

TEST REPORT

Application No.:	GZCR2412001458HS
Applicant:	Health In Motion LLC
Address of Applicant:	3300 Horseless Carriage Drive, Norco, CA 92860, United States of America
Manufacturer:	SHUHUA SPORTS CO., LTD
Address of Manufacturer:	SHICHUN INDUSTRIAL PARK, CHIDIAN, JINJIANG, FUJIAN, CHINA
Factory:	SHUHUA SPORTS CO., LTD
Address of Factory:	SHICHUN INDUSTRIAL PARK, CHIDIAN, JINJIANG, FUJIAN, CHINA
Product Name:	Motorized Treadmill
Model No.:	T7, T7-110.1, T7B-110.1 ♣
♣	Please refer to section 2 of this report which indicates which item was actually tested and which were electrically identical.
Trade Mark:	Inspire Fitness, CENTR
Standard(s) :	47 CFR Part 15, Subpart C 15.209
Date of Receipt:	2024-12-06
Date of Test:	2025-08-14 to 2025-08-15
Date of Issue:	2025-08-19

Test Result:	Pass*
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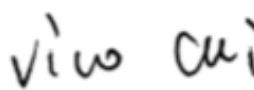
* In the configuration tested, the EUT complied with the standards specified above.



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Revision Record			
Version	Report No.	Date	Remark
01	GZCR241200145802	2025-08-19	Original

Authorized for issue by:			
Tested By	 Allen Zhou/Project Engineer		
Approved By	 Vico Cui/Reviewer		



2 Test Summary

Radio Spectrum Technical Requirement				
Item	Standard	Method	Requirement	Result
Antenna Requirement	47 CFR Part 15, Subpart C	N/A	47 CFR Part 15, Subpart C 15.203	Pass

Radio Spectrum Matter Part				
Item	Standard	Method	Requirement	Result
20dB Bandwidth	47 CFR Part 15, Subpart C	ANSI C63.10 (2013) Section 6.9.2	47 CFR Part 15, Subpart C 15.215	Pass
Conducted Emissions at AC Mains Power Port (150kHz-30MHz)		ANSI C63.10 (2013) Section 6.2	47 CFR Part 15, Subpart C 15.207	Pass
Restricted Bands		ANSI C63.10 (2013) Section 6.10.5	47 CFR Part 15, Subpart C 15.205	Pass
Radiated Emissions (9kHz-30MHz)		ANSI C63.10 (2013) Section 6.4	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass
Radiated Emissions (30MHz-1GHz)		ANSI C63.10 (2013) Section 6.5	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass

Note:

E.U.T./EUT means Equipment Under Test.

Pass means the test result passed the test standard requirement, please find the detailed decision rule in the report relative section.

◆ Declaration of EUT Family Grouping:

Model No.: T7, T7-110.1, T7B-110.1

According to the declaration from the applicant, the electrical circuit design, layout, components used and internal wiring were identical for all models, with only difference on model name.

Therefore, only one model T7 was tested in this report.



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4 General Information

4.1 Details of E.U.T.

Power supply:	AC 120V,60Hz
Test voltage:	AC 120V,60Hz
Cable(s):	AC mains cable:3 wires 1.5m unshielded
Antenna Type:	Loop Antenna
Modulation Type:	Load Modulation
Frequency Range	112kHz to 146.394kHz
Antenna Number:	1

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

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Mobile Phone	SAMSUNG	SM-G9508	R28K110W9JV
Mobile Phone	SAMSUNG	SM-G9810	RFCN309Q9QF
Mobile Phone	APPLE	iPhone 12 mini	F71DP3NG0GQY

4.3 Measurement Uncertainty

Test Item	Measurement Uncertainty
20dB Bandwidth	± 0.274%
Conducted Emissions at AC Mains Power Port (150kHz-30MHz)	± 3.22dB
Restricted Bands	±5.14dB (3m); ±4.90dB (10m); ±4.88dB (1GHz-6GHz); ±5.06dB (6GHz-18GHz); ±5.30dB (18GHz-40GHz)
Radiated Emissions (9kHz-30MHz)	± 3.12dB
Radiated Emissions (30MHz-1GHz)	±5.14dB (3m); ±4.90dB (10m)

Remark:

The U_{lab} (lab Uncertainty) is less than U_{cisp} (CISPR Uncertainty) or U_{ETSI} (ETSI Uncertainty).

Emission decision rule:

- Compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit, marked as Pass in the report.
- Non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit, marked as Fail in the report.

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4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou Branch EMC Laboratory,
No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou,
Guangdong, China 510663

Tel: +86 20 82155555

No tests were sub-contracted.

4.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **ACMA**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory can also perform testing for the Australian/New Zealand Regulatory Compliance Mark (RCM).

- **SGS UK(Certificate No.: 32), SGS-TUV SAARLAND and SGS-FIMKO**

Have approved SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory as a supplier of EMC TESTING SERVICES and SAFETY TESTING SERVICES.

- **FCC Recognized Accredited Test Firm(Registration No.: 486818)**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been accredited and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Designation Number: CN5016, Test Firm Registration Number: 486818.

- **ISED (Registration No.: 4620B, CAB identifier: CN0052)**

SGS-CSTC Standards Technical Services Co., Ltd., has been registered by Innovation Science and Economic Development Canada for Wireless Device Testing laboratories to test to Canadian radio equipment requirements. Registration No. 4620B, CAB identifier: CN0052.

- **VCCI (Registration No.: R-12460, C-12584, G-20107 and T-11179)**

The 10m Semi-anechoic chamber, 966 Anechoic Chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-12460, C-12584, G-20107 and T-11179 respectively.

- **CBTL (Lab Code: TL129)**

SGS-CSTC Standards Technical Services Co., Ltd., E&E Laboratory has been assessed and fully comply with the requirements of ISO/IEC 17025:2017, the Basic Rules, IECEE 01 and Rules of procedure IECEE 02, and the relevant IECEE CB-Scheme Operational documents.

