



FCC RF Test Report

APPLICANT : Amazon.com Services LLC
EQUIPMENT : Wireless Accessory
MODEL NAME : B85V52
FCC ID : 2A4DH-2880
STANDARD : FCC Part 15 Subpart C §15.209
CLASSIFICATION : (DCD) Part 15 Low Power Transmitter Below 1705 kHz
TEST DATE(S) : Aug. 19, 2025 ~ Feb. 26, 2026

We, Sporton International Inc. (ShenZhen), would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (ShenZhen), the test report shall not be reproduced except in full.

Jason Jia

Approved by: Jason Jia



Sporton International Inc. (ShenZhen)

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People's Republic of China



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History of this test report

Report No.	Version	Description	Issued Date
FR520616-01B	01	Initial issue of report	Sep. 12, 2025
FR520616-01B	02	Updated the version of ANSI C63.10 This report is an updated version, replacing the report issued on Sep. 12, 2025.	Feb. 05, 2026
FR520616-01B	03	1. Updated the information of Equipment name 2. Updated test data for fundamental field strength This report is an updated version, replacing the report issued on Feb. 05, 2026.	Feb. 09, 2026
FR520616-01B	04	Updated test data for Radiated Emission(9kHz ~ 30MHz) This report is an updated version, replacing the report issued on Feb. 09, 2026.	Feb. 27, 2026

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	2.1049	20dB Bandwidth	Reporting Only	-
3.1	2.1049	99% Occupied Bandwidth	Reporting Only	-
3.2	15.209	Radiated Emission	Pass	Under limit 10.02 dB at 42.61 MHz
3.3	15.207	AC Conducted Emission	Pass	Under limit 11.78 dB at 0.1558 MHz
3.4	15.203	Antenna Requirements	Pass	-

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacture who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty"

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.



1 General Description

1.1 Applicant

Amazon.com Services LLC

410 Terry Avenue N, Seattle, WA 98109-5210, United States

1.2 Product Feature of Equipment Under Test

Product Feature	
Equipment	Wireless Accessory
Model Name	B85V52
FCC ID	2A4DH-2880
S/N Code	Conducted: GUW4E30353120241 Conduction: GUW4E30353120044 Radiation: GUW4E30353120241
Frequency Range	111 ~ 489kHz
Type of Modulation	BPSK
Antenna Type	Coil Antenna

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. The EUT is only used with the designated Digital Media Device through software control, and the operating frequency is 339.302kHz.

1.3 Modification of EUT

No modifications are made to the EUT during all test items.

1.4 Test Location

Sporton International Inc. (ShenZhen) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

Test Firm	Sporton International Inc. (ShenZhen)		
Test Site Location	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City, Guangdong Province 518103 People's Republic of China TEL: +86-755-86066985		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	TH01-SZ CO02-SZ 03CH04-SZ	CN1256	421272



1.5 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH04-SZ	AUDIX	E3	6.2009-8-24
2.	CO02-SZ	EMC32	R&S	V10.60.20

1.6 Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ FCC Part 15 Subpart C §15.209, §15.207
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01.
- ♦ ANSI C63.10-2020+Cor.1-2023

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.

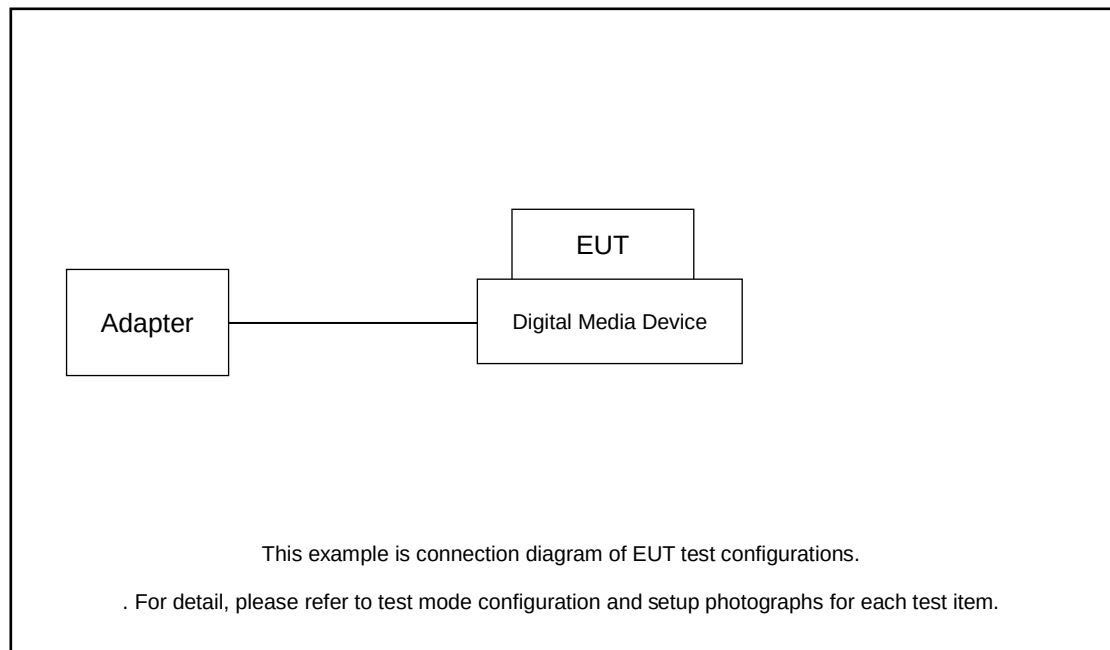
2 Test Configuration of Equipment Under Test

2.1 Test Mode

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 1000 MHz).
- b. AC power line Conducted Emission was tested under maximum output power.

