TEST REPORT

Applicant	:	Hangzhou Tanlink Technology Co., Ltd.
Address	:	Room 701, South Building, Building 3, No.16 Longtan Road, Cangqian Street, Yuhang District, Hangzhou, Zhejiang, China
Manufacturer	:	Hangzhou Tanlink Technology Co., Ltd.
Address	:	Room 701, South Building, Building 3, No.16 Longtan Road, Cangqian Street, Yuhang District, Hangzhou, Zhejiang, China
Product Name	:	ViewClear70Plus
Model Number	:	For details, please refer to Section 1.1 of the report.
Trademark	:	/
FCC ID	:	2BBBN-70PLUS
Test Date	:	Apr. 10, 2026 – Jun. 02, 2026
Date of Report	:	Jun. 02, 2026
Test Result	:	This device described above has been tested by NTT, and the test results show that the equipment under test (EUT) is in compliance with the Standard requirements. And it is applicable only to the tested sample identified in the report.

Test Procedure Used:

Standards : FCC CFR47 Part 15 Section 15.407
ANSI C63.10-2020+Cor.1-2023

Prepared by(Test Engineer):
Zhao Di

Reviewer(Supervisor):
Ken Wu

Approved(Manager):
Abel Yu

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Revision History of This Test Report		
Report Number	Description	Issued Date
SZNTT26016340E1-2	Initial Issue	2026-06-02

1. General Information

1.1.Description of Device (EUT)

EUT Name	:	ViewClear70Plus
Model No.	:	ViewClear70Plus, ViewClear70 1CH, ViewClear70Pro, Guardilux 30 Lite, Guardilux 30, F7N Plus, G900 Tripro-N, F9-N, G840S-N, G930-N, G850 Pro-N, I07-64G, ViewClear90, RVista R1, F17 Elite, F7N Elite-N, F17-N, F17 Elite-N, F17 Plus-N, F17, F7N TOUCH, F17Plus Pro, G900 Core, VisionPano 40-N, VisionPano 20-N, F4-N, F4 Pro-N, F7N Pro-N, F7N Elite-N, K7 Pro, K9 Pro, K9 Plus
Model Difference	:	All models are the same expect for the model name.
Power supply	:	DC 5V/2.5A
Wi-Fi Specification	:	IEEE 802.11a/n/ac/ax
Operation frequency	:	IEEE 802.11a/n(20M): 5745MHz ~5825MHz/ 5 channel IEEE 802.11n(40M): 5755MHz ~5795MHz/ 2 channel
Modulation	:	802.11a: (64-QAM, 16-QAM, QPSK, BPSK) OFDM 802.11n: (64-QAM, 16-QAM, QPSK, BPSK) OFDM
Antenna Type	:	FPC antenna, Maximum Gain is 1.31dBi
Intend use environment	:	Residential, commercial and light industrial environment

1.2.Channel List

U-NII-3 (5.725-5.85GHz)			
channel	**Frequency(MHz)**	**channel**	**Frequency(MHz)**
149	5745	151	5755
153	5765	159	5795
157	5785	165	5825
161	5805		

1.3.Test configuration

Transmitting mode	Keep the EUT in continuously transmitting mode.
Remark: During the test, the test voltage was tuned from 85% to 115% of the nominal rated supply voltage, and found that the worst case was under the nominal rated supply condition. So the report just shows that condition's data.	

Test Software	RF_TEST v8.5
Power level setup	10 dBm

1.4.Summary of test result

RF PART		
Test Items	**Test Requirement**	**Result**
15.407(b), 15.209	Radiated Spurious Emission	PASS
15.207	Conducted Emission	PASS
15.407 (a) 15.407 (e)	99% , 6dB Bandwidth	PASS
15.407 (a)	Maximum Conducted Output Power	PASS
15.407(b)	Band Edge	PASS
Duty cycle	ANSI C63.10 Section 11.6	PASS
15.407 (a)	Power Spectral Density	PASS
15.407(g)	Frequency Stability	PASS
15.203	Antenna Requirement	PASS
Remark: N/A is an abbreviation for Not Applicable. Measurement Uncertainty is not taken into account for conformity statement		

1.5.Special Accessories and Auxiliary Equipment

Description	Manufacturer	Model No.	Hardware Version	Software Version
Adapter	Shenzhen Yulong Technology Co., Ltd.	KYL-00502000Z	/	/
USB serial port	/	AML6001G	/	/
PC	ASUS	U1	/	/

1.6.Test mode

The special RF test software was used to control EUT work in Continuous WIFI TX mode, and select test channel, wireless mode.

Iru;35144d2q+53P K},=

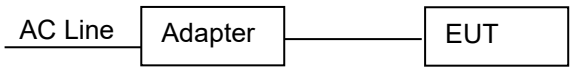
channel	Frequency(MHz)	channel	Frequency(MHz)
149	5745	157	5785
165	5825		

Iru;35144q+73P K},=

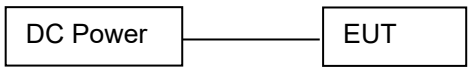
channel	Frequency(MHz)	channel	Frequency(MHz)
151	5755	159	5795

1.7.Block Diagram

Conducted Emission



Radiated Emission



RF Conducted Test

1.8.Test Conditions

Category	Normal Conditions	Extreme Conditions
Temperature range	15-35°C	N/A
Humidity range	20-75%	N/A
Pressure range	86-106kPa	N/A
Power supply	DC 5V	N/A
Note: N/A is an abbreviation for Not Applicable.		

1.9.Measurement Uncertainty (95% confidence levels, k=2)

Parameter	**Uncertainty**
RF output power, conducted	±1.0dB
Power Spectral Density, conducted	±2.2dB
Radio Frequency	± 1 x 10-6
Bandwidth	± 1.5 x 10-6
Time	±2%
Duty Cycle	±2%
Temperature	±1°C
Humidity	±5%
DC and low frequency voltages	±3%
Conducted Emissions (150kHz~30MHz)	±3.64dB
Radiated Emission(9KHz~30MHz)	±4.51dB
Radiated Emission(30MHz~1GHz)	±5.03dB
Radiated Emission(1GHz~25GHz)	±4.74dB
Remark:When making a conformity declaration based on test results for regulations/standards or specifications,the default is to use Clause 4.2.1of ILAC-G8:09/2019 and the guidelines on decision rules and conformity declaration in IEC Guide 115:2023.	

