CE EMC
TEST REPORT

for

AC ADAPTER

MODEL: KTPS65-1250DT-3P-VI; KTPS65-13548DT-3P-VI; KTPS65-1543DT-3P-VI; KTPS65-1640DT-3P-VI; KTPS65-1836DT-3P-VI; KTPS65-1934DT-3P-VI; KTPS65-2032DT-3P-VI; KTPS65-2427DT-3P-VI; KTPS65-2427DT-3P-VI-HP; KTPS65-3021DT-3P-VI; KTPS65-3220DT-3P-VI-HP; KTPS65-3220DT-3P-VI; KTPS65-4813DT-3P-VI; KTPS65-5611DT-3P-VI

Test Report Number:
T150625D04-E

Issued to:

KAGA ELECTRONICS (USA) INC

780 Montague Expy, Suite 403 San Jose, CA 95131 USA

Issued by:

Compliance Certification Services Inc.
Xindian Lab.
No.163-1, Jhongsheng Rd., Xindian Dist.,
New Taipei City, 23151 Taiwan.
TEL: 886-2-22170894
FAX: 886-2-22171029

Issued Date: July 20, 2015

TAF Testing Laboratory 1108

ACCREDITED TESTING CERT #0824.01

Revision History

Rev.		Issue Date		Revisions	Effect Page	Revised By
00		February 11, 2015		Initial Issue	ALL	Eva Fan
01		July 20, 2015		Copy Report	ALL	Eva Fan

TABLE OF CONTENTS

1 TEST CERTIFICATION 4
2 TEST RESULT SUMMARY 5
3 EUT DESCRIPTION 6
4 TEST METHODOLOGY 7
4.1. DECISION OF FINAL TEST MODE 7
4.2. EUT SYSTEM OPERATION 7
5 SETUP OF EQUIPMENT UNDER TEST 8
5.1. DESCRIPTION OF SUPPORT UNITS 8
5.2. CONFIGURATION OF SYSTEM UNDER TEST 8
6 FACILITIES AND ACCREDITATIONS 9
6.1. FACILITIES 9
6.2. ACCREDITATIONS 9
6.3. MEASUREMENT UNCERTAINTY 9
7 EMISSION TEST 10
7.1. CONDUCTED EMISSION MEASUREMENT 10
7.2. CONDUCTED EMISSION MEASUREMENT AT TELECOMMUNICATION PORTS 69
7.3. RADIATED EMISSION MEASUREMENT 72
7.4. HARMONICS CURRENT MEASUREMENT 133
7.5. VOLTAGE FLUCTUATION AND FLICKER MEASUREMENT 143
8 IMMUNITY TEST 159
8.1. GENERAL DESCRIPTION 159
8.2. GENERAL PERFORMANCE CRITERIA DESCRIPTION 160
8.3. ELECTROSTATIC DISCHARGE (ESD) 161
8.4. RADIATED, RADIO-FREQUENCY, ELECTROMAGNETIC FIELD (RS) 165
8.5. ELECTRICAL FAST TRANSIENT (EFT) 168
8.6. SURGE IMMUNITY TEST 170
8.7. CONDUCTED RADIO FREQUENCY DISTURBANCES (CS) 172
8.8. POWER FREQUENCY MAGNETIC FIELD 174
8.9. VOLTAGE DIPS & VOLTAGE INTERRUPTIONS 176
9 PHOTOGRAPHS OF THE TEST CONFIGURATION 178
APPENDIX 1 - PHOTOGRAPHS OF EUT A1-1

1 TEST CERTIFICATION

Product:	AC ADAPTER
Model:	KTPS65-1250DT-3P-VI; KTPS65-13548DT-3P-VI; KTPS65-1543DT-3P-VI; KTPS65-1640DT-3P-VI; KTPS65-1836DT-3P-VI; KTPS65-1934DT-3P-VI; KTPS65-2032DT-3P-VI; KTPS65-2427DT-3P-VI; KTPS65-2427DT-3P-VI-HP; KTPS65-3021DT-3P-VI; KTPS65-3220DT-3P-VI-HP; KTPS65-3220DT-3P-VI; KTPS65-4813DT-3P-VI; KTPS65-5611DT-3P-VI
Brand:	Volgen
Applicant:	**KAGA ELECTRONICS (USA) INC** 780 Montague Expy, Suite 403 San Jose, CA 95131 USA
Manufacturer:	**KAGA ELECTRONICS (USA) INC** 780 Montague Expy, Suite 403 San Jose, CA 95131 USA
Tested:	January 10, 2015 ~ February 4, 2015
Applicable Standards:	**EN 55022: 2010 / AC: 2011, Class B** **CISPR 22: 2008 (Ed 6.0), Class B** **AS/NZS CISPR 22:2009 + A1(2010), Class B** **EN 61000-3-2: 2006 + A1: 2009 + A2: 2009** **EN 61000-3-3: 2013** **EN 55024: 2010** EN 61000-4-2: 2009 / IEC 61000-4-2: 2008 ED. 2.0 EN 61000-4-3: 2006 + A1: 2008 + A2: 2010 / IEC 61000-4-3: 2006 + A1: 2007 + A2: 2010 ED. 3.2 EN 61000-4-4: 2012 / IEC 61000-4-4: 2012 ED. 3.0 EN 61000-4-5: 2006 / IEC 61000-4-5: 2005 ED. 2.0 EN 61000-4-6: 2009 / IEC 61000-4-6: 2008 ED. 3.0 EN 61000-4-8: 2010 / IEC 61000-4-8: 2009 ED. 2.0 EN 61000-4-11: 2004 / IEC 61000-4-11: 2004 ED. 2.0

Deviation from Applicable Standard
None

The above equipment was tested by Compliance Certification Services Inc. for compliance with the requirements of technical standards specified above under the EMC Directive 2004/108/EC* and 2014/30/EU. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.
*: Directive 2004/108/EC is repealed with effect form 20 April 2016.

Approved by:

Sam Hu
Assistant Manager

Reviewed by:

Eva Fan
Supervisor of report document dept.

2 TEST RESULT SUMMARY

EMISSION			
Standard	**Item**	**Result**	**Remarks**
EN 55022: 2010 / AC: 2011 CISPR 22: 2008 (Ed 6.0) AS/NZS CISPR 22:2009 + A1(2010)	Conducted (Power Port)	PASS	Meet Class B limit
	Conducted (Telecom port)	N/A	Please see the page 71
	Radiated	PASS	Meet Class B limit
EN 61000-3-2: 2006 + A1: 2009 + A2: 2009	Harmonic current emissions	N/A	Please see the page 135~141
EN 61000-3-3: 2013	Voltage fluctuations & flicker	PASS	Meets the requirements

IMMUNITY【 EN 55024 (2010) 】			
Standard	**Item**	**Result**	**Remarks**
EN 61000-4-2: 2009 IEC 61000-4-2: 2008 ED. 2.0	ESD	PASS	Meets the requirements of Performance Criterion A
EN 61000-4-3: 2006 + A1: 2008 + A2: 2010 IEC 61000-4-3: 2006 + A1: 2007 + A2: 2010 ED. 3.2	RS	PASS	Meets the requirements of Performance Criterion A
EN 61000-4-4: 2012 IEC 61000-4-4: 2012 ED. 3.0	EFT	PASS	Meets the requirements of Performance Criterion A
EN 61000-4-5: 2006 IEC 61000-4-5: 2005 ED. 2.0	Surge	PASS	Meets the requirements of Performance Criterion A
EN 61000-4-6: 2009 IEC 61000-4-6: 2008 ED. 3.0	CS	PASS	Meets the requirements of Performance Criterion A
EN 61000-4-8: 2010 IEC 61000-4-8: 2009 ED. 2.0	PFMF	N/A	Please see the page 175
EN 61000-4-11: 2004 IEC 61000-4-11: 2004 ED. 2.0	Voltage dips & voltage variations	PASS	Meets the requirements of **Voltage Dips:** 1) >95% reduction Performance Criterion A 2) 30% reduction Performance Criterion A **Voltage Interruptions:** 1) >95% reduction Performance Criterion B

Note: 1. The statements of test result on the above are decided by the request of test standard only; the measurement uncertainties are not factored into this compliance determination.
2. The information of measurement uncertainty is available upon the customer's request.

3 EUT DESCRIPTION

Product	AC ADAPTER
Brand Name	Volgen
Model	KTPS65-1250DT-3P-VI; KTPS65-13548DT-3P-VI; KTPS65-1543DT-3P-VI; KTPS65-1640DT-3P-VI; KTPS65-1836DT-3P-VI; KTPS65-1934DT-3P-VI; KTPS65-2032DT-3P-VI; KTPS65-2427DT-3P-VI; KTPS65-2427DT-3P-VI-HP; KTPS65-3021DT-3P-VI; KTPS65-3220DT-3P-VI-HP; KTPS65-3220DT-3P-VI; KTPS65-4813DT-3P-VI; KTPS65-5611DT-3P-VI
Applicant	KAGA ELECTRONICS (USA) INC
Housing material	Plastic
Identify Number	T150107B01
Received Date	January 7, 2015
EUT Power Rating	Please see the below model differences
AC Power During Test	230VAC / 50Hz
AC Power Cable Type	Unshielded, 1.8m (Detachable)
DC Power Cable Type	Unshielded, 1.5m (Non-Detachable, with a core)

Model Differences

Model Name	I/P Rating	O/P Voltage	O/P Current	Watt	Test (Check)
KTPS65-1250DT-3P-VI	100-240Vac, 50-60Hz, 1.4A Max.	12Vdc	5.00A	60W	☒
KTPS65-13548DT-3P-VI		13.5Vdc	4.82A	65W	☒
KTPS65-1543DT-3P-VI		15Vdc	4.34A	65W	☒
KTPS65-1640DT-3P-VI		16Vdc	4.07A	65W	☒
KTPS65-1836DT-3P-VI		18Vdc	3.62A	65W	☒
KTPS65-1934DT-3P-VI		19Vdc	3.43A	65W	☒
KTPS65-2032DT-3P-VI		20Vdc	3.25A	65W	☒
KTPS65-2427DT-3P-VI		24Vdc	2.71A	65W	☒
KTPS65-2427DT-3P-VI-HP		24Vdc	2.71A	65W	☒
KTPS65-3021DT-3P-VI		30Vdc	2.17A	65W	☒
KTPS65-3220DT-3P-VI-HP		32Vdc	2.04A	65W	☒
KTPS65-3220DT-3P-VI		32Vdc	2.04A	65W	☒
KTPS65-4813DT-3P-VI		48Vdc	1.36A	65W	☒
KTPS65-5611DT-3P-VI		56Vdc	1.17A	65W	☒

I/O PORT

I/O PORT TYPES	Q'TY	TESTED WITH

Note: None.

4 TEST METHODOLOGY

4.1. DECISION OF FINAL TEST MODE

The EUT was tested together with the below additional components, and a configuration, which produced the worst emission levels, was selected and recorded in this report.

The test configuration/ modes are as the following:

Modes:

1	KTPS65-1250DT-3P-VI	Full Rated Load Mode
2		Half Rated Load Mode
3	KTPS65-13548DT-3P-VI	Full Rated Load Mode
4		Half Rated Load Mode
5	KTPS65-1543DT-3P-VI	Full Rated Load Mode
6		Half Rated Load Mode
7	KTPS65-1640DT-3P-VI	Full Rated Load Mode
8		Half Rated Load Mode
9	KTPS65-1836DT-3P-VI	Full Rated Load Mode
10		Half Rated Load Mode
11	KTPS65-1934DT-3P-VI	Full Rated Load Mode
12		Half Rated Load Mode
13	KTPS65-2032DT-3P-VI	Full Rated Load Mode
14		Half Rated Load Mode
15	KTPS65-2427DT-3P-VI	Full Rated Load Mode
16		Half Rated Load Mode
17	KTPS65-2427DT-3P-VI-HP	Full Rated Load Mode
18		Half Rated Load Mode
19	KTPS65-3021DT-3P-VI	Full Rated Load Mode
20		Half Rated Load Mode
21	KTPS65-3220DT-3P-VI-HP	Full Rated Load Mode
22		Half Rated Load Mode
23	KTPS65-3220DT-3P-VI	Full Rated Load Mode
24		Half Rated Load Mode
25	KTPS65-4813DT-3P-VI	Full Rated Load Mode
26		Half Rated Load Mode
27	KTPS65-5611DT-3P-VI	Full Rated Load Mode
28		Half Rated Load Mode

Worst:
Conduction: Mode 5
Radiation: Mode 21

4.2. EUT SYSTEM OPERATION

1. To adjust variable resistor to test EUT.

   Note: Test program is self-repeating throughout the test.

5 SETUP OF EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF SUPPORT UNITS

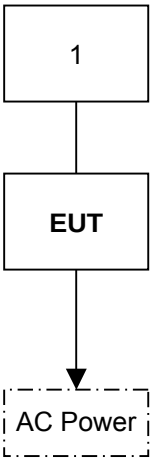
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Peripherals Devices:

No.	Equipment	Model No.	Serial No.	FCC ID / BSMI ID	Brand Name	Data Cable	Power Cord
1	Variable Resistor	N/A	N/A	N/A	N/A	N/A	Unshielded, 1.5m with a core

Note:
1) All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2) Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

5.2. CONFIGURATION OF SYSTEM UNDER TEST



6 FACILITIES AND ACCREDITATIONS

6.1. FACILITIES

All measurement facilities used to collect the measurement data are located at CCSrf Taiwan Xindian Lab. at No.163-1, Jhongsheng Rd., Xindian Dist., New Taipei City, 23151 Taiwan.

The sites are constructed in conformance with the requirements of ANSI C63.4 and CISPR Publication 22. All receiving equipment conforms to CISPR 16-1-1, CISPR 16-1-2, CISPR 16-1-3, CISPR 16-1-4 and CISPR 16-1-5.

6.2. ACCREDITATIONS

Our laboratories are accredited and approved by the following accreditation body according to ISO/IEC 17025.

Taiwan	TAF
USA	A2LA

The measuring facility of laboratories has been authorized or registered by the following approval agencies.

Canada	Industry Canada
Norway	Nemko
Japan	VCCI
Taiwan	BSMI
USA	FCC

Copies of granted accreditation certificates are available for downloading from our web site, http://www.ccsrf.com

6.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Frequency	Uncertainty
Conducted emissions	0.15MHz ~ 30MHz	± 1.59
Radiated emissions	30MHz ~ 1000MHz	± 3.72

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Consistent with industry standard (e.g. CISPR 22: 2005, clause 11, Measurement Uncertainty) determining compliance with the limits shall be base on the results of the compliance measurement. Consequently the measure emissions being less than the maximum allowed emission result in this be a compliant test or passing test.

The acceptable measurement uncertainty value without requiring revision of the compliance statement is base on conducted and radiated emissions being less than U_{CISPR} which is 3.6dB and 5.2dB respectively. CCS values (called U_{Lab} in CISPR 16-4-2) is less than U_{CISPR} as shown in the table above. Therefore, MU need not be considered for compliance.

7 EMISSION TEST

7.1. CONDUCTED EMISSION MEASUREMENT

7.1.1. LIMITS

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	79	66	66 - 56	56 - 46
0.50 - 5.0	73	60	56	46
5.0 - 30.0	73	60	60	50

NOTE:
(1) The lower limit shall apply at the transition frequencies.
(2) The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.
(3) All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

7.1.2. TEST INSTRUMENTS

Conducted Emission room # A				
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Due**
TEST RECEIVER	R&S	ESCI	101201	08/31/2015
LISN (EUT)	SCHWARZBECK	NSLK 8127	8127527	08/28/2015
LISN	SCHWARZBECK	NSLK 8127	8127526	08/28/2015
BNC CABLE	EMCI	CFD300-NL	BNC A6	06/23/2015
Pulse Limiter	R&S	ESH3-Z2	C3010026-2	08/26/2015
THERMO-HYGRO METER	WISEWIND	201A	No. 02	05/12/2015
Test S/W	EZ-EMC			

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. N.C.R = No Calibration Request.

7.1.3. TEST PROCEDURES (please refer to measurement standard or CCS SOP PA-031)

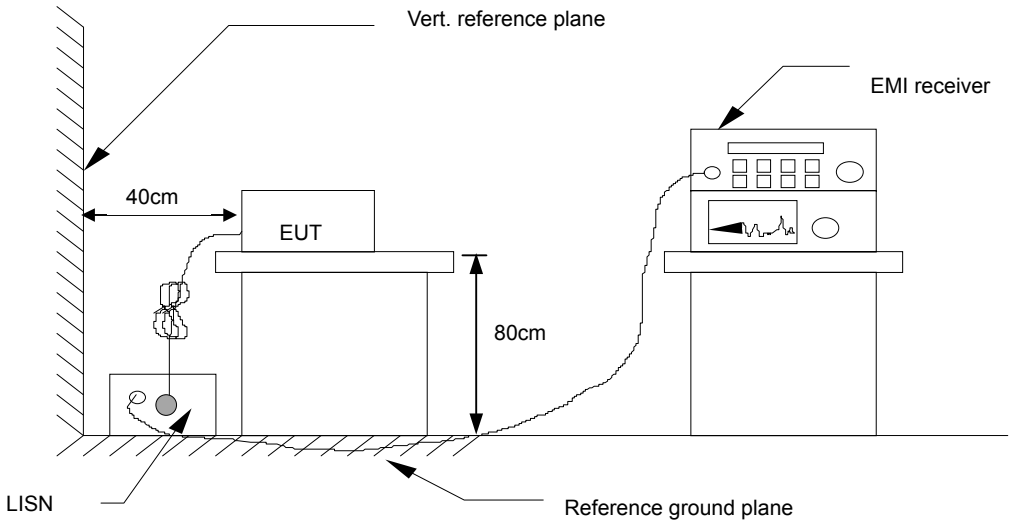
Procedure of Preliminary Test

- The EUT and Support equipment, if needed, was set up as per the test configuration to simulate typical usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per EN 55022 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor standing equipment, it is placed on the ground plane, which has a 15 cm non-conductive covering to insulate the EUT from the ground plane.
- All I/O cables were positioned to simulate typical actual usage as per EN 55022.
- The test equipment EUT installed received AC main power, through a Line Impedance Stabilization Network (LISN), which supplied power source and was grounded to the ground plane.
- All support equipment power received from a second LISN.
- The EUT test program was started. Emissions were measured on each current carrying line of the EUT using an EMI Test Receiver connected to the LISN powering the EUT.
- The Receiver scanned from 150kHz to 30MHz for emissions in each of the test modes.
- During the above scans, the emissions were maximized by cable manipulation.
- The test mode(s) described in Item 4.1 were scanned during the preliminary test.
- After the preliminary scan, we found the test mode described in Item 4.1 producing the highest emission level.
- The EUT configuration and cable configuration of the above highest emission levels were recorded for reference of the final test.

Procedure of Final Test

- EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test.
- A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit.
- The test data of the worst-case condition(s) was recorded.

7.1.4. TEST SETUP



- For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

7.1.5. DATA SAMPLE

Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
x.xx	42.95	0.55	43.50	56	-12.50	Q	L1

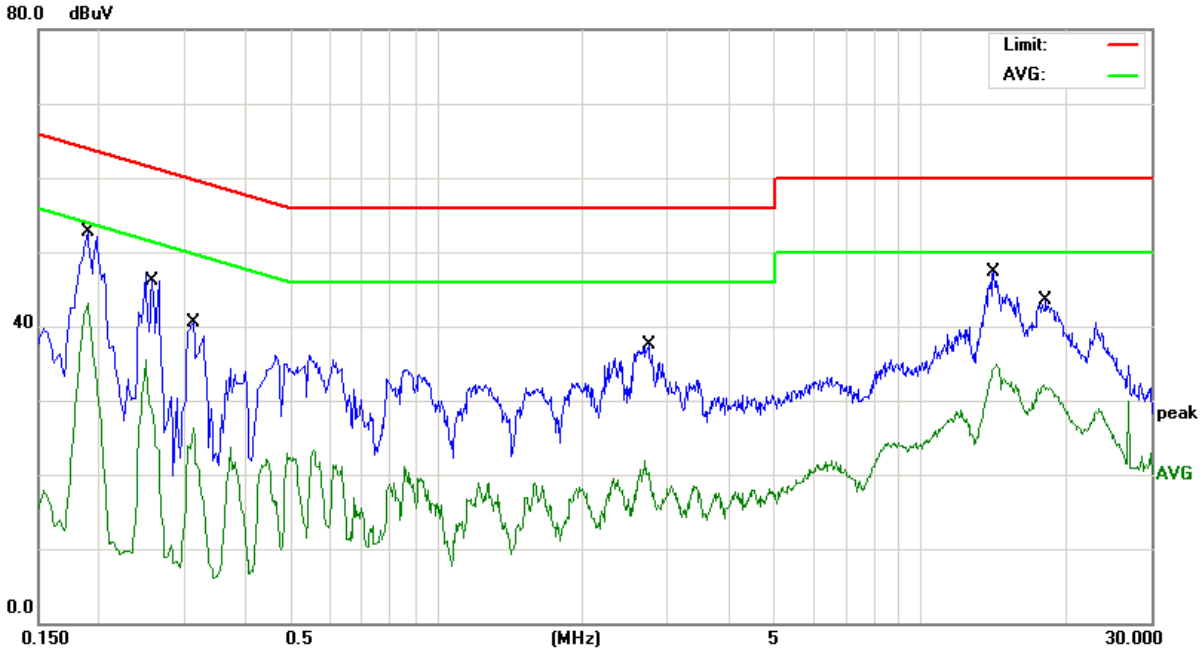
Freq. = Emission frequency in MHz
Reading = Uncorrected Analyzer/Receiver reading
Factor = Insertion loss of LISN + Cable Loss + Pulse Limit
Result = Reading + Factor
Limit = Limit stated in standard
Margin = Reading in reference to limit
P = Peak Reading
Q = Quasi-peak Reading
A = Average Reading
L1 = Hot side
L2 = Neutral side

Calculation Formula

Margin (dB) = Result (dBuV) – Limit (dBuV)

7.1.6. TEST RESULTS

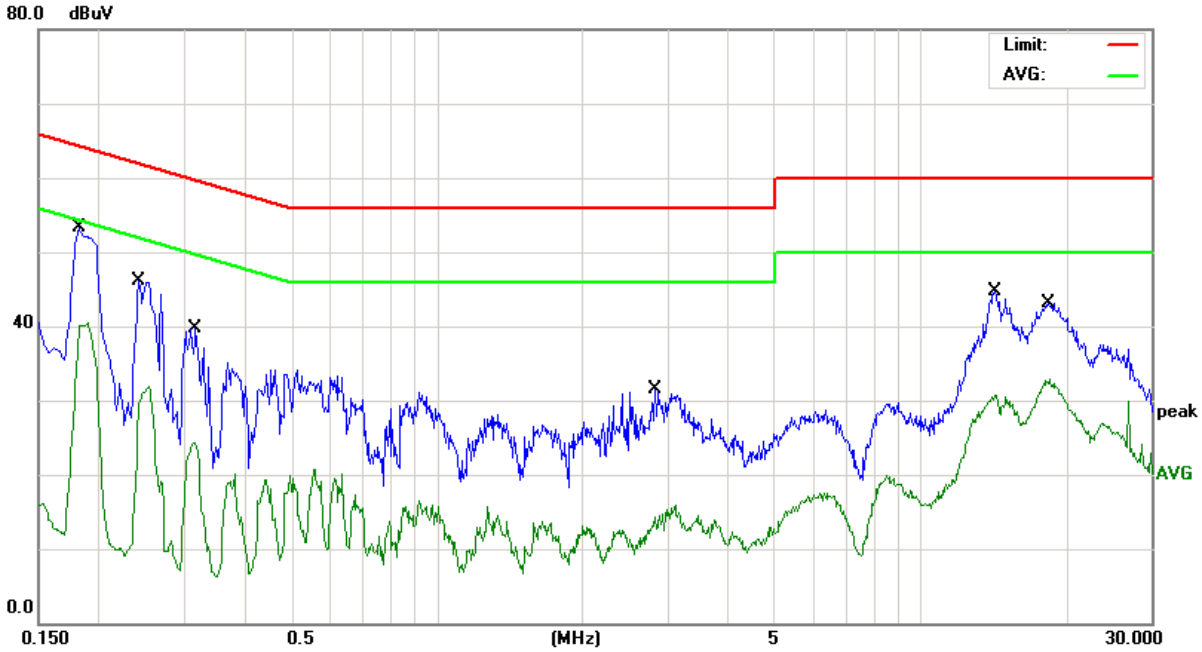
Model No.	KTPS65-1250DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 1
Tested by	Stanley Cheng	Phase	L1
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1900	40.35	10.02	50.37	64.03	-13.66	Q	L1
0.1904	32.41	10.02	42.43	54.01	-11.58	A	L1
0.2580	33.04	10.02	43.06	61.49	-18.43	Q	L1
0.2580	18.82	10.02	28.84	51.49	-22.65	A	L1
0.3140	26.95	10.02	36.97	59.86	-22.89	Q	L1
0.3140	16.23	10.02	26.25	49.86	-23.61	A	L1
2.7460	21.33	10.30	31.63	56.00	-24.37	Q	L1
2.7580	9.58	10.31	19.89	46.00	-26.11	A	L1
14.1900	29.26	10.72	39.98	60.00	-20.02	Q	L1
14.1900	23.61	10.72	34.33	50.00	-15.67	A	L1
18.1620	26.08	10.86	36.94	60.00	-23.06	Q	L1
18.1620	20.79	10.86	31.65	50.00	-18.35	A	L1

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

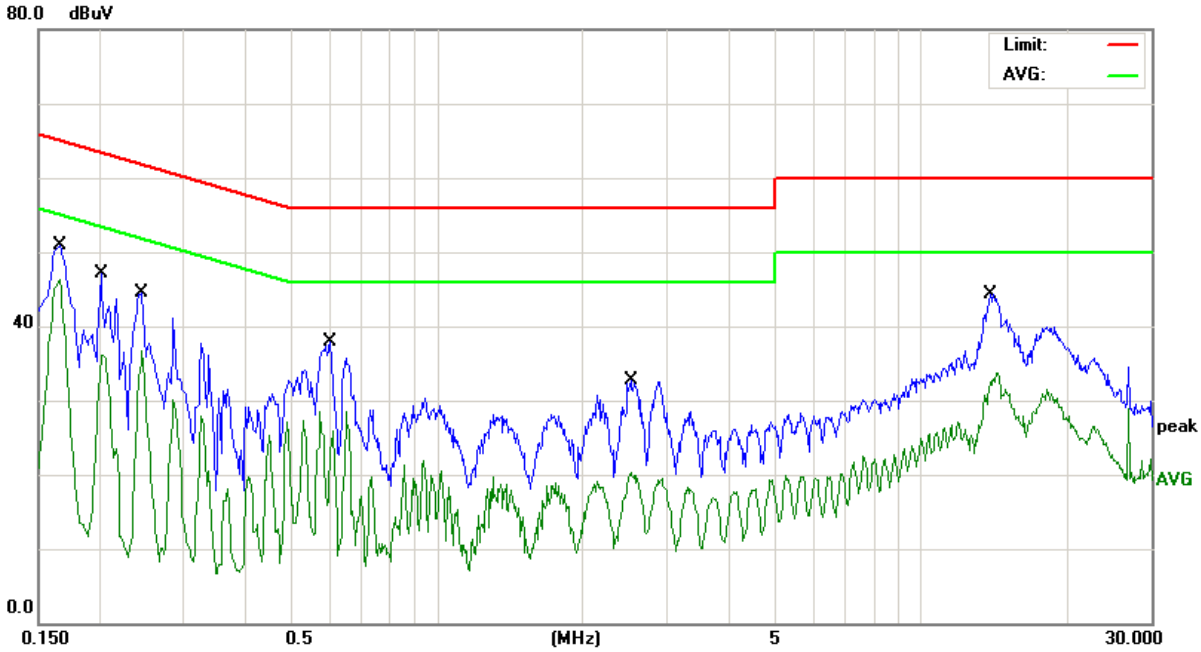
Model No.	KTPS65-1250DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 1
Tested by	Stanley Cheng	Phase	L2
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1819	40.66	10.02	50.68	64.39	-13.71	Q	L2
0.1824	30.07	10.02	40.09	54.37	-14.28	A	L2
0.2420	32.66	10.01	42.67	62.02	-19.35	Q	L2
0.2420	19.51	10.01	29.52	52.02	-22.50	A	L2
0.3180	26.20	10.02	36.22	59.76	-23.54	Q	L2
0.3180	14.12	10.02	24.14	49.76	-25.62	A	L2
2.8260	13.23	10.32	23.55	56.00	-32.45	Q	L2
2.8260	3.90	10.32	14.22	46.00	-31.78	A	L2
14.2499	27.26	10.72	37.98	60.00	-22.02	Q	L2
14.2499	20.04	10.72	30.76	50.00	-19.24	A	L2
18.4059	26.86	10.86	37.72	60.00	-22.28	Q	L2
18.4059	21.44	10.86	32.30	50.00	-17.70	A	L2

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

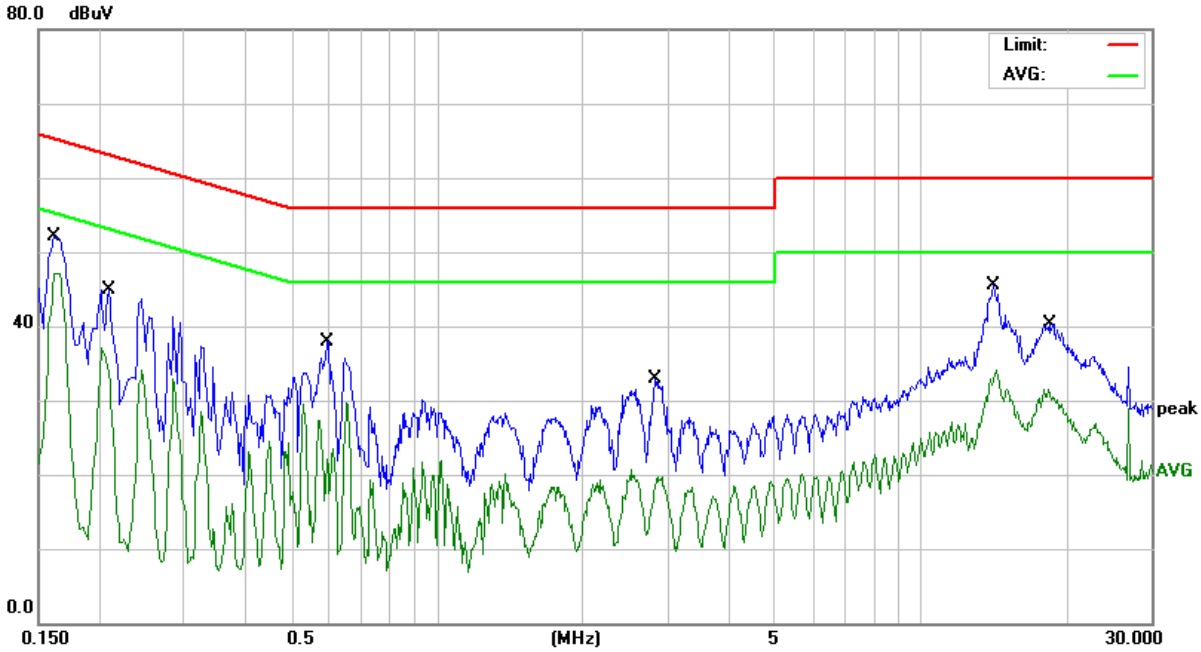
Model No.	KTPS65-1250DT-3P-VI	**6dB Bandwidth**	9 kHz
Environmental Conditions	25°C, 58% RH	**Test Mode**	Mode 2
Tested by	Stanley Cheng	**Phase**	L1
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				**150 kHz to 30 MHz**			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1660	**38.40**	**10.01**	**48.41**	**65.15**	**-16.74**	**Q**	**L1**
0.1660	**36.20**	**10.01**	**46.21**	**55.15**	**-8.94**	**A**	**L1**
0.2020	**35.26**	**10.02**	**45.28**	**63.52**	**-18.24**	**Q**	**L1**
0.2029	**26.06**	**10.02**	**36.08**	**53.49**	**-17.41**	**A**	**L1**
0.2460	**32.12**	**10.01**	**42.13**	**61.89**	**-19.76**	**Q**	**L1**
0.2460	**26.77**	**10.01**	**36.78**	**51.89**	**-15.11**	**A**	**L1**
0.6020	**24.27**	**10.07**	**34.34**	**56.00**	**-21.66**	**Q**	**L1**
0.6020	**13.40**	**10.07**	**23.47**	**46.00**	**-22.53**	**A**	**L1**
2.5220	**17.61**	**10.29**	**27.90**	**56.00**	**-28.10**	**Q**	**L1**
2.5340	**9.76**	**10.29**	**20.05**	**46.00**	**-25.95**	**A**	**L1**
13.9420	**26.95**	**10.72**	**37.67**	**60.00**	**-22.33**	**Q**	**L1**
13.9420	**21.75**	**10.72**	**32.47**	**50.00**	**-17.53**	**A**	**L1**

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

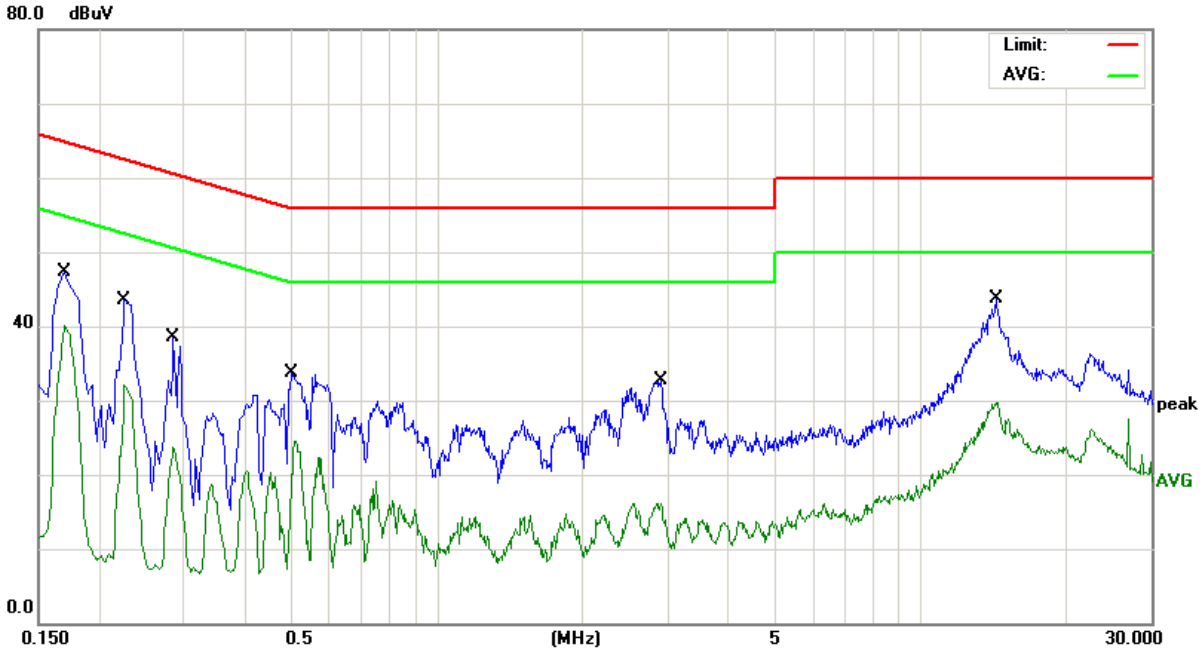
Model No.	KTPS65-1250DT-3P-VI	**6dB Bandwidth**	9 kHz
Environmental Conditions	25°C, 58% RH	**Test Mode**	Mode 2
Tested by	Stanley Cheng	**Phase**	L2
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				**150 kHz to 30 MHz**			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1620	**39.95**	**10.01**	**49.96**	**65.36**	**-15.40**	**Q**	**L2**
0.1620	**37.03**	**10.01**	**47.04**	**55.36**	**-8.32**	**A**	**L2**
0.2100	**32.45**	**10.02**	**42.47**	**63.20**	**-20.73**	**Q**	**L2**
0.2100	**23.61**	**10.02**	**33.63**	**53.20**	**-19.57**	**A**	**L2**
0.5940	**25.24**	**10.07**	**35.31**	**56.00**	**-20.69**	**Q**	**L2**
0.5940	**12.01**	**10.07**	**22.08**	**46.00**	**-23.92**	**A**	**L2**
2.8300	**16.68**	**10.32**	**27.00**	**56.00**	**-29.00**	**Q**	**L2**
2.8300	**7.77**	**10.32**	**18.09**	**46.00**	**-27.91**	**A**	**L2**
14.2020	**27.66**	**10.72**	**38.38**	**60.00**	**-21.62**	**Q**	**L2**
14.2020	**22.04**	**10.72**	**32.76**	**50.00**	**-17.24**	**A**	**L2**
18.6180	**24.10**	**10.87**	**34.97**	**60.00**	**-25.03**	**Q**	**L2**
18.6180	**20.07**	**10.87**	**30.94**	**50.00**	**-19.06**	**A**	**L2**

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

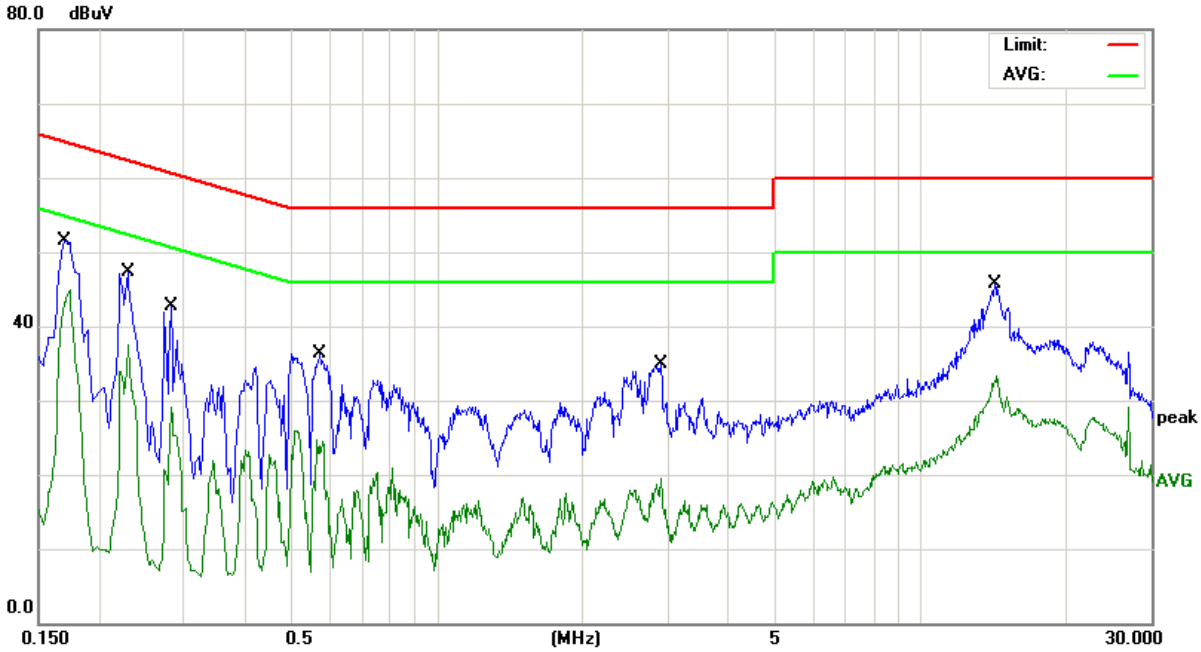
Model No.	KTPS65-13548DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 3
Tested by	Stanley Cheng	Phase	L1
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1700	35.12	10.01	45.13	64.96	-19.83	Q	L1
0.1700	30.08	10.01	40.09	54.96	-14.87	A	L1
0.2260	30.58	10.01	40.59	62.59	-22.00	Q	L1
0.2260	22.04	10.01	32.05	52.59	-20.54	A	L1
0.2860	25.37	10.01	35.38	60.64	-25.26	Q	L1
0.2860	13.59	10.01	23.60	50.64	-27.04	A	L1
0.5060	21.54	10.06	31.60	56.00	-24.40	Q	L1
0.5060	12.85	10.06	22.91	46.00	-23.09	A	L1
2.9100	16.19	10.33	26.52	56.00	-29.48	Q	L1
2.9100	5.80	10.33	16.13	46.00	-29.87	A	L1
14.3820	25.68	10.74	36.42	60.00	-23.58	Q	L1
14.3820	18.87	10.74	29.61	50.00	-20.39	A	L1

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

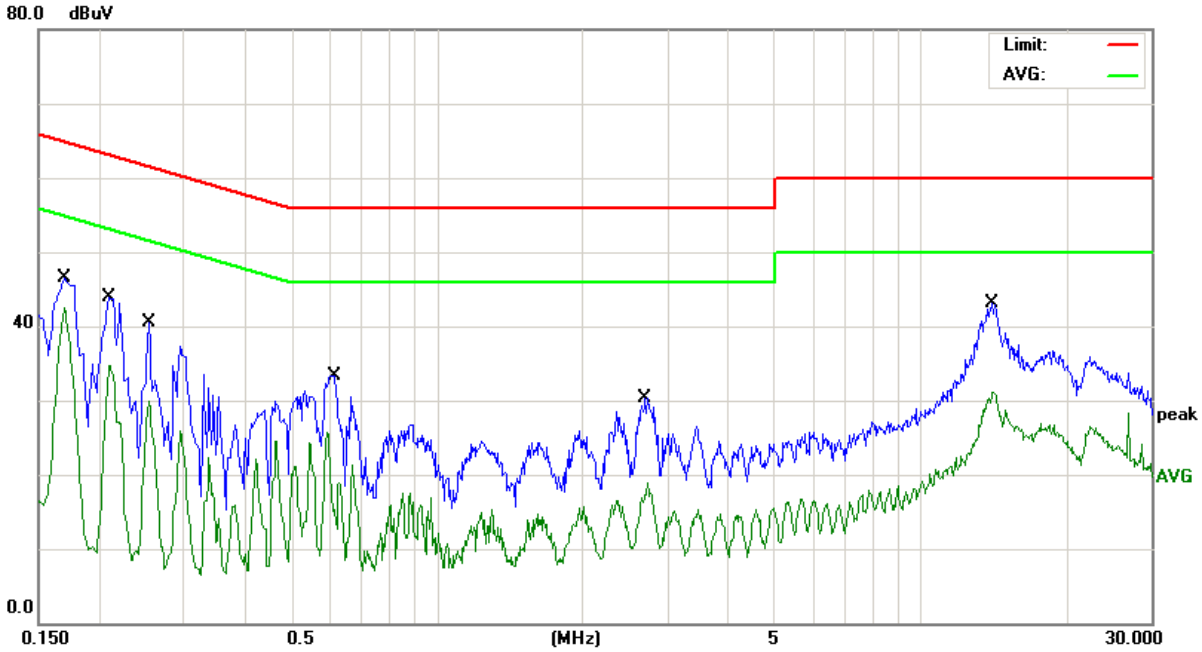
Model No.	KTPS65-13548DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 3
Tested by	Stanley Cheng	Phase	L2
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1700	35.15	10.01	45.16	64.96	-19.80	Q	L2
0.1700	33.21	10.01	43.22	54.96	-11.74	A	L2
0.2304	30.57	10.01	40.58	62.43	-21.85	Q	L2
0.2304	26.85	10.01	36.86	52.43	-15.57	A	L2
0.2819	25.00	10.01	35.01	60.76	-25.75	Q	L2
0.2819	19.06	10.01	29.07	50.76	-21.69	A	L2
0.5740	20.23	10.07	30.30	56.00	-25.70	Q	L2
0.5740	13.84	10.07	23.91	46.00	-22.09	A	L2
2.9140	15.65	10.33	25.98	56.00	-30.02	Q	L2
2.9140	9.26	10.33	19.59	46.00	-26.41	A	L2
14.2700	25.23	10.73	35.96	60.00	-24.04	Q	L2
14.2700	21.99	10.73	32.72	50.00	-17.28	A	L2

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

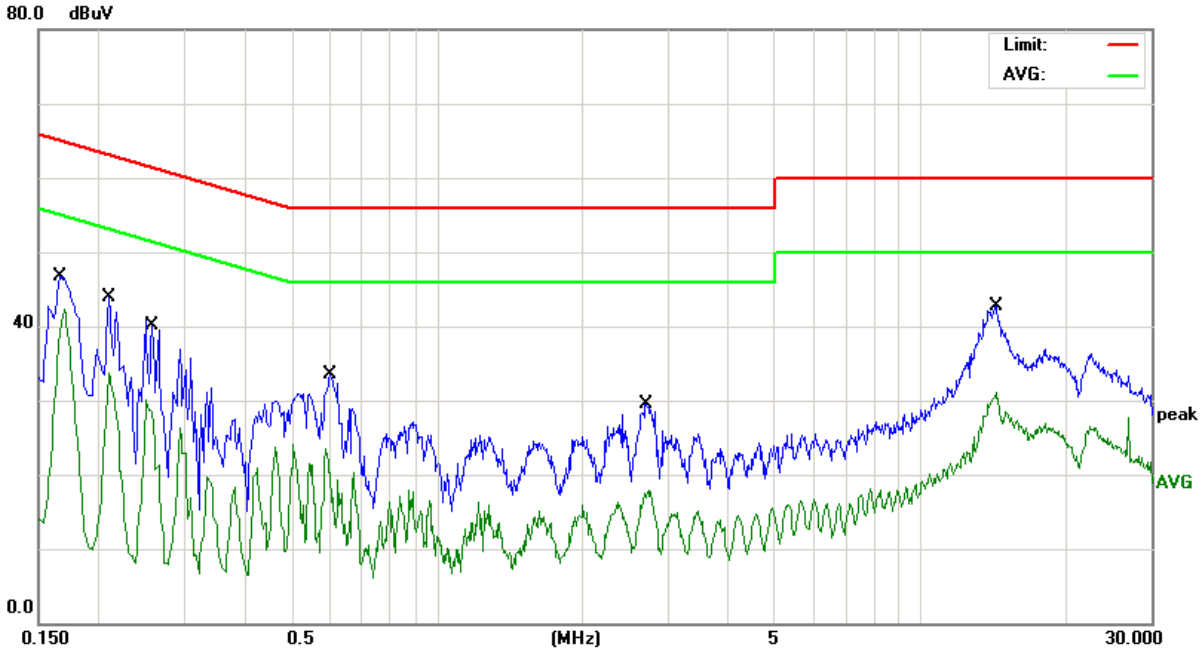
Model No.	KTPS65-13548DT-3P-VI	**6dB Bandwidth**	9 kHz
Environmental Conditions	25°C, 58% RH	**Test Mode**	Mode 4
Tested by	Stanley Cheng	**Phase**	L1
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				**150 kHz to 30 MHz**			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1712	**34.46**	**10.01**	**44.47**	**64.90**	**-20.43**	**Q**	**L1**
0.1712	**30.96**	**10.01**	**40.97**	**54.90**	**-13.93**	**A**	**L1**
0.2083	**31.68**	**10.02**	**41.70**	**63.27**	**-21.57**	**Q**	**L1**
0.2083	**21.62**	**10.02**	**31.64**	**53.27**	**-21.63**	**A**	**L1**
0.2540	**28.20**	**10.02**	**38.22**	**61.62**	**-23.40**	**Q**	**L1**
0.2540	**19.83**	**10.02**	**29.85**	**51.62**	**-21.77**	**A**	**L1**
0.6140	**20.76**	**10.07**	**30.83**	**56.00**	**-25.17**	**Q**	**L1**
0.6140	**5.13**	**10.07**	**15.20**	**46.00**	**-30.80**	**A**	**L1**
2.7060	**15.05**	**10.30**	**25.35**	**56.00**	**-30.65**	**Q**	**L1**
2.7060	**6.99**	**10.30**	**17.29**	**46.00**	**-28.71**	**A**	**L1**
14.1060	**25.29**	**10.72**	**36.01**	**60.00**	**-23.99**	**Q**	**L1**
14.1060	**20.46**	**10.72**	**31.18**	**50.00**	**-18.82**	**A**	**L1**

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

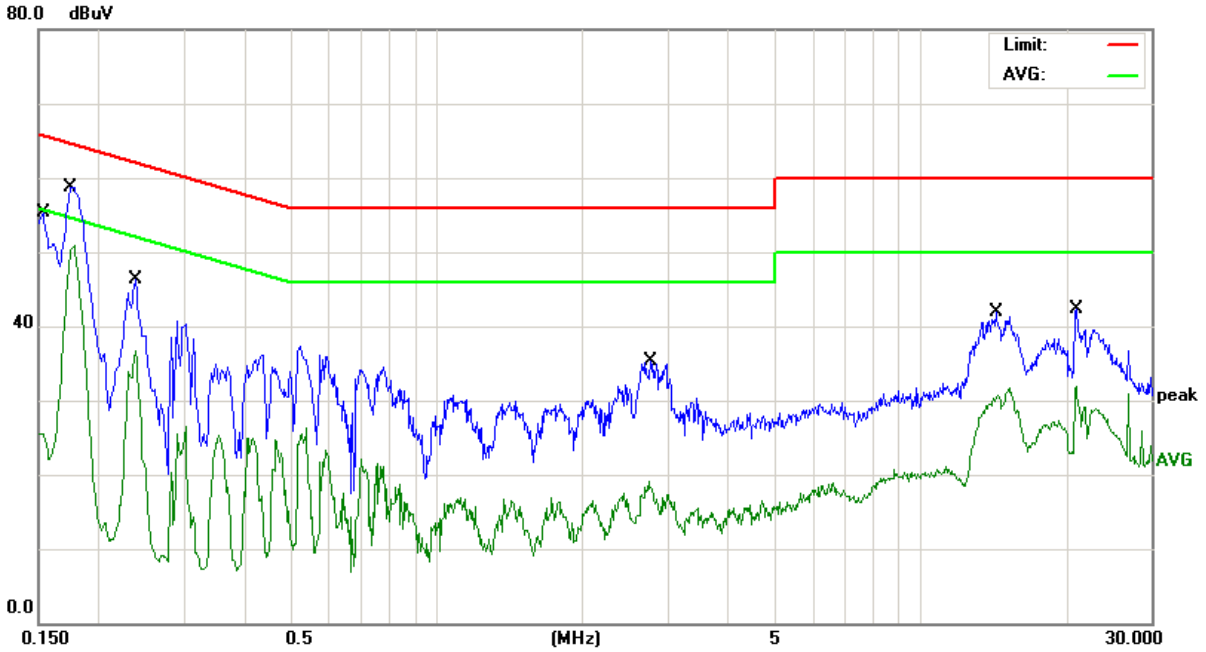
Model No.	KTPS65-13548DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 4
Tested by	Stanley Cheng	Phase	L2
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1660	35.01	10.01	45.02	65.15	-20.13	Q	L2
0.1660	29.50	10.01	39.51	55.15	-15.64	A	L2
0.2100	32.16	10.02	42.18	63.20	-21.02	Q	L2
0.2100	23.71	10.02	33.73	53.20	-19.47	A	L2
0.2580	26.65	10.02	36.67	61.49	-24.82	Q	L2
0.2580	18.53	10.02	28.55	51.49	-22.94	A	L2
0.6020	21.08	10.07	31.15	56.00	-24.85	Q	L2
0.6020	10.30	10.07	20.37	46.00	-25.63	A	L2
2.7180	15.43	10.30	25.73	56.00	-30.27	Q	L2
2.7180	6.55	10.30	16.85	46.00	-29.15	A	L2
14.3979	25.80	10.74	36.54	60.00	-23.46	Q	L2
14.3979	19.57	10.74	30.31	50.00	-19.69	A	L2

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

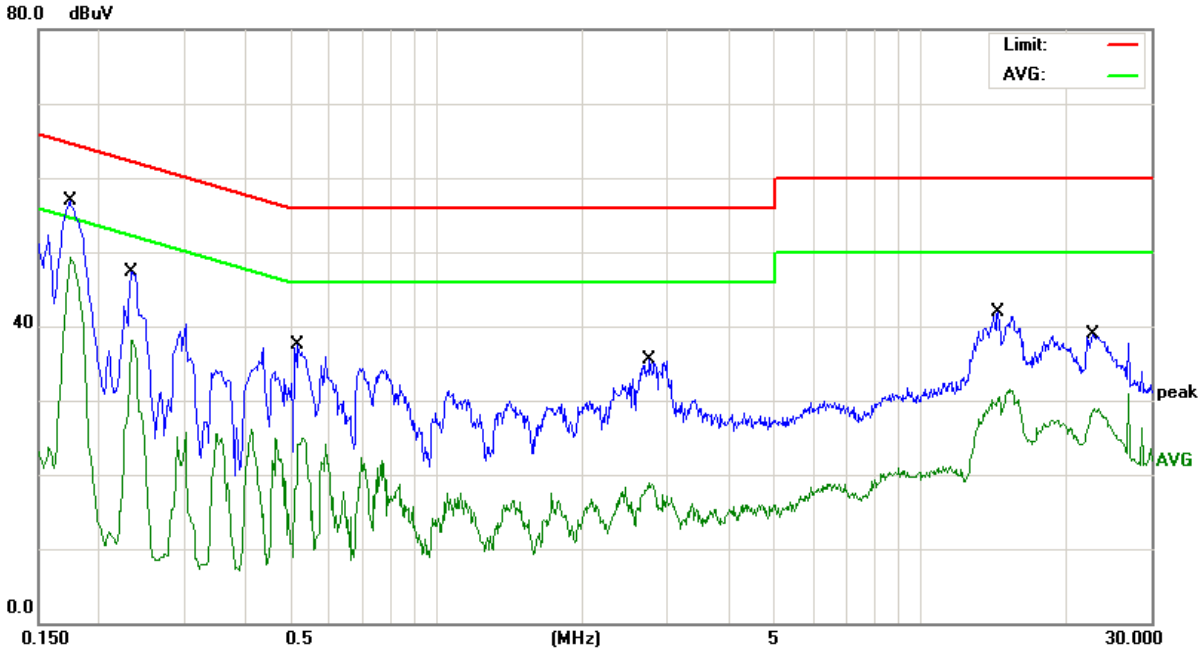
Model No.	KTPS65-1543DT-3P-VI	**6dB Bandwidth**	9 kHz
Environmental Conditions	25°C, 58% RH	**Test Mode**	Mode 5 / Worst
Tested by	Stanley Cheng	**Phase**	L1
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				**150 kHz to 30 MHz**			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1539	**34.60**	**10.01**	**44.61**	**65.78**	**-21.17**	**Q**	**L1**
0.1539	**12.68**	**10.01**	**22.69**	**55.78**	**-33.09**	**A**	**L1**
0.1758	**46.49**	**10.02**	**56.51**	**64.68**	**-8.17**	**Q**	**L1**
0.1758	**40.66**	**10.02**	**50.68**	**54.68**	**-4.00**	**A**	**L1**
0.2380	**33.48**	**10.01**	**43.49**	**62.16**	**-18.67**	**Q**	**L1**
0.2380	**24.26**	**10.01**	**34.27**	**52.16**	**-17.89**	**A**	**L1**
2.7780	**18.94**	**10.32**	**29.26**	**56.00**	**-26.74**	**Q**	**L1**
2.7780	**6.51**	**10.32**	**16.83**	**46.00**	**-29.17**	**A**	**L1**
14.3579	**24.55**	**10.73**	**35.28**	**60.00**	**-24.72**	**Q**	**L1**
14.3579	**17.98**	**10.73**	**28.71**	**50.00**	**-21.29**	**A**	**L1**
20.9300	**19.11**	**10.93**	**30.04**	**60.00**	**-29.96**	**Q**	**L1**
20.9300	**13.44**	**10.93**	**24.37**	**50.00**	**-25.63**	**A**	**L1**

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

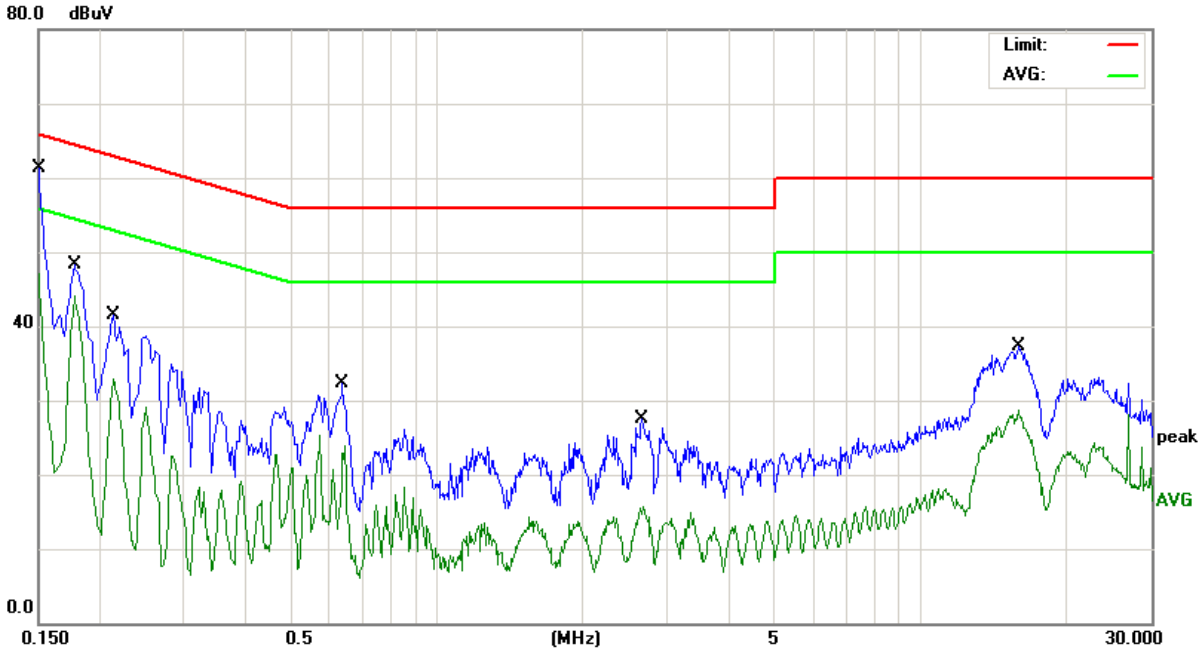
Model No.	KTPS65-1543DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 5 / Worst
Tested by	Stanley Cheng	Phase	L2
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1740	45.79	10.01	55.80	64.76	-8.96	Q	L2
0.1740	38.83	10.01	48.84	54.76	-5.92	A	L2
0.2340	34.18	10.01	44.19	62.30	-18.11	Q	L2
0.2340	24.55	10.01	34.56	52.30	-17.74	A	L2
0.5180	24.55	10.06	34.61	56.00	-21.39	Q	L2
0.5180	12.70	10.06	22.76	46.00	-23.24	A	L2
2.7540	19.31	10.31	29.62	56.00	-26.38	Q	L2
2.7540	7.37	10.31	17.68	46.00	-28.32	A	L2
14.4660	24.46	10.75	35.21	60.00	-24.79	Q	L2
14.4660	18.32	10.75	29.07	50.00	-20.93	A	L2
22.7060	22.79	10.98	33.77	60.00	-26.23	Q	L2
22.7060	16.72	10.98	27.70	50.00	-22.30	A	L2

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

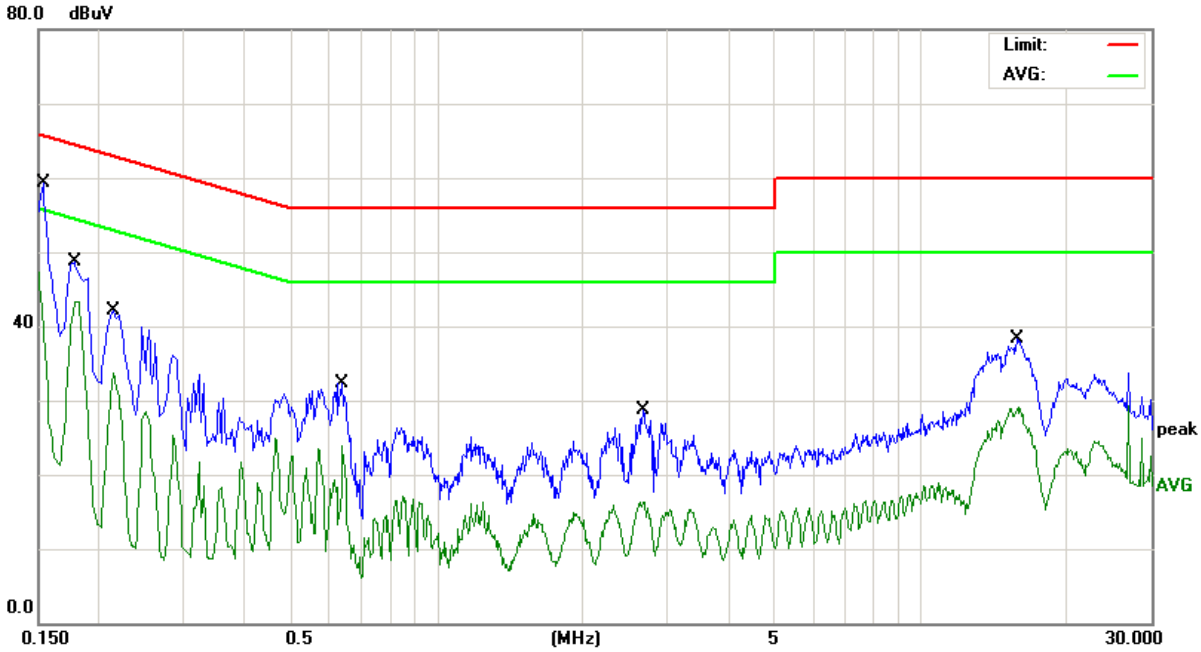
Model No.	KTPS65-1543DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 6
Tested by	Stanley Cheng	Phase	L1
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1500	49.94	10.01	59.95	65.99	-6.04	Q	L1
0.1500	36.99	10.01	47.00	55.99	-8.99	A	L1
0.1780	37.42	10.02	47.44	64.57	-17.13	Q	L1
0.1787	33.46	10.02	43.48	54.54	-11.06	A	L1
0.2140	29.59	10.02	39.61	63.04	-23.43	Q	L1
0.2162	21.94	10.02	31.96	52.96	-21.00	A	L1
0.6380	19.26	10.07	29.33	56.00	-26.67	Q	L1
0.6380	12.74	10.07	22.81	46.00	-23.19	A	L1
2.6580	12.30	10.30	22.60	56.00	-33.40	Q	L1
2.6580	4.43	10.30	14.73	46.00	-31.27	A	L1
16.0419	22.16	10.79	32.95	60.00	-27.05	Q	L1
16.0419	17.80	10.79	28.59	50.00	-21.41	A	L1

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

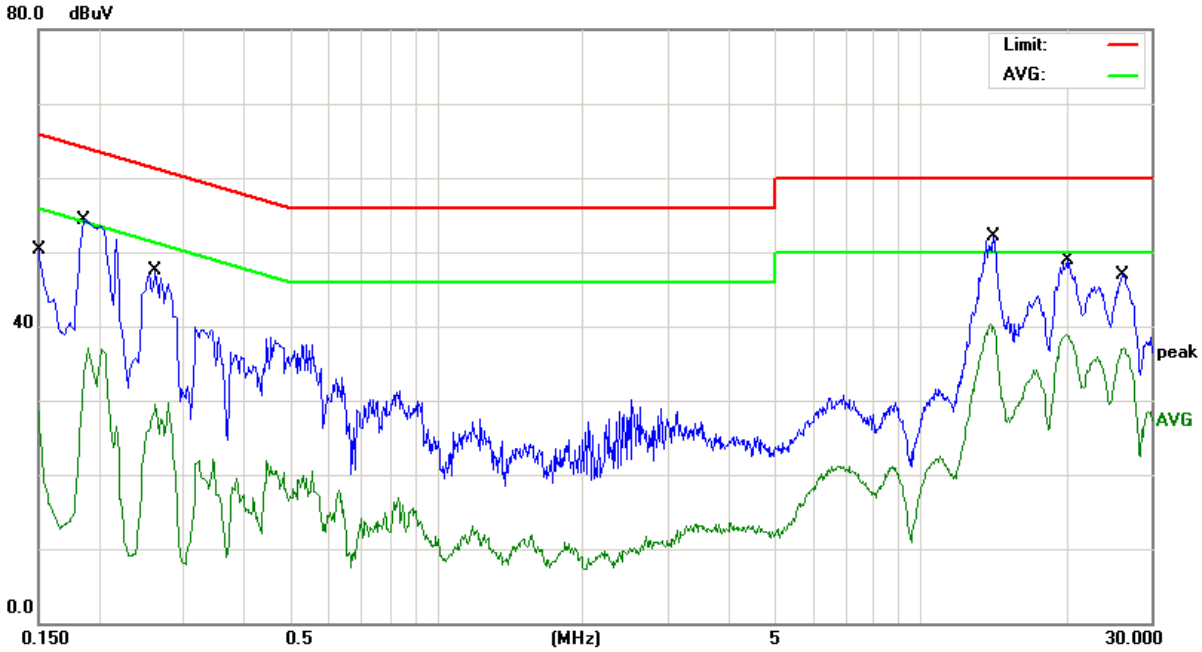
Model No.	KTPS65-1543DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 6
Tested by	Stanley Cheng	Phase	L2
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1539	43.39	10.01	53.40	65.78	-12.38	Q	L2
0.1539	26.14	10.01	36.15	55.78	-19.63	A	L2
0.1780	37.68	10.02	47.70	64.57	-16.87	Q	L2
0.1780	33.78	10.02	43.80	54.57	-10.77	A	L2
0.2140	30.20	10.02	40.22	63.04	-22.82	Q	L2
0.2140	23.23	10.02	33.25	53.04	-19.79	A	L2
0.6380	19.80	10.07	29.87	56.00	-26.13	Q	L2
0.6380	13.15	10.07	23.22	46.00	-22.78	A	L2
2.6740	12.99	10.30	23.29	56.00	-32.71	Q	L2
2.6740	5.06	10.30	15.36	46.00	-30.64	A	L2
15.8740	22.39	10.79	33.18	60.00	-26.82	Q	L2
15.8740	16.75	10.79	27.54	50.00	-22.46	A	L2

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

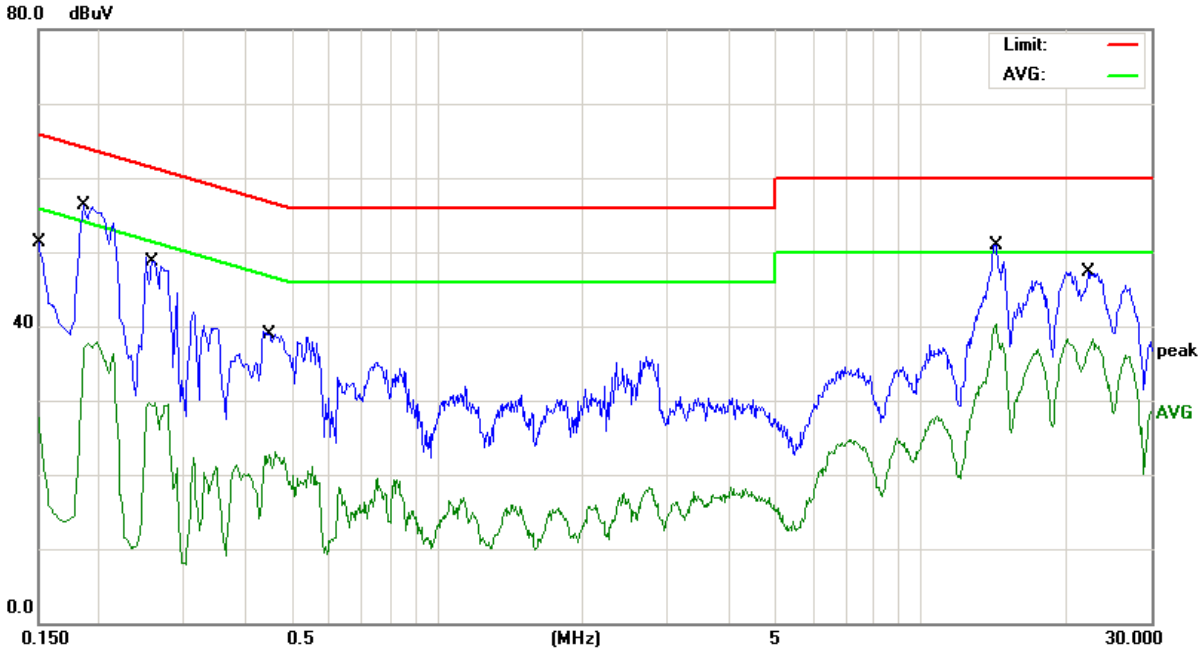
Model No.	KTPS65-1640DT-3P-VI	**6dB Bandwidth**	9 kHz
Environmental Conditions	25°C, 58% RH	**Test Mode**	Mode 7
Tested by	Stanley Cheng	**Phase**	L1
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				**150 kHz to 30 MHz**			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1500	**34.78**	**10.01**	**44.79**	**65.99**	**-21.20**	**Q**	**L1**
0.1500	**16.10**	**10.01**	**26.11**	**55.99**	**-29.88**	**A**	**L1**
0.1860	**39.90**	**10.02**	**49.92**	**64.21**	**-14.29**	**Q**	**L1**
0.1860	**18.34**	**10.02**	**28.36**	**54.21**	**-25.85**	**A**	**L1**
0.2620	**32.78**	**10.02**	**42.80**	**61.36**	**-18.56**	**Q**	**L1**
0.2620	**16.12**	**10.02**	**26.14**	**51.36**	**-25.22**	**A**	**L1**
14.1619	**33.68**	**10.72**	**44.40**	**60.00**	**-15.60**	**Q**	**L1**
14.1619	**25.99**	**10.72**	**36.71**	**50.00**	**-13.29**	**A**	**L1**
20.1020	**32.46**	**10.91**	**43.37**	**60.00**	**-16.63**	**Q**	**L1**
20.1020	**26.92**	**10.91**	**37.83**	**50.00**	**-12.17**	**A**	**L1**
26.2099	**30.83**	**11.07**	**41.90**	**60.00**	**-18.10**	**Q**	**L1**
26.2099	**25.28**	**11.07**	**36.35**	**50.00**	**-13.65**	**A**	**L1**