Test Items	Function Type
AC Conducted Emission	Mode 1: specific RF technology Link + Digital Media Device to Charging with Adapter
Radiated Emission	Mode 1: specific RF technology Tx_339.302kHz

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Digital Media Device	NA	NA	NA	NA	NA
2.	Adapter	N/A	N/A	N/A	N/A	N/A
3.	USB Cable	N/A	N/A	N/A	N/A	N/A

3 Test Result

3.1 20dB and 99% Occupied Bandwidth Measurement

3.1.1 Limit of 20dB and 99% Occupied Bandwidth

Reporting only, 99% OBW shall not located within 15.205 restricted bands.

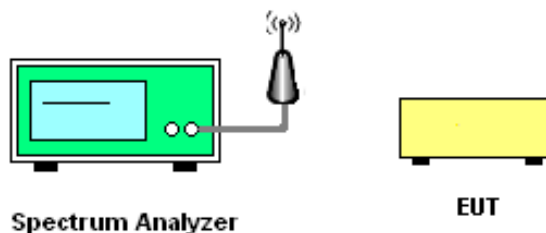
3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

3.1.3 Test Procedures

1. The 20dB bandwidth is measured with a spectrum analyzer connected via a receiver antenna placed near the EUT while wirelessly charging a charging board.
2. Use the following spectrum analyzer settings for 99 % Bandwidth measurement.
3. Measure and record the results in the test report.

3.1.4 Test Setup

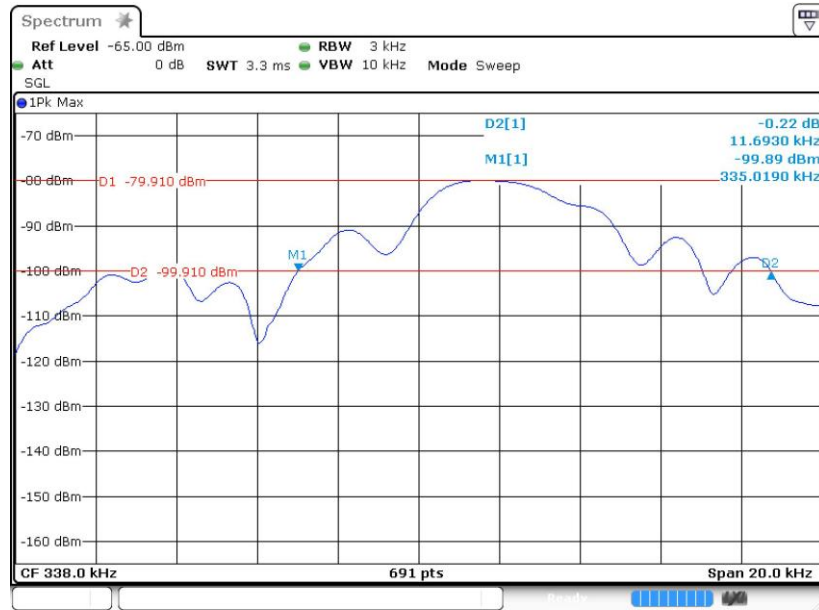


3.1.5 Test Result of 20dB and 99% Bandwidth

Test Engineer :	Liu Qiu Qiu	Temperature :	24~26℃
		Relative Humidity :	50~53%
20dB Bandwidth (kHz)		99% Occupied Bandwidth (kHz)	
11.6930		13.690	

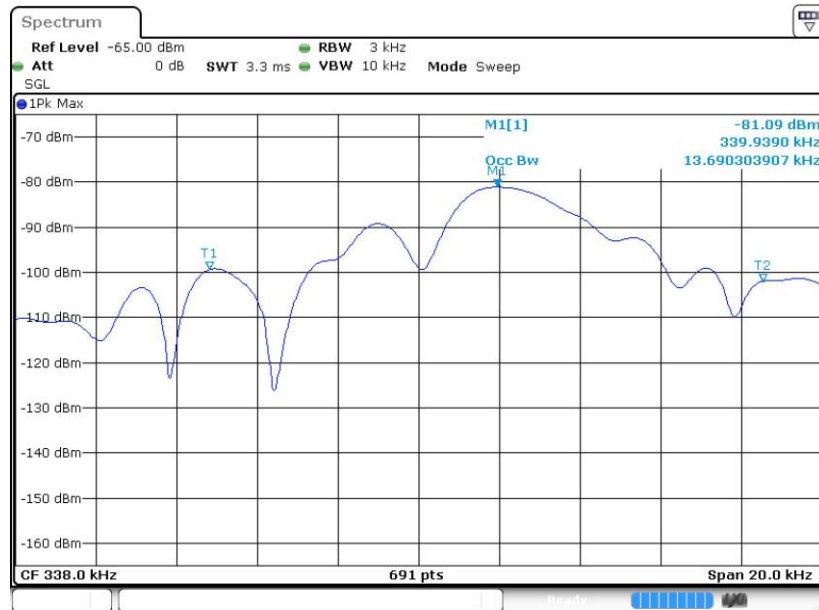


20 dB Bandwidth Plot



Date: 19.AUG.2025 10:54:36

99% Occupied Bandwidth Plot



Date: 19.AUG.2025 10:57:07

3.2 Radiated Emission Measurement

3.2.1 Limit of Radiated Emission

The emissions from an intentional radiator shall not exceed the field strength levels specified in the following 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

Receiver Parameter	Setting
Frequency Range: 9kHz~150kHz	RBW 200Hz for QP
Frequency Range: 150kHz~30MHz	RBW 9kHz for QP
Frequency Range: 30MHz~1000MHz	RBW 120kHz for Peak

Note: 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. Radiated emission limits in these two bands are based on measurements employing an average detector.

3.2.2 Measuring Instruments

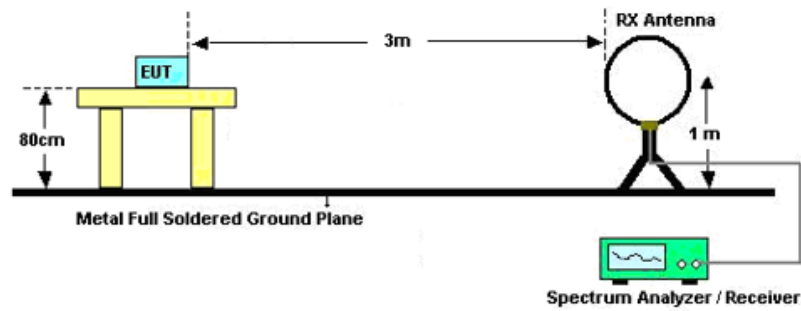
See list of measuring equipment of this test report.