1.10.Test Facility

Site Description		
Name of Firm	:	Shenzhen NTT Testing Technology Co.,Ltd.
Site Location	:	1B, Building 2, Factory Building & 103, Building 3, Factory Building, Dayang Industrial Park, No.4, Industrial Avenue, Tangwei Community, Fuhai Sub-district, Bao 'an District, Shenzhen City, Guangdong, China
FCC Designation Number	:	CN3446
FCC Test Firm Registration Number	:	129414

1.11.Test Equipment

Conducted Test Site

Name	Model No.	Serial No.	Manufacturer	Date of Cal.	Due Date
944 Shielded Room	HSRCE944	/	HTEC	2025/4/30	2028/4/29
EMI Test Receiver	ESCI	/	RS	2025/9/8	2026/9/7
LISN	NNLK 8129	00603	Schwarzbeck	2025/9/8	2026/9/7
LISN	NNHV 8123-400	00694	Schwarzbeck	2025/9/8	2026/9/7
LISN	NNHV 8123-400	00680	Schwarzbeck	2025/9/8	2026/9/7
Cable	RG223-1500MM	NA	RG	2025/9/8	2026/9/7

Radiated Test Site(Below 1G and Above 1G)&RF Test Site

Name	Model No.	Serial No.	Manufacturer	Date of Cal.	Due Date
966 Shielded Room	966 Room	/	EMToni	2025/7/24	2028/7/23
EMI Test Receiver	ESCI	101018	RS	2025/9/8	2026/9/7
Amplifi（30MHz-1GHz）	BBV 9718D	00042	SCHWARZBECK	2025/9/8	2026/9/7
Bilog Antenna（30MHz-1GHz）	VULB9168	1858	SCHWARZBECK	2025/9/9	2026/9/8
Horn antenna（1GHz-18GHz）	BBHA 9120 D	02622	SCHWARZBECK	2025/9/9	2026/9/8
Pream plifier（1GHz-18GHz）	BBV 9718D	0024	SCHWARZBECK	2025/9/8	2026/9/7
Spectrum Analyze（10Hz-40GHz）	FSV 40	100952	Rohde & Schwarz	2025/9/8	2026/9/7
Pream plifier（18GHz-40GHz）	BBV 9721	0056	SCHWARZBECK	2025/9/8	2026/9/7
Double Ridge Guide Horn Antenna（18GHz-40GHz）	SAS-574	588	A.H.System	2025/9/8	2026/9/7
Loop Antenna (9KHz-30MHz)	FMZB1519B	014	SCHWARZBECK	2025/9/8	2026/9/7
Amplifier (9KHz-30MHz)	CVP 9222 C	00109	SCHWARZBECK	2025/9/8	2026/9/7
MXG Signal Analyzer	N9020A	MY50510202	Agilent	2025/9/8	2026/9/7
MXG Vector Signal Generator	N5182A	MY50140020	Agilent	2025/9/8	2026/9/7

MXG Analog Signal Generator	N5181A	MY47420919	Agilent	2025/9/8	2026/9/7
Power Sensor	TR1029-2	512364	Techoy	2025/9/8	2026/9/7
RF Swith	TR1029-1	512364	Techoy	2025/9/8	2026/9/7
Cable	DA800-4000MM	NA	DA	2025/9/8	2026/9/7
Cable	DA800-11000MM	NA	DA	2025/9/8	2026/9/7
Oven	GX-3020-M150	NA	GAOXIN	2026/03/10	2027/03/09

Test software

Item	Name	Manufacturer	Model	Software version
1	EMC Conduction Test System	FALA	EZ-EMC	Ver.EMC-CON 3A1.1+
2	EMC radiation test system	FALA	EZ-EMC	Ver.FA-03A2 RE+
3	RF test system	TACHOY	RFTest	V1.0.0
4	RF communication test system	TACHOY	RFTest	V1.0.0

2. Conducted emission at the mains terminals test

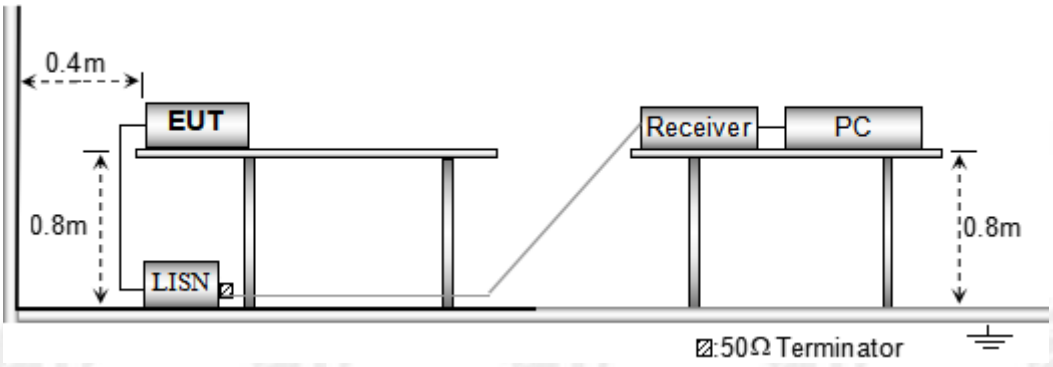
2.1.Limit

Test Requirement:	FCC Part15 C Section 15.207
Test Method:	ANSI C63.10-2020+Cor.1-2023
Test Frequency Range:	150KHz to 30MHz
Receiver setup:	RBW=9KHz, VBW=30KHz, Sweep time=auto

Frequency MHz	Limits dB(μV)	
	Quasi-peak Level	Average Level
0.15 ~ 0.50	66 ~ 56*	56 ~ 46*
0.50 ~ 5.00	56	46
5.00 ~ 30.00	60	50

Notes: 1. *Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

2.2.Test Setup

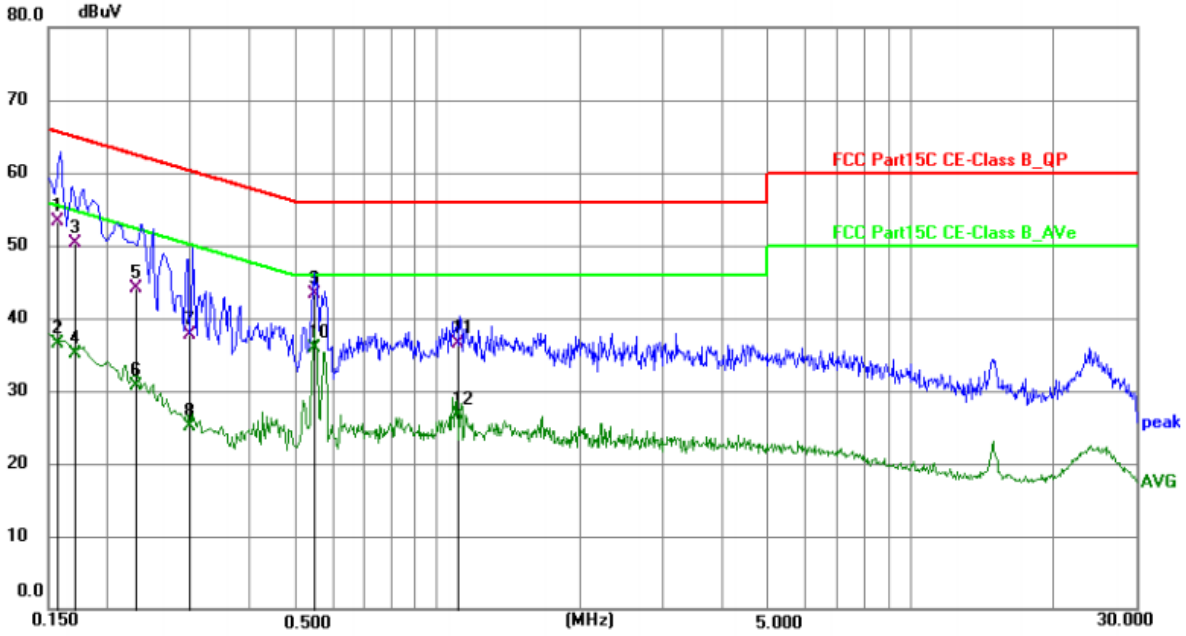


2.3.Test Procedure

1. 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.
2. 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.
3. 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.
4. LISN at least 80 cm from nearest part of EUT chassis.
5.For the actual test configuration, please refer to the related Item – EUT Test Photos.

