FCC 47 CFR PART 15 SUBPART B 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; KTPS65-2427DT-3P-VI-HP-CT; KTPS65-2430DT-3P-VI; KTPS65-3021DT-3P-VI; KTPS65-3220DT-3P-VI-HP; KTPS65-3220DT-3P-VI; KTPS65-4813DT-3P-VI; KTPS65-5611DT-3P-VI

> Test Report Number: T170331D05-D

> > Issued to:

KAGA ELECTRONICS (USA) INC

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

Issued by:

Compliance Certification Services Inc.

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Issued Date: April 6, 2017



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Revision History

	Issue		Effect	
Rev.	Date	Revisions	Page	Revised By
00	February 11, 2015	Initial Issue	ALL	Eva Fan
01	June 16, 2015	Add one model	ALL	Eva Fan
02	March 8, 2017	Update standard	ALL	Eva Fan
03	April 6, 2017	Copy report	ALL	Eva Fan

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1 TEST RESULT 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;

 KTPS65-2427DT-3P-VI-HP-CT; KTPS65-2430DT-3P-VI; KTPS65-3021DT-3P-VI;

 KTPS65-3220DT-3P-VI-HP; KTPS65-3220DT-3P-VI; KTPS65-4813DT-3P-VI;

 KTPS65-5611DT-3P-VI

Brand:



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 ~ June 12, 2015

EMISSION					
Standard	ltem	Result	Remarks		
FCC 47 CFR Part 15 Subpart B, ICES-003 Issue 6-2016	Conducted (Power Port)	PASS	Meet Class B limit		
ANSI C63.4-2014	Radiated	PASS	Meet Class B limit		

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.

Deviation from Applicable Standard	
None	

The above equipment has been tested by Compliance Certification Services Inc., and found compliance with the requirements set forth in the technical standards mentioned above. 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.

Approved by:

Sam Hu Assistant Manager

Reviewed by:

Eva Fan / Supervisor of report document dept.

2 EUT DESCRIPTION

Product	AC ADAPTER		
Brand Name	Võlgen		
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; KTPS65-2427DT-3P-VI-HP-CT; KTPS65-2430DT-3P-VI; 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	120VAC / 60Hz		
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		12Vdc	5.00A	60W	\square
KTPS65-13548DT-3P-VI		13.5Vdc	4.82A	65W	\square
KTPS65-1543DT-3P-VI		15Vdc	4.34A	65W	\boxtimes
KTPS65-1640DT-3P-VI		16Vdc	4.07A	65W	\square
KTPS65-1836DT-3P-VI		18Vdc	3.62A	65W	\boxtimes
KTPS65-1934DT-3P-VI		19Vdc	3.43A	65W	\boxtimes
KTPS65-2032DT-3P-VI		20Vdc	3.25A	65W	\boxtimes
KTPS65-2427DT-3P-VI	100-240Vac, 50-60Hz, 1.4A Max.	24Vdc	2.71A	65W	\boxtimes
KTPS65-2427DT-3P-VI-HP	T. II (Max.	24Vdc	2.71A	65W	\boxtimes
KTPS65-2427DT-3P-VI-HP-CT		24Vdc	2.71A	65W	\boxtimes
KTPS65-3021DT-3P-VI		30Vdc	2.17A	65W	\square
KTPS65-3220DT-3P-VI		32Vdc	2.04A	65W	\boxtimes
KTPS65-3220DT-3P-VI-HP		32Vdc	2.04A	65W	\square
KTPS65-4813DT-3P-VI	-	48Vdc	1.36A	65W	\square
KTPS65-5611DT-3P-VI		56Vdc	1.17A	65W	\square
KTPS65-2430DT-3P-VI	100-240Vac, 50-60Hz, 1.6A Max.	24Vdc	3.00A	72W	

I/O PORT

I/O PORT TYPES	Q'TY	TESTED WITH

Note: None.

3 TEST METHODOLOGY

3.1. 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:

Mode	es:			
1	KTPS65-1250DT-3P-VI	Full Rated Load Mode		
2		Half Rated Load Mode		
3	KTPS65-13548DT-3P-VI	Full Rated Load Mode		
4	NTF303-13340D1-3F-VI	Half Rated Load Mode		
5	KTPS65-1543DT-3P-VI	Full Rated Load Mode		
6	KTF 303-1343DT-3F-VI	Half Rated Load Mode		
7	KTPS65-1640DT-3P-VI	Full Rated Load Mode		
8	KTF 303-1040DT-3F-VI	Half Rated Load Mode		
9	KTPS65-1836DT-3P-VI	Full Rated Load Mode		
10	KTF 303-1830DT-3F-VI	Half Rated Load Mode		
11	KTPS65-1934DT-3P-VI	Full Rated Load Mode		
12	KTF 303-1934DT-3F-VI	Half Rated Load Mode		
13	KTPS65-2032DT-3P-VI	Full Rated Load Mode		
14	KTF 303-2032DT-3F-VT	Half Rated Load Mode		
15	KTPS65-2427DT-3P-VI	Full Rated Load Mode		
16	KTT 003-2427 DT-51 -VT	Half Rated Load Mode		
17	KTPS65-2427DT-3P-VI-HP	Full Rated Load Mode		
18	KTT 003-2427 DT-51 -VI-TI	Half Rated Load Mode		
19	KTPS65-3021DT-3P-VI	Full Rated Load Mode		
20		Half Rated Load Mode		
21	KTPS65-3220DT-3P-VI	Full Rated Load Mode		
22		Half Rated Load Mode		
23	KTPS65-3220DT-3P-VI-HP	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		
29	KTPS65-2430DT-3P-VI	Full Rated Load Mode		
30		Half Rated Load Mode		
		Full Rated Load Mode		
31	KTPS65-2427DT-3P-VI-HP-CT			

Worst: Conduction: Mode 6 Radiation: Mode 31

3.2. EUT SYSTEM OPERATION

To adjust variable resistor to test EUT.
 Note: Test program is self-repeating throughout the test.

