



FCC Part 15C Test Report

FCC ID:2A9Q9-EAC-IN25

Applicant: ShenZhen Zhongyi Technology Co.,Ltd.

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Manufacturer: ShenZhen Zhongyi Technology Co.,Ltd.

Address: Room 401, No.4 Road One, Shangxue Science and Technology City, Xinxue Community, Bantian Street, Longgang District, Shenzhen, China

EUT: Infinity 5-in-1 48 Charging Cable with Watch Charger

Trade Mark: N/A

Model Number: EAC-IN25
M1169Q

Date of Receipt: Apr. 02, 2025

Test Date: Apr. 02, 2025 - Aug. 11, 2025

Date of Report: Aug. 11, 2025

Prepared By: Shenzhen DL Testing Technology Co., Ltd.

Address: 101-201, Comprehensive Building, Tongzhou Electronics Longgang Factory Area, No.1 Baolong Fifth Road, Baolong Community, Baolong Street, Longgang District, Shenzhen, China

Applicable Standards: FCC CFR Title 47 Part 15 Subpart C

Test Result: Pass

Report Number: DLE-250731016R

Prepared by(Engineer): Ken Tan

Reviewer(Supervisor): Jack Bu

Approved(Manager): Jade Yang



This test report is based on a single evaluation of one sample of above mentioned products. It is not permitted to be duplicated in extracts without written approval of Shenzhen DL Testing Technology Co., Ltd.

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1. VERSION

Report No.	Version	Description	Approved
DLE-250731016R	Rev.01	Initial issue of report	Aug. 11, 2025

**2. TEST SUMMARY**

Test Item	Section in CFR 47	Result
Antenna requirement	15.203	Pass
AC Power Line Conducted Emission	15.207	Pass
Spurious Emission	15.209(a)(f)	Pass
20dB Bandwidth	15.215	Pass

NOTE:

(1) "N/A" denotes test is not applicable in this Test Report



2.1 TEST FACILITY

Test lab: Shenzhen DL Testing Technology Co., Ltd.

Address: 101-201, Comprehensive Building, Tongzhou Electronics Longgang Factory Area, No.1 Baolong Fifth Road, Baolong Community, Baolong Street, Longgang District, Shenzhen, China

FCC Test Firm Registration Number: 854456

Designation Number: CN1307

IC Registered No.: 27485

CAB ID.: CN0118

2.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

No.	Item	Uncertainty
1	3m chamber Radiated spurious emission(9KHz-30MHz)	$U=4.5\text{dB}$
2	3m chamber Radiated spurious emission(30MHz-1GHz)	$U=4.8\text{dB}$
3	3m chamber Radiated spurious emission(1GHz-18GHz)	$U=4.9\text{dB}$
4	3m chamber Radiated spurious emission(18GHz-40GHz)	$U=5.0\text{dB}$
5	Conducted Adjacent channel power	$U=1.38\text{dB}$
6	Conducted output power uncertainty Above 1G	$U=1.576\text{dB}$
7	Conducted output power uncertainty below 1G	$U=1.28\text{dB}$
8	humidity uncertainty	$U=5.3\%$
9	Temperature uncertainty	$U=0.59^{\circ}\text{C}$



3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Product Name:	Infinity 5-in-1 48 Charging Cable with Watch Charger
Model No.:	EAC-IN25 M1169Q
Model Difference:	N/A
Serial No.:	N/A
Hardware version:	H1.0
Software version:	S1.0
Operation Frequency:	Phone:115kHz-205kHz
Modulation type:	ASK
Antenna Type:	Inductive loop coil Antenna
Antenna gain:	0dBi
Power supply:	Input: 5V $\overline{=}$ 2.0A Output:5.0V $\overline{=}$ 2.0A Wireless Output: 2W
Test description:	Battery $\geq 98\%$, $\approx 50\%$ and $\leq 1\%$ are tested, and the worst is $\leq 1\%$.

3.2 Test mode

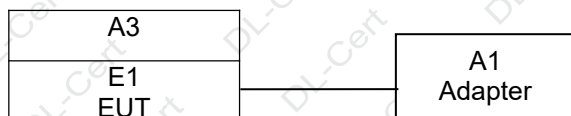
Test Modes:			Description:	
Mode 1	Input: 5V $\overline{=}$ 2.0A Output:5.0V $\overline{=}$ 2.0A	AC/DC Adapter +EUT+ Watch	Battery $\geq 98\%$	Pretest
			Battery $\approx 50\%$	
			Battery $\leq 1\%$	
Mode 2	Input: 5V $\overline{=}$ 2.0A Output:5.0V $\overline{=}$ 2.0A Wireless Output: 2W	AC/DC Adapter +EUT+ Watch	Battery $\geq 98\%$	Pretest
			Battery $\approx 50\%$	
			Battery $\leq 1\%$	

Note: All modes have been tested, and the report only reflects the worst case data.