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None



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5 Equipment List

Conducted Emissions at AC Mains Power Port (150kHz-30MHz)					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Coaxial Cable	HangTianXing	2m	EMC0107	2025-08-12	2026-08-11
10m Semi-Anechoic Chamber	ETS	N/A	EMC0530	2022-10-16	2025-10-15
Two-Line V-Network-GZ	Rohde & Schwarz	ENV216	EMC2135	2024-09-08	2025-09-07
EMI Test Receiver (9kHz-3.6GHz)	Rohde & Schwarz	ESR3	EMC2221	2024-12-04	2025-12-03
Test Software E3r	Audix	Ver.6.11812	GZE100-77	N/A	N/A

20dB Bandwidth & Restricted Bands					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
MI CABLE	SGS-EMC	0.8M	EMC2137	2023-11-02	2025-11-01
MXA Signal Analyzer (10Hz-8.4GHz)	Agilent Technologies	N9020A	SEM004-10	2024-12-03	2025-12-02

Radiated Emissions (9kHz-30MHz)					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
10m Semi-Anechoic Chamber	ETS	N/A	EMC0530	2022-10-16	2025-10-15
Coaxial cable	Mirco-COAX UTIFLEX	311A	EMC0540	2024-08-19	2026-08-18
Amplifier (9kHz-1.3GHz)	HP	8447F	EMC2065	2024-12-04	2025-12-03
Active Loop Antenna-RED	ETS-Lindgren	6502	EMC2190	2024-04-08	2026-04-07
EMI Test Receiver (1Hz-8GHz)	Rohde & Schwarz	ESW8	EMC2220	2024-12-04	2025-12-03
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A



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Radiated Emissions (30MHz-1GHz)

Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
10m Semi-Anechoic Chamber	ETS	N/A	EMC0530	2022-10-16	2025-10-15
Coaxial cable	Mirco-COAX UTIFLEX	311A	EMC0540	2024-08-19	2026-08-18
Amplifier (9kHz-1.3GHz)	HP	8447F	EMC2065	2024-12-04	2025-12-03
EMI Test Receiver (1Hz-8GHz)	Rohde & Schwarz	ESW8	EMC2220	2024-12-04	2025-12-03
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A
Trilog Broadband Antenna (25MHz-1GHz)	SCHWARZBECK MESS-ELEKTRONIK	VULB 9168	EMC2174	2025-04-21	2027-04-20

General used equipment

Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
DMM	Fluke	73	EMC0006	2024-06-13	2025-06-12



6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203

6.1.2 Conclusion

Standard 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 shall be considered sufficient to comply with the provisions of this section. 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 integrated on the main PCB and no consideration of replacement.

Refer to internal photos



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7 Radio Spectrum Matter Test Results

7.1 20dB Bandwidth

Test Requirement 47 CFR Part 15, Subpart C Section
Test Method: ANSI C63.10 (2013)

7.1.1 E.U.T. Operation

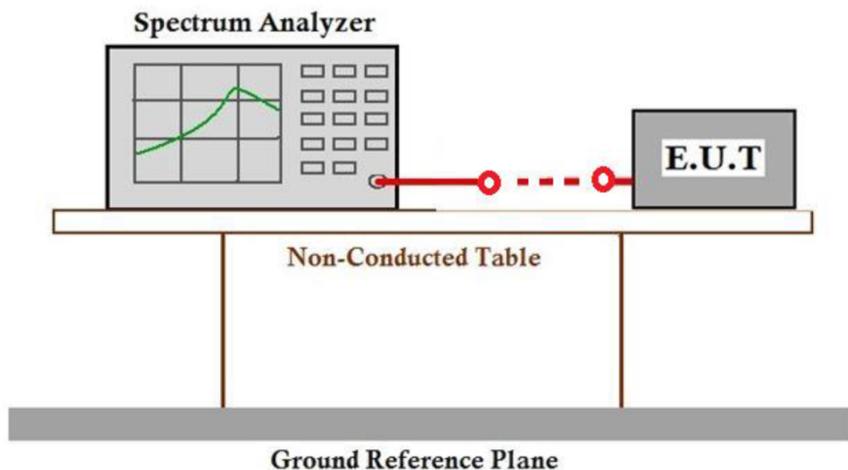
Operating Environment:

Temperature: 24.5 °C Humidity: 43.6 % RH Atmospheric Pressure: 1010 mbar

7.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Pre-scan	00	Charging mode_Keep the EUT charging(5W)
Pre-scan	01	Charging mode_Keep the EUT charging(7.5W)
Pre-scan	02	Charging mode_Keep the EUT charging(10W)
Final test	03	Charging mode_Keep the EUT charging(15W)

7.1.3 Test Setup Diagram



7.1.4 Measurement Procedure and Data

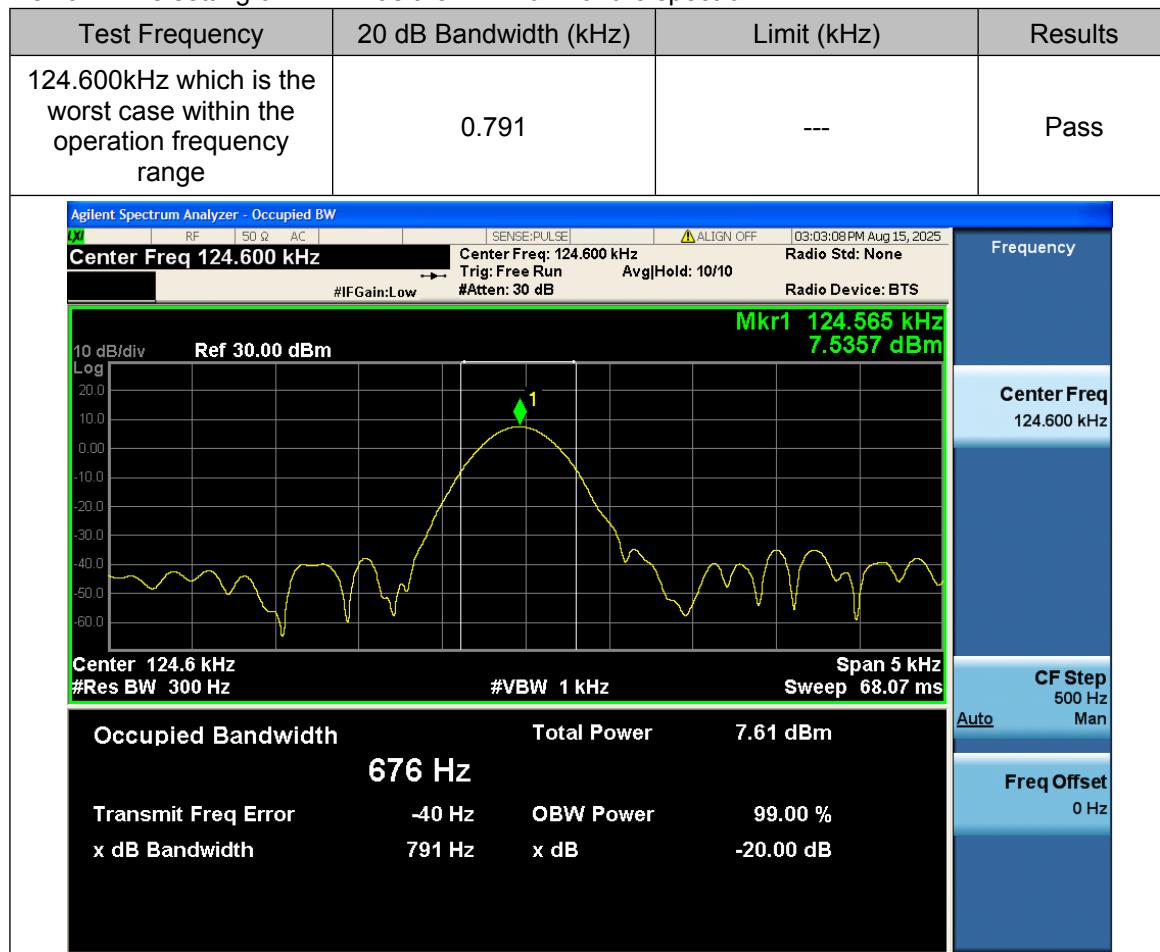


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Changing will take place when the charger is in contact with EUT only, no space is reserved/ designed for air because the structure of the EUT will automatically fix the device being charged closely.

