



FCC Part 15C Test Report

FCC ID: 2A6AM-UBOX9

Applicant: Taiwan Anbo Enterprise Co., Ltd.

Address: (234) 4th Floor, No. 20, Lane 67, Minzu Street, Yonghe District, New Taipei City

Manufacturer: Taiwan Anbo Enterprise Co., Ltd.

Address: (234) 4th Floor, No. 20, Lane 67, Minzu Street, Yonghe District, New Taipei City

EUT: Unblock tech Tvbox

Trade Mark: N/A

Model Number: UBOX 9

Date of Receipt: Mar. 29, 2022

Test Date: Mar. 29, 2022 – Apr. 06, 2022

Date of Report: Apr. 06, 2022

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

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

Test Result: Pass

Report Number: DL-20220406031E

Prepared (Test Engineer): Pxing Huang

Reviewer (Supervisor): Jack Bu

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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.



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1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15 (15.407) , Subpart C			
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	
15.403(i) 15.407(e)	26dB bandwidth and 99%dB Bandwidth 6dB 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

1.1 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	$\pm 2\%$



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Product Name:	Unblock tech Tvbox
Trademark	N/A
Model No.:	UBOX 9
Model Difference	N/A
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:	Internal antenna
Antenna gain:	4dBi
Power supply:	DC 5V from adapter
Adapter:	Model Number: GA0502000 Input: 100-240V~ 50/60Hz 0.6A Output: 5.0V  2000mA

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)/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	/	/



2.2 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	

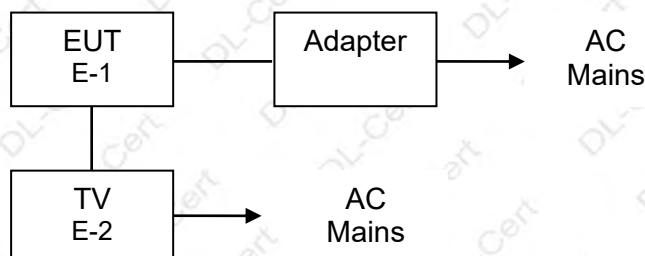
For Radiated Emission			
Pretest Mode	Channel	Band 1	Band 4
Mode 1	802.11a/n/acHT20	CH36, CH44, CH48	CH149, CH157, CH165
Mode 2	802.11n/acHT40	CH38, CH46	CH151, CH159
Mode 3	802.11acHT80	CH42	CH155
Mode 4	Other	Link Mode	

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.

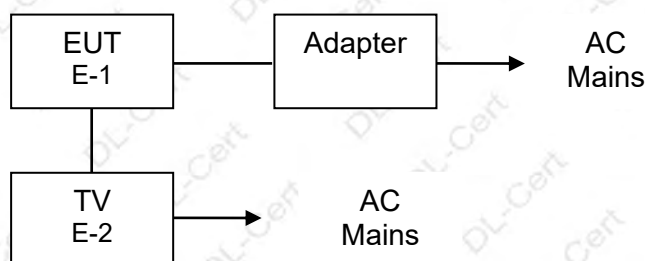


2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Radiated Spurious Emission Test



Conducted Spurious 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
E-1	Unblock tech Tvbox	UBOX 9	N/A	EUT
E-2	Changhong TV	32D3F	N/A	

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: AXDN-0002.0			
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



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	Nov. 06, 2021	Nov. 05, 2022
2	Test Receiver (9kHz-7GHz)	R&S	ESRP7	101393	Nov. 06, 2021	Nov. 05, 2022
3	Bilog Antenna (30MHz-1GHz)	R&S	VULB9162	00306	Nov. 06, 2021	Nov. 05, 2022
4	Horn Antenna (1GHz-18GHz)	Schwarzbeck	BBHA9120D	02139	Nov. 06, 2021	Nov. 05, 2022
5	Horn Antenna (18GHz-40GHz)	A.H. Systems	SAS-574	588	Nov. 06, 2021	Nov. 05, 2022
6	Amplifier (9KHz-6GHz)	Schwarzbeck	BBV9743B	00153	Nov. 06, 2021	Nov. 05, 2022
7	Amplifier (1GHz-18GHz)	EMEC	EM01G8GA	00270	Nov. 06, 2021	Nov. 05, 2022
8	Amplifier (18GHz-40GHz)	Quanjuda	DLE-161	97	Nov. 06, 2021	Nov. 05, 2022
9	Loop Antenna (9KHz-30MHz)	Schwarzbeck	FMZB1519B	00014	Nov. 06, 2021	Nov. 05, 2022
10	RF cables1 (9kHz-1GHz)	ChengYu	966	004	Nov. 06, 2021	Nov. 05, 2022
11	RF cables2 (1GHz-40GHz)	ChengYu	966	003	Nov. 06, 2021	Nov. 05, 2022
12	Antenna connector	Florida RF Labs	N/A	RF 01#	Nov. 06, 2021	Nov. 05, 2022
13	Power probe	KEYSIGHT	U2021XA	MY55210018	Nov. 06, 2021	Nov. 05, 2022
14	Signal Analyzer 9kHz-26.5GHz	Agilent	N9020A	MY55370280	Nov. 06, 2021	Nov. 05, 2022
15	Test Receiver 20kHz-40GHz	R&S	ESU 40	100376	Nov. 06, 2021	Nov. 05, 2022
16	D.C. Power Supply	LongWei	PS-305D	010964729	Nov. 06, 2021	Nov. 05, 2022

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
2	EMI Receiver	R&S	ESR	101421	Nov. 06, 2021	Nov. 05, 2022
3	LISN	R&S	ENV216	102417	Nov. 06, 2021	Nov. 05, 2022
4	843 Cable 1#	ChengYu	CE Cable	001	Nov. 06, 2021	Nov. 05, 2022

Other

Item	Name	Manufacturer	Model	Software version
1	EMC Conduction Test System	FALA	EZ_EMCC	EMC-CON 3A1.1
2	EMC radiation test system	FALA	EZ_EMCC	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

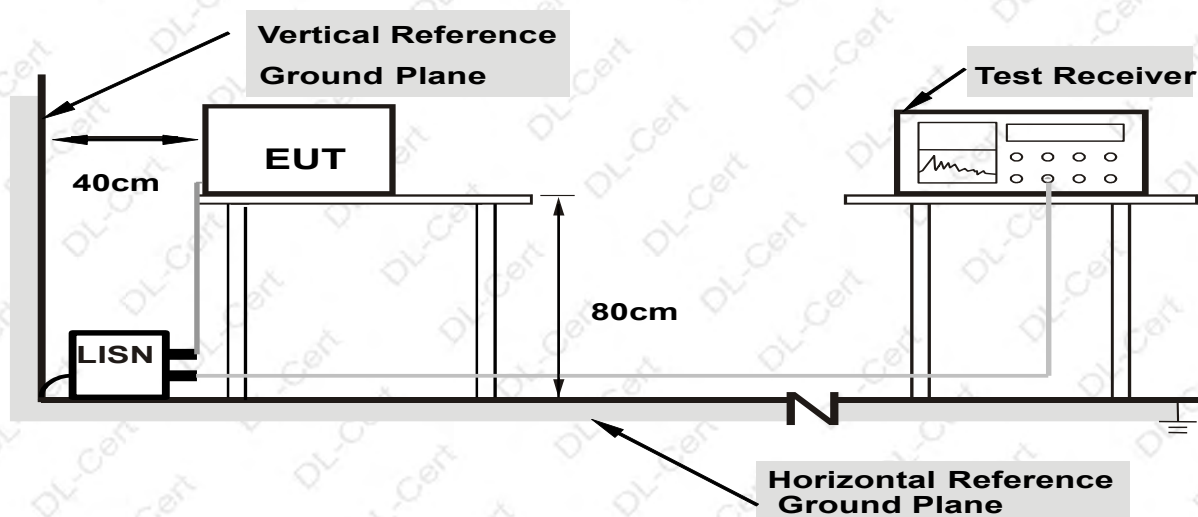
- The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- 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.

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

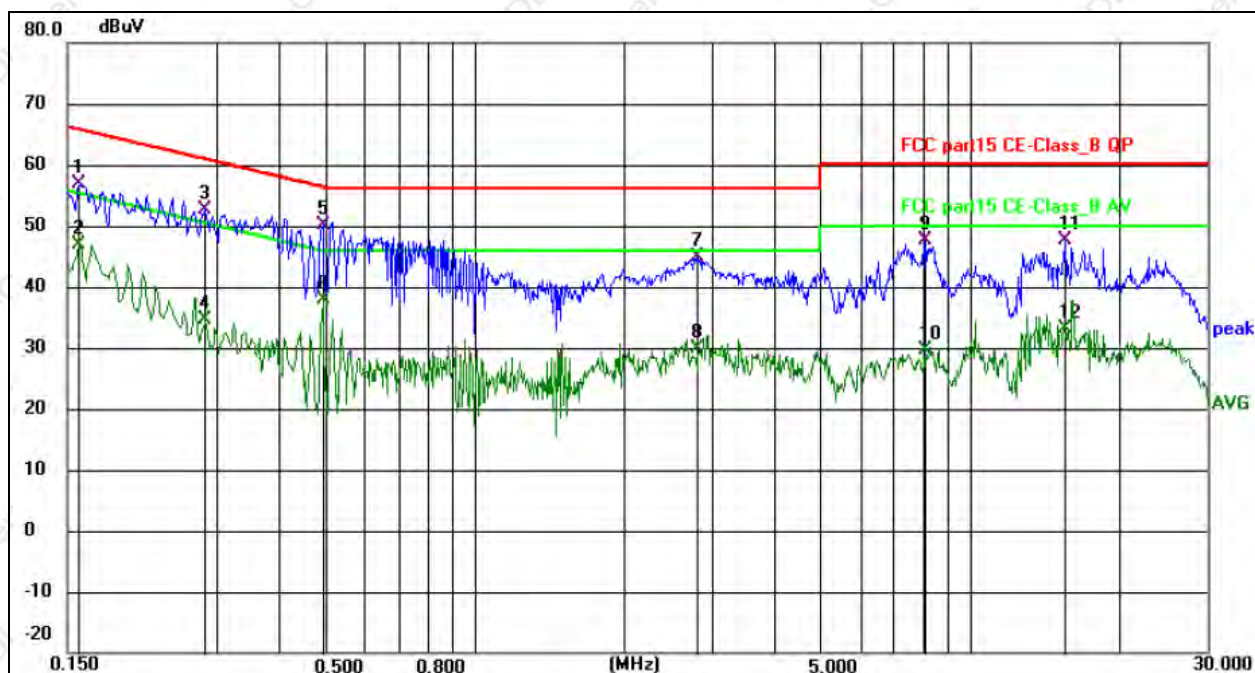
The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

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 °C	Relative Humidity:	54%
Pressure:	1010hPa	Phase :	L
Test Voltage :	AC 120V/60Hz	Test Mode:	Mode 4



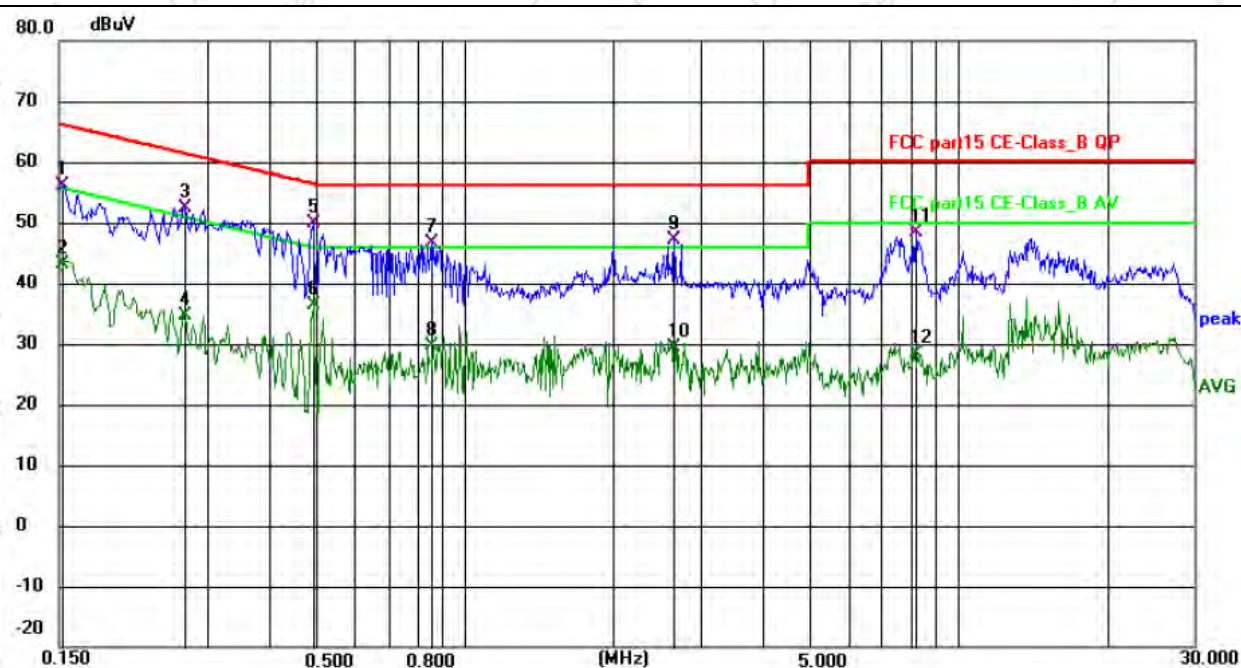
Remark:

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	0.1590	46.64	10.31	56.95	65.52	8.57	QP	P	
2	0.1590	36.53	10.31	46.84	55.52	8.68	AVG	P	
3	0.2847	43.48	9.10	52.58	60.68	8.10	QP	P	
4	0.2847	25.64	9.10	34.74	50.68	15.94	AVG	P	
5 *	0.4919	40.98	9.17	50.15	56.14	5.99	QP	P	
6	0.4919	28.72	9.17	37.89	46.14	8.25	AVG	P	
7	2.8093	36.17	8.78	44.95	56.00	11.05	QP	P	
8	2.8093	21.06	8.78	29.84	46.00	16.16	AVG	P	
9	8.1150	37.80	9.74	47.54	60.00	12.46	QP	P	
10	8.1150	19.87	9.74	29.61	50.00	20.39	AVG	P	
11	15.5265	37.57	10.05	47.62	60.00	12.38	QP	P	
12	15.5265	23.11	10.05	33.16	50.00	16.84	AVG	P	



Temperature:	25 °C	Relative Humidity:	54%
Pressure:	1010hPa	Phase :	N
Test Voltage :	AC 120V/60Hz	Test Mode:	Mode 4



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	0.1524	45.95	10.27	56.22	65.87	9.65	QP	P	
2	0.1524	32.75	10.27	43.02	55.87	12.85	AVG	P	
3	0.2714	43.32	8.99	52.31	61.07	8.76	QP	P	
4	0.2714	25.66	8.99	34.65	51.07	16.42	AVG	P	
5 *	0.4919	40.55	9.36	49.91	56.14	6.23	QP	P	
6	0.4919	26.97	9.36	36.33	46.14	9.81	AVG	P	
7	0.8564	37.34	9.29	46.63	56.00	9.37	QP	P	
8	0.8564	20.29	9.29	29.58	46.00	16.42	AVG	P	
9	2.6564	37.25	9.80	47.05	56.00	8.95	QP	P	
10	2.6564	19.69	9.80	29.49	46.00	16.51	AVG	P	
11	8.1958	38.44	9.89	48.33	60.00	11.67	QP	P	
12	8.1958	18.51	9.89	28.40	50.00	21.60	AVG	P	



