TEST REPORT

Report No.:	8430EU012301W
Applicant:	MeFun Technology (GD) Limited
Address:	#1 MeFun Road, DongCheng Town, EnPing City, GuangDong Province, China
Product Name:	Pet Water Fountain
Model No.:	MFYSJ01-P (refer to cluase 2.4)
Trademark:	N/A
FCC ID:	2BV2X-MFYSJ01-P
Test Standard(s):	47 CFR Part 15 Subpart C
Test Result:	Pass
Date of Receipt:	Apr. 23, 2026
Test Date:	Apr. 23, 2026 – May 08, 2026
Date of Issue:	Jun. 17, 2026

ISSUED BY:

SHENZHEN EU TESTING LABORATORY LIMITED

SHENZHEN EU TESTING LABORATORY LIMITED APPROVED

Prepared by:

Landon Qiu/ Engineer

Reviewed and Approved by:

Sally Zhang/ Manager

Revision Record

Report Version	Issued Date	Description	Status
V0	Jun. 17, 2026	Original	Valid

Address: 101, Building B1, Fuqiao Fourth Area, Qiaotou Community, Fuhai Subdistrict, Baoan District, Shenzhen, Guangdong, China
Website: www.eu-test.com
Tel: (86)-755-2357-9714 Email: Service@eu-test.com

Table of Contents

1 COVER PAGE 1
2 GENERAL INFORMATION 4
2.1 APPLICANT INFORMATION 4
2.2 MANUFACTURER INFORMATION 4
2.3 FACTORY INFORMATION 4
2.4 GENERAL DESCRIPTION OF E.U.T. 4
2.5 TECHNICAL INFORMATION OF E.U.T. 5
3 TEST SUMMARY 6
3.1 TEST STANDARD 6
3.2 TEST VERDICT 6
3.3 TEST LABORATORY 6
4 TEST CONFIGURATION 7
4.1 TEST ENVIRONMENT 7
4.2 TEST EQUIPMENT 7
4.3 DESCRIPTION OF SUPPORT UNIT 9
4.4 TEST MODE 9
4.5 DESCRIPTION OF CALCULATION 9
4.6 MEASUREMENT UNCERTAINTY 10
4.7 DEVIATION FROM STANDARDS 10
4.8 ABNORMALITIES FROM STANDARD CONDITION 10
5 TEST ITEMS 11
5.1 ANTENNA REQUIREMENT 11
5.1.1 Test Requirement 11
5.1.2 Antenna Anti-Replacement Construction 11
5.1.3 Antenna Gain 11
5.2 CONDUCTED EMISSION AT AC POWER LINE 12
5.2.1 Test Requirement 12
5.2.2 Test Setup Diagram 12
5.2.3 Test Procedure 12
5.2.4 Test Data 12
5.3 20DB BANDWIDTH 15
5.3.1 Test Requirement 15
5.3.2 Test Setup Diagram 15
5.3.3 Test Procedure 15
5.3.4 Test Data 16
5.4 FUNDAMENTAL AND RADIATED SPURIOUS EMISSION 17
5.4.1 Test Requirement 17
5.4.2 Test Setup Diagram 18
5.4.3 Test Procedure 19
5.4.4 Test Data 19
ANNEX A TEST SETUP PHOTOS 25
ANNEX B EXTERNAL PHOTOS 25
ANNEX C INTERNAL PHOTOS 25

Address: 101, Building B1, Fuqiao Fourth Area, Qiaotou Community, Fuhai Subdistrict, Baoan District, Shenzhen, Guangdong, China
Website: www.eu-test.com
Tel: (86)-755-2357-9714 Email: Service@eu-test.com

2 General Information

2.1 Applicant Information

Applicant	MeFun Technology (GD) Limited
Address	#1 MeFun Road, DongCheng Town, EnPing City, GuangDong Province, China

2.2 Manufacturer Information

Manufacturer	MeFun Technology (GD) Limited
Address	#1 MeFun Road, DongCheng Town, EnPing City, GuangDong Province, China

2.3 Factory Information

Factory	MeFun Technology (GD) Limited
Address	#1 MeFun Road, DongCheng Town, EnPing City, GuangDong Province, China

2.4 General Description of E.U.T.

Product Name	Pet Water Fountain
Model No. Under Test	MFYSJ01-P
List Model No.	MFYSJ02-P, MFYSJ03-P, MFYSJ04-P, MFYSJ05-P, MFYSJ06-P, PXW1, PXW1-B, PXW1-W, PXW1-G
Description of Model differentiation	All models are same with electrical parameters and internal circuit structure, but only differ in the appearance color, drinking tray, water tank and model name. (this information provided by the customer)
Rating(s)	Input: 5VDC, 2A Battery Capacity: 3.7VDC, 3000mAh, 11.1Wh
Product Type	☒ Mobile ☐ Portable ☐ Fix Location
Test Sample No.	8430EU012301W-1/2(Normal), 8430EU012301W-2/2(Engineering)
Hardware Version	N/A
Software Version	N/A
Remark	For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

Address: 101, Building B1, Fuqiao Fourth Area, Qiaotou Community, Fuhai Subdistrict, Baoan District, Shenzhen, Guangdong, China
Website: www.eu-test.com
Tel: (86)-755-2357-9714 Email: Service@eu-test.com

2.5 Technical Information of E.U.T.

Network and Wireless Connectivity	5.8G Radar

The requirement for the following technical information of the EUT was tested in this report:

Technology	**5.8G Radar**
Operating Frequency	5725 MHz to 5850 MHz
Number of Channel	1
Modulation Type	GFSK
Antenna Type	PCB Antenna
Antenna Gain(Peak)	2.35 dBi
Remark	The above information is declared by the applicant, EU-LAB is not responsible for the information accuracy provided by the applicant.

All channels were listed on the following table:

Channel Number	Frequency (MHz)
CH01	5770

Address: 101, Building B1, Fuqiao Fourth Area, Qiaotou Community, Fuhai Subdistrict, Baoan District, Shenzhen, Guangdong, China
Website: www.eu-test.com
Tel: (86)-755-2357-9714 Email: Service@eu-test.com

3 Test Summary

3.1 Test Standard

The tests were performed according to following standards:

No.	Identity	Document Title
1	47 CFR Part 15, Subpart C	Intentional radiators of radio frequency equipment
2	ANSI C63.10-2020+Cor 1-2023	American National Standard for Testing Unlicensed Wireless Devices

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

3.2 Test Verdict

No.	Description	FCC Part No.	Verdict	Remark
1	Antenna Requirement	15.203	Pass	Note [1]
2	Conducted Emission at AC Power Line	15.207	Pass	--
3	20dB Bandwidth	15.215	Pass	--
4	Field Strength of Fundamental	15.249 (a)	Pass	--
5	Radiated Emission	15.209 15.249 (a)	Pass	--
Note [1]: The EUT has a permanently and irreplaceable attached antenna, which complies with the requirement FCC 15.203.				

