



FCC Part 15C Test Report

FCC ID:2A4DV-A1171

Applicant: HUNAN ETOE Technology Co., Ltd
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Manufacturer: HUNAN ETOE Technology Co., Ltd
Address: Room 603, Building 3, Zone A, Jindaoyuan, NO.169, Huizhi Zhong Road, High-tech District, Changsha
EUT: PROJECTOR
Trade Mark: ETOE
Model Number: A1171
Date of Receipt: Jan. 14, 2022
Test Date: Jan. 14, 2022 – Jan. 21, 2022
Date of Report: Jan. 21, 2022
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Applicable Standards: FCC PART 15 C 15.407
ANSI C63.10:2013
Test Result: Pass
Report Number: DL-20220121039E

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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 expanded 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	$\pm 0.5\text{C}$
7	Humidity	$\pm 2\%$



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Product Name:	PROJECTOR
Trademark	ETOE
Model No.:	A1171
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
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 19V from adapter
Adapter:	Model Number: NSA60ED-190300 Input: 100-240V~ 50/60Hz 1.5A Output: 19.0V $\overline{=}$ 3.0A 57.0W

Note:

- 1.For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
- 2.The EUT's all information provided by client.



2. Channel List

Channel List for 802.11a/n(HT20)/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 generated from EUT, the test system was pre-scanning tested based on the consideration of following EUT operation mode or test configuration mode which possibly 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	

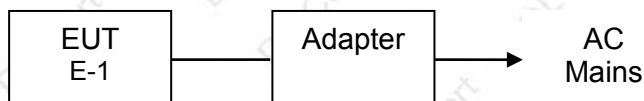
For Radiated Emission			
Pretest Mode	Channel	Band 1	Band 4
Mode 1	802.11a/n/acHT20	CH36, CH44, CH48	CH149, CH157, CH165
Mode 2	802.11n/acHT40	CH38, CH46	CH151, CH159
Mode 3	802.11acHT80	CH42	CH155
Mode 4	Other	Link Mode	

Note: 1. The measurements are performed at the highest, middle, lowest available channels.
2. During the test, the duty cycle >98%, 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.

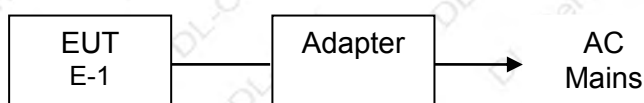


2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

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	PROJECTOR	A1171	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.

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	Dec. 07, 2021	Dec. 06, 2022
2	Test Receiver (9kHz-7GHz)	R&S	ESRP7	101393	Dec. 07, 2021	Dec. 06, 2022
3	Bilog Antenna (30MHz-1GHz)	R&S	VULB9162	00306	Dec. 07, 2021	Dec. 06, 2022
4	Horn Antenna (1GHz-18GHz)	Schwarzbeck	BBHA9120D	02139	Dec. 07, 2021	Dec. 06, 2022
5	Horn Antenna (18GHz-40GHz)	A.H. Systems	SAS-574	588	Dec. 07, 2021	Dec. 06, 2022
6	Amplifier (9KHz-6GHz)	Schwarzbeck	BBV9743B	00153	Dec. 07, 2021	Dec. 06, 2022
7	Amplifier (1GHz-18GHz)	EMEC	EM01G8GA	00270	Dec. 07, 2021	Dec. 06, 2022
8	Amplifier (18GHz-40GHz)	Quanjuda	DLE-161	97	Dec. 07, 2021	Dec. 06, 2022
9	Loop Antenna (9KHz-30MHz)	Schwarzbeck	FMZB1519B	00014	Dec. 07, 2021	Dec. 06, 2022
10	RF cables1 (9kHz-1GHz)	ChengYu	966	004	Dec. 07, 2021	Dec. 06, 2022
11	RF cables2 (1GHz-40GHz)	ChengYu	966	003	Dec. 07, 2021	Dec. 06, 2022
12	Antenna connector	Florida RF Labs	N/A	RF 01#	Dec. 07, 2021	Dec. 06, 2022
13	Power probe	KEYSIGHT	U2021XA	MY55210018	Dec. 07, 2021	Dec. 06, 2022
14	Signal Analyzer 9kHz-26.5GHz	Agilent	N9020A	MY55370280	Dec. 07, 2021	Dec. 06, 2022
15	Test Receiver 20kHz-40GHz	R&S	ESU 40	100376	Dec. 07, 2021	Dec. 06, 2022
16	D.C. Power Supply	LongWei	PS-305D	010964729	Dec. 07, 2021	Dec. 06, 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	Dec. 07, 2021	Dec. 06, 2022
3	LISN	R&S	ENV216	102417	Dec. 07, 2021	Dec. 06, 2022
4	843 Cable 1#	ChengYu	CE Cable	001	Dec. 07, 2021	Dec. 06, 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

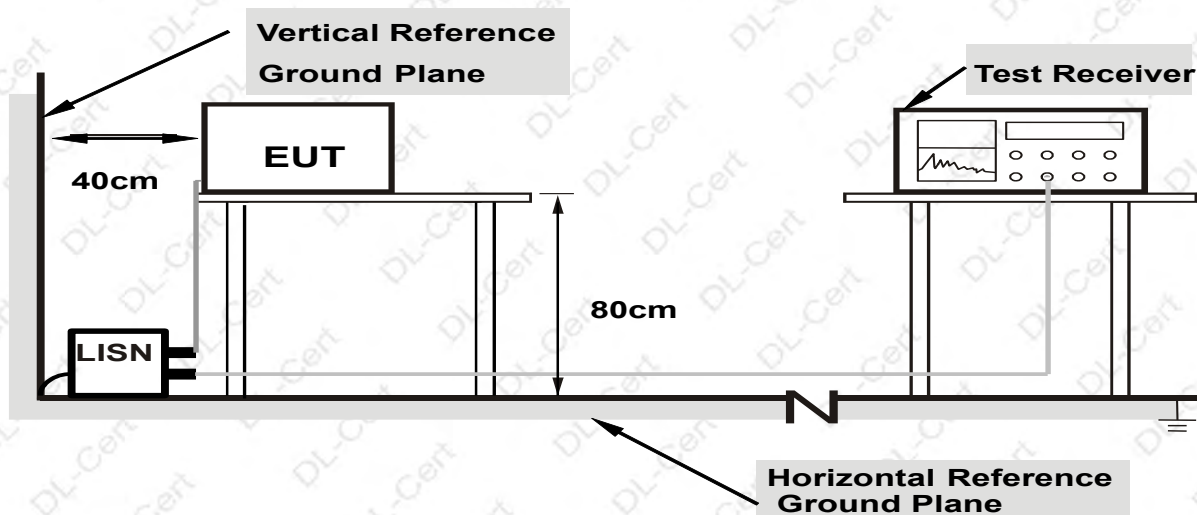
3.1.2 TEST PROCEDURE

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

3.1.3 DEVIATION FROM TEST STANDARD

No deviation

3.1.4 TEST SETUP



Note: 1. Support units were connected to second LISN.

2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

3.1.5 EUT OPERATING CONDITIONS

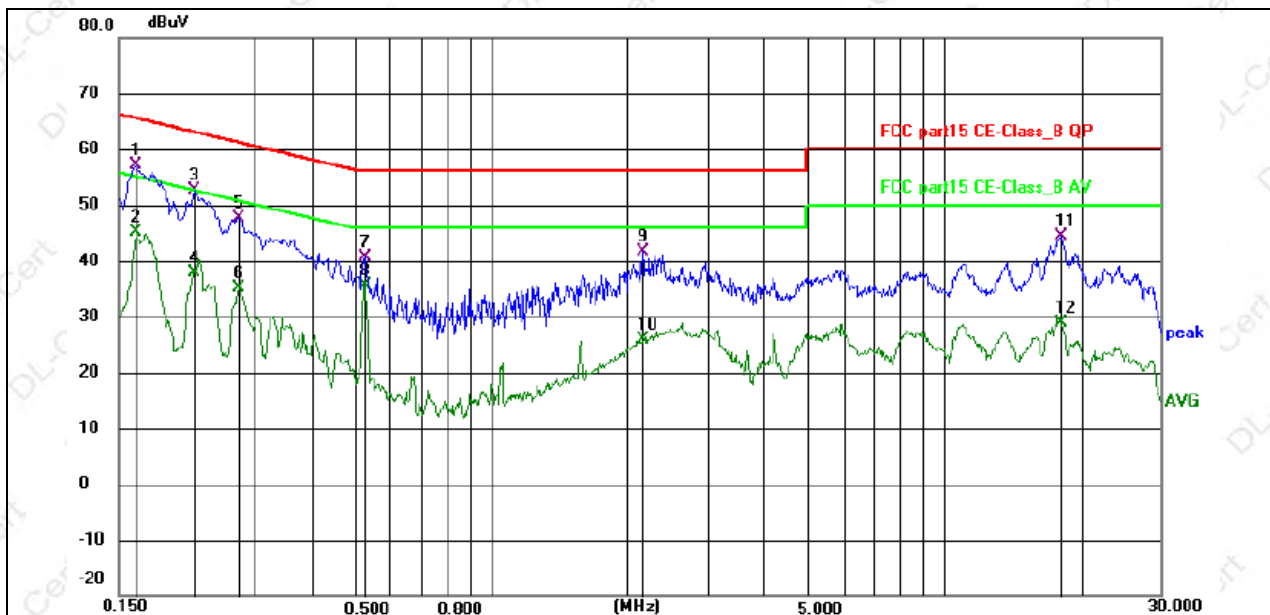
The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

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



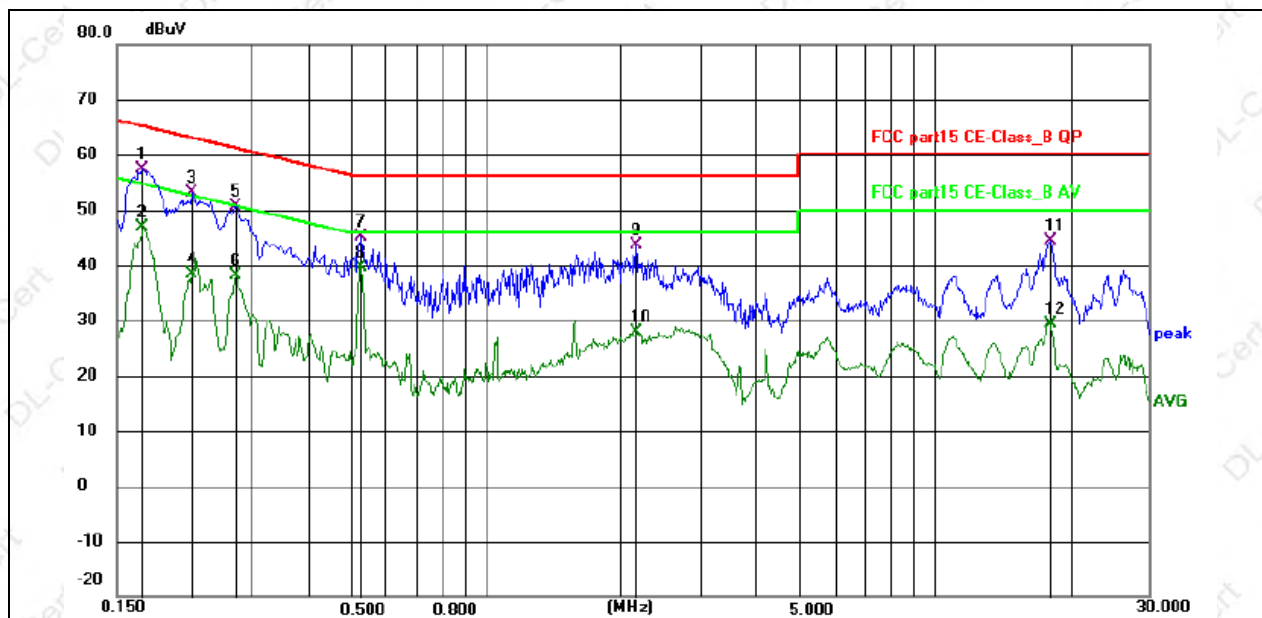
Remark:

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 *	0.1635	47.03	10.12	57.15	65.28	8.13	QP	P	
2	0.1635	35.03	10.12	45.15	55.28	10.13	AVG	P	
3	0.2220	43.47	9.08	52.55	62.74	10.19	QP	P	
4	0.2220	28.81	9.08	37.89	52.74	14.85	AVG	P	
5	0.2760	38.52	9.18	47.70	60.94	13.24	QP	P	
6	0.2760	26.07	9.18	35.25	50.94	15.69	AVG	P	
7	0.5237	31.10	9.52	40.62	56.00	15.38	QP	P	
8	0.5237	26.21	9.52	35.73	46.00	10.27	AVG	P	
9	2.1659	31.52	9.99	41.51	56.00	14.49	QP	P	
10	2.1659	15.81	9.99	25.80	46.00	20.20	AVG	P	
11	18.0419	33.85	10.42	44.27	60.00	15.73	QP	P	
12	18.0419	18.55	10.42	28.97	50.00	21.03	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	0.1703	47.48	9.92	57.40	64.95	7.55	QP	P	
2	0.1703	36.90	9.92	46.82	54.95	8.13	AVG	P	
3	0.2220	43.97	9.08	53.05	62.74	9.69	QP	P	
4	0.2220	29.28	9.08	38.36	52.74	14.38	AVG	P	
5	0.2760	41.52	9.18	50.70	60.94	10.24	QP	P	
6	0.2760	29.07	9.18	38.25	50.94	12.69	AVG	P	
7	0.5279	35.50	9.51	45.01	56.00	10.99	QP	P	
8 *	0.5279	30.22	9.51	39.73	46.00	6.27	AVG	P	
9	2.1659	33.52	9.99	43.51	56.00	12.49	QP	P	
10	2.1659	17.81	9.99	27.80	46.00	18.20	AVG	P	
11	18.0419	33.85	10.42	44.27	60.00	15.73	QP	P	
12	18.0419	19.01	10.42	29.43	50.00	20.57	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 (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	25GHz
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:

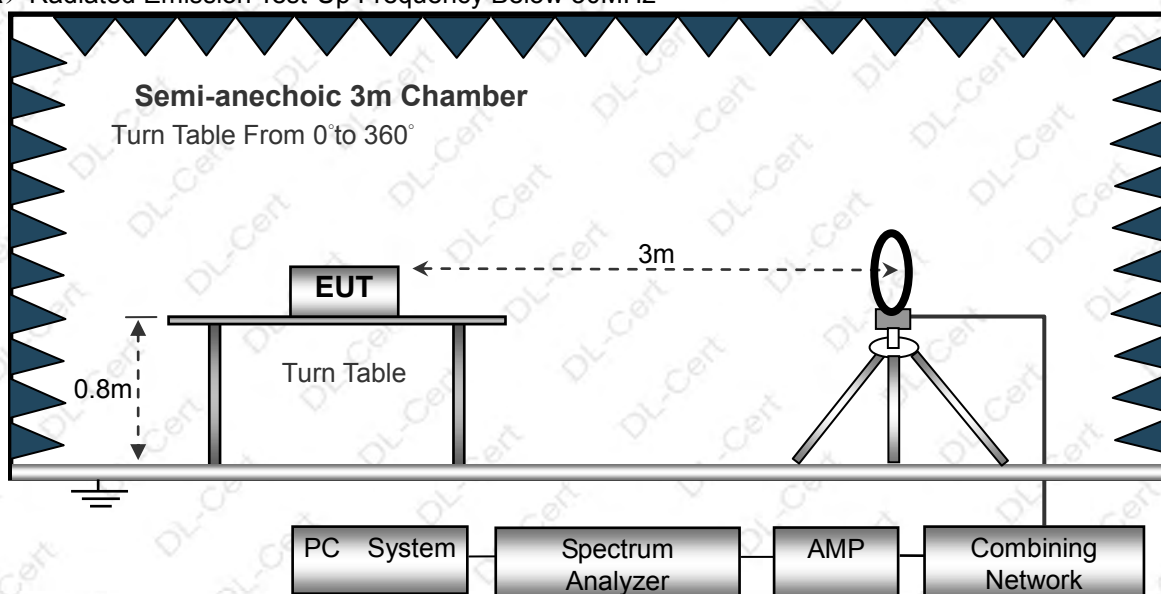
Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported

3.2.3 DEVIATION FROM TEST STANDARD

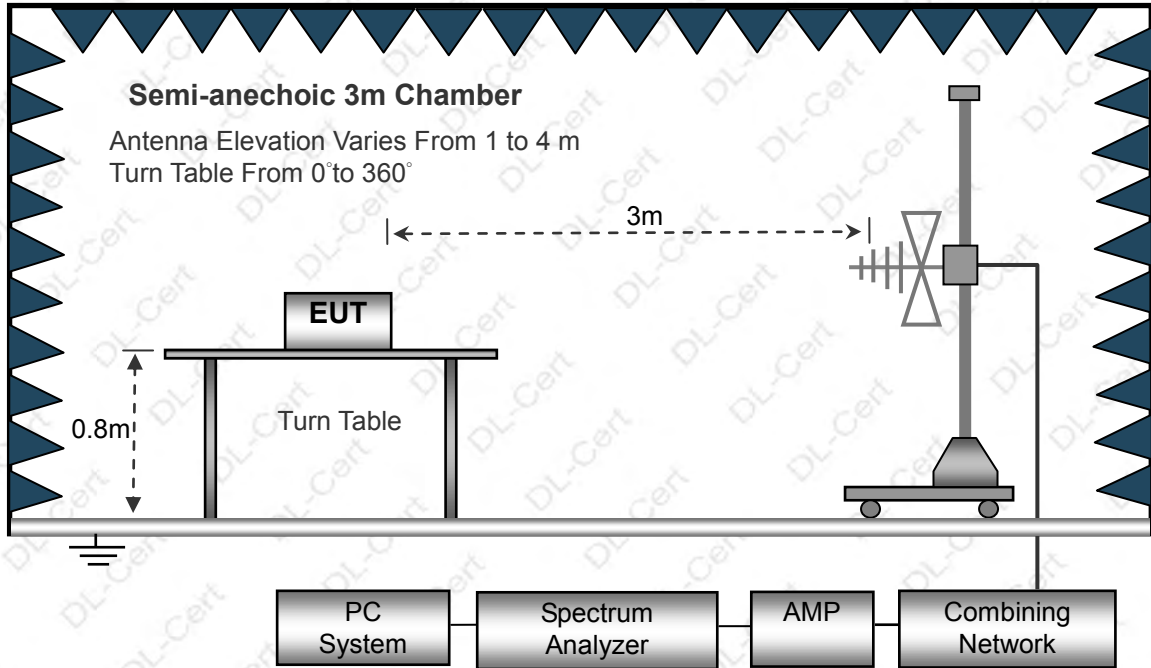
No deviation

3.2.4 TEST SETUP

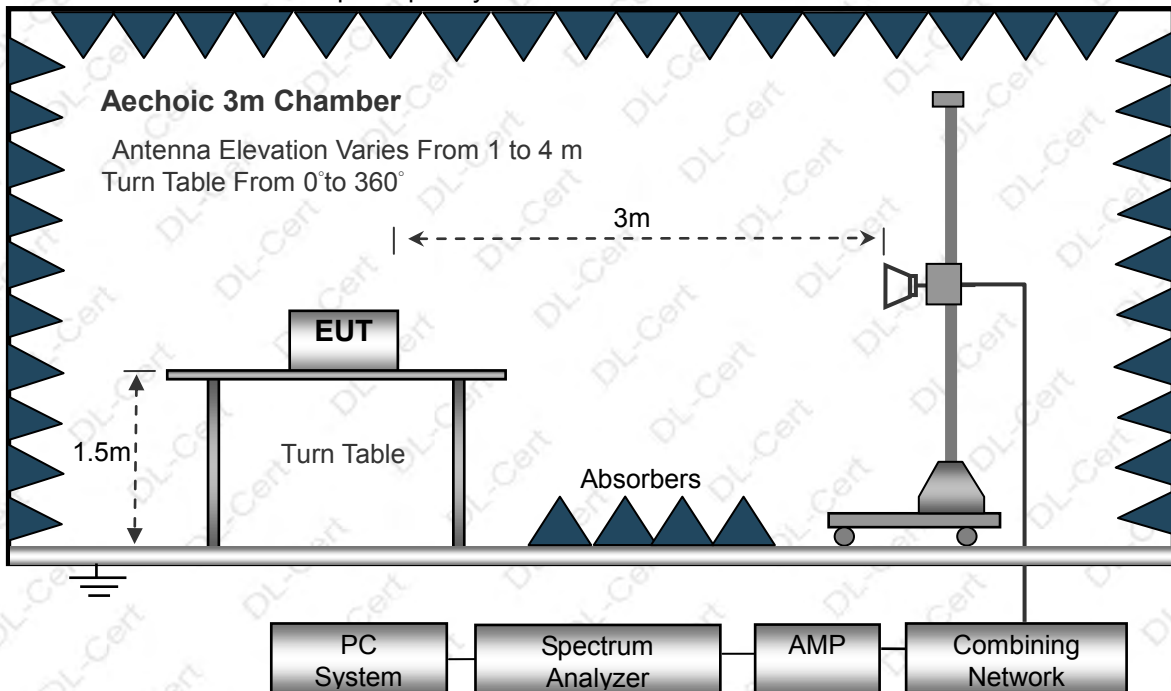
(A) Radiated Emission Test-Up Frequency Below 30MHz



(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°C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	Mode 4	Polarization :	--

Freq. (MHz)	Reading (dBuV/m)	Limit (dBuV/m)	Margin (dB)	State 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.

