



FCC Part 15E Test Report

FCC ID: 2A4DV-A1332

Applicant: HUNAN ETOE Technology Co., Ltd
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Address: District, Changsha

Manufacturer: HUNAN ETOE Technology Co., Ltd
Room 603, Building 3, Zone A, Jindaoyuan, NO.169, Huizhi Zhong Road, High-tech
Address: District, Changsha

EUT: PROJECTOR

Trade Mark: ETOE

Model Number: A1332, A1331

Date of Receipt: Oct. 13, 2022

Test Date: Oct. 13, 2022 - Jan. 18, 2023

Date of Report: Jan. 18, 2023

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Applicable Standards: FCC PART 15 E 15.407
ANSI C63.10:2013

Test Result: Pass

Report Number: DL-20221027009-3E

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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	Page
1. SUMMARY OF TEST RESULTS	5
1.1 MEASUREMENT UNCERTAINTY	5
2. GENERAL INFORMATION	6
2.1 GENERAL DESCRIPTION OF EUT	6
2.2 DESCRIPTION OF TEST MODES	8
2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	9
2.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)	9
2.5 TABLE OF PARAMETERS OF TEST SOFTWARE SETTING	9
2.6 EQUIPMENTS LIST FOR ALL TEST ITEMS	10
3. EMC EMISSION TEST	12
3.1 CONDUCTED EMISSION MEASUREMENT	12
3.1.1 POWER LINE CONDUCTED EMISSION LIMITS	12
3.1.2 TEST PROCEDURE	12
3.1.3 DEVIATION FROM TEST STANDARD	12
3.1.4 TEST SETUP	13
3.1.5 EUT OPERATING CONDITIONS	13
3.1.6 TEST RESULTS	13
3.2 RADIATED EMISSION MEASUREMENT	16
3.2.1 RADIATED EMISSION LIMITS	16
3.2.2 TEST PROCEDURE	17
3.2.3 DEVIATION FROM TEST STANDARD	17
3.2.4 TEST SETUP	17
3.2.5 EUT OPERATING CONDITIONS	18
3.2.6 TEST RESULTS (BETWEEN 9KHZ – 30 MHZ)	19
3.2.7 TEST RESULTS (BETWEEN 30MHZ – 1GHZ)	20
3.2.8 TEST RESULTS (1GHZ~40GHZ)	22
3.3 RADIATED BAND EMISSION MEASUREMENT	42
3.3.1 TEST REQUIREMENT:	42
3.3.2 TEST PROCEDURE	42
3.3.3 DEVIATION FROM TEST STANDARD	42
3.3.4 TEST SETUP	42
3.3.5 EUT OPERATING CONDITIONS	42
4. PEAK OUTPUT POWER	47
4.1 APPLIED PROCEDURES / LIMIT	47
4.1.1 TEST PROCEDURE	47
4.1.2 DEVIATION FROM STANDARD	47
4.1.3 TEST SETUP	47



Table of Contents	Page
4.1.4 EUT OPERATION CONDITIONS	47
4.1.5 TEST RESULTS	48
5 . POWER SPECTRAL DENSITY TEST	63
5.1 APPLIED PROCEDURES / LIMIT	63
5.1.1 TEST PROCEDURE	63
5.1.2 DEVIATION FROM STANDARD	63
5.1.3 TEST SETUP	63
5.1.4 EUT OPERATION CONDITIONS	63
5.1.5 TEST RESULTS	64
6 . 26DB&99% BANDWIDTH TEST	79
6.1 APPLIED PROCEDURES / LIMIT	79
6.1.1 TEST PROCEDURE	79
6.1.2 DEVIATION FROM STANDARD	79
6.1.3 TEST SETUP	79
6.1.4 EUT OPERATION CONDITIONS	80
6.1.5 TEST RESULTS	80
7 . DUTY CYCLE TEST SIGNAL	93
7.1 APPLIED PROCEDURES / LIMIT	93
7.1.1 TEST PROCEDURE	93
7.1.2 DEVIATION FROM STANDARD	93
7.1.3 TEST SETUP	93
7.1.4 EUT OPERATION CONDITIONS	93
7.1.5 TEST RESULTS	94
8 . FREQUENCY STABILITY	99
8.1 APPLIED PROCEDURES / LIMIT	99
8.1.1 TEST PROCEDURE	99
8.1.2 DEVIATION FROM STANDARD	99
8.1.3 TEST SETUP	99
8.1.4 EUT OPERATION CONDITIONS	99
8.1.5 TEST RESULTS	100
9 . TRANSMISSION IN THE ABSENCE OF DATA	102
9.1 STANDARD REQUIREMENT	102
9.2 TEST RESULT	102
10 . ANTENNA REQUIREMENT	102
10.1 STANDARD REQUIREMENT	102
10.2 EUT ANTENNA	102
11 . TEST SEUUP PHOTO	103



Table of Contents

Page

12 . EUT PHOTO

105

**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	Radiated Spurious Emission	PASS	
15.407 (b)	Band Edge Emission	PASS	
15.407 (a)	Peak Output Power	PASS	
15.407 (a)	Power Spectral Density	PASS	
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

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	Conducted Emission Test	$\pm 2.56\text{dB}$
2	RF power,conducted	$\pm 0.42\text{dB}$
3	Spurious emissions,conducted	$\pm 2.76\text{dB}$
4	All emissions,radiated(<1G)	$\pm 3.65\text{dB}$
5	All emissions,radiated(>1G)	$\pm 4.89\text{dB}$
6	Temperature	$\pm 0.5^{\circ}\text{C}$
7	Humidity	$\pm 2\%$
8	Bandwidth	$\pm 0.2\text{MHz}$
9	Power Spectral Density	$\pm 2.45\text{dBm}$
10	Frequency Stability	$\pm 0.3\text{MHz}$
11	DUTY CYCLE	$\pm 0.53\text{dB}$

**GENERAL INFORMATION****GENERAL DESCRIPTION OF EUT**

Product Name:	PROJECTOR
Trademark	ETOE
Model No.:	A1332, A1331
Test Model:	A1332
Model Difference	All samples are the same except the mode names and appearance color.
Operation Frequency:	5180-5240, 5745-5825MHz(802.11a/n/ac(HT20)) 5190-5230, 5755-5795MHz(802.11n/ac(HT40)) 5210MHz , 5775MHz (802.11ac(HT80))
Channel numbers:	See channel list
Channel separation:	20MHz/40MHz/80MHz
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
Antenna Type:	PCB antenna
Antenna gain:	Left :3dbi(Max) Right : 3dbi(Max)
Power supply:	DC 19V from adapter
Adapter:	NO.:1 Model: NSA90ED-19047400 Input: 100-240V~ 50/60Hz 2.0A Output: 19.0V $\overline{\text{---}}$ 4.74A 90.0W NO.:2 Model: NSA120EC-19063200 Input: 100-240V~ 50/60Hz 2.0A Output: 19.0V $\overline{\text{---}}$ 6.32A 120.0W NO.:3 Model: MX120Z-19005200 Input: 100-240V~ 50-60Hz 3.0A Output: 19.0V $\overline{\text{---}}$ 5.2A 98.8W

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.
3. The MIMO mode only support internal PCB antenna1 and PCB antenna2 the 802.11n/ac mode, the Directional Gain=3 dBi+10log(2)= 6.01dBi.



2. Channel List

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

Channel List for 802.11a/n(HT20)/ac(HT20)			
Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	161	5805
153	5765	165	5825
157	5785		

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

Channel List for 802.11n(HT40)/ac(HT40)			
Channel	Frequency (MHz)	Channel	Frequency (MHz)
151	5755	159	5795

Channel List for 802.11ac(HT80)			
Channel	Frequency (MHz)	Channel	Frequency (MHz)
42	5210	/	/

Channel List for 802.11ac(HT80)			
Channel	Frequency (MHz)	Channel	Frequency (MHz)
155	5775	/	/



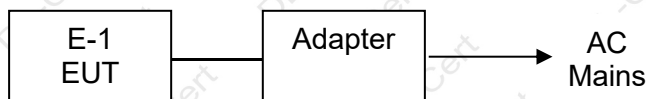
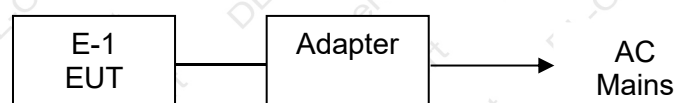
DESCRIPTION OF TEST MODES

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.

Description			
Pretest Mode	Channel	Band 1	Band 4
Mode 1	802.11a/n/acHT20	CH36, CH44, CH48	CH149, CH157, CH165
Mode 2	802.11n/acHT40	CH38, CH46	CH151, CH159
Mode 3	802.11acHT80	CH42	CH155
Mode 4	Other	Link Mode	
Mode 5	MIMO Mode		
For Conducted Emission			
Final Test Mode	Description		
Other	Link Mode		

For Radiated Emission			
Pretest Mode	Channel	Band 1	Band 4
Mode 1	802.11a/n/acHT20	CH36, CH44, CH48	CH149, CH157, CH165
Mode 2	802.11n/acHT40	CH38, CH46	CH151, CH159
Mode 3	802.11acHT80	CH42	CH155
Mode 4	Other	Link Mode	
Mode 5	MIMO Mode		

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 found that the worst case was under the nominal rated supply condition. So the report just shows that condition's data.

**BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED****Radiated Spurious Emission Test****Conducted Spurious Emission Test****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
E-1	PROJECTOR	A1332	N/A	EUT

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.

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: test_v1.01			
Mode	802.11a	802.11n HT20	802.11n HT40	802.11ac HT20/HT40/HT80
Data Rate	6Mbps	MSC0	MSC0	MSC0
Power Setting of Software	60	60	66	66

**EQUIPMENTS LIST FOR ALL TEST ITEMS**

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

Item	Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
1	Spectrum Analyzer (9kHz-26.5GHz)	Agilent	E4408B	MY50140780	Nov. 06, 2021	Nov. 05, 2022
					Nov. 05, 2022	Nov. 04, 2023
2	Test Receiver (9kHz-7GHz)	R&S	ESRP7	101393	Nov. 06, 2021	Nov. 05, 2022
					Nov. 05, 2022	Nov. 04, 2023
3	Bilog Antenna (30MHz-1GHz)	R&S	VULB9162	00306	Nov. 06, 2021	Nov. 05, 2022
					Nov. 05, 2022	Nov. 04, 2023
4	Horn Antenna (1GHz-18GHz)	Schwarzbeck	BBHA9120D	02139	Nov. 06, 2021	Nov. 05, 2022
					Nov. 05, 2022	Nov. 04, 2023
5	Horn Antenna (18GHz-40GHz)	A.H. Systems	SAS-574	588	Nov. 06, 2021	Nov. 05, 2022
					Nov. 05, 2022	Nov. 04, 2023
6	Amplifier (9KHz-6GHz)	Schwarzbeck	BBV9743B	00153	Nov. 06, 2021	Nov. 05, 2022
					Nov. 05, 2022	Nov. 04, 2023
7	Amplifier (1GHz-18GHz)	EMEC	EM01G8GA	00270	Nov. 06, 2021	Nov. 05, 2022
					Nov. 05, 2022	Nov. 04, 2023
8	Amplifier (18GHz-40GHz)	Quanjuda	DLE-161	97	Nov. 06, 2021	Nov. 05, 2022
					Nov. 05, 2022	Nov. 04, 2023
9	Loop Antenna (9KHz-30MHz)	Schwarzbeck	FMZB1519B	00014	Nov. 06, 2021	Nov. 05, 2022
					Nov. 05, 2022	Nov. 04, 2023
10	RF cables1 (9kHz-1GHz)	ChengYu	966	004	Nov. 06, 2021	Nov. 05, 2022
					Nov. 05, 2022	Nov. 04, 2023
11	RF cables2 (1GHz-40GHz)	ChengYu	966	003	Nov. 06, 2021	Nov. 05, 2022
					Nov. 05, 2022	Nov. 04, 2023
12	Antenna connector	Florida RF Labs	N/A	RF 01#	Nov. 06, 2021	Nov. 05, 2022
					Nov. 05, 2022	Nov. 04, 2023
13	Power probe	KEYSIGHT	U2021XA	MY55210018	Nov. 06, 2021	Nov. 05, 2022
					Nov. 05, 2022	Nov. 04, 2023
14	Signal Analyzer 9kHz-26.5GHz	Agilent	N9020A	MY55370280	Nov. 06, 2021	Nov. 05, 2022
					Nov. 05, 2022	Nov. 04, 2023
15	Test Receiver 20kHz-40GHz	R&S	ESU 40	100376	Nov. 06, 2021	Nov. 05, 2022
					Nov. 05, 2022	Nov. 04, 2023
16	D.C. Power Supply	LongWei	PS-305D	010964729	Nov. 06, 2021	Nov. 05, 2022
					Nov. 05, 2022	Nov. 04, 2023



