

TEST REPORT

Applicant: Xiamen Topstar Co., Ltd.

Address of Applicant: No.696 Meixi Road, Tongan District Xiamen City, Fujian Province, P.R.China

Manufacturer: Xiamen Topstar Co., Ltd.

Address of Manufacturer: No.696 Meixi Road, Tongan District Xiamen City, Fujian Province, P.R.China

Factory: Xiamen Topstar Lighting Co., Ltd

Address of Factory: 676 Meixi Avenue, Tong'an District, Xiamen, China

Equipment Under Test (EUT)

Product Name: Electric Vehicle supply equipment

Model No.: See section 5.1

FCC ID: 2A9FM-TSEA240VT2

Applicable standards: FCC CFR Title 47 Part 15 Subpart C Section 15.225

Date of sample receipt: July 22, 2025

Date of Test: July 22, 2025-August 25, 2025

Date of report issued: August 25, 2025

Test Result : PASS

* In the configuration tested, the EUT complied with the standards specified above.



Laboratory Manager

This results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

2 Version

Version No.	Date	Description
00	August 25, 2025	Original

Tested By:

Jauch. Gai

Date:

August 25, 2025

Test Engineer

Prepared By:

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Date:

August 25, 2025

Project Engineer

Check By:

Robinson Lu

Date:

August 25, 2025

Reviewer

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4 Test Summary

Test Item	Section in CFR 47	Result
Antenna Requirement	15.203	Pass
AC Power Line Conducted Emission	15.207	Pass
Field Strength of Fundamental Emissions and Mask Measurement	15.225(a)(b)(c)	Pass
Radiated Emission	15.225(d)&15.209	Pass
20dB Emission Bandwidth	15.225&15.215	Pass
Frequency Stability Measurement	15.225(e)	Pass

Remark:

1. Pass: The EUT complies with the essential requirements in the standard.

4.1 Measurement Uncertainty

Test Item	Frequency Range	Measurement Uncertainty	Notes
Radiated Emission	30MHz-200MHz	3.8039dB	(1)
Radiated Emission	200MHz-1GHz	3.9679dB	(1)
Radiated Emission	1GHz-18GHz	4.29dB	(1)
AC Power Line Conducted Emission	0.15MHz ~ 30MHz	3.44dB	(1)

Note (1): The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.

5 General Information

5.1 General Description of EUT

Product Name:	Electric Vehicle supply equipment
Model No.:	TSEA240V/80AUS-ZRGMP-C, TSEA240V/48AUS-ZRGMP-C, TSEA240V/40AUS-ZRGMP-C, TSEA240V/32AUS-ZRGMP-C TSEA240V/80AUS-ZRMP-C, TSEA240V/48AUS-ZRMP-C, TSEA240V/40AUS-ZRMP-C, TSEA240V/32AUS-ZRMP-C TSEA240V/80AUS-ZRGM-C, TSEA240V/48AUS-ZRGM-C, TSEA240V/40AUS-ZRGM-C, TSEA240V/32AUS-ZRGM-C TSEA240V/80AUS-ZRM-C, TSEA240V/48AUS-ZRM-C, TSEA240V/40AUS-ZRM-C, TSEA240V/32AUS-ZRM-C
Test Model No:	TSEA240V/80AUS-ZRGMP-C
Remark: The EUT is Electric Vehicle AC Charger with RF ID and PLC Function, it supports WIFI, Bluetooth and LTE function, the wireless module FCC ID is XMR202008EC25AFXD and 2AC7Z-ESP32WROOM32U.the wireless module IC is 10224A-022EC25AFXD and 21098-ESPWROOM32U used in those models except for output current. Business Edition model: TSEA240V/80AUS-ZRGMP-C:208-240VAC, 60Hz, 80A TSEA240V/48AUS-ZRGMP-C:208-240VAC, 60Hz, 48A TSEA240V/40AUS-ZRGMP-C:208-240VAC, 60Hz, 40A TSEA240V/32AUS-ZRGMP-C:208-240VAC, 60Hz, 32A, with LTE, WIFI, BLE, information recognition module and RFID TSEA240V/80AUS-ZRMP-C:208-240VAC, 60Hz, 80A TSEA240V/48AUS-ZRMP-C:208-240VAC, 60Hz, 48A TSEA240V/40AUS-ZRMP-C:208-240VAC, 60Hz, 40A TSEA240V/32AUS-ZRMP-C:208-240VAC, 60Hz, 32A, with WIFI, BLE, information recognition module and RFID TSEA240V/80AUS-ZRGM-C:208-240VAC, 60Hz, 80A TSEA240V/48AUS-ZRGM-C:208-240VAC, 60Hz, 48A TSEA240V/40AUS-ZRGM-C:208-240VAC, 60Hz, 40A TSEA240V/32AUS-ZRGM-C:208-240VAC, 60Hz, 32A, with LTE, WIFI, BLE and RFID TSEA240V/80AUS-ZRM-C:208-240VAC, 60Hz, 80A TSEA240V/48AUS-ZRM-C:208-240VAC, 60Hz, 48A TSEA240V/40AUS-ZRM-C:208-240VAC, 60Hz, 40A TSEA240V/32AUS-ZRM-C:208-240VAC, 60Hz, 32A, with WIFI, BLE and RFID So choose TSEA240V/80AUS-ZRGMP-C to test as representative	
S/N:	25070012
Test sample(s) ID:	GTS2025070415-1
Sample(s) Status	Engineered sample
Operation Frequency:	13.56MHz
Channel Number:	1
Modulation:	ASK
Antenna type:	PCB Antenna
Antenna gain:	0dBi
Power supply:	AC 208-240V, 60Hz

Disclaimer statement:

1. Antenna gain information provided by the customer, and the laboratory is not responsible for its authenticity.

2. The information in this section is provided by the applicant or manufacturer, GTS is not liable to the accuracy, suitability, reliability or/and integrity of the information.