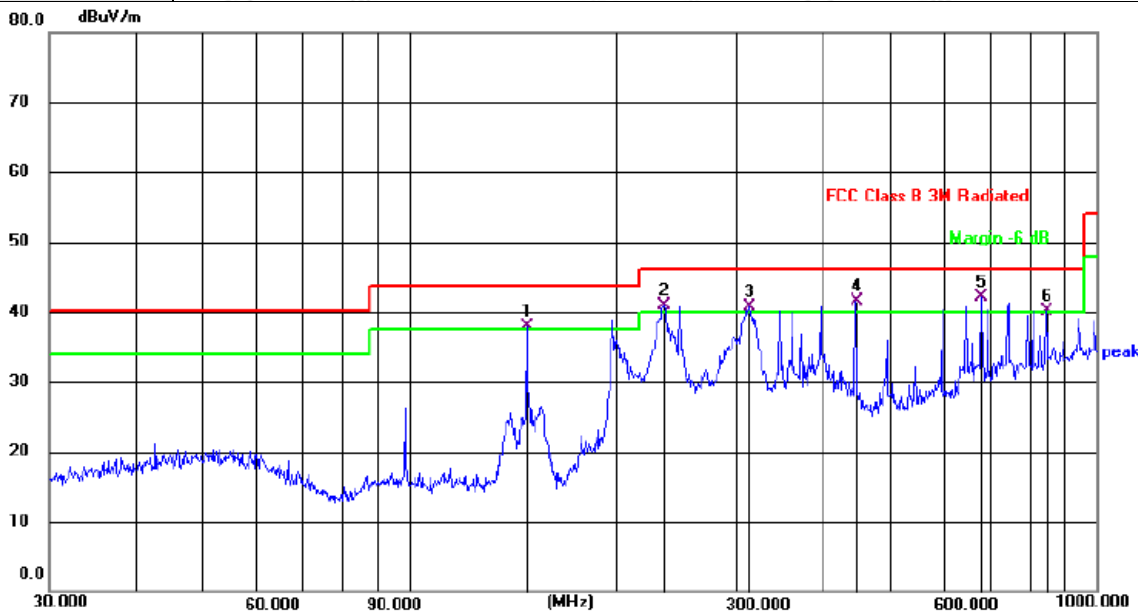
Distance extrapolation factor = $40 \log(\text{specific distance}/\text{test distance})$ (dB);

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



3.2.7 TEST RESULTS (Between 30MHz – 1GHz)

Temperature:	26°C	Relative Humidity:	54%
Pressure:	1010 hPa	Polarization :	Horizontal
Test Voltage :	AC 120V/60Hz		
Test Mode :	Mode 4		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1	!	148.4410	57.01	-19.09	37.92	43.50	5.58	QP
2	!	234.9909	55.38	-14.53	40.85	46.00	5.15	QP
3	!	313.2760	53.07	-12.28	40.79	46.00	5.21	QP
4	!	446.4140	51.04	-9.57	41.47	46.00	4.53	QP
5	*	679.9600	47.05	-4.93	42.12	46.00	3.88	QP
6	!	842.1296	42.46	-2.33	40.13	46.00	5.87	QP

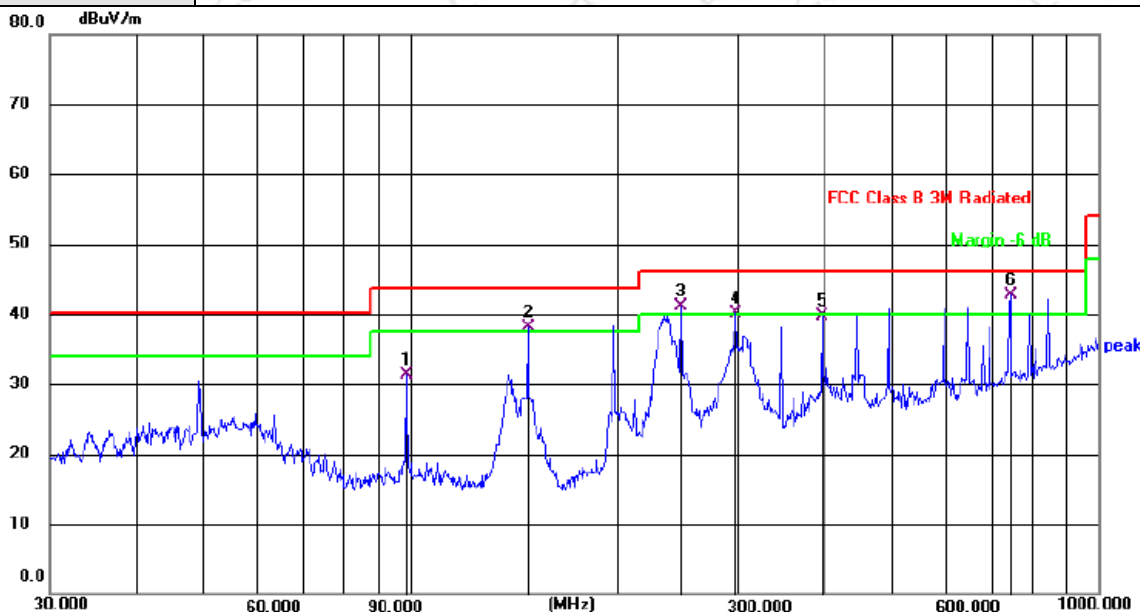
Remark:

Correct Factor = Cable loss + Antenna factor – Preamplifier;

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



Temperature:	26°C	Relative Humidity:	54%
Pressure:	1010 hPa	Polarization :	Vertical
test voltage :	AC 120V/60Hz		
Test Mode :	Mode 4		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		98.8324	48.86	-17.56	31.30	43.50	12.20	QP
2	!	148.4410	57.18	-19.09	38.09	43.50	5.41	QP
3	!	247.6818	55.03	-13.99	41.04	46.00	4.96	QP
4	!	297.2238	52.77	-12.59	40.18	46.00	5.82	QP
5		396.2412	50.66	-10.96	39.70	46.00	6.30	QP
6	*	744.8659	46.44	-3.83	42.61	46.00	3.39	QP

Remark:

Correct Factor = Cable loss + Antenna factor – Preamplifier;

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



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	56.24	49.05	15.3	37.39	59.88	74	-14.12	PK
V	10360	45.18	49.05	15.3	37.39	48.82	54	-5.18	AV
V	15540	56.33	49.16	15.27	40.45	62.89	74	-11.11	PK
V	15540	43.54	49.16	15.27	40.45	50.1	54	-3.90	AV
H	10360	56.08	49.05	15.3	37.39	59.72	74	-14.28	PK
H	10360	45.43	49.05	15.3	37.39	49.07	54	-4.93	AV
H	15540	59.13	49.16	15.27	40.45	65.69	74	-8.31	PK
H	15540	43.05	49.16	15.27	40.45	49.61	54	-4.39	AV
operation frequency:5200									
V	10400	57.46	49.09	15.34	37.42	61.13	74	-12.87	PK
V	10400	45.34	49.09	15.34	37.42	49.01	54	-4.99	AV
V	15600	59.48	49.18	15.29	40.47	66.06	74	-7.94	PK
V	15600	43.13	49.18	15.29	40.47	49.71	54	-4.29	AV
H	10400	56.63	49.09	15.34	37.42	60.3	74	-13.70	PK
H	10400	45.85	49.09	15.34	37.42	49.52	54	-4.48	AV
H	15600	59.46	49.18	15.29	40.47	66.04	74	-7.96	PK
H	15600	43.37	49.18	15.29	40.47	49.95	54	-4.05	AV
operation frequency:5240									
V	10480	58.55	49.11	15.37	37.46	62.27	74	-11.73	PK
V	10480	45.34	49.11	15.37	37.46	49.06	54	-4.94	AV
V	15720	59.17	49.21	15.34	40.51	65.81	74	-8.19	PK
V	15720	43.34	49.21	15.34	40.51	49.98	54	-4.02	AV
H	10480	57.07	49.11	15.37	31.31	54.64	74	-19.36	PK
H	10480	45.54	49.11	15.37	31.31	43.11	54	-10.89	AV
H	15720	57.43	49.21	15.34	40.51	64.07	74	-9.93	PK
H	15720	42.56	49.21	15.34	40.51	49.2	54	-4.80	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.



802.11n 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	56.74	49.05	15.3	37.39	60.38	74	-13.62	PK
V	10360	45.63	49.05	15.3	37.39	49.27	54	-4.73	AV
V	15540	56.24	49.16	15.27	40.45	62.8	74	-11.20	PK
V	15540	43.12	49.16	15.27	40.45	49.68	54	-4.32	AV
H	10360	56.67	49.05	15.3	37.39	60.31	74	-13.69	PK
H	10360	45.34	49.05	15.3	37.39	48.98	54	-5.02	AV
H	15540	54.15	49.16	15.27	40.45	60.71	74	-13.29	PK
H	15540	44.37	49.16	15.27	40.45	50.93	54	-3.07	AV
operation frequency:5200									
V	10400	56.28	49.09	15.34	37.42	59.95	74	-14.05	PK
V	10400	44.73	49.09	15.34	37.42	48.4	54	-5.60	AV
V	15600	55.35	49.18	15.29	40.47	61.93	74	-12.07	PK
V	15600	43.46	49.18	15.29	40.47	50.04	54	-3.96	AV
H	10400	55.57	49.09	15.34	37.42	59.24	74	-14.76	PK
H	10400	43.35	49.09	15.34	37.42	47.02	54	-6.98	AV
H	15600	55.08	49.18	15.29	40.47	61.66	74	-12.34	PK
H	15600	43.23	49.18	15.29	40.47	49.81	54	-4.19	AV
operation frequency:5240									
V	10480	57.13	49.11	15.37	37.46	60.85	74	-13.15	PK
V	10480	44.66	49.11	15.37	37.46	48.38	54	-5.62	AV
V	15720	54.46	49.21	15.34	40.51	61.1	74	-12.90	PK
V	15720	43.46	49.21	15.34	40.51	50.1	54	-3.90	AV
H	10480	57.18	49.11	15.37	31.31	54.75	74	-19.25	PK
H	10480	44.67	49.11	15.37	31.31	42.24	54	-11.76	AV
H	15720	55.31	49.21	15.34	40.51	61.95	74	-12.05	PK
H	15720	44.27	49.21	15.34	40.51	50.91	54	-3.09	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.



802.11n 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	45.76	49.07	15.33	37.41	49.43	54	-4.57	AV
V	15570	56.26	49.17	15.28	40.46	62.83	74	-11.17	PK
V	15570	43.34	49.17	15.28	40.46	49.91	54	-4.09	AV
H	10380	56.62	49.07	15.33	37.41	60.29	74	-13.71	PK
H	10380	45.35	49.07	15.33	37.41	49.02	54	-4.98	AV
H	15570	54.67	49.17	15.28	40.46	61.24	74	-12.76	PK
H	15570	44.34	49.17	15.28	40.46	50.91	54	-3.09	AV
operation frequency:5230									
V	10460	57.56	49.11	15.37	37.46	61.28	74	-12.72	PK
V	10460	44.63	49.11	15.37	37.46	48.35	54	-5.65	AV
V	15690	54.45	49.21	15.34	40.51	61.09	74	-12.91	PK
V	15690	43.46	49.21	15.34	40.51	50.1	54	-3.90	AV
H	10460	57.35	49.11	15.37	31.31	54.92	74	-19.08	PK
H	10460	44.84	49.11	15.37	31.31	42.41	54	-11.59	AV
H	15690	55.23	49.21	15.34	40.51	61.87	74	-12.13	PK
H	15690	44.05	49.21	15.34	40.51	50.69	54	-3.31	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 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	56.78	49.05	15.3	37.39	60.42	74	-13.58	PK
V	10360	45.56	49.05	15.3	37.39	49.2	54	-4.80	AV
V	15540	56.13	49.16	15.27	40.45	62.69	74	-11.31	PK
V	15540	43.34	49.16	15.27	40.45	49.9	54	-4.10	AV
H	10360	56.52	49.05	15.3	37.39	60.16	74	-13.84	PK
H	10360	45.56	49.05	15.3	37.39	49.2	54	-4.80	AV
H	15540	54.32	49.16	15.27	40.45	60.88	74	-13.12	PK
H	15540	44.25	49.16	15.27	40.45	50.81	54	-3.19	AV
operation frequency:5200									
V	10400	56.77	49.09	15.34	37.42	60.44	74	-13.56	PK
V	10400	44.96	49.09	15.34	37.42	48.63	54	-5.37	AV
V	15600	55.53	49.18	15.29	40.47	62.11	74	-11.89	PK
V	15600	43.31	49.18	15.29	40.47	49.89	54	-4.11	AV
H	10400	55.37	49.09	15.34	37.42	59.04	74	-14.96	PK
H	10400	43.57	49.09	15.34	37.42	47.24	54	-6.76	AV
H	15600	55.06	49.18	15.29	40.47	61.64	74	-12.36	PK
H	15600	43.23	49.18	15.29	40.47	49.81	54	-4.19	AV
operation frequency:5240									
V	10480	57.44	49.11	15.37	37.46	61.16	74	-12.84	PK
V	10480	44.66	49.11	15.37	37.46	48.38	54	-5.62	AV
V	15720	54.35	49.21	15.34	40.51	60.99	74	-13.01	PK
V	15720	43.32	49.21	15.34	40.51	49.96	54	-4.04	AV
H	10480	57.13	49.11	15.37	31.31	54.7	74	-19.30	PK
H	10480	44.58	49.11	15.37	31.31	42.15	54	-11.85	AV
H	15720	55.26	49.21	15.34	40.51	61.9	74	-12.10	PK
H	15720	44.06	49.21	15.34	40.51	50.7	54	-3.30	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 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	45.26	49.07	15.33	37.41	48.93	54	-5.07	AV
V	15570	56.35	49.17	15.28	40.46	62.92	74	-11.08	PK
V	15570	43.87	49.17	15.28	40.46	50.44	54	-3.56	AV
H	10380	56.53	49.07	15.33	37.41	60.2	74	-13.80	PK
H	10380	45.46	49.07	15.33	37.41	49.13	54	-4.87	AV
H	15570	54.56	49.17	15.28	40.46	61.13	74	-12.87	PK
H	15570	44.15	49.17	15.28	40.46	50.72	54	-3.28	AV
operation frequency:5230									
V	10460	57.36	49.11	15.37	37.46	61.08	74	-12.92	PK
V	10460	44.65	49.11	15.37	37.46	48.37	54	-5.63	AV
V	15690	54.42	49.21	15.34	40.51	61.06	74	-12.94	PK
V	15690	43.43	49.21	15.34	40.51	50.07	54	-3.93	AV
H	10460	57.13	49.11	15.37	31.31	54.7	74	-19.30	PK
H	10460	44.58	49.11	15.37	31.31	42.15	54	-11.85	AV
H	15690	55.36	49.21	15.34	40.51	62	74	-12.00	PK
H	15690	44.04	49.21	15.34	40.51	50.68	54	-3.32	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	56.75	49.07	15.33	37.41	60.42	74	-13.58	PK
V	10420	45.62	49.07	15.33	37.41	49.29	54	-4.71	AV
V	15630	56.25	49.17	15.28	40.46	62.82	74	-11.18	PK
V	15630	43.15	49.17	15.28	40.46	49.72	54	-4.28	AV
H	10420	56.36	49.07	15.33	37.41	60.03	74	-13.97	PK
H	10420	45.25	49.07	15.33	37.41	48.92	54	-5.08	AV
H	15630	54.08	49.17	15.28	40.46	60.65	74	-13.35	PK
H	15630	44.34	49.17	15.28	40.46	50.91	54	-3.09	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