4 SETUP OF EQUIPMENT UNDER TEST

4.1. 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:

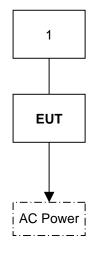
No.	Equipment	Model No.	Serial No.	FCC ID / BSMI ID	Brand Name	Data Cable	Power Cord
1	Variable Resistor	N/A	N/A	N/A	N/A	N/A	Unshielded, 1.5m with a core

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.

4.2. CONFIGURATION OF SYSTEM UNDER TEST



5 FACILITIES AND ACCREDITATIONS

5.1. 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.

5.2. 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, <u>http://www.ccsrf.com</u>

5.3. 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.

6 CONDUCTED EMISSION MEASUREMENT

6.1. LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY (MHz)	Class A	(dBuV)	Class B (dBuV)		
FREQUENCI (MHZ)	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 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.

6.2. 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	05/19/2016			
Pulse Limiter	R&S	ESH3-Z2	C3010026-2	08/26/2015			
THERMO- HYGRO METER	WISEWIND	201A	No. 02	05/10/2016			
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.

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

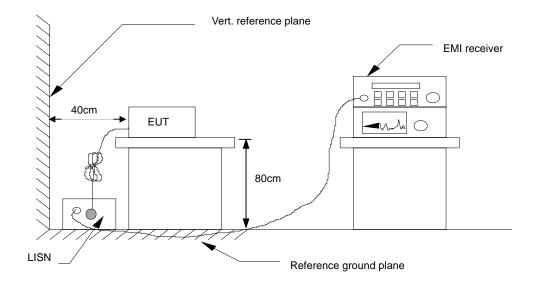
Procedure of Preliminary Test

- The EUT and support equipment, if needed, were 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 ANSI C63.4 (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 12 mm non-conductive covering to insulate the EUT from the ground plane.
- All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- The test equipment EUT installed by AC 120VAC/60Hz main power, through a Line Impedance Stabilization Network (LISN), which was supplied power source and was grounded to the ground plane.
- All support equipment power by from a second LISN.
- The test program of the EUT 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 3.1 were scanned during the preliminary test.
- After the preliminary scan, we found the test mode described in Item 3.1 producing the highest emission level.
- The worst configuration of EUT and cable of the above highest emission level 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.

6.4. TEST SETUP



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

6.5. DATA SAMPLE

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

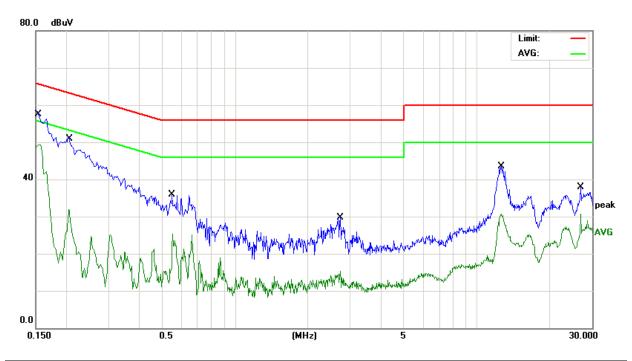
Freq.	= Emission frequency in MHz
Reading	= Uncorrected Analyzer/Receiver reading
Factor	= Insertion loss of LISN + Cable Loss + Pulse Limit
Result	= Reading + Factor
Limit	= Limit stated in standard
Margin	= Reading in reference to limit
P	= Peak Reading
Q	= Quasi-peak Reading
А	= Average Reading
L1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

Calculation Formula

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

6.6. TEST RESULTS

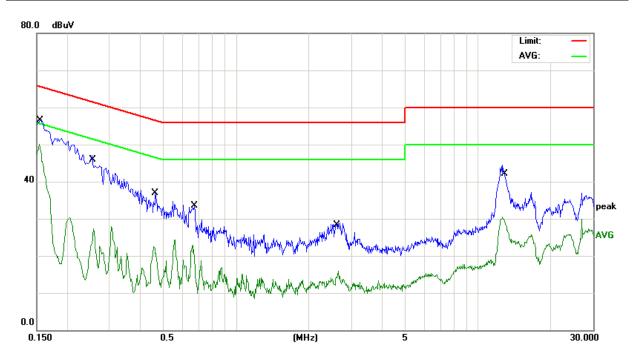
Model No.	KTPS65-1543DT-3P-VI	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 6
Tested by	Stanley Cheng	Phase	L1
Standard	FCC CLASS B		



