EMC
Measurement and Test Report

For

GlobTek, Inc.

186 Veterans Dr. Northvale, NJ 07647 USA

Test Standards:	EN 55032:2015/AC:2016-07 EN 61000-3-2:2014 EN 61000-3-3:2013 EN 55024:2010+A1:2015 EN 60601-1-2:2015
Product Description:	ITE Power Supply
Tested Model:	GT*86100-**-W2*-USB
Report No.:	STR18018281E
Tested Date:	2018-01-24 to 2018-01-31
Issued Date:	2018-02-01
Tested By:	Draven Li / Engineer
Reviewed By:	Silin Chen / EMC Manager
Approved & Authorized By:	Jandy So / PSQ Manager
Prepared By:	

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1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant:	GlobTek, Inc.
Address of applicant:	186 Veterans Dr. Northvale, NJ 07647 USA
Manufacturer:	1.GlobTek, Inc. 2.GlobTek (Suzhou) Co., Ltd
Address of manufacturer:	1.186 Veterans Dr. Northvale, NJ 07647 USA 2.Building 4, No. 76, Jin Ling East Rd., Suzhou Industrial Park, Suzhou, JiangSu 215021, China

General Description of EUT	
Product Name:	ITE Power Supply
Trade Name:	GlobTek, Inc.
Model No.:	GT*86100-**-W2*-USB
Adding Model(s):	/

*Note: The test data is gathered from a production sample, provided by the manufacturer. The appearance of others models listed in the report is different from main-test model GT*86100-**-W2*-USB, but the circuit and the electronic construction do not change, declared by the manufacturer.*

*GT*86100-**-W2*-USB*

The 1st "" part can be 'M' or '-' or 'H' for market identification and not related to safety.*

The 2nd"" denotes the rated output wattage designation, which can be "01" to "10", with interval of 1.*

The 3rd "" denotes the rated output voltage designation, which can be "05","5.1","5.2" or"05", "05.1","05.2".*

The 4th"" designates type of plug and can be E for European plug ,U for British plug, blank forNorth American /Japan plug/Taiwan plug, C for China plug, I for India plug, A for Australia plug, Kfor Korea plug, AR for Argentina plug, BR for Brazilian plug, SA for South African plug.*

-USB can be optional, when it is blank, denote the power supplies use DC output wires.

Technical Characteristics of EUT	
Rated Voltage:	AC 100-240V
Rated Current:	0.3A
Rated Power:	10W
Power Adaptor Model:	/
Highest Internal Frequency:	Below 108MHz
Classification of Equipment:	Class B

1.2 Test Standards

The following report is prepared on behalf of the GlobTek, Inc. in accordance with EN 60601-1-2, Medical electrical equipment –Part 1-2:General requirements for basicsafety and essential performance –Collateral standard:Electromagnetic compatibility –Requirements and tests.

The following report is prepared on behalf of the GlobTek, Inc. in accordance with EN55032, Electromagnetic compatibilityof multimedia equipment - Emission requirements, and EN61000-3-2, Electromagnetic compatibility (EMC) -- Part 3-2: Limits - Limits for harmonic current emissions (equipment input current up to and including 16 A per phase), and EN61000-3-3, Electromagnetic compatibility (EMC) -- Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current <= 16 A per phase and not subject to conditional connection, and EN55024, Immunity characteristics Limits and methods of measurement.

The objective of the manufacturer is to demonstrate compliance with the standards EN60601-1-2 for Medical electrical equipment, EN55032, EN61000-3-2, EN61000-3-3, and EN55024 for multimedia equipment.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product maybe which result in lowering the emission/immunity should be checked to ensure compliance has been maintained.

1.3 Test Methodology

All measurements contained in this report were conducted with the standards EN 60601-1-2 for Medical electrical equipment –Part 1-2:General requirements for basicsafety and essential performance –Collateral standard: Electromagnetic compatibility –Requirements and tests, EN55032, EN61000-3-2, EN61000-3-3, and EN55024 for Information Technology Equipment, and all related testing and measurement techniques intentional standards.

1.4 Test Facility

FCC – Registration No.: 125990

Shenzhen SEM Test Technology Co., Ltd. Laboratory has been recognized to perform compliance testing on equipment subject to the Commissions Declaration Of Conformity (DOC). The Designation Number is CN5010, and Test Firm Registration Number is 125990.

Industry Canada (IC) Registration No.: 11464A

The 3m Semi-anechoic chamber of Shenzhen SEM.Test Technology Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 11464A.

1.5 EUT Setup and Operation Mode

The equipment under test (EUT) was configured to measure itshighest possible emission/immunity level. The test modes were adapted according to the operation manual for use, more detailed description as follows:

Test Mode List:

Test Mode	Description	Remark
TM1	Working	GTM86100-1005-W2E
TM2	Working	GTM86100-1005.2-W2E
TM3	Working	GTM86100-1005-W2E-USB
TM4	Working	GTM86100-1005.2-W2E-USB

Note: The product is Measurement at two nominal voltages of 230V and 110V, using a frequency of 50Hz or 60Hz. This report is display the worst case with 230V/50Hz data.

EUT Cable List and Details

Cable Description	Length (M)	Shielded/Unshielded	With Core/Without Core
/	/	/	/

Auxiliary Equipment List and Details

Description	Manufacturer	Model	Serial Number
Multimeter	FLUKE	15B	/
Resistance	/	2.5RJ	/

Special Cable List and Details

Cable Description	Length (M)	Shielded/Unshielded	With Core/Without Core
/	/	/	/

1.6 Performance Criteria for EMS

All the test data has been collected, reduced, and analyzed within this report in accordance with Immunity requires the following as specific performance criteria:

A. The apparatus shall continue to operate as intended during and after the test. The manufacturer specifies some minimum performance level. The performance level may be specified by the manufacturer as a permissible loss of performance.

B. The apparatus shall continue to operate as intended after the test. This indicates that the EUT does not need to function at normal performance levels during the test, but must recover. Again some minimal performance is defined by the manufacture.No change in operating state or loss or data is permitted.

C. Temporary loss of function is allowed. Operation of the EUT may stop as long as it is either automatically reset or can be manually restored by operation of the controls.

1.7Test Equipment List and Details

No.	Description	Manufacturer	Model	Serial No.	Cal Date	Due. Date
SEMT-1031	Spectrum Analyzer	Rohde & Schwarz	FSP	836079/035	2017-06-12	2018-06-11
SEMT-1007	EMI Test Receiver	Rohde & Schwarz	ESVB	825471/005	2017-06-12	2018-06-11
SEMT-1008	Amplifier	Agilent	8447F	3113A06717	2017-06-12	2018-06-11
SEMT-1043	Amplifier	C&D	PAP-1G18	2002	2017-06-12	2018-06-11
SEMT-1011	TrilogBroadband Antenna	Schwarz beck	VULB9163	9163-333	2017-06-08	2018-06-07
SEMT-1068	Trilog Broadband Antenna	Schwarz beck	VULB9163(B)	9163-333	2017-06-08	2018-06-07
SEMT-1042	Horn Antenna	ETS	3117	00086197	2017-06-08	2018-06-07
SEMT-1069	Loop Antenna	Schwarz beck	FMZB 1516	9773	2017-06-08	2018-06-07
SEMT-1001	EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2017-06-12	2018-06-11
SEMT-1066	EMI Test Receiver	Rohde & Schwarz	ESPI	101391	2017-06-12	2018-06-11
SEMT-1002	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2017-06-12	2018-06-11
SEMT-1003	AC LISN	Schwarz beck	NSLK8126	8126-224	2017-06-12	2018-06-11
SEMT-1060	DC LISN	Schwarz beck	NNBM8126D	279	2017-06-12	2018-06-11
SEMT-1061	DC LISN	Schwarz beck	NNBM8126D	280	2017-06-12	2018-06-11
SEMT-1085	8-WIRE LISN	Schwarz beck	8158	CAT3-8158-0059	2017-06-12	2018-06-11
SEMT-1086	8-WIRE LISN	Schwarz beck	8158	CAT5-8158-0117	2017-06-12	2018-06-11
SEMT-1005	Clamp	Schwarz beck	MDS21	3809	2017-06-12	2018-06-11
SEMT-1014	Loop Antenna	EVERFINE	LLA-2	711001	2017-06-08	2018-06-07
SEMT-1071	VDH Test Head	AFJ	VDH 30	SC022Z	2017-06-12	2018-06-11
SEMT-1056	Digital Power Analyzer	California Instrument	CTS	72831	2017-06-12	2018-06-11
SEMT-1057	Power Source	California Instrument	5001IX-CTS-400	25965	2017-06-12	2018-06-11
SEMT-1027	ESD Generator	TESQ AG	NSG 437	161	2017-08-15	2018-08-14
SEMT-1055	Signal Generator	HP	8648A	3642U01277	2017-06-12	2018-06-11
SEMT-1008	Amplifier	Agilent	8447F	3113A06717	2017-06-12	2018-06-11
SEMT-1067	Amplifier	Agilent	8447D	2944A10179	2017-06-12	2018-06-11
SEMT-1024	Transient 2000	EMC PARTNER	TRA2000	863	2017-06-12	2018-06-11
SEMT-1045	CS Immunity Tester	EMTEST	CWS500	0900-03	2017-06-12	2018-06-11

2. SUMMARY OF TEST RESULTS

Standards	Description of Test Item	Result
EN55032	ConductedEmission	Compliant
	RadiatedEmission	Compliant
EN61000-3-2	Harmonic Current Emission	Compliant
EN61000-3-3	Voltage Fluctuation and Flicker	Compliant
EN55024	Electrostatic Discharge Immunity in accordance with IEC 61000-4-2	Compliant
	Continuous Radiated Disturbances Immunity in accordance withIEC 61000-4-3	Compliant
	Electrical Fast Transient/Burst Immunity in accordance withIEC 61000-4-4	Compliant
	SurgesImmunity in accordance with IEC 61000-4-5	Compliant
	Continuous Conducted Disturbances Immunity in accordance withIEC 61000-4-6	Compliant
	Power-frequency Magnetic Fields Immunity in accordance with IEC 61000-4-8	N/A
	Voltage Dips/Interruptions Immunity in accordance with IEC 61000-4-11	Compliant

N/A: not applicable

3. Conducted Emission

3.1 Measurement Uncertainty

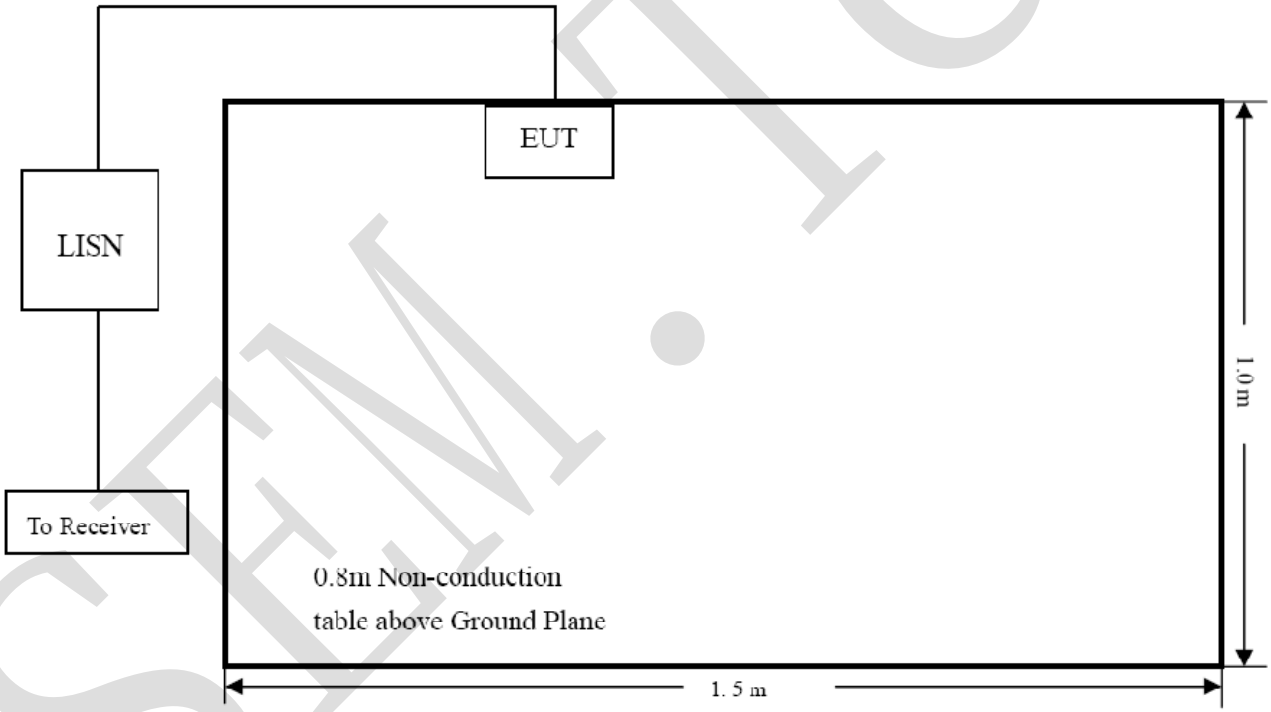
Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement

Measurement uncertainty		
Parameter	Conditions	Uncertainty
Conducted Emissions	Conducted	9-150kHz ±3.74dB
		0.15-30MHz ±3.34dB

3.2 Test Procedure

Test is conducting under the description of EN55032 Annex A.3.5.

3.3Basic Test Setup Block Diagram



3.4 Environmental Conditions

Temperature:	22 ° C
Relative Humidity:	55 %
ATM Pressure:	1015 mbar

3.5 Summary of Test Results/Plots

According to the data in section 3.6, the EUT complied with the EN55032 Conducted margin for a Class B device, with the *worst* margin reading of:

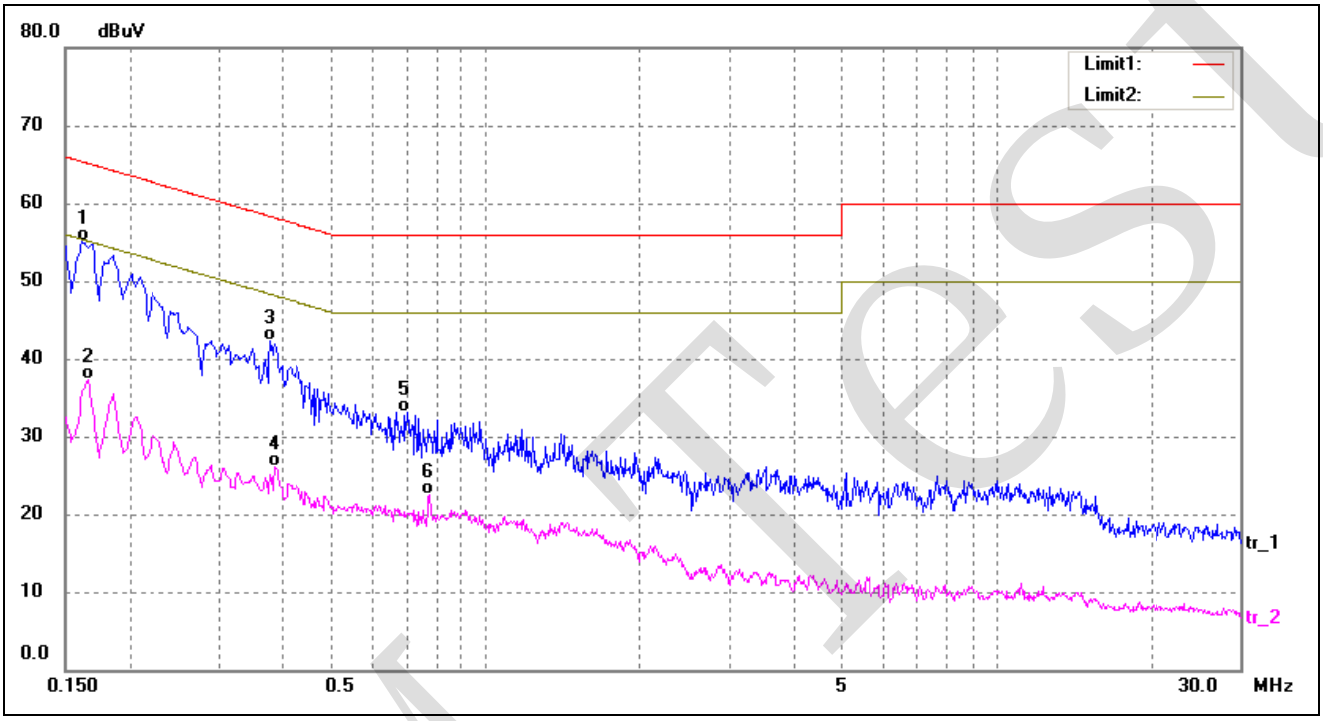
-9.82 dBat**0.6340 MHz** in the**Line** mode,**AVG** detector, **TM4** mode, **0.15-30MHz**