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	57.32	49.05	15.3	37.39	60.96	74	-13.04	PK
V	11490	45.23	49.05	15.3	37.39	48.87	54	-5.13	AV
V	17235	56.44	49.16	15.27	40.45	63	74	-11.00	PK
V	17235	43.76	49.16	15.27	40.45	50.32	54	-3.68	AV
H	11490	55.72	49.05	15.3	37.39	59.36	74	-14.64	PK
H	11490	45.46	49.05	15.3	37.39	49.1	54	-4.90	AV
H	17235	59.36	49.16	15.27	40.45	65.92	74	-8.08	PK
H	17235	43.65	49.16	15.27	40.45	50.21	54	-3.79	AV
operation frequency:5785									
V	11570	57.58	49.09	15.34	37.42	61.25	74	-12.75	PK
V	11570	45.25	49.09	15.34	37.42	48.92	54	-5.08	AV
V	17355	59.46	49.18	15.29	40.47	66.04	74	-7.96	PK
V	17355	43.06	49.18	15.29	40.47	49.64	54	-4.36	AV
H	11570	56.62	49.09	15.34	37.42	60.29	74	-13.71	PK
H	11570	45.35	49.09	15.34	37.42	49.02	54	-4.98	AV
H	17355	52.18	49.18	15.29	40.47	58.76	74	-15.24	PK
H	17355	43.63	49.18	15.29	40.47	50.21	54	-3.79	AV
operation frequency:5825									
V	11650	58.11	49.11	15.37	37.46	61.83	74	-12.17	PK
V	11650	45.56	49.11	15.37	37.46	49.28	54	-4.72	AV
V	17475	59.49	49.21	15.34	40.51	66.13	74	-7.87	PK
V	17475	43.32	49.21	15.34	40.51	49.96	54	-4.04	AV
H	11650	57.18	49.11	15.37	31.31	54.75	74	-19.25	PK
H	11650	45.67	49.11	15.37	31.31	43.24	54	-10.76	AV
H	17475	57.33	49.21	15.34	40.51	63.97	74	-10.03	PK
H	17475	42.35	49.21	15.34	40.51	48.99	54	-5.01	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	56.79	49.05	15.3	37.39	60.43	74	-13.57	PK
V	11490	45.76	49.05	15.3	37.39	49.4	54	-4.60	AV
V	17235	56.13	49.16	15.27	40.45	62.69	74	-11.31	PK
V	17235	43.35	49.16	15.27	40.45	49.91	54	-4.09	AV
H	11490	56.42	49.05	15.3	37.39	60.06	74	-13.94	PK
H	11490	45.66	49.05	15.3	37.39	49.3	54	-4.70	AV
H	17235	54.57	49.16	15.27	40.45	61.13	74	-12.87	PK
H	17235	44.29	49.16	15.27	40.45	50.85	54	-3.15	AV
operation frequency:5785									
V	11570	56.78	49.09	15.34	37.42	60.45	74	-13.55	PK
V	11570	44.94	49.09	15.34	37.42	48.61	54	-5.39	AV
V	17355	55.66	49.18	15.29	40.47	62.24	74	-11.76	PK
V	17355	43.35	49.18	15.29	40.47	49.93	54	-4.07	AV
H	11570	55.37	49.09	15.34	37.42	59.04	74	-14.96	PK
H	11570	43.58	49.09	15.34	37.42	47.25	54	-6.75	AV
H	17355	55.07	49.18	15.29	40.47	61.65	74	-12.35	PK
H	17355	43.16	49.18	15.29	40.47	49.74	54	-4.26	AV
operation frequency:5825									
V	11650	57.53	49.11	15.37	37.46	61.25	74	-12.75	PK
V	11650	44.67	49.11	15.37	37.46	48.39	54	-5.61	AV
V	17475	54.45	49.21	15.34	40.51	61.09	74	-12.91	PK
V	17475	43.49	49.21	15.34	40.51	50.13	54	-3.87	AV
H	11650	57.45	49.11	15.37	31.31	55.02	74	-18.98	PK
H	11650	44.77	49.11	15.37	31.31	42.34	54	-11.66	AV
H	17475	55.13	49.21	15.34	40.51	61.77	74	-12.23	PK
H	17475	44.07	49.21	15.34	40.51	50.71	54	-3.29	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	56.59	49.07	15.33	37.41	60.26	74	-13.74	PK
V	11510	45.76	49.07	15.33	37.41	49.43	54	-4.57	AV
V	17265	56.13	49.17	15.28	40.46	62.7	74	-11.30	PK
V	17265	43.37	49.17	15.28	40.46	49.94	54	-4.06	AV
H	11510	56.42	49.07	15.33	37.41	60.09	74	-13.91	PK
H	11510	45.65	49.07	15.33	37.41	49.32	54	-4.68	AV
H	17265	54.38	49.17	15.28	40.46	60.95	74	-13.05	PK
H	17265	44.34	49.17	15.28	40.46	50.91	54	-3.09	AV
operation frequency:5795									
V	11590	57.53	49.11	15.37	37.46	61.25	74	-12.75	PK
V	11590	44.67	49.11	15.37	37.46	48.39	54	-5.61	AV
V	17385	54.63	49.21	15.34	40.51	61.27	74	-12.73	PK
V	17385	43.16	49.21	15.34	40.51	49.8	54	-4.20	AV
H	11590	57.54	49.11	15.37	31.31	55.11	74	-18.89	PK
H	11590	44.78	49.11	15.37	31.31	42.35	54	-11.65	AV
H	17385	55.23	49.21	15.34	40.51	61.87	74	-12.13	PK
H	17385	44.07	49.21	15.34	40.51	50.71	54	-3.29	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	56.59	49.05	15.3	37.39	60.23	74	-13.77	PK
V	11490	45.76	49.05	15.3	37.39	49.4	54	-4.60	AV
V	17235	56.13	49.16	15.27	40.45	62.69	74	-11.31	PK
V	17235	43.38	49.16	15.27	40.45	49.94	54	-4.06	AV
H	11490	56.52	49.05	15.3	37.39	60.16	74	-13.84	PK
H	11490	45.64	49.05	15.3	37.39	49.28	54	-4.72	AV
H	17235	54.38	49.16	15.27	40.45	60.94	74	-13.06	PK
H	17235	44.49	49.16	15.27	40.45	51.05	54	-2.95	AV
operation frequency:5785									
V	11570	56.78	49.09	15.34	37.42	60.45	74	-13.55	PK
V	11570	44.94	49.09	15.34	37.42	48.61	54	-5.39	AV
V	17355	55.52	49.18	15.29	40.47	62.1	74	-11.90	PK
V	17355	43.44	49.18	15.29	40.47	50.02	54	-3.98	AV
H	11570	55.37	49.09	15.34	37.42	59.04	74	-14.96	PK
H	11570	43.58	49.09	15.34	37.42	47.25	54	-6.75	AV
H	17355	55.07	49.18	15.29	40.47	61.65	74	-12.35	PK
H	17355	43.26	49.18	15.29	40.47	49.84	54	-4.16	AV
operation frequency:5825									
V	11650	57.64	49.11	15.37	37.46	61.36	74	-12.64	PK
V	11650	44.58	49.11	15.37	37.46	48.3	54	-5.70	AV
V	17475	54.63	49.21	15.34	40.51	61.27	74	-12.73	PK
V	17475	43.44	49.21	15.34	40.51	50.08	54	-3.92	AV
H	11650	57.35	49.11	15.37	31.31	54.92	74	-19.08	PK
H	11650	44.78	49.11	15.37	31.31	42.35	54	-11.65	AV
H	17475	55.35	49.21	15.34	40.51	61.99	74	-12.01	PK
H	17475	44.04	49.21	15.34	40.51	50.68	54	-3.32	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 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	56.79	49.07	15.33	37.41	60.46	74	-13.54	PK
V	11510	45.76	49.07	15.33	37.41	49.43	54	-4.57	AV
V	17265	56.24	49.17	15.28	40.46	62.81	74	-11.19	PK
V	17265	43.38	49.17	15.28	40.46	49.95	54	-4.05	AV
H	11510	56.63	49.07	15.33	37.41	60.3	74	-13.70	PK
H	11510	45.65	49.07	15.33	37.41	49.32	54	-4.68	AV
H	17265	54.85	49.17	15.28	40.46	61.42	74	-12.58	PK
H	17265	44.34	49.17	15.28	40.46	50.91	54	-3.09	AV
operation frequency:5795									
V	11590	57.66	49.11	15.37	37.46	61.38	74	-12.62	PK
V	11590	44.58	49.11	15.37	37.46	48.3	54	-5.70	AV
V	17385	54.63	49.21	15.34	40.51	61.27	74	-12.73	PK
V	17385	43.41	49.21	15.34	40.51	50.05	54	-3.95	AV
H	11590	57.54	49.11	15.37	31.31	55.11	74	-18.89	PK
H	11590	44.78	49.11	15.37	31.31	42.35	54	-11.65	AV
H	17385	55.23	49.21	15.34	40.51	61.87	74	-12.13	PK
H	17385	44.04	49.21	15.34	40.51	50.68	54	-3.32	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:5775									
V	11550	56.59	49.07	15.33	37.41	60.26	74	-13.74	PK
V	11550	45.73	49.07	15.33	37.41	49.4	54	-4.60	AV
V	17325	56.22	49.17	15.28	40.46	62.79	74	-11.21	PK
V	17325	43.37	49.17	15.28	40.46	49.94	54	-4.06	AV
H	11550	56.66	49.07	15.33	37.41	60.33	74	-13.67	PK
H	11550	45.65	49.07	15.33	37.41	49.32	54	-4.68	AV
H	17325	54.38	49.17	15.28	40.46	60.95	74	-13.05	PK
H	17325	44.35	49.17	15.28	40.46	50.92	54	-3.08	AV

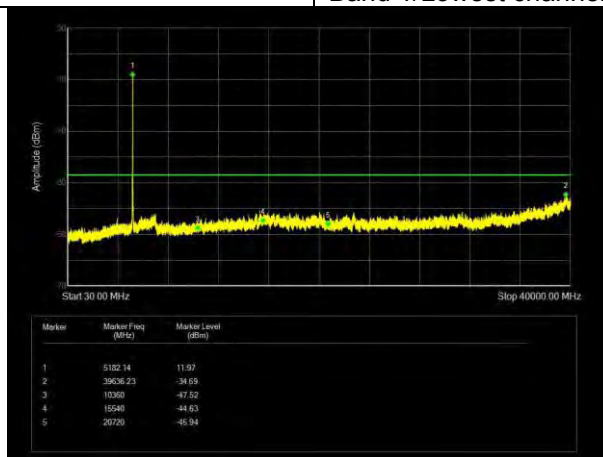
Remark:

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 found the 802.11a mode of Band 1 and Band 4 which it is worse case.

Test channel: Band 1/Lowest channel



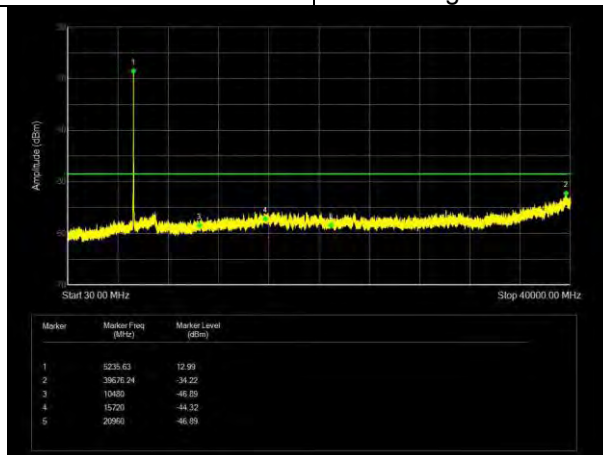
0.03Hz~40GHz

Test channel: Band 1/Middle channel



0.03GHz~40GHz

Test channel: Band 1/Highest channel



0.03GHz~40GHz



Test channel: Band 4/Lowest channel



0.03Hz~40GHz

Test channel: Band 4/Middle channel



0.03GHz~40GHz

Test channel: Band 4/Highest channel



0.03GHz~40GHz

3.3 RADIATED 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 within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm/MHz.

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

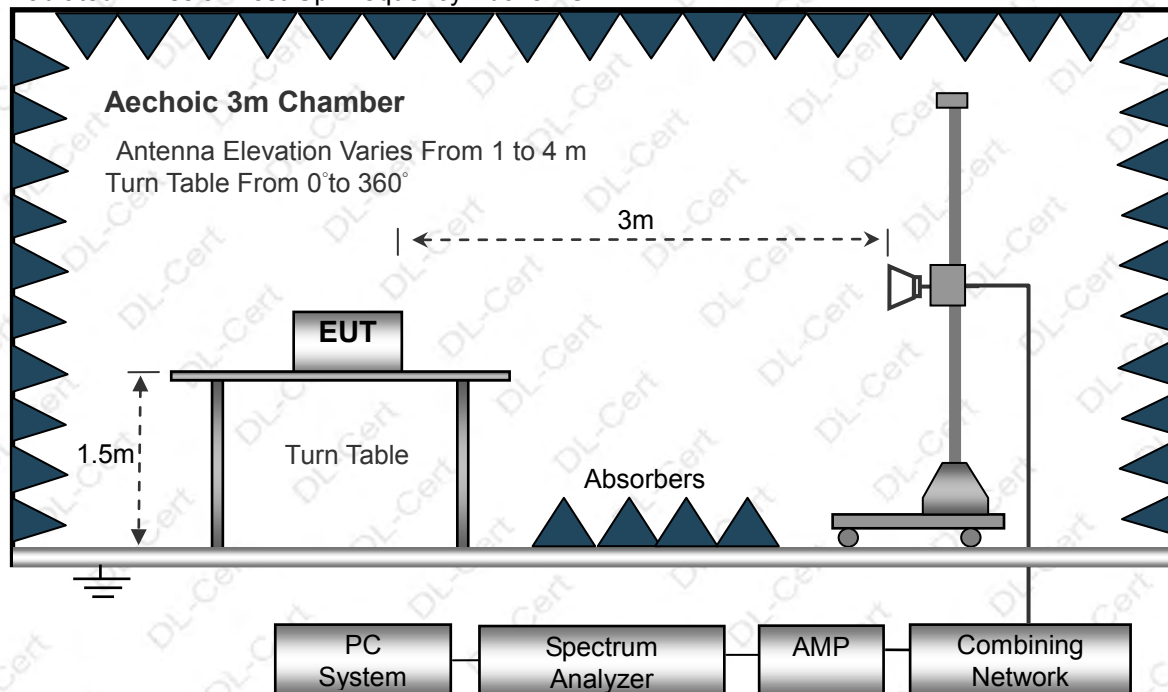
Test method: FCC KDB 789033 G)& Parts 15.407(b)(4) & 15.209(a)

3.3.3 DEVIATION FROM TEST STANDARD

No deviation

3.3.4 TEST SETUP

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**

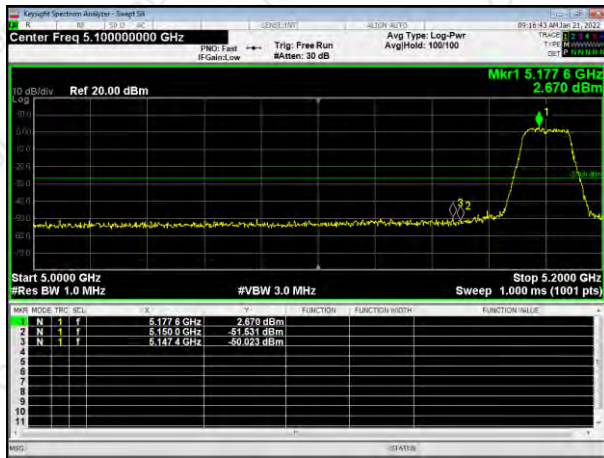
Modulation	Test Frequency (MHz)	Max Level Frequency (MHz)	Max Level (dB μ V/m)	EIRP (dBm)	Limit (dBm)	Result
802.11a	5180	5148.42	51.46	-43.74	-27.00	Pass
	5240	5255.15	53.31	-41.89	-27.00	Pass
	5745	5723.33	52.28	-42.92	-27.00	Pass
	5825	5853.85	51.66	-43.54	-27.00	Pass
802.11n(HT20)	5180	5146.14	52.17	-43.03	-27.00	Pass
	5240	5253.37	52.38	-42.82	-27.00	Pass
	5745	5723.56	51.52	-43.68	-27.00	Pass
	5825	5853.57	52.37	-42.83	-27.00	Pass
802.11n(HT40)	5190	5147.36	51.48	-43.72	-27.00	Pass
	5230	5253.74	52.39	-42.81	-27.00	Pass
	5755	5723.59	51.24	-43.96	-27.00	Pass
	5795	5853.47	51.18	-44.02	-27.00	Pass
802.11ac(HT20)	5180	5145.36	52.56	-42.64	-27.00	Pass
	5240	5256.17	52.33	-42.87	-27.00	Pass
	5745	5735.36	51.85	-43.35	-27.00	Pass
	5825	5849.52	52.71	-42.49	-27.00	Pass
802.11ac(HT40)	5190	5145.08	51.06	-44.14	-27.00	Pass
	5230	5252.41	52.38	-42.82	-27.00	Pass
	5755	5736.33	53.67	-41.53	-27.00	Pass
	5795	5856.28	52.14	-43.06	-27.00	Pass
802.11ac(HT80)	5210	5235.63	54.59	-40.61	-27.00	Pass
	5775	5769.78	51.63	-43.57	-27.00	Pass

Remark: 1. According to KDB 789033 D02 section H) d) (iii), for measurement above 1000MHz@3m distance, the limit of EIRP is calculated as follows: $EIRP[dBm] = E[dB\mu V/m] - 95.2$