Conduction Test equipment

Item	Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
1	843 Shielded Room	ChengYu	843 Room	843	Nov. 25, 2019	Nov. 24, 2022
					Sep. 20, 2022	Sep. 19, 2025
2	EMI Receiver	R&S	ESR	101421	Nov. 06, 2021	Nov. 05, 2022
					Nov. 05, 2022	Nov. 04, 2023
3	LISN	R&S	ENV216	102417	Nov. 06, 2021	Nov. 05, 2022
					Nov. 05, 2022	Nov. 04, 2023
4	843 Cable 1#	ChengYu	CE Cable	001	Nov. 06, 2021	Nov. 05, 2022
					Nov. 05, 2022	Nov. 04, 2023

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

**. EMC EMISSION TEST****CONDUCTED EMISSION MEASUREMENT****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

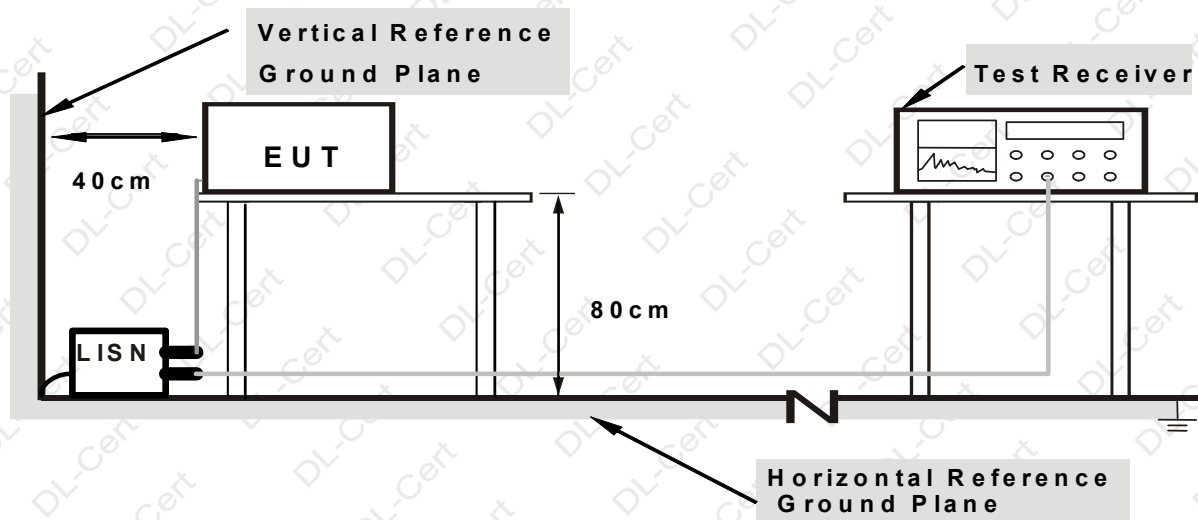
Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

TEST PROCEDURE

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

DEVIATION FROM TEST STANDARD

No deviation

**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

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.

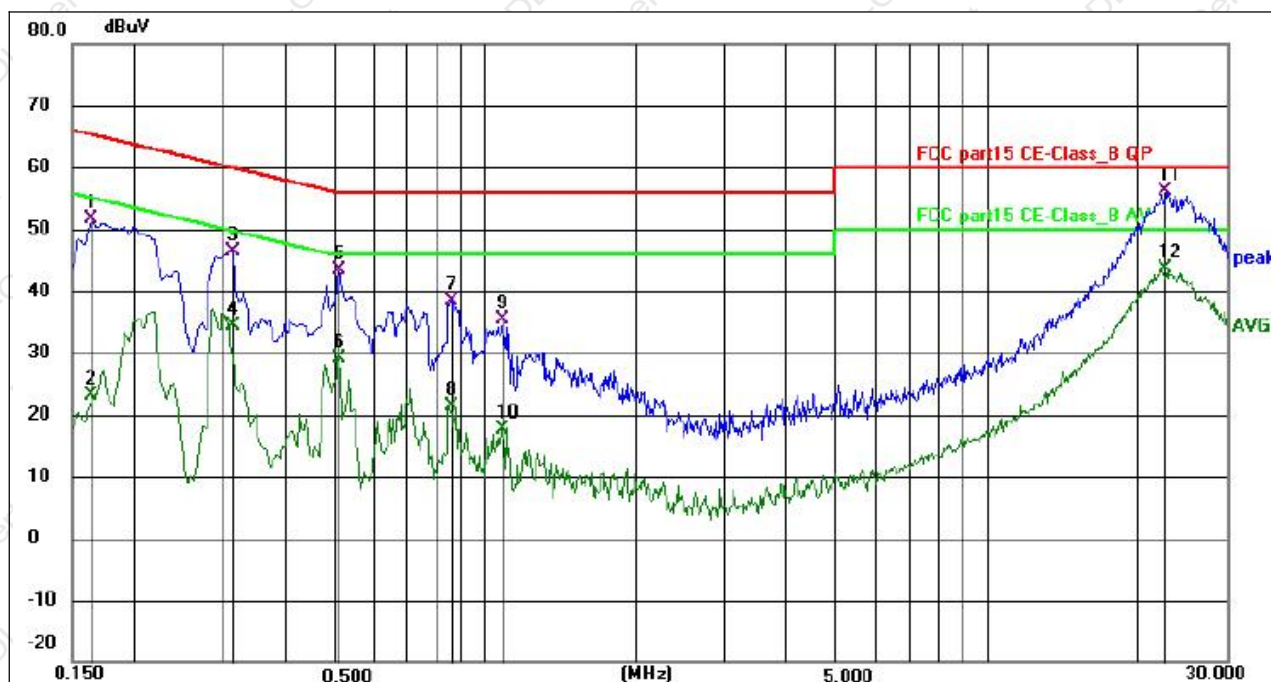
We pretest AC 120V and AC 230V, the worst voltage was AC 120V and the data recording in the report.

We pretest all adapter mode, the result only show the worst mode's data.

TEST RESULTS



Temperature:	25 °C	Relative Humidity:	54%
Pressure:	1010hPa	Phase :	L
Test Voltage :	AC 120V/60Hz	Test Mode:	Mode 4(Adapter NO.:2)



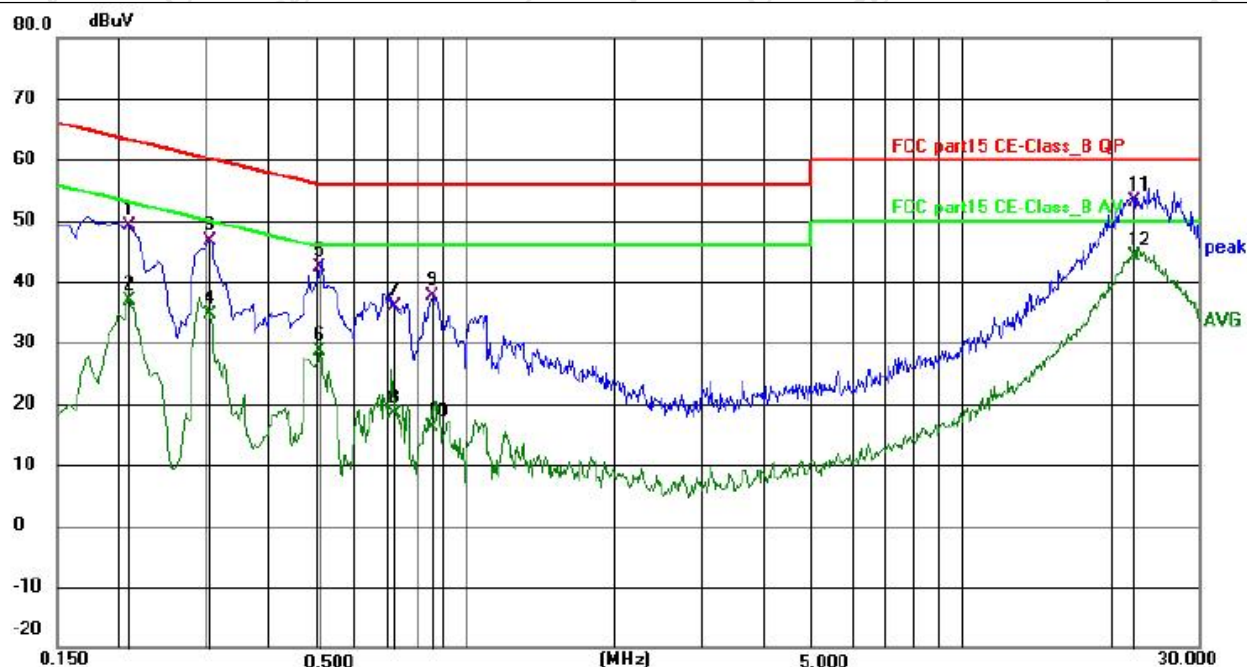
Remark:

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

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.163500	41.30	10.22	51.52	65.28	-13.76	QP	P	
2	0.163500	12.94	10.22	23.16	55.28	-32.12	AVG	P	
3	0.311900	37.36	9.01	46.37	59.92	-13.55	QP	P	
4	0.311900	25.45	9.01	34.46	49.92	-15.46	AVG	P	
5	0.510000	34.30	9.19	43.49	56.00	-12.51	QP	P	
6	0.510000	19.96	9.19	29.15	46.00	-16.85	AVG	P	
7	0.856500	29.09	9.33	38.42	56.00	-17.58	QP	P	
8	0.856500	12.05	9.33	21.38	46.00	-24.62	AVG	P	
9	1.076900	25.94	9.32	35.26	56.00	-20.74	QP	P	
10	1.076900	8.43	9.32	17.75	46.00	-28.25	AVG	P	
11 *	22.685800	45.15	10.91	56.06	60.00	-3.94	QP	P	
12	22.685800	32.66	10.91	43.57	50.00	-6.43	AVG	P	



Temperature:	25 °C	Relative Humidity:	54%
Pressure:	1010hPa	Phase :	N
Test Voltage :	AC 120V/60Hz	Test Mode:	Mode 4(Adapter NO.:2)



Remark:

 $\text{Margin} = \text{Limit} - \text{Level}$, $\text{Correct Factor} = \text{Cable lose} + \text{LISN insertion loss}$, $\text{Level} = \text{Reading} + \text{Correct factor}$

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.209400	40.27	8.87	49.14	63.23	-14.09	QP	P	
2	0.209400	28.09	8.87	36.96	53.23	-16.27	AVG	P	
3	0.305000	37.52	9.05	46.57	60.11	-13.54	QP	P	
4	0.305000	25.49	9.05	34.54	50.11	-15.57	AVG	P	
5	0.507300	33.11	9.37	42.48	56.00	-13.52	QP	P	
6	0.507300	19.14	9.37	28.51	46.00	-17.49	AVG	P	
7	0.715900	26.64	9.20	35.84	56.00	-20.16	QP	P	
8	0.715900	9.10	9.20	18.30	46.00	-27.70	AVG	P	
9	0.852700	28.27	9.30	37.57	56.00	-18.43	QP	P	
10	0.852700	6.81	9.30	16.11	46.00	-29.89	AVG	P	
11	22.180000	42.31	10.83	53.14	60.00	-6.86	QP	P	
12 *	22.180000	33.34	10.83	44.17	50.00	-5.83	AVG	P	

**RADIATED EMISSION MEASUREMENT****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 (micровolts/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)

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	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



TEST PROCEDURE

Below 1GHz test procedure as below:

- The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- 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.
- 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.
- The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- 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:

- 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(Above 18GHz the distance is 1 meter and table is 1.5 metre).
- Test the EUT in the lowest channel, the middle channel, the Highest channel

Note:

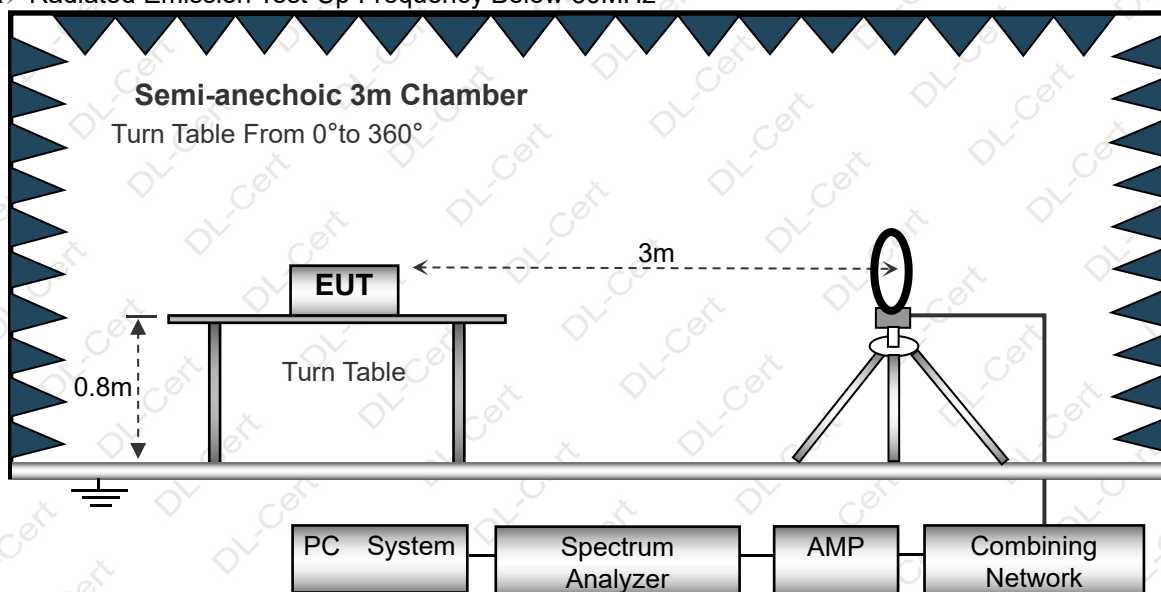
Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported. We pretest all adapter mode, the result only show the worst mode's data.

DEVIATION FROM TEST STANDARD

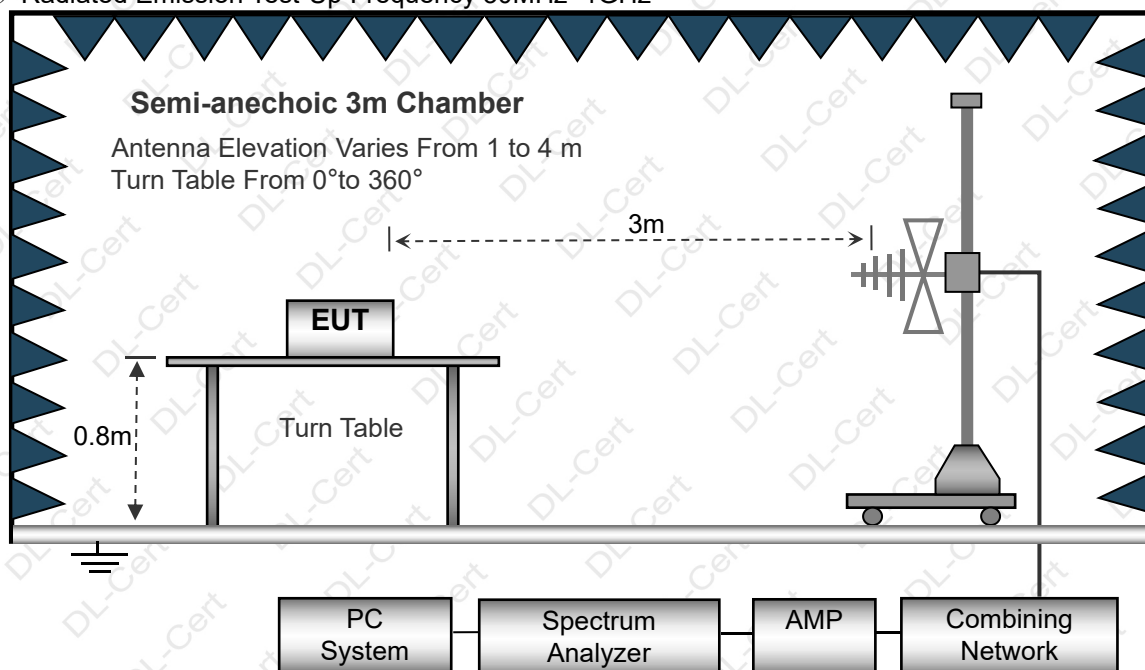
No deviation

TEST SETUP

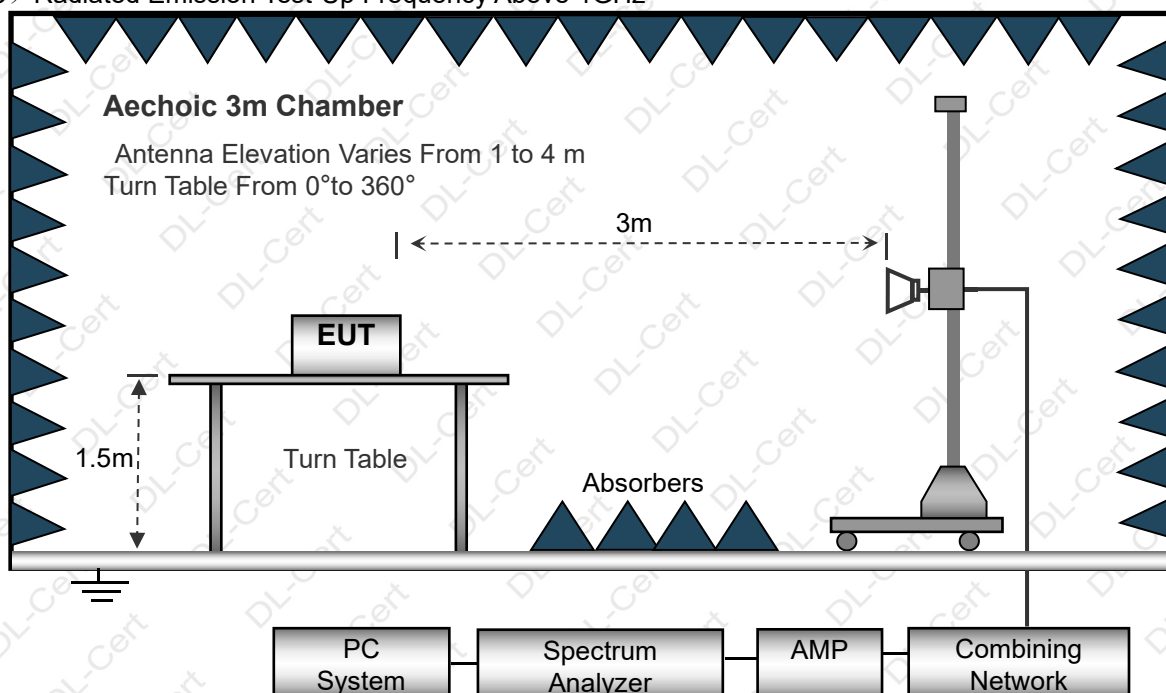
(A) Radiated Emission Test-Up Frequency Below 30MHz



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



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



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.

**TEST RESULTS (Between 9KHz – 30 MHz)**

Temperature:	20℃	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	Mode 4	Polarization :	--

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

NOTE:

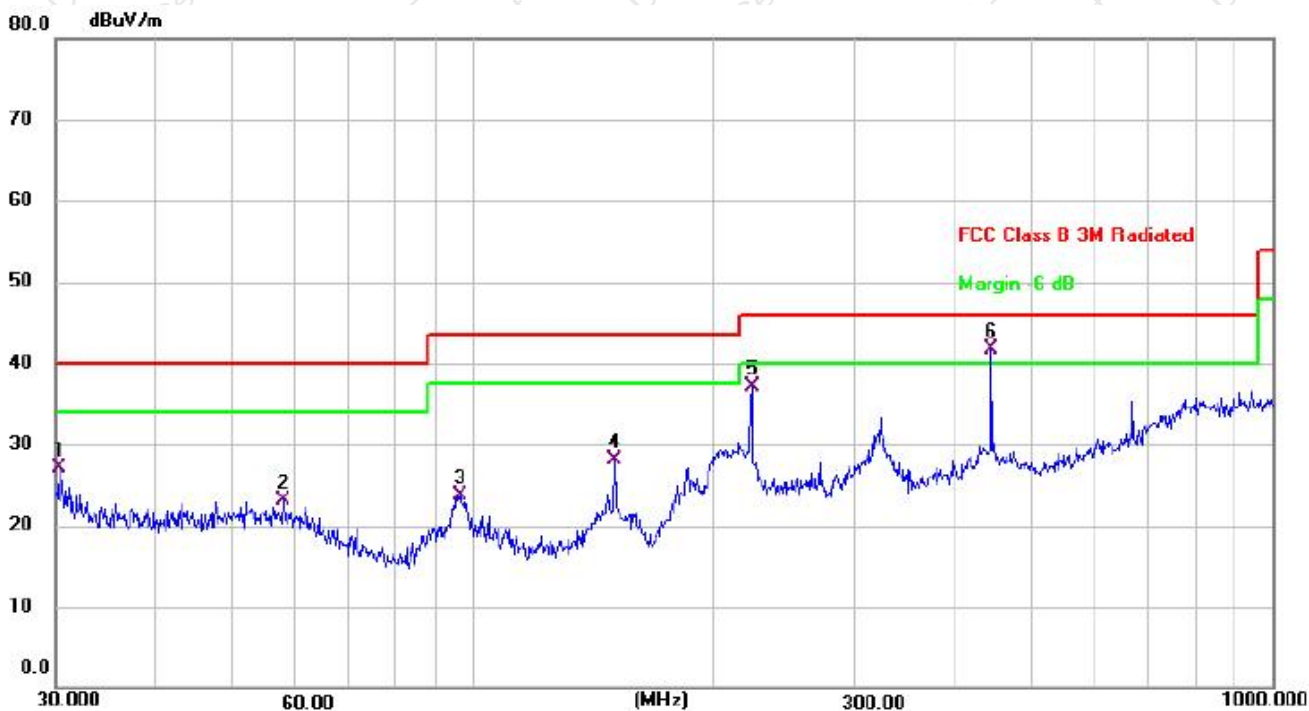
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor = $40 \log (\text{specific distance/test distance})$ (dB);

Limit line = specific limits(dBuV) + distance extrapolation factor.

**TEST RESULTS (Between 30MHz – 1GHz)**

Temperature:	26℃	Relative Humidity:	54%
Pressure:	1010 hPa	Polarization :	Horizontal(Adapter NO.:2)
Test Voltage :	AC 120V/60Hz		
Test Mode :	Mode 4		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	30.3173	42.12	-14.93	27.19	40.00	-12.81	QP
2	57.7962	35.39	-12.31	23.08	40.00	-16.92	QP
3	96.0986	37.86	-14.22	23.64	43.50	-19.86	QP
4	150.0108	44.44	-16.40	28.04	43.50	-15.46	QP
5	222.9502	49.20	-12.10	37.10	46.00	-8.90	QP
6 *	444.8514	49.34	-7.56	41.78	46.00	-4.22	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(Adapter NO.:2)
test voltage :	AC 120V/60Hz		
Test Mode :	Mode 4		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	30.0000	51.97	-15.00	36.97	40.00	-3.03	QP
2	42.3022	46.46	-12.48	33.98	40.00	-6.02	QP
3 !	86.8068	51.23	-16.05	35.18	40.00	-4.82	QP
4	180.0165	43.39	-14.56	28.83	43.50	-14.67	QP
5	222.9502	43.81	-12.10	31.71	46.00	-14.29	QP
6	668.1423	39.71	-3.54	36.17	46.00	-9.83	QP

Remark:

Correct Factor = Cable loss + Antenna factor – Preamplifier;

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

**TEST RESULTS (1ghz~40ghZ)**

802.11a band 1

We test all antenna's data, the data only show the antenna1 mode 1 worst mode.

