



FCC TEST REPORT

FCC ID:2A5UA-CW01

Applicant: Shenzhen Autige Technology Co., Ltd
Address: 3rd Floor, Building A, Zhaoｆeng Industrial Zone, No. 3 Hangkong Road, Hangcheng Street, Baoan District, 518126, Shenzhen, China

Manufacturer: Shenzhen Autige Technology Co., Ltd
Address: 3rd Floor, Building A, Zhaoｆeng Industrial Zone, No. 3 Hangkong Road, Hangcheng Street, Baoan District, 518126, Shenzhen, China

EUT: Multifunctional Clock 3 in 1 Wireless Charger

Trade Mark: N/A

Model Number: CW01
DCG01-GY, TCW01-GY

Date of Receipt: Jun. 24, 2025

Test Date: Jun. 24, 2025 to Jul. 21, 2025

Date of Report: Jul. 21, 2025

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

Address: 101-201, Building C, Shuanghuan, No.8, Baoqing Roa Baolong Industrial Zone, Baolong Street, Longgang Shenzhen, Guangdong, China

Applicable Standards: FCC CFR Title 47 Part 15 Subpart C

Test Result: Pass

Report Number: DLE-250715008R

Prepared (Test Engineer): Dimon 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.



TABLE OF CONTENTS

1. VERSION	3
2. TEST SUMMARY.....	4
2.1 TEST FACILITY	5
2.2 MEASUREMENT UNCERTAINTY	5
3. GENERAL INFORMATION.....	6
3.1 GENERAL DESCRIPTION OF EUT	6
3.2 TEST MODE.....	6
3.3 BLOCK DIAGRAM OF EUT CONFIGURATION.....	7
3.4 TEST CONDITIONS.....	8
3.5 DESCRIPTION OF SUPPORT UNITS (CONDUCTED MODE)	8
3.6 EQUIPMENTS LIST FOR ALL TEST ITEMS	9
4. CONDUCTED EMISSION TEST.....	11
4.1 CONDUCTED EMISSION MEASUREMENT	11
4.1.1 POWER LINE CONDUCTED EMISSION Limits	11
4.1.2 TEST PROCEDURE	11
4.1.3 DEVIATION FROM TEST STANDARD	11
4.1.4 TEST SETUP	12
4.1.5 EUT OPERATING CONDITIONS	12
4.1.6 TEST RESULT	13
5. RADIATED EMISSION MEASUREMENT	15
5.1 RADIATED EMISSION LIMITS	15
5.2 ANECHOIC CHAMBER TEST SETUP DIAGRAM.....	16
5.3 TEST PROCEDURE	17
5.4 DEVIATION FROM TEST STANDARD	17
5.5 TEST RESULT	17
6. 20DB BANDWIDTH TEST.....	24
6.1 TEST PROCEDURE	24
6.2 LIMIT	24
6.3 TEST SETUP	24
6.4 DEVIATION FROM STANDARD.....	24
6.5 TEST RESULT	25
7. ANTENNA REQUIREMENT	27
8. TEST SETUP PHOTO	28
9. EUT CONSTRUCTIONAL DETAILS	28



1. VERSION

Report No.	Version	Description	Approved
DLE-250715008R	Rev.01	Initial issue of report	Jul. 21, 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

Shenzhen DL Testing Technology Co., Ltd.

Add. : 101-201, Building C, Shuanghuan, No.8, Baoqing Roa Baolong Industrial Zone, Baolong Street, Longgang Shenzhen, Guangdong, China

FCC Test Firm Registration Number: 854456

Designation Number: CN1307

IC Registered No.: 27485

CAB identifier: CN0118

2.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expended 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-6GHz)	$U=4.9\text{dB}$
4	3m chamber Radiated spurious emission(6GHz-40GHz)	$U=5.0\text{dB}$
5	Conducted disturbance	$U=3.2\text{dB}$
6	RF conducted Spurious Emission	$U=2.2\text{dB}$
7	RF Occupied Bandwidth	$U=1.8\text{MHz}$
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:	Multifunctional Clock 3 in 1 Wireless Charger
Model No.:	CW01
Serial No.:	DCG01-GY, TCW01-GY
Model Difference:	Only the model name is different.
Hardware Version:	V 1.0
Software Version:	V 1.0
Operation Frequency:	Phone: 111kHz ~ 205kHz Earphone: 111kHz ~ 205kHz Watch :300kHz ~ 350kHz
Modulation Type:	ASK
Antenna Type:	Loop Coil Antenna
Antenna Gain:	0dBi
Ratings:	Rated Input: Type-C Input: 9V=3A, 12V=2.5A Rated Output: Mobile Phone Output: 15W Max Earphone Output: 5W Max Watch Output:2.5W Led light Power: 3W
Transmitting Mode:	Phone and Airpods and Watch Battery > 98%, =50% and < 1% are tested, and the worst is < 1%.

3.2 TEST MODE

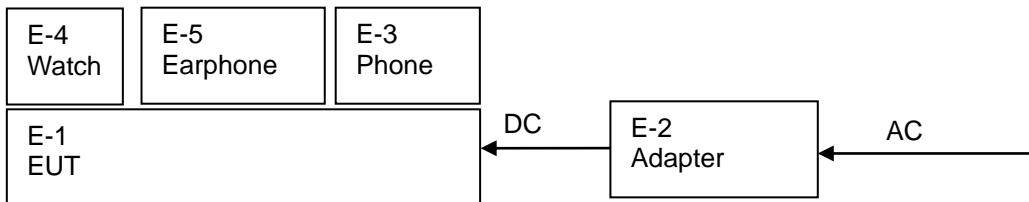
To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Test Modes:	Description:
Phone Coil+Airpods Coil+ Watch Coil	Mode 1: AC/DC Adapter+EUT + Phone +Airpods+Watch (Battery Status:<1%)
	Mode 2: AC/DC Adapter+EUT + Phone +Airpods+Watch (Battery Status:<50%)
	Mode 3: AC/DC Adapter+EUT + Phone +Airpods+Watch (Battery Status:<100%)
Phone Coi	Mode 4 :AC/DC Adapter+EUT + Phone (Battery Status:<1%)
	Mode 5: AC/DC Adapter+EUT + Phone (Battery Status:<50%)
	Mode 6: AC/DC Adapter+EUT + Phone (Battery Status:<100%)
Airpods Coil	Mode 7:AC/DC Adapter+EUT +Airpods (Battery Status:<1%)
	Mode 8:AC/DC Adapter+EUT+Airpods (Battery Status:<50%)
	Mode 9:AC/DC Adapter+EUT +Airpods (Battery Status:<100%)
Watch Coil	Mode 10 :AC/DC Adapter+EUT + Watch (Battery Status:<1%)
	Mode 11: AC/DC Adapter+EUT + Watch (Battery Status:<50%)
	Mode 12: AC/DC Adapter+EUT + Watch (Battery Status:<100%)
No Loads	AC/DC Adapter+EUT