Remark: The setting of RBW was the minimum for the spectrum.



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7.2 Conducted Emissions at AC Mains Power Port (150kHz-30MHz)

Test Requirement 47 CFR Part 15, Subpart C 15.207

Test Method: ANSI C63.10 (2013) Section 6.2

Limit:

Frequency of emission(MHz)	Conducted limit(dB μ V)	
	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.

7.2.1 E.U.T. Operation

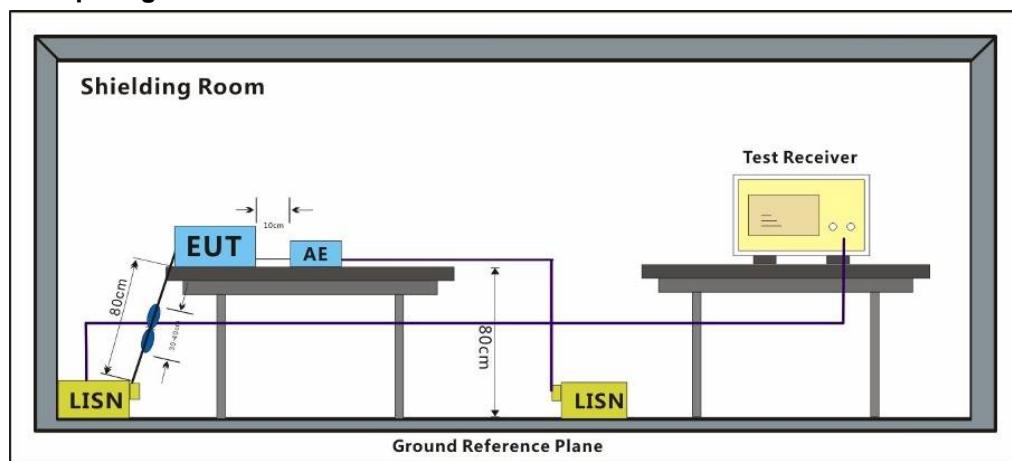
Operating Environment:

Temperature: 24.3 °C Humidity: 52.0 % RH Atmospheric Pressure: 1010 mbar

7.2.2 Test Mode Description

Pre-scan / Mode	Final test	Code	Description
Pre-scan	01		Charge mode_Keep the EUT charging(5W)
Pre-scan	02		Charge mode_Keep the EUT charging(7.5W)
Pre-scan	03		Charge mode_Keep the EUT charging(10W)
Final test	04		Charge mode_Keep the EUT charging(15W)

7.2.3 Test Setup Diagram



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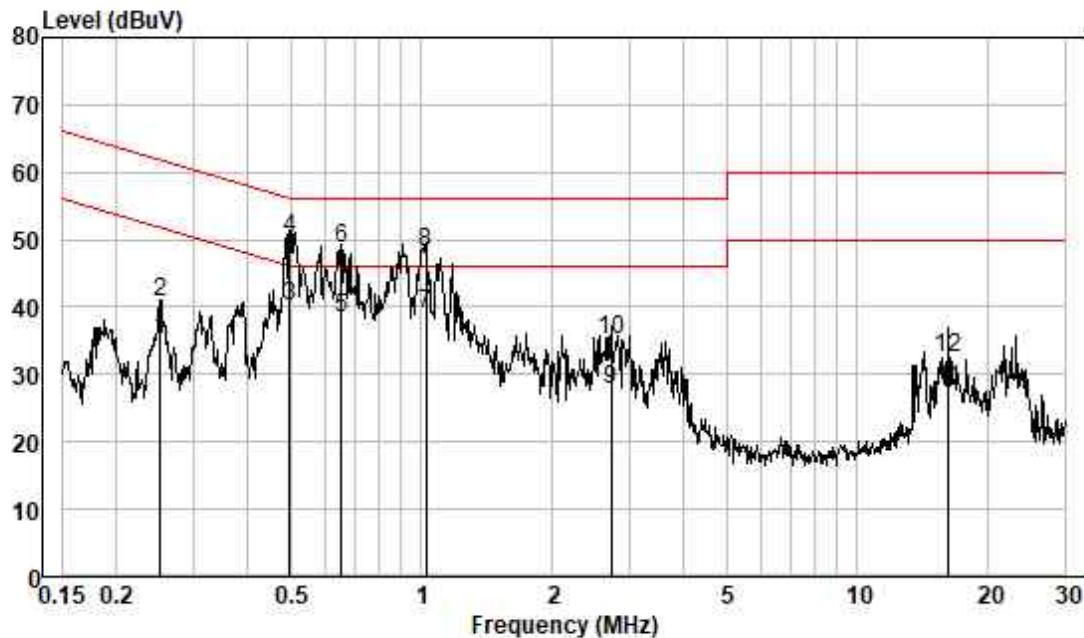
7.2.4 Measurement Procedure and Data

- 1) The mains terminal disturbance voltage test was conducted in a shielded room.
- 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50ohm/50μH + 5ohm linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.
- 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,
- 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.
- 5) 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 on conducted measurement.