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	56.68	49.05	15.3	37.39	60.32	74	-13.68	PK
V	10360	45.44	49.05	15.3	37.39	49.08	54	-4.92	AV
V	15540	56.37	49.16	15.27	40.45	62.93	74	-11.07	PK
V	15540	43.82	49.16	15.27	40.45	50.38	54	-3.62	AV
H	10360	56.13	49.05	15.3	37.39	59.77	74	-14.23	PK
H	10360	45.90	49.05	15.3	37.39	49.54	54	-4.46	AV
H	15540	54.28	49.16	15.27	40.45	60.84	74	-13.16	PK
H	15540	44.08	49.16	15.27	40.45	50.64	54	-3.36	AV
operation frequency:5200									
V	10400	57.32	49.09	15.34	37.42	60.99	74	-13.01	PK
V	10400	39.26	49.09	15.34	37.42	42.93	54	-11.07	AV
V	15600	59.27	49.18	15.29	40.47	65.85	74	-8.15	PK
V	15600	38.05	49.18	15.29	40.47	44.63	54	-9.37	AV
H	10400	56.18	49.09	15.34	37.42	59.85	74	-14.15	PK
H	10400	39.64	49.09	15.34	37.42	43.31	54	-10.69	AV
H	15600	59.27	49.18	15.29	40.47	65.85	74	-8.15	PK
H	15600	38.25	49.18	15.29	40.47	44.83	54	-9.17	AV
operation frequency:5240									
V	10480	58.45	49.11	15.37	37.46	62.17	74	-11.83	PK
V	10480	39.22	49.11	15.37	37.46	42.94	54	-11.06	AV
V	15720	59.05	49.21	15.34	40.51	65.69	74	-8.31	PK
V	15720	38.29	49.21	15.34	40.51	44.93	54	-9.07	AV
H	10480	57.08	49.11	15.37	31.31	54.65	74	-19.35	PK
H	10480	45.42	49.11	15.37	31.31	42.99	54	-11.01	AV
H	15720	57.36	49.21	15.34	40.51	64.00	74	-10.00	PK
H	15720	37.44	49.21	15.34	40.51	44.08	54	-9.92	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

We test all antenna's data, the data only show the mode 5 worst mode.

Polar (H/V)	Frequency	Meter Reading	Pre- amplifier	Cable Loss	Antenna Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	(dB)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
operation frequency:5180									
V	10360	56.14	49.05	15.3	37.39	59.78	74	-14.22	PK
V	10360	38.48	49.05	15.3	37.39	42.12	54	-11.88	AV
V	15540	56.55	49.16	15.27	40.45	63.11	74	-10.89	PK
V	15540	38.24	49.16	15.27	40.45	44.80	54	-9.20	AV
H	10360	56.66	49.05	15.3	37.39	60.30	74	-13.70	PK
H	10360	39.35	49.05	15.3	37.39	42.99	54	-11.01	AV
H	15540	54.14	49.16	15.27	40.45	60.70	74	-13.30	PK
H	15540	38.38	49.16	15.27	40.45	44.94	54	-9.06	AV
operation frequency:5200									
V	10400	56.23	49.09	15.34	37.42	59.90	74	-14.10	PK
V	10400	39.62	49.09	15.34	37.42	43.29	54	-10.71	AV
V	15600	55.20	49.18	15.29	40.47	61.78	74	-12.22	PK
V	15600	38.29	49.18	15.29	40.47	44.87	54	-9.13	AV
H	10400	55.43	49.09	15.34	37.42	59.10	74	-14.90	PK
H	10400	40.25	49.09	15.34	37.42	43.92	54	-10.08	AV
H	15600	54.90	49.18	15.29	40.47	61.48	74	-12.52	PK
H	15600	39.12	49.18	15.29	40.47	45.70	54	-8.30	AV
operation frequency:5240									
V	10480	57.17	49.11	15.37	37.46	60.89	74	-13.11	PK
V	10480	40.49	49.11	15.37	37.46	44.21	54	-9.79	AV
V	15720	54.21	49.21	15.34	40.51	60.85	74	-13.15	PK
V	15720	38.37	49.21	15.34	40.51	45.01	54	-8.99	AV
H	10480	57.00	49.11	15.37	31.31	54.57	74	-19.43	PK
H	10480	44.51	49.11	15.37	31.31	42.08	54	-11.92	AV
H	15720	55.19	49.21	15.34	40.51	61.83	74	-12.17	PK
H	15720	39.19	49.21	15.34	40.51	45.83	54	-8.17	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.



802.11n HT40

We test all antenna's data, the data only show the mode 5 worst mode.

Polar (H/V)	Frequency	Meter Reading	Pre- amplifier	Cable Loss	Antenna Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	(dB)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
operation frequency:5190									
V	10380	56.76	49.07	15.33	37.41	60.43	74	-13.57	PK
V	10380	39.27	49.07	15.33	37.41	42.94	54	-11.06	AV
V	15570	56.21	49.17	15.28	40.46	62.78	74	-11.22	PK
V	15570	38.33	49.17	15.28	40.46	44.90	54	-9.10	AV
H	10380	56.64	49.07	15.33	37.41	60.31	74	-13.69	PK
H	10380	40.39	49.07	15.33	37.41	44.06	54	-9.94	AV
H	15570	54.63	49.17	15.28	40.46	61.20	74	-12.80	PK
H	15570	38.22	49.17	15.28	40.46	44.79	54	-9.21	AV
operation frequency:5230									
V	10460	57.20	49.11	15.37	37.46	60.92	74	-13.08	PK
V	10460	39.45	49.11	15.37	37.46	43.17	54	-10.83	AV
V	15690	54.46	49.21	15.34	40.51	61.10	74	-12.90	PK
V	15690	38.38	49.21	15.34	40.51	45.02	54	-8.98	AV
H	10460	57.31	49.11	15.37	31.31	54.88	74	-19.12	PK
H	10460	44.86	49.11	15.37	31.31	42.43	54	-11.57	AV
H	15690	55.35	49.21	15.34	40.51	61.99	74	-12.01	PK
H	15690	39.09	49.21	15.34	40.51	45.73	54	-8.27	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.



802.11ac HT20

We test all antenna's data, the data only show the mode 5 worst mode.

Polar (H/V)	Frequency	Meter Reading	Pre- amplifier	Cable Loss	Antenna Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	(dB)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
operation frequency:5180									
V	10360	56.76	49.05	15.3	37.39	60.40	74	-13.60	PK
V	10360	39.57	49.05	15.3	37.39	43.21	54	-10.79	AV
V	15540	56.16	49.16	15.27	40.45	62.72	74	-11.28	PK
V	15540	38.35	49.16	15.27	40.45	44.91	54	-9.09	AV
H	10360	56.15	49.05	15.3	37.39	59.79	74	-14.21	PK
H	10360	38.13	49.05	15.3	37.39	41.77	54	-12.23	AV
H	15540	54.30	49.16	15.27	40.45	60.86	74	-13.14	PK
H	15540	39.35	49.16	15.27	40.45	45.91	54	-8.09	AV
operation frequency:5200									
V	10400	56.56	49.09	15.34	37.42	60.23	74	-13.77	PK
V	10400	41.74	49.09	15.34	37.42	45.41	54	-8.59	AV
V	15600	55.57	49.18	15.29	40.47	62.15	74	-11.85	PK
V	15600	40.34	49.18	15.29	40.47	46.92	54	-7.08	AV
H	10400	55.2	49.09	15.34	37.42	58.87	74	-15.13	PK
H	10400	40.56	49.09	15.34	37.42	44.23	54	-9.77	AV
H	15600	55.05	49.18	15.29	40.47	61.63	74	-12.37	PK
H	15600	41.28	49.18	15.29	40.47	47.86	54	-6.14	AV
operation frequency:5240									
V	10480	57.46	49.11	15.37	37.46	61.18	74	-12.82	PK
V	10480	40.66	49.11	15.37	37.46	44.38	54	-9.62	AV
V	15720	54.38	49.21	15.34	40.51	61.02	74	-12.98	PK
V	15720	39.74	49.21	15.34	40.51	46.38	54	-7.62	AV
H	10480	57.16	49.11	15.37	31.31	54.73	74	-19.27	PK
H	10480	44.57	49.11	15.37	31.31	42.14	54	-11.86	AV
H	15720	55.69	49.21	15.34	40.51	62.33	74	-11.67	PK
H	15720	40.05	49.21	15.34	40.51	46.69	54	-7.31	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.



802.11ac HT40

We test all antenna's data, the data only show the mode 5 worst mode.

Polar (H/V)	Frequency	Meter Reading	Pre- amplifier	Cable Loss	Antenna Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	(dB)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
operation frequency:5190									
V	10380	56.76	49.07	15.33	37.41	60.43	74	-13.57	PK
V	10380	40.27	49.07	15.33	37.41	43.94	54	-10.06	AV
V	15570	56.33	49.17	15.28	40.46	62.90	74	-11.10	PK
V	15570	39.77	49.17	15.28	40.46	46.34	54	-7.66	AV
H	10380	56.58	49.07	15.33	37.41	60.25	74	-13.75	PK
H	10380	40.45	49.07	15.33	37.41	44.12	54	-9.88	AV
H	15570	54.56	49.17	15.28	40.46	61.13	74	-12.87	PK
H	15570	39.39	49.17	15.28	40.46	45.96	54	-8.04	AV
operation frequency:5230									
V	10460	57.16	49.11	15.37	37.46	60.88	74	-13.12	PK
V	10460	41.17	49.11	15.37	37.46	44.89	54	-9.11	AV
V	15690	54.46	49.21	15.34	40.51	61.10	74	-12.90	PK
V	15690	39.35	49.21	15.34	40.51	45.99	54	-8.01	AV
H	10460	57.19	49.11	15.37	31.31	54.76	74	-19.24	PK
H	10460	44.6	49.11	15.37	31.31	42.17	54	-11.83	AV
H	15690	55.15	49.21	15.34	40.51	61.79	74	-12.21	PK
H	15690	40.09	49.21	15.34	40.51	46.73	54	-7.27	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.

802.11ac HT80

We test all antenna's data, the data only show the mode 5 worst mode.

Polar (H/V)	Frequency	Meter Reading	Pre- amplifier	Cable Loss	Antenna Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	(dB)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
operation frequency:5210									
V	10420	56.25	49.07	15.33	37.41	59.92	74	-14.08	PK
V	10420	41.65	49.07	15.33	37.41	45.32	54	-8.68	AV
V	15630	56.15	49.17	15.28	40.46	62.72	74	-11.28	PK
V	15630	39.20	49.17	15.28	40.46	45.77	54	-8.23	AV
H	10420	56.38	49.07	15.33	37.41	60.05	74	-13.95	PK
H	10420	41.28	49.07	15.33	37.41	44.95	54	-9.05	AV
H	15630	54.06	49.17	15.28	40.46	60.63	74	-13.37	PK
H	15630	40.34	49.17	15.28	40.46	46.91	54	-7.09	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.



802.11a band 4

We test all antenna's data, the data only show the antenna1 mode 1 worst mode.

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:5745									
V	11490	56.37	49.05	15.3	37.39	60.01	74	-13.99	PK
V	11490	45.59	49.05	15.3	37.39	49.23	54	-4.77	AV
V	17235	56.30	49.16	15.27	40.45	62.86	68.2	-5.34	PK
V	17235	43.22	49.16	15.27	40.45	49.78	54	-4.22	AV
H	11490	56.65	49.05	15.3	37.39	60.29	74	-13.71	PK
H	11490	45.57	49.05	15.3	37.39	49.21	54	-4.79	AV
H	17235	54.29	49.16	15.27	40.45	60.85	68.2	-7.35	PK
H	17235	44.22	49.16	15.27	40.45	50.78	54	-3.22	AV
operation frequency:5785									
V	11570	51.36	49.09	15.34	37.42	55.03	74	-18.97	PK
V	11570	41.79	49.09	15.34	37.42	45.46	54	-8.54	AV
V	17355	50.28	49.18	15.29	40.47	56.86	68.2	-11.34	PK
V	17355	40.36	49.18	15.29	40.47	46.94	54	-7.06	AV
H	11570	50.69	49.09	15.34	37.42	54.36	74	-19.64	PK
H	11570	42.24	49.09	15.34	37.42	45.91	54	-8.09	AV
H	17355	48.26	49.18	15.29	40.47	54.84	68.2	-13.36	PK
H	17355	40.72	49.18	15.29	40.47	47.30	54	-6.70	AV
operation frequency:5825									
V	11650	52.21	49.11	15.37	37.46	55.93	74	-18.07	PK
V	11650	41.61	49.11	15.37	37.46	45.33	54	-8.67	AV
V	17475	49.19	49.21	15.34	40.51	55.83	68.2	-12.37	PK
V	17475	40.69	49.21	15.34	40.51	47.33	54	-6.67	AV
H	11650	57.19	49.11	15.37	31.31	54.76	74	-19.24	PK
H	11650	48.43	49.11	15.37	31.31	46.00	54	-8.00	AV
H	17475	49.19	49.21	15.34	40.51	55.83	68.2	-12.37	PK
H	17475	40.17	49.21	15.34	40.51	46.81	54	-7.19	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

We test all antenna's data, the data only show the mode 5 worst mode.