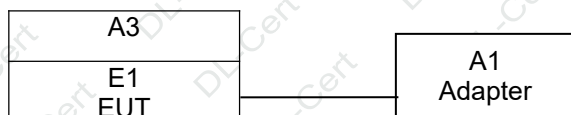


3.3 Block Diagram of EUT Configuration

Conducted Emission



Radiated Emission



3.4 Test Conditions

Temperature: 23~26℃

Relative Humidity: 54~63 %

3.5 Description Of Support Units (Conducted Mode)

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
E1	Infinity 5-in-1 48 Charging Cable with Watch Charger	N/A	EAC-IN25	N/A	EUT
A1	Adapter	Ying Yuan	C30	N/A	Auxiliary
A3	Watch	Apple	Watch Series 8	N/A	Auxiliary

Item	Shielded Type	Ferrite Core	Length	Note
C1	NO	NO	1.0M	DC cable unshielded

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.
- (3) “YES” is means “shielded” “with core”; “NO” is means “unshielded” “without core”.



3.6 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation test, Band-edge test and 6db bandwidth test equipment

Item	Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
1	Spectrum Analyzer (9kHz-26.5GHz)	Agilent	E4408B	MY50140780	Nov. 01, 2024	Oct. 31, 2025
2	Test Receiver (9kHz-7GHz)	R&S	ESRP7	101393	Nov. 01, 2024	Oct. 31, 2025
3	Bilog Antenna (30MHz-1GHz)	R&S	VULB9162	00306	Nov. 01, 2024	Oct. 31, 2025
4	Horn Antenna (1GHz-18GHz)	Schwarzbeck	BBHA9120D	02139	Nov. 01, 2024	Oct. 31, 2025
5	Horn Antenna (18GHz-40GHz)	A.H. Systems	SAS-574	588	Nov. 01, 2024	Oct. 31, 2025
6	Amplifier (9KHz-6GHz)	Schwarzbeck	BBV9743B	00153	Nov. 01, 2024	Oct. 31, 2025
7	Amplifier (1GHz-18GHz)	EMEC	EM01G8GA	00270	Nov. 01, 2024	Oct. 31, 2025
8	Amplifier (18GHz-40GHz)	Quanjuda	DLE-161	97	Nov. 01, 2024	Oct. 31, 2025
9	Loop Antenna (9KHz-30MHz)	Schwarzbeck	FMZB1519B	00014	Nov. 01, 2024	Oct. 31, 2025
10	RF cables1 (9kHz-1GHz)	ChengYu	966	004	Nov. 01, 2024	Oct. 31, 2025
11	RF cables2 (1GHz-40GHz)	ChengYu	966	003	Nov. 01, 2024	Oct. 31, 2025
12	Antenna connector	Florida RF Labs	N/A	RF 01#	Nov. 01, 2024	Oct. 31, 2025
13	Power probe	KEYSIGHT	U2021XA	MY55210018	Nov. 01, 2024	Oct. 31, 2025
14	Signal Analyzer 9kHz-26.5GHz	Agilent	N9020A	MY55370280	Nov. 01, 2024	Oct. 31, 2025
15	Test Receiver 20kHz-40GHz	R&S	ESU 40	100376	Nov. 01, 2024	Oct. 31, 2025
16	D.C. Power Supply	LongWei	PS-305D	010964729	Nov. 01, 2024	Oct. 31, 2025

Conduction Test equipment

Item	Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
1	843 Shielded Room	YIHENG	843 Room	843	Nov. 05, 2023	Nov. 04, 2026
2	EMI Receiver	R&S	ESR	101421	Nov. 01, 2024	Oct. 31, 2025
3	LISN	R&S	ENV216	102417	Nov. 01, 2024	Oct. 31, 2025
4	843 Cable 1#	ChengYu	CE Cable	001	Nov. 01, 2024	Oct. 31, 2025

Other

Item	Name	Manufacturer	Model	Software version
1	EMC Conduction Test System	FALA	EZ EMC	EMC-CON 3A1.1
2	EMC radiation test system	FALA	EZ EMC	FA-03A2
3	RF test system	MAIWEI	MTS8310	2.0.0.0
4	RF communication test system	MAIWEI	MTS8200	2.0.0.0



4. CONDUCTED EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

Test Requirement:	FCC Part15 C Section 15.207
Test Method:	ANSI C63.10:2013
Test Frequency Range:	150KHz to 30MHz
Receiver setup:	RBW=9KHz, VBW=30KHz, Sweep time=auto

4.1.1 POWER LINE CONDUCTED EMISSION Limits

FREQUENCY (MHz)	Limit (dBuV)		Standard
	Quas-peak	Average	
0.15 -0.5	66 - 56 *	56 - 46 *	FCC
0.50 -5.0	56.00	46.00	FCC
5.0 -30.0	60.00	50.00	FCC

Note:

(1) *Decreases with the logarithm of the frequency.