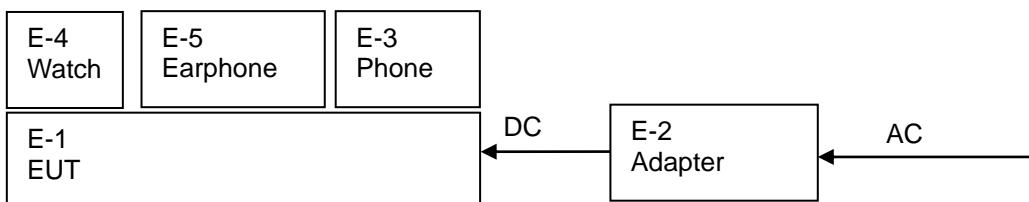


3.3 BLOCK DIAGRAM OF EUT CONFIGURATION

Conducted Emission



Radiated Emission





3.4 TEST CONDITIONS

Temperature: 23~26°C

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
E-1	Multifunctional Clock 3 in 1 Wireless Charger	N/A	CW01	N/A	EUT
E-2	AC/DC Adapter	SANXING	SX-200200CP1	N/A	Auxiliary
E-3	Phone	Xiaomi	Xiaomi 13	N/A	Auxiliary
E-4	Watch	ULTRA	WS85	N/A	Auxiliary
E-5	Earphone	Baseus	E3	N/A	Auxiliary

Item	Shielded Type	Ferrite Core	Length	Note
C1	NO	NO	0.8M	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

Conduction Emissions Test

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Firmware Version	Last calibration	Calibrated until
1	LISN	R&S	ENV216	101471	N/A	Sep. 30, 2024	Sep. 29, 2025
2	LISN	CYBERTEK	EM5040A	E1850400149	N/A	Sep. 30, 2024	Sep. 29, 2025
3	Test Cable	N/A	C-01	N/A	N/A	Sep. 30, 2024	Sep. 29, 2025
4	EMI Test Receiver	R&S	ESCI3	101393	4.42 SP3	Sep. 29, 2024	Sep. 28, 2025
5	EMC Software	Frad	EZ-EMC	Ver.EMC-CON 3A1.1	N/A	\	\

Radiation Emissions & Radiation Spurious Emissions Test

Item	Equipment	Manufacturer	Type No.	Serial No.	Firmware Version	Last calibration	Calibrated until
1	Spectrum Analyzer (9kHz-26.5GHz)	KEYSIGHT	N9020A	MY55370835	A.17.05	Sep. 29, 2024	Sep. 28, 2025
2	Spectrum Analyzer (10kHz-39.9GHz)	R&S	FSV40-N	100363	1.71 SP2	Sep. 30, 2024	Sep. 29, 2025
3	EMI Test Receiver (9kHz-7GHz)	R&S	ESCI7	100969	4.32	Sep. 29, 2024	Sep. 28, 2025
4	Bilog Antenna (30MHz-1500MHz)	Schwarzbeck	VULB9168	00877	N/A	Sep. 30, 2024	Sep. 29, 2025
5	Horn Antenna (1GHz-18GHz)	Agilent	AH-118	071145	N/A	Sep. 30, 2024	Sep. 29, 2025
6	Horn Antenna (15GHz-40GHz)	A.H.System	SAS-574	588	N/A	Sep. 30, 2024	Sep. 29, 2025
7	Loop Antenna	TESEQ	HLA6121	58357	N/A	Oct. 11, 2024	Oct. 10, 2025
8	Amplifier (30-1000MHz)	EM Electronics	EM330 Amplifier	60747	N/A	Sep. 29, 2024	Sep. 28, 2025
9	Amplifier (1GHz-26.5GHz)	HuiPu	8449B	3008A00315	N/A	Sep. 29, 2024	Sep. 28, 2025
10	Amplifier (500MHz-40GHz)	QuanJuDa	DLE-161	097	N/A	Sep. 30, 2024	Sep. 29, 2025
11	Test Cable	N/A	R-01	N/A	N/A	Sep. 30, 2024	Sep. 29, 2025
12	Test Cable	N/A	R-02	N/A	N/A	Sep. 30, 2024	Sep. 29, 2025
13	Test Cable	N/A	R-03	N/A	N/A	Sep. 30, 2024	Sep. 29, 2025
14	D.C. Power Supply	LongWei	TPR-6405D	GQ7516	N/A	Sep. 29, 2024	Sep. 28, 2025
15	EMC Software	Frad	EZ-EMC	Ver.EMC-CO N 3A1.1	N/A	\	\
16	Turntable	MF	MF-7802BS	N/A	N/A	\	\
17	Antenna tower	MF	MF-7802BS	N/A	N/A	\	\



RF Conducted Test

Item	Equipment	Manufacturer	Type No.	Serial No.	Firmware Version	Last calibration	Calibrated until
1	Spectrum Analyzer (9kHz-26.5GHz)	KEYSIGHT	N9020A	MY55370835	A.17.05	Sep. 29, 2024	Sep. 28, 2025
2	Spectrum Analyzer (10kHz-39.9GHz)	R&S	FSV40-N	100363	1.71 SP2	Sep. 30, 2024	Sep. 29, 2025
3	Test Cable	N/A	RF-01	N/A	N/A	Sep. 30, 2024	Sep. 29, 2025
4	Test Cable	N/A	RF-02	N/A	N/A	Sep. 30, 2024	Sep. 29, 2025
5	Test Cable	N/A	RF-03	N/A	N/A	Sep. 30, 2024	Sep. 29, 2025
6	ESG Signal Generator	Agilent	E4421B	GB40051203	B.03.84	Sep. 29, 2024	Sep. 28, 2025
7	Signal Generator	Agilent	N5182A	MY47420215	A.01.87	Sep. 29, 2024	Sep. 28, 2025
8	Magnetic Field Probe Tester	Narda	ELT-400	0-0344/M-17 52	N/A	Sep. 29, 2024	Sep. 28, 2025
9	Van der Hoofden measuring head	Schwarzbeck Mess-elektronik	VDHH 9502	9502-039	N/A	Sep. 30, 2024	Sep. 29, 2025
10	Wideband Radio Communication Test	R&S	CMW500	106504	V 3.7.22	Sep. 30, 2024	Sep. 29, 2025
11	MWRF Power Meter Test system	MW	MW100-RF CB	10371	N/A	Sep. 29, 2024	Sep. 28, 2025
12	D.C. Power Supply	LongWei	TPR-6405D	GQ7516	N/A	Sep. 29, 2024	Sep. 28, 2025
13	RF Software	MW	MTS8310	V2.0.0.0	N/A	\	\



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.