3.3 Test Laboratory

Test Laboratory	Shenzhen EU Testing Laboratory Limited
Address	101, Building B1, Fuqiao Fourth Area, Qiaotou Community, Fuhai Subdistrict, Baoan District, Shenzhen, Guangdong, China
Designation Number	CN1368
Test Firm Registration Number	952583

4 Test Configuration

4.1 Test Environment

During the measurement, the normal environmental conditions were within the listed ranges:

Relative Humidity	30% to 60%	
Atmospheric Pressure	86 kPa to 106 kPa	
Temperature	NT (Normal Temperature)	+15℃ to +35℃
Working Voltage of the EUT	NV (Normal Voltage)	120VAC, 50Hz for adapter

4.2 Test Equipment

Conducted Emission at AC power line					
Equipment	**Manufacturer**	**Model No**	**Serial No**	**Cal Date**	**Cal Due Date**
Test Software	Farad	EZ-EMC	EE-014	/	/
EMI Test Receiver	Rohde & Schwarz	ESCI	EE-005	2026-01-07	2027-01-06
L.I.S.N. Artificial Mains Network	Rohde & Schwarz	ENV216	EE-004	2026-01-07	2027-01-06

RF Test					
Equipment	**Manufacturer**	**Model No**	**Serial No**	**Cal Date**	**Cal Due Date**
MXA Signal Analyzer	Agilent	N9020A	EE-011	2026-01-07	2027-01-06
MXG RF Vector Signal Generator	Agilent	N5182A	EE-012	2026-01-07	2027-01-06
MIMO Power Measurement Module	TSTPASS	TSPS 2023R	EE-016	2026-01-07	2027-01-06
Wideband Radio Communication Tester	ROHDE & SCHWARZ	CMW500	EE-402	2026-02-13	2027-02-12
MXG RF Analog Signal Generator	Agilent	N5181A	EE-406	2026-02-13	2027-02-12
Power Meter	Anritsu	ML2495A	EE-416	2026-02-13	2027-02-12
Constant Temperature Humidity Chamber	Guangxin	GXP-401	ES-002	2025-07-29	2026-07-28
RF Test Software	TSTPASS	TS32893 V2.0	EE-017	/	/

Address: 101, Building B1, Fuqiao Fourth Area, Qiaotou Community, Fuhai Subdistrict, Baoan District, Shenzhen, Guangdong, China
Website: www.eu-test.com
Tel: (86)-755-2357-9714 Email: Service@eu-test.com

Band edge emissions (Radiated) Emissions in frequency bands (above 1GHz)					
Equipment	**Manufacturer**	**Model No**	**Serial No**	**Cal Date**	**Cal Due Date**
EMI Test Receiver	ROHDE & SCHWARZ	ESPI	EE-006	2026-01-07	2027-01-06
Double Ridged Horn Antenna	A-INFOMW	LB-10180-NF	EE-008	2026-01-11	2029-01-10
Pre-amplifier	Agilent	8449B	EE-010	2026-01-07	2027-01-06
MXG RF Vector Signal Generator	Agilent	N5182A	EE-012	2026-01-07	2027-01-06
DRG Horn Antenna	SCHWARZBECK	BBHA 9170	EE-410	2026-02-13	2027-02-12
Pre-amplifier	SKET	LNPA-1840-50	EE-411	2026-02-13	2027-02-12
Loop Antenna	TESEQ	HLA6121	EE-403	2026-02-13	2027-02-12
Test Software	Farad	EZ-EMC	EE-015	/	/

Emissions in frequency bands (below 1GHz)					
Equipment	**Manufacturer**	**Model No**	**Serial No**	**Cal Date**	**Cal Due Date**
EMI Test Receiver	ROHDE & SCHWARZ	ESPI	EE-006	2026-01-07	2027-01-06
Bilog Broadband Antenna	SCHWARZBECK	VULB 9163	EE-007	2026-01-13	2029-01-12
Pre-amplifier	Agilent	8447D	EE-009	2026-01-07	2027-01-06
MXA Signal Analyzer	Agilent	N9020A	EE-011	2026-01-07	2027-01-06
Test Software	Farad	EZ-EMC	EE-015	/	/

Address: 101, Building B1, Fuqiao Fourth Area, Qiaotou Community, Fuhai Subdistrict, Baoan District, Shenzhen, Guangdong, China
Website: www.eu-test.com
Tel: (86)-755-2357-9714 Email: Service@eu-test.com

4.3 Description of Support Unit

No.	Title	Manufacturer	Model No.	Serial No.
1	Adapter	MI3	A232-050200U-CN2	EMC-PJ-022

4.4 Test Mode

No.	Test Modes	Description
TM1	5770MHz--TX Mode	Keep the EUT connect to AC power line and works in continuously transmitting mode.

4.5 Description of Calculation

4.5.1. Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

FS (dBuV/m) = RA (dBuV) + AF (dB/m) + CL (dB) – AG (dB)

Where	FS = Field Strength	CL = Cable Attenuation Factor (Cable Loss)
	RA = Reading Amplitude	AG = Amplifier Gain
	AF = Antenna Factor	

4.5.2. Disturbance Calculation

The AC mains conducted disturbance is calculated by adding the 10dB Pulse Limiter and Cable Factor and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

CD (dBuV) = RA (dBuV) + PL (dB) + CL (dB)

Where	CD = Conducted Disturbance	CL = Cable Attenuation Factor (Cable Loss)
	RA = Reading Amplitude	PL = 10 dB Pulse Limiter Factor

Address: 101, Building B1, Fuqiao Fourth Area, Qiaotou Community, Fuhai Subdistrict, Baoan District, Shenzhen, Guangdong, China
Website: www.eu-test.com
Tel: (86)-755-2357-9714 Email: Service@eu-test.com

4.6 Measurement Uncertainty

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2.
This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Test Item	Measurement Uncertainty
Conducted Emission	2.64 dB
Occupied Channel Bandwidth	70 kHz
RF output power, conducted	1.04 dB
Power Spectral Density, conducted	0.91 dB
Time of Occupancy (Dwell Time)	1.8 %
Unwanted Emissions, conducted	2.72 dB
Radiated Emission (9kHz- 30MHz)	Ur = 2.50 dB
Radiated Emission (30MHz- 1GHz)	Ur = 2.70 dB (Horizontal)
	Ur = 2.70 dB (Vertical)
Radiated Emission (1GHz- 18GHz)	Ur = 3.50 dB (Horizontal)
	Ur = 3.50 dB (Vertical)
Radiated Emission (18GHz- 40GHz)	Ur = 5.15 dB (Horizontal)
	Ur = 5.24 dB (Vertical)
Temperature	0.8°C
Humidity	4%

4.7 Deviation from Standards

None.

4.8 Abnormalities from Standard Condition

None.

Address: 101, Building B1, Fuqiao Fourth Area, Qiaotou Community, Fuhai Subdistrict, Baoan District, Shenzhen, Guangdong, China
Website: www.eu-test.com
Tel: (86)-755-2357-9714 Email: Service@eu-test.com

5 Test Items

5.1 Antenna requirement

5.1.1 Test Requirement

Test Requirement	According to FCC §15.203, 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. This requirement does not apply to carrier current devices or to devices operated under the provisions of § 15.211, § 15.213, § 15.217, § 15.219, or § 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded. If directional gain of transmitting antennas is greater than 6 dBi, the power shall be reduced by the same level in dB comparing to gain minus 6 dBi. For the fixed point-to-point operation, the power shall be reduced by one dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi. 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 FCC rule.

5.1.2 Antenna Anti-Replacement Construction

The Antenna Anti-Replacement as following method:

Protected Method	Description
The antenna is embedded in the product.	An embedded-in antenna design is used.

Reference Documents	Item
Photo	Please refer to the EUT Photo documents.