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

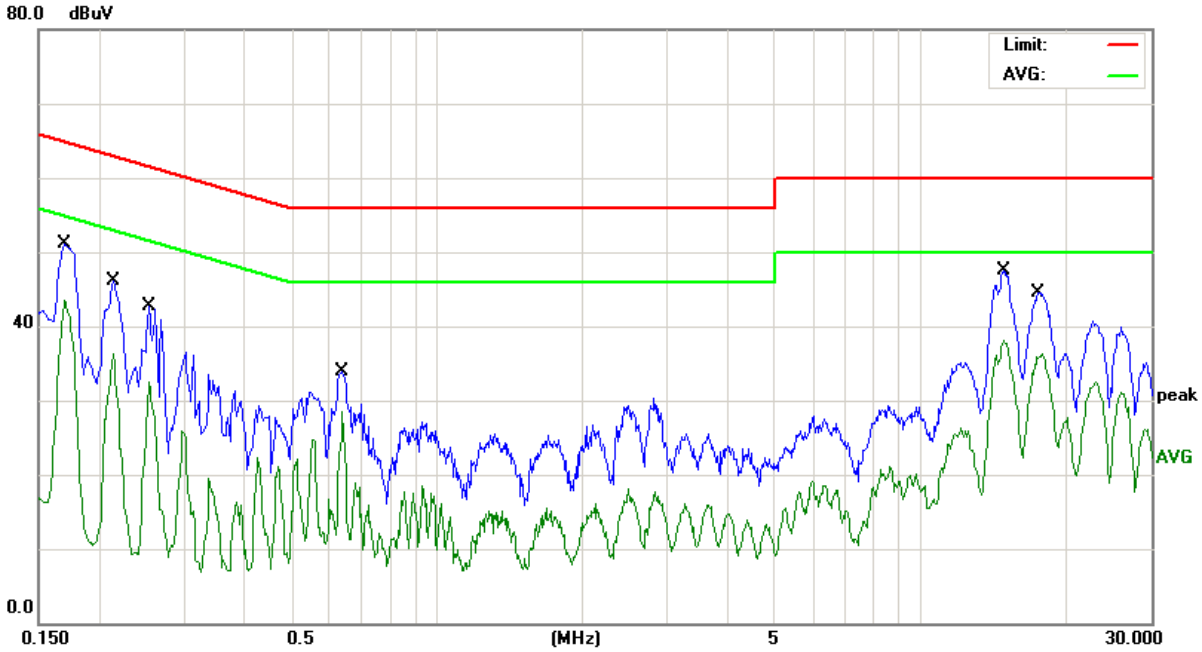
Model No.	KTPS65-1640DT-3P-VI	**6dB Bandwidth**	9 kHz
Environmental Conditions	25°C, 58% RH	**Test Mode**	Mode 7
Tested by	Stanley Cheng	**Phase**	L2
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				**150 kHz to 30 MHz**			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1500	**36.29**	**10.01**	**46.30**	**65.99**	**-19.69**	**Q**	**L2**
0.1500	**17.58**	**10.01**	**27.59**	**55.99**	**-28.40**	**A**	**L2**
0.1860	**41.38**	**10.02**	**51.40**	**64.21**	**-12.81**	**Q**	**L2**
0.1860	**20.56**	**10.02**	**30.58**	**54.21**	**-23.63**	**A**	**L2**
0.2580	**35.10**	**10.02**	**45.12**	**61.49**	**-16.37**	**Q**	**L2**
0.2580	**17.32**	**10.02**	**27.34**	**51.49**	**-24.15**	**A**	**L2**
0.4500	**26.40**	**10.04**	**36.44**	**56.87**	**-20.43**	**Q**	**L2**
0.4500	**11.67**	**10.04**	**21.71**	**46.87**	**-25.16**	**A**	**L2**
14.3340	**33.61**	**10.73**	**44.34**	**60.00**	**-15.66**	**Q**	**L2**
14.3340	**27.08**	**10.73**	**37.81**	**50.00**	**-12.19**	**A**	**L2**
22.2060	**30.52**	**10.95**	**41.47**	**60.00**	**-18.53**	**Q**	**L2**
22.2060	**24.75**	**10.95**	**35.70**	**50.00**	**-14.30**	**A**	**L2**

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

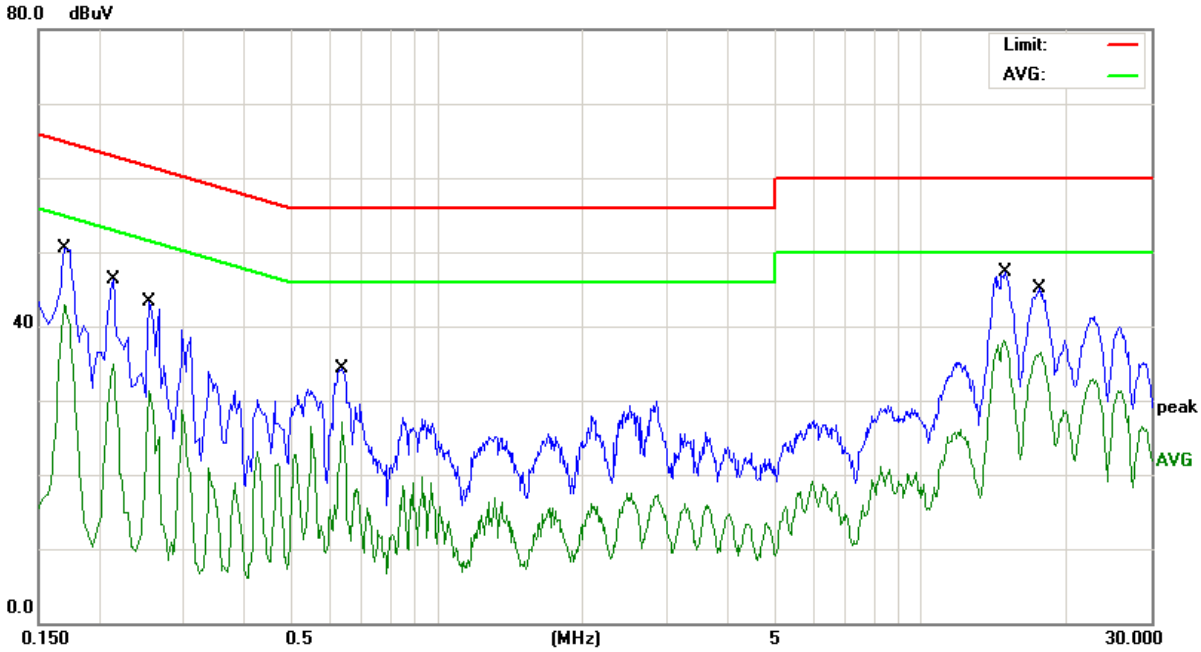
Model No.	KTPS65-1640DT-3P-VI	**6dB Bandwidth**	9 kHz
Environmental Conditions	25°C, 58% RH	**Test Mode**	Mode 8
Tested by	Stanley Cheng	**Phase**	L1
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				**150 kHz to 30 MHz**			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1700	**39.44**	**10.01**	**49.45**	**64.96**	**-15.51**	**Q**	**L1**
0.1700	**32.80**	**10.01**	**42.81**	**54.96**	**-12.15**	**A**	**L1**
0.2140	**34.42**	**10.02**	**44.44**	**63.04**	**-18.60**	**Q**	**L1**
0.2140	**24.32**	**10.02**	**34.34**	**53.04**	**-18.70**	**A**	**L1**
0.2540	**31.19**	**10.02**	**41.21**	**61.62**	**-20.41**	**Q**	**L1**
0.2540	**20.02**	**10.02**	**30.04**	**51.62**	**-21.58**	**A**	**L1**
0.6380	**22.01**	**10.07**	**32.08**	**56.00**	**-23.92**	**Q**	**L1**
0.6380	**16.11**	**10.07**	**26.18**	**46.00**	**-19.82**	**A**	**L1**
14.8980	**31.38**	**10.76**	**42.14**	**60.00**	**-17.86**	**Q**	**L1**
14.8980	**25.27**	**10.76**	**36.03**	**50.00**	**-13.97**	**A**	**L1**
17.5300	**29.71**	**10.84**	**40.55**	**60.00**	**-19.45**	**Q**	**L1**
17.5300	**24.43**	**10.84**	**35.27**	**50.00**	**-14.73**	**A**	**L1**

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

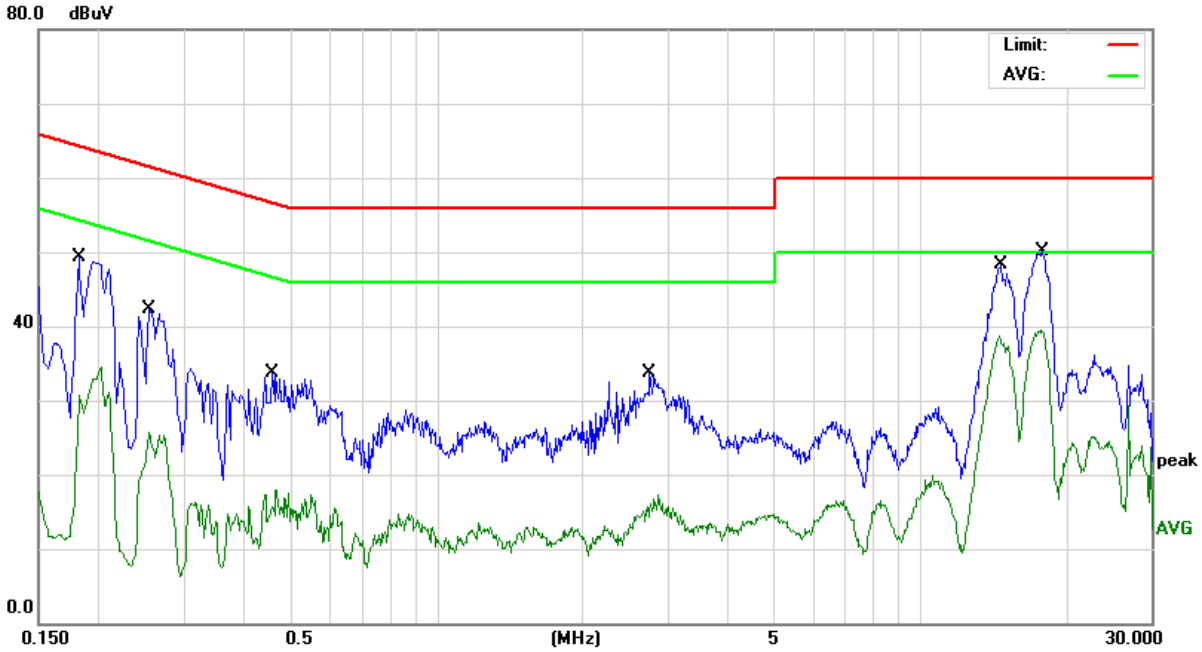
Model No.	KTPS65-1640DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 8
Tested by	Stanley Cheng	Phase	L2
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1700	39.24	10.01	49.25	64.96	-15.71	Q	L2
0.1700	32.80	10.01	42.81	54.96	-12.15	A	L2
0.2140	34.14	10.02	44.16	63.04	-18.88	Q	L2
0.2140	24.16	10.02	34.18	53.04	-18.86	A	L2
0.2540	31.02	10.02	41.04	61.62	-20.58	Q	L2
0.2540	20.18	10.02	30.20	51.62	-21.42	A	L2
0.6380	22.16	10.07	32.23	56.00	-23.77	Q	L2
0.6380	16.23	10.07	26.30	46.00	-19.70	A	L2
14.9340	30.95	10.76	41.71	60.00	-18.29	Q	L2
14.9340	24.73	10.76	35.49	50.00	-14.51	A	L2
17.6140	29.81	10.84	40.65	60.00	-19.35	Q	L2
17.6140	24.52	10.84	35.36	50.00	-14.64	A	L2

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

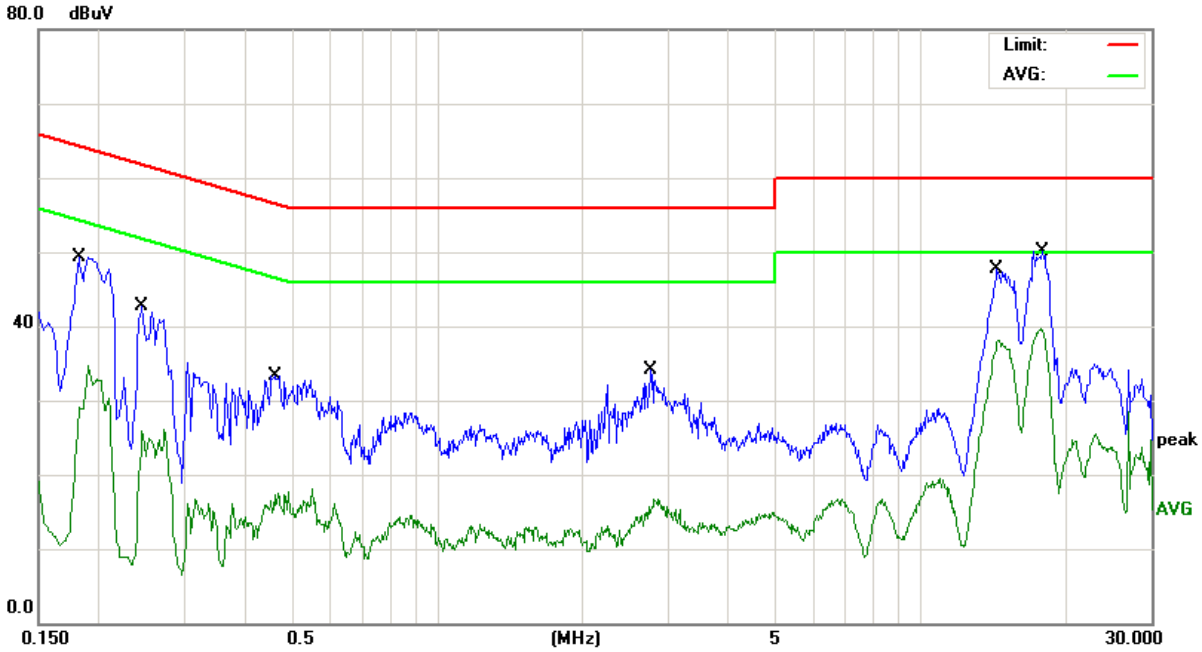
Model No.	KTPS65-1836DT-3P-VI	**6dB Bandwidth**	9 kHz
Environmental Conditions	25°C, 58% RH	**Test Mode**	Mode 9
Tested by	Stanley Cheng	**Phase**	L1
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				**150 kHz to 30 MHz**			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1819	**35.42**	**10.02**	**45.44**	**64.39**	**-18.95**	**Q**	**L1**
0.1819	**16.35**	**10.02**	**26.37**	**54.39**	**-28.02**	**A**	**L1**
0.2540	**28.30**	**10.02**	**38.32**	**61.62**	**-23.30**	**Q**	**L1**
0.2540	**13.64**	**10.02**	**23.66**	**51.62**	**-27.96**	**A**	**L1**
0.4580	**19.40**	**10.05**	**29.45**	**56.73**	**-27.28**	**Q**	**L1**
0.4580	**5.76**	**10.05**	**15.81**	**46.73**	**-30.92**	**A**	**L1**
2.7620	**16.10**	**10.32**	**26.42**	**56.00**	**-29.58**	**Q**	**L1**
2.7620	**3.43**	**10.32**	**13.75**	**46.00**	**-32.25**	**A**	**L1**
14.6900	**31.42**	**10.75**	**42.17**	**60.00**	**-17.83**	**Q**	**L1**
14.6900	**26.09**	**10.75**	**36.84**	**50.00**	**-13.16**	**A**	**L1**
17.8060	**32.95**	**10.84**	**43.79**	**60.00**	**-16.21**	**Q**	**L1**
17.8060	**26.59**	**10.84**	**37.43**	**50.00**	**-12.57**	**A**	**L1**

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

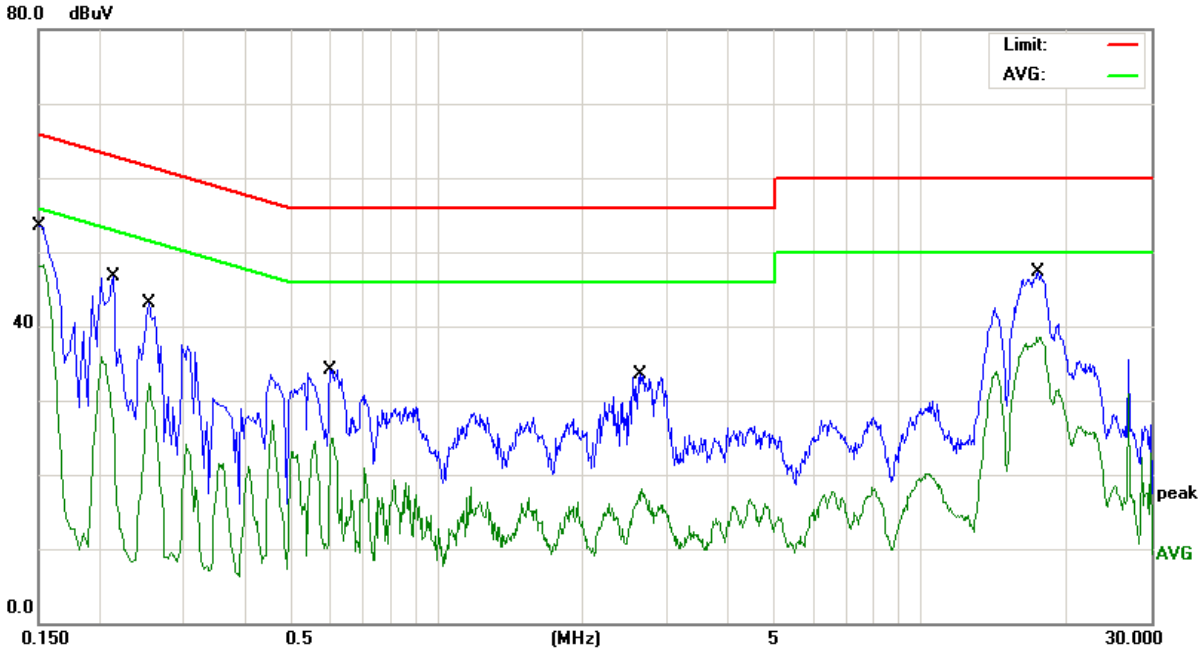
Model No.	KTPS65-1836DT-3P-VI	**6dB Bandwidth**	9 kHz
Environmental Conditions	25°C, 58% RH	**Test Mode**	Mode 9
Tested by	Stanley Cheng	**Phase**	L2
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				**150 kHz to 30 MHz**			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1819	**35.53**	**10.02**	**45.55**	**64.39**	**-18.84**	**Q**	**L2**
0.1819	**15.86**	**10.02**	**25.88**	**54.39**	**-28.51**	**A**	**L2**
0.2460	**28.70**	**10.01**	**38.71**	**61.89**	**-23.18**	**Q**	**L2**
0.2460	**11.44**	**10.01**	**21.45**	**51.89**	**-30.44**	**A**	**L2**
0.4620	**19.00**	**10.05**	**29.05**	**56.66**	**-27.61**	**Q**	**L2**
0.4620	**5.52**	**10.05**	**15.57**	**46.66**	**-31.09**	**A**	**L2**
2.7659	**15.73**	**10.32**	**26.05**	**56.00**	**-29.95**	**Q**	**L2**
2.7659	**3.27**	**10.32**	**13.59**	**46.00**	**-32.41**	**A**	**L2**
14.3980	**30.99**	**10.74**	**41.73**	**60.00**	**-18.27**	**Q**	**L2**
14.3980	**25.87**	**10.74**	**36.61**	**50.00**	**-13.39**	**A**	**L2**
17.8620	**32.87**	**10.84**	**43.71**	**60.00**	**-16.29**	**Q**	**L2**
17.8620	**26.71**	**10.84**	**37.55**	**50.00**	**-12.45**	**A**	**L2**

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

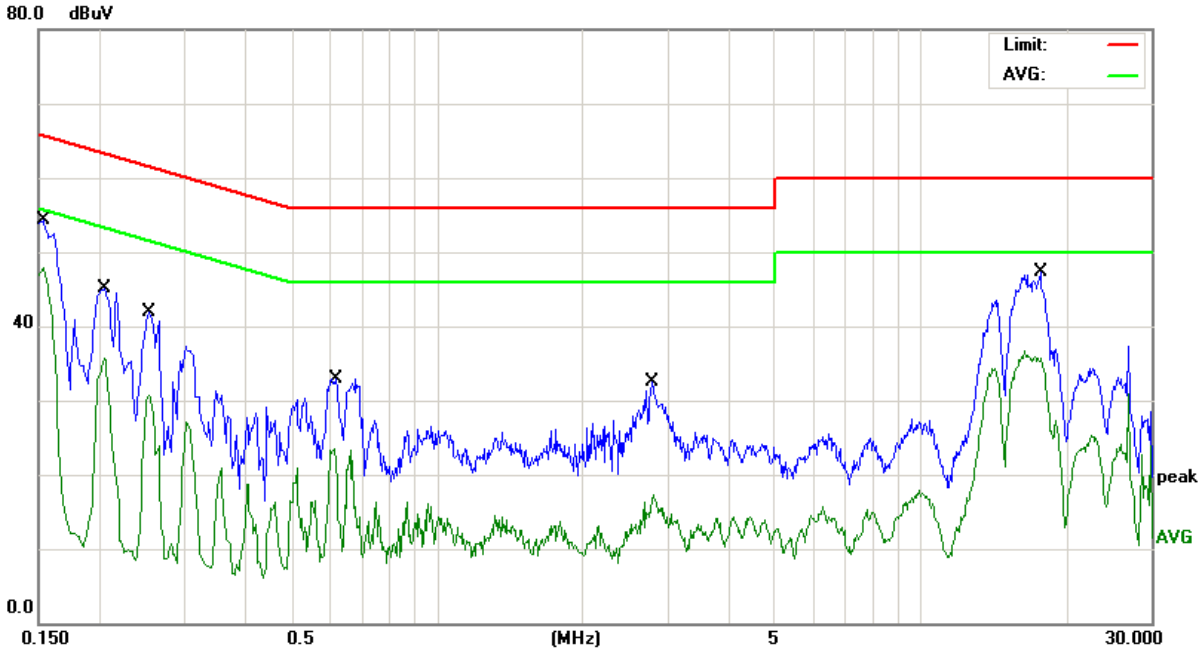
Model No.	KTPS65-1836DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 10
Tested by	Stanley Cheng	Phase	L1
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1500	43.07	10.01	53.08	65.99	-12.91	Q	L1
0.1500	36.80	10.01	46.81	55.99	-9.18	A	L1
0.2140	30.94	10.02	40.96	63.04	-22.08	Q	L1
0.2140	12.69	10.02	22.71	53.04	-30.33	A	L1
0.2540	31.03	10.02	41.05	61.62	-20.57	Q	L1
0.2540	21.73	10.02	31.75	51.62	-19.87	A	L1
0.6020	21.37	10.07	31.44	56.00	-24.56	Q	L1
0.6020	11.41	10.07	21.48	46.00	-24.52	A	L1
2.6260	18.22	10.30	28.52	56.00	-27.48	Q	L1
2.6260	6.08	10.30	16.38	46.00	-29.62	A	L1
17.5259	31.44	10.84	42.28	60.00	-17.72	Q	L1
17.5259	25.78	10.84	36.62	50.00	-13.38	A	L1

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

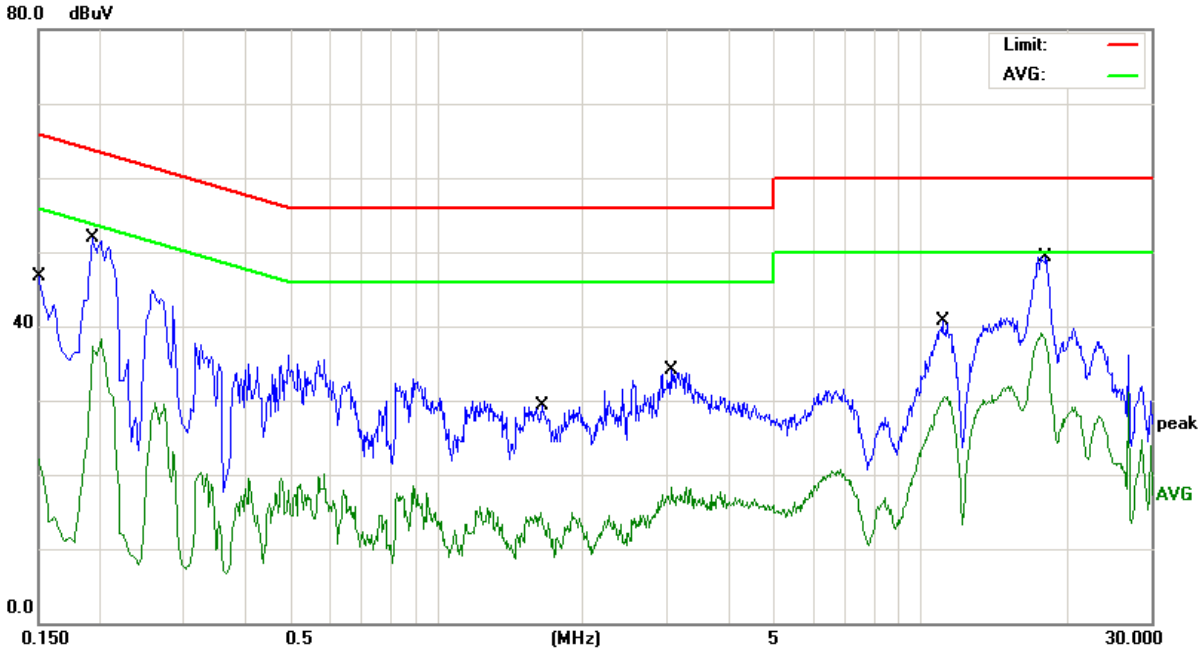
Model No.	KTPS65-1836DT-3P-VI	**6dB Bandwidth**	9 kHz
Environmental Conditions	25°C, 58% RH	**Test Mode**	Mode 10
Tested by	Stanley Cheng	**Phase**	L2
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				**150 kHz to 30 MHz**			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1539	**41.94**	**10.01**	**51.95**	**65.78**	**-13.83**	**Q**	**L2**
0.1539	**36.92**	**10.01**	**46.93**	**55.78**	**-8.85**	**A**	**L2**
0.2060	**33.53**	**10.02**	**43.55**	**63.36**	**-19.81**	**Q**	**L2**
0.2060	**23.35**	**10.02**	**33.37**	**53.36**	**-19.99**	**A**	**L2**
0.2540	**29.16**	**10.02**	**39.18**	**61.62**	**-22.44**	**Q**	**L2**
0.2540	**20.15**	**10.02**	**30.17**	**51.62**	**-21.45**	**A**	**L2**
0.6180	**19.74**	**10.07**	**29.81**	**56.00**	**-26.19**	**Q**	**L2**
0.6180	**10.51**	**10.07**	**20.58**	**46.00**	**-25.42**	**A**	**L2**
2.7860	**15.35**	**10.32**	**25.67**	**56.00**	**-30.33**	**Q**	**L2**
2.7860	**3.50**	**10.32**	**13.82**	**46.00**	**-32.18**	**A**	**L2**
17.6860	**29.16**	**10.84**	**40.00**	**60.00**	**-20.00**	**Q**	**L2**
17.6860	**22.76**	**10.84**	**33.60**	**50.00**	**-16.40**	**A**	**L2**

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

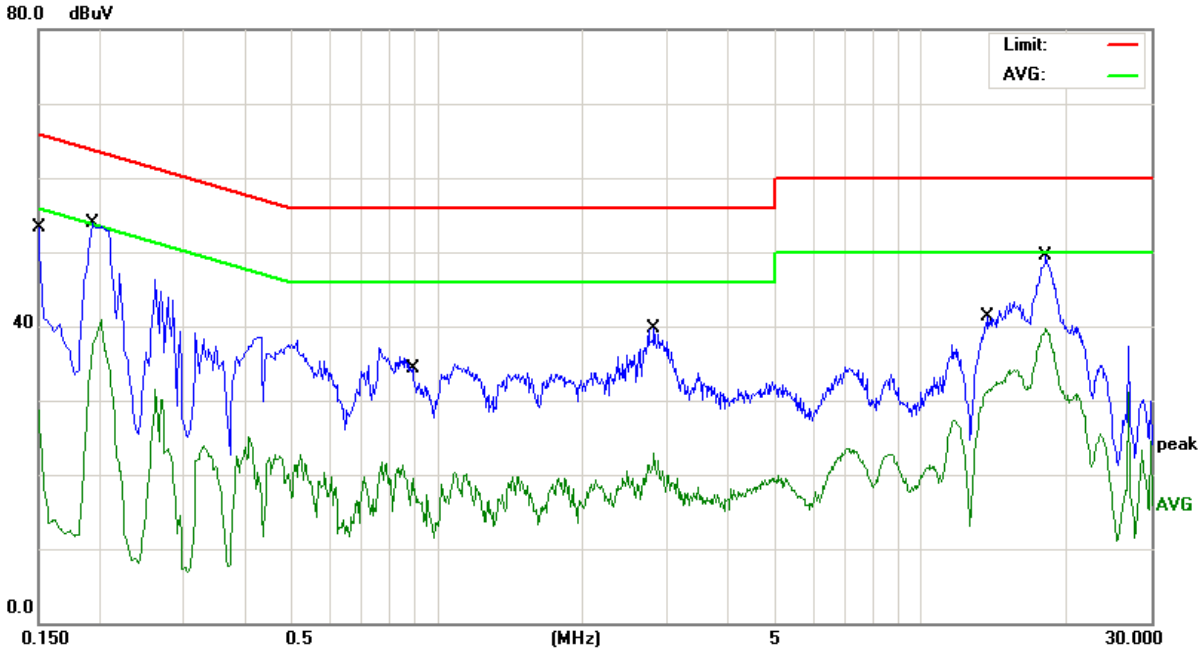
Model No.	KTPS65-1934DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 11
Tested by	Stanley Cheng	Phase	L1
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1500	32.96	10.01	42.97	65.99	-23.02	Q	L1
0.1500	14.10	10.01	24.11	55.99	-31.88	A	L1
0.1940	39.34	10.02	49.36	63.86	-14.50	Q	L1
0.1940	24.70	10.02	34.72	53.86	-19.14	A	L1
1.6460	14.27	10.21	24.48	56.00	-31.52	Q	L1
1.6460	3.02	10.21	13.23	46.00	-32.77	A	L1
3.0460	16.45	10.33	26.78	56.00	-29.22	Q	L1
3.0460	4.75	10.33	15.08	46.00	-30.92	A	L1
11.1340	23.36	10.59	33.95	60.00	-26.05	Q	L1
11.1340	17.78	10.59	28.37	50.00	-21.63	A	L1
18.1900	32.13	10.86	42.99	60.00	-17.01	Q	L1
18.1900	26.05	10.86	36.91	50.00	-13.09	A	L1

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

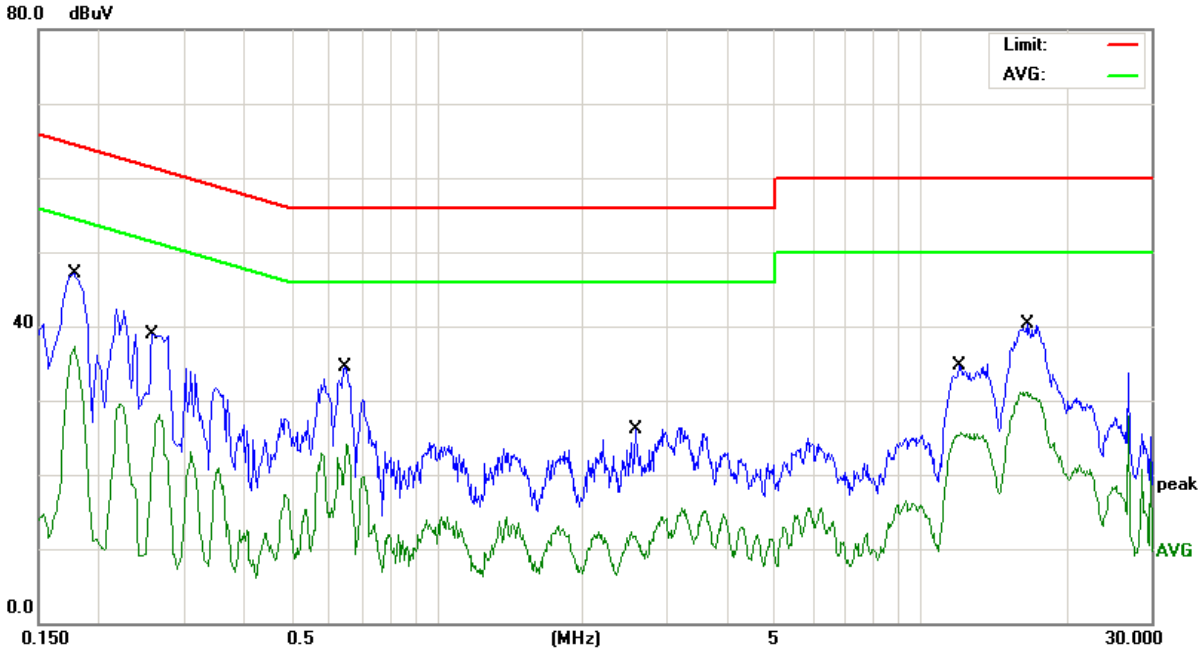
Model No.	KTPS65-1934DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 11
Tested by	Stanley Cheng	Phase	L2
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1500	34.38	10.01	44.39	65.99	-21.60	Q	L2
0.1500	15.51	10.01	25.52	55.99	-30.47	A	L2
0.1940	40.95	10.02	50.97	63.86	-12.89	Q	L2
0.1940	26.04	10.02	36.06	53.86	-17.80	A	L2
0.8940	20.83	10.11	30.94	56.00	-25.06	Q	L2
0.8940	8.33	10.11	18.44	46.00	-27.56	A	L2
2.8100	24.21	10.32	34.53	56.00	-21.47	Q	L2
2.8100	11.07	10.32	21.39	46.00	-24.61	A	L2
13.8180	25.03	10.71	35.74	60.00	-24.26	Q	L2
13.8180	19.96	10.71	30.67	50.00	-19.33	A	L2
18.1900	32.93	10.86	43.79	60.00	-16.21	Q	L2
18.1900	27.52	10.86	38.38	50.00	-11.62	A	L2

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

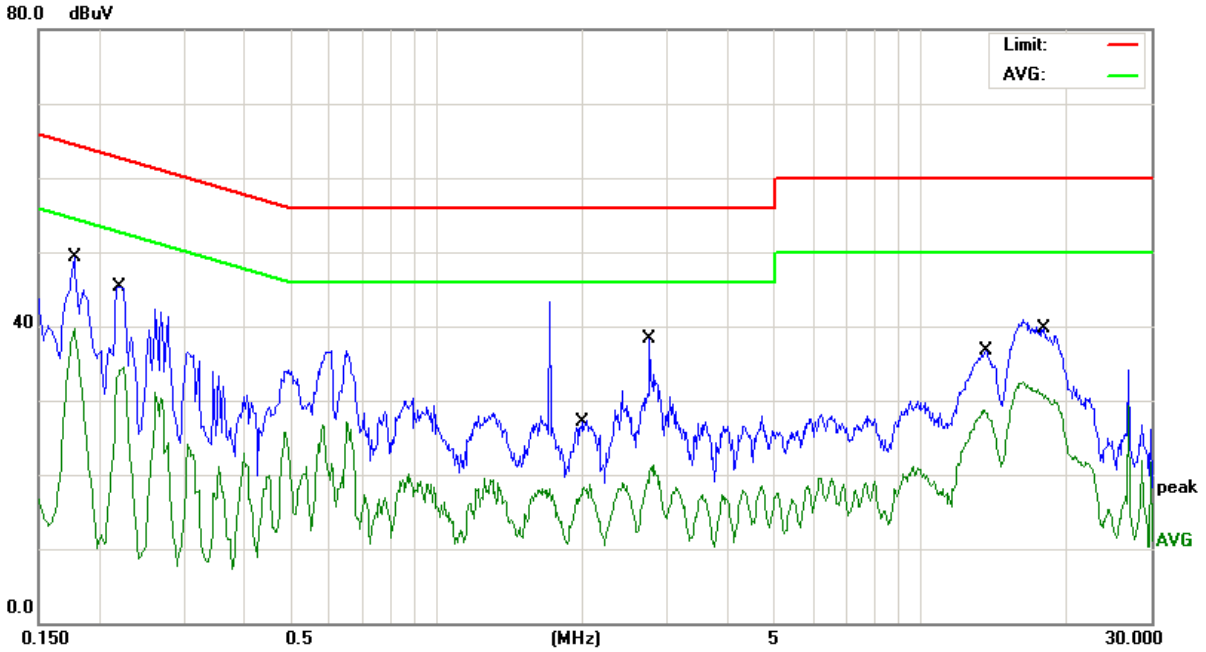
Model No.	KTPS65-1934DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 12
Tested by	Stanley Cheng	Phase	L1
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1780	34.64	10.02	44.66	64.57	-19.91	Q	L1
0.1780	25.82	10.02	35.84	54.57	-18.73	A	L1
0.2580	24.54	10.02	34.56	61.49	-26.93	Q	L1
0.2580	11.34	10.02	21.36	51.49	-30.13	A	L1
0.6460	21.59	10.07	31.66	56.00	-24.34	Q	L1
0.6460	10.99	10.07	21.06	46.00	-24.94	A	L1
2.5740	7.34	10.29	17.63	56.00	-38.37	Q	L1
2.5740	0.60	10.29	10.89	46.00	-35.11	A	L1
12.0340	18.62	10.63	29.25	60.00	-30.75	Q	L1
12.0340	13.52	10.63	24.15	50.00	-25.85	A	L1
16.6220	23.61	10.81	34.42	60.00	-25.58	Q	L1
16.6220	18.54	10.81	29.35	50.00	-20.65	A	L1

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

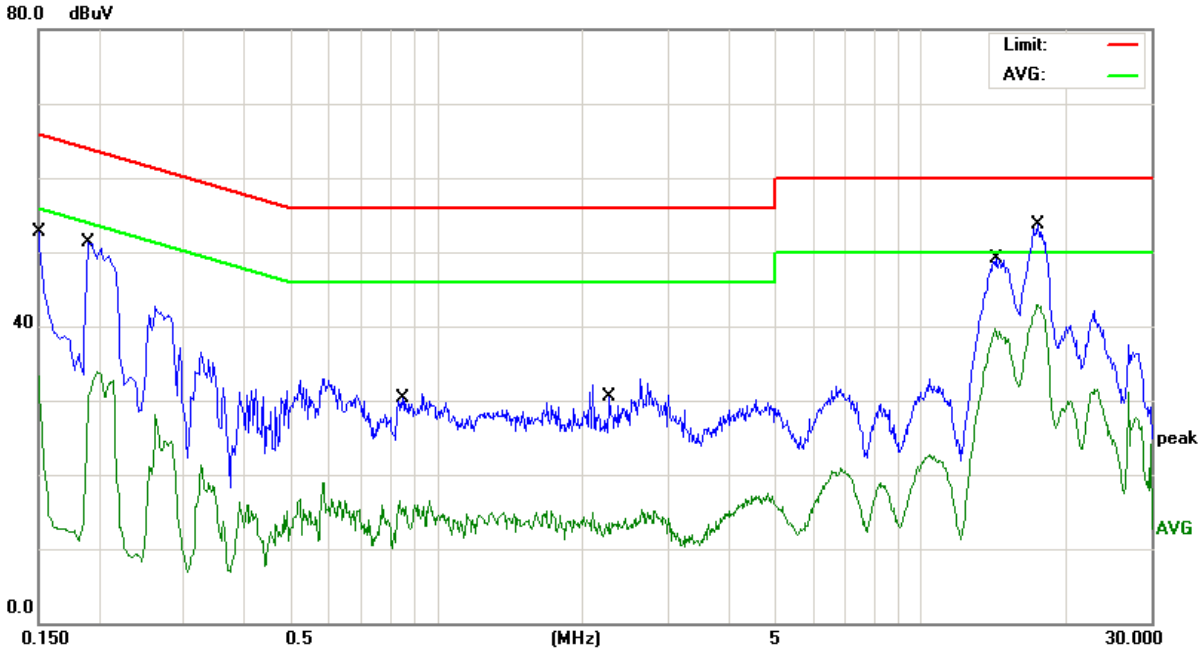
Model No.	KTPS65-1934DT-3P-VI	**6dB Bandwidth**	9 kHz
Environmental Conditions	25°C, 58% RH	**Test Mode**	Mode 12
Tested by	Stanley Cheng	**Phase**	L2
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				**150 kHz to 30 MHz**			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1780	**37.49**	**10.02**	**47.51**	**64.57**	**-17.06**	**Q**	**L2**
0.1780	**29.20**	**10.02**	**39.22**	**54.57**	**-15.35**	**A**	**L2**
0.2220	**33.11**	**10.02**	**43.13**	**62.74**	**-19.61**	**Q**	**L2**
0.2220	**22.43**	**10.02**	**32.45**	**52.74**	**-20.29**	**A**	**L2**
2.0059	**13.59**	**10.25**	**23.84**	**56.00**	**-32.16**	**Q**	**L2**
2.0059	**7.58**	**10.25**	**17.83**	**46.00**	**-28.17**	**A**	**L2**
2.7580	**17.67**	**10.32**	**27.99**	**56.00**	**-28.01**	**Q**	**L2**
2.7580	**9.85**	**10.32**	**20.17**	**46.00**	**-25.83**	**A**	**L2**
13.6340	**21.86**	**10.70**	**32.56**	**60.00**	**-27.44**	**Q**	**L2**
13.6340	**16.90**	**10.70**	**27.60**	**50.00**	**-22.40**	**A**	**L2**
17.9980	**23.69**	**10.85**	**34.54**	**60.00**	**-25.46**	**Q**	**L2**
17.9980	**18.64**	**10.85**	**29.49**	**50.00**	**-20.51**	**A**	**L2**

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

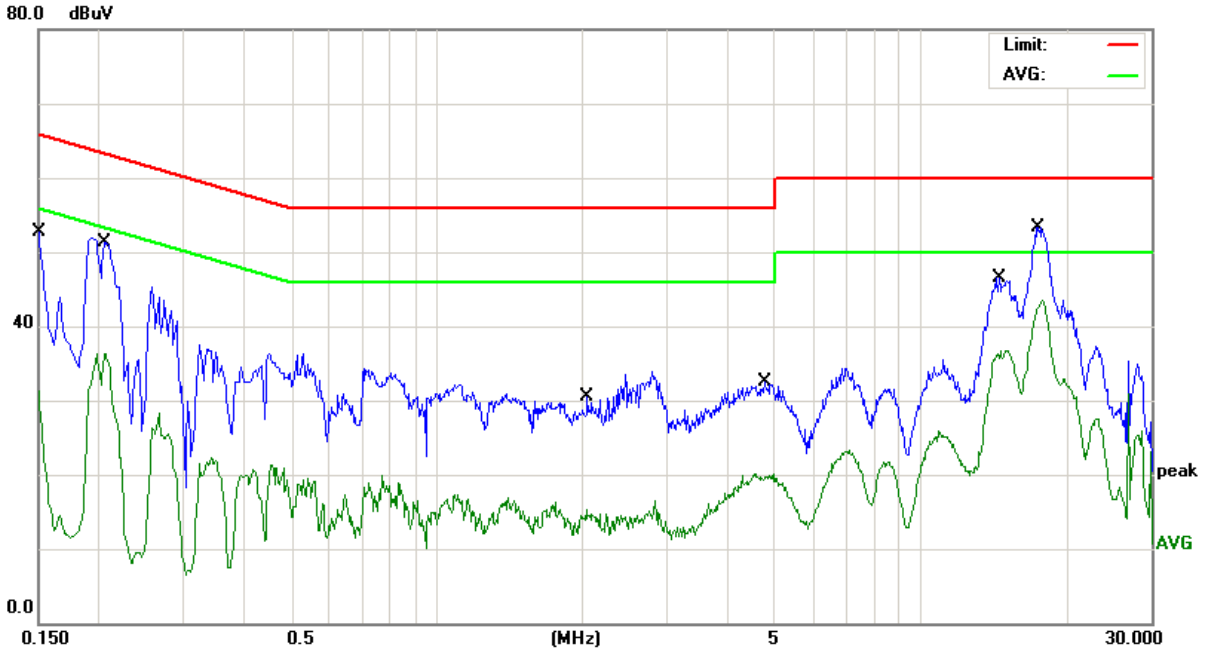
Model No.	KTPS65-2032DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 13
Tested by	Stanley Cheng	Phase	L1
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1500	39.69	10.01	49.70	65.99	-16.29	Q	L1
0.1500	21.06	10.01	31.07	55.99	-24.92	A	L1
0.1900	36.26	10.02	46.28	64.03	-17.75	Q	L1
0.1900	14.07	10.02	24.09	54.03	-29.94	A	L1
0.8500	17.18	10.11	27.29	56.00	-28.71	Q	L1
0.8500	5.38	10.11	15.49	46.00	-30.51	A	L1
2.2740	12.88	10.28	23.16	56.00	-32.84	Q	L1
2.2740	1.66	10.28	11.94	46.00	-34.06	A	L1
14.3020	32.84	10.73	43.57	60.00	-16.43	Q	L1
14.3020	25.84	10.73	36.57	50.00	-13.43	A	L1
17.5540	36.64	10.84	47.48	60.00	-12.52	Q	L1
17.5540	29.30	10.84	40.14	50.00	-9.86	A	L1

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

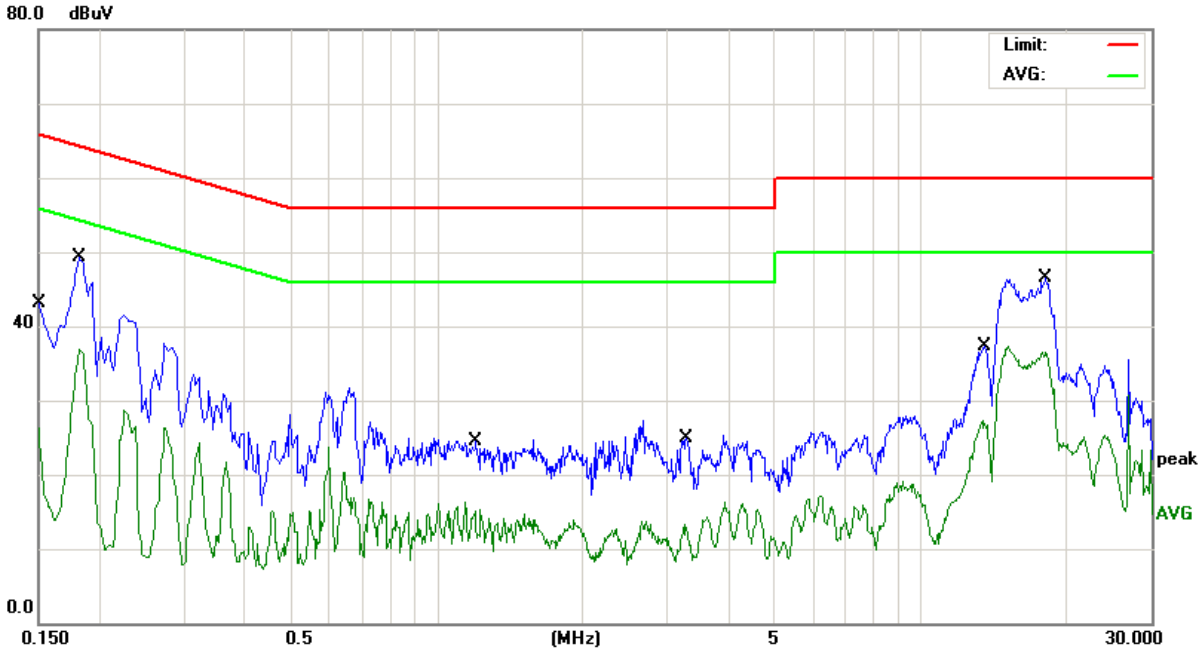
Model No.	KTPS65-2032DT-3P-VI	**6dB Bandwidth**	9 kHz
Environmental Conditions	25°C, 58% RH	**Test Mode**	Mode 13
Tested by	Stanley Cheng	**Phase**	L2
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				**150 kHz to 30 MHz**			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1500	**39.66**	**10.01**	**49.67**	**65.99**	**-16.32**	**Q**	**L2**
0.1500	**21.40**	**10.01**	**31.41**	**55.99**	**-24.58**	**A**	**L2**
0.2060	**38.11**	**10.02**	**48.13**	**63.36**	**-15.23**	**Q**	**L2**
0.2060	**23.59**	**10.02**	**33.61**	**53.36**	**-19.75**	**A**	**L2**
2.0500	**15.16**	**10.25**	**25.41**	**56.00**	**-30.59**	**Q**	**L2**
2.0500	**3.87**	**10.25**	**14.12**	**46.00**	**-31.88**	**A**	**L2**
4.7500	**16.69**	**10.37**	**27.06**	**56.00**	**-28.94**	**Q**	**L2**
4.7500	**8.65**	**10.37**	**19.02**	**46.00**	**-26.98**	**A**	**L2**
14.5500	**29.41**	**10.75**	**40.16**	**60.00**	**-19.84**	**Q**	**L2**
14.5500	**23.47**	**10.75**	**34.22**	**50.00**	**-15.78**	**A**	**L2**
17.5580	**35.95**	**10.84**	**46.79**	**60.00**	**-13.21**	**Q**	**L2**
17.5580	**29.49**	**10.84**	**40.33**	**50.00**	**-9.67**	**A**	**L2**

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

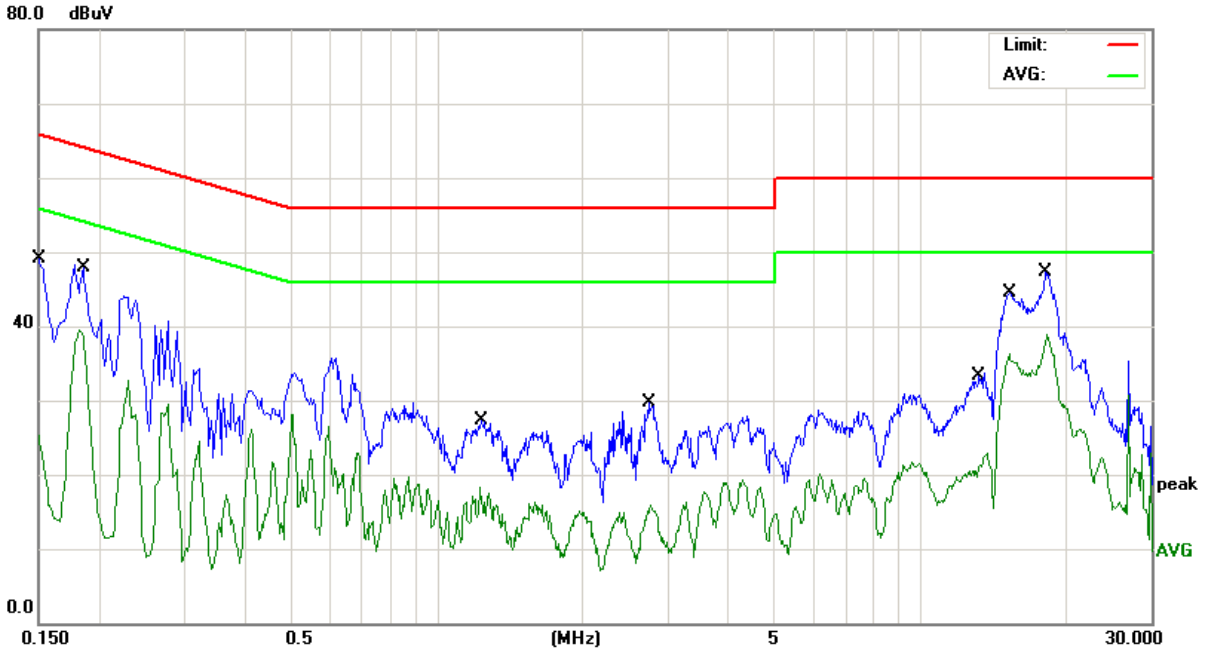
Model No.	KTPS65-2032DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 14
Tested by	Stanley Cheng	Phase	L1
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1500	31.56	10.01	41.57	65.99	-24.42	Q	L1
0.1500	14.84	10.01	24.85	55.99	-31.14	A	L1
0.1819	37.36	10.02	47.38	64.39	-17.01	Q	L1
0.1819	27.19	10.02	37.21	54.39	-17.18	A	L1
1.2059	9.61	10.16	19.77	56.00	-36.23	Q	L1
1.2059	1.85	10.16	12.01	46.00	-33.99	A	L1
3.2780	8.15	10.35	18.50	56.00	-37.50	Q	L1
3.2780	0.72	10.35	11.07	46.00	-34.93	A	L1
13.5980	20.83	10.70	31.53	60.00	-28.47	Q	L1
13.5980	14.04	10.70	24.74	50.00	-25.26	A	L1
18.2099	30.28	10.86	41.14	60.00	-18.86	Q	L1
18.2099	23.41	10.86	34.27	50.00	-15.73	A	L1

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

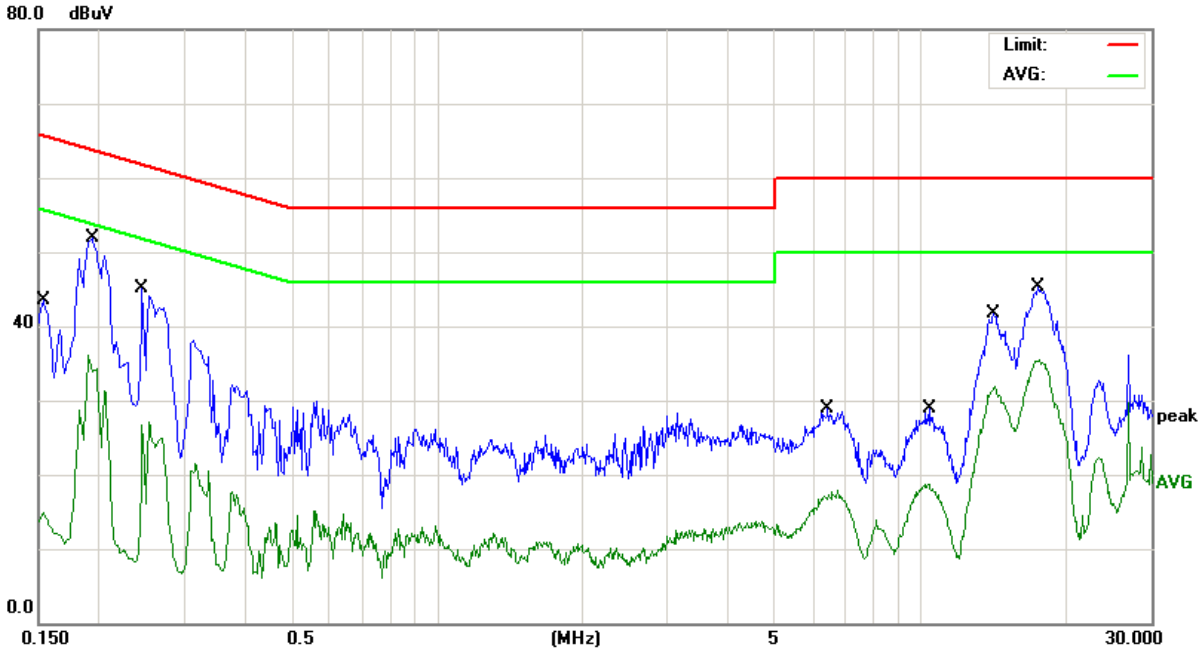
Model No.	KTPS65-2032DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 14
Tested by	Stanley Cheng	Phase	L2
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1500	32.25	10.01	42.26	65.99	-23.73	Q	L2
0.1500	15.56	10.01	25.57	55.99	-30.42	A	L2
0.1860	34.94	10.02	44.96	64.21	-19.25	Q	L2
0.1860	27.25	10.02	37.27	54.21	-16.94	A	L2
1.2380	14.25	10.16	24.41	56.00	-31.59	Q	L2
1.2380	7.59	10.16	17.75	46.00	-28.25	A	L2
2.7500	14.01	10.30	24.31	56.00	-31.69	Q	L2
2.7500	4.32	10.30	14.62	46.00	-31.38	A	L2
13.2340	16.35	10.68	27.03	60.00	-32.97	Q	L2
13.2340	8.01	10.68	18.69	50.00	-31.31	A	L2
15.3780	28.92	10.77	39.69	60.00	-20.31	Q	L2
15.3780	23.15	10.77	33.92	50.00	-16.08	A	L2
18.1180	30.60	10.85	41.45	60.00	-18.55	Q	L2
18.1180	24.56	10.85	35.41	50.00	-14.59	A	L2

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

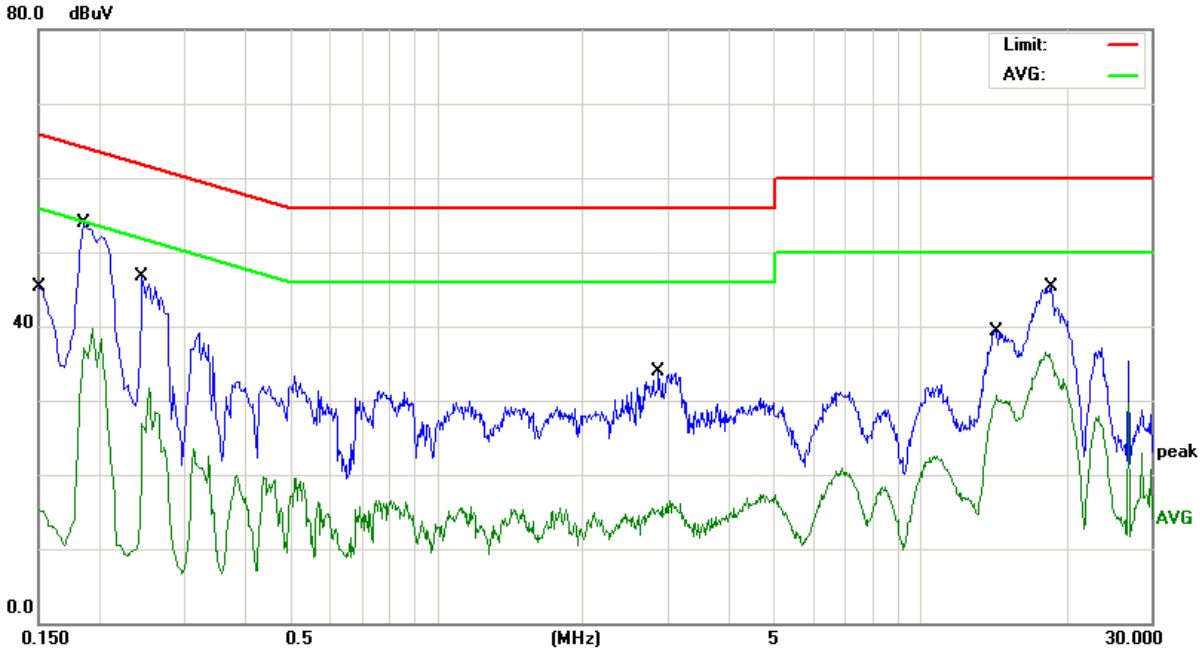
Model No.	KTPS65-2427DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 15
Tested by	Stanley Cheng	Phase	L1
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1539	23.37	10.01	33.38	65.78	-32.40	Q	L1
0.1539	3.05	10.01	13.06	55.78	-42.72	A	L1
0.1940	39.73	10.02	49.75	63.86	-14.11	Q	L1
0.1940	23.90	10.02	33.92	53.86	-19.94	A	L1
0.2460	31.31	10.01	41.32	61.89	-20.57	Q	L1
0.2460	9.70	10.01	19.71	51.89	-32.18	A	L1
6.4460	12.91	10.42	23.33	60.00	-36.67	Q	L1
6.4460	6.44	10.42	16.86	50.00	-33.14	A	L1
10.4060	12.08	10.56	22.64	60.00	-37.36	Q	L1
10.4060	6.94	10.56	17.50	50.00	-32.50	A	L1
14.1820	25.26	10.72	35.98	60.00	-24.02	Q	L1
14.1820	19.90	10.72	30.62	50.00	-19.38	A	L1
17.4980	28.87	10.84	39.71	60.00	-20.29	Q	L1
17.4980	23.35	10.84	34.19	50.00	-15.81	A	L1

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

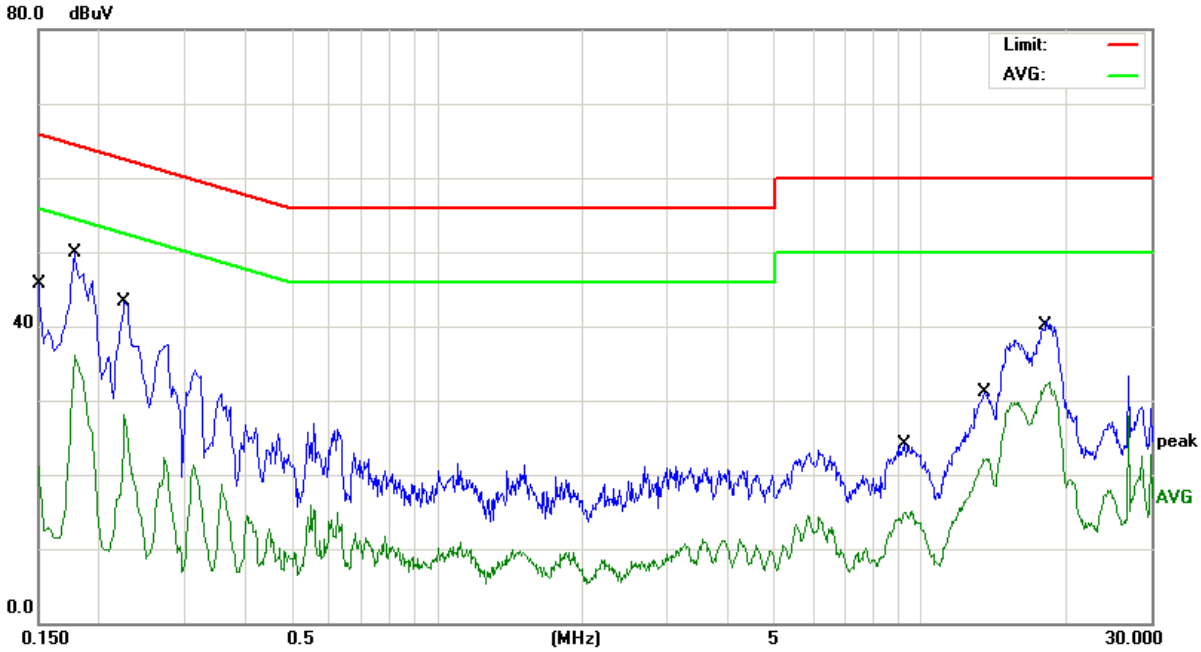
Model No.	KTPS65-2427DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 15
Tested by	Stanley Cheng	Phase	L2
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1500	26.32	10.01	36.33	65.99	-29.66	Q	L2
0.1500	4.72	10.01	14.73	55.99	-41.26	A	L2
0.1860	40.49	10.02	50.51	64.21	-13.70	Q	L2
0.1860	22.57	10.02	32.59	54.21	-21.62	A	L2
0.2460	31.64	10.01	41.65	61.89	-20.24	Q	L2
0.2460	11.34	10.01	21.35	51.89	-30.54	A	L2
2.8699	16.56	10.32	26.88	56.00	-29.12	Q	L2
2.8699	3.80	10.32	14.12	46.00	-31.88	A	L2
14.3660	23.17	10.73	33.90	60.00	-26.10	Q	L2
14.3660	18.09	10.73	28.82	50.00	-21.18	A	L2
18.6860	28.70	10.87	39.57	60.00	-20.43	Q	L2
18.6860	23.59	10.87	34.46	50.00	-15.54	A	L2

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

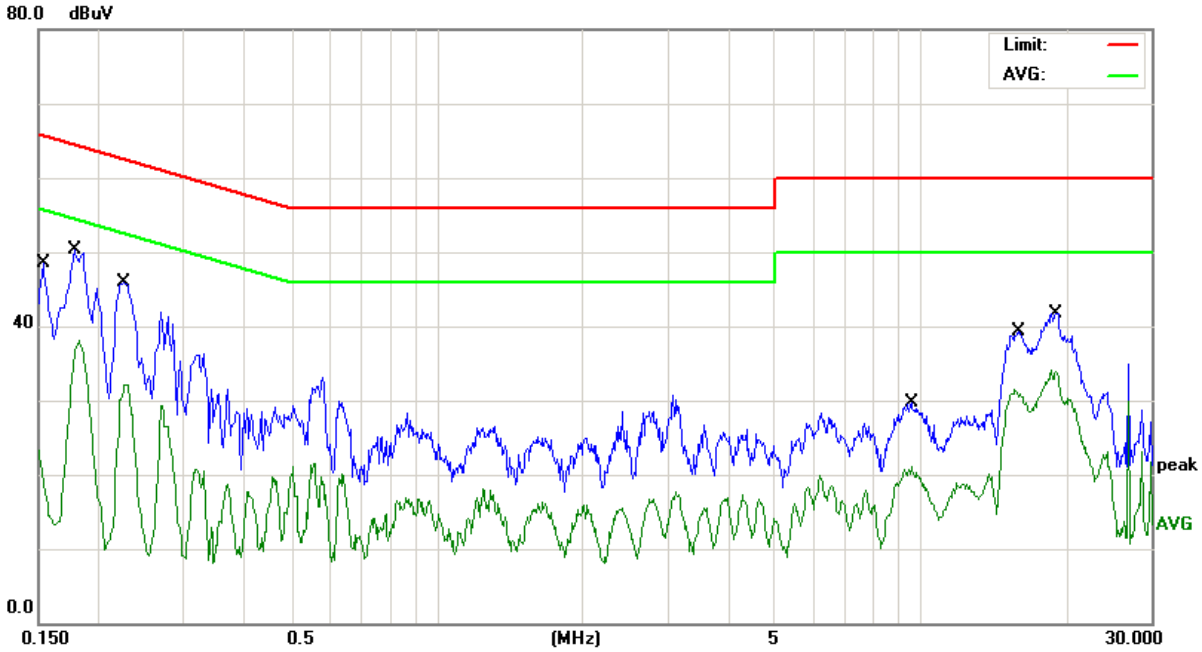
Model No.	KTPS65-2427DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 16
Tested by	Stanley Cheng	Phase	L1
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1500	28.03	10.01	38.04	65.99	-27.95	Q	L1
0.1500	9.81	10.01	19.82	55.99	-36.17	A	L1
0.1780	37.34	10.02	47.36	64.57	-17.21	Q	L1
0.1780	23.50	10.02	33.52	54.57	-21.05	A	L1
0.2260	31.15	10.01	41.16	62.59	-21.43	Q	L1
0.2260	17.15	10.01	27.16	52.59	-25.43	A	L1
9.2940	9.47	10.51	19.98	60.00	-40.02	Q	L1
9.2940	4.48	10.51	14.99	50.00	-35.01	A	L1
13.5860	15.38	10.70	26.08	60.00	-33.92	Q	L1
13.5860	10.29	10.70	20.99	50.00	-29.01	A	L1
17.9260	24.55	10.84	35.39	60.00	-24.61	Q	L1
17.9260	19.40	10.84	30.24	50.00	-19.76	A	L1