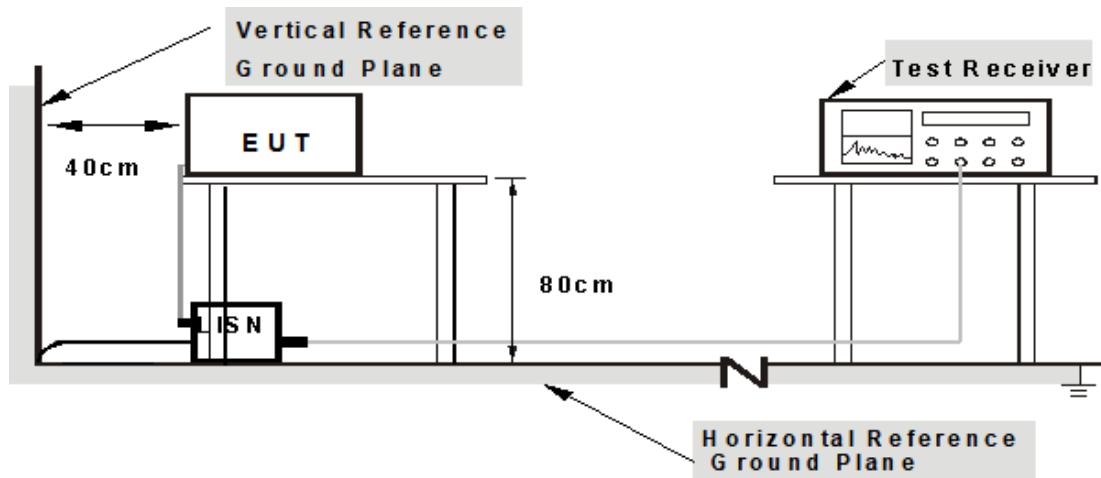
4.1.2 TEST PROCEDURE

- a. 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.
- b. 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.
- c. 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.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. 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 cm from other units and other metal planes

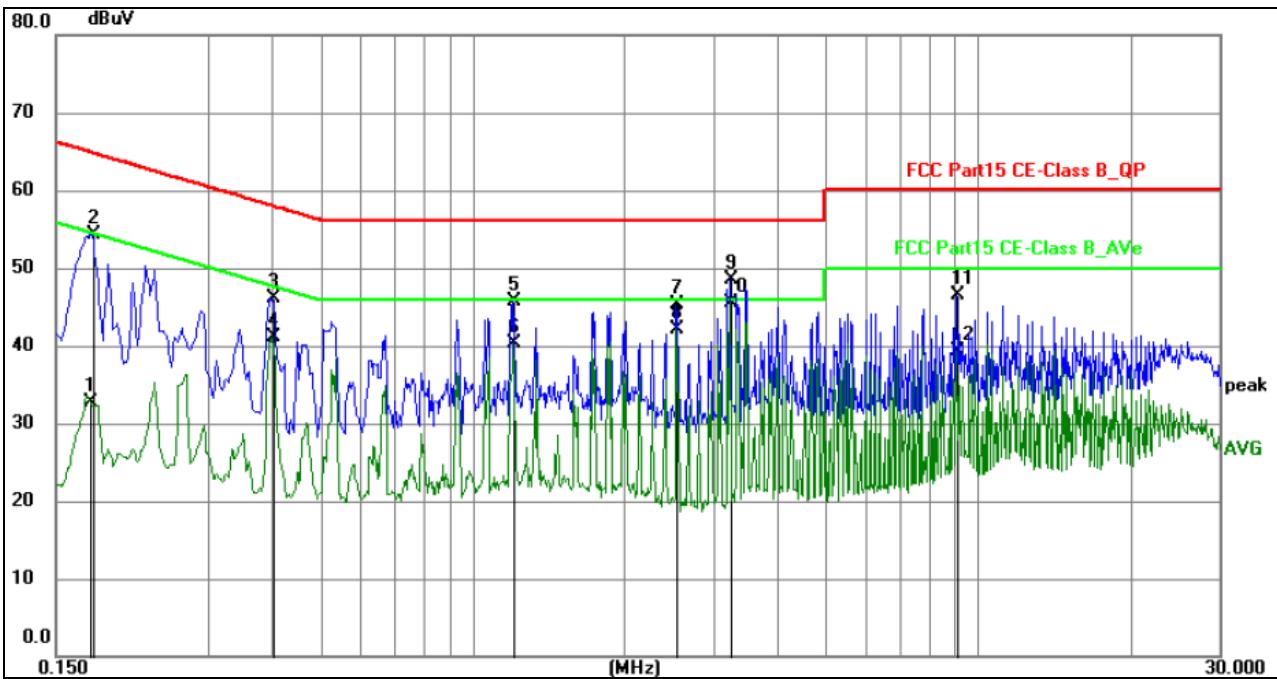
4.1.5 EUT OPERATING CONDITIONS

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.



4.1.6 TEST RESULT

Temperature :	26°C	Relative Humidity :	54%
Pressure :	101kPa	Phase :	L
Test Voltage :	DC 12V	Test Mode :	Mode 1



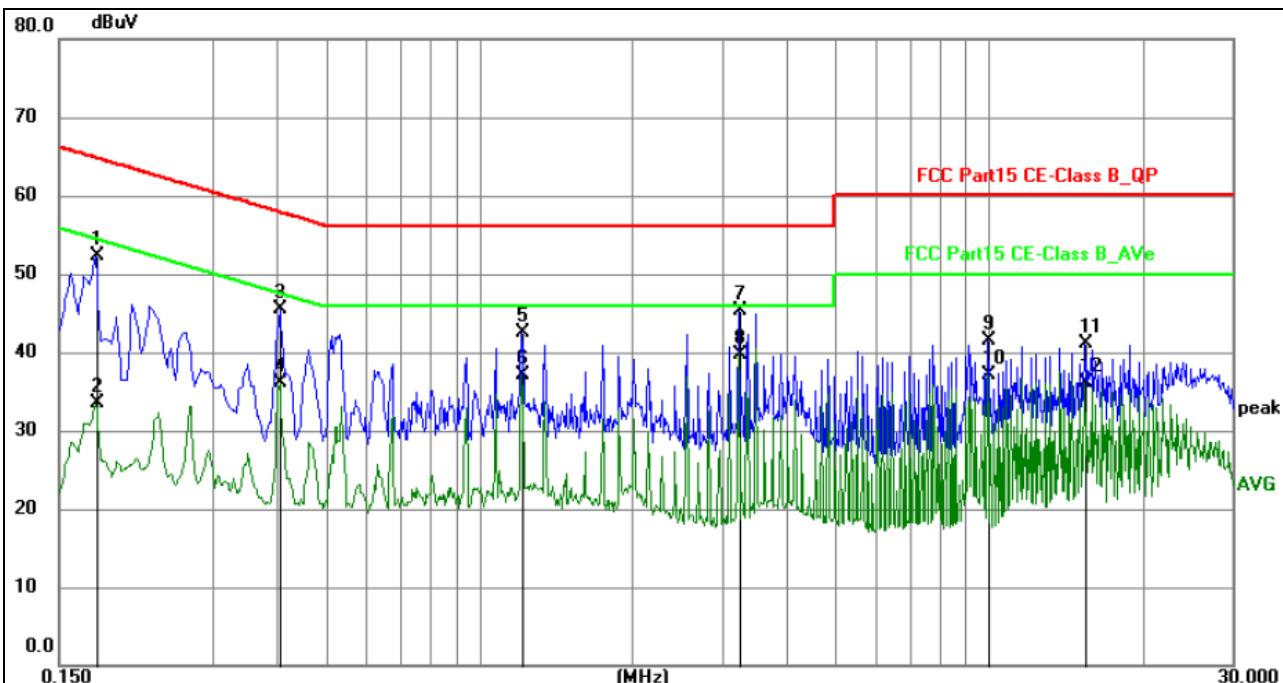
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1758	12.39	20.28	32.67	54.68	-22.01	AVG	P
2	0.1770	34.05	20.29	54.34	64.63	-10.29	QP	P
3	0.4020	25.85	20.32	46.17	57.81	-11.64	QP	P
4	0.4020	20.86	20.32	41.18	47.81	-6.63	AVG	P
5	1.2074	25.34	20.30	45.64	56.00	-10.36	QP	P
6	1.2074	20.08	20.30	40.38	46.00	-5.62	AVG	P
7	2.5350	25.00	20.32	45.32	56.00	-10.68	QP	P
8	2.5350	21.74	20.32	42.06	46.00	-3.94	AVG	P
9	3.2325	28.18	20.33	48.51	56.00	-7.49	QP	P
10	3.2325	25.11	20.33	45.44	46.00	-0.56	AVG	P
11	9.0735	26.03	20.44	46.47	60.00	-13.53	QP	P
12	9.0735	18.78	20.44	39.22	50.00	-10.78	AVG	P

