FCC Part 15E Test Report
FCC ID: 2BVRH-Y06

Applicant:	Chengdu Yingmiao Zhihui Education Technology Co., Ltd.
Address:	No.12, Building 1, No.66 Pingdong Road, Donglin Village, Deyuan Subdistrict, Pidu District, Chengdu, Sichuan Province, P.R.China
Manufacturer:	Chengdu Yingmiao Zhihui Education Technology Co., Ltd.
Address:	No.12, Building 1, No.66 Pingdong Road, Donglin Village, Deyuan Subdistrict, Pidu District, Chengdu, Sichuan Province, P.R.China
Product Name:	Tracing Projector
Trade Mark:	N/A
Model Number:	Y06, Y6, LY06, LY600, Y220, LY220, S6, S06, S600, LS6, LS06, LS600, MT06, MT600, MT220
Date of Receipt:	Apr. 13, 2026
Test Date:	Apr. 13, 2026 - May. 13, 2026
Date of Report:	May. 13, 2026
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 PART 15 E 15.407 ANSI C63.10-2020+Cor 1-2023
Test Result:	Pass
Report Number:	DLE-260413032R

Prepared (Test Engineer):	Alisa Song
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. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15 (15.407) , Subpart E			
Standard Section	Test Item	Judgment	Remark
15.207	Conducted Emission	PASS	
15.407(b), 15.209 15.205	Radiated Spurious Emission	PASS	
15.407 (b)	Band Edge Emission	PASS	
15.407 (a)	Average Output Power	PASS	
15.407 (a)	Power Spectral Density	PASS	
15.403(i) 15.407(e)	26dB bandwidth and 99%dB Bandwidth	PASS	
15.407(g)	Frequency Stability	PASS	
15.407(c)	Transmission in case of Absence of Information	PASS	
15.203	Antenna Requirement	PASS	

NOTE:

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

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

1.1 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement **y** ± **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	Conducted Emission Test	±2.56dB
2	RF power,conducted	±0.42dB
3	Spurious emissions,conducted	±2.76dB
4	All emissions,radiated(<1G)	±3.65dB
5	All emissions,radiated(>1G)	±4.89dB
6	Temperature	±0.5°C
7	Humidity	±2%
8	Bandwidth	±0.2MHz
9	Power Spectral Density	±2.45dBm
10	Frequency Stability	±0.3MHz
11	DUTY CYCLE	±0.53dB

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Product Name:	Tracing Projector
Trade Mark:	N/A
Model Number:	Y06, Y6, LY06, LY600, Y220, LY220, S6, S06, S600, LS6, LS06, LS600, MT06, MT600, MT220
Test Model:	Y06
Model Difference:	All models are same as the samples except model name and appearance color, they have the same structure and circuit.
Operation Frequency:	5180-5240MHz(802.11a/n (HT20)) 5190-5230MHz(802.11n (HT40))
Channel numbers:	See channel list
Channel separation:	5MHz
Modulation technology:	64QAM, 16QAM, QPSK, BPSK for OFDM
Rate of Transmitter	802.11a: 6Mbps, 9Mbps, 12Mbps, 18Mbps, 24Mbps, 36Mbps, 48Mbps,54Mbps 802.11n: Up to 500Mbps 802.11ac: up to 867Mbps
Antenna Type:	FPC Antenna
Antenna gain:	3.25 dBi
Power supply:	DC 15V from adapter
Adapter:	MODEL:YCZX-1502400 Input: 100-240V~ 50/60Hz 1.2A Output: 15.0V⎓2.4A 36.0W

Note:

1.For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2.The EUT's all information provided by client.

2. Channel List

Channel List for 802.11a/n(HT20)			
Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	44	5220
40	5200	48	5240

Channel List for 802.11n(HT40)			
Channel	Frequency (MHz)	Channel	Frequency (MHz)
38	5190	46	5230

2.2 DESCRIPTION OF TEST MODES

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

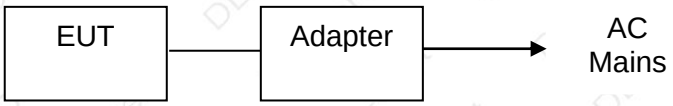
Band 1:

Pretest Mode	Modulation	Channel
Mode 1	802.11a	CH36
Mode 2		CH44
Mode 3		CH48
Mode 4	802.11n HT20	CH36
Mode 5		CH44
Mode 6		CH48
Mode 7	802.11n HT40	CH38
Mode 8		CH46

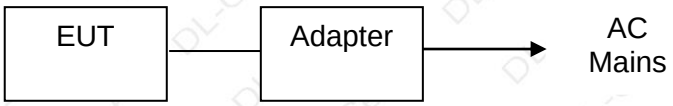
Note: (1) The measurements are performed at the highest, middle, lowest available channels.
(2) During the test, the test voltage was tuned from 85% to 115% of the nominal rated supply voltage, and und that the worst case was under the nominal rated supply condition. So the report just shows that ondition's data.
(3) For the two items of conducted disturbance at the power supply end and space radiation below 1GHz, all modes have undergone pre-tests. The report only shows the worst test results of mode 6.

2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Radiated Spurious Emission Test



Power Line Conducted Emission Test



2.4 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	Model/Type No.	Series No.	Note

Item	Shielded Type	Ferrite Core	Length	Note

Note:

(1) For detachable type I/O cable should be specified the length in cm in『Length』column.

2.5 TABLE OF PARAMETERS OF TEST SOFTWARE SETTING

During testing, channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the end product.

Max output power Setting				
Test software Version	Test program: Trolink_TL8731BUUA1			
Mode	802.11a	802.11n HT20	802.11n HT40	802.11ac HT20/HT40/HT80
Data Rate	6Mbps	MSC0	MSC0	MSC0
Power Setting of Softwave	60	60	66	66

2.6 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	Oct. 25, 2025	Oct. 24, 2026
2	Test Receiver (9kHz-7GHz)	R&S	ESRP7	101393	Oct. 25, 2025	Oct. 24, 2026
3	Bilog Antenna (30MHz-1GHz)	R&S	VULB9162	00306	Oct. 25, 2025	Oct. 24, 2026
4	Horn Antenna (1GHz-18GHz)	Schwarzbeck	BBHA9120D	02139	Oct. 25, 2025	Oct. 24, 2026
5	Horn Antenna (18GHz-40GHz)	A.H. Systems	SAS-574	588	Oct. 25, 2025	Oct. 24, 2026
6	Amplifier (9KHz-6GHz)	Schwarzbeck	BBV9743B	00153	Oct. 25, 2025	Oct. 24, 2026
7	Amplifier (1GHz-18GHz)	EMEC	EM01G8GA	00270	Oct. 25, 2025	Oct. 24, 2026
8	Amplifier (18GHz-40GHz)	Quanjuda	DLE-161	97	Oct. 25, 2025	Oct. 24, 2026
9	Loop Antenna (9KHz-30MHz)	Schwarzbeck	FMZB1519B	00014	Oct. 25, 2025	Oct. 24, 2026
10	RF cables1 (9kHz-1GHz)	ChengYu	966	004	Oct. 25, 2025	Oct. 24, 2026
11	RF cables2 (1GHz-40GHz)	ChengYu	966	003	Oct. 25, 2025	Oct. 24, 2026
12	Antenna connector	Florida RF Labs	N/A	RF 01#	Oct. 25, 2025	Oct. 24, 2026
13	Power probe	KEYSIGHT	U2021XA	MY55210018	Oct. 25, 2025	Oct. 24, 2026
14	Signal Analyzer 9kHz-26.5GHz	Agilent	N9020A	MY55370280	Oct. 25, 2025	Oct. 24, 2026
15	Test Receiver 20kHz-40GHz	R&S	ESU 40	100376	Oct. 25, 2025	Oct. 24, 2026
16	D.C. Power Supply	LongWei	PS-305D	010964729	Oct. 25, 2025	Oct. 24, 2026
17	Temperature & humidity chamber	Tenglong	TL-HWHS-1000-40	TL-20230113-01	Oct. 25, 2025	Oct. 24, 2026

Conduction Test equipment

Item	Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
1	843 Shielded Room	ChengYu	843 Room	843	Nov. 05, 2023	Nov. 04, 2026
2	EMI Receiver	R&S	ESR	101421	Oct. 25, 2025	Oct. 24, 2026
3	LISN	R&S	ENV216	102417	Oct. 25, 2025	Oct. 24, 2026
4	843 Cable 1#	ChengYu	CE Cable	001	Oct. 25, 2025	Oct. 24, 2026

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

3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

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

Note:

(1) The tighter limit applies at the band edges.