2.4.Test Result

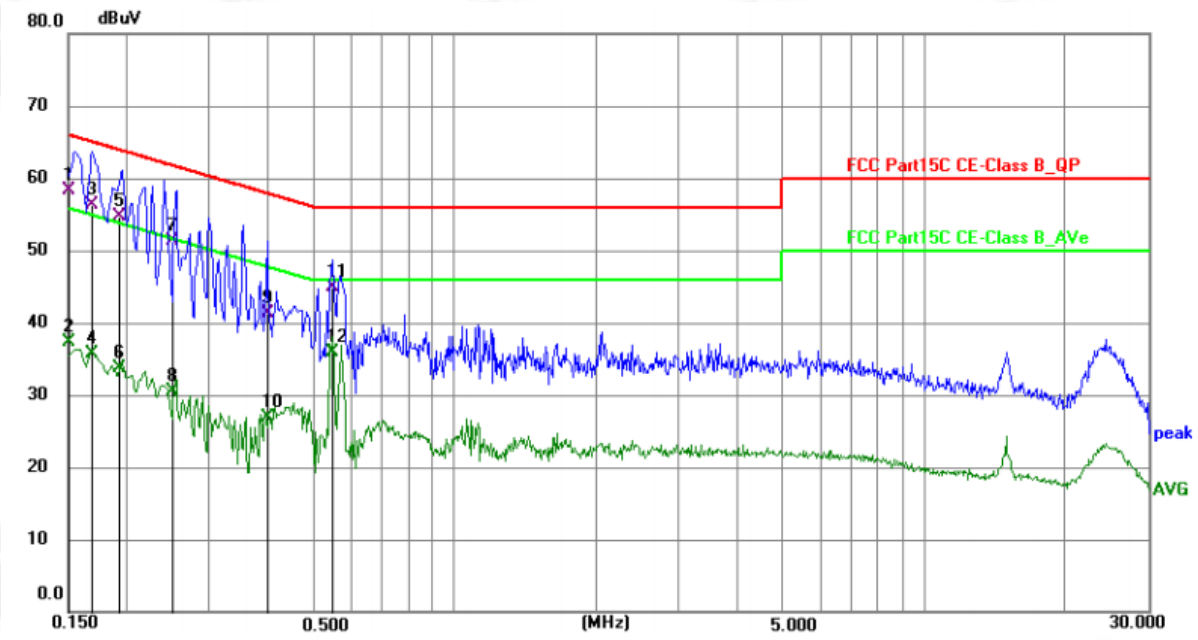
Conducted Emission At The Mains Terminals Test Data			
Temperature:	25.1℃	Relative Humidity:	56%
Pressure:	1008hPa	Phase :	Line
Test Voltage :	DC 5V from Adapter Input AC 120V/60Hz	Test Mode:	802.11a(5745.00MHz)



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1573	43.03	10.18	53.21	65.61	-12.40	QP	P
2	0.1573	26.28	10.18	36.46	55.61	-19.15	AVG	P
3	0.1703	40.12	10.18	50.30	64.95	-14.65	QP	P
4	0.1703	24.96	10.18	35.14	54.95	-19.81	AVG	P
5	0.2304	33.96	10.15	44.11	62.44	-18.33	QP	P
6	0.2304	20.49	10.15	30.64	52.44	-21.80	AVG	P
7	0.2994	27.54	10.12	37.66	60.26	-22.60	QP	P
8	0.2994	15.00	10.12	25.12	50.26	-25.14	AVG	P
9	0.5502	33.24	10.13	43.37	56.00	-12.63	QP	P
10 *	0.5502	25.73	10.13	35.86	46.00	-10.14	AVG	P
11	1.1095	26.37	10.13	36.50	56.00	-19.50	QP	P
12	1.1095	16.65	10.13	26.78	46.00	-19.22	AVG	P

Note:
1. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
2. Margin = Reading level + Correct Factor - Limit Correct Factor = Insertion loss of LISN + Cable loss.
3. All the modes have tested and recorded the worst mode(802.11a) in the report

Conducted Emission At The Mains Terminals Test Data			
Temperature:	25.1℃	Relative Humidity:	56%
Pressure:	1008hPa	Phase :	Neutral
Test Voltage :	DC 5V from Adapter Input AC 120V/60Hz	Test Mode:	802.11a(5745.00MHz)



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1 *	0.1505	48.10	10.19	58.29	65.97	-7.68	QP	P
2	0.1505	27.05	10.19	37.24	55.97	-18.73	AVG	P
3	0.1686	46.18	10.18	56.36	65.03	-8.67	QP	P
4	0.1686	25.52	10.18	35.70	55.03	-19.33	AVG	P
5	0.1929	44.46	10.16	54.62	63.91	-9.29	QP	P
6	0.1929	23.45	10.16	33.61	53.91	-20.30	AVG	P
7	0.2505	41.13	10.14	51.27	61.74	-10.47	QP	P
8	0.2505	20.28	10.14	30.42	51.74	-21.32	AVG	P
9	0.4016	31.24	10.12	41.36	57.82	-16.46	QP	P
10	0.4016	16.72	10.12	26.84	47.82	-20.98	AVG	P
11	0.5472	34.71	10.12	44.83	56.00	-11.17	QP	P
12	0.5472	25.70	10.12	35.82	46.00	-10.18	AVG	P

Note:
1. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
2. Margin = Reading level + Correct Factor - Limit Correct Factor = Insertion loss of LISN + Cable loss.
3. All the modes have tested and recorded the worst mode(802.11a) in the report

3. Radiated Spurious Emissions

3.1.Limit

Test Requirement: FCC CFR47 Part 15 Section 15.209 & 15.407
Test Method: KDB 789033 D02 v02r01 15.247 Meas Guidance v05r02; ANSI C63.10-2020+Cor.1-2023
Test Result: PASS
Measurement Distance: 3m

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

Limit:

Frequency (MHz)	Field Strength		Field Strength Limit at 3m Measurement Dist	
	uV/m	Distance (m)	uV/m	dBuV/m
0.009 ~ 0.490	2400/F(kHz)	300	10000 * 2400/F(kHz)	20log(2400/F(kHz)) + 80
0.490 ~ 1.705	24000/F(kHz)	30	100 * 24000/F(kHz)	20log(24000/F(kHz)) + 40
1.705 ~ 30	30	30	100 * 30	20log(30) + 40
30 ~ 88	100	3	100	20log(100)
88 ~ 216	150	3	150	20log(150)
216 ~ 960	200	3	200	20log(200)
Above 960	500	3	500	20log(500)

Undesirable emission limits

The maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(4) For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of