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:5745									
V	11490	49.29	49.05	15.3	37.39	52.93	74	-21.07	PK
V	11490	42.26	49.05	15.3	37.39	45.90	54	-8.10	AV
V	17235	48.74	49.16	15.27	40.45	55.30	68.2	-12.90	PK
V	17235	40.18	49.16	15.27	40.45	46.74	54	-7.26	AV
H	11490	49.38	49.05	15.3	37.39	53.02	74	-20.98	PK
H	11490	41.92	49.05	15.3	37.39	45.56	54	-8.44	AV
H	17235	48.39	49.16	15.27	40.45	54.95	68.2	-13.25	PK
H	17235	40.70	49.16	15.27	40.45	47.26	54	-6.74	AV
operation frequency:5785									
V	11570	52.49	49.09	15.34	37.42	56.16	74	-17.84	PK
V	11570	42.23	49.09	15.34	37.42	45.90	54	-8.10	AV
V	17355	49.32	49.18	15.29	40.47	55.90	68.2	-12.30	PK
V	17355	40.27	49.18	15.29	40.47	46.85	54	-7.15	AV
H	11570	49.70	49.09	15.34	37.42	53.37	74	-20.63	PK
H	11570	43.48	49.09	15.34	37.42	47.15	54	-6.85	AV
H	17355	49.64	49.18	15.29	40.47	56.22	68.2	-11.98	PK
H	17355	40.07	49.18	15.29	40.47	46.65	54	-7.35	AV
operation frequency:5825									
V	11650	51.20	49.11	15.37	37.46	54.92	74	-19.08	PK
V	11650	41.67	49.11	15.37	37.46	45.39	54	-8.61	AV
V	17475	48.19	49.21	15.34	40.51	54.83	68.2	-13.37	PK
V	17475	40.27	49.21	15.34	40.51	46.91	54	-7.09	AV
H	11650	57.74	49.11	15.37	31.31	55.31	74	-18.69	PK
H	11650	44.24	49.11	15.37	31.31	41.81	54	-12.19	AV
H	17475	49.38	49.21	15.34	40.51	56.02	68.2	-12.18	PK
H	17475	40.51	49.21	15.34	40.51	47.15	54	-6.85	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

We test all antenna's data, the data only show the mode 5 worst mode.

Polar (H/V)	Frequency	Meter Reading	Pre- amplifier	Cable Loss	Antenna Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	(dB)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
operation frequency:5755									
V	11510	49.20	49.07	15.33	37.41	52.87	74	-21.13	PK
V	11510	41.57	49.07	15.33	37.41	45.24	54	-8.76	AV
V	17265	49.23	49.17	15.28	40.46	55.80	68.2	-12.40	PK
V	17265	40.78	49.17	15.28	40.46	47.35	54	-6.65	AV
H	11510	48.21	49.07	15.33	37.41	51.88	74	-22.12	PK
H	11510	41.35	49.07	15.33	37.41	45.02	54	-8.98	AV
H	17265	49.58	49.17	15.28	40.46	56.15	68.2	-12.05	PK
H	17265	40.42	49.17	15.28	40.46	46.99	54	-7.01	AV
operation frequency:5795									
V	11590	49.31	49.11	15.37	37.46	53.03	74	-20.97	PK
V	11590	41.42	49.11	15.37	37.46	45.14	54	-8.86	AV
V	17385	48.61	49.21	15.34	40.51	55.25	68.2	-12.95	PK
V	17385	40.48	49.21	15.34	40.51	47.12	54	-6.88	AV
H	11590	57.39	49.11	15.37	31.31	54.96	74	-19.04	PK
H	11590	44.46	49.11	15.37	31.31	42.03	54	-11.97	AV
H	17385	48.13	49.21	15.34	40.51	54.77	68.2	-13.43	PK
H	17385	40.57	49.21	15.34	40.51	47.21	54	-6.79	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.



802.11ac HT20

We test all antenna's data, the data only show the mode 5 worst mode.

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:5745									
V	11490	49.49	49.05	15.3	37.39	53.13	74	-20.87	PK
V	11490	42.57	49.05	15.3	37.39	46.21	54	-7.79	AV
V	17235	48.12	49.16	15.27	40.45	54.68	68.2	-13.52	PK
V	17235	40.17	49.16	15.27	40.45	46.73	54	-7.27	AV
H	11490	48.70	49.05	15.3	37.39	52.34	74	-21.66	PK
H	11490	41.65	49.05	15.3	37.39	45.29	54	-8.71	AV
H	17235	48.27	49.16	15.27	40.45	54.83	68.2	-13.37	PK
H	17235	40.63	49.16	15.27	40.45	47.19	54	-6.81	AV
operation frequency:5785									
V	11570	48.18	49.09	15.34	37.42	51.85	74	-22.15	PK
V	11570	41.82	49.09	15.34	37.42	45.49	54	-8.51	AV
V	17355	49.19	49.18	15.29	40.47	55.77	68.2	-12.43	PK
V	17355	40.67	49.18	15.29	40.47	47.25	54	-6.75	AV
H	11570	49.47	49.09	15.34	37.42	53.14	74	-20.86	PK
H	11570	43.18	49.09	15.34	37.42	46.85	54	-7.15	AV
H	17355	50.01	49.18	15.29	40.47	56.59	68.2	-11.61	PK
H	17355	40.47	49.18	15.29	40.47	47.05	54	-6.95	AV
operation frequency:5825									
V	11650	49.73	49.11	15.37	37.46	53.45	74	-20.55	PK
V	11650	41.47	49.11	15.37	37.46	45.19	54	-8.81	AV
V	17475	48.19	49.21	15.34	40.51	54.83	68.2	-13.37	PK
V	17475	40.96	49.21	15.34	40.51	47.60	54	-6.40	AV
H	11650	57.74	49.11	15.37	31.31	55.31	74	-18.69	PK
H	11650	44.17	49.11	15.37	31.31	41.74	54	-12.26	AV
H	17475	48.59	49.21	15.34	40.51	55.23	68.2	-12.97	PK
H	17475	40.26	49.21	15.34	40.51	46.90	54	-7.10	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.



802.11ac HT40

We test all antenna's data, the data only show the mode 5 worst mode.

Polar (H/V)	Frequency	Meter Reading	Pre- amplifier	Cable Loss	Antenna Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	(dB)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
operation frequency:5755									
V	11510	49.41	49.07	15.33	37.41	53.08	74	-20.92	PK
V	11510	42.19	49.07	15.33	37.41	45.86	54	-8.14	AV
V	17265	48.47	49.17	15.28	40.46	55.04	68.2	-13.16	PK
V	17265	41.17	49.17	15.28	40.46	47.74	54	-6.26	AV
H	11510	48.59	49.07	15.33	37.41	52.26	74	-21.74	PK
H	11510	42.72	49.07	15.33	37.41	46.39	54	-7.61	AV
H	17265	48.39	49.17	15.28	40.46	54.96	68.2	-13.24	PK
H	17265	40.30	49.17	15.28	40.46	46.87	54	-7.13	AV
operation frequency:5795									
V	11590	49.58	49.11	15.37	37.46	53.30	74	-20.70	PK
V	11590	41.42	49.11	15.37	37.46	45.14	54	-8.86	AV
V	17385	48.17	49.21	15.34	40.51	54.81	68.2	-13.39	PK
V	17385	40.70	49.21	15.34	40.51	47.34	54	-6.66	AV
H	11590	57.23	49.11	15.37	31.31	54.80	74	-19.20	PK
H	11590	44.88	49.11	15.37	31.31	42.45	54	-11.55	AV
H	17385	48.37	49.21	15.34	40.51	55.01	68.2	-13.19	PK
H	17385	40.57	49.21	15.34	40.51	47.21	54	-6.79	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.

802.11ac HT80

We test all antenna's data, the data only show the mode 5 worst mode.

Polar (H/V)	Frequency	Meter Reading	Pre- amplifier	Cable Loss	Antenna Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	(dB)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
operation frequency:5775									
V	11550	48.22	49.07	15.33	37.41	51.89	74	-22.11	PK
V	11550	42.37	49.07	15.33	37.41	46.04	54	-7.96	AV
V	17325	49.2	49.17	15.28	40.46	55.77	68.2	-12.43	PK
V	17325	40.25	49.17	15.28	40.46	46.82	54	-7.18	AV
H	11550	48.51	49.07	15.33	37.41	52.18	74	-21.82	PK
H	11550	41.22	49.07	15.33	37.41	44.89	54	-9.11	AV
H	17325	48.66	49.17	15.28	40.46	55.23	68.2	-12.97	PK
H	17325	40.5	49.17	15.28	40.46	47.07	54	-6.93	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.

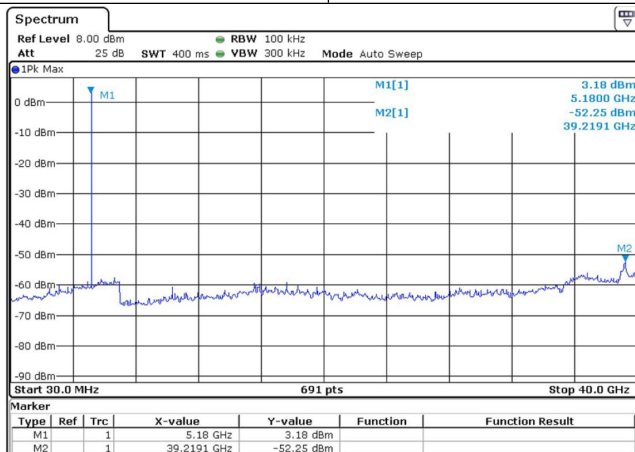


For Conducted

During the test, pre-scan the all modulation and all antenna , the 802.11a, antenna 1 were found to have the worst test results, as reflected in the report.

Test channel:

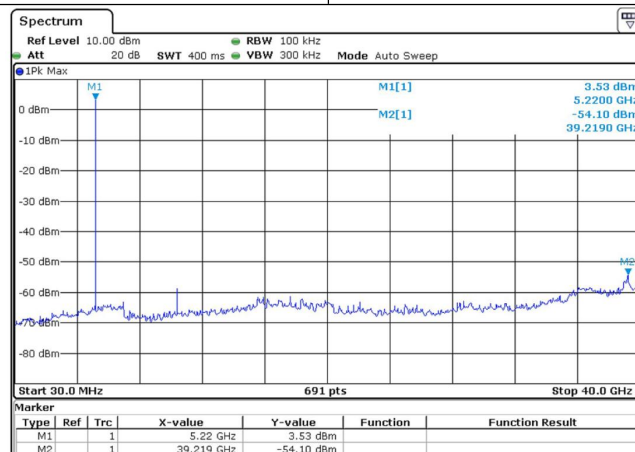
Band 1/802.11a Lowest channel



0.03Hz~40GHz

Test channel:

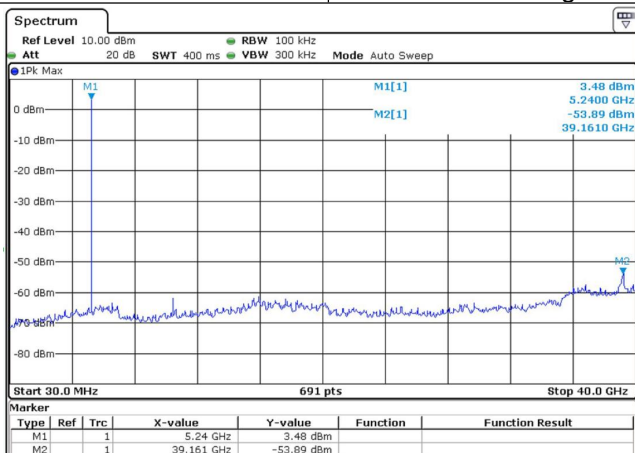
Band 1/802.11a Middle channel



0.03GHz~40GHz

Test channel:

Band 1/802.11a Highest channel

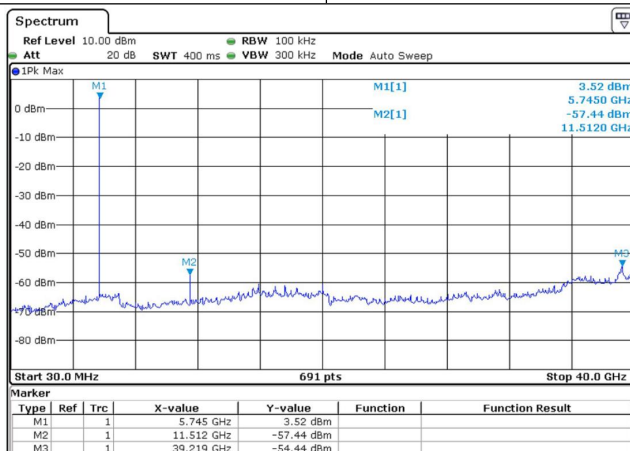


0.03GHz~40GHz



Test channel:

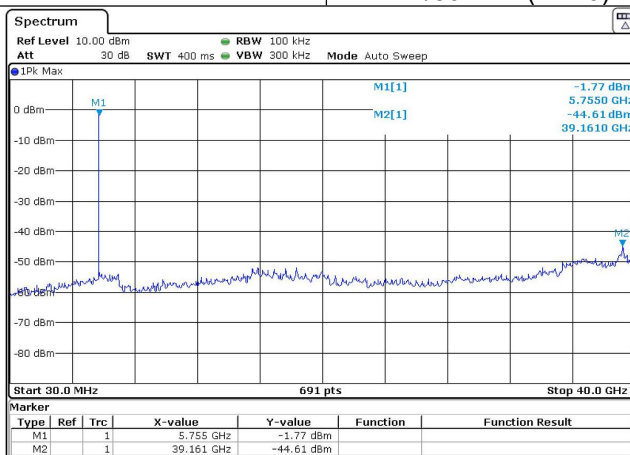
Band 4/802.11a Lowest channel



0.03Hz~40GHz

Test channel:

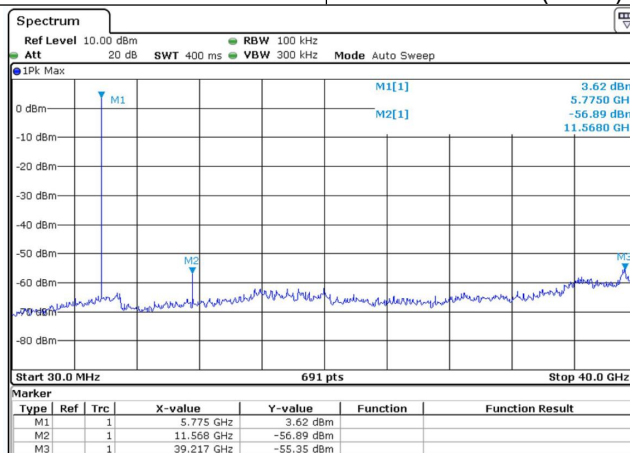
Band 4/802.11n(HT40) Lowest channel



0.03GHz~40GHz

Test channel:

Band 4/802.11ac(HT80)



0.03GHz~40GHz



3.3 RADIATED BAND EMISSION MEASUREMENT

3.3.1 TEST REQUIREMENT:

FCC Part15 C Section 15.209 and 15.407

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

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

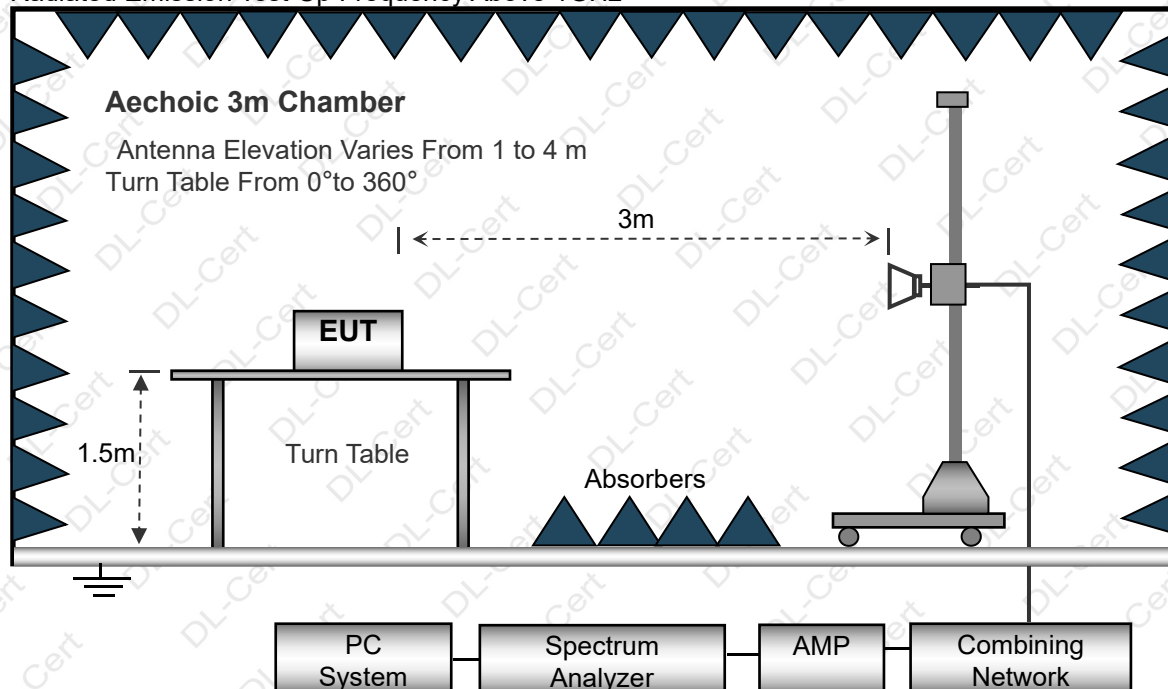
3.3.3 DEVIATION FROM TEST STANDARD

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 band 1

We test all antenna's data, the data only show the antenna1 mode 1 worst mode.

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	53.02	49.12	15.6	37.34	56.84	74.00	-17.16	PK
V	5150	39.28	49.12	15.6	37.34	43.10	54.00	-10.90	AV
V	5145	54.11	49.19	15.24	40.43	60.59	74.00	-13.41	PK
V	5145	36.32	49.19	15.24	40.43	42.80	54.00	-11.20	AV
H	5150	52.02	49.12	15.6	37.34	55.84	74.00	-18.16	PK
H	5150	37.48	49.12	15.6	37.34	41.30	54.00	-12.70	AV
H	5145	54.23	49.19	15.24	40.43	60.71	74.00	-13.29	PK
H	5145	33.06	49.19	15.24	40.43	39.54	54.00	-14.46	AV
operation frequency:5240									
V	5350	53.74	49.13	15.32	37.46	57.39	74.00	-16.61	PK
V	5350	35.42	49.13	15.32	37.46	39.07	54.00	-14.93	AV
V	5370	53.02	49.24	15.36	40.51	59.65	74.00	-14.35	PK
V	5370	32.05	49.24	15.36	40.51	38.68	54.00	-15.32	AV
H	5350	52.03	49.13	15.32	31.31	49.53	74.00	-24.47	PK
H	5350	40.13	49.13	15.32	31.31	37.63	54.00	-16.37	AV
H	5370	52.03	49.24	15.36	40.51	58.66	74.00	-15.34	PK
H	5370	32.46	49.24	15.36	40.51	39.09	54.00	-14.91	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

We test all antenna's data, the data only show the mode 5 worst mode.

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	51.11	49.12	15.6	37.34	54.93	74.00	-19.07	PK
V	5150	32.97	49.12	15.6	37.34	36.79	54.00	-17.21	AV
V	5145	51.47	49.19	15.24	40.43	57.95	74.00	-16.05	PK
V	5145	33.06	49.19	15.24	40.43	39.54	54.00	-14.46	AV
H	5150	51.83	49.12	15.6	37.34	55.65	74.00	-18.35	PK
H	5150	33.41	49.12	15.6	37.34	37.23	54.00	-16.77	AV
H	5145	50.01	49.19	15.24	40.43	56.49	74.00	-17.51	PK
H	5145	32.31	49.19	15.24	40.43	38.79	54.00	-15.21	AV
operation frequency:5240									
V	5350	53.54	49.13	15.32	37.46	57.19	74.00	-16.81	PK
V	5350	34.08	49.13	15.32	37.46	37.73	54.00	-16.27	AV
V	5370	50.16	49.24	15.36	40.51	56.79	74.00	-17.21	PK
V	5370	33.45	49.24	15.36	40.51	40.08	54.00	-13.92	AV
H	5350	54.02	49.13	15.32	31.31	51.52	74.00	-22.48	PK
H	5350	36.22	49.13	15.32	31.31	33.72	54.00	-20.28	AV
H	5370	51.13	49.24	15.36	40.51	57.76	74.00	-16.24	PK
H	5370	33.45	49.24	15.36	40.51	40.08	54.00	-13.92	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

We test all antenna's data, the data only show the mode 5 worst mode.

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	52.03	49.12	15.33	37.41	55.65	74.00	-18.35	PK
V	5150	34.47	49.12	15.33	37.41	38.09	54.00	-15.91	AV
V	5145	51.05	49.19	15.28	40.46	57.60	74.00	-16.40	PK
V	5145	33.45	49.19	15.28	40.46	40.00	54.00	-14.00	AV
H	5150	52.34	49.12	15.33	37.41	55.96	74.00	-18.04	PK
H	5150	34.61	49.12	15.33	37.41	38.23	54.00	-15.77	AV
H	5145	50.53	49.19	15.28	40.46	57.08	74.00	-16.92	PK
H	5145	33.47	49.19	15.28	40.46	40.02	54.00	-13.98	AV
operation frequency:5230									
V	5350	53.56	49.13	15.32	37.46	57.21	74.00	-16.79	PK
V	5350	36.30	49.13	15.32	37.46	39.95	54.00	-14.05	AV
V	5370	50.08	49.24	15.36	40.51	56.71	74.00	-17.29	PK
V	5370	33.58	49.24	15.36	40.51	40.21	54.00	-13.79	AV
H	5350	53.04	49.13	15.32	31.31	50.54	74.00	-23.46	PK
H	5350	40.14	49.13	15.32	31.31	37.64	54.00	-16.36	AV
H	5370	51.79	49.24	15.36	40.51	58.42	74.00	-15.58	PK
H	5370	35.57	49.24	15.36	40.51	42.20	54.00	-11.80	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.



802.11ac HT20

We test all antenna's data, the data only show the mode 5 worst mode.

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	51.99	49.12	15.6	37.39	55.86	74.00	-18.14	PK
V	5150	35.55	49.12	15.6	37.39	39.42	54.00	-14.58	AV
V	5145	51.45	49.19	15.24	40.45	57.95	74.00	-16.05	PK
V	5145	34.55	49.19	15.24	40.45	41.05	54.00	-12.95	AV
H	5150	52.49	49.12	15.6	37.39	56.36	74.00	-17.64	PK
H	5150	34.65	49.12	15.6	37.39	38.52	54.00	-15.48	AV
H	5145	50.02	49.19	15.24	40.45	56.52	74.00	-17.48	PK
H	5145	35.53	49.19	15.24	40.45	42.03	54.00	-11.97	AV
operation frequency:5240									
V	5350	53.55	49.13	15.34	37.46	57.22	74.00	-16.78	PK
V	5350	37.45	49.13	15.34	37.46	41.12	54.00	-12.88	AV
V	5370	50.16	49.24	15.35	40.51	56.78	74.00	-17.22	PK
V	5370	36.25	49.24	15.35	40.51	42.87	54.00	-11.13	AV
H	5350	54.14	49.13	15.34	31.31	51.66	74.00	-22.34	PK
H	5350	41.13	49.13	15.34	31.31	38.65	54.00	-15.35	AV
H	5370	52.53	49.24	15.35	40.51	59.15	74.00	-14.85	PK
H	5370	36.75	49.24	15.35	40.51	43.37	54.00	-10.63	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.



802.11ac HT40

We test all antenna's data, the data only show the mode 5 worst mode.