Notes:

- An initial pre-scan was performed on the line and neutral lines with peak detector.
- Quasi - Peak and Average measurement were performed at the frequencies with maximized peak emission.
- Final Level = Reading level + Correct Factor.
- Correct Factor = Lsn factor+ Cable loss factor + limiter factor.
- Margin = Measurement Level-Limit.
- All test modes were tested, with only the worst Mode 19 recorded.



Temperature :	26°C	Relative Humidity :	54%
Pressure :	101kPa	Phase :	N
Test Voltage :	DC 12V	Test Mode :	Mode 1



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1770	31.93	20.28	52.21	64.63	-12.42	QP	P
2	0.1770	13.31	20.28	33.59	54.63	-21.04	AVG	P
3	0.4065	25.22	20.32	45.54	57.72	-12.18	QP	P
4	0.4065	15.82	20.32	36.14	47.72	-11.58	AVG	P
5	1.2119	22.18	20.30	42.48	56.00	-13.52	QP	P
6	1.2119	16.72	20.30	37.02	46.00	-8.98	AVG	P
7	3.2325	24.89	20.32	45.21	56.00	-10.79	QP	P
8	3.2325	19.43	20.32	39.75	46.00	-6.25	AVG	P
9	9.9645	21.12	20.47	41.59	60.00	-18.41	QP	P
10	9.9645	16.54	20.47	37.01	50.00	-12.99	AVG	P
11	15.3915	20.51	20.50	41.01	60.00	-18.99	QP	P
12	15.3915	15.68	20.50	36.18	50.00	-13.82	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. Final Level = Reading level + Correct Factor.
4. Correct Factor = Lsfn factor+ Cable loss factor + limiter factor.
5. Margin = Measurement Level-Limit.
6. All test modes were tested, with only the worst Mode 19 recorded.



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(kHz)	300	Quasi-peak Value
0.490-1.705	24000/F(kHz)	30	Quasi-peak Value
1.705-30	30	30	Quasi-peak Value