3.2.3 Measuring Instrument Setting

Follow the guidelines in ANSI C63.10 with respect to maximizing the emission by rotating the EUT, measuring the emission for three EUT orthogonal planes, and adjusting the measurement antenna height and polarization. A pre-amp and a high pass filter are used for this test in order to get the good signal level.

3.2.4 Test Setup of Radiated Emission

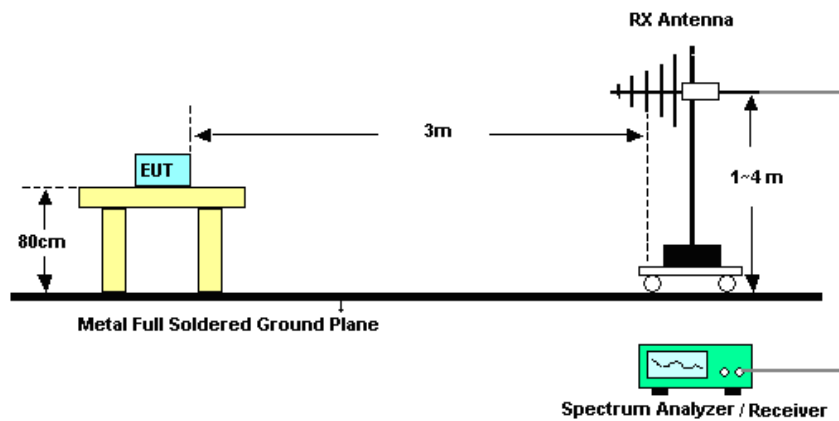
For radiated emissions below 30MHz



Note:

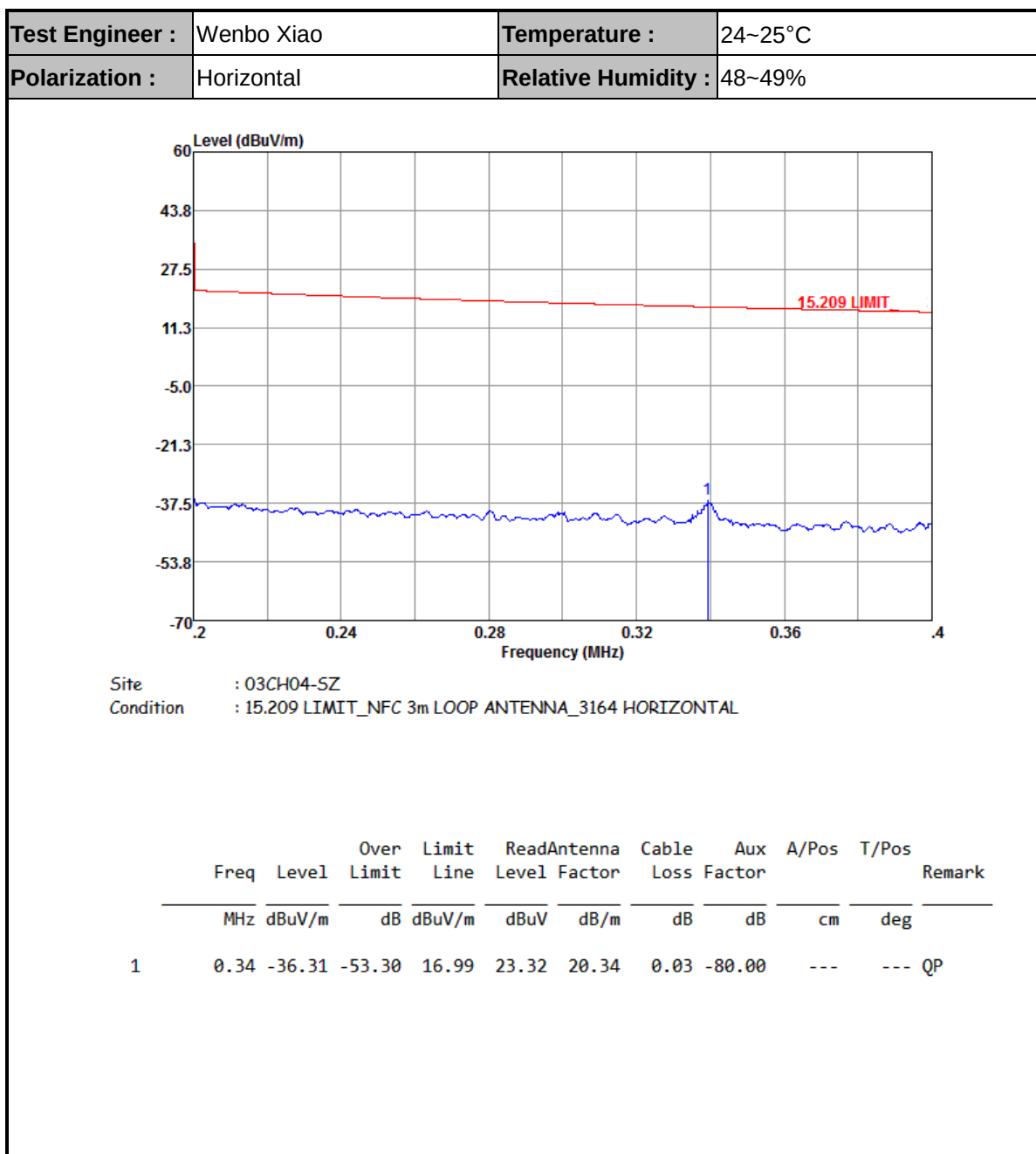
1. There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.
2. Tested for radiated below 30 MHz using a loop antenna in accordance with C63.10, the antenna was positioned in three antenna orientations: horizontal, vertical, and ground-parallel three polarization's, the worst case is horizontal & vertical polarization, test data of two mode was reported.