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 (microvolts/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



3.2.2 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:

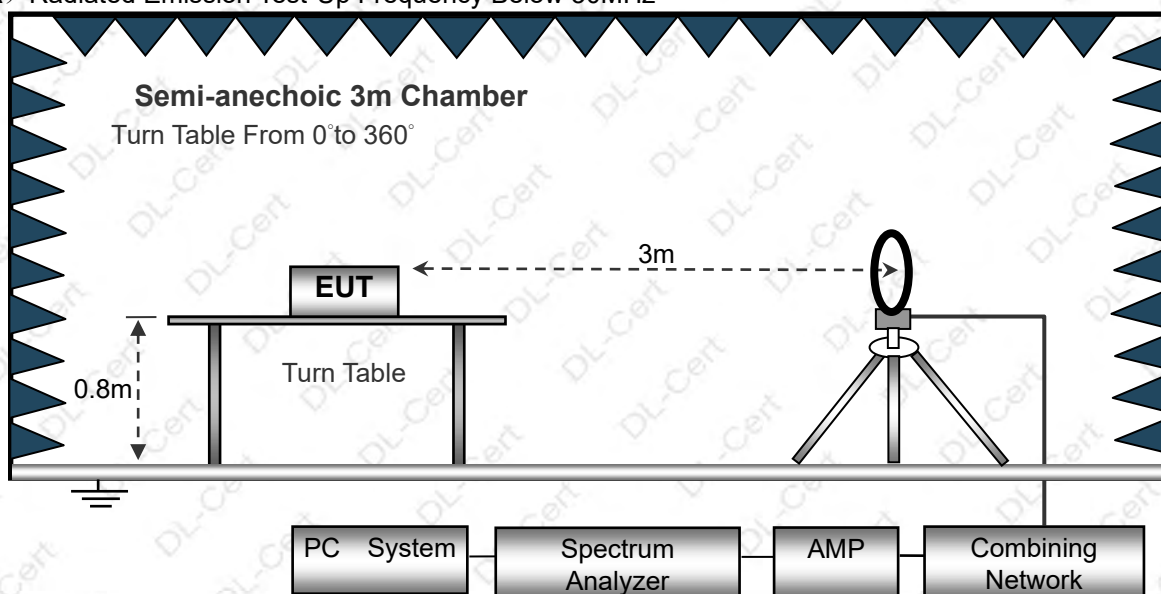
Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported

3.2.3 DEVIATION FROM TEST STANDARD

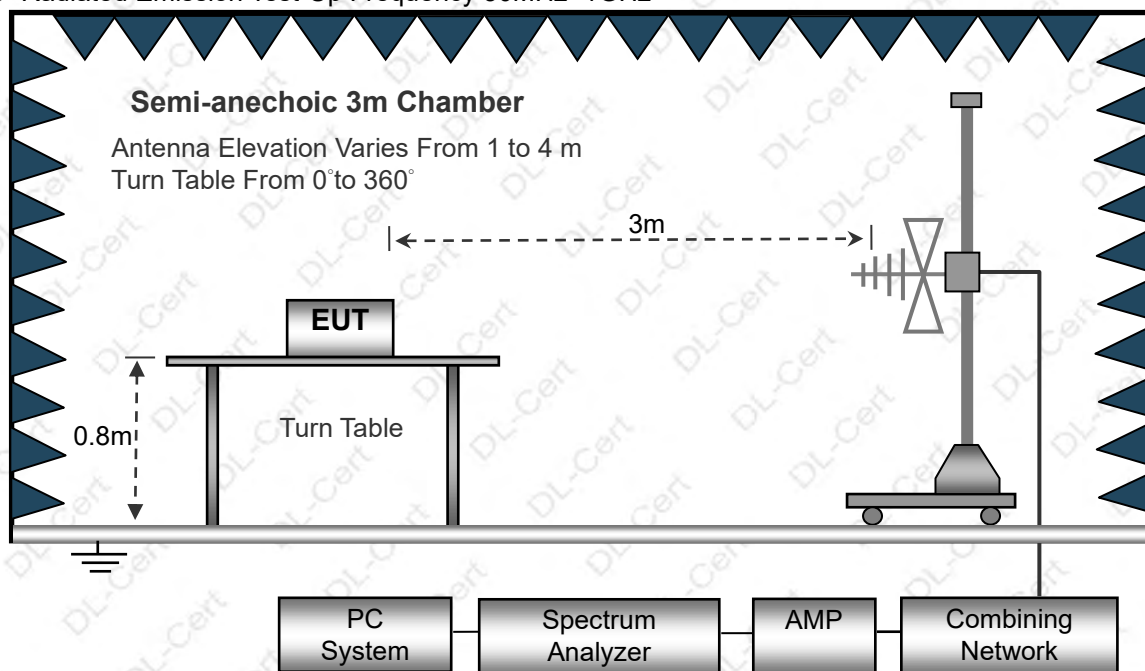
No deviation

3.2.4 TEST SETUP

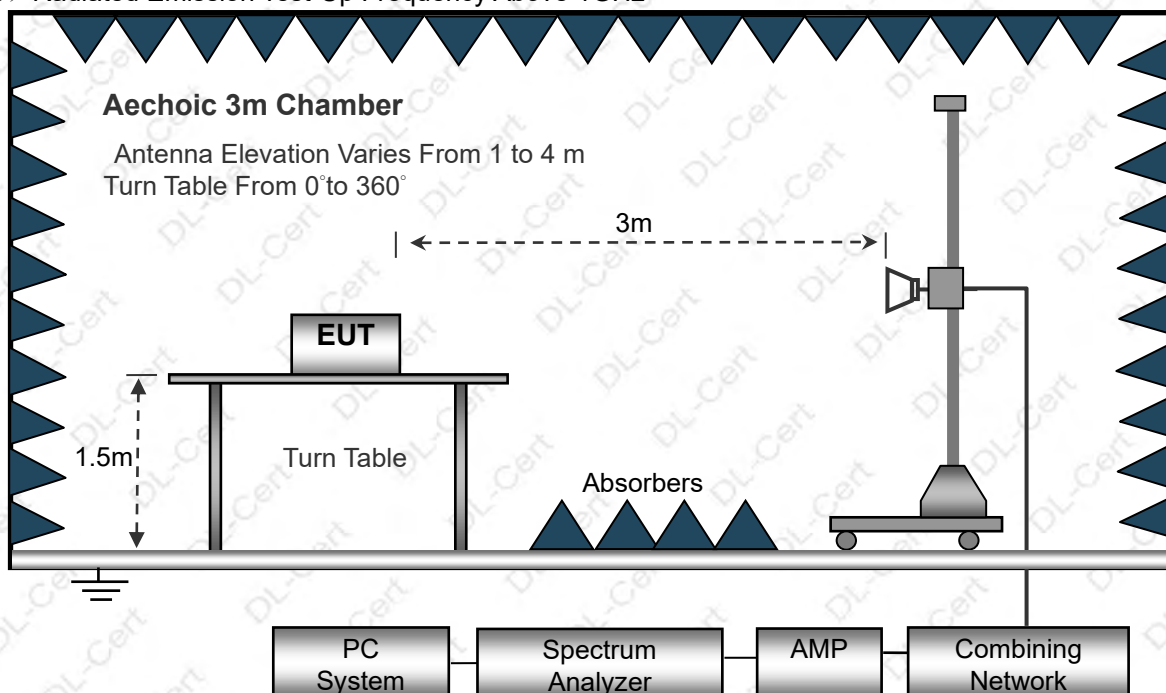
(A) Radiated Emission Test-Up Frequency Below 30MHz



(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 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.

**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 4		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		37.9448	40.41	-12.63	27.78	40.00	-12.22	QP
2	!	148.4410	54.30	-16.27	38.03	43.50	-5.47	QP
3		222.9500	50.68	-12.59	38.09	46.00	-7.91	QP
4	*	372.0045	50.88	-9.69	41.19	46.00	-4.81	QP
5	!	431.0314	48.71	-8.51	40.20	46.00	-5.80	QP
6		595.1326	45.75	-5.75	40.00	46.00	-6.00	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 4		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		32.5197	47.04	-14.24	32.80	40.00	-7.20	QP
2	*	148.4410	53.65	-16.45	37.20	43.50	-6.30	QP
3		222.9500	50.82	-12.06	38.76	46.00	-7.24	QP
4		372.0045	48.23	-8.67	39.56	46.00	-6.44	QP
5		432.5455	46.49	-7.50	38.99	46.00	-7.01	QP
6		595.1326	44.07	-4.75	39.32	46.00	-6.68	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	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	56.36	49.05	15.3	37.39	60	74	-14.00	PK
V	10360	41.27	49.05	15.3	37.39	44.91	54	-9.09	AV
V	15540	56.65	49.16	15.27	40.45	63.21	74	-10.79	PK
V	15540	39.56	49.16	15.27	40.45	46.12	54	-7.88	AV
H	10360	56.07	49.05	15.3	37.39	59.71	74	-14.29	PK
H	10360	40.42	49.05	15.3	37.39	44.06	54	-9.94	AV
H	15540	59.18	49.16	15.27	40.45	65.74	74	-8.26	PK
H	15540	38.06	49.16	15.27	40.45	44.62	54	-9.38	AV
operation frequency:5200									
V	10400	57.44	49.09	15.34	37.42	61.11	74	-12.89	PK
V	10400	39.35	49.09	15.34	37.42	43.02	54	-10.98	AV
V	15600	59.42	49.18	15.29	40.47	66	74	-8.00	PK
V	15600	38.16	49.18	15.29	40.47	44.74	54	-9.26	AV
H	10400	56.67	49.09	15.34	37.42	60.34	74	-13.66	PK
H	10400	39.75	49.09	15.34	37.42	43.42	54	-10.58	AV
H	15600	59.49	49.18	15.29	40.47	66.07	74	-7.93	PK
H	15600	38.34	49.18	15.29	40.47	44.92	54	-9.08	AV
operation frequency:5240									
V	10480	58.55	49.11	15.37	37.46	62.27	74	-11.73	PK
V	10480	39.38	49.11	15.37	37.46	43.1	54	-10.90	AV
V	15720	59.14	49.21	15.34	40.51	65.78	74	-8.22	PK
V	15720	38.36	49.21	15.34	40.51	45	54	-9.00	AV
H	10480	57.08	49.11	15.37	31.31	54.65	74	-19.35	PK
H	10480	45.56	49.11	15.37	31.31	43.13	54	-10.87	AV
H	15720	57.42	49.21	15.34	40.51	64.06	74	-9.94	PK
H	15720	37.54	49.21	15.34	40.51	44.18	54	-9.82	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	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	56.75	49.05	15.3	37.39	60.39	74	-13.61	PK
V	10360	38.66	49.05	15.3	37.39	42.3	54	-11.70	AV
V	15540	56.27	49.16	15.27	40.45	62.83	74	-11.17	PK
V	15540	38.38	49.16	15.27	40.45	44.94	54	-9.06	AV
H	10360	56.66	49.05	15.3	37.39	60.3	74	-13.70	PK
H	10360	39.34	49.05	15.3	37.39	42.98	54	-11.02	AV
H	15540	54.18	49.16	15.27	40.45	60.74	74	-13.26	PK
H	15540	38.36	49.16	15.27	40.45	44.92	54	-9.08	AV
operation frequency:5200									
V	10400	56.24	49.09	15.34	37.42	59.91	74	-14.09	PK
V	10400	39.79	49.09	15.34	37.42	43.46	54	-10.54	AV
V	15600	55.32	49.18	15.29	40.47	61.9	74	-12.10	PK
V	15600	38.33	49.18	15.29	40.47	44.91	54	-9.09	AV
H	10400	55.58	49.09	15.34	37.42	59.25	74	-14.75	PK
H	10400	40.35	49.09	15.34	37.42	44.02	54	-9.98	AV
H	15600	55.04	49.18	15.29	40.47	61.62	74	-12.38	PK
H	15600	39.28	49.18	15.29	40.47	45.86	54	-8.14	AV
operation frequency:5240									
V	10480	57.16	49.11	15.37	37.46	60.88	74	-13.12	PK
V	10480	40.53	49.11	15.37	37.46	44.25	54	-9.75	AV
V	15720	54.31	49.21	15.34	40.51	60.95	74	-13.05	PK
V	15720	38.43	49.21	15.34	40.51	45.07	54	-8.93	AV
H	10480	57.14	49.11	15.37	31.31	54.71	74	-19.29	PK
H	10480	44.66	49.11	15.37	31.31	42.23	54	-11.77	AV
H	15720	55.38	49.21	15.34	40.51	62.02	74	-11.98	PK
H	15720	39.23	49.21	15.34	40.51	45.87	54	-8.13	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	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	56.75	49.07	15.33	37.41	60.42	74	-13.58	PK
V	10380	39.24	49.07	15.33	37.41	42.91	54	-11.09	AV
V	15570	56.28	49.17	15.28	40.46	62.85	74	-11.15	PK
V	15570	38.34	49.17	15.28	40.46	44.91	54	-9.09	AV
H	10380	56.66	49.07	15.33	37.41	60.33	74	-13.67	PK
H	10380	40.38	49.07	15.33	37.41	44.05	54	-9.95	AV
H	15570	54.63	49.17	15.28	40.46	61.2	74	-12.80	PK
H	15570	38.21	49.17	15.28	40.46	44.78	54	-9.22	AV
operation frequency:5230									
V	10460	57.17	49.11	15.37	37.46	60.89	74	-13.11	PK
V	10460	39.43	49.11	15.37	37.46	43.15	54	-10.85	AV
V	15690	54.45	49.21	15.34	40.51	61.09	74	-12.91	PK
V	15690	38.32	49.21	15.34	40.51	44.96	54	-9.04	AV
H	10460	57.34	49.11	15.37	31.31	54.91	74	-19.09	PK
H	10460	44.87	49.11	15.37	31.31	42.44	54	-11.56	AV
H	15690	55.35	49.21	15.34	40.51	61.99	74	-12.01	PK
H	15690	39.06	49.21	15.34	40.51	45.7	54	-8.30	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

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	56.71	49.05	15.3	37.39	60.35	74	-13.65	PK
V	10360	39.53	49.05	15.3	37.39	43.17	54	-10.83	AV
V	15540	56.18	49.16	15.27	40.45	62.74	74	-11.26	PK
V	15540	38.34	49.16	15.27	40.45	44.9	54	-9.10	AV
H	10360	56.56	49.05	15.3	37.39	60.2	74	-13.80	PK
H	10360	38.15	49.05	15.3	37.39	41.79	54	-12.21	AV
H	15540	54.27	49.16	15.27	40.45	60.83	74	-13.17	PK
H	15540	39.34	49.16	15.27	40.45	45.9	54	-8.10	AV
operation frequency:5200									
V	10400	56.51	49.09	15.34	37.42	60.18	74	-13.82	PK
V	10400	41.76	49.09	15.34	37.42	45.43	54	-8.57	AV
V	15600	55.54	49.18	15.29	40.47	62.12	74	-11.88	PK
V	15600	40.35	49.18	15.29	40.47	46.93	54	-7.07	AV
H	10400	55.18	49.09	15.34	37.42	58.85	74	-15.15	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	41.24	49.18	15.29	40.47	47.82	54	-6.18	AV
operation frequency:5240									
V	10480	57.45	49.11	15.37	37.46	61.17	74	-12.83	PK
V	10480	40.67	49.11	15.37	37.46	44.39	54	-9.61	AV
V	15720	54.34	49.21	15.34	40.51	60.98	74	-13.02	PK
V	15720	39.39	49.21	15.34	40.51	46.03	54	-7.97	AV
H	10480	57.14	49.11	15.37	31.31	54.71	74	-19.29	PK
H	10480	44.55	49.11	15.37	31.31	42.12	54	-11.88	AV
H	15720	55.63	49.21	15.34	40.51	62.27	74	-11.73	PK
H	15720	40.01	49.21	15.34	40.51	46.65	54	-7.35	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.