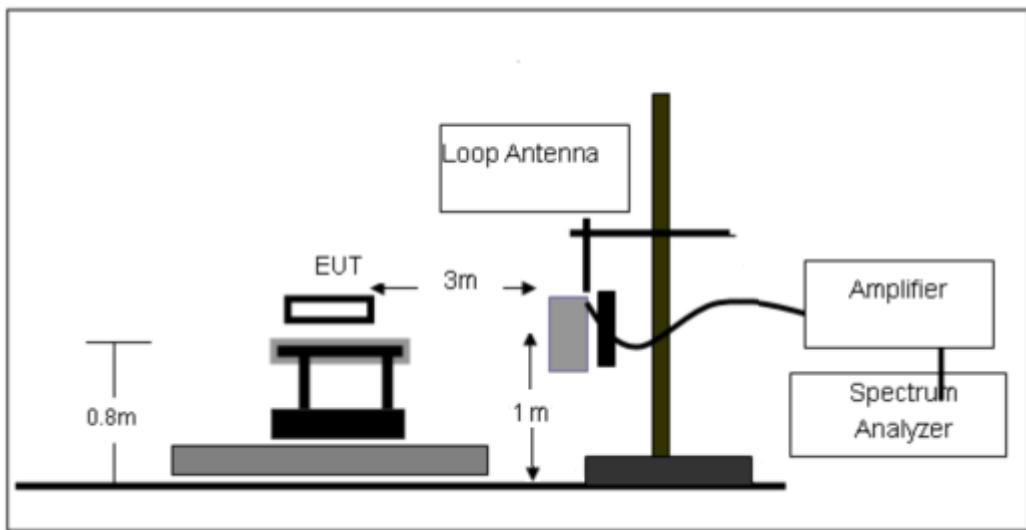
Limits for frequency Above 30MHz

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

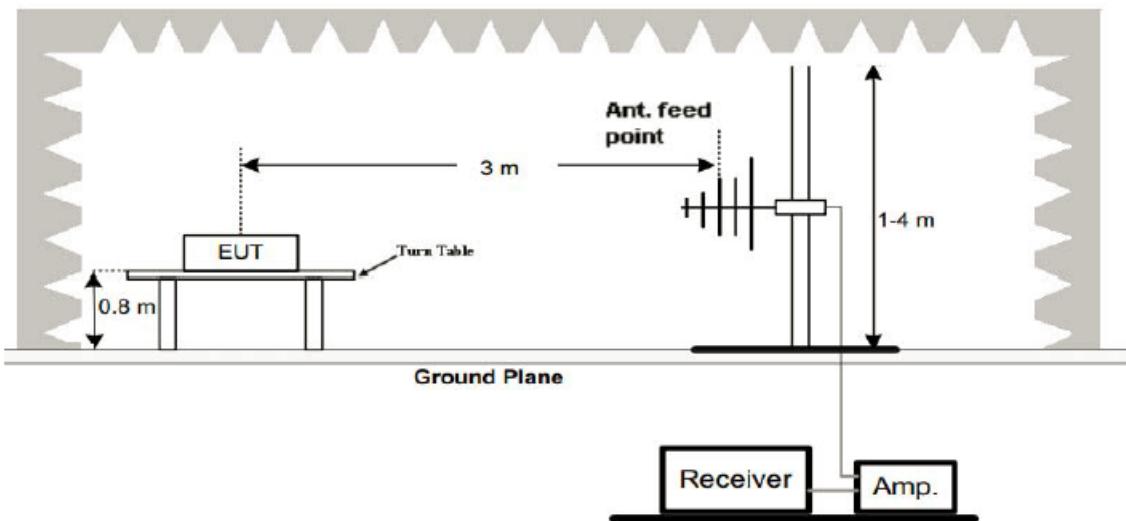


5.2 ANECHOIC CHAMBER TEST SETUP DIAGRAM

(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

Below 30MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meterssemi-anechoic chamber. The table was rotated 360 degrees to determine the position of thehighest radiation.
- b. The EUT was set 3 meters away from the interference-receiving loop antenna and in thecenter of a loop antenna, which was mounted on the top of a variable-height antenna tower.
- c. For each suspected emission, the EUT was arranged to its worst case, the height ofinterference-receiving loop antenna centre is 1 meter above the ground, and the rotatable tablewas turned from 0 degrees to 360 degrees to find the maximum reading.
- d. Both coaxial (loop plane perpendicular to the ground plane and to the measurement axis) andcoplanar (loop plane perpendicular to the ground plane and coplanar with the measurement axis)polarizations of the antenna are set to make the measurement.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth withmaximum hold mode when the test frequency is below 1 GHz.

30MHz-1GHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meterssemi-anechoic chamber. The table was rotated 360 degrees to determine the position of thehighest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mountedon the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four metersabove the ground to determine the maximum value of the field strength. Both horizontal andvertical 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 antennawas tuned to heights from 1 meter to 4 meters 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 quasi-peak detect function and specified bandwidth withmaximum hold mode when the test frequency is below 1 GHz.

5.4 DEVIATION FROM TEST STANDARD

No deviation

5.5 TEST RESULT

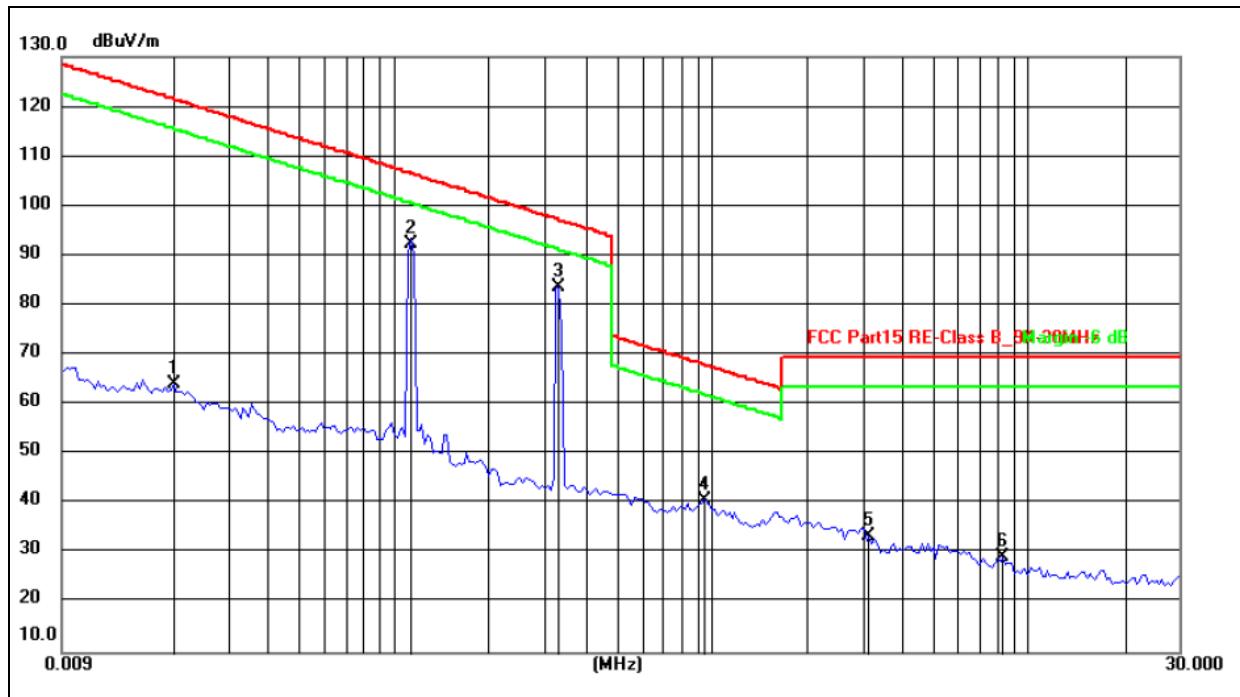
Measurement data:

Note: Limit dB_{UV}/m @3m = Limit dB_{UV}/m @300m+ 80
Limit dB_{UV}/m @3m = Limit dB_{UV}/m @30m + 40



9 kHz~30 MHz

Temperature:	26°C	Relative Humidity:	54%
Pressure:	101 kPa	Polarization:	coaxial
Test Voltage:	DC 12V	Test Mode:	Mode 1



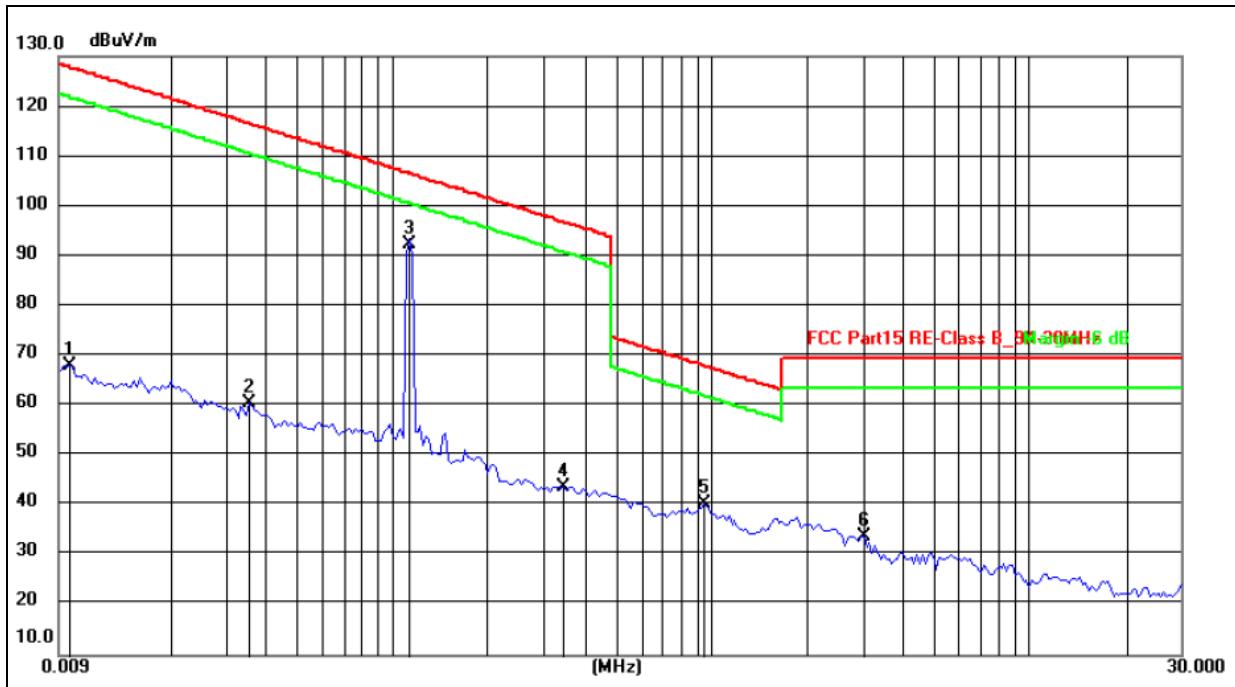
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	0.0200	43.56	20.45	64.01	121.58	-57.57	peak
2	0.1120	72.48	19.83	92.31	106.62	-14.31	peak
3	0.3286	63.49	20.13	83.62	97.27	-13.65	peak
4	0.9546	20.86	20.04	40.90	68.01	-27.11	peak
5	3.1587	14.01	19.64	33.65	69.54	-35.89	peak
6	8.3611	10.30	19.16	29.46	69.54	-40.08	peak