For radiated emissions above 30MHz



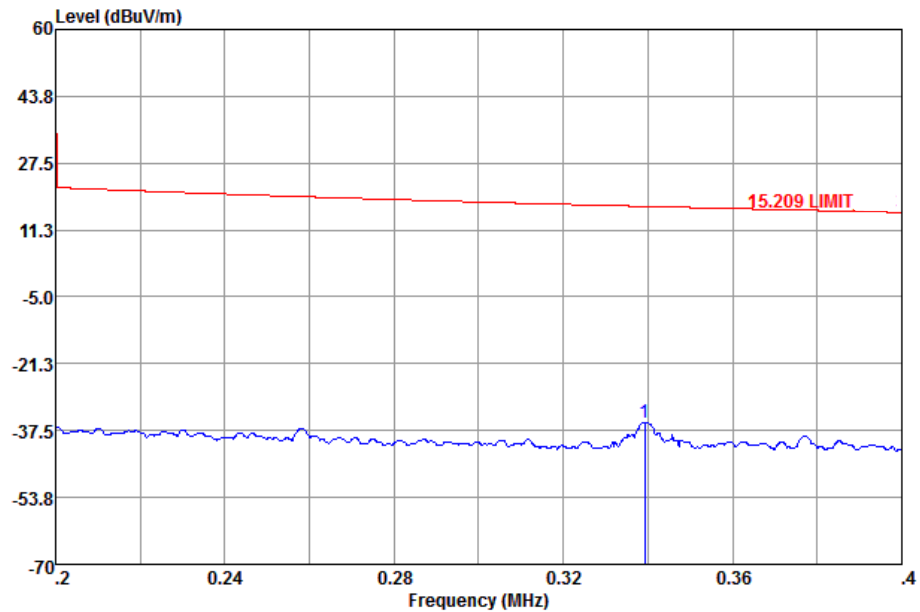


3.2.5 Test Result of Field Strength of Fundamental Emissions





Test Engineer :	Wenbo Xiao	Temperature :	24~25°C
Polarization :	Vertical	Relative Humidity :	48~49%



Site : 03CH04-SZ
Condition : 15.209 LIMIT_NFC 3m LOOP ANTENNA_3164 VERTICAL

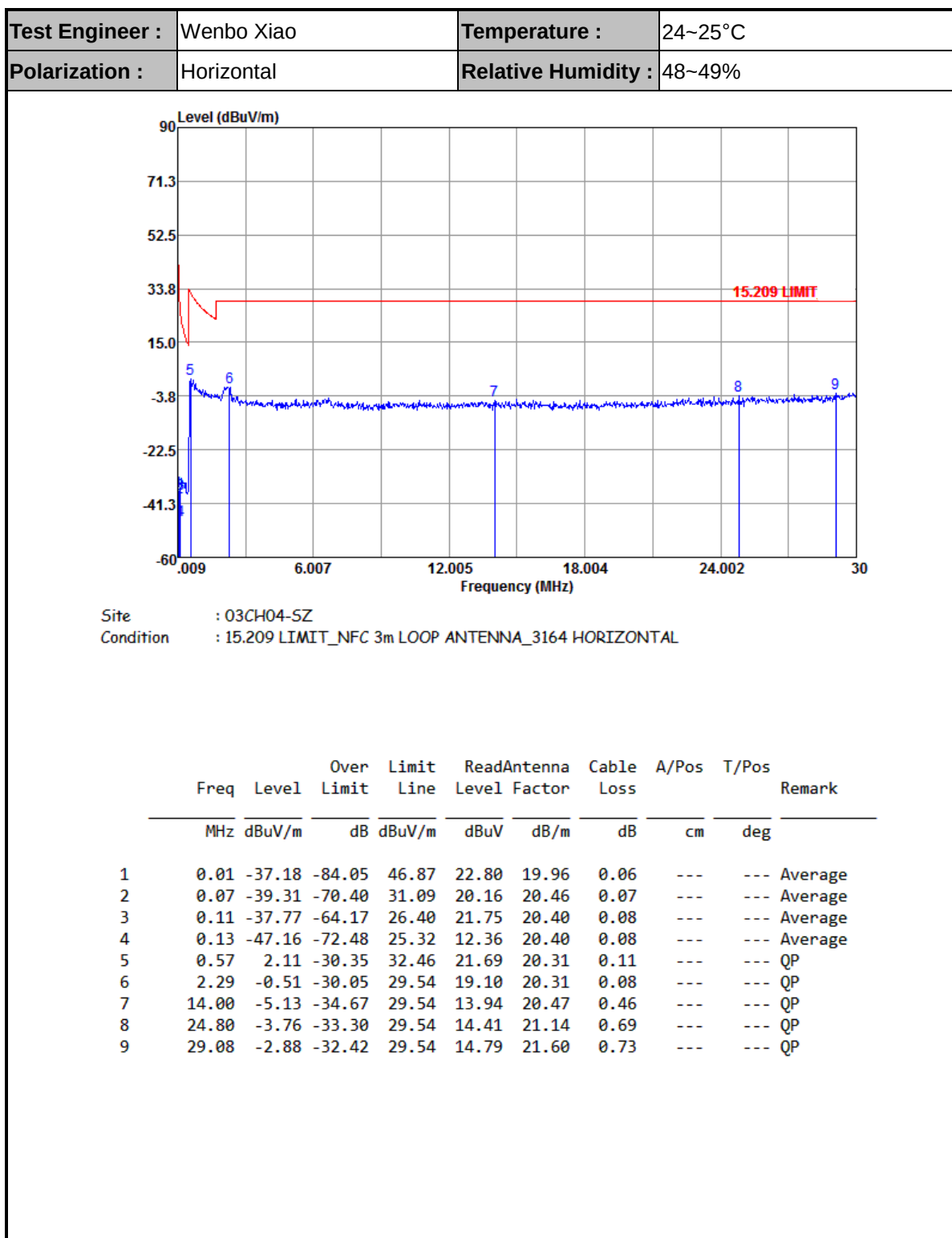
	Freq	Level	Over	Limit	ReadAntenna	Cable	Aux	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	0.34	-35.71	-52.70	16.99	23.92	20.34	0.03	-80.00	---	--- QP