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	52.74	49.13	15.32	37.41	56.34	74.00	-17.66	PK
V	5150	37.53	49.13	15.32	37.41	41.13	54.00	-12.87	AV
V	5145	52.30	49.24	15.36	40.46	58.88	74.00	-15.12	PK
V	5145	36.47	49.24	15.36	40.46	43.05	54.00	-10.95	AV
H	5150	52.85	49.13	15.32	37.41	56.45	74.00	-17.55	PK
H	5150	37.61	49.13	15.32	37.41	41.21	54.00	-12.79	AV
H	5145	51.16	49.24	15.36	40.46	57.74	74.00	-16.26	PK
H	5145	36.26	49.24	15.36	40.46	42.84	54.00	-11.16	AV
operation frequency:5230									
V	5350	54.52	49.13	15.34	37.34	58.07	74.00	-15.93	PK
V	5350	36.54	49.13	15.34	37.34	40.09	54.00	-13.91	AV
V	5370	51.36	49.24	15.35	40.43	57.90	74.00	-16.10	PK
V	5370	36.91	49.24	15.35	40.43	43.45	54.00	-10.55	AV
H	5350	54.07	49.13	15.34	37.34	57.62	74.00	-16.38	PK
H	5350	41.29	49.13	15.34	37.34	44.84	54.00	-9.16	AV
H	5370	50.17	49.24	15.35	40.43	56.71	74.00	-17.29	PK
H	5370	35.54	49.24	15.35	40.43	42.08	54.00	-11.92	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.



802.11ac HT80

We test all antenna's data, the data only show the mode 5 worst mode.

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:5210									
V	5150	52.02	49.13	15.32	37.48	55.69	74.00	-18.31	PK
V	5150	35.19	49.13	15.32	37.48	38.86	54.00	-15.14	AV
V	5145	51.11	49.24	15.36	40.42	57.65	74.00	-16.35	PK
V	5145	35.55	49.24	15.36	40.42	42.09	54.00	-11.91	AV
H	5150	52.37	49.13	15.32	37.48	56.04	74.00	-17.96	PK
H	5150	36.17	49.13	15.32	37.48	39.84	54.00	-14.16	AV
H	5145	50.10	49.24	15.36	40.42	56.64	74.00	-17.36	PK
H	5145	35.19	49.24	15.36	40.42	41.73	54.00	-12.27	AV
V	5350	54.09	49.13	15.34	37.34	57.64	74.00	-16.36	PK
V	5350	36.25	49.13	15.34	37.34	39.8	54.00	-14.20	AV
V	5370	50.96	49.24	15.35	40.43	57.5	74.00	-16.50	PK
V	5370	36.62	49.24	15.35	40.43	43.16	54.00	-10.84	AV
H	5350	53.65	49.13	15.34	37.34	57.2	74.00	-16.80	PK
H	5350	40.97	49.13	15.34	37.34	44.52	54.00	-9.48	AV
H	5370	49.79	49.24	15.35	40.43	56.33	74.00	-17.67	PK
H	5370	35.26	49.24	15.35	40.43	41.8	54.00	-12.20	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.



3.4 CONDUCTED BAND EMISSION MEASUREMENT

3.4.1 TEST REQUIREMENT:

FCC Part15 C Section 15.209 and 15.407

(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.

Spectrum Parameter	Setting	
Attenuation	Auto	
Start Frequency	5150MHz	5725MHz
Stop Frequency	5250MHz	5850MHz
RB / VB (emission in restricted band)	1 MHz / 1 MHz for Peak, 1 MHz / 10Hz for Average	

3.4.2 TEST PROCEDURE

Test method: FCC KDB 789033 G)& Parts 15.407(b)(4) & 15.209(a)

3.4.3 DEVIATION FROM TEST STANDARD

No deviation

3.4.4 TEST SETUP



3.4.5 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.

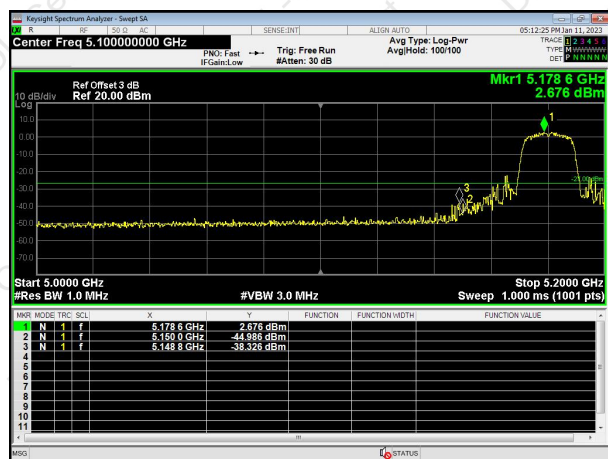


3.4.6 TEST RESULT

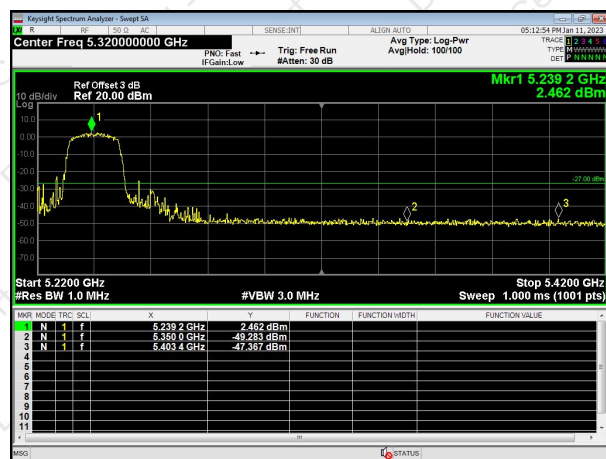
Each antenna has been tested and has a margin of more than 3 dB, the data only show the antenna1 worst mode, so the MIMO mode is definitely Pass.

Note: Offset= Antenna gain(3 dBi)+ Cable loss (0 dB)