5.1.3 Antenna Gain

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.

Address: 101, Building B1, Fuqiao Fourth Area, Qiaotou Community, Fuhai Subdistrict, Baoan District, Shenzhen, Guangdong, China
Website: www.eu-test.com
Tel: (86)-755-2357-9714 Email: Service@eu-test.com

5.2 Conducted Emission at AC Power Line

5.2.1 Test Requirement

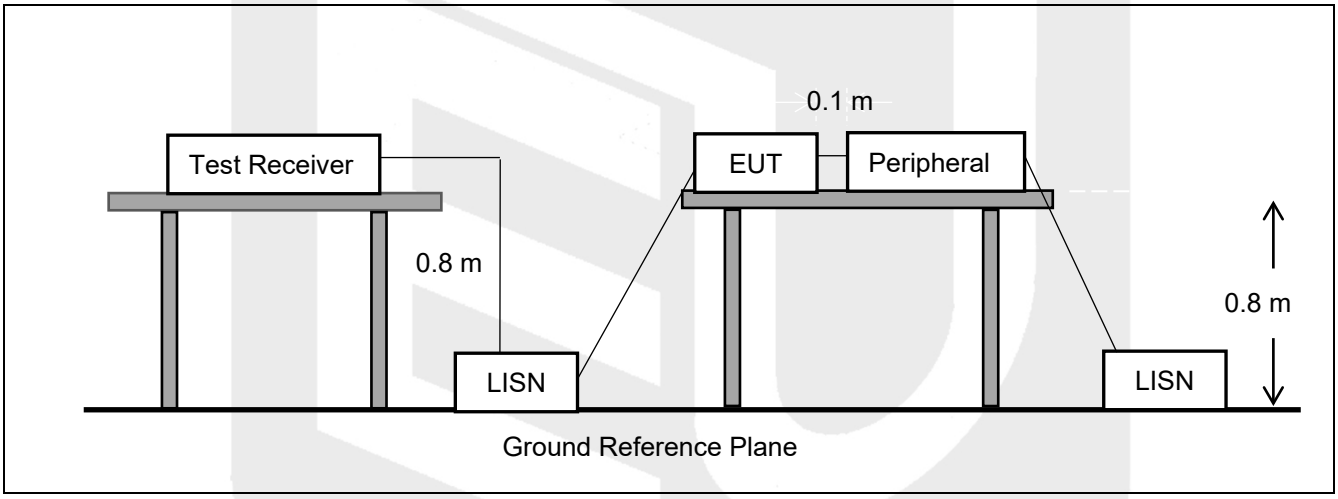
Test Requirement	Except as shown in paragraphs (b)and (c)of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μH/50 ohms line impedance stabilization network (LISN).
Test Limit	

Frequency of emission (MHz)	Conducted limit (dBμV)	
	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 Method	ANSI C63.10-2020+Cor 1-2023 section 6.2

5.2.2 Test Setup Diagram



5.2.3 Test Procedure

The EUT is put on the plane 0.8 m high above the ground by insulating support and connected to the AC mains through Line Impedance Stability Network (L.I.S.N). This provided a 50ohm coupling impedance for the tested equipment. Both sides of AC line are investigated to find out the maximum conducted emission according to the test standard regulations during conducted emission measurement.
The bandwidth of the field strength meter (R&S Test Receiver ESCI) is set at 9kHz in 150kHz~30MHz.
The maximum conducted interference is searched using Peak (PK), if the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. Refer to recorded points and plots below.
Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 50/60 Hz and 240 VAC, 50/60 Hz) for which the device is capable of operation. A device rated for 50/60 Hz operation need not be tested at both frequencies provided the radiated and line conducted emissions are the same at both frequencies.

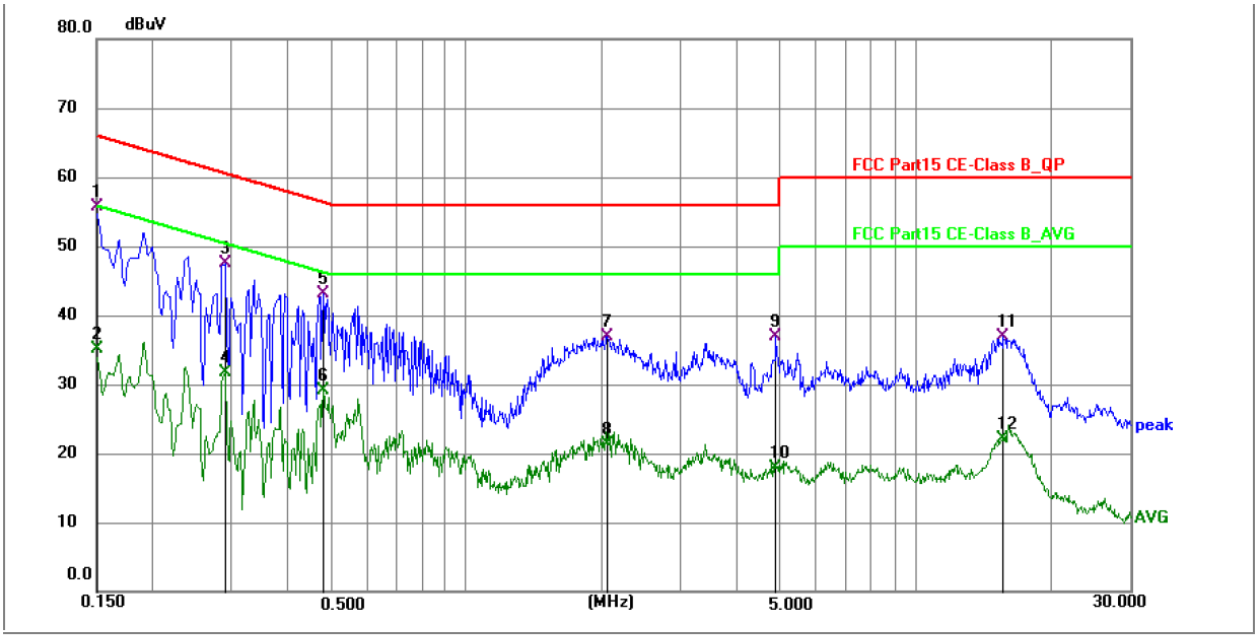
5.2.4 Test Data

PASS.

Only the worst case data was showed in the report, please to see the following pages.