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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	56.74	49.07	15.33	37.41	60.41	74	-13.59	PK
V	10380	40.28	49.07	15.33	37.41	43.95	54	-10.05	AV
V	15570	56.33	49.17	15.28	40.46	62.9	74	-11.10	PK
V	15570	39.74	49.17	15.28	40.46	46.31	54	-7.69	AV
H	10380	56.52	49.07	15.33	37.41	60.19	74	-13.81	PK
H	10380	40.46	49.07	15.33	37.41	44.13	54	-9.87	AV
H	15570	54.58	49.17	15.28	40.46	61.15	74	-12.85	PK
H	15570	39.33	49.17	15.28	40.46	45.9	54	-8.10	AV
operation frequency:5230									
V	10460	57.14	49.11	15.37	37.46	60.86	74	-13.14	PK
V	10460	41.61	49.11	15.37	37.46	45.33	54	-8.67	AV
V	15690	54.48	49.21	15.34	40.51	61.12	74	-12.88	PK
V	15690	39.36	49.21	15.34	40.51	46	54	-8.00	AV
H	10460	57.12	49.11	15.37	31.31	54.69	74	-19.31	PK
H	10460	44.54	49.11	15.37	31.31	42.11	54	-11.89	AV
H	15690	55.38	49.21	15.34	40.51	62.02	74	-11.98	PK
H	15690	40.04	49.21	15.34	40.51	46.68	54	-7.32	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

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	56.22	49.07	15.33	37.41	59.89	74	-14.11	PK
V	10420	41.63	49.07	15.33	37.41	45.3	54	-8.70	AV
V	15630	56.18	49.17	15.28	40.46	62.75	74	-11.25	PK
V	15630	39.16	49.17	15.28	40.46	45.73	54	-8.27	AV
H	10420	56.38	49.07	15.33	37.41	60.05	74	-13.95	PK
H	10420	41.21	49.07	15.33	37.41	44.88	54	-9.12	AV
H	15630	54.04	49.17	15.28	40.46	60.61	74	-13.39	PK
H	15630	40.33	49.17	15.28	40.46	46.9	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.



802.11a band 4

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:5745									
V	11490	53.55	49.05	15.3	37.39	57.19	68.2	-11.01	PK
V	11490	41.36	49.05	15.3	37.39	45	68.2	-23.20	AV
V	17235	51.02	49.16	15.27	40.45	57.58	68.2	-10.62	PK
V	17235	43.64	49.16	15.27	40.45	50.2	68.2	-18.00	AV
H	11490	50.63	49.05	15.3	37.39	54.27	68.2	-13.93	PK
H	11490	45.27	49.05	15.3	37.39	48.91	68.2	-19.29	AV
H	17235	50.93	49.16	15.27	40.45	57.49	68.2	-10.71	PK
H	17235	43.55	49.16	15.27	40.45	50.11	68.2	-18.09	AV
operation frequency:5785									
V	11570	51.13	49.09	15.34	37.42	54.8	68.2	-13.40	PK
V	11570	45.25	49.09	15.34	37.42	48.92	68.2	-19.28	AV
V	17355	50.86	49.18	15.29	40.47	57.44	68.2	-10.76	PK
V	17355	43.34	49.18	15.29	40.47	49.92	68.2	-18.28	AV
H	11570	50.47	49.09	15.34	37.42	54.14	68.2	-14.06	PK
H	11570	45.53	49.09	15.34	37.42	49.2	68.2	-19.00	AV
H	17355	48.66	49.18	15.29	40.47	55.24	68.2	-12.96	PK
H	17355	43.24	49.18	15.29	40.47	49.82	68.2	-18.38	AV
operation frequency:5825									
V	11650	52.56	49.11	15.37	37.46	56.28	68.2	-11.92	PK
V	11650	45.15	49.11	15.37	37.46	48.87	68.2	-19.33	AV
V	17475	49.63	49.21	15.34	40.51	56.27	68.2	-11.93	PK
V	17475	43.57	49.21	15.34	40.51	50.21	68.2	-17.99	AV
H	11650	57.29	49.11	15.37	31.31	54.86	68.2	-13.34	PK
H	11650	51.44	49.11	15.37	31.31	49.01	68.2	-19.19	AV
H	17475	49.93	49.21	15.34	40.51	56.57	68.2	-11.63	PK
H	17475	42.55	49.21	15.34	40.51	49.19	68.2	-19.01	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	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:5745									
V	11490	49.16	49.05	15.3	37.39	52.8	68.2	-15.40	PK
V	11490	45.32	49.05	15.3	37.39	48.96	68.2	-19.24	AV
V	17235	48.24	49.16	15.27	40.45	54.8	68.2	-13.40	PK
V	17235	43.51	49.16	15.27	40.45	50.07	68.2	-18.13	AV
H	11490	49.38	49.05	15.3	37.39	53.02	68.2	-15.18	PK
H	11490	45.42	49.05	15.3	37.39	49.06	68.2	-19.14	AV
H	17235	48.17	49.16	15.27	40.45	54.73	68.2	-13.47	PK
H	17235	44.54	49.16	15.27	40.45	51.1	68.2	-17.10	AV
operation frequency:5785									
V	11570	52.35	49.09	15.34	37.42	56.02	68.2	-12.18	PK
V	11570	44.41	49.09	15.34	37.42	48.08	68.2	-20.12	AV
V	17355	49.33	49.18	15.29	40.47	55.91	68.2	-12.29	PK
V	17355	43.64	49.18	15.29	40.47	50.22	68.2	-17.98	AV
H	11570	49.38	49.09	15.34	37.42	53.05	68.2	-15.15	PK
H	11570	43.58	49.09	15.34	37.42	47.25	68.2	-20.95	AV
H	17355	49.34	49.18	15.29	40.47	55.92	68.2	-12.28	PK
H	17355	43.16	49.18	15.29	40.47	49.74	68.2	-18.46	AV
operation frequency:5825									
V	11650	51.34	49.11	15.37	37.46	55.06	68.2	-13.14	PK
V	11650	44.73	49.11	15.37	37.46	48.45	68.2	-19.75	AV
V	17475	48.38	49.21	15.34	40.51	55.02	68.2	-13.18	PK
V	17475	43.51	49.21	15.34	40.51	50.15	68.2	-18.05	AV
H	11650	57.13	49.11	15.37	31.31	54.7	68.2	-13.50	PK
H	11650	44.38	49.11	15.37	31.31	41.95	68.2	-26.25	AV
H	17475	49.16	49.21	15.34	40.51	55.8	68.2	-12.40	PK
H	17475	44.54	49.21	15.34	40.51	51.18	68.2	-17.02	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	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	49.27	49.07	15.33	37.41	52.94	68.2	-15.26	PK
V	11510	45.36	49.07	15.33	37.41	49.03	68.2	-19.17	AV
V	17265	49.18	49.17	15.28	40.46	55.75	68.2	-12.45	PK
V	17265	43.56	49.17	15.28	40.46	50.13	68.2	-18.07	AV
H	11510	48.24	49.07	15.33	37.41	51.91	68.2	-16.29	PK
H	11510	45.41	49.07	15.33	37.41	49.08	68.2	-19.12	AV
H	17265	49.52	49.17	15.28	40.46	56.09	68.2	-12.11	PK
H	17265	44.56	49.17	15.28	40.46	51.13	68.2	-17.07	AV
operation frequency:5795									
V	11590	49.38	49.11	15.37	37.46	53.1	68.2	-15.10	PK
V	11590	44.54	49.11	15.37	37.46	48.26	68.2	-19.94	AV
V	17385	48.32	49.21	15.34	40.51	54.96	68.2	-13.24	PK
V	17385	43.56	49.21	15.34	40.51	50.2	68.2	-18.00	AV
H	11590	57.27	49.11	15.37	31.31	54.84	68.2	-13.36	PK
H	11590	44.45	49.11	15.37	31.31	42.02	68.2	-26.18	AV
H	17385	48.16	49.21	15.34	40.51	54.8	68.2	-13.40	PK
H	17385	44.61	49.21	15.34	40.51	51.25	68.2	-16.95	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

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:5745									
V	11490	49.32	49.05	15.3	37.39	52.96	68.2	-15.24	PK
V	11490	45.56	49.05	15.3	37.39	49.2	68.2	-19.00	AV
V	17235	48.37	49.16	15.27	40.45	54.93	68.2	-13.27	PK
V	17235	43.48	49.16	15.27	40.45	50.04	68.2	-18.16	AV
H	11490	48.34	49.05	15.3	37.39	51.98	68.2	-16.22	PK
H	11490	45.45	49.05	15.3	37.39	49.09	68.2	-19.11	AV
H	17235	48.27	49.16	15.27	40.45	54.83	68.2	-13.37	PK
H	17235	44.21	49.16	15.27	40.45	50.77	68.2	-17.43	AV
operation frequency:5785									
V	11570	48.33	49.09	15.34	37.42	52	68.2	-16.20	PK
V	11570	44.84	49.09	15.34	37.42	48.51	68.2	-19.69	AV
V	17355	49.46	49.18	15.29	40.47	56.04	68.2	-12.16	PK
V	17355	43.17	49.18	15.29	40.47	49.75	68.2	-18.45	AV
H	11570	49.62	49.09	15.34	37.42	53.29	68.2	-14.91	PK
H	11570	43.44	49.09	15.34	37.42	47.11	68.2	-21.09	AV
H	17355	49.16	49.18	15.29	40.47	55.74	68.2	-12.46	PK
H	17355	43.58	49.18	15.29	40.47	50.16	68.2	-18.04	AV
operation frequency:5825									
V	11650	49.15	49.11	15.37	37.46	52.87	68.2	-15.33	PK
V	11650	44.68	49.11	15.37	37.46	48.4	68.2	-19.80	AV
V	17475	48.54	49.21	15.34	40.51	55.18	68.2	-13.02	PK
V	17475	43.59	49.21	15.34	40.51	50.23	68.2	-17.97	AV
H	11650	57.13	49.11	15.37	31.31	54.7	68.2	-13.50	PK
H	11650	44.55	49.11	15.37	31.31	42.12	68.2	-26.08	AV
H	17475	48.21	49.21	15.34	40.51	54.85	68.2	-13.35	PK
H	17475	44.36	49.21	15.34	40.51	51	68.2	-17.20	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.



802.11ac HT40

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	49.43	49.07	15.33	37.41	53.1	68.2	-15.10	PK
V	11510	45.22	49.07	15.33	37.41	48.89	68.2	-19.31	AV
V	17265	48.27	49.17	15.28	40.46	54.84	68.2	-13.36	PK
V	17265	43.34	49.17	15.28	40.46	49.91	68.2	-18.29	AV
H	11510	48.38	49.07	15.33	37.41	52.05	68.2	-16.15	PK
H	11510	45.14	49.07	15.33	37.41	48.81	68.2	-19.39	AV
H	17265	48.56	49.17	15.28	40.46	55.13	68.2	-13.07	PK
H	17265	44.25	49.17	15.28	40.46	50.82	68.2	-17.38	AV
operation frequency:5795									
V	11590	49.54	49.11	15.37	37.46	53.26	68.2	-14.94	PK
V	11590	44.36	49.11	15.37	37.46	48.08	68.2	-20.12	AV
V	17385	48.14	49.21	15.34	40.51	54.78	68.2	-13.42	PK
V	17385	43.65	49.21	15.34	40.51	50.29	68.2	-17.91	AV
H	11590	57.13	49.11	15.37	31.31	54.7	68.2	-13.50	PK
H	11590	44.85	49.11	15.37	31.31	42.42	68.2	-25.78	AV
H	17385	48.64	49.21	15.34	40.51	55.28	68.2	-12.92	PK
H	17385	44.52	49.21	15.34	40.51	51.16	68.2	-17.04	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

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	48.13	49.07	15.33	37.41	51.8	68.2	-16.40	PK
V	11550	45.37	49.07	15.33	37.41	49.04	68.2	-19.16	AV
V	17325	49.11	49.17	15.28	40.46	55.68	68.2	-12.52	PK
V	17325	43.29	49.17	15.28	40.46	49.86	68.2	-18.34	AV
H	11550	48.45	49.07	15.33	37.41	52.12	68.2	-16.08	PK
H	11550	45.52	49.07	15.33	37.41	49.19	68.2	-19.01	AV
H	17325	48.63	49.17	15.28	40.46	55.2	68.2	-13.00	PK
H	17325	44.57	49.17	15.28	40.46	51.14	68.2	-17.06	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.

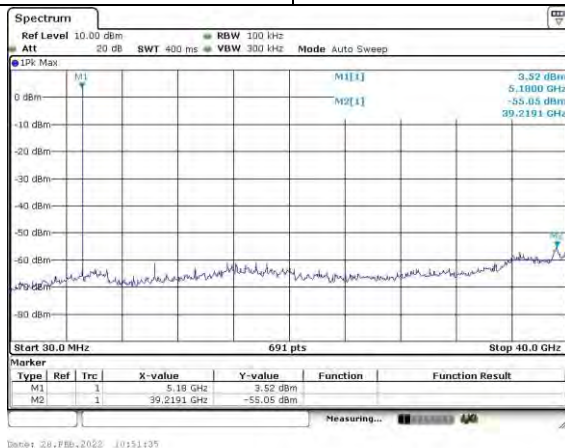


For Conducted

During the test, pre-scan the all modulation, the modulation below were found to have the worst test results, as reflected in the report.

