Unique Number: 003916

TEST REPORT

Product Name : **ICT/ITE POWER SUPPLY**

Model Number : **GTM96600-6016-R2, GTM96600-6015-R2, GTM96600-6019-R2, GTM96600-5409-R2**

Prepared for : GlobTek, Inc.
Address : 186 VETERANS DRIVE NORTHVALE NJ 07647 United States of America

Prepared by : EMTEK (SHENZHEN) CO., LTD.
Address : Building 69, Majialong Industry Zone, Nanshan District, Shenzhen, Guangdong, China

Tel: (0755) 26954280
Fax: (0755) 26954282

Report Number : ENS2304260212E00201R
Date(s) of Tests : April 26, 2023 to May 19, 2023
Date of issue : May 20, 2023

TABLE OF CONTENT

TEST REPORT DESCRIPTION

Applicant	:	GlobTek, Inc.
Manufacturer	:	GlobTek, Inc.
Trade Mark	:	G GlobTek, Inc.
EUT	:	ICT/ITE POWER SUPPLY
Model Number	:	GTM96600-6016-R2, GTM96600-6015-R2, GTM96600-6019-R2, GTM96600-5409-R2
Unique Number	:	003916

Measurement Procedure Used:

SANS 2332:2017/CISPR 32:2015
SANS 61000-3-2:2009/IEC 61000-3-2:2014, SANS 61000-3-3:2009/IEC 61000-3-3:2013
SANS 2335:2018/CISPR35:2016
(SANS 61000-4-2:2009/IEC 61000-4-2:2008,
SANS 61000-4-3:2008/IEC 61000-4-3:2006+A1:2007+A2:2010,
SANS 61000-4-4:2011/IEC 61000-4-4:2012, SANS 61000-4-5: 2006/IEC 61000-4-5:2014+A1:2017,
SANS 61000-4-6:2017/IEC 61000-4-6:2013, SANS 61000-4-8: 2009/IEC 61000-4-8:2009,
SANS 61000-4-11:2005/IEC 61000-4-11:2004+A1:2017)

The device described above is tested by EMTEK (SHENZHEN) CO., LTD. to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and EMTEK (SHENZHEN) CO., LTD. is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with the SANS 2332/CISPR 32, SANS 61000-3-2/IEC 61000-3-2, SANS 61000-3-3/IEC 61000-3-3 and SANS 2335/CISPR 35 requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of EMTEK (SHENZHEN) CO., LTD.

Date of Test	:	April 26, 2023 to May 19, 2023
Prepared by	:	Jessie Hu/Editor
Reviewer	:	Kaimin Guo/Supervisor
Approved & Authorized Signer	:	Lisa Wang/Manager

Modified Information

Version	Report No.	Revision Date	Summary
Ver.1.0	ENS2304260212E00101R	/	Original Report

1. DESCRIPTION OF STANDARDS AND RESULTS (EUT)

EMISSION			
Description of Test Item	Standard	Limits	Results
Conducted Emissions From the AC Mains Power Ports	**SANS 2332:2017/CISPR 32:2015**	Class B	Pass
Asymmetric mode conducted emissions at Wired network ports	**SANS 2332:2017/CISPR 32:2015**	Class B	N/A
Radiated emissions at frequencies up to 1 GHz	**SANS 2332:2017/CISPR 32:2015**	Class B	Pass
Radiated emissions at frequencies above 1 GHz	**SANS 2332:2017/CISPR 32:2015**	Class B	N/A
Harmonic Current Emissions	**SANS 61000-3-2:2009/IEC 61000-3-2:2014**	Class A	N/A
Voltage Fluctuation and Flicker	**SANS 61000-3-3:2009/IEC 61000-3-3:2013**	Section 5	Pass

IMMUNITY				
Description of Test Item		Basic Standard	Performance Criteria	Results
Electrostatic Discharge	Enclosure ports	**SANS 61000-4-2:2009/IEC 61000-4-2:2008**	B	Pass
Continuous RF electromagnetic field disturbances	Enclosure ports	**SANS 61000-4-3:2008/IEC 61000-4-3:2006+A1:2007+A2:2010**	A	Pass
Electrical fast transients/burst	AC mains power ports	**SANS 61000-4-4:2011/IEC 61000-4-4:2012**	B	Pass
	Analogue/digital data ports		N/A	N/A
	DC network power ports		N/A	N/A
Surges	AC mains power ports	**SANS 61000-4-5:2006/IEC 61000-4-5:2014+A1:2017**	B	Pass
	Analogue/digital data ports		N/A	N/A
	DC network power ports		N/A	N/A
Continuous induced RF disturbances	AC mains power ports	**SANS 61000-4-6:2017/IEC 61000-4-6:2013**	A	Pass
	Analogue/digital data ports		N/A	N/A
	DC network power ports		N/A	N/A
Power frequency magnetic field	Enclosure ports	**SANS 61000-4-8:2009/IEC 61000-4-8:2009**	A	Pass
Voltage dips and interruptions	AC mains power ports	**SANS 61000-4-11:2005/IEC 61000-4-11:2004+A1:2017**	B,C	Pass
Note: N/A is an abbreviation for Not Applicable.				

2. GENERAL INFORMATION

2.1. Description of Device (EUT)

EUT	:	ICT/ITE POWER SUPPLY
Model Number	:	GTM96600-6016-R2, GTM96600-6015-R2, GTM96600-6019-R2, GTM96600-5409-R2 (Note: These models are identical in circuitry and electrical, mechanical and physical construction; the only differences are the model number. for trading purpose. We prepare GTM96600-5409-R2 and GTM96600-6019-R2 for test.)
Rating	:	GTM96600-5409-R2 Input: 100-240V ~, 50-60Hz, 1.5A Output: 9.0V⎓6A, 54W GTM96600-6019-R2 Input: 100-240V ~, 50-60Hz, 1.5A Output: 19V⎓3.15A, 60W GTM96600-6016-R2 Input: 100-240V ~, 50-60Hz, 1.5A Output: 16.0V⎓3.75A, 60.0W GTM96600-6015-R2 Input: 100-240V ~, 50-60Hz, 1.5A Output: 15.0V⎓4.0A, 60.0W
Applicant	:	GlobTek, Inc.
Address	:	186 VETERANS DRIVE NORTHVALE NJ 07647 United States of America
Manufacturer	:	GlobTek, Inc.
Address	:	186 VETERANS DRIVE NORTHVALE NJ 07647 United States of America
Factroy	:	GlobTek (Suzhou) Co., Ltd.
Address	:	Building 4, No. 76 JinLing East Road, Suzhou Industrial Park, Suzhou, JiangSu, 215021, China
Date of Received	:	April 26, 2023
Date of Test	:	April 26, 2023 to May 19, 2023

2.2. Independent Operation Modes

A. ON
   1. Full Load

2.3. Test Manner

Details of EUT Test Modes:

Test Items	Test Voltage	Function Type	Worst case
Conducted disturbance at mains Terminals	AC 220V/50Hz	Mode A	Mode A.1
Radiated emissions at frequencies up to 1 GHz	AC 220V/50Hz	Mode A	Mode A.1
Harmonic Current Emissions	AC 220V/50Hz	Mode A	\
Voltage Fluctuation and Flicker	AC 220V/50Hz	Mode A	\
Electrostatic Discharge	AC 220V/50Hz	Mode A	\
Continuous RF electromagnetic field disturbances	AC 220V/50Hz	Mode A	\
Electrical fast transients/burst	AC 220V/50Hz	Mode A	\
Surges	AC 220V/50Hz	Mode A	\
Continuous induced RF disturbances	AC 220V/50Hz	Mode A	\
Power frequency magnetic field	AC 220V/50Hz	Mode A	\
Voltage dips and interruptions	AC 220V/50Hz	Mode A	\

2.4. Description of Support Device

N/A

2.5. Description of Test Facility

Site Description

EMC Lab. : **Accredited by CNAS**
The Certificate Registration Number is L2291.
The Laboratory has been assessed and proved to be in compliance with CNAS-CL01 (identical to ISO/IEC 17025:2017)

Accredited by FCC
Designation Number: CN1204
Test Firm Registration Number: 882943

Accredited by A2LA
The Certificate Number is 4321.01.

Accredited by Industry Canada
The Conformity Assessment Body Identifier is CN0008

Name of Firm : EMTEK (SHENZHEN) CO., LTD.
Site Location : Building 69, Majialong Industry Zone, Nanshan District, Shenzhen, Guangdong, China

2.6. Measurement Uncertainty

Test Item		Uncertainty
Conducted Emission Uncertainty	:	3.16dB(9k~150kHz Conduction 2#) 2.90dB(150k-30MHz Conduction 2#)
Radiated Emission Uncertainty (3m 3# Chamber)	:	4.40dB (30M~1GHz Polarize: H) 5.04dB (30M~1GHz Polarize: V)
Uncertainty for Flicker test	:	0.07%
Uncertainty for Harmonic test	:	1.8%
Uncertainty for C/S Test	:	1.45dB(Using CDN Test)
Uncertainty for R/S Test	:	2.10dB(80MHz-200MHz) 1.76dB(200MHz-1000MHz)
Uncertainty for ESD Test	:	6%
Uncertainty for test site temperature and humidity	:	0.6℃ 4%

3. MEASURING DEVICE AND TEST EQUIPMENT

3.1. For Conducted Emissions at the AC Mains Power Ports

Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
☑	EMI Test Receiver	Rohde & Schwarz	ESCI	101045	May 13, 2023	1 Year
☑	PULSE LIMITER	Rohde & Schwarz	ESH3-Z2	100107	May 13, 2023	1 Year
☑	AMN	Rohde & Schwarz	ESH3-Z5	100191	May 10, 2023	1 Year

3.2. For Radiated Emission Measurement (3m)

Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
☑	EMI Test Receiver	Rohde & Schwarz	ESU 26	100154	May 13, 2023	1 Year
☑	Pre-Amplifie	Lunar EM	LNA30M3G-25	J10100000070	May 13, 2023	1 Year
☑	Bilog Antenna	Schwarzbeck	VULB9163	659	Aug. 22, 2021	2 Year

3.3. For Harmonic Current / Flicker Measurement

Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
☑	45KVA AC Power source	Teseq	NSG 1007-45/45KVA	1305A02873	May 13, 2023	1 Year
☑	Signal conditioning Unit	Teseq	CCN 1000-3	1305A02873	May 13, 2023	1 Year
☑	Impedance network	Teseq	INA2197/37A	1305A02873	May 13, 2023	1 Year
☑	Impedance network	Teseq	INA 2196/75A	1305A02874	May 13, 2023	1 Year
☐	Profline 2100 AC Switching Unit	Teseq	NSG 2200-3	A22714	May 13, 2023	1 Year

3.4. For Electrostatic Discharge Immunity Test

Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
☑	ESD Tester	EMTEST	Dito	CR46527B	Nov. 01, 2022	1 Year

3.5. For Continuous RF Electromagnetic Field Disturbances Immunity

Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
☑	Power Amplifier	MILMEGA	AS0102-55	1018770	May 13, 2023	1 Year
☑	RF Power Meter. Dual Channel	BOONTON	4232A	10539	May 13, 2023	1 Year
☑	Log.-Per. Antenna	SCHWARZBECK	STLP 9129-7/16	3050	N/A	N/A
☑	Signal Generator	Agilent	N5181A	MY50145187	May 13, 2023	1 Year
☑	50ohm Diode Power Sensor	BOONTON	51011EMC	36164	May 13, 2023	1 Year
☑	Field Strength Meter	DARE	RSS1006A	10I00037SNO22	May 23, 2022	1 Year
☑	Multi-function interface system	DARE	CTR1009B	12I00250SNO72	N/A	N/A
☑	Automatic switch group	DARE	RSW1004A	N/A	N/A	N/A
☑	Power Amplifier	MILMEGA	AS1860-50	1059346	May 13, 2023	1 Year
☑	Power Amplifier	Vectawave	VBA 1000-600C	133627	Oct. 31, 2022	1 Year

3.6. For Electrical Fast Transient / Burst Immunity Test

Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
☑	Burst Tester	HAEFELY	PEFT4010	080981-16	May 15, 2023	1 Year
☐	Coupling Clamp	HAEFELY	IP-4A	147147	May 11, 2023	1 Year

3.7. For Surge Immunity Test

Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
☑	Controller	HAEFELY	Psurge 8000	174031	May 10, 2023	1 Year
☑	Impulse Module	HAEFELY	PIM 100	174124	May 10, 2023	1 Year
☑	Coupling Decoupling	HAEFELY	PCD 130	172181	May 10, 2023	1 Year
☐	Coupling Module	HAEFELY	PCD122	174354	May 10, 2023	1 Year
☐	Impulse Module	HAEFELY	PIM 120	174435	May 10, 2023	1 Year
☐	Coupling Module	HAEFELY	PCD 126A	174387	May 10, 2023	1 Year
☐	Impulse Module	HAEFELY	PIM 110	174391	May 10, 2023	1 Year
☐	Impulse Module	HAEFELY	PIM 150	178707	May 15, 2023	1 Year
☐	Impulse Module	PMI	PCDN8	190422	May 10, 2023	1 Year

3.8. For Continuous Induced RF Disturbances Immunity Test

Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
☑	Continuous Wave Simulator	EMTEST	CWS500C	0900-12	May 11, 2023	1 Year
☐	CDN	EMTEST	CDN-M2	510010010010	May 10, 2023	1 Year
☑	CDN	EMTEST	CDN-M3	0900-11	May 10, 2023	1 Year
☐	EM Injection Clamp	EMTEST	F-2031-23MM	368	May 10, 2023	1 Year
☑	Attenuator	EMTEST	100W 6dB DC-3G	/	May 11, 2023	1 Year
☐	Signal Generator	R&S	SMB100A	103041	May 11, 2023	1 Year
☑	CDN	LUTHI	CDN L-801 M2/M3	2606	May 10, 2023	1 Year

3.9. For Power Frequency Magnetic Field Immunity Test

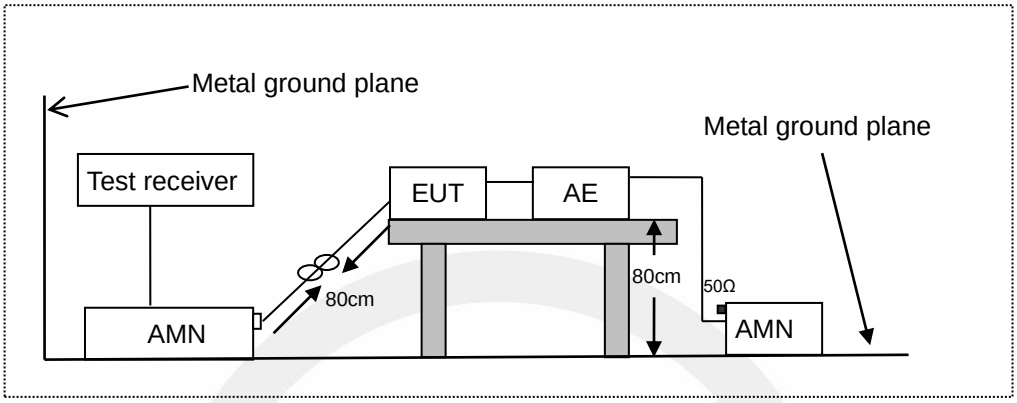
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
☑	Magnetic Field Tester	HAEFELY	MAG100	250040.1	May 10, 2023	1 Year

3.10.For Voltage Dips and Interruptions Immunity Test

Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
☑	45KVA AC Power source	Teseq	NSG 1007-45/45KVA	1305A02873	May 13, 2023	1 Year
☐	Signal conditioning Unit	Teseq	CCN 1000-3	1305A02873	May 13, 2023	1 Year
☐	Impedance network	Teseq	INA2197/37A	1305A02873	May 13, 2023	1 Year
☐	Impedance network	Teseq	INA 2196/75A	1305A02874	May 13, 2023	1 Year
☑	Profline 2100 AC Switching Unit	Teseq	NSG 2200-3	A22714	May 13, 2023	1 Year

4. CONDUCTED EMISSIONS FROM THE AC MAINS POWER PORTS

4.1. Block Diagram of Test Setup



AMN: Artificial Mains Network
AE: Associated equipment
EUT: Equipment under test

4.2. Limits

SANS 2332/CISPR 32

Frequency range MHz	Coupling device	Detector type / bandwidth	Class B limits dB(μV)
0.15 to 0.5	AMN	Quasi Peak / 9 kHz	66 to 56
0.5 to 5			56
5 to 30			60
0.15 to 0.5	AMN	Average / 9 kHz	56 to 46
0.5 to 5			46
5 to 30			50

4.3. Test Procedure

The EUT was placed on a desk 0.8 m height from the metal ground plane and 0.4 m from the conducting wall of the shielding room and it was kept at least 0.8 m from any other grounded conducting surface. The size of the table will nominally be 1.5 m x1.0 m.