Note:

1. The field strength is tested at 3m distance then convert to 300m by adding Distance extrapolation factor
2. Distance extrapolation factor = $40 \log (\text{specific distance} / \text{test distance})$ (dB);
3. Limit line (dB μ V/m) = $20 \log$ Emission level (μ V/m)
4. Level(dB μ V/m) @300m = Read Level(dB μ V) + Antenna Factor(dB/m) + Cable Loss(dB) - Distance extrapolation factor
5. Over Limit(dB) = Level(dB μ V/m) – Limit Line(dB μ V/m)

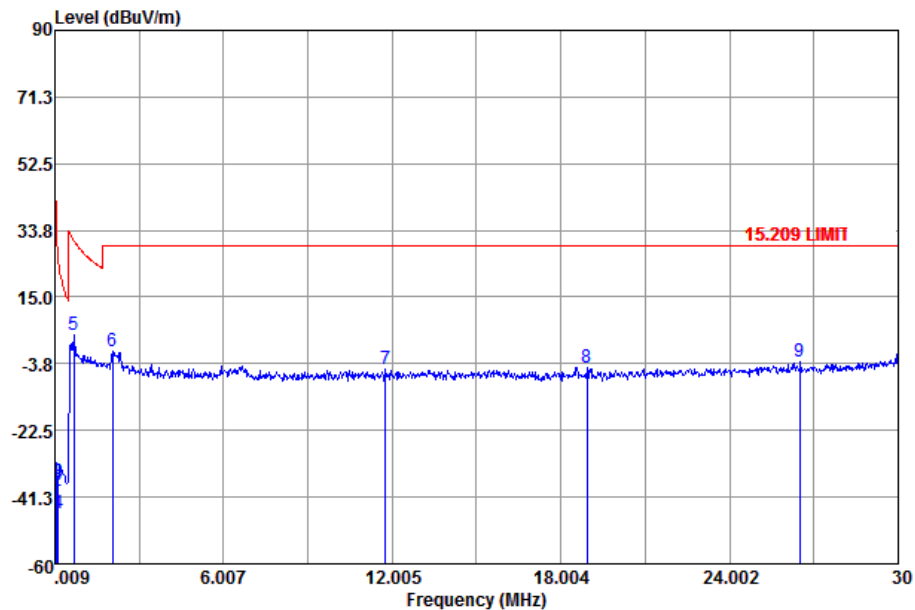


3.2.6 Test Result of Radiated Emission (9kHz ~ 30MHz)





Test Engineer :	Wenbo Xiao	Temperature :	24~25°C
Polarization :	Vertical	Relative Humidity :	48~49%



Site : 03CH04-SZ
Condition : 15.209 LIMIT_NFC 3m LOOP ANTENNA_3164 VERTICAL

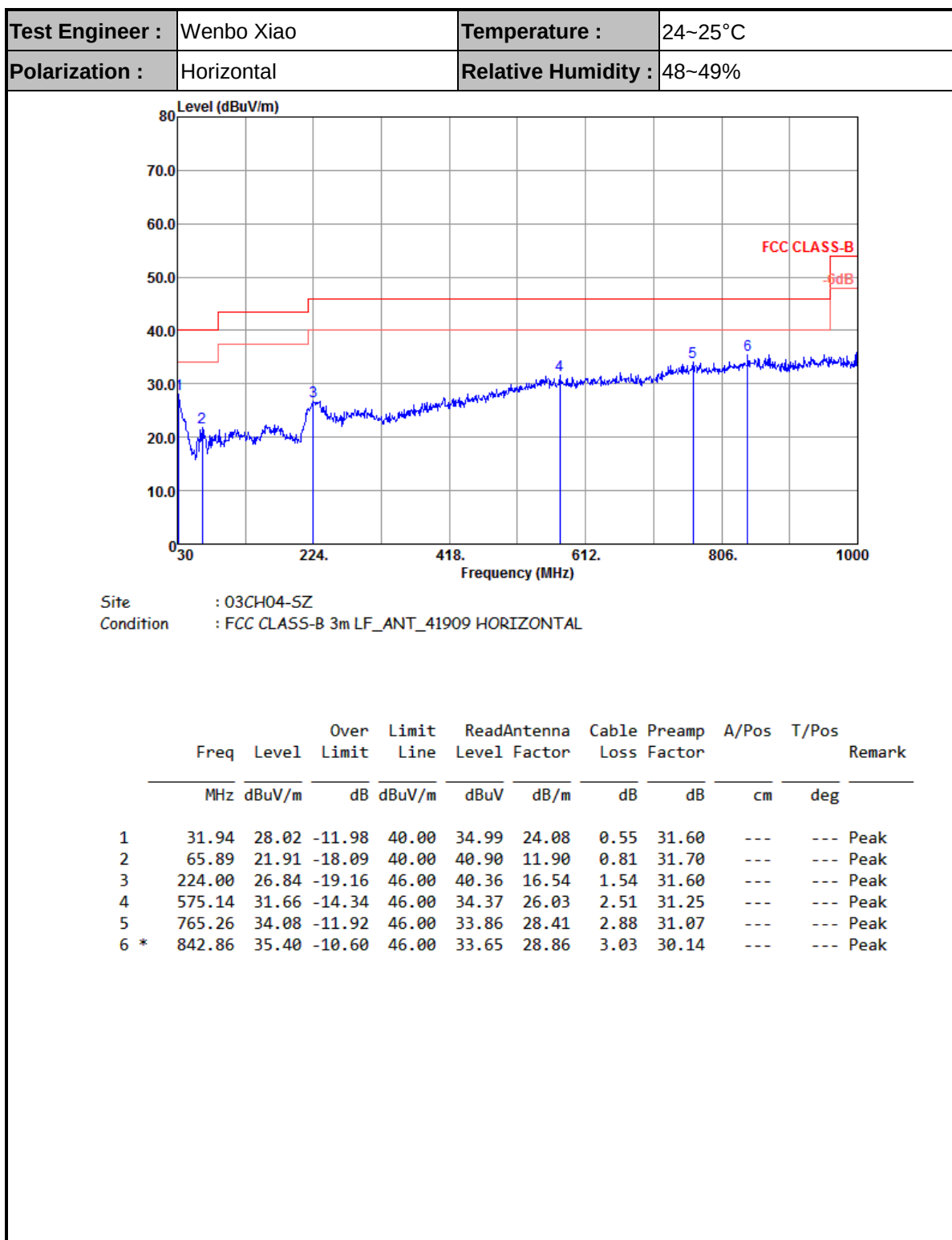
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level Factor	Cable Loss	A/Pos	T/Pos	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	cm	deg	
1	0.01	-36.50	-84.40	47.90	23.48	19.96	0.06	---	---	Average
2	0.07	-39.53	-70.57	31.04	19.94	20.46	0.07	---	---	Average
3	0.11	-36.98	-63.38	26.40	22.54	20.40	0.08	---	---	Average
4	0.13	-45.93	-70.94	25.01	13.59	20.40	0.08	---	---	Average
5	0.69	4.17	-26.65	30.82	23.75	20.31	0.11	---	---	QP
6	2.06	-0.41	-29.95	29.54	19.16	20.32	0.11	---	---	QP
7	11.75	-5.45	-34.99	29.54	13.70	20.42	0.43	---	---	QP
8	18.93	-4.68	-34.22	29.54	14.13	20.67	0.52	---	---	QP
9	26.50	-3.08	-32.62	29.54	14.89	21.32	0.71	---	---	QP