Test channel:

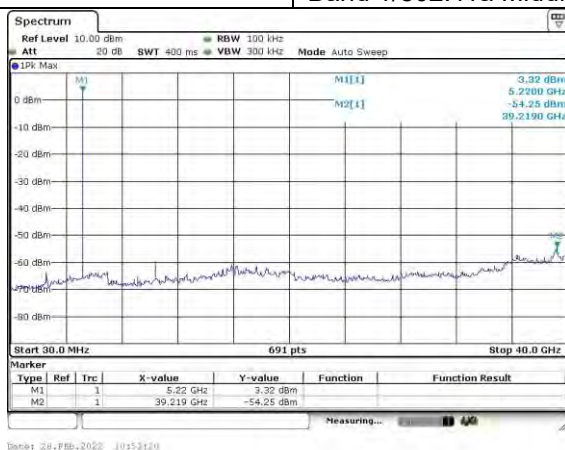
Band 1/802.11a Lowest channel



0.03Hz~40GHz

Test channel:

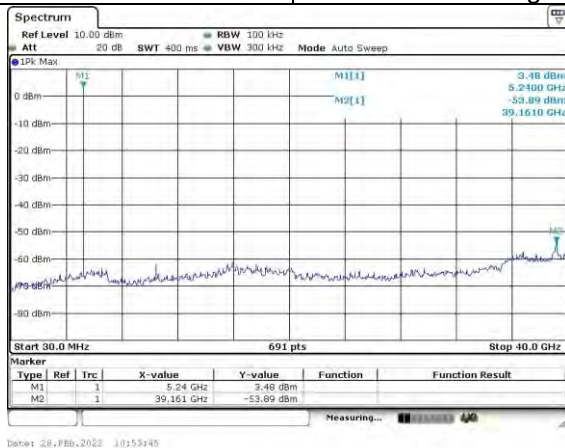
Band 1/802.11a Middle channel



0.03GHz~40GHz

Test channel:

Band 1/802.11a Highest channel

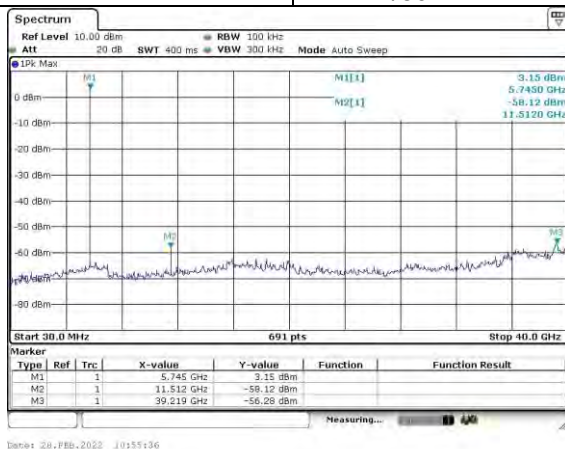


0.03GHz~40GHz



Test channel:

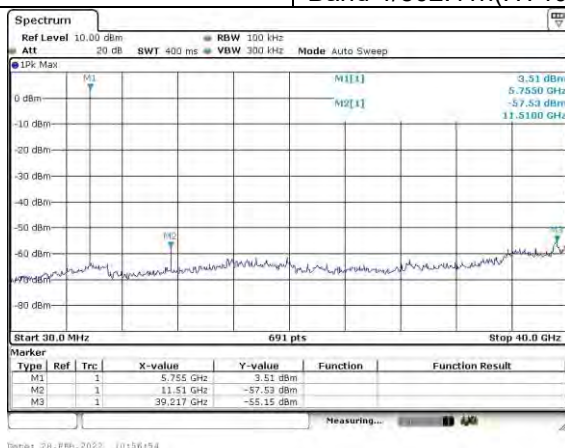
Band 4/802.11a Lowest channel



0.03Hz~40GHz

Test channel:

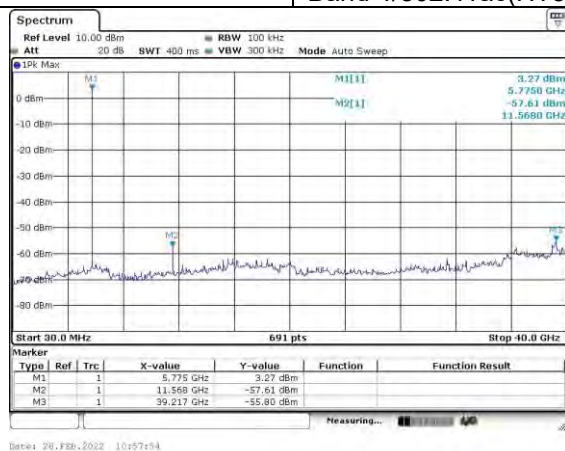
Band 4/802.11n(HT40) Lowest channel



0.03GHz~40GHz

Test channel:

Band 4/802.11ac(HT80)



0.03GHz~40GHz



3.3 CONDUCTED BAND EMISSION MEASUREMENT

3.3.1 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.

(4) For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

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	

3.3.2 TEST PROCEDURE

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

3.3.3 DEVIATION FROM TEST STANDARD

No deviation

3.3.4 TEST SETUP



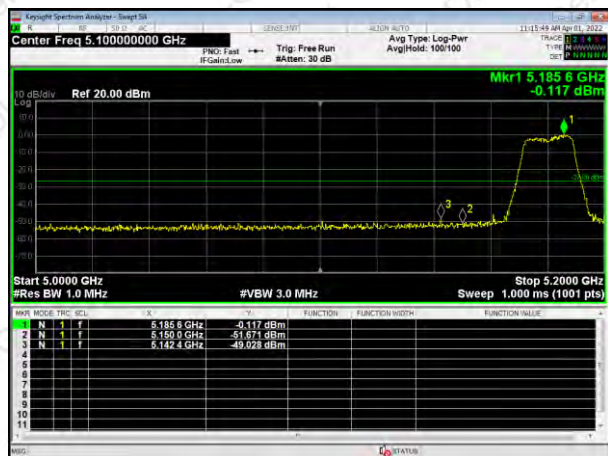
3.3.5 EUT OPERATING CONDITIONS

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.