The rear of the arrangement shall be flush with the back of the supporting tabletop unless that would not be possible or typical of normal use.

All units of equipment forming the system under test (includes the EUT as well as connected peripherals and associated equipment or devices) shall be arranged such that a nominal 0.1 m separation is achieved between the neighboring units.

Connect EUT to the power mains through a artificial mains network (AMN). Where the mains cable supplied by the manufacturer is longer than 1 m, the excess should be folded at the centre into a bundle

no longer than 0.4 m, so that its length is shortened to 1 m.

All the support units are connecting to the other AMN.

The AMN provides 50 ohm coupling impedance for the measuring instrument.

The CISPR states that the AMN with 50 ohm and 50 microhenry should be used.

Both sides of AC line were checked for maximum conducted interference.

The frequency range from 150 kHz to 30 MHz was sweep.

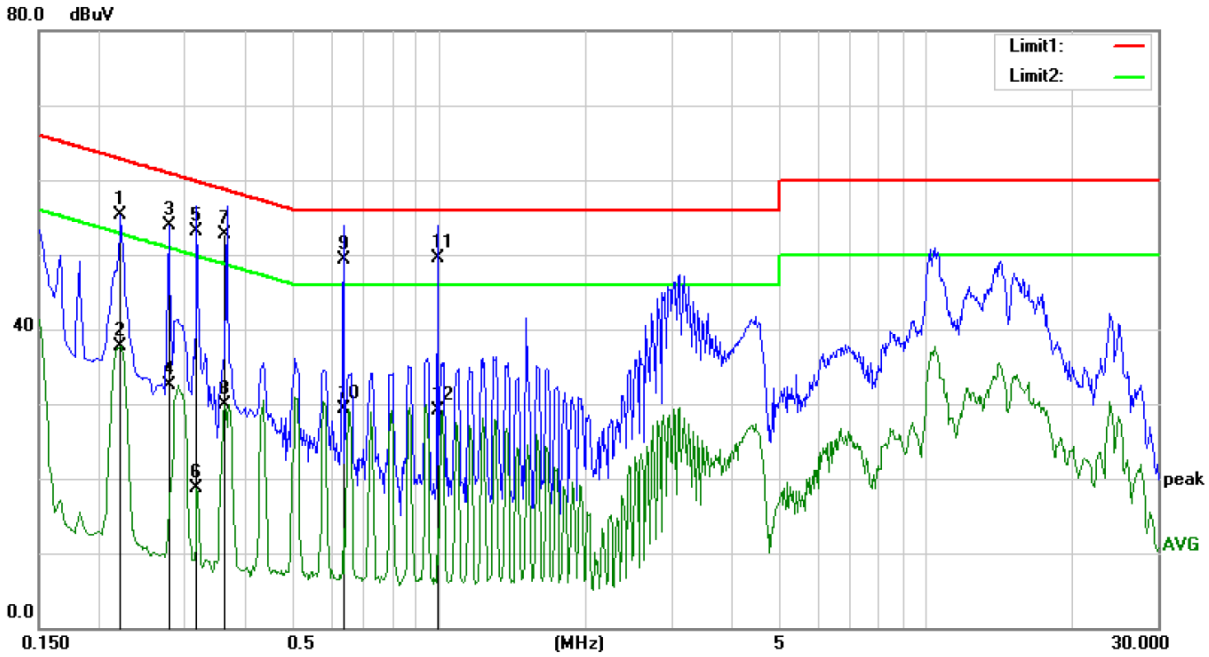
Set the test-receiver system to quasi peak detect function and average detect function, and to measure the conducted emissions values.

Test results were obtained from the following equation:
Emission Level (dBμV) = AMN Factor (dB) + Cable Loss (dB) + Reading (dBμV)
Margin (dB) = Emission Level (dBμV) - Limit (dBμV)

4.4. Measuring Results

PASS.

All the modes were tested and the data of the worst modes are attached the following pages.



Site Conduction #2 Phase: *L1* Temperature: 25.1

Limit: (CE)CISPR 32 CLASSB Power: AC 220V/50Hz Humidity: 45 %

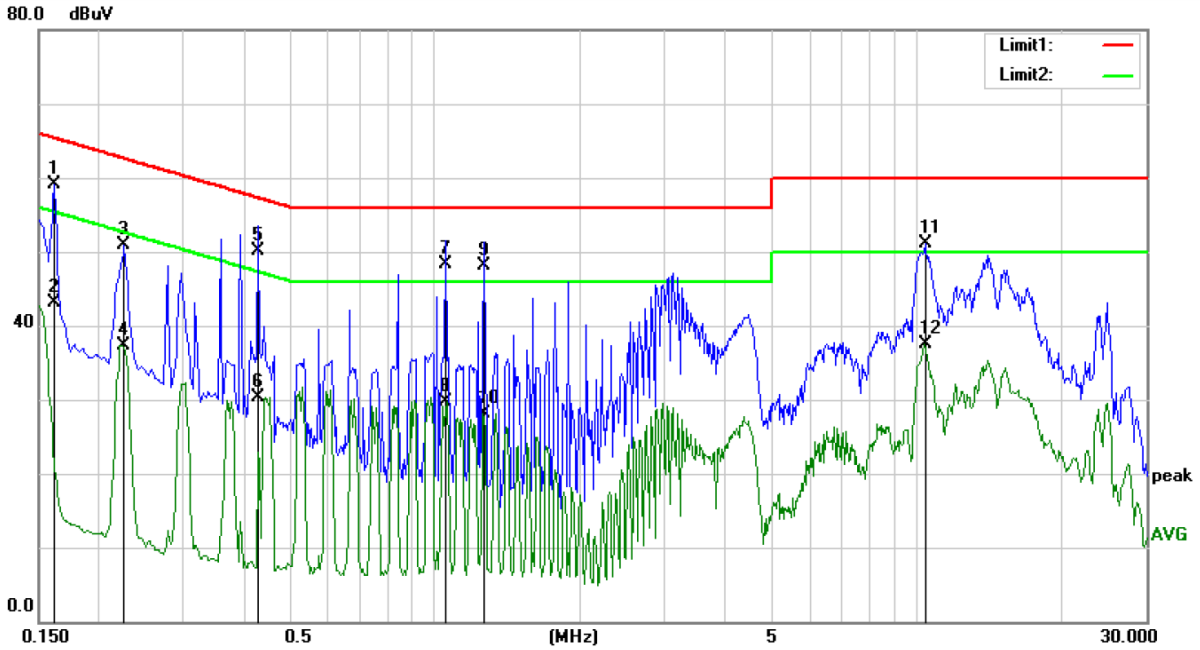
M/N: GTM96600-5409-R2

Mode: full load

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2220	45.25	10.10	55.35	62.74	-7.39	QP	
2		0.2220	27.68	10.10	37.78	52.74	-14.96	AVG	
3		0.2780	43.88	10.09	53.97	60.88	-6.91	QP	
4		0.2780	22.43	10.09	32.52	50.88	-18.36	AVG	
5		0.3180	43.01	10.09	53.10	59.76	-6.66	QP	
6		0.3180	8.68	10.09	18.77	49.76	-30.99	AVG	
7	*	0.3620	42.70	10.10	52.80	58.68	-5.88	QP	
8		0.3620	19.81	10.10	29.91	48.68	-18.77	AVG	
9		0.6340	39.17	10.13	49.30	56.00	-6.70	QP	
10		0.6340	19.13	10.13	29.26	46.00	-16.74	AVG	
11		0.9940	39.42	10.18	49.60	56.00	-6.40	QP	
12		0.9940	18.89	10.18	29.07	46.00	-16.93	AVG	

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: CCH



Site Conduction #2 Phase: N Temperature: 25.1

Limit: (CE)CISPR 32 CLASSB Power: AC 220V/50Hz Humidity: 45 %

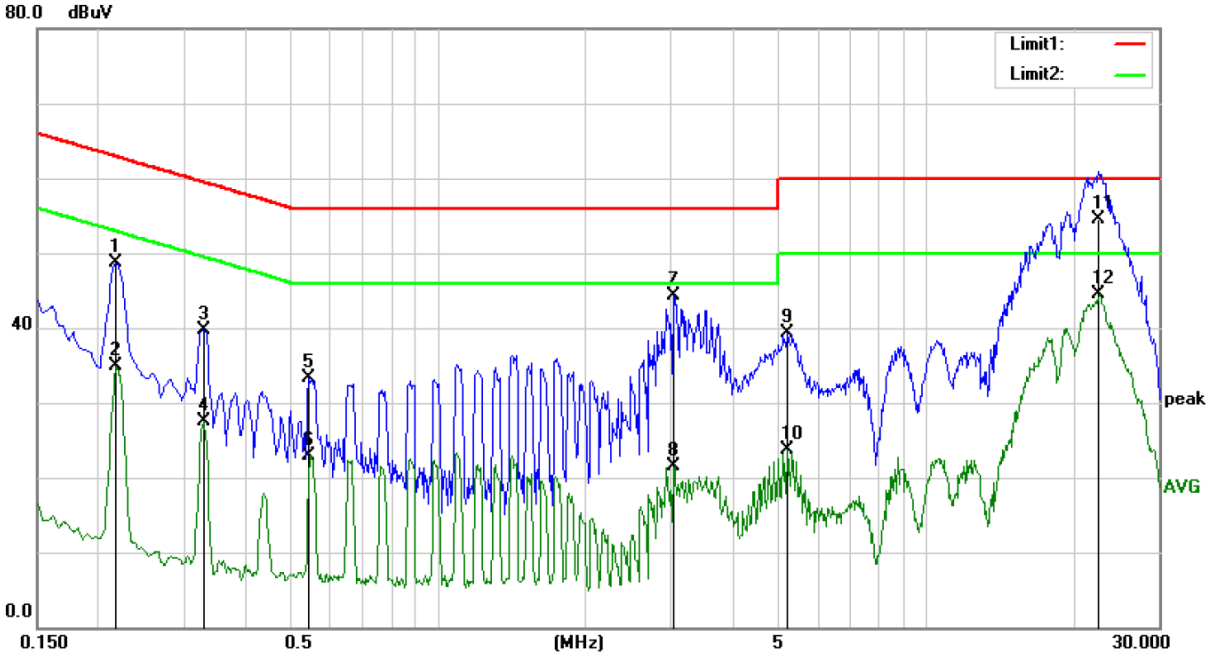
M/N: GTM96600-5409-R2

Mode: full load

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1620	48.94	10.09	59.03	65.36	-6.33	QP	
2		0.1620	33.09	10.09	43.18	55.36	-12.18	AVG	
3		0.2260	40.74	10.10	50.84	62.60	-11.76	QP	
4		0.2260	27.28	10.10	37.38	52.60	-15.22	AVG	
5		0.4300	40.00	10.10	50.10	57.25	-7.15	QP	
6		0.4300	20.26	10.10	30.36	47.25	-16.89	AVG	
7		1.0540	38.12	10.18	48.30	56.00	-7.70	QP	
8		1.0540	19.46	10.18	29.64	46.00	-16.36	AVG	
9		1.2660	38.04	10.16	48.20	56.00	-7.80	QP	
10		1.2660	17.93	10.16	28.09	46.00	-17.91	AVG	
11		10.4380	40.68	10.44	51.12	60.00	-8.88	QP	
12		10.4380	27.08	10.44	37.52	50.00	-12.48	AVG	

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: CCH



Site Conduction #2 Phase: *L1* Temperature: 25.1

Limit: (CE)CISPR 32 CLASSB Power: AC 220V/50Hz Humidity: 45 %

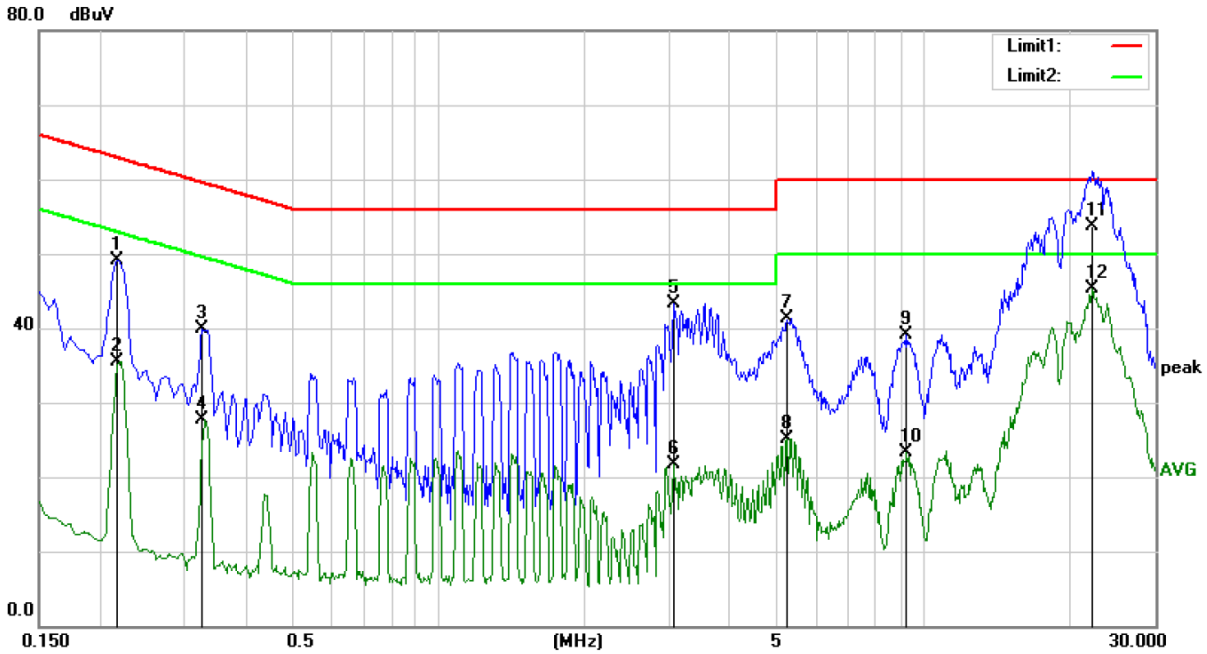
M/N: GTM96600-6019-R2

Mode: full load

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2180	38.52	10.10	48.62	62.89	-14.27	QP	
2		0.2180	24.81	10.10	34.91	52.89	-17.98	AVG	
3		0.3300	29.60	10.09	39.69	59.45	-19.76	QP	
4		0.3300	17.32	10.09	27.41	49.45	-22.04	AVG	
5		0.5420	23.10	10.11	33.21	56.00	-22.79	QP	
6		0.5420	12.84	10.11	22.95	46.00	-23.05	AVG	
7		3.0380	34.11	10.15	44.26	56.00	-11.74	QP	
8		3.0380	11.37	10.15	21.52	46.00	-24.48	AVG	
9		5.1900	28.97	10.25	39.22	60.00	-20.78	QP	
10		5.1900	13.39	10.25	23.64	50.00	-26.36	AVG	
11	*	22.5420	44.11	10.49	54.60	60.00	-5.40	QP	
12		22.5420	33.92	10.49	44.41	50.00	-5.59	AVG	

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: CCH



Site Conduction #2 Phase: N Temperature: 25.1

Limit: (CE)CISPR 32 CLASSB Power: AC 220V/50Hz Humidity: 45 %

M/N: GTM96600-6019-R2

Mode: full load

Note:

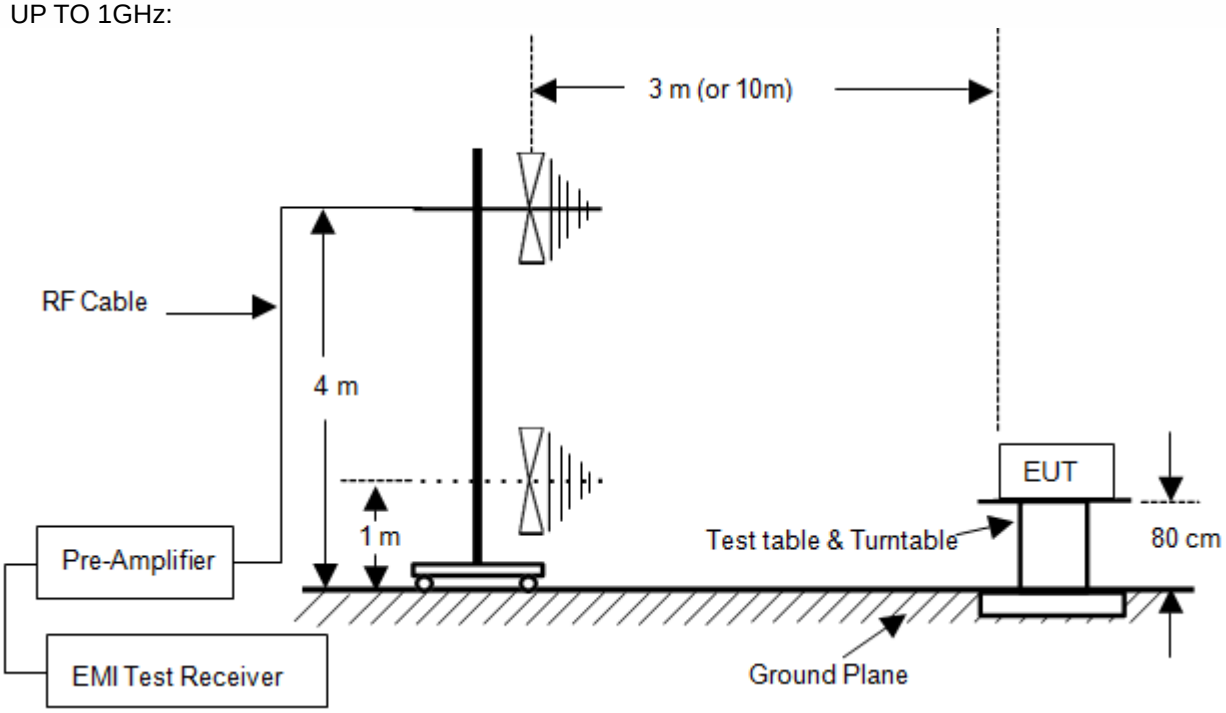
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2180	39.09	10.10	49.19	62.89	-13.70	QP	
2		0.2180	25.37	10.10	35.47	52.89	-17.42	AVG	
3		0.3260	29.74	10.09	39.83	59.55	-19.72	QP	
4		0.3260	17.71	10.09	27.80	49.55	-21.75	AVG	
5		3.0500	33.20	10.15	43.35	56.00	-12.65	QP	
6		3.0500	11.56	10.15	21.71	46.00	-24.29	AVG	
7		5.2300	31.07	10.25	41.32	60.00	-18.68	QP	
8		5.2300	14.84	10.25	25.09	50.00	-24.91	AVG	
9		9.2260	28.61	10.40	39.01	60.00	-20.99	QP	
10		9.2260	12.89	10.40	23.29	50.00	-26.71	AVG	
11		22.2100	43.23	10.47	53.70	60.00	-6.30	QP	
12	*	22.2100	34.81	10.47	45.28	50.00	-4.72	AVG	

*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: CCH

5. RADIATED EMISSION MEASUREMENT (UP TO 1GHz)

5.1. Block Diagram of Test Setup

UP TO 1GHz:



5.2. Measuring Standard

SANS 2332/CISPR 32

Frequency range MHz	Measurement			Class B limits dB(μV/m)
	Facility	Distance (m)	Detector type / bandwidth	
30 to 230	OATS/SAC	10	Quasi Peak / 120 kHz	30
230 to 1 000				37
30 to 230	OATS/SAC	3		40
230 to 1 000				47

5.3. Test Procedure

The EUT was placed on a non-conductive table whose total height equaled 80cm. All units of equipment forming the system under test (includes the EUT as well as connected peripherals and associated equipment or devices) shall be arranged such that a nominal 0.1 m separation is achieved between the neighboring units. Where the mains cable supplied by the manufacturer is longer than 1 m, the excess should be folded at the centre into a bundle no longer than 0.4 m, so that its length is shortened to 1 m.

The EUT was set 3 meters (or 10 meters) away from the receiving antenna that was mounted on a non-conductive mast. The antenna can move up and down between 1 to 4 meters to find out the maximum emission level.

The turntable can rotate 360 degree to determine the position of the maximum emission level.

The initial testing identified the frequency that has the highest disturbance relative to the limit while operating the EUT in typical modes of operation and cable positions in a test setup representative of typical system configuration.

The identification of the frequency of highest emission with respect to the limit was found by investigating emissions at a number of significant frequencies. The probable frequency of maximum emission had been found and that the associated cable and EUT configuration and mode of operation had been identified.

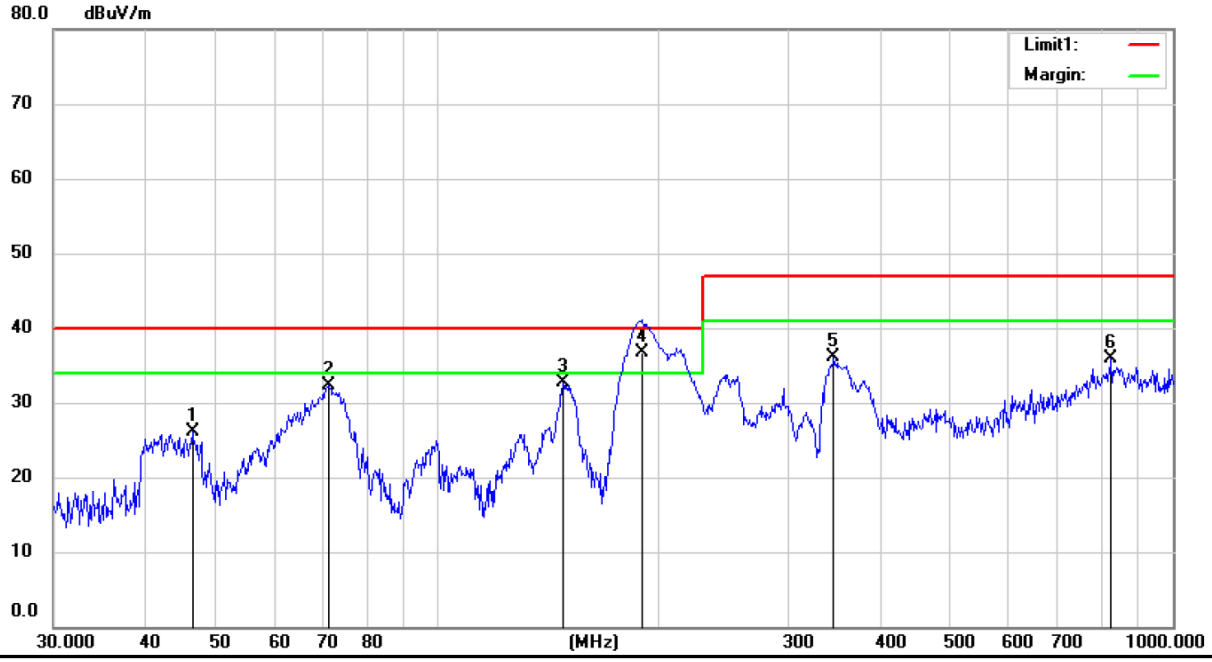
The bandwidth of the Receiver is set at 120 kHz.

Test results were obtained from the following equation:
Emission level (dBμV/m) = Antenna Factor -Amp Factor +Cable Loss + Reading
Margin (dB) = Emission Level (dBμV/m) - Limit (dBμV/m)

5.4. Measuring Results

PASS.

All the modes were tested and the data of the worst modes are attached the following pages.



Site 3m Chamber #3 Polarization: ***Horizontal*** Temperature: 26 C

Limit: (RE)CISPR 32 CLASSB Power: AC 220V/50Hz Humidity: 60 %

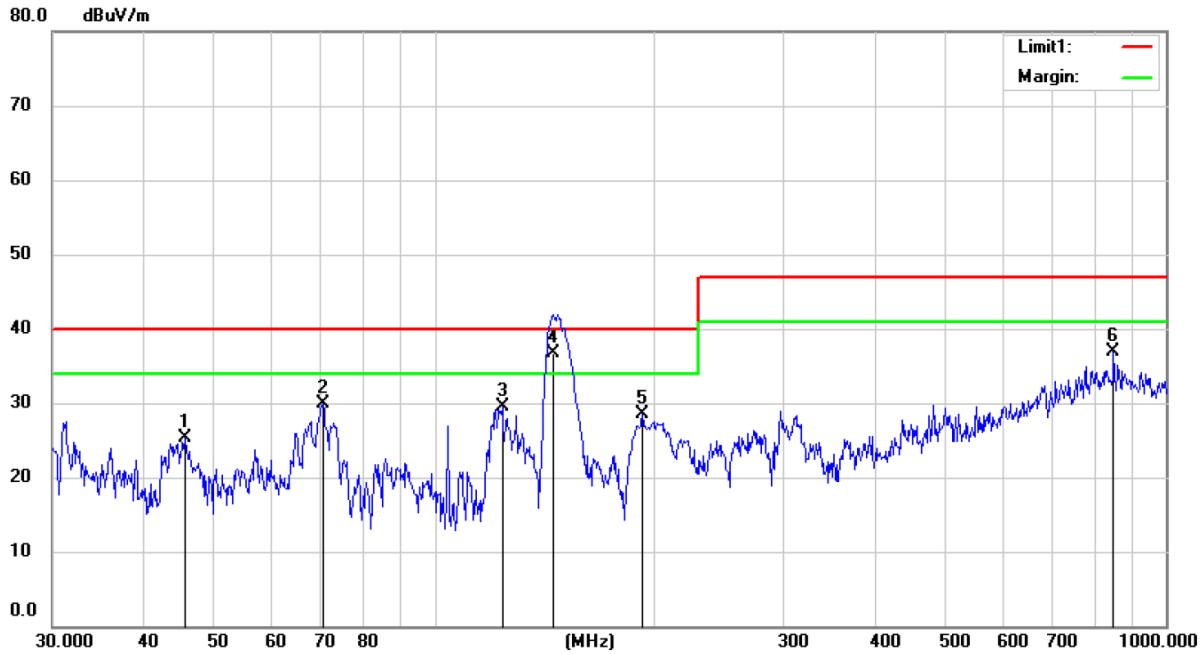
M/N: GTM96000-5409-R2

Mode:full load

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		46.4420	34.33	-8.32	26.01	40.00	-13.99	QP			
2		71.1427	41.70	-9.45	32.25	40.00	-7.75	QP			
3		148.3760	42.66	-9.94	32.72	40.00	-7.28	QP			
4	*	190.3216	46.89	-10.09	36.80	40.00	-3.20	QP			
5		345.7467	40.66	-4.57	36.09	47.00	-10.91	QP			
6		824.9583	28.15	7.83	35.98	47.00	-11.02	QP			

*:Maximum data x:Over limit !:over margin Operator: CCH



Site 3m Chamber #3 Polarization: *Vertical* Temperature: 26 C

Limit: (RE)CISPR 32 CLASSB Power: AC 220V/50Hz Humidity: 60 %

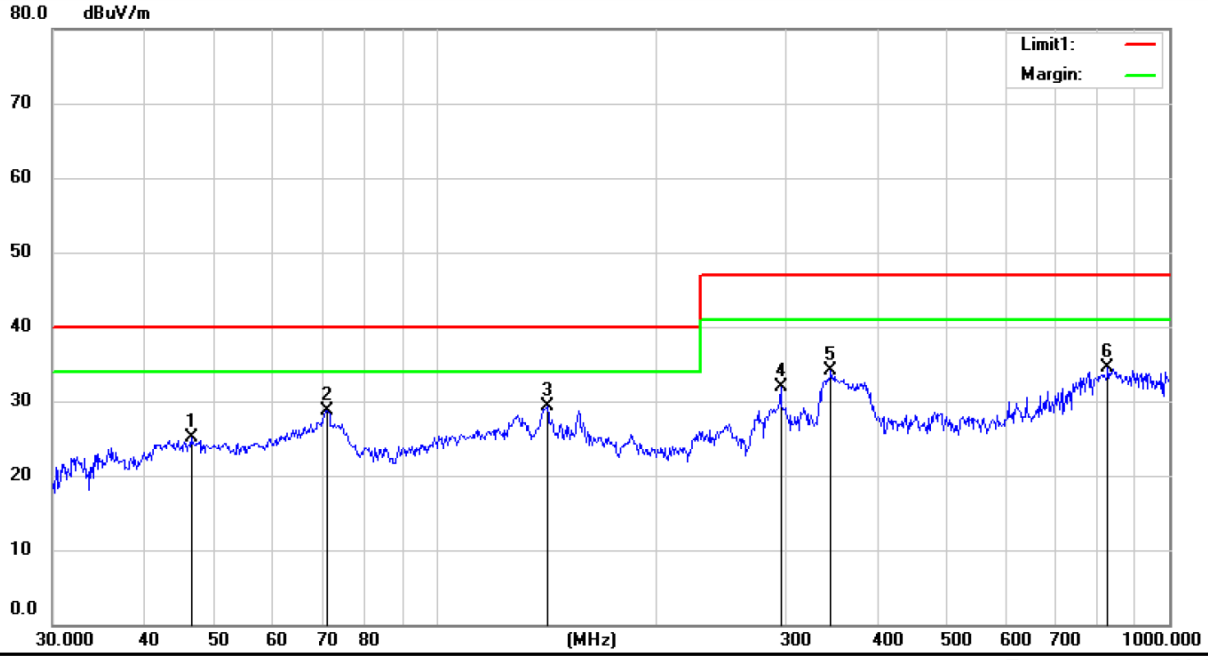
M/N: GTM96000-5409-R2

Mode:full load

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		45.6347	33.65	-8.38	25.27	40.00	-14.73	QP			
2		70.4600	39.15	-9.23	29.92	40.00	-10.08	QP			
3		123.9698	39.84	-10.38	29.46	40.00	-10.54	QP			
4	*	145.6695	46.97	-10.17	36.80	40.00	-3.20	QP			
5		192.5873	38.45	-9.88	28.57	40.00	-11.43	QP			
6		848.0563	28.43	8.46	36.89	47.00	-10.11	QP			

*:Maximum data x:Over limit !:over margin Operator: CCH



Site 3m Chamber #3 Polarization: ***Horizontal*** Temperature: 26 C

Limit: (RE)CISPR 32 CLASSB Power: AC 220V/50Hz Humidity: 60 %

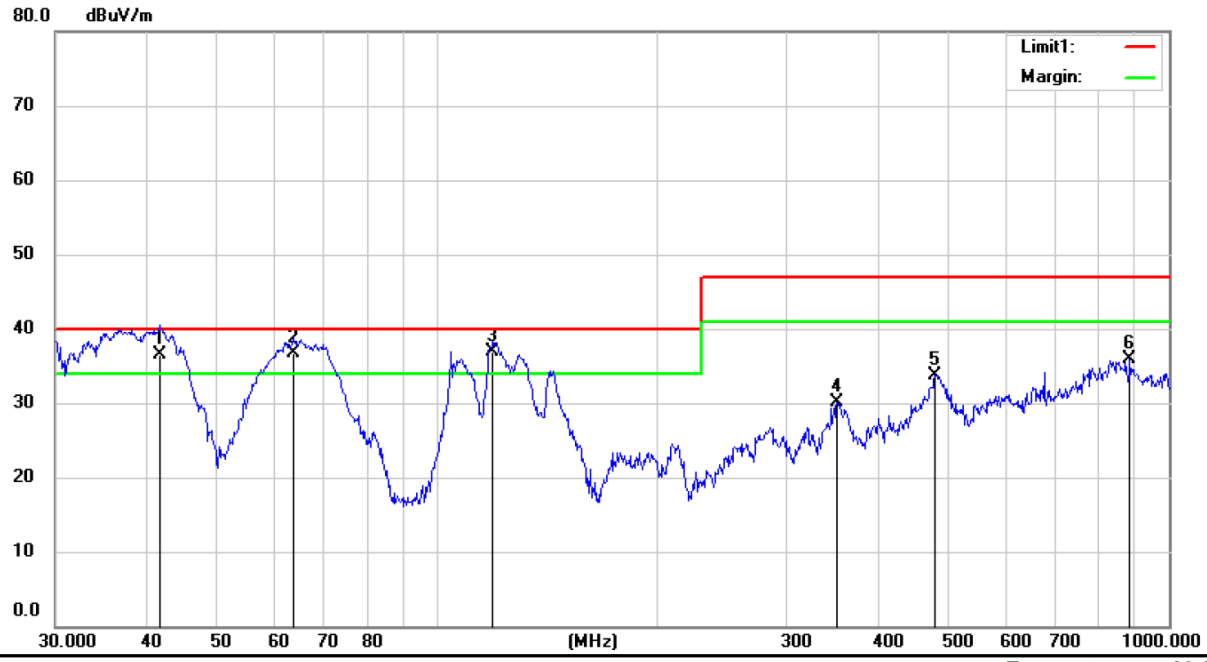
M/N: GTM96600-6019-R2

Mode:full load

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		46.4420	33.33	-8.32	25.01	40.00	-14.99	QP			
2		71.1426	38.20	-9.45	28.75	40.00	-11.25	QP			
3	*	141.9506	39.69	-10.44	29.25	40.00	-10.75	QP			
4		296.1836	37.80	-5.98	31.82	47.00	-15.18	QP			
5		345.7467	38.66	-4.57	34.09	47.00	-12.91	QP			
6		824.9583	26.65	7.83	34.48	47.00	-12.52	QP			