(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

3.1.2 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.

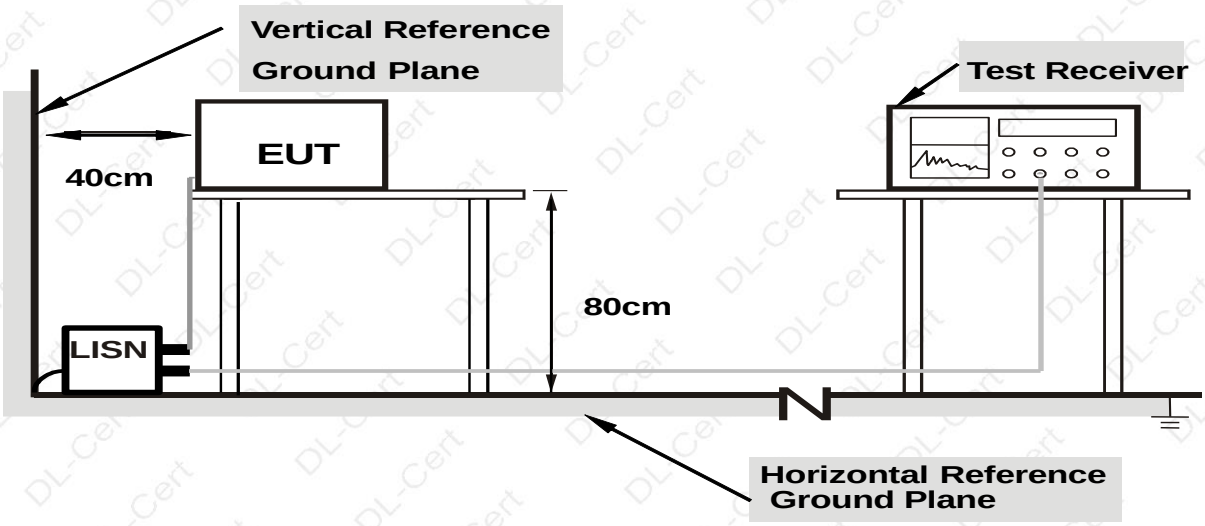
d. LISN at least 80 cm from nearest part of EUT chassis.

e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.1.3 DEVIATION FROM TEST STANDARD

No deviation

3.1.4 TEST SETUP



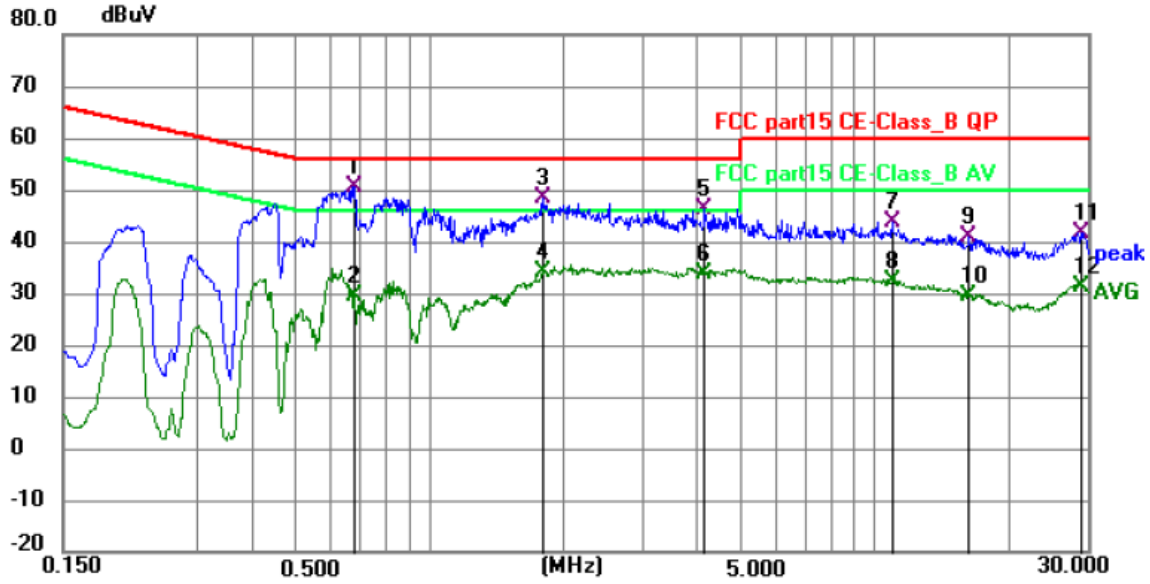
Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

3.1.5 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.

3.1.6 TEST RESULTS

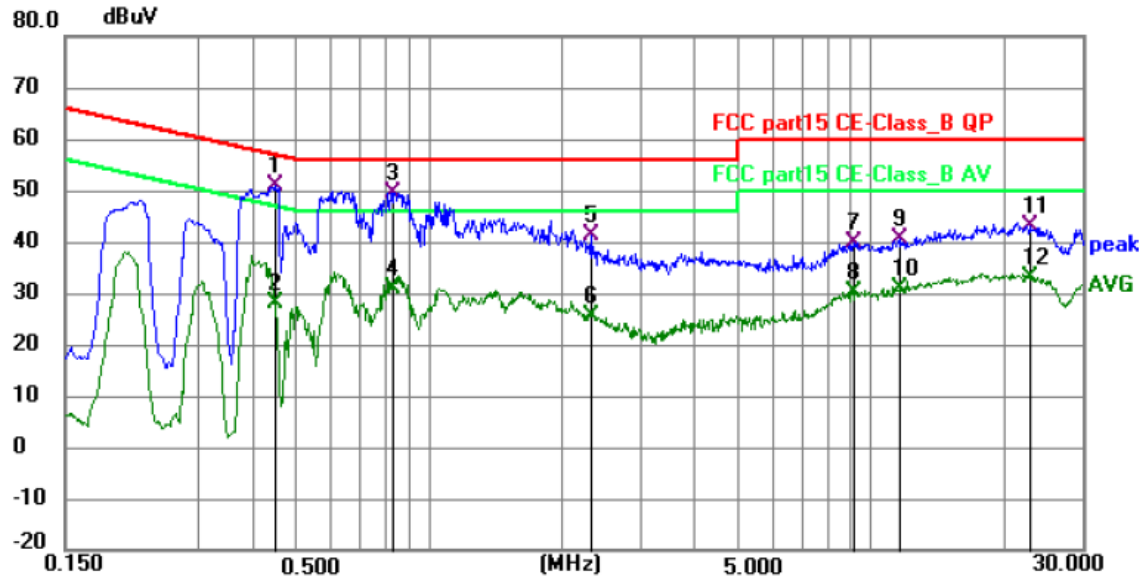
Temperature:	25 ℃	Relative Humidity:	54%
Pressure:	1010hPa	Phase :	L
Test Voltage :	AC 120V/60Hz	Test Mode:	Mode 6