5.2 Test mode

Transmitter mode	Keep the EUT in continuously transmitting.		
Pre-test mode.			
GTS has verified the construction and function in typical operation, The EUT was placed on three different polar directions; i.e. X axis, Y axis, Z axis. which was shown in this test report and defined as follows:			
Axis	X	Y	Z
Field Strength(dBuV/m)	54.03	54.74	54.10
Final Test Mode:			
According to ANSI C63.4 standards, the test results are both the “worst case” and “worst setup”: Y axis (see the test setup photo)			

5.3 Test Facility

The test facility is recognized, certified, or accredited by the following organizations: ● FCC —Registration No.: 381383 Designation Number: CN5029 Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in files. ● ISED —Registration No.: 9079A CAB identifier: CN0091 The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of ISED for radio equipment testing. ● NVLAP (LAB CODE:600179-0) Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP).

5.4 Test Location

All tests were performed at:
Global United Technology Services Co., Ltd. Address: No. 123-128, Tower A, Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102 Tel: 0755-27798480 Fax: 0755-27798960

5.5 Description of Support Units

None

6 Test Instruments list

Radiated Emission:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	Apr. 11, 2025	Apr. 10, 2026
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	Apr. 12, 2025	Apr. 11, 2026
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9168	GTS640	Apr. 12, 2025	Apr. 11, 2026
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120 D	GTS208	Apr. 11, 2025	Apr. 10, 2026
6	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS575	Jul. 01, 2025	Jun. 30, 2026
7	Loop Antenna	ZHINAN	ZN30900A	GTS534	Nov.16, 2024	Nov.15, 2025
8	Broadband Preamplifier	SCHWARZBECK	BBV9718	GTS535	Apr. 11, 2025	Apr. 10, 2026
9	Amplifier(1GHz-26.5GHz)	HP	8449B	GTS601	Apr. 11, 2025	Apr. 10, 2026
10	Horn Antenna (18GH-40GHz)	Schwarzbeck	BBHA 9170	GTS691	Apr. 11, 2025	Apr. 10, 2026
11	FSV·Signal Analyzer (10Hz-40GHz)	Keysight	FSV-40-N	GTS666	Mar. 11, 2025	Mar. 10, 2026
12	Amplifier	/	LNA-1000-30S	GTS650	Apr. 11, 2025	Apr. 10, 2026
13	CDNE M2+M3-16A	HCT	30MHz-300MHz	GTS692	Nov. 13, 2024	Nov. 12, 2025
14	Wideband Amplifier	/	WDA-01004000-15P35	GTS602	Apr. 11, 2025	Apr. 10, 2026
15	Thermo meter	JINCHUANG	GSP-8A	GTS643	Apr. 15, 2025	Apr. 14, 2026
16	RE cable 1	GTS	N/A	GTS675	Jul. 11, 2025	Jul. 10, 2026
17	RE cable 2	GTS	N/A	GTS676	Jul. 11, 2025	Jul. 10, 2026
18	RE cable 3	GTS	N/A	GTS677	Jul. 11, 2025	Jul. 10, 2026
19	RE cable 4	GTS	N/A	GTS678	Jul. 11, 2025	Jul. 10, 2026
20	RE cable 5	GTS	N/A	GTS679	Jul. 11, 2025	Jul. 10, 2026
21	RE cable 6	GTS	N/A	GTS680	Jul. 11, 2025	Jul. 10, 2026
22	RE cable 7	GTS	N/A	GTS681	Jul. 11, 2025	Jul. 10, 2026
23	RE cable 8	GTS	N/A	GTS682	Jul. 11, 2025	Jul. 10, 2026
24	EMI Test Software	AUDIX	E3-6.100614a	GTS725	N/A	N/A

Conducted Emission						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	Shielding Room	ZhongYu Electron	7.3(L)x3.1(W)x2.9(H)	GTS252	Jul. 12, 2022	Jul. 11, 2027
2	EMI Test Receiver	R&S	ESCI 7	GTS552	Apr. 12, 2025	Apr. 11, 2026
3	LISN	ROHDE & SCHWARZ	ENV216	GTS226	Apr. 11, 2025	Apr. 10, 2026
4	Coaxial Cable	GTS	N/A	GTS227	N/A	N/A
5	Thermo meter	JINCHUANG	GSP-8A	GTS642	Apr. 15, 2025	Apr. 14, 2026
6	Absorbing clamp	Elektronik-Feinmechanik	MDS21	GTS229	Apr. 12, 2025	Apr. 11, 2026
7	ISN	SCHWARZBECK	NTFM 8158	GTS565	Apr. 11, 2025	Apr. 10, 2026
8	High voltage probe	SCHWARZBECK	TK9420	GTS537	Apr. 11, 2025	Apr. 10, 2026
9	Antenna end assembly	Weinschel	1870A	GTS560	Apr. 11, 2025	Apr. 10, 2026
10	EMI Test Software	AUDIX	E3-6.100622	GTS726	N/A	N/A
11	Current probe	CYBERTEK	EM5011	GTS698	Jan. 13, 2025	Jan. 12, 2026