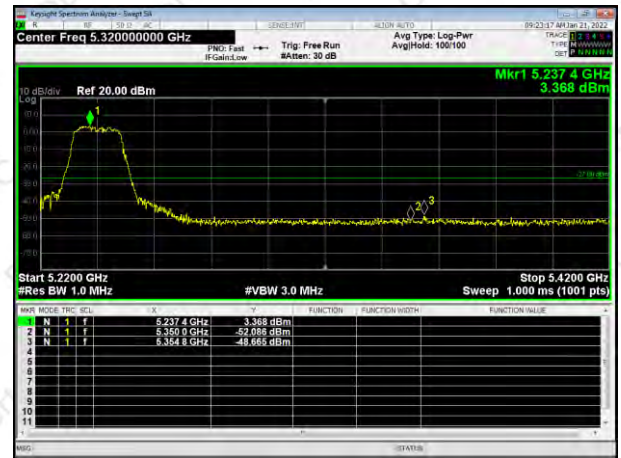


For Conducted

802.11a

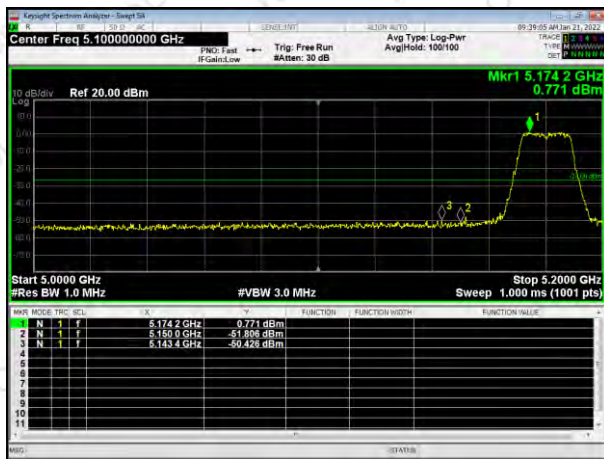


5180MHz

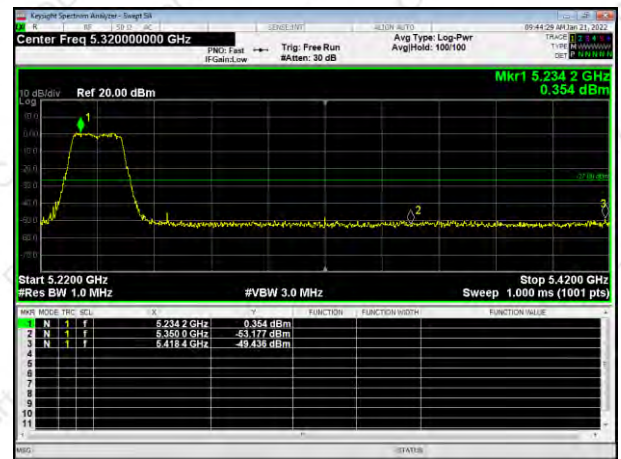


5240MHz

802.11n HT20

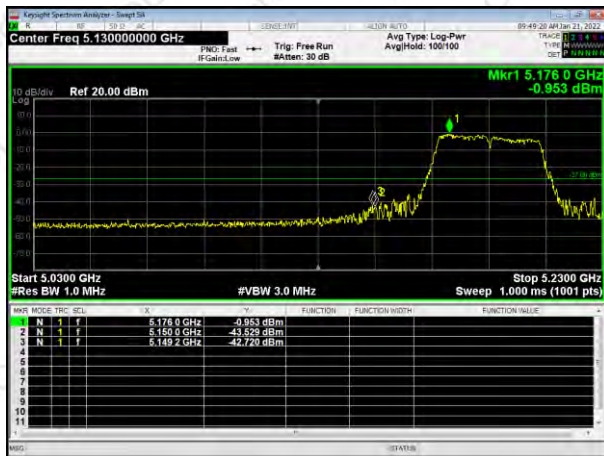


5180MHz

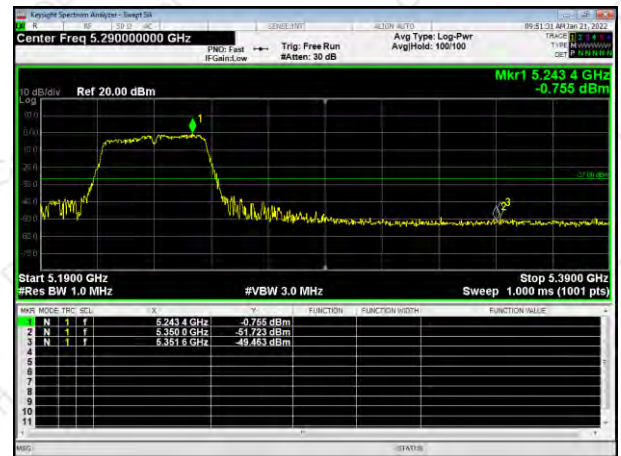


5240MHz

802.11n HT40



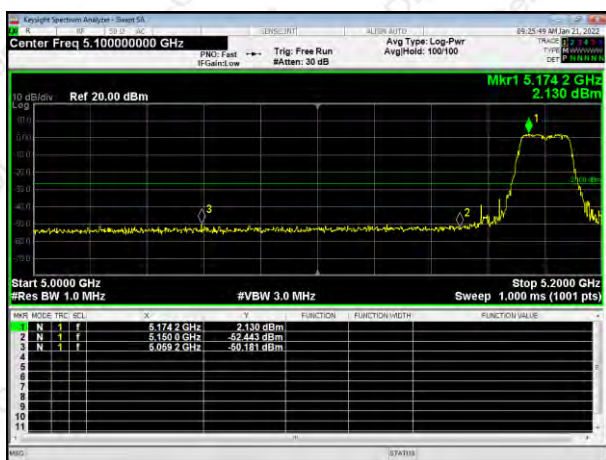
5190MHz



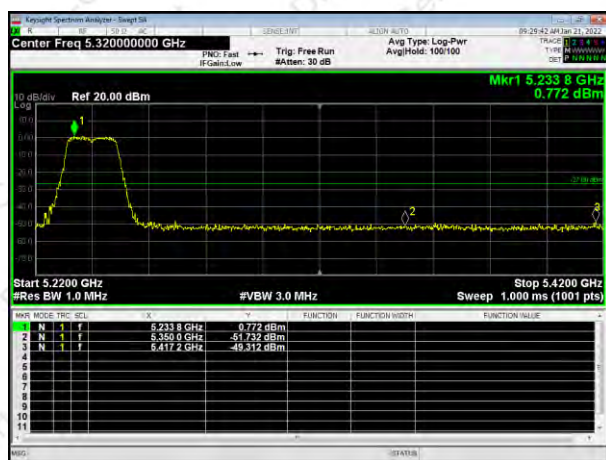
5230MHz



802.11ac HT20

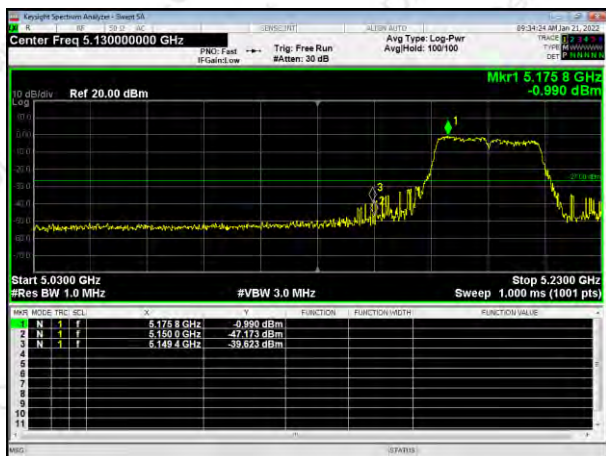


5180MHz



5240MHz

802.11ac HT40

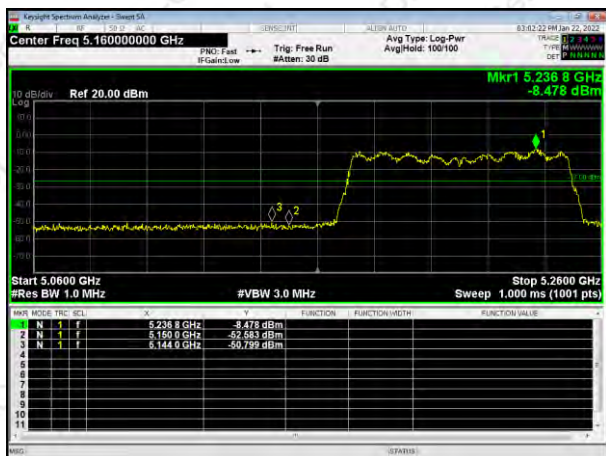


5190MHz



5230MHz

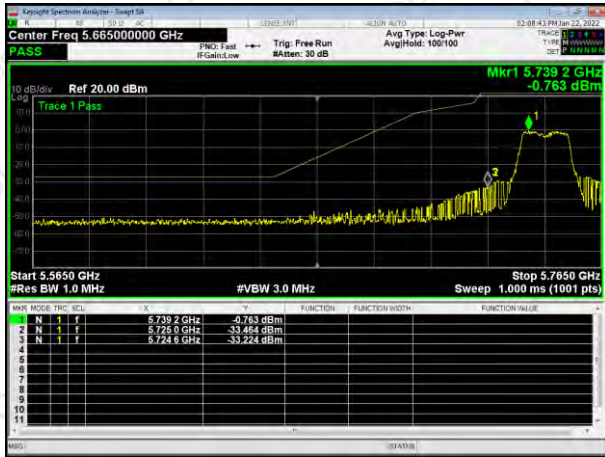
802.11ac HT80



5210MHz



802.11a

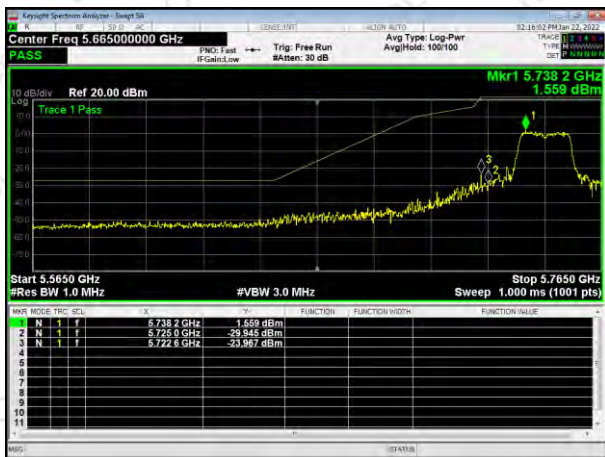


5745MHz



5825MHz

802.11n HT20

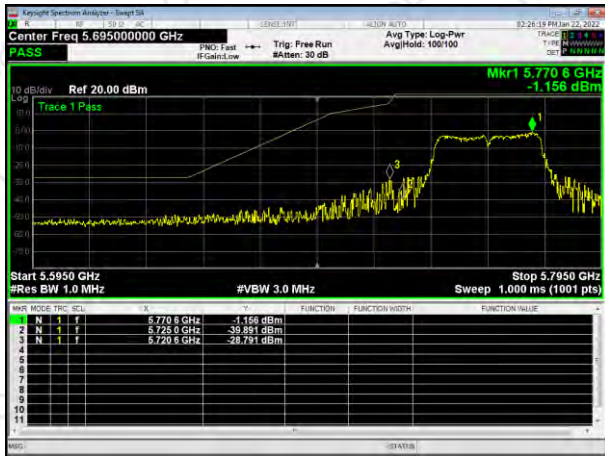


5745MHz



5825MHz

802.11n HT40



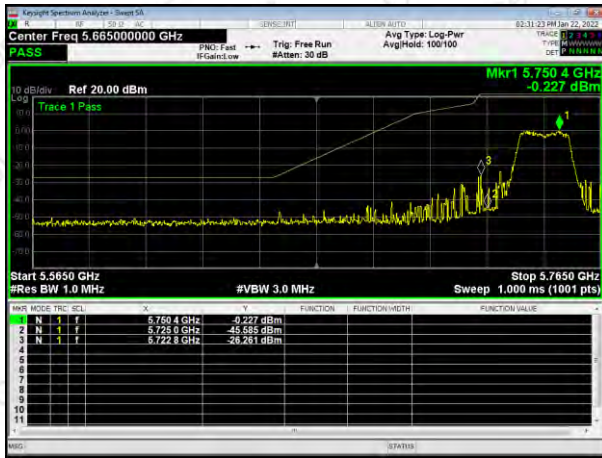
5755MHz



5795MHz



802.11ac HT20



5745MHz



5825MHz

802.11ac HT40

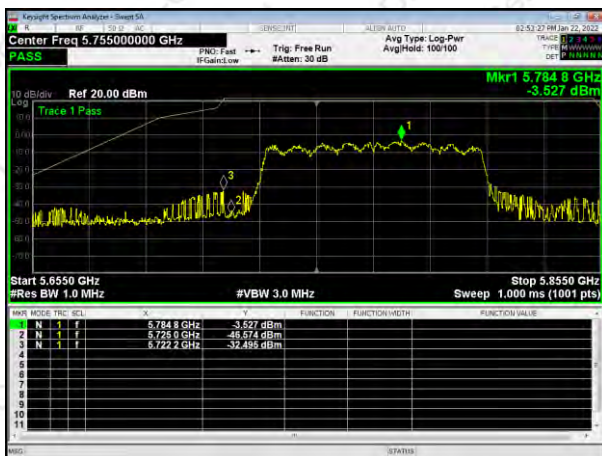


5755MHz



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

- a. The EUT was directly connected to the power meter and antenna output port as show in the block diagram below,
- b. 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 = peak
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.

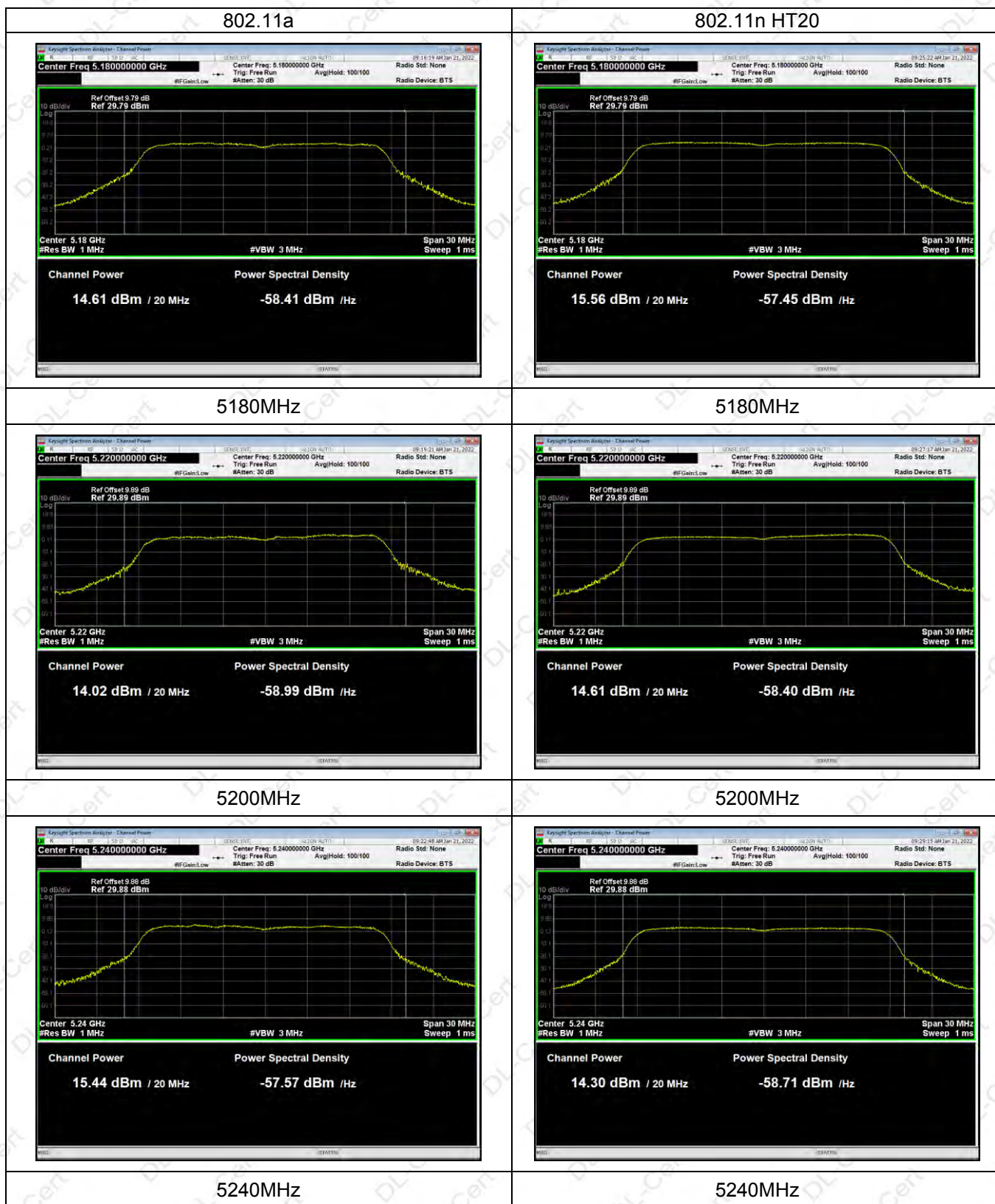


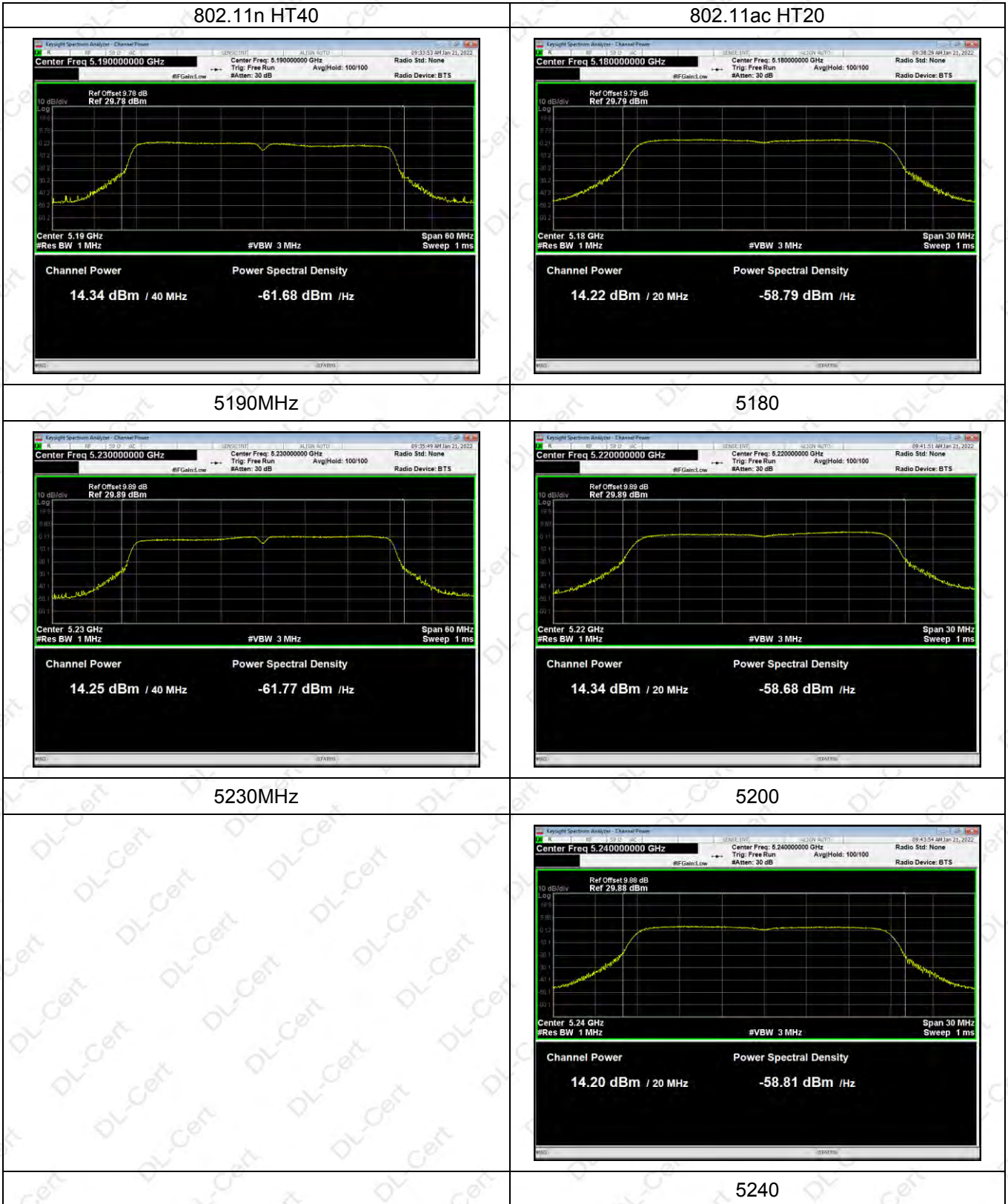
4.1.5 TEST RESULTS

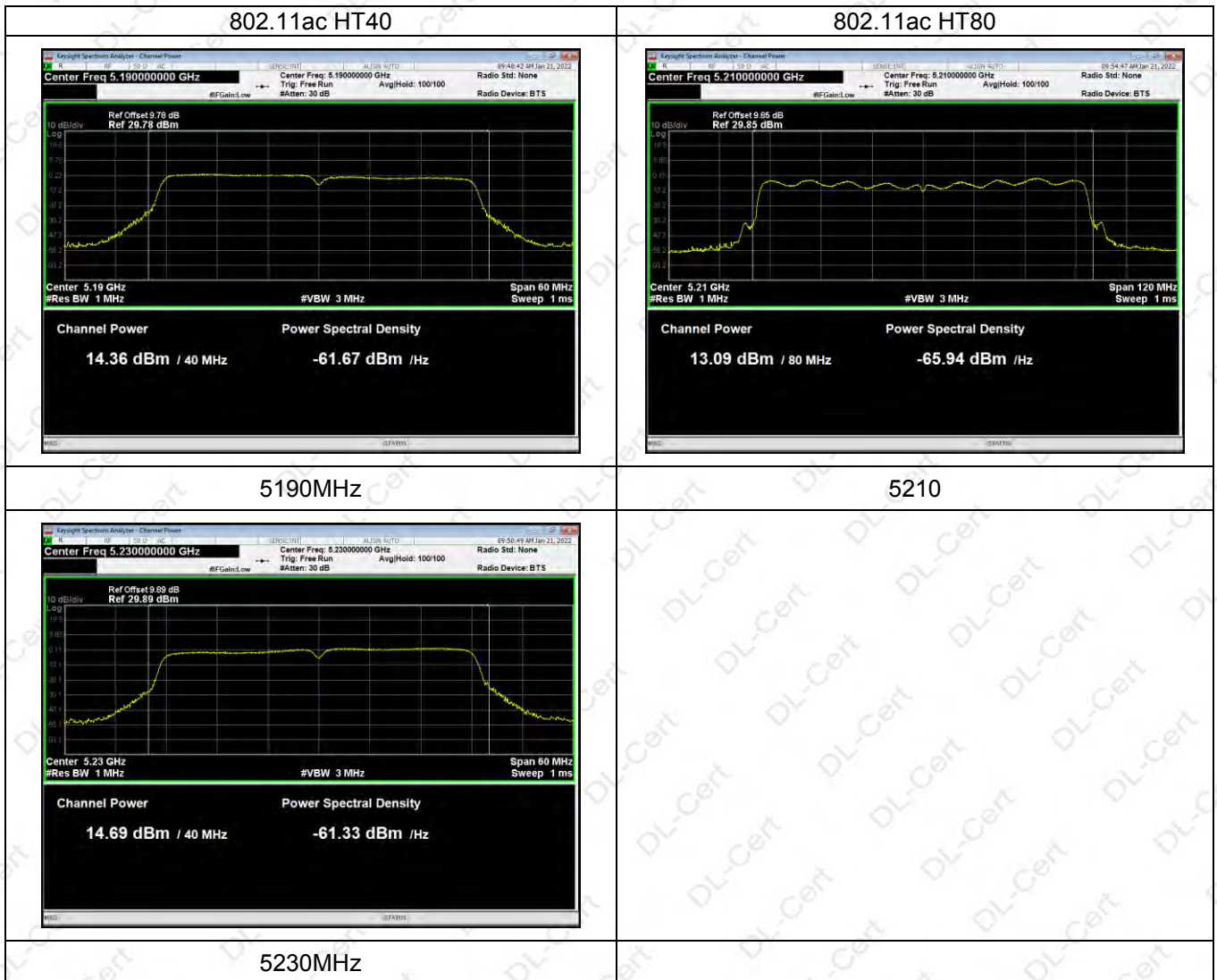
Temperature:	25 °C	Relative Humidity:	60%
Pressure:	1012 hPa	Test Voltage :	AC 120V/60Hz