Remark: Level=Read Level+ Cable Loss+ LISN Factor



Test Mode: 04; Line: Live line



Pol :LINE

Mode :

Model :

Power :

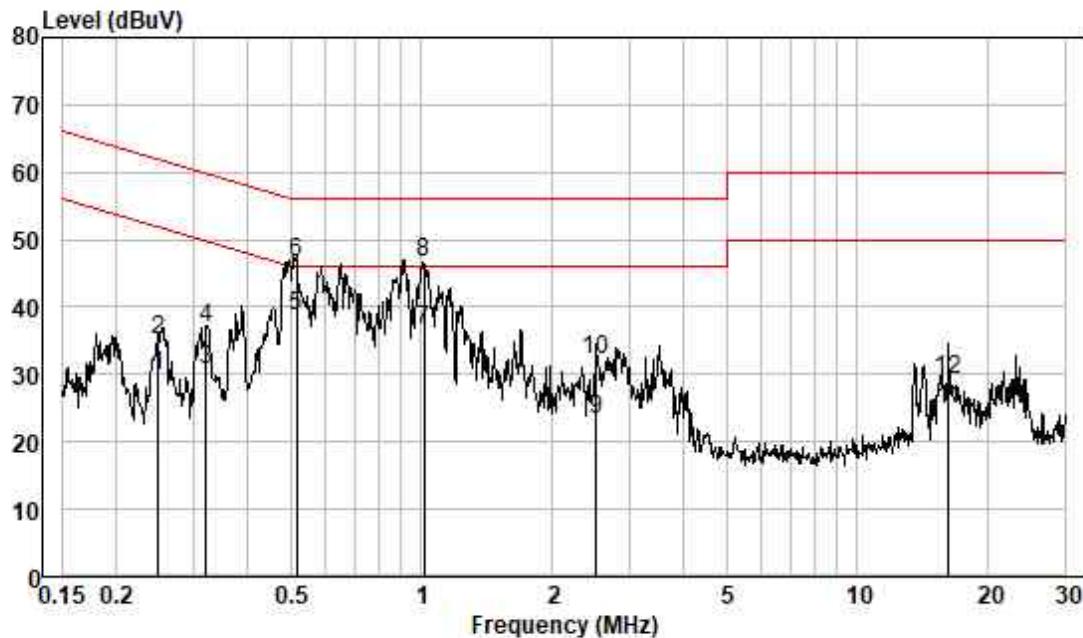
Frequency MHz	Read Level dBuV	Cable Loss dB	LISN Factor dB	Measured Level dBuV	Limit Line dBuV	Over Limit dB	Remark
1 0.252	25.55	0.04	9.60	35.19	51.69	-16.50	Average
2 0.252	31.00	0.04	9.60	40.64	61.69	-21.05	QP
3 0.499	30.59	0.05	9.59	40.23	46.01	-5.78	Average
4 0.499	40.67	0.05	9.59	50.31	56.01	-5.70	QP
5 0.654	28.86	0.06	9.57	38.49	46.00	-7.51	Average
6 0.654	39.03	0.06	9.57	48.66	56.00	-7.34	QP
7 1.027	29.23	0.07	9.54	38.84	46.00	-7.16	Average
8 1.027	38.55	0.07	9.54	48.16	56.00	-7.84	QP
9 2.721	17.96	0.15	9.54	27.65	46.00	-18.35	Average
10 2.721	25.58	0.15	9.54	35.27	56.00	-20.73	QP
11 16.226	17.50	0.34	9.84	27.68	50.00	-22.32	Average
12 16.226	22.16	0.34	9.84	32.34	60.00	-27.66	QP



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Test Mode: 04; Line: Neutral Line



Pol : NEUTRAL

Mode :

Model :

Power :

Frequency MHz	Read Level dBuV	Cable Loss dB	LISN Factor dB	Measured Level dBuV	Limit Line dBuV	Over Limit dB	Remark
1 0.249	20.34	0.04	9.53	29.91	51.78	-21.87	Average
2 0.249	25.49	0.04	9.53	35.06	61.78	-26.72	QP
3 0.320	21.03	0.04	9.53	30.60	49.71	-19.11	Average
4 0.320	27.37	0.04	9.53	36.94	59.71	-22.77	QP
5 0.518	29.15	0.05	9.58	38.78	46.00	-7.22	Average
6 0.518	36.91	0.05	9.58	46.54	56.00	-9.46	QP
7 1.016	27.02	0.07	9.56	36.65	46.00	-9.35	Average
8 1.016	37.02	0.07	9.56	46.65	56.00	-9.35	QP
9 2.513	13.66	0.14	9.58	23.38	46.00	-22.62	Average
10 2.513	22.40	0.14	9.58	32.12	56.00	-23.88	QP
11 16.226	14.47	0.34	9.90	24.71	50.00	-25.29	Average
12 16.226	19.03	0.34	9.90	29.27	60.00	-30.73	QP



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7.3 Restricted Bands

Test Requirement	47 CFR Part 15, Subpart C 15.205
Test Method:	ANSI C63.10 (2013) Section 6.10.5
Limit:	The fundamental wave could not fall in the restricted band 90KHz-110KHz

7.3.1 E.U.T. Operation

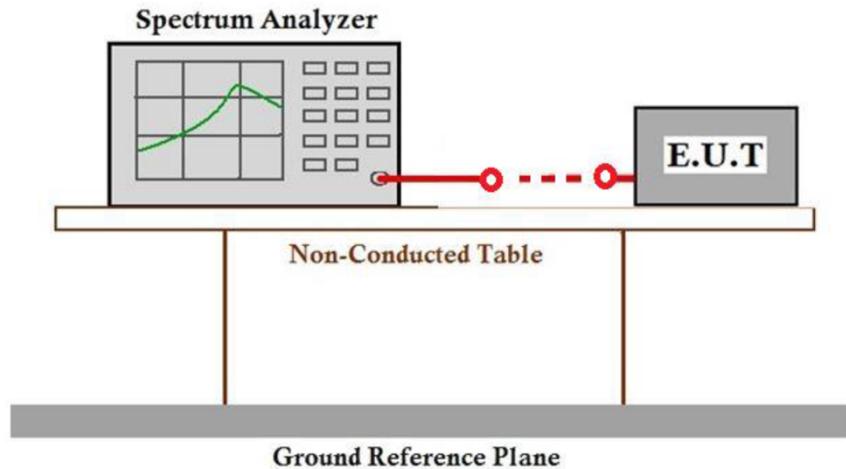
Operating Environment:

Temperature: 23.3 °C Humidity: 64.4 % RH Atmospheric Pressure: 1010 mbar

7.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Pre-scan	01	Charge mode_Keep the EUT charging(5W)
Pre-scan	02	Charge mode_Keep the EUT charging(7.5W)
Pre-scan	03	Charge mode_Keep the EUT charging(10W)
Final test	04	Charge mode_Keep the EUT charging(15W)