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. Tests were conducted in both the coaxial and coplanar directions, and only the worst coaxial data is presented.



Temperature:	26°C	Relative Humidity:	54%
Pressure:	101 kPa	Polarization:	coaxial
Test Voltage:	DC 12V	Test Mode:	Mode 4



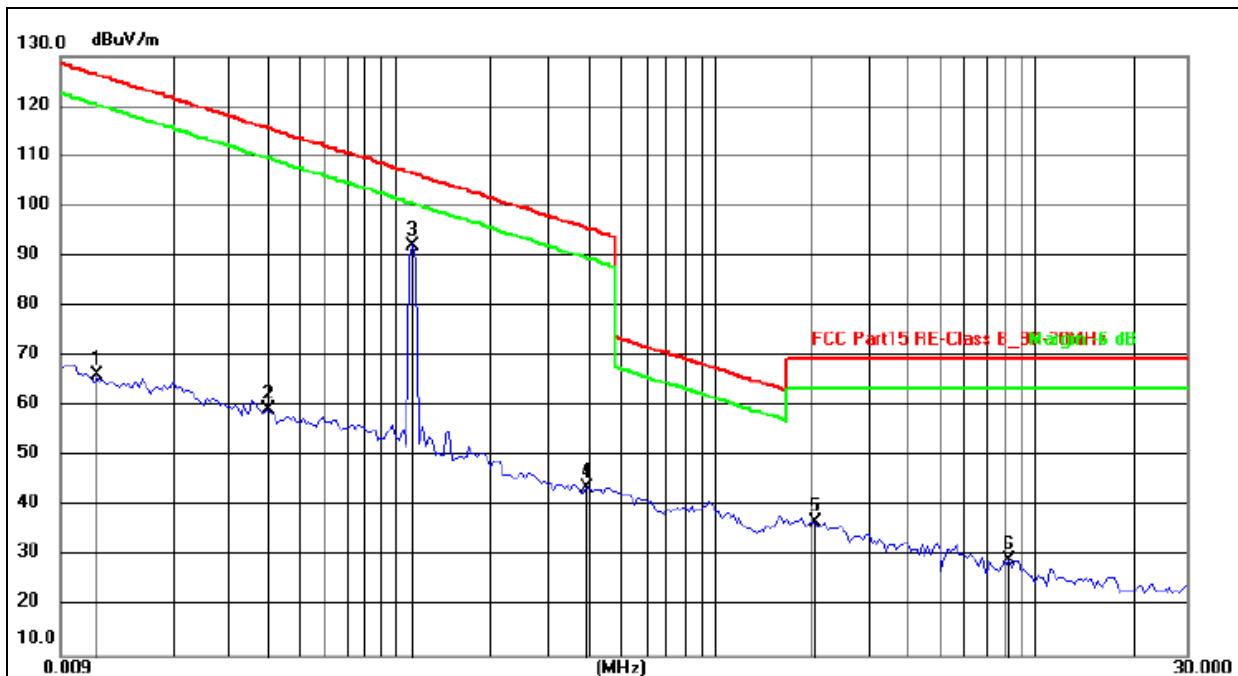
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	0.0097	67.95	0.05	68.00	127.87	-59.87	peak
2	0.0357	40.61	20.08	60.69	116.55	-55.86	peak
3	0.1120	72.48	19.83	92.31	106.62	-14.31	peak
4	0.3462	23.70	20.14	43.84	96.82	-52.98	peak
5	0.9546	20.36	20.04	40.40	68.01	-27.61	peak
6	3.0331	14.35	19.64	33.99	69.54	-35.55	peak

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. Tests were conducted in both the coaxial and coplanar directions, and only the worst coaxial data is presented.



Temperature:	26°C	Relative Humidity:	54%
Pressure:	101 kPa	Polarization:	coaxial
Test Voltage:	DC 12V	Test Mode:	Mode 7



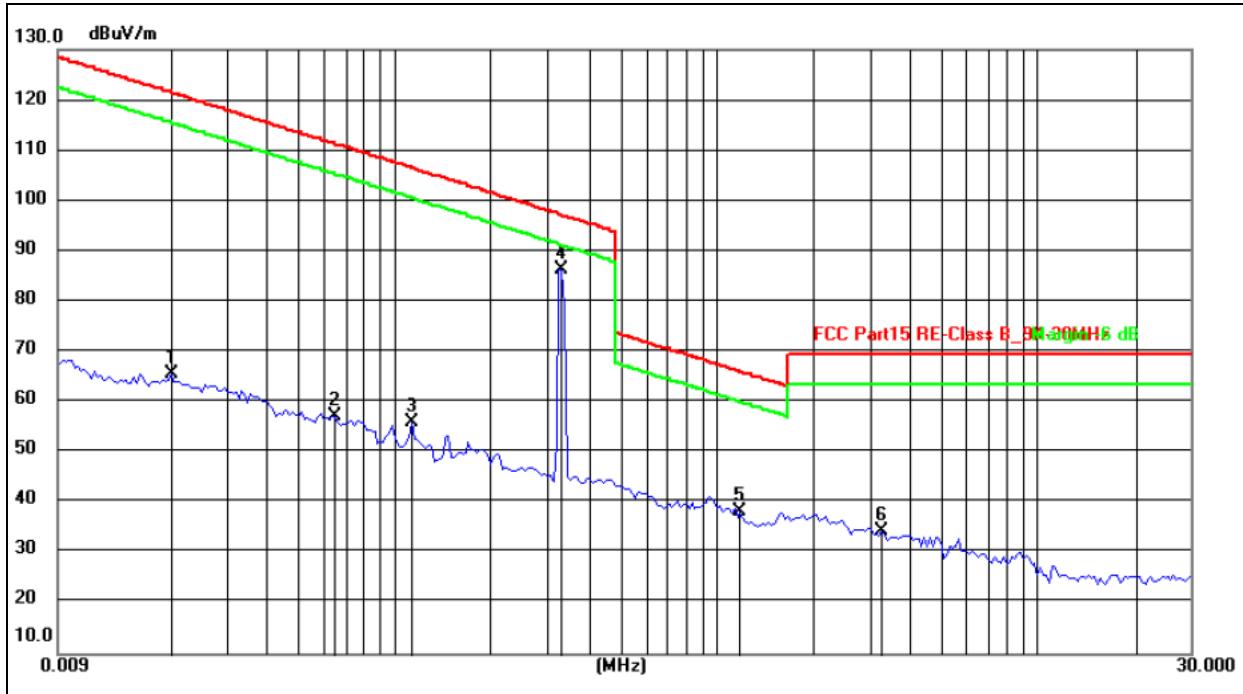
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	0.0117	45.73	20.53	66.26	126.24	-59.98	peak
2	0.0403	39.31	19.98	59.29	115.50	-56.21	peak
3	0.1120	72.15	19.83	91.98	106.62	-14.64	peak
4	0.3991	23.69	20.16	43.85	95.58	-51.73	peak
5	2.0632	17.10	19.79	36.89	69.54	-32.65	peak
6	8.3611	10.30	19.16	29.46	69.54	-40.08	peak