Band	Mode	Test Channel	Peak Output Power (dBm)	LIMIT (dBm)
Band 1	802.11a	Low	14.61	23.98
		Moddle	14.02	23.98
		High	15.44	23.98
	802.11n HT20	Low	15.56	23.98
		Moddle	14.61	23.98
		High	14.30	23.98
	802.11n HT40	Low	14.35	23.98
		High	14.25	23.98
	802.11ac HT20	Low	14.22	23.98
		Moddle	14.34	23.98
		High	14.20	23.98
	802.11ac HT40	Low	14.36	23.98
		High	14.69	23.98
	802.11ac HT80	/	13.09	23.98

Band	Mode	Test Channel	Peak Output Power (dBm)	LIMIT (dBm)
Band 4	802.11a	Low	12.57	30
		Moddle	13.82	30
		High	12.91	30
	802.11n HT20	Low	14.86	30
		Moddle	13.89	30
		High	14.14	30
	802.11n HT40	Low	14.10	30
		High	14.02	30
	802.11ac HT20	Low	13.06	30
		Moddle	14.83	30
		High	14.40	30
	802.11ac HT40	Low	13.75	30
		High	14.33	30
	802.11ac HT80	/	13.59	30





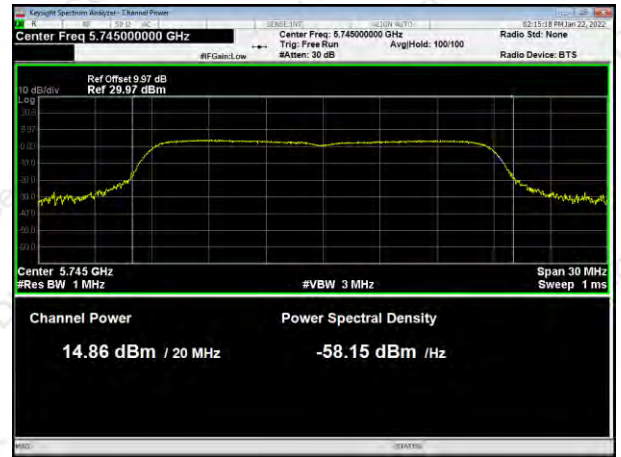




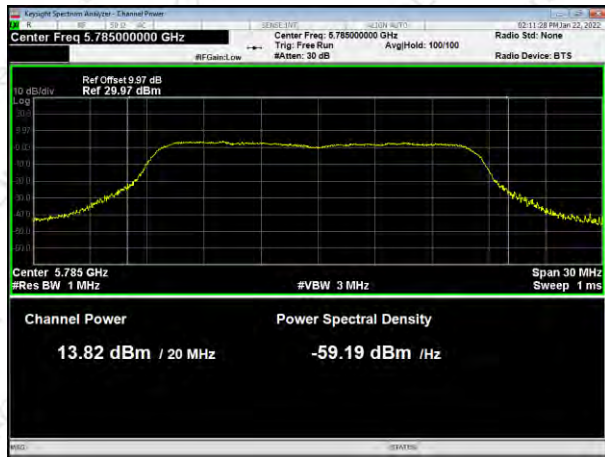
802.11a



802.11n HT20



5745MHz



5745MHz



5785MHz



5785MHz

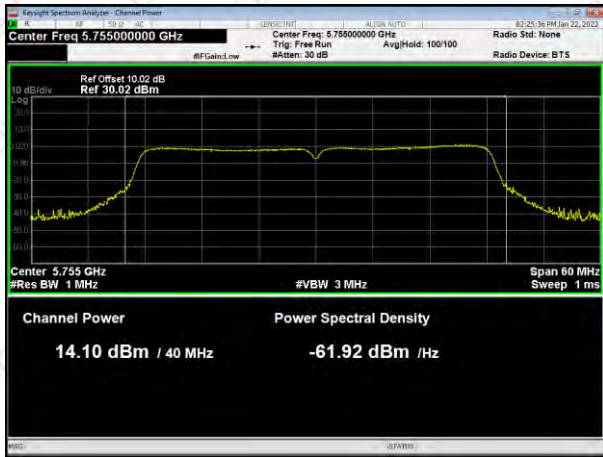


5825MHz

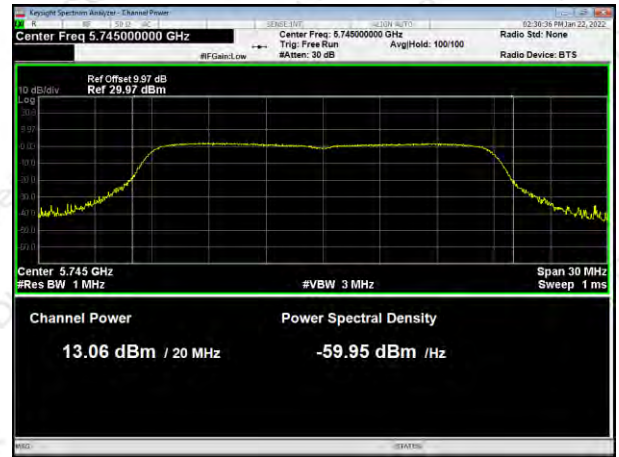
5825MHz



802.11n HT40



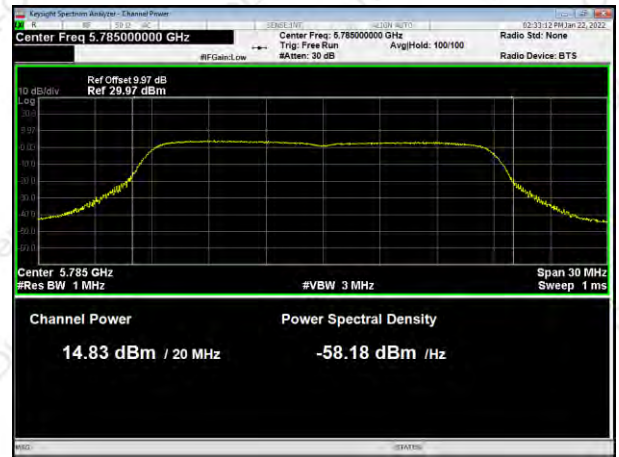
802.11ac HT20



5755MHz



5745MHz



5795MHz



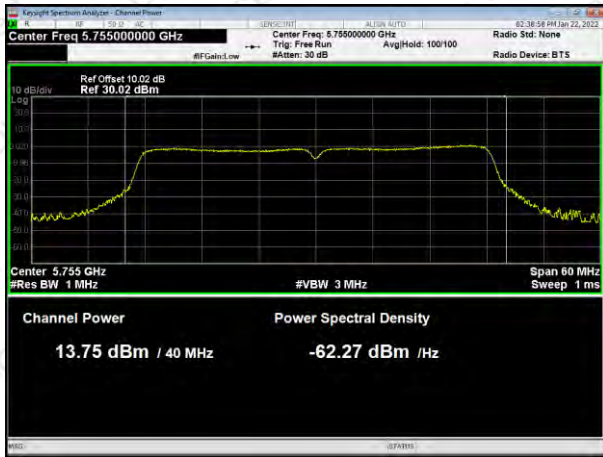
5785MHz



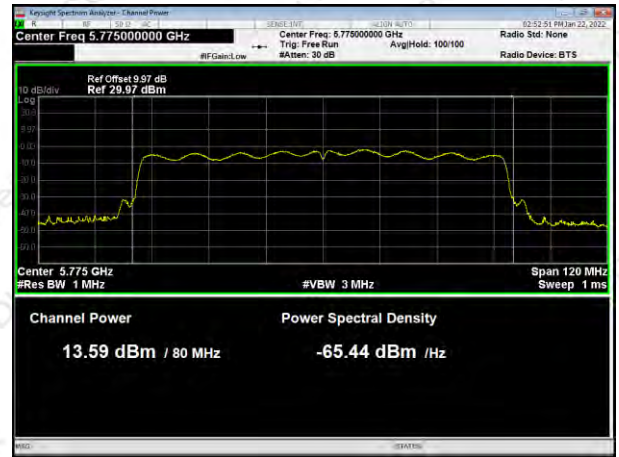
5825MHz



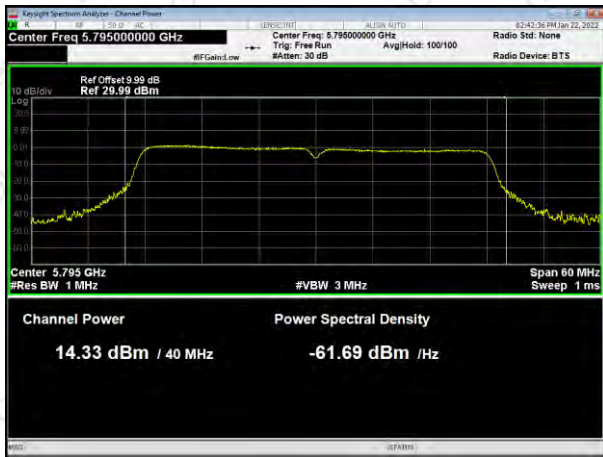
802.11ac HT40



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 ≥ 1MHz for band 1 RBW ≥ 510KHz for band 4
VB	VBW ≥ 3RBW
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

5.1.1 TEST PROCEDURE

- Place the EUT on the table and set it in transmitting mode.
- The testing follows FCC KDB 789033 D02.
- Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to Spectrum.
- 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)
- Use the cursor on spectrum to peak search the highest level of trace
- 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.
- 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

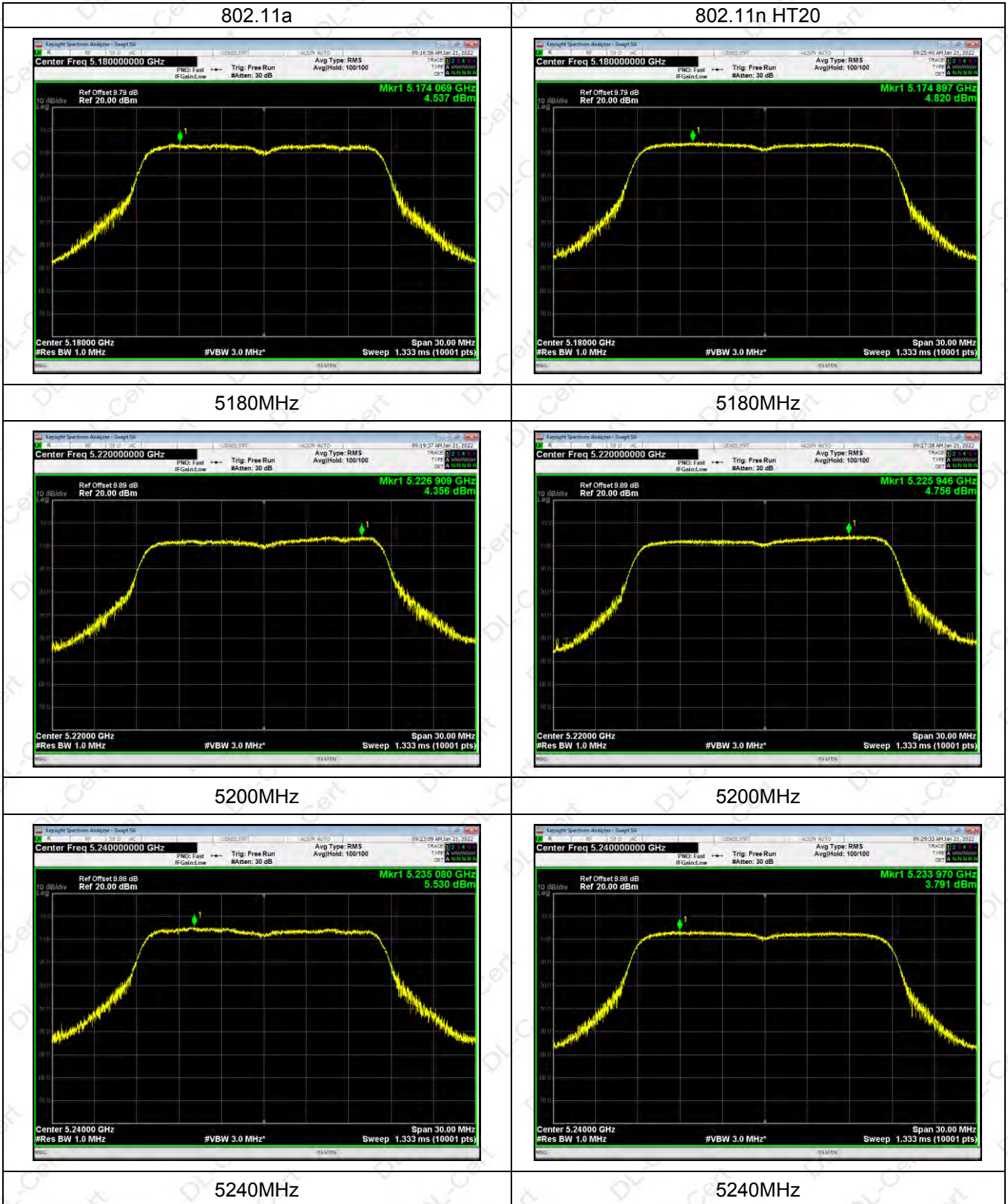
The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.



5.1.5 TEST RESULTS

	Mode	Test Channel	Reading Level (dBm)	Duty factor (dB)	PSD (dBm)	Limit (dBm)	Result
Band1	802.11a	Low	4.537	0.85	5.387	11.00	PASS
		Moddle	4.356	0.85	5.206	11.00	PASS
		High	5.53	0.85	6.38	11.00	PASS
	802.11n20	Low	4.82	0.13	4.95	11.00	PASS
		Moddle	4.756	0.13	4.886	11.00	PASS
		High	3.791	0.13	3.921	11.00	PASS
	802.11n40	Low	1.482	0.26	1.742	11.00	PASS
		High	1.124	0.26	1.384	11.00	PASS
	802.11ac20	Low	3.905	0.14	4.045	11.00	PASS
		Moddle	4.846	0.14	4.986	11.00	PASS
		High	3.661	0.14	3.801	11.00	PASS
	802.11ac40	Low	1.456	0.27	1.726	11.00	PASS
		High	1.581	0.27	1.851	11.00	PASS
802.11ac80	/	-1.487	0.52	-0.967	11.00	PASS	

	Mode	Test Channel	Reading Level (dBm)	Duty factor (dB)	PSD (dBm)	Limit (dBm)	Result
Band4	802.11a	Low	0.02	0.85	0.87	30.00	PASS
		Moddle	0.818	0.85	1.668	30.00	PASS
		High	0.565	0.85	1.415	30.00	PASS
	802.11n20	Low	0.635	0.13	0.765	30.00	PASS
		Moddle	0.551	0.13	0.681	30.00	PASS
		High	0.995	0.13	1.125	30.00	PASS
	802.11n40	Low	-1.66	0.26	-1.4	30.00	PASS
		High	-1.595	0.26	-1.335	30.00	PASS
	802.11ac20	Low	-0.658	0.14	-0.518	30.00	PASS
		Moddle	1.576	0.14	1.716	30.00	PASS
		High	1.279	0.14	1.419	30.00	PASS
	802.11ac40	Low	-1.937	0.27	-1.667	30.00	PASS
		High	-1.424	0.27	-1.154	30.00	PASS
	802.11ac80	/	-4.198	0.51	-3.688	30.00	PASS