*:Maximum data x:Over limit !:over margin Operator: CCH



Site 3m Chamber #3 Polarization: *Vertical* Temperature: 26 C

Limit: (RE)CISPR 32 CLASSB Power: AC 220V/50Hz Humidity: 60 %

M/N: GTM96600-6019-R2

Mode:full load

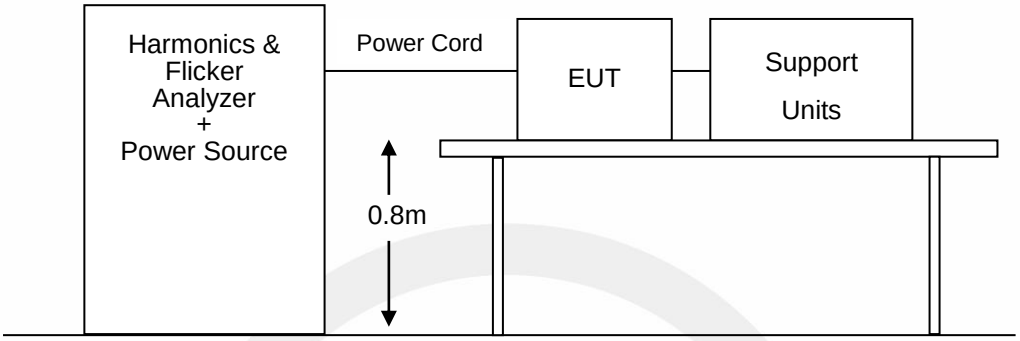
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	!	41.8596	44.93	-8.43	36.50	40.00	-3.50	QP			
2	!	63.6471	44.76	-7.96	36.80	40.00	-3.20	QP			
3	*	119.2791	47.20	-10.30	36.90	40.00	-3.10	QP			
4		352.3251	34.55	-4.36	30.19	47.00	-16.81	QP			
5		479.6858	34.85	-1.15	33.70	47.00	-13.30	QP			
6		884.5030	28.79	7.15	35.94	47.00	-11.06	QP			

*:Maximum data x:Over limit !:over margin Operator: CCH

6. HARMONIC CURRENT EMISSION MEASUREMENT

6.1. Block Diagram of Test Setup



6.2. Standard Limits

SANS 61000-3-2/IEC 61000-3-2, CLASS A
Harmonic current emissions evaluate the potential for the EUT to cause distortion on the AC power lines. It is applicable to electrical and electronic equipment having an input current≤16 A per phase, and intended to be connected to public low-voltage distribution systems

Table 1 - Limits for Class A equipment

Harmonic order n	Maximum permissible harmonic current (A)
Odd harmonics	
3	2.30
5	1.14
7	0.77
9	0.40
11	0.33
13	0.21
$15 \le n \le 39$	$0.15\ \frac{0.15}{n}$
Even harmonics	
2	1.08
4	0.43
6	0.30
$8 \le n \le 40$	$0.23\frac{8}{n}$

6.3. Test Procedure

The measurement of harmonic currents shall be performed as follows: i. For each harmonic order, measure the 1.5 s smoothed r.m.s. harmonic current in each DFT time window as defined in EN / IEC 61000-4-7:2009. ii. Calculate the arithmetic average of the measured values from the DFT time windows, over the entire observation period Short cyclic (T cycle≤2.5 min). Because of synchronisation to meet the requirements for repeatability in 5%.

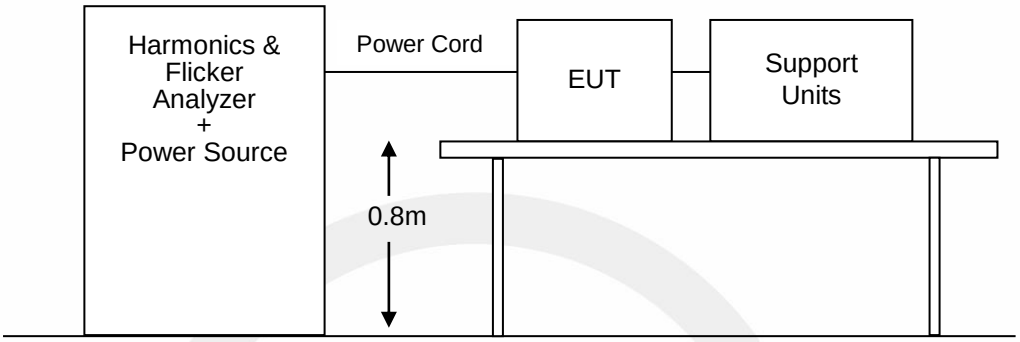
6.4. Test Results

N/A.

As specified on section 7 and above figure of EN 61000-3-2, the limits are not specified for equipment with a rated power of 75W or less. The EUT meets the above condition, so it conforms to EN 61000-3-2.

7. VOLTAGE FLUCTUATION AND FLICKER MEASUREMENT

7.1. Block Diagram of Test Setup



7.2. Standard Limits

SANS 61000-3-3/IEC 61000-3-3 Limits
The objective of voltage changes, voltage fluctuations and flicker in public low voltage supply systems during equipment with rated current≤16 A per phase, ensures that home appliances and certain other electrical equipment do not adversely affect lighting equipment when connected to the same power system.
Voltage Fluctuation and Flicker Limits:
— the value of Pst shall not be greater than 1.0;
— the value of Plt shall not be greater than 0.65;
— the value of d(t) during a voltage change shall not exceed 3.3 % for more than 500 ms;
— the relative steady-state voltage change, dc, shall not exceed 3.3 %;
— the maximum relative voltage change, dmax, shall not exceed 4.0 %;

7.3. Test Procedure

The total impedance of the test circuit, excluding the appliance under test, but including the internal impedance of the supply source, shall be equal to the reference impedance. The stability and tolerance of the reference impedance shall be adequate to ensure that the overall accuracy of 8% is achieved during the whole assessment procedure.

7.4. Test Results

PASS.

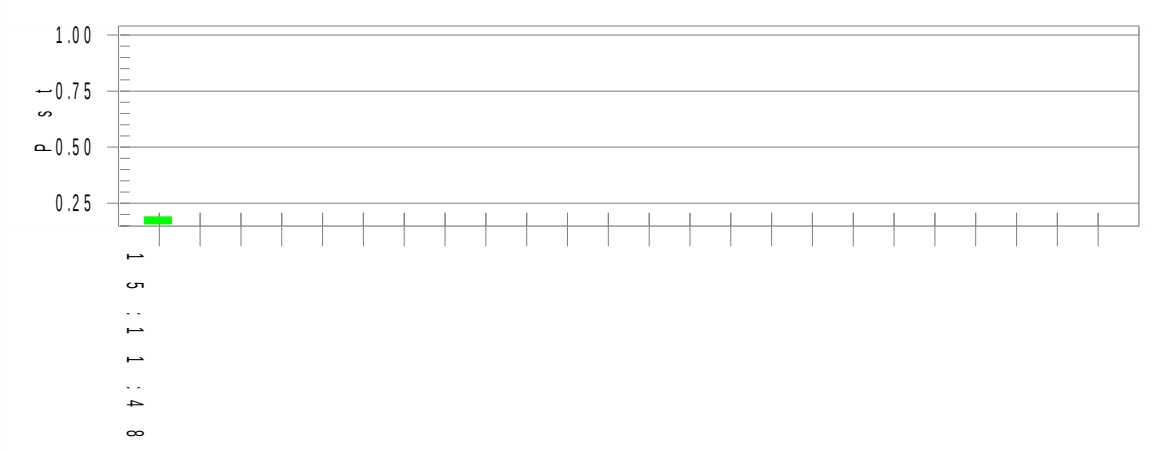
Please see the attached page.

Flicker Test Summary per IEC61000-3-3:2013/AMD1:2017 (Run time)

EUT: ICT/ITE POWER SUPPLY (GTM96600-5409-R2) **Tested by: PJH**
Test category: All parameters (European limits) **Test Margin: 100**
Test date: 2023/5/9 **Start time: 15:01:27** **End time: 15:11:54**
Test duration (min): 10 **Data file name: F-000769.cts_data**
Comment: FULL LOAD
Customer: GlobTek, Inc.

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

Pst and limit line **European Limits**



Parameter values recorded during the test:

Vrms at the end of test (Volt):	**220.10**			
Highest dt (%):		**Test limit (%):**		
T-max (mS):	**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):	**0.188**	**Test limit:**	**1.000**	**Pass**

Flicker Test Summary per IEC61000-3-3:2013/AMD1:2017 (Run time)

EUT: ICT/ITE POWER SUPPLY (GTM96600-6019-R2) **Tested by: PJH**
Test category: All parameters (European limits) **Test Margin: 100**
Test date: 2023/5/9 **Start time: 15:20:31** **End time: 15:30:58**
Test duration (min): 10 **Data file name: F-000770.cts_data**
Comment: FULL LOAD
Customer: GlobTek, Inc.

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

Pst_i and limit line **European Limits**

Parameter values recorded during the test:

Vrms at the end of test (Volt):	**219.94**			
Highest dt (%):		**Test limit (%):**		
T-max (mS):	**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):	**0.166**	**Test limit:**	**1.000**	**Pass**

8. IMMUNITY PERFORMANCE CRITERIA DESCRIPTION

Performance Level

The test results shall be classified in terms of the loss of function or degradation of performance of the equipment under test, relative to a performance level by its manufacturer or the requestor of the test, or the agreed between the manufacturer and the purchaser of the product.

Definition related to the performance level:
1. Based on the used product standard
2. Based on the declaration of the manufacturer, requestor or purchaser

SANS 2335/CISPR 35:

Performance criterion A
The equipment shall continue to operate as intended without operator intervention. No degradation of performance, loss of function or change of operating state is allowed below a performance level specified by the manufacturer when the equipment is used as intended. The performance level may be replaced by a permissible loss of performance. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, 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.

Performance criterion B
During the application of the disturbance, degradation of performance is allowed. However, no unintended change of actual operating state or stored data is allowed to persist after the test.
After the test, the equipment shall continue 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 equipment is used as intended. The performance level may be replaced by a permissible loss of performance.
If the minimum performance level (or the permissible performance loss), or recovery time, is not specified by the manufacturer, 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.

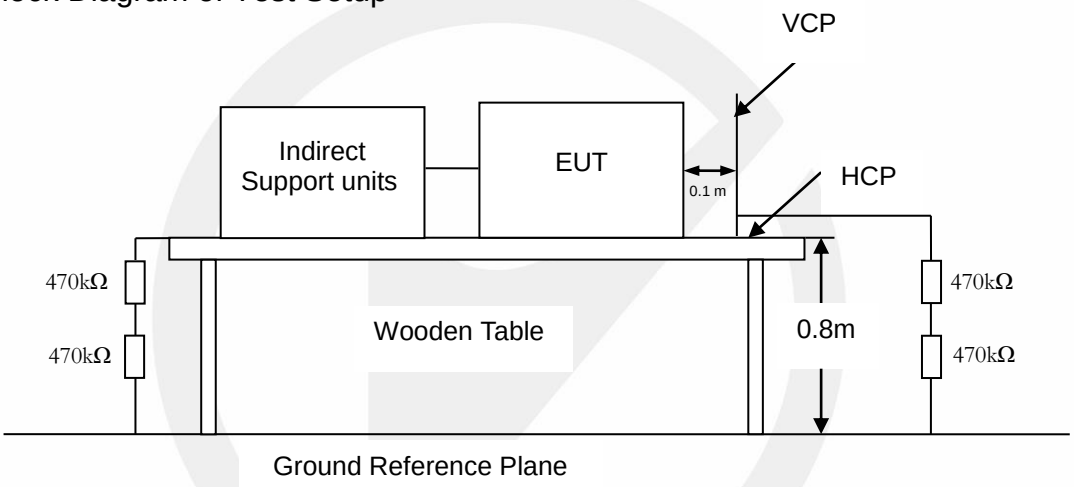
Performance criterion C
Loss of function is allowed, provided the function is self-recoverable, or can be restored by the operation of the controls by the user in accordance with the manufacturer's instructions. A reboot or re-start operation is allowed. Information stored in non-volatile memory, or protected by a battery backup, shall not be lost.

9. ELECTROSTATIC DISCHARGE

9.1. Test Specification

Test Standard	:	SANS 2335/CISPR 35
Basic Standard	:	IEC 61000-4-2
Performance criterion	:	B
Test level	:	±8.0kV (Air discharge) ±4.0kV (Contact discharge)

9.2. Block Diagram of Test Setup



9.3. Test Procedure

a. In the case of air discharge testing, the climatic conditions shall be within the following ranges:
- ambient temperature: 15°C to 35°C;
- relative humidity : 30% to 60%;
- atmospheric pressure : 86 kPa (860 mbar) to 106 kPa (1060 mbar)

b. Test programs and software shall be chosen so as to exercise all normal modes of operation of the EUT. The use of special exercising software is encouraged, but permitted only where it can be shown that the EUT is being comprehensively exercised.

c. In the case of contact discharges, the tip of the discharge electrode shall touch the EUT before the discharge switch is operated.

d. In the case of painted surface covering a conducting substrate, the following procedure shall be adopted : - If the coating is not declared to be an insulating coating by the equipment manufacturer, then the pointed tip of the generator shall penetrate the coating so as to make contact with the conducting substrate. - Coating declared as insulating by the manufacturer shall only be submitted to the air discharge. - The contact discharge test shall not be applied to such surfaces.

e. In the case of air discharges, the round discharge tip of the discharge electrode shall be approached as fast as possible (without causing mechanical damage) to touch the EUT. After each discharge, the ESD generator (discharge electrode) shall be removed from the EUT. The generator is then retriggered for a new single discharge. This procedure shall be repeated until the discharges are completed. In the case of an air discharge test, the discharge switch, which is used for contact discharge, shall be closed.

f. The test voltage shall be increased from the minimum to the selected test severity level, in order to determine any threshold of failure. The final test level should not exceed the product specification value in order to avoid damage to the equipment.
g. The test shall be performed with both air discharge and contact discharge. The test shall be performed with single discharges. On each pre-selected point at least 10 single discharges (in the most sensitive polarity) shall be applied. For the time interval between successive single discharges an initial value of 1 s is recommended. Longer intervals may be necessary to determine whether a system failure has occurred.
h. Ensure that the applied charge on the EUT has been dis-charged before next ESD pulse.