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1 *	0.6764	40.70	9.86	50.56	56.00	-5.44	QP	P	
2	0.6764	19.70	9.86	29.56	46.00	-16.44	AVG	P	
3	1.7970	38.48	9.85	48.33	56.00	-7.67	QP	P	
4	1.7970	24.25	9.85	34.10	46.00	-11.90	AVG	P	
5	4.1550	36.29	10.09	46.38	56.00	-9.62	QP	P	
6	4.1550	23.72	10.09	33.81	46.00	-12.19	AVG	P	
7	10.9320	33.50	10.21	43.71	60.00	-16.29	QP	P	
8	10.9320	22.09	10.21	32.30	50.00	-17.70	AVG	P	
9	16.2780	30.50	10.23	40.73	60.00	-19.27	QP	P	
10	16.2780	19.11	10.23	29.34	50.00	-20.66	AVG	P	
11	28.9272	31.29	10.38	41.67	60.00	-18.33	QP	P	
12	28.9272	20.96	10.38	31.34	50.00	-18.66	AVG	P	

Remark:
Margin = Limit – Level, Correct Factor = Cable lose + LISN insertion loss, Level= Reading + Correct factor

Temperature:	25 ℃	Relative Humidity:	54%
Pressure:	1010hPa	Phase :	N
Test Voltage :	AC 120V/60Hz	Test Mode:	Mode 6



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1 *	0.4470	40.85	9.95	50.80	56.93	-6.13	QP	P	
2	0.4470	18.04	9.95	27.99	46.93	-18.94	AVG	P	
3	0.8340	39.69	9.88	49.57	56.00	-6.43	QP	P	
4	0.8340	20.93	9.88	30.81	46.00	-15.19	AVG	P	
5	2.3370	31.19	9.95	41.14	56.00	-14.86	QP	P	
6	2.3370	15.73	9.95	25.68	46.00	-20.32	AVG	P	
7	9.1272	29.50	10.20	39.70	60.00	-20.30	QP	P	
8	9.1272	19.81	10.20	30.01	50.00	-19.99	AVG	P	
9	11.6022	30.20	10.21	40.41	60.00	-19.59	QP	P	
10	11.6022	20.74	10.21	30.95	50.00	-19.05	AVG	P	
11	22.9965	32.84	10.26	43.10	60.00	-16.90	QP	P	
12	22.9965	22.65	10.26	32.91	50.00	-17.09	AVG	P	

Remark:

Margin = Limit – Level, Correct Factor = Cable lose + LISN insertion loss, Level= Reading + Correct factor

3.2 RADIATED EMISSION MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS (Frequency Range 9kHz-1000MHz)

In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (micorvolts/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

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)
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.
The provisions of §15.205 apply to intentional radiators operating under this section,15.205 Restricted bands of operation

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
10.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(2)
13.36-13.41			

FREQUENCY (MHz)	Limit (dBuV/m) (at 3M)	
	PEAK	AVERAGE
Above 1000	74	54

Notes:

(1) The limit for radiated test was performed according to FCC PART 15C.

(2) The tighter limit applies at the band edges.

(3) Emission level (dBuV/m)=20log Emission level (uV/m).

(4) Measurement was performed at an antenna to the closed point of EUT distance of meters.

(5) Only spurious frequency is permitted to locate within the Restricted Bands specified in provision of 15.205, and the emissions located in restricted bands also comply with 15.209 limit.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	40GHz
RB / VB (emission in restricted band)	1 MHz / 1 MHz for Peak, 1 MHz / 10Hz for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

3.2.2 TEST PROCEDURE

Below 1GHz test procedure as below:

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical 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 antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) 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 Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

Above 1GHz test procedure as below:

g. Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 metre to 1.5 metre.
h. Test the EUT in the lowest channel, the middle channel, the Highest channel

Note:

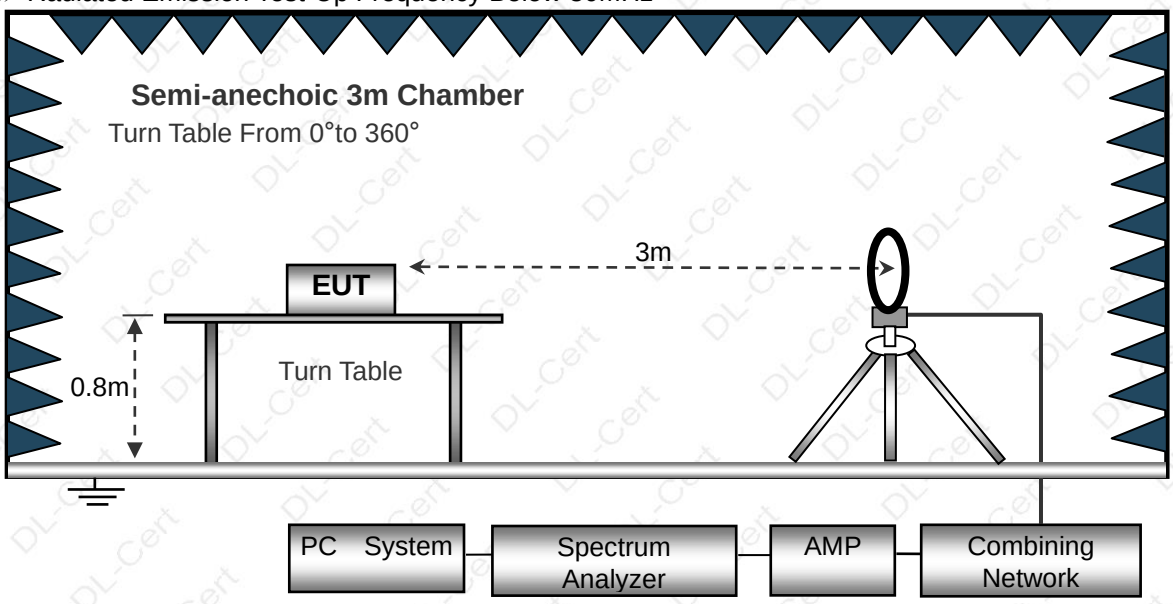
Both horizontal and vertical antenna polarities were tested
and performed pretest to three orthogonal axis. The worst case emissions were reported