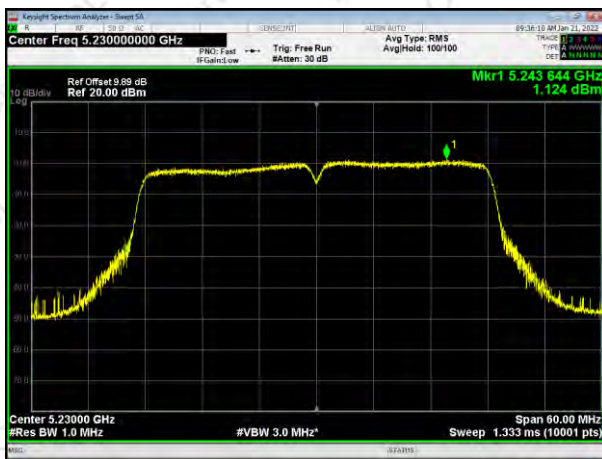
802.11n HT40



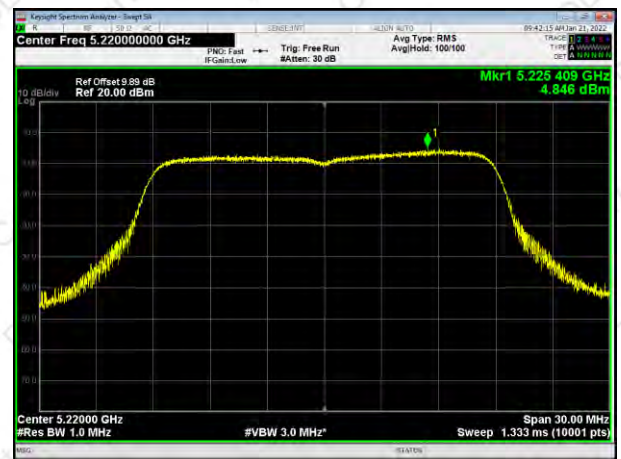
802.11ac HT20



5190MHz



5180



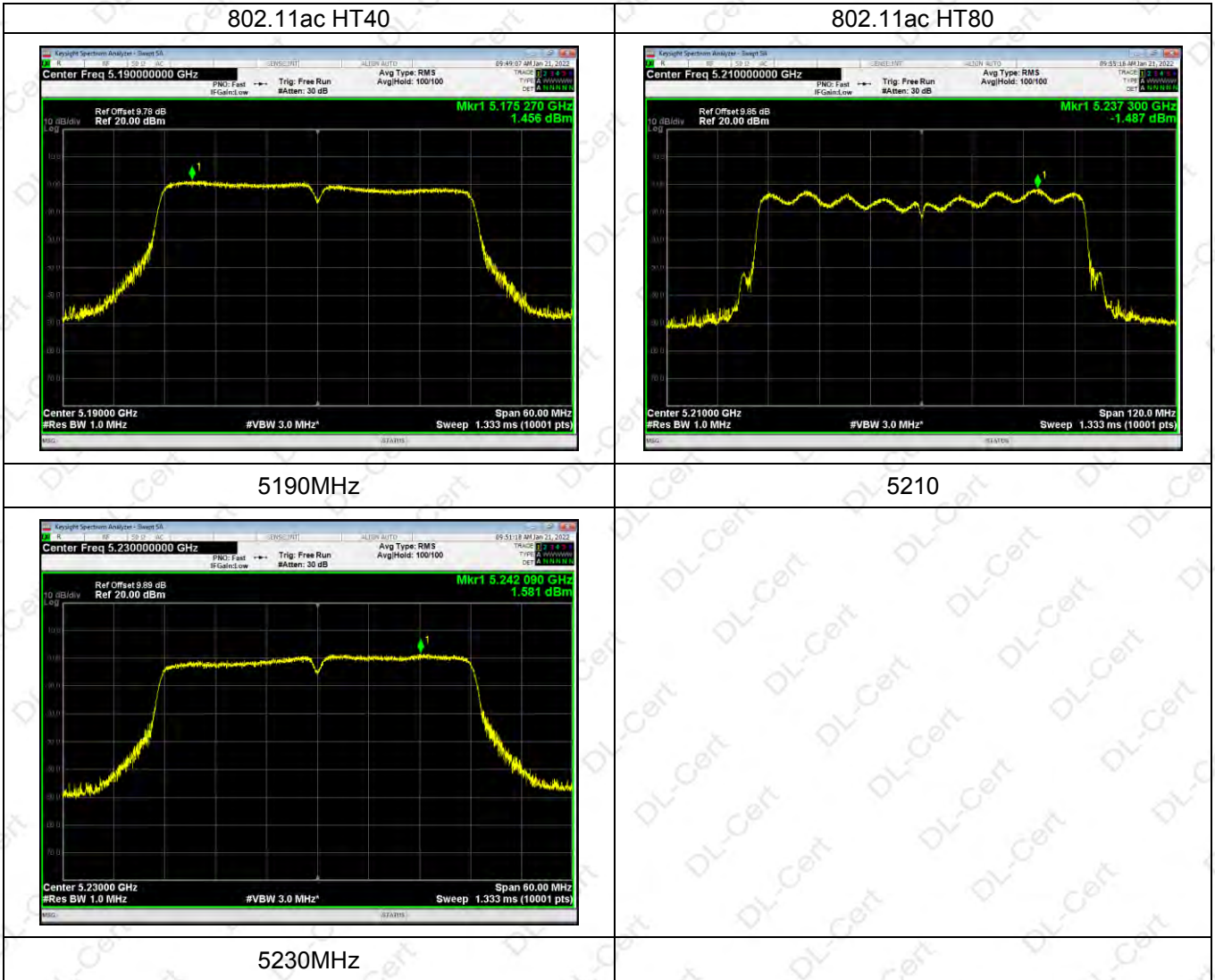
5230MHz

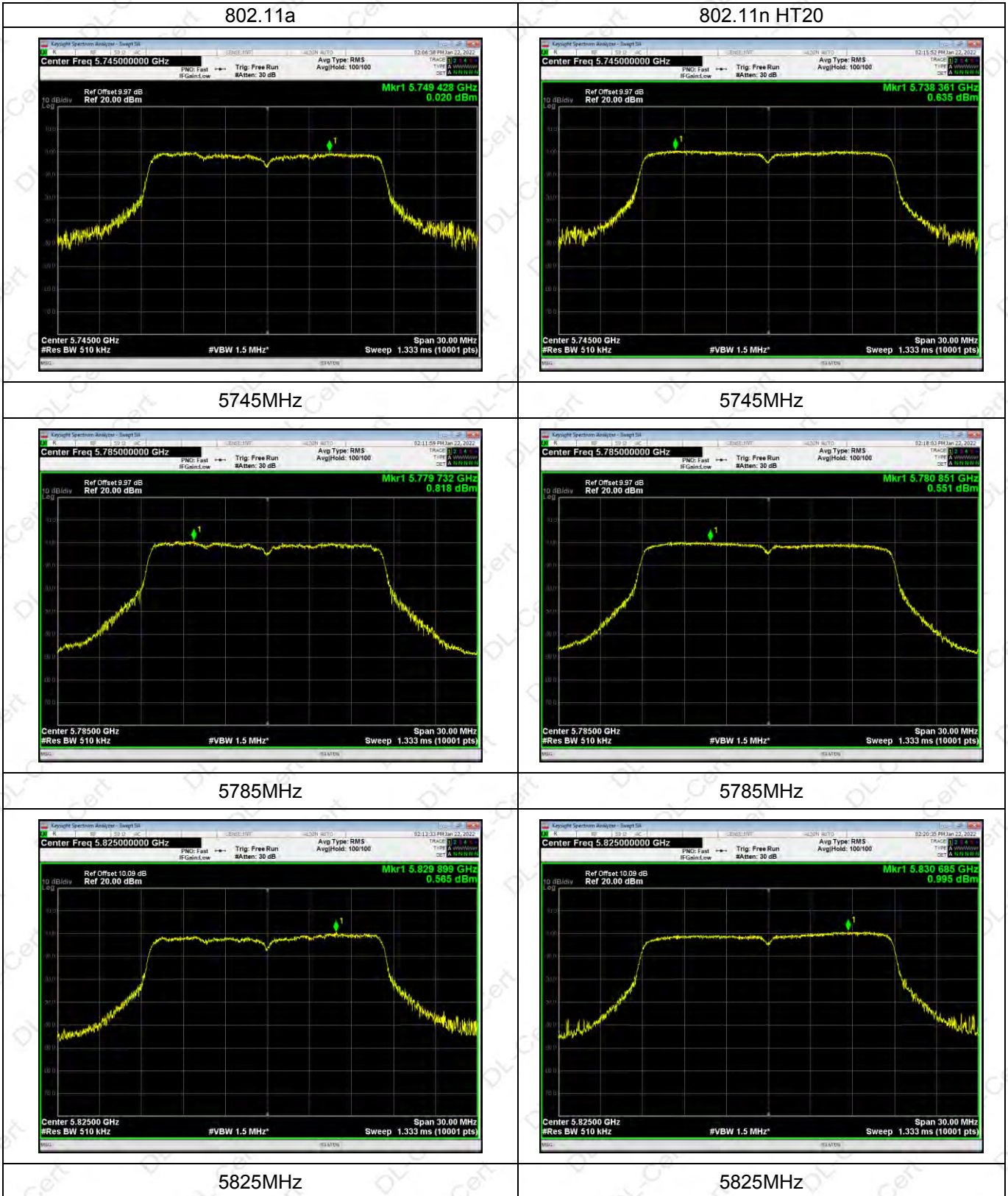


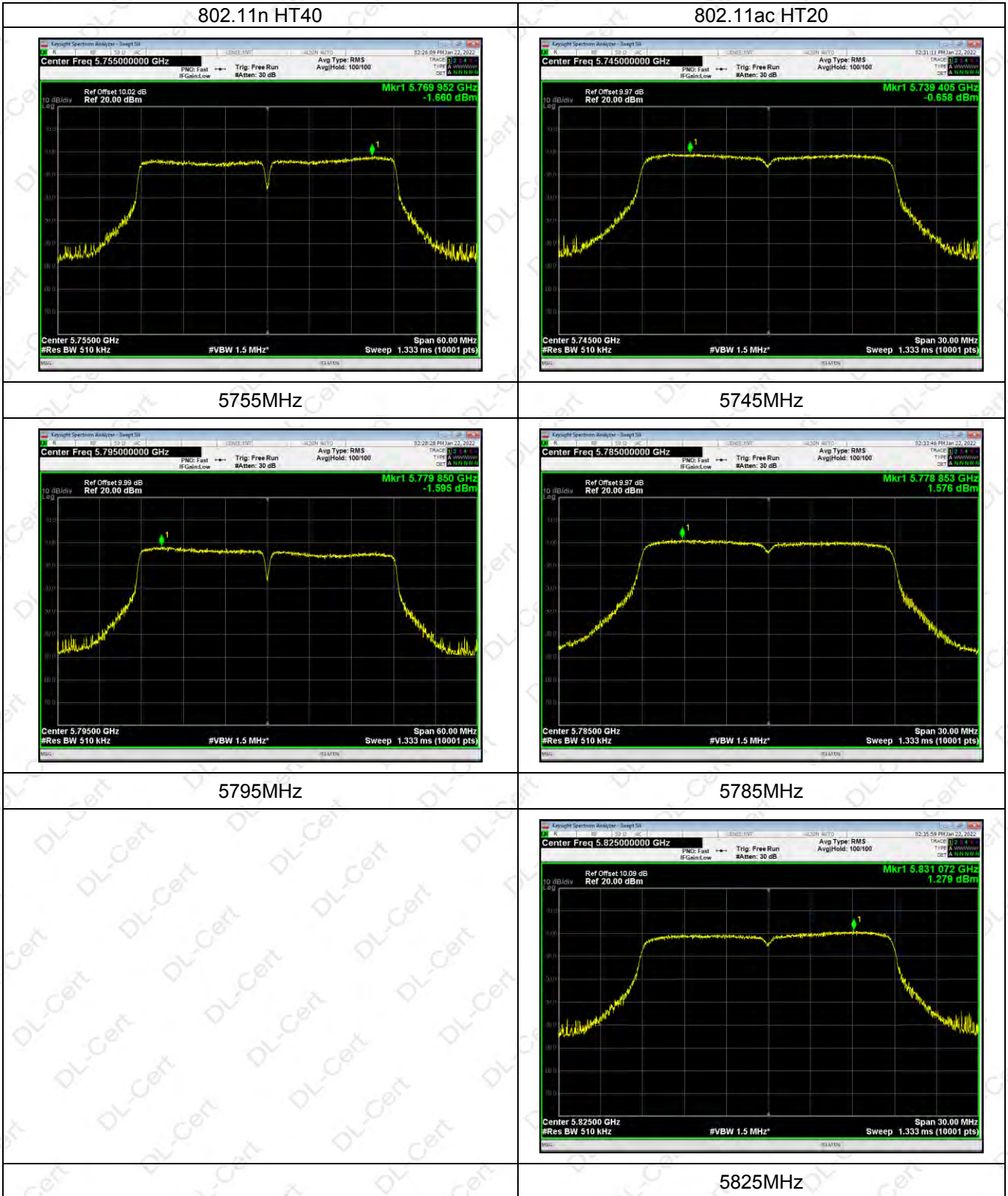
5200



5240





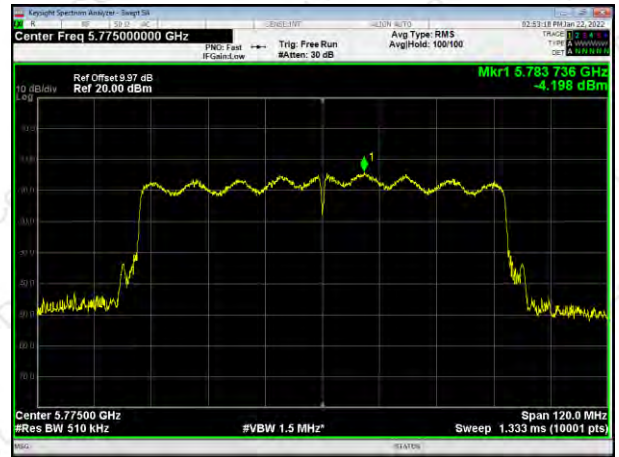




802.11ac HT40



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





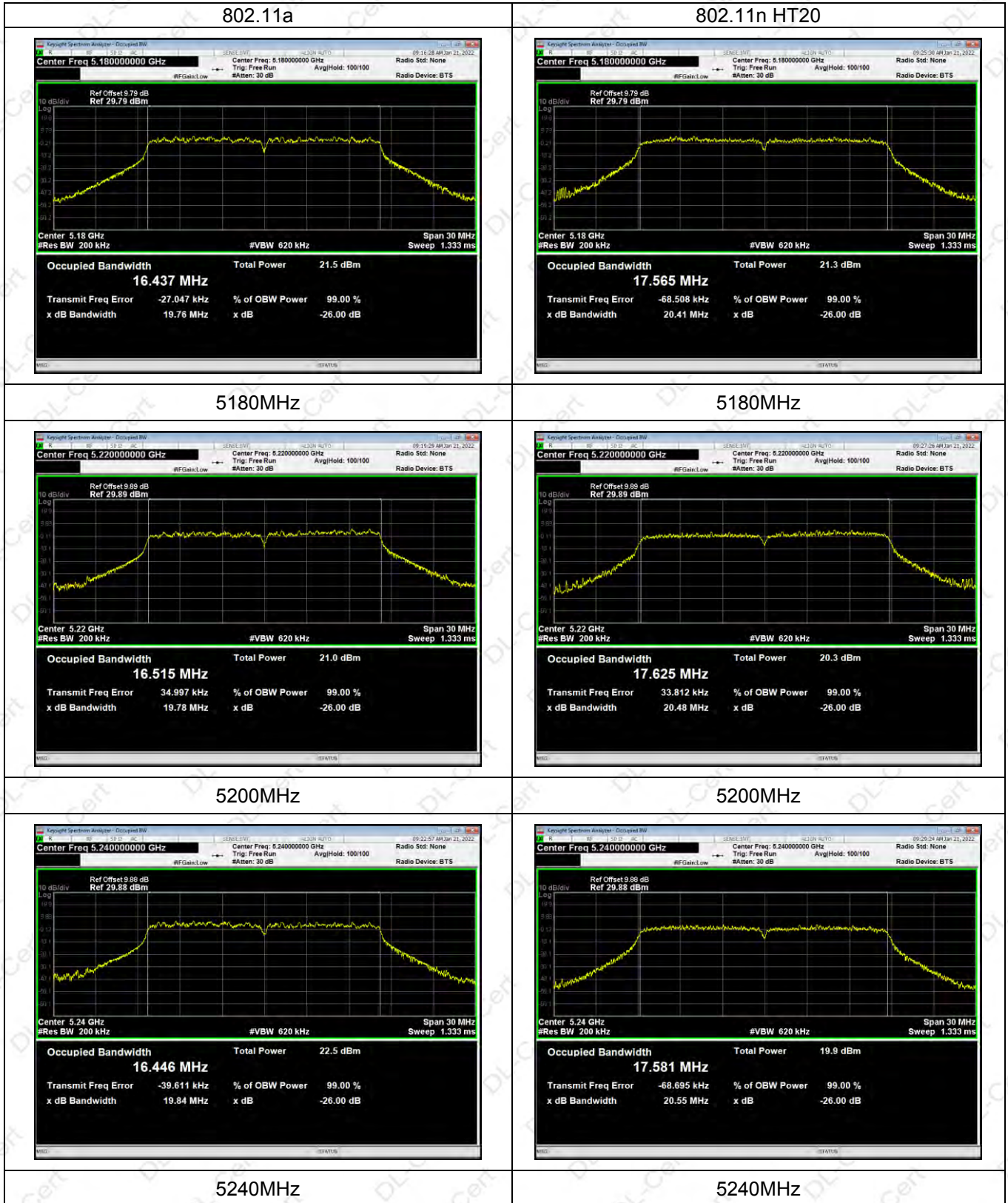
6.1.4 EUT OPERATION CONDITIONS

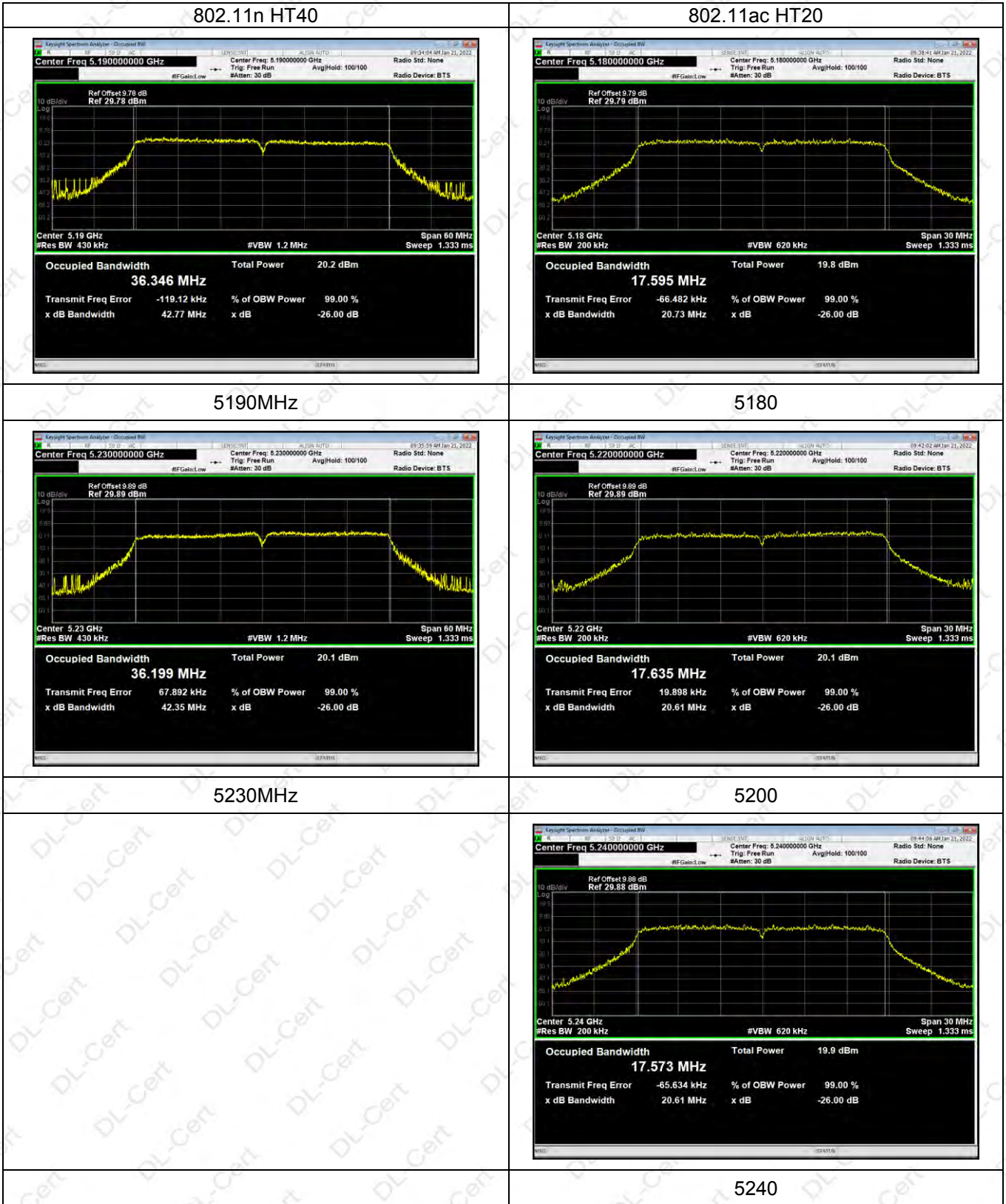
The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