	Conducted Emission Readings							
Frequ	uency Rang	ge Investig	gated		150 kHz to	o 30 MHz		
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)	
0.1548	46.57	10.01	56.58	65.73	-9.15	Q	L1	
0.1548	39.33	10.01	49.34	55.73	-6.39	Α	L1	
0.2072	33.46	10.02	43.48	63.31	-19.83	Q	L1	
0.2072	20.42	10.02	30.44	53.31	-22.87	Α	L1	
0.5540	20.85	10.06	30.91	56.00	-25.09	Q	L1	
0.5540	15.31	10.06	25.37	46.00	-20.63	Α	L1	
2.7020	11.75	10.30	22.05	56.00	-33.95	Q	L1	
2.7020	1.99	10.30	12.29	46.00	-33.71	Α	L1	
12.6979	25.62	10.66	36.28	60.00	-23.72	Q	L1	
12.6979	19.73	10.66	30.39	50.00	-19.61	Α	L1	
26.9140	24.03	11.10	35.13	60.00	-24.87	Q	L1	
26.9140	19.62	11.10	30.72	50.00	-19.28	Α	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	FCC CLASS B		



	Conducted Emission Readings							
Frequ	uency Rang	je Investig	gated	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	46.04	10.01	56.05	65.78	-9.73	Q	L2	
0.1539	40.07	10.01	50.08	55.78	-5.70	Α	L2	
0.2580	27.99	10.02	38.01	61.49	-23.48	Q	L2	
0.2580	17.31	10.02	27.33	51.49	-24.16	Α	L2	
0.4587	18.77	10.05	28.82	56.72	-27.90	Q	L2	
0.4587	12.31	10.05	22.36	46.72	-24.36	Α	L2	
0.6700	19.83	10.07	29.90	56.00	-26.10	Q	L2	
0.6700	11.66	10.07	21.73	46.00	-24.27	A	L2	
2.6099	12.90	10.29	23.19	56.00	-32.81	Q	L2	
2.6099	3.84	10.29	14.13	46.00	-31.87	Α	L2	
12.9779	24.35	10.67	35.02	60.00	-24.98	Q	L2	
12.9779	18.72	10.67	29.39	50.00	-20.61	Α	L2	

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

7 RADIATED EMISSION MEASUREMENT

7.1. LIMITS OF RADIATED EMISSION MEASUREMENT

Below 1GHz (for digital device)

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

Limit tables for non-digital device:

Class A Radiated Emission limit at 10m (for others)

Frequency (MHZ)	Field Strength Limit (uV/m)Q.P.	Field Strength Limit (dBuV/m)Q.P.
30 - 88	90	39
88 - 216	150	43.5
216 – 960	210	46.4
Above 960	300	49.5

Class B Radiated Emission limit at 3m (for others)

Frequency (MHZ)	Field Strength Limit (uV/m)Q.P.	Field Strength Limit (dBuV/m)Q.P.
30 - 88	100	40
88 - 216	150	43.5
216 – 960	200	46
Above 960	500	54

Above 1GHz(for all device)

Frequency	Class A (dBu)	V/m) (At 10m)	Class B (dBuV/m) (At 3m)		
(MHZ)	Average	Peak	Average	Peak	
Above 1000	49.5	69.5	54	74	

NOTE: (1) The lower limit shall apply at the transition frequencies.

(2) Emission level (dBuV/m) = 20 log Emission level (uV/m).

(3) The measurement above 1GHz is at close-in distances 3m,and determine the limit L2 corresponding to the close-in distance d2 by applying the following relation: L2 = L1 (d1/d2), where L1 is the specified limit in microvolts per metre (uV/m) at the distance d1 (10m), L2 is the new limit for distance d2 (3m).

So the new Class A limit above 1GHz at 3m is as following table:

Frequency	Class A (dBuV/m) (At 3m)				
(MHZ)	Average	Peak			
Above 1000	60	80			

According to FCC Part 15.33 (b), for an unintentional radiator, including a digital device, the spectrum shall be investigated from the lowest radio frequency signal generated or used in the device, without going below the lowest frequency for which a radiated emission limit is specified, up to the frequency shown in the following table:

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705-108	1000
108-500	2000
500-1000	5000
Above 1000	5 th harmonic of the highest frequency or 40GHz, whichever is lower

7.2. TEST INSTRUMENTS

Open Area Test Site # H									
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due					
EMI Test Receiver	R&S	ESCI	101340	04/07/2016					
Bilog Antenna	Sunol	JB1	A061711	08/17/2015					
Pre-Amplifier	HP	8447D	1937A01554	10/02/2015					
CABLE	EMCI	CFD400-E	N-Type#H10	04/08/2016					
Thermo-Hygro Meter	Wisewind	201A	No. 03	06/02/2016					
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. TEST PROCEDURES (please refer to measurement standard or CCS SOP PA-031)