3.6 Conducted Emissions Test Data

Plot of Conducted Emissions Test Data

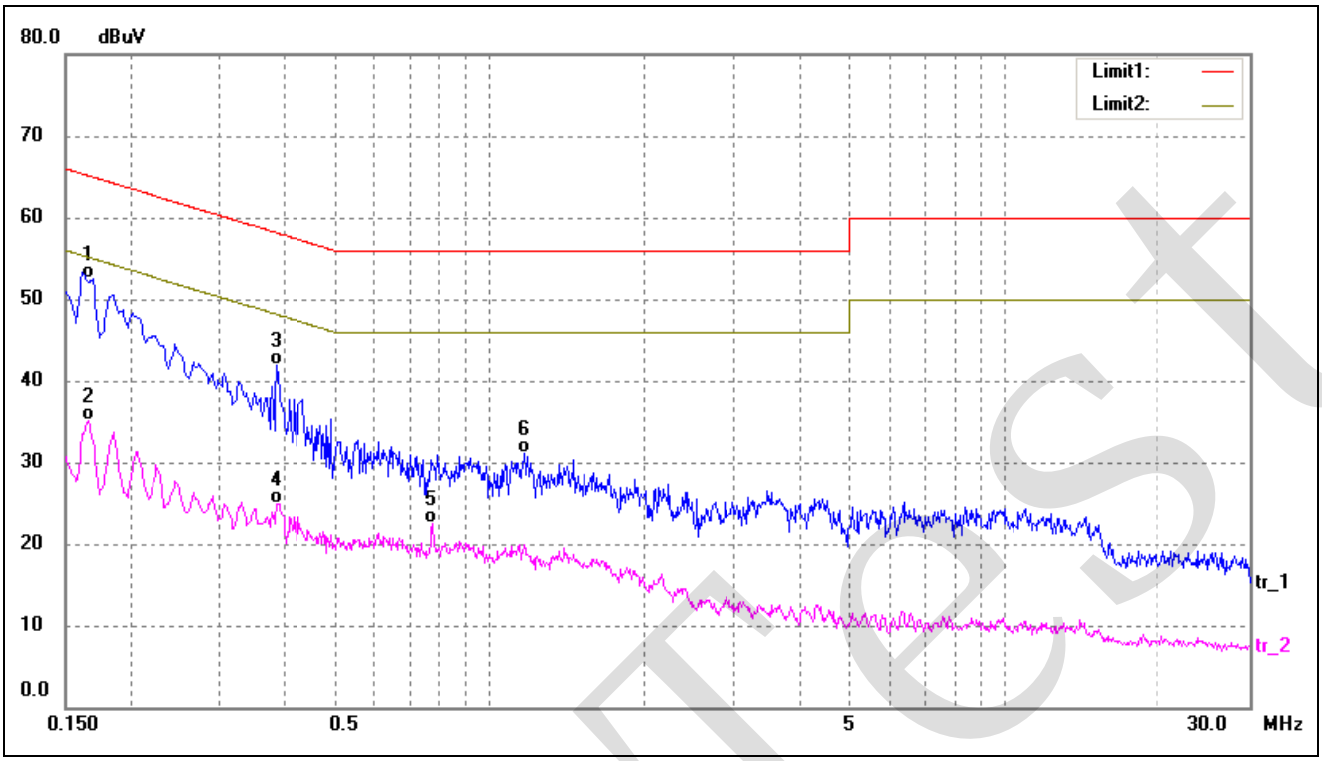
EUT: *ITE Power Supply*
Tested Model: *GTM86100-1005-W2E*
Operating Condition: *TM1*
Comment: *AC 230V/50Hz*

Test Specification: *Line*



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1*	0.1620	45.26	9.84	55.10	65.36	-10.26	QP
2	0.1660	27.42	9.83	37.25	55.16	-17.91	AVG
3	0.3780	32.55	9.80	42.35	58.32	-15.97	QP
4	0.3860	16.28	9.80	26.08	48.15	-22.07	AVG
5	0.7020	23.35	9.78	33.13	56.00	-22.87	QP
6	0.7780	12.81	9.78	22.59	46.00	-23.41	AVG

Test Specification: *Neutral*

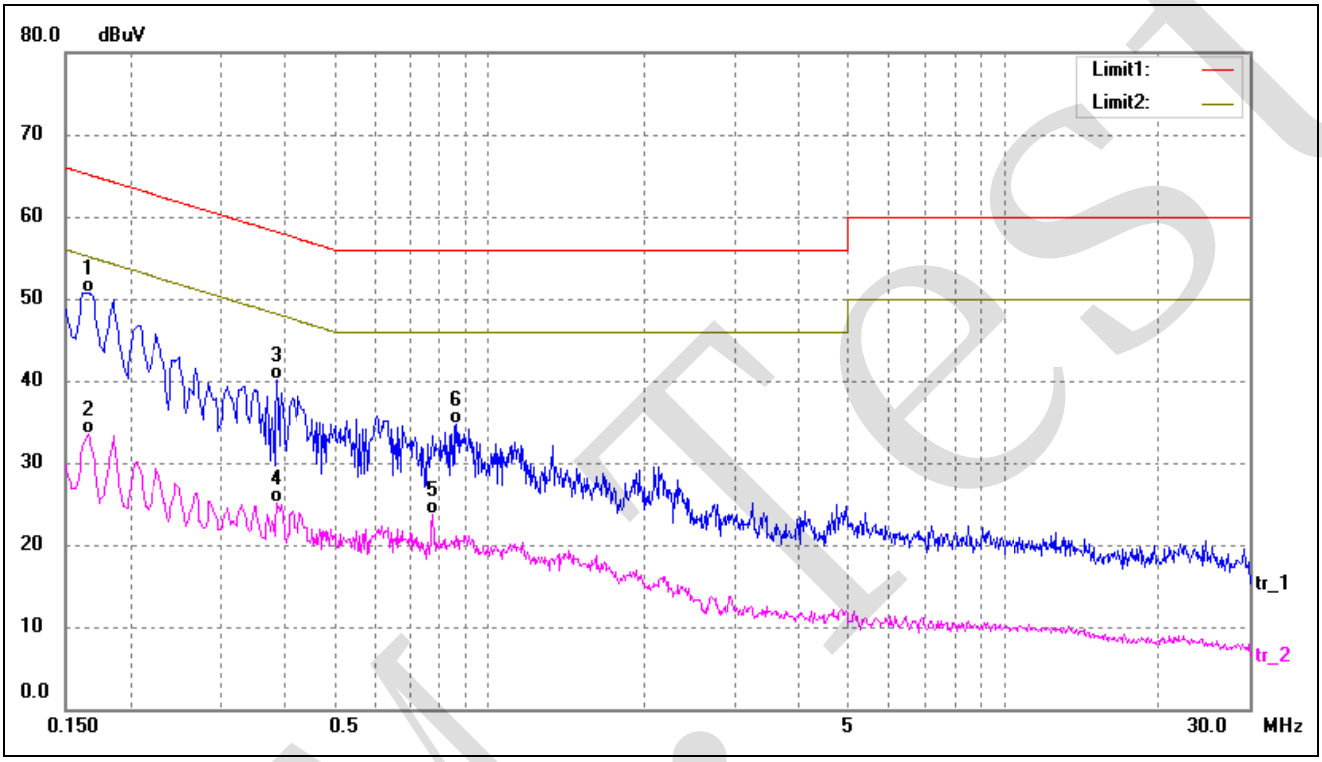


No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1*	0.1641	42.75	9.84	52.59	65.25	-12.66	QP
2	0.1660	25.19	9.83	35.02	55.16	-20.14	AVG
3	0.3860	32.09	9.80	41.89	58.15	-16.26	QP
4	0.3860	15.16	9.80	24.96	48.15	-23.19	AVG
5	0.7780	12.63	9.78	22.41	46.00	-23.59	AVG
6	1.1700	21.44	9.76	31.20	56.00	-24.80	QP

Plot of Conducted Emissions Test Data

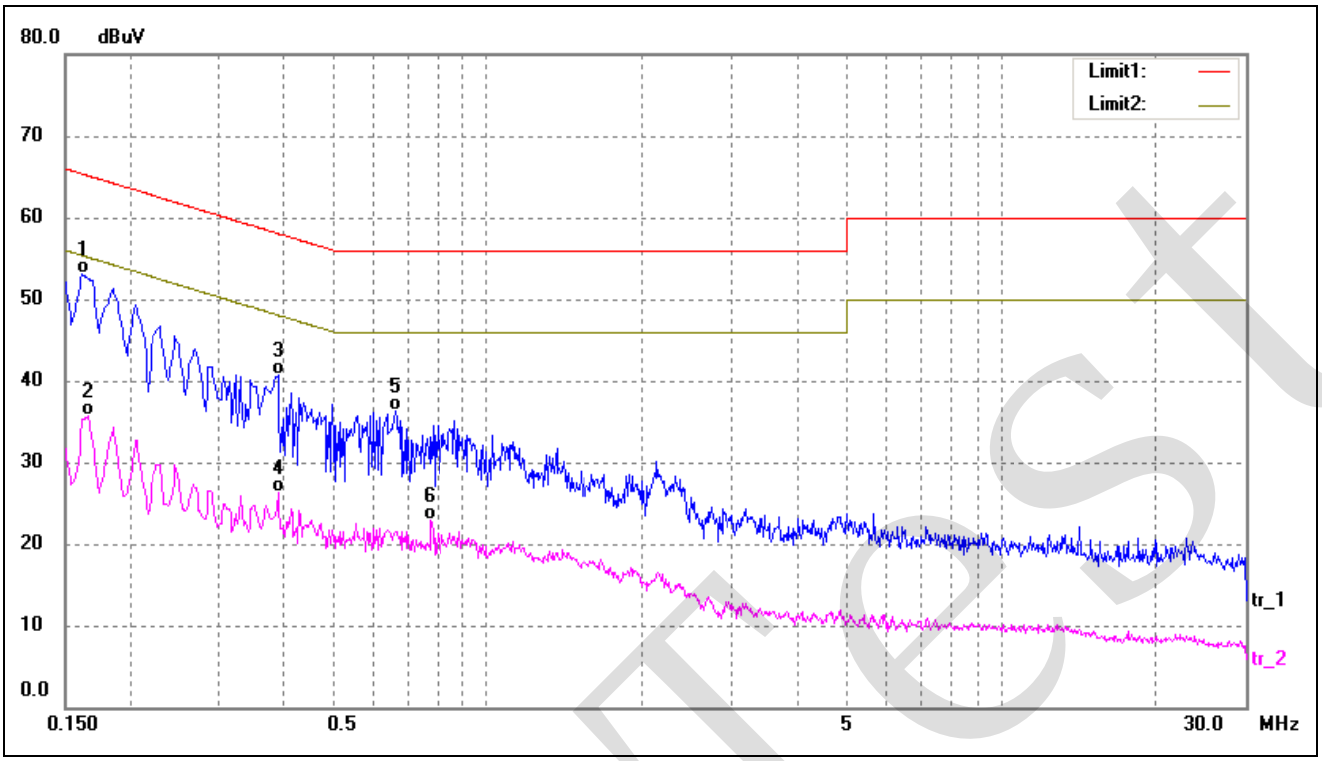
EUT: *ITE Power Supply*
Tested Model: *GTM86100-1005.2-W2E*
Operating Condition: *TM2*
Comment: *AC 230V/50Hz*

Test Specification: *Line*



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1*	0.1660	40.91	9.83	50.74	65.16	-14.42	QP
2	0.1660	23.67	9.83	33.50	55.16	-21.66	AVG
3	0.3860	30.30	9.80	40.10	58.15	-18.05	QP
4	0.3860	15.29	9.80	25.09	48.15	-23.06	AVG
5	0.7780	13.95	9.78	23.73	46.00	-22.27	AVG
6	0.8620	24.92	9.77	34.69	56.00	-21.31	QP

Test Specification: *Neutral*

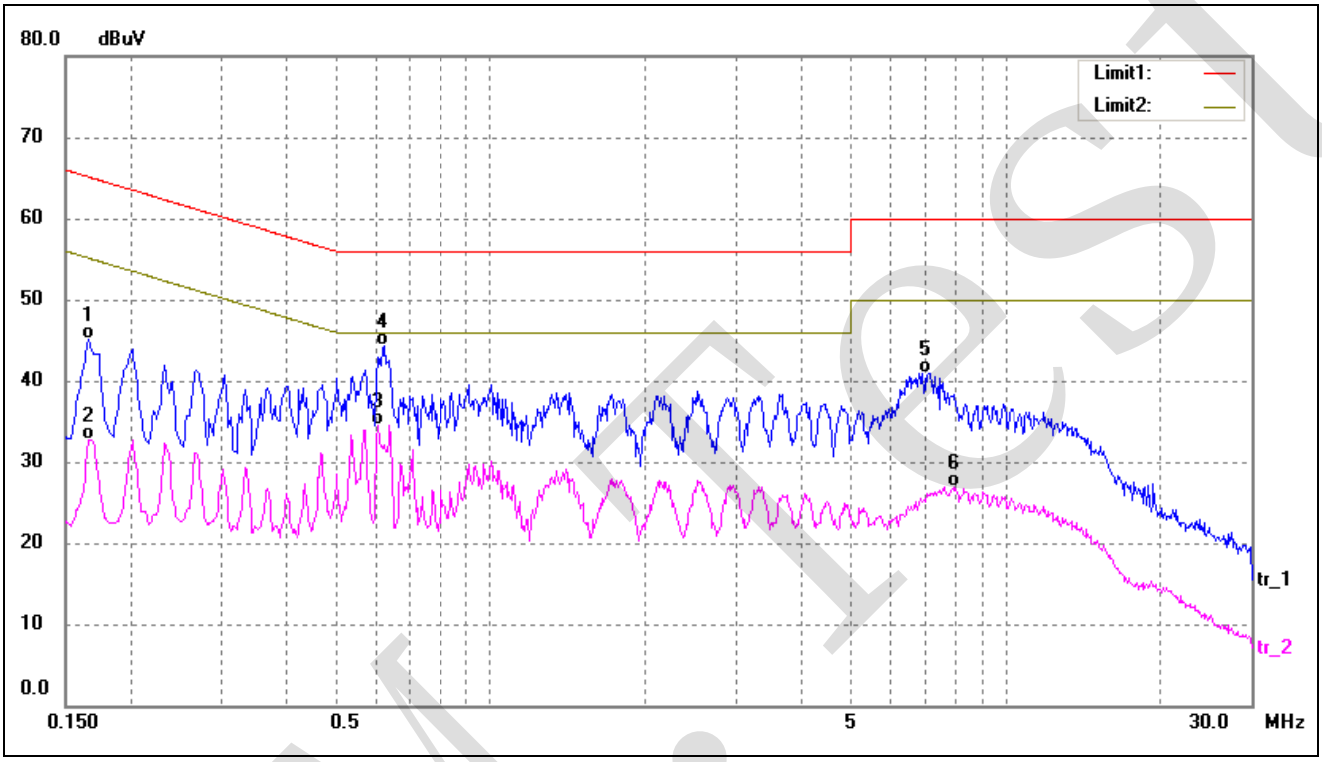


No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1*	0.1620	43.17	9.84	53.01	65.36	-12.35	QP
2	0.1660	25.86	9.83	35.69	55.16	-19.47	AVG
3	0.3900	30.88	9.80	40.68	58.06	-17.38	QP
4	0.3900	16.46	9.80	26.26	48.06	-21.80	AVG
5	0.6580	26.58	9.79	36.37	56.00	-19.63	QP
6	0.7740	13.15	9.78	22.93	46.00	-23.07	AVG

Plot of Conducted Emissions Test Data

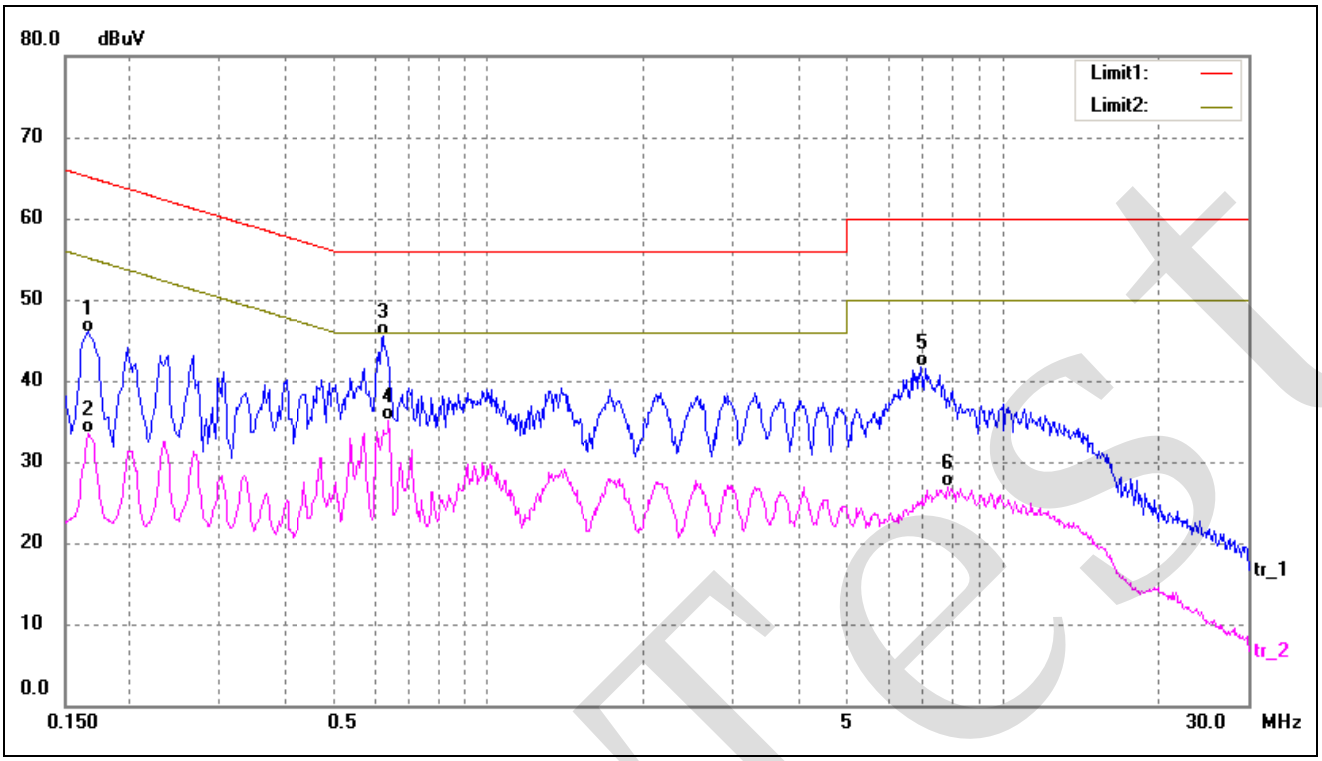
EUT: *ITE Power Supply*
Tested Model: *GTM86100-1005-W2E-USB*
Operating Condition: *TM3*
Comment: *AC 230V/50Hz*