15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge

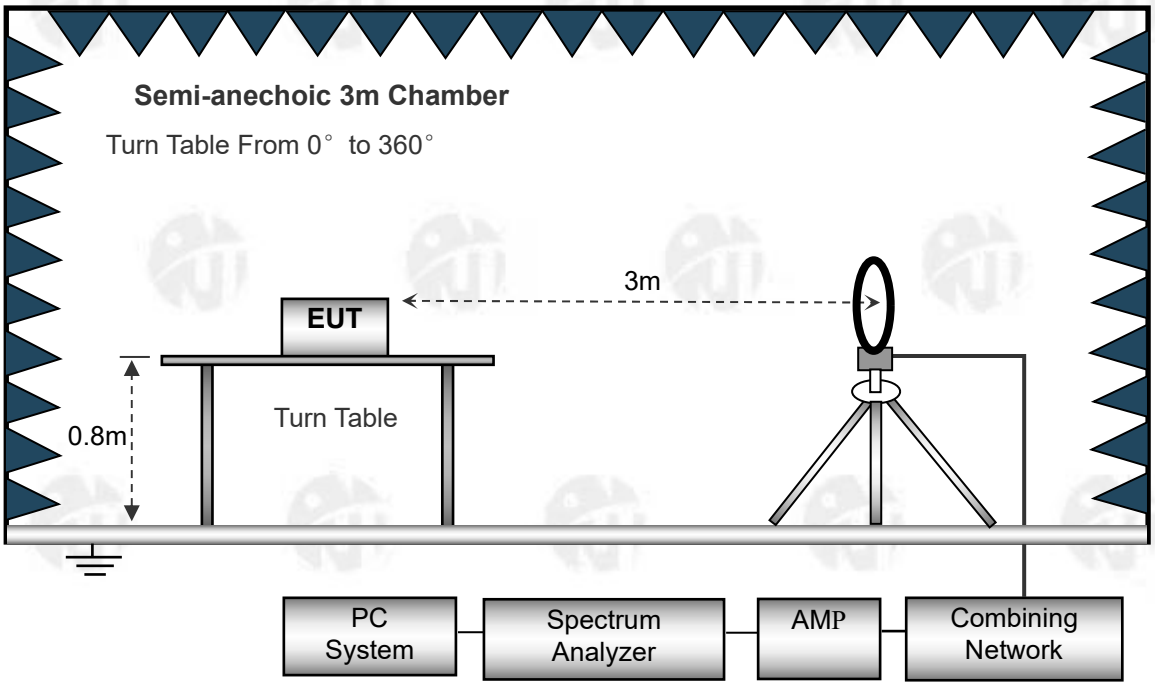
Requirement	Limit(EIRP)	Limit (Field strength at 3m)
15.407(b)(1)	PK:-27(dBm/MHz)	PK:68.2(dBμV/m)
15.407(b)(2)		
15.407(b)(3)		

Requirement	Frequency	Limit(EIRP)	Limit (Field strength at 3m)
15.407(b)(4)	5650MHz	PK:-27(dBm/MHz)	PK:68.2(dBμV/m)
	5700MHz	PK:10(dBm/MHz)	PK:105.2(dBμV/m)
	5720MHz	PK:15.6(dBm/MHz)	PK:110.8(dBμV/m)
	5725MHz	PK:27(dBm/MHz)	PK:122.2(dBμV/m)
	5850MHz	PK:27(dBm/MHz)	PK:122.2(dBμV/m)
	5855MHz	PK:15.6(dBm/MHz)	PK:110.8(dBμV/m)
	5875MHz	PK:10(dBm/MHz)	PK:105.2(dBμV/m)
	5925MHz	PK:-27(dBm/MHz)	PK:68.2(dBμV/m)

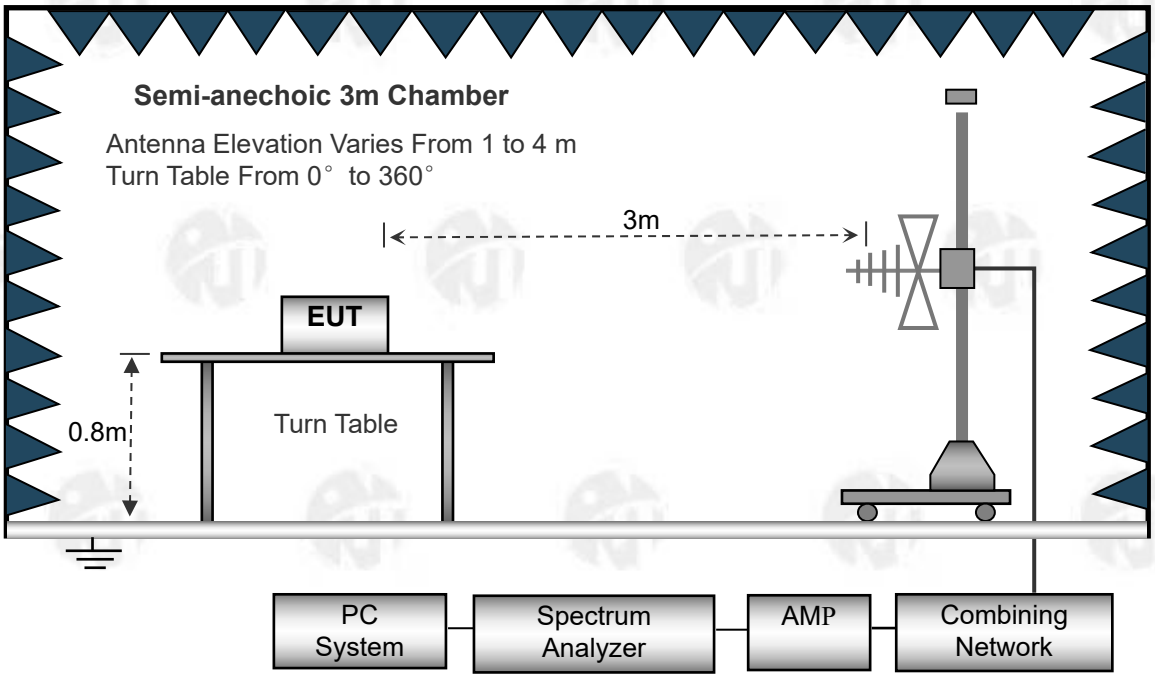
3.2.Test Setup

The radiated emission tests were performed in the 3m Semi- Anechoic Chamber test site, using the setup accordance with the ANSI C63.10.