Procedure of Preliminary Test

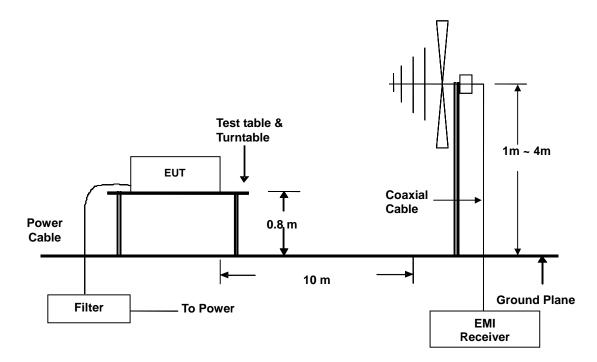
- The equipment was set up as per the test configuration to simulate typical usage per the user's manual. When the EUT is a tabletop system, a wooden turntable with a height of 0.8 meters is used which is placed on the ground plane. When the EUT is a floor standing equipment, it is placed on the ground plane which has a 12 mm non-conductive covering to insulate the EUT from the ground plane.
- Support equipment, if needed, was placed as per ANSI C63.4.
- All I/O cables were positioned to simulate typical usage as per ANSI C63.4.
- The EUT received AC 120VAC/60Hz 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 ANSI C63.4. 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 40GHz. 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 3.1 were scanned during the preliminary test:
- After the preliminary scan, we found the test mode described in Item 3.1 producing the highest emission level.
- The worst configuration of EUT and cable of the above highest emission level were recorded for reference of the final test.

Procedure of Final Test

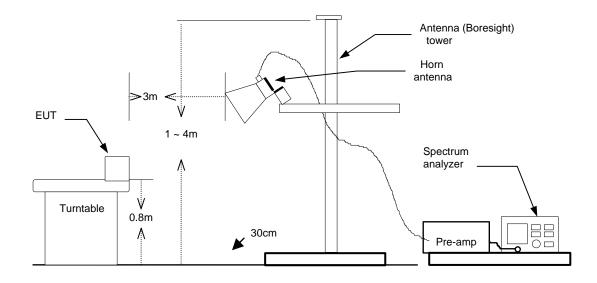
- EUT and support equipment were set up on the turntable as per the configuration with highest emission level in the preliminary test.
- The Analyzer / Receiver scanned from 30MHz to 40GHz. Emissions were scanned and measured rotating the EUT to 360 degrees, varying cable placement and positioning the antenna 1 or 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.
- Recording 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.

7.4. TEST SETUP

Below 1GHz



Above 1GHz



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

7.5. DATA SAMPLE

Below 1GHz

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

Above 1GHz

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

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)

7.6. TEST RESULTS

Below 1GHz

Model No.	KTPS65-2427DT-3P-VI-HP-CT	Test Mode	Mode 31				
Environmental Conditions	21°C, 60% RH	6dB Bandwidth	120 kHz				
Antenna Pole	Vertical	Antenna Distance	10m				
Detector Function	Quasi-peak. Tested by Frank Liao						
Standard	FCC CLASS B W/ CISPR 22 CLASS B LIMIT						

80.0 dBuV/m Limit: Margin: 40 8 0.0 30.000 224.00 321.00 418.00 515.00 612.00 709.00 806.00 1000.00 MHz 127.00

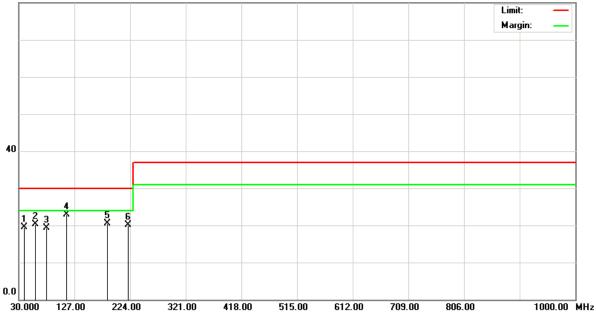
Radiated Emission Readings										
Frequency Range Investigated					30 N	/IHz to 10	00 MHz a	t 10m		
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Lin (dBu`		Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
46.1240	38.40	-16.81	21.59	30.00		-8.41	100	195	Q	V
87.3040	42.30	-18.32	23.98	30.	00	-6.02	100	122	Q	V
112.8600	37.60	-13.23	24.37	30.	00	-5.63	100	184	Q	V
132.8400	35.20	-12.38	22.82	30.	00	-7.18	100	103	Q	V
158.1799	36.50	-13.26	23.24	30.	00	-6.76	100	203	Q	V
248.4600	36.40	-12.85	23.55	37.	00	-13.45	100	226	Q	V

Note: 1. 30MHz to 1000MHz test is Applicable CISPR 22 standard.

2. P= Peak Reading; Q= Quasi-peak Reading.

Model No.	KTPS65-2427DT-3P-VI-HP-CT	Test Mode	Mode 31				
Environmental Conditions	21°C, 60% RH	6dB Bandwidth	120 kHz				
Antenna Pole	Horizontal	Antenna Distance	10m				
Detector Function	Quasi-peak. Tested by Frank Liao						
Standard	FCC CLASS B W/ CISPR 22 CLASS B LIMIT						

80.0 dBuV/m



Radiated Emission Readings										
Frequency Range Investigated					30 N	/IHz to 10	00 MHz a	t 10m		
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Lin (dBu)		Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
39.8200	32.30	-12.73	19.57	30.00		-10.43	400	65	Q	Н
59.2400	39.20	-18.98	20.22	30.	00	-9.78	400	120	Q	Н
78.5400	37.60	-18.22	19.38	30.	00	-10.62	400	185	Q	Н
113.8200	35.90	-13.06	22.84	30.	00	-7.16	400	177	Q	Н
184.5600	34.20	-13.71	20.49	30.	00	-9.51	400	59	Q	Н
221.2300	34.30	-14.27	20.03	30.	00	-9.97	400	160	Q	Н

Note: 1. 30MHz to 1000MHz test is Applicable CISPR 22 standard. 2. 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.