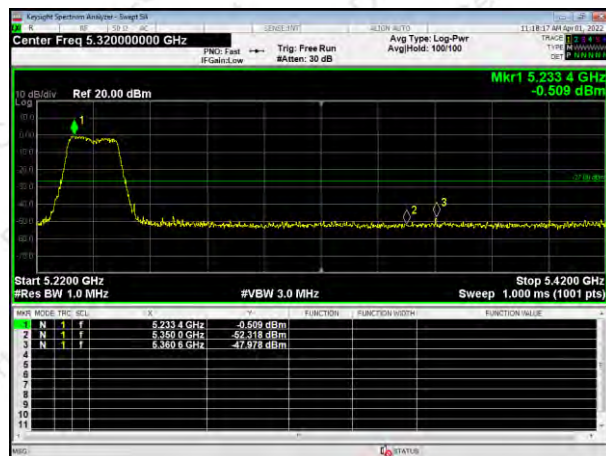


3.3.6 TEST RESULT

802.11a

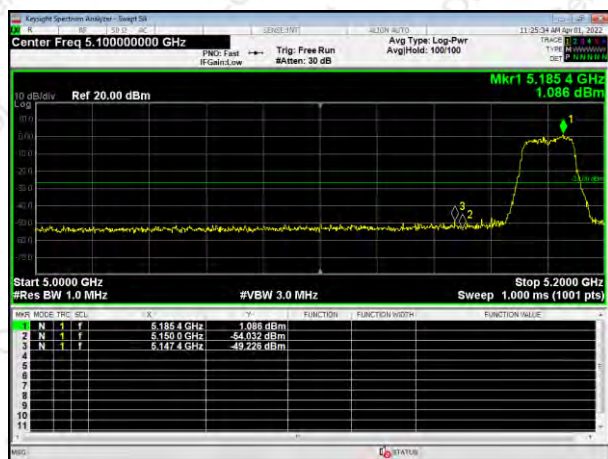


5180MHz

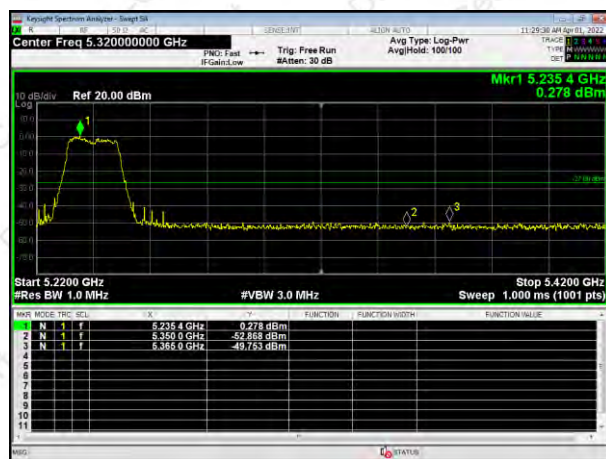


5240MHz

802.11n HT20

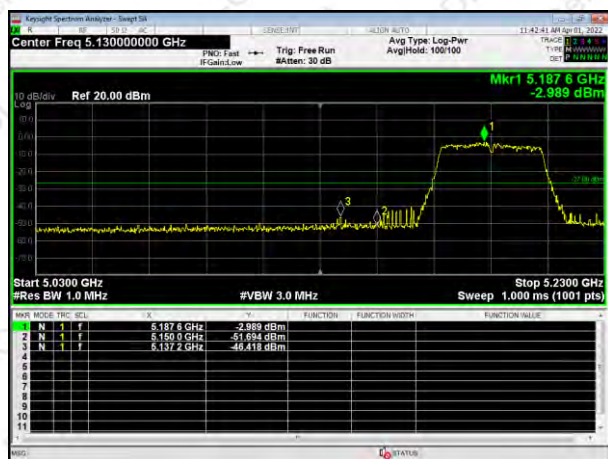


5180MHz

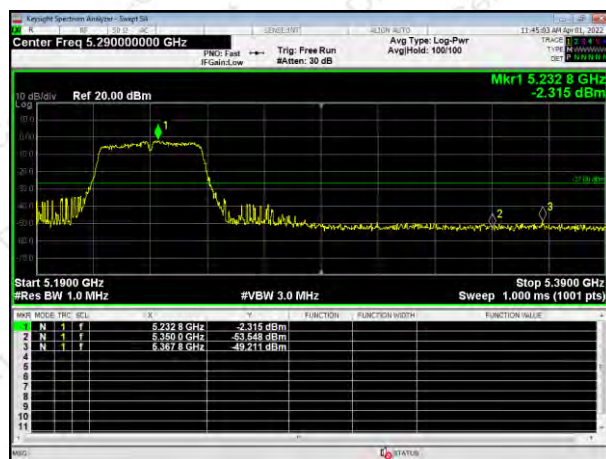


5240MHz

802.11n HT40



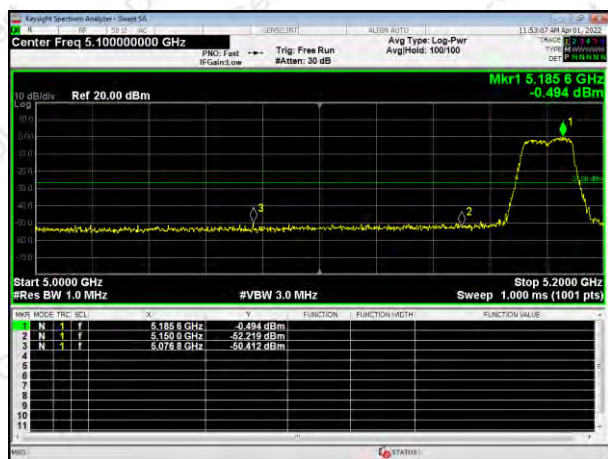
5190MHz



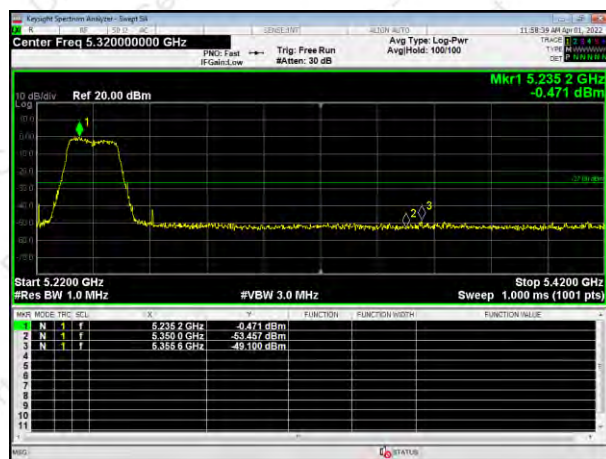
5230MHz



802.11ac HT20

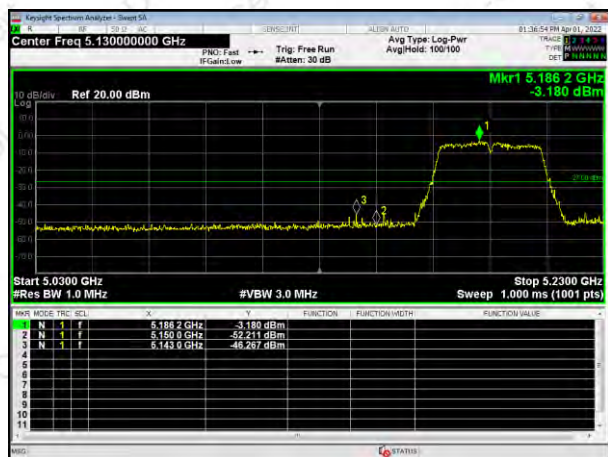


5180MHz

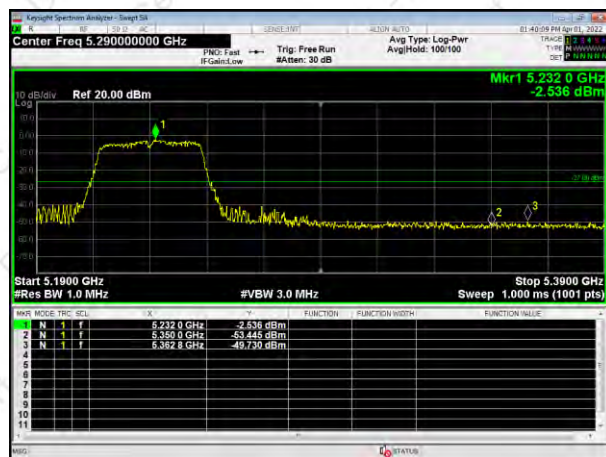


5240MHz

802.11ac HT40

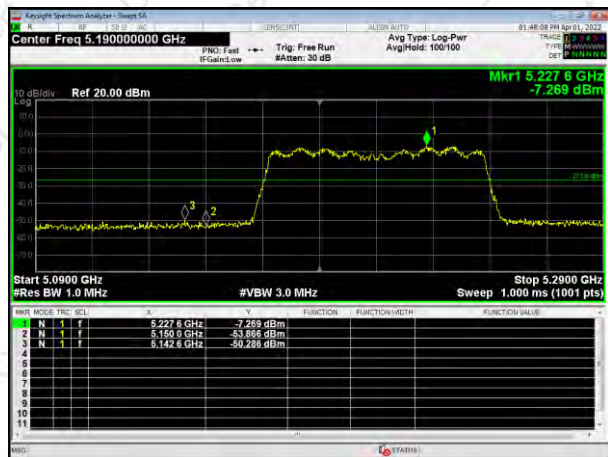


5190MHz



5230MHz

802.11ac HT80



5210MHz



802.11a

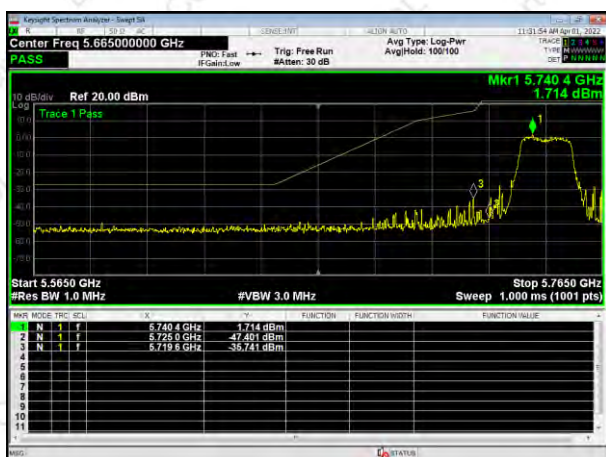


5745MHz



5825MHz

802.11n HT20

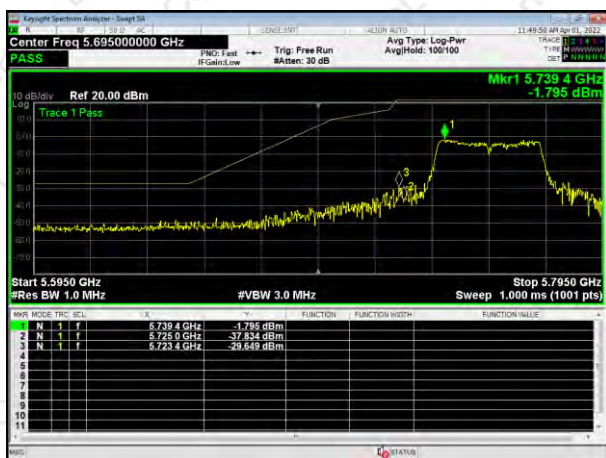


5745MHz



5825MHz

802.11n HT40



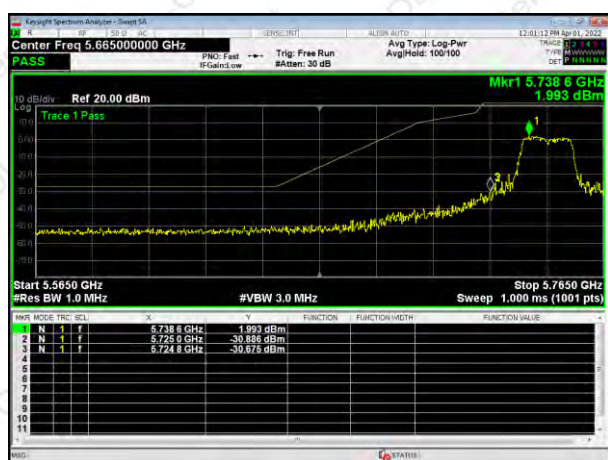
5755MHz



5795MHz



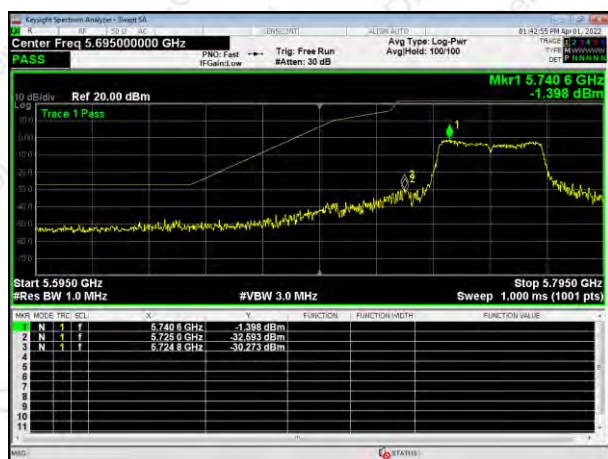
802.11ac HT20



5745MHz

5825MHz

802.11ac HT40



5755MHz

5795MHz

802.11ac HT80



5775MHz



4. PEAK 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.

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

4.1.1 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

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

Band	Mode	Test Channel	Peak Output Power (dBm)	Duty factor (dB)	Total Output Power(dB)	LIMIT (dBm)
Band 1	802.11a	Low	12.569	0.13	12.699	23.98
		Moddle	11.561	0.13	11.691	23.98
		High	12.402	0.13	12.532	23.98
	802.11n HT20	Low	11.538	0.77	12.308	23.98
		Moddle	10.947	0.77	11.717	23.98
		High	12.008	0.77	12.778	23.98
	802.11n HT40	Low	12.171	0.27	12.441	23.98
		High	13.33	0.27	13.6	23.98
	802.11ac HT20	Low	12.229	0.14	12.369	23.98
		Moddle	11.485	0.14	11.625	23.98
		High	12.424	0.14	12.564	23.98
	802.11ac HT40	Low	11.865	0.27	12.135	23.98
		High	13.281	0.27	13.551	23.98
	802.11ac HT80	/	9.677	0.52	10.197	23.98

Band	Mode	Test Channel	Peak Output Power (dBm)	Duty factor (dB)	Total Output Power(dB)	LIMIT (dBm)
Band 4	802.11a	Low	14.988	0.14	15.128	30
		Moddle	16.23	0.14	16.37	30
		High	16.017	0.14	16.157	30
	802.11n HT20	Low	12.883	0.77	13.653	30
		Moddle	14.132	0.77	14.902	30
		High	14.117	0.77	14.887	30
	802.11n HT40	Low	13.611	0.26	13.871	30
		High	14.584	0.26	14.844	30
	802.11ac HT20	Low	15.082	0.14	15.222	30
		Moddle	16.121	0.14	16.261	30
		High	15.975	0.14	16.115	30
	802.11ac HT40	Low	14.137	0.27	14.407	30
		High	14.789	0.27	15.059	30
	802.11ac HT80	/	13.305	0.51	13.815	30



802.11a



802.11n HT20



5180MHz



5180MHz



5200MHz



5200MHz

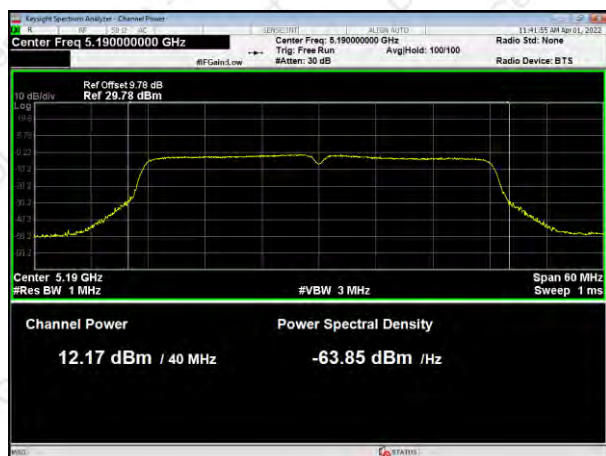


5240MHz

5240MHz



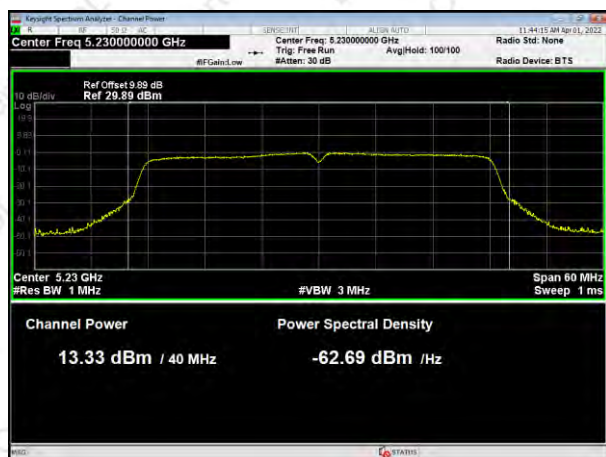
802.11n HT40



802.11ac HT20



5190MHz



5180



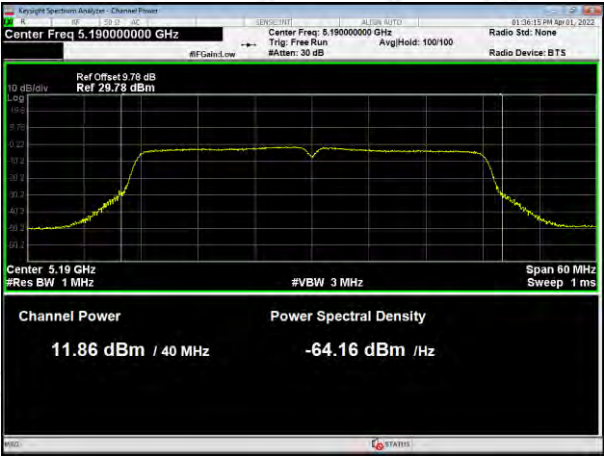
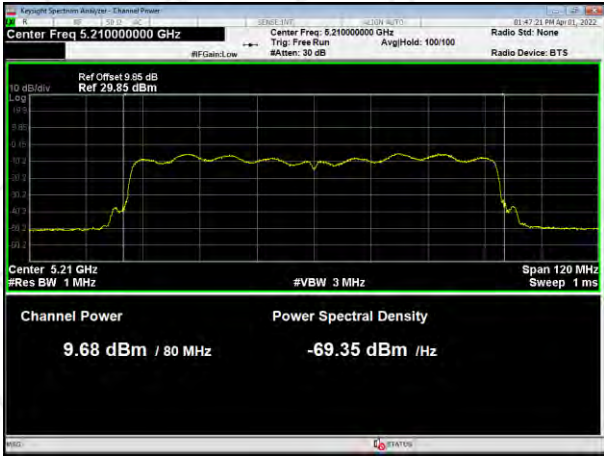
5230MHz



5200

5240



802.11ac HT40  Center Freq: 5.19000000 GHz Span: 60 MHz Channel Power: 11.86 dBm / 40 MHz Power Spectral Density: -64.16 dBm / Hz	802.11ac HT80  Center Freq: 5.21000000 GHz Span: 120 MHz Channel Power: 9.68 dBm / 80 MHz Power Spectral Density: -69.35 dBm / Hz
5190MHz  Center Freq: 5.23000000 GHz Span: 60 MHz Channel Power: 13.28 dBm / 40 MHz Power Spectral Density: -62.74 dBm / Hz	5210
5230MHz	



802.11a



802.11n HT20



5745MHz



5745MHz



5785MHz



5785MHz



5825MHz

5825MHz



802.11n HT40



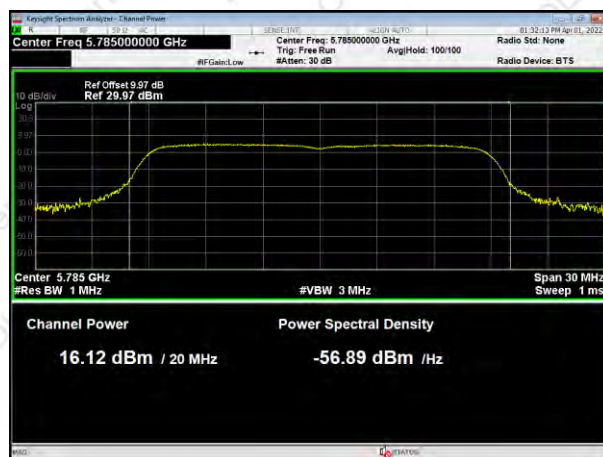
802.11ac HT20



5755MHz



5745MHz



5795MHz

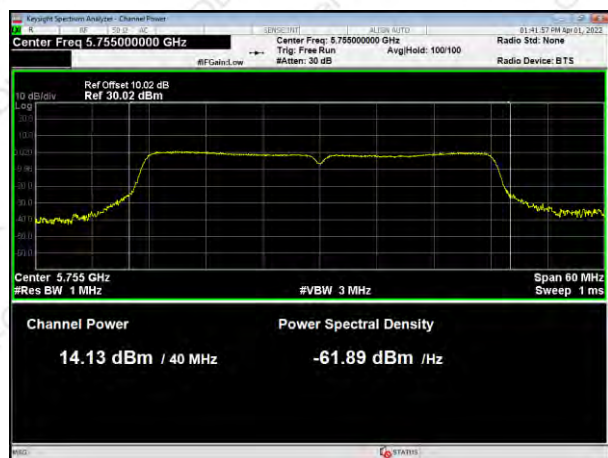
5785MHz



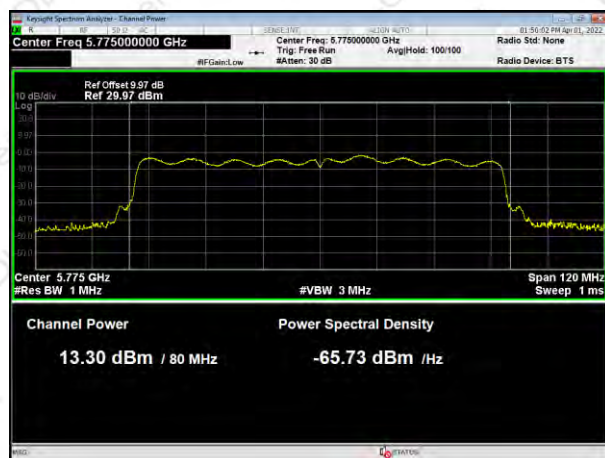
5825MHz



802.11ac HT40



802.11ac HT80



5755MHz



5775MHz

5795MHz



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.
In addition, the maximum power spectral density shall not exceed 30 dBm in any 500 kHz band.

Spectrum Parameters	Setting
Attenuation	Auto
Span Frequency	= the frequency band of operation
RB	RBW $\geq$ 1MHz for band 1 RBW $\geq$ 510KHz for band 4
VB	VBW $\geq$ 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. Use 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.