7.3.3 Test Setup Diagram



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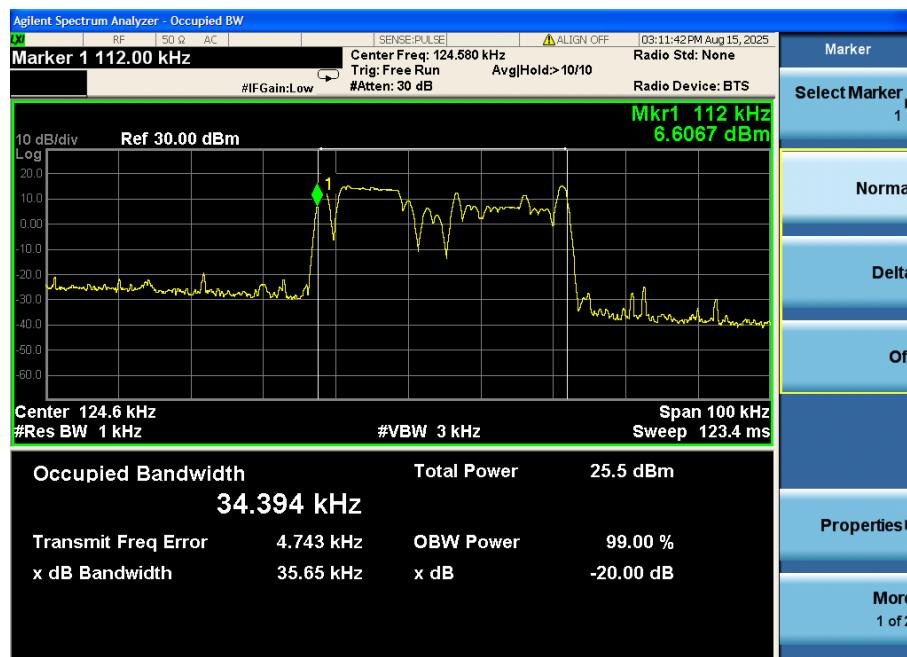
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7.3.4 Measurement Procedure and Data

Changing will take place when the charger is in contact with EUT only, no space is reserved/ designed for air because the structure of the EUT will automatically fix the device being charged closely.

According the test data below, the fundamental wave is not fall in the restricted band 90k~110kHz, the field strength also meet the 15.209 requirement, please refer to clause 7.4.

Test Mode: 04



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7.4 Radiated Emissions(9kHz-30MHz)

Test Requirement 47 CFR Part 15, Subpart C Section 15.205/15.209

Test Method: ANSI C63.10 (2013) (2013) Section 6.4

Test Distance: 10m

Limit:

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

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

If field strength is measured at only a single point, then that point shall be at the radial from the EUT that produces the maximum emission at the frequency being measured, as described in 5.4. If that point is closer to the EUT than $\lambda/2\pi$ and the limit distance is greater than $\lambda/2\pi$, the measurement shall be extrapolated to the limit distance by conservatively presuming that the field strength decreases at a 40 dB/decade of distance rate to the $\lambda/2\pi$ distance, and at a 20 dB/decade of distance rate beyond $\lambda/2\pi$. This shall be accomplished using Equation (2):

$$FS_{(3m)} = FS_{(30/300m)} + 40\log\{d_{(near field)}/d_{(3m)}\} + 20\log\{d_{(30/300m)}/d_{(near field)}\} \quad (2)$$

If the single point measured is at a distance greater than $\lambda/2\pi$, then extrapolation to the limit distance shall be calculated using Equation (3):

$$FS_{(3m)} = FS_{(30/300m)} + 20\log\{d_{(30/300m)}/d_{(3m)}\} \quad (3)$$

If both the single point and the limit distance are equal to or closer to the EUT than $\lambda/2\pi$, then extrapolation to the limit distance shall be calculated using Equation (4):

$$FS_{(3m)} = FS_{(30/300m)} + 40\log\{d_{(30/300m)}/d_{(3m)}\} \quad (4)$$

Remark:

$$d_{near field} = 47.77 / f_{MHz}$$

where f_{MHz} is the frequency of the emission being measured in MHz.

7.4.1 E.U.T. Operation

Operating Environment:

Temperature: 22.3 °C Humidity: 40.6 % RH Atmospheric Pressure: 1010 mbar



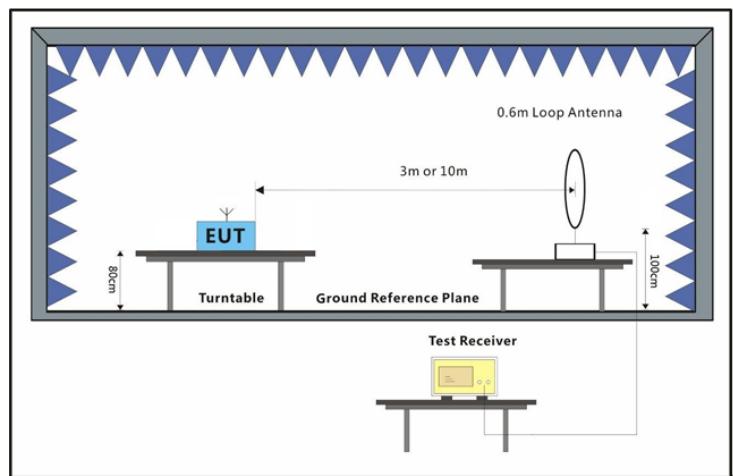
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7.4.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Pre-scan	01	Charging mode_Keep the EUT charging(5W)
Pre-scan	02	Charging mode_Keep the EUT charging(7.5W)
Pre-scan	03	Charging mode_Keep the EUT charging(10W)
Final test	04	Charging mode_Keep the EUT charging(15W)

7.4.3 Test Setup Diagram



7.4.4 Measurement Procedure and Data

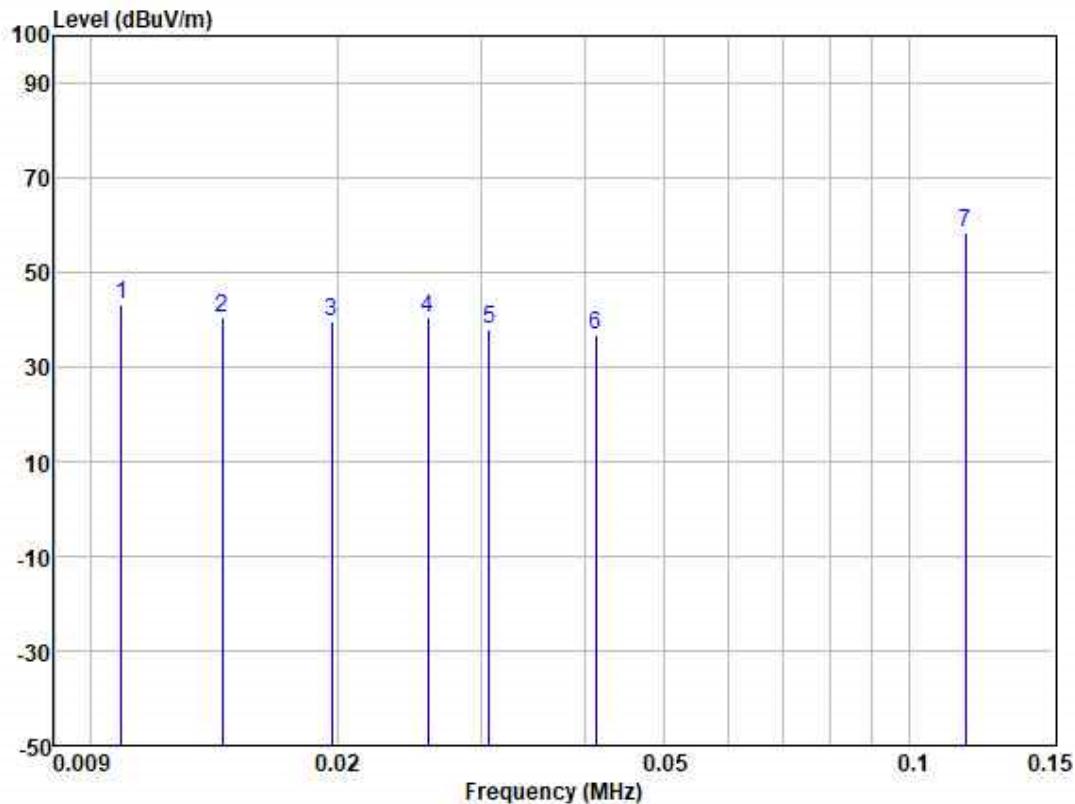
For testing performed with the loop antenna, the center of the loop was positioned 1 m above the ground and positioned with its plane vertical at the specified distance from the EUT. During testing the loop was rotated about its vertical axis for maximum response at each azimuth and also investigated with the loop positioned in the horizontal plane. Only the worst position of vertical was shown in the report.