8 PHOTOGRAPHS OF THE TEST CONFIGURATION CONDUCTED EMISSION TEST











Model: KTPS65-13548DT-3P-VI







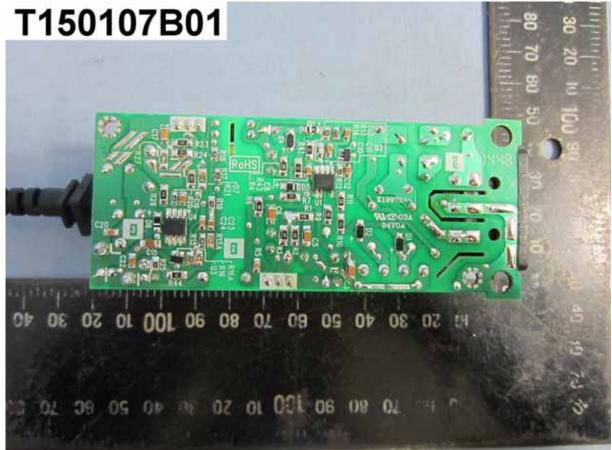
Date of Issue: April 6, 2017













Model: KTPS65-13548DT-3P-VI







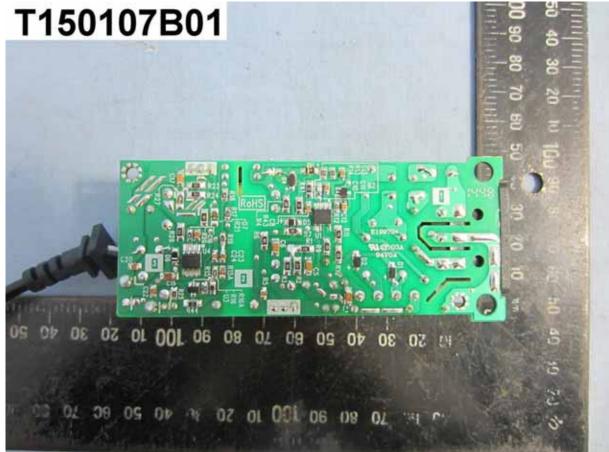
Date of Issue: April 6, 2017















Model: KTPS65-1543DT-3P-VI







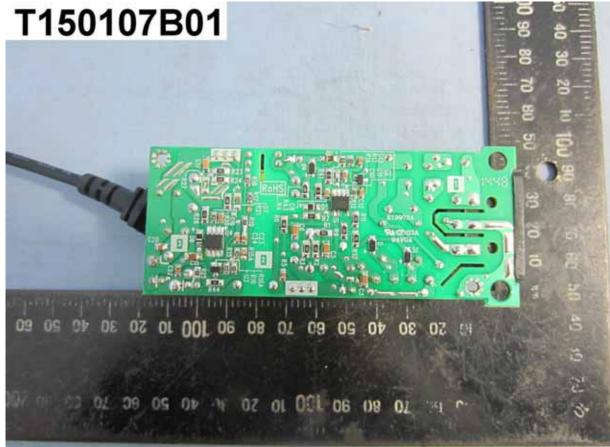
Date of Issue: April 6, 2017











Model: KTPS65-1640DT-3P-VI







Date of Issue: April 6, 2017

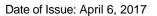












Model: KTPS65-1836DT-3P-VI



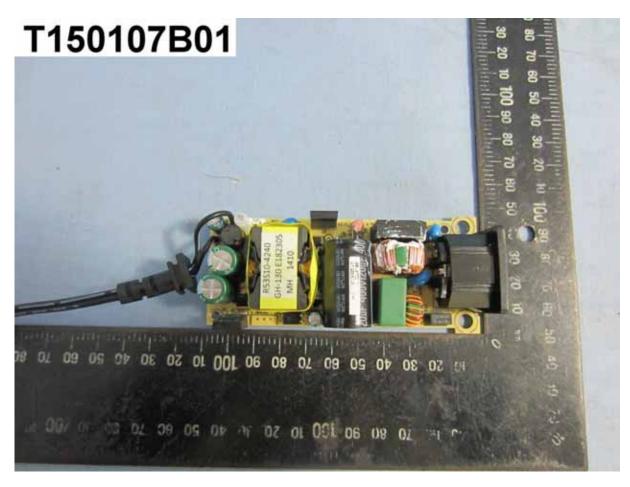


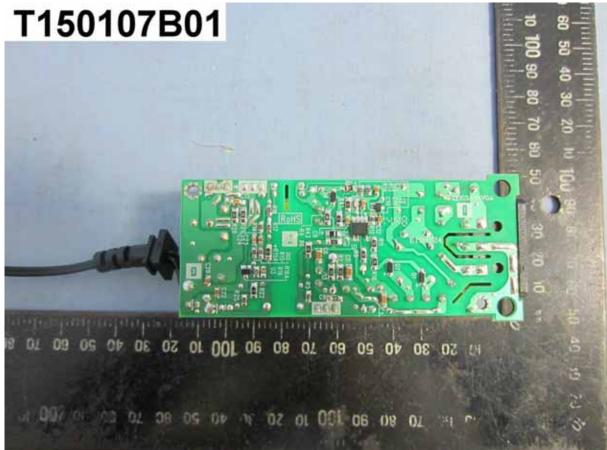












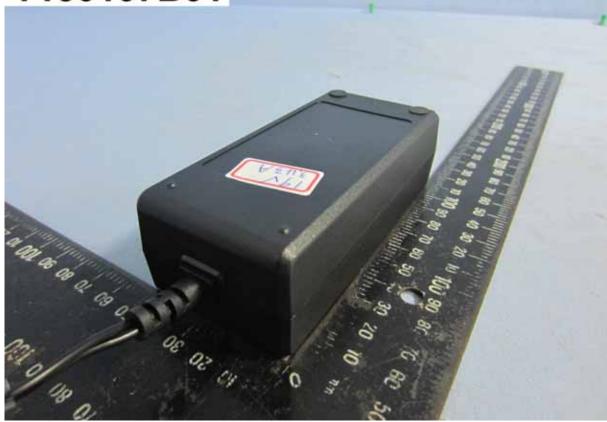


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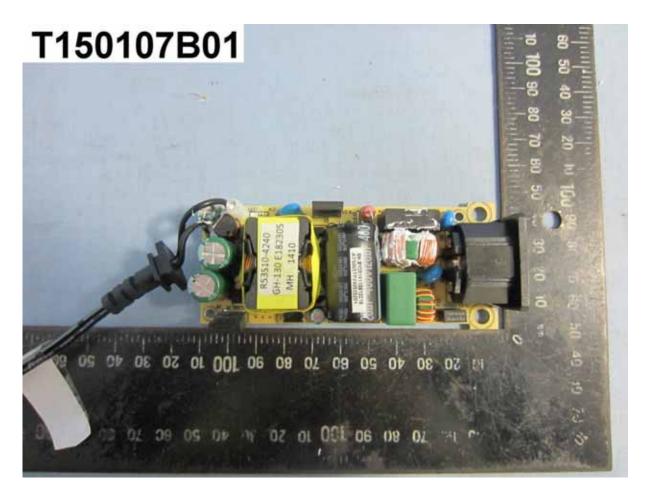