9.4. Test Results

PASS

Temperature	:	24.3°C
Humidity	:	48%
Atmospheric Pressure	:	101kpa
Test Engineer	:	PJH
Test Date	:	2023-05-09

Air Discharge:

Test Voltage	Location	Actual criterion	Required performance criterion	Result (Pass/Fail)
±2; 4; 8 kV	SLOT/LED	A	B	Pass

Contact Discharge

Test Voltage	Location	Actual criterion	Required performance criterion	Result (Pass/Fail)
±2; 4kV	METAL	A	B	Pass

Indirect Discharge

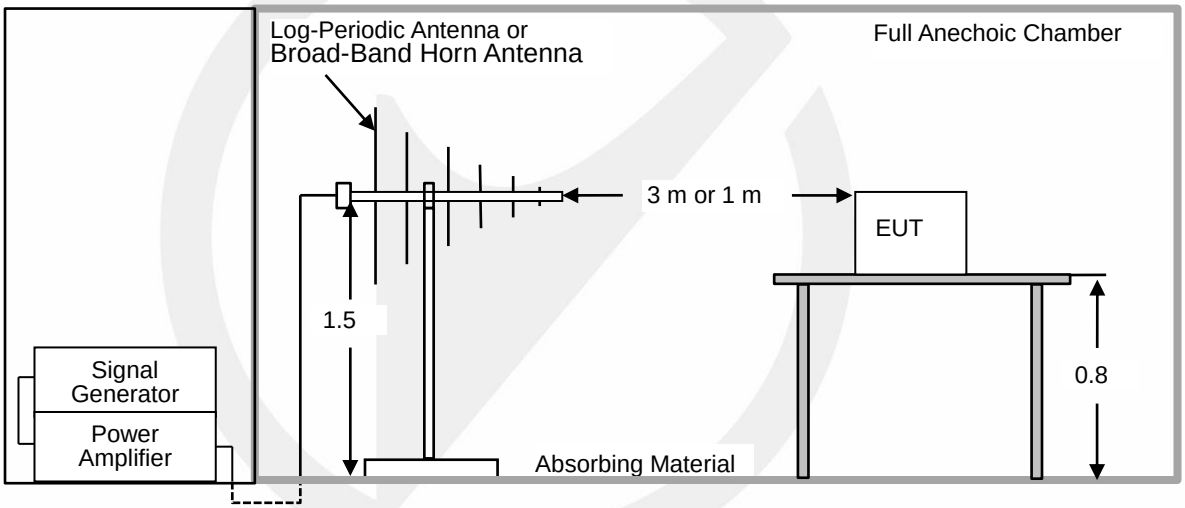
Test Voltage	Location	Actual criterion	Required performance criterion	Result (Pass/Fail)
±2; 4 kV	HCP	A	B	Pass
±2; 4kV	VCP	A	B	Pass

10. CONTINUOUS RF ELECTROMAGNETIC FIELD DISTURBANCES

10.1. Test Specification

Test standard	:	SANS 2335/CISPR 35	
Basic standard	:	IEC 61000-4-3	
Performance criterion	:	A	
Frequency range & Test level	:	☒80M-1000MHz	3V/m
		☒Spot frequency	3V/m
		☐Additional spot frequency	3V/m
Modulation	:	AM, 80%, 1kHz sine-wave	

10.2. Block Diagram of Test Setup



10.3. Test procedure

The procedure defined in this part requires the generation of electromagnetic fields within which the test sample is placed and its operation observed. To generate fields that are useful for simulation of actual (field) conditions may require significant antenna drive power and the resultant high field strength levels. To comply with local regulations and to prevent biological hazards to the testing personnel, it is recommended that these tests be carried out in a shielded enclosure or semi-anechoic chamber.

a. The antenna which is enabling the complete frequency range of 80-1000 MHz is placed 3m (or 1m) away from the equipment. The required field strength is determined by placing the field strength meter(s) on top of or directly alongside the equipment under test and monitoring the field strength meter via a remote field strength indicator outside the enclosure while adjusting the continuous-wave to the antenna.
b. The test is performed with the antenna facing the front and back sides of the EUT with. Both vertical and horizontal polarizations from antenna are tested.

10.4.Test results

PASS

Temperature	:	22.7°C
Humidity	:	50%
Atmospheric Pressure	:	101kpa
Test Engineer	:	PJH
Test Date	:	2023-05-09

☒ 80M-1000MHz:

Freq. Range (MHz)	Field	Modulation	Polarity	Position (°)	Actual criterion	Required performance criterion	Result
80-1000	3V/m	AM, 80%	H / V	0, 90,180, 270	A	A	Pass

☒ Spot frequency:

Freq (MHz)	Field	Modulation	Polarity	Position (°)	Actual criterion	Required performance criterion	Result
1800, 2600, 3500, 5000	3V/m	AM, 80%	H / V	0, 90,180, 270	A	A	Pass

☐ Additional spot frequency:

Freq (MHz)	Field	Modulation	Polarity	Position (°)	Actual criterion	Required performance criterion	Result
80, 120, 160, 230, 434, 460, 600, 863, 900	3V/m	AM, 80%	H / V	0, 90,180, 270	N/A	N/A	N/A

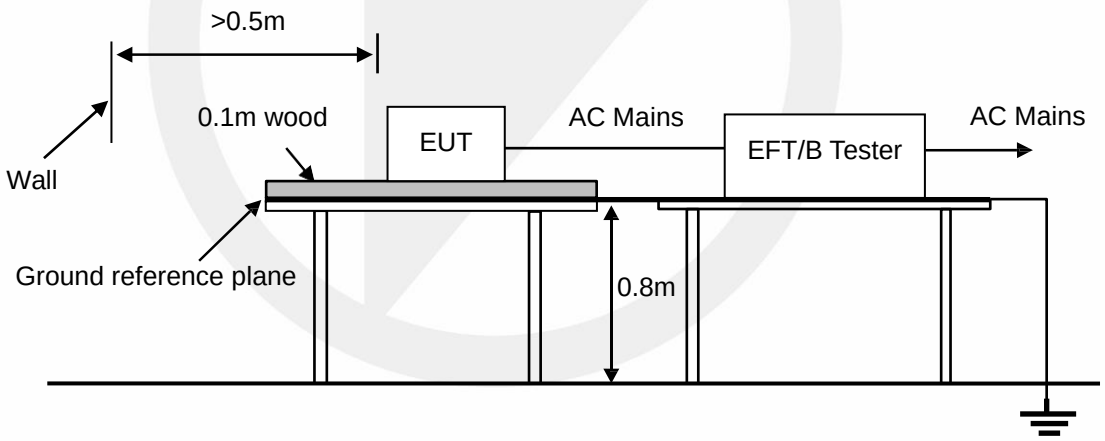
11. ELECTRICAL FAST TRANSIENT/BURST IMMUNITY TEST

11.1. Test Specification

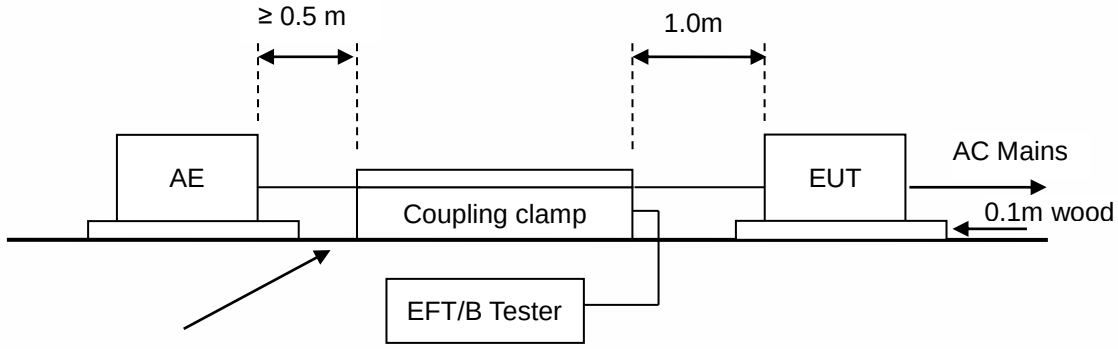
Test standard	:	SANS 2335/CISPR 35
Basic standard	:	IEC 61000-4-4
Performance criterion	:	B
Test level	:	☒1kV, AC mains power ports
		☐0.5kV, DC network power ports
		☐0.5kV, Analogue/digital data ports
Repetition frequency	:	☒5kHz, ☐100kHz(Only xDSL ports)
Tr/Th:	:	5/50ns
Burst period	:	300ms
Test time :	:	120s

11.2. Block Diagram of Test Setup

AC Lines:



Signal lines:



11.3. Test Procedure

The EUT is put on the table that is 0.8 meter high above the ground. This reference ground plane shall project beyond the EUT by at least 0.1m on all sides and the minimum distance between EUT and all other conductive structure, except the ground plane beneath the EUT, shall be more than 0.5m.

11.4. Test Results

PASS

Temperature	:	23.8°C
Humidity	:	45%
Atmospheric Pressure	:	101kpa
Test Engineer	:	PJH
Test Date	:	2023-05-09

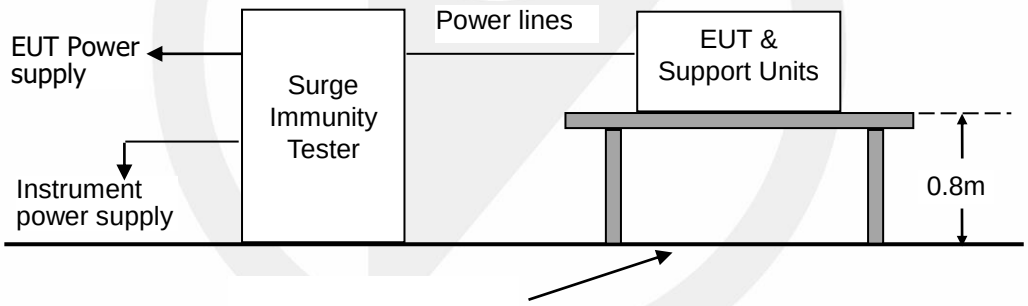
Injection Line	Voltage (kV)	Injected Method	Actual criterion	Required performance criterion	Result (Pass/Fail)
☒ AC mains power ports	± 1	☒ CDN ☐ Direct injection ☐ Capacitive coupling clamp	A	B	Pass
☐ DC network power ports	± 0.5	☐ CDN ☐ Direct injection ☐ Capacitive coupling clamp	N/A	N/A	N/A
☐ Analogue/digital data ports (Wired network port)	± 0.5	☐ CDN ☐ Direct injection ☒ Capacitive coupling clamp	N/A	N/A	N/A
☐ Analogue/digital data ports (Broadcast receiver tuner port)	± 0.5	☐ CDN ☐ Direct injection ☒ Capacitive coupling clamp	N/A	N/A	N/A

12. SURGE IMMUNITY TEST

12.1. Test Specification

Test standard	:	SANS 2335/CISPR 35
Basic standard	:	IEC 61000-4-5
Test level	:	☒1kV, Line to Line, AC mains power ports, Criterion B
		☐2kV, Line to Earth, AC mains power ports, Criterion B
		☐0.5kV, Line to Reference ground, DC network power ports, Criterion B
		☐1.0kV, Lines to Ground, Unshielded symmetrical, Criterion C
		☐4.0kV, Lines to Ground, Unshielded symmetrical, Criterion C
		☐0.5kV, Shield to ground, Coaxial or shielded port, Criterion B
Number of surges	:	5 (for each combination of parameters)
Repetition rate	:	1 minute / time
Polarity:	:	Positive / Negative
Phase angle:	:	90º, 270º (Only AC mains power ports)

12.2. Block Diagram of Test Setup



12.3. Test Procedure

This test simulates a lightning event by inducing transients onto the AC/DC power supply lines in common mode (Line to Ground) and differential mode (Line to Line). Each device was tested in a total of two surge configurations: Line to Ground (L-G): Combination Wave, Line to Protective Earth with 9uF and 10Ohm and Neutral to Protective Earth with 9uF and 10Ohm, common mode, generator earthed.
Line to Line (L-L): Combination Wave,
Line to Neutral with 18uF, differential mode, generator floated.
2 ohm : the source impedance of the low-voltage power supply network.
12 ohm : the source impedance of the low-voltage power supply network and ground.

a. If not otherwise specified the surges have to be applied synchronized to the voltage phase at the zero-crossing and the peak value of the a.c. voltage wave (positive and negative).
b. The surges have to be applied line to line and line to earth. When testing line to earth, the test voltage has to be applied successively between each of the lines and earth, if there is no other specification.
c. The test procedure shall also consider the non-linear current-voltage characteristics of the equipment under test. Therefore the test voltage has to be increased by steps up to the test level specified in the product standard or test plan. All lower levels including the selected test level shall be satisfied.
d. For testing the secondary protection, the output voltage of the generator shall be increased up to the worst-case voltage breakdown level (let-through level) of the primary protection.

e. Testing shall be performed according to a Test Plan, which shall be included in the test report.
f. To find all critical points of the duty cycle of the equipment, a sufficient number of positive and negative test pulses shall be applied.

12.4. Test results

PASS

Temperature	:	23.8°C
Humidity	:	45%
Atmospheric Pressure	:	101kpa
Test Engineer	:	PJH
Test Date	:	2023-05-09

☒ AC mains power ports:

Coupling Line	Voltage (kV)	Waveform (μs)	Polarity	Actual criterion	Required performance criterion	Result (Pass/Fail)
☒ Line to line	0.5, 1	1.2/50 (8/20)	Pos./ Neg.	A	B	Pass
☐ Line to earth	0.5, 1, 2	1.2/50 (8/20)	Pos./ Neg.	N/A	B	N/A

☐ DC network power ports:

Coupling Line	Voltage (kV)	Waveform (μs)	Polarity	Actual criterion	Required performance criterion	Result (Pass/Fail)
Line to Reference ground	0.5	1.2/50 (8/20)	Pos./ Neg.	N/A	B	N/A

☐ Analogue/digital data ports:

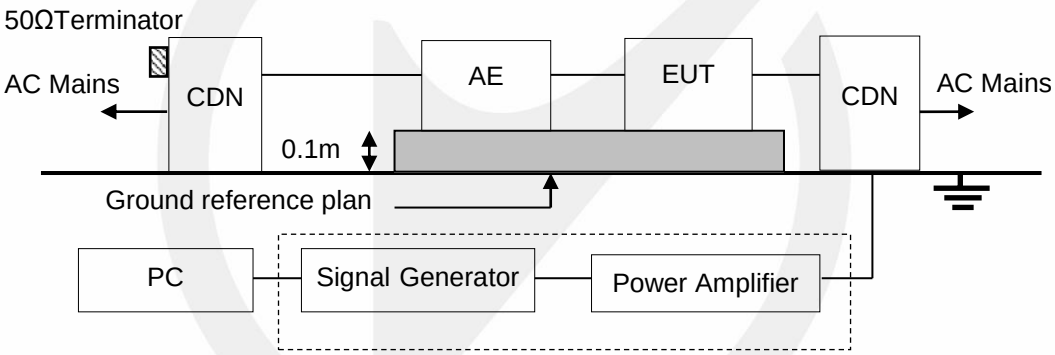
Port type	Coupling Line	Voltage (kV)	Waveform (μs)	Polarity	Actual criterion	Required performance criterion	Result (Pass/Fail)
☐ Unshielded symmetrical (Wired network port)	Lines to ground	0.5, 1	10/700 (5/320)	Pos./ Neg.	N/A	C	N/A
☐ Unshielded symmetrical (.....)	Lines to ground	0.5, 1	10/700 (5/320)	Pos./ Neg.	N/A	C	N/A
☐ Unshielded symmetrical	Lines to ground	0.5, 1, 2, 4	10/700 (5/320)	Pos./ Neg.	N/A	C	N/A
☐ Coaxial or shielded (Broadcast receiver tuner port)	Shield to ground	0.5	1.2/50 (8/20)	Pos./ Neg.	N/A	C	N/A
☐ Coaxial or shielded (.....)	Shield to ground	0.5	1.2/50 (8/20)	Pos./ Neg.	N/A	C	N/A

13. CONTINUOUS INDUCED RF DISTURBANCES

13.1. Test Specification

Test standard	:	SANS 2335/CISPR 35
Basic standard	:	IEC 61000-4-6
Performance criterion	:	A
Frequency range & Test level	:	0.15M to 10MHz, 3V 10M to 30MHz, 3V to 1V 30M to 80MHz, 1V
Modulation	:	AM 80%, 1kHz sine-wave
Frequency Step	:	1% of fundamental

13.2. Block Diagram of Test Setup



13.3. Test Procedure

a. The EUT shall be operated within its intended climatic conditions. The temperature and relative humidity should be recorded.
b. The EUT is placed on a 0.1m high test table, and a well grounded cable is connected to metallic plane above the test table.
c. All cables/wires must be laid out on test plate (3cm in thickness),and the EUT is set up on test plate (10 cm in thickness) as shown in test setup photo, and the cables/wires must not be in mid-air, they should be touching the surface of test plate. Ensure that the EUT is properly connected to the accessory equipment.
d. The test shall be 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.
e. The frequency range is swept from 150 kHz to 80 MHz, using the signal levels established during the setting process, and with the disturbance signal 80% amplitude modulated with a 1 kHz sine wave, pausing to adjust the RF-signal level or to switch coupling devices as necessary. The rate of sweep shall no exceed 1.5 x 10-3 decades/s. Where the frequency is swept incrementally, the step size shall no exceed 1% of the start and thereafter 1% of the preceding frequency value.
f. The dwell time at each frequency shall not be less than the time necessary for the EUT to be exercised, and able to respond. Sensitive frequencies e.g. clock frequency (ies) and harmonics or frequencies of dominant interest shall be analyzed separately.

g. Attempts should be made to fully exercise the EUT during testing, and to fully interrogate all exercise modes selected for susceptibility
h. Testing shall be performed according to a Test Plan, which shall be included in the test report.