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

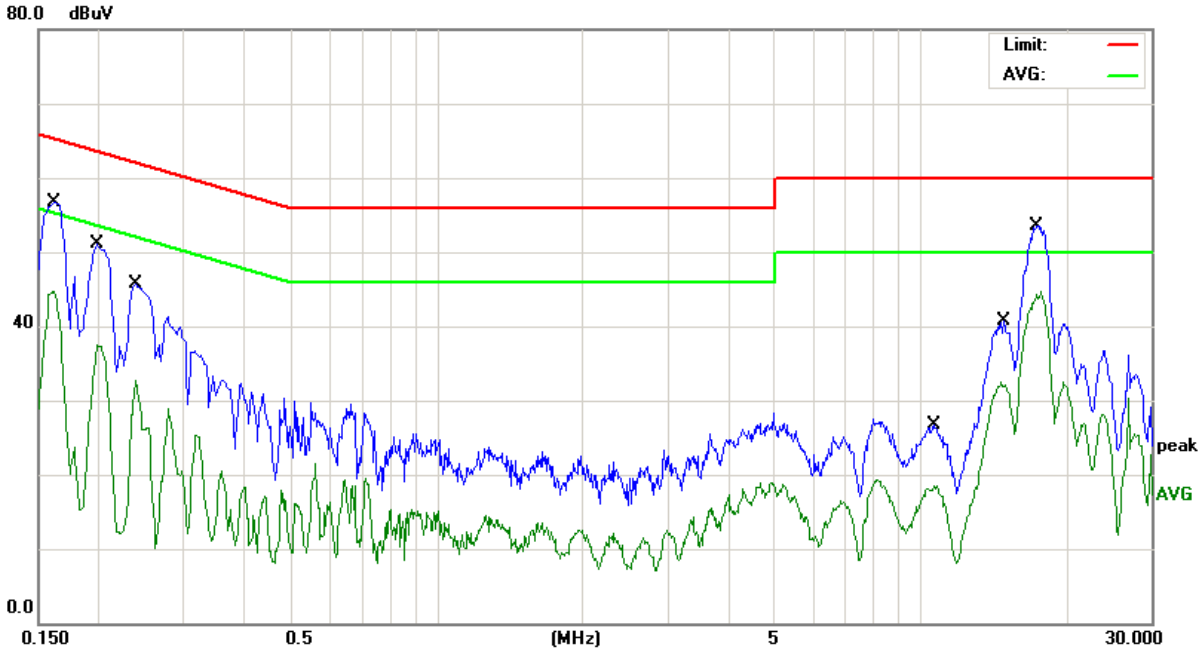
Model No.	KTPS65-2427DT-3P-VI	**6dB Bandwidth**	9 kHz
Environmental Conditions	25°C, 58% RH	**Test Mode**	Mode 16
Tested by	Stanley Cheng	**Phase**	L2
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				**150 kHz to 30 MHz**			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1539	**26.37**	**10.01**	**36.38**	**65.78**	**-29.40**	**Q**	**L2**
0.1539	**5.17**	**10.01**	**15.18**	**55.78**	**-40.60**	**A**	**L2**
0.1780	**38.33**	**10.02**	**48.35**	**64.57**	**-16.22**	**Q**	**L2**
0.1780	**26.58**	**10.02**	**36.60**	**54.57**	**-17.97**	**A**	**L2**
0.2260	**33.42**	**10.01**	**43.43**	**62.59**	**-19.16**	**Q**	**L2**
0.2260	**21.30**	**10.01**	**31.31**	**52.59**	**-21.28**	**A**	**L2**
9.5900	**14.09**	**10.53**	**24.62**	**60.00**	**-35.38**	**Q**	**L2**
9.5900	**9.08**	**10.53**	**19.61**	**50.00**	**-30.39**	**A**	**L2**
15.9100	**24.42**	**10.79**	**35.21**	**60.00**	**-24.79**	**Q**	**L2**
15.9100	**19.50**	**10.79**	**30.29**	**50.00**	**-19.71**	**A**	**L2**
19.0459	**26.87**	**10.88**	**37.75**	**60.00**	**-22.25**	**Q**	**L2**
19.0459	**21.88**	**10.88**	**32.76**	**50.00**	**-17.24**	**A**	**L2**

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

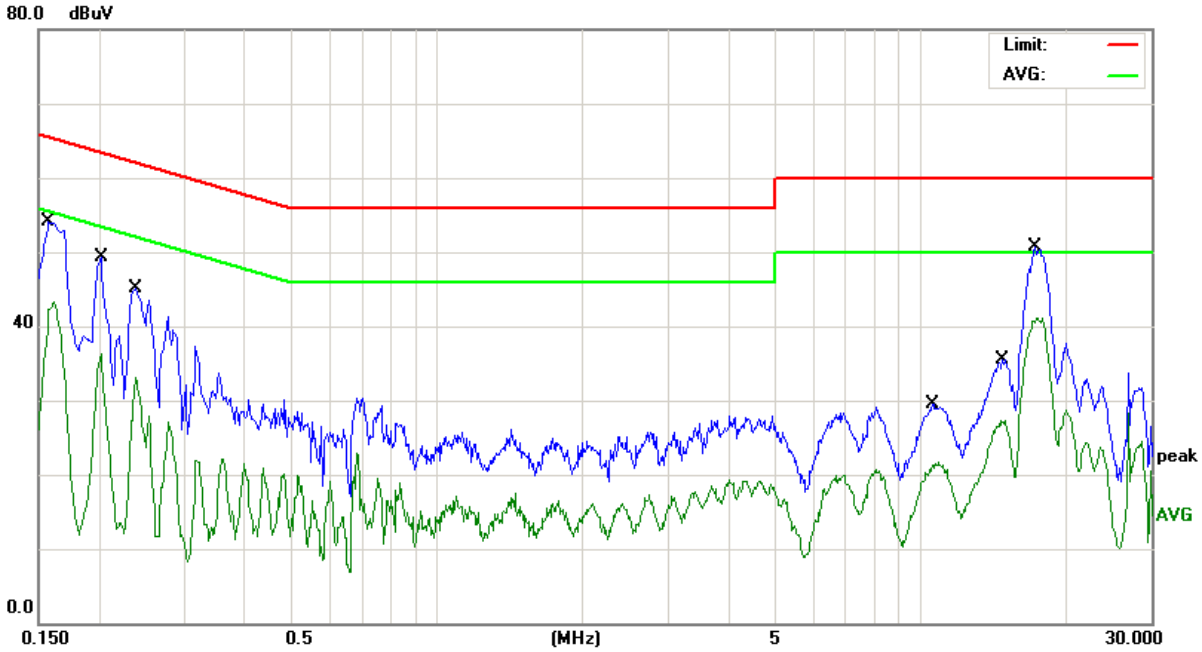
Model No.	KTPS65-2427DT-3P-VI-HP	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 17
Tested by	Stanley Cheng	Phase	L1
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1620	44.54	10.01	54.55	65.36	-10.81	Q	L1
0.1620	34.09	10.01	44.10	55.36	-11.26	A	L1
0.1980	39.18	10.02	49.20	63.69	-14.49	Q	L1
0.1980	25.86	10.02	35.88	53.69	-17.81	A	L1
0.2380	33.89	10.01	43.90	62.16	-18.26	Q	L1
0.2380	20.78	10.01	30.79	52.16	-21.37	A	L1
10.6540	11.46	10.57	22.03	60.00	-37.97	Q	L1
10.6540	6.58	10.57	17.15	50.00	-32.85	A	L1
14.8940	24.53	10.76	35.29	60.00	-24.71	Q	L1
14.8940	19.52	10.76	30.28	50.00	-19.72	A	L1
17.4140	37.59	10.84	48.43	60.00	-11.57	Q	L1
17.4140	30.52	10.84	41.36	50.00	-8.64	A	L1

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

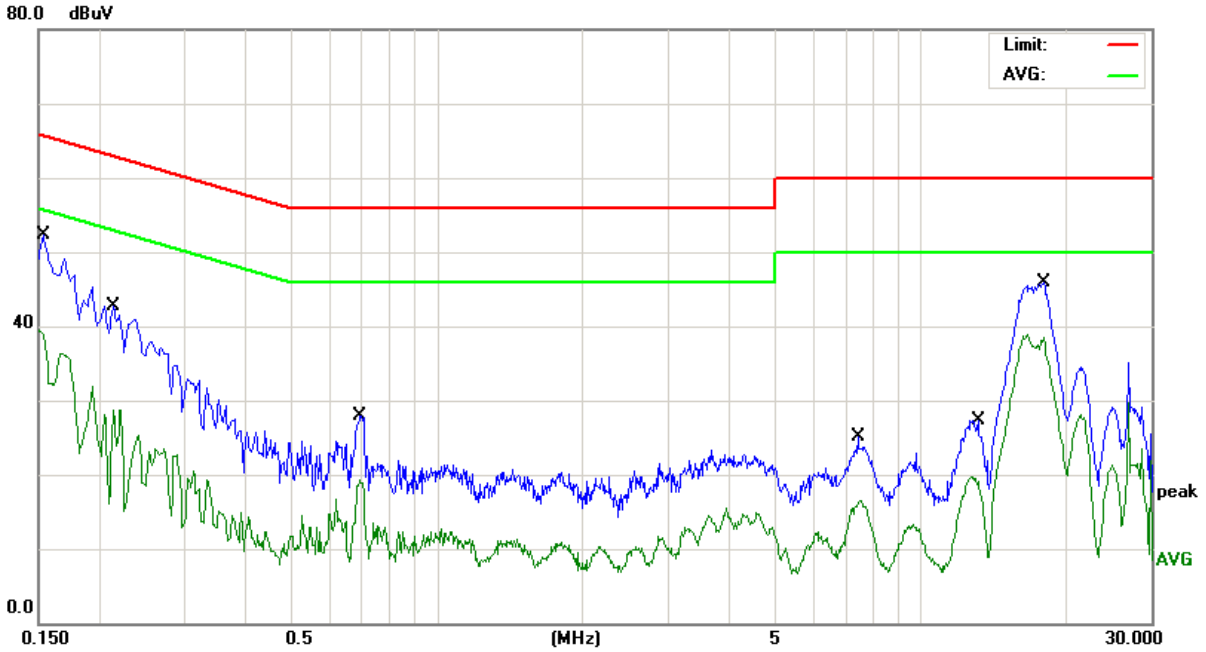
Model No.	KTPS65-2427DT-3P-VI-HP	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 17
Tested by	Stanley Cheng	Phase	L2
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1580	42.68	10.01	52.69	65.56	-12.87	Q	L2
0.1580	32.88	10.01	42.89	55.56	-12.67	A	L2
0.2020	36.84	10.02	46.86	63.52	-16.66	Q	L2
0.2020	24.90	10.02	34.92	53.52	-18.60	A	L2
0.2380	32.83	10.01	42.84	62.16	-19.32	Q	L2
0.2380	20.71	10.01	30.72	52.16	-21.44	A	L2
10.5659	14.76	10.56	25.32	60.00	-34.68	Q	L2
10.5659	9.97	10.56	20.53	50.00	-29.47	A	L2
14.7500	19.94	10.75	30.69	60.00	-29.31	Q	L2
14.7500	14.69	10.75	25.44	50.00	-24.56	A	L2
17.2099	33.95	10.83	44.78	60.00	-15.22	Q	L2
17.2099	28.28	10.83	39.11	50.00	-10.89	A	L2

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

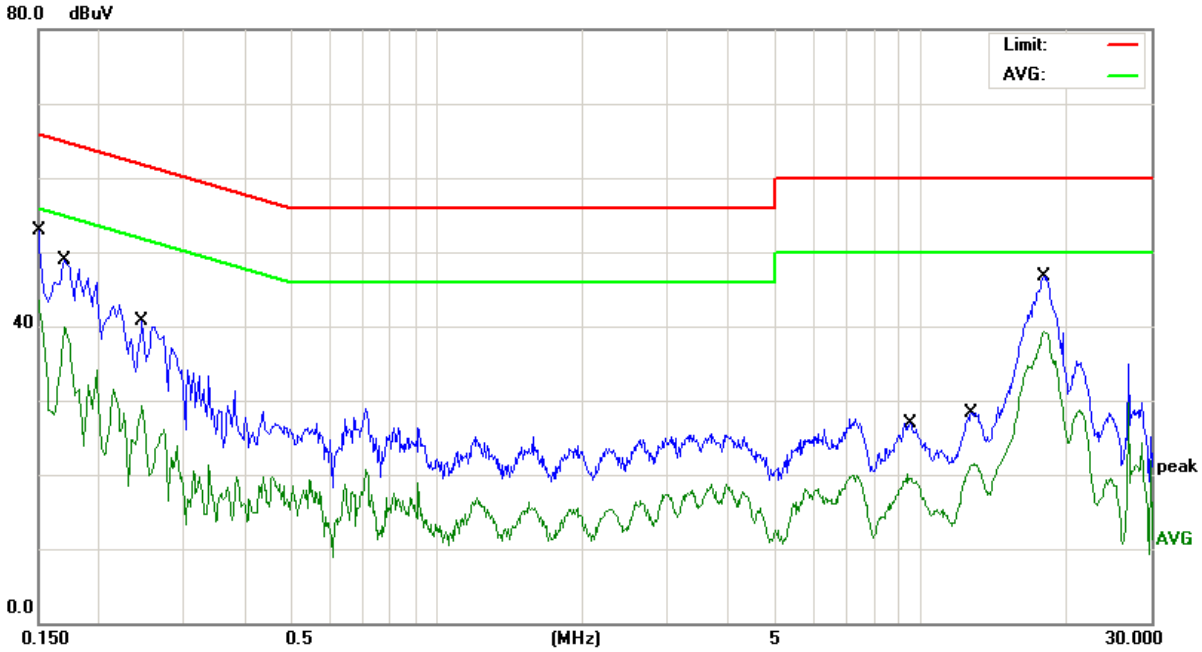
Model No.	KTPS65-2427DT-3P-VI-HP	**6dB Bandwidth**	9 kHz
Environmental Conditions	25°C, 58% RH	**Test Mode**	Mode 18
Tested by	Stanley Cheng	**Phase**	L1
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				**150 kHz to 30 MHz**			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1539	**38.07**	**10.01**	**48.08**	**65.78**	**-17.70**	**Q**	**L1**
0.1539	**24.84**	**10.01**	**34.85**	**55.78**	**-20.93**	**A**	**L1**
0.2140	**30.50**	**10.02**	**40.52**	**63.04**	**-22.52**	**Q**	**L1**
0.2140	**14.64**	**10.02**	**24.66**	**53.04**	**-28.38**	**A**	**L1**
0.6940	**15.72**	**10.08**	**25.80**	**56.00**	**-30.20**	**Q**	**L1**
0.6940	**9.80**	**10.08**	**19.88**	**46.00**	**-26.12**	**A**	**L1**
7.4180	**9.32**	**10.45**	**19.77**	**60.00**	**-40.23**	**Q**	**L1**
7.4180	**4.89**	**10.45**	**15.34**	**50.00**	**-34.66**	**A**	**L1**
13.1540	**11.09**	**10.68**	**21.77**	**60.00**	**-38.23**	**Q**	**L1**
13.1540	**6.62**	**10.68**	**17.30**	**50.00**	**-32.70**	**A**	**L1**
17.9500	**31.24**	**10.85**	**42.09**	**60.00**	**-17.91**	**Q**	**L1**
17.9500	**24.14**	**10.85**	**34.99**	**50.00**	**-15.01**	**A**	**L1**

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

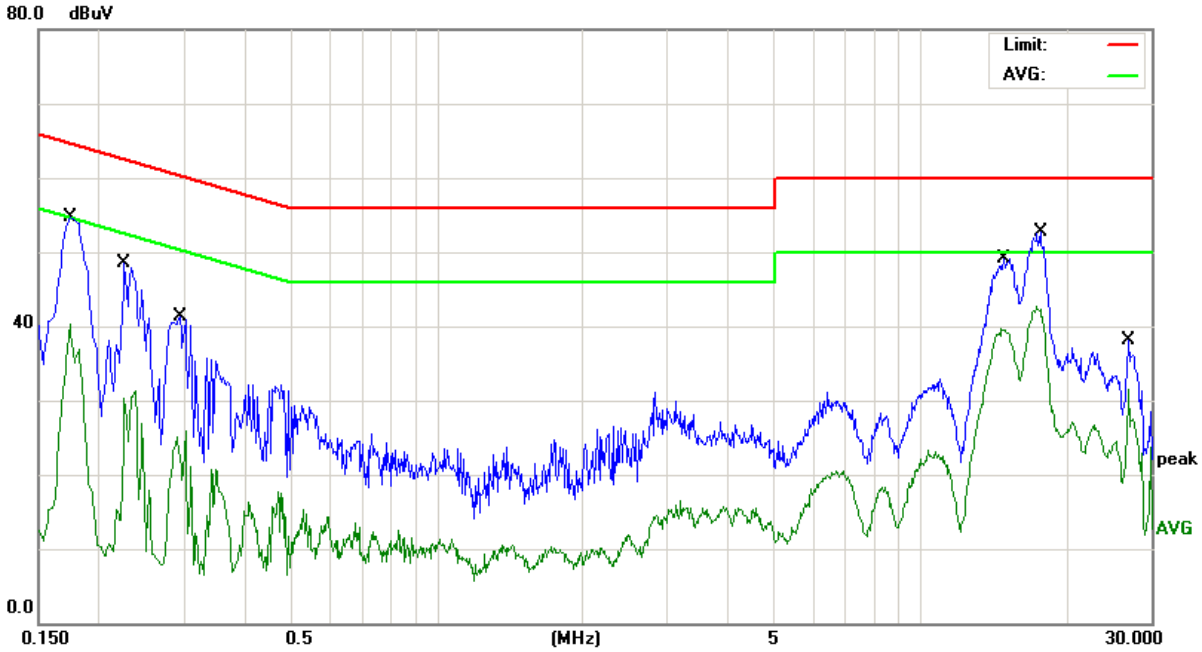
Model No.	KTPS65-2427DT-3P-VI-HP	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 18
Tested by	Stanley Cheng	Phase	L2
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1500	39.87	10.01	49.88	65.99	-16.11	Q	L2
0.1500	32.83	10.01	42.84	55.99	-13.15	A	L2
0.1700	36.60	10.01	46.61	64.96	-18.35	Q	L2
0.1700	26.61	10.01	36.62	54.96	-18.34	A	L2
0.2460	28.03	10.01	38.04	61.89	-23.85	Q	L2
0.2460	15.95	10.01	25.96	51.89	-25.93	A	L2
9.5100	12.63	10.53	23.16	60.00	-36.84	Q	L2
9.5100	8.24	10.53	18.77	50.00	-31.23	A	L2
12.7780	14.02	10.67	24.69	60.00	-35.31	Q	L2
12.7780	9.61	10.67	20.28	50.00	-29.72	A	L2
17.9860	31.66	10.85	42.51	60.00	-17.49	Q	L2
17.9860	25.57	10.85	36.42	50.00	-13.58	A	L2

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

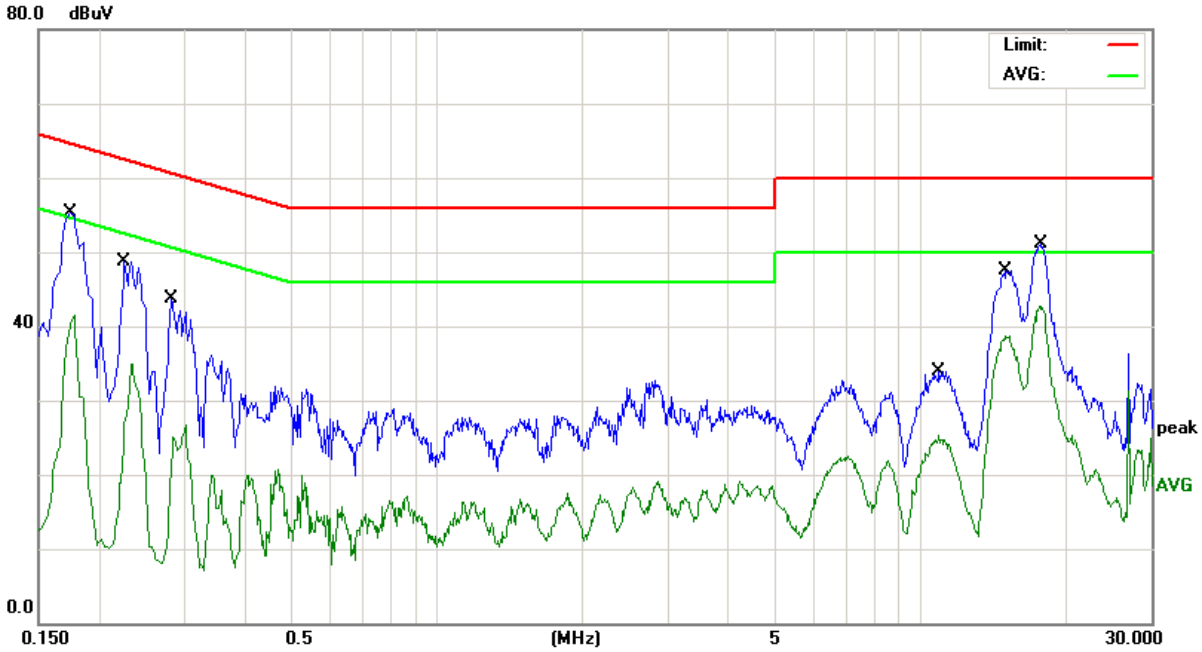
Model No.	KTPS65-3021DT-3P-VI	**6dB Bandwidth**	9 kHz
Environmental Conditions	25°C, 58% RH	**Test Mode**	Mode 19
Tested by	Stanley Cheng	**Phase**	L1
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				**150 kHz to 30 MHz**			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1740	**42.30**	**10.01**	**52.31**	**64.76**	**-12.45**	**Q**	**L1**
0.1740	**27.12**	**10.01**	**37.13**	**54.76**	**-17.63**	**A**	**L1**
0.2260	**34.66**	**10.01**	**44.67**	**62.59**	**-17.92**	**Q**	**L1**
0.2260	**14.68**	**10.01**	**24.69**	**52.59**	**-27.90**	**A**	**L1**
0.2940	**28.22**	**10.01**	**38.23**	**60.41**	**-22.18**	**Q**	**L1**
0.2940	**12.98**	**10.01**	**22.99**	**50.41**	**-27.42**	**A**	**L1**
14.8820	**33.04**	**10.76**	**43.80**	**60.00**	**-16.20**	**Q**	**L1**
14.8820	**27.71**	**10.76**	**38.47**	**50.00**	**-11.53**	**A**	**L1**
17.6740	**35.49**	**10.84**	**46.33**	**60.00**	**-13.67**	**Q**	**L1**
17.6740	**29.94**	**10.84**	**40.78**	**50.00**	**-9.22**	**A**	**L1**
26.9180	**25.22**	**11.10**	**36.32**	**60.00**	**-23.68**	**Q**	**L1**
26.9180	**20.83**	**11.10**	**31.93**	**50.00**	**-18.07**	**A**	**L1**

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

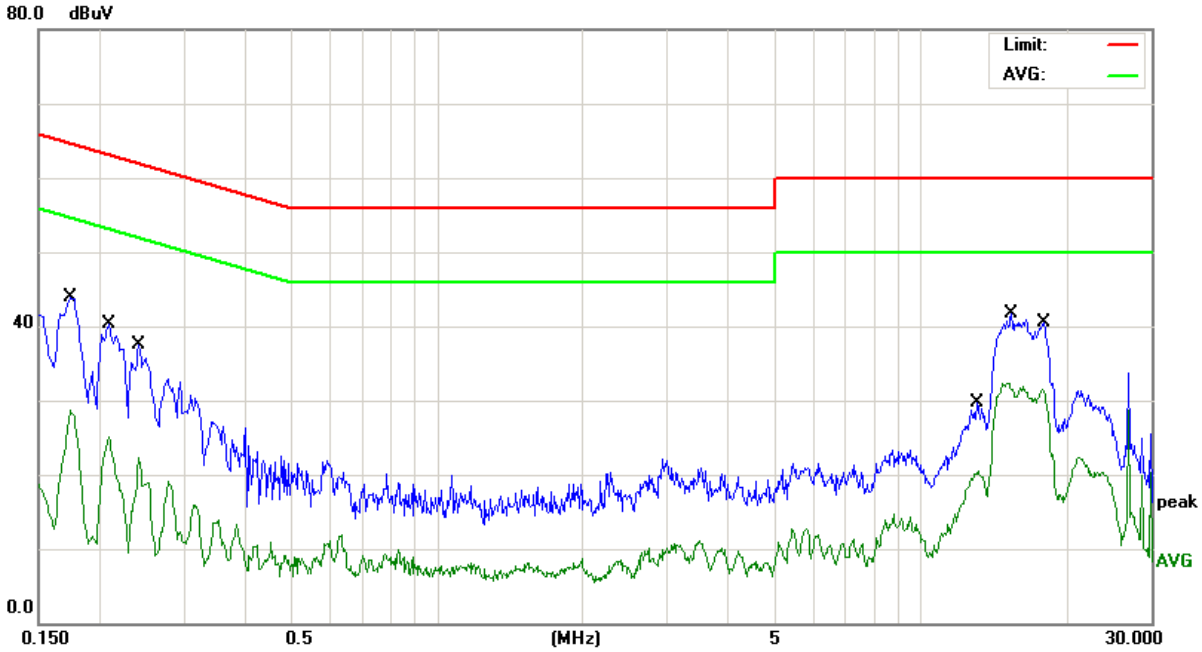
Model No.	KTPS65-3021DT-3P-VI	**6dB Bandwidth**	9 kHz
Environmental Conditions	25°C, 58% RH	**Test Mode**	Mode 19
Tested by	Stanley Cheng	**Phase**	L2
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				**150 kHz to 30 MHz**			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1740	**42.54**	**10.01**	**52.55**	**64.76**	**-12.21**	**Q**	**L2**
0.1740	**28.56**	**10.01**	**38.57**	**54.76**	**-16.19**	**A**	**L2**
0.2260	**34.66**	**10.01**	**44.67**	**62.59**	**-17.92**	**Q**	**L2**
0.2260	**16.87**	**10.01**	**26.88**	**52.59**	**-25.71**	**A**	**L2**
0.2819	**28.14**	**10.01**	**38.15**	**60.76**	**-22.61**	**Q**	**L2**
0.2819	**10.25**	**10.01**	**20.26**	**50.76**	**-30.50**	**A**	**L2**
10.9420	**18.49**	**10.59**	**29.08**	**60.00**	**-30.92**	**Q**	**L2**
10.9420	**13.03**	**10.59**	**23.62**	**50.00**	**-26.38**	**A**	**L2**
15.0180	**31.67**	**10.77**	**42.44**	**60.00**	**-17.56**	**Q**	**L2**
15.0180	**26.33**	**10.77**	**37.10**	**50.00**	**-12.90**	**A**	**L2**
17.8260	**35.50**	**10.84**	**46.34**	**60.00**	**-13.66**	**Q**	**L2**
17.8260	**30.27**	**10.84**	**41.11**	**50.00**	**-8.89**	**A**	**L2**

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

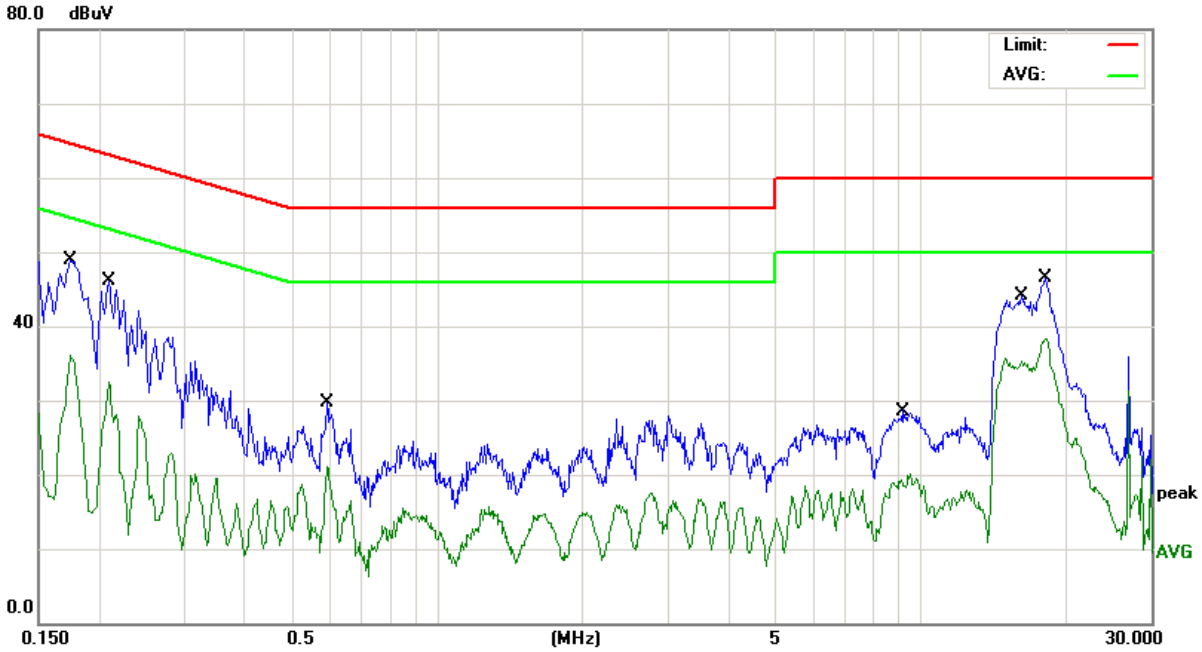
Model No.	KTPS65-3021DT-3P-VI	**6dB Bandwidth**	9 kHz
Environmental Conditions	25°C, 58% RH	**Test Mode**	Mode 20
Tested by	Stanley Cheng	**Phase**	L1
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				**150 kHz to 30 MHz**			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1740	**33.41**	**10.01**	**43.42**	**64.76**	**-21.34**	**Q**	**L1**
0.1740	**19.60**	**10.01**	**29.61**	**54.76**	**-25.15**	**A**	**L1**
0.2100	**29.41**	**10.02**	**39.43**	**63.20**	**-23.77**	**Q**	**L1**
0.2100	**15.01**	**10.02**	**25.03**	**53.20**	**-28.17**	**A**	**L1**
0.2420	**25.14**	**10.01**	**35.15**	**62.02**	**-26.87**	**Q**	**L1**
0.2420	**10.29**	**10.01**	**20.30**	**52.02**	**-31.72**	**A**	**L1**
13.1020	**14.59**	**10.67**	**25.26**	**60.00**	**-34.74**	**Q**	**L1**
13.1020	**9.27**	**10.67**	**19.94**	**50.00**	**-30.06**	**A**	**L1**
15.4540	**25.65**	**10.77**	**36.42**	**60.00**	**-23.58**	**Q**	**L1**
15.4540	**20.08**	**10.77**	**30.85**	**50.00**	**-19.15**	**A**	**L1**
17.9940	**25.73**	**10.85**	**36.58**	**60.00**	**-23.42**	**Q**	**L1**
17.9940	**20.39**	**10.85**	**31.24**	**50.00**	**-18.76**	**A**	**L1**

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

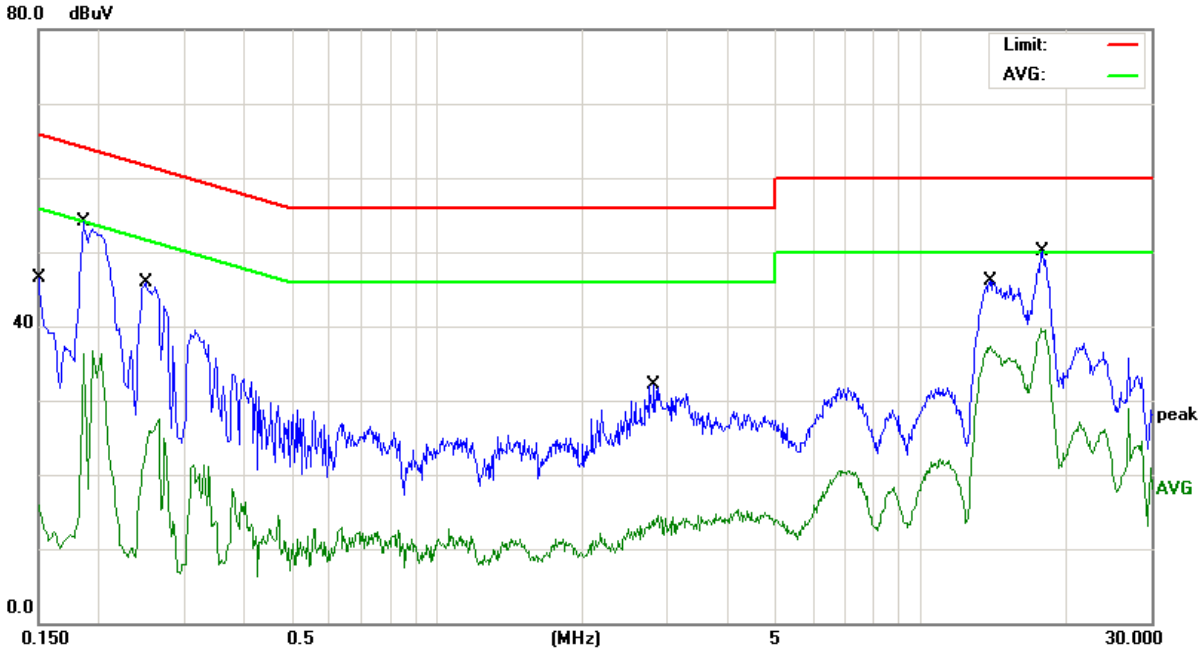
Model No.	KTPS65-3021DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 20
Tested by	Stanley Cheng	Phase	L2
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1740	37.06	10.01	47.07	64.76	-17.69	Q	L2
0.1740	24.71	10.01	34.72	54.76	-20.04	A	L2
0.2100	33.35	10.02	43.37	63.20	-19.83	Q	L2
0.2100	20.66	10.02	30.68	53.20	-22.52	A	L2
0.5940	15.19	10.07	25.26	56.00	-30.74	Q	L2
0.5940	10.23	10.07	20.30	46.00	-25.70	A	L2
9.1820	13.08	10.51	23.59	60.00	-36.41	Q	L2
9.1820	7.98	10.51	18.49	50.00	-31.51	A	L2
16.1940	28.23	10.80	39.03	60.00	-20.97	Q	L2
16.1940	23.07	10.80	33.87	50.00	-16.13	A	L2
18.1540	31.49	10.86	42.35	60.00	-17.65	Q	L2
18.1540	26.48	10.86	37.34	50.00	-12.66	A	L2

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

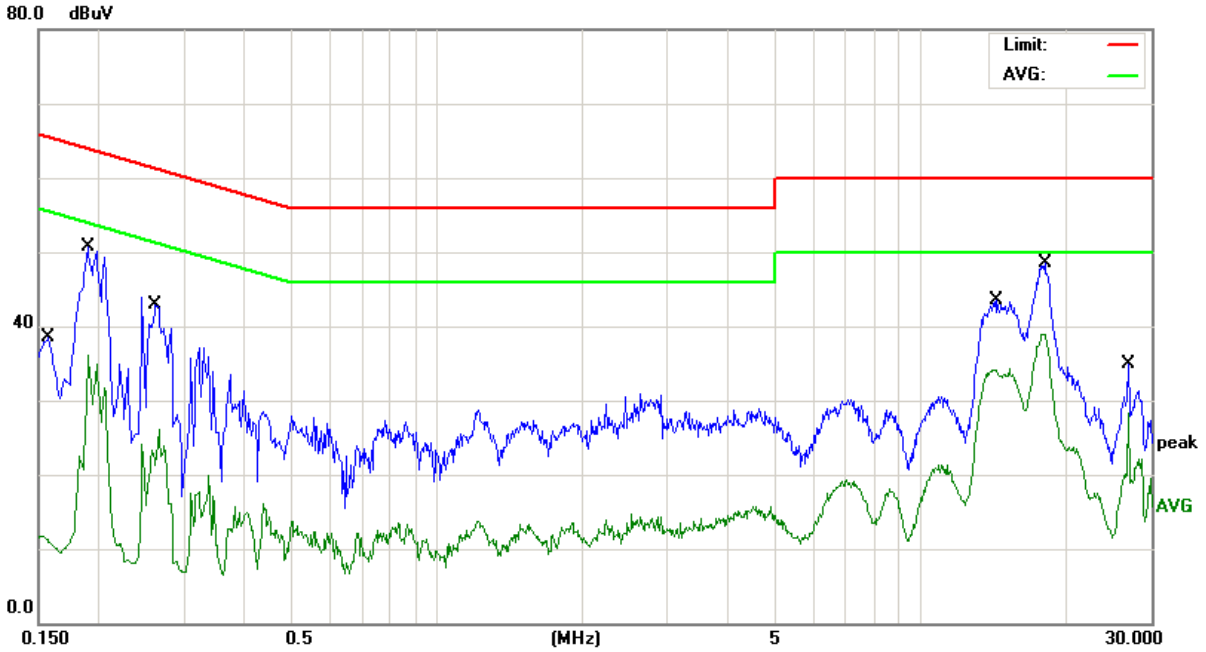
Model No.	KTPS65-3220DT-3P-VI-HP	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 21
Tested by	Stanley Cheng	Phase	L1
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1500	27.20	10.01	37.21	65.99	-28.78	Q	L1
0.1500	4.20	10.01	14.21	55.99	-41.78	A	L1
0.1860	40.68	10.02	50.70	64.21	-13.51	Q	L1
0.1860	18.09	10.02	28.11	54.21	-26.10	A	L1
0.2500	33.37	10.02	43.39	61.75	-18.36	Q	L1
0.2500	12.81	10.02	22.83	51.75	-28.92	A	L1
2.8140	14.70	10.32	25.02	56.00	-30.98	Q	L1
2.8140	2.47	10.32	12.79	46.00	-33.21	A	L1
13.9620	30.62	10.72	41.34	60.00	-18.66	Q	L1
13.9620	25.50	10.72	36.22	50.00	-13.78	A	L1
17.9420	33.67	10.84	44.51	60.00	-15.49	Q	L1
17.9420	27.99	10.84	38.83	50.00	-11.17	A	L1

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

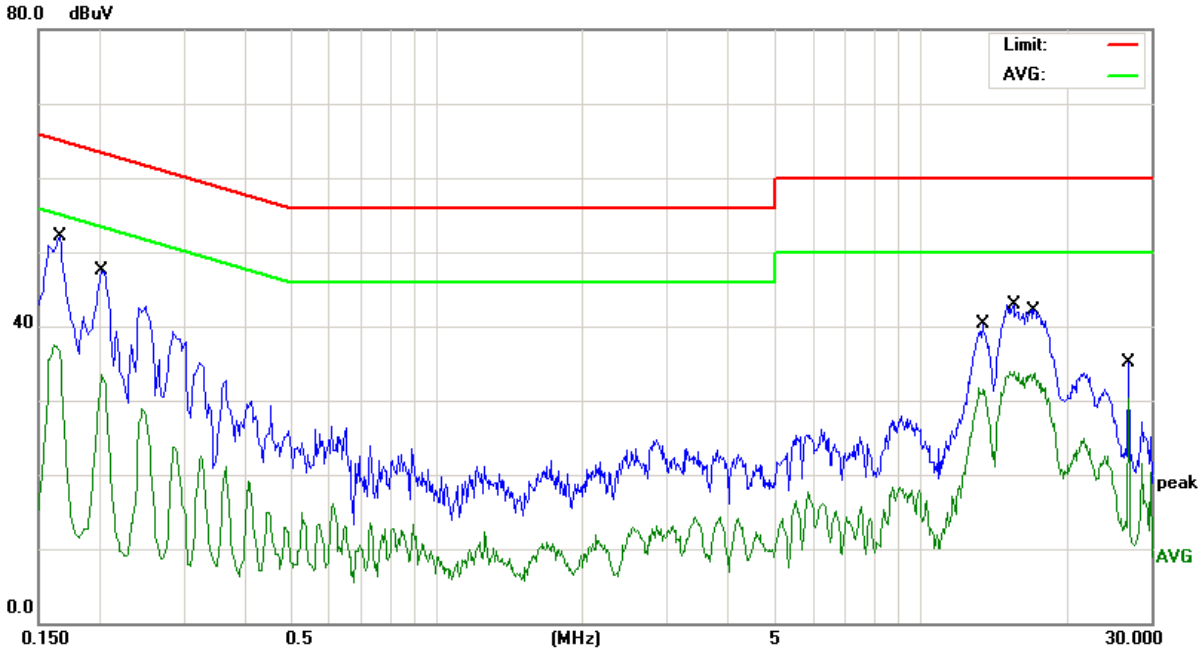
Model No.	KTPS65-3220DT-3P-VI-HP	**6dB Bandwidth**	9 kHz
Environmental Conditions	25°C, 58% RH	**Test Mode**	Mode 21
Tested by	Stanley Cheng	**Phase**	L2
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				**150 kHz to 30 MHz**			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1580	**19.37**	**10.01**	**29.38**	**65.56**	**-36.18**	**Q**	**L2**
0.1580	**0.38**	**10.01**	**10.39**	**55.56**	**-45.17**	**A**	**L2**
0.1900	**37.67**	**10.02**	**47.69**	**64.03**	**-16.34**	**Q**	**L2**
0.1900	**20.32**	**10.02**	**30.34**	**54.03**	**-23.69**	**A**	**L2**
0.2620	**29.83**	**10.02**	**39.85**	**61.36**	**-21.51**	**Q**	**L2**
0.2620	**12.82**	**10.02**	**22.84**	**51.36**	**-28.52**	**A**	**L2**
14.3780	**28.63**	**10.74**	**39.37**	**60.00**	**-20.63**	**Q**	**L2**
14.3780	**23.44**	**10.74**	**34.18**	**50.00**	**-15.82**	**A**	**L2**
18.1020	**33.59**	**10.85**	**44.44**	**60.00**	**-15.56**	**Q**	**L2**
18.1020	**28.09**	**10.85**	**38.94**	**50.00**	**-11.06**	**A**	**L2**
26.9180	**21.04**	**11.10**	**32.14**	**60.00**	**-27.86**	**Q**	**L2**
26.9180	**16.76**	**11.10**	**27.86**	**50.00**	**-22.14**	**A**	**L2**

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

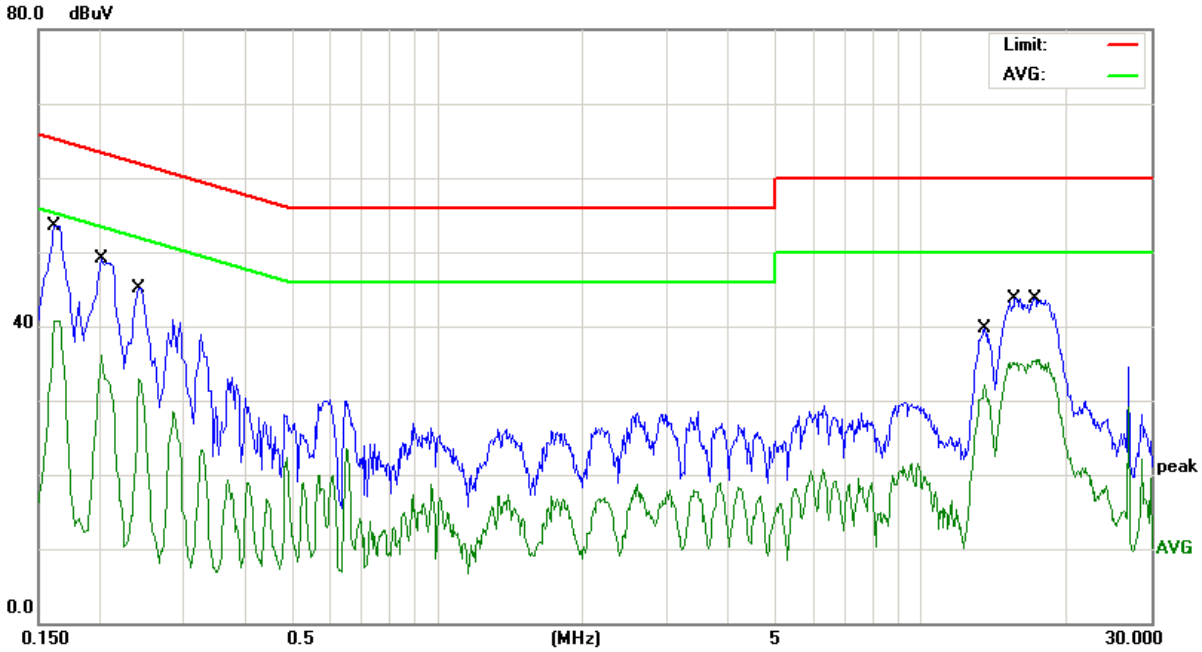
Model No.	KTPS65-3220DT-3P-VI-HP	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 22
Tested by	Stanley Cheng	Phase	L1
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1660	39.51	10.01	49.52	65.15	-15.63	Q	L1
0.1660	25.99	10.01	36.00	55.15	-19.15	A	L1
0.2020	35.67	10.02	45.69	63.52	-17.83	Q	L1
0.2020	20.68	10.02	30.70	53.52	-22.82	A	L1
13.4780	25.05	10.70	35.75	60.00	-24.25	Q	L1
13.4780	19.87	10.70	30.57	50.00	-19.43	A	L1
15.6140	27.21	10.78	37.99	60.00	-22.01	Q	L1
15.6140	22.14	10.78	32.92	50.00	-17.08	A	L1
17.2180	27.90	10.83	38.73	60.00	-21.27	Q	L1
17.2180	22.22	10.83	33.05	50.00	-16.95	A	L1
26.9180	23.15	11.10	34.25	60.00	-25.75	Q	L1
26.9180	19.57	11.10	30.67	50.00	-19.33	A	L1

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

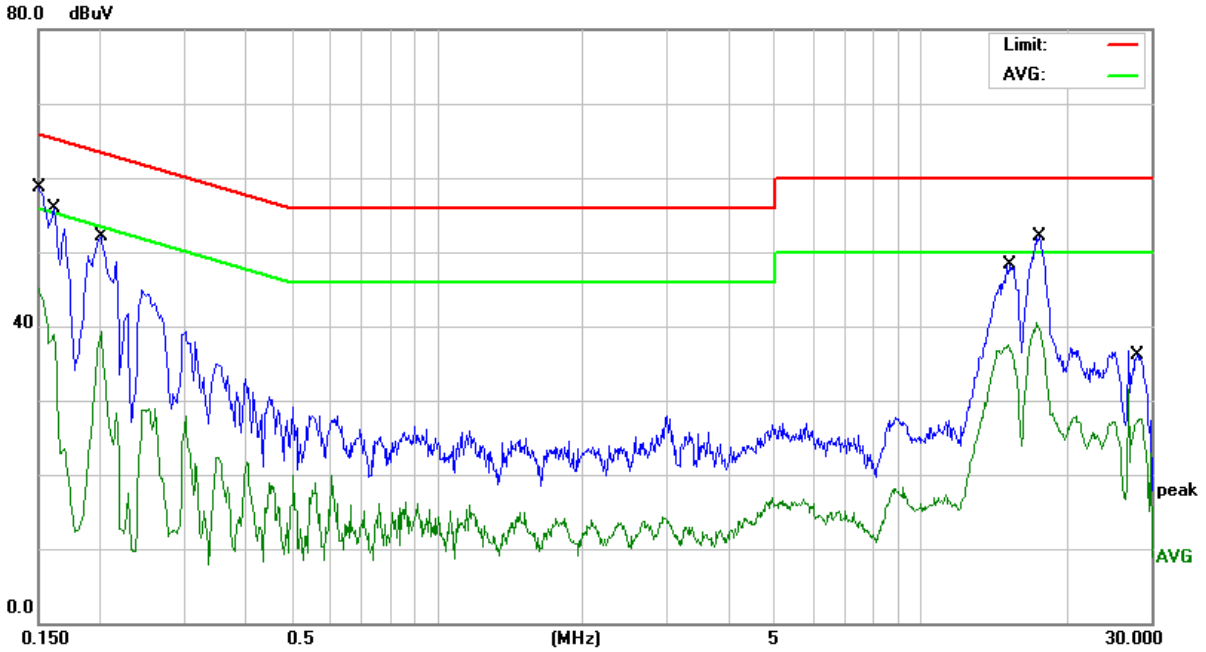
Model No.	KTPS65-3220DT-3P-VI-HP	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 22
Tested by	Stanley Cheng	Phase	L2
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1620	42.33	10.01	52.34	65.36	-13.02	Q	L2
0.1620	29.84	10.01	39.85	55.36	-15.51	A	L2
0.2020	36.95	10.02	46.97	63.52	-16.55	Q	L2
0.2020	24.06	10.02	34.08	53.52	-19.44	A	L2
0.2420	32.79	10.01	42.80	62.02	-19.22	Q	L2
0.2420	19.80	10.01	29.81	52.02	-22.21	A	L2
13.6140	24.60	10.70	35.30	60.00	-24.70	Q	L2
13.6140	19.47	10.70	30.17	50.00	-19.83	A	L2
15.7020	28.21	10.79	39.00	60.00	-21.00	Q	L2
15.7020	23.34	10.79	34.13	50.00	-15.87	A	L2
17.2900	28.53	10.83	39.36	60.00	-20.64	Q	L2
17.2900	23.29	10.83	34.12	50.00	-15.88	A	L2

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

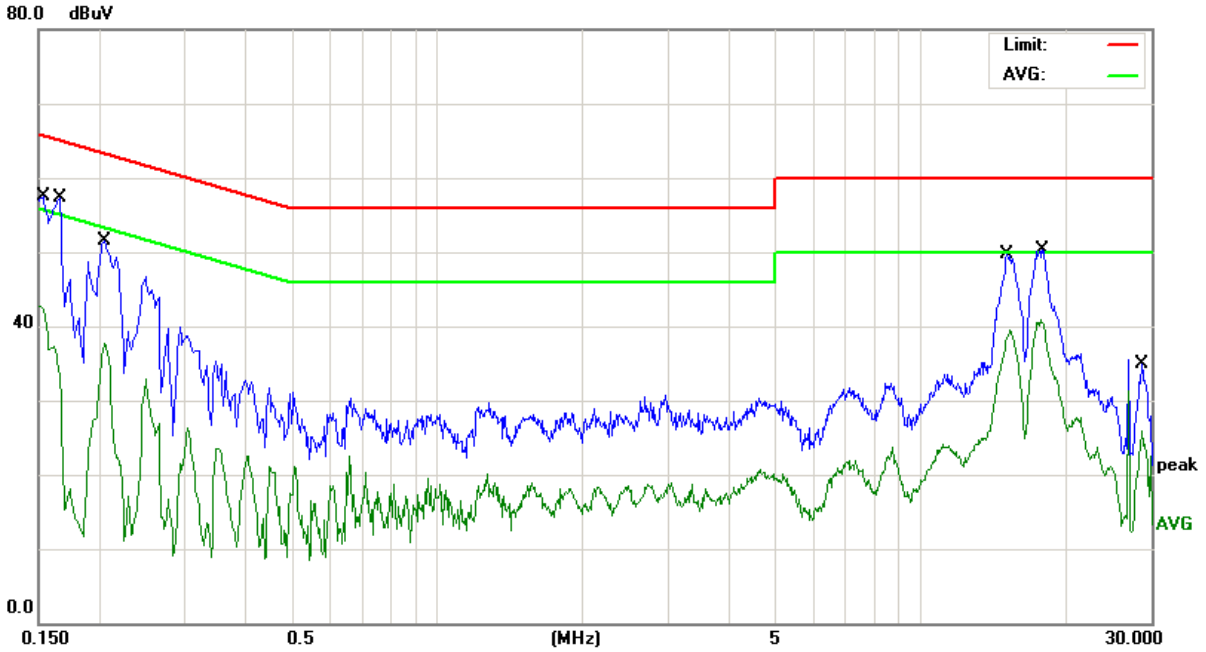
Model No.	KTPS65-3220DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 23
Tested by	Stanley Cheng	Phase	L1
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1500	46.88	10.01	56.89	65.99	-9.10	Q	L1
0.1500	33.58	10.01	43.59	55.99	-12.40	A	L1
0.1620	41.21	10.01	51.22	65.36	-14.14	Q	L1
0.1620	20.60	10.01	30.61	55.36	-24.75	A	L1
0.2020	39.55	10.02	49.57	63.52	-13.95	Q	L1
0.2020	25.67	10.02	35.69	53.52	-17.83	A	L1
15.3540	31.36	10.77	42.13	60.00	-17.87	Q	L1
15.3540	24.81	10.77	35.58	50.00	-14.42	A	L1
17.5980	34.65	10.84	45.49	60.00	-14.51	Q	L1
17.5980	26.31	10.84	37.15	50.00	-12.85	A	L1
28.0660	20.22	11.14	31.36	60.00	-28.64	Q	L1
28.0660	15.23	11.14	26.37	50.00	-23.63	A	L1

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

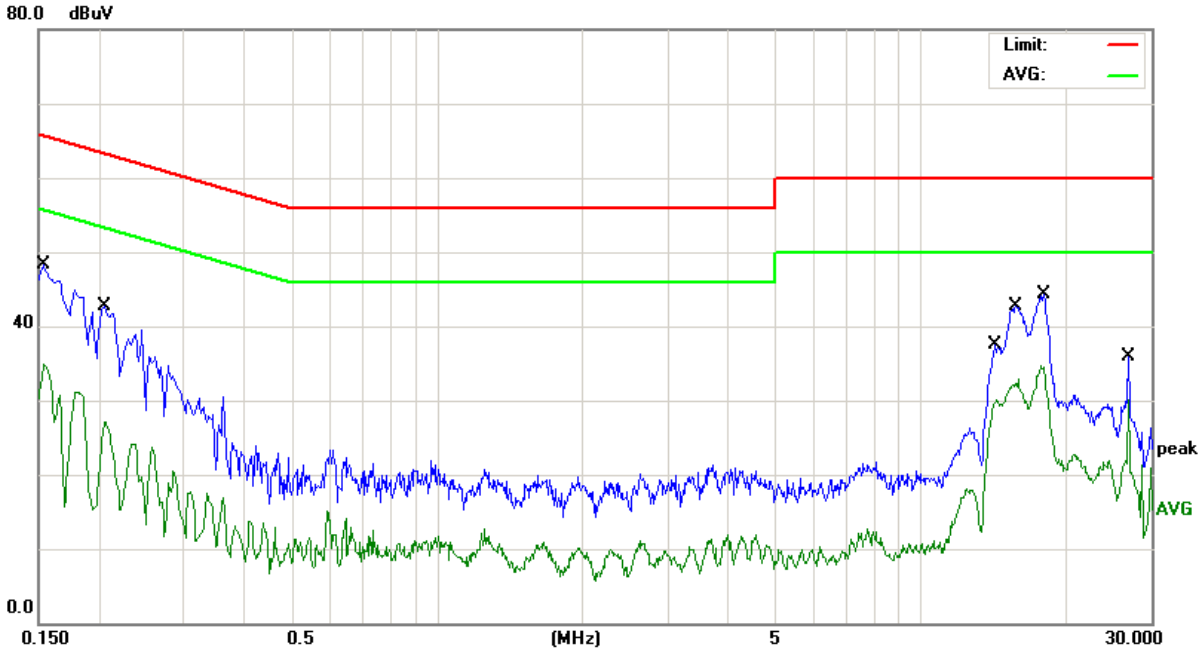
Model No.	KTPS65-3220DT-3P-VI	**6dB Bandwidth**	9 kHz
Environmental Conditions	25°C, 58% RH	**Test Mode**	Mode 23
Tested by	Stanley Cheng	**Phase**	L2
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				**150 kHz to 30 MHz**			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1539	**47.45**	**10.01**	**57.46**	**65.78**	**-8.32**	**Q**	**L2**
0.1539	**33.58**	**10.01**	**43.59**	**55.78**	**-12.19**	**A**	**L2**
0.1660	**38.83**	**10.01**	**48.84**	**65.15**	**-16.31**	**Q**	**L2**
0.1660	**15.53**	**10.01**	**25.54**	**55.15**	**-29.61**	**A**	**L2**
0.2060	**39.26**	**10.02**	**49.28**	**63.36**	**-14.08**	**Q**	**L2**
0.2060	**25.00**	**10.02**	**35.02**	**53.36**	**-18.34**	**A**	**L2**
15.1140	**32.27**	**10.77**	**43.04**	**60.00**	**-16.96**	**Q**	**L2**
15.1140	**25.30**	**10.77**	**36.07**	**50.00**	**-13.93**	**A**	**L2**
17.9420	**33.52**	**10.84**	**44.36**	**60.00**	**-15.64**	**Q**	**L2**
17.9420	**26.96**	**10.84**	**37.80**	**50.00**	**-12.20**	**A**	**L2**
28.6380	**18.97**	**11.17**	**30.14**	**60.00**	**-29.86**	**Q**	**L2**
28.6380	**13.91**	**11.17**	**25.08**	**50.00**	**-24.92**	**A**	**L2**

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

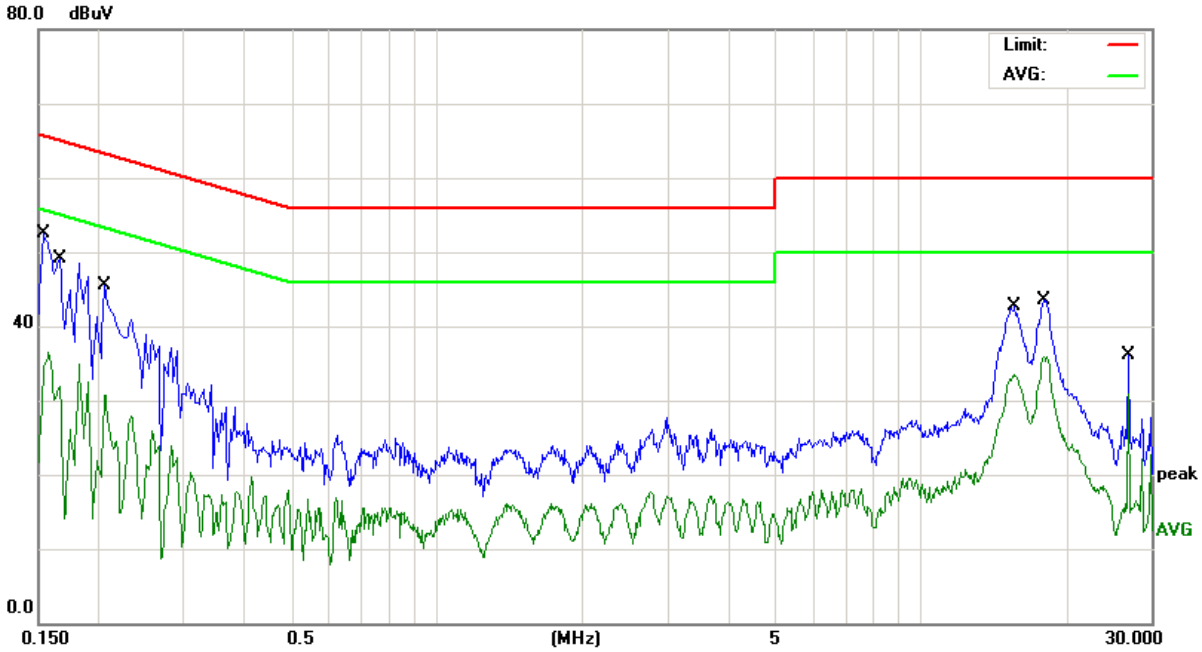
Model No.	KTPS65-3220DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 24
Tested by	Stanley Cheng	Phase	L1
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1539	37.56	10.01	47.57	65.78	-18.21	Q	L1
0.1539	23.81	10.01	33.82	55.78	-21.96	A	L1
0.2060	30.83	10.02	40.85	63.36	-22.51	Q	L1
0.2060	16.72	10.02	26.74	53.36	-26.62	A	L1
14.2540	22.59	10.72	33.31	60.00	-26.69	Q	L1
14.2540	17.69	10.72	28.41	50.00	-21.59	A	L1
15.7860	26.92	10.79	37.71	60.00	-22.29	Q	L1
15.7860	19.16	10.79	29.95	50.00	-20.05	A	L1
17.9460	28.67	10.84	39.51	60.00	-20.49	Q	L1
17.9460	21.10	10.84	31.94	50.00	-18.06	A	L1
26.9180	22.55	11.10	33.65	60.00	-26.35	Q	L1
26.9180	18.85	11.10	29.95	50.00	-20.05	A	L1

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

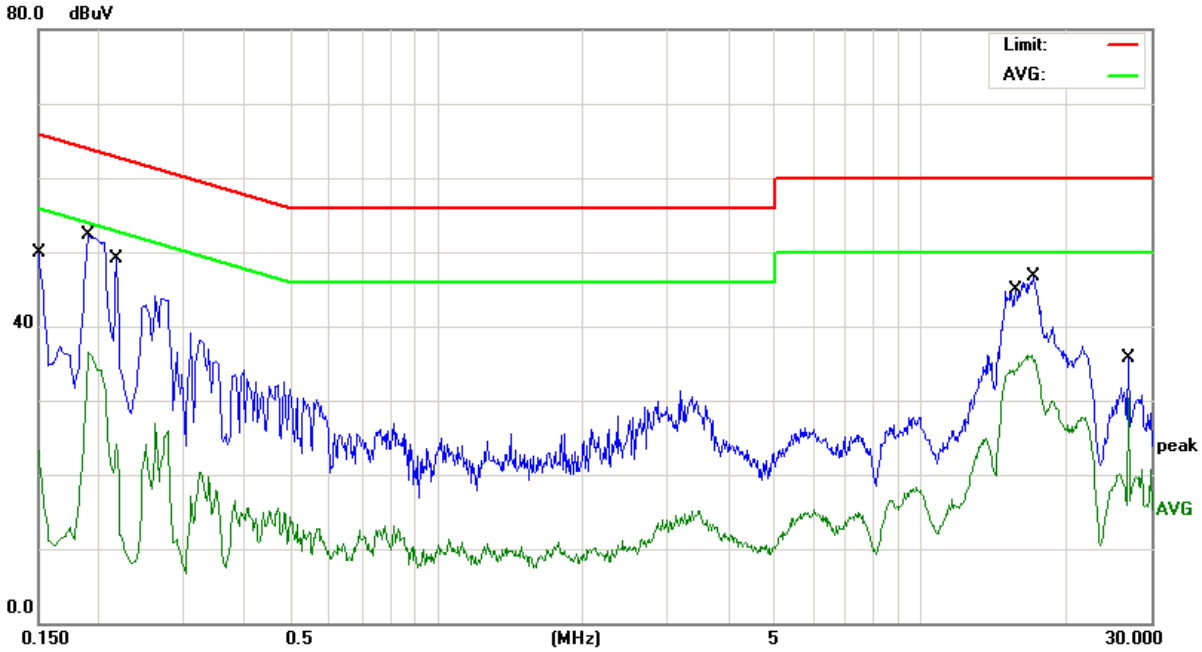
Model No.	KTPS65-3220DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 24
Tested by	Stanley Cheng	Phase	L2
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1539	39.85	10.01	49.86	65.78	-15.92	Q	L2
0.1539	25.56	10.01	35.57	55.78	-20.21	A	L2
0.1660	34.19	10.01	44.20	65.15	-20.95	Q	L2
0.1660	12.21	10.01	22.22	55.15	-32.93	A	L2
0.2060	32.65	10.02	42.67	63.36	-20.69	Q	L2
0.2060	18.77	10.02	28.79	53.36	-24.57	A	L2
15.6860	26.71	10.79	37.50	60.00	-22.50	Q	L2
15.6860	20.39	10.79	31.18	50.00	-18.82	A	L2
18.0180	28.53	10.85	39.38	60.00	-20.62	Q	L2
18.0180	22.80	10.85	33.65	50.00	-16.35	A	L2
26.9180	22.04	11.10	33.14	60.00	-26.86	Q	L2
26.9180	19.13	11.10	30.23	50.00	-19.77	A	L2

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

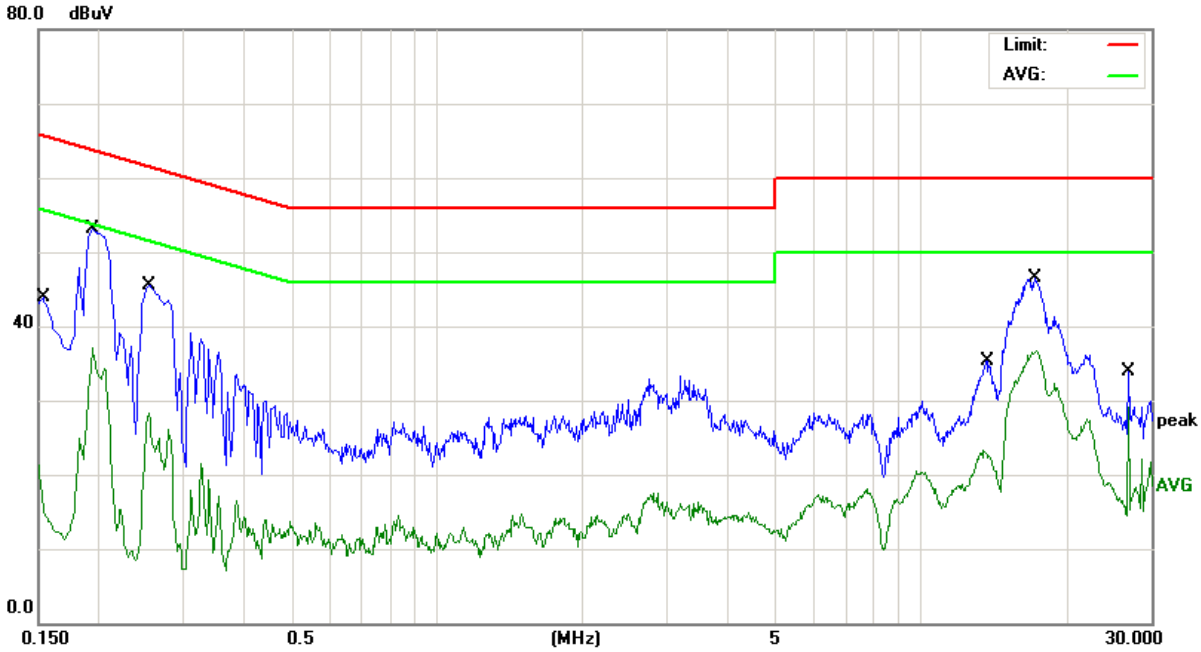
Model No.	KTPS65-4813DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 25
Tested by	Stanley Cheng	Phase	L1
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1500	29.91	10.01	39.92	65.99	-26.07	Q	L1
0.1500	10.63	10.01	20.64	55.99	-35.35	A	L1
0.1900	39.27	10.02	49.29	64.03	-14.74	Q	L1
0.1900	22.35	10.02	32.37	54.03	-21.66	A	L1
0.2180	29.87	10.02	39.89	62.89	-23.00	Q	L1
0.2180	6.79	10.02	16.81	52.89	-36.08	A	L1
15.7500	27.50	10.79	38.29	60.00	-21.71	Q	L1
15.7500	20.86	10.79	31.65	50.00	-18.35	A	L1
17.1700	29.13	10.83	39.96	60.00	-20.04	Q	L1
17.1700	23.33	10.83	34.16	50.00	-15.84	A	L1
26.9180	22.10	11.10	33.20	60.00	-26.80	Q	L1
26.9180	18.38	11.10	29.48	50.00	-20.52	A	L1

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

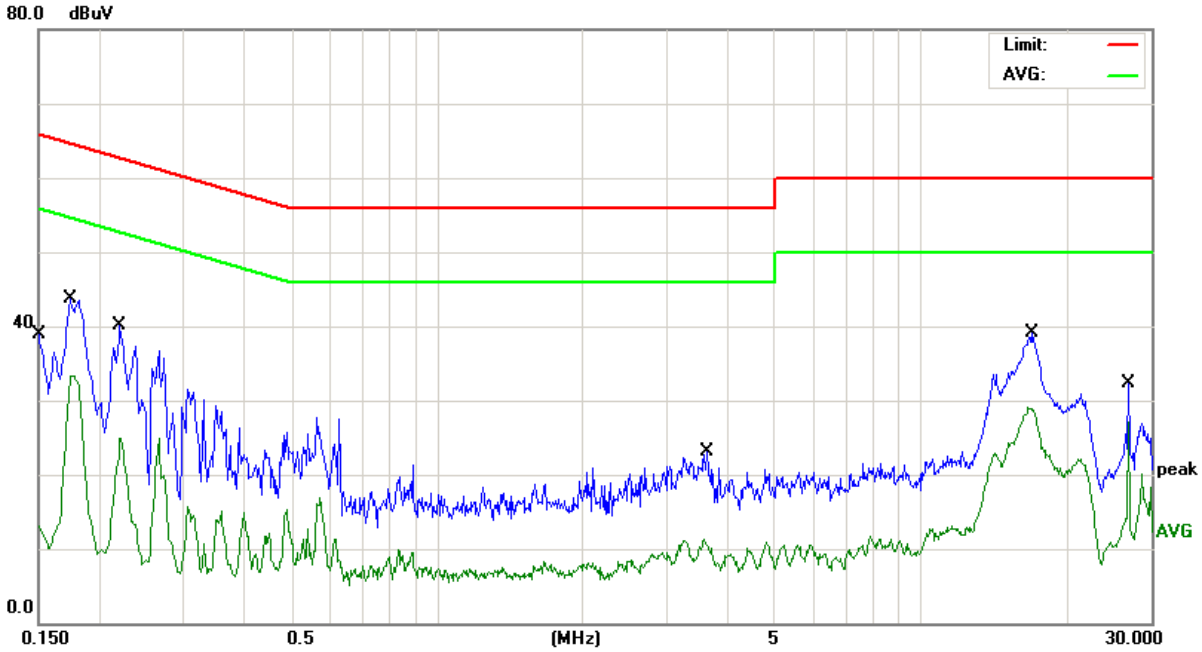
Model No.	KTPS65-4813DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 25
Tested by	Stanley Cheng	Phase	L2
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1539	25.57	10.01	35.58	65.78	-30.20	Q	L2
0.1539	4.52	10.01	14.53	55.78	-41.25	A	L2
0.1940	40.45	10.02	50.47	63.86	-13.39	Q	L2
0.1940	22.99	10.02	33.01	53.86	-20.85	A	L2
0.2540	32.59	10.02	42.61	61.62	-19.01	Q	L2
0.2540	12.63	10.02	22.65	51.62	-28.97	A	L2
13.7260	17.12	10.70	27.82	60.00	-32.18	Q	L2
13.7260	8.96	10.70	19.66	50.00	-30.34	A	L2
17.2820	29.58	10.83	40.41	60.00	-19.59	Q	L2
17.2820	23.99	10.83	34.82	50.00	-15.18	A	L2
26.9180	21.40	11.10	32.50	60.00	-27.50	Q	L2
26.9180	17.71	11.10	28.81	50.00	-21.19	A	L2