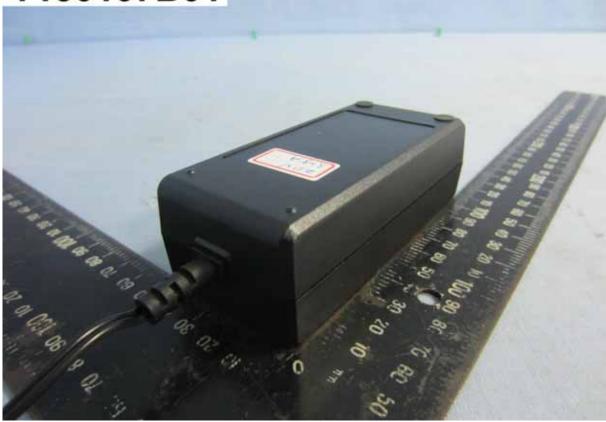


Model: KTPS65-2032DT-3P-VI

















Model: KTPS65-2427DT-3P-VI



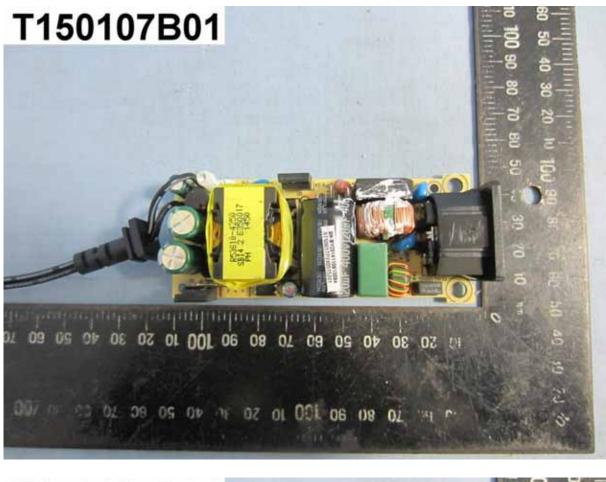












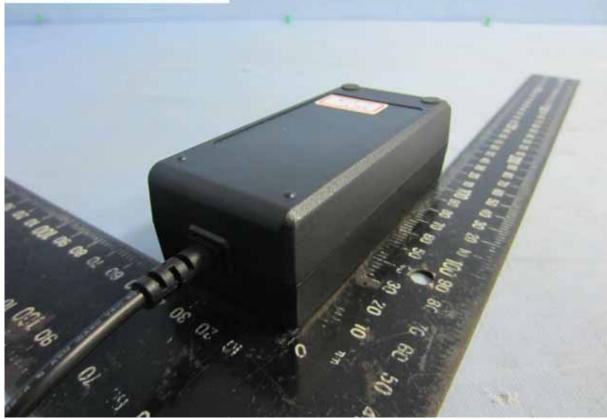


Model: KTPS65-2427DT-3P-VI-HP





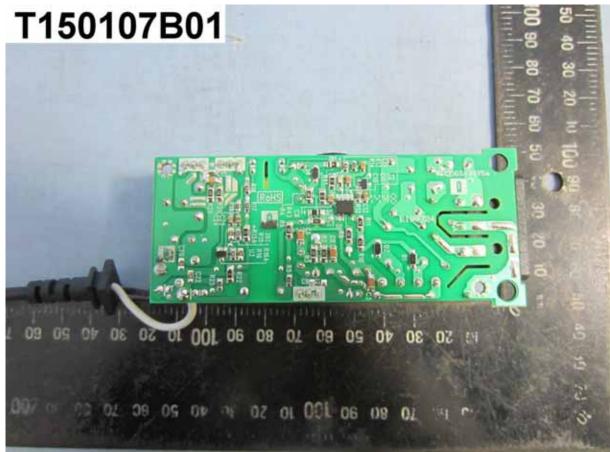


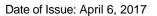










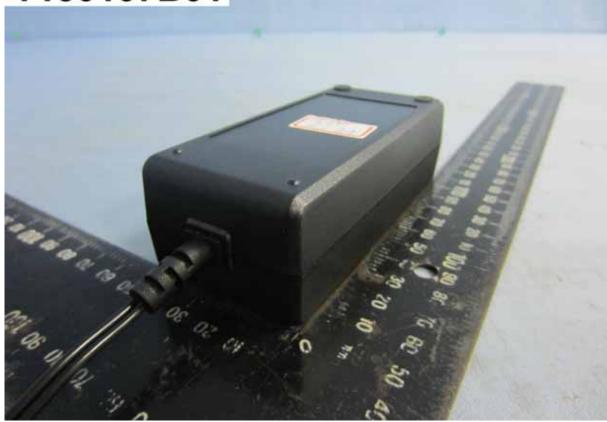


Model: KTPS65-3021DT-3P-VI