13.4. Test results

PASS

Temperature	:	23.8°C
Humidity	:	45%
Atmospheric Pressure	:	101kpa
Test Engineer	:	PJH
Test Date	:	2023-05-09

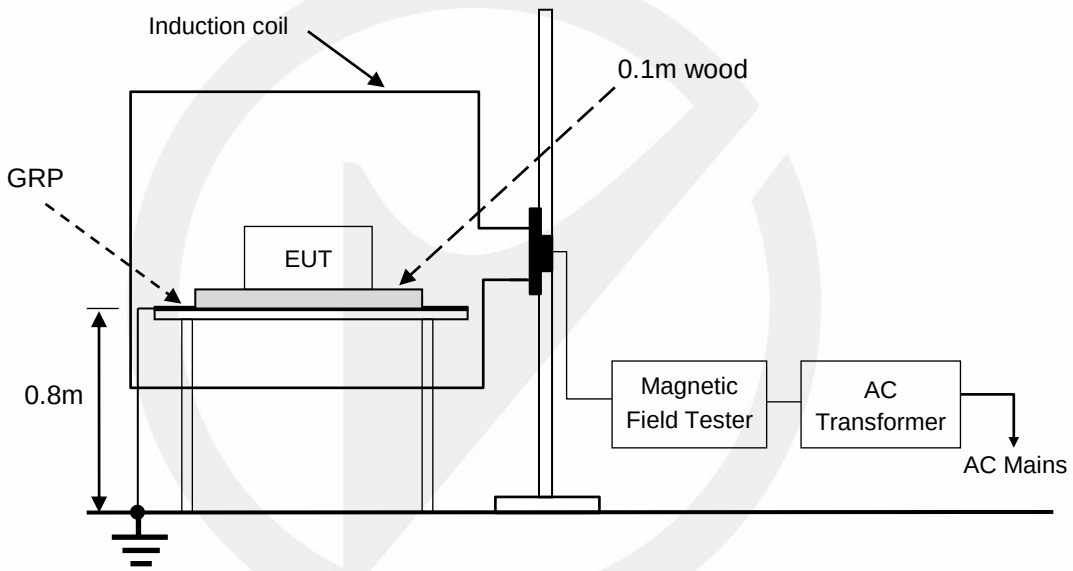
Range (MHz)	Levers (V)	Injection port	Coupling type	Actual criterion	Required performance criterion	Result (Pass/Fail)
0.15-10	3	☒AC mains power ports	☒CDN ☐EM Clamp ☐Current Clamp ☐Direct injection	A	A	Pass
10-30	3-1					
30-80	1					
0.15-10	3	☐DC network power ports	☒CDN ☐EM Clamp ☐Current Clamp ☐Direct injection	N/A	N/A	N/A
10-30	3-1					
30-80	1					
0.15-10	3	☐Analogue/digital data ports (Wired network port)	☐CDN ☒EM Clamp ☐Current Clamp ☐Direct injection	N/A	N/A	N/A
10-30	3-1					
30-80	1					
0.15-10	3	☐Analogue/digital data ports (Broadcast receiver tuner port)	☐CDN ☐EM Clamp ☒Current Clamp ☐Direct injection	N/A	N/A	N/A
10-30	3-1					
30-80	1					
0.15-10	3	☐Analogue/digital data ports (.....)	☐CDN ☐EM Clamp ☒Current Clamp ☐Direct injection	N/A	N/A	N/A
10-30	3-1					
30-80	1					

14. POWER FREQUENCY MAGNETIC FIELD

14.1. Test Specification

Test Standard	:	SANS 2335/CISPR 35
Basic Standard	:	IEC 61000-4-8
Performance criterion	:	A
Test level	:	1A/m

14.2. Block Diagram of Test Setup



GRP: Ground reference plane
EUT: Equipment under test

14.3. Test Procedure

The EUT is placed in the middle of a induction coil (1*1m), under which is a 1*1*0.1m (high) table, this small table is also placed on a larger table, 0.8 m above the ground. Both horizontal and vertical polarization of the induction coil is set on test, so that each side of the EUT is affected by the magnetic field. Also can reach the same aim by change the position of the EUT.

14.4. Test Results

PASS

Temperature	:	23.8°C
Humidity	:	45%
Atmospheric Pressure	:	101kpa
Test Engineer	:	PJH
Test Date	:	2023-05-09

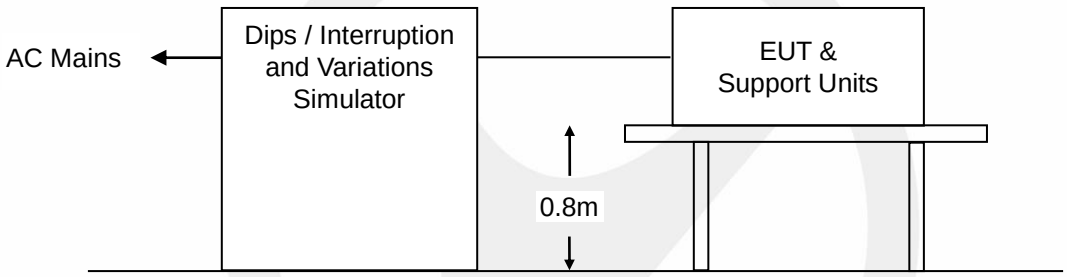
Test Level (A/m)	Frequency	Testing Duration	Coil Orientation	Actual criterion	Required performance criterion	Result (Pass/Fail)
1	☒ 50Hz ☒ 60Hz	5 mins	☒ x-axis ☒ y-axis ☒ z-axis	A	A	Pass

15. VOLTAGE DIPS AND INTERRUPTIONS TEST

15.1. Test Specification

Test standard	:	SANS 2335/CISPR 35
Basic standard	:	IEC 61000-4-11
Test level	:	☒0%, 0.5 period, Criterion B
		☒70%, 25 periods for 50Hz, Criterion C
		☒0%, 250 periods for 50Hz, Criterion C

15.2. Block Diagram of Test Setup



15.3. Test Procedure

a. Where the equipment has a rated voltage the following shall apply - If the voltage range does not exceed 20% of the lower voltage specified for the rated voltage range, a single voltage within that range may be specified as a basis for test level specification.
- In all other cases, the test procedure shall be applied for both the lowest and highest voltages declared in the voltage range.
b. Test Conditions
- Select operated voltage and frequency of EUT - Test of interval : 10 sec.
- Level and duration : Sequence of 3 dips/interrupts.
- Voltage rise (and fall) time : 1.5 μs.

15.4. Test results

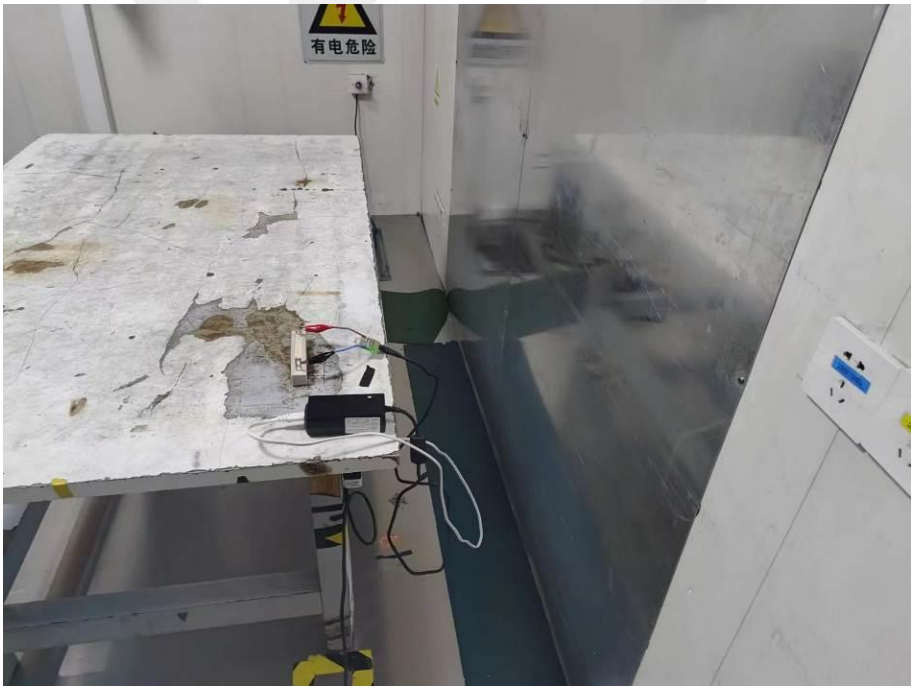
PASS

Temperature	:	23.8°C
Humidity	:	45%
Atmospheric Pressure	:	101kpa
Test Engineer	:	PJH
Test Date	:	2023-05-09

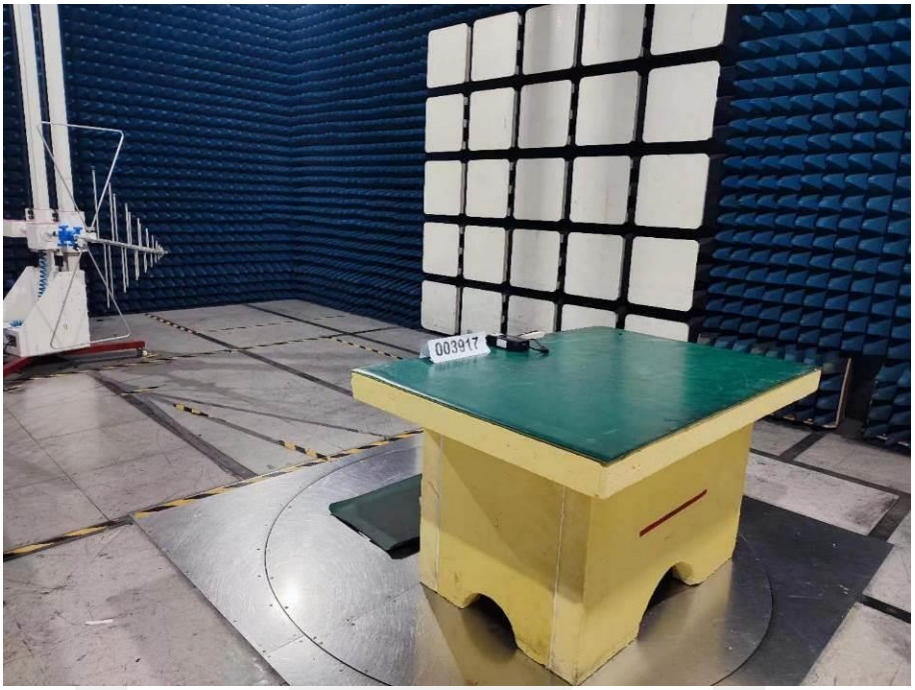
	Test Level (% UT)	Phase angle (°)	Input Voltage (V)	Freq (Hz)	Duration (periods)	Actual criterion	Required performance criterion	Result (Pass /Fail)
☒Voltage dips	0%	0º, 180º	AC 220V	50	0.5	A	B	Pass
☒Voltage dips	70%	0º, 180º	AC 220V	50	25	A	C	Pass
☒Voltage interruptions	0%	0º, 180º	AC 220V	50	250	B	C	Pass

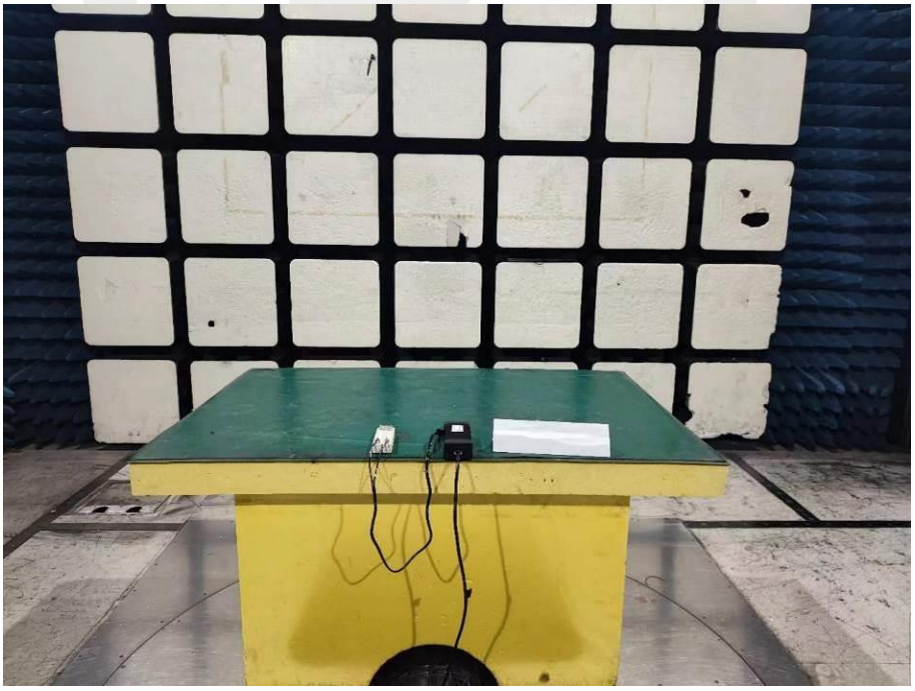
16. PHOTOGRAPHS

16.1. Photos of Conducted Emissions from the AC Mains Power Ports



16.2.Photos of Radiation Emission Measurement





16.3.Photo of Harmonic / Flicker Measurement

16.4.Photo of Electrostatic Discharge Test

16.5.Photo of Continuous RF Electromagnetic Field Disturbances

16.6.Photos of Electrical Fast Transient / Burst Test

16.7.Photos of Surge Test

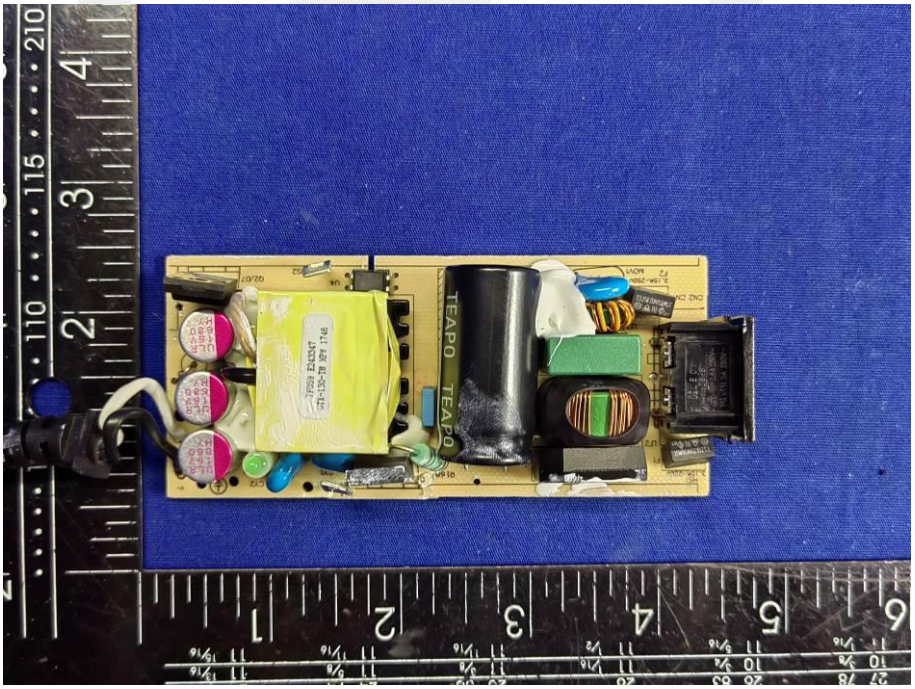
16.8.Photos of Continuous Induced RF Disturbances Test