4.1.2 TEST PROCEDURE

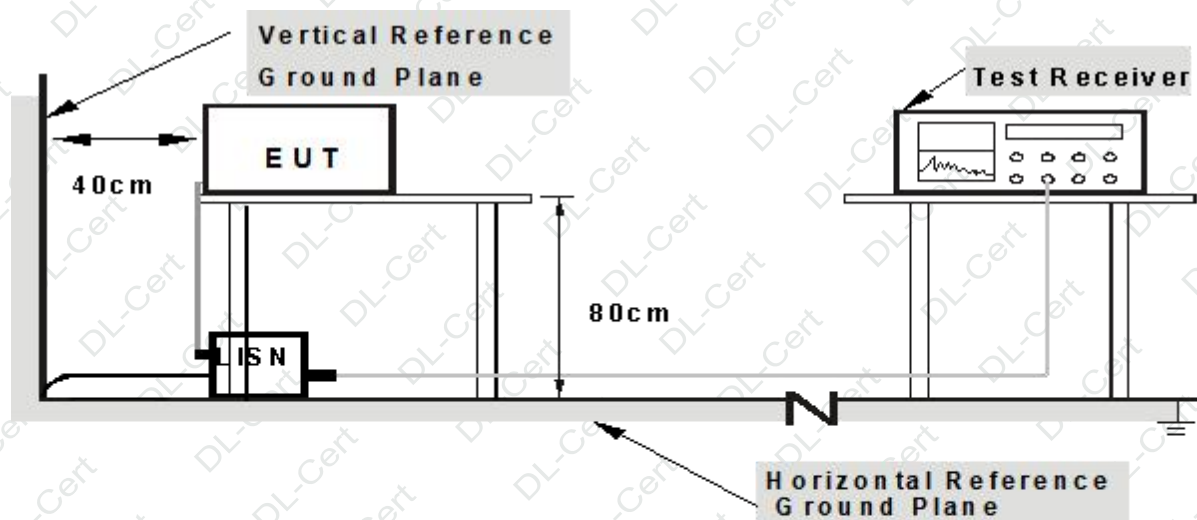
- The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- LISN at least 80 cm from nearest part of EUT chassis.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.1.3 DEVIATION FROM TEST STANDARD

No deviation



4.1.4 TEST SETUP



Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

4.1.5 EUT OPERATING CONDITIONS

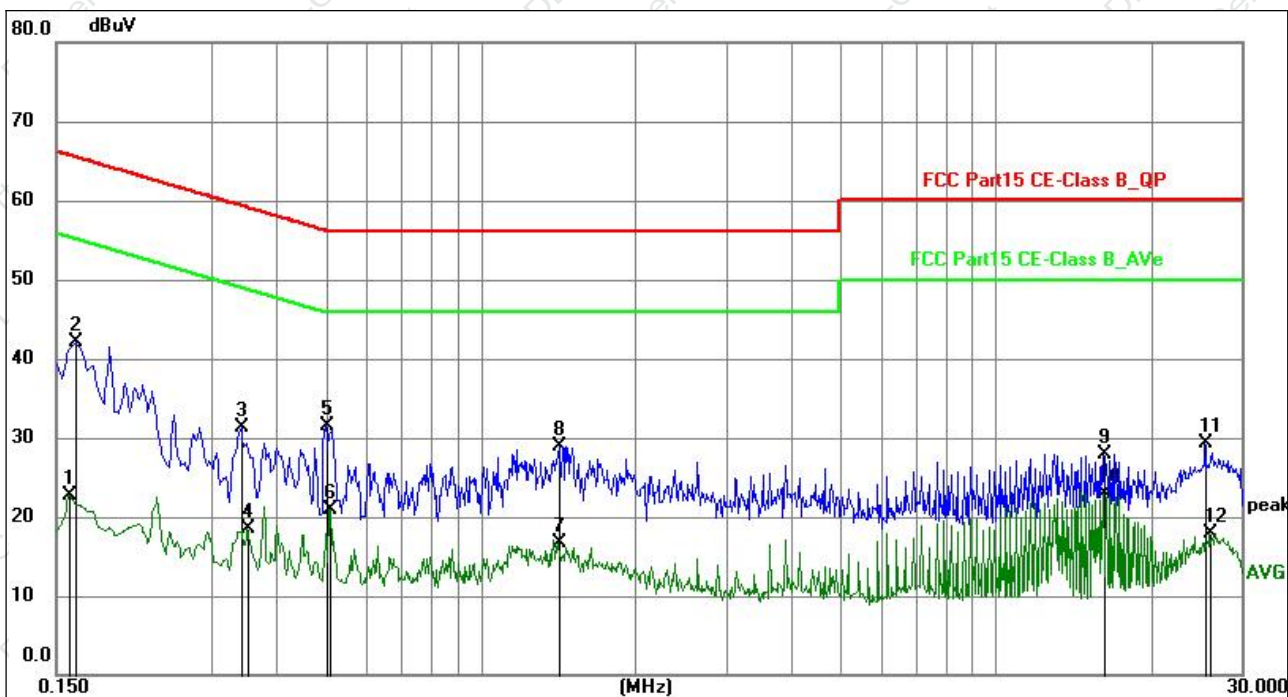
The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

We pretest AC 120V and AC 230V, the worst voltage was AC 120V and the data recording in the report.