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

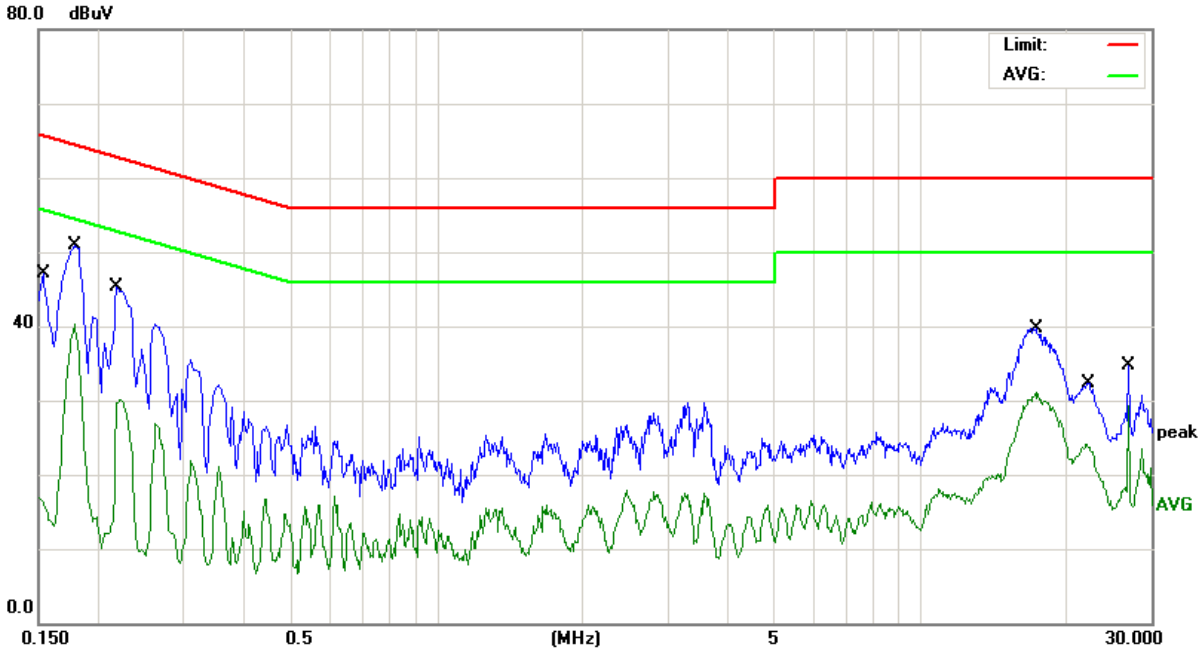
Model No.	KTPS65-4813DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 26
Tested by	Stanley Cheng	Phase	L1
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1500	21.53	10.01	31.54	65.99	-34.45	Q	L1
0.1500	2.71	10.01	12.72	55.99	-43.27	A	L1
0.1740	31.10	10.01	41.11	64.76	-23.65	Q	L1
0.1740	21.07	10.01	31.08	54.76	-23.68	A	L1
0.2220	27.94	10.02	37.96	62.74	-24.78	Q	L1
0.2220	15.99	10.02	26.01	52.74	-26.73	A	L1
3.6300	7.65	10.34	17.99	56.00	-38.01	Q	L1
3.6300	0.93	10.34	11.27	46.00	-34.73	A	L1
16.9460	23.20	10.83	34.03	60.00	-25.97	Q	L1
16.9460	17.88	10.83	28.71	50.00	-21.29	A	L1
26.9180	19.36	11.10	30.46	60.00	-29.54	Q	L1
26.9180	15.65	11.10	26.75	50.00	-23.25	A	L1

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

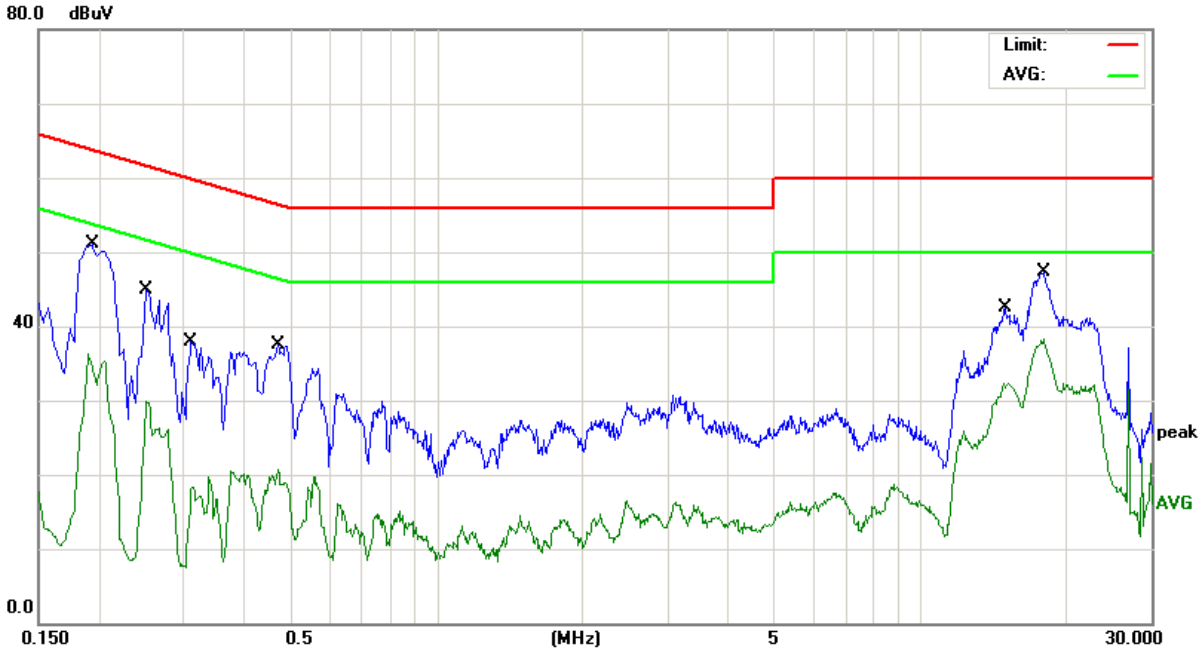
Model No.	KTPS65-4813DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 26
Tested by	Stanley Cheng	Phase	L2
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1539	25.08	10.01	35.09	65.78	-30.69	Q	L2
0.1539	4.79	10.01	14.80	55.78	-40.98	A	L2
0.1780	39.00	10.02	49.02	64.57	-15.55	Q	L2
0.1780	28.65	10.02	38.67	54.57	-15.90	A	L2
0.2180	32.59	10.02	42.61	62.89	-20.28	Q	L2
0.2180	16.73	10.02	26.75	52.89	-26.14	A	L2
17.3300	23.71	10.83	34.54	60.00	-25.46	Q	L2
17.3300	18.27	10.83	29.10	50.00	-20.90	A	L2
22.1820	16.94	10.95	27.89	60.00	-32.11	Q	L2
22.1820	12.05	10.95	23.00	50.00	-27.00	A	L2
26.9180	22.69	11.10	33.79	60.00	-26.21	Q	L2
26.9180	18.72	11.10	29.82	50.00	-20.18	A	L2

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

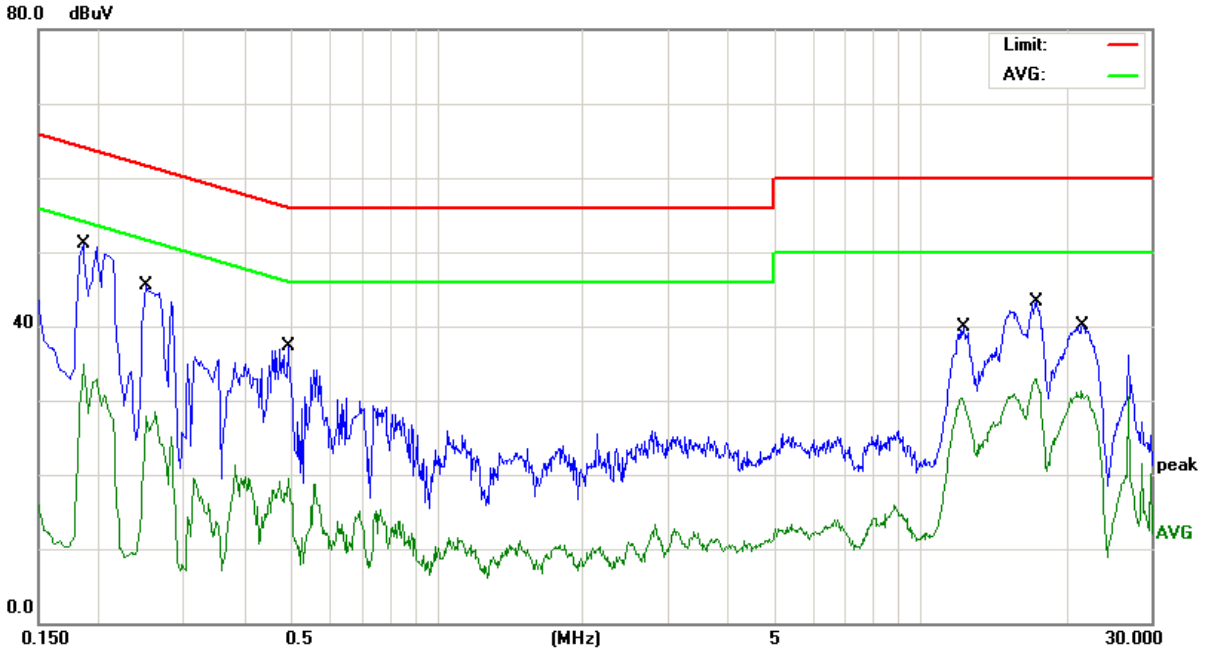
Model No.	KTPS65-5611DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 27
Tested by	Stanley Cheng	Phase	L1
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1940	38.39	10.02	48.41	63.86	-15.45	Q	L1
0.1940	22.74	10.02	32.76	53.86	-21.10	A	L1
0.2500	31.00	10.02	41.02	61.75	-20.73	Q	L1
0.2500	15.52	10.02	25.54	51.75	-26.21	A	L1
0.3100	23.73	10.02	33.75	59.97	-26.22	Q	L1
0.3100	3.80	10.02	13.82	49.97	-36.15	A	L1
0.4700	24.83	10.05	34.88	56.51	-21.63	Q	L1
0.4700	9.94	10.05	19.99	46.51	-26.52	A	L1
14.9540	25.72	10.76	36.48	60.00	-23.52	Q	L1
14.9540	19.31	10.76	30.07	50.00	-19.93	A	L1
17.9500	31.50	10.85	42.35	60.00	-17.65	Q	L1
17.9500	26.15	10.85	37.00	50.00	-13.00	A	L1

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

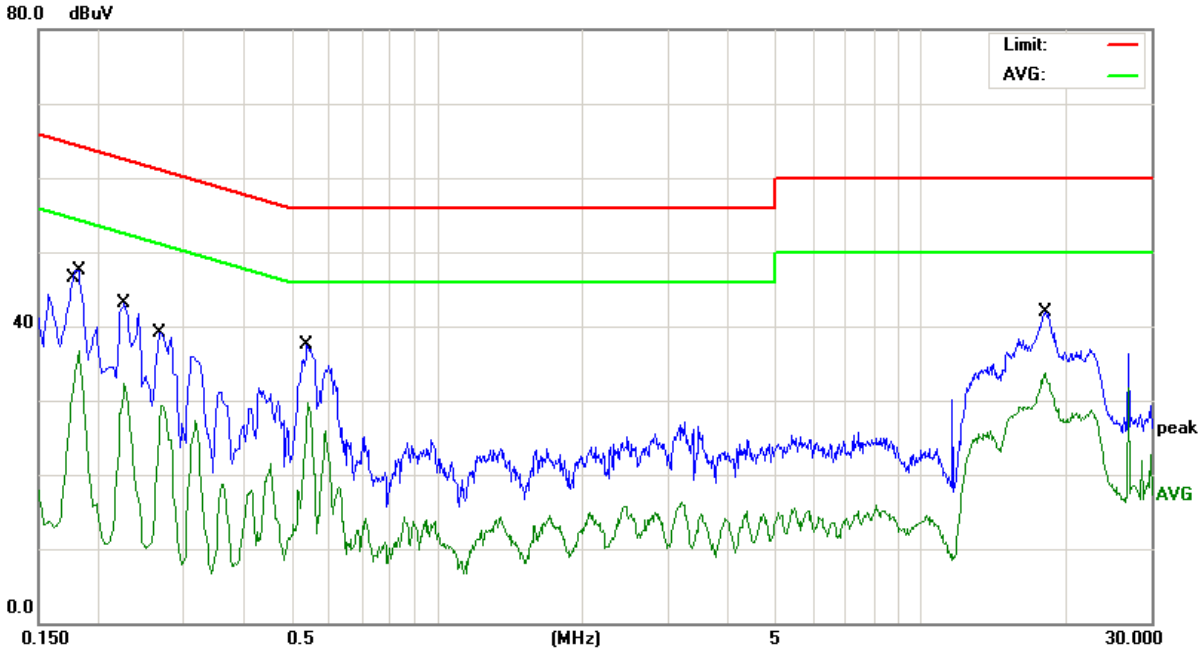
Model No.	KTPS65-5611DT-3P-VI	**6dB Bandwidth**	9 kHz
Environmental Conditions	25°C, 58% RH	**Test Mode**	Mode 27
Tested by	Stanley Cheng	**Phase**	L2
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				**150 kHz to 30 MHz**			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1860	**37.31**	**10.02**	**47.33**	**64.21**	**-16.88**	**Q**	**L2**
0.1860	**18.01**	**10.02**	**28.03**	**54.21**	**-26.18**	**A**	**L2**
0.2500	**31.39**	**10.02**	**41.41**	**61.75**	**-20.34**	**Q**	**L2**
0.2500	**13.28**	**10.02**	**23.30**	**51.75**	**-28.45**	**A**	**L2**
0.4940	**22.24**	**10.05**	**32.29**	**56.10**	**-23.81**	**Q**	**L2**
0.4940	**7.89**	**10.05**	**17.94**	**46.10**	**-28.16**	**A**	**L2**
12.3060	**22.32**	**10.65**	**32.97**	**60.00**	**-27.03**	**Q**	**L2**
12.3060	**16.92**	**10.65**	**27.57**	**50.00**	**-22.43**	**A**	**L2**
17.3420	**26.73**	**10.83**	**37.56**	**60.00**	**-22.44**	**Q**	**L2**
17.3420	**21.11**	**10.83**	**31.94**	**50.00**	**-18.06**	**A**	**L2**
21.7099	**24.36**	**10.95**	**35.31**	**60.00**	**-24.69**	**Q**	**L2**
21.7099	**19.12**	**10.95**	**30.07**	**50.00**	**-19.93**	**A**	**L2**

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

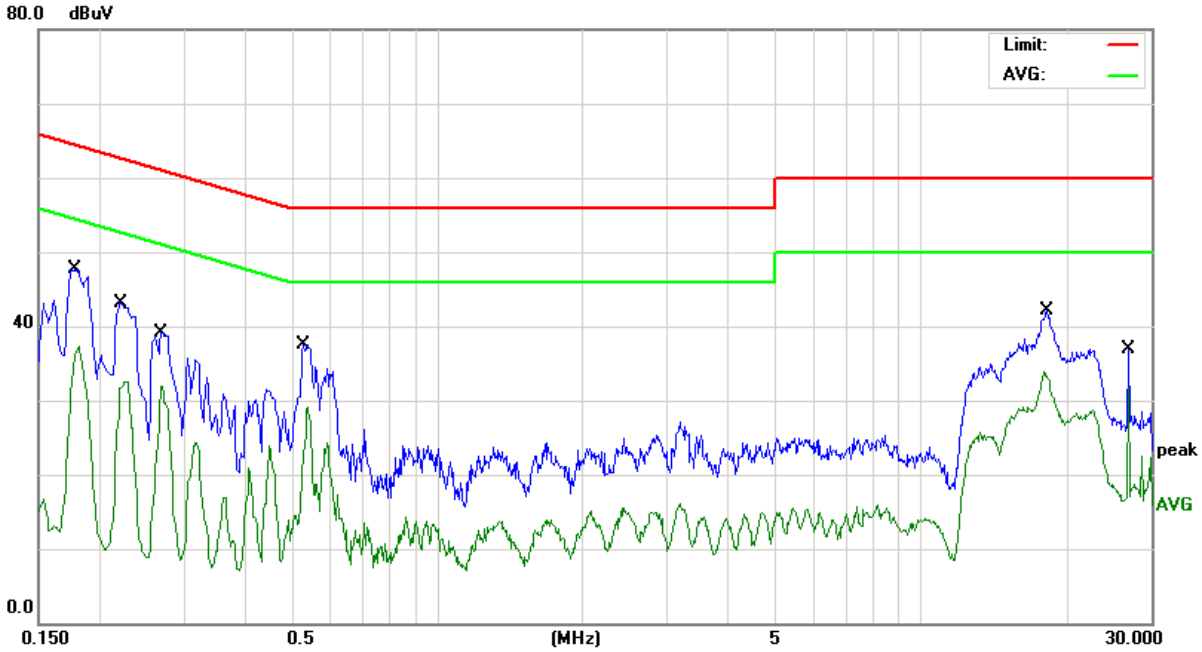
Model No.	KTPS65-5611DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 28
Tested by	Stanley Cheng	Phase	L1
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1749	34.38	10.01	44.39	64.72	-20.33	Q	L1
0.1749	20.25	10.01	30.26	54.72	-24.46	A	L1
0.1819	35.72	10.02	45.74	64.39	-18.65	Q	L1
0.1819	26.34	10.02	36.36	54.39	-18.03	A	L1
0.2260	31.05	10.01	41.06	62.59	-21.53	Q	L1
0.2260	21.97	10.01	31.98	52.59	-20.61	A	L1
0.2660	25.93	10.02	35.95	61.24	-25.29	Q	L1
0.2660	16.00	10.02	26.02	51.24	-25.22	A	L1
0.5380	25.43	10.06	35.49	56.00	-20.51	Q	L1
0.5380	17.72	10.06	27.78	46.00	-18.22	A	L1
18.1380	26.41	10.86	37.27	60.00	-22.73	Q	L1
18.1380	21.26	10.86	32.12	50.00	-17.88	A	L1

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

Model No.	KTPS65-5611DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 28
Tested by	Stanley Cheng	Phase	L2
Standard	EN 55022 CLASS B		



Conducted Emission Readings							
Frequency Range Investigated				150 kHz to 30 MHz			
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1787	35.71	10.02	45.73	64.54	-18.81	Q	L2
0.1787	25.63	10.02	35.65	54.54	-18.89	A	L2
0.2232	30.70	10.02	40.72	62.70	-21.98	Q	L2
0.2232	20.68	10.02	30.70	52.70	-22.00	A	L2
0.2700	26.61	10.02	36.63	61.12	-24.49	Q	L2
0.2700	19.47	10.02	29.49	51.12	-21.63	A	L2
0.5299	23.44	10.06	33.50	56.00	-22.50	Q	L2
0.5299	11.68	10.06	21.74	46.00	-24.26	A	L2
18.2540	26.20	10.86	37.06	60.00	-22.94	Q	L2
18.2540	21.04	10.86	31.90	50.00	-18.10	A	L2
26.9180	23.92	11.10	35.02	60.00	-24.98	Q	L2
26.9180	19.93	11.10	31.03	50.00	-18.97	A	L2

Note: L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

7.2. CONDUCTED EMISSION MEASUREMENT AT TELECOMMUNICATION PORTS

7.2.1. LIMITS

For Class A Equipment

FREQUENCY (MHz)	Voltage Limit (dBuV)		Current Limit (dBuA)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 ~ 0.5	97 ~ 87	84 ~ 74	53 ~ 43	40 ~ 30
0.5 ~ 30.0	87	74	43	30

NOTE: The limits decrease linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

For Class B Equipment

FREQUENCY (MHz)	Voltage Limit (dBuV)		Current Limit (dBuA)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	84 ~ 74	74 ~ 64	40 ~ 30	30 ~ 20
0.5 - 30.0	74	64	30	20

NOTE: The limits decrease linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

7.2.2. TEST INSTRUMENTS

Conducted Emission room #				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. N.C.R = No Calibration Request.

7.2.3. TEST PROCEDURE (please refer to measurement standard or CCS SOP PA-031)

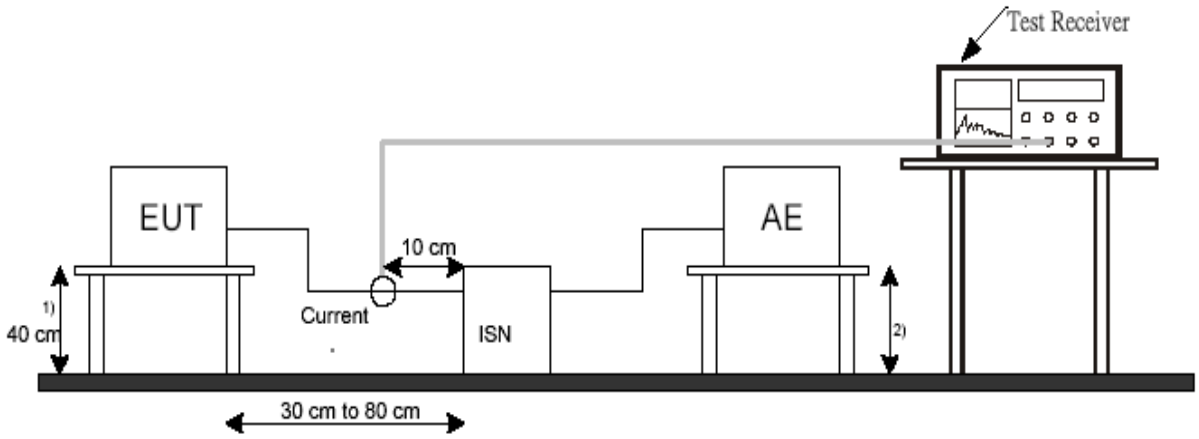
- Selecting ISN for unscreened cable or a current probe for screened cable to take measurement.
- The port of the EUT was connected to the remote side support equipment through the ISN/Current Probe and communication in normal condition.
- Making a overall range scan by using the test receiver controlled by controller and record at least six highest emissions for showing in the test report.
- Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit.
- In case of measuring on the screened cable, the current limit shall be applied; otherwise the voltage limit should be applied.
- The following test modes was scanned during the preliminary test:

  N/A

- After the preliminary scan, we found the following test mode(s) producing the highest emission level and test data of the worst case was recorded.

  N/A

7.2.4. TEST SETUP



1) Distance to the ground reference plane (vertical or horizontal).
2) Distance to the ground reference plane is not critical.

- For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

7.2.5. DATA SAMPLE

Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)
x.xx	62.95	0.55	63.50	84	-20.50	Q

Freq. = Emission frequency in MHz
Reading = Uncorrected Analyzer/Receiver reading
Factor = Insertion loss of LISN + Cable Losss + Pulse Limit
Result = Reading + Factor
Limit = Limit stated in standard
Margin = Reading in reference to limit
P = Peak Reading
Q = Quasi-peak Reading
A = Average Reading

Calculation Formula

Margin (dB) = Result (dBuV) – Limit (dBuV)

7.2.6. TEST RESULTS

Model No.	N/A	**6dB Bandwidth**	N/A
Environmental Conditions	N/A	**Test Mode**	N/A
Tested by	N/A		

Note: No applicable, the EUT doesn't have LAN Port or Modem port.

7.3. RADIATED EMISSION MEASUREMENT

7.3.1. LIMITS

Below 1GHz

FREQUENCY (MHz)	dBuV/m (At 10m)	
	Class A	Class B
30 ~ 230	40	30
230 ~ 1000	47	37

Above 1GHz

Frequency (MHz)	Class A (dBuV/m) (At 3m)		Class B (dBuV/m) (At 3m)	
	Average	Peak	Average	Peak
1000 ~ 3000	56	76	50	70
3000 ~ 6000	60	80	54	74

NOTE: The lower limit shall apply at the transition frequencies.

According to EN 55022: 2010 / AC: 2011 clause 6.2, the measurement frequency range shown in the following table:

Highest frequency generated or used within the EUT or on which the EUT operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Less than 108	1000
108-500	2000
500-1000	5000
Above 1000	5 times of the highest frequency or 6GHz, whichever is less

7.3.2. TEST INSTRUMENTS

Open Area Test Site # H				
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Due**
MEASURE RECEIVER	R&S	ESCI	101339	01/17/2015
ANTENNA	SUNOL	JB1	A061711	08/17/2015
AMPLIFIER	HP	8447D	1937A01554	10/02/2015
CABLE	BELDEN	9913	N-TYPE #H9	05/01/2015
THERMO-HYGRO METER	TECPEL	DTM-303	090639	05/21/2015
Test S/W	EZ-EMC			

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. N.C.R = No Calibration Request.

7.3.3. TEST PROCEDURE (please refer to measurement standard or CCS SOP PA-031)

Procedure of Preliminary Test

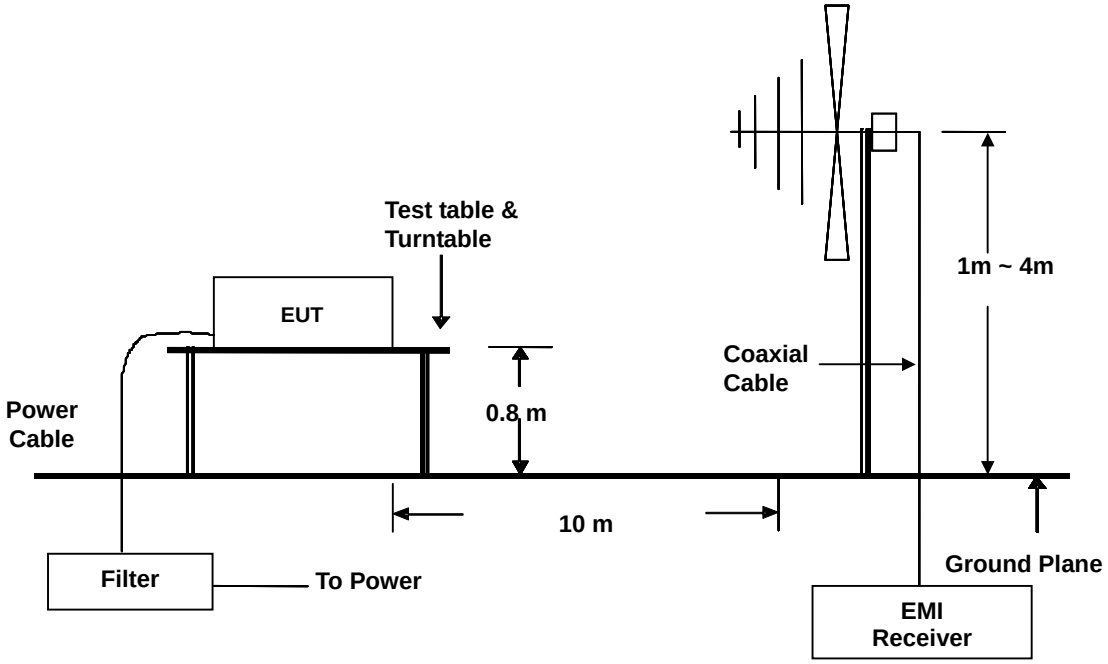
- The equipment was set up as per the test configuration to simulate typical usage per the user's manual. When the EUT is a tabletop system, a wooden turntable with a height of 0.8 meters is used which is placed on the ground plane. When the EUT is a floor standing equipment, it is placed on the ground plane which has a 15 cm non-conductive covering to insulate the EUT from the ground plane.
- Support equipment, if needed, was placed as per EN 55022.
- All I/O cables were positioned to simulate typical usage as per EN 55022.
- The EUT received AC power source from the outlet socket under the turntable. All support equipment power received from another socket under the turntable.
- The antenna was placed at 3 or 10 meter away from the EUT as stated in EN 55022. The antenna connected to the Spectrum Analyzer via a cable and at times a pre-amplifier would be used.
- The Analyzer / Receiver quickly scanned from 30MHz to 6000MHz. The EUT test program was started. Emissions were scanned and measured rotating the EUT to 360 degrees and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.
- The test mode(s) described in Item 4.1 were scanned during the preliminary test:
- After the preliminary scan, we found the test mode described in Item 4.1 producing the highest emission level.
- The EUT and cable configuration, antenna position, polarization and turntable position of the above highest emission level were recorded for the final test.

Procedure of Final Test

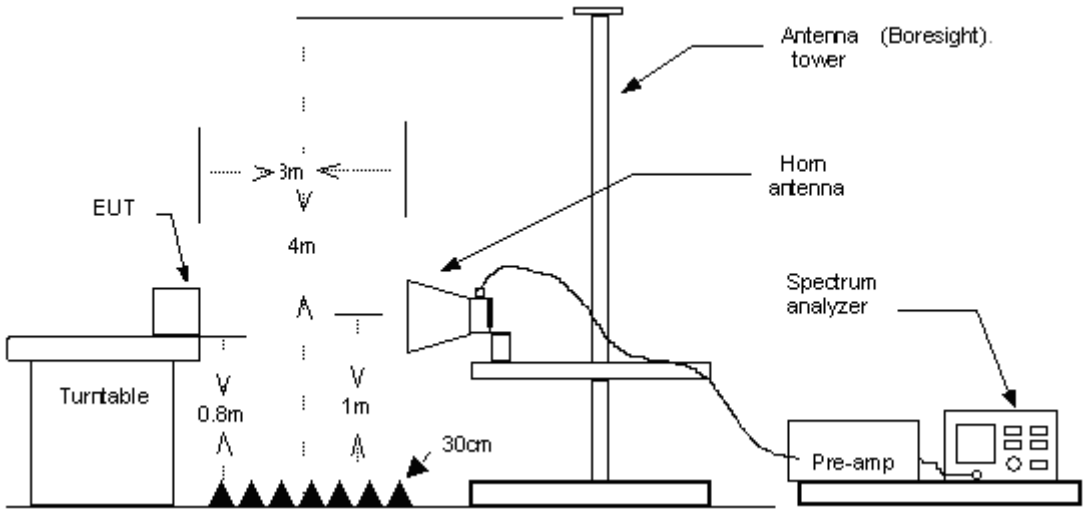
- EUT and support equipment were set up on the turntable as per the configuration with highest emission level in the preliminary test.
- The Analyzer / Receiver scanned from 30MHz to 6000MHz. Emissions were scanned and measured rotating the EUT to 360 degrees, varying cable placement and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.
- Recorded at least the six highest emissions. Emission frequency, amplitude, antenna position, polarization and turntable position were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. Below 1GHz the Q.P. reading and above 1GHz the Peak and Average reading are presented.
- The test data of the worst-case condition(s) was recorded.

7.3.4. TEST SETUP

Below 1GHz



Above 1GHz



- For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

7.3.5. DATA SAMPLE

Below 1GHz

Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector (P/Q)	Pol. (H/V)
x.xx	14.0	12.2	26.2	30	-3.8	Q	H

Above 1GHz

Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector (P/A)	Pol. (H/V)
x.xx	42.95	0.55	43.50	54	-10.50	A	H

Freq. = Emission frequency in MHz
Reading = Uncorrected Analyzer/Receiver reading
Factor = Antenna Factor + Cable Loss - Amplifier Gain
Result = Reading + Factor
Limit = Limit stated in standard
Margin = Reading in reference to limit
P = Peak Reading
Q = Quasi-peak Reading
A = Average Reading
H = Antenna Polarization: Horizontal
V = Antenna Polarization: Vertical

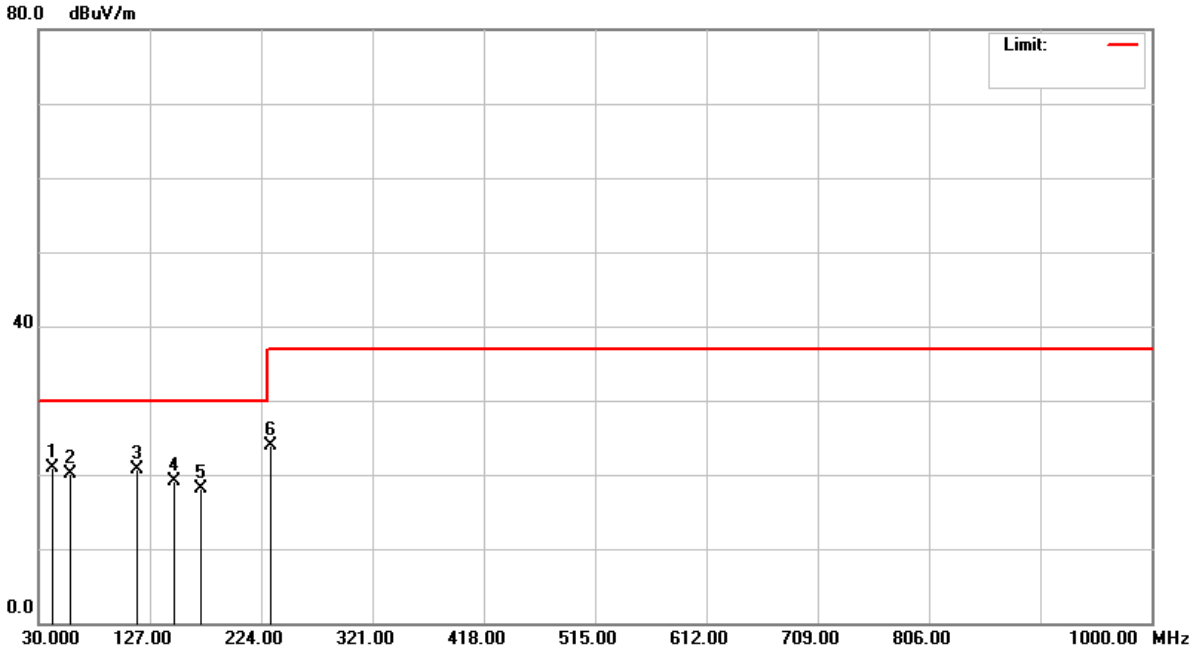
Calculation Formula

Margin (dB) = Result (dBuV/m) – Limit (dBuV/m)

7.3.6. TEST RESULTS

Below 1GHz

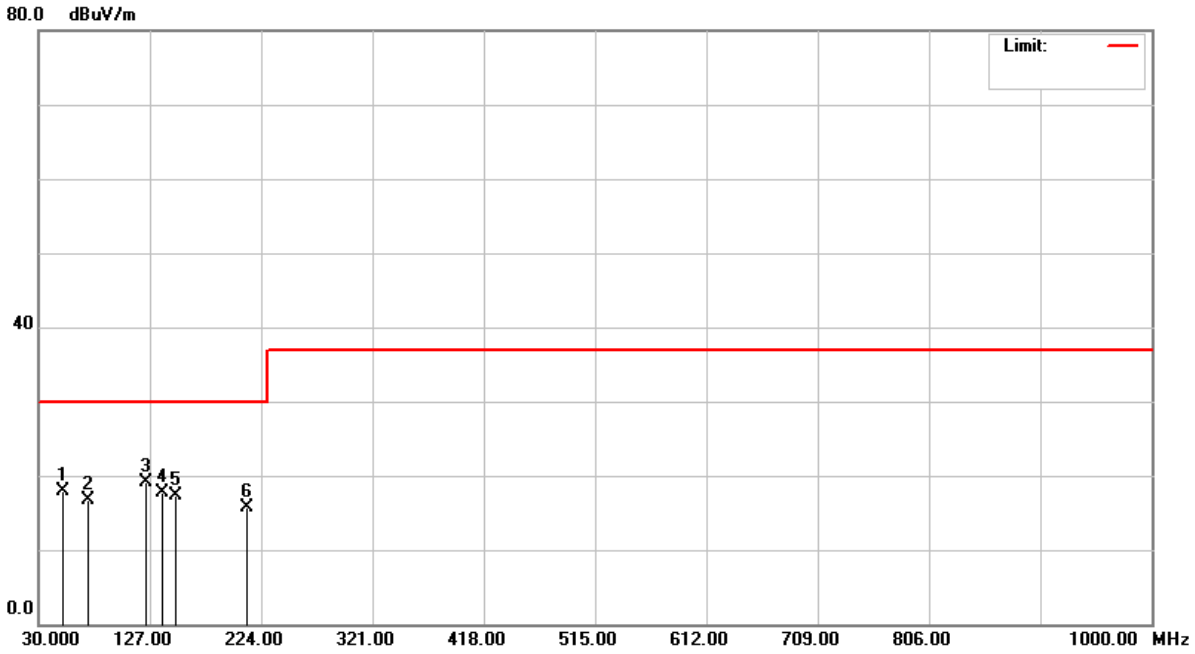
Model No.	KTPS65-1250DT-3P-VI	Test Mode	Mode 1
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Vertical	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
42.8100	35.80	-14.84	20.96	30.00	-9.04	100	56	Q	V
58.3600	39.10	-18.91	20.19	30.00	-9.81	100	119	Q	V
115.7900	33.50	-12.72	20.78	30.00	-9.22	100	279	Q	V
148.6500	32.10	-12.92	19.18	30.00	-10.82	100	99	Q	V
171.6900	31.90	-13.70	18.20	30.00	-11.80	100	310	Q	V
231.8400	37.50	-13.66	23.84	37.00	-13.16	100	195	Q	V

Note: P= Peak Reading; Q= Quasi-peak Reading.

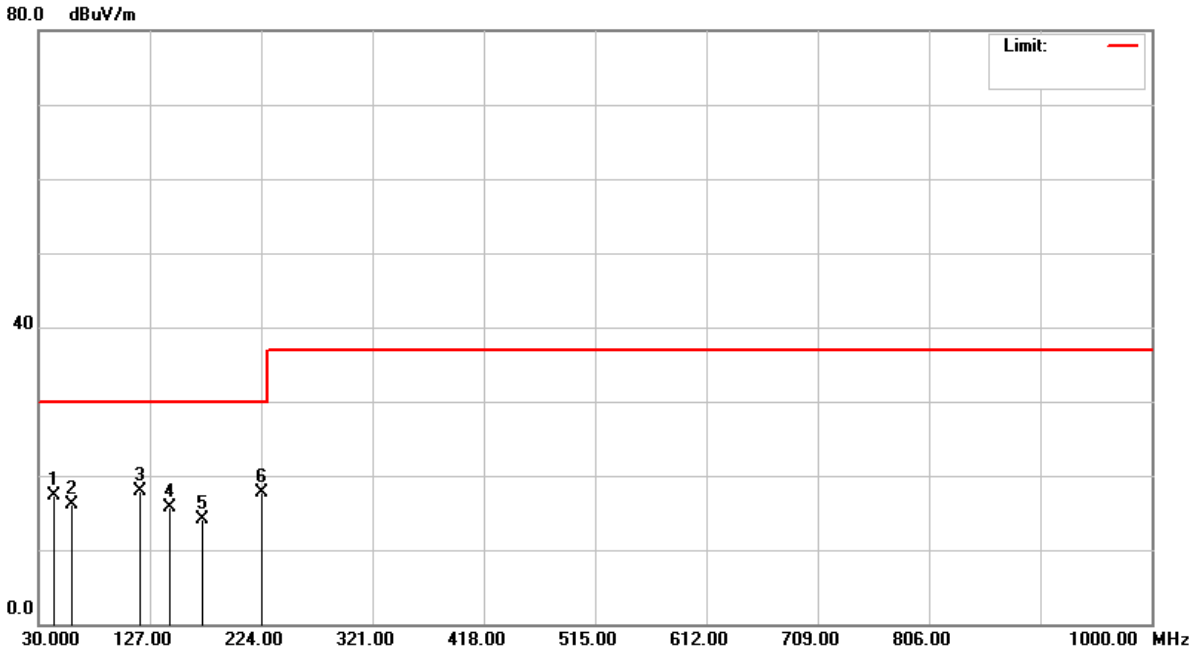
Model No.	KTPS65-1250DT-3P-VI	Test Mode	Mode 1
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Horizontal	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
51.3100	36.20	-18.35	17.85	30.00	-12.15	400	296	Q	H
73.8399	34.90	-18.14	16.76	30.00	-13.24	400	54	Q	H
123.6900	31.10	-12.09	19.01	30.00	-10.99	400	187	Q	H
138.4500	30.20	-12.55	17.65	30.00	-12.35	400	99	Q	H
149.3600	30.20	-12.94	17.26	30.00	-12.74	400	312	Q	H
211.7900	29.50	-13.73	15.77	30.00	-14.23	400	217	Q	H

Note: P= Peak Reading; Q= Quasi-peak Reading.

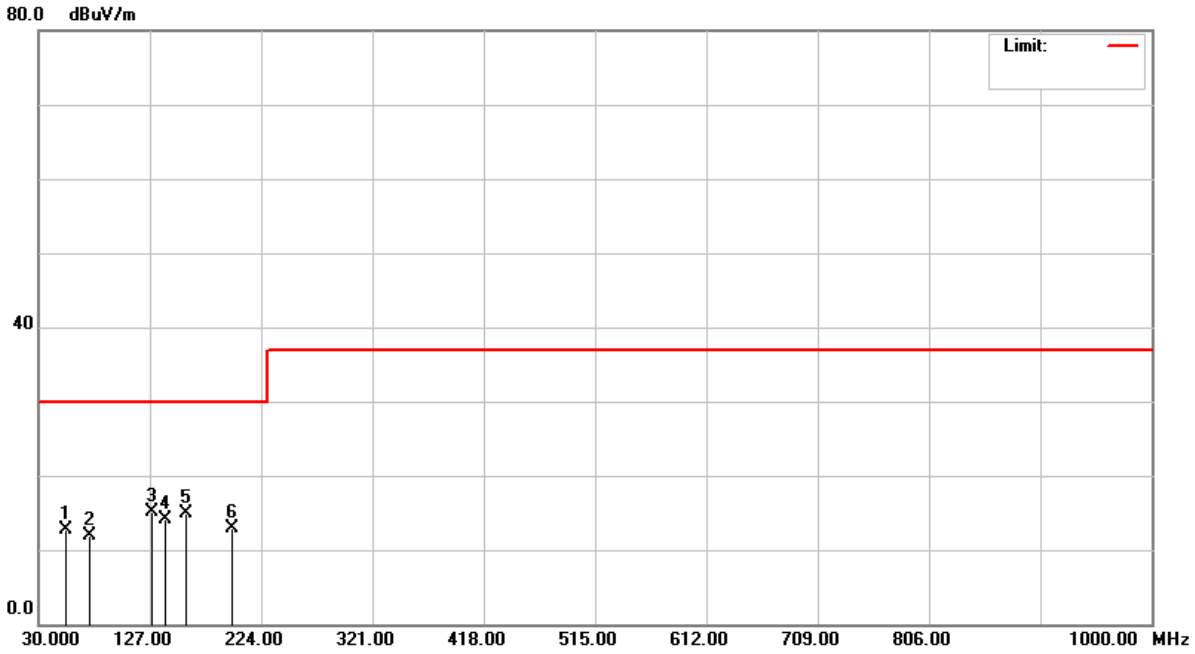
Model No.	KTPS65-1250DT-3P-VI	Test Mode	Mode 2
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Vertical	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
43.9800	32.90	-15.67	17.23	30.00	-12.77	100	109	Q	V
59.6100	35.20	-19.01	16.19	30.00	-13.81	100	58	Q	V
118.2500	30.10	-12.28	17.82	30.00	-12.18	100	77	Q	V
144.3200	28.40	-12.76	15.64	30.00	-14.36	100	198	Q	V
173.4800	27.90	-13.75	14.15	30.00	-15.85	100	274	Q	V
224.6800	31.80	-14.07	17.73	30.00	-12.27	100	146	Q	V

Note: P= Peak Reading; Q= Quasi-peak Reading.

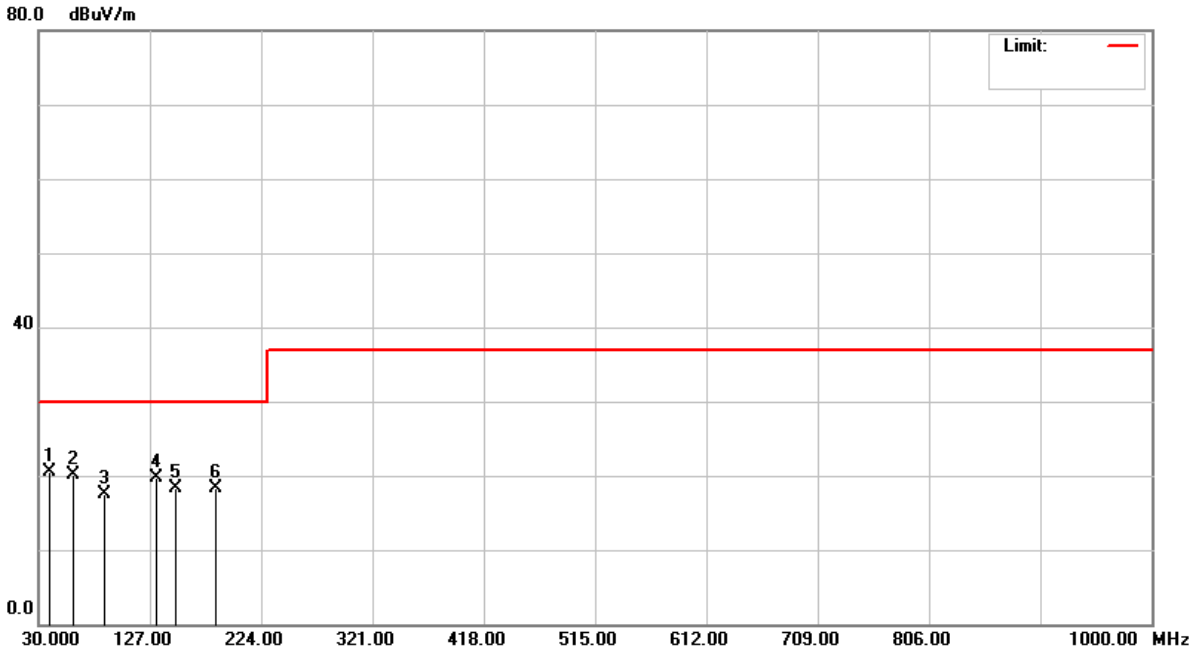
Model No.	KTPS65-1250DT-3P-VI	Test Mode	Mode 2
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Horizontal	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
53.9800	31.20	-18.56	12.64	30.00	-17.36	400	177	Q	H
74.1200	30.10	-18.14	11.96	30.00	-18.04	400	109	Q	H
128.4500	27.40	-12.24	15.16	30.00	-14.84	400	58	Q	H
140.6600	26.80	-12.62	14.18	30.00	-15.82	400	187	Q	H
158.7400	28.10	-13.28	14.82	30.00	-15.18	400	228	Q	H
199.1200	25.90	-12.91	12.99	30.00	-17.01	400	145	Q	H

Note: P= Peak Reading; Q= Quasi-peak Reading.

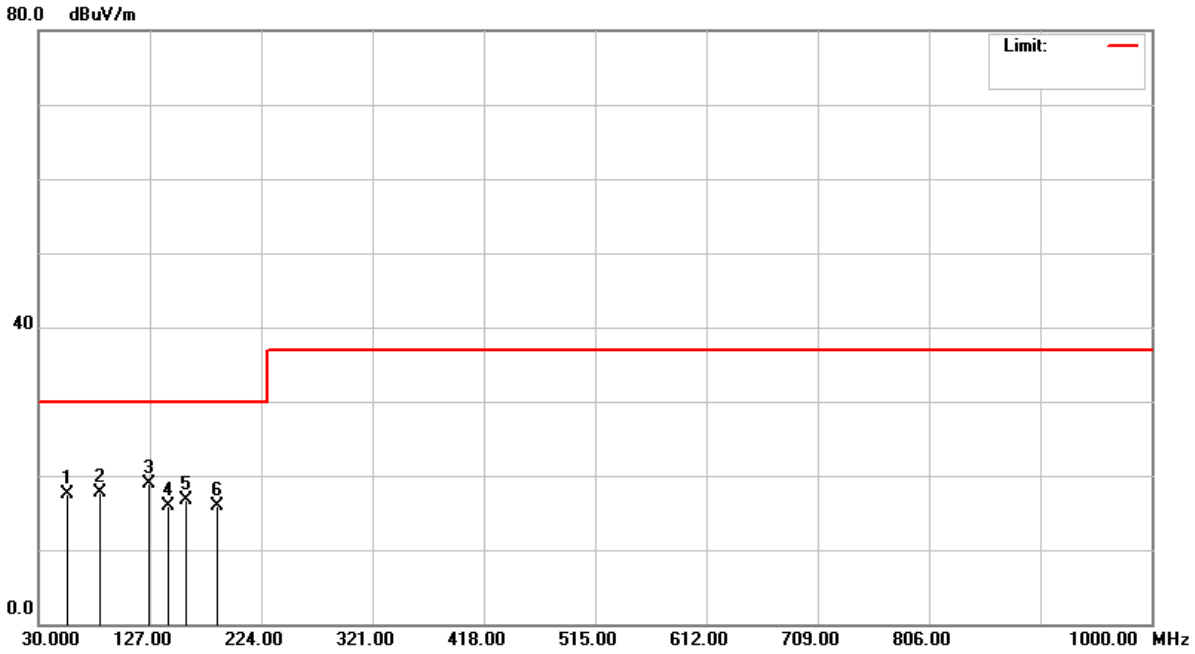
Model No.	KTPS65-13548DT-3P-VI	Test Mode	Mode 3
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Vertical	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
39.6500	33.20	-12.61	20.59	30.00	-9.41	100	195	Q	V
59.8400	39.10	-19.03	20.07	30.00	-9.93	100	141	Q	V
87.1400	35.90	-18.32	17.58	30.00	-12.42	100	97	Q	V
132.9800	32.10	-12.38	19.72	30.00	-10.28	100	45	Q	V
149.6900	31.30	-12.95	18.35	30.00	-11.65	100	118	Q	V
184.3600	32.10	-13.72	18.38	30.00	-11.62	100	316	Q	V

Note: P= Peak Reading; Q= Quasi-peak Reading.

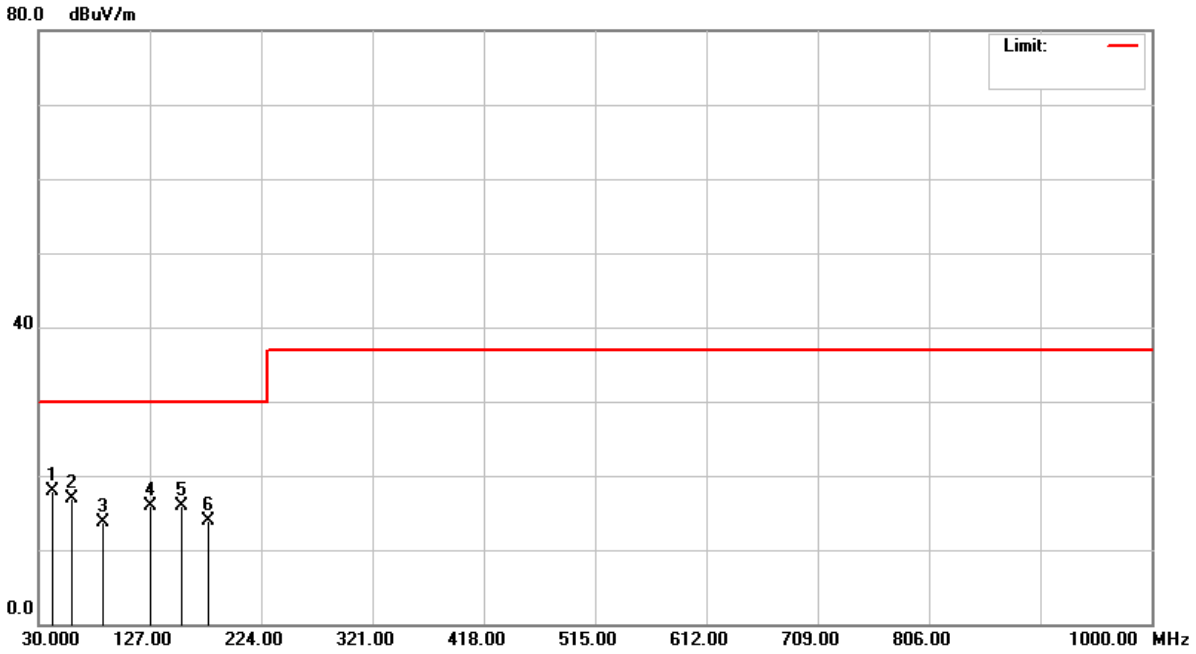
Model No.	KTPS65-13548DT-3P-VI	Test Mode	Mode 3
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Horizontal	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
54.8500	36.20	-18.63	17.57	30.00	-12.43	400	177	Q	H
84.1200	35.90	-18.29	17.61	30.00	-12.39	400	87	Q	H
126.8100	31.10	-12.18	18.92	30.00	-11.08	400	198	Q	H
142.9800	28.70	-12.71	15.99	30.00	-14.01	400	55	Q	H
158.2300	29.90	-13.27	16.63	30.00	-13.37	400	154	Q	H
186.2100	29.50	-13.62	15.88	30.00	-14.12	400	116	Q	H

Note: P= Peak Reading; Q= Quasi-peak Reading.

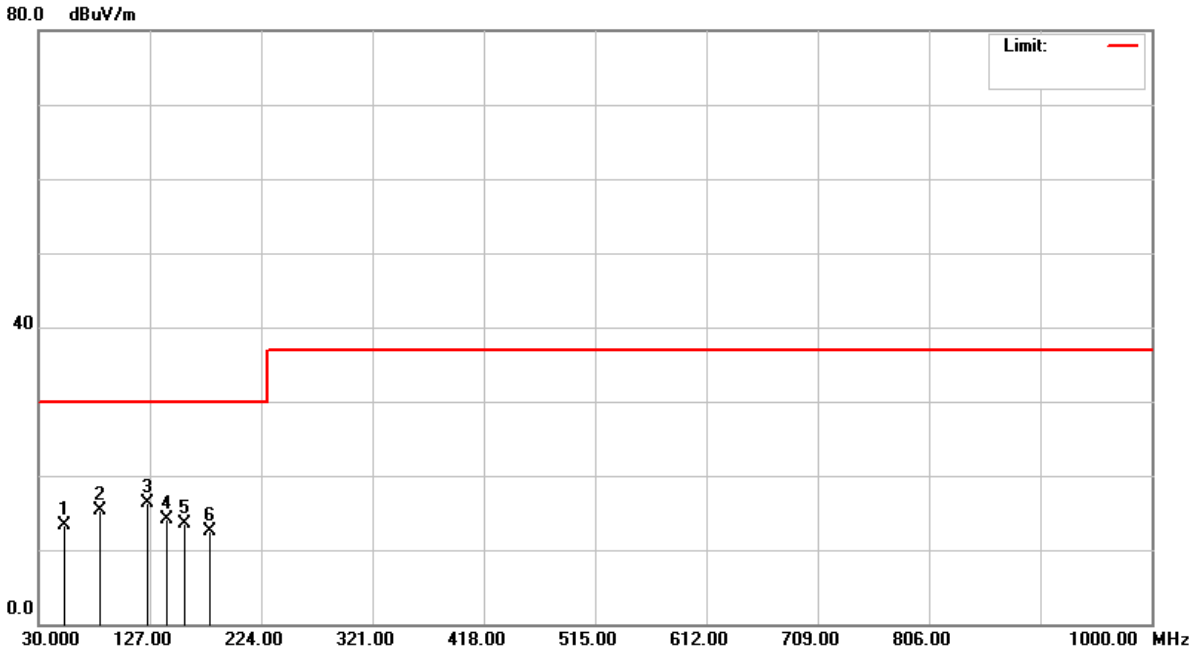
Model No.	KTPS65-13548DT-3P-VI	Test Mode	Mode 4
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Vertical	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
41.6500	**31.90**	**-14.02**	**17.88**	**30.00**	**-12.12**	**100**	**39**	**Q**	**V**
58.5600	**35.80**	**-18.93**	**16.87**	**30.00**	**-13.13**	**100**	**154**	**Q**	**V**
86.1200	**32.10**	**-18.31**	**13.79**	**30.00**	**-16.21**	**100**	**312**	**Q**	**V**
127.9800	**28.10**	**-12.22**	**15.88**	**30.00**	**-14.12**	**100**	**87**	**Q**	**V**
154.3900	**29.10**	**-13.13**	**15.97**	**30.00**	**-14.03**	**100**	**144**	**Q**	**V**
177.5900	**27.80**	**-13.88**	**13.92**	**30.00**	**-16.08**	**100**	**65**	**Q**	**V**

Note: P= Peak Reading; Q= Quasi-peak Reading.

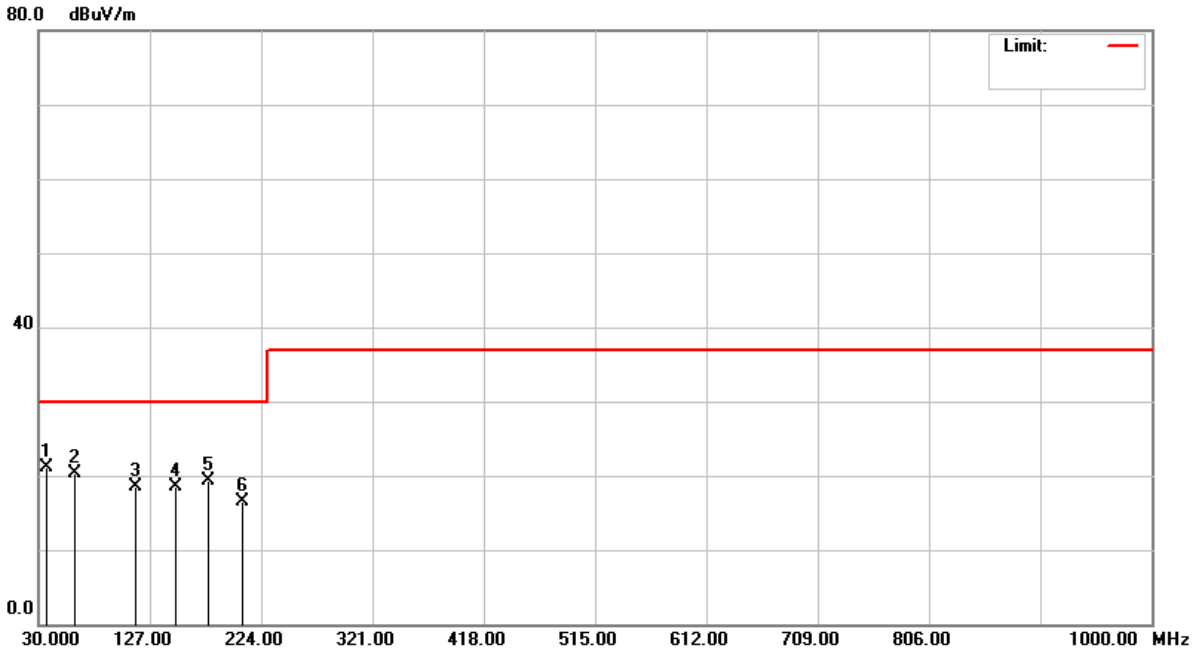
Model No.	KTPS65-13548DT-3P-VI	Test Mode	Mode 4
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Horizontal	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
53.1200	31.80	-18.50	13.30	30.00	-16.70	400	216	Q	H
83.7400	33.50	-18.28	15.22	30.00	-14.78	400	184	Q	H
124.6100	28.50	-12.12	16.38	30.00	-13.62	400	298	Q	H
141.8900	26.80	-12.67	14.13	30.00	-15.87	400	54	Q	H
157.3200	26.70	-13.23	13.47	30.00	-16.53	400	118	Q	H
179.3600	26.40	-13.94	12.46	30.00	-17.54	400	98	Q	H

Note: P= Peak Reading; Q= Quasi-peak Reading.

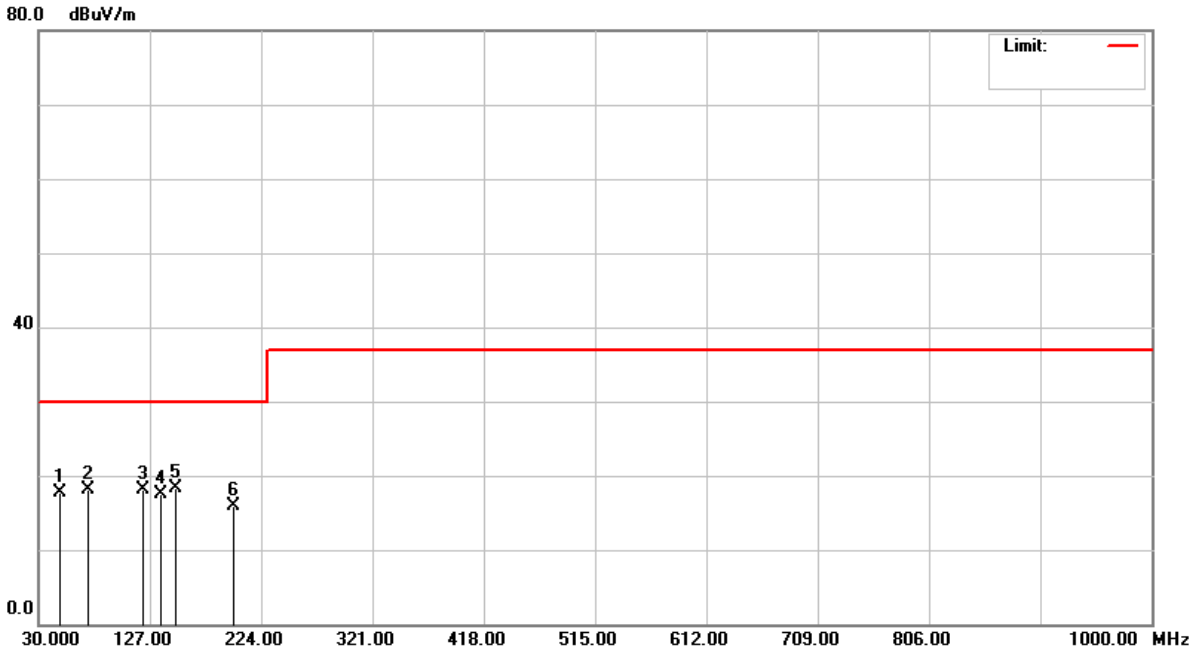
Model No.	KTPS65-1543DT-3P-VI	Test Mode	Mode 5
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Vertical	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
37.4600	32.10	-11.05	21.05	30.00	-8.95	100	128	Q	V
61.5200	39.10	-18.89	20.21	30.00	-9.79	100	154	Q	V
114.6900	31.50	-12.91	18.59	30.00	-11.41	100	149	Q	V
149.8400	31.50	-12.96	18.54	30.00	-11.46	100	312	Q	V
178.3200	33.20	-13.91	19.29	30.00	-10.71	100	223	Q	V
207.6500	29.90	-13.43	16.47	30.00	-13.53	100	87	Q	V

Note: P= Peak Reading; Q= Quasi-peak Reading.

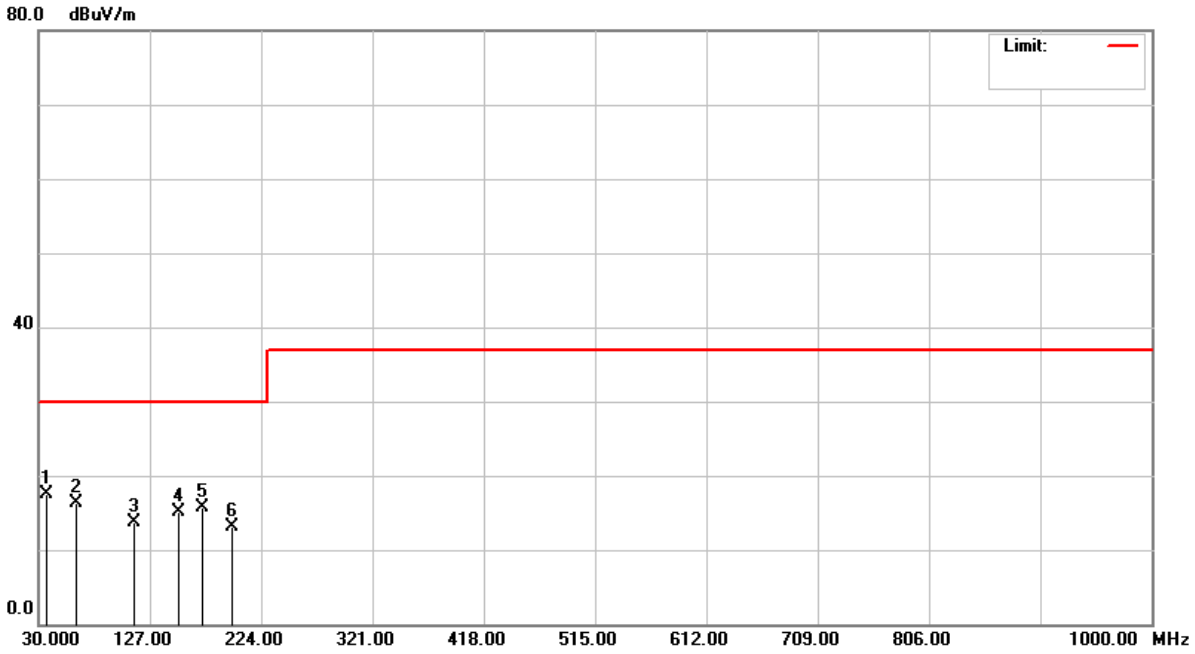
Model No.	KTPS65-1543DT-3P-VI	Test Mode	Mode 5
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Horizontal	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
48.9800	35.50	-17.87	17.63	30.00	-12.37	400	114	Q	H
73.1200	36.20	-18.12	18.08	30.00	-11.92	400	219	Q	H
121.7900	30.10	-12.03	18.07	30.00	-11.93	400	54	Q	H
136.4500	29.90	-12.49	17.41	30.00	-12.59	400	312	Q	H
149.2100	31.20	-12.94	18.26	30.00	-11.74	400	87	Q	H
199.6500	28.80	-12.88	15.92	30.00	-14.08	400	161	Q	H

Note: P= Peak Reading; Q= Quasi-peak Reading.

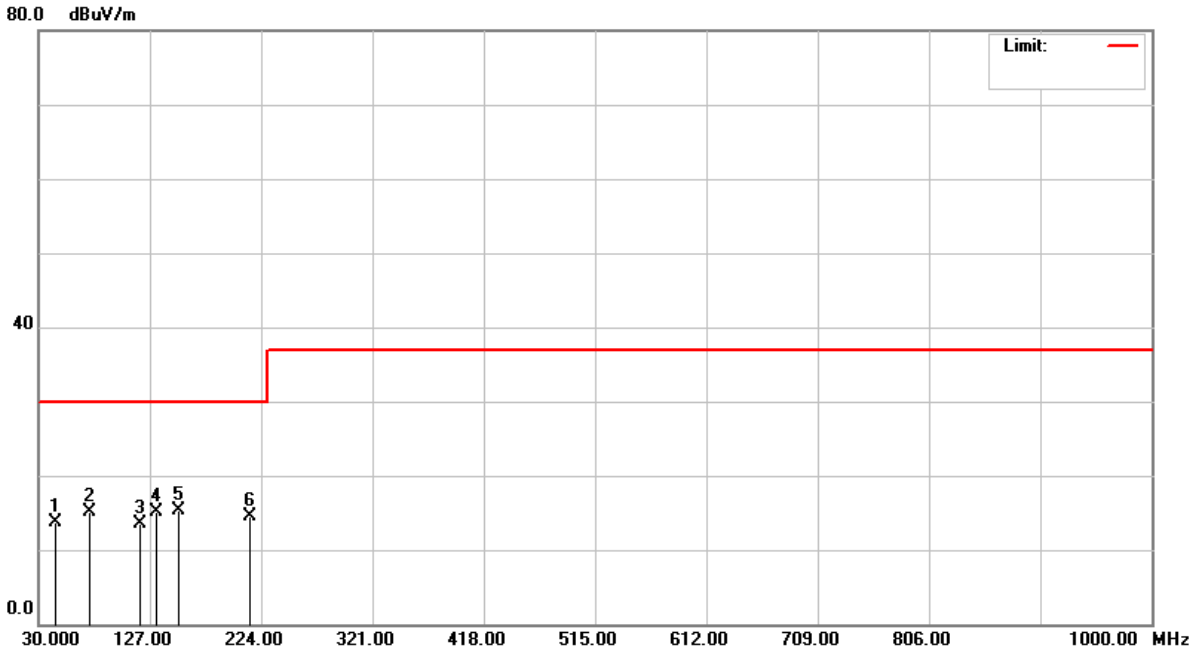
Model No.	KTPS65-1543DT-3P-VI	Test Mode	Mode 6
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Vertical	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
36.5099	27.90	-10.37	17.53	30.00	-12.47	100	312	Q	V
62.8700	35.10	-18.76	16.34	30.00	-13.66	100	98	Q	V
113.1200	26.80	-13.19	13.61	30.00	-16.39	100	154	Q	V
151.7800	28.20	-13.03	15.17	30.00	-14.83	100	221	Q	V
173.4100	29.40	-13.75	15.65	30.00	-14.35	100	91	Q	V
199.1200	26.10	-12.91	13.19	30.00	-16.81	100	265	Q	V

Note: P= Peak Reading; Q= Quasi-peak Reading.