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

	Mode	Test Channel	Reading Level (dBm)	Duty factor (dB)	PSD (dBm/MHz)	Limit (dBm)	Result
Band1	802.11a	Low	2.71	0.13	2.84	11.00	PASS
		Moddle	2.109	0.13	2.239	11.00	PASS
		High	2.571	0.13	2.701	11.00	PASS
	802.11n20	Low	1.697	0.77	2.467	11.00	PASS
		Moddle	1.678	0.77	2.448	11.00	PASS
		High	2.519	0.77	3.289	11.00	PASS
	802.11n40	Low	-0.998	0.27	-0.728	11.00	PASS
		High	0.115	0.27	0.385	11.00	PASS
	802.11ac20	Low	2.524	0.14	2.664	11.00	PASS
		Moddle	1.885	0.14	2.025	11.00	PASS
		High	2.417	0.14	2.557	11.00	PASS
	802.11ac40	Low	-1.169	0.27	-0.899	11.00	PASS
		High	0.404	0.27	0.674	11.00	PASS
	802.11ac80	/	-5.209	0.52	-4.689	11.00	PASS

	Mode	Test Channel	Reading Level (dBm)	Duty factor (dB)	PSD (dBm/500kHz)	Limit (dBm)	Result
Band4	802.11a	Low	1.836	0.14	1.976	30.00	PASS
		Moddle	2.822	0.14	2.962	30.00	PASS
		High	2.669	0.14	2.809	30.00	PASS
	802.11n20	Low	-0.26	0.77	0.51	30.00	PASS
		Moddle	0.983	0.77	1.753	30.00	PASS
		High	1.523	0.77	2.293	30.00	PASS
	802.11n40	Low	-2.119	0.26	-1.859	30.00	PASS
		High	-1.066	0.26	-0.806	30.00	PASS
	802.11ac20	Low	2.094	0.14	2.234	30.00	PASS
		Moddle	2.483	0.14	2.623	30.00	PASS
		High	2.807	0.14	2.947	30.00	PASS
	802.11ac40	Low	-1.703	0.27	-1.433	30.00	PASS
		High	-0.963	0.27	-0.693	30.00	PASS
	802.11ac80	/	-4.287	0.51	-3.777	30.00	PASS



802.11a



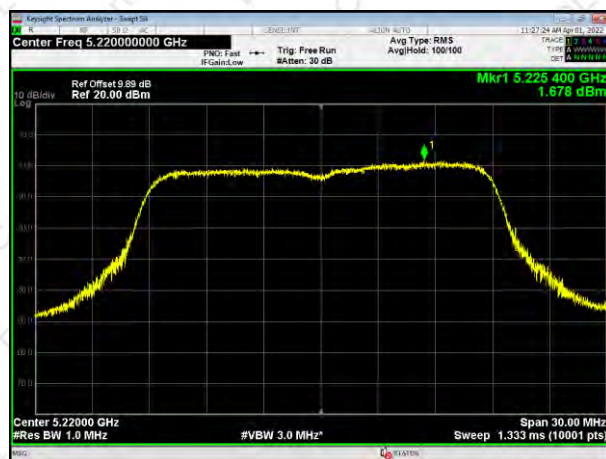
802.11n HT20



5180MHz



5180MHz



5200MHz



5200MHz



5240MHz

5240MHz



802.11n HT40



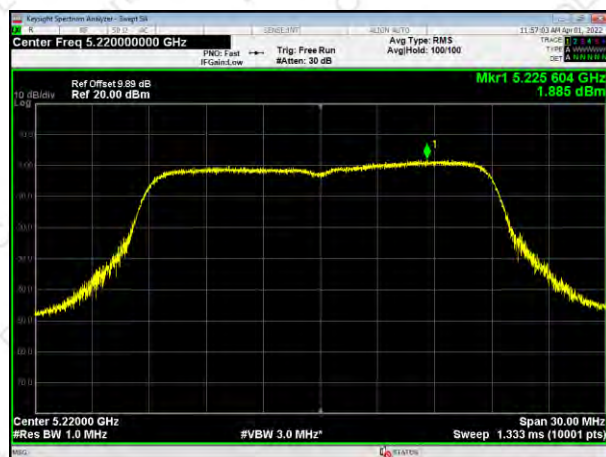
802.11ac HT20



5190MHz



5180

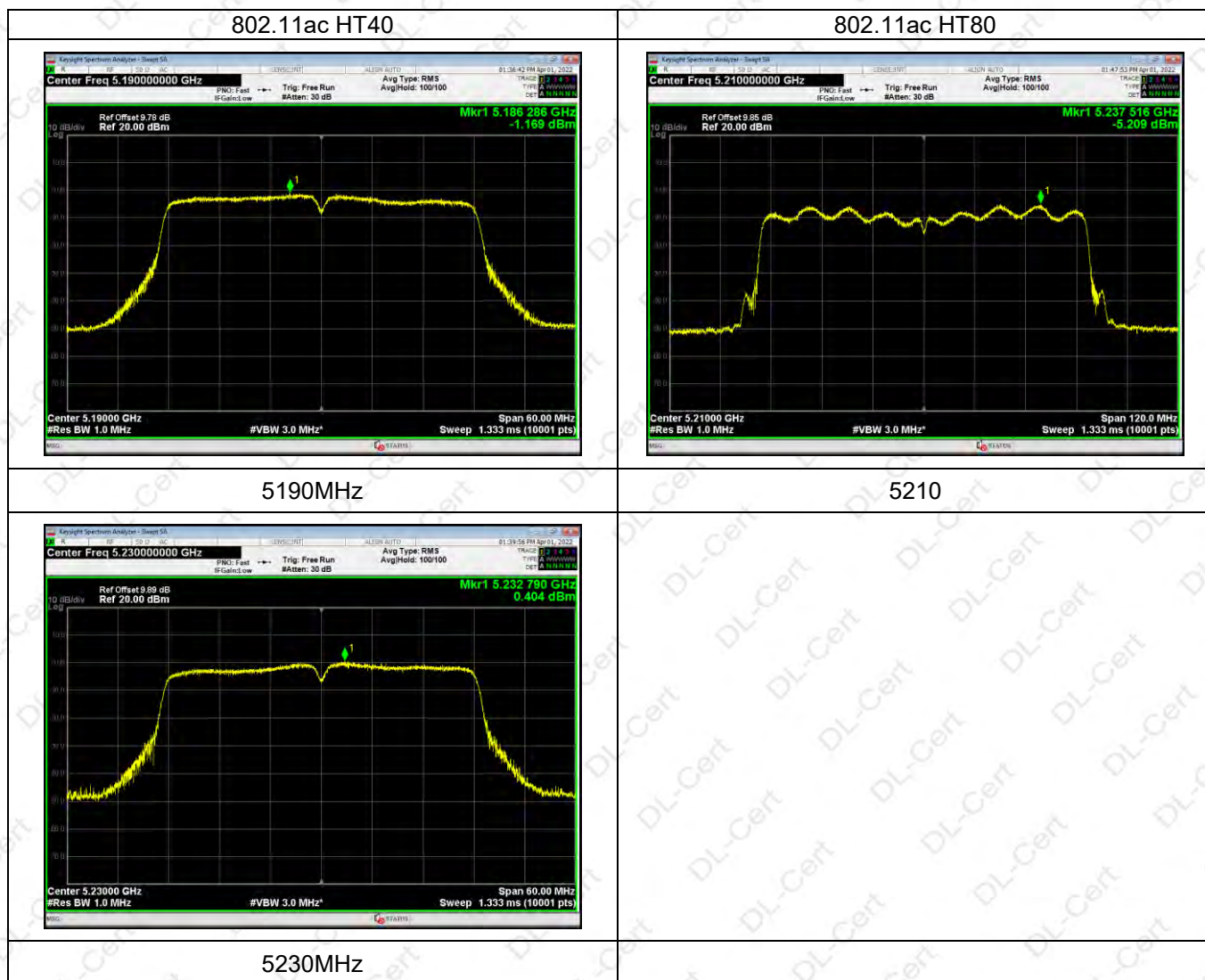


5230MHz



5200

5240





802.11a



802.11n HT20



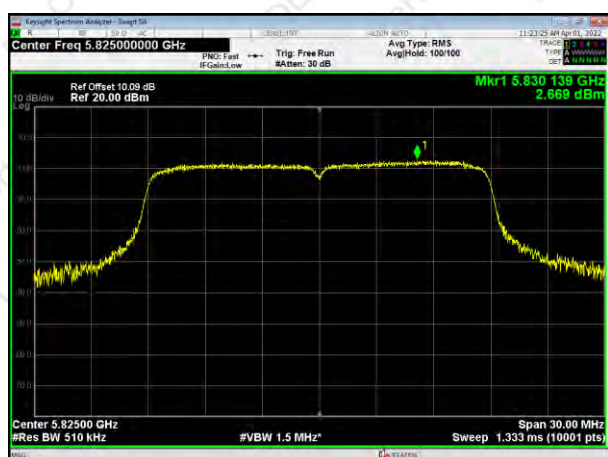
5745MHz



5745MHz



5785MHz



5785MHz



5825MHz

5825MHz



802.11n HT40



802.11ac HT20



5755MHz



5745MHz



5795MHz

5785MHz



5825MHz



802.11ac HT40



802.11ac HT80



5755MHz



5775MHz

5795MHz



6. 6DB&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.

The minimum of 6dB Bandwidth measurement is 0.5 MHz for U-NII-3

6.1.1 TEST PROCEDURE

6dB Bandwidth	
Spectrum Parameters	Setting
RBW	100KHz
VBW	300KHz
Span	30MHz(20MHz Bandwidth mode) 60MHz(40MHz Bandwidth mode) 120MHz(80MHz Bandwidth mode)
Sweep Time	Auto
Detector	Peak
Trace Mode	Max Hold

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

		Test Channel	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Result
Band 1	802.11a	Low	20.85	17.581	Pass
		Middle	20.41	17.621	Pass
		High	20.50	17.604	Pass
	802.11n HT20	Low	20.32	17.581	Pass
		Middle	20.25	17.620	Pass
		High	19.92	17.593	Pass
	802.11n HT40	Low	41.72	36.104	Pass
		High	41.66	36.117	Pass
	802.11ac HT20	Low	20.71	17.576	Pass
		Middle	21.01	17.628	Pass
		High	20.45	17.601	Pass
	802.11ac HT40	Low	41.69	36.102	Pass
		High	41.91	36.101	Pass
	802.11ac HT80	/	81.64	75.306	Pass

		Test Channel	6dB Bandwidth (MHz)	99% Bandwidth (MHz)	6dB Bandwidth Limit (MHz)	Result
Band 4	802.11a	Low	16.33	17.563	>0.5	Pass
		Middle	16.25	17.551	>0.5	Pass
		High	16.27	17.600	>0.5	Pass
	802.11n HT20	Low	16.96	17.549	>0.5	Pass
		Middle	16.92	17.539	>0.5	Pass
		High	17.49	17.515	>0.5	Pass
	802.11n HT40	Low	36.04	36.248	>0.5	Pass
		High	35.70	36.153	>0.5	Pass
	802.11ac HT20	Low	16.42	17.583	>0.5	Pass
		Middle	17.06	17.586	>0.5	Pass
		High	16.38	17.600	>0.5	Pass
	802.11ac HT40	Low	36.30	36.249	>0.5	Pass
		High	35.72	36.167	>0.5	Pass
	802.11ac HT80	/	75.14	75.382	>0.5	Pass



802.11a



802.11n HT20



5180MHz



5180MHz



5200MHz



5200MHz



5240MHz

5240MHz



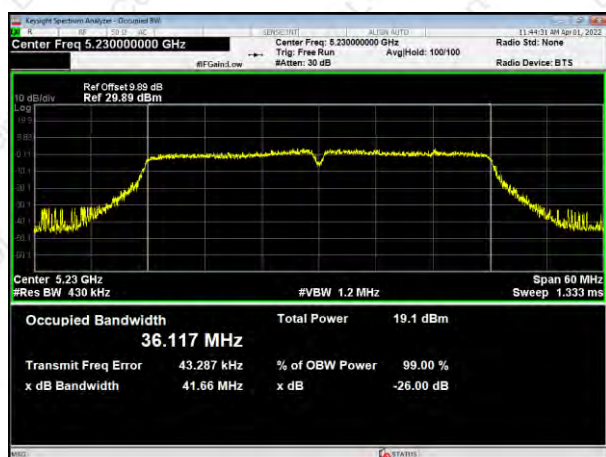
802.11n HT40



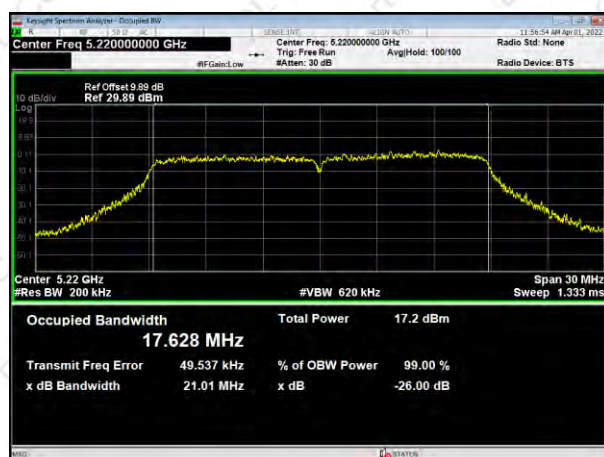
802.11ac HT20



5190MHz



5180



5230MHz



5200

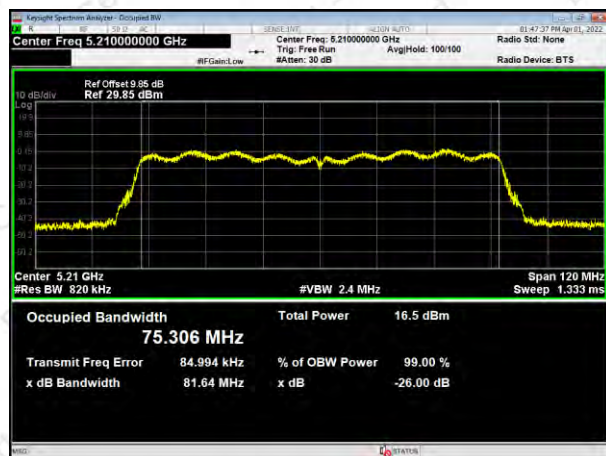
5240



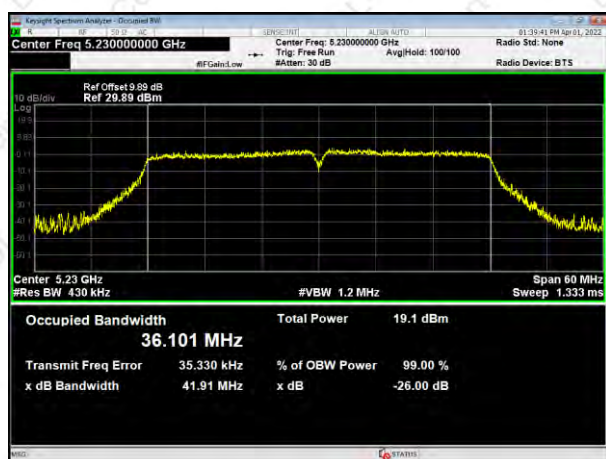
802.11ac HT40



802.11ac HT80



5190MHz



5210

5230MHz



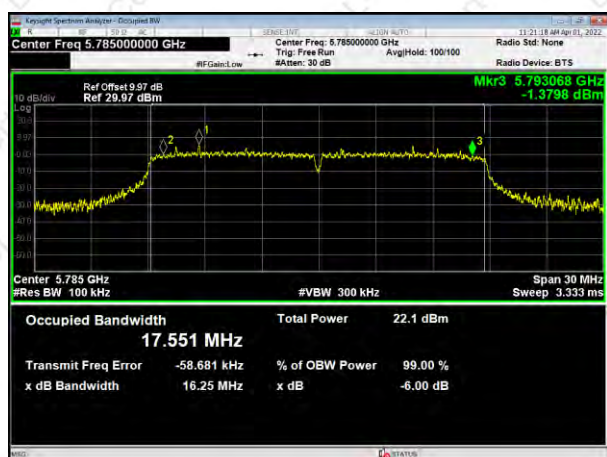
802.11a



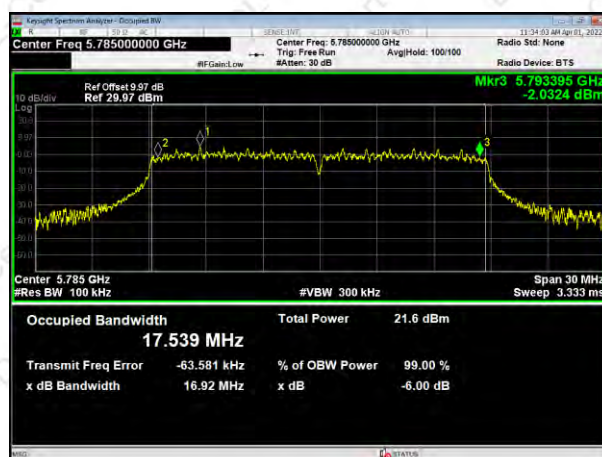
802.11n HT20



5745MHz



5745MHz



5785MHz



5785MHz



5825MHz

5825MHz



802.11n HT40



802.11ac HT20



5755MHz



5745MHz



5795MHz



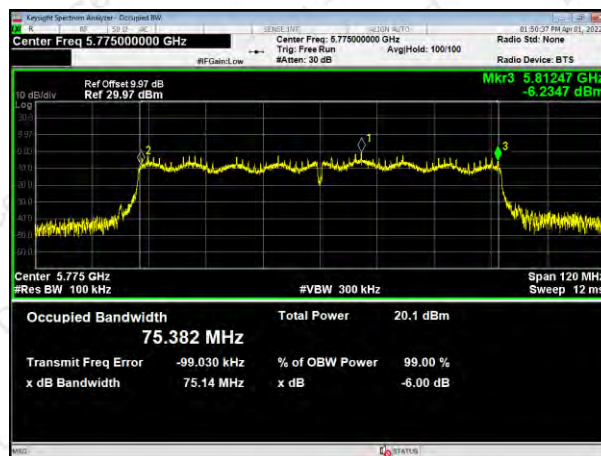
5825MHz



802.11ac HT40



802.11ac HT80



5755MHz



5775MHz

5795MHz



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 = 1 MHz.
2. Set the video bandwidth (VBW) $\geq$ 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