Note:

1. The Field Strength of Fundamental Emissions test distance is 3m.
2. Distance extrapolation factor = 40 log (specific distance / test distance) (dB);
3. specific line (dBμV/m) = 20 log Emission level (μV/m)
4. Limit line @300m/30m = specific limits (dBμV/m).
5. Level(dBμV/m) @300m/30m = Read Level(dBμV) + Antenna Factor(dB/m) + Cable Loss(dB) - distance extrapolation factor
6. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

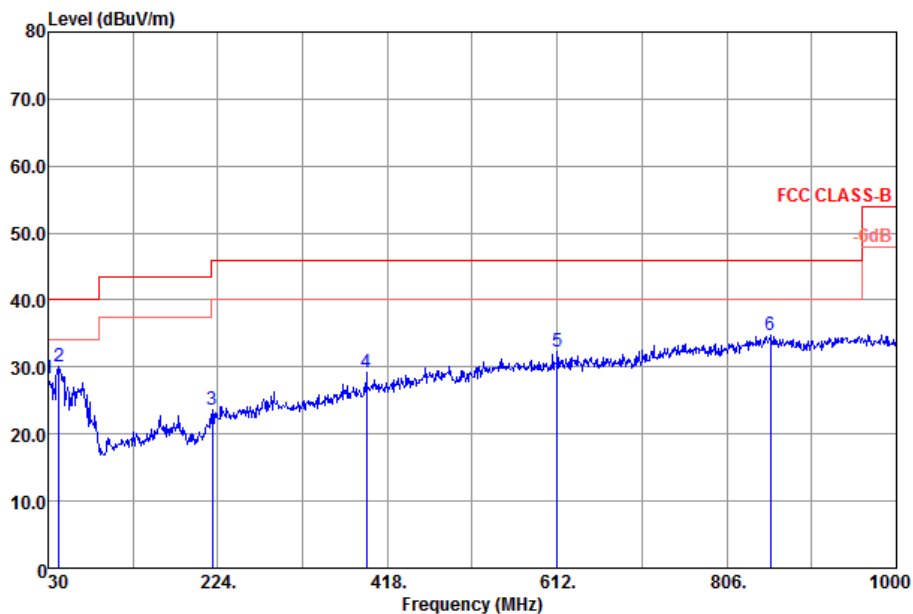


3.2.7 Test Result of Radiated Emission (30MHz ~ 1000MHz)





Test Engineer :	Wenbo Xiao	Temperature :	24~25°C
Polarization :	Vertical	Relative Humidity :	48~49%



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	A/Pos	T/Pos	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor			
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	30.00	28.26	-11.74	40.00	34.25	25.08	0.53	31.60	---	Peak
2 *	42.61	29.98	-10.02	40.00	42.53	18.42	0.63	31.60	---	Peak
3	218.18	23.54	-22.46	46.00	37.53	16.10	1.51	31.60	---	Peak
4	393.75	29.13	-16.87	46.00	36.74	21.71	2.09	31.41	---	Peak
5	612.00	32.40	-13.60	46.00	34.94	26.08	2.58	31.20	---	Peak
6	855.47	34.83	-11.17	46.00	32.92	28.96	3.06	30.11	---	Peak

Note:

- Level(dBuV/m) = Read Level(dBuV) + Antenna Factor(dB/m) + Cable Loss(dB)
- Over Limit(dB) = Level(dBuV/m) – Limit Line(dBuV/m)

3.3 AC Conducted Emission Measurement

3.3.1 Limits of AC Conducted Emission

For equipment 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.

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.