4.1.6 Test Result



Temperature:	26℃	Relative Humidity:	54%
Pressure:	101kPa	Phase :	L
Test Voltage :	AC 120V/60Hz	Test Mode:	Mode 2



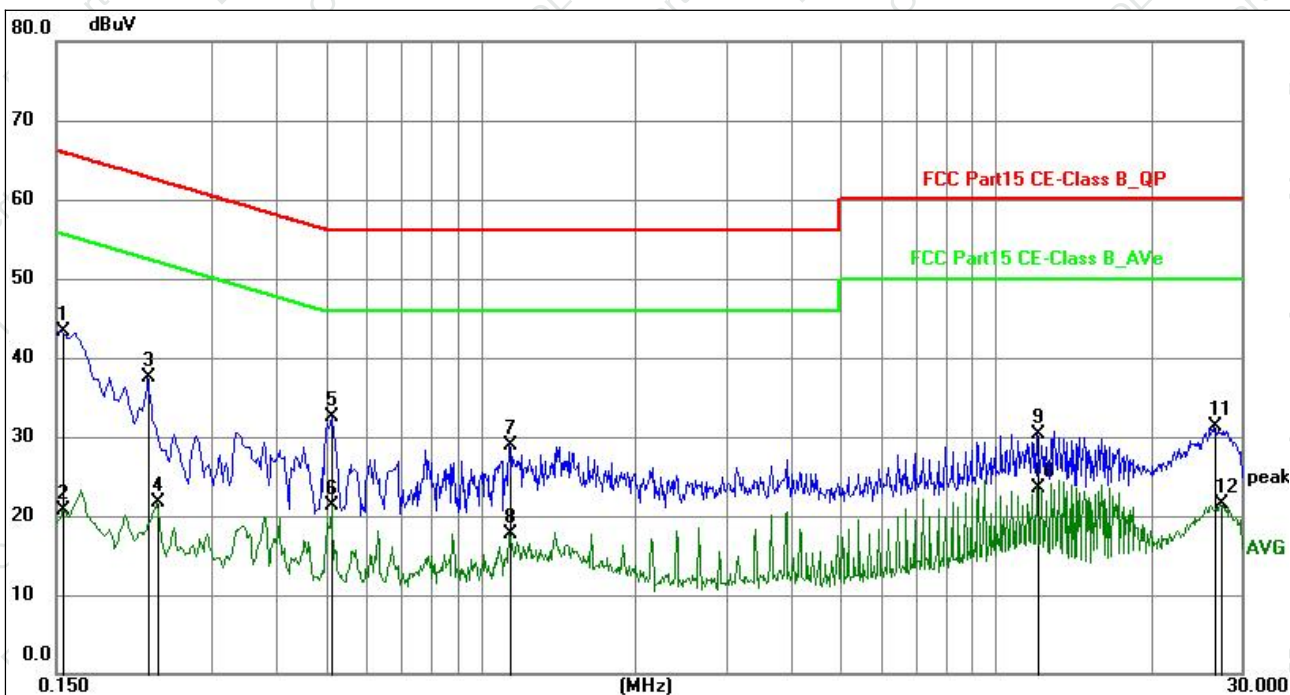
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1590	11.53	11.15	22.68	55.52	-32.84	AVG	P
2	0.1635	30.84	11.18	42.02	65.28	-23.26	QP	P
3	0.3435	19.96	11.34	31.30	59.12	-27.82	QP	P
4	0.3525	7.22	11.33	18.55	48.90	-30.35	AVG	P
5	0.5010	20.30	11.30	31.60	56.00	-24.40	QP	P
6	0.5100	9.59	11.30	20.89	46.00	-25.11	AVG	P
7	1.4144	5.33	11.34	16.67	46.00	-29.33	AVG	P
8	1.4234	17.57	11.34	28.91	56.00	-27.09	QP	P
9	16.1835	16.49	11.41	27.90	60.00	-32.10	QP	P
10	16.1835	11.50	11.41	22.91	50.00	-27.09	AVG	P
11	25.5345	17.90	11.48	29.38	60.00	-30.62	QP	P
12	26.0430	6.45	11.49	17.94	50.00	-32.06	AVG	P

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. Measurement Level = Reading level + Correct Factor



Temperature:	26°C	Relative Humidity:	54%
Pressure:	101kPa	Phase :	N
Test Voltage :	AC 120V/60Hz	Test Mode:	Mode 2



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1545	32.11	11.15	43.26	65.75	-22.49	QP	P
2	0.1545	9.61	11.15	20.76	55.75	-34.99	AVG	P
3	0.2265	26.15	11.27	37.42	62.58	-25.16	QP	P
4	0.2355	10.39	11.27	21.66	52.25	-30.59	AVG	P
5	0.5144	21.14	11.30	32.44	56.00	-23.56	QP	P
6	0.5144	10.02	11.30	21.32	46.00	-24.68	AVG	P
7	1.1400	17.70	11.22	28.92	56.00	-27.08	QP	P
8	1.1400	6.57	11.22	17.79	46.00	-28.21	AVG	P
9	12.0390	18.87	11.44	30.31	60.00	-29.69	QP	P
10	12.0390	12.16	11.44	23.60	50.00	-26.40	AVG	P
11	26.6235	19.60	11.64	31.24	60.00	-28.76	QP	P
12	27.3705	9.84	11.66	21.50	50.00	-28.50	AVG	P