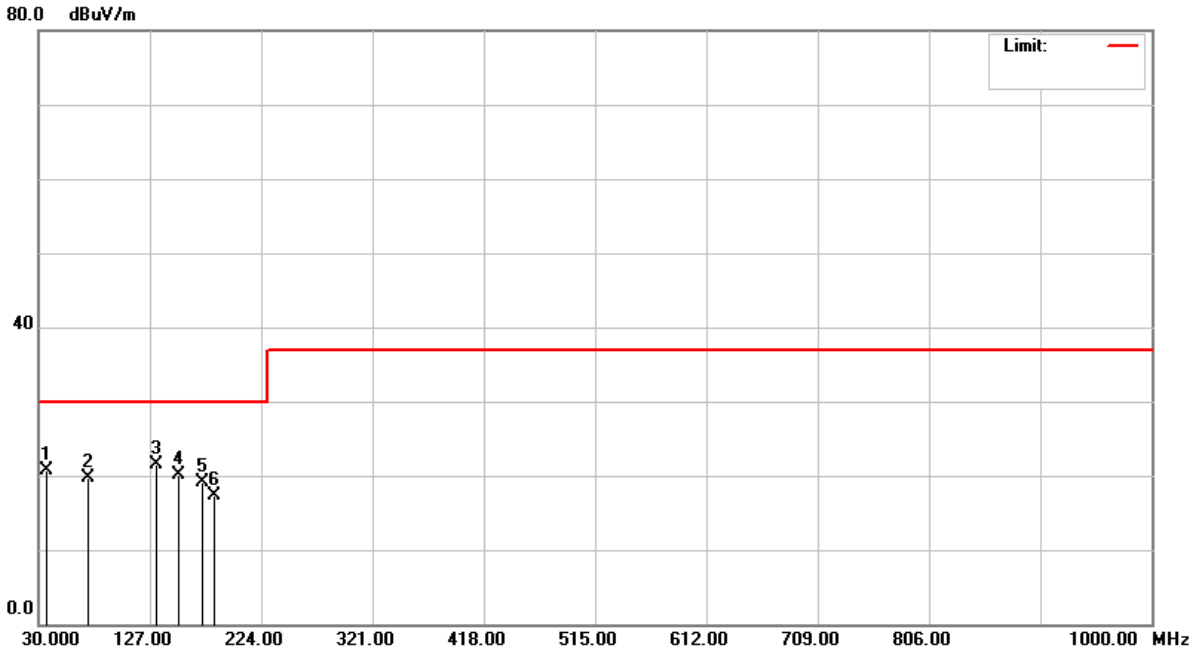
Model No.	KTPS65-1543DT-3P-VI	Test Mode	Mode 6
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Horizontal	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
45.2300	30.10	-16.48	13.62	30.00	-16.38	400	35	Q	H
74.9600	33.20	-18.15	15.05	30.00	-14.95	400	98	Q	H
118.4600	25.80	-12.24	13.56	30.00	-16.44	400	117	Q	H
132.5399	27.40	-12.36	15.04	30.00	-14.96	400	154	Q	H
151.9600	28.40	-13.04	15.36	30.00	-14.64	400	319	Q	H
213.7800	28.30	-13.88	14.42	30.00	-15.58	400	51	Q	H

Note: P= Peak Reading; Q= Quasi-peak Reading.

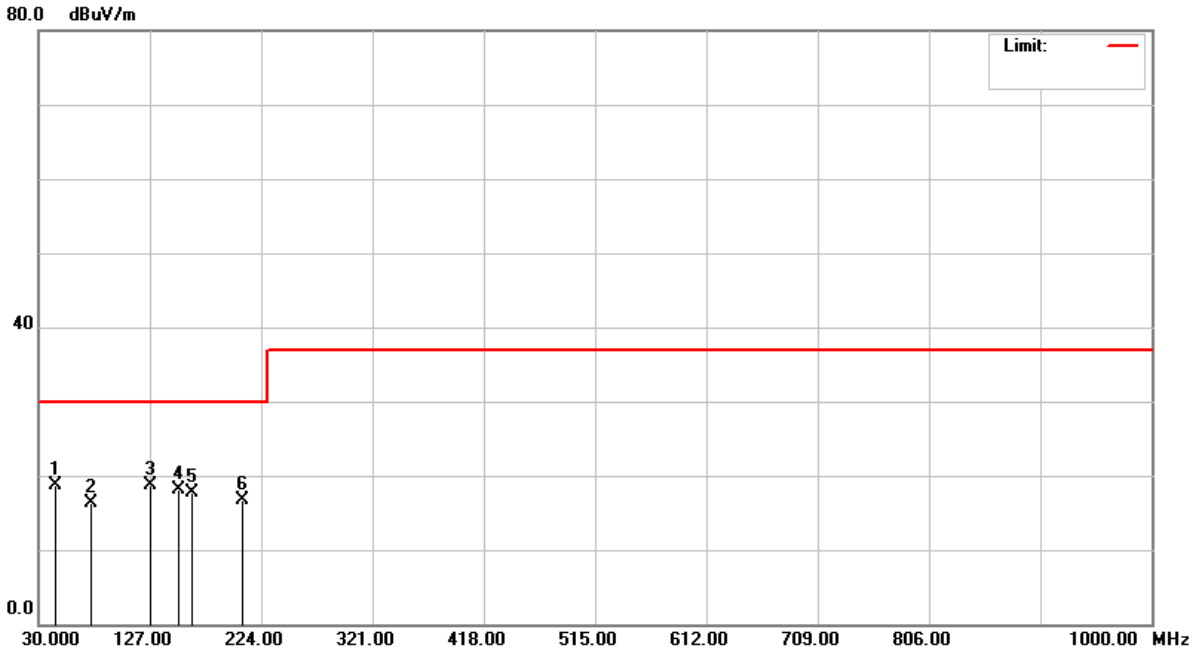
Model No.	KTPS65-1640DT-3P-VI	Test Mode	Mode 7
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Vertical	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
37.6400	31.90	-11.17	20.73	30.00	-9.27	100	87	Q	V
72.9800	37.80	-18.12	19.68	30.00	-10.32	100	146	Q	V
132.5399	33.80	-12.36	21.44	30.00	-8.56	100	318	Q	V
151.9800	33.10	-13.04	20.06	30.00	-9.94	100	56	Q	V
172.9100	32.80	-13.74	19.06	30.00	-10.94	100	117	Q	V
183.6500	31.10	-13.76	17.34	30.00	-12.66	100	218	Q	V

Note: P= Peak Reading; Q= Quasi-peak Reading.

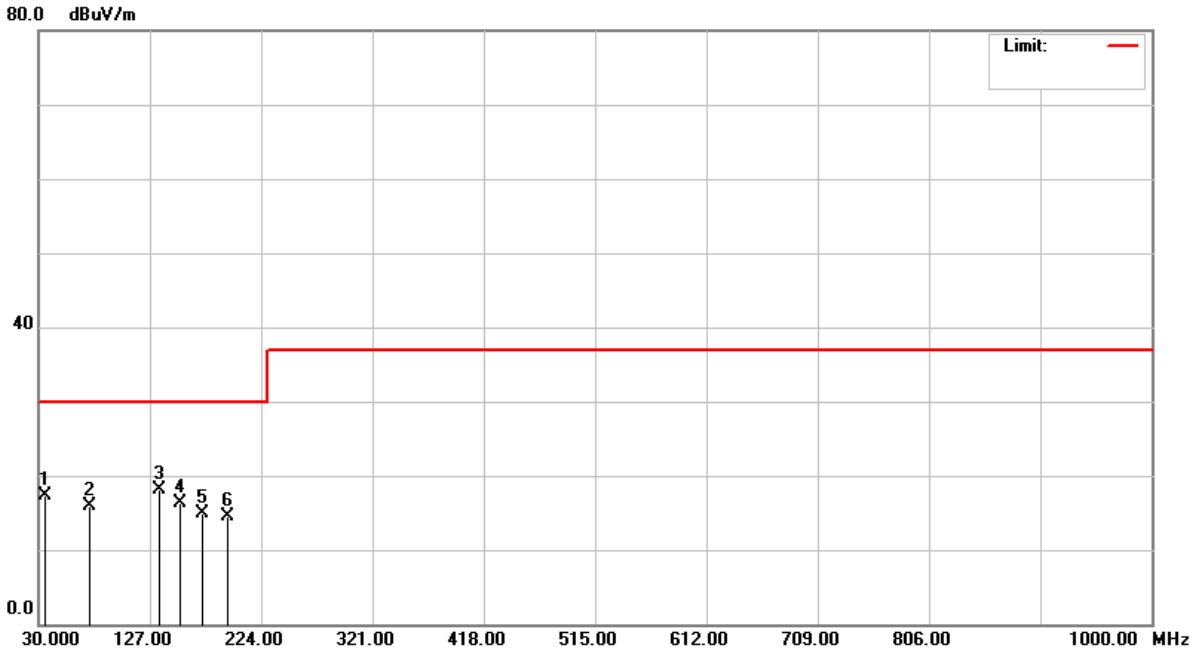
Model No.	KTPS65-1640DT-3P-VI	Test Mode	Mode 7
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Horizontal	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
44.7900	34.90	-16.24	18.66	30.00	-11.34	400	179	Q	H
75.8100	34.50	-18.17	16.33	30.00	-13.67	400	54	Q	H
127.9800	30.90	-12.22	18.68	30.00	-11.32	400	113	Q	H
151.6500	31.20	-13.03	18.17	30.00	-11.83	400	298	Q	H
163.9800	31.10	-13.46	17.64	30.00	-12.36	400	48	Q	H
207.6500	30.20	-13.43	16.77	30.00	-13.23	400	148	Q	H

Note: P= Peak Reading; Q= Quasi-peak Reading.

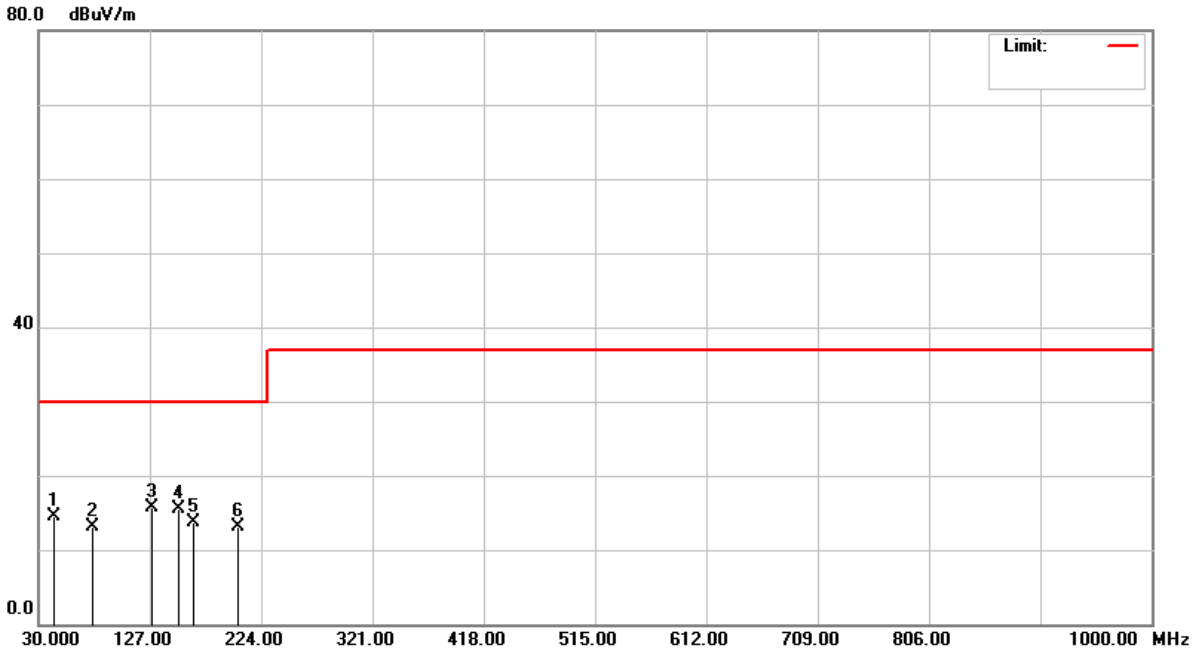
Model No.	KTPS65-1640DT-3P-VI	Test Mode	Mode 8
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Vertical	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
36.2500	27.40	-10.18	17.22	30.00	-12.78	100	39	Q	V
73.9800	34.10	-18.14	15.96	30.00	-14.04	100	156	Q	V
135.7400	30.60	-12.47	18.13	30.00	-11.87	100	223	Q	V
153.9100	29.50	-13.11	16.39	30.00	-13.61	100	86	Q	V
173.4600	28.60	-13.75	14.85	30.00	-15.15	100	167	Q	V
195.2100	27.60	-13.12	14.48	30.00	-15.52	100	110	Q	V

Note: P= Peak Reading; Q= Quasi-peak Reading.

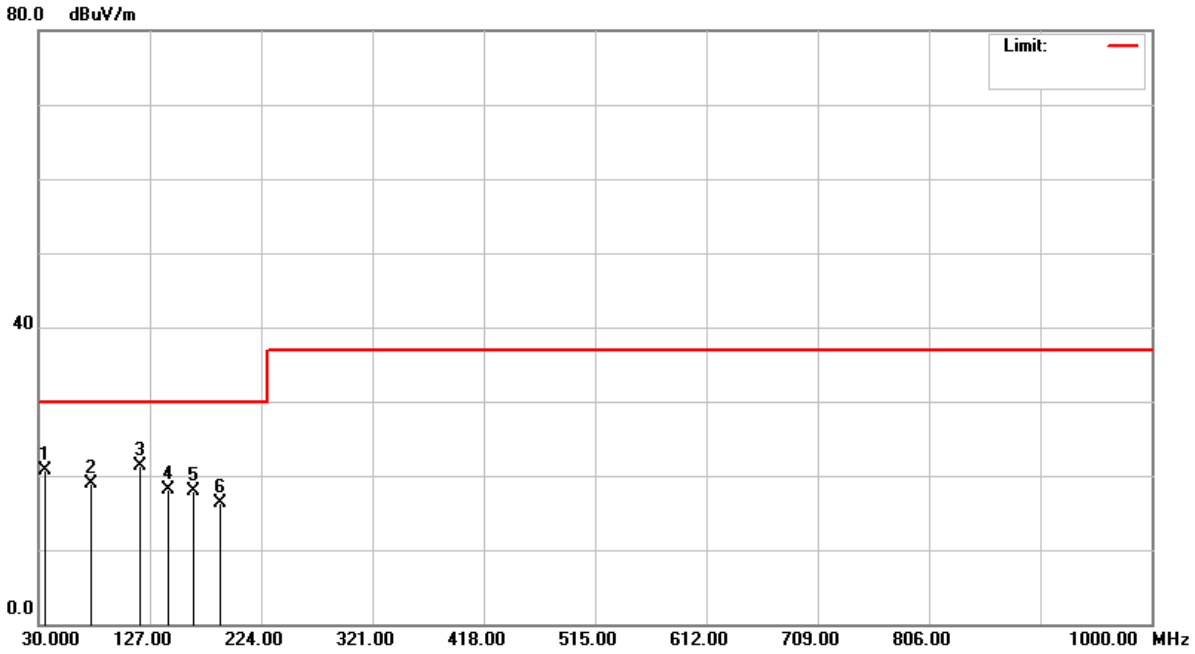
Model No.	KTPS65-1640DT-3P-VI	Test Mode	Mode 8
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Horizontal	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
44.1200	30.20	-15.77	14.43	30.00	-15.57	400	87	Q	H
76.9800	31.30	-18.19	13.11	30.00	-16.89	400	163	Q	H
129.2100	27.90	-12.26	15.64	30.00	-14.36	400	218	Q	H
152.7400	28.60	-13.06	15.54	30.00	-14.46	400	98	Q	H
165.5100	27.30	-13.50	13.80	30.00	-16.20	400	41	Q	H
203.4500	26.30	-13.12	13.18	30.00	-16.82	400	265	Q	H

Note: P= Peak Reading; Q= Quasi-peak Reading.

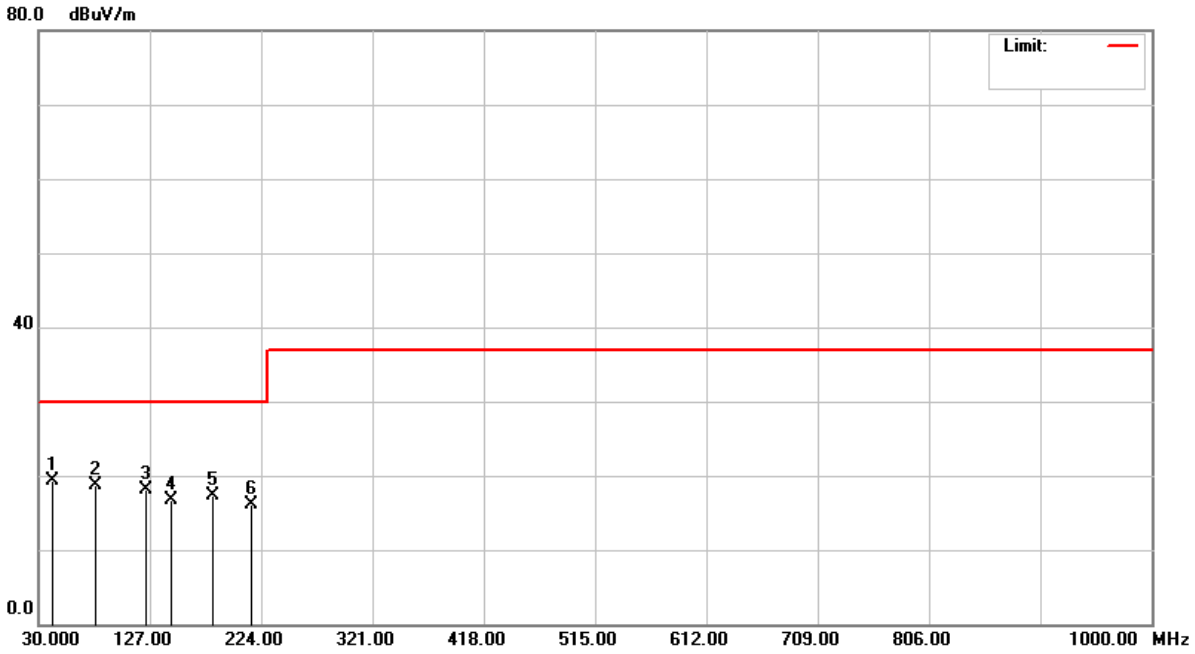
Model No.	KTPS65-1836DT-3P-VI	Test Mode	Mode 9
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Vertical	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
36.1200	30.80	-10.09	20.71	30.00	-9.29	100	98	Q	V
75.3900	37.10	-18.16	18.94	30.00	-11.06	100	187	Q	V
118.6200	33.60	-12.21	21.39	30.00	-8.61	100	36	Q	V
143.7899	30.80	-12.74	18.06	30.00	-11.94	100	154	Q	V
165.3200	31.50	-13.50	18.00	30.00	-12.00	100	112	Q	V
187.9500	29.90	-13.52	16.38	30.00	-13.62	100	238	Q	V

Note: P= Peak Reading; Q= Quasi-peak Reading.

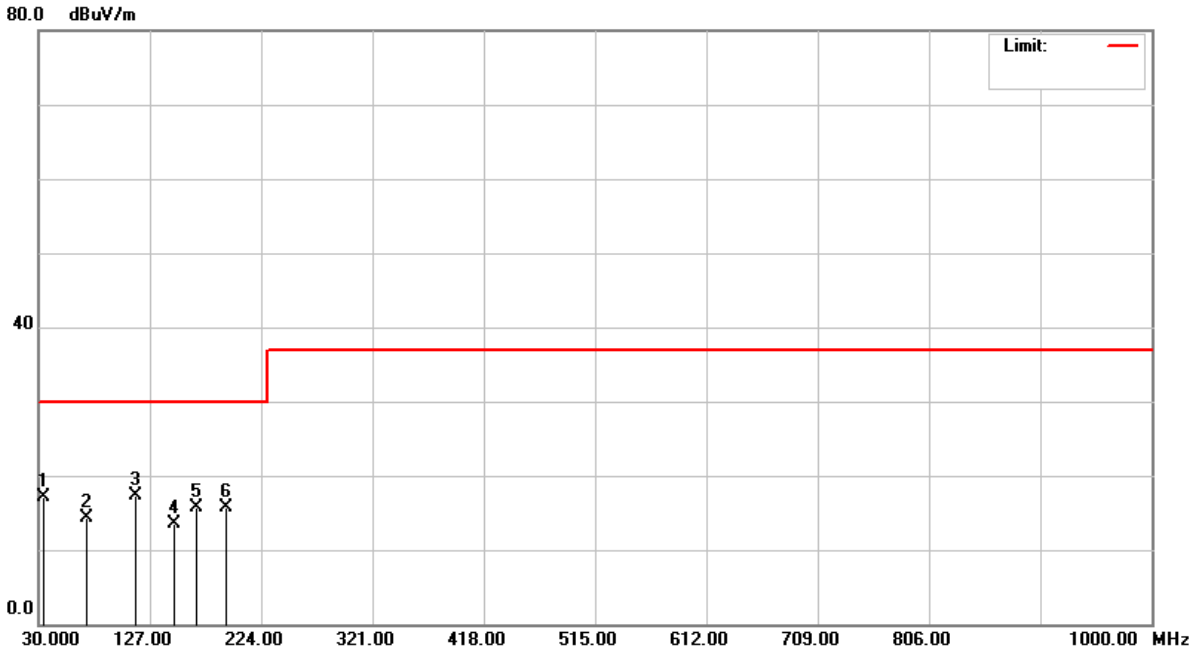
Model No.	KTPS65-1836DT-3P-VI	Test Mode	Mode 9
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Horizontal	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
42.8400	34.10	-14.86	19.24	30.00	-10.76	400	91	Q	H
79.1800	36.90	-18.23	18.67	30.00	-11.33	400	215	Q	H
124.3600	30.20	-12.11	18.09	30.00	-11.91	400	308	Q	H
145.2600	29.50	-12.79	16.71	30.00	-13.29	400	84	Q	H
181.5500	31.10	-13.87	17.23	30.00	-12.77	400	254	Q	H
215.6500	30.20	-14.02	16.18	30.00	-13.82	400	54	Q	H

Note: P= Peak Reading; Q= Quasi-peak Reading.

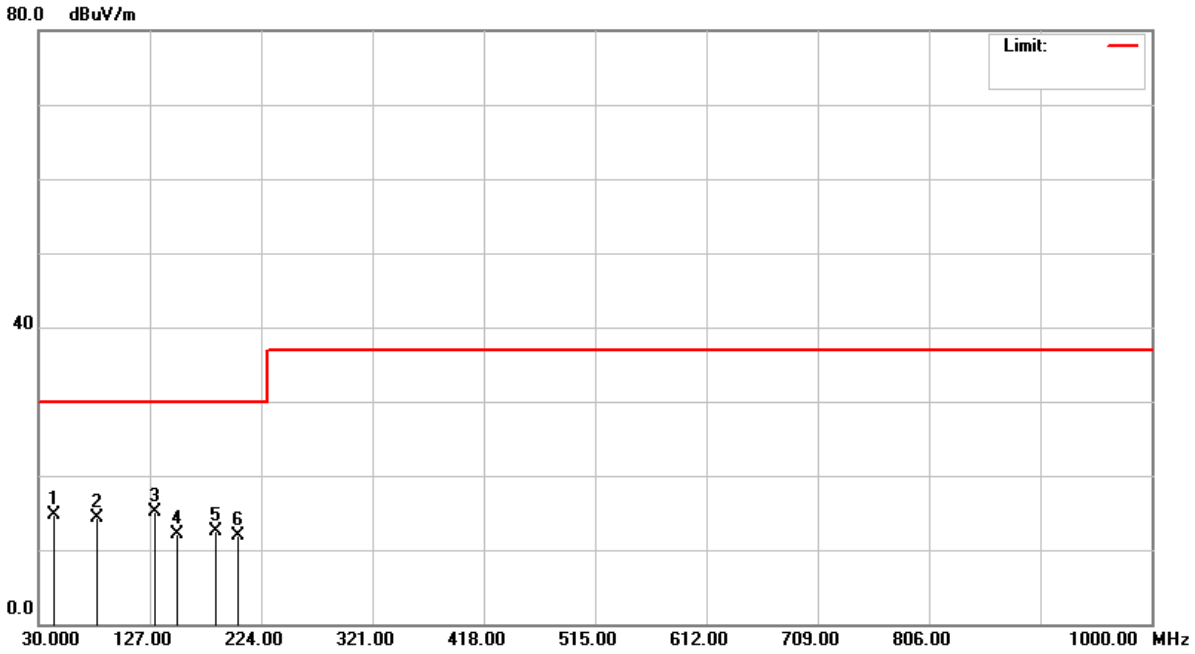
Model No.	KTPS65-1836DT-3P-VI	Test Mode	Mode 10
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Vertical	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
34.5099	25.90	-8.87	17.03	30.00	-12.97	100	147	Q	V
72.6500	32.50	-18.11	14.39	30.00	-15.61	100	305	Q	V
115.2100	30.10	-12.82	17.28	30.00	-12.72	100	98	Q	V
148.9800	26.50	-12.93	13.57	30.00	-16.43	100	158	Q	V
168.1500	29.20	-13.59	15.61	30.00	-14.39	100	228	Q	V
194.2100	28.90	-13.18	15.72	30.00	-14.28	100	161	Q	V

Note: P= Peak Reading; Q= Quasi-peak Reading.

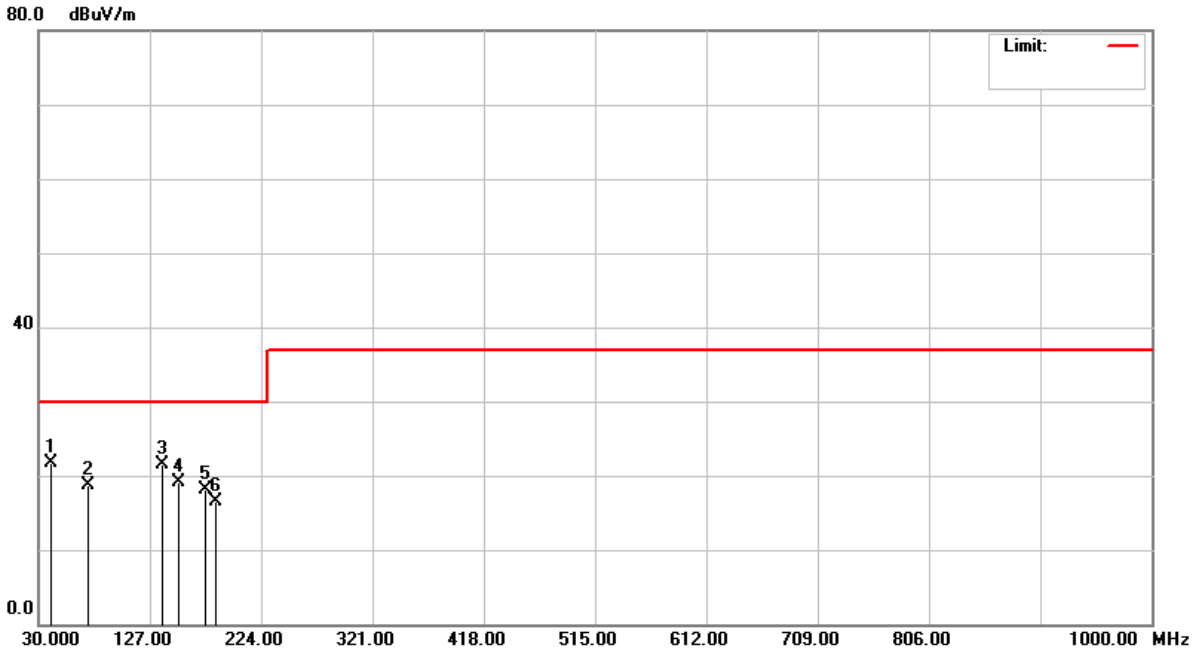
Model No.	KTPS65-1836DT-3P-VI	Test Mode	Mode 10
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Horizontal	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
43.6500	30.20	-15.44	14.76	30.00	-15.24	400	229	Q	H
81.6900	32.50	-18.26	14.24	30.00	-15.76	400	146	Q	H
131.5399	27.50	-12.33	15.17	30.00	-14.83	400	312	Q	H
150.8500	25.10	-13.00	12.10	30.00	-17.90	400	87	Q	H
184.9800	26.20	-13.69	12.51	30.00	-17.49	400	154	Q	H
204.2100	25.10	-13.17	11.93	30.00	-18.07	400	115	Q	H

Note: P= Peak Reading; Q= Quasi-peak Reading.

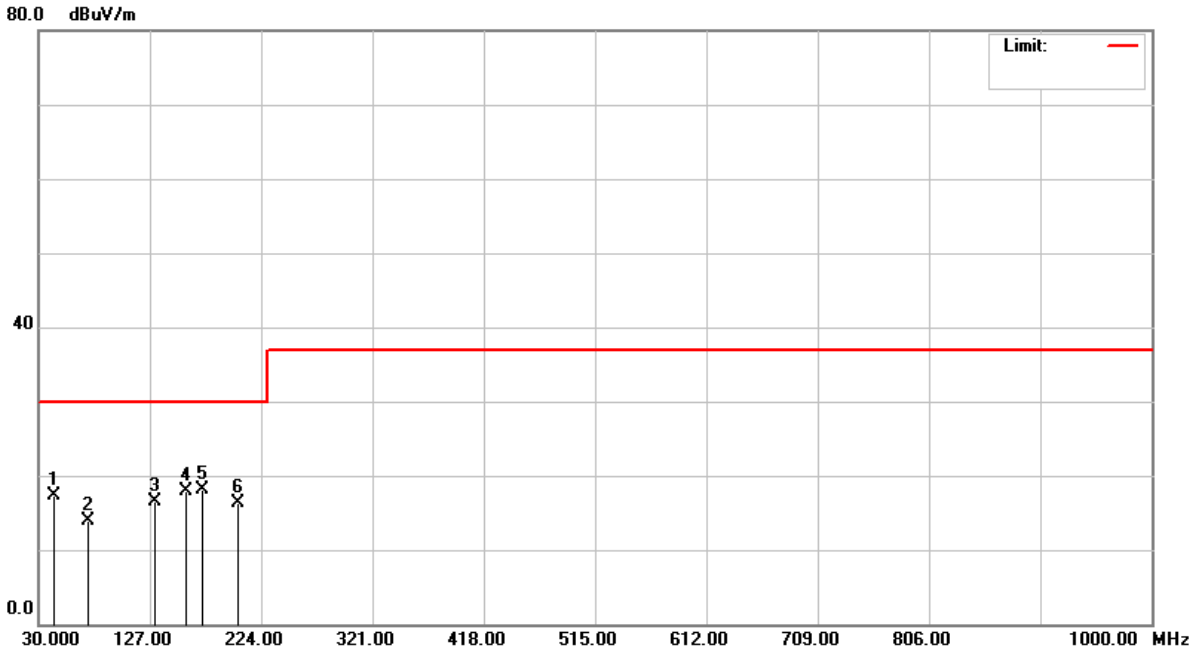
Model No.	KTPS65-1934DT-3P-VI	Test Mode	Mode 11
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Vertical	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
40.9800	35.20	-13.55	21.65	30.00	-8.35	100	119	Q	V
73.1200	36.90	-18.12	18.78	30.00	-11.22	100	198	Q	V
138.5600	34.10	-12.55	21.55	30.00	-8.45	100	312	Q	V
151.7400	32.20	-13.03	19.17	30.00	-10.83	100	85	Q	V
175.3200	31.90	-13.81	18.09	30.00	-11.91	100	114	Q	V
185.1100	30.20	-13.68	16.52	30.00	-13.48	100	187	Q	V

Note: P= Peak Reading; Q= Quasi-peak Reading.

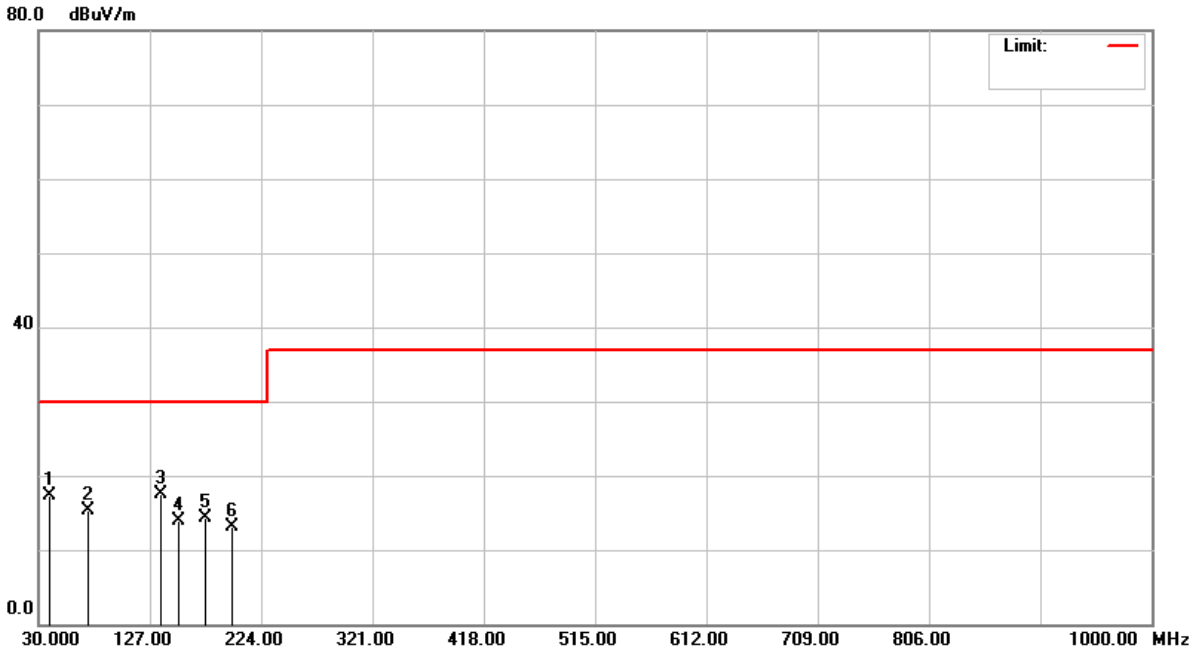
Model No.	KTPS65-1934DT-3P-VI	Test Mode	Mode 11
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Horizontal	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
43.9800	32.90	-15.67	17.23	30.00	-12.77	400	45	Q	H
73.6500	32.10	-18.13	13.97	30.00	-16.03	400	226	Q	H
131.4100	28.90	-12.33	16.57	30.00	-13.43	400	308	Q	H
159.3200	31.20	-13.31	17.89	30.00	-12.11	400	97	Q	H
172.6500	31.80	-13.73	18.07	30.00	-11.93	400	168	Q	H
204.3600	29.50	-13.18	16.32	30.00	-13.68	400	112	Q	H

Note: P= Peak Reading; Q= Quasi-peak Reading.

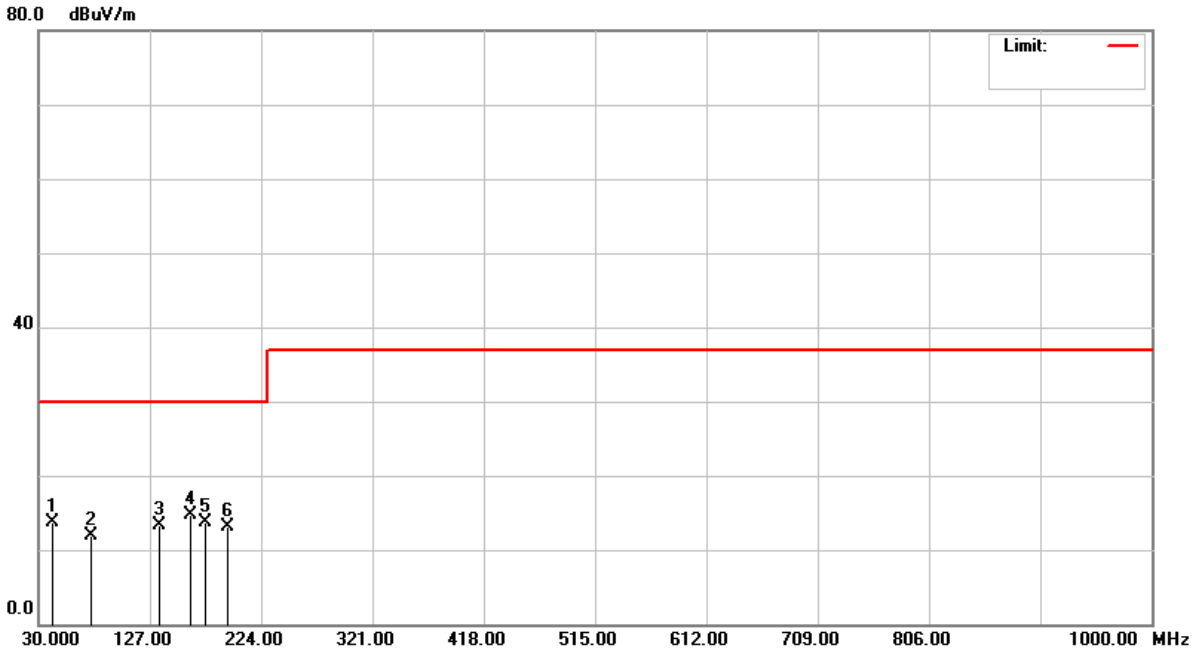
Model No.	KTPS65-1934DT-3P-VI	Test Mode	Mode 12
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Vertical	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
39.9600	30.10	-12.83	17.27	30.00	-12.73	100	191	Q	V
73.5899	33.50	-18.13	15.37	30.00	-14.63	100	215	Q	V
136.5100	29.90	-12.49	17.41	30.00	-12.59	100	35	Q	V
151.9800	26.90	-13.04	13.86	30.00	-16.14	100	312	Q	V
175.6900	28.20	-13.82	14.38	30.00	-15.62	100	87	Q	V
199.1200	26.10	-12.91	13.19	30.00	-16.81	100	45	Q	V

Note: P= Peak Reading; Q= Quasi-peak Reading.

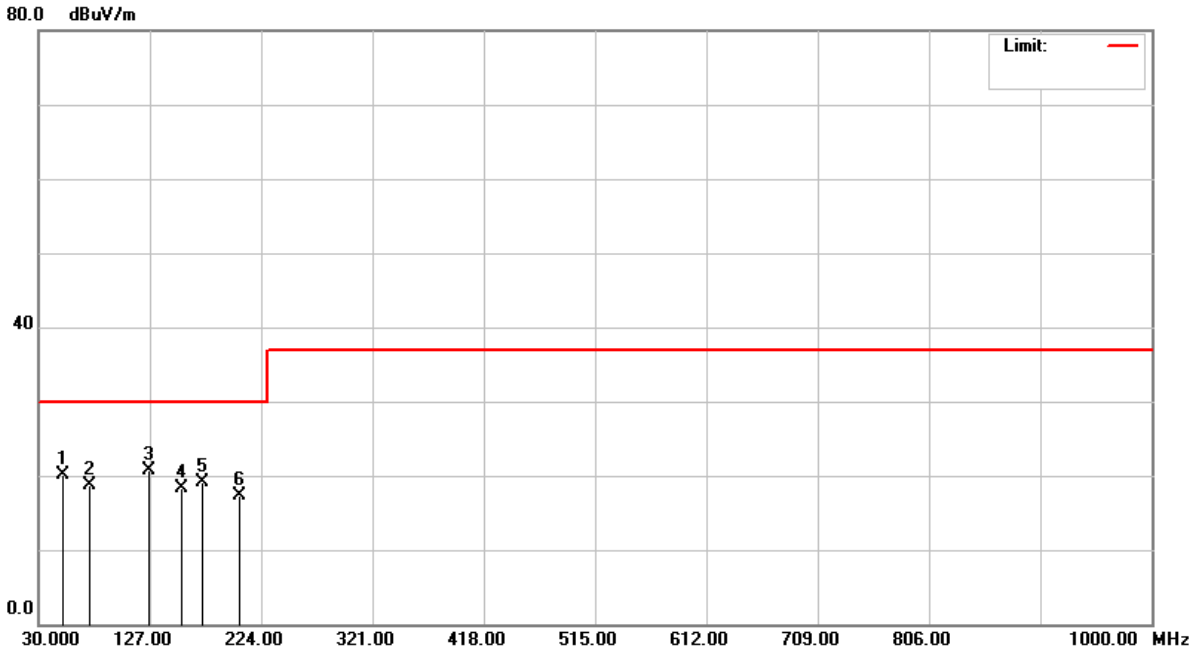
Model No.	KTPS65-1934DT-3P-VI	Test Mode	Mode 12
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Horizontal	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
42.9100	28.60	-14.91	13.69	30.00	-16.31	400	119	Q	H
75.3600	30.10	-18.16	11.94	30.00	-18.06	400	218	Q	H
135.9800	25.80	-12.47	13.33	30.00	-16.67	400	198	Q	H
162.9100	28.20	-13.42	14.78	30.00	-15.22	400	56	Q	H
175.5100	27.50	-13.82	13.68	30.00	-16.32	400	114	Q	H
195.2300	26.20	-13.12	13.08	30.00	-16.92	400	301	Q	H

Note: P= Peak Reading; Q= Quasi-peak Reading.

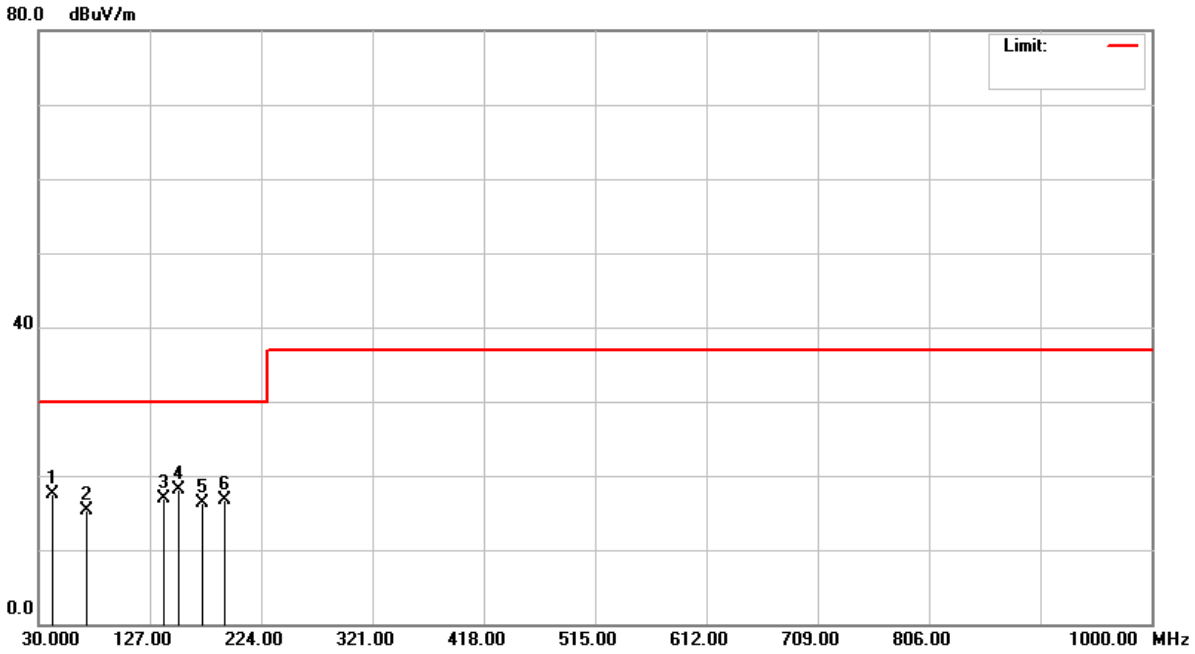
Model No.	KTPS65-2032DT-3P-VI	Test Mode	Mode 13
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Vertical	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
51.9800	**38.50**	**-18.41**	**20.09**	**30.00**	**-9.91**	**100**	**216**	**Q**	**V**
74.5800	**36.90**	**-18.15**	**18.75**	**30.00**	**-11.25**	**100**	**97**	**Q**	**V**
125.9100	**32.90**	**-12.16**	**20.74**	**30.00**	**-9.26**	**100**	**115**	**Q**	**V**
154.6500	**31.50**	**-13.13**	**18.37**	**30.00**	**-11.63**	**100**	**246**	**Q**	**V**
172.4900	**32.80**	**-13.72**	**19.08**	**30.00**	**-10.92**	**100**	**187**	**Q**	**V**
204.6500	**30.50**	**-13.20**	**17.30**	**30.00**	**-12.70**	**100**	**110**	**Q**	**V**

Note: P= Peak Reading; Q= Quasi-peak Reading.

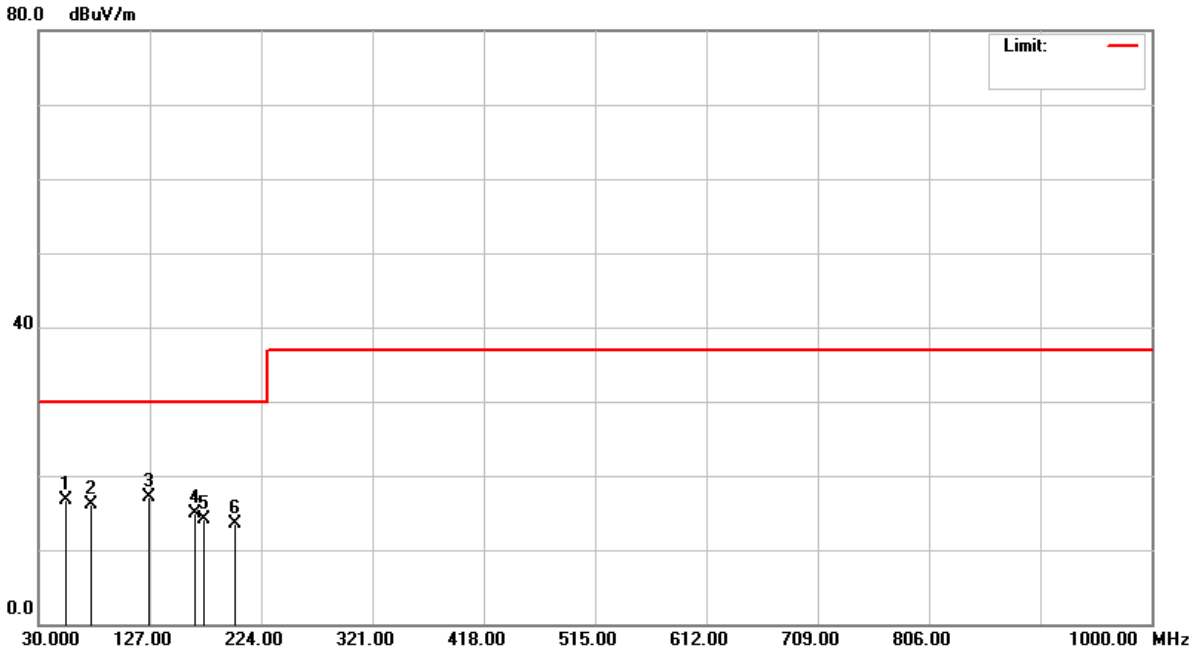
Model No.	KTPS65-2032DT-3P-VI	Test Mode	Mode 13
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Horizontal	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
41.6500	31.50	-14.02	17.48	30.00	-12.52	400	312	Q	H
72.5400	33.50	-18.11	15.39	30.00	-14.61	400	69	Q	H
138.9800	29.50	-12.57	16.93	30.00	-13.07	400	214	Q	H
152.6500	31.20	-13.06	18.14	30.00	-11.86	400	59	Q	H
172.3300	30.10	-13.72	16.38	30.00	-13.62	400	119	Q	H
192.1400	29.90	-13.29	16.61	30.00	-13.39	400	248	Q	H

Note: P= Peak Reading; Q= Quasi-peak Reading.

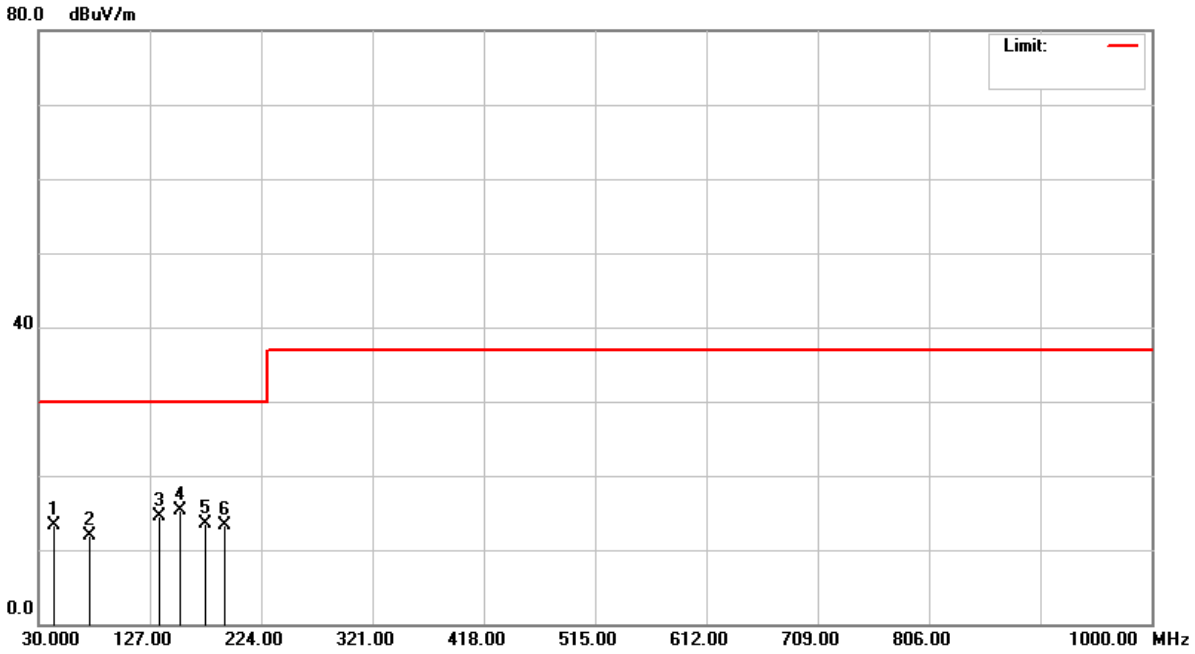
Model No.	KTPS65-2032DT-3P-VI	Test Mode	Mode 14
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Vertical	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
53.6800	35.20	-18.54	16.66	30.00	-13.34	100	198	Q	V
75.4100	34.20	-18.16	16.04	30.00	-13.96	100	225	Q	V
126.9800	29.20	-12.19	17.01	30.00	-12.99	100	38	Q	V
165.8700	28.40	-13.51	14.89	30.00	-15.11	100	99	Q	V
173.8400	27.90	-13.77	14.13	30.00	-15.87	100	148	Q	V
201.7700	26.40	-12.99	13.41	30.00	-16.59	100	301	Q	V

Note: P= Peak Reading; Q= Quasi-peak Reading.

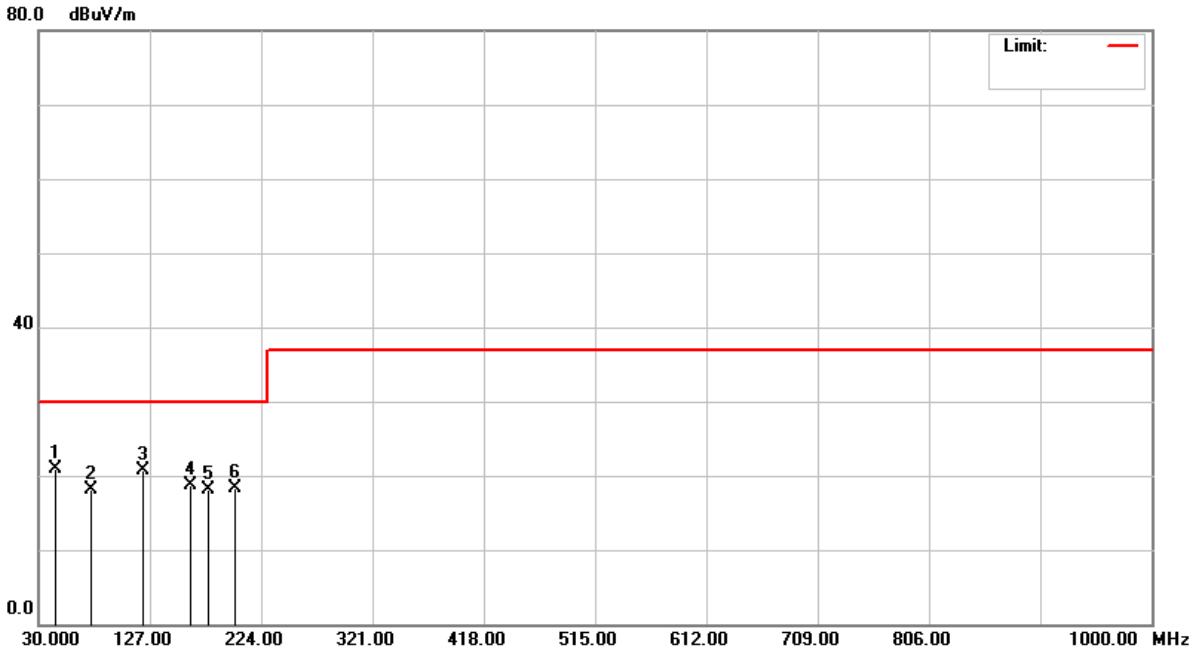
Model No.	KTPS65-2032DT-3P-VI	Test Mode	Mode 14
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Horizontal	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
43.5099	28.60	-15.34	13.26	30.00	-16.74	400	194	Q	H
73.9800	30.10	-18.14	11.96	30.00	-18.04	400	56	Q	H
135.4100	26.90	-12.46	14.44	30.00	-15.56	400	117	Q	H
153.1200	28.40	-13.08	15.32	30.00	-14.68	400	312	Q	H
175.9800	27.40	-13.83	13.57	30.00	-16.43	400	85	Q	H
192.1400	26.50	-13.29	13.21	30.00	-16.79	400	45	Q	H

Note: P= Peak Reading; Q= Quasi-peak Reading.

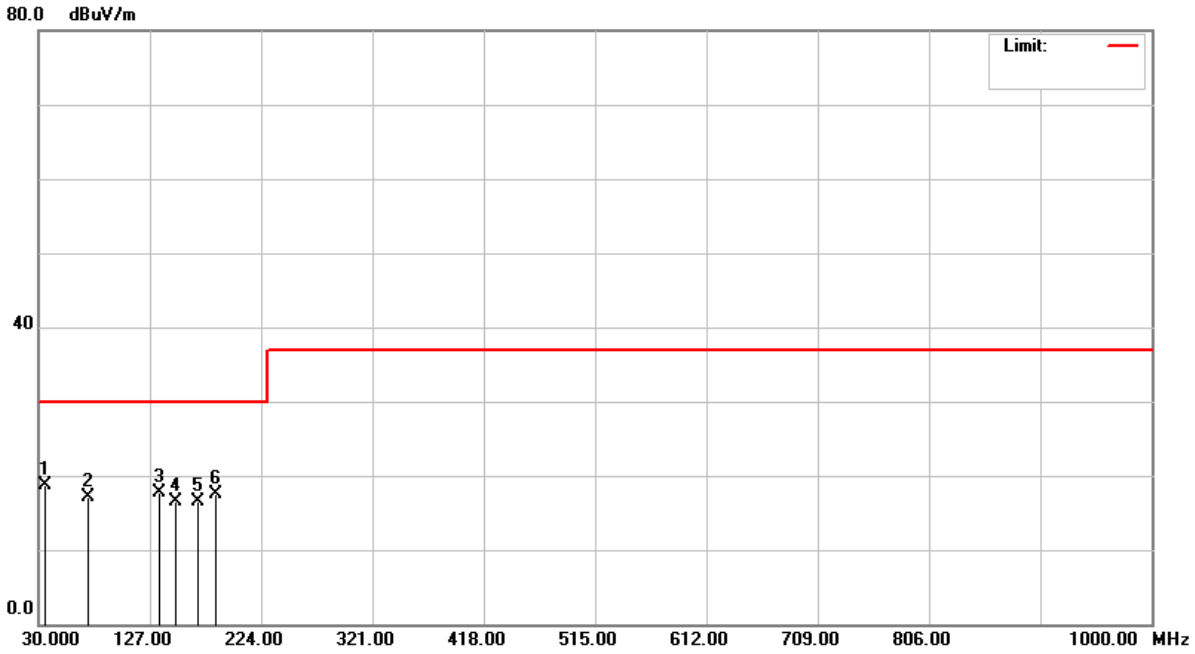
Model No.	KTPS65-2427DT-3P-VI	Test Mode	Mode 15
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Vertical	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
45.3800	37.40	-16.53	20.87	30.00	-9.13	100	169	Q	V
76.5400	36.20	-18.18	18.02	30.00	-11.98	100	311	Q	V
121.4500	32.80	-12.02	20.78	30.00	-9.22	100	28	Q	V
162.3600	32.20	-13.40	18.80	30.00	-11.20	100	214	Q	V
178.5100	32.10	-13.91	18.19	30.00	-11.81	100	99	Q	V
201.2300	31.20	-12.95	18.25	30.00	-11.75	100	145	Q	V

Note: P= Peak Reading; Q= Quasi-peak Reading.

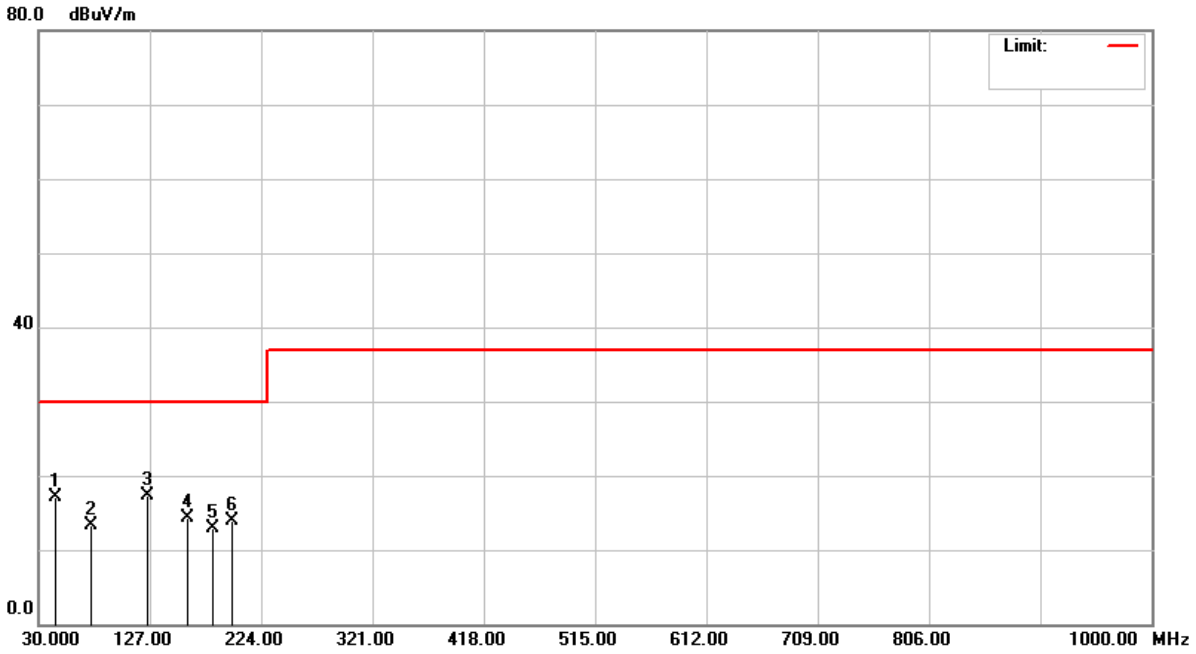
Model No.	KTPS65-2427DT-3P-VI	Test Mode	Mode 15
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Horizontal	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
36.4100	29.10	-10.30	18.80	30.00	-11.20	400	177	Q	H
72.9800	35.20	-18.12	17.08	30.00	-12.92	400	49	Q	H
134.7800	30.10	-12.44	17.66	30.00	-12.34	400	154	Q	H
149.2100	29.50	-12.94	16.56	30.00	-13.44	400	306	Q	H
168.6600	30.20	-13.60	16.60	30.00	-13.40	400	99	Q	H
184.5399	31.20	-13.71	17.49	30.00	-12.51	400	199	Q	H

Note: P= Peak Reading; Q= Quasi-peak Reading.

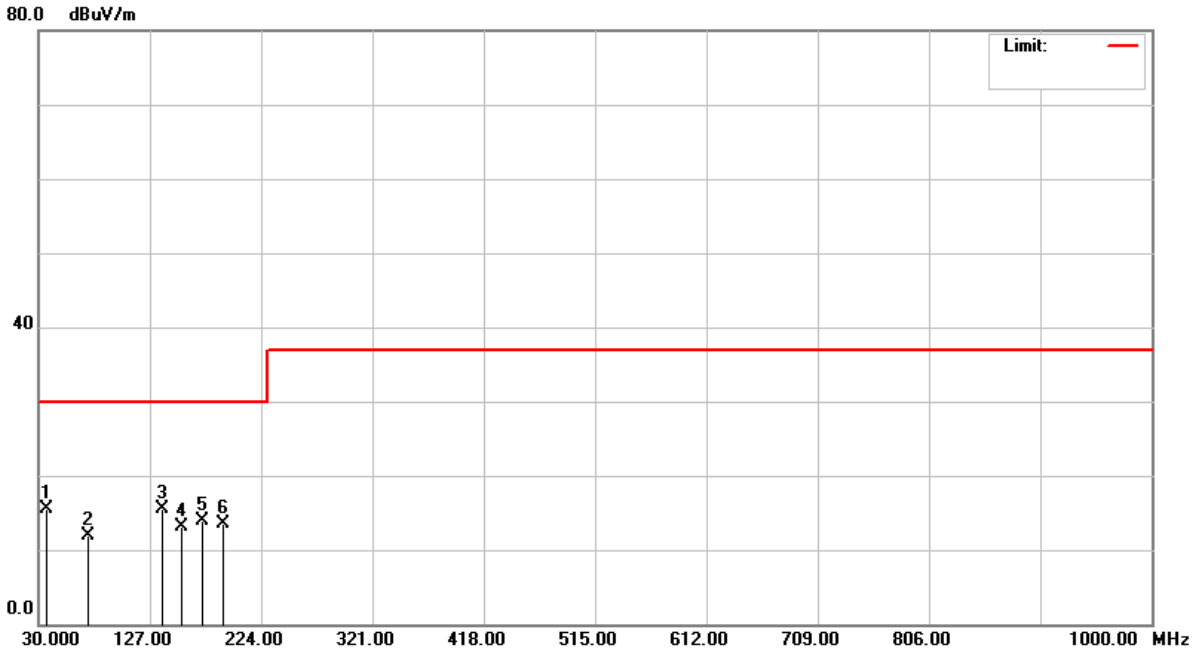
Model No.	KTPS65-2427DT-3P-VI	Test Mode	Mode 16
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Vertical	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
44.2300	32.90	-15.85	17.05	30.00	-12.95	100	52	Q	V
75.6100	31.50	-18.16	13.34	30.00	-16.66	100	99	Q	V
125.5400	29.50	-12.14	17.36	30.00	-12.64	100	147	Q	V
159.6500	27.60	-13.32	14.28	30.00	-15.72	100	315	Q	V
181.4500	26.80	-13.88	12.92	30.00	-17.08	100	112	Q	V
199.3200	26.90	-12.90	14.00	30.00	-16.00	100	261	Q	V

Note: P= Peak Reading; Q= Quasi-peak Reading.

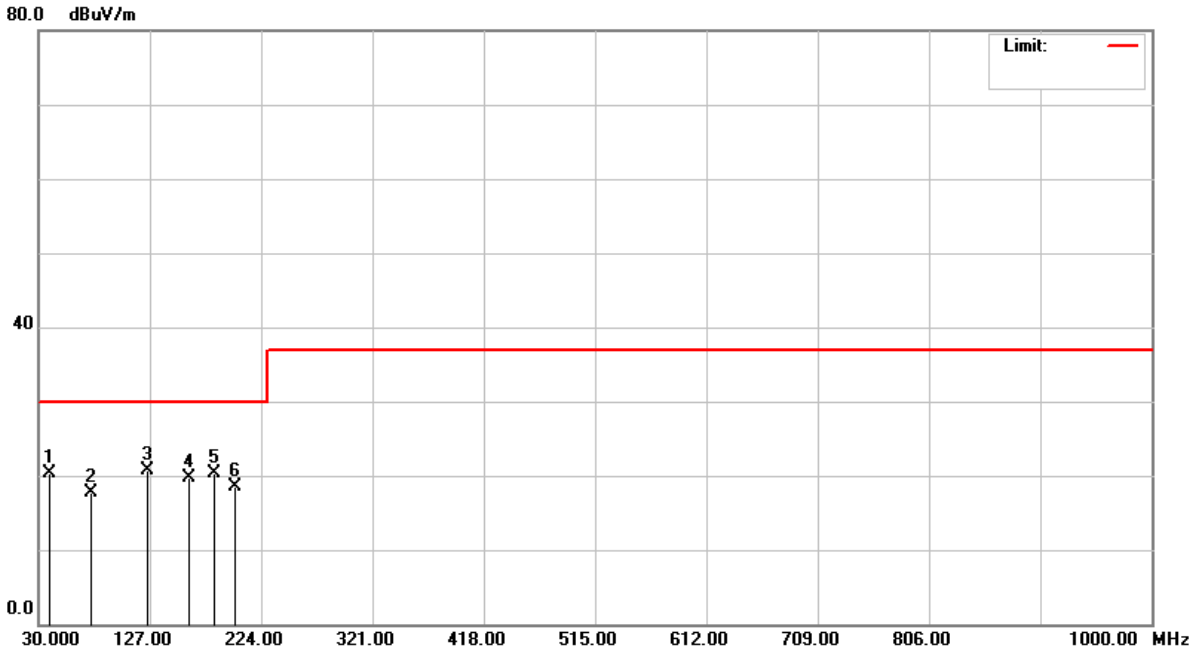
Model No.	KTPS65-2427DT-3P-VI	Test Mode	Mode 16
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Horizontal	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
37.4900	26.50	-11.07	15.43	30.00	-14.57	400	219	Q	H
73.5800	30.10	-18.13	11.97	30.00	-18.03	400	41	Q	H
138.1200	28.10	-12.54	15.56	30.00	-14.44	400	112	Q	H
154.3600	26.20	-13.12	13.08	30.00	-16.92	400	301	Q	H
172.5900	27.60	-13.73	13.87	30.00	-16.13	400	185	Q	H
191.2100	26.90	-13.34	13.56	30.00	-16.44	400	85	Q	H

Note: P= Peak Reading; Q= Quasi-peak Reading.

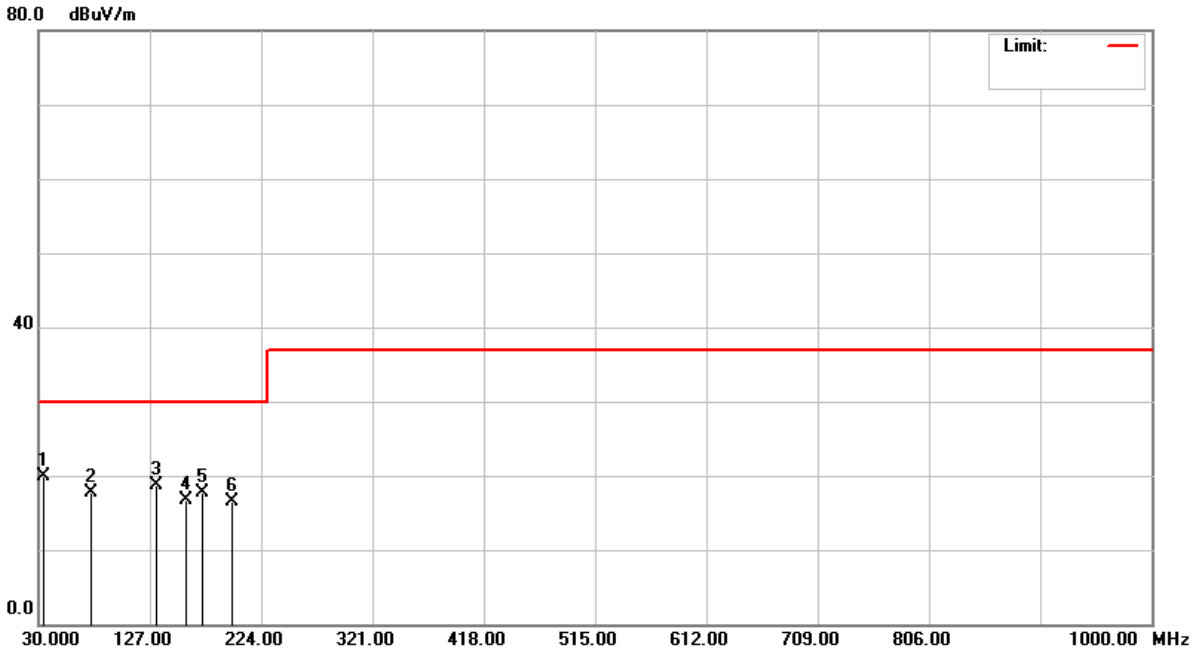
Model No.	KTPS65-2427DT-3P-VI-HP	Test Mode	Mode 17
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Vertical	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
39.5600	32.90	-12.55	20.35	30.00	-9.65	100	177	Q	V
75.9800	35.80	-18.17	17.63	30.00	-12.37	100	325	Q	V
125.4100	32.90	-12.14	20.76	30.00	-9.24	100	119	Q	V
161.5100	33.10	-13.38	19.72	30.00	-10.28	100	308	Q	V
182.6900	34.10	-13.81	20.29	30.00	-9.71	100	98	Q	V
201.1200	31.50	-12.94	18.56	30.00	-11.44	100	145	Q	V

Note: P= Peak Reading; Q= Quasi-peak Reading.