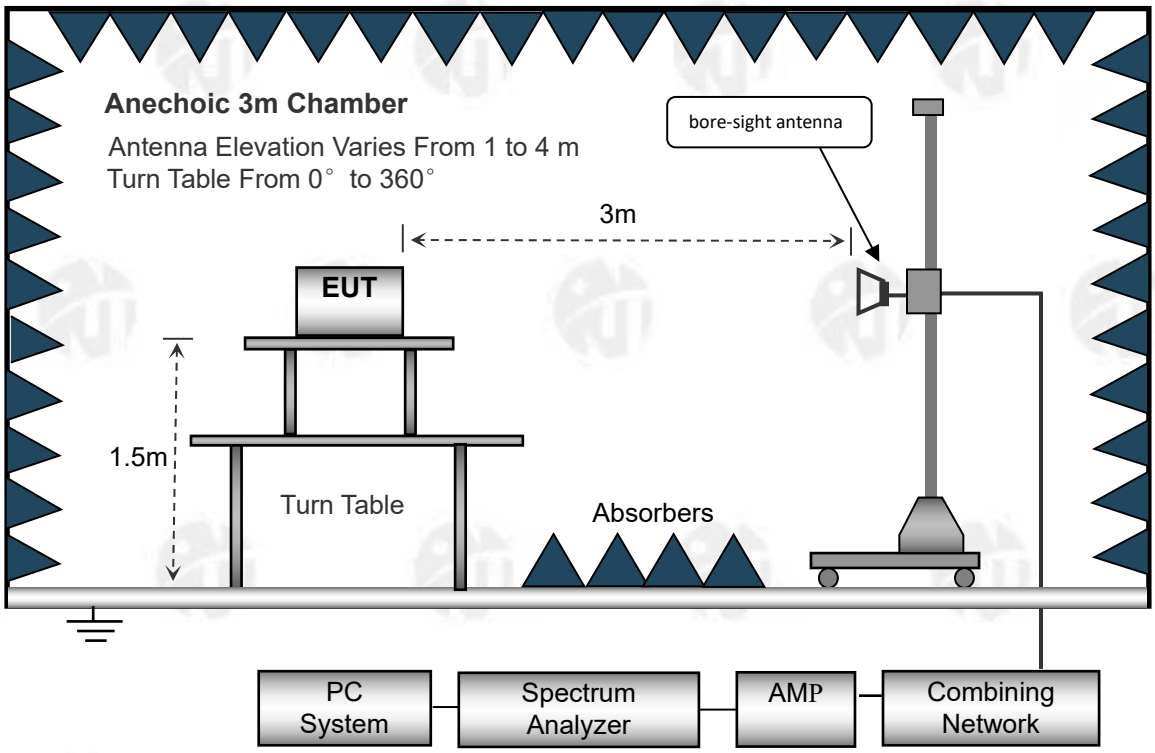
The test setup for emission measurement below 30MHz.

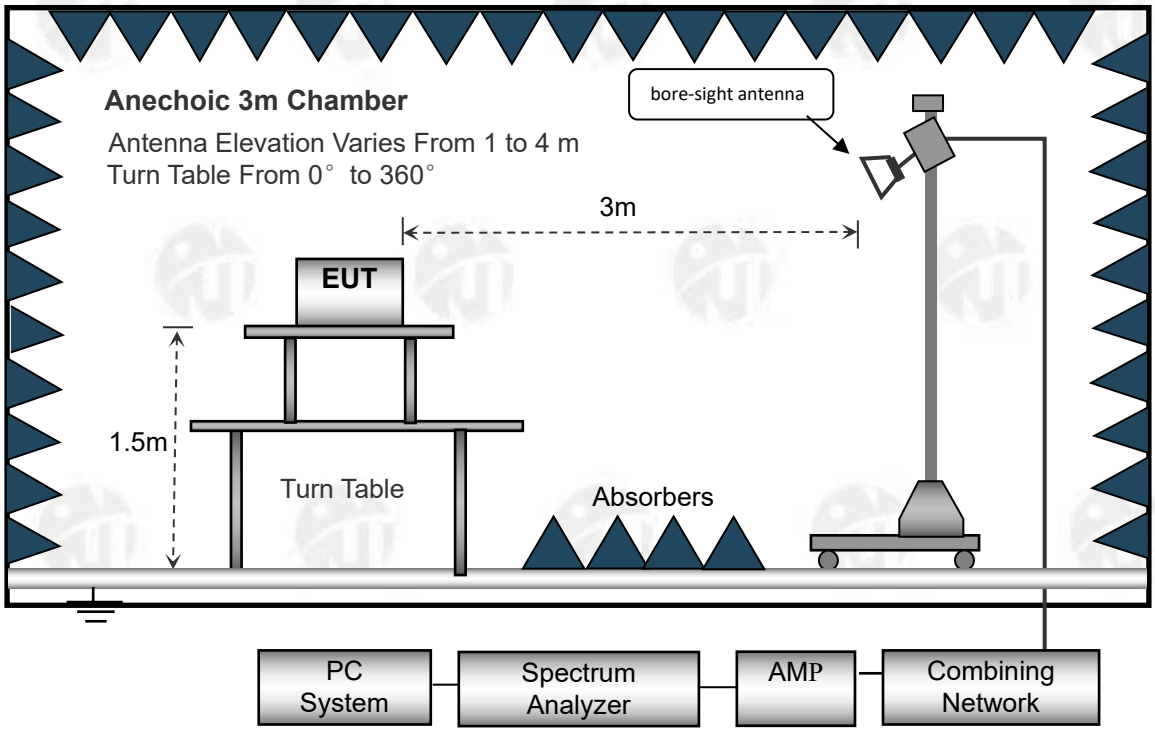


The test setup for emission measurement from 30 MHz to 1 GHz.



The test setup for emission measurement above 1 GHz.





3.3.Test Procedure

1. The EUT is placed on a turntable, which is 0.8m above ground plane for below 1GHz and 1.5m for above 1GHz.

2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.

3. EUT is set 3m away from the receiving antenna, which is moved from 1m to 4m to find out the maximum emissions.

4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.

5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.

6. Repeat above procedures until the measurements for all frequencies are complete.

7. The radiation measurements are performed in X,Y and Z axis positioning(X denotes lying on the table, Y denotes side stand and Z denotes vertical stand),the worst condition was tested putting the eut in Z axis,so the worst data were shown as follow.

8. A 5GHz high – pass filter is used druing radiated emissions above 1GHz measurement.

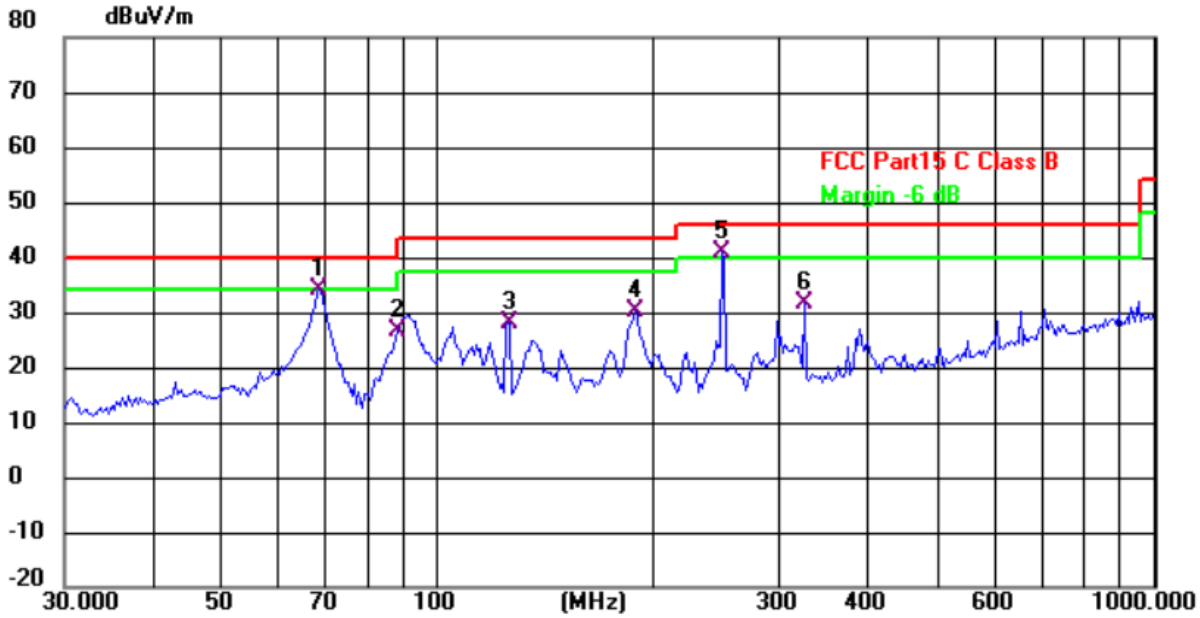
3.4.Test Result

Test Frequency: 9KHz~30MHz

The measurements were more than 20 dB below the limit and not reported.