Conducted Emission Test Data

Test Site:	Shielded Room #1
Test Mode:	TM1
Comments:	Live Line



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1 *	0.1500	45.79	9.95	55.74	66.00	-10.26	QP	P	
2	0.1500	25.22	9.95	35.17	56.00	-20.83	AVG	P	
3	0.2895	37.44	9.99	47.43	60.54	-13.11	QP	P	
4	0.2895	21.78	9.99	31.77	50.54	-18.77	AVG	P	
5	0.4785	33.16	10.04	43.20	56.37	-13.17	QP	P	
6	0.4785	19.14	10.04	29.18	46.37	-17.19	AVG	P	
7	2.0625	26.95	10.02	36.97	56.00	-19.03	QP	P	
8	2.0625	11.19	10.02	21.21	46.00	-24.79	AVG	P	
9	4.8840	26.90	10.04	36.94	56.00	-19.06	QP	P	
10	4.8840	7.94	10.04	17.98	46.00	-28.02	AVG	P	
11	15.6615	26.97	9.98	36.95	60.00	-23.05	QP	P	
12	15.6615	12.15	9.98	22.13	50.00	-27.87	AVG	P	

Note: Level = Reading + Factor Margin = Level - Limit

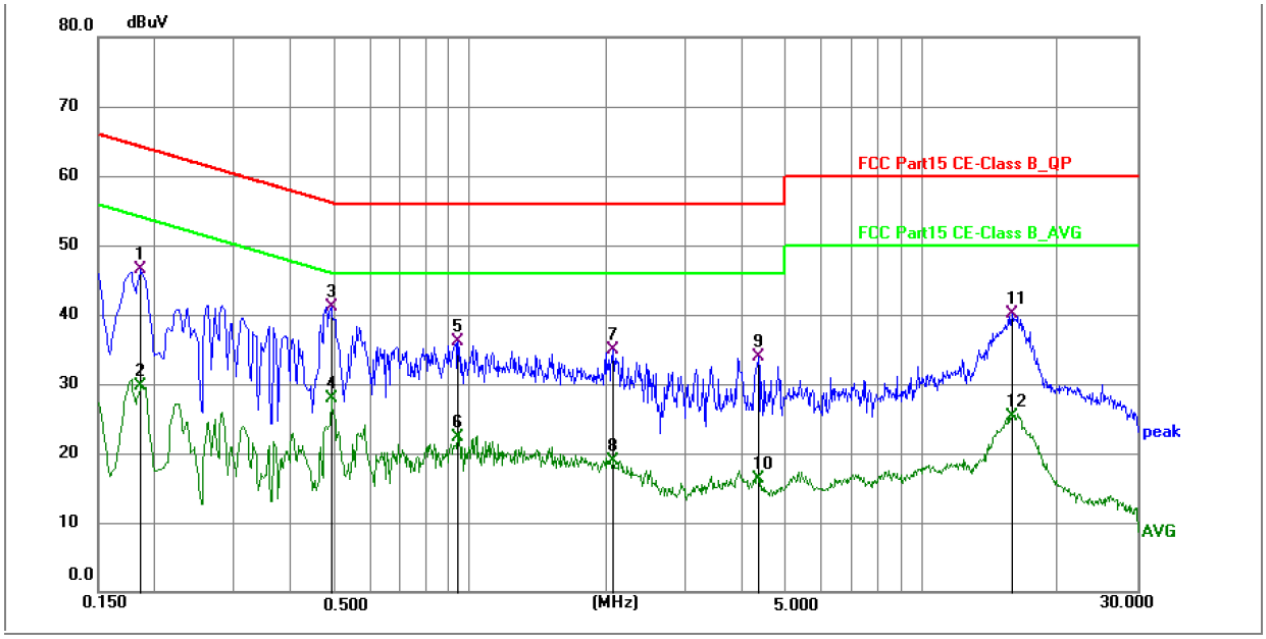
Address: 101, Building B1, Fuqiao Fourth Area, Qiaotou Community, Fuhai Subdistrict, Baoan District, Shenzhen, Guangdong, China

Website: www.eu-test.com

Tel: (86)-755-2357-9714 Email: Service@eu-test.com

Conducted Emission Test Data

Test Site:	Shielded Room #1
Test Mode:	TM1
Comments:	Neutral Line



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1860	36.46	9.99	46.45	64.21	-17.76	QP	P	
2	0.1860	19.64	9.99	29.63	54.21	-24.58	AVG	P	
3 *	0.4920	31.05	10.07	41.12	56.13	-15.01	QP	P	
4	0.4920	17.78	10.07	27.85	46.13	-18.28	AVG	P	
5	0.9420	26.09	10.06	36.15	56.00	-19.85	QP	P	
6	0.9420	12.26	10.06	22.32	46.00	-23.68	AVG	P	
7	2.0760	24.76	10.07	34.83	56.00	-21.17	QP	P	
8	2.0760	8.78	10.07	18.85	46.00	-27.15	AVG	P	
9	4.3530	23.90	10.05	33.95	56.00	-22.05	QP	P	
10	4.3530	6.34	10.05	16.39	46.00	-29.61	AVG	P	
11	15.8640	30.09	10.01	40.10	60.00	-19.90	QP	P	
12	15.8640	15.38	10.01	25.39	50.00	-24.61	AVG	P	

Note: Level = Reading + Factor Margin = Level - Limit

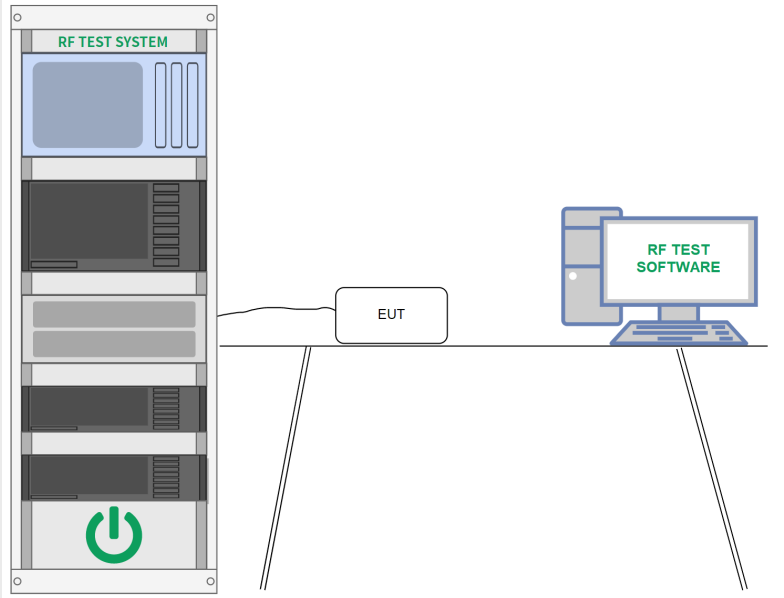
Address: 101, Building B1, Fuqiao Fourth Area, Qiaotou Community, Fuhai Subdistrict, Baoan District, Shenzhen, Guangdong, China
Website: www.eu-test.com
Tel: (86)-755-2357-9714 Email: Service@eu-test.com

5.3 20dB Bandwidth

5.3.1 Test Requirement

Test Requirement	§ 15.215 (c): Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.
Test Method	ANSI C63.10-2020+Cor 1-2023 section 6.9.2

5.3.2 Test Setup Diagram



5.3.3 Test Procedure

a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the EMI receiver or spectrum analyzer shall be between two times and five times the OBW.
b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW and video bandwidth (VBW) shall be approximately three times RBW, unless otherwise specified by the applicable requirement.
c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than [10 log (OBW/RBW)] below the reference level. Specific guidance is given in 4.1.5.2.
d) Steps a) through c) might require iteration to adjust within the specified tolerances.
e) The dynamic range of the instrument at the selected RBW shall be more than 10 dB below the target "−xx dB down" requirement; that is, if the requirement calls for measuring the −20 dB OBW, the instrument noise floor at the selected RBW shall be at least 30 dB below the
reference value.
f) Set detection mode to peak and trace mode to max hold.
g) Determine the reference value: Set the EUT to transmit an unmodulated carrier or modulated signal, as applicable. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace (this is the reference value).
h) Determine the "−xx dB down amplitude" using [(reference value) − xx]. Alternatively, this calculation may be made by using the marker-delta function of the instrument.
i) If the reference value is determined by an unmodulated carrier, then turn the EUT modulation ON, and