3.2.3 DEVIATION FROM TEST STANDARD

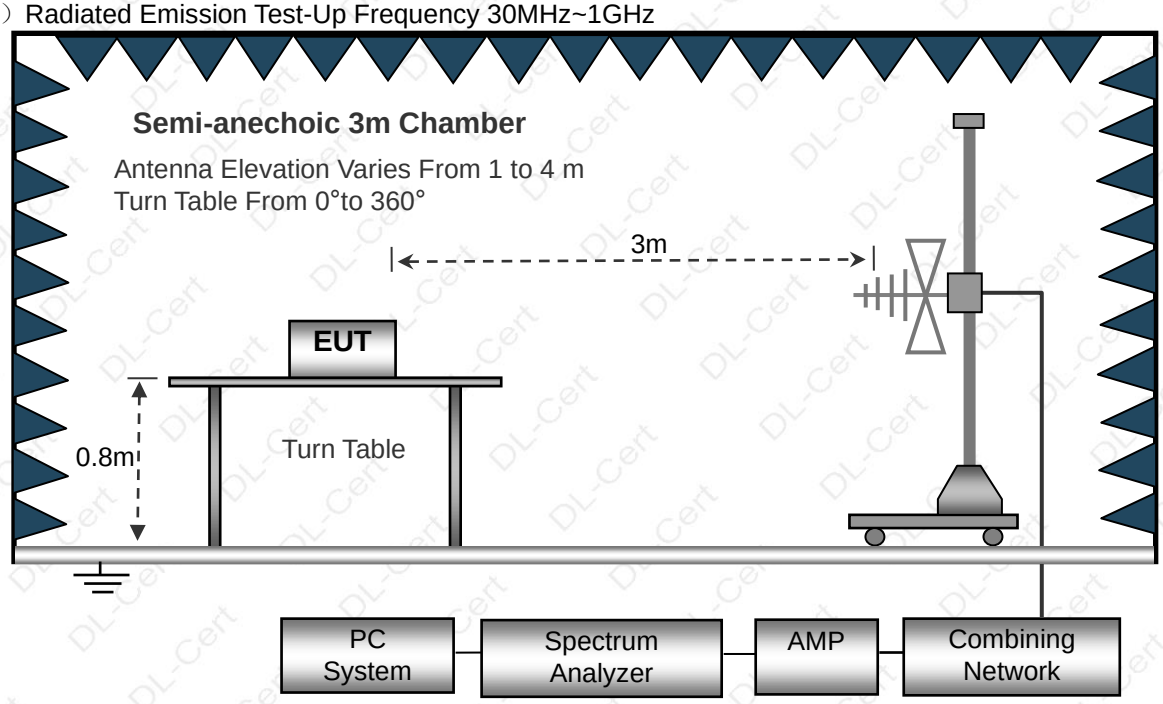
No deviation

3.2.4 TEST SETUP

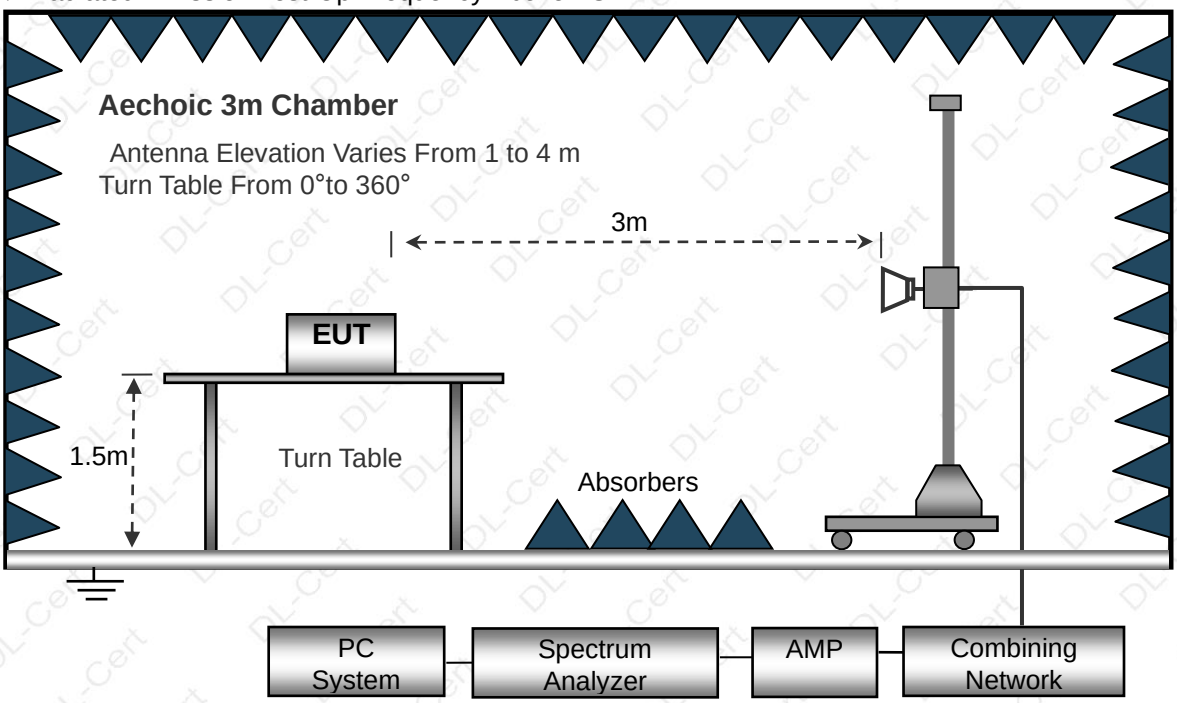
（A）Radiated Emission Test-Up Frequency Below 30MHz



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



（C）Radiated Emission Test-Up Frequency Above 1GHz



3.2.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

3.2.6 TEST RESULTS (Between 9KHz – 30 MHz)

Temperature:	20℃	Relative Humidtity:	48%
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	Mode 6	Polarization :	--

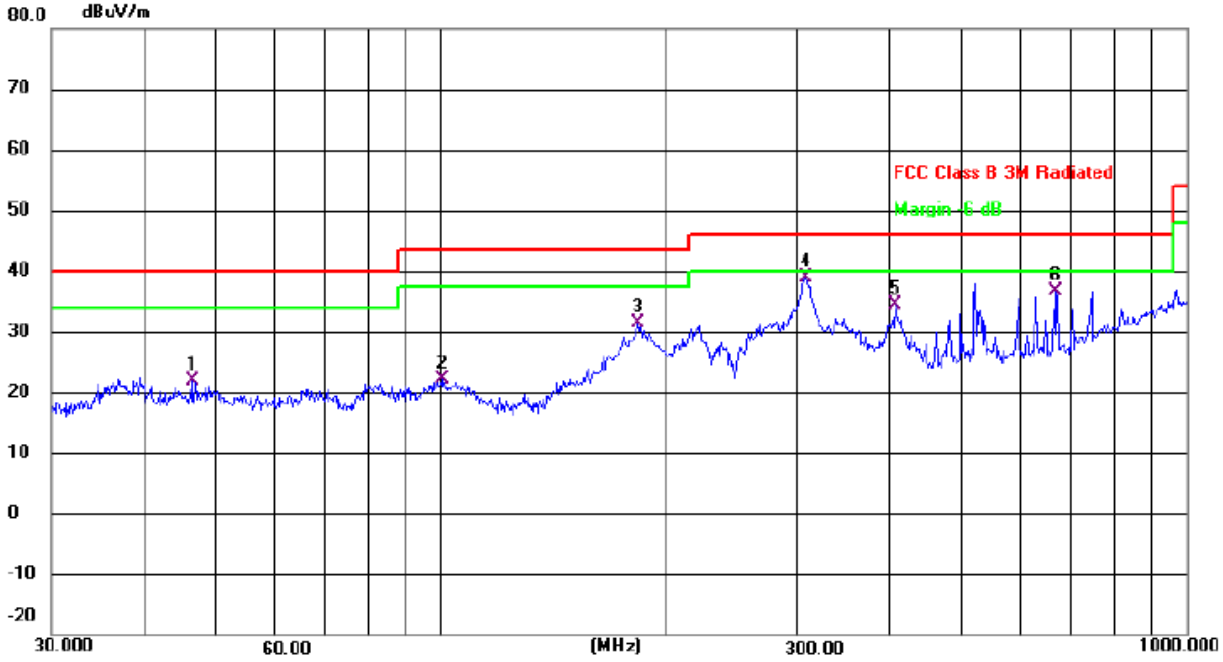
Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	PASS
--	--	--	--	PASS

NOTE:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
Distance extrapolation factor =40 log (specific distance/test distance)(dB);
Limit line = specific limits(dBuv) + distance extrapolation factor.