Test Frequency : 30MHz ~ 1GHz

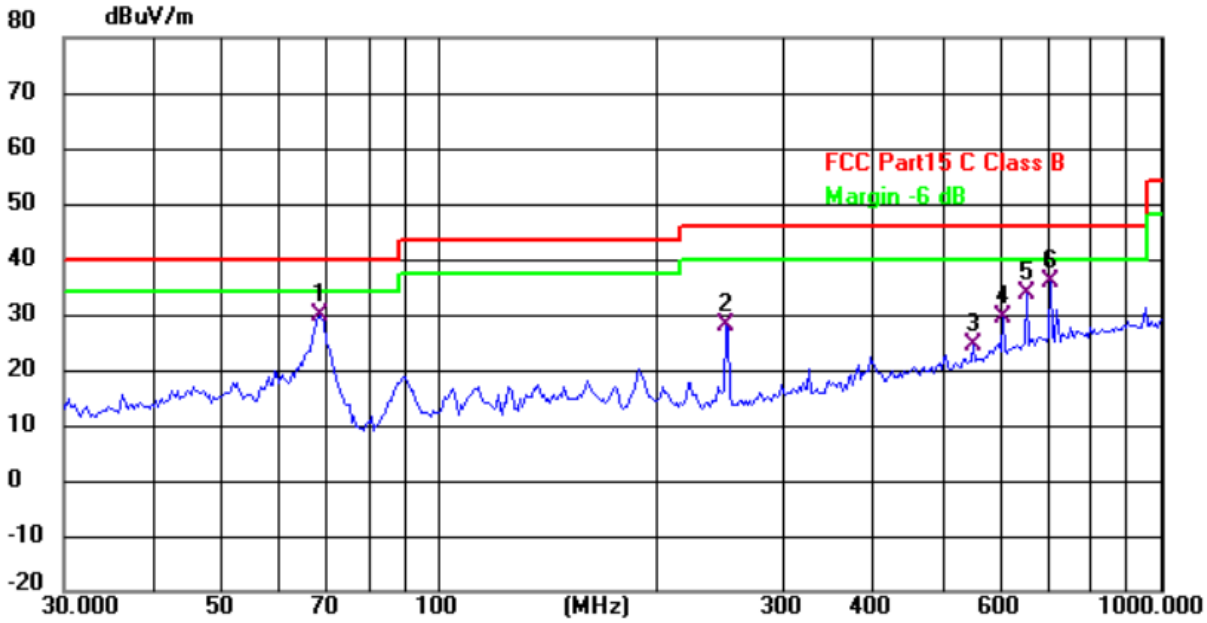
Radiation Emission Test Data			
Temperature:	25.1℃	Relative Humidity:	56%
Pressure:	1008hPa	Phase :	Horizontal
Test Voltage :	DC 5V	Test Mode	802.11a(5745.00MHz)



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 !	68.1514	49.78	-15.51	34.27	40.00	-5.73	QP
2	87.7246	43.85	-17.25	26.60	40.00	-13.40	QP
3	125.4457	41.55	-13.64	27.91	43.50	-15.59	QP
4	188.4125	45.12	-15.06	30.06	43.50	-13.44	QP
5 *	249.4250	54.88	-14.11	40.77	46.00	-5.23	QP
6	325.5958	43.16	-11.68	31.48	46.00	-14.52	QP

Note:
1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.
Emission Level = Reading + Factor
Margin=Emission Level-Limit
2. All the modes have tested and recorded the worst mode(802.11a) in the report

Radiation Emission Test Data			
Temperature:	25.1℃	Relative Humidity:	56%
Pressure:	1008hPa	Phase :	Vertical
Test Voltage :	DC 5V	Test Mode	802.11a(5745.00MHz)



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	68.1514	45.23	-15.51	29.72	40.00	-10.28	QP
2	249.4250	42.09	-14.11	27.98	46.00	-18.02	QP
3	550.9480	30.84	-6.30	24.54	46.00	-21.46	QP
4	603.5391	34.47	-4.95	29.52	46.00	-16.48	QP
5	651.9417	37.74	-4.07	33.67	46.00	-12.33	QP
6 *	704.2261	38.99	-3.10	35.89	46.00	-10.11	QP

Note:
1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.
Emission Level = Reading + Factor
Margin=Emission Level-Limit
2. All the modes have tested and recorded the worst mode(802.11a) in the report