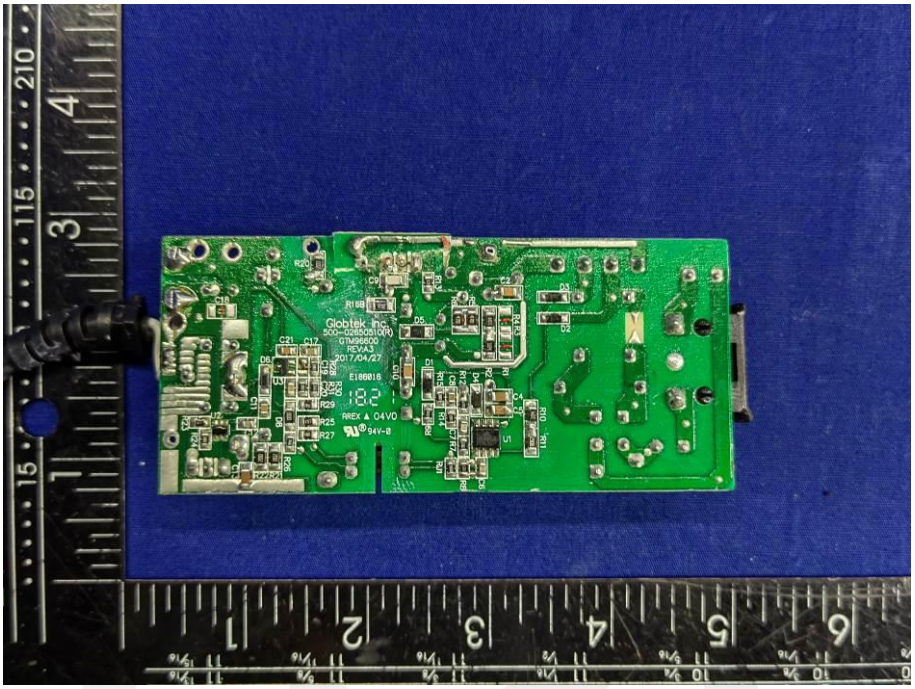
16.9.Photo of Power Frequency Magnetic Field Test

16.10.Photo of Voltage Dips and Interruption Immunity Test

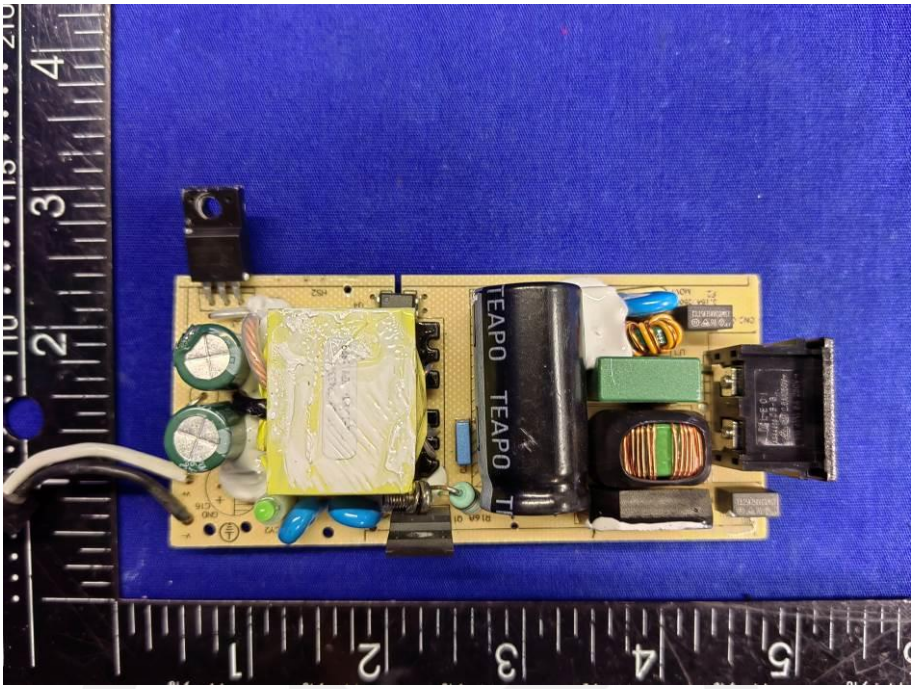
APPENDIX A: Photos of EUT

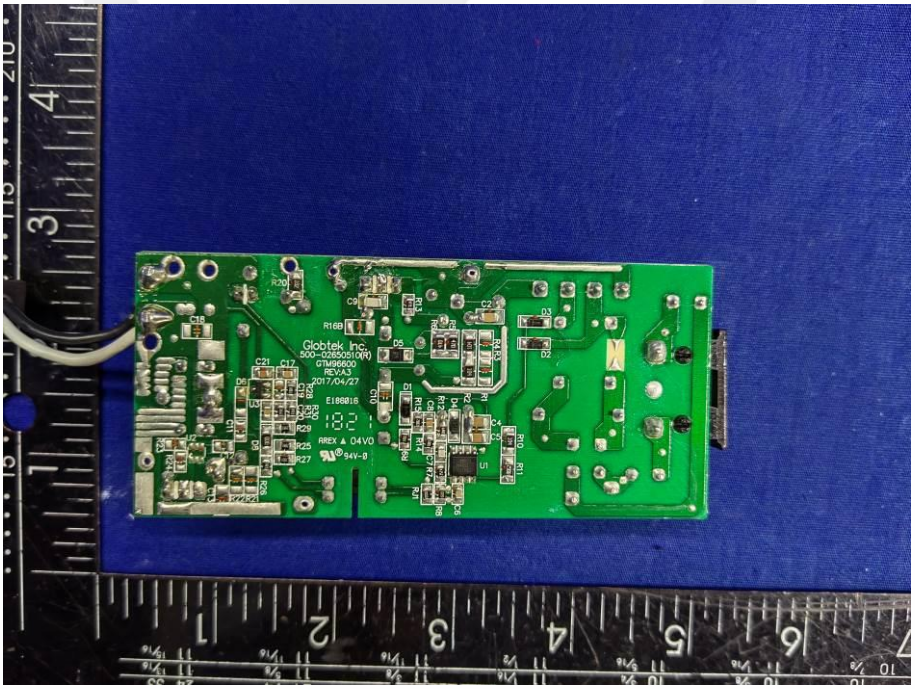
GTM96600-5409-R2





GTM96600-6019-R2


TEAPO
TEAPO


Globtek Inc.


GlobTek, Inc.
186 Veterans Dr.
Northvale, NJ 07647 USA
www.globtek.com
адаптер питания/电源供应器/電源供應
ICT/ITE/Medical Power Supply/Class 2/Household Power Supply
REF P/N/номер/料号/料號:RR9KG4000LCPCIMR6B
MODEL/модель/型号/型號:GTM96600-6015-R2
INPUT/вход/输入/輸入:100-240V~,50-60Hz,1.5A
Input only for India:100-240V~,50/60Hz,1.5A
OUTPUT/выход/输出/輸出:15.0V ⎓ 4.0A,60.0W
RECYCLED COMPONENT
Intertek
4007497
Intertek
Class 2 Power Unit
10276
Intertek
Conforms to AAMI STD.ES60601-1,IEC 60601-1-11
Certified to CAN/CSA STD.C22.2 NO.60601-1
Certified to CSA STD C22.2 NO.60950-1 ;NO.223;NO.62368-1
Confirms to UL STD.60950-1;1310;62368-1
IS 15885(Part 1)/
IEC 60950-1
R-41017175
www.bis.gov.in
ICT HU10449-20044A
전기통신연구원의 의한 표시
방송통신GTM96600-6015-R2
Mfr. Name: GLOBTEK (SUZHOU) CO.,LTD
MS Center:10-6221-6100
GlobTek, Inc.
N136
SAA-170301-EA
RoHS
LPS
EFFICIENCY LEVEL VI
用于电子/音响/MADE IN CHINA/Китай Производство/中国制造


GlobTek, Inc.
186 Veterans Dr.
Northvale, NJ 07647 USA
www.globtek.com
адаптер питания/电源供应器
ICT/ITE/Medical Power Supply/Class 2/Household Power Supply
REF P/N/номер/料号:RR9KT3750LRPCR6B2799
MODEL/модель/型号: GTM96600-6016-R2
INPUT/вход/输入:100-240V~, 50-60Hz, 1.5A
OUTPUT/выход/输出: 16.0V ⎓ 3.75 A, 60.0W
RECYCLED COMPONENT
Intertek
4007497
Intertek
Class 2 Power Unit
10276
GlobTek, Inc.
Conforms to AAMI STD. ES60601-1,IEC 60601-1-11
Certified to CAN/CSA STD.C22.2 NO.60601-1
Certified to CSA STD C22.2 NO.60950-1 ;NO.223;NO.62368-1
Confirms to UL STD.60950-1;1310;62368-1
RoHS
EFFICIENCY LEVEL VI
GMA-512694-EA
IP42
LPS
MADE IN CHINA/Китай Производство/中国制造

APPENDIX B: Critical Component List

No.	Object/part No.	Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s) of conformity1)
1.	Adaptor Enclosure	SABIC INNOVATIVE PLASTICS B V	SE1X, SE1	PPE+PS, Min. V-1, Min. thickness: 2.0mm, 105°C	IEC 60950-1 UL 94 UL 746 A/B/C/D	UL E45329
2.	Alt.	SABIC INNOVATIVE PLASTICS B V	SE100	PPE+PS, Min. V-1, Min. thickness: 2.0mm, 95°C	IEC 60950-1 UL 94 UL 746 A/B/C/D	UL E45329
3.	Alt.	SABIC INNOVATIVE PLASTICS B V	C2950	PC/ABS, Min. V-0, Min. thickness: 2.0mm, 85°C	IEC 60950-1 UL 94 UL 746 A/B/C/D	UL E45329
4.	Alt.	SABIC INNOVATIVE PLASTICS B V	CX7211 EXCY0098	PC/ABS, Min. V-1, Min. thickness: 2.0mm, 90°C	IEC 60950-1 UL 94 UL 746 A/B/C/D	UL E45329
5.	Alt.	SABIC INNOVATIVE PLASTICS B V	945 940	PC, Min. V-1, Min. thickness: 2.0mm, 120°C	IEC 60950-1 UL 94 UL 746 A/B/C/D	UL E45329
6.	Alt.	SABIC INNOVATIVE PLASTICS B V	HF500R	PC, V-0, Min. thickness: 2.0mm, 125°C	IEC 60950-1 UL 94 UL 746 A/B/C/D	UL E45329
7.	Alt.	SABIC JAPAN L L C	SE1X, SE1	PPE+PS, Min. V-1, Min. thickness: 2.0mm, 105°C	IEC 60950-1 UL 94 UL 746 A/B/C/D	UL E207780
8.	Alt.	SABIC JAPAN L L C	SE100	PPE+PS, Min. V-1, Min. thickness: 2.0mm, 95°C	IEC 60950-1 UL 94 UL 746 A/B/C/D	UL E207780
9.	Alt.	SABIC JAPAN L L C	C2950	PC/ABS, Min. V-0, Min. thickness: 2.0mm, 85°C	IEC 60950-1 UL 94 UL 746 A/B/C/D	UL E207780
10.	Alt.	SABIC JAPAN L L C	CX7211 EXCY0098	PC/ABS, Min. V-1, Min. thickness: 2.0mm, 90°C	IEC 60950-1 UL 94 UL 746 A/B/C/D	UL E207780
11.	Alt.	SABIC JAPAN L L C	945 940	PC, Min. V-1, Min. thickness: 2.0mm, 120°C	IEC 60950-1 UL 94 UL 746 A/B/C/D	UL E207780
12.	Alt.	SABIC JAPAN L L C	HF500R	PC, V-0, Min. thickness: 2.0mm, 125°C	IEC 60950-1 UL 94 UL 746 A/B/C/D	UL E207780
13.	Alt.	TEIJIN CHEMICALS LTD	LN-1250P LN-1250G	PC, Min. V-0, Min. thickness: 2.0mm, 115°C	IEC 60950-1 UL 94 UL 746 A/B/C/D	UL E50075

No.	Object/part No.	Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s) of conformity1)
14.	Alt.	CHI MEI CORPORATION	PA-765A	ABS, Min. V-0, Min. thickness: 2.0mm, 85°C	IEC 60950-1 UL 94 UL 746 A/B/C/D	UL E56070
15.	Alt.	CHI MEI CORPORATION	PC-540	PC/ABS, Min. V-0, Min. thickness: 2.0mm, 70°C	IEC 60950-1 UL 94 UL 746 A/B/C/D	UL E56070
16.	PCB	WALEX ELECTRONIC (WUXI) CO LTD	T2, T2A T2B T4	Min. 1,6 mm thickness, min. V-0, 130°C	IEC 60335-1 UL 796	UL E154355
17.	Alt.	YUANMAN PRINTED CIRCUIT CO LTD	1V0	Min. 1,6 mm thickness, min. V-0, 130°C	IEC 60335-1 UL 796	UL E74757
18.	Alt.	SUZHOU XINKE ELECTRONICS CO LTD	XK-2,XK1	Min. 1,6 mm thickness, min. V-0, 130°C	IEC 60335-1 UL 796	UL E231590
19.	Alt.	DONGGUAN HE TONG ELECTRONICS CO LTD	CEM1 2V0 FR4	Min. 1,6 mm thickness, min. V-0, 130°C	C	UL E243157
20.	Alt.	KUNSHAN CITY HUA SHENG CIRCUIT BOARD CO LTD	HS-S	Min. 1,6 mm thickness, min. V-0, 130°C	IEC 60335-1 UL 796	UL E229877
21.	Alt.	CHEERFUL ELECTRONIC	02 03 03A	Min. 1,6 mm thickness, min. V-0, 130°C	IEC 60335-1 UL 796	UL E199724
22.	Alt.	JIANGSU DIFEIDA ELECTRONICS CO LTD	DFD-1	Min. 1,6 mm thickness, min. V-0, 130°C	IEC 60335-1 UL 796	UL E213009
23.	Alt.	DONGGUAN DAYSUN ELECTRONIC CO LTD	DS2	Min. 1,6 mm thickness, min. V-0, 130°C	IEC 60335-1 UL 796	UL E251754
24.	Alt.	SUZHOU CITY YILIHUA ELECTRONICS CO LTD	YLH-1	Min. 1,6 mm thickness, min. V-0, 130°C	IEC 60335-1 UL 796	UL E251781
25.	Alt.	DAFENG AREX ELECTRONICS TECHNOLOGY CO LTD	02V0, 03V0 04V0	Min. 1,6 mm thickness, min. V-0, 130°C	IEC 60335-1 UL 796	UL E186016
26.	Alt.	BRITE PLUS ELECTRONICS (SUZHOU) CO LTD	DKV0-3A DGV0-3A	Min. 1,6 mm thickness, min. V-0, 130°C	IEC 60335-1 UL 796	UL E177671
27.	Alt.	KUOTIANG ENT LTD	C-2 C-2A	Min. V-0, min 1.6 mm thickness, 130°C	IEC/EN 60950-1 UL 796	E227299

No.	Object/part No.	Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s) of conformity1)
28.	Alt.	PACIFIC WIN INDUSTRIAL LTD	PW-02 PW-03	Min. V-0, min 1.6 mm thickness, 130°C	IEC/EN 60950-1 UL 796	E228070
29.	Alt.	SHENZHEN TONGCHUANG XIN ELECTRONICS CO LTD	TCX	Min. 1,6 mm thickness, min. V-0, 130°C	IEC 60335-1 UL 796	UL E250336
30.	Alt.	Huizhou Shunjia Electronics Co., Ltd	SJ-B	Min. 1,6 mm thickness, min. V-0, 130°C	IEC 60335-1 UL 796	UL E320884
31.	Alt.	SHANGHAI H-FAST ELECTRONICS CO LTD	211001	Min. 1,6 mm thickness, min. V-0, 130°C	Min. 1,6 mm thickness, min. V-0, 130°C	UL E337862
32.	Alt.	JIANGXI ZHONG XIN HUA ELECTRONICS INDUSTRY CO LTD	ZXH-2, ZXH-3	Min. 1,6 mm thickness, min. V-0, 130°C	Min. 1,6 mm thickness, min. V-0, 130°C	UL E331298
33.	Fuse (F1,F2, F2 is optional))	Conquer Electronics Co., Ltd.	MST series	T3.15A, 250V	IEC 60127-1 IEC 60127-3 UL 248-1 UL 248-14	VDE 40017118 UL E82636
34.	Alt.	Ever Island Electric Co., Ltd. And Walter Electric	2010, ICP	T3.15A, 250V	IEC 60127-1 IEC 60127-3 UL 248-1 UL 248-14	VDE 40018781 UL E220181
35.	Alt.	WALTER ELECTRONIC CO LTD	ICP	T3.15A, 250V	IEC 60127-1 IEC 60127-3 UL 248-1 UL 248-14	VDE 40012824 UL E56092
36.	Alt.	Bel Fuse Ltd.	RST-Serie(s)	T3.15A, 250V	IEC 60127-1 IEC 60127-3 UL 248-1 UL 248-14	VDE 40011144 UL E20624
37.	Alt.	Cooper Bussmann LLC	SS-5	T3.15A, 250V	IEC 60127-1 IEC 60127-3 UL 248-1 UL 248-14	VDE 40015513 UL E19180
38.	Alt.	Dongguan Better	932	T3.15A, 250V	IEC 60127-1 IEC 60127-3 UL 248-1 UL 248-14	VDE 40033369 UL E300003
39.	Alt.	Hollyland	5ET	T3.15A, 250V	IEC 60127-1 IEC 60127-3 UL 248-1 UL 248-14	VDE 40015669 UL E156471
40.	Alt.	Sunny East	CFD	T3.15A, 250V	IEC 60127-1 IEC 60127-3 UL 248-1 UL 248-14	VDE 40030246 UL E133774