Address: 101, Building B1, Fuqiao Fourth Area, Qiaotou Community, Fuhai Subdistrict, Baoan District, Shenzhen, Guangdong, China
Website: www.eu-test.com
Tel: (86)-755-2357-9714 Email: Service@eu-test.com

either clear the existing trace or start a new trace on the spectrum analyzer and allow the new trace to stabilize. Otherwise, the trace from step g) shall be used for step j).

j) Place two markers, one at the lowest frequency and the other at the highest frequency of the envelope of the spectral display, such that each marker is at or slightly below the "-xx dB down amplitude" determined in step h). If a marker is below this "−xx dB down amplitude" value, then it shall be as close as possible to this value. The occupied bandwidth is the frequency difference between the two markers. Alternatively, set a marker at the lowest frequency of the envelope of the spectral display, such that the marker is at or slightly below the "-xx dB down amplitude" determined in step h). Reset the marker-delta function and move the marker to the other side of the emission until the delta marker amplitude is at the same level as the reference marker amplitude. The marker-delta frequency reading at this point is the specified emission bandwidth.

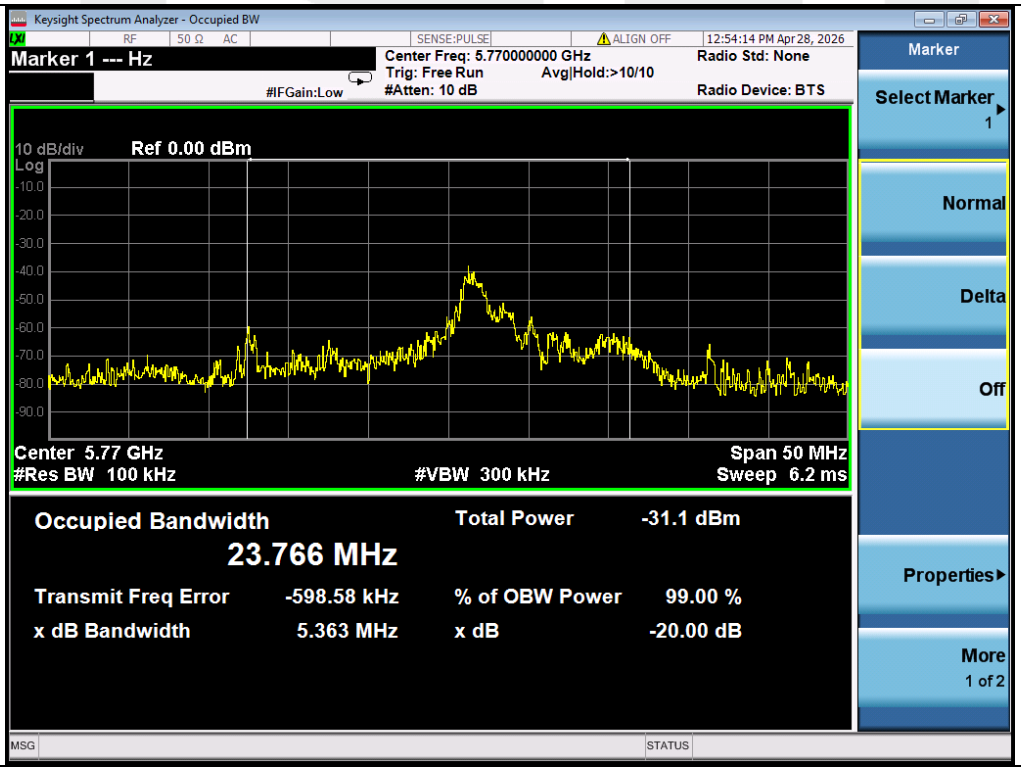
The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

5.3.4 Test Data

Test Mode	Frequency (MHz)	20 dB Bandwidth (MHz)	Verdict
TM1	5770	5.363	Pass

Test Plot:

TM1



5.4 Fundamental and Radiated Spurious Emission

5.4.1 Test Requirement

Test Requirement and Limit

§ 15.249 (a):
Except as provided in paragraph (b)of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental frequency	Field strength of fundamental emissions (mV/m)	Field strength of harmonics emissions (microvolts/meter)
902-928 MHz	50	500
2400-2483.5 MHz	50	500
5725-5875 MHz	50	500
24.0-24.25 GHz	250	2500

Field strength limits are specified at a distance of 3 meters.

§ 15.209:

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

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.

Note:
1) Field Strength (dBμV/m) = 20*log[Field Strength (μV/m)].
2) In the emission tables above, the tighter limit applies at the band edges.
3) For Above 1000 MHz, the emission limit in this paragraph is based on measurement instrumentation employing an average detector, measurement using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit.
4) For above 1000 MHz, limit field strength of harmonics:
54dBuV/m@3m (AV) and 74dBuV/m@3m (PK).

Test Method

ANSI C63.10-2020+Cor 1-2023 section 6.6.4

Address: 101, Building B1, Fuqiao Fourth Area, Qiaotou Community, Fuhai Subdistrict, Baoan District, Shenzhen, Guangdong, China
Website: www.eu-test.com
Tel: (86)-755-2357-9714 Email: Service@eu-test.com