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Test Mode: 04



Site : SGS
 Job :
 Model :
 Power :
 Test Mode : 15W

Freq	Read	Antenna	Cable	Preamp	Measured	Limit	Over	Pol/	Remark
	MHz	Level	Factor	Loss	Factor	Level	Line	Limit	
1	0.011	52.86	18.30	0.00	28.04	43.12			
2	0.014	52.86	15.73	0.00	28.12	40.47			
3	0.020	53.79	14.26	0.00	28.25	39.80			
4	0.026	55.36	13.31	0.01	28.47	40.21			
5	0.031	53.95	12.92	0.01	28.82	38.06			
6	0.041	53.68	12.41	0.01	29.19	36.91			
7	0.117	76.05	11.94	0.02	29.50	58.51			

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Frequency (MHz)	Level @10m (dBuV/m)	Limit @300m (dBuV/m)	Convert Factor (dB)@10 m to 300 m	Level @ 300m (dBuV/m)	Over limit (dB)	Remark
0.011	43.12	46.78	-59.08	-15.96	-62.74	AV
0.014	40.47	44.68	-59.08	-18.61	-63.30	AV
0.020	39.80	41.58	-59.08	-19.28	-60.87	AV
0.026	40.21	39.30	-59.08	-18.87	-58.18	AV
0.031	38.06	37.78	-59.08	-21.02	-58.80	AV
0.041	36.91	35.35	-59.08	-22.17	-57.52	AV
0.117	58.51	26.24	-59.08	-0.57	-26.82	AV

Remark1:

Extrapolation Correction (dB)@10m to 300 m = $40 \times \log(10/300) = -59.08$ according to FCC part 15.31 (f) (1)

Level (dBuV/m) @ 300m = Measured Level (dBuV/m) @10m + Extrapolation Correction (dB)@10 m to 300 m

Remark2: The frequency 117kHz is the intentional transmitter.

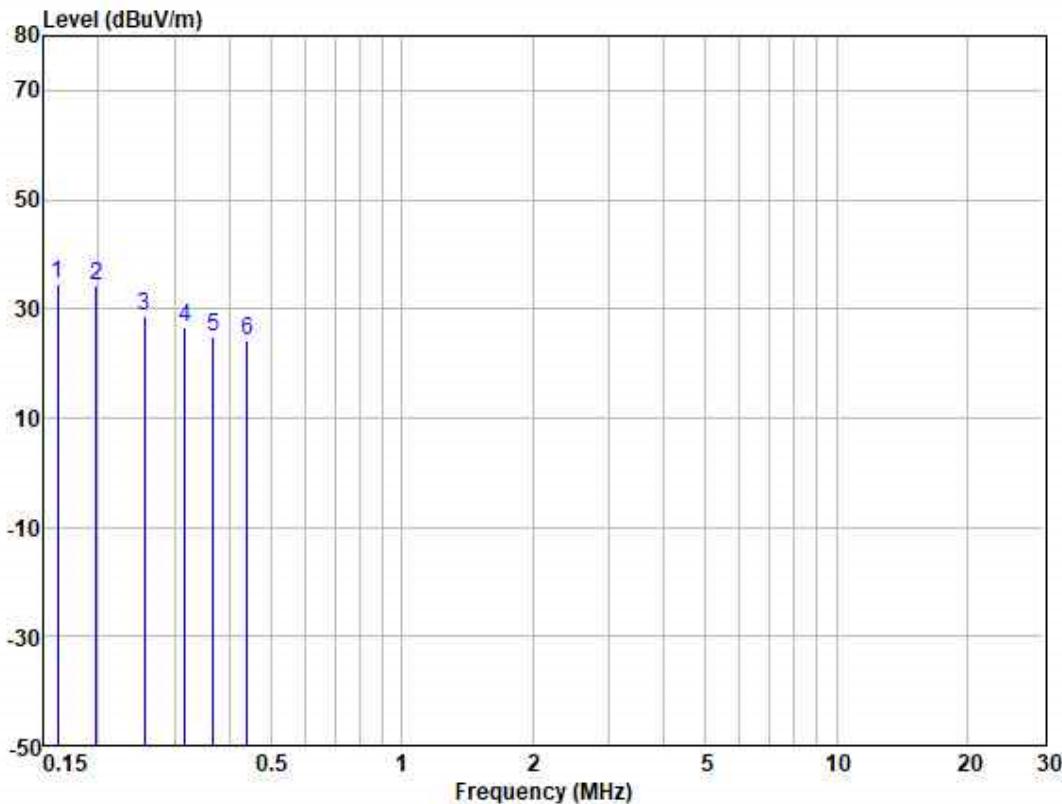
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Test Mode: 04



Site : SGS
Job :
Model :
Power :
Test Mode : 15W

Freq	Read	Antena	Cable	Preamp	Measured	Limit	Over	Pol/	Remark
	MHz	Level	Factor	Loss	Factor	Level	Line	Limit	
1	0.162	52.33	11.87	0.03	29.50	34.73			
2	0.198	51.70	11.85	0.03	29.50	34.08			
3	0.255	46.45	11.86	0.03	29.48	28.86			
4	0.317	44.21	11.87	0.05	29.45	26.68			
5	0.367	42.45	11.86	0.05	29.42	24.94			
6	0.440	41.64	11.84	0.06	29.41	24.13			