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.Measurement Level = Reading level + Correct Factor



5. RADIATED EMISSION MEASUREMENT

Test Requirement:	FCC Part15 C Section 15.209				
Test Method:	ANSI C63.10:2013				
Test Frequency Range:	9kHz to 1GHz				
Test site:	Measurement Distance: 3m				
Receiver setup:	Frequency	Detector	RBW	VBW	Value
	9KHz-150KHz	Quasi-peak	200Hz	600Hz	Quasi-peak
	150KHz-30MHz	Quasi-peak	9KHz	30KHz	Quasi-peak
	30MHz-1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak
	Above 1GHz	Peak	1MHz	3MHz	Peak
		Peak	1MHz	10Hz	Average

5.1 Radiated Emission Limits

Limits for frequency below 30MHz

Frequency	Limit (uV/m)	Measurement Distance(m)	Remark
0.009-0.490	$2400/F(\text{kHz})$	300	Quasi-peak Value
0.490-1.705	$24000/F(\text{kHz})$	30	Quasi-peak Value
1.705-30	30	30	Quasi-peak Value

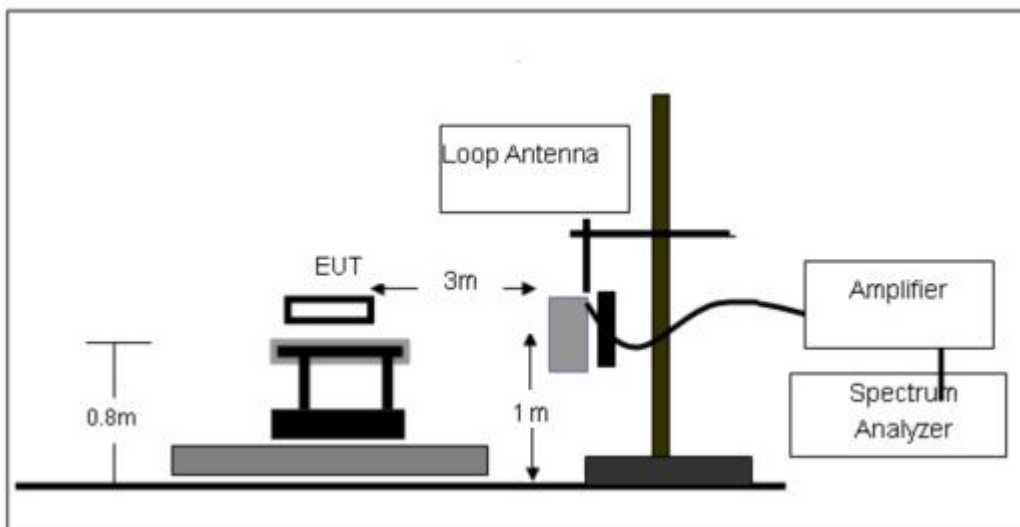
Limits for frequency Above 30MHz

Frequency	Limit (dBuV/m @3m)	Remark
30MHz-88MHz	40.00	Quasi-peak Value
88MHz-216MHz	43.50	Quasi-peak Value
216MHz-960MHz	46.00	Quasi-peak Value
960MHz-1GHz	54.00	Quasi-peak Value
Above 1GHz	54.00	Average Value
	74.00	Peak Value

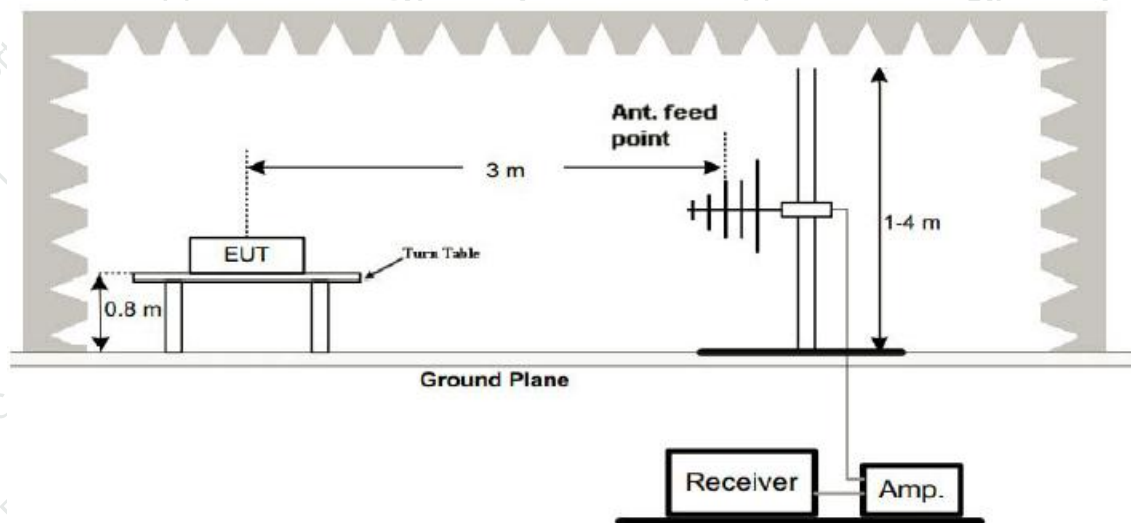


5.2 Anechoic Chamber Test Setup Diagram

(A) Radiated Emission Test-Up Frequency Below 30MHz



(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC 15.209 and FCC 15.205 limits.