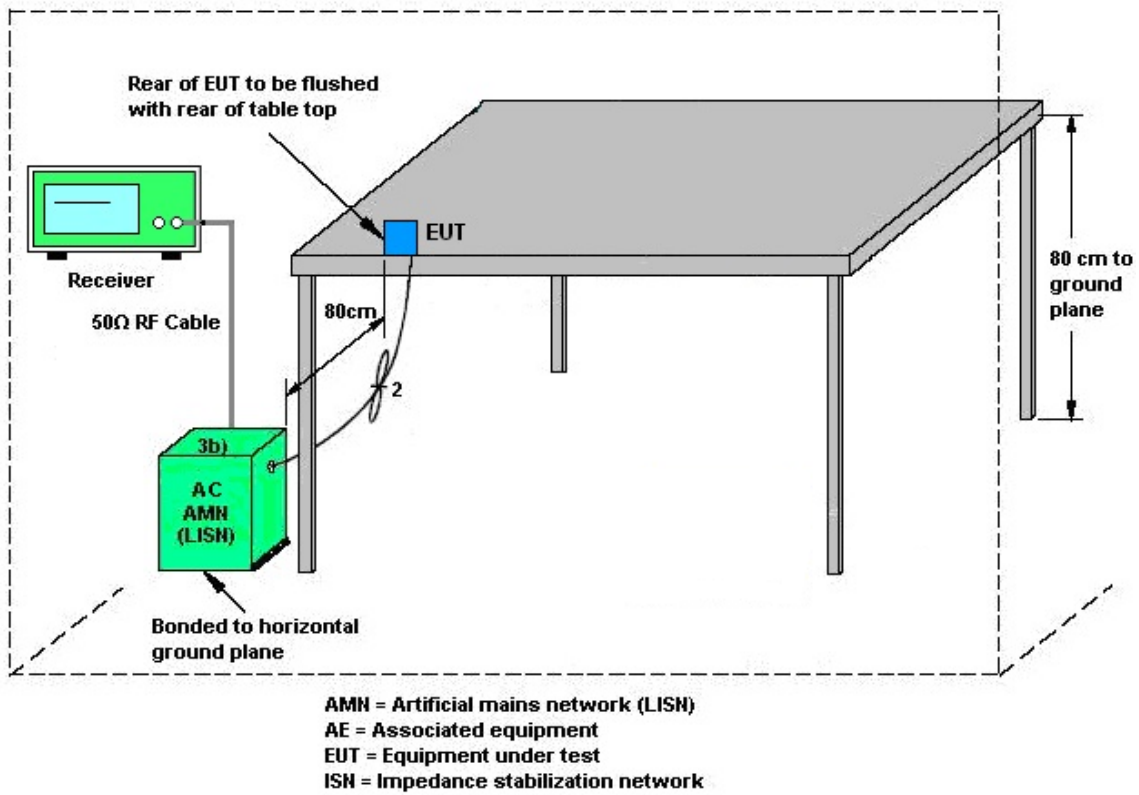
3.3.2 Measuring Instruments

See list of measuring equipment of this test report.

3.3.3 Test Procedure

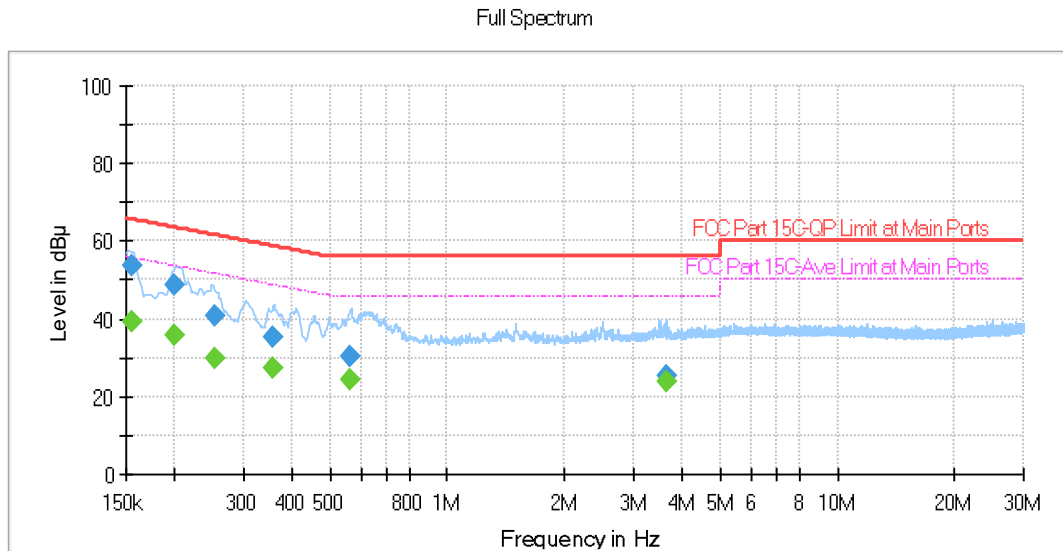
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

3.3.4 Test Setup



3.3.5 Test Result of AC Conducted Emission

Test Engineer :	Lily Qiu	Temperature :	22~24°C
		Relative Humidity :	44~50%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