RF Conducted Test:						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	MXA Signal Analyzer	Agilent	N9020A	GTS566	Apr. 11, 2025	Apr. 10, 2026
2	EMI Test Receiver	R&S	ESCI 7	GTS552	Apr. 12, 2025	Apr. 11, 2026
3	PSA Series Spectrum Analyzer	Agilent	E4440A	GTS536	Apr. 11, 2025	Apr. 10, 2026
4	MXG vector Signal Generator	Agilent	N5182A	GTS567	Apr. 11, 2025	Apr. 10, 2026
5	ESG Analog Signal Generator	Agilent	E4428C	GTS568	Apr. 11, 2025	Apr. 10, 2026
6	Wideband Power Meter	Keysight	N1924A	GTS673	Apr. 11, 2025	Apr. 10, 2026
7	USB RF Power Sensor	DARE	RPR3006W	GTS569	Apr. 11, 2025	Apr. 10, 2026
8	RF Switch Box	Shongyi	RFSW3003328	GTS571	Apr. 11, 2025	Apr. 10, 2026
9	Programmable Constant Temp & Humi Test Chamber	WEWON	WHTH-150L-40-880	GTS572	Apr. 11, 2025	Apr. 10, 2026
10	Thermo meter	JINCHUANG	GSP-8A	GTS641	Apr. 15, 2025	Apr. 14, 2026

General used equipment:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	Barometer	KUMAO	SF132	GTS647	Jul. 16, 2025	Jul. 15, 2026

7 Test results and Measurement Data

7.1 Antenna requirement:

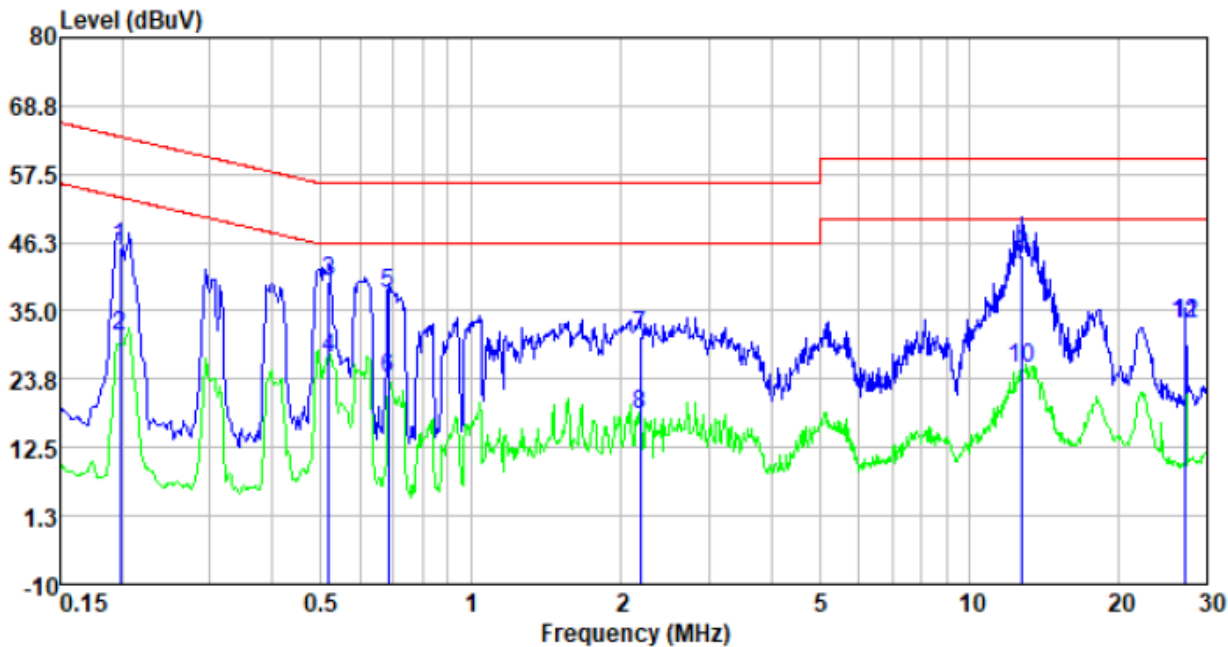
Standard requirement:	FCC Part15 C Section 15.203
15.203 requirement: An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.	
EUT Antenna:	
The antenna is PCB antenna, reference to the appendix II for details	

7.2 Conducted Emissions

Test Requirement:	FCC Part15 C Section 15.207					
Test Method:	ANSI C63.10:2020					
Test Frequency Range:	150KHz to 30MHz					
Receiver setup:	RBW=9KHz, VBW=30KHz, Sweep time=auto					
Limit:	Frequency range (MHz)		Limit (dBuV)			
			Quasi-peak		Average	
	0.15-0.5		66 to 56*		56 to 46*	
	0.5-5		56		46	
	5-30		60		50	
* Decreases with the logarithm of the frequency.						
Test setup:	Reference Plane Remark E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m					
Test procedure:	1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. 2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). 3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10:2013 on conducted measurement.					
Test Instruments:	Refer to section 6.0 for details					
Test mode:	Refer to section 5.2 for details					
Test environment:	Temp.:	25 °C	Humid.:	52%	Press.:	1012mbar
Test voltage:	AC 240V, 60Hz					
Test results:	Pass					