3.2.7 TEST RESULTS (Between 30MHz – 1GHz)

Temperature:	26℃	Relative Humidity:	54%
Pressure:	1010 hPa	Polarization :	Horizontal
Test Voltage :	AC 120V/60Hz		
Test Mode :	Mode 6		



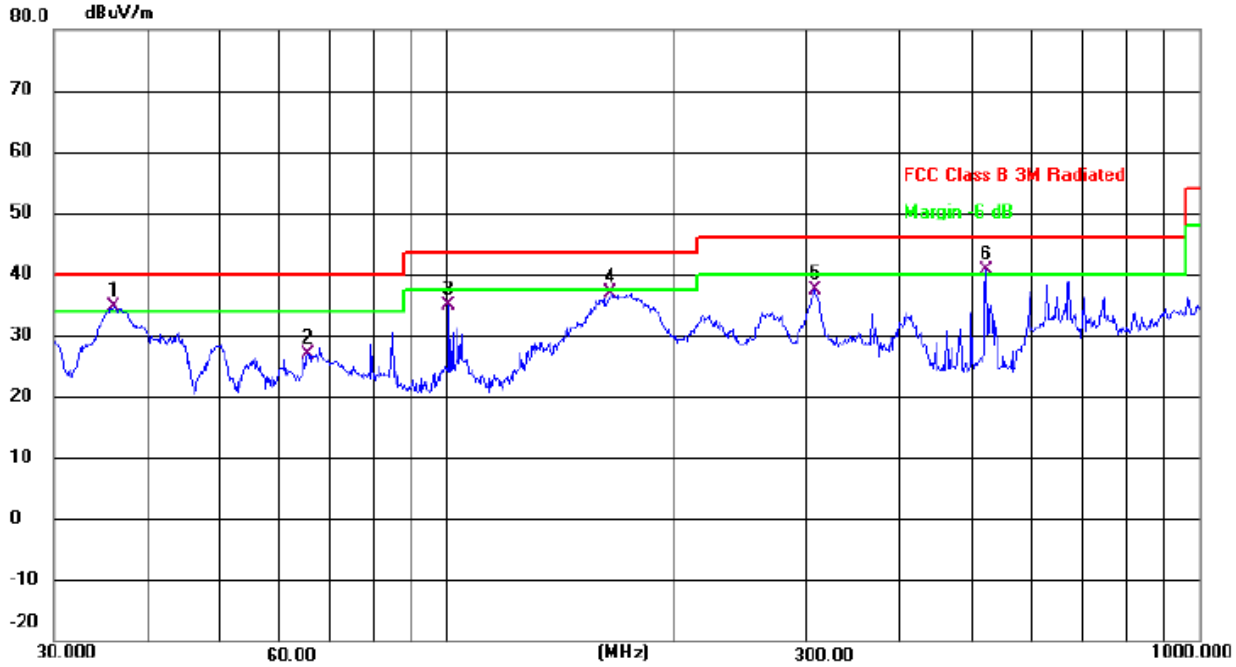
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		46.3402	28.82	-7.03	21.79	40.00	-18.21	QP	
2		100.5806	31.38	-9.20	22.18	43.50	-21.32	QP	
3		183.8437	41.49	-10.17	31.32	43.50	-12.18	QP	
4	*	307.8312	44.76	-5.80	38.96	46.00	-7.04	QP	
5		406.0880	37.94	-3.48	34.46	46.00	-11.54	QP	
6		668.1422	35.11	1.46	36.57	46.00	-9.43	QP	

Remark:

Correct Factor = Cable loss + Antenna factor – Preamplifier;

Level = Reading Level + Correct Factor; Margin = Level - Limit;

Temperature:	26℃	Relative Humidity:	54%
Pressure:	1010 hPa	Polarization :	Vertical
test voltage :	AC 120V/60Hz		
Test Mode :	Mode 6		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	36.0007	43.67	-9.08	34.59	40.00	-5.41	QP	
2		65.3431	36.65	-9.79	26.86	40.00	-13.14	QP	
3		100.5806	43.98	-9.20	34.78	43.50	-8.72	QP	
4		165.4866	48.35	-11.52	36.83	43.50	-6.67	QP	
5		307.8312	43.30	-5.80	37.50	46.00	-8.50	QP	
6	!	520.8881	41.98	-1.43	40.55	46.00	-5.45	QP	

Remark:

Correct Factor = Cable loss + Antenna factor – Preamplifier;

Level = Reading Level + Correct Factor; Margin = Level - Limit;

3.2.8 TEST RESULTS (1ghz~40ghZ)

802.11a band 1

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:5180									
V	10360	56.25	49.05	15.3	37.39	59.89	68.2	-8.31	PK
V	10360	41.48	49.05	15.3	37.39	45.12	54	-8.88	AV
V	15540	52.52	49.16	15.27	40.45	59.08	74	-14.92	PK
V	15540	39.21	49.16	15.27	40.45	45.77	54	-8.23	AV
H	10360	56.78	49.05	15.3	37.39	60.42	68.2	-7.78	PK
H	10360	40.63	49.05	15.3	37.39	44.27	54	-9.73	AV
H	15540	51.41	49.16	15.27	40.45	57.97	74	-16.03	PK
H	15540	38.28	49.16	15.27	40.45	44.84	54	-9.16	AV
operation frequency:5200									
V	10400	57.63	49.09	15.34	37.42	61.3	68.2	-6.90	PK
V	10400	39.41	49.09	15.34	37.42	43.08	54	-10.92	AV
V	15600	52.25	49.18	15.29	40.47	58.83	74	-15.17	PK
V	15600	38.63	49.18	15.29	40.47	45.21	54	-8.79	AV
H	10400	56.52	49.09	15.34	37.42	60.19	68.2	-8.01	PK
H	10400	39.14	49.09	15.34	37.42	42.81	54	-11.19	AV
H	15600	53.36	49.18	15.29	40.47	59.94	74	-14.06	PK
H	15600	38.74	49.18	15.29	40.47	45.32	54	-8.68	AV
operation frequency:5240									
V	10480	58.25	49.11	15.37	37.46	61.97	68.2	-6.23	PK
V	10480	39.41	49.11	15.37	37.46	43.13	54	-10.87	AV
V	15720	53.25	49.21	15.34	40.51	59.89	74	-14.11	PK
V	15720	38.35	49.21	15.34	40.51	44.99	54	-9.01	AV
H	10480	57.58	49.11	15.37	31.31	55.15	68.2	-13.05	PK
H	10480	45.41	49.11	15.37	31.31	42.98	54	-11.02	AV
H	15720	54.56	49.21	15.34	40.51	61.2	74	-12.80	PK
H	15720	37.22	49.21	15.34	40.51	43.86	54	-10.14	AV

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.

802.11n HT20

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:5180									
V	10360	56.31	49.05	15.3	37.39	59.95	68.2	-8.25	PK
V	10360	38.48	49.05	15.3	37.39	42.12	54	-11.88	AV
V	15540	52.63	49.16	15.27	40.45	59.19	74	-14.81	PK
V	15540	38.72	49.16	15.27	40.45	45.28	54	-8.72	AV
H	10360	56.85	49.05	15.3	37.39	60.49	68.2	-7.71	PK
H	10360	39.41	49.05	15.3	37.39	43.05	54	-10.95	AV
H	15540	51.46	49.16	15.27	40.45	58.02	74	-15.98	PK
H	15540	38.21	49.16	15.27	40.45	44.77	54	-9.23	AV
operation frequency:5200									
V	10400	56.63	49.09	15.34	37.42	60.3	68.2	-7.90	PK
V	10400	39.68	49.09	15.34	37.42	43.35	54	-10.65	AV
V	15600	52.41	49.18	15.29	40.47	58.99	74	-15.01	PK
V	15600	38.43	49.18	15.29	40.47	45.01	54	-8.99	AV
H	10400	55.25	49.09	15.34	37.42	58.92	68.2	-9.28	PK
H	10400	40.58	49.09	15.34	37.42	44.25	54	-9.75	AV
H	15600	53.41	49.18	15.29	40.47	59.99	74	-14.01	PK
H	15600	39.63	49.18	15.29	40.47	46.21	54	-7.79	AV
operation frequency:5240									
V	10480	57.85	49.11	15.37	37.46	61.57	68.2	-6.63	PK
V	10480	40.41	49.11	15.37	37.46	44.13	54	-9.87	AV
V	15720	52.26	49.21	15.34	40.51	58.9	74	-15.10	PK
V	15720	38.25	49.21	15.34	40.51	44.89	54	-9.11	AV
H	10480	57.53	49.11	15.37	31.31	55.1	68.2	-13.10	PK
H	10480	44.58	49.11	15.37	31.31	42.15	54	-11.85	AV
H	15720	51.52	49.21	15.34	40.51	58.16	74	-15.84	PK
H	15720	39.73	49.21	15.34	40.51	46.37	54	-7.63	AV

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.