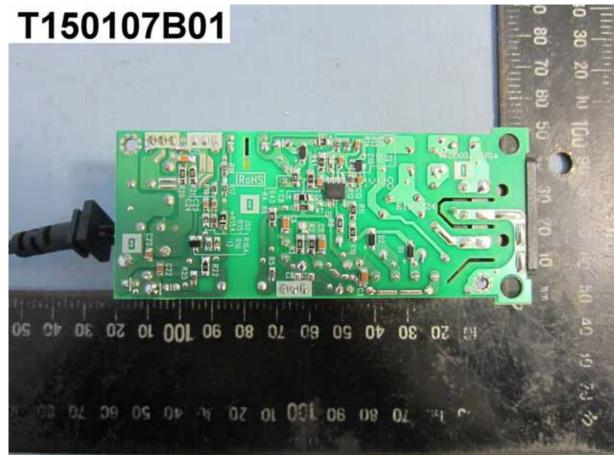














Model: KTPS65-3220DT-3P-VI





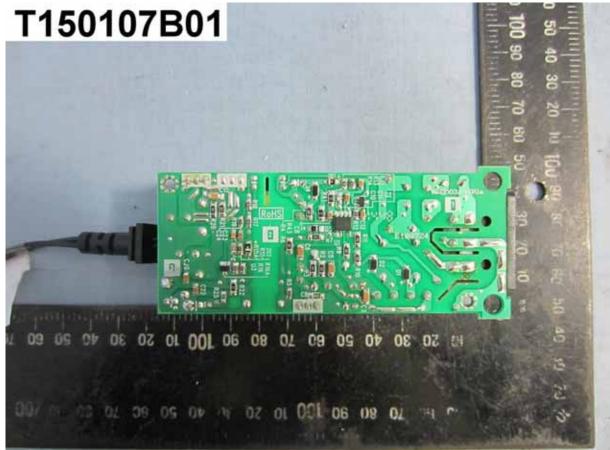










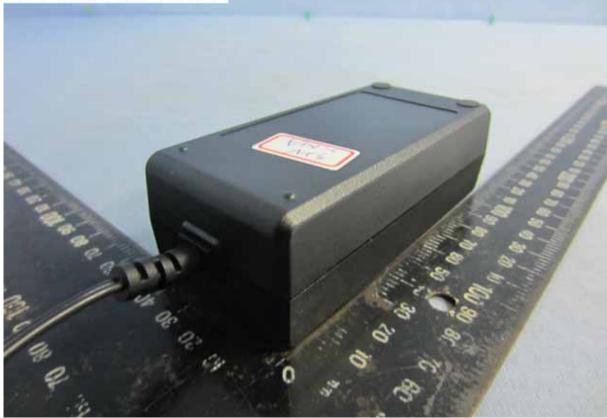


Model: KTPS65-3220DT-3P-VI-HP

















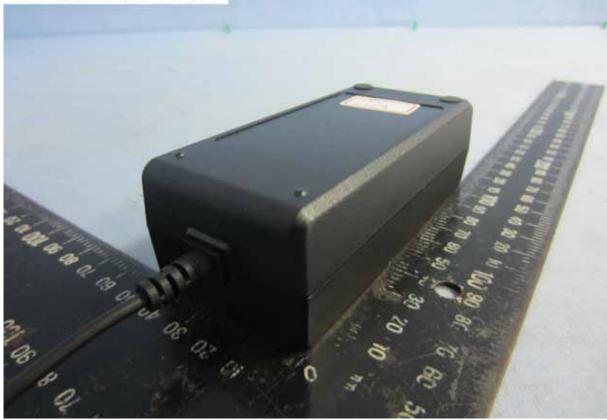


Model: KTPS65-4813DT-3P-VI





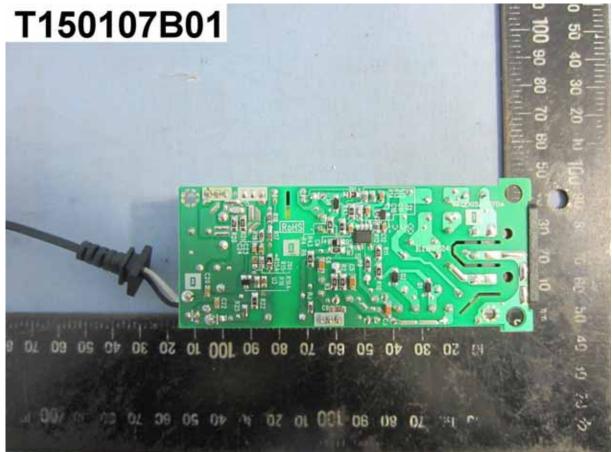












Model: KTPS65-5611DT-3P-VI



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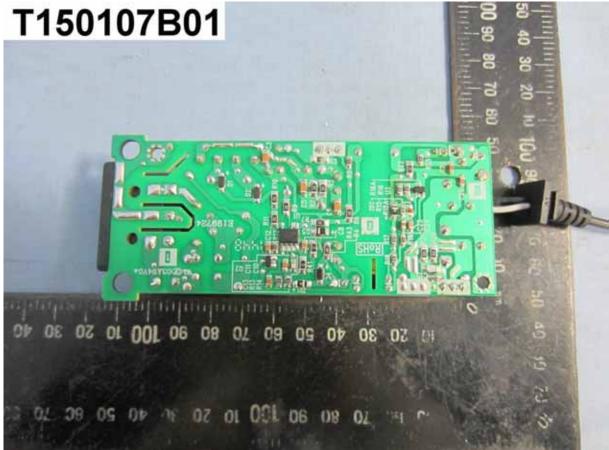