802.11a

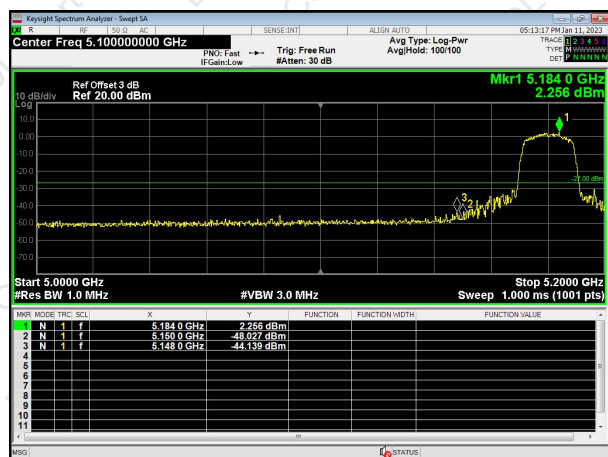


5180MHz



5240MHz

802.11n HT20

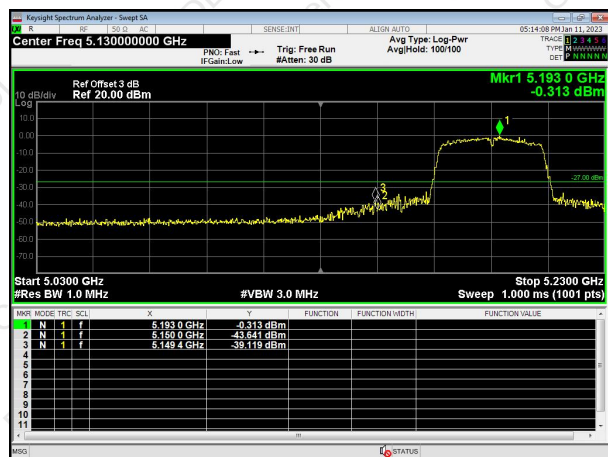


5180MHz

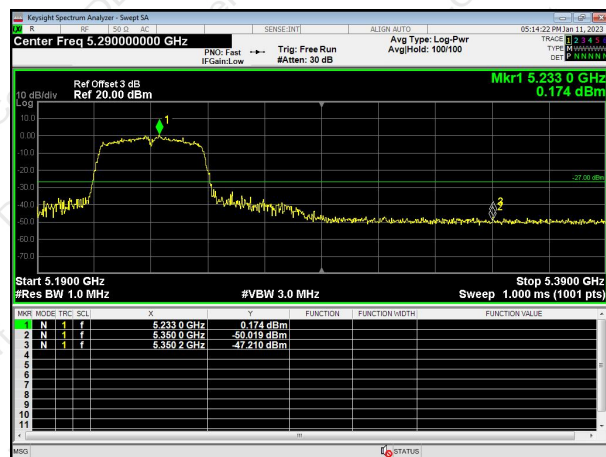


5240MHz

802.11n HT40



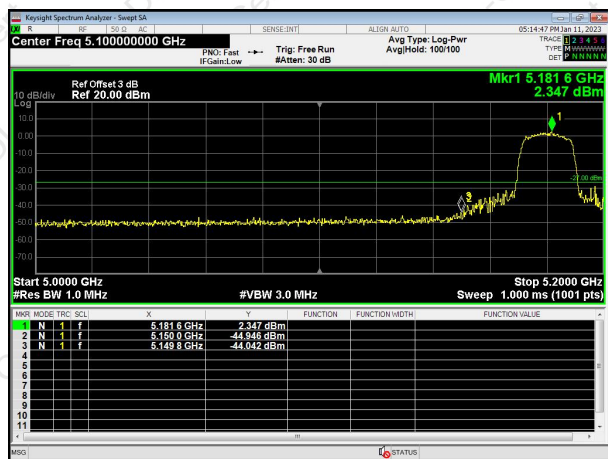
5190MHz



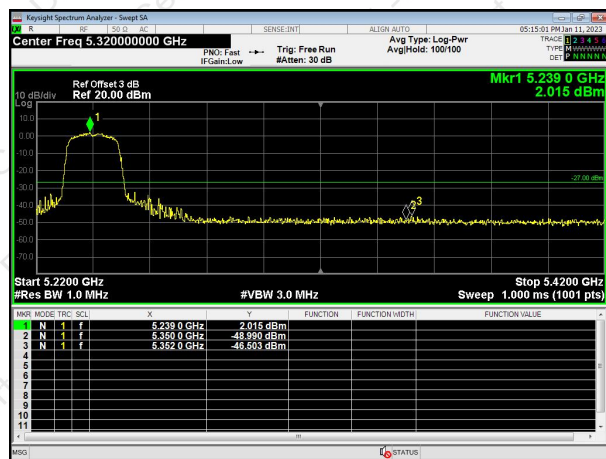
5230MHz



802.11ac HT20

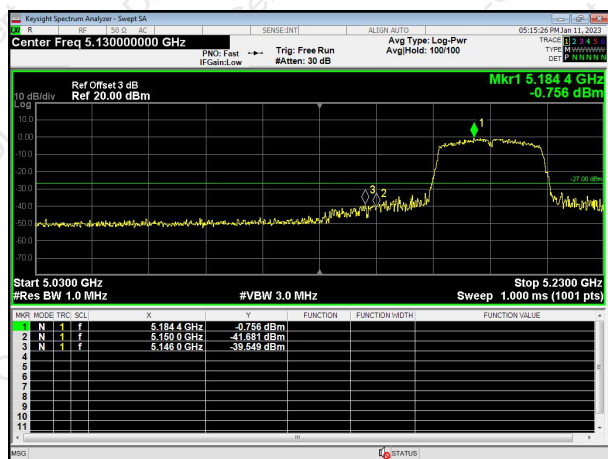


5180MHz

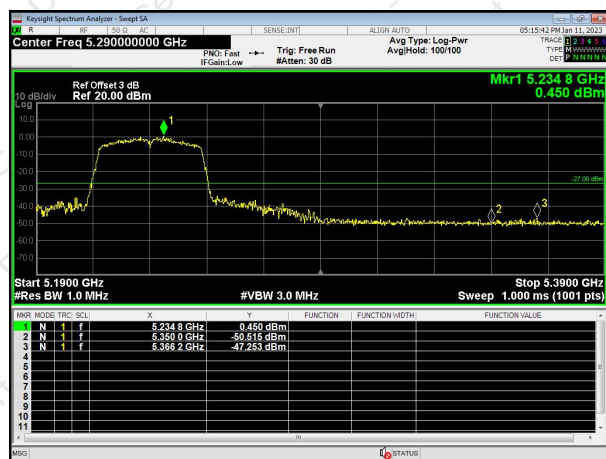


5240MHz

802.11ac HT40

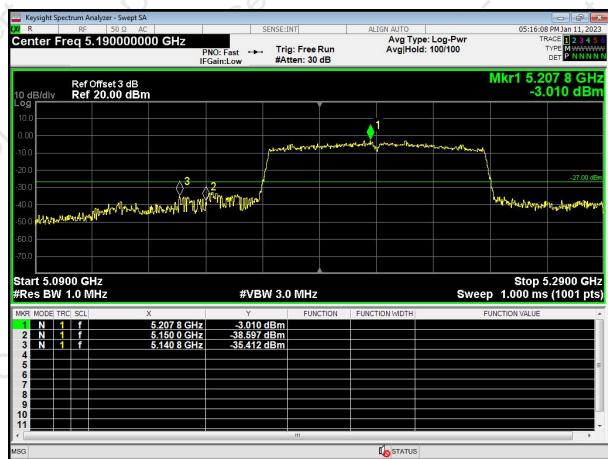


5190MHz



5230MHz

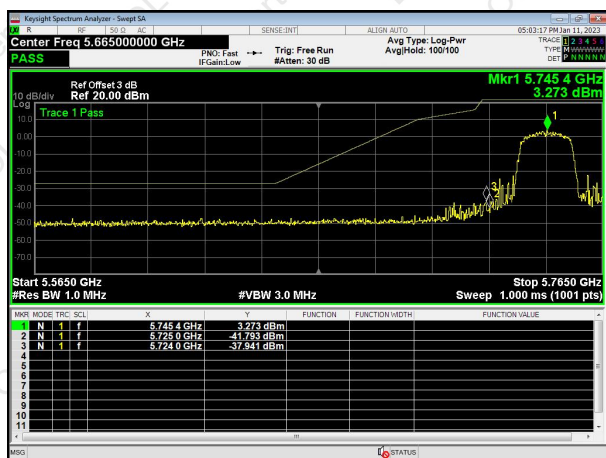
802.11ac HT80



5210MHz



802.11a

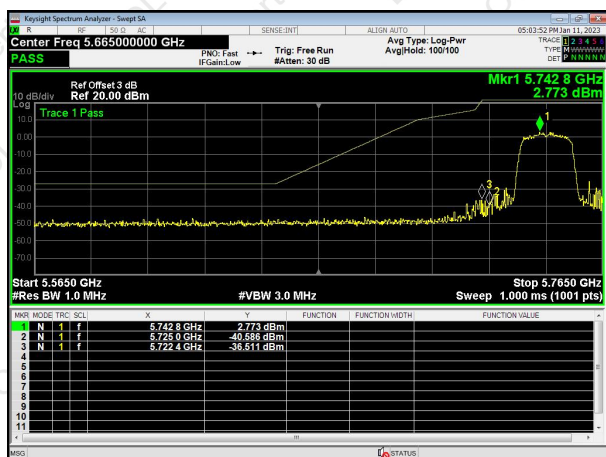


5745MHz



5825MHz

802.11n HT20

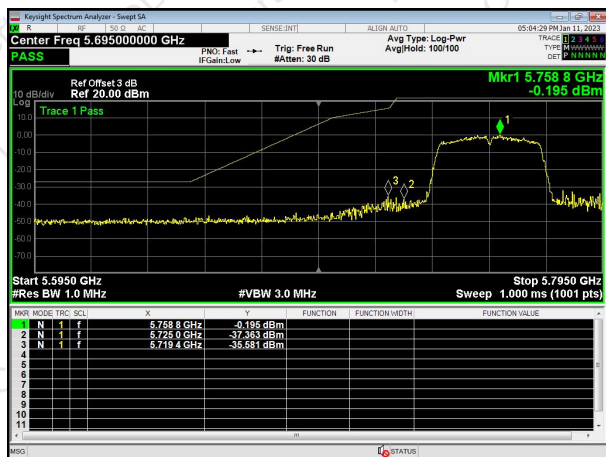


5745MHz



5825MHz

802.11n HT40



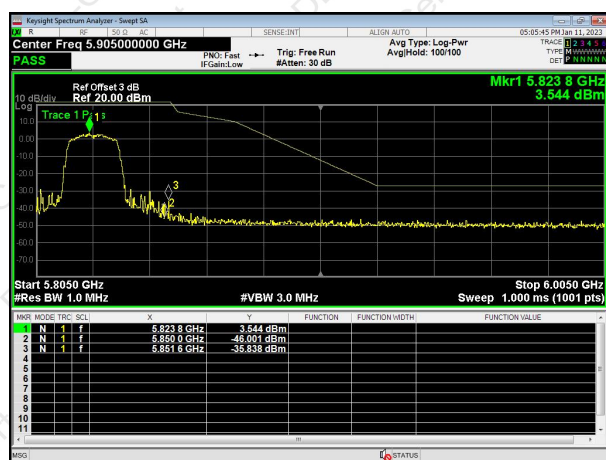
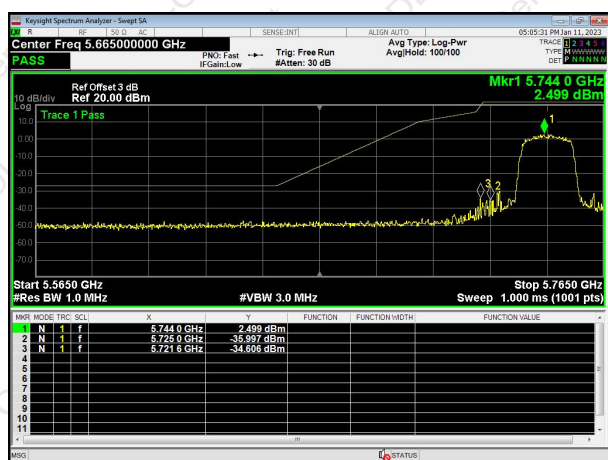
5755MHz



5795MHz



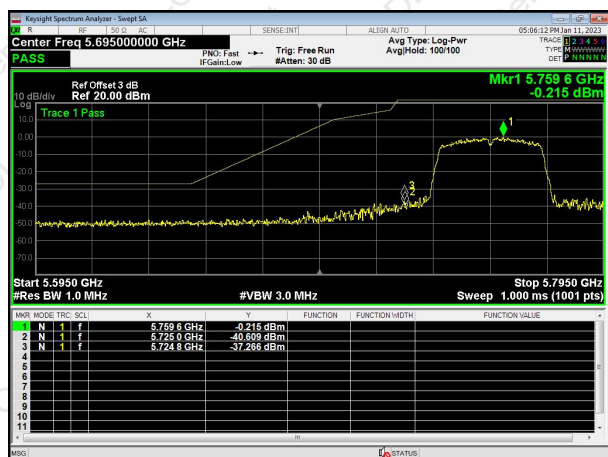
802.11ac HT20



5745MHz

5825MHz

802.11ac HT40



5755MHz

5795MHz

802.11ac HT80



5775MHz

**. PEAK OUTPUT POWER****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.

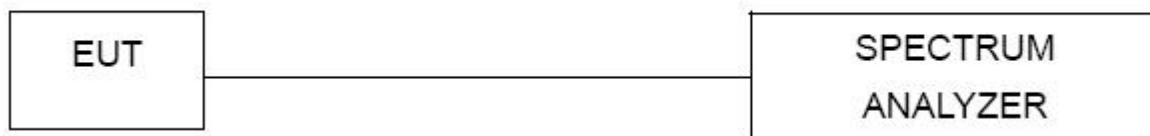
For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

TEST PROCEDURE

- The EUT was directly connected to the power meter and antenna output port as show in the block diagram below,
- Spectrum Setting : RBW > the 20 dB bandwidth of the emission being measured
Span = approximately 5 times the 20 dB bandwidth, centered on a hopping channel
VBW $\geq$ RBW
Sweep = auto
Detector function = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.
Trace = max hold

DEVIATION FROM STANDARD

No deviation.

TEST SETUP**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.

**TEST RESULTS**

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

Antenna 1:

Band	Mode	Test Channel	Peak Output Power (dBm)	Duty factor (dB)	Total Output Power(dB)	LIMIT (dBm)
Band 1	802.11a	Low	9.145	0.11	9.255	23.98
		Moddle	8.376	0.11	8.486	23.98
		High	7.895	0.11	8.005	23.98
	802.11ac HT20	Low	8.650	0.36	9.010	23.98
		Moddle	7.863	0.36	8.223	23.98
		High	7.456	0.36	7.816	23.98
	802.11ac HT40	Low	8.029	0.63	8.659	23.98
		High	7.165	0.63	7.795	23.98
	802.11n HT20	Low	9.078	0.2	9.278	23.98
		Moddle	8.185	0.2	8.385	23.98
		High	7.649	0.2	7.849	23.98
	802.11n HT40	Low	8.107	0.55	8.657	23.98
		High	7.480	0.55	8.030	23.98
	802.11ac HT80	/	8.131	0.39	8.521	23.98

Band	Mode	Test Channel	Peak Output Power (dBm)	Duty factor (dB)	Total Output Power(dB)	LIMIT (dBm)
Band 4	802.11a	Low	8.287	0.11	8.397	30
		Moddle	7.265	0.11	7.375	30
		High	7.569	0.11	7.679	30
	802.11ac HT20	Low	7.746	0.38	8.126	30
		Moddle	6.946	0.38	7.326	30
		High	6.669	0.38	7.049	30
	802.11ac HT40	Low	7.081	0.53	7.611	30
		High	6.501	0.53	7.031	30
	802.11n HT20	Low	8.102	0.21	8.312	30
		Moddle	7.110	0.21	7.320	30
		High	7.366	0.21	7.576	30
	802.11n HT40	Low	7.166	0.40	7.566	30
		High	6.873	0.40	7.273	30
	802.11ac HT80	/	7.092	0.41	7.502	30

**Antenna 2:**

Band	Mode	Test Channel	Peak Output Power (dBm)	Duty factor (dB)	Total Output Power(dB)	LIMIT (dBm)
Band 1	802.11a	Low	8.588	0.11	8.698	23.98
		Moddle	9.206	0.11	9.316	23.98
		High	9.434	0.11	9.544	23.98
	802.11ac HT20	Low	8.330	0.29	8.62	23.98
		Moddle	8.731	0.29	9.021	23.98
		High	9.010	0.29	9.30	23.98
	802.11ac HT40	Low	7.822	0.52	8.342	23.98
		High	8.529	0.52	9.049	23.98
	802.11n HT20	Low	8.407	0.21	8.617	23.98
		Moddle	9.065	0.21	9.275	23.98
		High	9.279	0.21	9.489	23.98
	802.11n HT40	Low	8.397	0.21	8.607	23.98
		High	9.020	0.21	9.230	23.98
	802.11ac HT80	/	7.682	0.87	8.552	23.98

Band	Mode	Test Channel	Peak Output Power (dBm)	Duty factor (dB)	Total Output Power(dB)	LIMIT (dBm)
Band 4	802.11a	Low	10.555	0.11	10.665	30
		Moddle	10.636	0.11	10.746	30
		High	10.868	0.11	10.978	30
	802.11ac HT20	Low	9.845	0.29	10.135	30
		Moddle	10.397	0.29	10.687	30
		High	10.468	0.29	10.758	30
	802.11ac HT40	Low	9.388	0.52	9.908	30
		High	10.231	0.52	10.751	30
	802.11n HT20	Low	9.811	0.21	10.021	30
		Moddle	10.420	0.21	10.630	30
		High	10.675	0.21	10.885	30
	802.11n HT40	Low	9.592	0.39	9.982	30
		High	10.433	0.39	10.823	30
	802.11ac HT80	/	9.530	0.87	10.40	30



For Band 1 MIMO

Mode	Test Channel	Antenna	Total Output Power(dB)	Limit (dBm)	Result
802.11ac HT20	Low	Antenna1+ Antenna2	11.83	23.97	PASS
	Middle		11.65	23.97	PASS
	High		11.63	23.97	PASS
802.11ac HT40	Low		11.51	23.97	PASS
	High		11.48	23.97	PASS
802.11n HT20	Low		11.97	23.97	PASS
	Middle		11.86	23.97	PASS
	High		11.76	23.97	PASS
802.11n HT40	Low		11.64	23.97	PASS
	High		11.68	23.97	PASS
802.11ac HT80	/		11.55	23.97	PASS

For Band 4 MIMO

Mode	Test Channel	Antenna	Total Output Power(dB)	Limit (dBm)	Result
802.11ac HT20	Low	Antenna1+ Antenna2	12.26	29.99	PASS
	Middle		12.33	29.99	PASS
	High		12.30	29.99	PASS
802.11ac HT40	Low		11.92	29.99	PASS
	High		12.29	29.99	PASS
802.11n HT20	Low		12.26	29.99	PASS
	Middle		12.29	29.99	PASS
	High		12.55	29.99	PASS
802.11n HT40	Low		11.95	29.99	PASS
	High		12.41	29.99	PASS
802.11ac HT80	/		12.20	29.99	PASS