802.11n HT40

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:5190									
V	10380	56.48	49.07	15.33	37.41	60.15	68.2	-8.05	PK
V	10380	39.41	49.07	15.33	37.41	43.08	54	-10.92	AV
V	15570	52.83	49.17	15.28	40.46	59.4	74	-14.60	PK
V	15570	38.25	49.17	15.28	40.46	44.82	54	-9.18	AV
H	10380	56.86	49.07	15.33	37.41	60.53	68.2	-7.67	PK
H	10380	40.41	49.07	15.33	37.41	44.08	54	-9.92	AV
H	15570	52.62	49.17	15.28	40.46	59.19	74	-14.81	PK
H	15570	38.43	49.17	15.28	40.46	45	54	-9.00	AV
operation frequency:5230									
V	10460	57.25	49.11	15.37	37.46	60.97	68.2	-7.23	PK
V	10460	39.53	49.11	15.37	37.46	43.25	54	-10.75	AV
V	15690	52.74	49.21	15.34	40.51	59.38	74	-14.62	PK
V	15690	38.76	49.21	15.34	40.51	45.4	54	-8.60	AV
H	10460	57.22	49.11	15.37	31.31	54.79	68.2	-13.41	PK
H	10460	44.26	49.11	15.37	31.31	41.83	54	-12.17	AV
H	15690	52.41	49.21	15.34	40.51	59.05	74	-14.95	PK
H	15690	39.63	49.21	15.34	40.51	46.27	54	-7.73	AV

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.

3.3 RADIATED BAND EMISSION MEASUREMENT

3.3.1 TEST REQUIREMENT:

15.407 (b)

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)
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.
The provisions of §15.205 apply to intentional radiators operating under this section,15.205 Restricted bands of operation

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
10.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(2)
13.36-13.41			

FREQUENCY (MHz)	Limit (dBuV/m) (at 3M)	
	PEAK	AVERAGE
Above 1000	74	54

Notes:

(1) The limit for radiated test was performed according to FCC PART 15C.

(2) The tighter limit applies at the band edges.

(3) Emission level (dBuV/m)=20log Emission level (uV/m).

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	5000MHz
Stop Frequency	5420MHz
RB / VB (emission in restricted band)	1 MHz / 1 MHz for Peak, 1 MHz / 10Hz for Average

3.3.2 TEST PROCEDURE

Above 1GHz test procedure as below:

a. 1. The EUT was placed on the top of a rotating table 0.1 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical 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 antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.
e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
g. Test the EUT in the lowest channel,the Highest channel

Note:

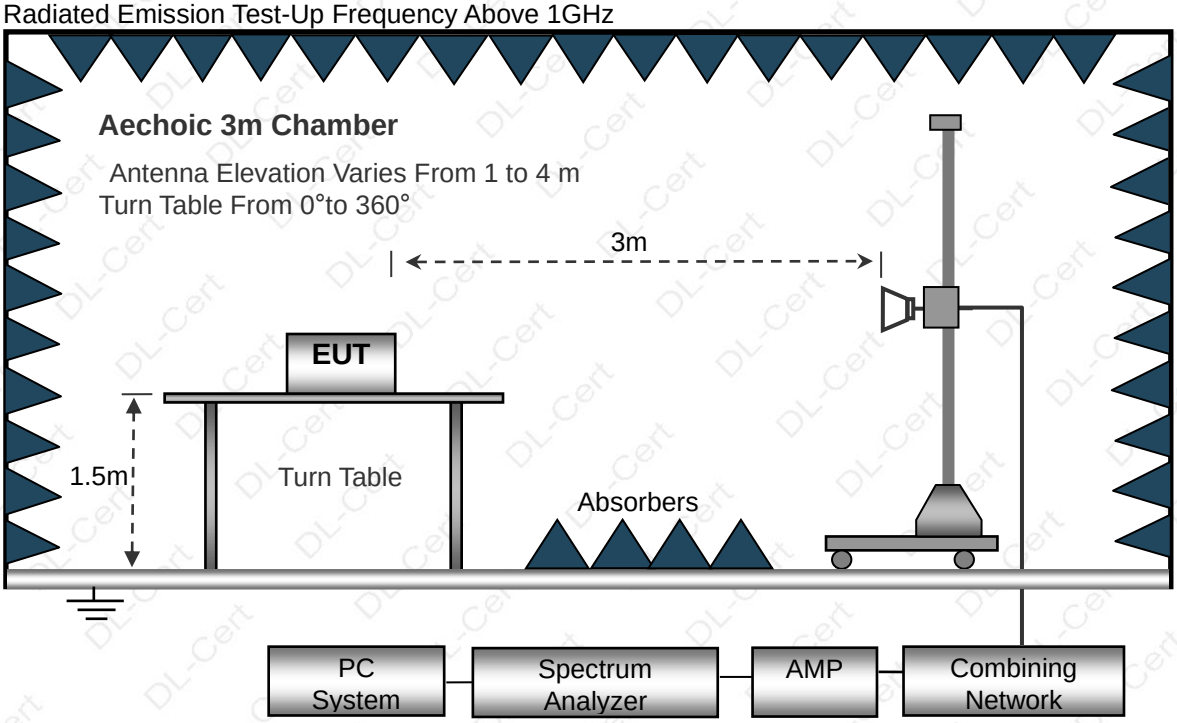
Both horizontal and vertical antenna polarities were tested
and performed pretest to three orthogonal axis. The worst case emissions were reported

3.3.3 DEVIATION FROM TEST STANDARD

No deviation

3.3.4 TEST SETUP

Radiated Emission Test-Up Frequency Above 1GHz



3.3.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

3.3.6 TEST RESULT

802.11a

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:5180									
V	5150	53.25	49.12	15.6	37.34	57.07	74	-16.93	PK
V	5150	39.41	49.12	15.6	37.34	43.23	54	-10.77	AV
V	5145	54.46	49.19	15.24	40.43	60.94	74	-13.06	PK
V	5145	36.74	49.19	15.24	40.43	43.22	54	-10.78	AV
H	5150	52.45	49.12	15.6	37.34	56.27	74	-17.73	PK
H	5150	37.13	49.12	15.6	37.34	40.95	54	-13.05	AV
H	5145	54.44	49.19	15.24	40.43	60.92	74	-13.08	PK
H	5145	33.41	49.19	15.24	40.43	39.89	54	-14.11	AV
operation frequency:5240									
V	5350	53.23	49.13	15.32	37.46	56.88	74	-17.12	PK
V	5350	35.58	49.13	15.32	37.46	39.23	54	-14.77	AV
V	5370	53.52	49.24	15.36	40.51	60.15	74	-13.85	PK
V	5370	32.63	49.24	15.36	40.51	39.26	54	-14.74	AV
H	5350	52.74	49.13	15.32	31.31	50.24	74	-23.76	PK
H	5350	40.21	49.13	15.32	31.31	37.71	54	-16.29	AV
H	5370	52.65	49.24	15.36	40.51	59.28	74	-14.72	PK
H	5370	32.47	49.24	15.36	40.51	39.1	54	-14.9	AV

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.