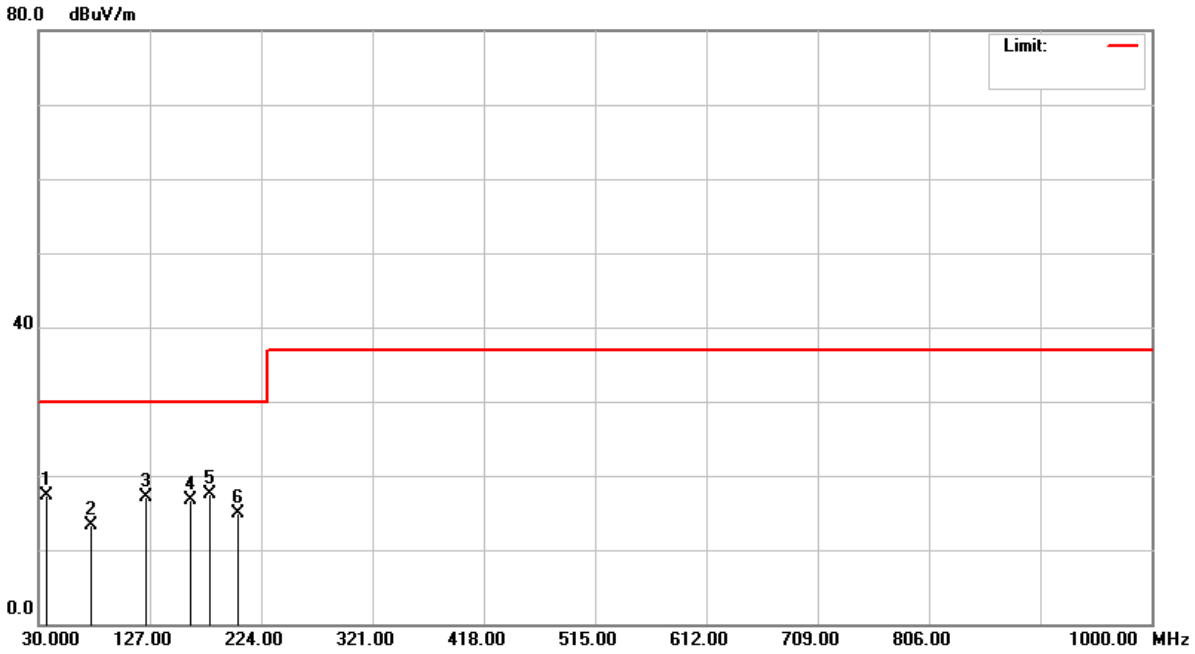
Model No.	KTPS65-2427DT-3P-VI-HP	Test Mode	Mode 17
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Horizontal	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
34.9800	29.10	-9.27	19.83	30.00	-10.17	400	265	Q	H
76.3500	35.90	-18.18	17.72	30.00	-12.28	400	178	Q	H
132.9800	31.10	-12.38	18.72	30.00	-11.28	400	94	Q	H
158.1400	29.90	-13.26	16.64	30.00	-13.36	400	116	Q	H
173.5399	31.50	-13.76	17.74	30.00	-12.26	400	298	Q	H
199.2100	29.50	-12.90	16.60	30.00	-13.40	400	48	Q	H

Note: P= Peak Reading; Q= Quasi-peak Reading.

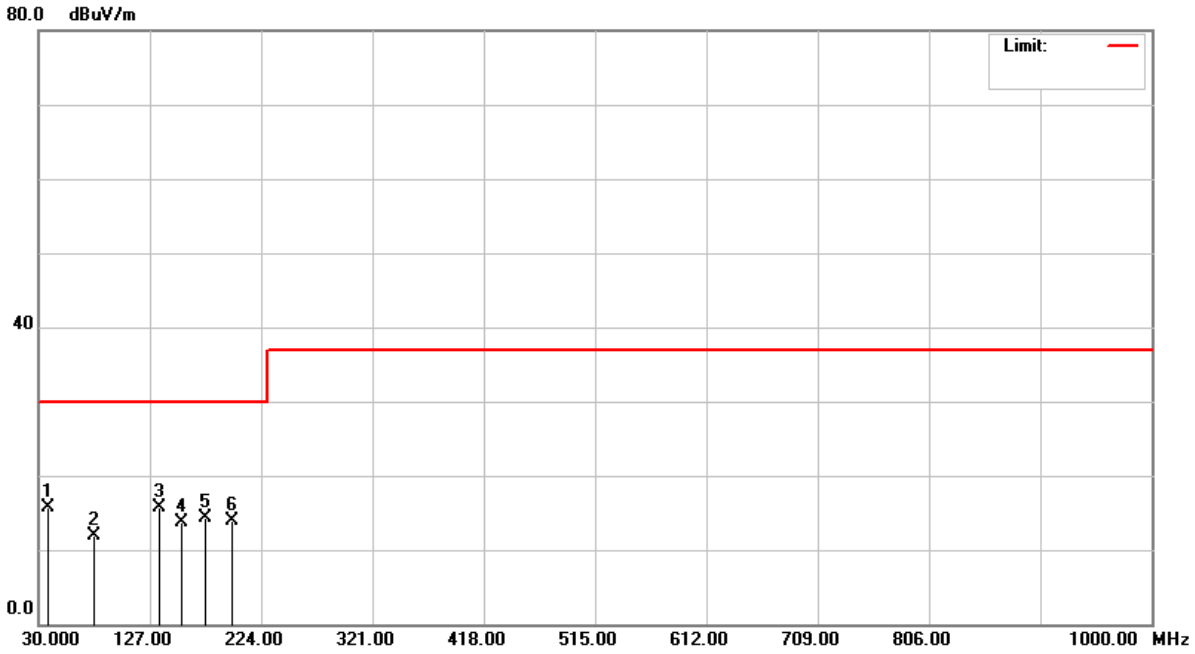
Model No.	KTPS65-2427DT-3P-VI-HP	Test Mode	Mode 18
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Vertical	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
37.6900	28.50	-11.21	17.29	30.00	-12.71	100	305	Q	V
76.2300	31.50	-18.18	13.32	30.00	-16.68	100	98	Q	V
123.5400	29.20	-12.08	17.12	30.00	-12.88	100	145	Q	V
162.9800	30.20	-13.42	16.78	30.00	-13.22	100	187	Q	V
179.5100	31.50	-13.94	17.56	30.00	-12.44	100	45	Q	V
203.4500	28.10	-13.12	14.98	30.00	-15.02	100	66	Q	V

Note: P= Peak Reading; Q= Quasi-peak Reading.

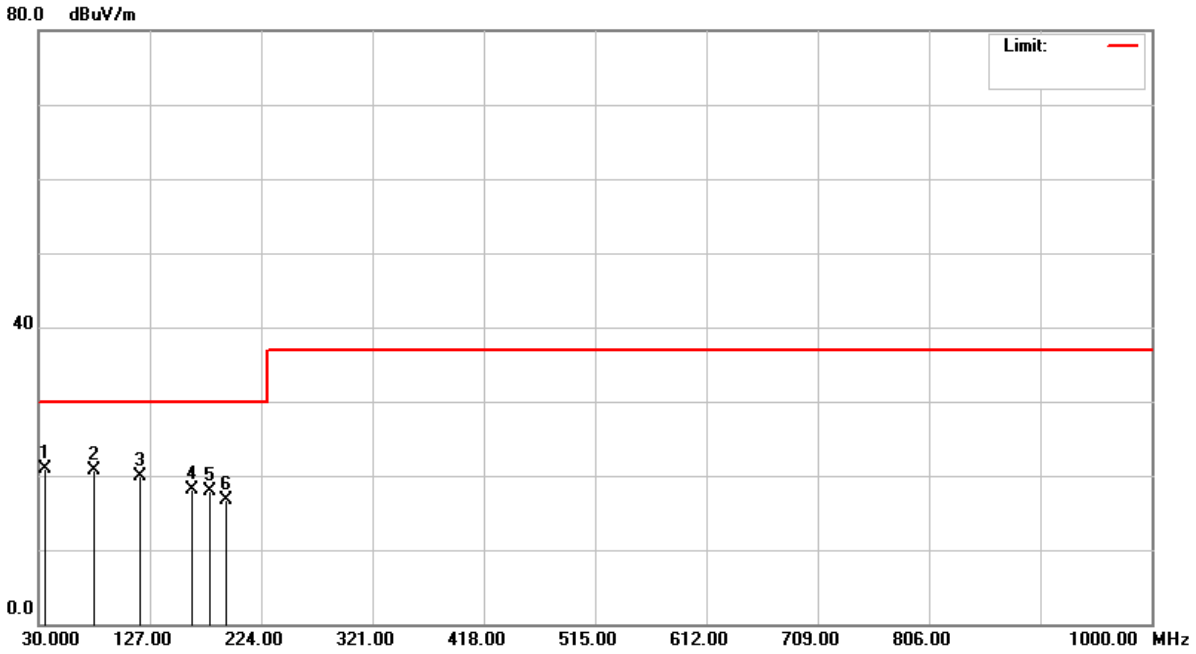
Model No.	KTPS65-2427DT-3P-VI-HP	Test Mode	Mode 18
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Horizontal	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
38.6100	27.60	-11.87	15.73	30.00	-14.27	400	58	Q	H
78.1200	30.10	-18.21	11.89	30.00	-18.11	400	169	Q	H
135.9900	28.20	-12.47	15.73	30.00	-14.27	400	125	Q	H
154.6900	26.90	-13.14	13.76	30.00	-16.24	400	312	Q	H
175.8400	28.10	-13.83	14.27	30.00	-15.73	400	89	Q	H
198.1500	26.90	-12.96	13.94	30.00	-16.06	400	114	Q	H

Note: P= Peak Reading; Q= Quasi-peak Reading.

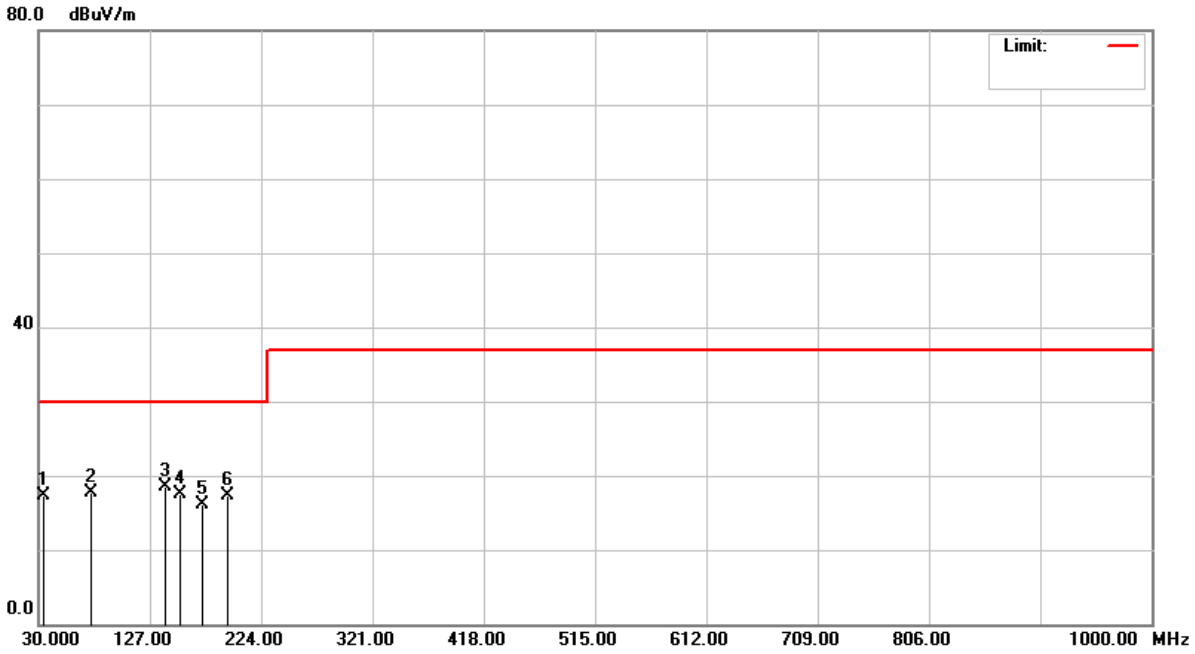
Model No.	KTPS65-3021DT-3P-VI	Test Mode	Mode 19
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Vertical	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
35.9800	30.90	-9.99	20.91	30.00	-9.09	100	269	Q	V
77.9800	38.90	-18.21	20.69	30.00	-9.31	100	154	Q	V
118.6300	32.10	-12.21	19.89	30.00	-10.11	100	117	Q	V
163.2500	31.50	-13.43	18.07	30.00	-11.93	100	85	Q	V
179.8400	31.90	-13.95	17.95	30.00	-12.05	100	46	Q	V
194.2100	29.90	-13.18	16.72	30.00	-13.28	100	199	Q	V

Note: P= Peak Reading; Q= Quasi-peak Reading.

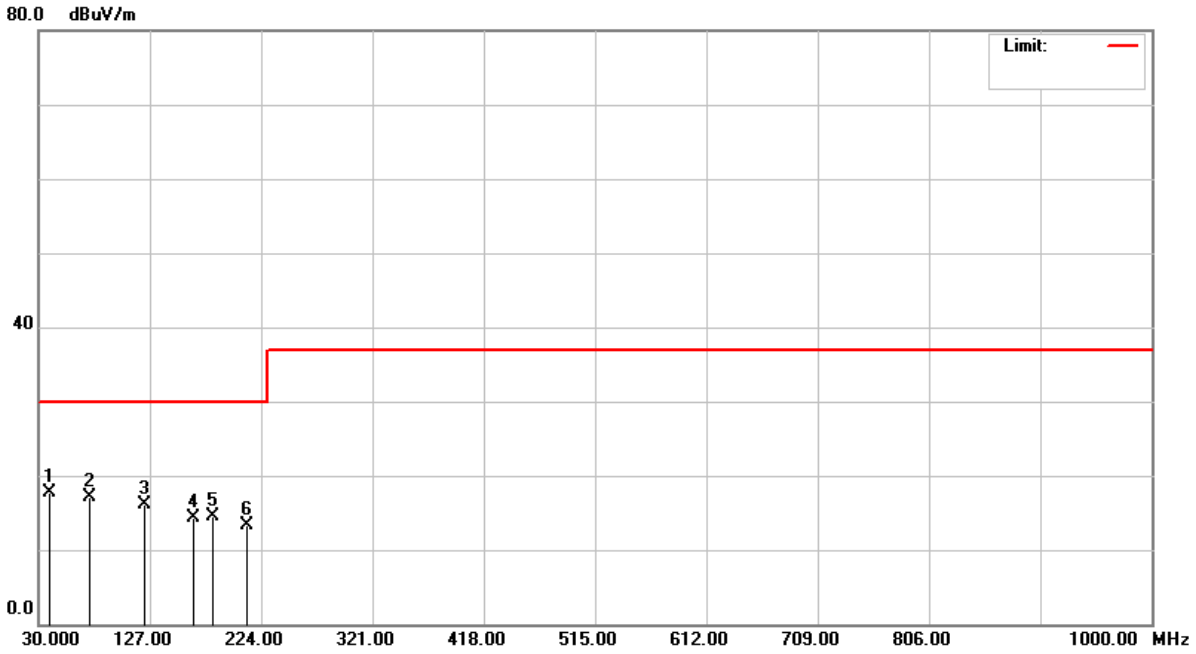
Model No.	KTPS65-3021DT-3P-VI	Test Mode	Mode 19
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Horizontal	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
34.2100	25.90	-8.62	17.28	30.00	-12.72	400	291	Q	H
76.5400	35.80	-18.18	17.62	30.00	-12.38	400	54	Q	H
140.8400	31.10	-12.63	18.47	30.00	-11.53	400	117	Q	H
152.9800	30.50	-13.07	17.43	30.00	-12.57	400	218	Q	H
173.1500	29.90	-13.74	16.16	30.00	-13.84	400	103	Q	H
195.4600	30.50	-13.11	17.39	30.00	-12.61	400	315	Q	H

Note: P= Peak Reading; Q= Quasi-peak Reading.

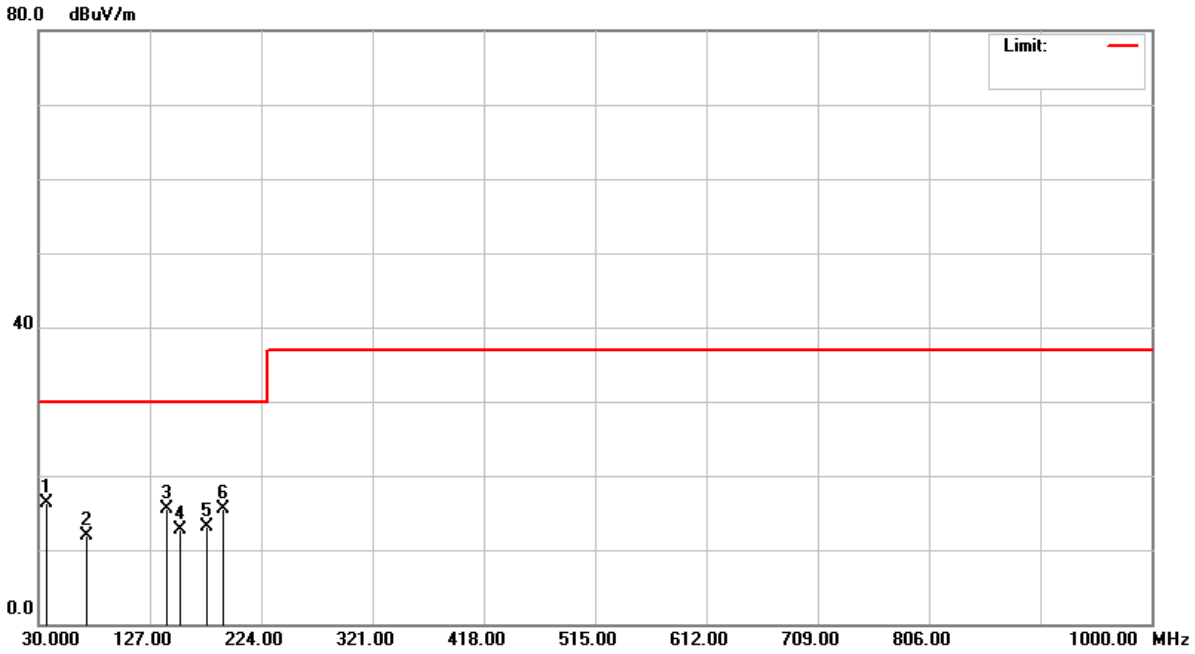
Model No.	KTPS65-3021DT-3P-VI	Test Mode	Mode 20
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Vertical	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
39.2500	30.10	-12.32	17.78	30.00	-12.22	100	145	Q	V
74.1200	35.20	-18.14	17.06	30.00	-12.94	100	198	Q	V
121.9800	28.10	-12.03	16.07	30.00	-13.93	100	211	Q	V
165.5100	27.90	-13.50	14.40	30.00	-15.60	100	65	Q	V
181.9600	28.30	-13.85	14.45	30.00	-15.55	100	128	Q	V
212.3100	27.10	-13.77	13.33	30.00	-16.67	100	41	Q	V

Note: P= Peak Reading; Q= Quasi-peak Reading.

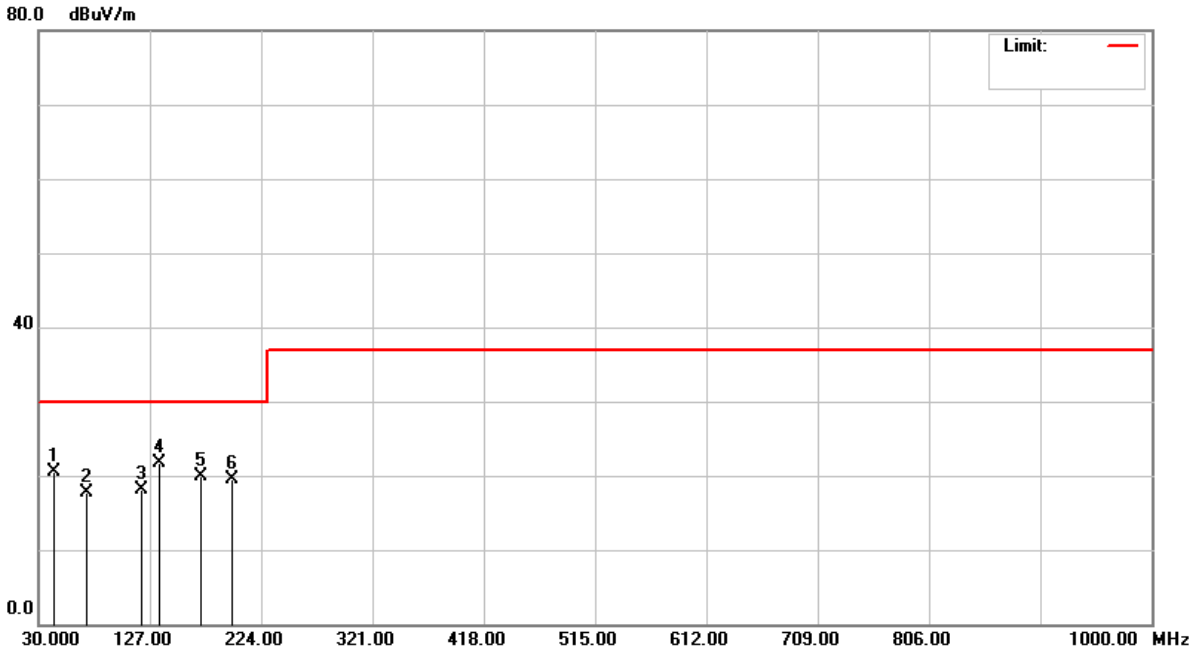
Model No.	KTPS65-3021DT-3P-VI	Test Mode	Mode 20
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Horizontal	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
36.9800	27.10	-10.70	16.40	30.00	-13.60	400	146	Q	H
71.6500	30.10	-18.10	12.00	30.00	-18.00	400	239	Q	H
141.8100	28.10	-12.67	15.43	30.00	-14.57	400	287	Q	H
153.8400	25.90	-13.11	12.79	30.00	-17.21	400	59	Q	H
176.3900	26.90	-13.85	13.05	30.00	-16.95	400	315	Q	H
191.5100	28.90	-13.33	15.57	30.00	-14.43	400	84	Q	H

Note: P= Peak Reading; Q= Quasi-peak Reading.

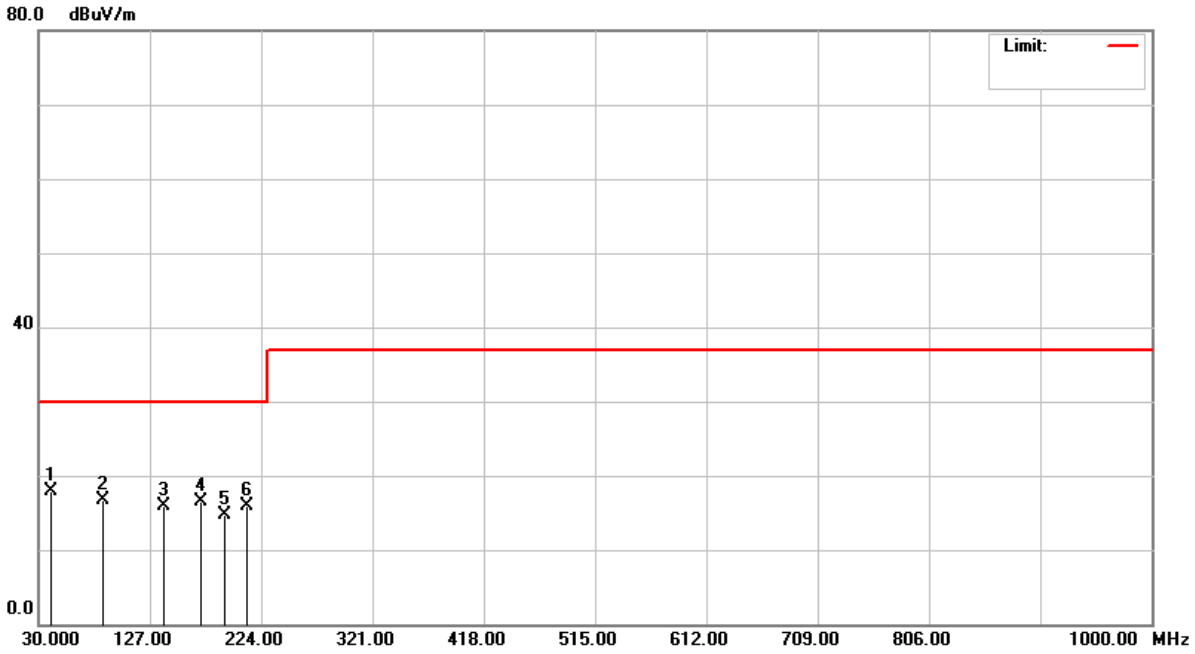
Model No.	KTPS65-3220DT-3P-VI-HP	Test Mode	Mode 21 / Worst
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Vertical	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
43.6500	35.90	-15.44	20.46	30.00	-9.54	100	179	Q	V
72.5100	35.90	-18.11	17.79	30.00	-12.21	100	54	Q	V
119.6000	30.10	-12.04	18.06	30.00	-11.94	100	159	Q	V
135.8700	34.20	-12.47	21.73	30.00	-8.27	100	301	Q	V
171.5600	33.50	-13.69	19.81	30.00	-10.19	100	249	Q	V
199.1500	32.50	-12.91	19.59	30.00	-10.41	100	115	Q	V

Note: P= Peak Reading; Q= Quasi-peak Reading.

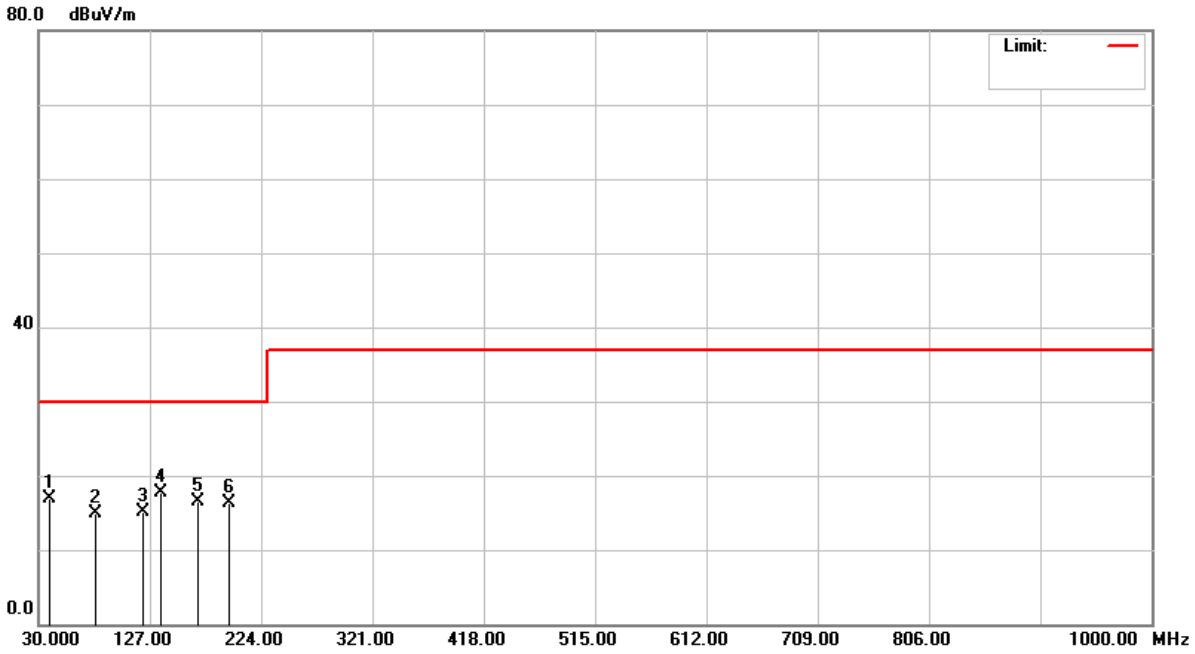
Model No.	KTPS65-3220DT-3P-VI-HP	Test Mode	Mode 21 / Worst
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Horizontal	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
40.3600	31.10	-13.11	17.99	30.00	-12.01	400	99	Q	H
85.9100	35.10	-18.30	16.80	30.00	-13.20	400	162	Q	H
139.5600	28.50	-12.59	15.91	30.00	-14.09	400	114	Q	H
171.5100	30.10	-13.69	16.41	30.00	-13.59	400	24	Q	H
192.3600	27.90	-13.28	14.62	30.00	-15.38	400	187	Q	H
211.2100	29.50	-13.69	15.81	30.00	-14.19	400	312	Q	H

Note: P= Peak Reading; Q= Quasi-peak Reading.

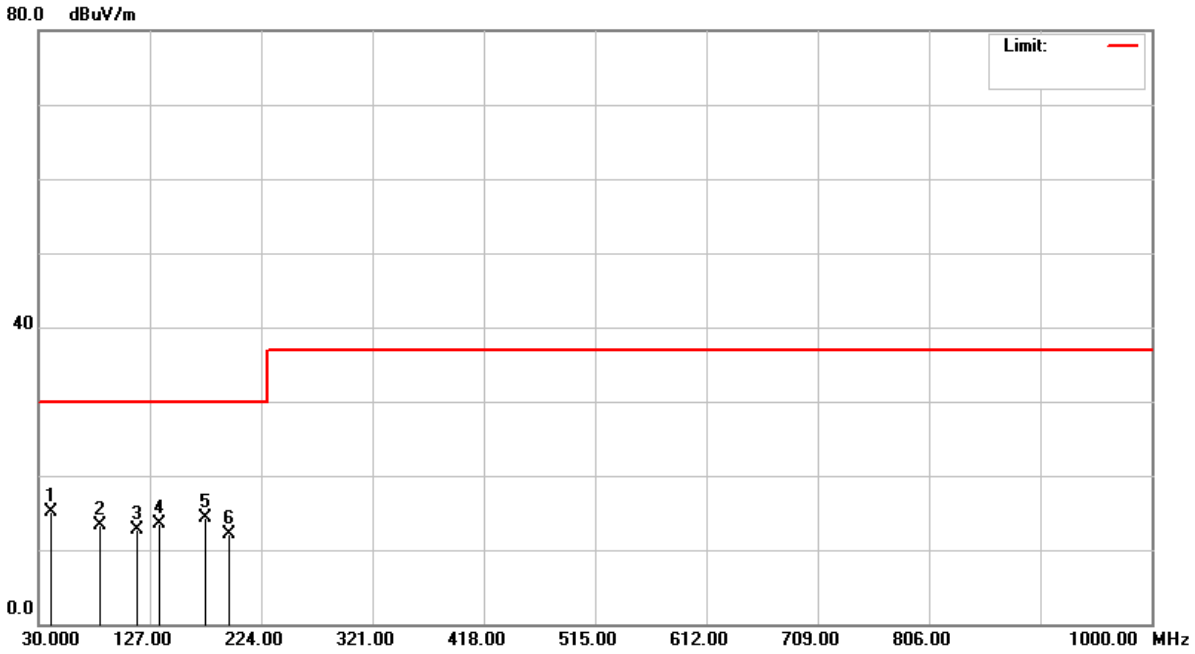
Model No.	KTPS65-3220DT-3P-VI-HP	Test Mode	Mode 22
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Vertical	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
39.6500	29.50	-12.61	16.89	30.00	-13.11	100	63	Q	V
80.2100	33.20	-18.24	14.96	30.00	-15.04	100	154	Q	V
121.4500	27.10	-12.02	15.08	30.00	-14.92	100	119	Q	V
136.9800	30.20	-12.50	17.70	30.00	-12.30	100	305	Q	V
169.6100	30.10	-13.63	16.47	30.00	-13.53	100	87	Q	V
195.6500	29.50	-13.10	16.40	30.00	-13.60	100	116	Q	V

Note: P= Peak Reading; Q= Quasi-peak Reading.

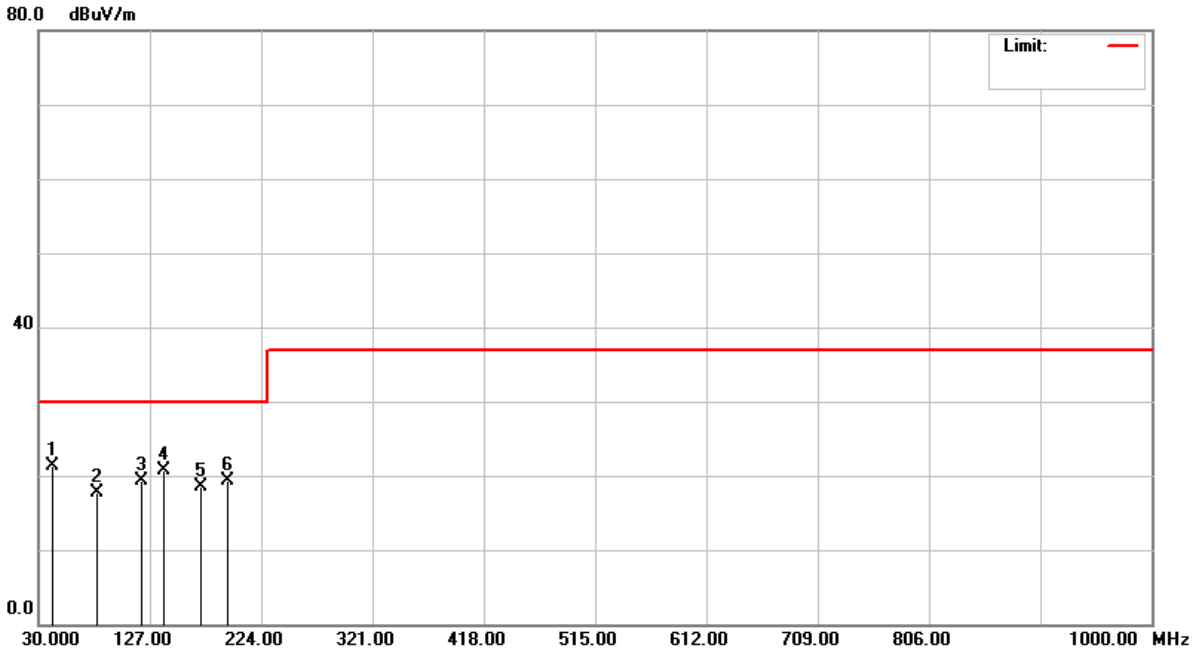
Model No.	KTPS65-3220DT-3P-VI-HP	Test Mode	Mode 22
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Horizontal	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
41.2500	28.90	-13.74	15.16	30.00	-14.84	400	305	Q	H
84.1200	31.50	-18.28	13.22	30.00	-16.78	400	98	Q	H
115.3600	25.50	-12.79	12.71	30.00	-17.29	400	187	Q	H
135.2600	25.90	-12.45	13.45	30.00	-16.55	400	114	Q	H
175.1799	28.10	-13.81	14.29	30.00	-15.71	400	261	Q	H
195.8700	25.20	-13.09	12.11	30.00	-17.89	400	54	Q	H

Note: P= Peak Reading; Q= Quasi-peak Reading.

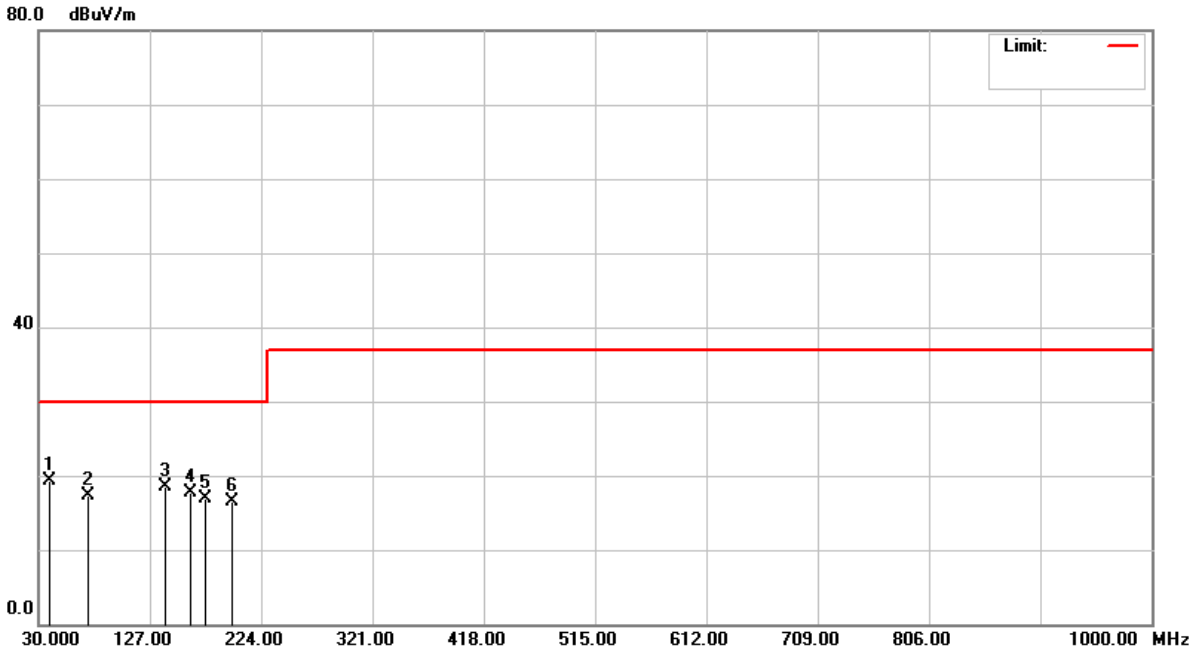
Model No.	KTPS65-3220DT-3P-VI	Test Mode	Mode 23
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Vertical	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
42.6900	36.10	-14.76	21.34	30.00	-8.66	100	294	Q	V
81.3200	35.90	-18.25	17.65	30.00	-12.35	100	154	Q	V
119.2900	31.50	-12.10	19.40	30.00	-10.60	100	312	Q	V
139.5600	33.20	-12.59	20.61	30.00	-9.39	100	87	Q	V
171.2100	32.10	-13.68	18.42	30.00	-11.58	100	114	Q	V
195.4800	32.50	-13.11	19.39	30.00	-10.61	100	65	Q	V

Note: P= Peak Reading; Q= Quasi-peak Reading.

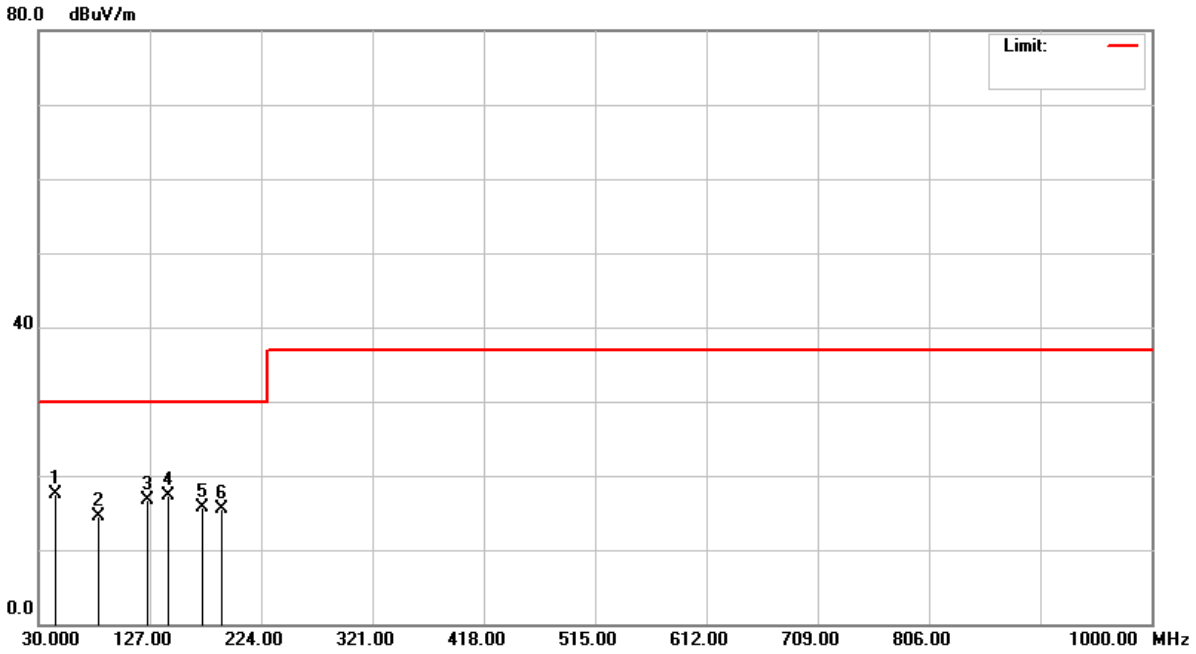
Model No.	KTPS65-3220DT-3P-VI	Test Mode	Mode 23
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Horizontal	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
39.1800	31.60	-12.27	19.33	30.00	-10.67	400	129	Q	H
73.5199	35.50	-18.13	17.37	30.00	-12.63	400	98	Q	H
141.1200	31.20	-12.64	18.56	30.00	-11.44	400	221	Q	H
162.8700	31.10	-13.42	17.68	30.00	-12.32	400	178	Q	H
175.2600	30.80	-13.81	16.99	30.00	-13.01	400	121	Q	H
199.2100	29.50	-12.90	16.60	30.00	-13.40	400	69	Q	H

Note: P= Peak Reading; Q= Quasi-peak Reading.

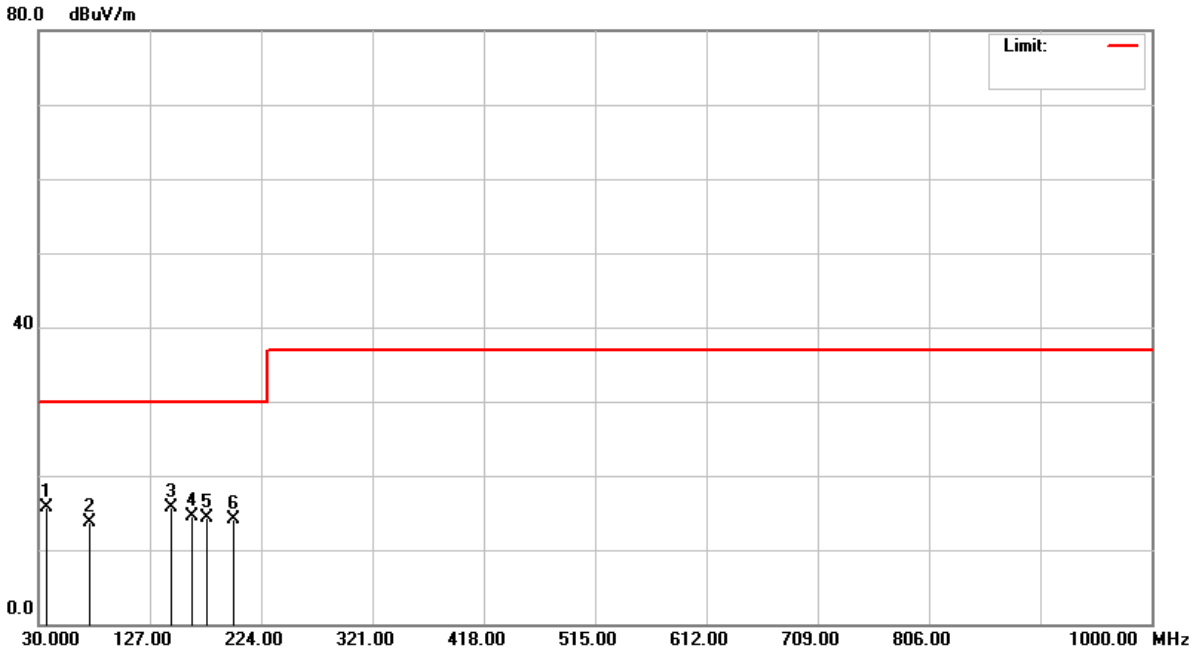
Model No.	KTPS65-3220DT-3P-VI	Test Mode	Mode 24
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Vertical	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
44.3600	33.50	-15.94	17.56	30.00	-12.44	100	59	Q	V
82.9800	32.80	-18.27	14.53	30.00	-15.47	100	121	Q	V
125.1400	28.90	-12.13	16.77	30.00	-13.23	100	30	Q	V
143.5100	30.10	-12.73	17.37	30.00	-12.63	100	187	Q	V
172.6900	29.50	-13.73	15.77	30.00	-14.23	100	311	Q	V
189.5399	28.90	-13.44	15.46	30.00	-14.54	100	178	Q	V

Note: P= Peak Reading; Q= Quasi-peak Reading.

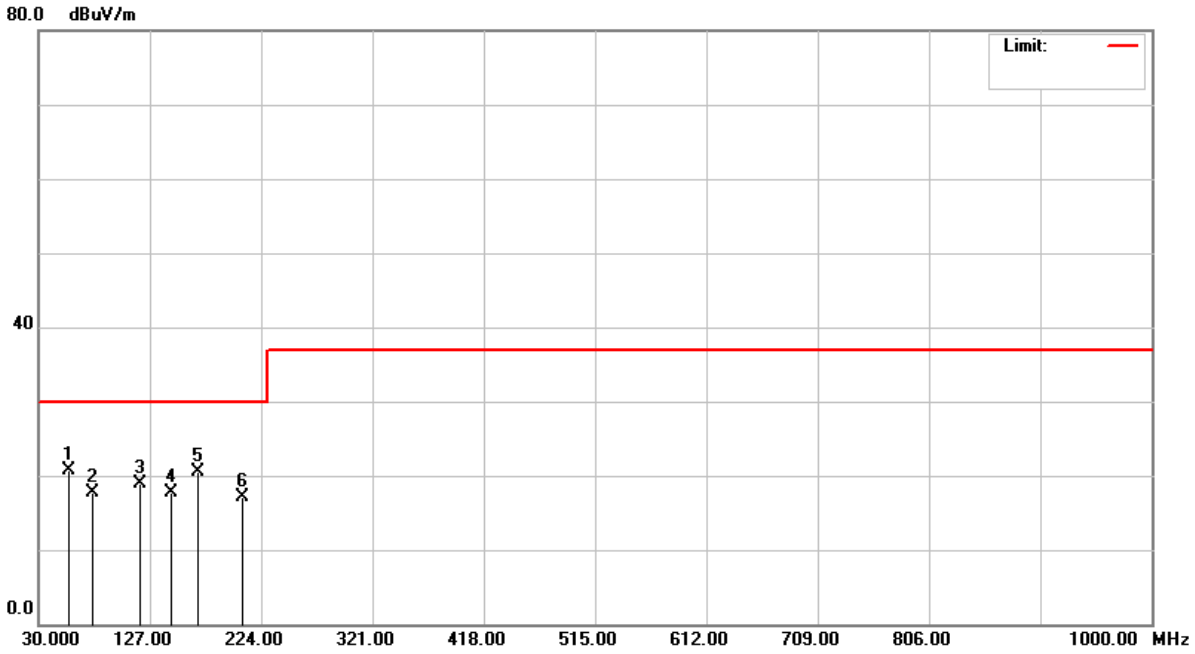
Model No.	KTPS65-3220DT-3P-VI	Test Mode	Mode 24
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Horizontal	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
37.6200	26.90	-11.16	15.74	30.00	-14.26	400	177	Q	H
74.9500	31.90	-18.15	13.75	30.00	-16.25	400	306	Q	H
145.1500	28.50	-12.79	15.71	30.00	-14.29	400	56	Q	H
163.7800	27.90	-13.45	14.45	30.00	-15.55	400	114	Q	H
176.2100	28.20	-13.84	14.36	30.00	-15.64	400	308	Q	H
200.5800	27.10	-12.90	14.20	30.00	-15.80	400	98	Q	H

Note: P= Peak Reading; Q= Quasi-peak Reading.

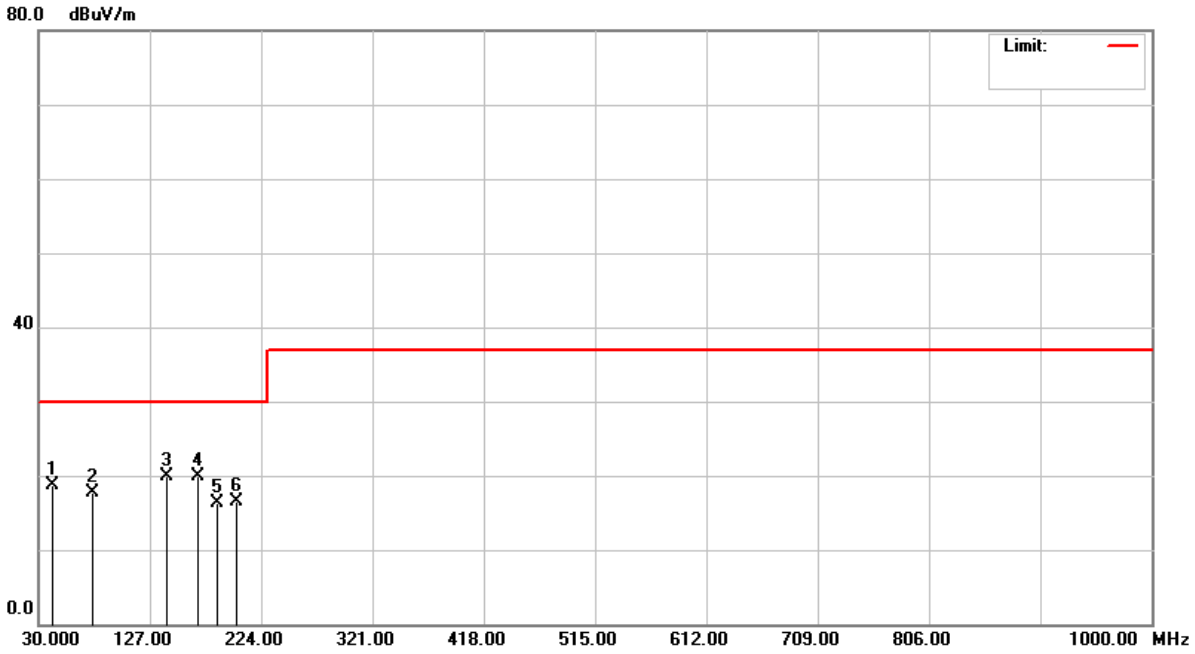
Model No.	KTPS65-4813DT-3P-VI	Test Mode	Mode 25
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Vertical	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
56.2300	39.50	-18.74	20.76	30.00	-9.24	100	65	Q	V
76.9800	35.90	-18.19	17.71	30.00	-12.29	100	217	Q	V
118.6500	31.10	-12.21	18.89	30.00	-11.11	100	98	Q	V
145.2500	30.50	-12.79	17.71	30.00	-12.29	100	221	Q	V
169.5100	34.20	-13.63	20.57	30.00	-9.43	100	305	Q	V
208.3100	30.50	-13.47	17.03	30.00	-12.97	100	189	Q	V

Note: P= Peak Reading; Q= Quasi-peak Reading.

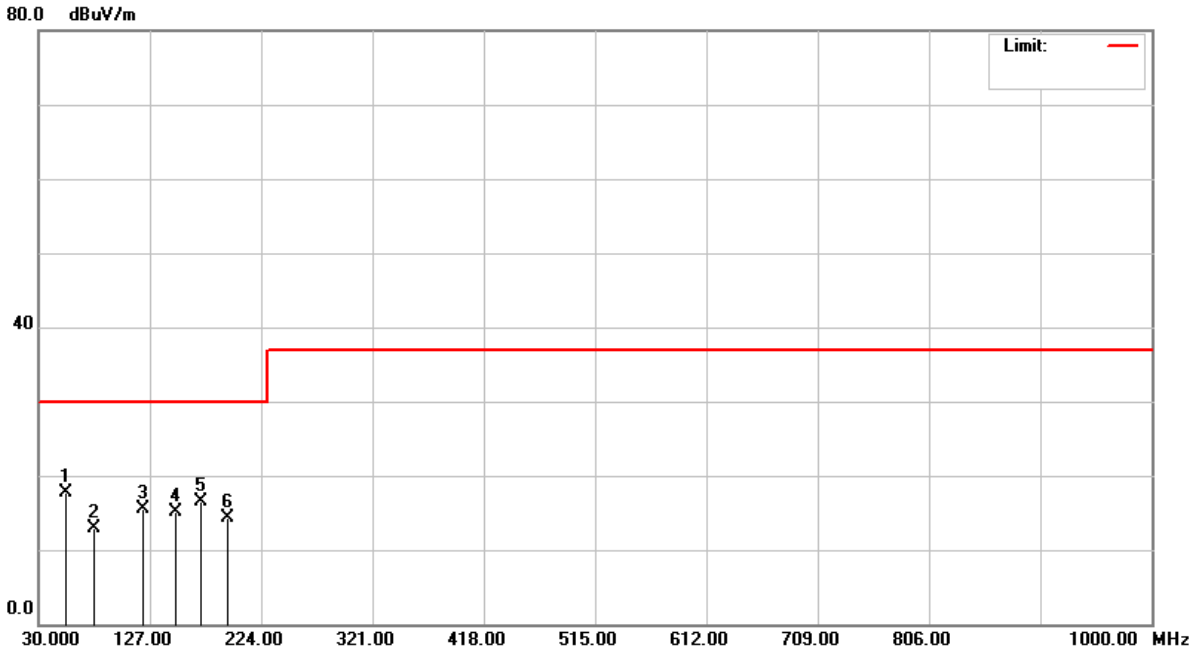
Model No.	KTPS65-4813DT-3P-VI	Test Mode	Mode 25
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Horizontal	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
42.6500	33.50	-14.73	18.77	30.00	-11.23	400	59	Q	H
76.9800	35.90	-18.19	17.71	30.00	-12.29	400	154	Q	H
141.5100	32.50	-12.65	19.85	30.00	-10.15	400	312	Q	H
168.5399	33.50	-13.60	19.90	30.00	-10.10	400	87	Q	H
185.2100	29.90	-13.67	16.23	30.00	-13.77	400	154	Q	H
202.5399	29.50	-13.05	16.45	30.00	-13.55	400	30	Q	H

Note: P= Peak Reading; Q= Quasi-peak Reading.

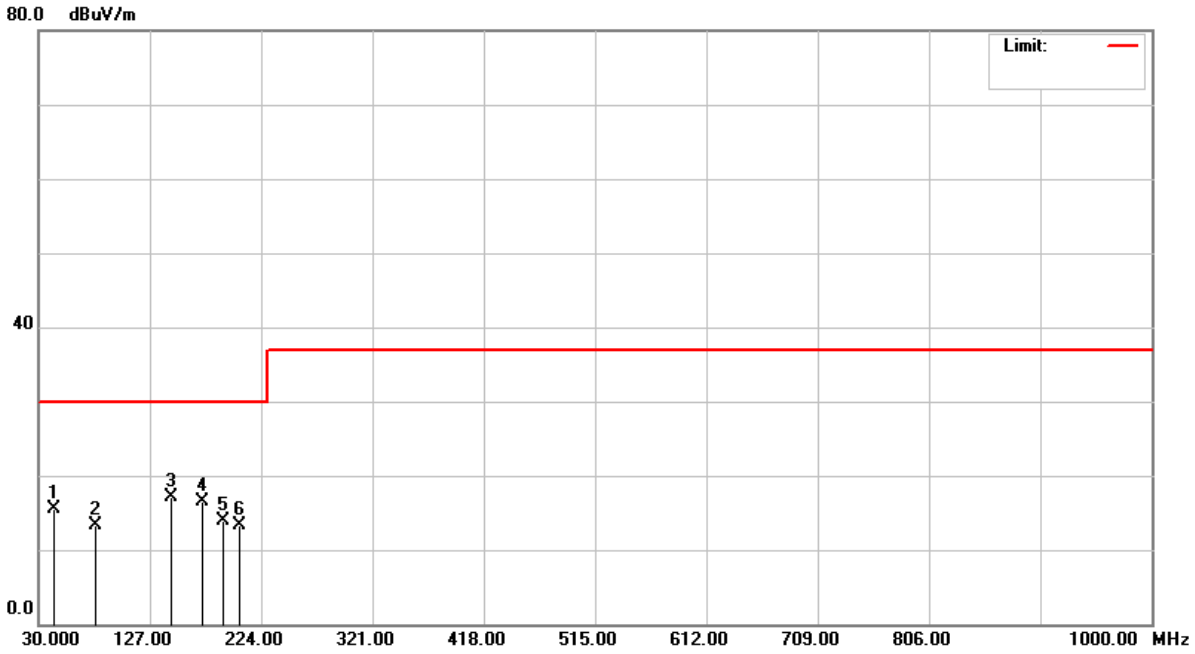
Model No.	KTPS65-4813DT-3P-VI	Test Mode	Mode 26
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Vertical	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
54.3200	36.20	-18.59	17.61	30.00	-12.39	100	109	Q	V
77.9600	31.19	-18.20	12.99	30.00	-17.01	100	169	Q	V
120.8100	27.50	-12.00	15.50	30.00	-14.50	100	221	Q	V
149.2300	28.10	-12.94	15.16	30.00	-14.84	100	315	Q	V
171.5200	30.10	-13.69	16.41	30.00	-13.59	100	98	Q	V
195.3500	27.50	-13.12	14.38	30.00	-15.62	100	177	Q	V

Note: P= Peak Reading; Q= Quasi-peak Reading.

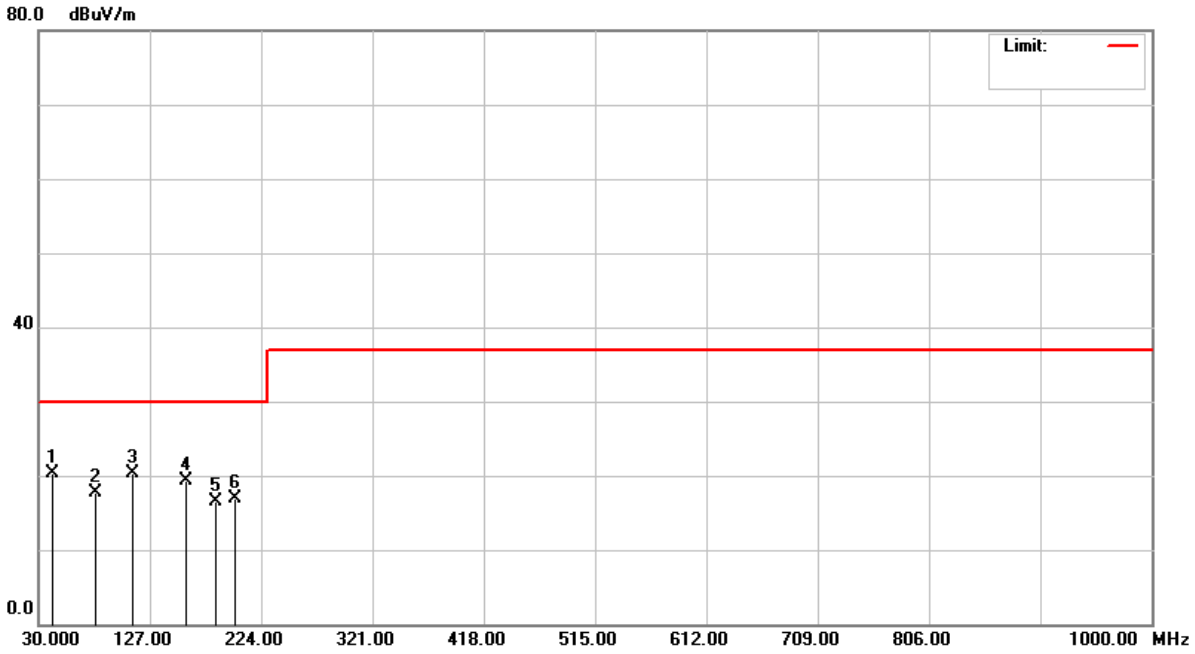
Model No.	KTPS65-4813DT-3P-VI	Test Mode	Mode 26
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Horizontal	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
43.5200	30.80	-15.35	15.45	30.00	-14.55	400	109	Q	H
79.6500	31.50	-18.23	13.27	30.00	-16.73	400	315	Q	H
145.8500	29.90	-12.81	17.09	30.00	-12.91	400	98	Q	H
172.6230	30.20	-13.73	16.47	30.00	-13.53	400	214	Q	H
191.1200	27.20	-13.35	13.85	30.00	-16.15	400	221	Q	H
205.4100	26.50	-13.26	13.24	30.00	-16.76	400	298	Q	H

Note: P= Peak Reading; Q= Quasi-peak Reading.

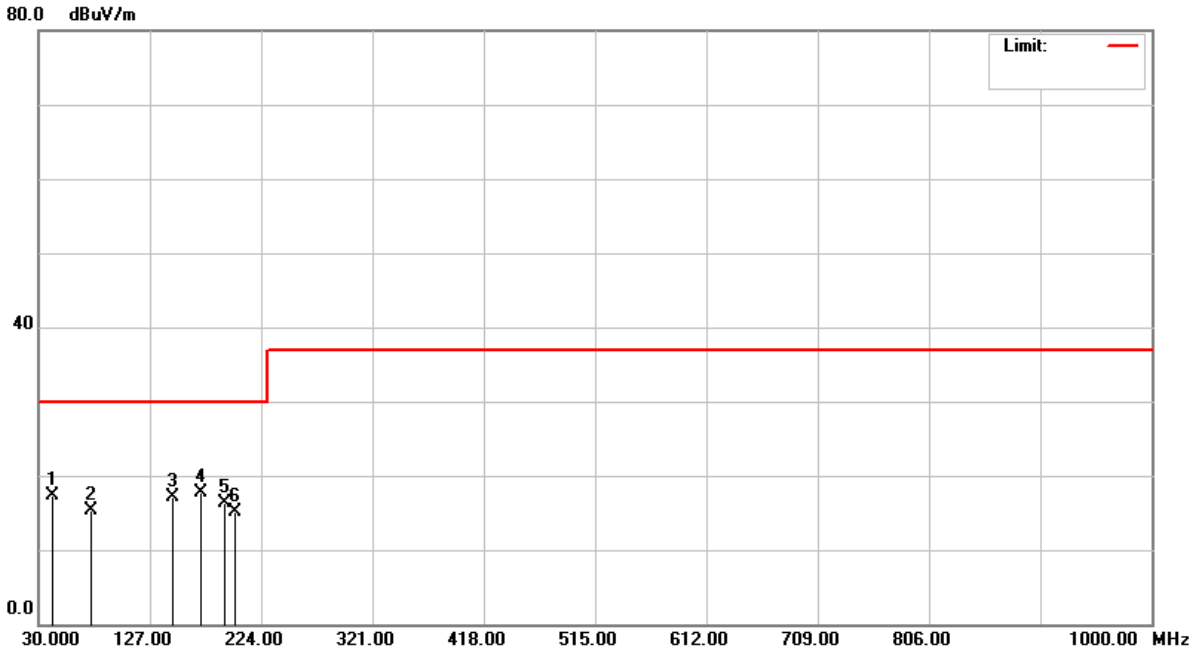
Model No.	KTPS65-5611DT-3P-VI	Test Mode	Mode 27
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Vertical	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
42.6200	35.10	-14.71	20.39	30.00	-9.61	100	109	Q	V
79.8500	35.90	-18.24	17.66	30.00	-12.34	100	301	Q	V
112.6500	33.50	-13.27	20.23	30.00	-9.77	100	287	Q	V
158.3100	32.50	-13.27	19.23	30.00	-10.77	100	56	Q	V
184.1200	30.20	-13.73	16.47	30.00	-13.53	100	102	Q	V
201.4500	29.90	-12.97	16.93	30.00	-13.07	100	136	Q	V

Note: P= Peak Reading; Q= Quasi-peak Reading.

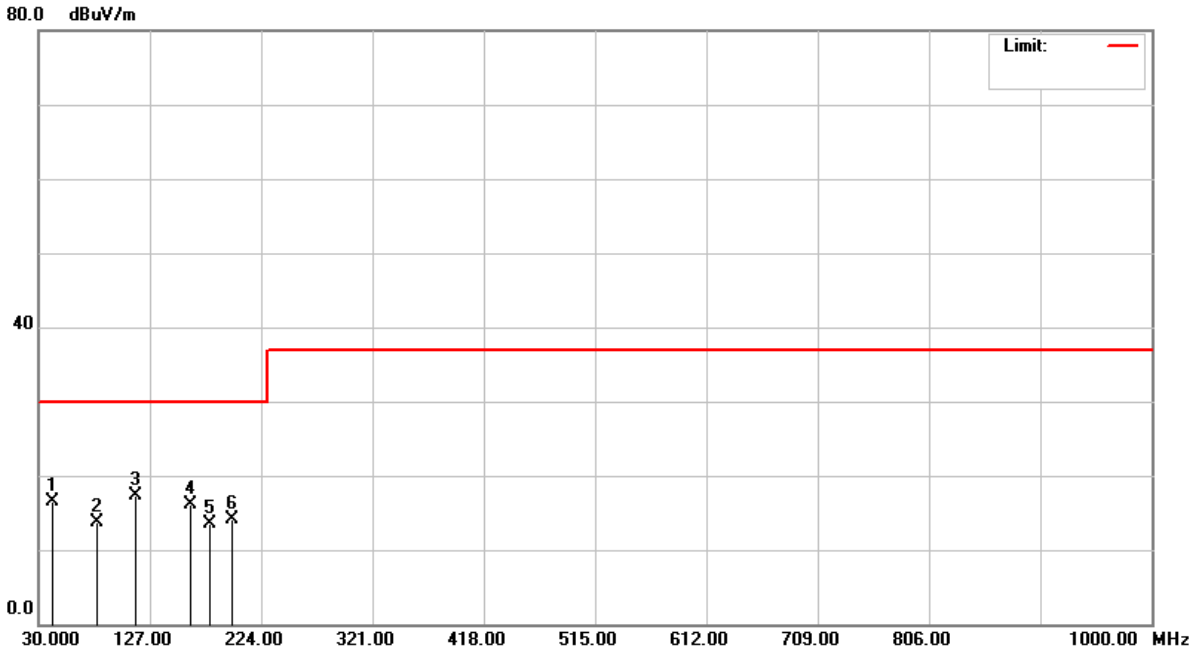
Model No.	KTPS65-5611DT-3P-VI	Test Mode	Mode 27
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Horizontal	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
41.9800	31.50	-14.26	17.24	30.00	-12.76	400	312	Q	H
76.2100	33.50	-18.18	15.32	30.00	-14.68	400	98	Q	H
146.5200	29.90	-12.84	17.06	30.00	-12.94	400	114	Q	H
171.9800	31.50	-13.71	17.79	30.00	-12.21	400	351	Q	H
192.5399	29.50	-13.27	16.23	30.00	-13.77	400	56	Q	H
201.8700	28.20	-13.00	15.20	30.00	-14.80	400	221	Q	H

Note: P= Peak Reading; Q= Quasi-peak Reading.

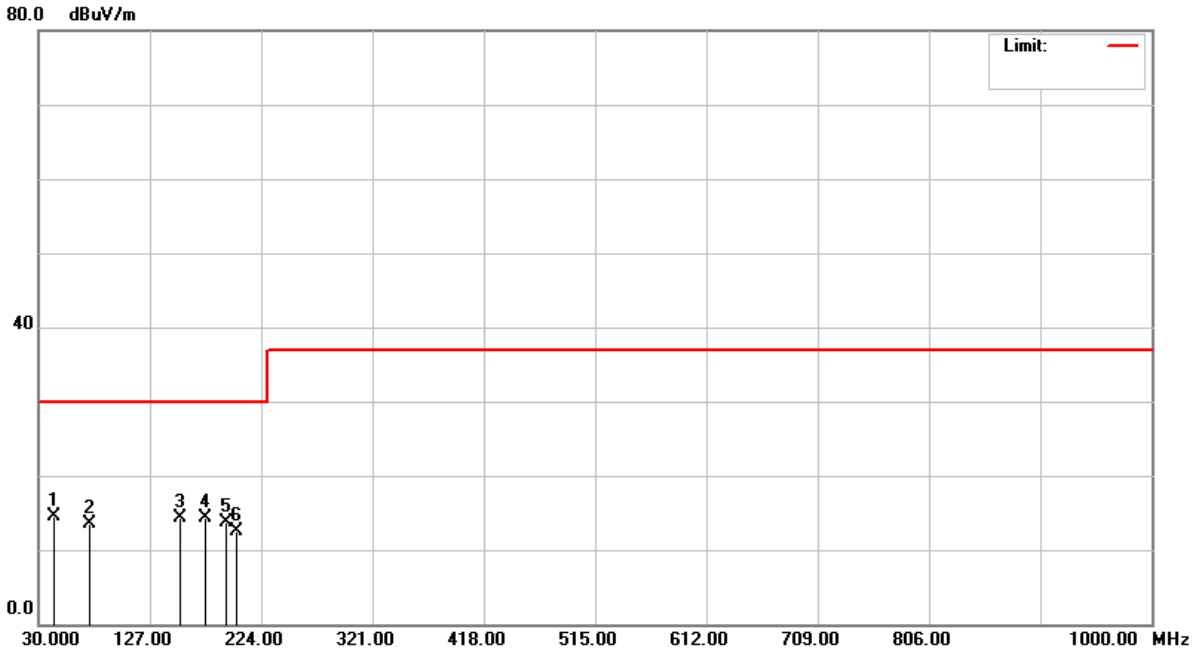
Model No.	KTPS65-5611DT-3P-VI	Test Mode	Mode 28
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Vertical	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
41.6500	30.50	-14.02	16.48	30.00	-13.52	100	99	Q	V
81.3200	31.90	-18.25	13.65	30.00	-16.35	100	154	Q	V
115.1200	30.10	-12.83	17.27	30.00	-12.73	100	312	Q	V
161.9800	29.50	-13.39	16.11	30.00	-13.89	100	108	Q	V
179.5399	27.50	-13.95	13.55	30.00	-16.45	100	98	Q	V
198.5100	27.10	-12.94	14.16	30.00	-15.84	100	230	Q	V

Note: P= Peak Reading; Q= Quasi-peak Reading.