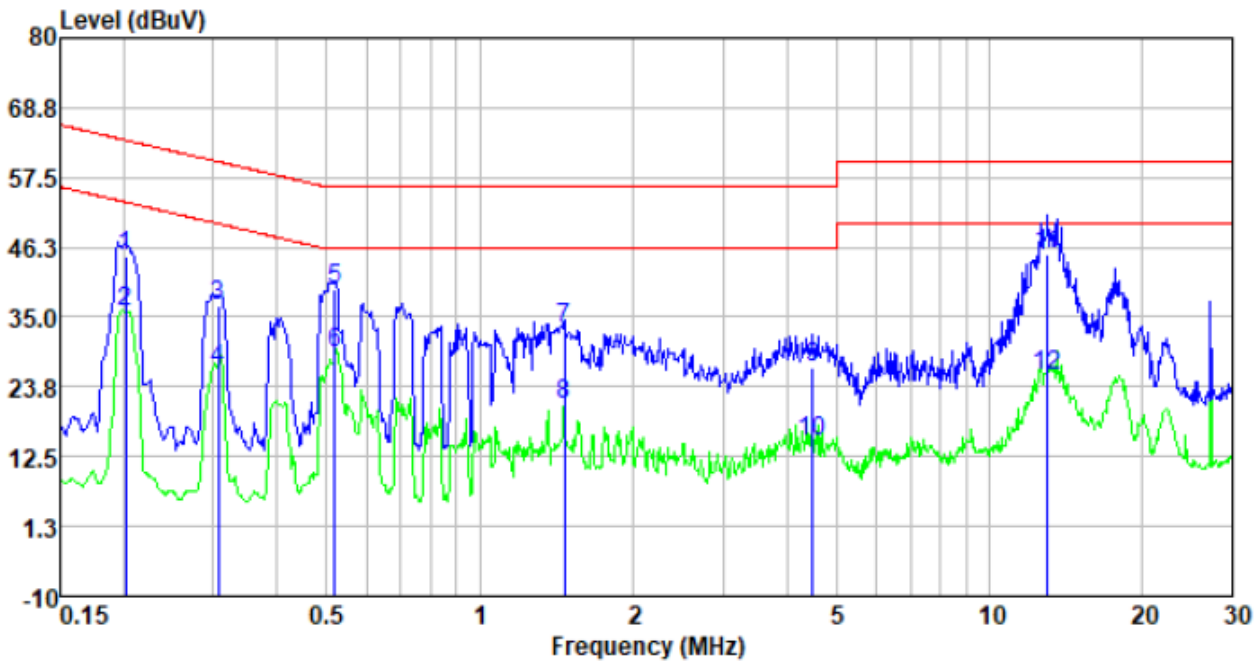
Measurement data:

Line:



Freq	Reading level	LISN/ISN factor	Cable loss	Level	Limit level	Over limit	Remark
MHz	dBuV	dB	dB	dBuV	dBuV	dB	
0.20	25.73	9.57	0.01	45.31	63.71	-18.40	QP
0.20	11.26	9.57	0.01	30.84	53.71	-22.87	Average
0.52	19.91	9.82	0.01	39.74	56.00	-16.26	QP
0.52	7.42	9.82	0.01	27.25	46.00	-18.75	Average
0.68	18.01	9.73	0.02	37.76	56.00	-18.24	QP
0.68	4.05	9.73	0.02	23.80	46.00	-22.20	Average
2.19	11.12	9.76	0.05	30.93	56.00	-25.07	QP
2.19	-1.86	9.76	0.05	17.95	46.00	-28.05	Average
12.78	24.30	9.68	0.14	44.12	60.00	-15.88	QP
12.78	5.65	9.68	0.14	25.47	50.00	-24.53	Average
27.12	12.58	10.08	0.20	32.86	60.00	-27.14	QP
27.12	12.46	10.08	0.20	32.74	50.00	-17.26	Average

Neutral:

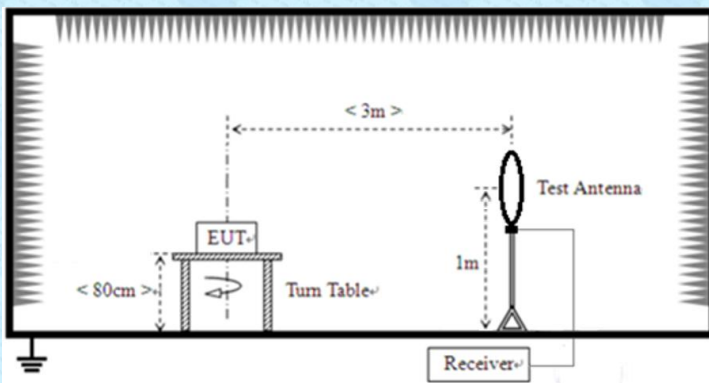


Freq	Reading	LISN/ISN	Cable		Limit	Over	
	level	factor	loss	Level	level	limit	Remark
MHz	dBuV	dB	dB	dBuV	dBuV	dB	
0.20	25.18	9.69	0.01	44.88	63.54	-18.66	QP
0.20	16.24	9.69	0.01	35.94	53.54	-17.60	Average
0.31	16.94	9.75	0.01	36.70	60.06	-23.36	QP
0.31	6.67	9.75	0.01	26.43	50.06	-23.63	Average
0.52	19.62	9.78	0.01	39.41	56.00	-16.59	QP
0.52	9.44	9.78	0.01	29.23	46.00	-16.77	Average
1.46	13.29	9.85	0.04	33.18	56.00	-22.82	QP
1.46	0.87	9.85	0.04	20.76	46.00	-25.24	Average
4.50	7.20	9.74	0.06	27.00	56.00	-29.00	QP
4.50	-4.76	9.74	0.06	15.04	46.00	-30.96	Average
12.99	25.16	9.89	0.14	45.19	60.00	-14.81	QP
12.99	5.65	9.89	0.14	25.68	50.00	-24.32	Average

Notes:

1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Test Level(dBuV) = Reading level(dBuV) + LISN/ISN Factor (dB) + Cable Loss(dB)

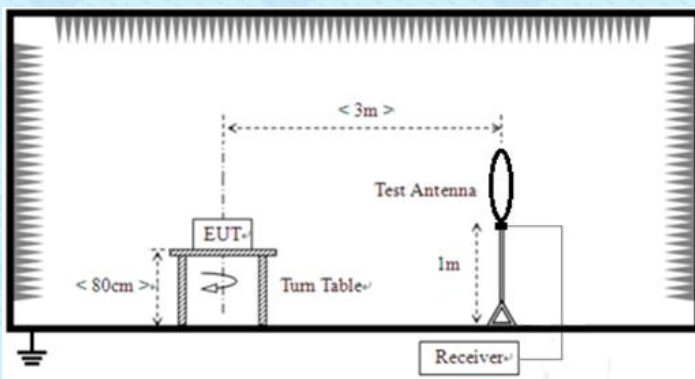
7.3 Field Strength of Fundamental Emissions and Mask Measurement

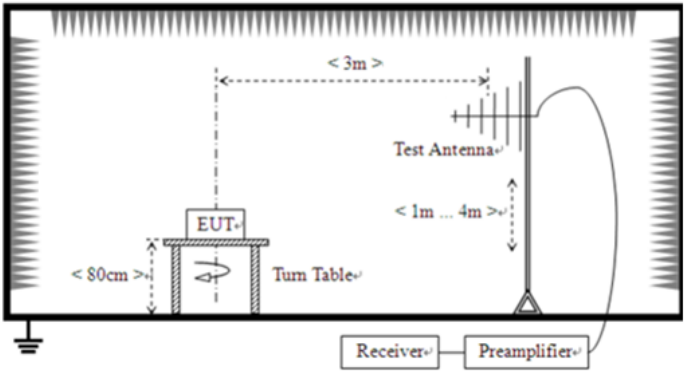
Test Requirement:	FCC Part15 C Section 15.225(a)(b)(c)		
Test Method:	ANSI C63.10:2020 & ANSI C63.4: 2014		
Test site:	Measurement Distance: 3m		
Receiver setup:	RBW=9KHz, VBW=30KHz, Sweep time=Auto		
limit:	FCC Part 15.225 & 15.209		
	Frequencies(MHz)	Limit at 30m(dBuV/m)	Limit at 3m(dBuV/m)
	13.110-13.410	40.50	80.50
	13.410-13.553	50.50	90.50
	13.553-13.567	84.00	124.00
	13.567-13.710	50.50	90.50
	13.710-14.010	40.50	80.50
Test setup:			
Test Instruments:	Refer to section 6.0 for details		
Test mode:	Refer to section 5.2 for details		
Test results:	Pass		

Measurement data:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Remark
13.56	33.66	20.57	0.51	54.74	124	-69.26	PK