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Frequency (MHz)	Level @10m (dBuV/m)	Limit @300m (dBuV/m)	Convert Factor (dB)@10 m to 300 m	Level @ 300m (dBuV/m)	Over limit (dB)	Remark
0.162	34.73	23.41	-59.08	-24.35	-47.77	AV
0.198	34.08	21.67	-59.08	-25.00	-46.68	AV
0.255	28.86	19.47	-59.08	-30.22	-49.70	AV
0.317	26.68	17.58	-59.08	-32.40	-49.99	AV
0.367	24.94	16.31	-59.08	-34.14	-50.46	AV
0.440	24.13	14.74	-59.08	-34.95	-49.69	AV

Remark:

Extrapolation Correction (dB)@10m to 300 m = $40 \times \log(10/300) = -59.08$ according to FCC part 15.31 (f) (1)

Level (dBuV/m) @ 300m = Measured Level (dBuV/m) @10m + Extrapolation Correction (dB)@10 m to 300 m

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7.5 Radiated Emissions (30MHz-1GHz)

Test Requirement 47 CFR Part 15, Subpart C 15.205 & 15.209

Test Method: ANSI C63.10 (2013) Section 6.5

Test Distance: 10 m

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector.

7.5.1 E.U.T. Operation

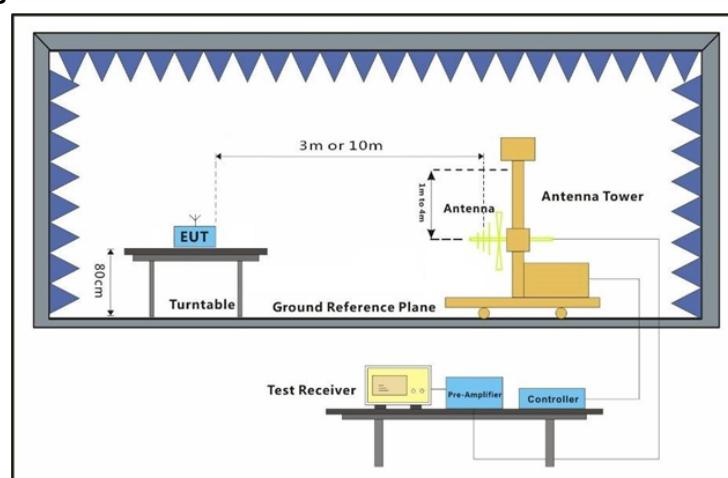
Operating Environment:

Temperature: 22.3 °C Humidity: 40.6 % RH Atmospheric Pressure: 1010 mbar

7.5.2 Test Mode Description

Pre-scan / Mode	Description	
Final test	Code	
Pre-scan	01	Charging mode_Keep the EUT charging(5W)
Pre-scan	02	Charging mode_Keep the EUT charging(7.5W)
Pre-scan	03	Charging mode_Keep the EUT charging(10W)
Final test	04	Charging mode_Keep the EUT charging(15W)

7.5.3 Test Setup Diagram



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7.5.4 Measurement Procedure and Data

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground for below 1GHz at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- g. Test the EUT in the lowest channel, the middle channel, the Highest channel
- h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case.
- i. Repeat above procedures until all frequencies measured was complete.

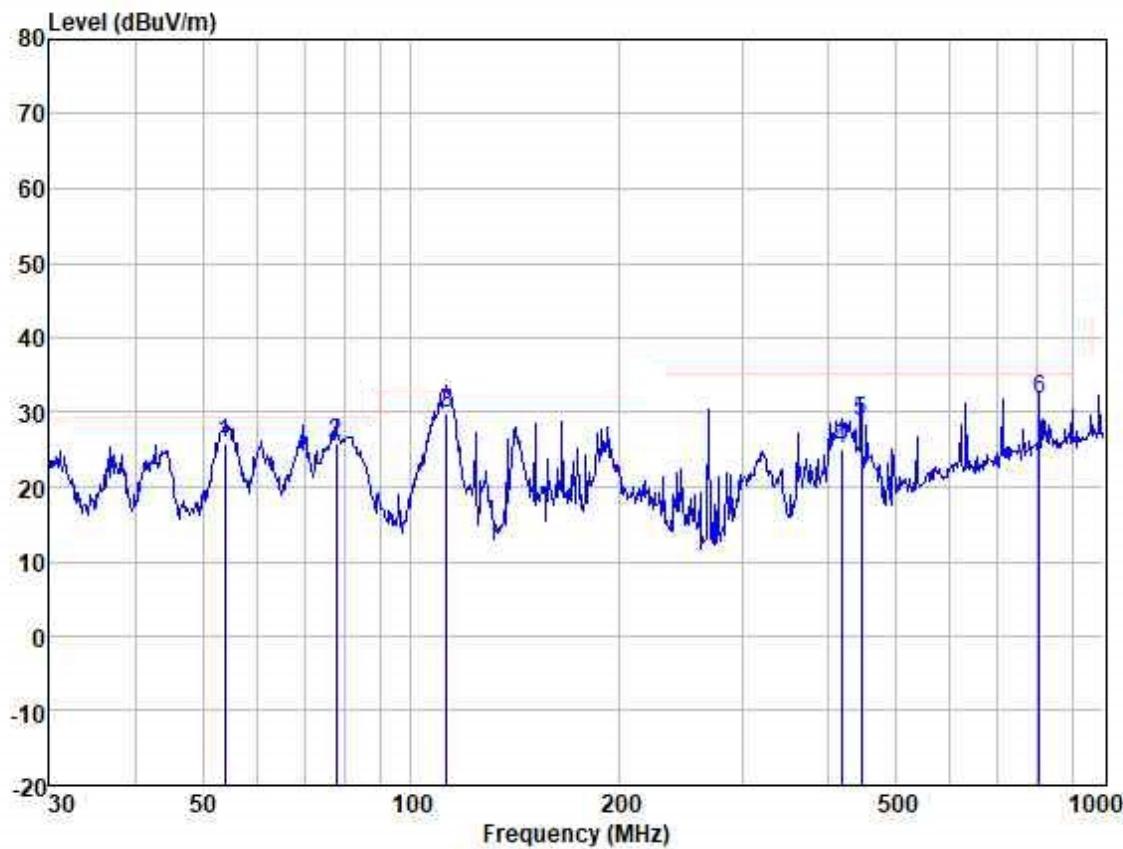
Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor



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Test Mode: 04



Site : SGS
Job :
Model :
Power :
Test Mode : 15W

Freq	Read	Antena	Cable	Preamp	Measured	Limit	Over	Pol/	Remark
	Level	Factor	Loss	Factor	Level	Line	Limit	Phase	
1	53.693	39.63	13.90	0.49	28.10	25.92		HORIZONTAL	QP
2	77.865	43.87	9.61	0.58	28.10	25.96		HORIZONTAL	QP
3	112.524	46.65	10.56	0.71	28.07	29.85		HORIZONTAL	QP
4	417.641	35.77	15.97	1.38	28.16	24.96		HORIZONTAL	QP
5	446.414	38.83	16.91	1.45	28.34	28.85		HORIZONTAL	QP
6	807.429	35.18	23.10	1.94	28.49	31.73		HORIZONTAL	QP