6.1.5 TEST RESULTS

		Test Channel	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Result
Band 1	802.11a	Low	19.76	16.437	Pass
		Middle	19.78	16.515	Pass
		High	19.84	16.446	Pass
	802.11n HT20	Low	20.41	17.565	Pass
		Middle	20.48	17.625	Pass
		High	20.55	17.581	Pass
	802.11n HT40	Low	42.77	36.346	Pass
		High	42.35	36.199	Pass
	802.11ac HT20	Low	20.73	17.595	Pass
		Middle	20.61	17.635	Pass
		High	20.61	17.573	Pass
	802.11ac HT40	Low	42.86	36.309	Pass
High		42.43	36.191	Pass	
802.11ac HT80	/	82.32	75.687	Pass	

		Test Channel	6dB Bandwidth (MHz)	99% Bandwidth (MHz)	6dB Bandwidth Limit (MHz)	Result
Band 4	802.11a	Low	16.38	16.392	>0.5	Pass
		Middle	16.36	16.358	>0.5	Pass
		High	16.10	16.365	>0.5	Pass
	802.11n HT20	Low	17.30	17.635	>0.5	Pass
		Middle	17.14	17.565	>0.5	Pass
		High	16.32	17.595	>0.5	Pass
	802.11n HT40	Low	35.71	36.248	>0.5	Pass
		High	35.70	36.150	>0.5	Pass
	802.11ac HT20	Low	17.30	17.622	>0.5	Pass
		Middle	17.33	17.561	>0.5	Pass
		High	16.56	17.610	>0.5	Pass
	802.11ac HT40	Low	35.72	36.216	>0.5	Pass
		High	35.70	36.132	>0.5	Pass
	802.11ac HT80	/	75.10	75.159	>0.5	Pass



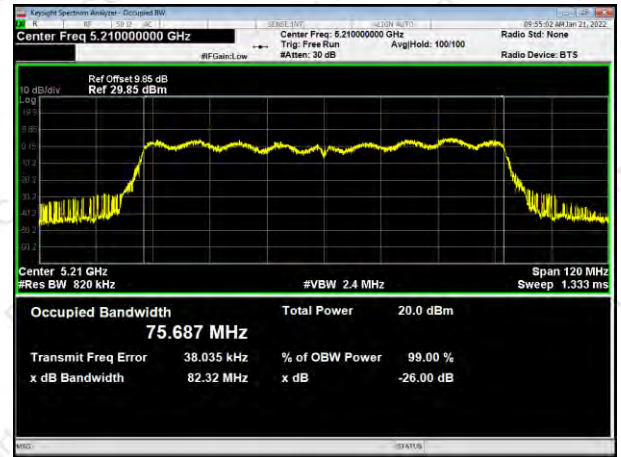




802.11ac HT40



802.11ac HT80



5190MHz



5210

5230MHz



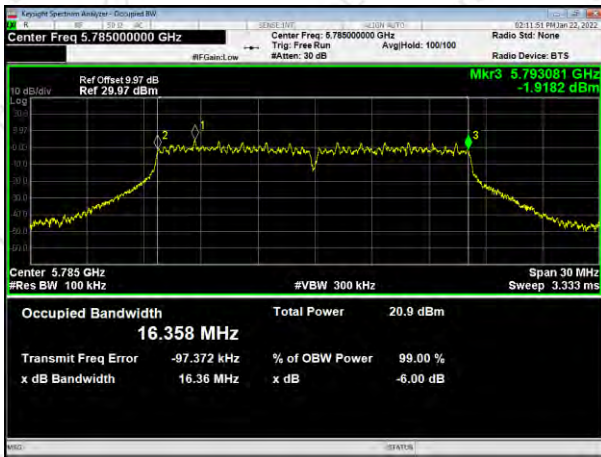
802.11a



802.11n HT20



5745MHz



5745MHz



5785MHz



5785MHz



5825MHz

5825MHz



802.11n HT40



802.11ac HT20



5755MHz



5745MHz



5795MHz



5785MHz

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.

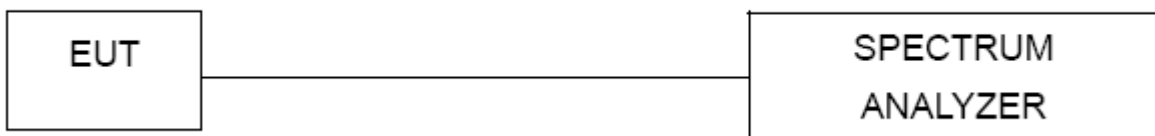
7.1.1 TEST PROCEDURE

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

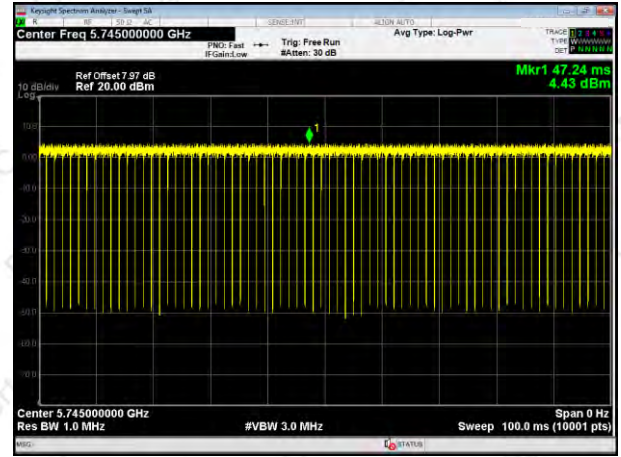
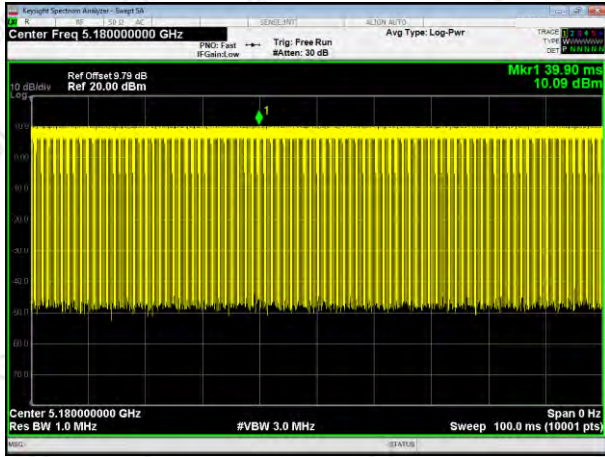
The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

**7.1.5 TEST RESULTS**

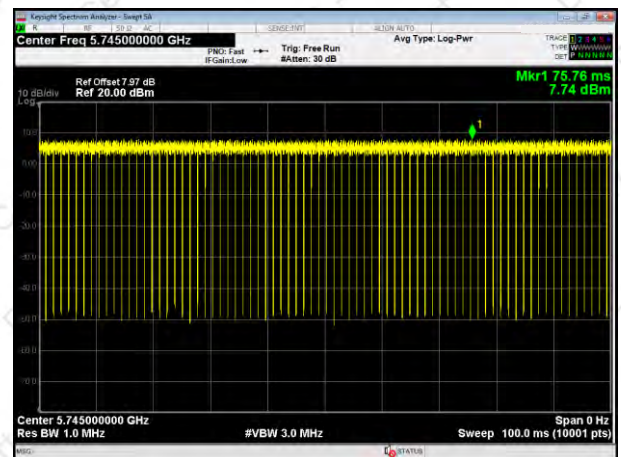
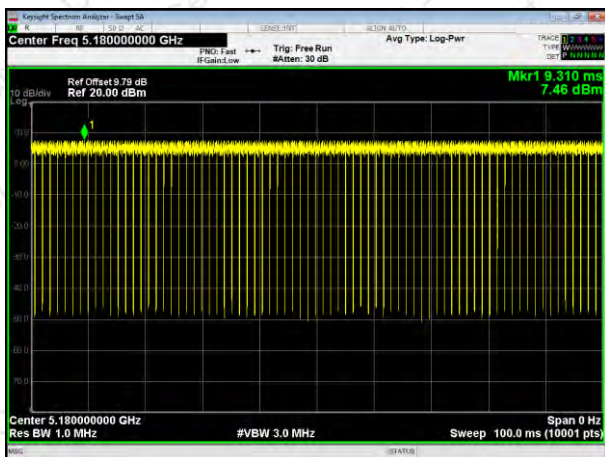
Operation Mode		Duty Cycle(%)	Duty Fator (dB) $10 * \log (1/ \text{Duty cycle})$
Band 1	802.11a	82.22	0.85
	802.11n(HT20)	97	0.13
	802.11n(HT40)	94.12	0.26
	802.11ac(HT20)	96.91	0.14
	802.11ac(HT40)	94.02	0.27
	802.11ac(HT80)	88.77	0.52
Band 4	802.11a	82.21	0.85
	802.11n(HT20)	96.97	0.13
	802.11n(HT40)	94.13	0.26
	802.11ac(HT20)	96.91	0.14
	802.11ac(HT40)	94.05	0.27
	802.11ac(HT80)	88.84	0.51



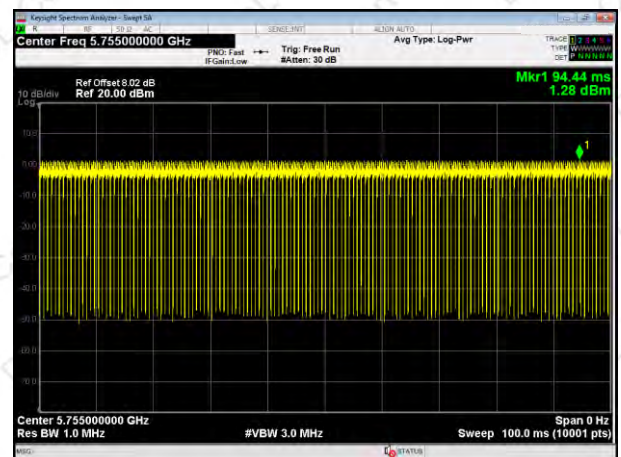
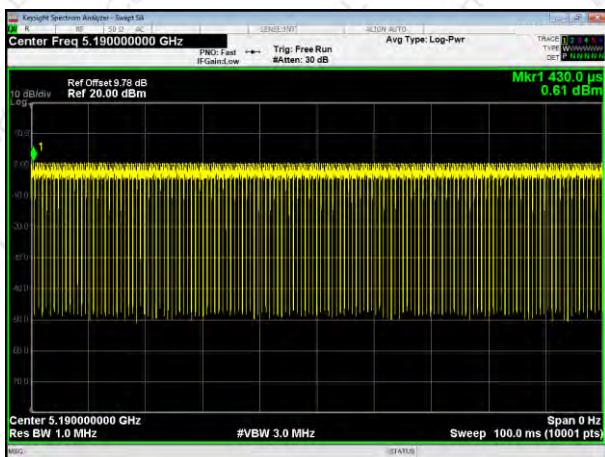
802.11a



802.11n HT20

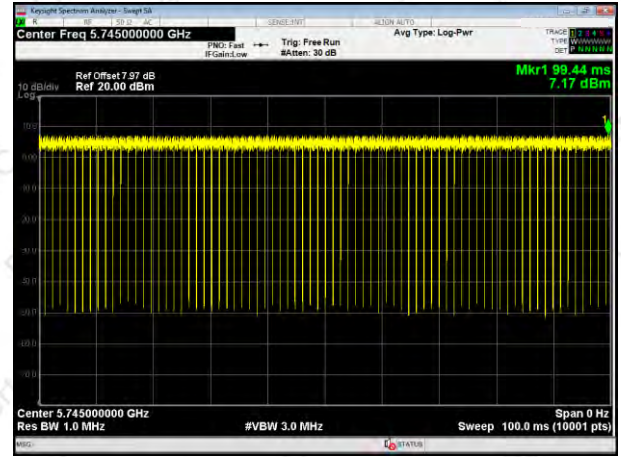
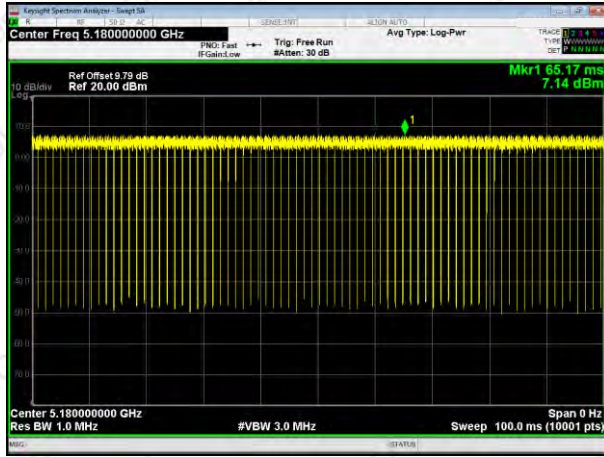


802.11n HT40

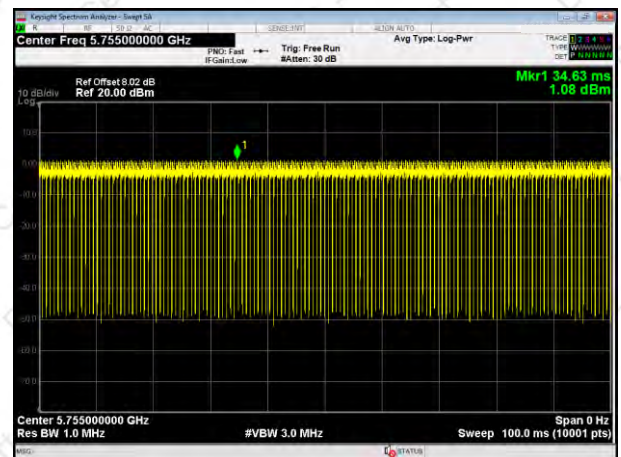
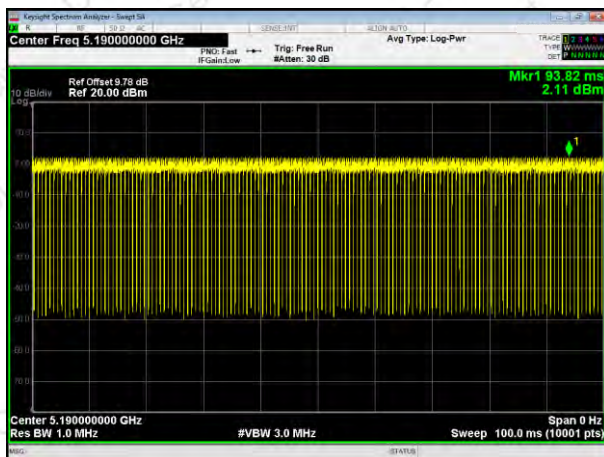




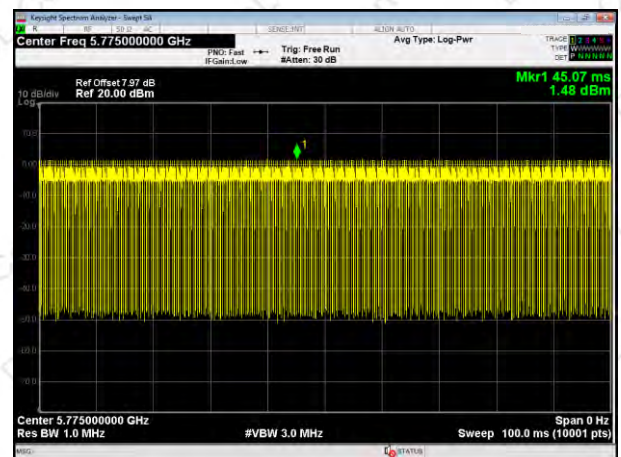
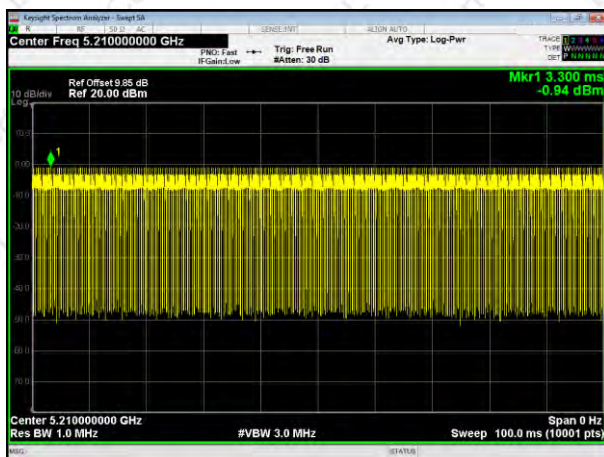
802.11ac HT20



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.