Test Frequency 1GHz-40GHz

802.11a

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel:5745MHz									
V	11490	42.47	32.29	8.39	38.9	57.47	74.00	-16.53	Pk
V	11490	21.36	32.29	8.39	38.9	36.36	54.00	-17.64	AV
V	17233.3	37.98	31.19	9.62	40.37	56.78	68.20	-11.42	Pk
V	17233.3	21.33	31.19	9.62	40.37	40.13	54.00	-13.87	AV
V	22980	39.37	27.02	7.2	38.98	58.53	74.00	-15.47	Pk
V	22980	18.48	27.02	7.2	38.98	37.64	54.00	-16.36	AV
V	28723.3	36.4	27.1	7.56	40.18	57.04	68.20	-11.16	Pk
V	28723.3	17.05	27.1	7.56	40.18	37.69	54.00	-16.31	AV
H	11490	42.71	32.29	8.39	38.9	57.71	74.00	-16.29	Pk
H	11490	21.71	32.29	8.39	38.9	36.71	54.00	-17.29	AV
H	17233.3	38.8	31.19	9.62	40.37	57.6	68.20	-10.6	Pk
H	17233.3	18.19	31.19	9.62	40.37	36.99	54.00	-17.01	AV
H	22980	36.69	27.02	7.2	38.98	55.85	74.00	-18.15	Pk
H	22980	20.13	27.02	7.2	38.98	39.29	54.00	-14.71	AV
H	28723.3	37.06	27.1	7.56	40.18	57.7	68.20	-10.5	Pk
H	28723.3	15.85	27.1	7.56	40.18	36.49	54.00	-17.51	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Middle Channel:5785MHz									
V	11570	41.48	32.26	8.48	38.9	56.6	74.00	-17.4	Pk
V	11570	18.41	32.26	8.48	38.9	33.53	54.00	-20.47	AV
V	17353.3	36.7	31.08	9.67	40.61	55.9	68.20	-12.3	Pk
V	17353.3	16.07	31.08	9.67	40.61	35.27	54.00	-18.73	AV
V	23140	36.4	27.03	7.24	39.03	55.64	68.20	-12.56	Pk
V	23140	15.88	27.03	7.24	39.03	35.12	54.00	-18.88	AV
V	28923.3	35.86	27.1	7.58	40.34	56.68	68.20	-11.52	Pk
V	28923.3	16.53	27.1	7.58	40.34	37.35	54.00	-16.65	AV
H	11570	37.75	32.26	8.48	38.9	52.87	74.00	-21.13	Pk
H	11570	19.44	32.26	8.48	38.9	34.56	54.00	-19.44	AV
H	17353.3	35.32	31.08	9.67	40.61	54.52	68.20	-13.68	Pk
H	17353.3	15.44	31.08	9.67	40.61	34.64	54.00	-19.36	AV
H	23140	35.58	27.03	7.24	39.03	54.82	68.20	-13.38	Pk
H	23140	16.79	27.03	7.24	39.03	36.03	54.00	-17.97	AV
H	28923.3	35.29	27.1	7.58	40.34	56.11	68.20	-12.09	Pk
H	28923.3	13.09	27.1	7.58	40.34	33.91	54.00	-20.09	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:5825MHz									
V	11650	44.96	32.23	8.56	38.9	60.19	74.00	-13.81	Pk
V	11650	32.26	32.23	8.56	38.9	47.49	54.00	-6.51	AV
V	17473.3	43.26	30.97	9.73	40.85	62.87	68.20	-5.33	Pk
V	17473.3	28.13	30.97	9.73	40.85	47.74	54.00	-6.26	AV
V	23300	41.44	27.03	7.26	39.06	60.73	68.20	-7.47	Pk
V	23300	23.85	27.03	7.26	39.06	43.14	54.00	-10.86	AV
V	29123.3	41.56	27.1	7.61	40.4	62.47	68.20	-5.73	Pk
V	29123.3	23.5	27.1	7.61	40.4	44.41	54.00	-9.59	AV
H	11650	44.53	32.23	8.56	38.9	59.76	74.00	-14.24	Pk
H	11650	30.59	32.23	8.56	38.9	45.82	54.00	-8.18	AV
H	17473.3	44.03	30.97	9.73	40.85	63.64	68.20	-4.56	Pk
H	17473.3	27.98	30.97	9.73	40.85	47.59	54.00	-6.41	AV
H	23300	44.43	27.03	7.26	39.06	63.72	68.20	-4.48	Pk
H	23300	23.51	27.03	7.26	39.06	42.8	54.00	-11.2	AV
H	29123.3	37.79	27.1	7.61	40.4	58.7	68.20	-9.5	Pk
H	29123.3	24.04	27.1	7.61	40.4	44.95	54.00	-9.05	AV

Note: 1. The testing has been conformed to 40GHz.
2. All other emissions more than 30dB below the limit.
3. Factor = Antenna Factor + Cable Loss – Pre-amplifier.
Emission Level = Reading + Factor
Margin=Emission Level-Limit
4. All the modes have tested and recorded the worst mode(802.11a) in the report

Radiated Band Emission Measurement:

U-NII-3

Frequency	Meter Reading	antenna Factor	cable loss	preamp factor	Emission Level	Limit	Margin	Polar	Detector Type	Result
(MHz)	(dBuV/m)	(dB)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(H/V)		
802.11a:5745MHz										
5650	45.15	30.22	4.85	23.98	56.24	68.2	-11.96	V	PK	Pass
5725	68.39	30.22	4.85	23.98	79.48	122.2	-42.72	V	PK	Pass
5650	43.88	30.22	4.85	23.98	54.97	68.2	-13.23	H	PK	Pass
5725	64.07	30.22	4.85	23.98	75.16	122.2	-47.04	H	PK	Pass
802.11a:5825MHz										
5850	70.22	30.22	4.85	23.98	81.31	122.2	-40.89	V	PK	Pass
5925	43.6	30.22	4.85	23.98	54.69	68.2	-13.51	V	PK	Pass
5850	70.02	30.22	4.85	23.98	81.11	122.2	-41.09	H	PK	Pass
5925	41.39	30.22	4.85	23.98	52.48	68.2	-15.72	H	PK	Pass
802.11n20:5745MHz										
5650	42.31	30.22	4.85	23.98	53.4	68.2	-14.8	V	PK	Pass
5725	70.8	30.22	4.85	23.98	81.89	122.2	-40.31	V	PK	Pass
5650	42.17	30.22	4.85	23.98	53.26	68.2	-14.94	H	PK	Pass
5725	64.06	30.22	4.85	23.98	75.15	122.2	-47.05	H	PK	Pass
802.11n20:5785MHz										
5850	69.98	30.22	4.85	23.98	81.07	122.2	-41.13	V	PK	Pass
5925	43.53	30.22	4.85	23.98	54.62	68.2	-13.58	V	PK	Pass
5850	70.34	30.22	4.85	23.98	81.43	122.2	-40.77	H	PK	Pass
5925	42.39	30.22	4.85	23.98	53.48	68.2	-14.72	H	PK	Pass
802.11n40:5755MHz										
5650	43.27	30.22	4.85	23.98	54.36	68.2	-13.84	V	PK	Pass
5725	69.43	30.22	4.85	23.98	80.52	122.2	-41.68	V	PK	Pass
5650	42.9	30.22	4.85	23.98	53.99	68.2	-14.21	H	PK	Pass
5725	67.68	30.22	4.85	23.98	78.77	122.2	-43.43	H	PK	Pass
802.11n40:5795MHz										
5850	69.81	30.22	4.85	23.98	80.9	122.2	-41.3	V	PK	Pass
5925	42.76	30.22	4.85	23.98	53.85	68.2	-14.35	V	PK	Pass
5850	70.3	30.22	4.85	23.98	81.39	122.2	-40.81	H	PK	Pass
5925	41.97	30.22	4.85	23.98	53.06	68.2	-15.14	H	PK	Pass

Remark:
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

4. Maximum Peak Output Power

4.1.Limit

For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi.
If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi.
If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.
Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power.
For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power is required for each 1 dB of antenna gain in excess of 23 dBi.
Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi.
If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz.
If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.
If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

4.2.Test Setup

4.3.Test Procedure

The EUT was directly connected to the Power meter
1. Device Configuration
If possible, configure or modify the operation of the EUT so that it transmits continuously at its maximum power control level (see section II.B.).
The intent is to test at 100 percent duty cycle; however a small reduction in duty cycle (to no lower than 98 percent) is permitted if required by the EUT for amplitude control purposes. Manufacturers are expected to provide software to the test lab to permit such continuous operation.
b) If continuous transmission (or at least 98 percent duty cycle) cannot be achieved due to hardware limitations (e.g., overheating), the EUT shall be operated at its maximum power control level with the transmit duration as long as possible and the duty cycle as high as possible.
Measurement using a Power Meter(PM)
a) Method PM (Measurement using an RF average power meter):
(i)Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the following conditions are satisfied:
● The EUT is configured to transmit continuously or to transmit with a constant duty cycle.
●At all times when the EUT is transmitting, it must be transmitting at its maximum power control level.
● The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.
(i) If the transmitter does not transmit continuously, measure the duty cycle, x, of the transmitter output signal as described in IIL.B.
(ii) Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.
(iv) Adjust the measurement in dBm by adding 10 log (1/x) where x is the duty cycle (e.g. 10 log (1/0.25) if the duty cycle is 25%).
b) Method PM-G (Measurement using a gated RF average power meter):
Measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

4.4.Test Result

Please see the attachment for WIFI 5G data.