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. Tests were conducted in both the coaxial and coplanar directions, and only the worst coaxial data is presented.



Temperature:	26°C	Relative Humidity:	54%
Pressure:	101 kPa	Polarization:	coaxial
Test Voltage:	DC 12V	Test Mode:	Mode 10



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	0.0200	45.06	20.45	65.51	121.58	-56.07	peak
2	0.0656	37.52	19.82	57.34	111.27	-53.93	peak
3	0.1135	36.14	19.84	55.98	106.50	-50.52	peak
4	0.3286	66.19	20.13	86.32	97.27	-10.95	peak
5	1.1933	18.36	19.92	38.28	66.07	-27.79	peak
6	3.2894	14.82	19.63	34.45	69.54	-35.09	peak

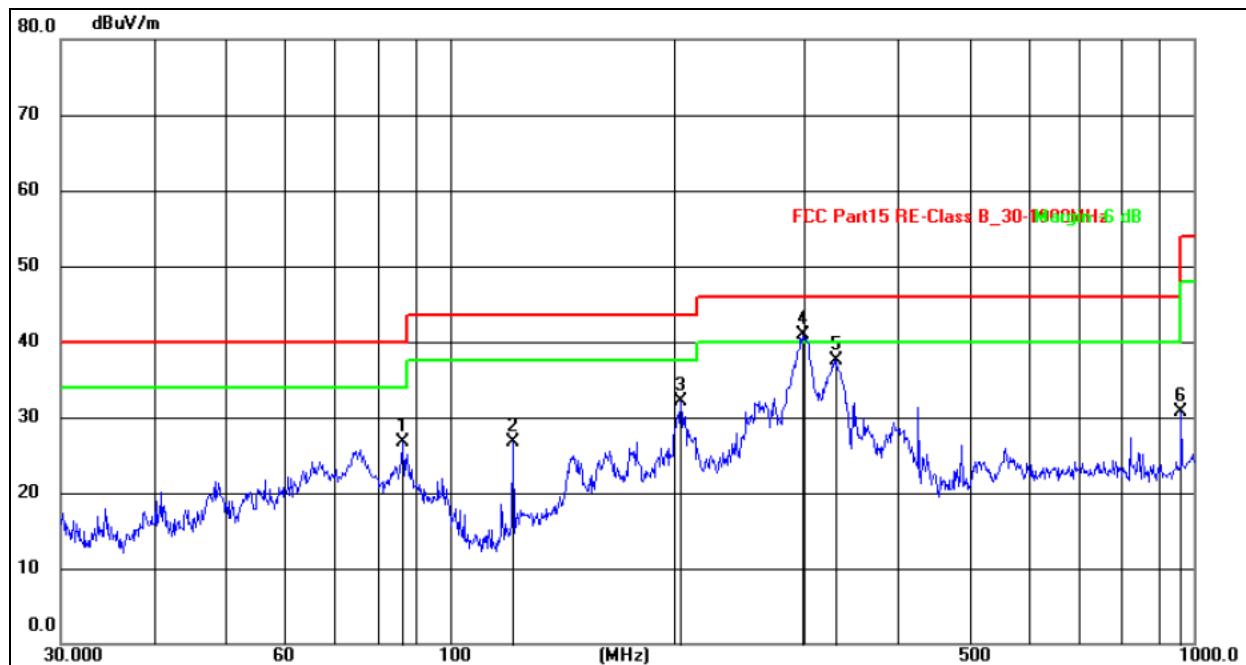
Remarks:

- 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. Tests were conducted in both the coaxial and coplanar directions, and only the worst coaxial data is presented.