Test Specification: *Line*



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1660	35.26	9.83	45.09	65.16	-20.07	QP
2	0.1660	22.89	9.83	32.72	55.16	-22.44	AVG
3*	0.6060	24.79	9.79	34.58	46.00	-11.42	AVG
4	0.6260	34.47	9.79	44.26	56.00	-11.74	QP
5	6.8900	31.35	9.61	40.96	60.00	-19.04	QP
6	7.9260	17.30	9.58	26.88	50.00	-23.12	AVG

Test Specification: *Neutral*

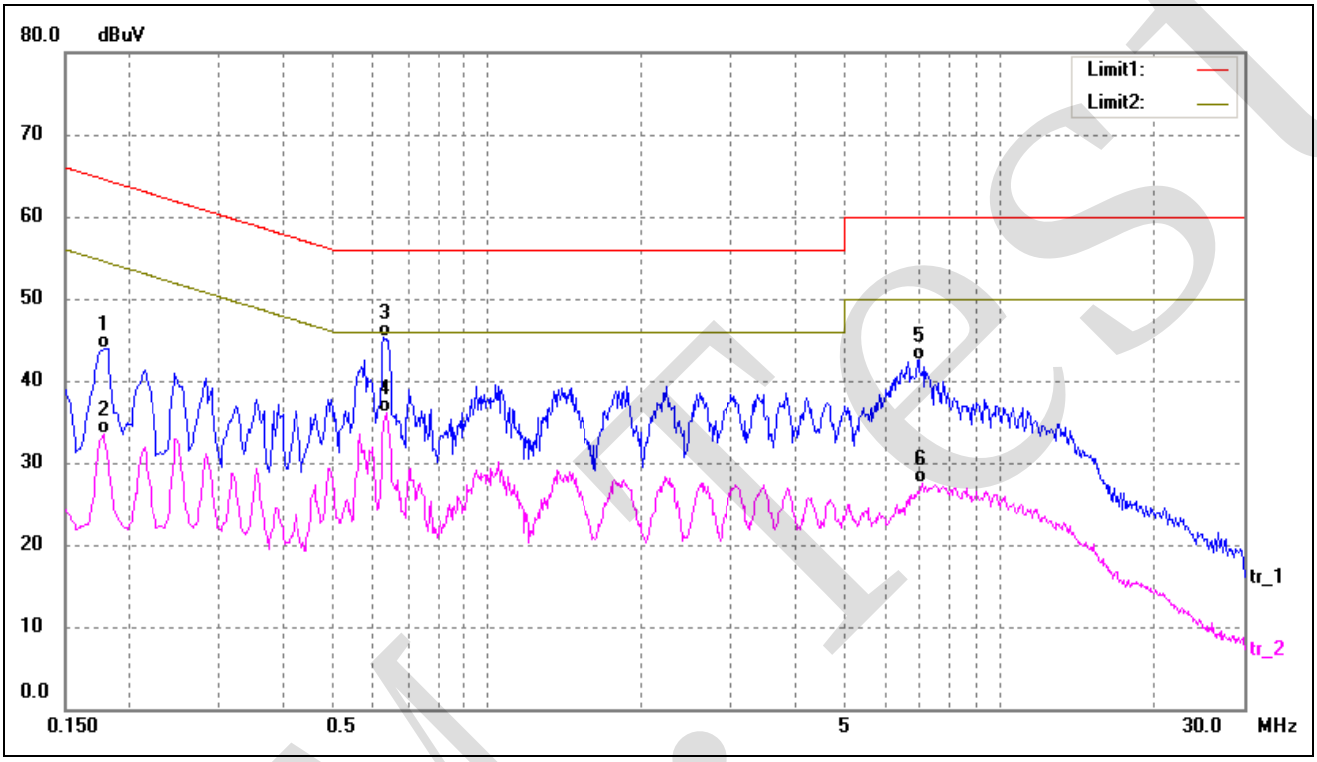


No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1	0.1660	36.17	9.83	46.00	65.16	-19.16	QP
2	0.1660	23.59	9.83	33.42	55.16	-21.74	AVG
3*	0.6220	35.67	9.79	45.46	56.00	-10.54	QP
4	0.6380	25.35	9.79	35.14	46.00	-10.86	AVG
5	6.9300	32.06	9.61	41.67	60.00	-18.33	QP
6	7.8260	17.36	9.58	26.94	50.00	-23.06	AVG

Plot of Conducted Emissions Test Data

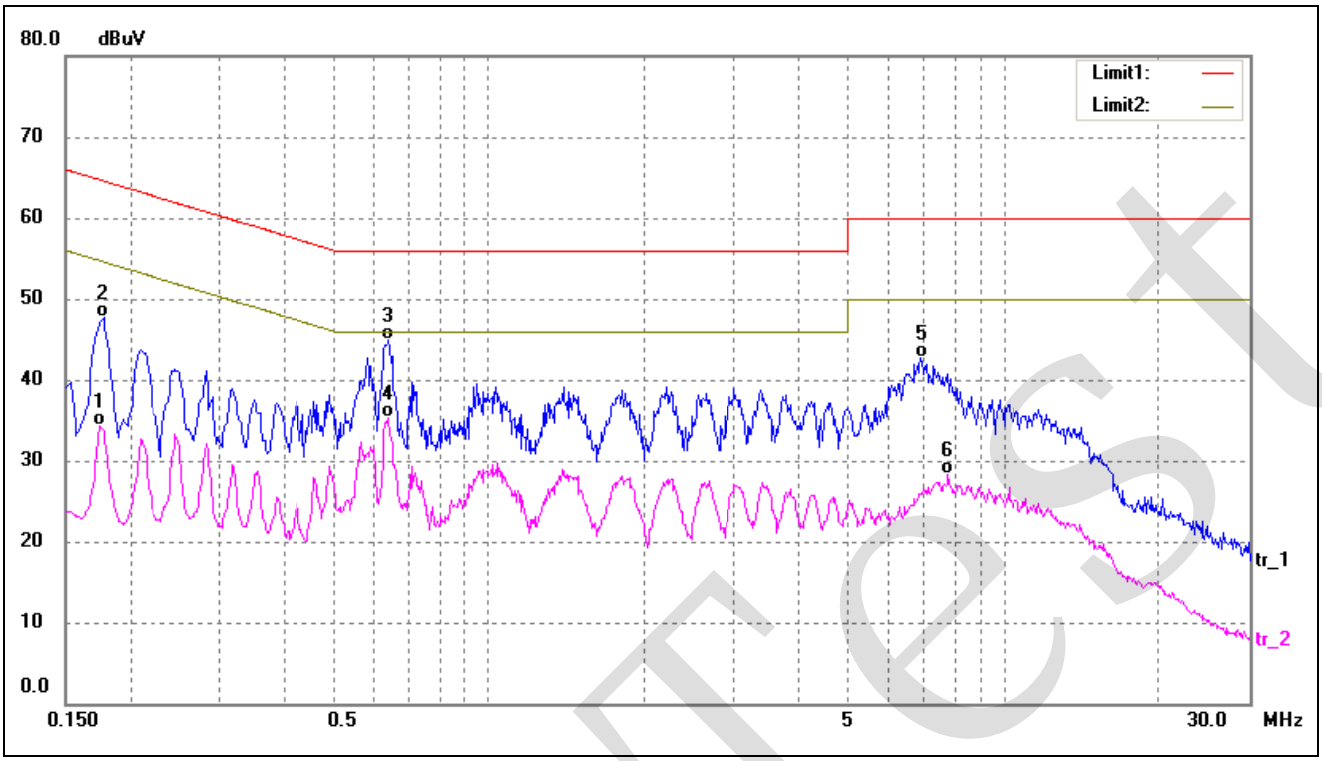
EUT: *ITE Power Supply*
Tested Model: *GTM86100-1005.2-W2E-USB*
Operating Condition: *TM4*
Comment: *AC 230V/50Hz*

Test Specification: *Line*



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1780	34.06	9.82	43.88	64.58	-20.70	QP
2	0.1780	23.65	9.82	33.47	54.58	-21.11	AVG
3	0.6300	35.51	9.79	45.30	56.00	-10.70	QP
4*	0.6340	26.39	9.79	36.18	46.00	-9.82	AVG
5	6.9700	33.00	9.60	42.60	60.00	-17.40	QP
6	7.0660	17.82	9.60	27.42	50.00	-22.58	AVG

Test Specification: *Neutral*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1	0.1740	24.39	9.83	34.22	54.77	-20.55	AVG
2	0.1780	37.87	9.82	47.69	64.58	-16.89	QP
3	0.6380	35.11	9.79	44.90	56.00	-11.10	QP
4*	0.6380	25.43	9.79	35.22	46.00	-10.78	AVG
5	6.9060	33.17	9.61	42.78	60.00	-17.22	QP
6	7.8020	18.81	9.58	28.39	50.00	-21.61	AVG

4. Radiated Emission

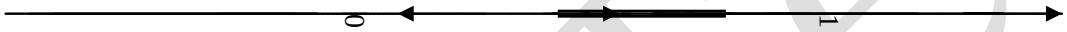
4.1 Measurement Uncertainty

Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any radiation emissions measurement

Measurement uncertainty		
Parameter	Conditions	Uncertainty
Radiated Emissions	Radiated	30-200MHz ±4.52dB
		0.2-1GHz ±5.56dB
		1-6GHz ±3.84dB
		6-18GHz ±3.92dB

4.2 Test Procedure

Test is conducting under the description of EN55032 Annex C.2.2.4



4.3 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and the Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

Corr. Ampl. = Indicated Reading + Antenna Factor + Cable Factor - Amplifier Gain

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -6dBμV means the emission is 6dBμV below the maximum limit for Class B device. The equation for margin calculation is as follows:

Margin = Corr. Ampl. – EN55032 Class B Limit

4.4 Environmental Conditions

Temperature:	23° C
Relative Humidity:	53%
ATM Pressure:	1011 mbar

4.5 Summary of Test Results/Plots

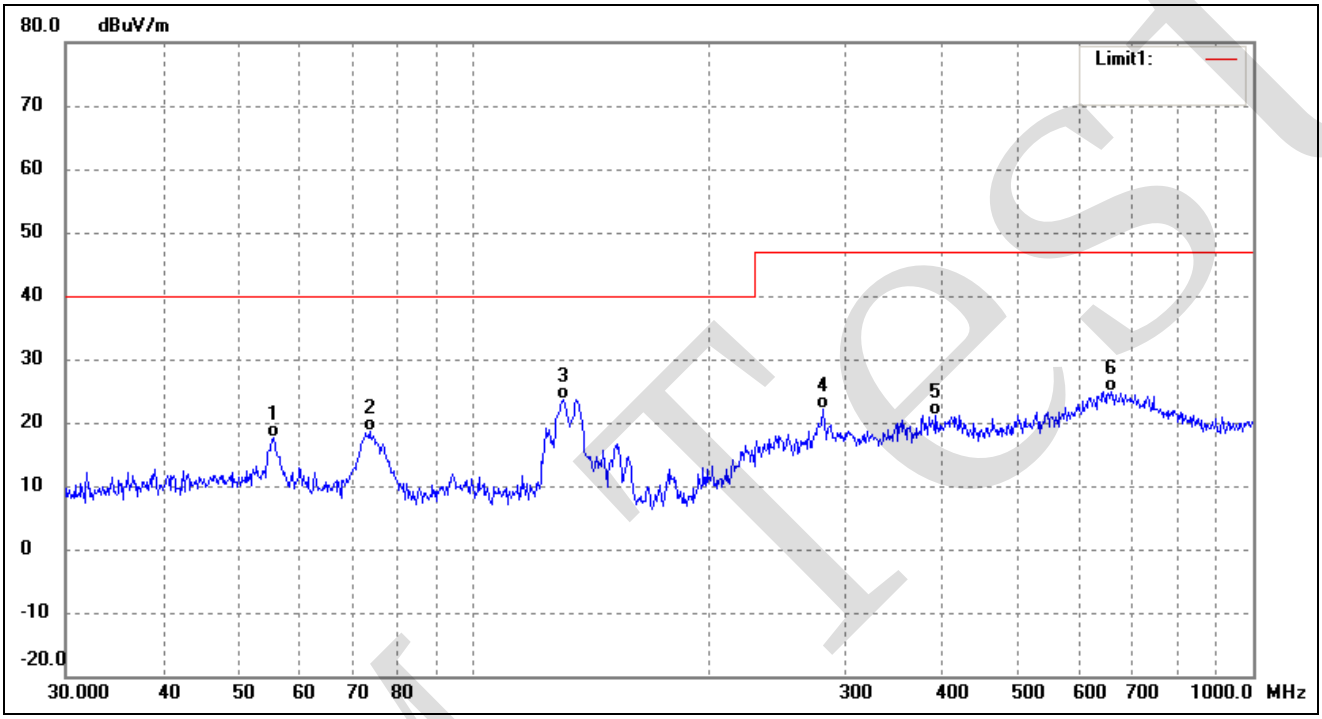
According to the data in section 4.5, the EUT complied with the EN55032 Class B standards, and had the worst margin is:

-3.65 dB at **74.9191MHz** in the**Vertical**polarization, **TM2** mode, **30 MHz to 1 GHz, 3Meters**

Plot of Radiated Emissions Test Data

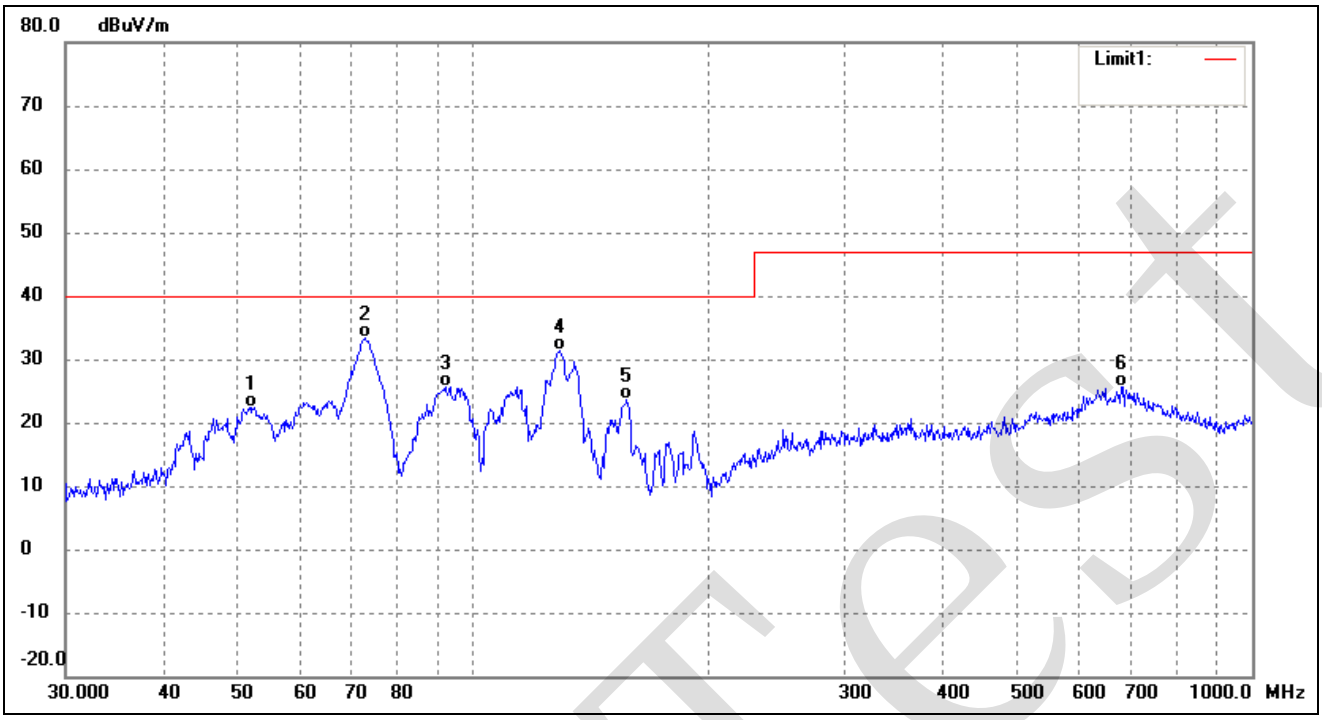
EUT: *ITE Power Supply*
Tested Model: *GTM86100-1005-W2E*
Operating Condition: *TM1*
Comment: *AC 230V/50Hz*

Test Specification: *Horizontal*



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	55.4147	34.04	-16.51	17.53	40.00	-22.47	251	100	QP
2	73.6170	37.75	-19.13	18.62	40.00	-21.38	12	100	QP
3	130.3789	41.25	-17.53	23.72	40.00	-16.28	306	100	QP
4	281.0075	32.52	-10.32	22.20	47.00	-24.80	298	100	QP
5	392.0951	29.46	-8.21	21.25	47.00	-25.75	111	100	QP
6	656.5300	26.27	-1.41	24.86	47.00	-22.14	205	100	QP