7.4 Radiated Emission

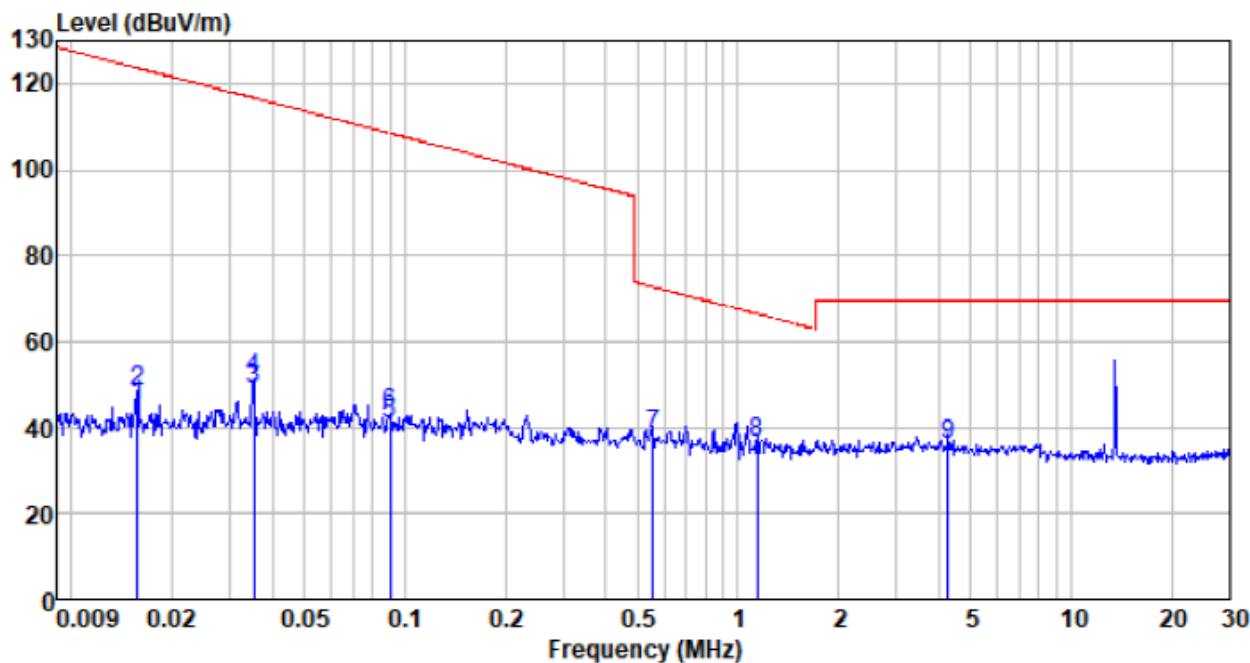
Test Requirement:	FCC Part15 C Section 15.225(d) and 15.209																												
Test Method:	ANSI C63.10: 2020 & ANSI C63.4: 2014																												
Test Frequency Range:	9KHz to 1000MHz																												
Test site:	Measurement Distance: 3m																												
Receiver setup:	Frequency	Detector	RBW	VBW	Remark																								
	9kHz-150kHz	Quasi-peak	200Hz	300Hz	Quasi-peak Value																								
	150kHz-30MHz	Quasi-peak	9kHz	10kHz	Quasi-peak Value																								
	30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak Value																								
FCC Limit:	<table><tr><th>Frequency (MHz)</th><th>Field strength (microvolts/meter)</th><th>Measurement distance (meters)</th></tr><tr><td>0.009-0.490</td><td>2400/F(kHz)</td><td>300</td></tr><tr><td>0.490-1.705</td><td>24000/F(kHz)</td><td>30</td></tr><tr><td>1.705-30.0</td><td>30</td><td>30</td></tr><tr><td>30-88</td><td>100**</td><td>3</td></tr><tr><td>88-216</td><td>150**</td><td>3</td></tr><tr><td>216-960</td><td>200**</td><td>3</td></tr><tr><td>Above 960</td><td>500</td><td>3</td></tr></table>					Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)	0.009-0.490	2400/F(kHz)	300	0.490-1.705	24000/F(kHz)	30	1.705-30.0	30	30	30-88	100**	3	88-216	150**	3	216-960	200**	3	Above 960	500	3
	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)																										
0.009-0.490	2400/F(kHz)	300																											
0.490-1.705	24000/F(kHz)	30																											
1.705-30.0	30	30																											
30-88	100**	3																											
88-216	150**	3																											
216-960	200**	3																											
Above 960	500	3																											
	The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.																												
Test setup:	Below 30MHz																												
																													
	Above 30MHz																												

						
Test Instruments:	Refer to section 6.0 for details					
Test mode:	Refer to section 5.2 for details					
Test environment:	Temp.:	25 °C	Humid.:	52%	Press.:	1012mbar
Test voltage:	AC 240V					
Test results:	Pass					

Measurement data:

■ 9kHz~30MHz

the radiation emission more than 20dB below the limit.