Frequency (MHz)	Level @10m (dBuV/m)	Convert Factor (dB)@10 m to 3 m	Level @ 3m (dBuV/m)	Limit @3m (dBuV/m)	Over limit (dB)	Pol/Phase	Remark
53.693	25.92	10.46	36.38	40.00	-3.62	HORIZONTAL	QP
77.865	25.96	10.46	36.42	40.00	-3.58	HORIZONTAL	QP
112.524	29.85	10.46	40.31	43.52	-3.21	HORIZONTAL	QP
417.641	24.96	10.46	35.42	46.02	-10.60	HORIZONTAL	QP
446.414	28.85	10.46	39.31	46.02	-6.71	HORIZONTAL	QP
807.429	31.73	10.46	42.19	46.02	-3.83	HORIZONTAL	QP

*Remark:

Level (dBuV/m) @3m = Level (dBuV/m) @10m + Convert Factor (dB)

Convert Factor (dB) = $20 \cdot \log(\text{Measurement Distance}/\text{Specified Distance}) = 20 \cdot \log(10/3) = 10.46$
dB according to 15.31 (f) (1)



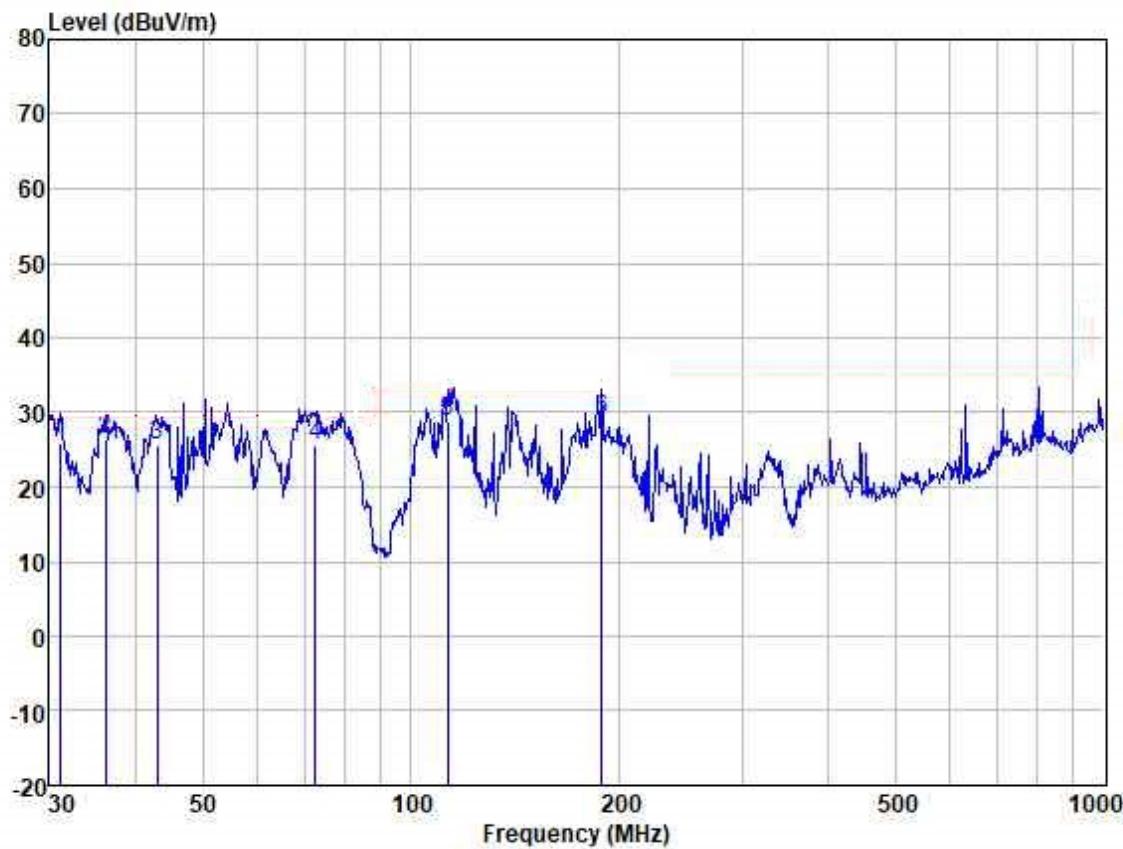
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Test Mode: 04; Polarity: Vertical



Site : SGS
Job :
Model :
Power :
Test Mode : 15W

Freq	Read	Antena	Cable	Preamp	Measured	Limit	Over	Pol/	Remark
	Level	Factor	Loss	Factor	Level	Line	Limit	Phase	
1 31.180	40.88	12.85	0.38	28.17	25.94			VERTICAL	QP
2 36.127	41.19	13.08	0.41	28.15	26.53			VERTICAL	QP
3 42.900	39.63	13.75	0.43	28.12	25.69			VERTICAL	QP
4 72.592	42.13	10.97	0.57	28.10	25.57			VERTICAL	QP
5 112.920	45.64	10.56	0.71	28.07	28.84			VERTICAL	QP
6 188.413	44.44	11.38	0.92	27.63	29.11			VERTICAL	QP



Frequency (MHz)	Level @10m (dBuV/m)	Convert Factor (dB)@10 m to 3 m	Level @ 3m (dBuV/m)	Limit @3m (dBuV/m)	Over limit (dB)	Pol/Phase	Remark
31.180	25.94	10.46	36.4	40.00	-3.60	VERTICAL	QP
36.127	26.53	10.46	36.99	40.00	-3.01	VERTICAL	QP
42.900	25.69	10.46	36.15	40.00	-3.85	VERTICAL	QP
72.592	25.57	10.46	36.03	40.00	-3.97	VERTICAL	QP
112.920	28.84	10.46	39.3	43.52	-4.22	VERTICAL	QP
188.413	29.11	10.46	39.57	43.52	-3.95	VERTICAL	QP

*Remark:

Level (dBuV/m) @3m = Level (dBuV/m) @10m + Convert Factor (dB)

Convert Factor (dB) = $20 \times \log(\text{Measurement Distance}/\text{Specified Distance}) = 20 \times \log(10/3) = 10.46 \text{ dB}$
according to 15.31 (f) (1)



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8 Test Setup Photo

Refer to Appendix - Test Setup Photo for GZCR241200145802



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9 EUT Constructional Details (EUT Photos)

Refer to External and Internal Photos for GZCR2412001458HS

- End of the Report -



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