Test Specification: *Vertical*

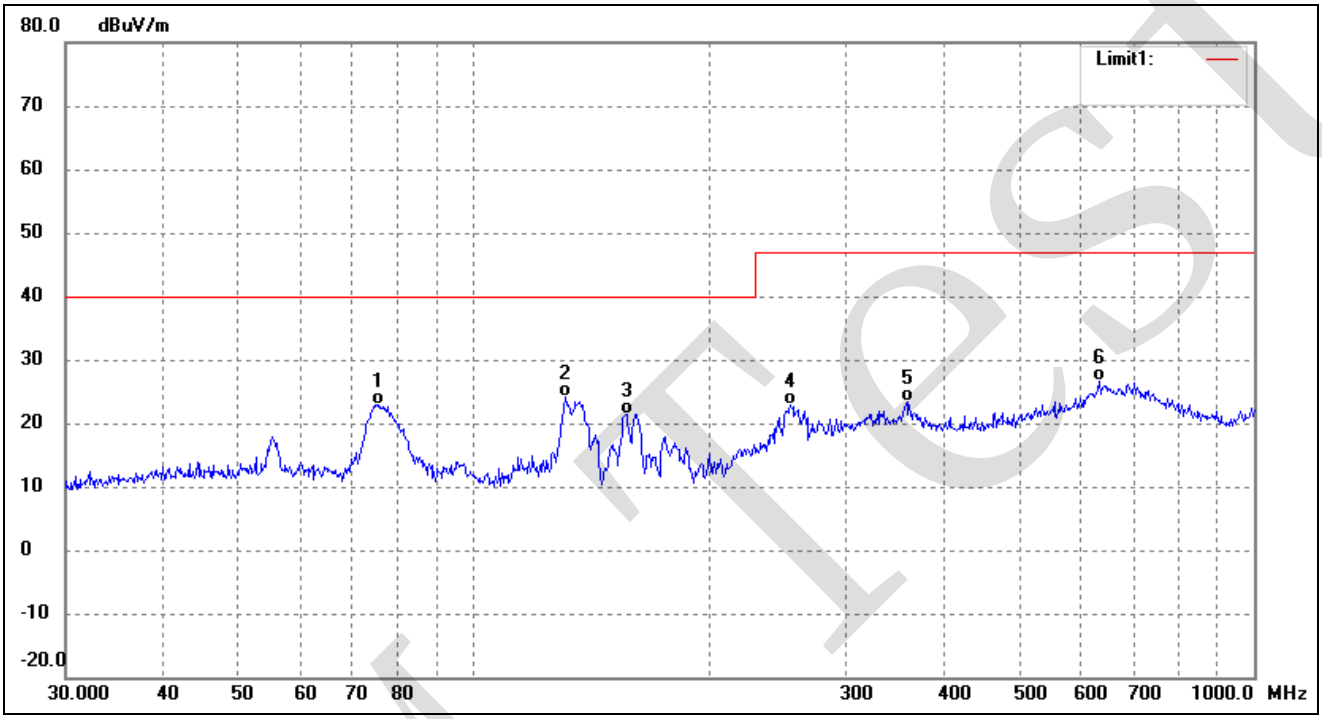


No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	52.0251	38.92	-16.50	22.42	40.00	-17.58	24	100	QP
2	72.5917	52.35	-19.02	33.33	40.00	-6.67	155	100	QP
3	92.1388	43.37	-17.75	25.62	40.00	-14.38	218	100	QP
4	129.0146	48.78	-17.42	31.36	40.00	-8.64	326	100	QP
5	157.5589	42.52	-19.01	23.51	40.00	-16.49	201	100	QP
6	679.9600	26.09	-0.37	25.72	47.00	-21.28	111	100	QP

Plot of Radiated Emissions Test Data

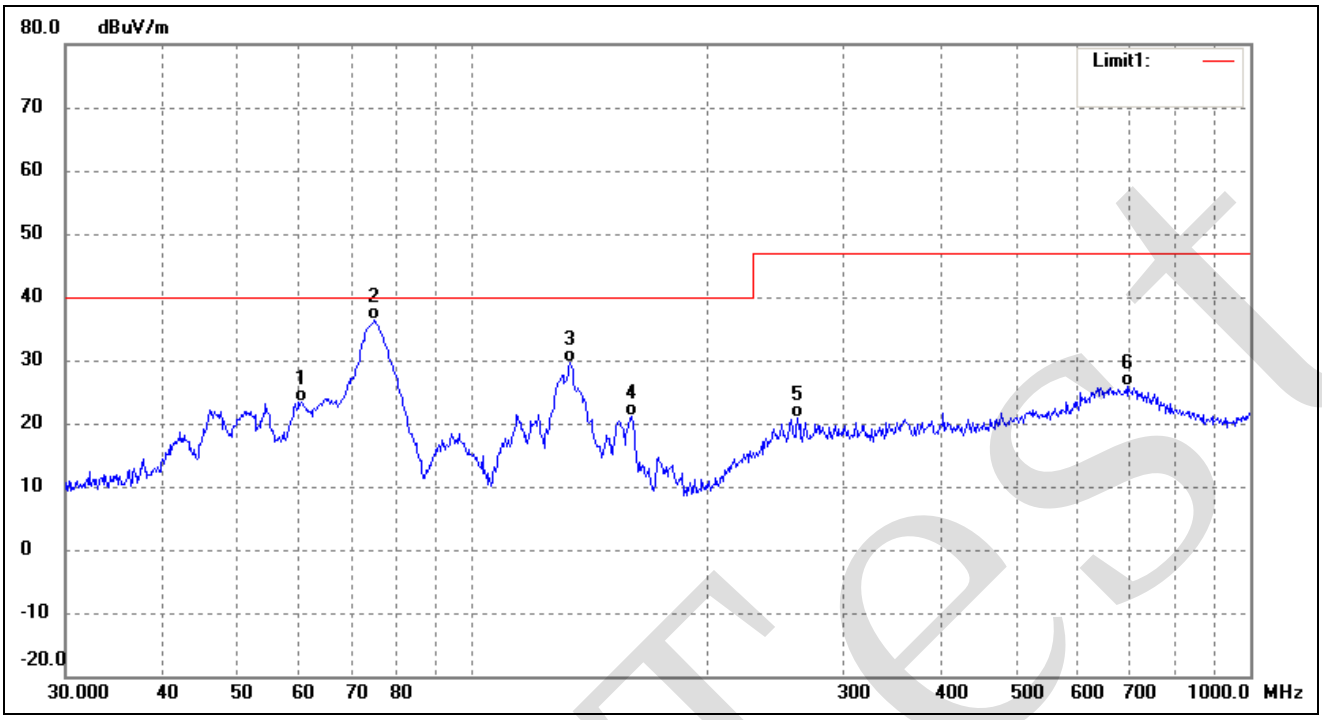
EUT: *ITE Power Supply*
Tested Model: *GTM86100-1005.2-W2E*
Operating Condition: *TM2*
Comment: *AC 230V/50Hz*

Test Specification: *Horizontal*



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	75.4464	42.19	-19.32	22.87	40.00	-17.13	321	100	QP
2	131.2965	41.83	-17.61	24.22	40.00	-15.78	152	100	QP
3	157.0074	40.48	-18.99	21.49	40.00	-18.51	240	100	QP
4	254.7284	34.86	-11.97	22.89	47.00	-24.11	155	100	QP
5	359.1860	32.39	-8.95	23.44	47.00	-23.56	266	100	QP
6	633.9073	27.85	-1.21	26.64	47.00	-20.36	312	100	QP

Test Specification: *Vertical*

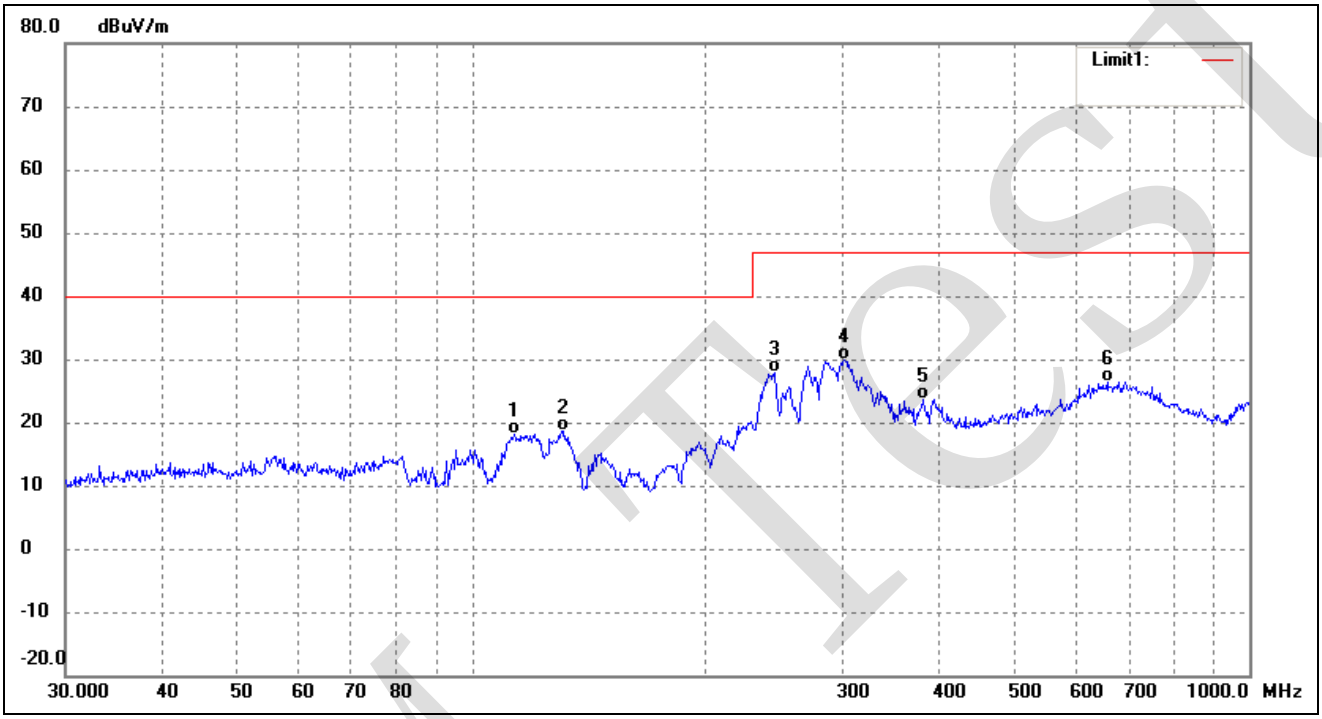


No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	60.2801	39.95	-16.56	23.39	40.00	-16.61	85	100	QP
2	74.9191	55.62	-19.27	36.35	40.00	-3.65	144	100	QP
3	133.6188	47.44	-17.80	29.64	40.00	-10.36	265	100	QP
4	160.3457	40.18	-19.10	21.08	40.00	-18.92	311	100	QP
5	261.9753	32.55	-11.64	20.91	47.00	-26.09	215	100	QP
6	696.8567	27.42	-1.59	25.83	47.00	-21.17	222	100	QP

Plot of Radiated Emissions Test Data

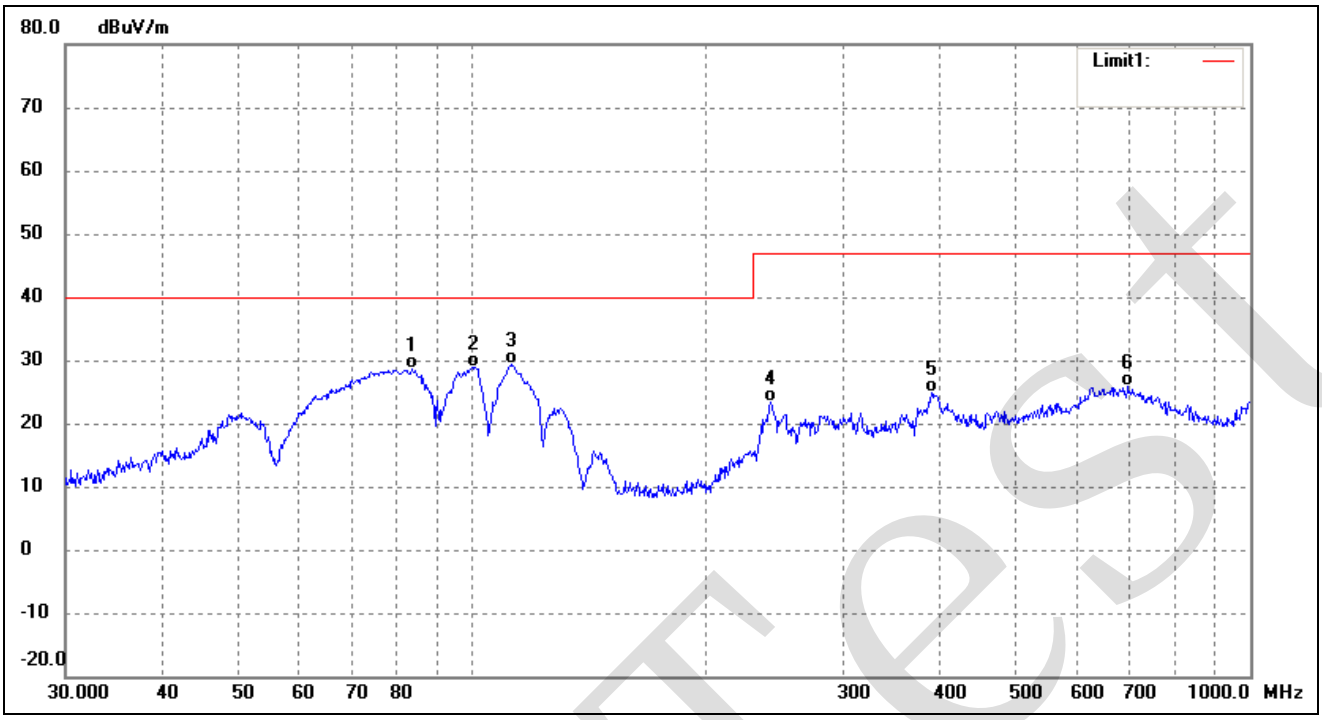
EUT: *ITE Power Supply*
Tested Model: *GTM86100-1005-W2E-USB*
Operating Condition: *TM3*
Comment: *AC 230V/50Hz*

Test Specification: *Horizontal*



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	113.3163	34.69	-16.63	18.06	40.00	-21.94	254	100	QP
2	131.2965	36.30	-17.61	18.69	40.00	-21.31	326	100	QP
3	245.0900	40.14	-12.33	27.81	47.00	-19.19	215	100	QP
4	301.4224	39.36	-9.59	29.77	47.00	-17.23	10	100	QP
5	379.9141	32.40	-8.86	23.54	47.00	-23.46	165	100	QP
6	656.5300	27.86	-1.41	26.45	47.00	-20.55	210	100	QP

Test Specification: *Vertical*

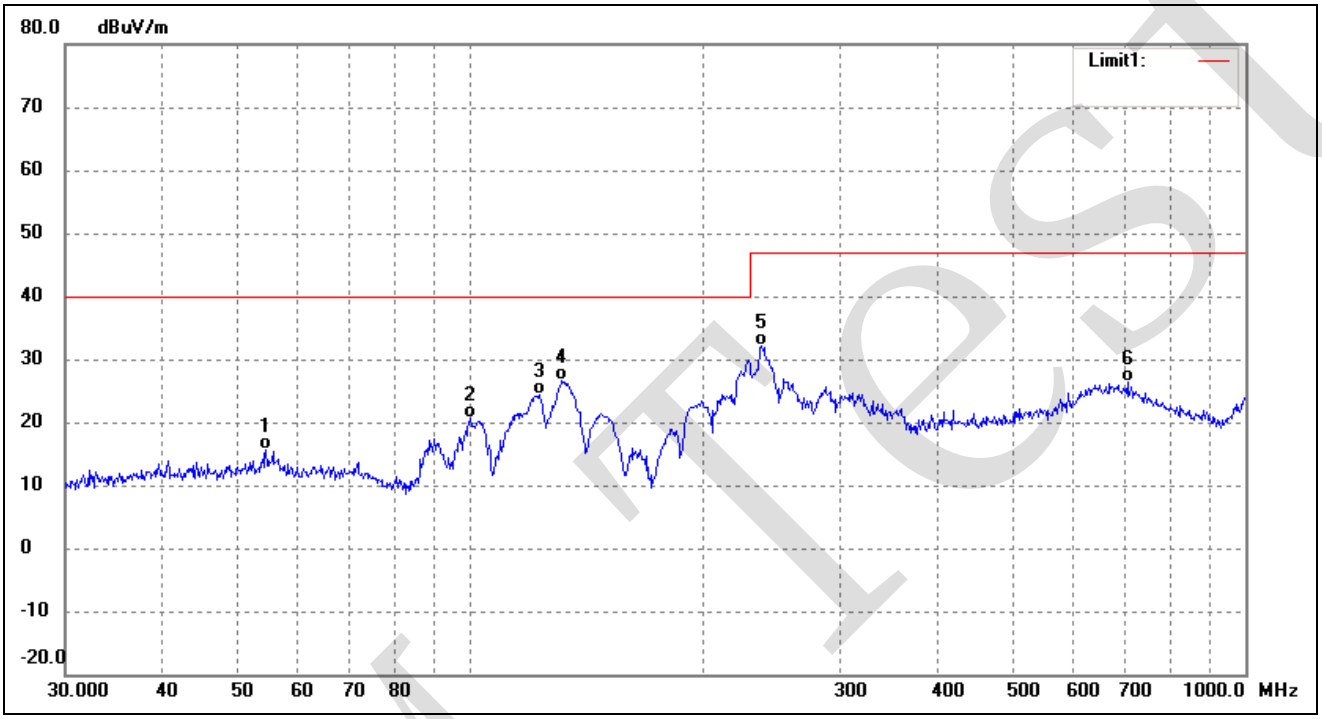


No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	83.5222	47.80	-19.21	28.59	40.00	-11.41	54	100	QP
2	100.5806	45.51	-16.57	28.94	40.00	-11.06	124	100	QP
3	112.5244	46.06	-16.64	29.42	40.00	-10.58	210	100	QP
4	241.6763	35.94	-12.47	23.47	47.00	-23.53	255	100	QP
5	389.3549	33.16	-8.37	24.79	47.00	-22.21	38	100	QP
6	696.8567	27.57	-1.59	25.98	47.00	-21.02	120	100	QP