Model No.	KTPS65-5611DT-3P-VI	Test Mode	Mode 28
Environmental Conditions	15°C, 80% RH	6dB Bandwidth	120 kHz
Antenna Pole	Horizontal	Antenna Distance	10m
Detector Function	Quasi-peak.	Tested by	David Cheng
Standard	EN 55022 CLASS B		



Radiated Emission Readings									
Frequency Range Investigated				30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
42.9800	29.50	-14.96	14.54	30.00	-15.46	400	41	Q	H
74.5100	31.60	-18.15	13.45	30.00	-16.55	400	198	Q	H
154.1200	27.50	-13.12	14.38	30.00	-15.62	400	214	Q	H
175.9100	28.20	-13.83	14.37	30.00	-15.63	400	312	Q	H
193.5399	26.90	-13.22	13.68	30.00	-16.32	400	161	Q	H
202.4100	25.60	-13.04	12.56	30.00	-17.44	400	98	Q	H

Note: P= Peak Reading; Q= Quasi-peak Reading.

Above 1GHz

Model No.	N/A	**Test Mode**	N/A
Environmental Conditions	N/A	**6dB Bandwidth**	N/A
Antenna Pole	N/A	**Antenna Distance**	N/A
Highest frequency generated or used	65kHz	**Upper frequency**	See note
Detector Function	N/A	**Tested by**	N/A

Note: No applicable, when the highest frequency of the internal sources of the EUT is less than 108MHz, the measurement shall only be made up to 1 GHz.

7.4. HARMONICS CURRENT MEASUREMENT

7.4.1. LIMITS OF HARMONICS CURRENT MEASUREMENT

Limits for Class A equipment	
Harmonics Order n	Max. permissible harmonics current A
Odd harmonics	
3	2.30
5	1.14
7	0.77
9	0.40
11	0.33
13	0.21
15<=n<=39	0.15x15/n
Even harmonics	
2	1.08
4	0.43
6	0.30
8<=n<=40	0.23x8/n

Limits for Class D equipment		
Harmonics Order n	Max. permissible harmonics current per watt mA/W	Max. permissible harmonics current A
Odd Harmonics only		
3	3.4	2.30
5	1.9	1.14
7	1.0	0.77
9	0.5	0.40
11	0.35	0.33
13	0.30	0.21
15<=n<=39	3.85/n	0.15x15/n

NOTE: 1. Class A and Class D are classified according to item 7.4.3.

2. According to section 7 of EN 61000-3-2, the above limits for all equipment except for lighting equipment having an active input power > 75 W and no limits apply for equipment with an active input power up to and including 75 W.

7.4.2. TEST INSTRUMENTS

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
H/F Measurement System	EMC Partner	HAR1000-1P	189	08/11/2015
Digital Power Meter	Protronix	1201	201091	No Calibration Required
Software	HARCS V4.19			

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

7.4.3. TEST PROCEDURE (please refer to measurement standard or CCS SOP PA-029)

- The EUT was placed on the top of a wooden table 0.8 meters above the ground and operated to produce the maximum harmonic components under normal operating conditions for each successive harmonic component in turn.
- The classification of EUT is according to section 5 of EN 61000-3-2.
- The EUT is classified as follows:

  Class A: Balanced three-phase equipment, Household appliances excluding equipment as Class D, Tools excluding portable tools, Dimmers for incandescent lamps, audio equipment, equipment not specified in one of the three other classes.

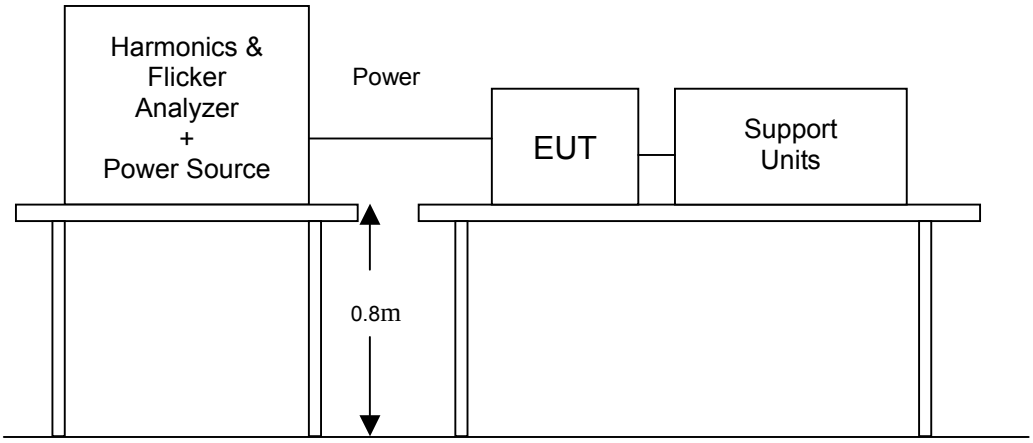
  Class B: Portable tools; Arc welding equipment which is not professional equipment.

  Class C: Lighting equipment.

  Class D: Equipment having a specified power less than or equal to 600 W of the following types: Personal computers and personal computer monitors and television receivers.

- The correspondent test program of test instrument to measure the current harmonics emanated from EUT is chosen. The measure time shall be not less than the time necessary for the EUT to be exercised.

7.4.4. TEST SETUP



- For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

7.4.5. TEST RESULTS

Model No.: KTPS65-1250DT-3P-VI

Power Consumption	61.11W	**Test Mode**	Operating
Environmental Conditions	19°C, 48% RH, 1005mbar	**Tested by**	Stanley Cheng

NOTE: 1. Limits classified according to item 7.4.1.
2. According to clause 7 of EN 61000-3-2, equipment with a rated power of 75W or less, no limits apply. The test result is only for reference.

Test result of EN 61000-3-2

Urms =	229.9V	Freq =	50.078	Range:	10 A
Irms =	0.669A	Ipk =	3.413A	cf =	5.102
P =	61.11W	S =	153.8VA	pf =	0.397
THDi =	233 %	THDu =	0.10 %	Class A	

Model No.: KTPS65-13548DT-3P-VI

Power Consumption	63.81W	**Test Mode**	Operating
Environmental Conditions	19°C, 48% RH, 1005mbar	**Tested by**	Stanley Cheng

NOTE: 1. Limits classified according to item 7.4.1.
2. According to clause 7 of EN 61000-3-2, equipment with a rated power of 75W or less, no limits apply. The test result is only for reference.

Test result of EN 61000-3-2

Urms =	229.9V	Freq =	50.039	Range:	10 A
Irms =	0.698A	Ipk =	3.574A	cf =	5.119
P =	63.81W	S =	160.5VA	pf =	0.397
THDi =	235 %	THDu =	0.10 %	Class A	

Model No.: KTPS65-1543DT-3P-VI

Power Consumption	62.34W	**Test Mode**	Operating
Environmental Conditions	19°C, 48% RH, 1005mbar	**Tested by**	Stanley Cheng

NOTE: 1. Limits classified according to item 7.4.1.
2. According to clause 7 of EN 61000-3-2, equipment with a rated power of 75W or less, no limits apply. The test result is only for reference.

Test result of EN 61000-3-2

Urms =	229.9V	Freq =	50.078	Range:		10 A	
Irms =	0.679A	Ipk	=	3.418A	cf	=	5.036
P	= 62.34W	S	=	156.0VA	pf	=	0.399
THDi =	231 %	THDu =	0.10 %	Class A			

Model No.: KTPS65-1640DT-3P-VI

Power Consumption	63.32W	**Test Mode**	Operating
Environmental Conditions	19°C, 48% RH, 1005mbar	**Tested by**	Stanley Cheng

NOTE: 1. Limits classified according to item 7.4.1.
2. According to clause 7 of EN 61000-3-2, equipment with a rated power of 75W or less, no limits apply. The test result is only for reference.

Test result of EN 61000-3-2

Urms =	229.9V	Freq =	50.078	Range:		10 A	
Irms =	0.703A	Ipk	=	3.643A	cf	=	5.181
P	= 63.32W	S	=	161.7VA	pf	=	0.392
THDi =	238 %	THDu =	0.10 %	Class A			

Model No.: KTPS65-1836DT-3P-VI

Power Consumption	63.81W	**Test Mode**	Operating
Environmental Conditions	19°C, 48% RH, 1005mbar	**Tested by**	Stanley Cheng

NOTE: 1. Limits classified according to item 7.4.1.
2. According to clause 7 of EN 61000-3-2, equipment with a rated power of 75W or less, no limits apply. The test result is only for reference.

Test result of EN 61000-3-2

Urms =	229.9V	Freq =	50.078	Range:		10 A	
Irms =	0.698A	Ipk =	3.555A	cf	=	5.091	
P =	63.81W	S =	160.5VA	pf	=	0.397	
THDi =	233 %	THDu =	0.10 %	Class A			

Model No.: KTPS65-1934DT-3P-VI

Power Consumption	64.55W	**Test Mode**	Operating
Environmental Conditions	19°C, 48% RH, 1005mbar	**Tested by**	Kevin Wang

NOTE: 1. Limits classified according to item 7.4.1.
2. According to clause 7 of EN 61000-3-2, equipment with a rated power of 75W or less, no limits apply. The test result is only for reference.

Test result of EN 61000-3-2

Urms =	229.9V	Freq =	50.065	Range:		10 A	
Irms =	0.693A	Ipk =	3.516A	cf	=	5.070	
P =	64.55W	S =	159.4VA	pf	=	0.405	
THDi =	228 %	THDu =	0.10 %	Class A			

Model No.: KTPS65-2032DT-3P-VI

Power Consumption	63.81W	**Test Mode**	Operating
Environmental Conditions	19°C, 48% RH, 1005mbar	**Tested by**	Stanley Cheng

NOTE: 1. Limits classified according to item 7.4.1.
2. According to clause 7 of EN 61000-3-2, equipment with a rated power of 75W or less, no limits apply. The test result is only for reference.

Test result of EN 61000-3-2

Urms =	229.9V	Freq =	50.065	Range:		10 A	
Irms =	0.693A	Ipk	=	3.521A	cf	=	5.077
P	= 63.81W	S	=	159.4VA	pf	=	0.400
THDi =	231 %	THDu =	0.10 %	Class A			

Model No.: KTPS65-2427DT-3P-VI

Power Consumption	67.25W	**Test Mode**	Operating
Environmental Conditions	19°C, 48% RH, 1005mbar	**Tested by**	Kevin Wang

NOTE: 1. Limits classified according to item 7.4.1.
2. According to clause 7 of EN 61000-3-2, equipment with a rated power of 75W or less, no limits apply. The test result is only for reference.

Test result of EN 61000-3-2

Urms =	229.9V	Freq =	50.039	Range:		10 A	
Irms =	0.723A	Ipk	=	3.662A	cf	=	5.068
P	= 67.25W	S	=	166.1VA	pf	=	0.405
THDi =	227 %	THDu =	0.10 %	Class A			

Model No.: KTPS65-2427DT-3P-VI-HP

Power Consumption	63.32W	**Test Mode**	Operating
Environmental Conditions	19°C, 48% RH, 1005mbar	**Tested by**	Kevin Wang

NOTE: 1. Limits classified according to item 7.4.1.
2. According to clause 7 of EN 61000-3-2, equipment with a rated power of 75W or less, no limits apply. The test result is only for reference.

Test result of EN 61000-3-2

Urms =	229.9V	Freq =	50.065	Range:		10 A	
Irms =	0.703A	Ipk	=	3.516A	cf	=	5.000
P	= 63.32W	S	=	161.7VA	pf	=	0.392
THDi =	240 %	THDu =	0.20 %	Class A			

Model No.: KTPS65-3021DT-3P-VI

Power Consumption	63.93W	**Test Mode**	Operating
Environmental Conditions	19°C, 48% RH, 1005mbar	**Tested by**	Bonny Tsai

NOTE: 1. Limits classified according to item 7.4.1.
2. According to clause 7 of EN 61000-3-2, equipment with a rated power of 75W or less, no limits apply. The test result is only for reference.

Test result of EN 61000-3-2

Urms =	229.9V	Freq =	50.026	Range:		5 A	
Irms =	0.679A	Ipk	=	3.311A	cf	=	4.878
P	= 63.93W	S	=	156.0VA	pf	=	0.410
THDi =	224 %	THDu =	0.10 %	Class A			

Model No.: KTPS65-3220DT-3P-VI-HP

Power Consumption	64.79W	**Test Mode**	Operating
Environmental Conditions	19°C, 48% RH, 1005mbar	**Tested by**	Stanley Cheng

NOTE: 1. Limits classified according to item 7.4.1.
2. According to clause 7 of EN 61000-3-2, equipment with a rated power of 75W or less, no limits apply. The test result is only for reference.

Test result of EN 61000-3-2

Urms =	229.9V	Freq =	50.065	Range:	10 A
Irms =	0.698A	Ipk =	3.516A	cf =	5.035
P =	64.79W	S =	160.5VA	pf =	0.404
THDi =	227 %	THDu =	0.10 %	Class A	

Model No.: KTPS65-3220DT-3P-VI

Power Consumption	64.67W	**Test Mode**	Operating
Environmental Conditions	19°C, 48% RH, 1005mbar	**Tested by**	Bonny Tsai

NOTE: Limits classified according to item 7.4.1.

Test result of EN 61000-3-2

Urms =	229.9V	Freq =	50.078	Range:	5 A
Irms =	0.681A	Ipk =	3.313A	cf =	4.864
P =	64.67W	S =	156.6VA	pf =	0.413
THDi =	221 %	THDu =	0.10 %	Class A	

Model No.: KTPS65-4813DT-3P-VI

Power Consumption	66.02W	**Test Mode**	Operating
Environmental Conditions	19°C, 48% RH, 1005mbar	**Tested by**	Stanley Cheng

NOTE: 1. Limits classified according to item 7.4.1.
2. According to clause 7 of EN 61000-3-2, equipment with a rated power of 75W or less, no limits apply. The test result is only for reference.

Test result of EN 61000-3-2

Urms =	229.9V	Freq =	50.078	Range:		10 A	
Irms =	0.713A	Ipk =	3.618A	cf	=	5.075	
P =	66.02W	S =	163.9VA	pf	=	0.403	
THDi =	230 %	THDu =	0.10 %	Class A			

Model No.: KTPS65-5611DT-3P-VI

Power Consumption	64.55W	**Test Mode**	Operating
Environmental Conditions	19°C, 48% RH, 1005mbar	**Tested by**	Kevin Wang

NOTE: 1. Limits classified according to item 7.4.1.
2. According to clause 7 of EN 61000-3-2, equipment with a rated power of 75W or less, no limits apply. The test result is only for reference.

Test result of EN 61000-3-2

Urms =	229.9V	Freq =	50.065	Range:		10 A	
Irms =	0.708A	Ipk =	3.638A	cf	=	5.138	
P =	64.55W	S =	162.8VA	pf	=	0.397	
THDi =	233 %	THDu =	0.10 %	Class A			

Definitions of Abbreviations

Urms	***	Actual total Voltage in Volt RMS
Irms	***	Actual total Current in Ampere RMS
Ipk	***	Actual Peak value of the Current in Ampere
cf	***	Actual Crest Factor (Ipk/Irms)
P	***	Actual Active Power in Watt
S	***	Actual Apparent Power in VA (Urms*Irms)
pf	***	Actual Power Factor (P/S)
THDi	***	Actual Total Harmonic Current Distortion in %
THDu	***	Actual Total Harmonic Voltage Distortion in %
THC	***	Actual Total Harmonic Current in Ampere
PHC	***	Actual Partial Harmonic Current in Ampere

Individual measurements for 2nd to 40th order:

Iavg		Average value of the Individual Harmonic Current in Ampere RMS
Irms	***	Actual Individual Harmonic Current in Ampere RMS
Irms%	***	Actual Individual Harmonic Current in percentage of the actual total RMS Current
Irms%L	***	Actual Individual Harmonic Current in percentage of the applicable Limit
Imax		Maximum Individual Harmonic Current in Ampere RMS
Imax%		Maximum Individual Harmonic Current in percentage of the actual total RMS Current
Imax%lim		Maximum Individual Harmonic Current in percentage of the applicable Limit
Limit Irms		Individual Limit (100%) for the selected Class in Ampere RMS

7.5. VOLTAGE FLUCTUATION AND FLICKER MEASUREMENT

7.5.1. LIMITS OF VOLTAGE FLUCTUATION AND FLICKER MEASUREMENT

TEST ITEM	LIMIT	REMARK
P_{st}	1.0	P_{st} means short-term flicker indicator.
P_{lt}	0.65	P_{lt} means long-term flicker indicator.
T_{dt} (ms)	500	T_{dt} means maximum time that dt exceeds 3 %.
d_{max} (%)	4%	d_{max} means maximum relative voltage change.
dc (%)	3.3%	dc means relative steady-state voltage change

7.5.2. TEST INSTRUMENTS

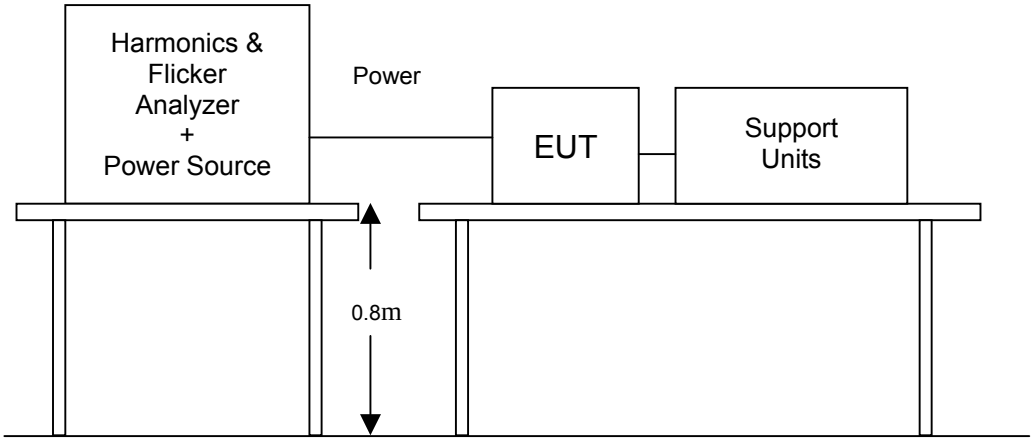
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
H/F Measurement System	EMC Partner	HAR1000-1P	189	08/11/2015
Digital Power Meter	Protronix	1201	201091	No Calibration Required
Software	HARCS V4.19			

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

7.5.3. TEST PROCEDURE (please refer to measurement standard or CCS SOP PA-030)

- The EUT was placed on the top of a wooden table 0.8 meters above the ground and operated to produce the most unfavorable sequence of voltage changes under normal operating conditions.
- During the flick measurement, the measure time shall include that part of whole operation cycle in which the EUT produce the most unfavorable sequence of voltage changes. The observation period for short-term flicker indicator is 10 minutes and the observation period for long-term flicker indicator is 2 hours.

7.5.4. TEST SETUP



- For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

7.5.5. TEST RESULTS

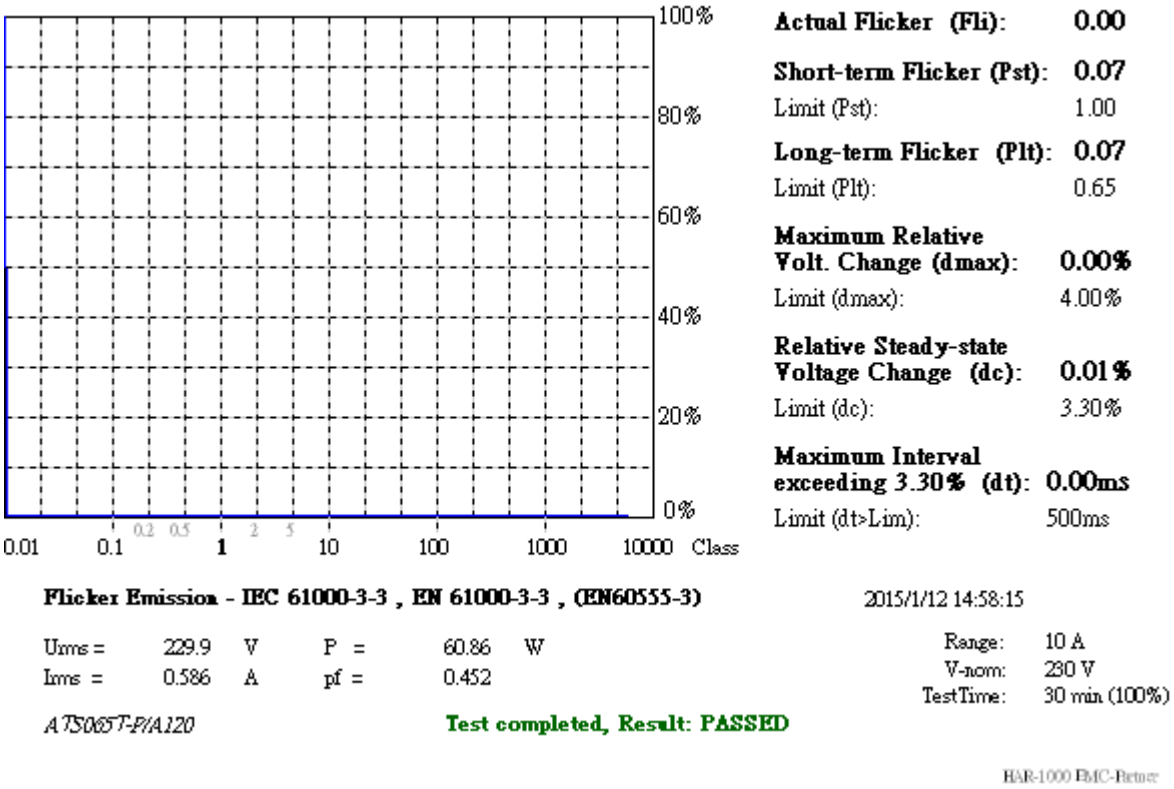
Model No.: KTPS65-1250DT-3P-VI

Observation Period (Tp)	30mins	**Test Mode**	Operating
Environmental Conditions	19°C, 48% RH, 1005mbar	**Tested by**	Stanley Cheng

TEST PARAMETER	MEASUREMENT VALUE	LIMIT	REMARK
P_{st}	0.07	1.0	PASS
P_{lt}	0.07	0.65	PASS
T_{dt} (ms)	0	500	PASS
d_{max} (%)	0	4%	PASS
dc (%)	0.01	3.3%	PASS

Note: None.

Test result of EN 61000-3-3



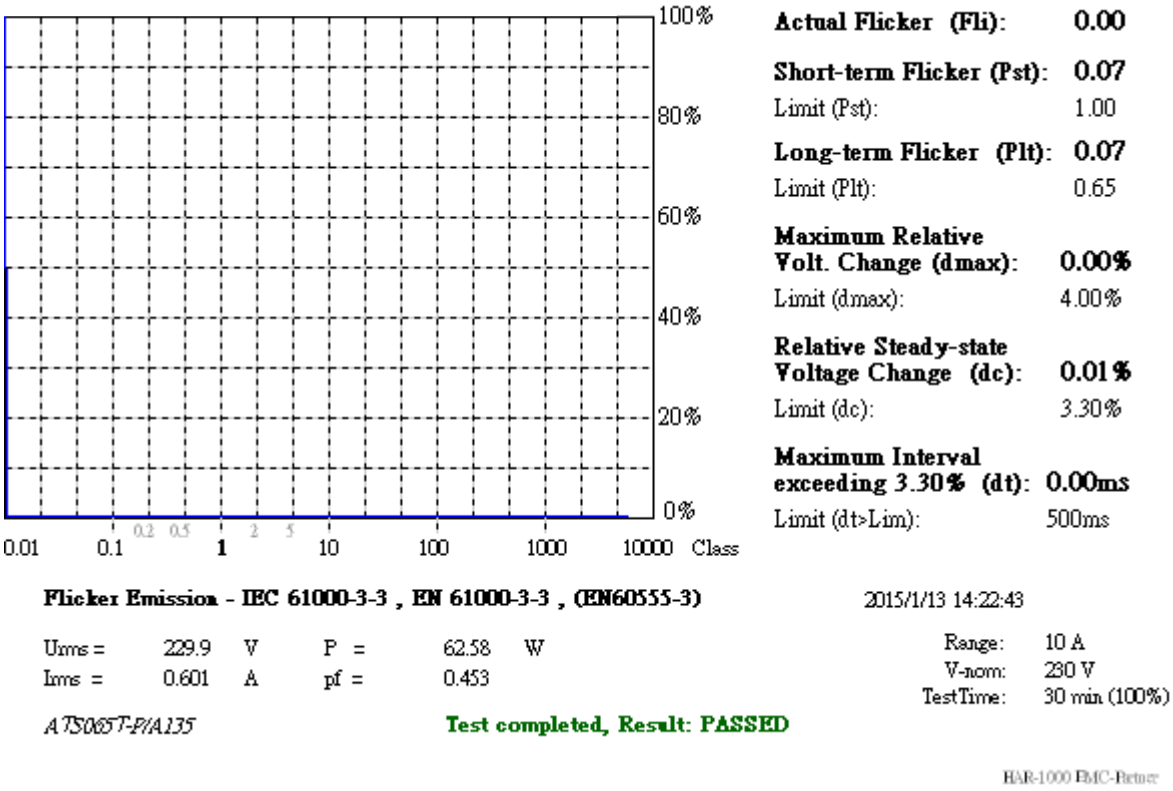
Model No.: KTPS65-13548DT-3P-VI

Observation Period (Tp)	30mins	**Test Mode**	Operating
Environmental Conditions	19°C, 48% RH, 1005mbar	**Tested by**	Stanley Cheng

TEST PARAMETER	MEASUREMENT VALUE	LIMIT	REMARK
P_{st}	0.07	1.0	PASS
P_{lt}	0.07	0.65	PASS
T_{dt} (ms)	0	500	PASS
d_{max} (%)	0	4%	PASS
dc (%)	0.01	3.3%	PASS

Note: None.

Test result of EN 61000-3-3



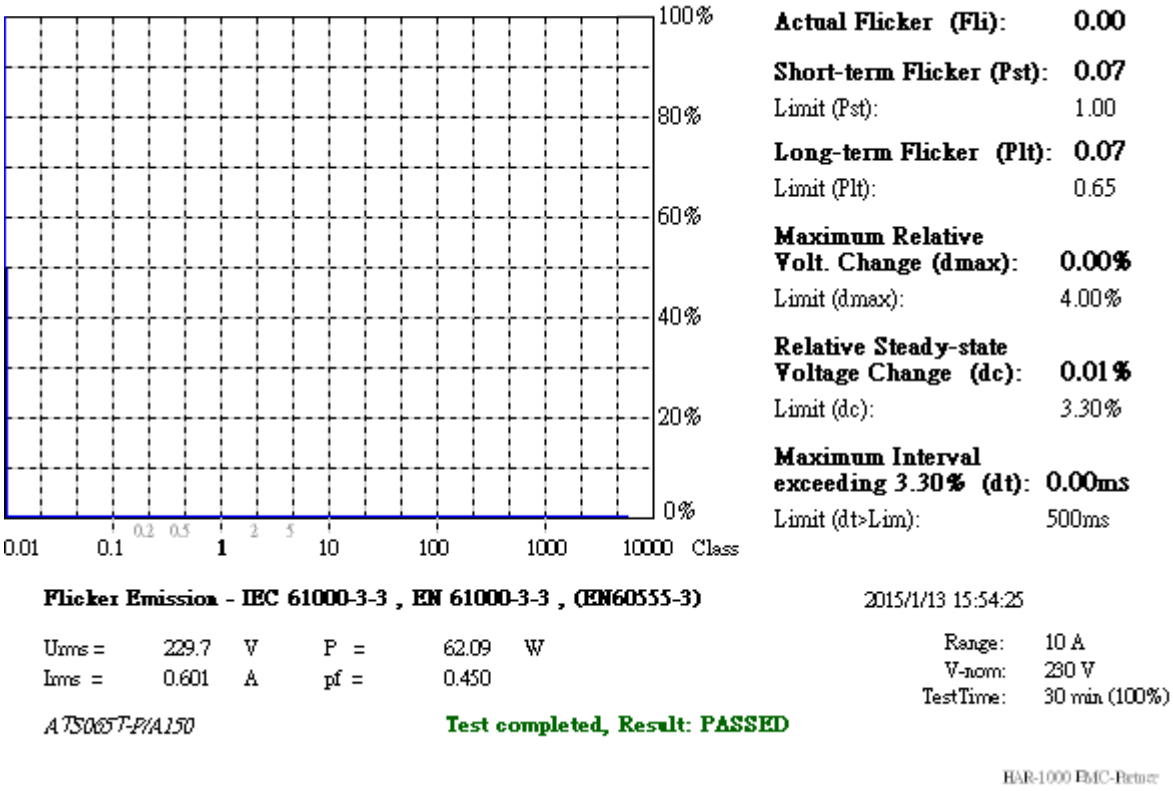
Model No.: KTPS65-1543DT-3P-VI

Observation Period (Tp)	30mins	**Test Mode**	Operating
Environmental Conditions	19°C, 48% RH, 1005mbar	**Tested by**	Stanley Cheng

TEST PARAMETER	MEASUREMENT VALUE	LIMIT	REMARK
P_{st}	0.07	1.0	PASS
P_{lt}	0.07	0.65	PASS
T_{dt} (ms)	0	500	PASS
d_{max} (%)	0	4%	PASS
dc (%)	0.01	3.3%	PASS

Note: None.

Test result of EN 61000-3-3



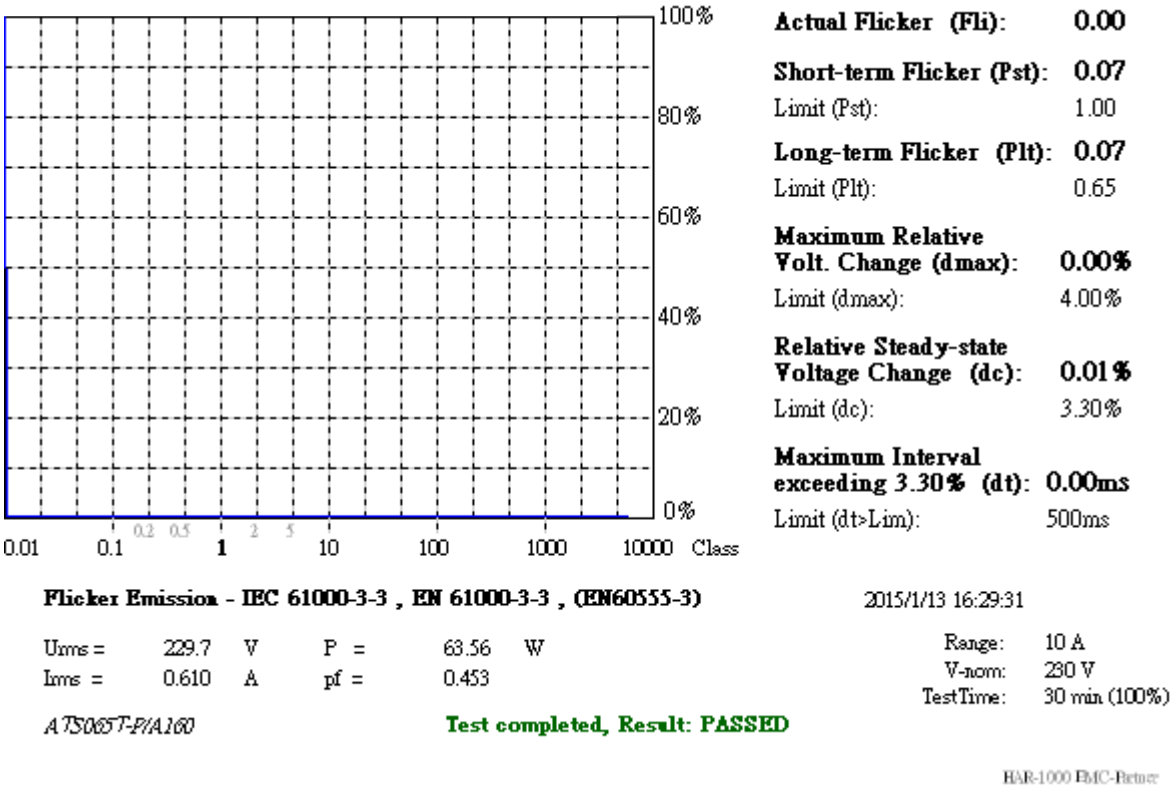
Model No.: KTPS65-1640DT-3P-VI

Observation Period (Tp)	30mins	**Test Mode**	Operating
Environmental Conditions	19°C, 48% RH, 1005mbar	**Tested by**	Stanley Cheng

TEST PARAMETER	MEASUREMENT VALUE	LIMIT	REMARK
P_{st}	0.07	1.0	PASS
P_{lt}	0.07	0.65	PASS
T_{dt} (ms)	0	500	PASS
d_{max} (%)	0	4%	PASS
dc (%)	0.01	3.3%	PASS

Note: None.

Test result of EN 61000-3-3



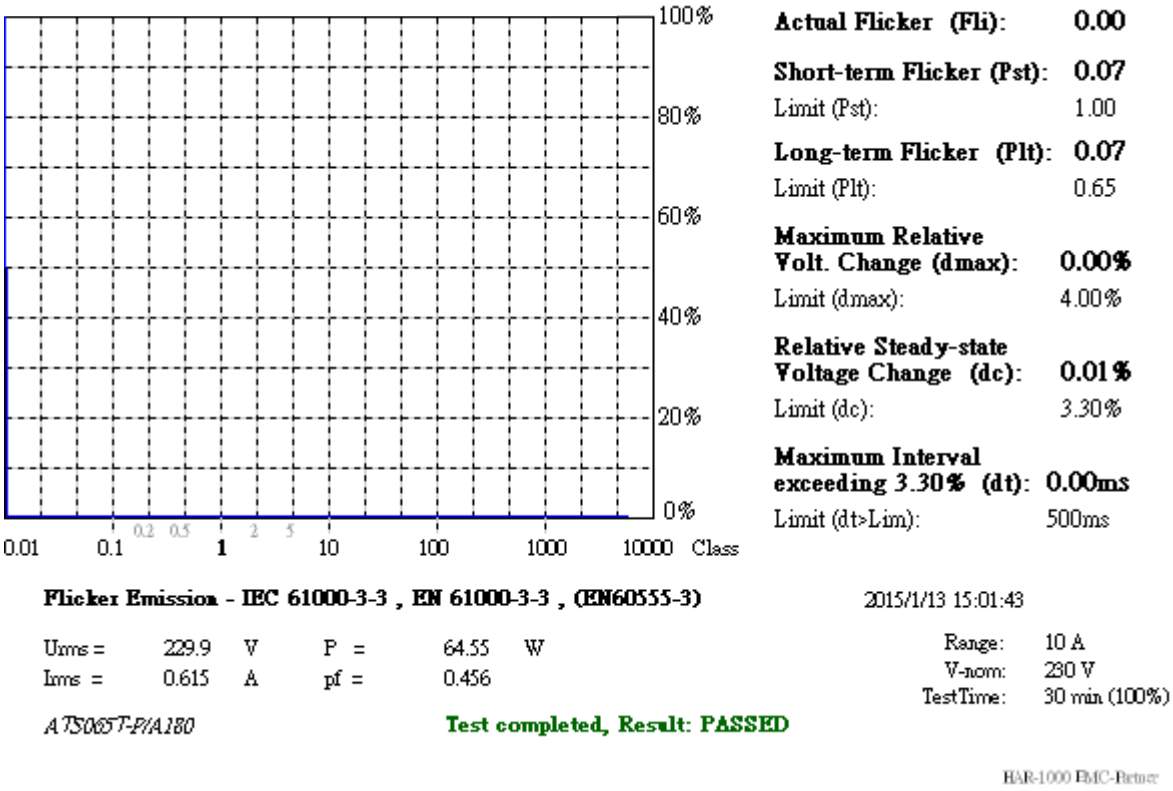
Model No.: KTPS65-1836DT-3P-VI

Observation Period (Tp)	30mins	**Test Mode**	Operating
Environmental Conditions	19°C, 48% RH, 1005mbar	**Tested by**	Stanley Cheng

TEST PARAMETER	MEASUREMENT VALUE	LIMIT	REMARK
P_{st}	0.07	1.0	PASS
P_{lt}	0.07	0.65	PASS
T_{dt} (ms)	0	500	PASS
d_{max} (%)	0	4%	PASS
dc (%)	0.01	3.3%	PASS

Note: None.

Test result of EN 61000-3-3



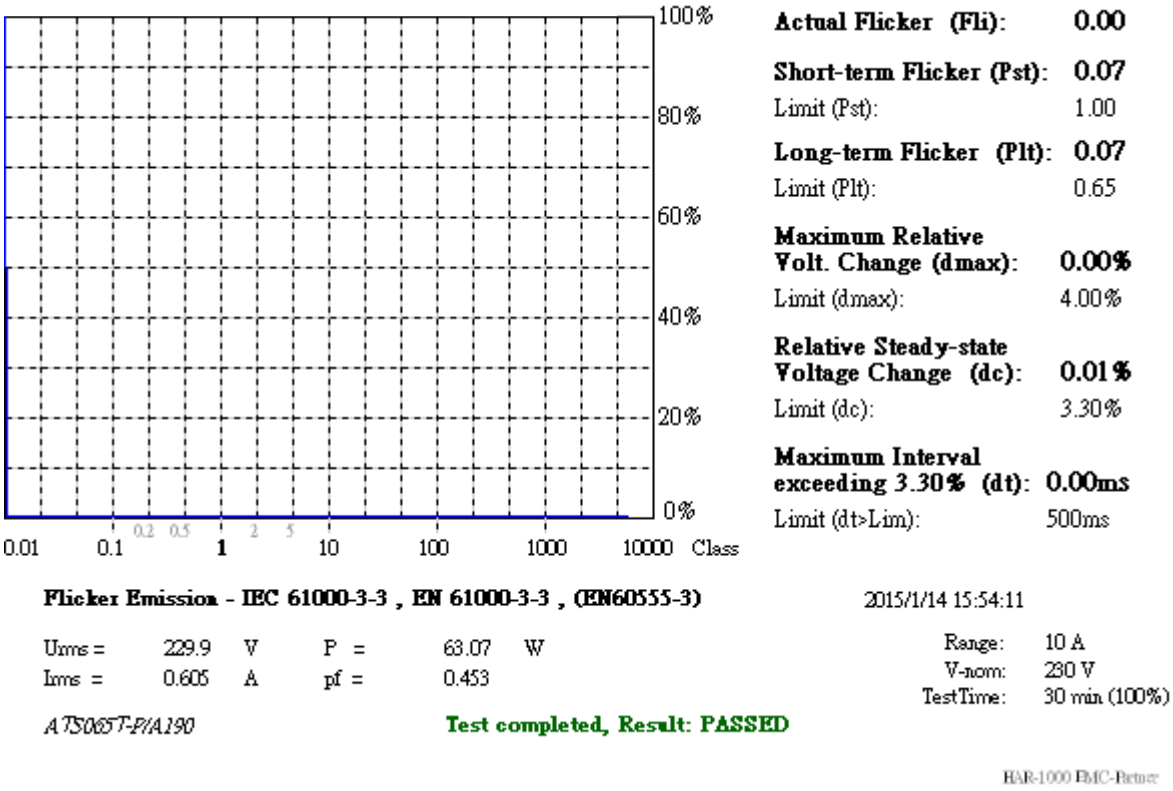
Model No.: KTPS65-1934DT-3P-VI

Observation Period (Tp)	30mins	**Test Mode**	Operating
Environmental Conditions	19°C, 48% RH, 1005mbar	**Tested by**	Kevin Wang

TEST PARAMETER	MEASUREMENT VALUE	LIMIT	REMARK
P_{st}	0.07	1.0	PASS
P_{lt}	0.07	0.65	PASS
T_{dt} (ms)	0	500	PASS
d_{max} (%)	0	4%	PASS
dc (%)	0.01	3.3%	PASS

Note: None.

Test result of EN 61000-3-3



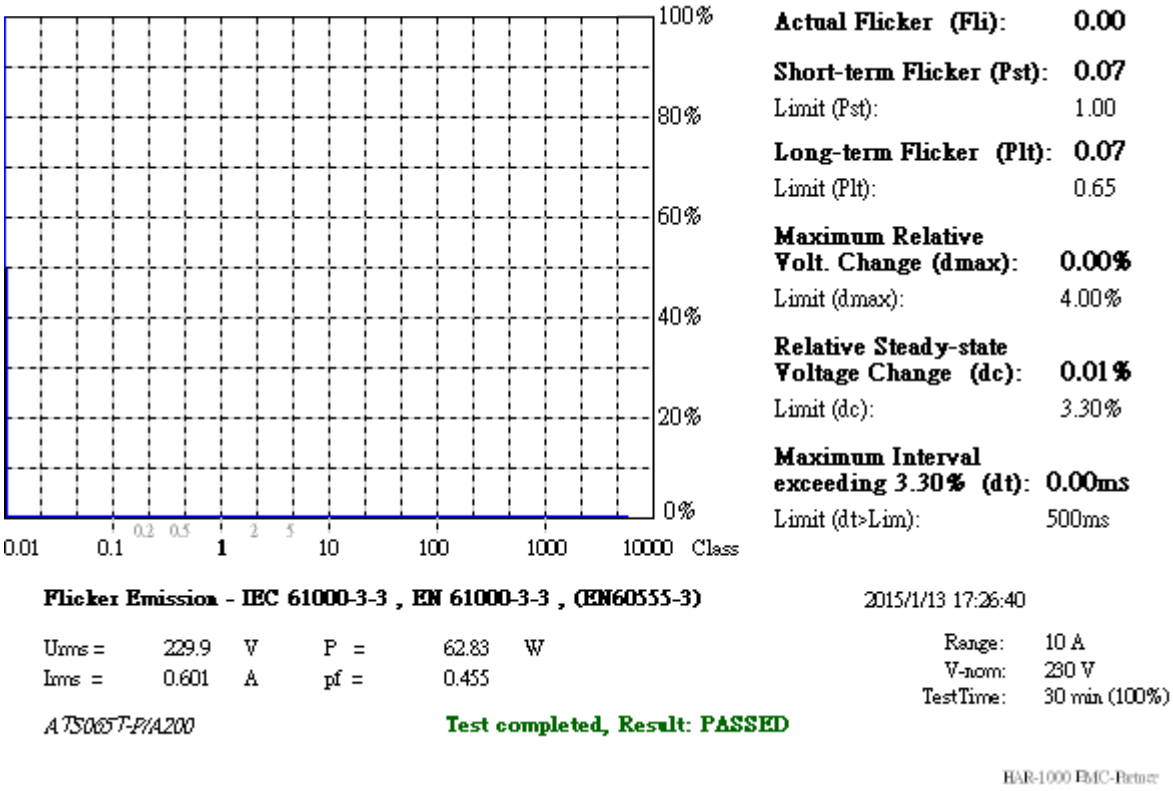
Model No.: KTPS65-2032DT-3P-VI

Observation Period (Tp)	30mins	**Test Mode**	Operating
Environmental Conditions	19°C, 48% RH, 1005mbar	**Tested by**	Stanley Cheng

TEST PARAMETER	MEASUREMENT VALUE	LIMIT	REMARK
P_{st}	0.07	1.0	PASS
P_{lt}	0.07	0.65	PASS
T_{dt} (ms)	0	500	PASS
d_{max} (%)	0	4%	PASS
dc (%)	0.01	3.3%	PASS

Note: None.

Test result of EN 61000-3-3



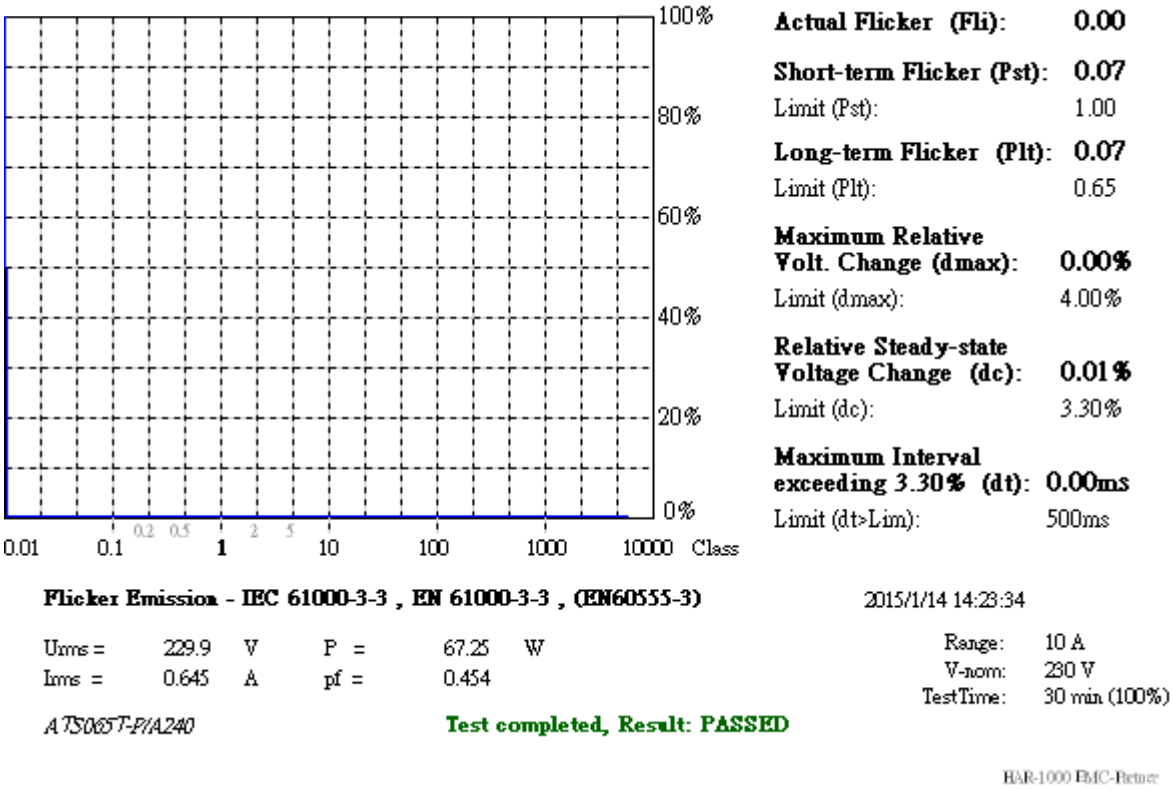
Model No.: KTPS65-2427DT-3P-VI

Observation Period (Tp)	30mins	**Test Mode**	Operating
Environmental Conditions	19°C, 48% RH, 1005mbar	**Tested by**	Kevin Wang

TEST PARAMETER	MEASUREMENT VALUE	LIMIT	REMARK
P_{st}	0.07	1.0	PASS
P_{lt}	0.07	0.65	PASS
T_{dt} (ms)	0	500	PASS
d_{max} (%)	0	4%	PASS
dc (%)	0.01	3.3%	PASS

Note: None.

Test result of EN 61000-3-3



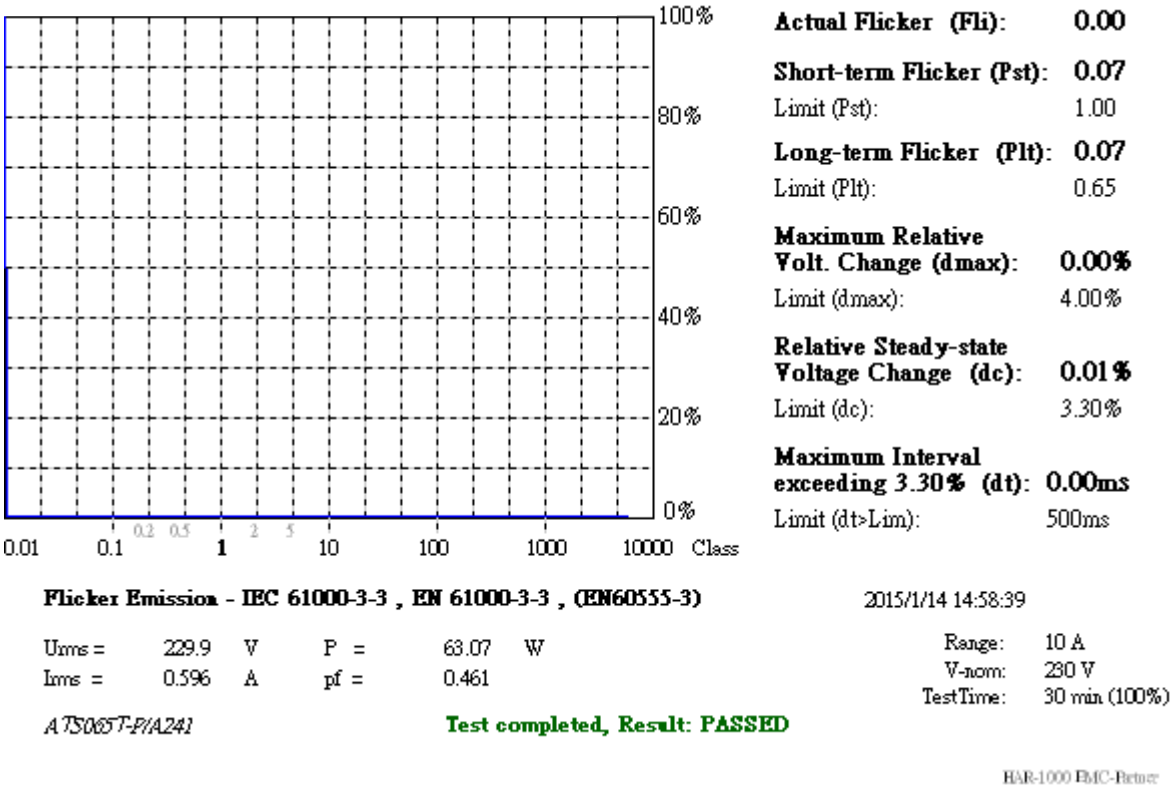
Model No.: KTPS65-2427DT-3P-VI-HP

Observation Period (Tp)	30mins	**Test Mode**	Operating
Environmental Conditions	19°C, 48% RH, 1005mbar	**Tested by**	Kevin Wang

TEST PARAMETER	MEASUREMENT VALUE	LIMIT	REMARK
P_{st}	0.07	1.0	PASS
P_{lt}	0.07	0.65	PASS
T_{dt} (ms)	0	500	PASS
d_{max} (%)	0	4%	PASS
dc (%)	0.01	3.3%	PASS

Note: None.

Test result of EN 61000-3-3



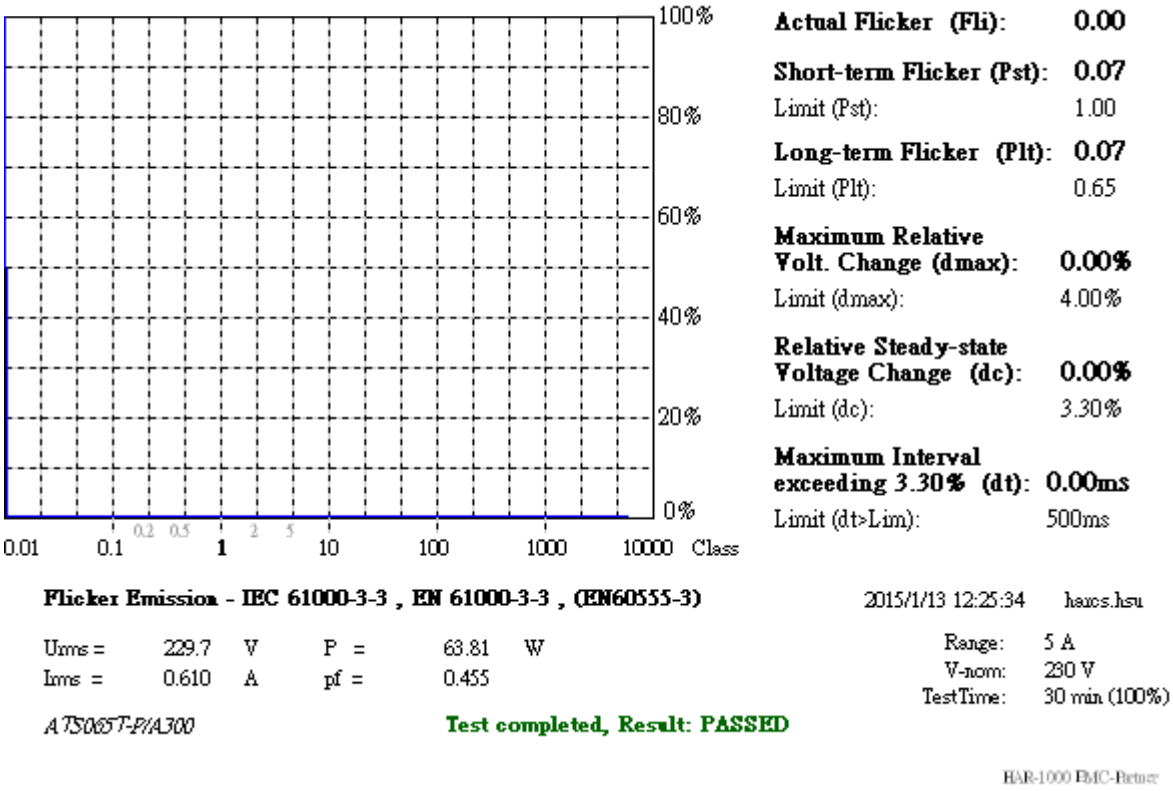
Model No.: KTPS65-3021DT-3P-VI

Observation Period (Tp)	30mins	**Test Mode**	Operating
Environmental Conditions	19°C, 48% RH, 1005mbar	**Tested by**	Bonny Tsai

TEST PARAMETER	MEASUREMENT VALUE	LIMIT	REMARK
P_{st}	0.07	1.0	PASS
P_{lt}	0.07	0.65	PASS
T_{dt} (ms)	0	500	PASS
d_{max} (%)	0	4%	PASS
dc (%)	0	3.3%	PASS

Note: None.

Test result of EN 61000-3-3



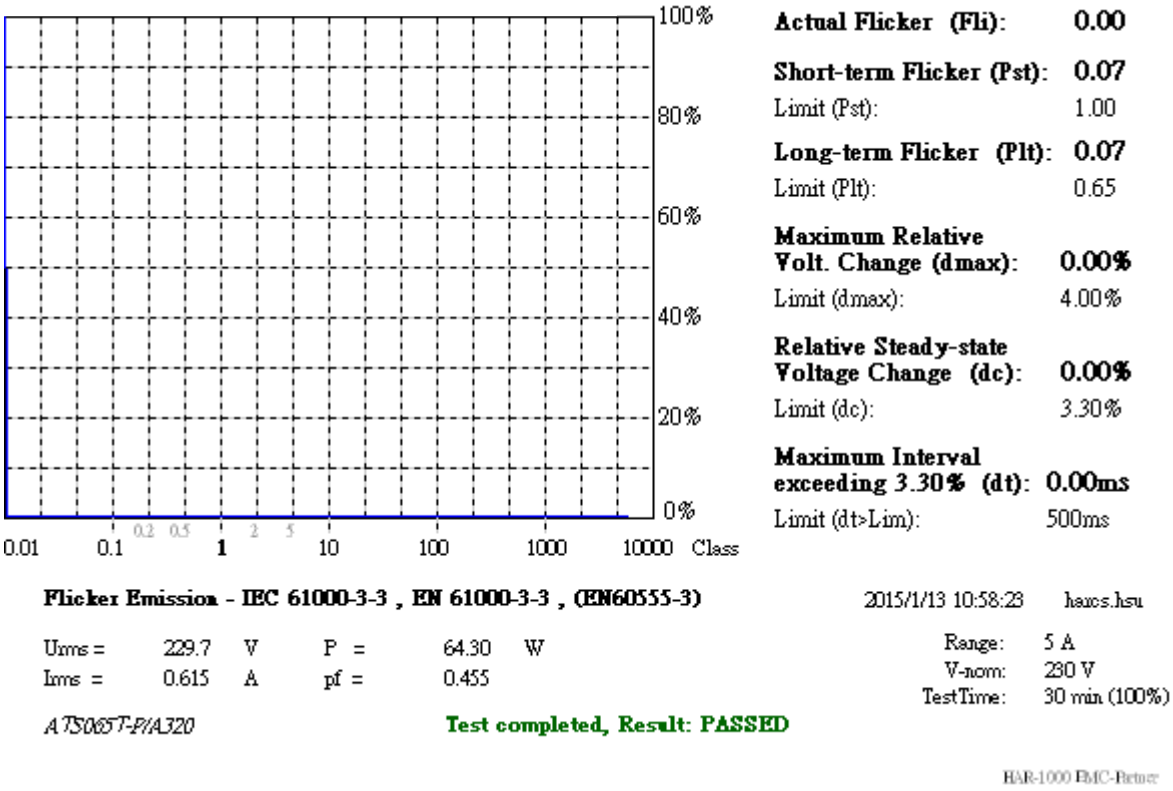
Model No.: KTPS65-3220DT-3P-VI-HP

Observation Period (Tp)	30mins	**Test Mode**	Operating
Environmental Conditions	19°C, 48% RH, 1005mbar	**Tested by**	Bonny Tsai

TEST PARAMETER	MEASUREMENT VALUE	LIMIT	REMARK
P_{st}	0.07	1.0	PASS
P_{lt}	0.07	0.65	PASS
T_{dt} (ms)	0	500	PASS
d_{max} (%)	0	4%	PASS
dc (%)	0	3.3%	PASS

Note: None.

Test result of EN 61000-3-3



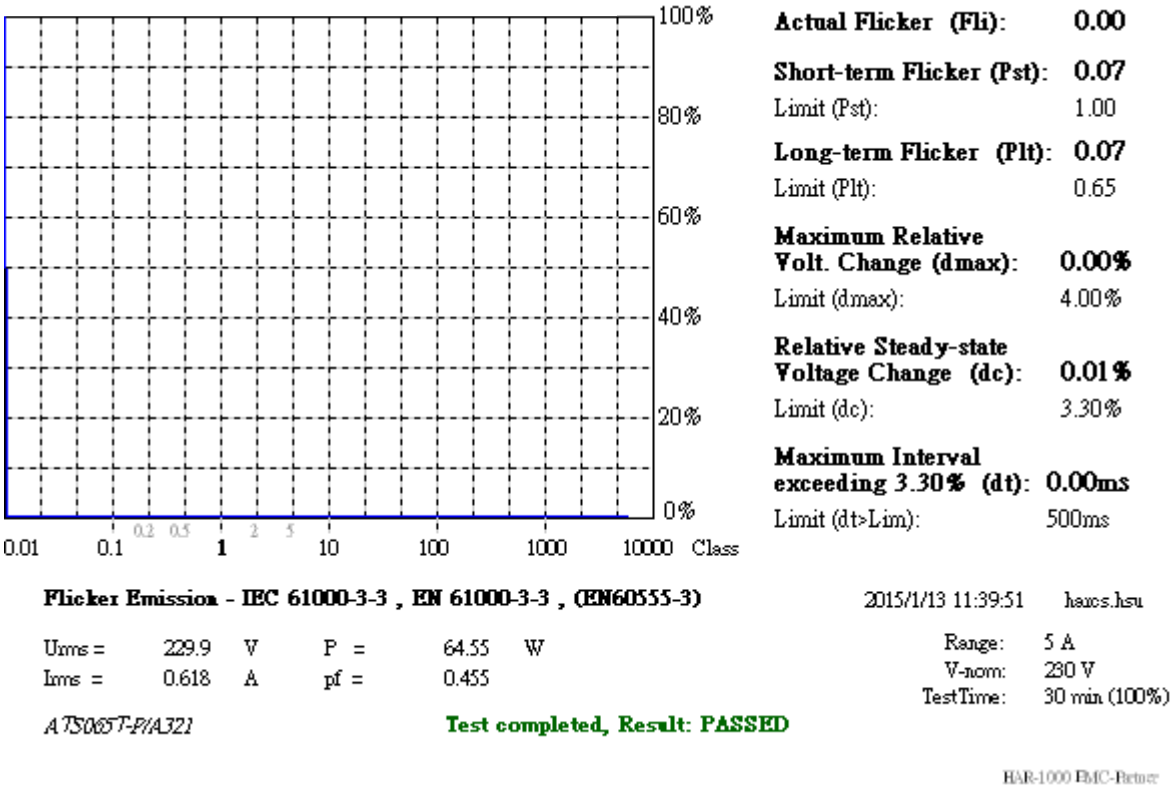
Model No.: KTPS65-3220DT-3P-VI

Observation Period (Tp)	30mins	**Test Mode**	Operating
Environmental Conditions	19°C, 48% RH, 1005mbar	**Tested by**	Bonny Tsai

TEST PARAMETER	MEASUREMENT VALUE	LIMIT	REMARK
P_{st}	0.07	1.0	PASS
P_{lt}	0.07	0.65	PASS
T_{dt} (ms)	0	500	PASS
d_{max} (%)	0	4%	PASS
dc (%)	0.01	3.3%	PASS

Note: None.

Test result of EN 61000-3-3



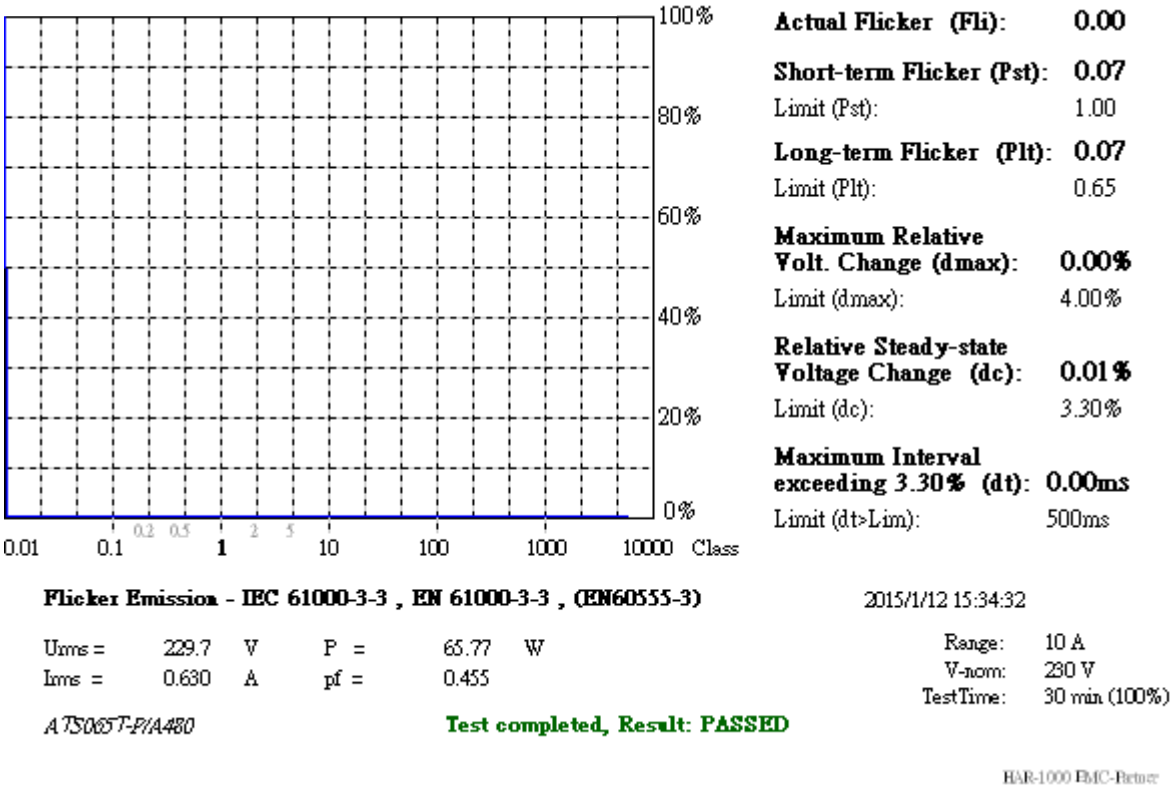
Model No.: KTPS65-4813DT-3P-VI

Observation Period (Tp)	30mins	**Test Mode**	Operating
Environmental Conditions	19°C, 48% RH, 1005mbar	**Tested by**	Stanley Cheng

TEST PARAMETER	MEASUREMENT VALUE	LIMIT	REMARK
P_{st}	0.07	1.0	PASS
P_{lt}	0.07	0.65	PASS
T_{dt} (ms)	0	500	PASS
d_{max} (%)	0	4%	PASS
dc (%)	0.01	3.3%	PASS

Note: None.

Test result of EN 61000-3-3



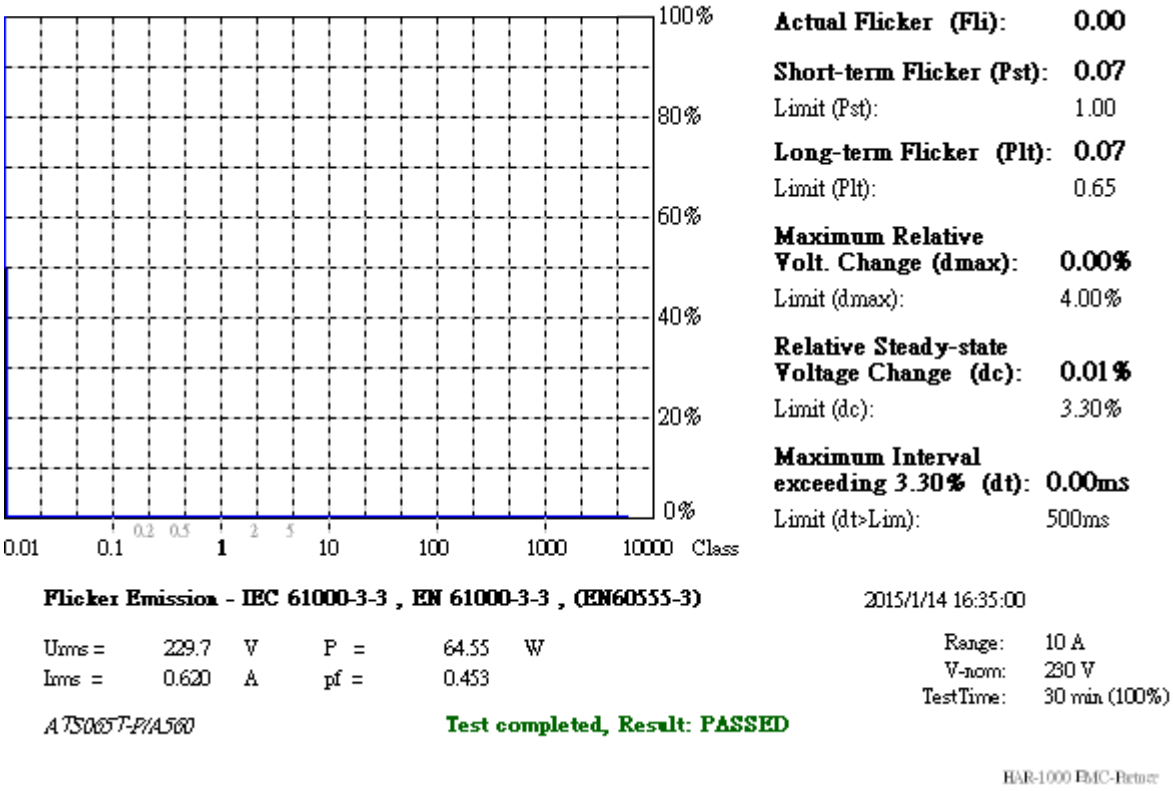
Model No.: KTPS65-5611DT-3P-VI

Observation Period (Tp)	30mins	**Test Mode**	Operating
Environmental Conditions	19°C, 48% RH, 1005mbar	**Tested by**	Kevin Wang

TEST PARAMETER	MEASUREMENT VALUE	LIMIT	REMARK
P_{st}	0.07	1.0	PASS
P_{lt}	0.07	0.65	PASS
T_{dt} (ms)	0	500	PASS
d_{max} (%)	0	4%	PASS
dc (%)	0.01	3.3%	PASS

Note: None.