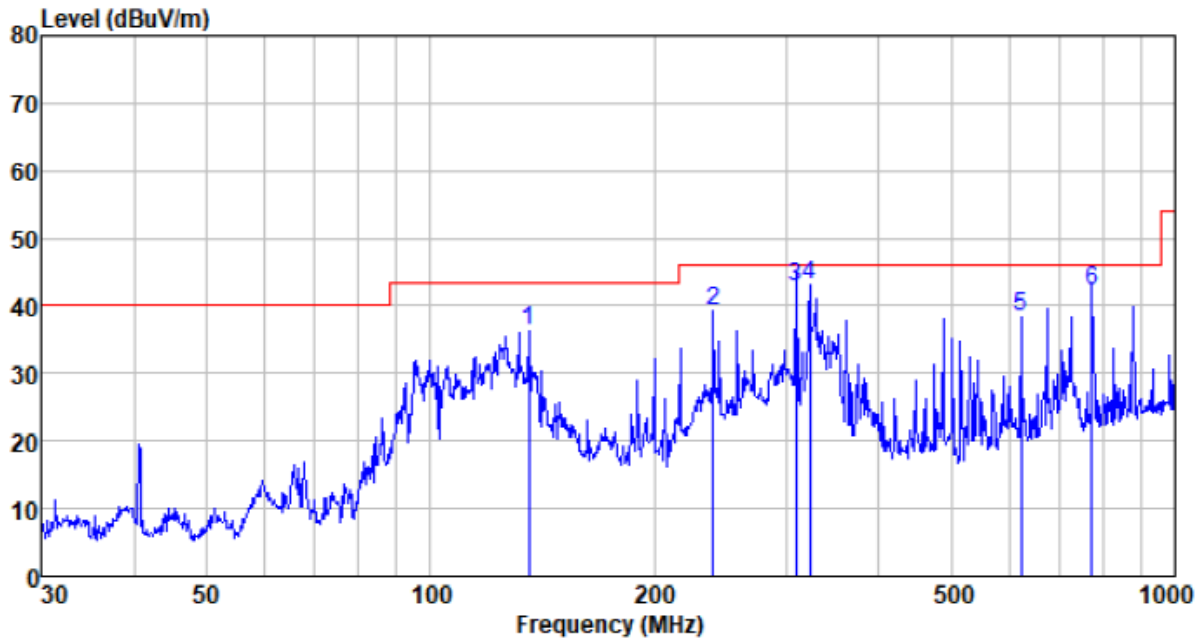


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
0.016	24.28	20.71	0.05	0.00	45.04	123.65	-78.61	Average
0.016	27.58	20.71	0.05	0.00	48.34	123.65	-75.31	Peak
0.035	28.42	20.50	0.07	0.00	48.99	116.68	-67.69	Average
0.035	30.84	20.50	0.07	0.00	51.41	116.68	-65.27	Peak
0.090	20.42	20.40	0.08	0.00	40.90	108.51	-67.61	Average
0.090	22.51	20.40	0.08	0.00	42.99	108.51	-65.52	Peak
0.554	18.21	19.90	0.09	0.00	38.20	72.73	-34.53	QP
1.141	15.64	20.54	0.12	0.00	36.30	66.46	-30.16	QP
4.282	15.02	20.87	0.29	0.00	36.18	69.54	-33.36	QP

Remarks: level = Reading level + Antenna factor + Cable loss - Preamp Factor

■ 30MHz~1GHz

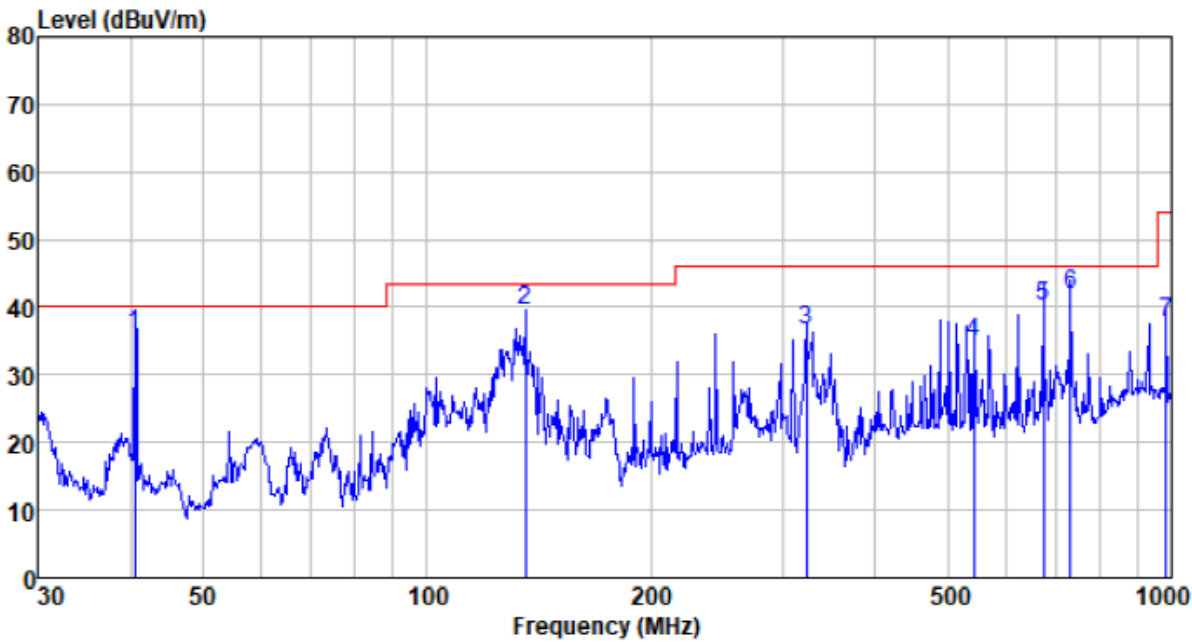
Horizontal:



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	Final level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
135.506	54.15	13.35	2.32	33.51	36.31	43.50	-7.19	QP
239.987	59.47	10.10	3.13	33.31	39.39	46.00	-6.61	QP
309.998	60.00	12.50	3.62	33.18	42.94	46.00	-3.06	QP
323.320	59.72	12.93	3.70	33.16	43.19	46.00	-2.81	QP
620.710	46.38	19.43	5.18	32.58	38.41	46.00	-7.59	QP
774.158	46.63	21.77	5.94	32.25	42.09	46.00	-3.91	QP

Remarks:
Final level(dBuV/m) = Reading level(dBuV) + Antenna factor(dB/m) + Cable loss(dB) - Preamp Factor(dB)

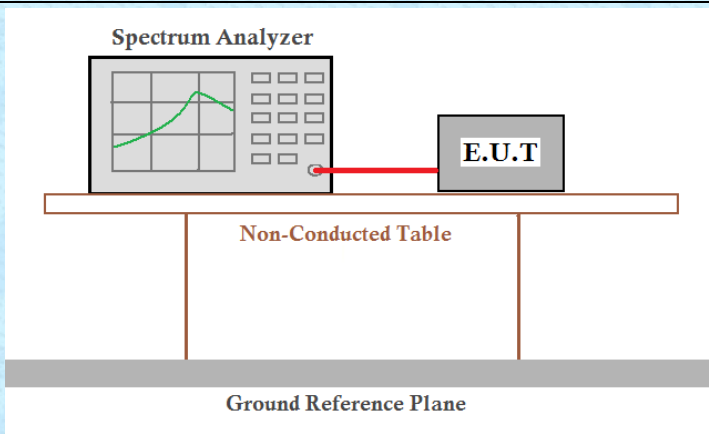
Vertical:



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	Final level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
40.559	54.21	14.12	1.30	33.54	36.09	40.00	-3.91	QP
135.506	57.44	13.35	2.32	33.51	39.60	43.50	-3.90	QP
323.320	53.01	12.93	3.70	33.16	36.48	46.00	-9.52	QP
543.274	45.16	17.57	4.81	32.78	34.76	46.00	-11.24	QP
672.845	47.13	20.20	5.41	32.46	40.28	46.00	-5.72	QP
731.920	47.48	21.04	5.71	32.33	41.90	46.00	-4.10	QP
982.620	38.51	23.90	6.61	31.19	37.83	54.00	-16.17	QP

Remarks:
Final level(dBuV/m) = Reading level(dBuV) + Antenna factor(dB/m) + Cable loss(dB) - Preamp Factor(dB)

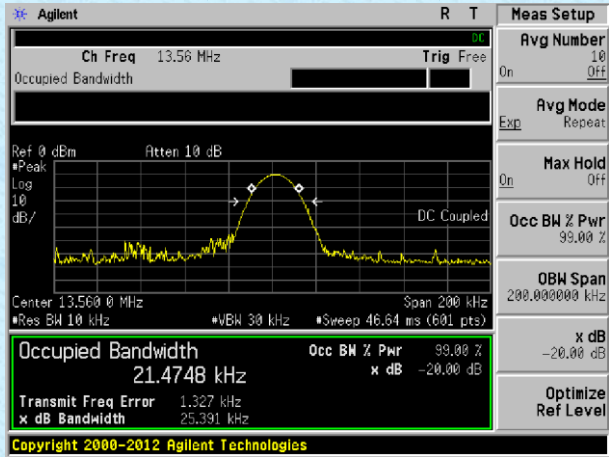
7.5 Channel Bandwidth

Test Requirement:	FCC Part15 C Section 15.225 and 15.215
Test Method:	ANSI C63.10:2020
Limit:	N/A
Test Procedure:	1. According to the follow Test-setup, keep the relative position between the artificial antenna and the EUT. 2. Set the EUT to proper test channel. 3. Max hold the radiated emissions, mark the peak power frequency point and the -20dB upper and lower frequency points. 4. Read 20dB bandwidth & 99%bandwidth.
Test setup:	 The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T (Equipment Under Test) via a red cable. Both the Spectrum Analyzer and the E.U.T are positioned on a Non-Conducted Table. This table is supported by a Ground Reference Plane.
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

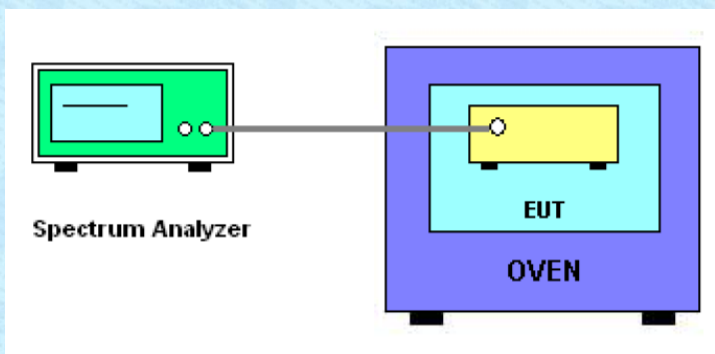
Measurement Data

Test frequency (MHz)	20dB bandwidth(KHz)	Result
13.56	25.391	Pass

Test plot as follows:



7.6 Frequency Stability Measurement

Test Requirement:	FCC Part15 C Section 15.225 (e)
Test Method:	ANSI C63.10: 2020
Receiver setup:	RBW=1KHz, VBW=1KHz, Sweep time=Auto
Limit:	The frequency tolerance of the carrier signal shall be maintained within $\pm 0.01\%$ of the operating frequency over a temperature variation of -20 degrees to $+50$ degrees C at normal supply voltage, for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.
Test setup:	 The diagram illustrates the test setup. On the left is a green Spectrum Analyzer. A cable connects its output to a yellow rectangular device labeled 'EUT' (Equipment Under Test). The EUT is placed inside a blue rectangular box labeled 'OVEN'.
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Measurement data:

Reference Frequency: 13.56MHz					
Power supplied (Vac)	Temperature (°C)	Frequency error		Limit	Result
		Hz	%		
240	-20	90	0.0003	+/- 0.01%	Pass
	-10	79	0.0004		
	0	81	0.0005		
	10	59	0.0004		
	20	47	0.0005		
	30	56	0.0005		
	40	45	0.0004		
	50	78	0.0005		

Reference Frequency: 13.56MHz					
Temperature (°C)	Power supplied (Vac)	Frequency error		Limit	Result
		Hz	Ppm		
20	90	184	0.0012	+/- 0.01%	Pass
	110	121	0.0008		

8 Test Setup Photo

Reference to the **appendix I** for details.

9 EUT Constructional Details

Reference to the **appendix II** for details.

----- End -----