5. -6dB Bandwidth and 99% Bandwidth Measurement

5.1.Limit

Test Standard	FCC Part15 C Section 15.407
	The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used. Measurements in the 5.725-5.85 GHz band, the minimum bandwidth 6 dB bandwidth of U-NII devices shall be at least 500KHz. Measurements in the 5.15-5.25 GHz, 5.25-5.35 GHz, and the 5.47-5.725 GHz bands are made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth.

5.2.Test Setup

5.3.Test Procedure

a) Set RBW = 100KHz
b) Set the VBW ≥ 3 · RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) 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 6 dB relative to the maximum level measured in the fundamental emission.
The following procedure shall be used for measuring (99 %) power bandwidth:
1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW ≥ 3 · RBW
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

5.4.Test Result

Please see the attachment for WIFI 5G data.

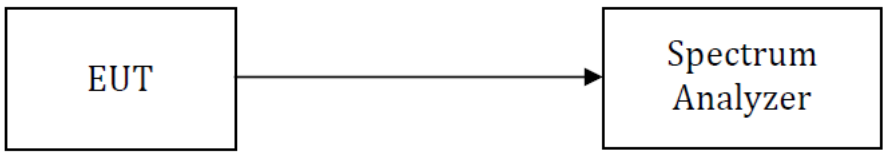
6. Power Spectral density

6.1.Limit

According to FCC § 15.407(3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

6.2.Test Setup



6.3.Test Procedure

1. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above,
2. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01
3. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to Spectrum.
4. For U-NII1, U-NII-2A, U-NII-2C Band:
Set RBW=1MHz, VBW=3MHz, where span is enough to capture the entire bandwidth, Sweep time = Auto (601 pts), detector = sample, traces 100 sweeps of video averaging. (SA-2 with the omission of procedure x, the integration with 26dB EBW bandwidth)
For U-NII-3 Band:
Set RBW=510 kHz, VBW=3*RBW, where span is enough to capture the entire bandwidth, Sweep time = Auto (601 pts), detector = sample, traces 100 sweeps of video averaging. (SA-2 with the omission of procedure x, the integration with 26dB EBW bandwidth)
5. User the cursor on spectrum to peak search the highest level of trace
6. Record the max. reading and add 10 log(1/duty cycle).

6.4.Test Result

Please see the attachment for WIFI 5G data.

7. Out of Band Emissions and Spurious Emission

7.1.Limit

According to FCC §15.407(b)
Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:
(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.
(2) For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of −17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of −27 dBm/MHz.
RSS-247 Section 6.2
Devices shall comply with the following:
All emissions outside the band 5250-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p.; or
All emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. and its power shall comply with the spectral power density for operation within the band 5150-5250 MHz. The device, except devices installed in vehicles, shall be labelled or include in the user manual the following text “for indoor use only.”
Devices operating in the band 5725-5850 MHz shall have e.i.r.p. of unwanted emissions comply with the following:
27 dBm/MHz at frequencies from the band edges decreasing linearly to 15.6 Bm/MHz at 5 MHz above or below the band edges;
15.6 dBm/MHz at 5 MHz above or below the band edges decreasing linearly to 10 dBm/MHz at 25 MHz above or below the band edges;
10 dBm/MHz at 25 MHz above or below the band edges decreasing linearly to -27 dBm/MHz at 75 MHz above or below the band edges; and -27 dBm/MHz at frequencies more than 75 MHz above or below the band edges.

7.2.Test Setup

7.3.Test Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3. Set RBW of spectrum analyzer to 1 MHz with a convenient frequency span.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.

7.4.Test Result

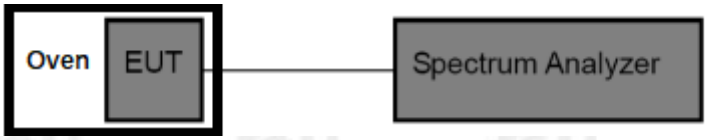
Please see the attachment for WIFI 5G data.

8. Frequency Stability Measurement

8.1.Limit

The frequency of the carrier signal shall be maintained within band of operation.

8.2.Test setup



8.3.Test Procedure

1. The transmitter output (antenna port) was connected to the spectrum analyzer.
2. EUT have transmitted absence of modulation signal and fixed channelize.
3. Set the spectrum analyzer span to view the entire absence of modulation emissions bandwidth.
4. Set RBW = 10Hz, VBW = 30Hz with peak detector and maxhold settings.
5. fc is declaring of channel frequency. Then the frequency error formula is (fc-f)/fc × 106 ppm and the limit is less than ±20ppm (IEEE 802.11nspecification).
6. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value
Extreme temperature is -20°C~50°C.

8.4.Test Result

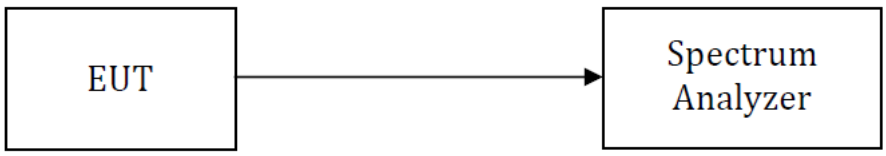
Please see the attachment for WIFI 5G data.

9. Duty cycle

9.1.Limit

Test Requirement:	FCC CFR47 Part 15 Section 15.407
Test Method:	KDB 789033 D02 v02r01; ANSI C63.10-2020+Cor.1-2023
Test Result:	PASS

9.2.Test setup



9.3.Test Procedure

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum;
2. Set the spectrum analyzer:
a) Set the center frequency of the instrument to the center frequency of the transmission.
b) Set RBW ≥ OBW if possible; otherwise, set RBW to the largest available value.
c) Set VBW ≥ RBW. Detector = peak or average.
d) Sweep time = auto couple.
e) Trace mode = max hold.
f) Allow trace to fully stabilize.

9.4.Test Result

Please see the attachment for WIFI 5G data.

10. Antenna Requirement

Test Standard	FCC Part15 Section 15.203
Requirement	1) 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. For expediting the testing, measurements may be performed using only the antenna with highest gain of each combination of transmitter and antenna type, with the transmitter output power set at the maximum level. However, the transmitter shall comply with the applicable requirements under all operational conditions and when in combination with any type of antenna from the list provided in the test report (and in the notice to be included in the user manual, provided below). When measurements at the antenna port are used to determine the RF output power, the effective gain of the device's antenna shall be stated, based on a measurement or on data from the antenna's manufacturer. The test report shall state the RF power, output power setting and spurious emission measurements with each antenna type that is used with the transmitter being tested. For licence-exempt equipment with detachable antennas, the user manual shall also contain the following notice in a conspicuous location: This radio transmitter [enter the device's ISED certification number] has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device. Immediately following the above notice, the manufacturer shall provide a list of all antenna types which can be used with the transmitter, indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna type.
Antenna Connected Construction	The antenna is FPC Antenna which permanently attached, and the best case gain of the antenna is 1.31 dBi. It complies with the standard requirement.

11. TEST SETUP & EUT PHOTOGRAPH

Please see the attachment for details.

---------- End of Report ----------