Plot of Radiated Emissions Test Data

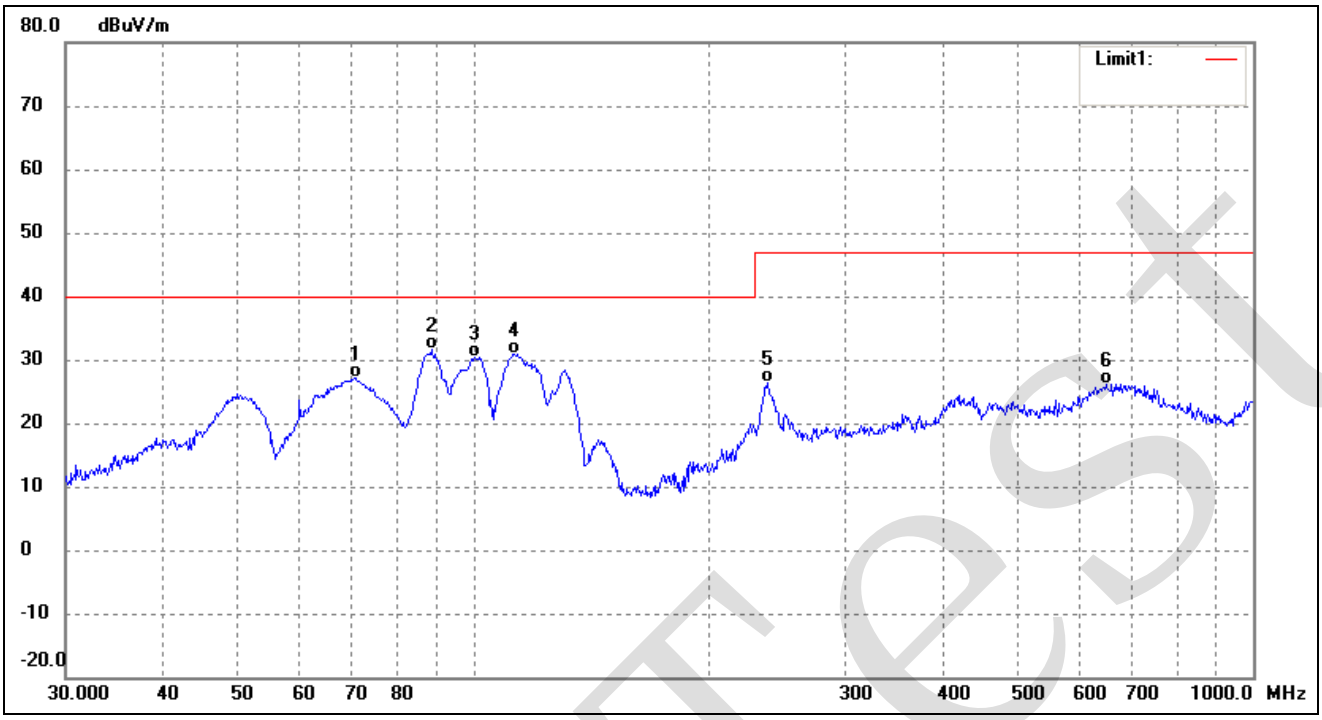
EUT: *ITE Power Supply*
Tested Model: *GTM86100-1005.2-W2E-USB*
Operating Condition: *TM4*
Comment: *AC 230V/50Hz*

Test Specification: *Horizontal*



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	54.4516	32.13	-16.51	15.62	40.00	-24.38	240	100	QP
2	99.8777	37.23	-16.58	20.65	40.00	-19.35	121	100	QP
3	122.8340	41.37	-16.90	24.47	40.00	-15.53	166	100	QP
4	131.2965	44.21	-17.61	26.60	40.00	-13.40	231	100	QP
5	237.4760	44.78	-12.71	32.07	47.00	-14.93	200	100	QP
6	704.2261	28.09	-1.68	26.41	47.00	-20.59	105	100	QP

Test Specification: *Vertical*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	70.8315	46.03	-18.83	27.20	40.00	-12.80	98	100	QP
2	88.3421	50.00	-18.38	31.62	40.00	-8.38	142	100	QP
3	100.2286	46.91	-16.56	30.35	40.00	-9.65	265	100	QP
4	112.9196	47.55	-16.63	30.92	40.00	-9.08	312	100	QP
5	238.3102	39.08	-12.65	26.43	47.00	-20.57	215	100	QP
6	647.3856	27.31	-1.19	26.12	47.00	-20.88	205	100	QP

5. Harmonic Current Emissions

5.1 Test Procedure

Test is conducting under the description of EN61000-3-2.

5.2 Test Standards

EN61000-3-2, Clause 7.1 Limits for Class A equipment.

Environmental Conditions

Temperature:	22°C
Relative Humidity:	48%
ATM Pressure:	1022 mbar

5.3 Harmonic CurrentEmissions Test Data

According to Clause 7 of EN61000-3-2, the rated power of the EUT is less than 75W, belong to ‘equipment with a rated power of 75W or less’, therefore ‘limits are not specified in this edition of the standards’. It is deem to full fit the requirements of the standards.

Result: The EUT is compliance with the requirements of this section.

6. Voltage Fluctuation Flicker

6.1 Test Procedure

Test is conducting under the description of EN61000-3-3.

6.2 Test Standards

EN61000-3-3, Limit: Clause 5.

Environmental Conditions

Temperature:	22°C
Relative Humidity:	48%
ATM Pressure:	1022 mbar

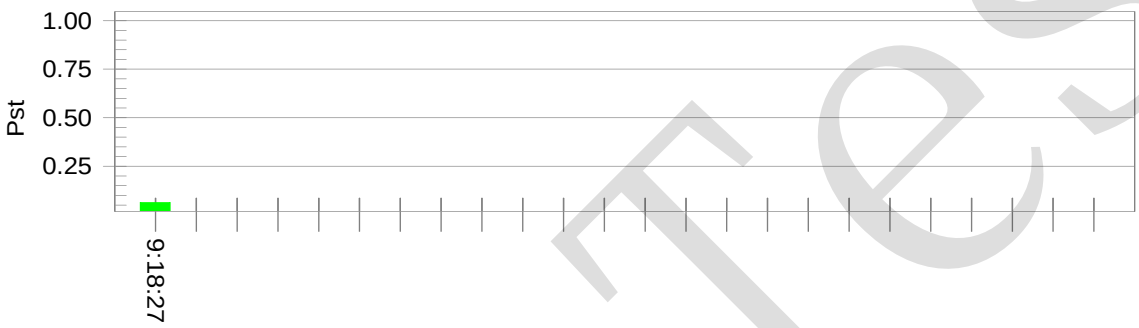
6.3 Voltage Fluctuation and Flicker Test Data

Flicker Test Summary per EN/IEC61000-3-3 (Run time)

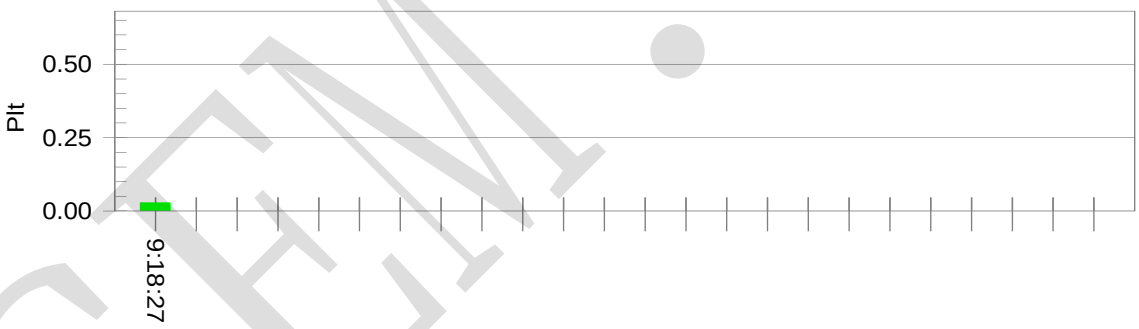
EUT: ITE Power Supply (TM1) **Tested by: Draven**
Test category: All parameters (European limits) **Test Margin: 100**
Test date: 2018-1-29 **Start time: 09:08:07 AM** **End time: 09:18:28 AM**
Test duration (min): 10 **Data file name: F-000261.cts_data**
Comment: Working
Customer: GlobTek, Inc.

Test Result: Pass **Status: Test Completed**

Pst_i and limit line **European Limits**



Plt and limit line



Parameter values recorded during the test:

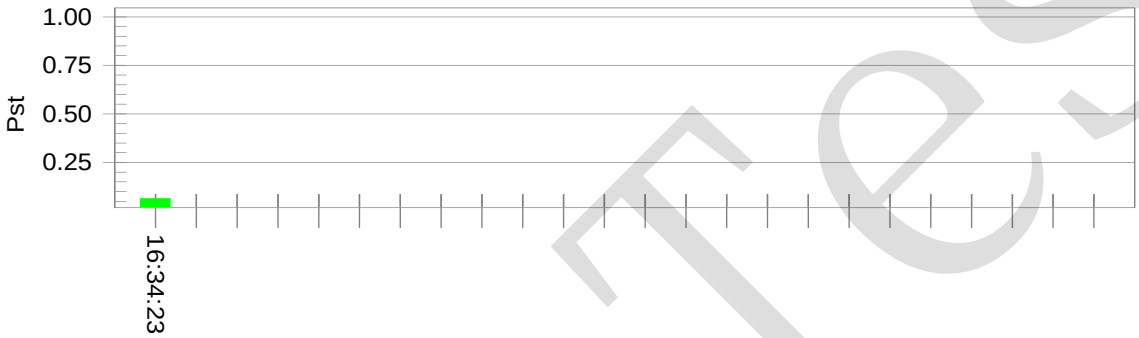
Vrms at the end of test (Volt):	**229.79**			
Highest dt (%):	**0.00**	**Test limit (%):**	**3.30**	**Pass**
Time(mS) >dt:	**0.0**	**Test limit (mS):**	**500.0**	**Pass**
Highest dc (%):	**0.00**	**Test limit (%):**	**3.30**	**Pass**
Highest dmax (%):	**0.00**	**Test limit (%):**	**4.00**	**Pass**
Highest Pst (10 min. period):	**0.064**	**Test limit:**	**1.000**	**Pass**
Highest Plt (2 hr. period):	**0.028**	**Test limit:**	**0.650**	**Pass**

Flicker Test Summary per EN/IEC61000-3-3 (Run time)

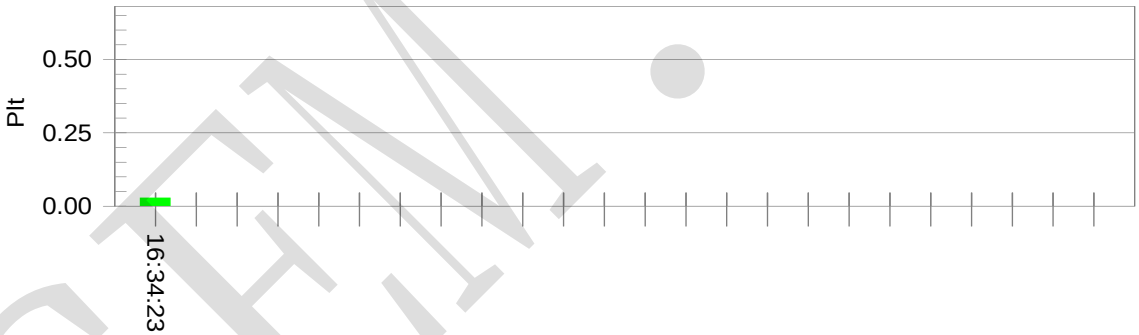
EUT:ITE Power Supply (TM2) **Tested by: Draven**
Test category: All parameters (European limits) **Test Margin: 100**
Test date: 2018-1-29 **Start time: 04:24:04 PM** **End time: 04:34:25 PM**
Test duration (min): 10 **Data file name: F-000149.cts_data**
Comment: Working
Customer: GlobTek, Inc.

Test Result: Pass **Status: Test Completed**

Pst_t and limit line **European Limits**



Plt and limit line



Parameter values recorded during the test:

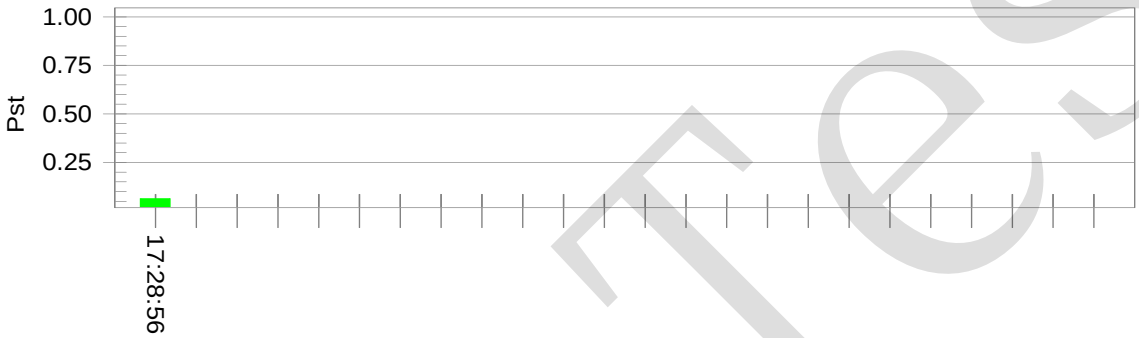
Vrms at the end of test (Volt):	**229.56**			
Highest dt (%):	**0.00**	**Test limit (%):**	**3.30**	**Pass**
Time(mS) >dt:	**0.0**	**Test limit (mS):**	**500.0**	**Pass**
Highest dc (%):	**0.00**	**Test limit (%):**	**3.30**	**Pass**
Highest dmax (%):	**0.00**	**Test limit (%):**	**4.00**	**Pass**
Highest Pst (10 min. period):	**0.064**	**Test limit:**	**1.000**	**Pass**
Highest Plt (2 hr. period):	**0.028**	**Test limit:**	**0.650**	**Pass**

Flicker Test Summary per EN/IEC61000-3-3 (Run time)

EUT: ITE Power Supply (TM3) **Tested by: Draven**
Test category: All parameters (European limits) **Test Margin: 100**
Test date: 2018-1-29 **Start time: 05:18:36 PM** **End time: 05:28:57 PM**
Test duration (min): 10 **Data file name: F-000153.cts_data**
Comment: Working
Customer: GlobTek,Inc.

Test Result: Pass **Status: Test Completed**

Pst_i and limit line **European Limits**



Plt and limit line

Parameter values recorded during the test:

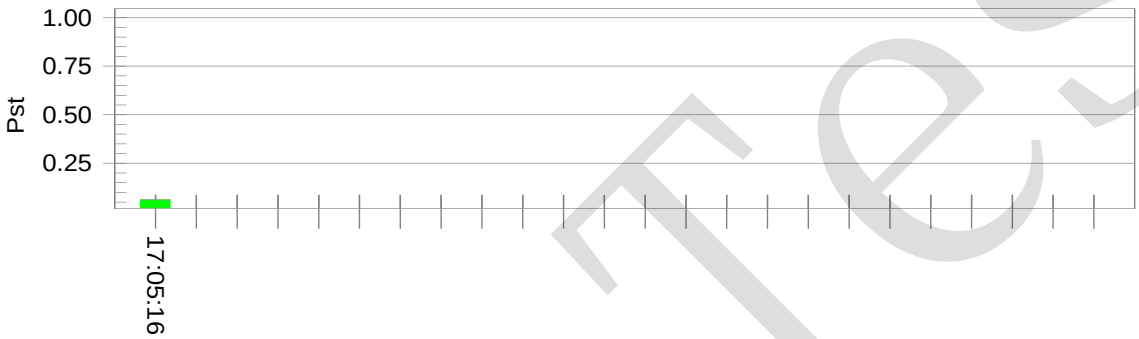
Vrms at the end of test (Volt):	**229.78**			
Highest dt (%):	**0.00**	**Test limit (%):**	**3.30**	**Pass**
Time(mS) >dt:	**0.0**	**Test limit (mS):**	**500.0**	**Pass**
Highest dc (%):	**0.00**	**Test limit (%):**	**3.30**	**Pass**
Highest dmax (%):	**0.00**	**Test limit (%):**	**4.00**	**Pass**
Highest Pst (10 min. period):	**0.064**	**Test limit:**	**1.000**	**Pass**
Highest Plt (2 hr. period):	**0.028**	**Test limit:**	**0.650**	**Pass**

Flicker Test Summary per EN/IEC61000-3-3 (Run time)

EUT: ITE Power Supply (TM4) **Tested by: Draven**
Test category: All parameters (European limits) **Test Margin: 100**
Test date: 2018-1-29 **Start time: 04:54:56 PM** **End time: 05:05:17 PM**
Test duration (min): 10 **Data file name: F-000151.cts_data**
Comment: Working
Customer: GlobTek, Inc.