30MHz-1GHz

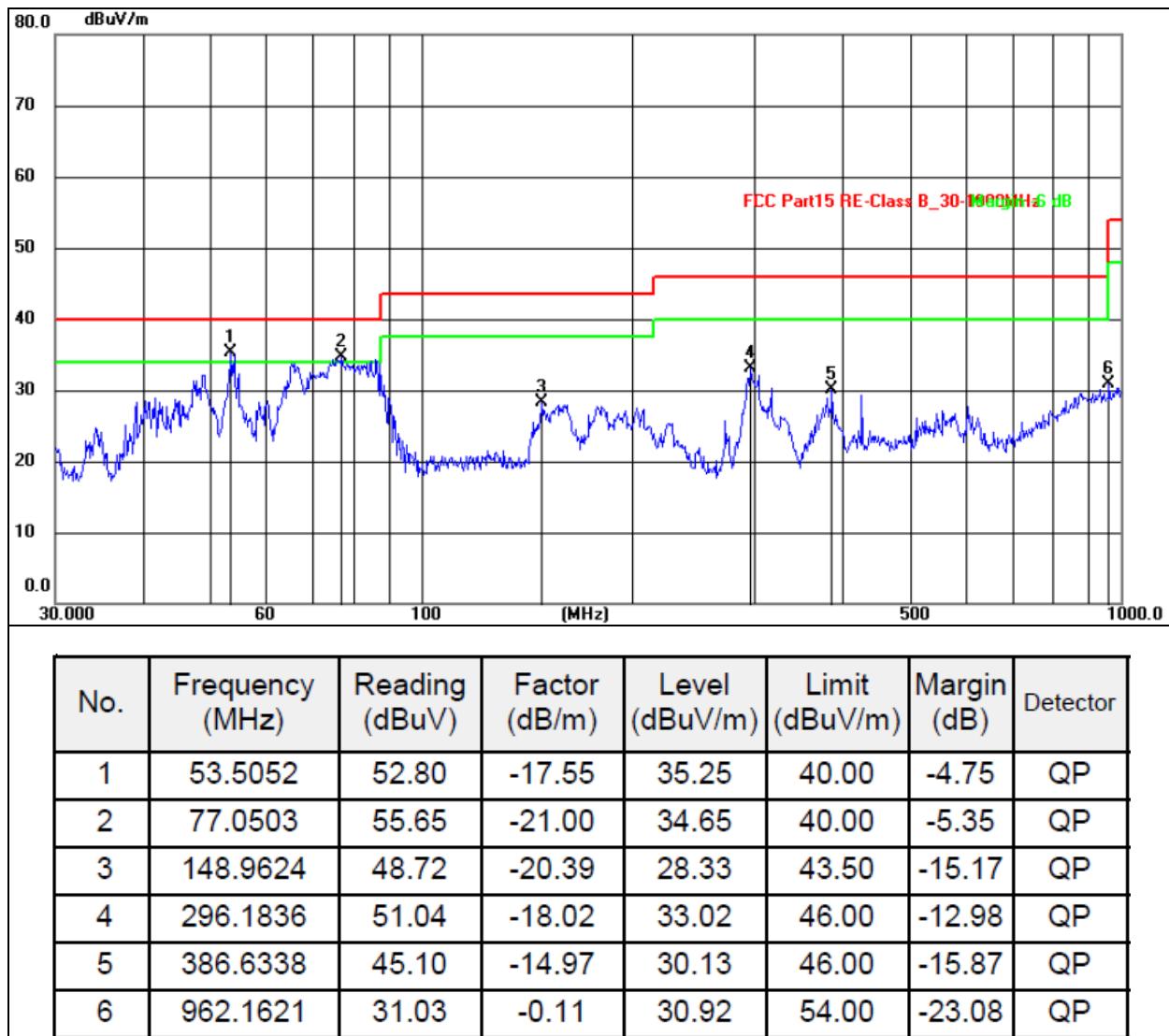
Temperature:	26°C	Relative Humidity:	54%
Pressure:	101 kPa	Polarization:	Horizontal
Test Voltage:	DC 12V	Test Mode:	Mode 1



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	86.5027	46.43	-19.82	26.61	40.00	-13.39	QP
2	121.5485	44.97	-18.30	26.67	43.50	-16.83	QP
3	204.2375	50.40	-18.28	32.12	43.50	-11.38	QP
4	298.2681	57.29	-16.32	40.97	46.00	-5.03	QP
5	331.3546	53.87	-16.40	37.47	46.00	-8.53	QP
6	962.1621	36.06	-5.36	30.70	54.00	-23.30	QP



Temperature:	26°C	Relative Humidity:	54%
Pressure:	101kPa	Polarization:	Vertical
Test Voltage:	DC 12V	Test Mode:	Mode 1



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

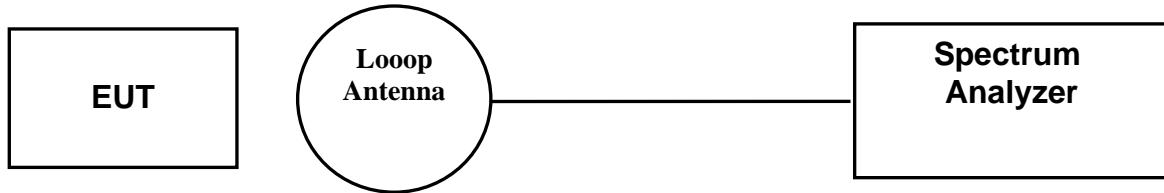
6.1 TEST PROCEDURE

1. Set span = 1.5 ~ 5 times OBW.
2. Set RBW = 1%~5% OBW.
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.

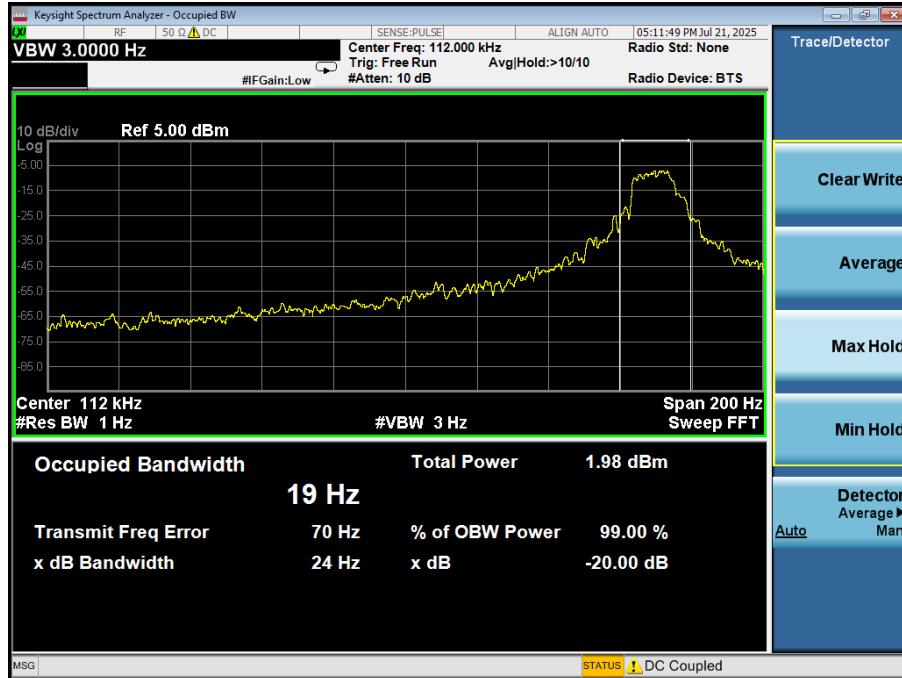


6.5 TEST RESULT

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101kPa	Test Voltage:	DC 12V

Test Coil	Frequency (kHz)	20dB Bandwidth (Hz)	Result
Phone	112.00	19	Pass
Airpods	112.00	34	Pass
Watch	329.20	891	Pass

Phone:



Note: The measured signal is Cw-like, adjusting the RBW per C63.10 would not be practical since measurement bandwidth will always follow the RBW. The RBW is set to 1Hz and VBW is set to 3Hz to perform the occupied bandwidth test.



Airpods:



Note: The measured signal is Cw-like, adjusting the RBW per C63.10 would not be practical since measurement bandwidth will always follow the RBW. The RBW is set to 1Hz and VBW is set to 3Hz to perform the occupied bandwidth test.

Watch:



Note: The measured signal is Cw-like, adjusting the RBW per C63.10 would not be practical since measurement bandwidth will always follow the RBW. The RBW is set to 100Hz and VBW is set to 300Hz to perform the occupied bandwidth test.



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 Coil 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 ※※※※