802.11n HT20

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:5180									
V	5150	51.52	49.12	15.6	37.34	55.34	74	-18.66	PK
V	5150	33.23	49.12	15.6	37.34	37.05	54	-16.95	AV
V	5145	51.52	49.19	15.24	40.43	58	74	-16	PK
V	5145	33.63	49.19	15.24	40.43	40.11	54	-13.89	AV
H	5150	51.52	49.12	15.6	37.34	55.34	74	-18.66	PK
H	5150	33.28	49.12	15.6	37.34	37.1	54	-16.9	AV
H	5145	50.41	49.19	15.24	40.43	56.89	74	-17.11	PK
H	5145	32.33	49.19	15.24	40.43	38.81	54	-15.19	AV
operation frequency:5240									
V	5350	53.21	49.13	15.32	37.46	56.86	74	-17.14	PK
V	5350	34.36	49.13	15.32	37.46	38.01	54	-15.99	AV
V	5370	50.25	49.24	15.36	40.51	56.88	74	-17.12	PK
V	5370	33.63	49.24	15.36	40.51	40.26	54	-13.74	AV
H	5350	54.34	49.13	15.32	31.31	51.84	74	-22.16	PK
H	5350	36.85	49.13	15.32	31.31	34.35	54	-19.65	AV
H	5370	51.36	49.24	15.36	40.51	57.99	74	-16.01	PK
H	5370	33.41	49.24	15.36	40.51	40.04	54	-13.96	AV

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.

802.11n HT40

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
operation frequency:5190									
V	5150	52.58	49.12	15.6	37.39	56.45	74	-17.55	PK
V	5150	35.63	49.12	15.6	37.39	39.5	54	-14.5	AV
V	5145	51.12	49.19	15.24	40.45	57.62	74	-16.38	PK
V	5145	34.47	49.19	15.24	40.45	40.97	54	-13.03	AV
H	5150	52.52	49.12	15.6	37.39	56.39	74	-17.61	PK
H	5150	34.53	49.12	15.6	37.39	38.4	54	-15.6	AV
H	5145	50.41	49.19	15.24	40.45	56.91	74	-17.09	PK
H	5145	35.25	49.19	15.24	40.45	41.75	54	-12.25	AV
operation frequency:5230									
V	5350	53.63	49.13	15.34	37.46	57.3	74	-16.7	PK
V	5350	37.38	49.13	15.34	37.46	41.05	54	-12.95	AV
V	5370	50.54	49.24	15.35	40.51	57.16	74	-16.84	PK
V	5370	36.41	49.24	15.35	40.51	43.03	54	-10.97	AV
H	5350	54.63	49.13	15.34	31.31	52.15	74	-21.85	PK
H	5350	41.52	49.13	15.34	31.31	39.04	54	-14.96	AV
H	5370	52.87	49.24	15.35	40.51	59.49	74	-14.51	PK
H	5370	36.21	49.24	15.35	40.51	42.83	54	-11.17	AV

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. AVERAGE OUTPUT POWER

4.1 APPLIED PROCEDURES / LIMIT

For mobile and portable 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.

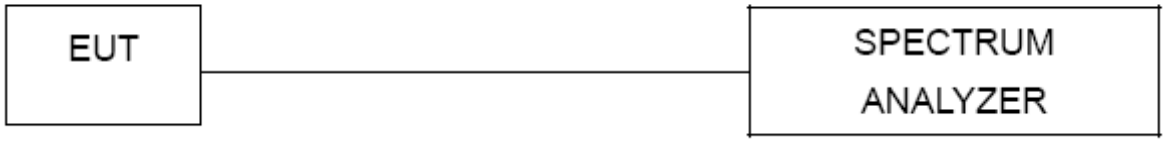
4.1.1 TEST PROCEDURE

Method SA-2 uses trace averaging across ON and OFF times of the EUT transmissions, followed by duty cycle correction. The procedure for this method is as follows:
a)Measure the duty cycle D of the transmitter output signal as described in 12.2.
b)Set span to encompass the entire 26 dB EBW or 99% OBW of the signal.
c)Set RBW=1 MHz.
d)Set VBW ≥3 MHz.
e)Number of points in sweep ≥ [2 x span / RBW]. (This gives bin-to-bin spacing ≤ RBW / 2, so that narrowband signals are not lost between frequency bins.)
f)Sweep time = auto.
g) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.
h) Do not use sweep triggering. Allow the sweep to "free run."
i) Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed such that the average accurately represents the true average over the ON and OFF periods of the transmitter.
j)Compute power by integrating the spectrum across the 26 dB EBW or 99% OBW of the signal using the instrument's band power measurement function with band limits set equal to the EBW or OBW band edges. If the instrument does not have a band power function, then sum the spectrum levels (in power units) at 1MHz intervals extending across the 26 dB EBW or 99% OBW of the spectrum.
k) Add [10 log (1 / D)], where D is the duty cycle, to the measured power to compute the average power during the actual transmission times (because the measurement represents an average over both the ON and ofF times of the transmission). For example, add [10 log (1 / 0.25)] = 6 dB if the duty cycle is 25%.

4.1.2 DEVIATION FROM STANDARD

No deviation.

4.1.3 TEST SETUP



4.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

4.1.5 TEST RESULTS

Temperature:	25 ℃	Relative Humidity:	60%
Pressure:	1012 hPa	Test Voltage :	AC 120V/60Hz

Please see ANNEX 2 test data.

5. POWER SPECTRAL DENSITY TEST

5.1 APPLIED PROCEDURES / LIMIT

In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.

Spectrum Parameters	Setting
Attenuation	Auto
Span Frequency	= the frequency band of operation
RB	RBW ≥ 1MHz for band 1 RBW ≥ 510KHz for band 4
VB	VBW ≥ 3RBW
Detector	RMS (i.e., power averaging).
Trace	Max Hold
Sweep Time	Auto

5.1.1 TEST PROCEDURE

1. Place the EUT on the table and set it in transmitting mode.
2. The testing follows FCC KDB 789033 D02.
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).
we test all antennas, the antenna 1 was worst mode and the data recording in the report.
7. Duty factor Reference is made to the test results in Section 7.1.5.

Method SA-2 uses trace averaging across ON and OFF times of the EUT transmissions, followed by duty cycle correction. The procedure for this method is as follows:
a)Measure the duty cycle D of the transmitter output signal as described in 12.2.
b)Set span to encompass the entire 26 dB EBW or 99% OBW of the signal.
c)Set RBW=1 MHz.
d)Set VBW≥3 MHz.
e)Number of points in sweep ≥ [2 x span / RBW]. (This gives bin-to-bin spacing ≤RBW / 2, so that narrowband signals are not lost between frequency bins.)
f) Sweep time = auto.
g) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.
h) Do not use sweep triggering. Allow the sweep to “free run."
i) Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed such that the average accurately represents the true average over the ON and oFF periods of the transmitter.
j. Use the peak search function on the instrument to find the peak of the spectrum.
k. Make the following adjustments to the peak value of the spectrum, if applicable:
1) If method SA-2 or SA-2A was used, then add [10 log (1 / D)], where D is the duty cycle, to the peak of the spectrum.
2) If method SA-3A was used and the linear mode was used in step h) of 12.3.2.7, add 1 dB to the final result to compensate for the difference between linear averaging and power averaging.
l. The result is the PPSD.

5.1.2 DEVIATION FROM STANDARD

No deviation.

5.1.3 TEST SETUP

5.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

5.1.5 TEST RESULTS

Please see ANNEX 2 test data.

6. 26DB&99% BANDWIDTH TEST

6.1 APPLIED PROCEDURES / LIMIT

The 26 dB bandwidth is used to determine the conducted power limits. There is no limit bandwidth for U-NII-1, U-NII-2-A and U-NII-2-C.