Test Result: Pass **Status: Test Completed**

Pst_i and limit line **European Limits**



Plt and limit line

Parameter values recorded during the test:

Vrms at the end of test (Volt):	**229.57**			
Highest dt (%):	**0.00**	**Test limit (%):**	**3.30**	**Pass**
Time(mS) >dt:	**0.0**	**Test limit (mS):**	**500.0**	**Pass**
Highest dc (%):	**0.00**	**Test limit (%):**	**3.30**	**Pass**
Highest dmax (%):	**0.00**	**Test limit (%):**	**4.00**	**Pass**
Highest Pst (10 min. period):	**0.064**	**Test limit:**	**1.000**	**Pass**
Highest Plt (2 hr. period):	**0.028**	**Test limit:**	**0.650**	**Pass**

7. Electrostatic Discharges (ESD)

7.1 Test Procedure

Test is conducting under the description of IEC61000-4-2.

Test Performance

Performance Criterion: B

Environmental Conditions

Temperature:	26°C
Relative Humidity:	55%
ATM Pressure:	1011 mbar

7.2 Electrostatic Discharge Immunity Test Data

EN 55024

Table 1: Electrostatic Discharge Immunity (Air Discharge)

EN 61000-4-2	Test Levels (kV)									
Test Points	-2	+2	-4	+4	-6	+6	-8	+8	-15	+15
Surface	A	A	A	A	A	A	A	A	/	/
USB port	A	A	A	A	A	A	A	A	/	/

Table 2: Electrostatic Discharge Immunity (Direct Contact)

EN 61000-4-2	Test Levels (kV)									
Test Points	-2	+2	-4	+4	-6	+6	-8	+8	-15	+15
HCP	A	A	A	A	A	A	A	A	/	/
VCP	A	A	A	A	A	A	A	A	/	/

Table 3: Electrostatic Discharge Immunity (Indirect Contact HCP)

EN 61000-4-2	Test Levels (kV)									
Test Points	-2	+2	-4	+4	-6	+6	-8	+8	-15	+15
Front Side	A	A	A	A	A	A	A	A	/	/
Top Side	A	A	A	A	A	A	A	A	/	/
Back Side	A	A	A	A	A	A	A	A	/	/
Left Side	A	A	A	A	A	A	A	A	/	/
Right Side	A	A	A	A	A	A	A	A	/	/

Table 4: Electrostatic Discharge Immunity (Indirect Contact VCP)

EN 61000-4-2	Test Levels (kV)									
Test Points	-2	+2	-4	+4	-6	+6	-8	+8	-15	+15
Front Side	A	A	A	A	A	A	A	A	/	/
Top Side	A	A	A	A	A	A	A	A	/	/
Back Side	A	A	A	A	A	A	A	A	/	/
Left Side	A	A	A	A	A	A	A	A	/	/
Right Side	A	A	A	A	A	A	A	A	/	/

EN 60601

Table 1: Electrostatic Discharge Immunity (Air Discharge)

EN 61000-4-2	Test Levels (Kv)									
Test Points	-2	+2	-4	+4	-6	+6	-8	+8	-15	+15
Surface	A	A	A	A	A	A	A	A	A	A
USB port	A	A	A	A	A	A	A	A	A	A

Table 2: Electrostatic Discharge Immunity (Direct Contact)

EN 61000-4-2	Test Levels (Kv)									
Test Points	-2	+2	-4	+4	-6	+6	-8	+8	-15	+15
HCP	A	A	A	A	A	A	A	A	/	/
VCP	A	A	A	A	A	A	A	A	/	/

Table 3: Electrostatic Discharge Immunity (Indirect Contact HCP)

EN 61000-4-2	Test Levels (Kv)									
Test Points	-2	+2	-4	+4	-6	+6	-8	+8	-15	+15
Front Side	A	A	A	A	A	A	A	A	/	/
Top Side	A	A	A	A	A	A	A	A	/	/
Back Side	A	A	A	A	A	A	A	A	/	/
Left Side	A	A	A	A	A	A	A	A	/	/
Right Side	A	A	A	A	A	A	A	A	/	/

Table 4: Electrostatic Discharge Immunity (Indirect Contact VCP)

EN 61000-4-2	Test Levels (Kv)									
Test Points	-2	+2	-4	+4	-6	+6	-8	+8	-15	+15
Front Side	A	A	A	A	A	A	A	A	/	/
Top Side	A	A	A	A	A	A	A	A	/	/
Back Side	A	A	A	A	A	A	A	A	/	/
Left Side	A	A	A	A	A	A	A	A	/	/
Right Side	A	A	A	A	A	A	A	A	/	/

Test Result: Pass

8. Continuous RadiatedDisturbances (R/S)

8.1 Test Procedure

Test is conducting under the description of IEC61000-4-3.

Test Performance

Performance Criterion: A

Environmental Conditions

Temperature:	25°C
Relative Humidity:	52%
ATM Pressure:	1010 mbar

8.2 Continuous Radiated Disturbances Test Data

Frequency step: 1% of fundamental
Dwell time: 1 second
Modulation: AM by 1kHz sine wave with 80% modulation depth

EN 55024

Frequency Range(MHz)	Field (V/m)	Front		Rear		Left Side		Right Side	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000	3	A	A	A	A	A	A	A	A

EN 60601

Frequency Range(MHz)	Field (V/m)	Front		Rear		Left Side		Right Side	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000	3	A	A	A	A	A	A	A	A
1000-2700	3	A	A	A	A	A	A	A	A

Test Result: Pass

9. Electrical Fast Transients (EFT)

9.1 Test Procedure

Test is conducting under the description of IEC61000-4-4.

Test Performance

Performance Criterion: B

Environmental Conditions

Temperature:	22°C
Relative Humidity:	53%
ATM Pressure:	1011 mbar

9.2 Electrical Fast Transients Test Data

EN 55024

EN 61000-4-4 Test Points		Test Levels (kV)							
		+0.5	-0.5	+1.0	-1.0	+2.0	-2.0	+4.0	-4.0
Power Supply Power Port of EUT	L1	A	A	A	A	/	/	/	/
	L2	A	A	A	A	/	/	/	/
	PE	/	/	/	/	/	/	/	/
	L1+L2	A	A	A	A	/	/	/	/
	L1 + PE	/	/	/	/	/	/	/	/
	L2 + PE	/	/	/	/	/	/	/	/
	L1+L2+PE	/	/	/	/	/	/	/	/
Signal ports	/	/	/	/	/	/	/	/	/

EN 60601

EN 61000-4-4 Test Points		Test Levels (kV)							
		+0.5	**-0.5**	**+1.0**	**-1.0**	**+2.0**	**-2.0**	**+4.0**	**-4.0**
Power Supply Power Port of EUT	L1	A	A	A	A	A	A	/	/
	L2	A	A	A	A	A	A	/	/
	PE	/	/	/	/	/	/	/	/
	L1+L2	A	A	A	A	A	A	/	/
	L1 + PE	/	/	/	/	/	/	/	/
	L2 + PE	/	/	/	/	/	/	/	/
	L1+L2+PE	/	/	/	/	/	/	/	/
Signal ports	/	/	/	/	/	/	/	/	/

Test Result: Pass

10. Surges

10.1 Test Procedure

Test is conducting under the description of IEC 61000-4-5.

Test Performance

Performance Criterion: B

Environmental Conditions

Temperature:	25°C
Relative Humidity:	53%
ATM Pressure:	1011 mbar

10.2 Surge Test Data

EN 55024

Level	Voltage	Poll	Path	Pass	Fail
1	0.5kV	±	L-N	A	/
2	1kV	±	L-N	A	/
3	2kV	±	/	/	/
4	4kV	±	/	/	/

EN 60601

Level	Voltage	Poll	Path	Pass	Fail
1	0.5kV	±	L-N	A	/
2	1kV	±	L-N	A	/
3	2kV	±	/	/	/
4	4kV	±	/	/	/

Test Result: Pass

11. Continuous Conducted Disturbances (C/S)

11.1 Test Procedure

Test is conducting under the description of IEC 61000-4-6.

Test Performance

Performance Criterion: A

Environmental Conditions

Temperature:	25°C
Relative Humidity:	53%
ATM Pressure:	1011 mbar

11.2 Continuous Conducted Disturbances Test Data

Sweep frequency range: 150kHz~80MHz
Frequency step: 1% of fundamental
Dwell time: 1 second

EN 55024

Level	Voltage Level (e.m.f.) U_0	Modulation:	Pass	Fail
1	1	AM 80%, 1kHz sinewave	/	/
2	3	AM 80%, 1kHz sinewave	A	/
3	10	AM 80%, 1kHz sinewave	/	/
X	Special	/	/	/

EN60601

Level	Voltage Level (e.m.f.) U_0	Modulation:	Pass	Fail
1	1	AM 80%, 1kHz sinewave	/	/
2	3	AM 80%, 1kHz sinewave	A	/
3	10	AM 80%, 1kHz sinewave	/	/
X	Special	/	/	/

Test Result: Pass

12. Voltage Dips and Interruptions

12.1 Test Procedure

Test is conducting under the description of IEC 61000-4-11.

Test Performance

Performance Criterion: B/C

Environmental Conditions

Temperature:	25°C
Relative Humidity:	50%
ATM Pressure:	1011 mbar

12.2 Voltage Dips And Interruptions Test Data

U: Vlotage dips in % U_T (U_T is rated voltage for the EUT)
T: Test duration

EN 55024

Level	U	T	Phase Angle	N	Pass	Fail
1	100%	0.5P	0/90/180/270	3	A	/
2	30%	25P	0/90/180/270	3	A	/
3	100%	250P	0/90/180/270	3	A	/

EN60601

Level	U	T	Phase Angle	N	Pass	Fail
1	100%	0.5P	0/90/180/270	3	A	/
2	60%	5P	0/90/180/270	3	A	/
3	30%	25P	0/90/180/270	3	A	/
4	100%	250P	0/90/180/270	3	B	/

Test Result: Pass

EXHIBIT 1 - PRODUCT LABELING

Proposed CE Label Format

ITE Power Supply
Model: GT*86100-**-W2*-USB
Brand: Glob Tek
Importer Name: XXX
Importer Address: XXX
GlobTek, Inc.
186 Veterans Dr. Northvale, NJ 07647 USA

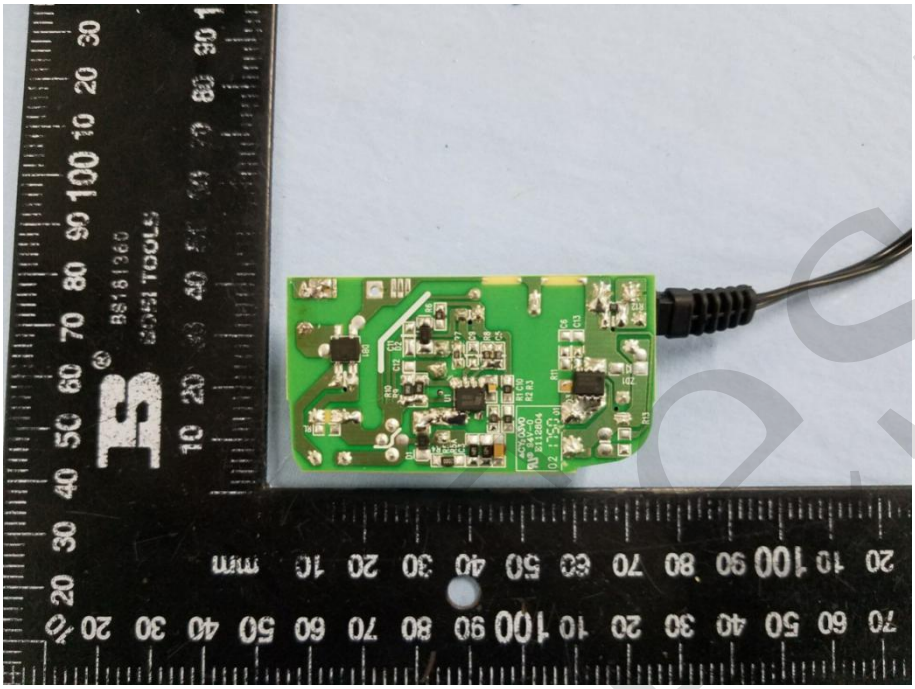
Specifications: Text is Black in color and is justified. Labels are printed in indelible ink on permanent adhesive backing or silk-screened onto the EUT or shall be affixed at a conspicuous location on the EUT. The 'CE' marking must be affixed to the EUT or to its data plate. Where this is not possible or not warranted on account of the nature of the apparatus, it must be affixed to the packaging, if any, and to the accompanying documents. The 'CE' marking is allowed less than 5 mm but must clear. If the 'CE' marking is reduced or enlarged the proportions given in the above graduated drawing must be respected. The Importer name, address and Manufacturer name and address should indicate on marking label or packaging or in a document accompanying

Proposed Label Location on EUT

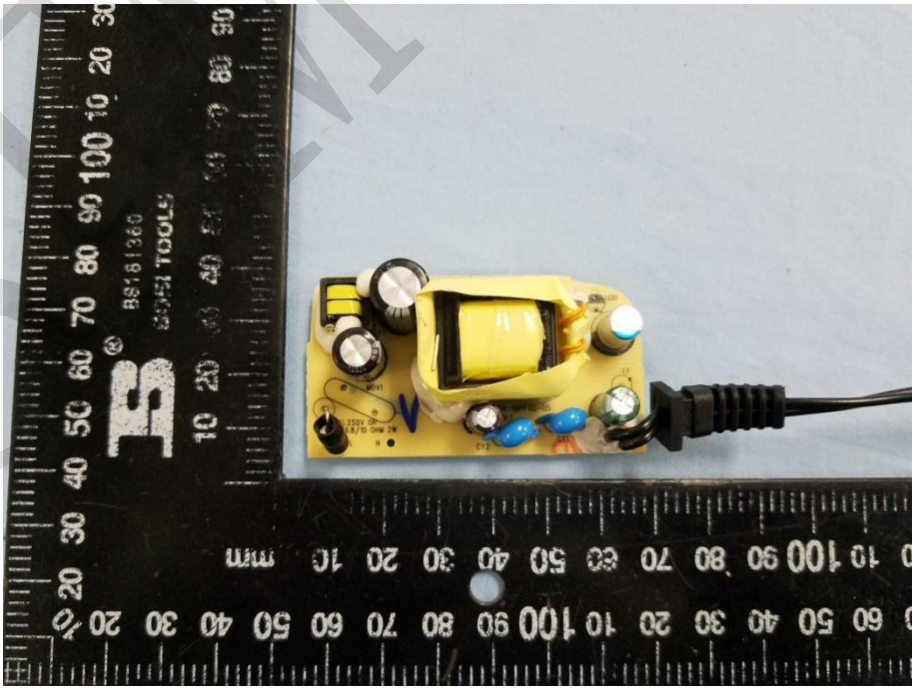
CE Label Location

EXHIBIT 2 - EUT PHOTOGRAPHS

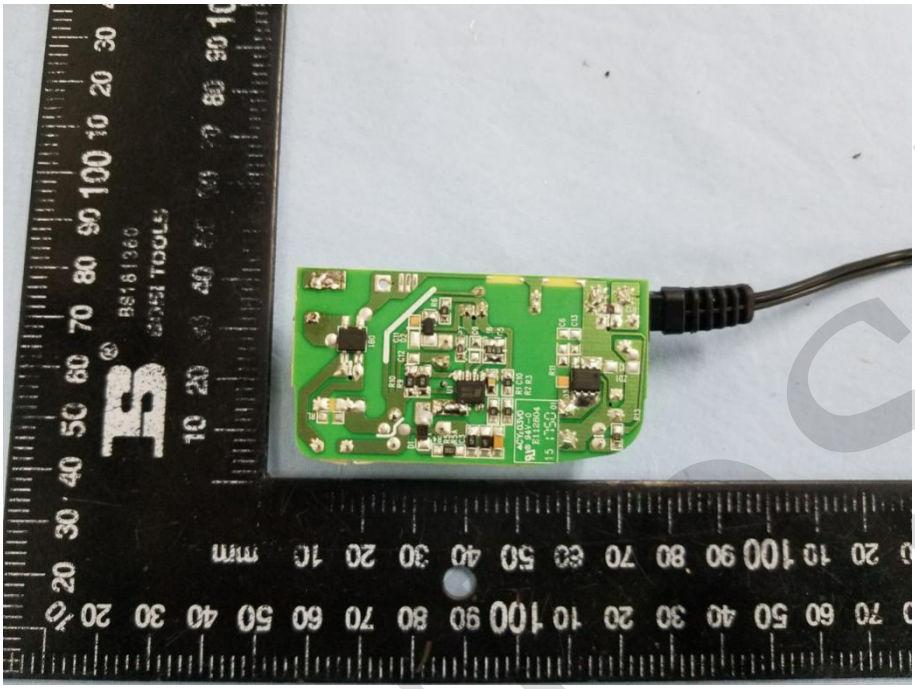
GTM86100-1005-W2C-5.2V
Solder Board-Component View 1