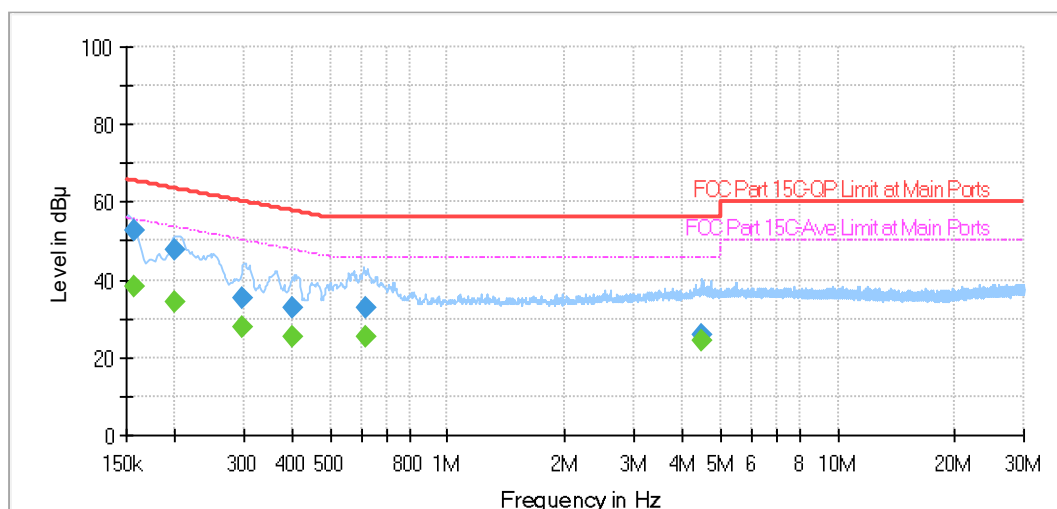
Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.155873	53.90	---	65.68	11.78	L1	OFF	19.8
0.155873	---	39.52	55.68	16.16	L1	OFF	19.8
0.199680	48.91	---	63.62	14.71	L1	OFF	19.7
0.199680	---	35.89	53.62	17.73	L1	OFF	19.7
0.253500	40.86	---	61.64	20.78	L1	OFF	19.7
0.253500	---	29.99	51.64	21.65	L1	OFF	19.7
0.357810	35.24	---	58.78	23.54	L1	OFF	19.7
0.357810	---	27.42	48.78	21.36	L1	OFF	19.7
0.564270	30.23	---	56.00	25.77	L1	OFF	19.7
0.564270	---	24.27	46.00	21.73	L1	OFF	19.7
3.648750	25.38	---	56.00	30.62	L1	OFF	19.8
3.648750	---	23.86	46.00	22.14	L1	OFF	19.8



Test Engineer :	Lily Qiu	Temperature :	22~24°C
		Relative Humidity :	44~50%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.156750	52.62	---	65.63	13.01	N	OFF	19.8
0.156750	---	38.08	55.63	17.55	N	OFF	19.8
0.199500	47.79	---	63.63	15.84	N	OFF	19.7
0.199500	---	34.32	53.63	19.31	N	OFF	19.7
0.298500	35.54	---	60.28	24.75	N	OFF	19.7
0.298500	---	28.05	50.28	22.23	N	OFF	19.7
0.399300	32.60	---	57.87	25.27	N	OFF	19.7
0.399300	---	25.43	47.87	22.43	N	OFF	19.7
0.613500	32.97	---	56.00	23.03	N	OFF	19.7
0.613500	---	25.56	46.00	20.44	N	OFF	19.7
4.493310	26.02	---	56.00	29.98	N	OFF	19.8
4.493310	---	24.40	46.00	21.60	N	OFF	19.8



3.4 Antenna Requirements

3.4.1 Standard Applicable

Except for special regulations, the Low-power Radio-frequency Devices must not be equipped with any jacket for installing an antenna with extension cable. 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 the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited.

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 rule.

3.4.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 02, 2025	Aug. 19, 2025	Apr. 01, 2026	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 02, 2025	Aug. 19, 2025	Jul. 01, 2026	Conducted (TH01-SZ)
EMI Test Receiver	R&S	ESR7	101404	9kHz~7GHz	Oct. 14, 2024	Aug. 20, 2025~ Feb. 26, 2026	Oct. 13, 2025	Radiation (03CH04-SZ)
EMI Test Receiver	R&S	ESR7	101404	9kHz~7GHz	Oct. 13, 2025		Oct. 12, 2026	Radiation (03CH04-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150213	10Hz~44GHz	Jul. 03, 2025	Aug. 20, 2025~ Feb. 26, 2026	Jul. 02, 2026	Radiation (03CH04-SZ)
Loop Antenna	R&S	HFH2-Z2E	101141	9kHz~30MHz	Dec. 28, 2024	Aug. 20, 2025~ Feb. 26, 2026	Dec. 27, 2025	Radiation (03CH04-SZ)
Loop Antenna	R&S	HFH2-Z2E	101141	9kHz~30MHz	Dec. 25, 2025		Dec. 24, 2026	Radiation (03CH04-SZ)
Bilog Antenna	TeseQ	CBL6111D	41909	30MHz~1GHz	Apr. 21, 2025	Aug. 20, 2025~ Feb. 26, 2026	Apr. 20, 2026	Radiation (03CH04-SZ)
Amplifier	Agilent Technologies	83017A	MY57280136	500MHz~26.5GHz	Jul. 03, 2025	Aug. 20, 2025~ Feb. 26, 2026	Jul. 02, 2026	Radiation (03CH04-SZ)
AC Power Source	APC	AFV-S-600B	F119050019	N/A	Oct. 14, 2024	Aug. 20, 2025~ Feb. 26, 2026	Oct. 13, 2025	Radiation (03CH04-SZ)
AC Power Source	APC	AFV-S-600B	F119050019	N/A	Oct. 14, 2025		Oct. 13, 2026	Radiation (03CH04-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Aug. 20, 2025~ Feb. 26, 2026	NCR	Radiation (03CH04-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Aug. 20, 2025~ Feb. 26, 2026	NCR	Radiation (03CH04-SZ)
EMI Receiver	R&S	ESR7	102297	9kHz~7GHz;	Jul. 02, 2025	Sep. 10, 2025	Jul. 01, 2026	Conduction (CO02-SZ)
AC LISN	R&S	ENV216	101499	9kHz~30MHz	Jul. 03, 2025	Sep. 10, 2025	Jul. 02, 2026	Conduction (CO02-SZ)
AC Power Source	CHROMA	61601	616010002470	100Vac~250Vac	Dec.25, 2024	Sep. 10, 2025	Dec. 24, 2025	Conduction (CO02-SZ)

NCR: No Calibration Required



5 Measurement Uncertainty

Uncertainty of Conducted Emission Measurement (150 kHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.5dB
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Uncertainty of Radiated Emission Measurement (9 kHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.1dB
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.1dB
--	-------

----- THE END -----