5.3 Test Procedure

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna which is mounted on a antenna tower. The antenna can move up and down between 1 to 4 meters to find out the maximum emission level. Broadband antenna (calibrated by dipole antenna) are used as a receiving antenna. Both horizontal and vertical polarization of the antenna are set on measurement.

5.4 DEVIATION FROM TEST STANDARD

No deviation



5.5 Test Result

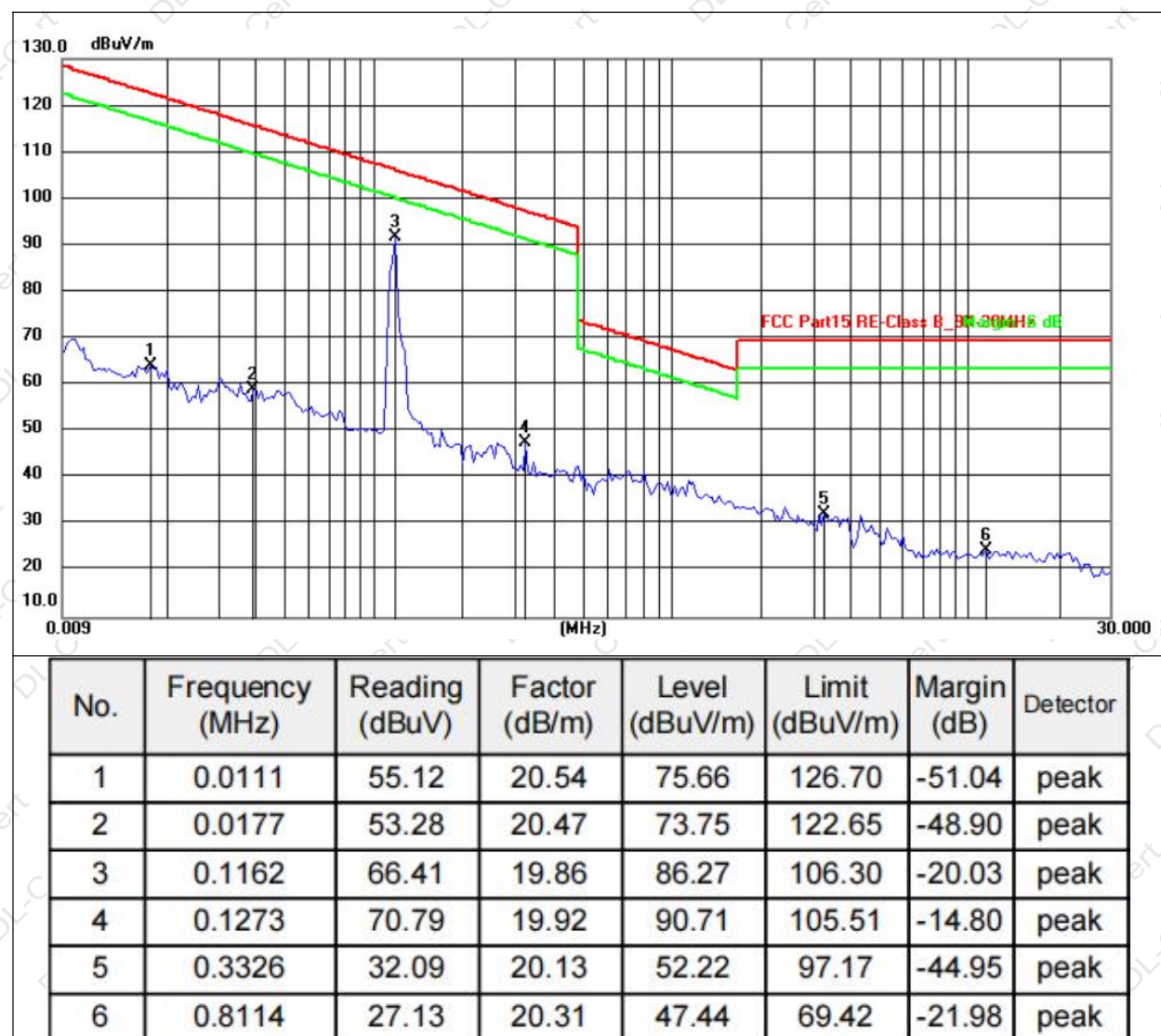
Measurement data:

Note: Limit dBuV/m @3m = Limit dBuV/m @300m+ 80

Limit dBuV/m @3m = Limit dBuV/m @30m + 40

9 kHz~30 MHz

Temperature:	26℃	Relative Humidity:	54%
Pressure:	101 kPa	Polarization:	coaxial
Test Voltage:	AC 120V/60Hz	Test Mode:	Mode 2