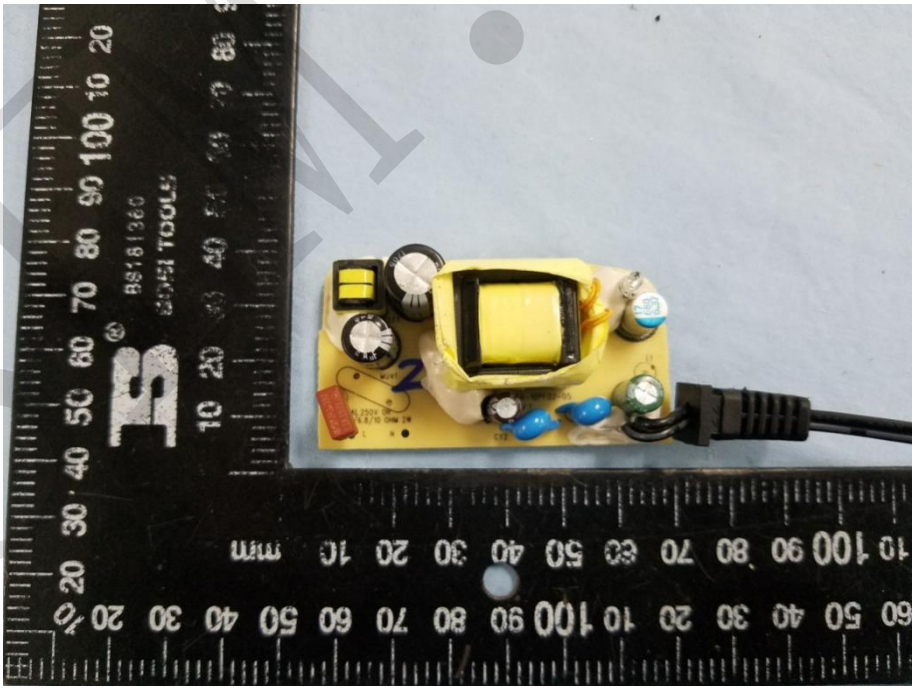
Solder Board-Component View 2



GTM86100-1005-W2C-5V
Solder Board-Component View 1



Solder Board-Component View 2

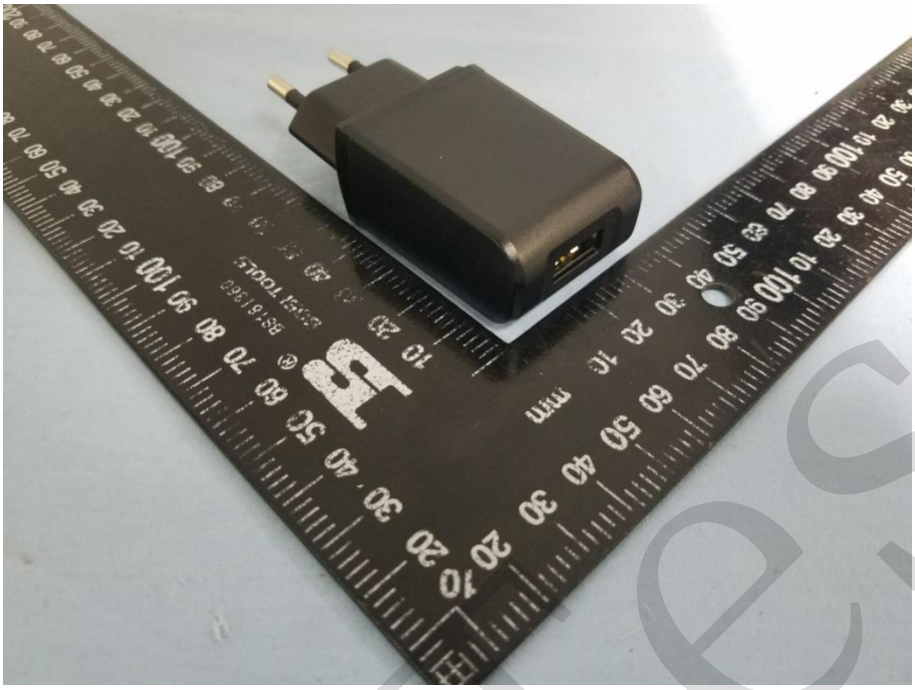


GTM86100-1005-W2E-USB-5.2V

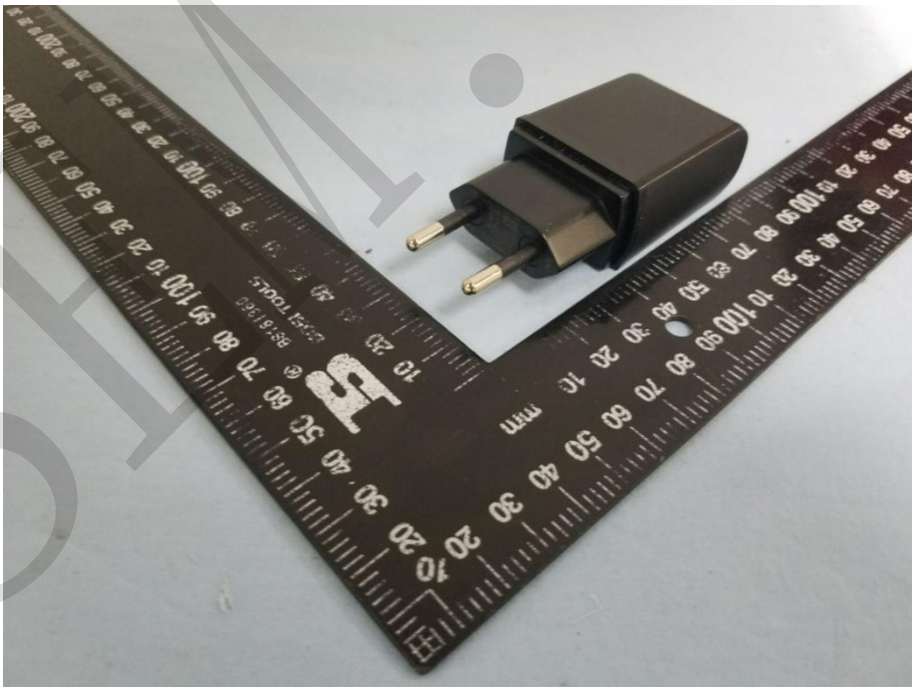
EUT View 1

EUT View 2

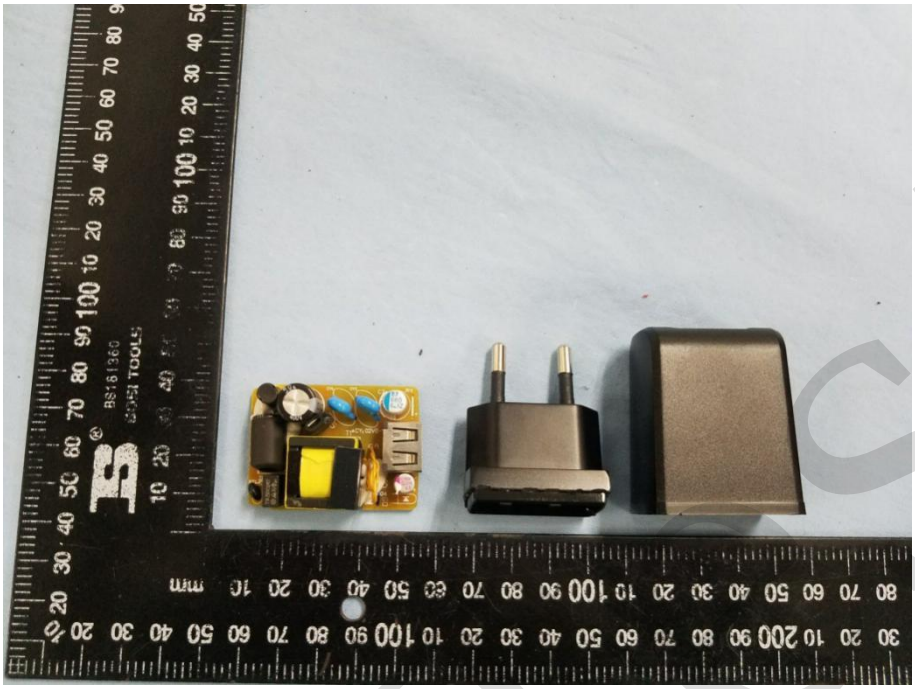
EUT View 3



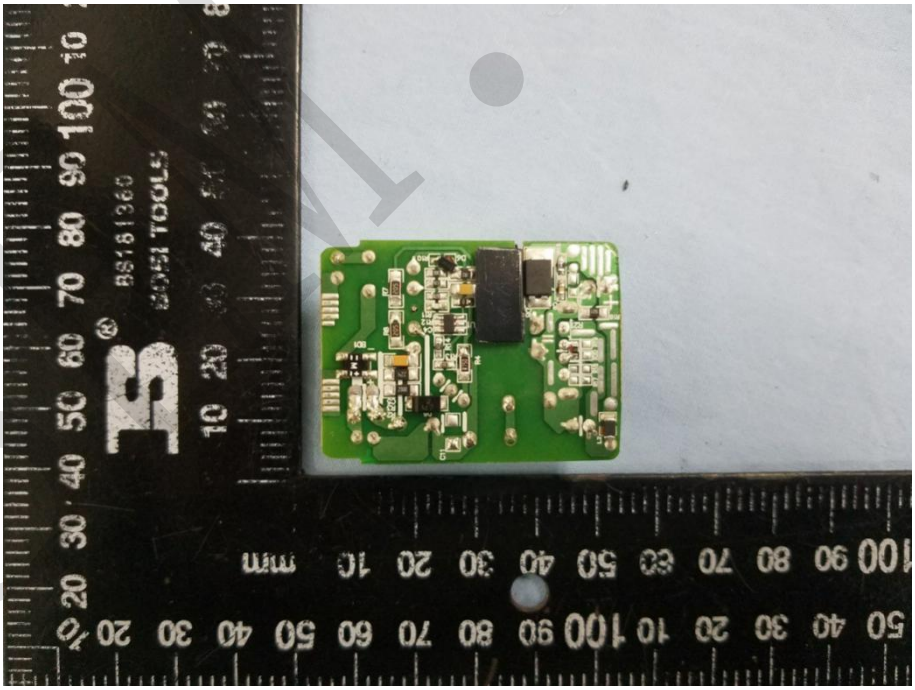
EUT View 4



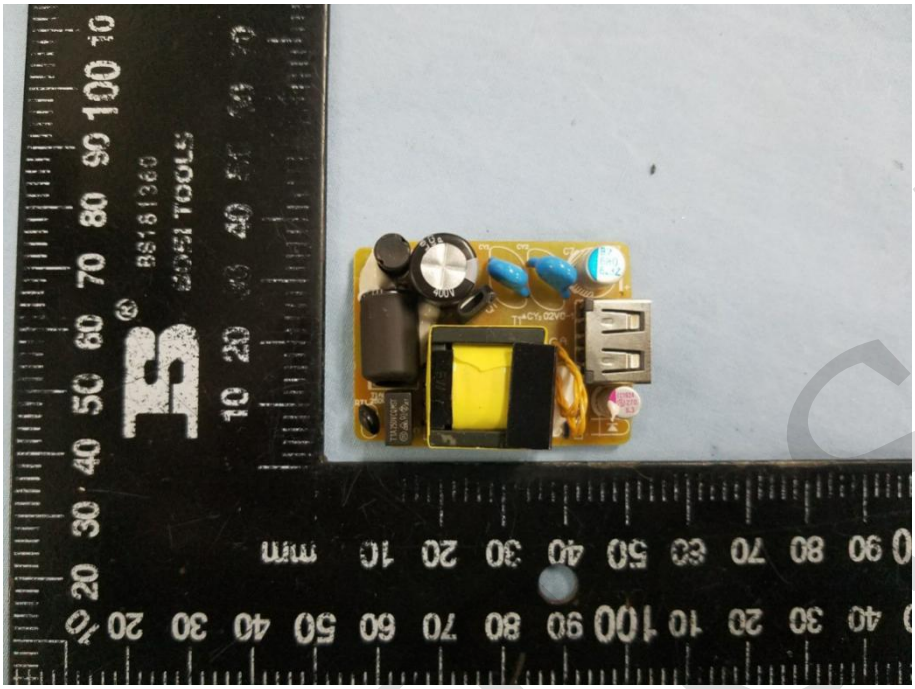
EUT Housing and Board View 1



Solder Board-Component View 1

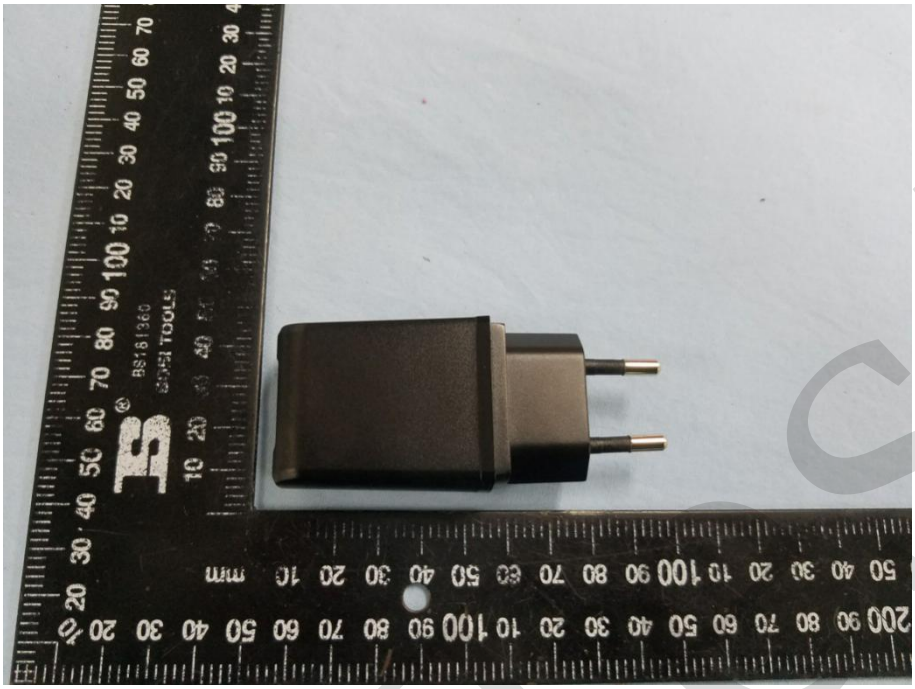


Solder Board-Component View 2

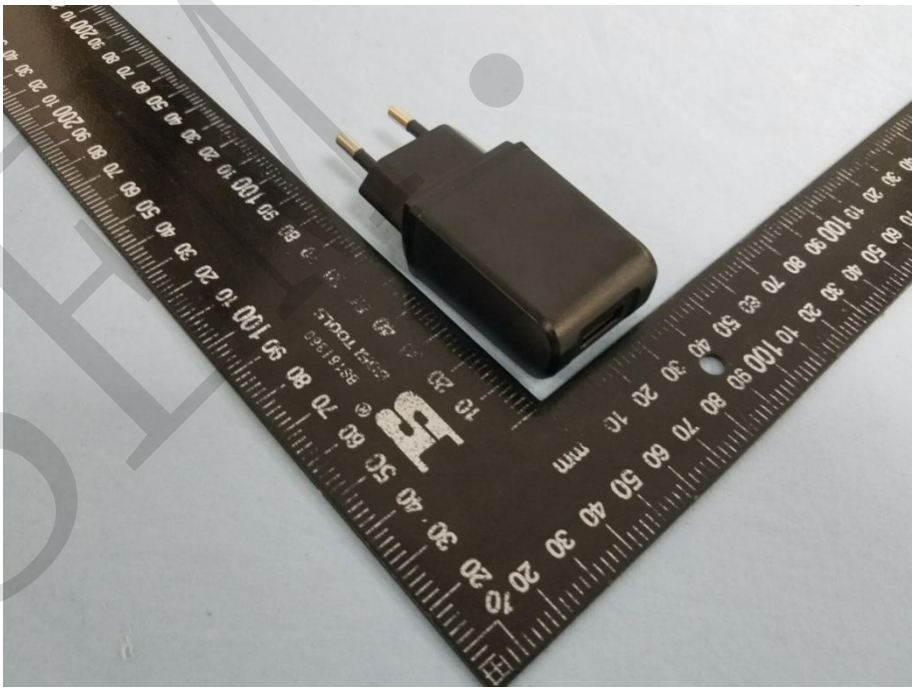


GTM86100-1005-W2E-USB-5V
EUT View 1

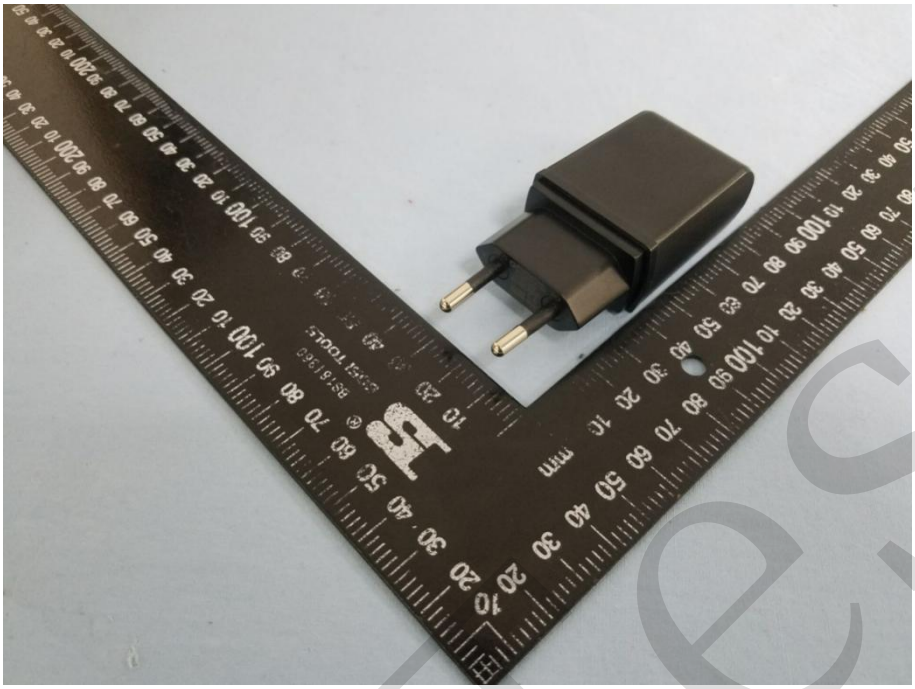
EUT View 2