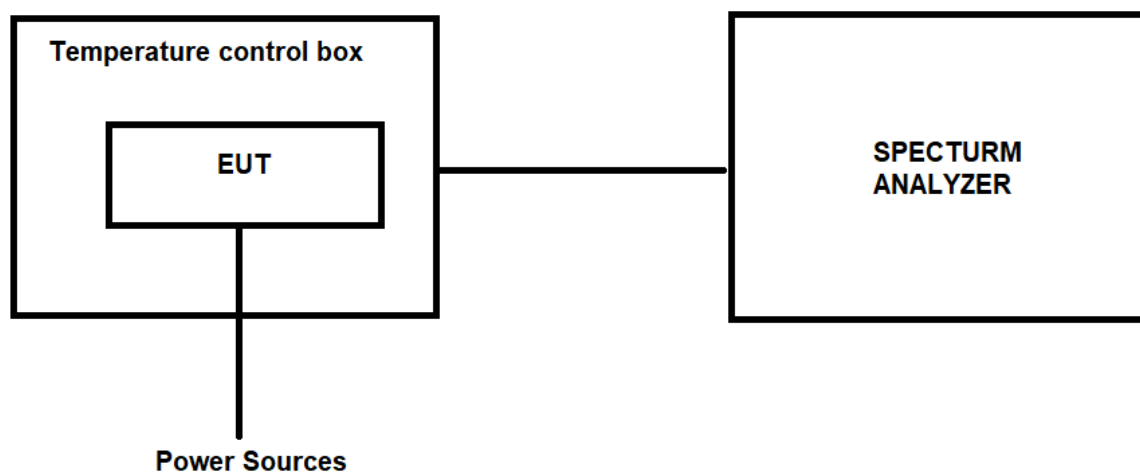
8.1.1 TEST PROCEDURE

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°C	5180.000	5180.0314	5180.0326	5180.0344	-0.0314	-0.0326	-0.0344
		5220.000	5220.0305	5220.0351	5220.0356	-0.0305	-0.0351	-0.0356
		5240.000	5240.0263	5240.0236	5240.0226	-0.0263	-0.0236	-0.0226
		5745.000	5745.0341	5745.0358	5745.0311	-0.0341	-0.0358	-0.0311
		5785.000	5785.0337	5785.0327	5785.0375	-0.0337	-0.0327	-0.0375
		5825.000	5825.0312	5825.0346	5825.0356	-0.0312	-0.0346	-0.0356
108V	-20°C	5180.000	5180.0214	5180.0276	5180.0232	-0.0214	-0.0276	-0.0232
		5220.000	5220.0323	5220.0352	5220.0315	-0.0323	-0.0352	-0.0315
		5240.000	5240.0211	5240.0228	5240.0223	-0.0211	-0.0228	-0.0223
		5745.000	5745.0244	5745.0217	5745.0247	-0.0244	-0.0217	-0.0247
		5785.000	5785.0337	5785.0351	5785.0385	-0.0337	-0.0351	-0.0385
		5825.000	5825.0481	5825.0437	5825.0413	-0.0481	-0.0437	-0.0413
120V	25°C	5180.000	5180.0556	5180.0534	5180.0507	-0.0556	-0.0534	-0.0507
		5220.000	5220.0264	5220.0264	5220.0222	-0.0264	-0.0264	-0.0222
		5240.000	5240.0312	5240.0316	5240.0332	-0.0312	-0.0316	-0.0332
		5745.000	5745.0362	5745.0384	5745.0337	-0.0362	-0.0384	-0.0337
		5785.000	5785.0431	5785.0456	5785.0457	-0.0431	-0.0456	-0.0457
		5825.000	5825.0252	5825.0253	5825.0272	-0.0252	-0.0253	-0.0272
132V	50°C	5180.000	5180.0381	5180.0381	5180.0363	-0.0381	-0.0381	-0.0363
		5220.000	5220.0243	5220.0215	5220.0244	-0.0243	-0.0215	-0.0244
		5240.000	5240.0338	5240.0332	5240.0316	-0.0338	-0.0332	-0.0316
		5745.000	5745.0615	5745.0674	5745.0662	-0.0615	-0.0674	-0.0662
		5785.000	5785.0427	5785.0463	5785.0473	-0.0427	-0.0463	-0.0473
		5825.000	5825.0663	5825.0653	5825.0634	-0.0663	-0.0653	-0.0634
108V	50°C	5180.000	5180.0347	5180.0327	5180.0358	-0.0347	-0.0327	-0.0358
		5220.000	5220.0217	5220.0244	5220.0214	-0.0217	-0.0244	-0.0214
		5240.000	5240.0332	5240.0338	5240.0361	-0.0332	-0.0338	-0.0361
		5745.000	5745.0453	5745.0456	5745.0437	-0.0453	-0.0456	-0.0437
		5785.000	5785.0212	5785.0241	5785.0229	-0.0212	-0.0241	-0.0229
		5825.000	5825.0728	5825.0731	5825.0756	-0.0728	-0.0731	-0.0756



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°C	5190.000	5190.0255	5190.0212	-0.0255	-0.0212
		5230.000	5230.0334	5230.0303	-0.0334	-0.0303
		5755.000	5755.0512	5755.0526	-0.0512	-0.0526
		5795.000	5795.0646	5795.0654	-0.0646	-0.0654
108V		5190.000	5190.0274	5190.0234	-0.0274	-0.0234
		5230.000	5230.0353	5230.0374	-0.0353	-0.0374
		5755.000	5755.0263	5755.021	-0.0263	-0.021
		5795.000	5795.0444	5795.0446	-0.0444	-0.0446
120V	25°C	5190.000	5190.0215	5190.0255	-0.0215	-0.0255
		5230.000	5230.0667	5230.0687	-0.0667	-0.0687
		5755.000	5755.0283	5755.0226	-0.0283	-0.0226
		5795.000	5795.0525	5795.0562	-0.0525	-0.0562
132V	50°C	5190.000	5190.0668	5190.0615	-0.0668	-0.0615
		5230.000	5230.0537	5230.0526	-0.0537	-0.0526
		5755.000	5755.0483	5755.0456	-0.0483	-0.0456
		5795.000	5795.0315	5795.0355	-0.0315	-0.0355
108V	50°C	5190.000	5190.0535	5190.0526	-0.0535	-0.0526
		5230.000	5230.0356	5230.0365	-0.0356	-0.0365
		5755.000	5755.0326	5755.0318	-0.0326	-0.0318
		5795.000	5795.0423	5795.0464	-0.0423	-0.0464

Test Voltage	Test Temp.	Measured Frequency (MHz)	Spectrum Frequency (MHz)	Δ Frequency (MHz)
			802.11ac HT80	802.11ac HT80
132V	-20°C	5210.000	5210.0126	-0.0126
		5775.000	5775.0165	-0.0165
108V		5210.000	5210.0212	-0.0212
		5775.000	5775.0337	-0.0337
230V	25°C	5210.000	5210.0414	-0.0414
		5775.000	5775.0475	-0.0475
132V	50°C	5210.000	5210.0386	-0.0386
		5775.000	5775.0235	-0.0235
108V	50°C	5210.000	5210.0343	-0.0343
		5775.000	5775.0557	-0.0557



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.

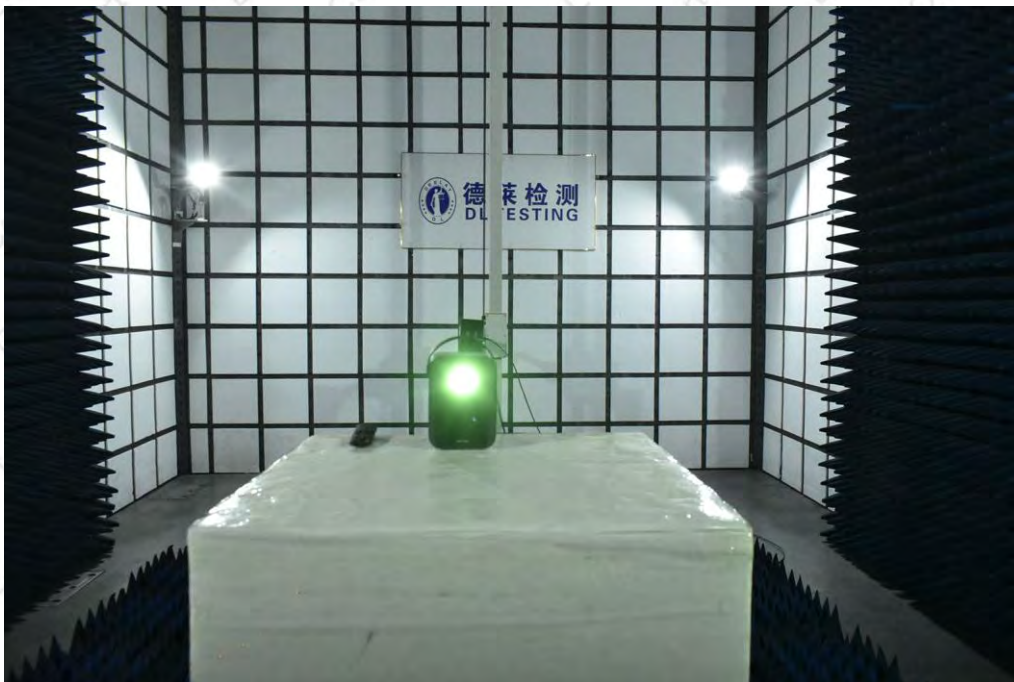
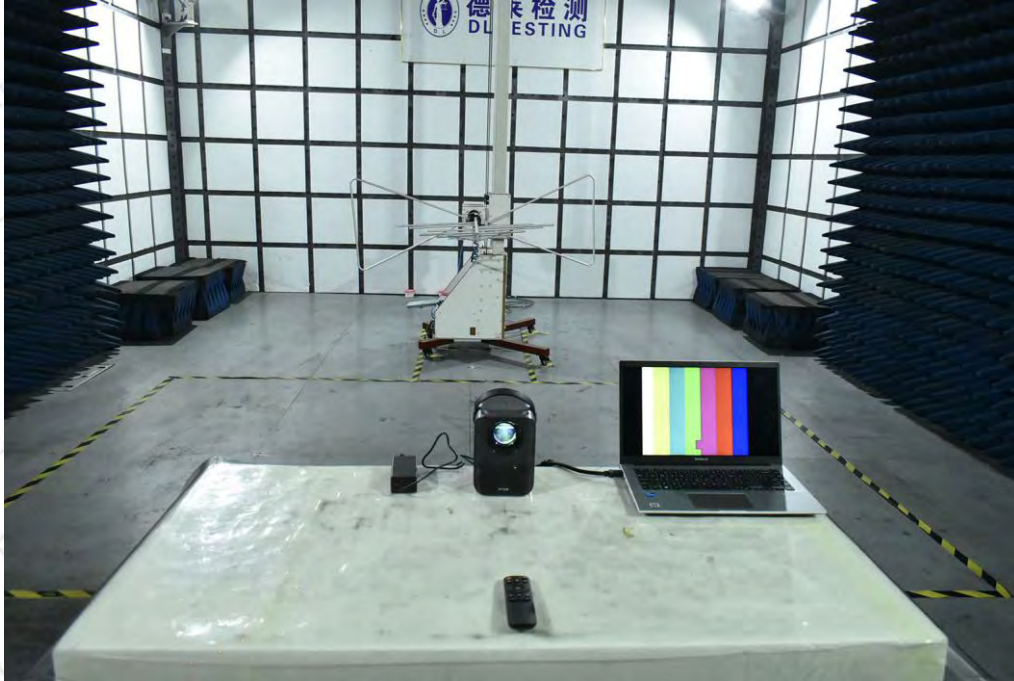
10.2 EUT ANTENNA

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



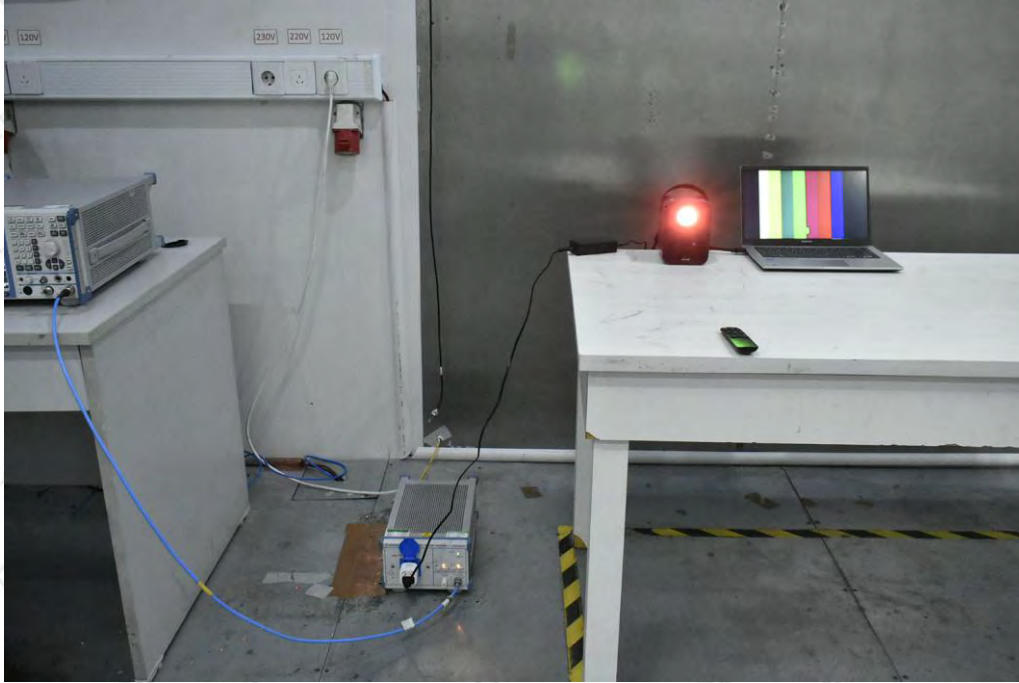
11. TEST SEUUP PHOTO

Radiated Measurement Photos





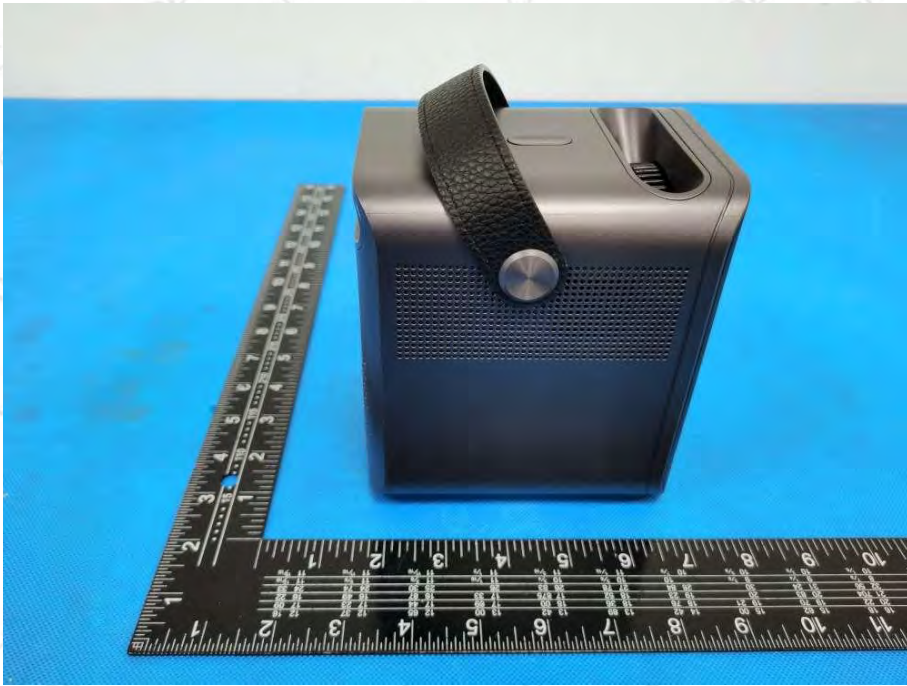
Conducted Measurement Photos



12. EUT PHOTO

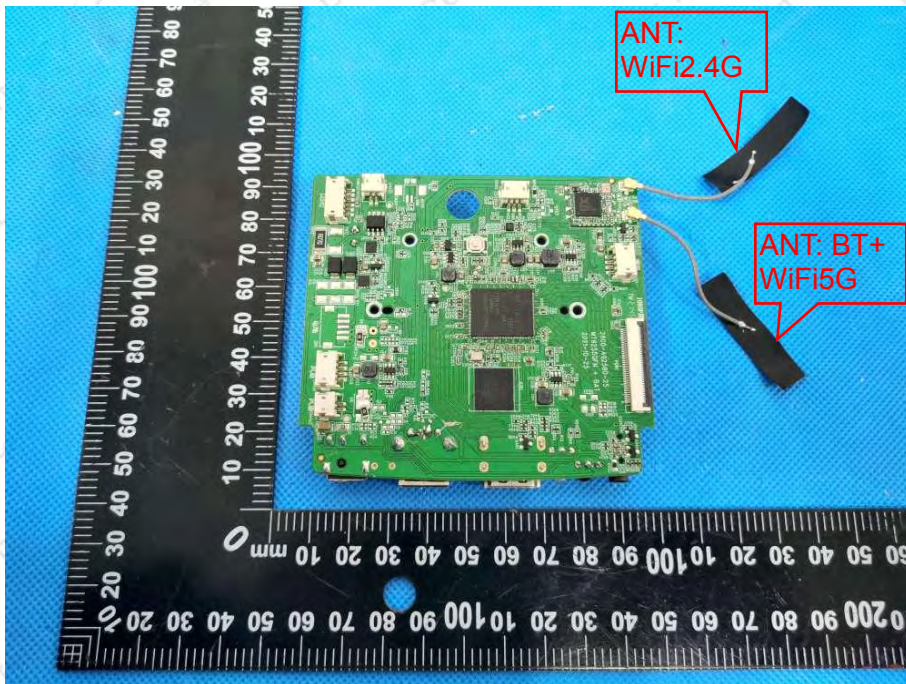
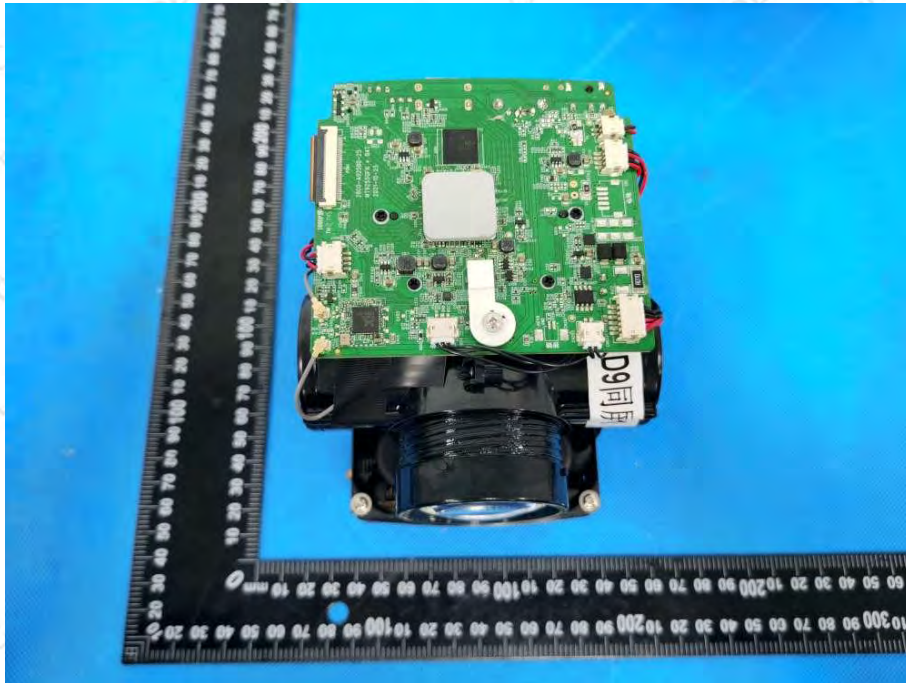


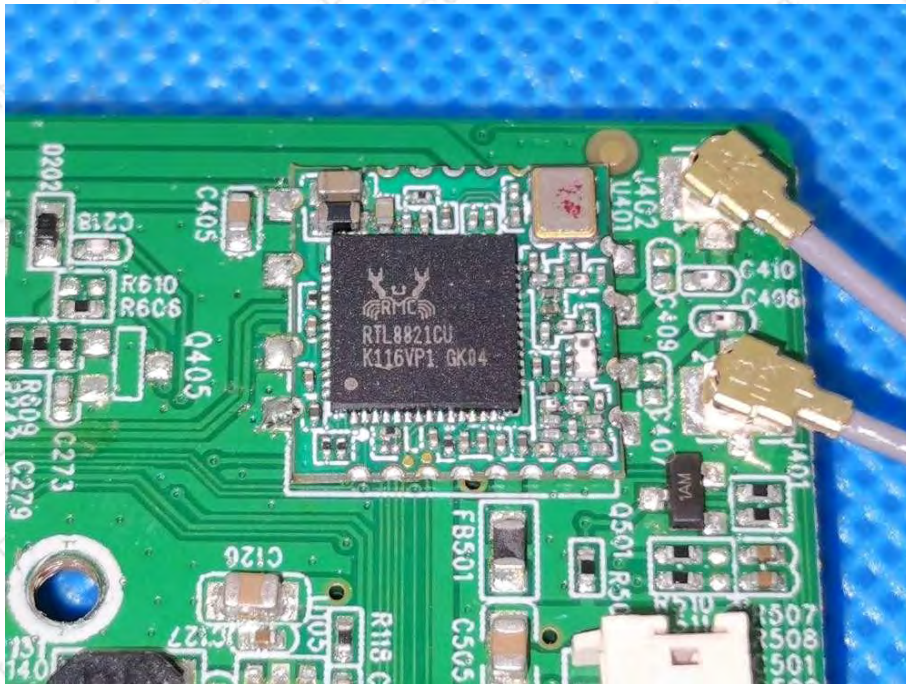












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