5.4.2 Test Setup Diagram

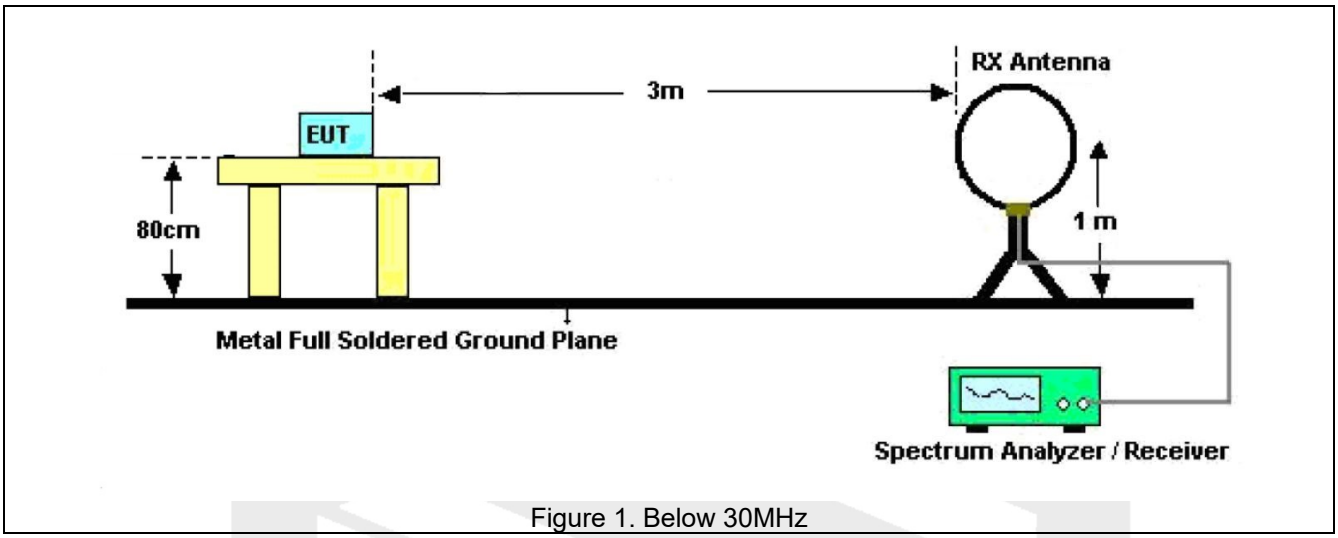


Figure 1. Below 30MHz

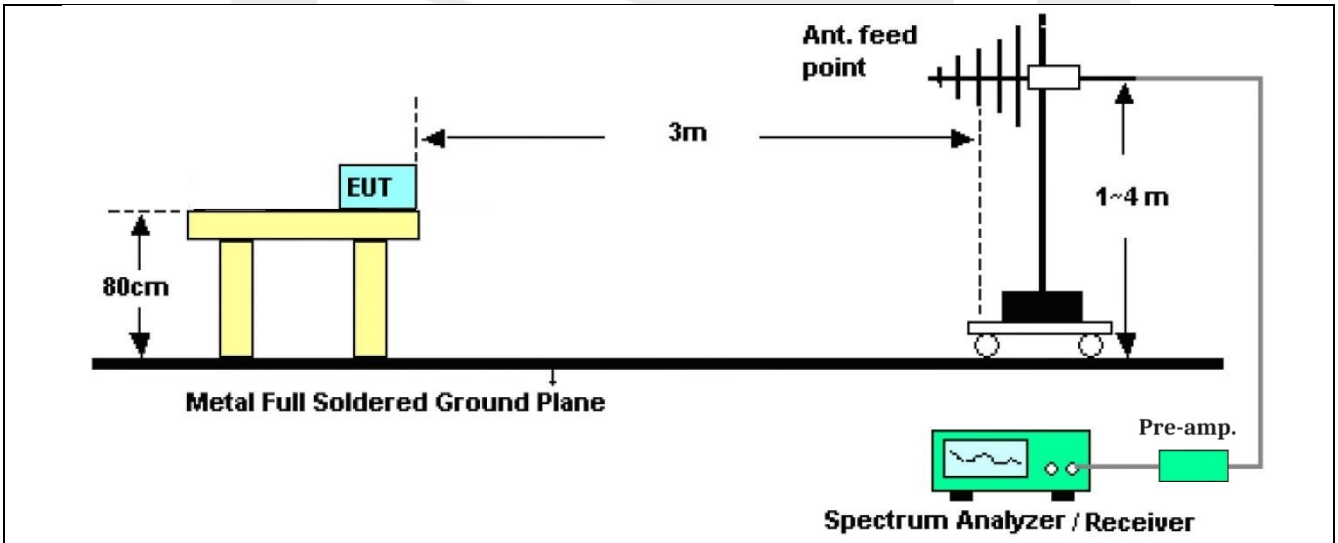


Figure 2. 30MHz to 1GHz

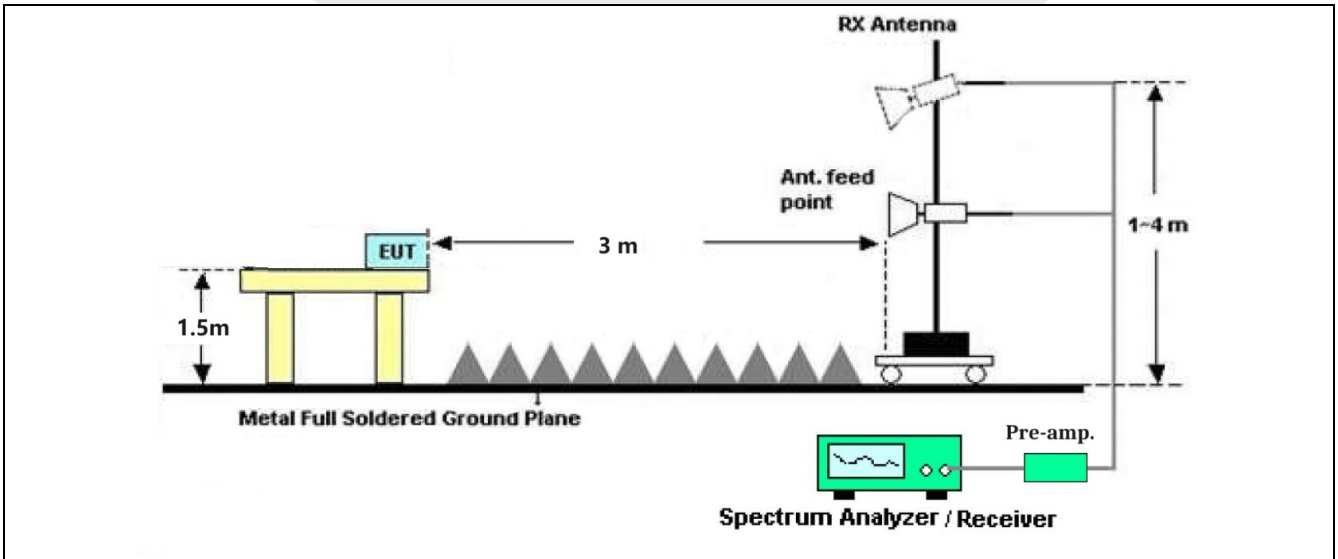


Figure 3. Above 1 GHz

5.4.3 Test Procedure

The measurement frequency range is from 9 kHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power.
Mid channels on all channel bandwidth verified. Only the worst RB size/offset presented.
The power of the EUT transmitting frequency should be ignored.
All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.
Use the following spectrum analyzer settings:
Span = wide enough to fully capture the emission being measured
For 9kHz to 150kHz, Set the spectrum analyzer as:
RBW = 200Hz, VBW =1kHz, Detector= Quasi-Peak, Trace mode= Max hold, Sweep- auto couple.

For 150kHz to 30MHz, Set the spectrum analyzer as:
RBW = 9KHz, VBW =30kHz, Detector= Quasi-Peak, Trace mode= Max hold, Sweep- auto couple.

For 30MHz to 1000MHz, Set the spectrum analyzer as:
RBW = 100kHz, VBW =300kHz, Detector= Quasi-Peak, Trace mode= Max hold, Sweep- auto couple.

For above 1GHz, Set the spectrum analyzer as:
RBW =1MHz, VBW =1MHz, Detector= Peak, Trace mode= Max hold, Sweep- auto couple.
RBW =1MHz, VBW =10Hz, Detector= Average, Trace mode= Max hold, Sweep- auto couple.