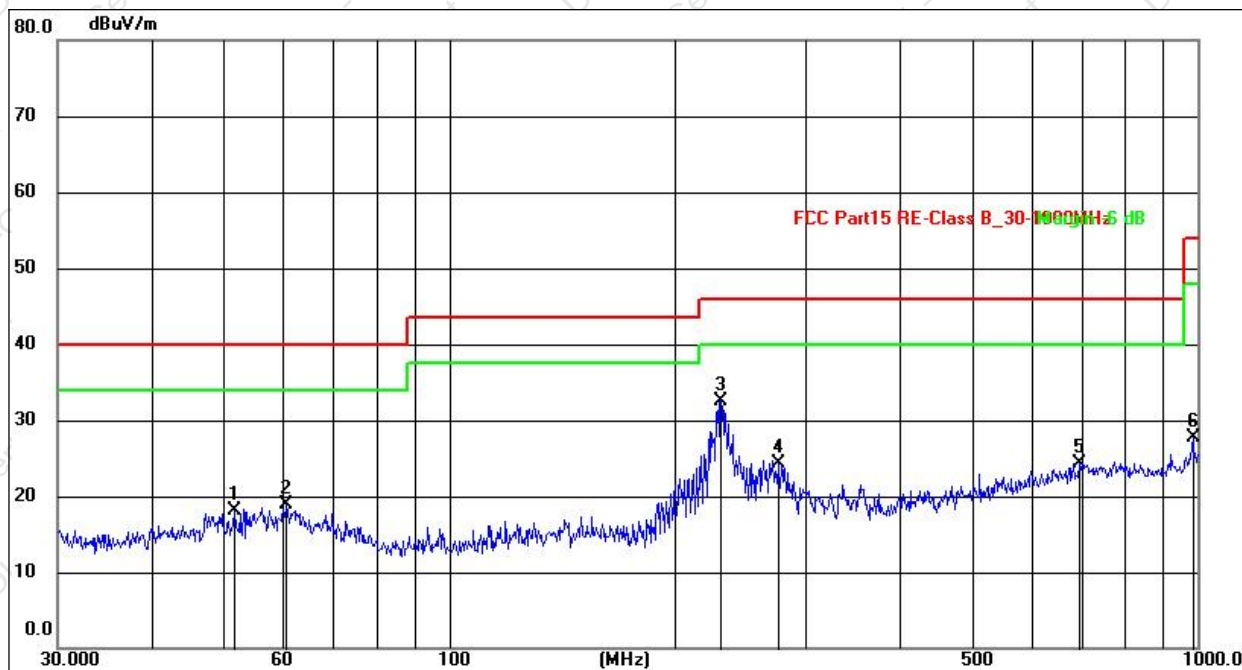
Remarks:

- 1.Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
- 2.The emission levels of other frequencies are very lower than the limit and not show in test report.
- 3.All modes have been tested, and the report only reflects the worst case data.



30MHz-1GHz

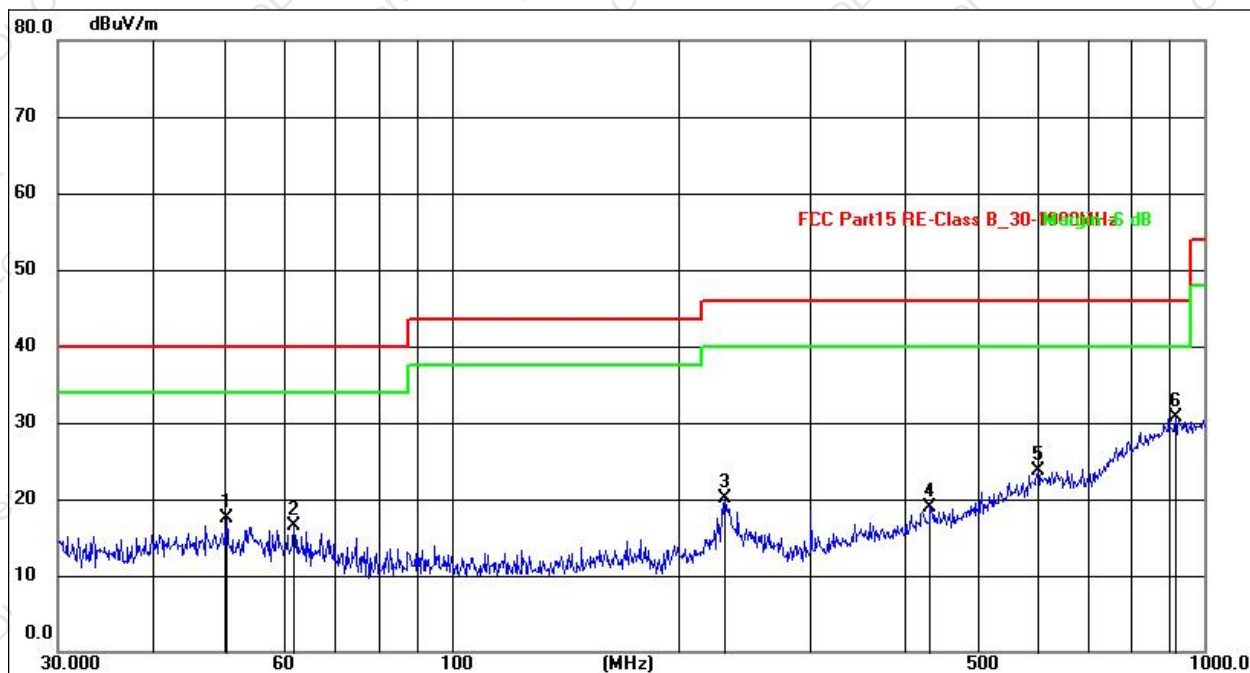
Temperature:	26℃	Relative Humidity:	54%
Pressure:	101 kPa	Polarization:	Horizontal
Test Voltage:	AC 120V/60Hz	Test Mode:	Mode 2