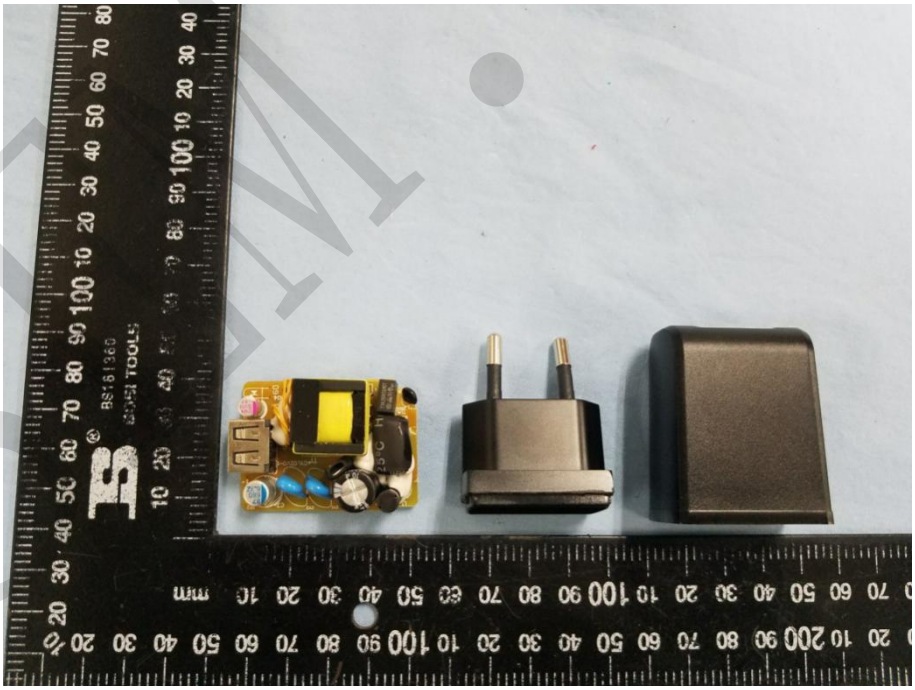
EUT View 3



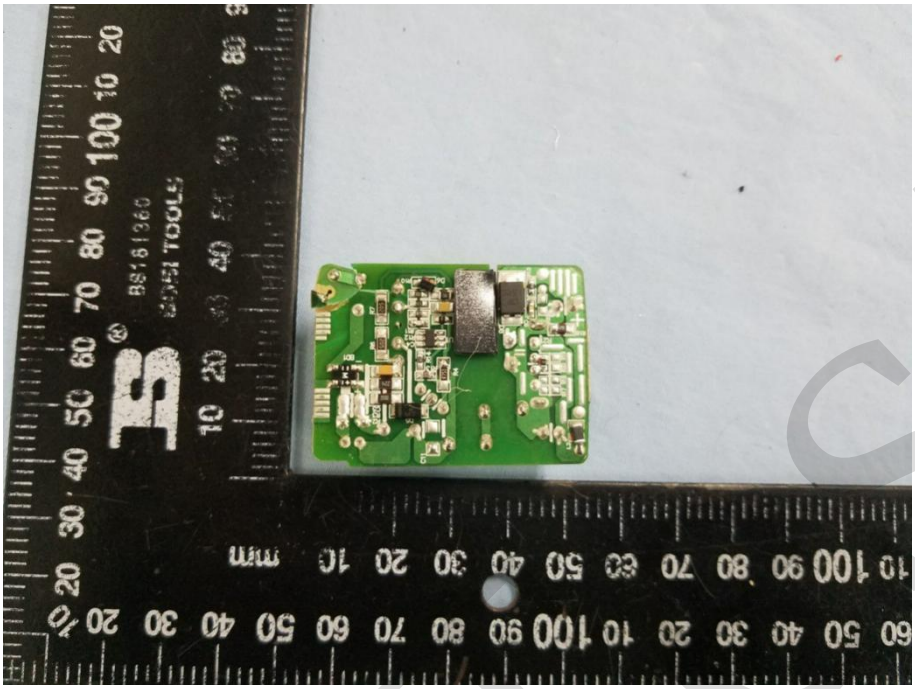
EUT View 4



EUT Housing and Board View 1



Solder Board-Component View 1



Solder Board-Component View 2

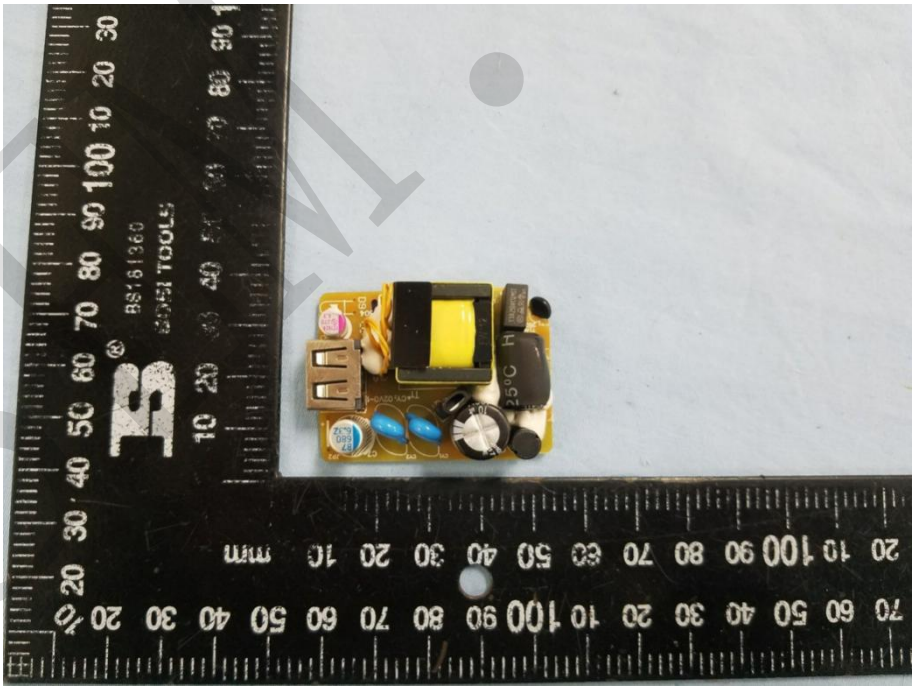
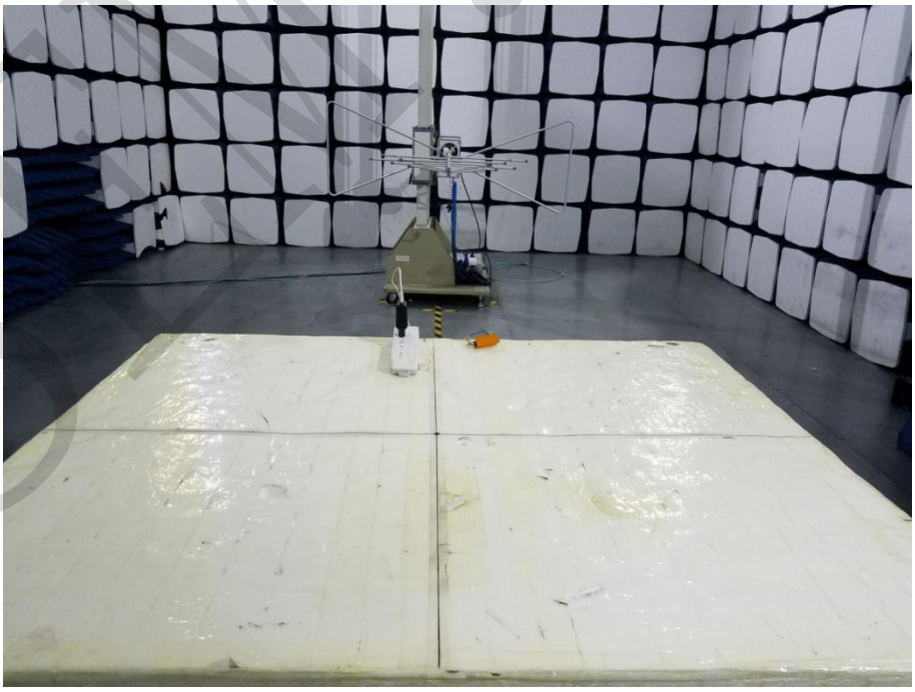


EXHIBIT 3 - TEST SETUP PHOTOGRAPHS

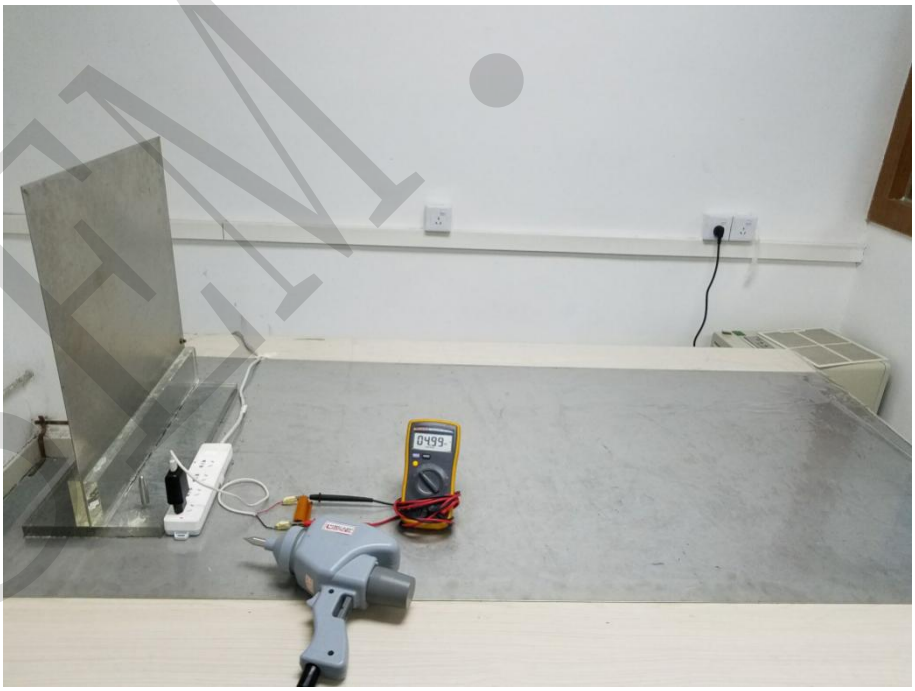
Conduction Emission Test View

Radiation Emission Test View

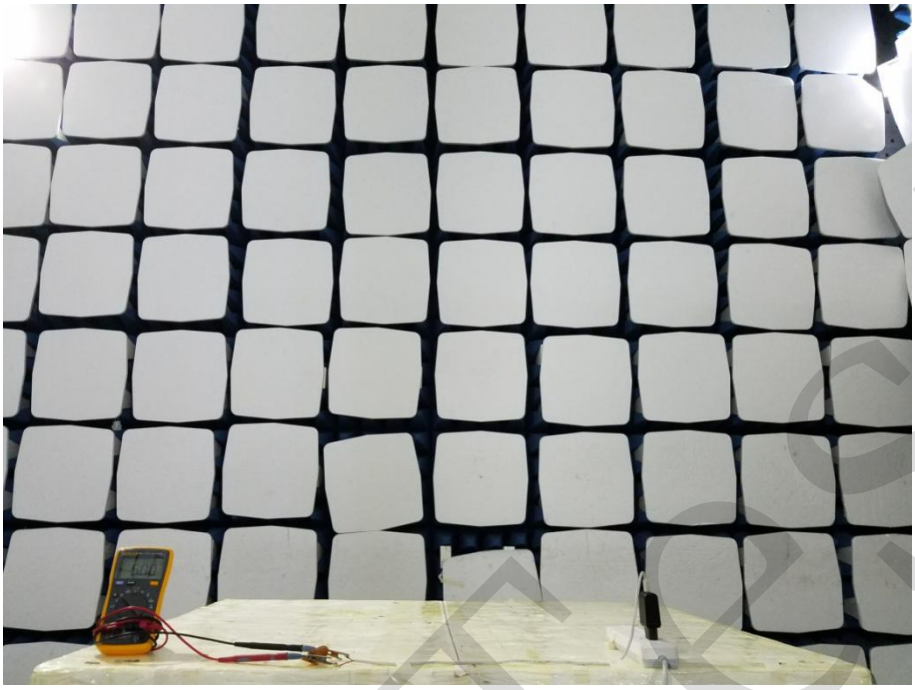


Flicker Test View

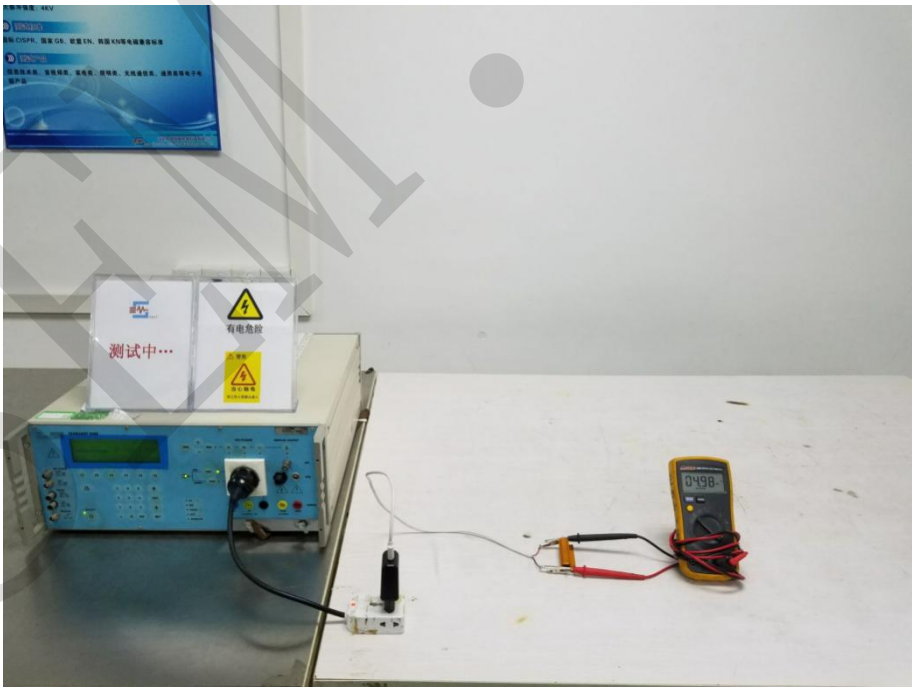
IEC61000-4-2 Test View



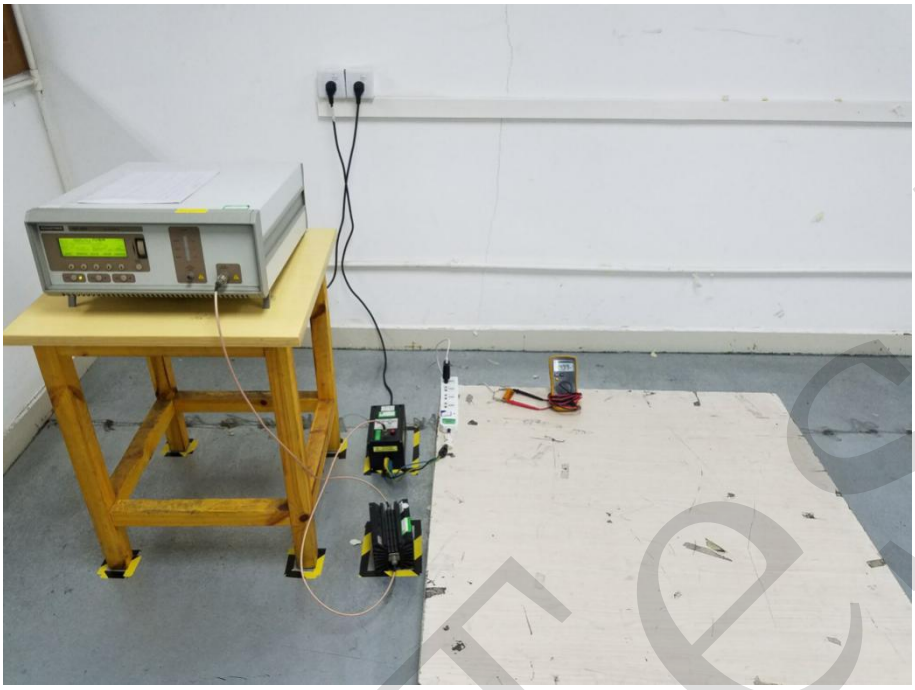
IEC61000-4-3 Test View



IEC61000-4-4/5/11 Test View



IEC61000-4-6 Test View



******* END OF REPORT *******