For measurement below 1GHz, If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported, Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

5.4.4 Test Data

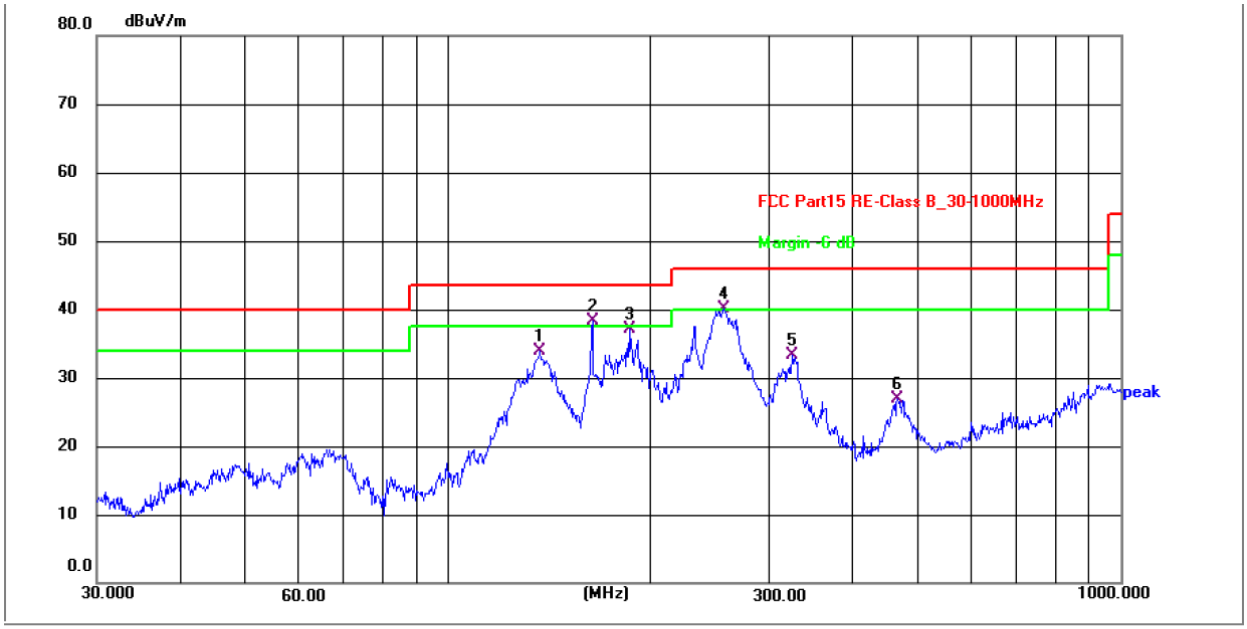
PASS.

Please to see the following pages.
The test results of 9kHz-30MHz was attenuated more than 20dB below the permissible limits, so the results don't record in the report.
For test of 30MHz-1GHz, during the test, pre-scan all modes, only the worst case is recorded in the report.

Address: 101, Building B1, Fuqiao Fourth Area, Qiaotou Community, Fuhai Subdistrict, Baoan District, Shenzhen, Guangdong, China
Website: www.eu-test.com
Tel: (86)-755-2357-9714 Email: Service@eu-test.com

Radiated Emission Test Data (30-1000MHz)

Test Site:	**966 Chamber #1**	**Polarization:**	**Horizontal**
Distance:	**3m**	**Test Mode:**	**TM1**



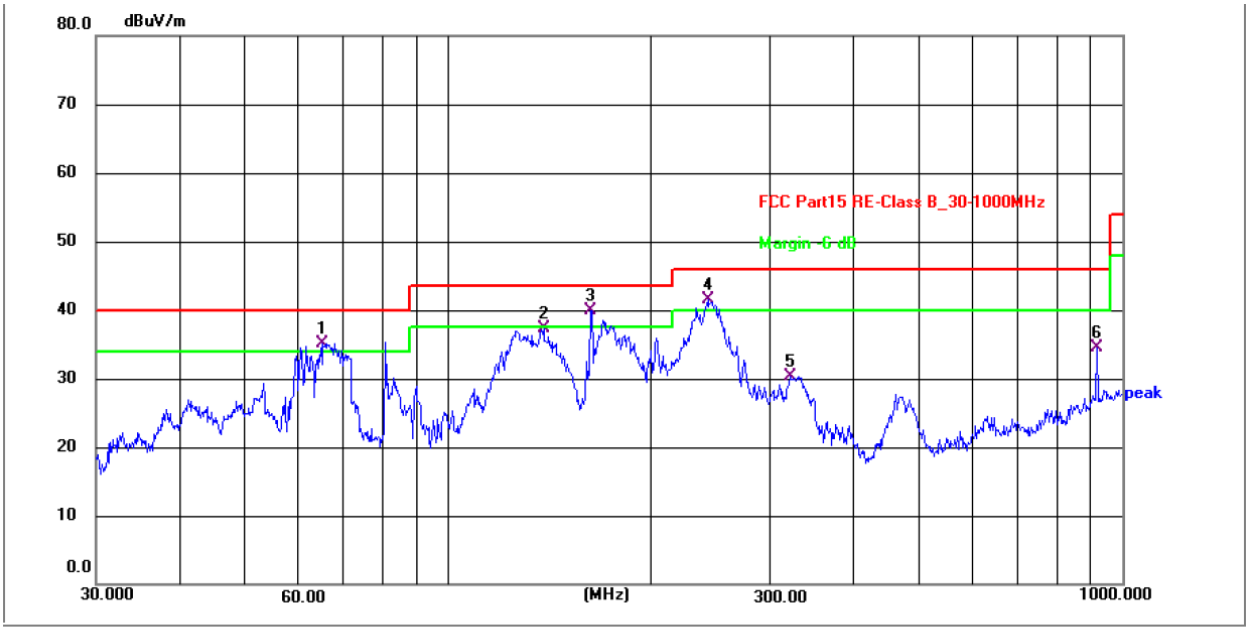
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	136.9390	51.83	-17.92	33.91	43.50	-9.59	QP	P	
2 *	163.7550	55.93	-17.70	38.23	43.50	-5.27	QP	P	
3	185.7881	53.12	-16.10	37.02	43.50	-6.48	QP	P	
4 !	257.4221	53.23	-13.13	40.10	46.00	-5.90	QP	P	
5	324.4560	44.78	-11.45	33.33	46.00	-12.67	QP	P	
6	465.5994	35.80	-8.92	26.88	46.00	-19.12	QP	P	

Note: Level = Reading + Factor **Margin = Level - Limit**

Address: 101, Building B1, Fuqiao Fourth Area, Qiaotou Community, Fuhai Subdistrict, Baoan District, Shenzhen, Guangdong, China
Website: www.eu-test.com
Tel: (86)-755-2357-9714 Email: Service@eu-test.com

Radiated Emission Test Data (30-1000MHz)

Test Site:	**966 Chamber #1**	**Polarization:**	**Vertical**
Distance:	**3m**	**Test Mode:**	**TM1**



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 !	65.1144	51.41	-16.22	35.19	40.00	-4.81	QP	P	
2	138.3873	55.24	-18.01	37.23	43.50	-6.27	QP	P	
3 *	162.6105	57.65	-17.77	39.88	43.50	-3.62	QP	P	
4 !	242.5252	55.18	-13.73	41.45	46.00	-4.55	QP	P	
5	322.1885	41.78	-11.49	30.29	46.00	-15.71	QP	P	
6	916.0686	36.51	-2.08	34.43	46.00	-11.57	QP	P	

Note: Level = Reading + Factor **Margin = Level - Limit**

Address: 101, Building B1, Fuqiao Fourth Area, Qiaotou Community, Fuhai Subdistrict, Baoan District, Shenzhen, Guangdong, China
Website: www.eu-test.com
Tel: (86)-755-2357-9714 Email: Service@eu-test.com