6.1.1 TEST PROCEDURE

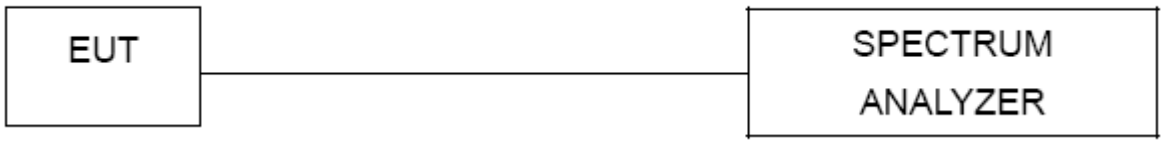
26dB Bandwidth	
Spectrum Parameters	Setting
RBW	approximately 1% of the emission bandwidth
VBW	>RBW
Span	30MHz(20MHz Bandwidth mode) 60MHz(40MHz Bandwidth mode) 120MHz(80MHz Bandwidth mode)
Sweep Time	Auto
Detector	Peak
Trace Mode	Max Hold

99% Occupied Bandwidth	
Spectrum Parameters	Setting
RBW	1% to 5% of the OBW
VBW	Approximately three times the RBW
Span	between 1.5 times and 5.0 times the OBW
Sweep Time	Auto
Detector	Peak
Trace Mode	Max Hold

6.1.2 DEVIATION FROM STANDARD

No deviation.

6.1.3 TEST SETUP



6.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

6.1.5 TEST RESULTS

Please see ANNEX 2 test data.

7. DUTY CYCLE TEST SIGNAL

7.1 APPLIED PROCEDURES / LIMIT

Pre-analysis Check: While conducting average power measurement, duty cycle of each mode shall be checked to ensure its duty cycle in order to compensate for the loss due to insufficient ratio of duty cycle. All duty cycle is pre-scanned, and result as obtained below shows only the most representative ones where duty cycle is conducted as the given transmission with given virtual operation that expresses the percentage.

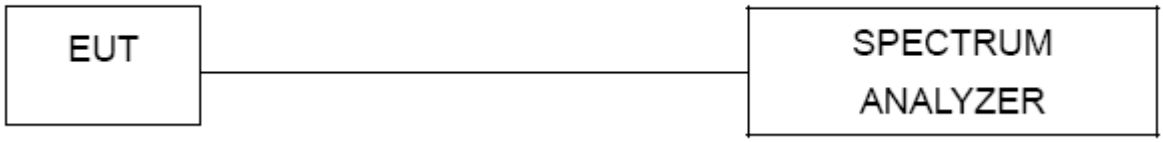
7.1.1 TEST PROCEDURE

1. Set RBW≥EBW if possible, otherwise, set RBW to the largest available value.
2. Set VBW≥RBW.
3. Detector = Peak.
4. Sweep = auto couple.
5. Allow the trace to stabilize.
6. Span=0

7.1.2 DEVIATION FROM STANDARD

No deviation.

7.1.3 TEST SETUP



7.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

7.1.5 TEST RESULTS

Please see ANNEX 2 test data.

8. FREQUENCY STABILITY

8.1 APPLIED PROCEDURES / LIMIT

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

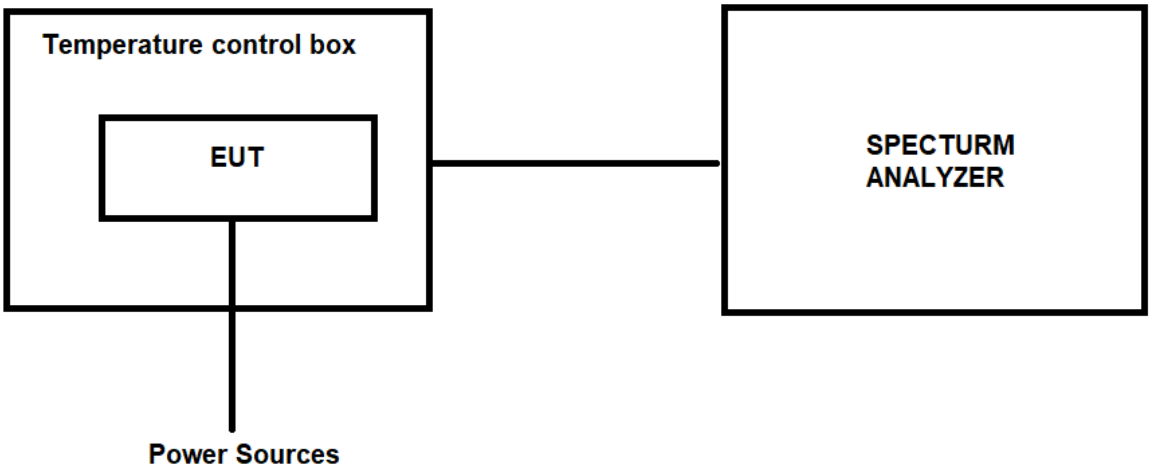
8.1.1 TEST PROCEDURE

1. The EUT was placed inside temperature chamber and powered and powered by nominal DC voltage.
2. Set EUT as normal operation.
3. Turn the EUT on and couple its output to spectrum.
4. Turn the EUT off and set the chamber to the highest temperature specified.
5. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT and measure the operating frequency.
6. Repeat step with the temperature chamber set to the lowest temperature.

8.1.2 DEVIATION FROM STANDARD

No deviation.

8.1.3 TEST SETUP



8.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

8.1.5 TEST RESULTS

Test Voltage	Test Temp.	Measured Frequency (MHz)	Spectrum Frequency (MHz)			Δ Frequency (PPM)		
			802.11a	802.11n HT20	/	802.11a	802.11n HT20	/
AC 132V	-20℃	5180	5180.0259	5180.0237	/	5.0000	4.5753	/
		5220	5220.0299	5220.0273	/	5.7280	5.2299	/
		5240	5240.0274	5240.0250	/	5.2290	4.7710	/
AC 108V		5180	5180.0365	5180.0334	/	7.0463	6.4479	/
		5220	5220.0240	5220.0220	/	4.5977	4.2146	/
		5240	5240.0408	5240.0373	/	7.7863	7.1183	/
AC 120V	25℃	5180	5180.0351	5180.0321	/	6.7761	6.1969	/
		5220	5220.0295	5220.0269	/	5.6513	5.1533	/
		5240	5240.0372	5240.0340	/	7.0992	6.4885	/
AC 132V	50℃	5180	5180.0284	5180.0259	/	5.4826	5.0000	/
		5220	5220.0240	5220.0220	/	4.5977	4.2146	/
		5240	5240.0370	5240.0338	/	7.0611	6.4504	/
AC 108V		5180	5180.0299	5180.0273	/	5.7722	5.2703	/
		5220	5220.0370	5220.0338	/	7.0881	6.4751	/
		5240	5240.0285	5240.0260	/	5.4389	4.9618	/

Test Voltage	Test Temp.	Measured Frequency (MHz)	Spectrum Frequency (MHz)		Δ Frequency (PPM)	
			802.11n HT40	/	802.11n HT40	/
AC 132V	-20℃	5190	5190.0263	/	5.0674	/
		5230	5230.0304	/	5.8126	/
AC 108V		5190	5190.0278	/	5.3565	/
		5230	5230.0371	/	7.0937	/
AC 120V	25℃	5190	5190.0244	/	4.7013	/
		5230	5230.0414	/	7.9159	/
AC 132V	50℃	5190	5190.0356	/	6.8593	/
		5230	5230.0299	/	5.7170	/
AC 108V		5190	5190.0377	/	7.2640	/
		5230	5230.0288	/	5.5067	/

9. TRANSMISSION IN THE ABSENCE OF DATA

9.1 STANDARD REQUIREMENT

According to §15.407(c)

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met.

9.2 TEST RESULT

Pass.

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure.

10. ANTENNA REQUIREMENT

10.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

10.2 EUT ANTENNA

The EUT antenna is FPC antenna, It comply with the standard requirement.

11. TEST SEUUP PHOTO

Reference to the appendix I for details.

12. EUT PHOTO

Reference to the appendix II for details.

※※※※※ END OF REPORT ※※※※※