No.	Object/part No.	Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s) of conformity1)
41.	Alt.	Conquer Electronics Co., Ltd.	MET series	T3.15A, 250V	IEC 60127-1 IEC 60127-3 UL 248-1 UL 248-14	VDE 40017157 UL E82636
42.	Alt.	Shenzhen Lanson Electronics Co. Ltd.	SMT	T3.15A, 250V	IEC 60127-1 IEC 60127-3 UL 248-1 UL 248-14	VDE 40012592 UL E221465
43.	Alt.	Zhongshan Lanbao Electrical Appliances Co., Ltd.	RTI-10 Serie(s)	T3.15A, 250V	IEC 60127-1 IEC 60127-3 UL 248-1 UL 248-14	VDE 40017009 UL E213695
44.	X capacitor (CX1) (optional)	Cheng Tung Industrial Co., Ltd.	CTX	Max 0.47µF, Min.250V,100oC X1 or X2	IEC/EN 60384-14 UL 1414	UL CB / US-17992-UL VDE 40022642 UL E193049
45.	Alt.	Tenta Electric Industrial Co. Ltd.	MEX	Max 0.47µF, Min.250V,100oC X1 or X2	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 119119 UL E222911
46.	Alt.	Joey	MPX	Max 0.47µF, Min.250V,100oC X1 or X2	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40032481 UL E216807
47.	Alt.	Ultra Tech Xiphi Enterprise Co. Ltd.	HQX	Max 0.47µF, Min.250V,100oC X1 or X2	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40015608 UL E183780
48.	Alt.	Xiangtai Electronic (Shenzhen) Co., Ltd.	MKP/MPX	Max 0.47µF, Min.250V,100oC X1 or X2	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40036065 UL E357475
49.	Alt.	Carli Electronics Co., Ltd.	MPX	Max 0.47µF, Min.250V,100oC X1 or X2	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40008520 UL E120045
50.	Alt.	Dain Electronics Co., Ltd.	MEX, MPX, NPX	Max 0.47µF, Min.250V,100oC X1 or X2	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40018798 UL E147776
51.	Alt.	Yuon Yu Electronics Co. Ltd.	MPX	Max 0.47µF, Min.250V,100oC X1 or X2	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40032392 UL E200119
52.	Alt.	Sinhua Electronics (Huzhou) Co., Ltd.	MPX	Max 0.47µF, Min.250V,100oC X1 or X2	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40014686 UL E237560
53.	Alt.	Jiangsu Xinghua Huayu Electronics Co., Ltd.	MPX - Series	Max 0.47µF, Min.250V,100oC X1 or X2	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40022417 UL E311166

No.	Object/part No.	Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s) of conformity1)
54.	Alt.	Jinghao	CBB62B	Max 0.47μF, Min.250V,100oC X1 or X2	EC/EN 60384-14 UL 60384-14 UL 1414	VDE40018690 UL E252286
55.	Alt.	Foshan Shunde Chuang Ge Electronic Industrial Co., Ltd.	MKP-X2	Min. 250VAC, Max. 0.47μF, 40/105/21/B, X2	IEC/EN 60384-14	VDE 40008922
56.	Alt.	Okaya Electric Industries Co. LTD	RE-Series	Min. 250VAC, Max. 0.47μF, 55/100/56/C, X2	IEC/EN 60384-14	VDE 40028657
57.	Alt.	VISHAY Capacitors Belgium NV	F 1772	Min. 250VAC, Max. 0.47μF, 40/100/56/C, X2	IEC/EN 60384-14	VDE 40005095
58.	Alt.	Winday Electronic Industrial Co., Ltd.	MPX series	Min. 250VAC, Max. 0.47μF, 40/100/21/C, X2	IEC/EN 60384-14	VDE 40018071
59.	Y capacitor (CY1, CY2) (Optional)	TDK-EPC Corporation, Capacitors Group Circuit Devices Business Group	CD	Min.250V Min.125oC Max.2200pF Y1	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40029780 UL E37861
60.	Alt. use	Success Electronics Co., Ltd.	SE	Min.250V Min.125oC Max.2200pF Y1	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40037211 VDE 40020002 UL E114280
61.	Alt. use	Success Electronics Co., Ltd.	SB	Min.250V Min.125oC Max.2200pF Y1	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40037221 VDE 40020001 UL E114280
62.	Alt.	Walsin Technology Corp.	AH	Min.250V Min.125oC Max.2200pF Y1	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40001804 UL E146544
63.	Alt.	Haohua Electronic Co.	CT 7	Min.250V Min.125oC Max.2200pF Y1	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40003902 UL E233106
64.	Alt.	Xiangtai Electronic (Shenzhen) Co., Ltd.	YO-series	Min.250V Min.125oC Max.2200pF Y1	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40036880 UL E319473
65.	Alt.	JUHONG ELECTRONICS LTD	JB- series	Min.250V Min.125oC Max.2200pF Y1	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40035339 UL E253194
66.	Alt.	Murata Mfg. Co., Ltd.	KX	Min.250V Min.125oC Max.2200pF Y1	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40002831 UL E37921

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67.	Alt.	JYA-NAY Co., Ltd.	JN	Min.250V Min.125oC Max.2200pF Y1	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 40001831 UL E201384
68.	Alt.	Jyh Chung Electronic Co., Ltd.	JD	Min.250V Min.125oC Max.2200pF Y1	IEC/EN 60384-14 UL 60384-14 UL 1414	VDE 137027 UL E187963
69.	Alt.	WELSON INDUSTRIAL CO LT D	WD	Min.250V Min.125oC Max.2200pF Y1	IEC/EN 60384-14	VDE 40016157
70.	Varistor MOV1 (Optional)	TKS	TVR10471K, TVR14471K	Max. Continuous voltage: min 300Vac(rms), 85°C The coating is V-0	IEC 61051-2 IEC 60950-1	VDE005944 E314979
71.	-Alt.	Centra	CNR-10D471K, CNR-14D471K	Max. Continuous voltage: min 300Vac(rms), 85°C The coating is V-0	IEC 61051-2 IEC 60950-1	VDE40008220 E316325
72.	-Alt.	Success Electronics Co Ltd	SVR10D471K SVR14D471K	Max. Continuous voltage: min 300Vac(rms), 85°C The coating is V-0	IEC 61051-2 IEC 60950-1	VDE40030401 E330256
73.	-Alt.	Walsin	VZ10D471K VZ14D471K	Max. Continuous voltage: min 300Vac(rms), 85°C The coating is V-0	IEC 61051-2 IEC 60950-1	VDE5932 E309297
74.	-Alt.	Lien Shun Electronics Co., Ltd.	10D471K 14D471K	Max. Continuous voltage: min 300Vac(rms), 85°C The coating is V-0	IEC 61051-2 IEC 60950-1	VDE40005858 E315524
75.	-Alt.	CERAMATE	GNR10D471K GNR14D471K	Max. Continuous voltage: min 300Vac(rms), 85°C The coating is V-0	IEC 61051-2 IEC 60950-1	VDE40031745 E315429
76.	-Alt.	Brightking	14D471K 10D471K	Max. Continuous voltage: min 300Vac(rms), 85°C The coating is V-0	IEC 61051-2 IEC 60950-1	VDE40027827 E327997
77.	Alt.	Joyin Co., Ltd.	JVT10N471K JVT14N471K	300V rms; 385V d.c., 3kA, 8/20µs	IEC 609501 EN 609501	VDE005937 E325508
78.	Photo coupler (U4)	Lite-On Technology Corporation	LTV-817	Dti=0.8mm Int. , EXT.dcr=7.8mm, thermal cycling test,110°C	IEC/EN 60747-5-2 UL 1577	VDE40015248 UL E113898

No.	Object/part No.	Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s) of conformity1)
79.	Alt.	Everlight Electronics Co., Ltd.	EL817	Dti=0.5mm Int. , dcr=6.0mm EXT.dcr=7.7mm, thermal cycling test,110°C	IEC/EN 60747-5-2 UL 1577	VDE 132249 UL E214129
80.	Alt.	Fairchild Semiconductor Pte Ltd.	H11A817B / FOD817B	Insulation voltage: 850V; Transient overvoltage: 6000V; CTI175; Int. Cr/ Ext. Cr: ≥7,0/ 7,0 mm; 30/110/21	IEC/EN 60747-5-2	VDE 40026857
81.	Alt.	Sharp Corporation Electronic Components and Devices Group	PC817	Insulation voltage: 890V; Transient overvoltage: 9000V Int. Cr/ Ext. Cr: 7.62/ 7.62 mm; 30/100/21	IEC/EN 60747-5-2	VDE 40008087
82.	Alt.	Bright Led Electronics Corp.	BPC-817 A/B/C/D/L BPC-817 M BPC-817 S	Dti=0.4mm EXT.dcr=7.0mm, thermal cycling test,110°C	IEC/EN 60747-5-2	VDE 40007240
83.	Alt.	Toshiba Corporation Semiconductor & Storage Products Company	TLP781F	Dti > 0.4mm, Ext cr > 8.0mm, Isolation 3000Vac min., 110°C min., Thermal cycling test	IEC/EN 60747-5-2	VDE 40021173
84.	Alt.	COSMO Electronics Corporation	K1010 / KP1010	Dti=0.6mm Int. , dcr=4.0mm EXT.dcr=5.0mm, thermal cycling test,115°C	IEC/EN 60747-5-2	VDE 101347
85.	Output cord	Interchangeable	Interchangeable	Min. 24AWG, min. 300Vac, min. 80°C	IEC/EN 60950-1 UL 758	Tested with appliance UL approved
86.	Appliance inlet	Zhejiang LECI Electronics Co., Ltd	DB-8	2.5A, 250Vac	IEC60320-1	VDE 40032028
87.	Alt.	Rich Bay Co., Ltd.	R-201SN90	2.5A, 250Vac	IEC60320-1	VDE 40030384
88.	Alt.	TECX-UNIONS Technology Corporation	SO-222	2.5A, 250Vac	IEC60320-1	ENEC-00859
89.	Alt.	Rong Feng Industrial Co., Ltd.	RF-180	2.5A, 250Vac	IEC60320-1	VDE 40030168
90.	Alt.	Inalways Corporation	0721	2.5A, 250Vac	IEC60320-1	ENEC 2010087

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91.	Alt.	Zhe Jiang Bei Er jia	ST-A03-005	2.5A, 250Vac	IEC60320-1	VDE 40014833
92.	Alt.	Shenzhen Delikang Electronics Technology Co. Ltd.	CDJ-8	2.5A, 250Vac	IEC60320-1	VDE 40025531
93.	Transformer(T1)	GlobTek/ BOAM/ Haopuwei/ ENG	TF058 (for 5V) TF059 (for 12V) TF060 (for 24V) TF061 (for 48V)	Class B	--	--
94.	- Insulation system used in T1	GlobTek	GTX-130-TM	Class 130 (B)		E243347
95.	Alt.	Haopuwei	HPW	Class 130 (B)		E315275
96.	Alt.	BOAM	BOAM-01 or B1	Class 130 (B)		E252329
97.	Alt.	ENG	ENG130-1	Class 130 (B)		E308897
98.	-Triple-insulated wire (Secondary)	Great Leoflon Industrial Co., Ltd.	TRW (B) Serie(s)	Class B, reinforced insulation	IEC 60950-1 IEC 61558-2-16 UL 2353 UL 60601-1	VDE 136581 UL E211989
99.	-Alt.	COSMOLINK CO. Ltd.	TIW-M Serie(s)	Class B, reinforced insulation	IEC 60950-1 IEC 61558-2-16 UL 2353 UL 60601-1	VDE 138053 UL E213764
100.	-Alt.	Furukawa Electric Co., Ltd. Electronics & Automotive Systems Company Global Business Development Division	TEX-E	Class B, reinforced insulation	IEC 60950-1 IEC 61558-2-16 UL 2353 UL 60601-1	VDE 006735 UL E206440
101.	- Alt	TOTOKU ELECTRIC CO LTD	TIW-2	Reinforced insulation, rated 130° C (Class B)	IEC 60950-1 IEC 61558-2-16 UL 2353 UL 60601-1	VDE 40005152 UL E249037
102.	- Alt	E&B TECHNOLOGY CO LTD	E&B-XXXB E&B-XXXB-1	Reinforced insulation, Class B	IEC 60950-1 IEC 61558-2-16 UL 2353 UL 60601-1	VDE 40023473 UL E315265
103.	-Alt.	SHENZHEN JIUDING NEW MATERIAL CO LTD	DTIW-B	Class B	IEC 60950-1 IEC 61558-2-16 UL 2353 UL 60601-1	VDE 40037495 UL E357999

No.	Object/part No.	Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s) of conformity1)
104.	-Bobbin	CHANG CHUN PLASTICS CO LTD	T375J T375HF	V-0, 150°C, thickness 0,45 mm min.	IEC 60335-1 UL 94 UL 746 A/B/C/D	Tested within appliance UL E59481
105.	- Alt	CHANG CHUN PLASTICS CO LTD	4130	V-0, 140°C, thickness 0,74 mm min.	IEC 60950-1 UL 94 UL 746 A/B/C/D	Tested with appliance UL E59481
106.	-Alt.	SUMITOMO BAKELITE CO LTD	PM-9820	V-0, 150°C, thickness 0,45 mm min.	IEC 60335-1 UL 94 UL 746 A/B/C/D	Tested within appliance UL E41429
107.	-Alt.	HITACHI CHEMICAL CO LTD	CP-J-8800	V-0, 150°C, thickness 0,45 mm min.	IEC 60335-1 UL 94 UL 746 A/B/C/D	Tested within appliance UL E42956
108.	-Insulating tape	3M COMPANY ELECTRICAL MARKETS DIV (EMD)	1350F-1(b) 1350T-1 44	Min.130°C	IEC 60335-1 UL 510	Tested within appliance UL E17385
109.	-Alt.	BONDTEC PACIFIC CO LTD	370S(b)	Min.130°C	IEC 60335-1 UL 510	Tested within appliance UL E175868
110.	-Alt.	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	PZ CT WF	Min.130°C	IEC 60335-1 UL 510	Tested within appliance UL E165111
111.	-Alt.	JINGJIANG JINGYI ADHESIVE PRODUCT CO LTD	JY25-A(b)	Min.130°C	IEC 60335-1 UL 510	Tested within appliance UL E246950
112.	-Alt.	CHANG SHU LIANG YI TAPE INDUSTRY CO LTD	LY-XX(a)(b)	Min.130°C	IEC 60335-1 UL 510	Tested within appliance UL E246820
113.	tubing	GREAT HOLDING INDUSTRIAL CO LTD	TFT/TFS/TFL	Min. 300V, 200oC	IEC 60950-1	Tested with appliance UL E156256
114.	-Alt.	SHENZHEN WOER HEAT-SHRINKABLE MATERIAL CO LTD	WF	600V, 200oC	IEC 60950-1	Tested with appliance UL E203950
115.	-Alt	CHANGYUAN ELECTRONICS (SHENZHEN) CO LTD	CB-TT-T / CB-TT-S	Min. 300V, 200oC	IEC 60950-1	Tested with appliance UL E180908
116.	Inductor (LF1)	GlobTek/BOAM/ Haopuwei/ENG/ HEJIA	LF019	Min. 200mH	IEC 60950-1	Tested with appliance

No.	Object/part No.	Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s) of conformity1)
117.	Inductor (LF2)	GlobTek/ BOAM/ Haopuwei/ ENG/ HEJIA	NF00031	Min. 10mH	IEC 60950-1	Tested with appliance

End of Report

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