Test result of EN 61000-3-3



8 IMMUNITY TEST

8.1. GENERAL DESCRIPTION

Product Standard	EN 55024: 2010	
	Test Type	Minimum Requirement
Basic Standard, Specification, and Performance Criterion required	IEC 61000-4-2	Electrostatic Discharge – ESD: 8kV air discharge, 4kV Contact discharge, Performance Criterion B
	IEC 61000-4-3	Radio-Frequency Electromagnetic Field Susceptibility Test – RS: 80 ~1000 MHz, 3V/m, 80% AM(1kHz), Performance Criterion A
	IEC 61000-4-4	Electrical Fast Transient/Burst - EFT, AC Power Port: 1kV DC Power Port: 0.5kV Signal Ports and Telecommunication Ports: 0.5kV Performance Criterion B
	IEC 61000-4-5	Surge Immunity Test: 1.2/50 μs Open Circuit Voltage, 8/20 μs Short Circuit Current, AC Power Port ~ line to line: 1kV, line to earth (ground): 2kV DC Power Port ~ line to earth: 0.5kV Signal Ports and Telecommunication Ports ~ line to ground: 1kV Performance Criterion B 10/700 μs Open Circuit Voltage, Performance Criterion C
	IEC 61000-4-6	Conducted Radio Frequency Disturbances Test – CS: 0.15 ~ 80 MHz, 3Vrms, 80% AM, 1kHz, Performance Criterion A
	IEC 61000-4-8	Power frequency magnetic field immunity test 50 Hz or 60 Hz, 1A/m, Performance Criterion A
	IEC 61000-4-11	Voltage Dips: i) >95% reduction for 0.5 period, Performance Criterion B ii) 30% reduction for 25 period, Performance Criterion C Voltage Interruptions: >95% reduction for 250 period Performance Criterion C

8.2. GENERAL PERFORMANCE CRITERIA DESCRIPTION

Criteria A:	The apparatus shell continues to operate as intended without operator intervention. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. The performance level may be replaced by a permissible loss of performance. If the manufacturer does not specify the minimum performance level or the permissible performance loss, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the equipment if used as intended.
Criteria B:	After test, the apparatus shell continues to operate as intended without operator intervention. No degradation of performance or loss of function is allowed, after the application of the phenomenon below a performance level specified by the manufacturer, when the apparatus is used as intended. The performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is however allowed. However, no change of operating state if stored data is allowed to persist after the test. If the manufacturer does not specify the minimum performance level or the permissible performance loss, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the equipment if used as intended.
Criteria C:	Temporary loss of function is allowed, provided the functions is self-recoverable or can be restored by the operation of controls by the user in accordance with the manufacturer instructions. Functions, and/or information stored in non-volatile memory, or protected by a battery backup, shall not be lost.

8.3. ELECTROSTATIC DISCHARGE (ESD)

8.3.1. TEST SPECIFICATION

Basic Standard:	IEC 61000-4-2
Discharge Impedance:	330 ohm / 150 pF
Discharge Voltage:	Air Discharge: 2 ; 4 ; 8 kV (Direct) Contact Discharge: 2 ; 4 kV (Direct/Indirect)
Polarity:	Positive & Negative
Number of Discharge:	Air Discharge: min. 10 times at each test point for each polarity Contact Discharge: min. 200 times in total
Discharge Mode:	Single Discharge 1 second minimum

8.3.2. TEST INSTRUMENT

IMMUNITY SHIELDED ROOM				
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Due**
ESD Generator	Teseq	NSG 437	249	12/15/2015
Aneroid Barometer	Sato	7610-20	89090	10/12/2015
Thermo-Hygro meter	TECPEL	DTM-303	080269	04/20/2015

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

8.3.3. TEST PROCEDURE (please refer to measurement standard or CCS SOP PA-022)

The discharges shall be applied in two ways:

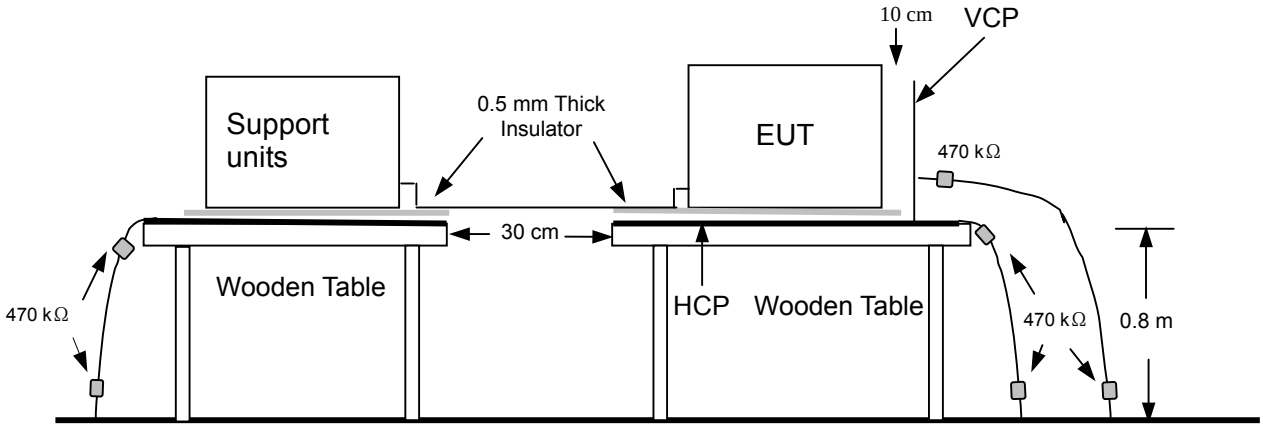
a) Contact discharges to the conductive surfaces and coupling planes:
   The EUT shall be exposed to at least 200 discharges, 100 each at negative and positive polarity, at a minimum of four test points. One of the test points shall be subjected to at least 50 indirect discharges to the center of the front edge of the **H**orizontal **C**oupling **P**lane (**HCP**). The remaining three test points shall each receive at least 50 direct contact discharges. If no direct contact test points are available, then at least 200 indirect discharges shall be applied in the indirect mode. Test shall be performed at a maximum repetition rate of one discharge per second.

b) Air discharges at slots and apertures and insulating surfaces:
   On those parts of the EUT where it is not possible to perform contact discharge testing, the equipment should be investigated to identify user accessible points where breakdown may occur. Such points are tested using the air discharge method. This investigation should be restricted to those area normally handled by the user. A minimum of 10 single air discharges shall be applied to the selected test point for each such area.

The basic test procedure was in accordance with IEC 61000-4-2:

a) The EUT was located 0.1 m minimum from all side of the **HCP** (dimensions 1.6m x 0.8m).
b) The support units were located another table 30 cm away from the EUT, but direct support unit was/were located at same location as EUT on the HCP and keep at a distance of 10 cm with EUT.
c) The time interval between two successive single discharges was at least 1 second.
d) Contact discharges were applied to the non-insulating coating, with the pointed tip of the generator penetrating the coating and contacting the conducting substrate.
e) Air discharges were applied with the round discharge tip of the discharge electrode approaching the EUT as fast as possible (without causing mechanical damage) to touch the EUT. After each discharge, the ESD generator was removed from the EUT and re-triggered for a new single discharge. The test was repeated until all discharges were complete.
f) At least ten single discharges (in the most sensitive polarity) were applied at the front edge of each **HCP** opposite the center point of each unit of the EUT and 0.1 meters from the front of the EUT. The long axis of the discharge electrode was in the plane of the **HCP** and perpendicular to its front edge during the discharge.
g) At least ten single discharges (in the most sensitive polarity) were applied to the center of one vertical edge of the **V**ertical **C**oupling **P**lane (**VCP**) in sufficiently different positions that the four faces of the EUT were completely illuminated. The **VCP** (dimensions 0.5m x 0.5m) was placed vertically to and 0.1 meters from the EUT.

8.3.4. TEST SETUP



Ground Reference Plane

- For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

NOTE:

TABLE-TOP EQUIPMENT

The configuration consisted of a wooden table 0.8 meters high standing on the **G**round **R**eference **P**lane. The **GRP** consisted of a sheet of aluminum at least 0.25mm thick, and 2.5 meters square connected to the protective grounding system. A **H**orizontal **C**oupling **P**lane (1.6m x 0.8m) was placed on the table and attached to the **GRP** by means of a cable with 940k ˙ total impedance. The equipment under test, was installed in a representative system as described in section 7 of IEC 61000-4-2, and its cables were placed on the **HCP** and isolated by an insulating support of 0.5mm thickness. A distance of 1-meter minimum was provided between the EUT and the walls of the laboratory and any other metallic structure.

FLOOR-STANDING EQUIPMENT

The equipment under test was installed in a representative system as described in section 7 of IEC 61000-4-2, and its cables were isolated from the Ground Reference Plane by an insulating support of 0.1-meter thickness. The GRP consisted of a sheet of aluminum that is at least 0.25mm thick, and 2.5 meters square connected to the protective grounding system and extended at least 0.5 meters from the EUT on all sides.

8.3.5. TEST RESULTS

Temperature	19°C	Humidity	49% RH
Pressure	1006mbar	Tested By	Stanley Cheng
Required Passing Performance		Criterion B	

Air Discharge							
Test Points	Test Levels			Results			
	± 2 kV	± 4 kV	± 8 kV	Pass	Fail	Performance Criterion	Observation
Front	☒	☒	☒	☒	☐	☒A ☐B	Note ☐1 ☒2
Back	☒	☒	☒	☒	☐	☒A ☐B	Note ☐1 ☒2
Left	☒	☒	☒	☒	☐	☒A ☐B	Note ☐1 ☒2
Right	☒	☒	☒	☒	☐	☒A ☐B	Note ☐1 ☒2
Top	☒	☒	☒	☒	☐	☒A ☐B	Note ☐1 ☒2
Bottom	☒	☒	☒	☒	☐	☒A ☐B	Note ☐1 ☒2

Discharge To Horizontal Coupling Plane							
Side of EUT	Test Levels			Results			
	± 2 kV	± 4 kV	± 8 kV	Pass	Fail	Performance Criterion	Observation
Front	☒	☒	☐	☒	☐	☒A ☐B	Note ☒1 ☐2
Back	☒	☒	☐	☒	☐	☒A ☐B	Note ☒1 ☐2
Left	☒	☒	☐	☒	☐	☒A ☐B	Note ☒1 ☐2
Right	☒	☒	☐	☒	☐	☒A ☐B	Note ☒1 ☐2

Discharge To Vertical Coupling Plane							
Side of EUT	Test Levels			Results			
	± 2 kV	± 4 kV	± 8 kV	Pass	Fail	Performance Criterion	Observation
Front	☒	☒	☐	☒	☐	☒A ☐B	Note ☒1 ☐2
Back	☒	☒	☐	☒	☐	☒A ☐B	Note ☒1 ☐2
Left	☒	☒	☐	☒	☐	☒A ☐B	Note ☒1 ☐2
Right	☒	☒	☐	☒	☐	☒A ☐B	Note ☒1 ☐2

NOTE: 1. There was no change compared with initial operation during the test.
2. No discharge point.

8.4. RADIATED, RADIO-FREQUENCY, ELECTROMAGNETIC FIELD (RS)

8.4.1. TEST SPECIFICATION

Basic Standard:	IEC 61000-4-3
Frequency Range:	80 MHz ~ 1000 MHz
Field Strength:	3 V/m
Modulation:	1kHz Sine Wave, 80%, AM Modulation
Frequency Step:	1 % of preceding frequency value
Polarity of Antenna:	Horizontal and Vertical
Test Distance:	3 m
Antenna Height:	1.5m

8.4.2. TEST INSTRUMENT

844 RS Chamber				
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Due**
Calibration of Field	N/A	Chamber#RS	80-1000MHz	04/05/2015
Signal Generator	Agilent	E4421B	MY43350597	05/22/2015
Electric Field Probe	AR	FL7006	0338955	06/08/2015
RF Power Meter	Boonton	4242-01-02	14357	03/19/2015
Amplifier	AR	500W1000A	320994	No Calibration Required
Direction Coupler	AR	DC6180A	312189	No Calibration Required
Broadband Antenna	AR	AT1080	311819	No Calibration Required
Thermo-Hygro meter	TFA	N/A	NO.6	11/02/2015
Software	Emcware Ver. 2.6.0.16			

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. N.C.R.= No Calibration required.

8.4.3. TEST PROCEDURE (please refer to measurement standard or CCS SOP PA-023)

The test procedure was in accordance with IEC 61000-4-3

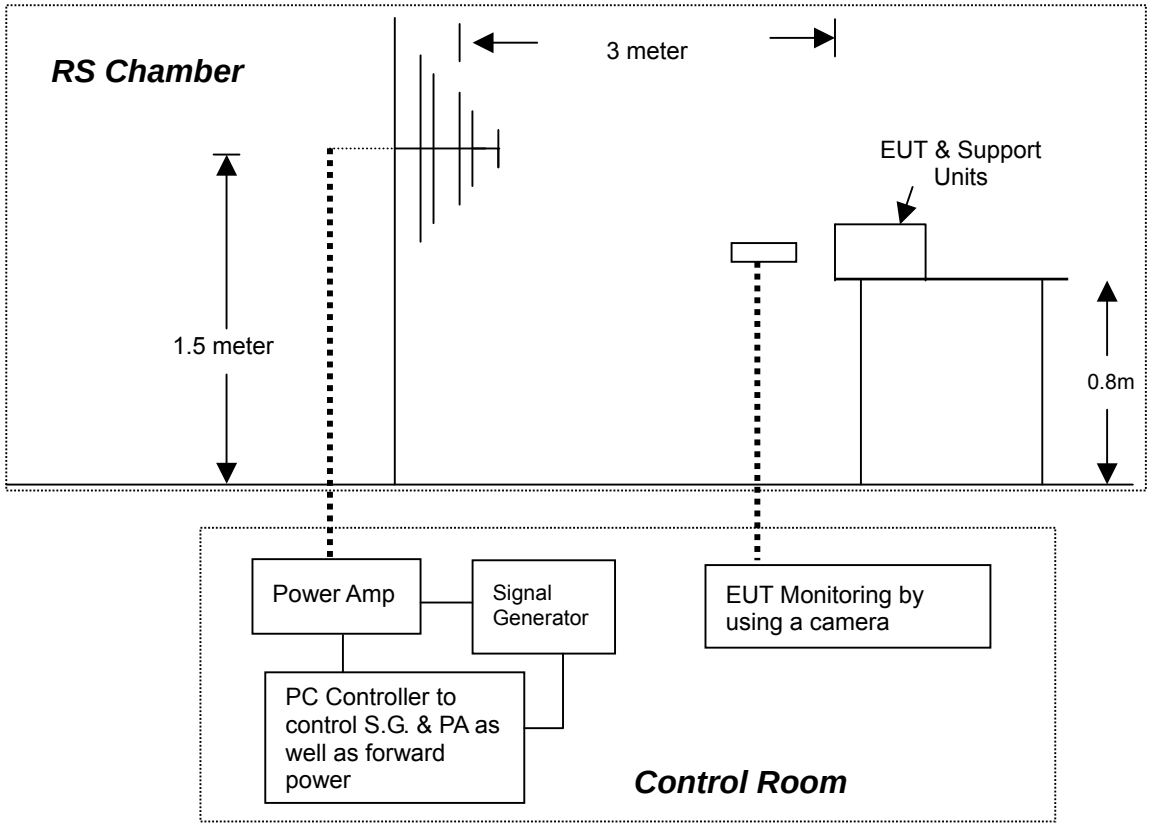
a) The testing was performed in a fully anechoic chamber. The transmit antenna was located at a distance of 3 meters from the EUT.

b) The frequency range is swept from 80 MHz to 1000 MHz, with the signal 80% amplitude modulated with a 1kHz sine-wave. The rate of sweep did not exceed 1.5×10^{-3} decade/s, where the frequency range is swept incrementally, the step size was 1% of preceding frequency value.

c) The dwell time at each frequency shall be not less than the time necessary for the EUT to be able to respond.

d) The test was performed with the EUT exposed to both vertically and horizontally polarized fields on each of the four sides.

8.4.4. TEST SETUP



- For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

NOTE:

TABLETOP EQUIPMENT

The EUT installed in a representative system as described in section 7 of IEC 61000-4-3 was placed on a non-conductive table 0.8 meters in height. The system under test was connected to the power and signal wire according to relevant installation instructions.

FLOOR STANDING EQUIPMENT

The EUT installed in a representative system as described in section 7 of IEC 61000-4-3 was placed on a non-conductive wood support 0.1 meters in height. The system under test was connected to the power and signal wire according to relevant installation instructions.

8.4.5. TEST RESULTS

Temperature	21°C	**Humidity**	53% RH
Pressure	1007mbar	**Dwell Time**	3 sec.
Tested By	Stanley Cheng	**Required Passing Performance**	**Criterion A**

Frequency (MHz)	Polarity	Azimuth	Field Strength (V/m)	Performance Criterion	Observation	Result
80 ~ 1000	V&H	0	3	☒A ☐B	Note ☒1 ☐2	PASS
80 ~ 1000	V&H	90	3	☒A ☐B	Note ☒1 ☐2	PASS
80 ~ 1000	V&H	180	3	☒A ☐B	Note ☒1 ☐2	PASS
80 ~ 1000	V&H	270	3	☒A ☐B	Note ☒1 ☐2	PASS

NOTE: 1. There was no change compared with the initial operation during the test.

8.5. ELECTRICAL FAST TRANSIENT (EFT)

8.5.1. TEST SPECIFICATION

Basic Standard:	IEC 61000-4-4
Test Voltage:	AC Power Port: 1kV
Polarity:	Positive & Negative
Impulse Frequency:	5 kHz
Impulse Wave-shape:	5/50 ns
Burst Duration:	15 ms
Burst Period:	300 ms
Test Duration:	Not less than 1 min.

8.5.2. TEST INSTRUMENT

Immunity Shield Room				
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Due**
EMC Immunity Tester	EMC Partner	TRANSIENT 2000	1117	03/04/2015
Capacitive Clamp	EMC-Partner	CN-EFT1000	589	07/23/2015
Software	Genecs Ver. 3.27			

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. N.C.R.= No Calibration required.

8.5.3. TEST PROCEDURE (please refer to measurement standard or CCS SOP PA-024)

a) All types of cables, including their length, and the interface port of the EUT to which they were connected.

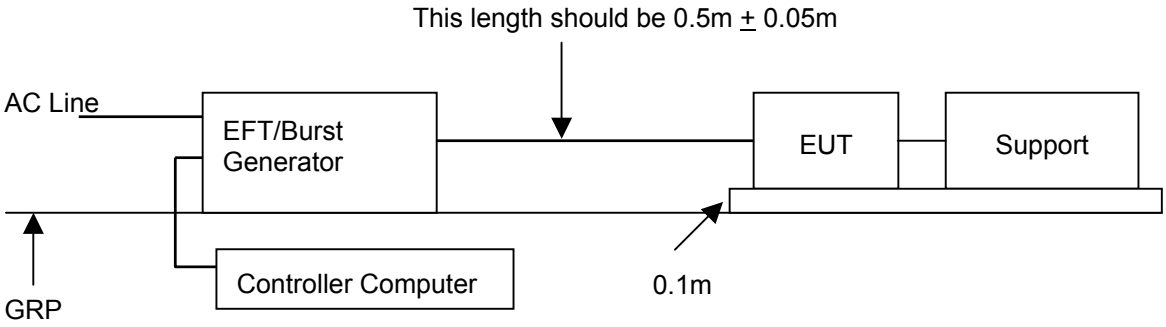
b) Both positive and negative polarity discharges were applied.

c) The length of the " hot wire " from the coaxial output of the EFT generator to the terminals on the EUT should not exceed 0.5 meter.

d) The duration time of each test sequential was 1 minute.

e) The transient/burst waveform was in accordance with IEC 61000-4-4, 5/50ns.

8.5.4. TEST SETUP



- For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

NOTE:

TABLETOP EQUIPMENT

The configuration consisted of a wooden table (0.1m high) standing on the Ground Reference Plane. The GRP consisted of a sheet of aluminum (at least 0.25mm thick and 2.5m square) connected to the protective grounding system. A minimum distance of 0.5m was provided between the EUT and the walls of the laboratory or any other metallic structure.

FLOOR STANDING EQUIPMENT

The EUT installed in a representative system as described in section 7 of IEC 61000-4-4 and its cables, were isolated from the Ground Reference Plane by an insulating support that is 0.1-meter thick. The GRP consisted of a sheet of aluminum (at least 0.25mm thick and 2.5m square) connected to the protective grounding system.

8.5.5. TEST RESULTS

Temperature	19°C	**Humidity**	49% RH
Pressure	1006mbar	**Tested By**	Stanley Cheng
Required Passing Performance		**Criterion B**	

Test Point	Polarity	Test Level (kV)	Performance Criterion	Observation	Result
L	+/-	1	☒A ☐B	Note ☒1 ☐2	PASS
N	+/-	1	☒A ☐B	Note ☒1 ☐2	PASS
L – N	+/-	1	☒A ☐B	Note ☒1 ☐2	PASS
PE	+/-	1	☒A ☐B	Note ☒1 ☐2	PASS
L – PE	+/-	1	☒A ☐B	Note ☒1 ☐2	PASS
N – PE	+/-	1	☒A ☐B	Note ☒1 ☐2	PASS
L – N – PE	+/-	1	☒A ☐B	Note ☒1 ☐2	PASS

NOTE: 1. There was no change compared with initial operation during the test.

8.6. SURGE IMMUNITY TEST

8.6.1. TEST SPECIFICATION

Basic Standard:	IEC 61000-4-5
Wave-Shape:	Combination Wave 1.2/50 μs Open Circuit Voltage 8/20 μs Short Circuit Current
Test Voltage:	AC Power Port~ line to line: 1kV, line to ground: 2kV
Surge Input/Output:	AC Power Line: L-N / L-PE / N-PE
Generator Source Impedance:	2 ohm between networks 12 ohm between network and ground
Polarity:	Positive/Negative
Phase Angle:	0° / 90° / 180° / 270°
Pulse Repetition Rate:	1 time / min. (maximum)
Number of Tests:	5 positive and 5 negative at selected points

8.6.2. TEST INSTRUMENT

Immunity Shield Room				
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Due**
EMC Immunity Tester	EMC Partner	TRANSIENT 2000	1117	03/04/2015
CDN	EMC Partner	CDN-UTP8	CDN-UTP8-1505	03/05/2015
Software	Genecs Ver. 3.27			

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. N.C.R.= No Calibration required.

8.6.3. TEST PROCEDURE (please refer to measurement standard or CCS SOP PA-025)

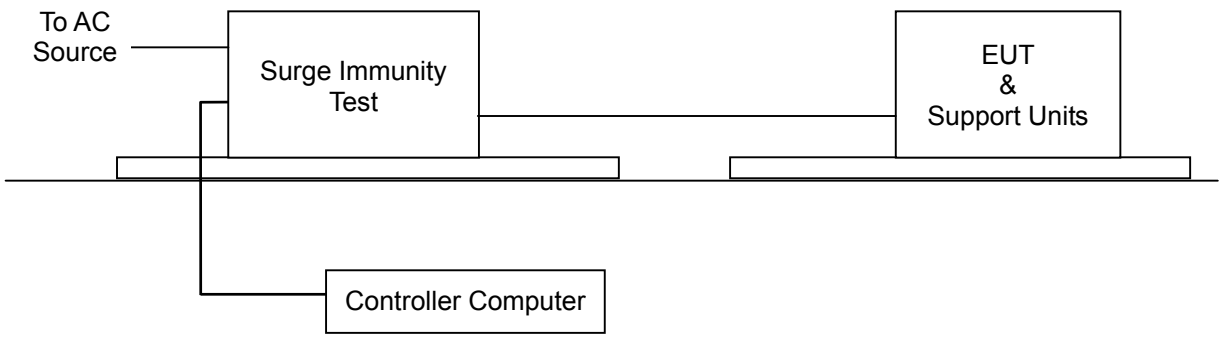
a) For EUT power supply:

The surge is applied to the EUT power supply terminals via the capacitive coupling network. Decoupling networks are required in order to avoid possible adverse effects on equipment not under test that may be powered by the same lines, and to provide sufficient decoupling impedance to the surge wave. The power cord between the EUT and the coupling/decoupling networks was shorter than 2 meters in length.

b) For test applied to unshielded un-symmetrically operated interconnection lines of EUT:
The surge was applied to the lines via the capacitive coupling. The coupling / decoupling networks didn't influence the specified functional conditions of the EUT. The interconnection line between the EUT and the coupling/decoupling networks was shorter than 2 meters in length.

c) For test applied to unshielded symmetrically operated interconnection / telecommunication lines of EUT:
The surge was applied to the lines via gas arrestors coupling. Test levels below the ignition point of the coupling arrestor were not specified. The interconnection line between the EUT and the coupling/decoupling networks was shorter than 2 meters in length.

8.6.4. TEST SETUP



- For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

8.6.5. TEST RESULTS

Temperature	19°C	**Humidity**	49% RH
Pressure	1006mbar	**Tested By**	Stanley Cheng
Required Passing Performance		**Criterion B**	

Test Point	Polarity	Test Level (kV)	Performance Criterion	Observation	Result
L - N	+/-	1	☒**A** ☐**B**	**Note** ☒**1** ☐**2**	PASS
L - PE	+/-	2	☒**A** ☐**B**	**Note** ☒**1** ☐**2**	PASS
N - PE	+/-	2	☒**A** ☐**B**	**Note** ☒**1** ☐**2**	PASS

NOTE: 1. There was no change compared with initial operation during the test.

8.7. CONDUCTED RADIO FREQUENCY DISTURBANCES (CS)

8.7.1. TEST SPECIFICATION

Basic Standard:	IEC 61000-4-6
Frequency Range:	0.15 MHz ~ 80 MHz
Field Strength:	3 Vrms
Modulation:	1kHz Sine Wave, 80%, AM Modulation
Frequency Step:	1 % of preceding frequency value
Coupled cable:	Power Mains, Unshielded
Coupling device:	CDN-M3 (3 wires)

8.7.2. TEST INSTRUMENT

CS Room				
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Due**
CWS Generator	EM Test	CWS 500N1	V0935105080	09/25/2015
CDN (EUT)	Teseq	CDN M016	35820	06/12/2015
CDN	Teseq	CDN M016	35821	06/12/2015
Attenuator	EMCI	SA3NL	10006F	No Calibration Required
Software	icd.control Ver. 5.1.9			

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. N.C.R.= No Calibration required.

8.7.3. TEST PROCEDURE (please refer to measurement standard or CCS SOP PA-026)

The EUT shall be tested within its intended operating and climatic conditions.

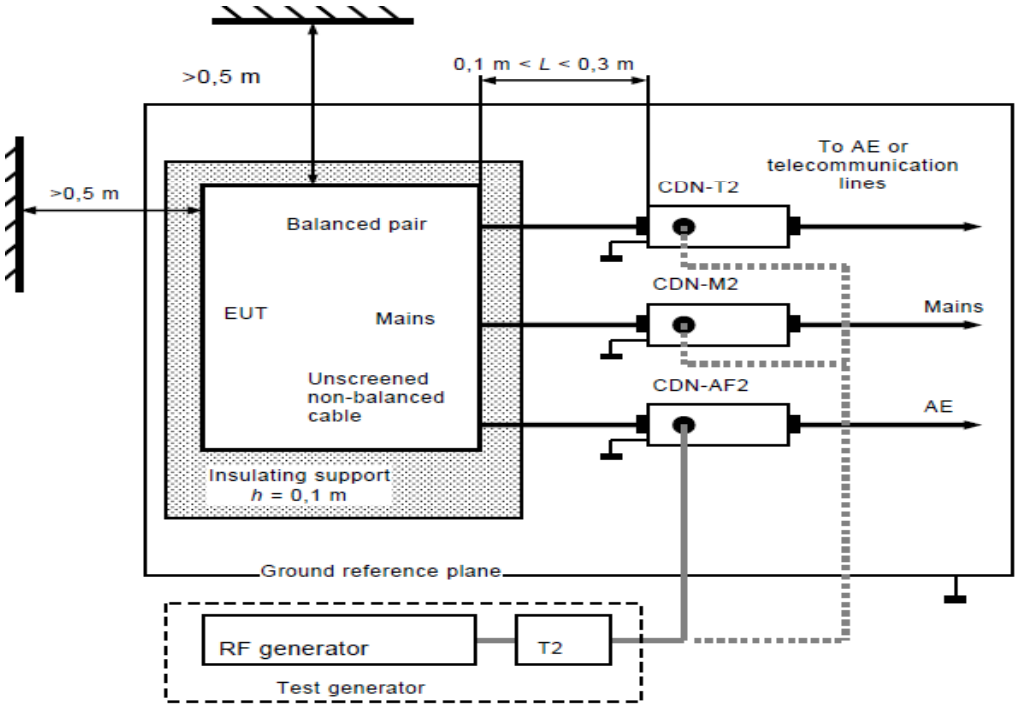
The test shell performed with the test generator connected to each of the coupling and decoupling devices in turn, while the other non-excited RF input ports of the coupling devices are terminated by a 50-ohm load resistor.

The frequency range was swept from 150 kHz to 80 MHz, using the signal level established during the setting process and with a disturbance signal of 80 % amplitude. The signal was modulated with a 1 kHz sine wave, pausing to adjust the RF signal level or the switch coupling devices as necessary. The sweep rate was 1.5×10^{-3} decades/s. Where the frequency range is swept incrementally, the step size was 1 % of preceding frequency value from 150 kHz to 80 MHz.

The dwell time at each frequency was less than the time necessary for the EUT to be exercised, and able to respond. Sensitive frequencies such as clock frequency(ies) and harmonics or frequencies of dominant interest, was analyzed separately.

Attempts was made to fully exercise the EUT during testing, and to fully interrogate all exercise modes selected for susceptibility.

8.7.4. TEST SETUP



Note: 1. The CDNs and / or EM clamp used for real test depends on ports and cables configuration of EUT.
2. The EUT clearance from any metallic obstacles shall be at least 0.5m

- For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

NOTE:
TABLE-TOP AND FLOOR-STANDING EQUIPMENT
The equipment to be tested is placed on an insulating support of 0.1 meters height above a ground reference plane. All relevant cables shall be provided with the appropriate coupling and decoupling devices at a distance between 0.1 meters and 0.3 meters from the projected geometry of the EUT on the ground reference plane.

8.7.5. TEST RESULTS

Temperature	19°C	**Humidity**	48% RH
Pressure	1005mbar	**Tested By**	Stanley Cheng
Required Passing Performance		**Criterion A**	

Frequency Band (MHz)	Field Strength (Vrms)	Cable	Injection Method	Performance Criterion	Observation	Result
0.15 ~ 80	3	AC Power Line (0.3m)	CDN-M3	☒A ☐B	Note ☒1 ☐2	PASS

NOTE: 1. There was no change compared with initial operation during the test.

8.8. POWER FREQUENCY MAGNETIC FIELD

8.8.1. TEST SPECIFICATION

Basic Standard:	IEC 61000-4-8
Frequency Range:	50Hz
Field Strength:	1 A/m
Observation Time:	1 minute
Inductance Coil:	Rectangular type, 1mx1m

8.8.2. TEST INSTRUMENT

Immunity Shield Room				
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Due**

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. N.C.R.= No Calibration required.

8.8.3. TEST PROCEDURE (please refer to measurement standard or CCS SOP PA-027)

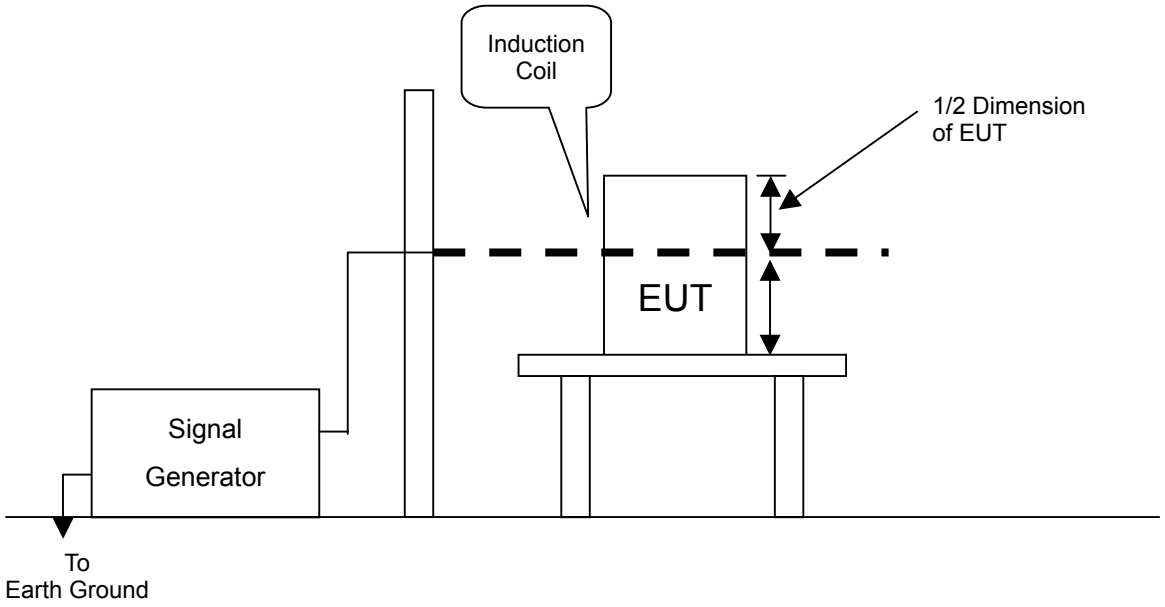
a. The equipment is configured and connected to satisfy its functional requirements. It shall be placed on the GRP with the interposition of a 0.1m-thick insulating support.

b. The equipment cabinets shall be connected to the safety earth directly on the GRP via the earth terminal of the EUT.

c. The power supply, input and output circuits shall be connected to the sources of power supply, control and signal.

d. The cables supplied or recommended by the equipment manufacturer shall be used. 1 meter of all cables used shall be exposed to the magnetic field.

8.8.4. TEST SETUP



- For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

NOTE:
TABLETOP EQUIPMENT
The equipment shall be subjected to the test magnetic field by using the induction coil of standard dimension (1 m x 1 m). The induction coil shall then be rotated by 90 degrees in order to expose the EUT to the test field with different orientations.

FLOOR-STANDING EQUIPMENT
The equipment shall be subjected to the test magnetic field by using induction coils of suitable dimensions. The test shall be repeated by moving and shifting the induction coils, in order to test the whole volume of the EUT for each orthogonal direction. The test shall be repeated with the coil shifted to different positions along the side of the EUT, in steps corresponding to 50 % of the shortest side of the coil. The induction coil shall then be rotated by 90 degrees in order to expose the EUT to the test field with different orientations.

8.8.5. TEST RESULTS

Temperature	N/A	**Humidity**	N/A
Pressure	N/A	**Tested By**	N/A
Required Passing Performance		**Criterion A**	

DIRECTION	Field Strength (A/m)	Performance Criterion	OBSERVATION	RESULTS
X	1	A	Note	N/A
Y	1	A	Note	N/A
Z	1	A	Note	N/A

NOTE: There is no any sensitive part for magnetic field test. Applicable only to equipment containing susceptible to magnetic field.

8.9. VOLTAGE DIPS & VOLTAGE INTERRUPTIONS

8.9.1. TEST SPECIFICATION

Basic Standard:	IEC 61000-4-11
Test duration time:	Minimum three test events in sequence
Interval between event:	Minimum 10 seconds
Phase Angle:	0^o / 180^o
Test cycle:	3 times

8.9.2. TEST INSTRUMENT

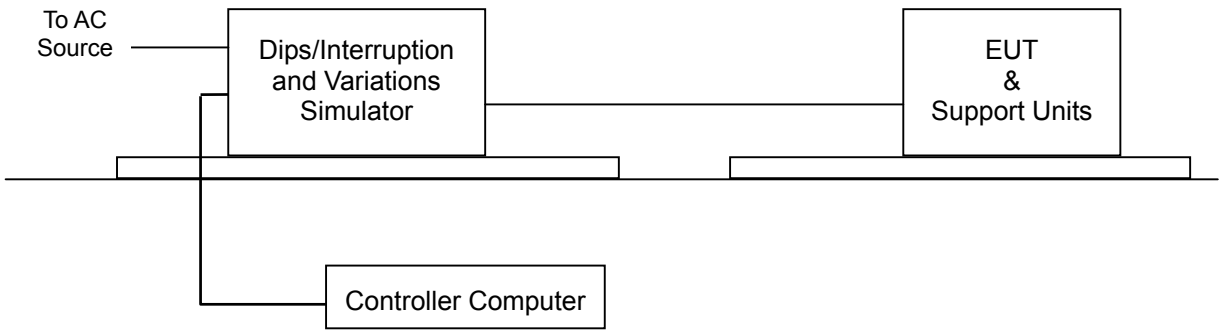
Immunity shielded room				
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Due**
EMC Immunity Tester	EMC Partner	TRANSIENT 2000	1117	03/04/2015
AC/DC Clamp Meter	Lutron	CM-9930R	I.200121	05/30/2015
Software	Genecs Ver. 3.27			

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. N.C.R.= No Calibration required.

8.9.3. TEST PROCEDURE (please refer to measurement standard or CCS SOP PA-028)

1. The EUT and support units were located on a wooden table, 0.8 m away from ground floor.
2. Setting the parameter of tests and then perform the test software of test simulator.
3. Conditions changes to occur at 0 degree crossover point of the voltage waveform.
4. Recording the test result in test record form.

8.9.4. TEST SETUP



- For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

8.9.5. TEST RESULTS

Temperature	19°C	**Humidity**	49% RH
Pressure	1006mbar	**Tested By**	Stanley Cheng
Required Passing Performance	**Criterion B: >95% reduction 0.5 period** **Criterion C: 30% reduction 25 period & >95% reduction 250 period**		

Test Power: 230Vac, 50Hz				
Voltage (% Reduction)	**Duration (Period)**	**Performance Criterion**	**Observation**	**Test Result**
>95	0.5	☒**A** ☐**B** ☐**C**	**Note** ☒**1** ☐**2**	PASS
30	25	☒**A** ☐**B** ☐**C**	**Note** ☒**1** ☐**2**	PASS
>95	250	☐**A** ☒**B** ☐**C**	**Note** ☐**1** ☒**2**	PASS

NOTE: 1. There was no change compared with initial operation during and after the test. No unintentional response was found during the test.
2. EUT shut down, but it could recover automatically afterwards.

9 PHOTOGRAPHS OF THE TEST CONFIGURATION

CONDUCTED EMISSION TEST

RADIATED EMISSION TEST

Harmonic & Flicker Test

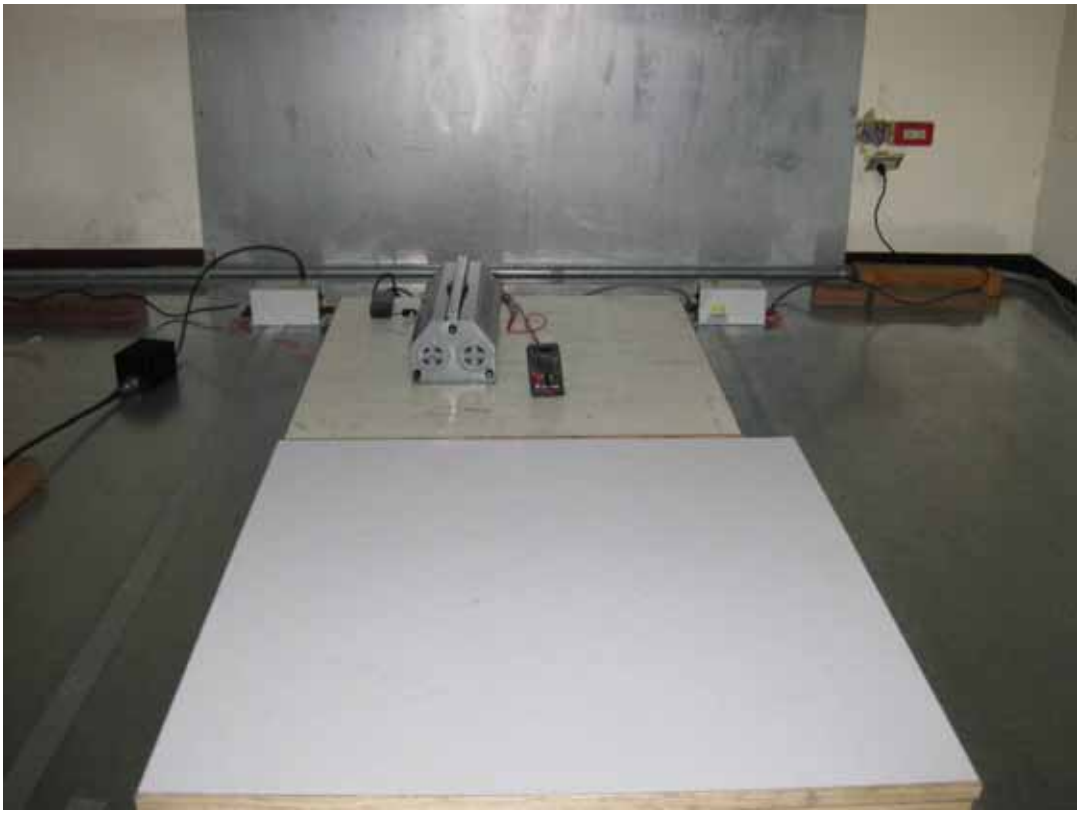
ESD Test

RS Test

EFT Test

Surge Test

CS Test



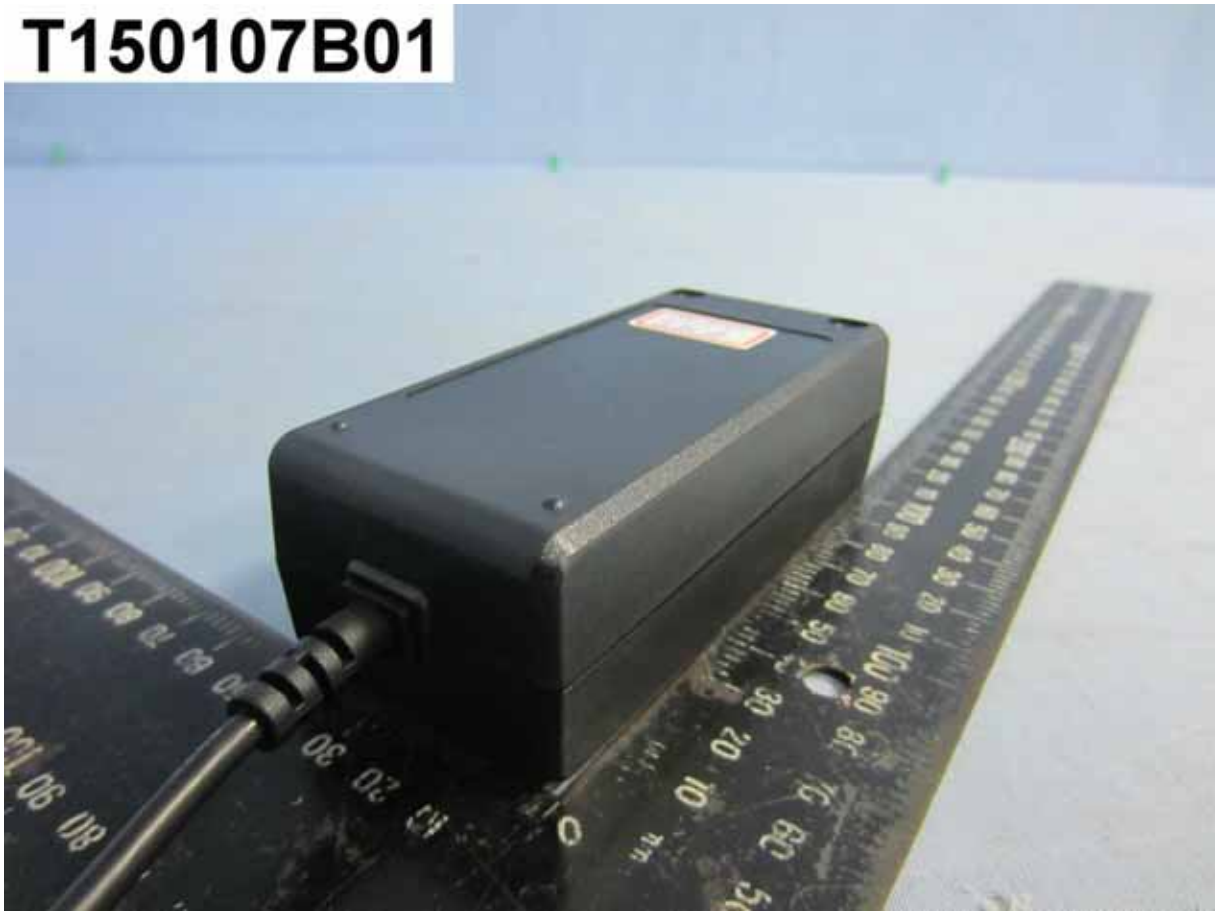
Voltage Dips / Interruptions Test

APPENDIX 1 - PHOTOGRAPHS OF EUT

Model: KTPS65-1250DT-3P-VI

Model: KTPS65-13548DT-3P-VI


T150107B01


T150107B01

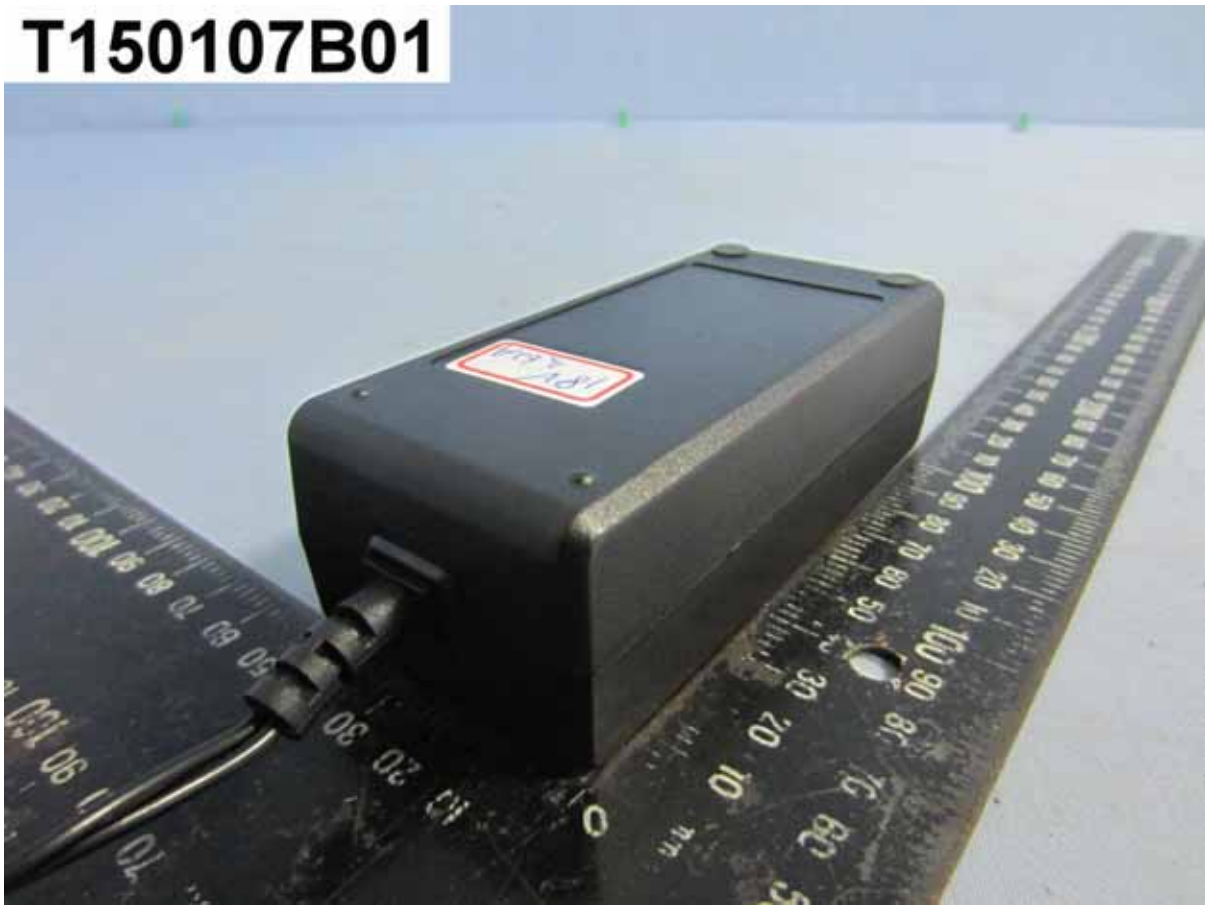
Model: KTPS65-1543DT-3P-VI

Model: KTPS65-1640DT-3P-VI


T150107B01

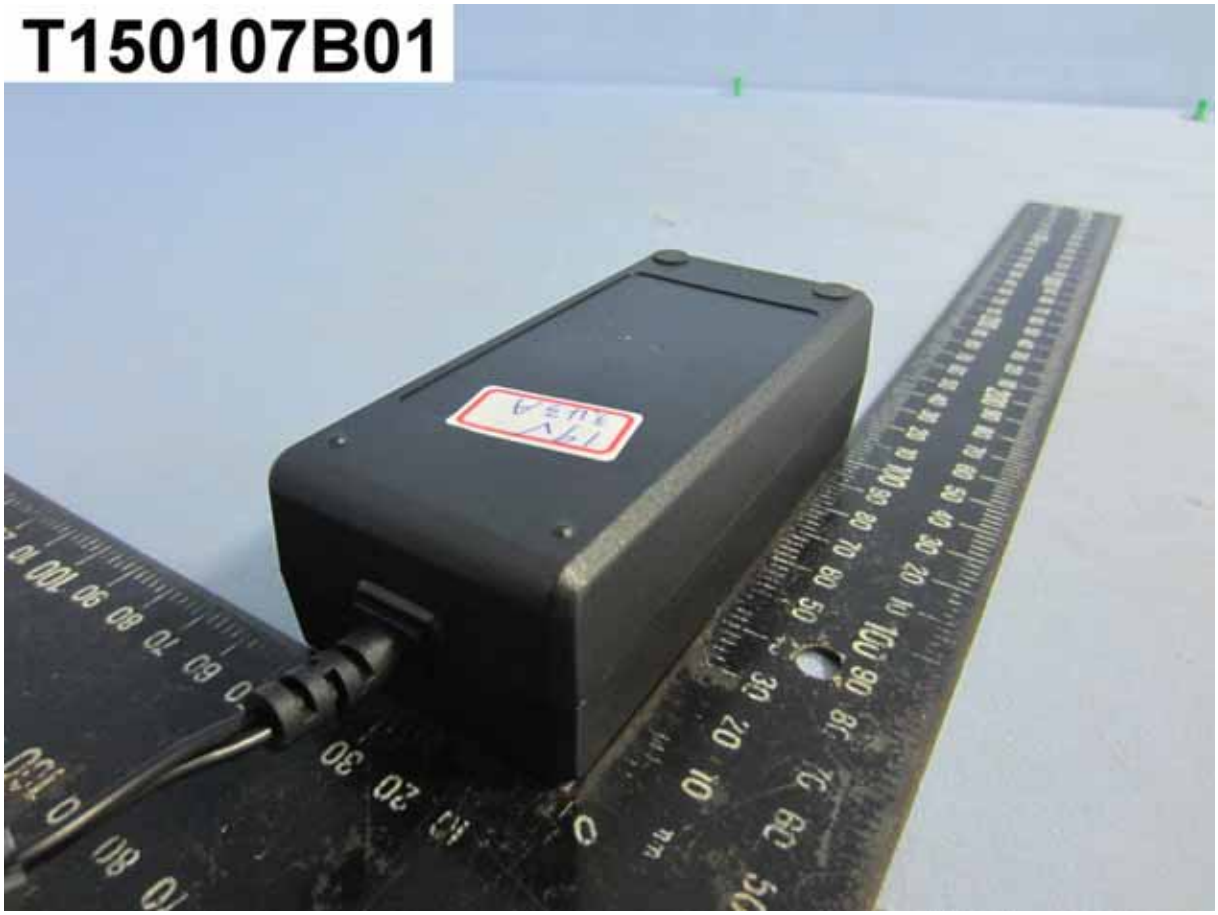

T150107B01

Model: KTPS65-1836DT-3P-VI



Model: KTPS65-1934DT-3P-VI

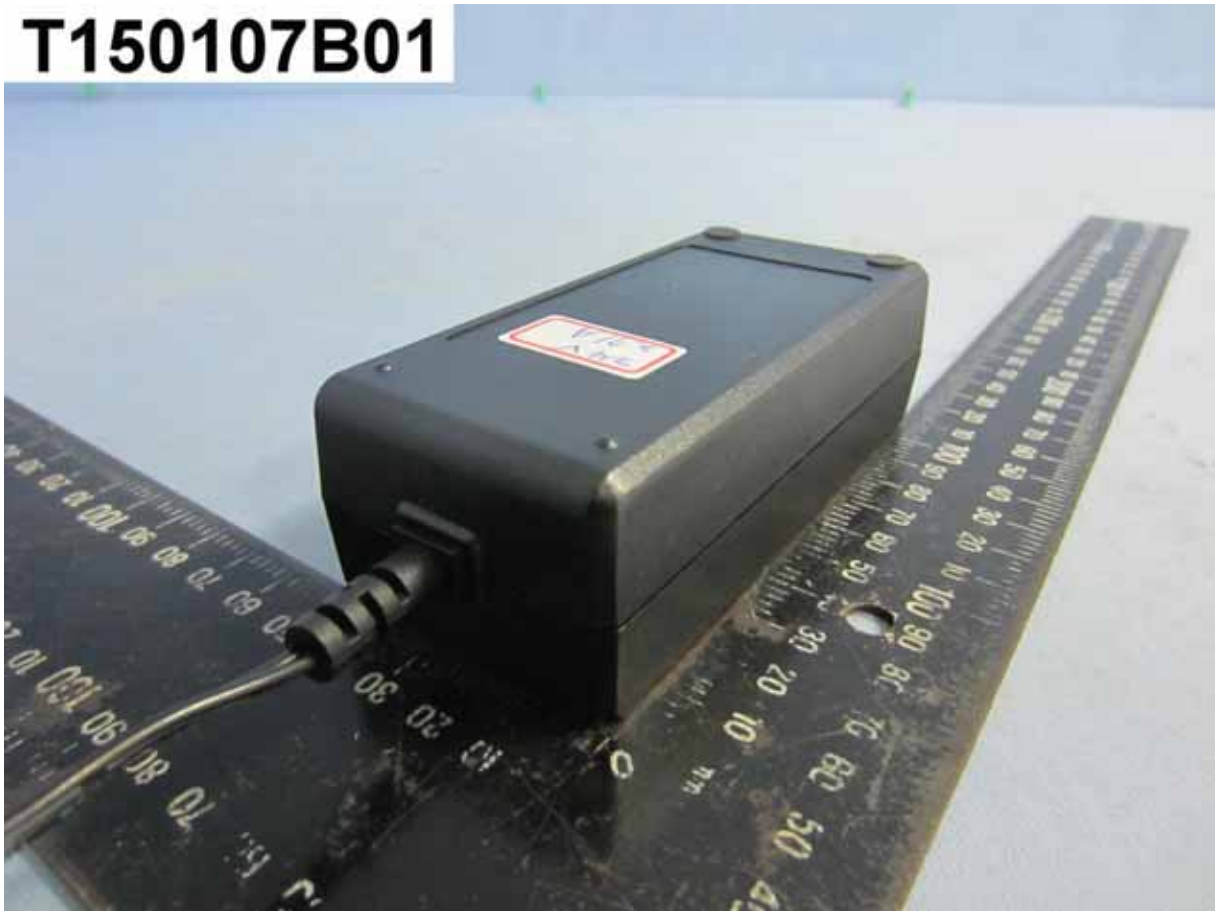

T150107B01


T150107B01

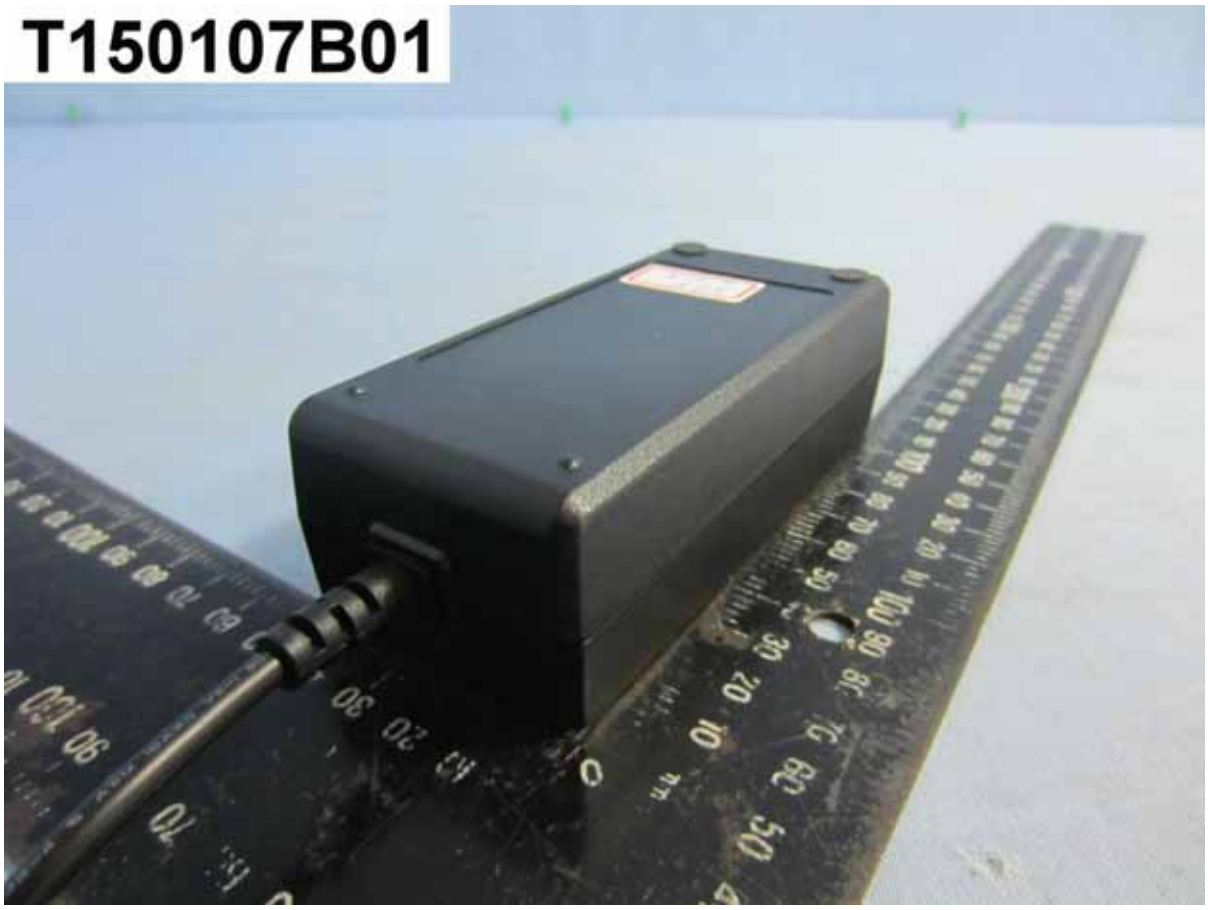
Model: KTPS65-2032DT-3P-VI

Model: KTPS65-2427DT-3P-VI


T150107B01

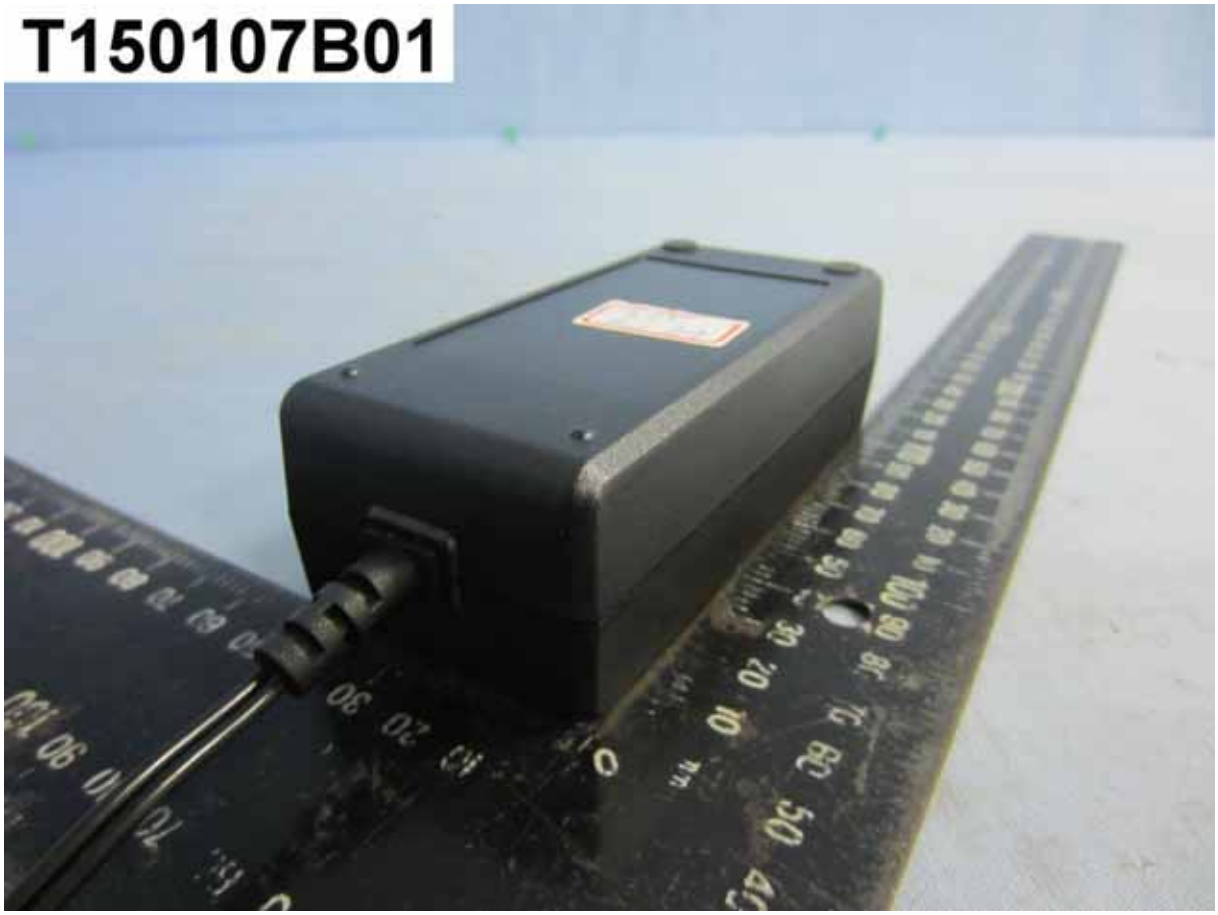

T150107B01

Model: KTPS65-2427DT-3P-VI-HP



Model: KTPS65-3021DT-3P-VI


T150107B01


T150107B01

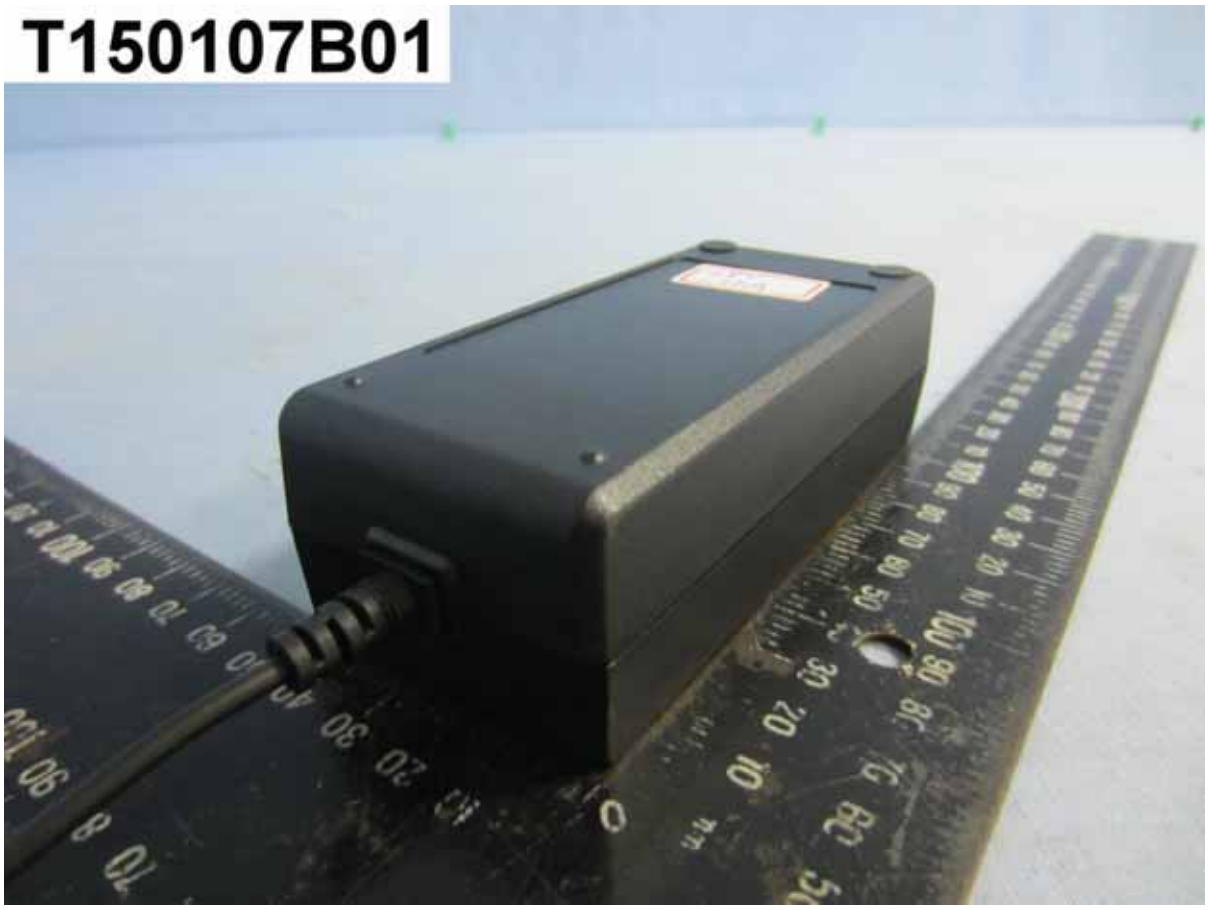
Model: KTPS65-3220DT-3P-VI-HP

Model: KTPS65-3220DT-3P-VI


T150107B01

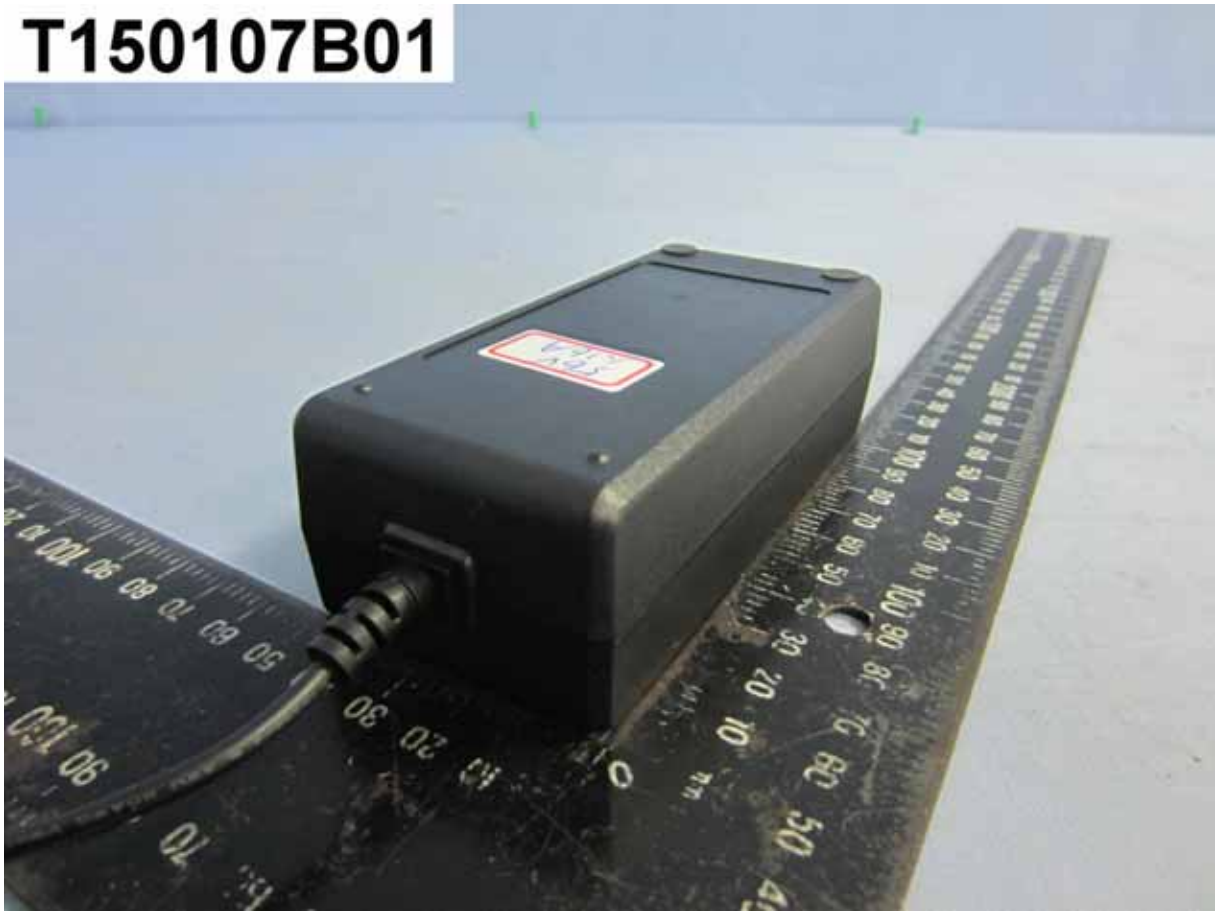

T150107B01

Model: KTPS65-4813DT-3P-VI



Model: KTPS65-5611DT-3P-VI


T150107B01


T150107B01

Model: KTPS65-2430DT-3P-VI


T150107B01


T150107B01


T150107B01