Operation Mode		Duty Cycle(%)	Duty Fator (dB) $10 * \log (1/ \text{Duty cycle})$
Band 1	802.11a	96.99	0.13
	802.11n(HT20)	83.68	0.77
	802.11n(HT40)	93.91	0.27
	802.11ac(HT20)	96.89	0.14
	802.11ac(HT40)	94.04	0.27
	802.11ac(HT80)	88.81	0.52
Band 4	802.11a	96.9	0.14
	802.11n(HT20)	83.69	0.77
	802.11n(HT40)	94.16	0.26
	802.11ac(HT20)	96.92	0.14
	802.11ac(HT40)	94.02	0.27
	802.11ac(HT80)	88.86	0.51



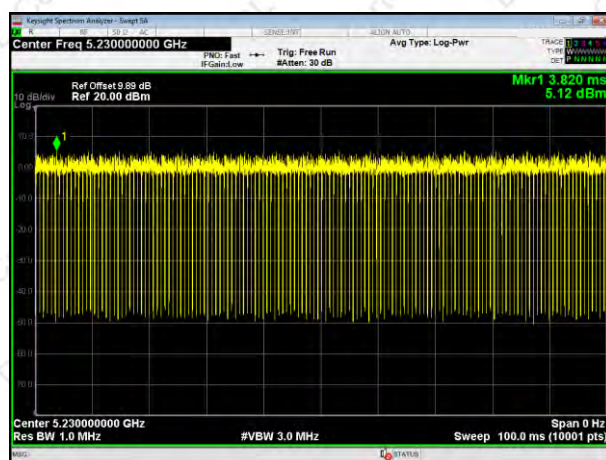
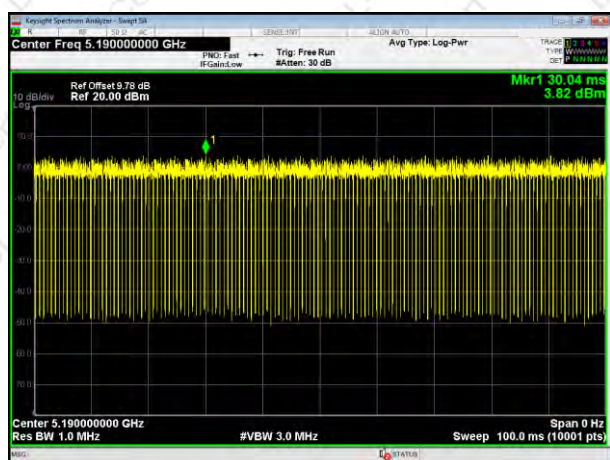
802.11a



802.11n HT20



802.11n HT40





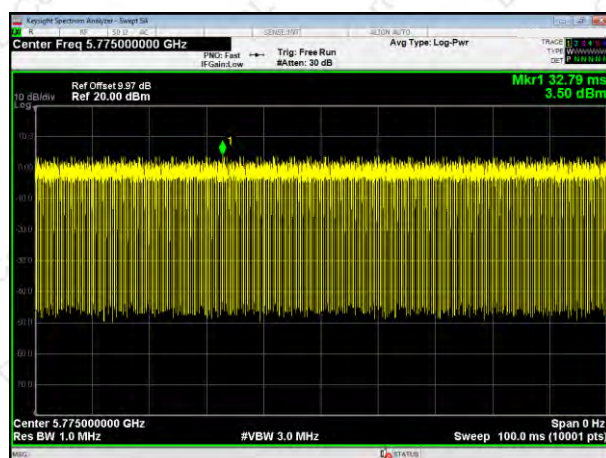
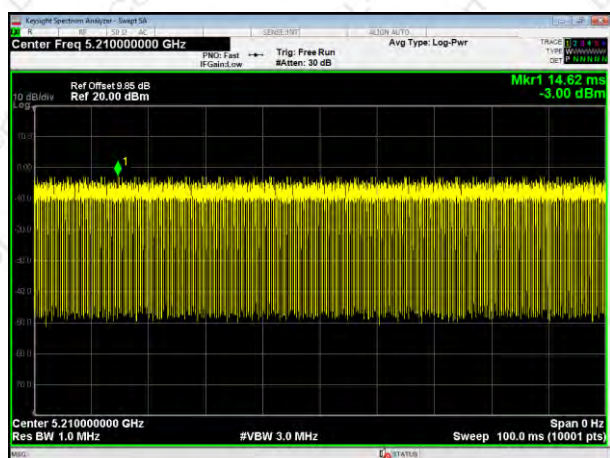
802.11ac HT20



802.11ac HT40



802.11ac HT80





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.

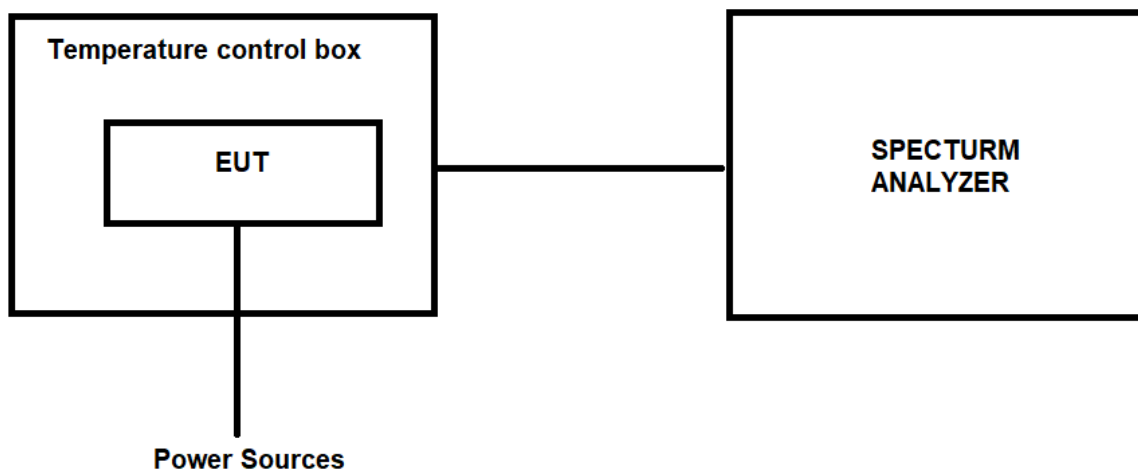
8.1.1 TEST PROCEDURE

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 (MHz)		
			802.11a	802.11n HT20	802.11ac HT20	802.11a	802.11n HT20	802.11ac HT20
132V	-20℃	5180	5180.0341	5180.0327	5180.0367	-0.0341	-0.0327	-0.0367
		5220	5220.0353	5220.0364	5220.0343	-0.0353	-0.0364	-0.0343
		5240	5240.0215	5240.0213	5240.0225	-0.0215	-0.0213	-0.0225
		5745	5745.0368	5745.0354	5745.0394	-0.0368	-0.0354	-0.0394
		5785	5785.0358	5785.0338	5785.0381	-0.0358	-0.0338	-0.0381
		5825	5825.0381	5825.0361	5825.0323	-0.0381	-0.0361	-0.0323
108V		5180	5180.0268	5180.0248	5180.0222	-0.0268	-0.0248	-0.0222
		5220	5220.0327	5220.0376	5220.0314	-0.0327	-0.0376	-0.0314
		5240	5240.0254	5240.0221	5240.0248	-0.0254	-0.0221	-0.0248
		5745	5745.0246	5745.0284	5745.0254	-0.0246	-0.0284	-0.0254
		5785	5785.0383	5785.0345	5785.0336	-0.0383	-0.0345	-0.0336
		5825	5825.0444	5825.0468	5825.0475	-0.0444	-0.0468	-0.0475
120V	25℃	5180	5180.0547	5180.0556	5180.0559	-0.0547	-0.0556	-0.0559
		5220	5220.0262	5220.0234	5220.0235	-0.0262	-0.0234	-0.0235
		5240	5240.0365	5240.0346	5240.0346	-0.0365	-0.0346	-0.0346
		5745	5745.0341	5745.0332	5745.0368	-0.0341	-0.0332	-0.0368
		5785	5785.0488	5785.0434	5785.0474	-0.0488	-0.0434	-0.0474
		5825	5825.0224	5825.0254	5825.0293	-0.0224	-0.0254	-0.0293
132V	50℃	5180	5180.0346	5180.0375	5180.0345	-0.0346	-0.0375	-0.0345
		5220	5220.0208	5220.0226	5220.0226	-0.0208	-0.0226	-0.0226
		5240	5240.0335	5240.0333	5240.0327	-0.0335	-0.0333	-0.0327
		5745	5745.0627	5745.0645	5745.0614	-0.0627	-0.0645	-0.0614
		5785	5785.0429	5785.0414	5785.0448	-0.0429	-0.0414	-0.0448
		5825	5825.0661	5825.0663	5825.0665	-0.0661	-0.0663	-0.0665
108V	50℃	5180	5180.0313	5180.0346	5180.0346	-0.0313	-0.0346	-0.0346
		5220	5220.0235	5220.0255	5220.0284	-0.0235	-0.0255	-0.0284
		5240	5240.0356	5240.0311	5240.0313	-0.0356	-0.0311	-0.0313
		5745	5745.0461	5745.0448	5745.0435	-0.0461	-0.0448	-0.0435
		5785	5785.0228	5785.0255	5785.0242	-0.0228	-0.0255	-0.0242
		5825	5825.0733	5825.0746	5825.0757	-0.0733	-0.0746	-0.0757



Test Voltage	Test Temp.	Measured Frequency (MHz)	Spectrum Frequency (MHz)		Δ Frequency (MHz)	
			802.11n HT40	802.11ac HT40	802.11n HT40	802.11ac HT40
132V	-20℃	5190	5190.0236	5190.0227	-0.0236	-0.0227
		5230	5230.0354	5230.0366	-0.0354	-0.0366
		5755	5755.0588	5755.0557	-0.0588	-0.0557
		5795	5795.0615	5795.0614	-0.0615	-0.0614
108V		5190	5190.0262	5190.0235	-0.0262	-0.0235
		5230	5230.0327	5230.0346	-0.0327	-0.0346
		5755	5755.0245	5755.0653	-0.0245	-0.0653
		5795	5795.0434	5795.0484	-0.0434	-0.0484
120V	25℃	5190	5190.0245	5190.0281	-0.0245	-0.0281
		5230	5230.0664	5230.0656	-0.0664	-0.0656
		5755	5755.0216	5755.0265	-0.0216	-0.0265
		5795	5795.0568	5795.0527	-0.0568	-0.0527
132V	50℃	5190	5190.0627	5190.0646	-0.0627	-0.0646
		5230	5230.0558	5230.0584	-0.0558	-0.0584
		5755	5755.0461	5755.0448	-0.0461	-0.0448
		5795	5795.0315	5795.0335	-0.0315	-0.0335
108V	50℃	5190	5190.0544	5190.0556	-0.0544	-0.0556
		5230	5230.0352	5230.0348	-0.0352	-0.0348
		5755	5755.0313	5755.0335	-0.0313	-0.0335
		5795	5795.0464	5795.0441	-0.0464	-0.0441

Test Voltage	Test Temp.	Measured Frequency (MHz)	Spectrum Frequency (MHz)	Δ Frequency (MHz)
			802.11ac HT80	802.11ac HT80
132V	-20℃	5210	5210.0123	-0.0123
		5775	5775.0145	-0.0145
108V		5210	5210.0274	-0.0274
		5775	5775.0343	-0.0343
230V	25℃	5210	5210.0495	-0.0495
		5775	5775.0451	-0.0451
132V	50℃	5210	5210.0334	-0.0334
		5775	5775.0273	-0.0273
108V	50℃	5210	5210.0329	-0.0329
		5775	5775.0555	-0.0555



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

No non-compliance noted:
Refer to the theory of operation.

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.