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	51.6613	32.12	-13.96	18.16	40.00	-21.84	QP
2	60.7043	33.14	-14.31	18.83	40.00	-21.17	QP
3	230.9067	49.17	-16.63	32.54	46.00	-13.46	QP
4	275.1569	38.50	-14.24	24.26	46.00	-21.74	QP
5	694.4174	30.92	-6.54	24.38	46.00	-21.62	QP
6	986.0715	32.56	-4.86	27.70	54.00	-26.30	QP



Temperature:	26℃	Relative Humidity:	54%
Pressure:	101kPa	Polarization:	Vertical
Test Voltage:	AC 120V/60Hz	Test Mode:	Mode 2



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	50.2323	34.68	-17.21	17.47	40.00	-22.53	QP
2	61.7779	34.97	-18.40	16.57	40.00	-23.43	QP
3	230.9067	40.03	-19.99	20.04	46.00	-25.96	QP
4	432.5455	32.27	-13.37	18.90	46.00	-27.10	QP
5	601.4265	30.94	-7.33	23.61	46.00	-22.39	QP
6	916.0683	31.03	-0.34	30.69	46.00	-15.31	QP

Remarks:

- 1.Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
- 2.The emission levels of other frequencies are very lower than the limit and not show in test report.



6. 20DB BANDWIDTH TEST

6.1 TEST PROCEDURE

1. Se span = 1.5 ~ 5 times OBW.
2. Set RBW = 100Hz.
3. Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
4. Detector = peak.
5. Trace mode = max hold.
6. Sweep = auto couple.
7. Allow the trace to stabilize.
8. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 20 dB relative to the maximum level measured in the fundamental emission.

6.2 LIMIT

N/A

6.3 TEST SETUP



6.4 DEVIATION FROM STANDARD

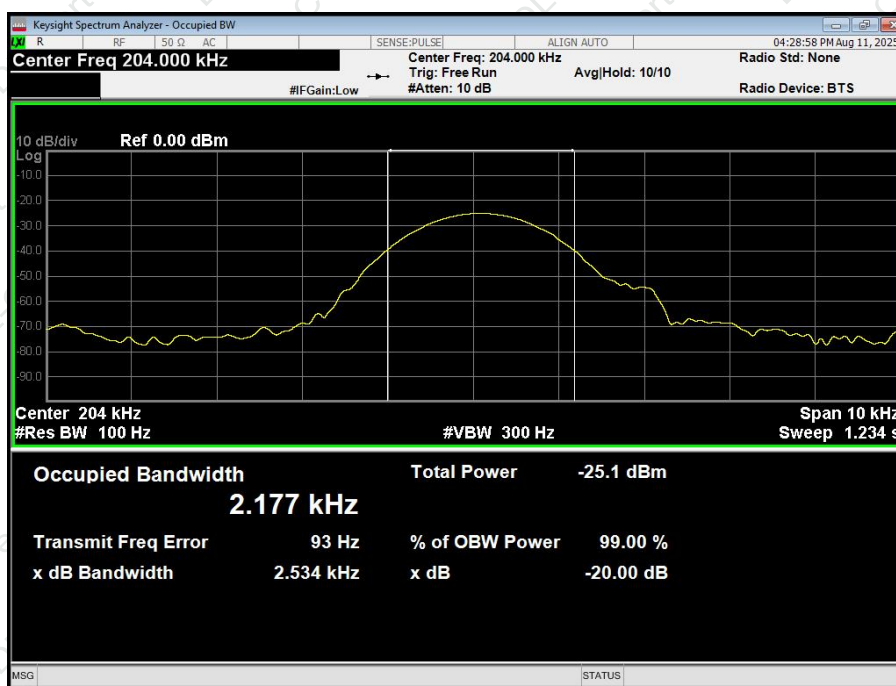
No deviation.



6.5 TEST RESULT

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101kPa	Test Voltage:	DC 5V

Test Coil	Frequency (kHz)	20dB Bandwidth (kHz)	Result
ANT 1	204.00	2.534	Pass





7. 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 Loop antenna, the best case gain of the antennas is 0dBi, reference to the appendix II for details	



8. TEST SETUP PHOTO

Reference to the appendix I for details.

9. EUT CONSTRUCTIONAL DETAILS

Reference to the appendix II for details.

***** END OF REPORT *****