Fundamental and Harmonics Emissions

Test Mode: TM1					CH Low: 5770MHz			
Pol.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type	Result
V	5770.25	90.01	3.75	93.76	114.00	-20.24	PK	PASS
V	5770.25	87.68	3.75	91.43	94.00	-2.58	AV	PASS
V	5770.32	84.35	5.02	89.37	114.00	-24.63	PK	PASS
V	5770.32	79.41	5.02	84.43	94.00	-9.57	AV	PASS
V	5770.59	*	*	*	*	*	*	PASS
V	5770.71	*	*	*	*	*	*	PASS
V	5770.84	*	*	*	*	*	*	PASS
V	5770.60	*	*	*	*	*	*	PASS
H	5770.12	91.16	3.75	94.91	114.00	-19.10	PK	PASS
H	5770.12	87.84	3.75	91.59	94.00	-2.41	AV	PASS
H	5770.68	83.85	5.02	88.87	114.00	-25.14	PK	PASS
H	5770.68	79.71	5.02	84.73	94.00	-9.28	AV	PASS
H	5770.25	*	*	*	*	*	*	PASS
H	5770.17	*	*	*	*	*	*	PASS
H	5770.29	*	*	*	*	*	*	PASS
H	5770.31	*	*	*	*	*	*	PASS

Remark:
1. Emission Level = Reading + Factor, Margin= Emission Level – Limit.
2. “*” means the test results were attenuated more than 20dB below the permissible limits, so the results don't record in the report.

Address: 101, Building B1, Fuqiao Fourth Area, Qiaotou Community, Fuhai Subdistrict, Baoan District, Shenzhen, Guangdong, China
Website: www.eu-test.com
Tel: (86)-755-2357-9714 Email: Service@eu-test.com

Radiated Spurious Emission (1GHz-40GHz)

Test Mode: TM1					Test Channel: 5770MHz			
Pol.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type	Result
V	11540.96	41.17	3.75	44.92	74.00	-29.09	PK	PASS
V	17310.94	33.83	5.02	38.85	74.00	-35.15	PK	PASS
V	23080.14	29.53	5.69	35.22	74.00	-38.78	PK	PASS
V	28850.14	*	*	*	74.00	*	PK	PASS
V	34620.97	*	*	*	74.00	*	PK	PASS
V	40390.67	*	*	*	74.00	*	PK	PASS
H	11540.46	40.96	3.75	44.71	74.00	-29.29	PK	PASS
H	17310.79	33.62	5.02	38.64	74.00	-35.37	PK	PASS
H	23080.09	30.48	5.69	36.17	74.00	-37.84	PK	PASS
H	28850.42	*	*	*	74.00	*	PK	PASS
H	34620.02	*	*	*	74.00	*	PK	PASS
H	40390.09	*	*	*	74.00	*	PK	PASS
V	11540.96	30.85	3.75	34.60	54.00	-19.41	AV	PASS
V	17310.94	24.34	5.02	29.36	54.00	-24.65	AV	PASS
V	23080.14	19.58	5.69	25.27	54.00	-28.73	AV	PASS
V	28850.14	*	*	*	54.00	*	AV	PASS
V	34620.97	*	*	*	54.00	*	AV	PASS
V	40390.67	*	*	*	54.00	*	AV	PASS
H	11540.46	30.53	3.75	34.28	54.00	-19.73	AV	PASS
H	17310.79	24.05	5.02	29.07	54.00	-24.94	AV	PASS
H	23080.09	17.69	5.69	23.38	54.00	-30.63	AV	PASS
H	28850.42	*	*	*	54.00	*	AV	PASS
H	34620.02	*	*	*	54.00	*	AV	PASS
H	40390.09	*	*	*	54.00	*	AV	PASS

Remark:
1. Emission Level = Reading + Factor, Margin= Emission Level – Limit.
2. “*” means the test results were attenuated more than 20dB below the permissible limits, so the results don't record in the report.

Address: 101, Building B1, Fuqiao Fourth Area, Qiaotou Community, Fuhai Subdistrict, Baoan District, Shenzhen, Guangdong, China
Website: www.eu-test.com
Tel: (86)-755-2357-9714 Email: Service@eu-test.com

Band Edge Emissions Test Data:

Test Mode: TM1					CH Low: 5770 MHz			
Pol.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type	Result
H	5650.00	42.81	-2.81	40.00	64.00	-24.00	PK	PASS
H	5700.00	46.98	-2.69	44.29	64.00	-19.71	PK	PASS
H	5720.00	64.02	-2.68	61.34	64.00	-2.66	PK	PASS
H	5725.00	43.59	-2.81	40.78	64.00	-23.22	PK	PASS
V	5650.00	44.88	-2.81	42.07	64.00	-21.93	PK	PASS
V	5700.00	48.25	-2.69	45.56	64.00	-18.44	PK	PASS
V	5720.00	62.74	-2.68	60.06	64.00	-3.94	PK	PASS
V	5725.00	44.46	-2.81	41.65	64.00	-22.35	PK	PASS
H	5650.00	32.80	-2.81	29.99	44.00	-14.01	AV	PASS
H	5700.00	37.59	-2.69	34.90	44.00	-9.10	AV	PASS
H	5720.00	38.59	-2.68	35.91	44.00	-8.09	AV	PASS
H	5725.00	33.80	-2.81	30.99	44.00	-13.01	AV	PASS
V	5650.00	35.44	-2.69	32.75	44.00	-11.25	AV	PASS
V	5700.00	39.47	-2.68	36.79	44.00	-7.21	AV	PASS
V	5720.00	35.08	-2.81	32.27	44.00	-11.73	AV	PASS
V	5725.00	37.44	-2.69	34.75	44.00	-9.25	AV	PASS

Remark:
1. Emission Level = Reading + Factor, Margin= Emission Level – Limit.

Address: 101, Building B1, Fuqiao Fourth Area, Qiaotou Community, Fuhai Subdistrict, Baoan District, Shenzhen, Guangdong, China
Website: www.eu-test.com
Tel: (86)-755-2357-9714 Email: Service@eu-test.com

ANNEX A TEST SETUP PHOTOS

Please refer to the document “8430EU012301W-AA.PDF”

ANNEX B EXTERNAL PHOTOS

Please refer to the document “8430EU012301W-AB.PDF”

ANNEX C INTERNAL PHOTOS

Please refer to the document “8430EU012301W-AC.PDF”

Address: 101, Building B1, Fuqiao Fourth Area, Qiaotou Community, Fuhai Subdistrict, Baoan District, Shenzhen, Guangdong, China
Website: www.eu-test.com
Tel: (86)-755-2357-9714 Email: Service@eu-test.com

STATEMENT

1. The laboratory guarantees the scientificity, accuracy and impartiality of the test, and is responsible for all the information in the report, except the information provided by the customer. The customer is responsible for the impact of the information provided on the validity of the results.
2. The report without China inspection body and laboratory Mandatory Approval (CMA) mark has no effect of proving to the society.
3. For the report with CNAS mark or A2LA mark, the items marked with "☆" are not within the accredited scope.
4. This report is invalid if it is altered, without the signature of the testing and approval personnel, or without the “inspection and testing dedicated stamp” or test report stamp.
5. The test data and results are only valid for the tested samples provided by the customer.
6. This report shall not be partially reproduced without the written permission of the laboratory.
7. Any objection shall be raised to the laboratory within 30 days after receiving the report.

--- End of Report ---

Address: 101, Building B1, Fuqiao Fourth Area, Qiaotou Community, Fuhai Subdistrict, Baoan District, Shenzhen, Guangdong, China
Website: www.eu-test.com
Tel: (86)-755-2357-9714 Email: Service@eu-test.com