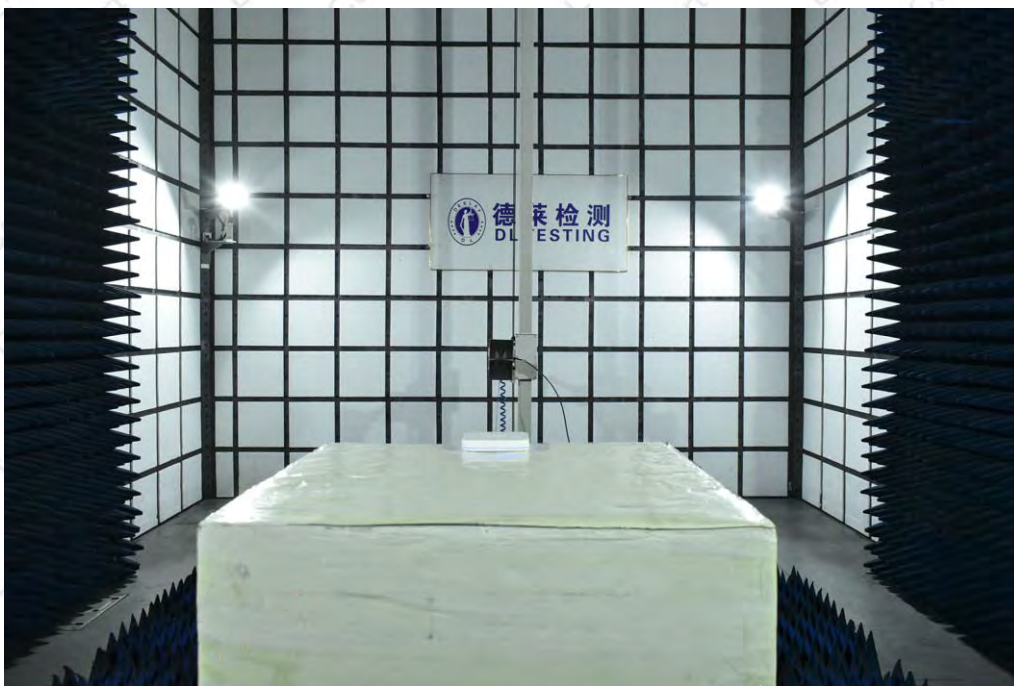
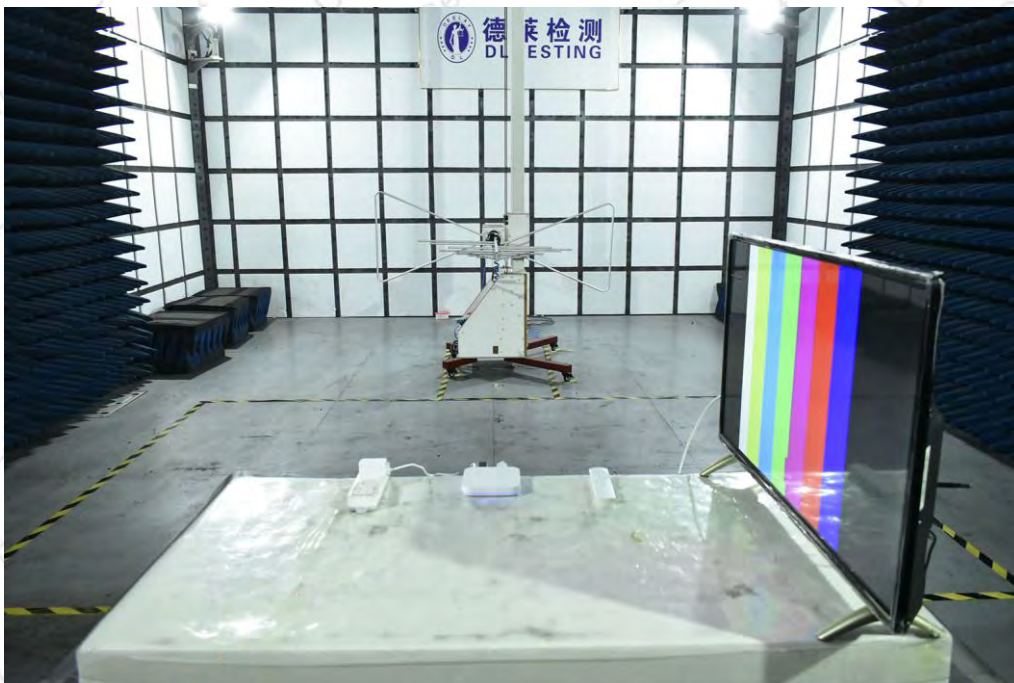
10.2 EUT ANTENNA

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



11. TEST SEUUP PHOTO

Radiated Measurement Photos



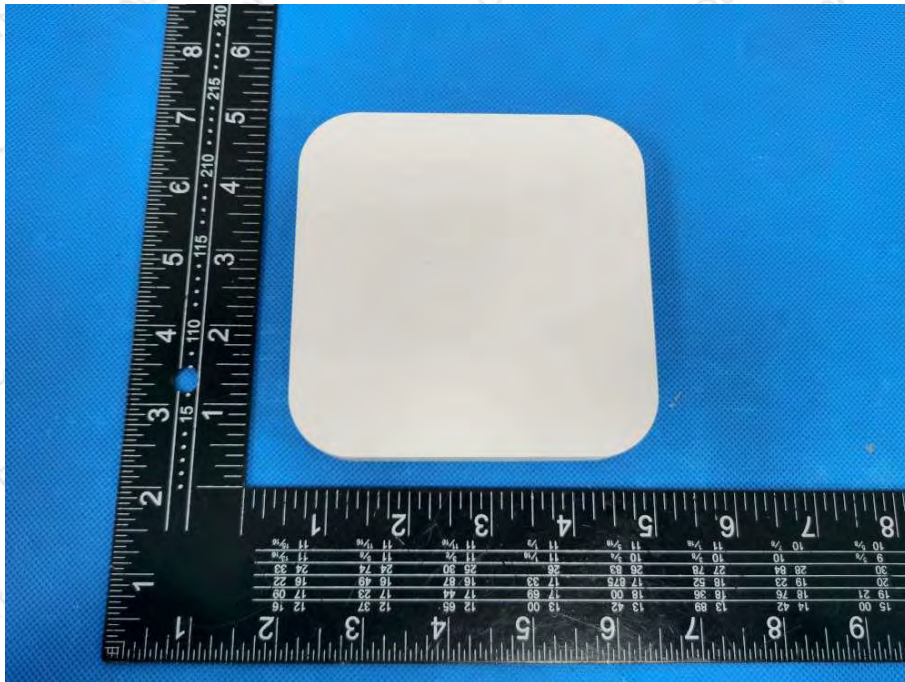


Conducted Measurement Photos



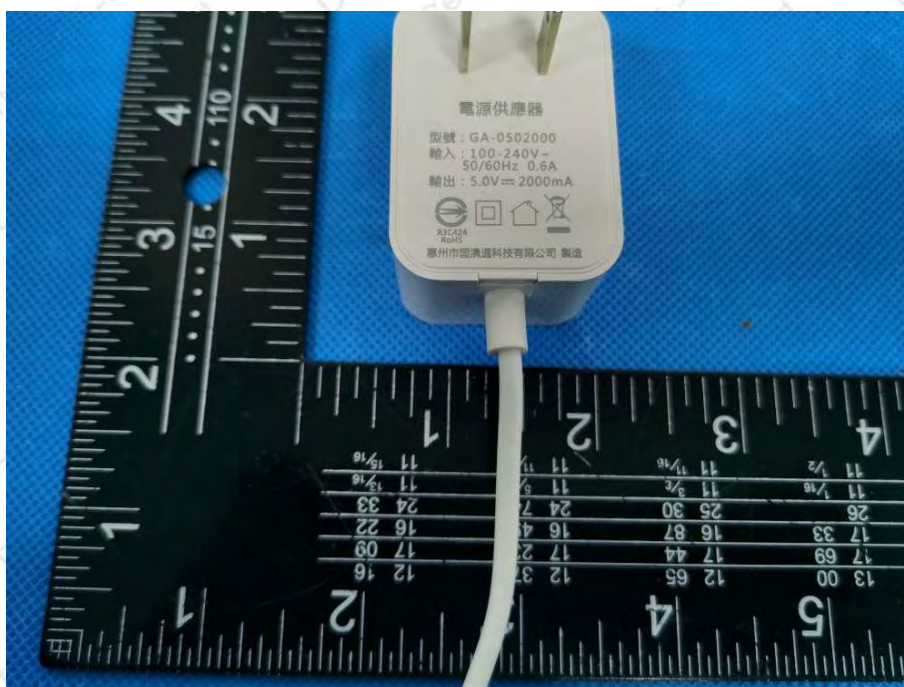
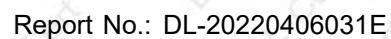


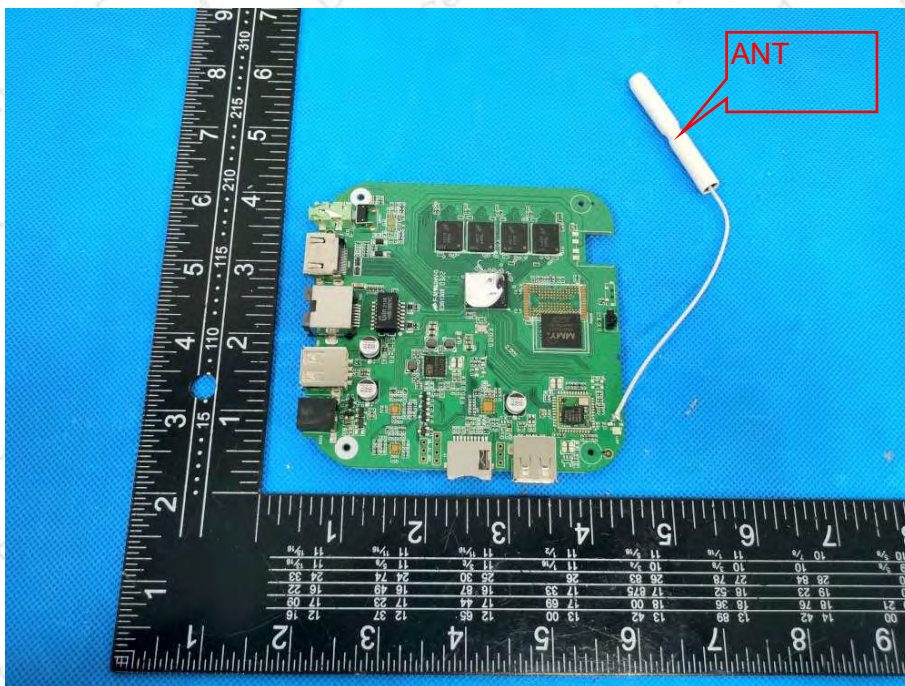
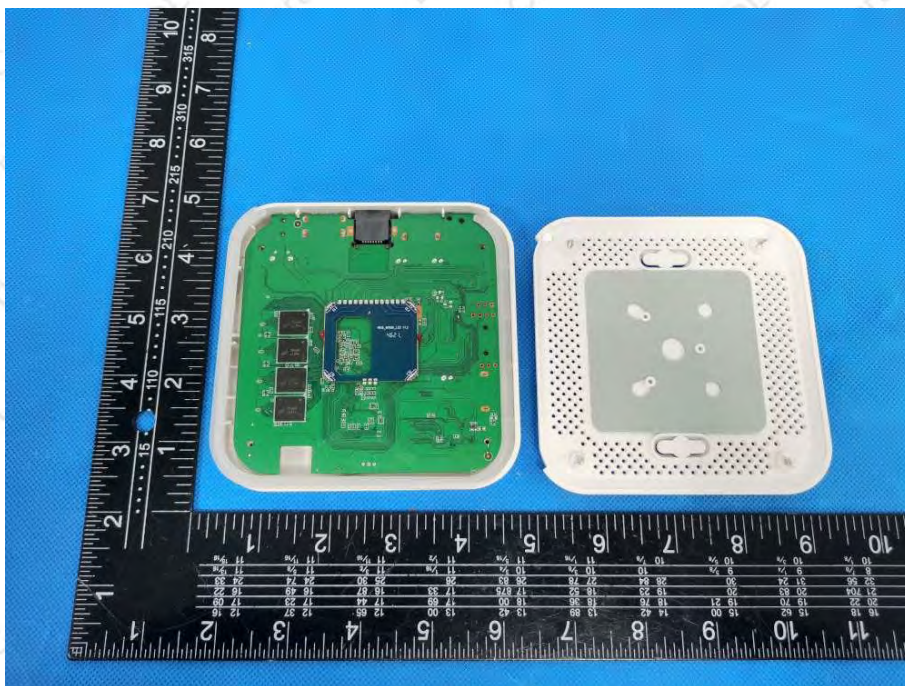
12. EUT PHOTO

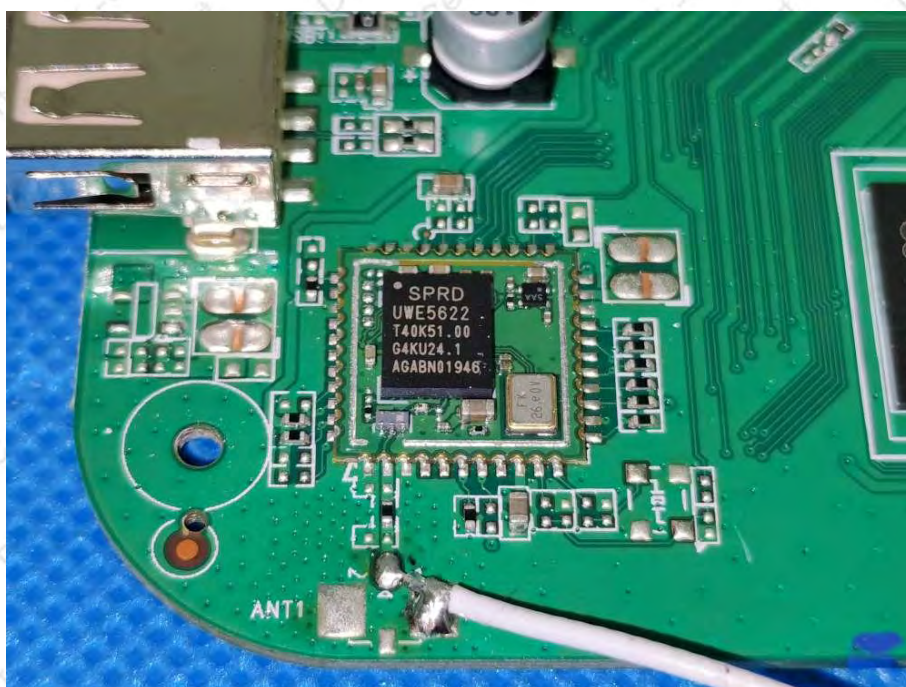
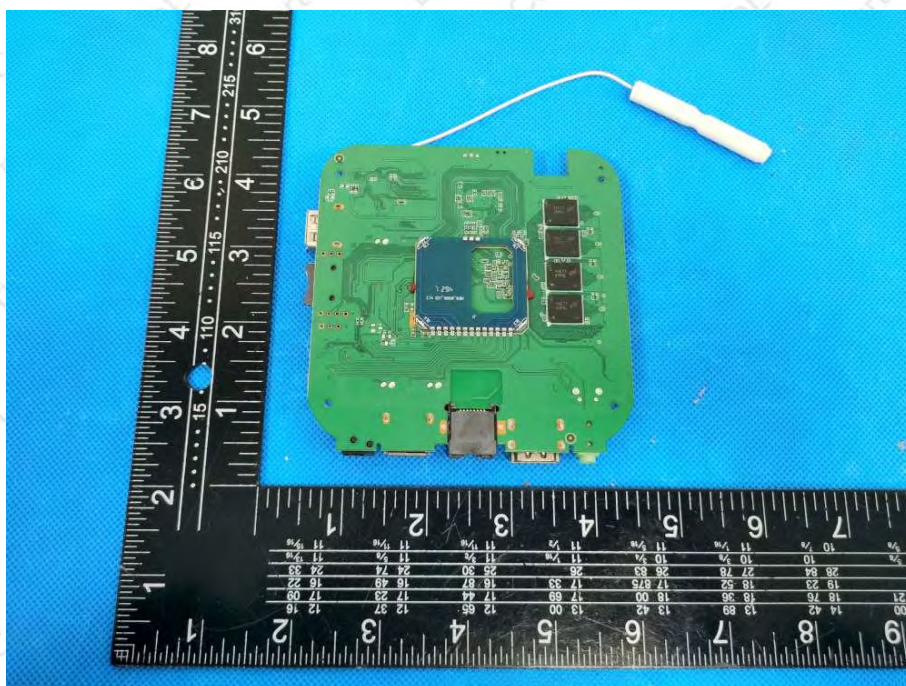












***** END OF REPORT *****