Model: KTPS65-2430DT-3P-VI

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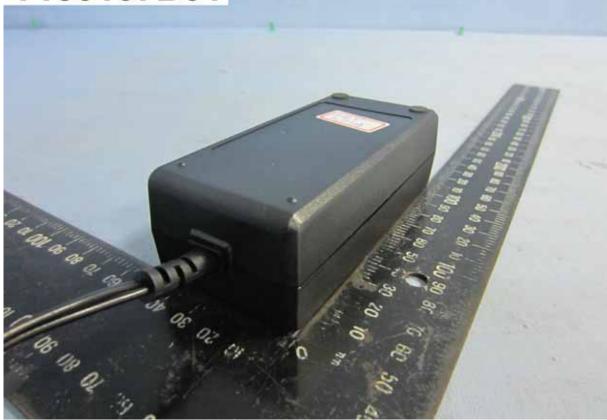
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Report No.: T170331D05





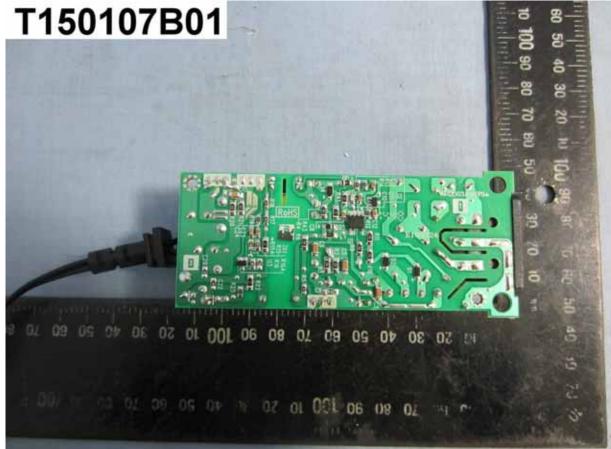














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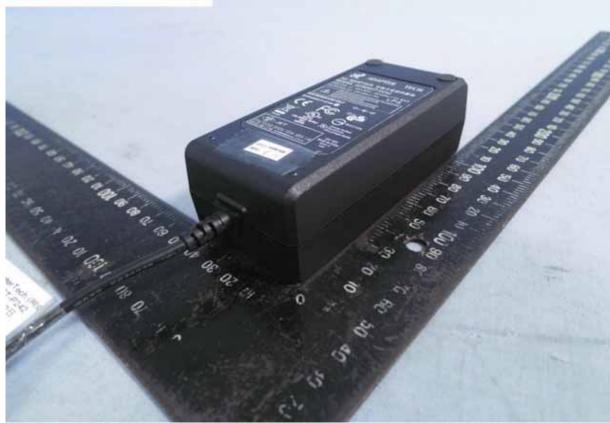


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