

FCC Test Report

Report No.: RFBFOK-WTW-P22010278-1

FCC ID: RYQSTTM21VAPP

Test Model: STTM21VAPP

Received Date: Feb. 10, 2022

Test Date: Feb. 23 ~ Mar. 02, 2022

Issued Date: Mar. 15, 2022

Applicant: FIH CO., LTD.

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FCC Registration / 788550 / TW0003
Designation Number:



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Release Control Record

Issue No.	Description	Date Issued
RFBFOK-WTW-P22010278-1	Original release	Mar. 15, 2022

1 Certificate of Conformity

Product: 4G cellular phone

Brand: SHARP

Test Model: STTM21VAPP

Applicant: FIH CO., LTD.

Test Date: Feb. 23 ~ Mar. 02, 2022

Standards: 47 CFR FCC Part 15, Subpart E (Section 15.407)
ANSI C63.10:2013

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

Prepared by : Celine Chou , **Date:** Mar. 15, 2022
Celine Chou / Senior Specialist

Approved by : Jeremy Lin , **Date:** Mar. 15, 2022
Jeremy Lin / Project Engineer

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
FCC Clause	Test Item	Result	Remarks
15.407(b)(9)	AC Power Conducted Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -15.74dB at 0.59800MHz.
15.407(b)(1/2/3/4(i/ii)/9)	Radiated Emissions & Band Edge Measurement	Pass	Meet the requirement of limit. Minimum passing margin is -5.40dB at 5725.00MHz.
15.407(a)(1/2/3)	Max Average Transmit Power	Pass	Meet the requirement of limit.
---	Occupied Bandwidth Measurement	-	Reference only.
15.407(a)(1/2/3)	Peak Power Spectral Density	Pass	Meet the requirement of limit.
15.407(e)	6dB bandwidth	Pass	Meet the requirement of limit. (U-NII-3 Band only)
15.407(g)	Frequency Stability	Pass	Meet the requirement of limit.
15.203	Antenna Requirement	Pass	Antenna connector is FIT not a standard connector.

Note:

1. For U-NII-3 band compliance with rule part 15.407(b)(4)(i), the OOB test plots were recorded in Annex A.
2. For U-NII-1, U-NII-2A, U-NII-2C band compliance with rule 15.407(b) of the band-edge items, the test plots were recorded in Annex B. Test Procedures refer to report 4.1.3.
3. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Frequency	Expanded Uncertainty (k=2) (±)
Conducted Emissions at mains ports	150kHz ~ 30MHz	2.79 dB
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	3.04 dB
	30MHz ~ 200MHz	2.93 dB
	200MHz ~ 1000MHz	2.95 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	2.26 dB
	18GHz ~ 40GHz	1.94 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	4G cellular phone
Brand	SHARP
Test Model	STTM21VAPP
Power Supply Rating	5Vdc from adapter or host equipment 3.85Vdc from battery
Modulation Type	256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM
Modulation Technology	OFDM
Transfer Rate	802.11a: 54/48/36/24/18/12/9/6Mbps 802.11n: up to 300Mbps 802.11ac: up to 433.3Mbps
Operating Frequency	5180 ~ 5240MHz, 5260 ~ 5320MHz, 5500 ~ 5700MHz, 5745 ~ 5825MHz
Number of Channel	5180 ~ 5240MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20): 4 802.11n (HT40), 802.11ac (VHT40): 2 802.11ac (VHT80): 1 5260 ~ 5320MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20): 4 802.11n (HT40), 802.11ac (VHT40): 2 802.11ac (VHT80): 1 5500 ~ 5700MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20): 11 802.11n (HT40), 802.11ac (VHT40): 5 802.11ac (VHT80): 2 5745 ~ 5825MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20): 5 802.11n (HT40), 802.11ac (VHT40): 2 802.11ac (VHT80): 1
Output Power	5180 ~ 5240MHz: 43.652mW 5260 ~ 5320MHz: 43.251mW 5500 ~ 5700MHz: 44.463mW 5745 ~ 5825MHz: 44.055mW
Antenna Type	PIFA antenna with 2.60dBi gain
Antenna Connector	FIT
Accessory Device	Adapter, Battery
Cable Supplied	0.95m shielded USB cable without core

Note:

1. The EUT provides 1 completed transmitter and 1 receiver.

Modulation Mode	TX Function
802.11a	1TX
802.11n (HT20)	1TX
802.11n (HT40)	1TX
802.11ac (VHT20)	1TX
802.11ac (VHT40)	1TX
802.11ac (VHT80)	1TX

* The bandwidth and modulation are similar for HT20/HT40 on 802.11n mode and VHT20/VHT40 on 802.11ac mode. Therefore the investigated worst case is the representative mode in test report. (Final test mode refer section 3.2.1)

2. The EUT consumes power from the following Adapter & Battery.

Adapter	
Brand	RTF
Model	RT-C6
Input Power	100-240Vac, 50/60Hz, 0.35A
Output Power	5Vdc, 2A

Battery	
Brand	ZHONGSHAN TIANMAO BATTERY CO., LTD.
Model	HE401
Rating	3.85Vdc, 3500mAh

3. The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

3.2 Description of Test Modes

For 5180 ~ 5240MHz:

4 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

Channel	Frequency	Channel	Frequency
36	5180 MHz	44	5220 MHz
40	5200 MHz	48	5240 MHz

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
42	5210MHz

For 5260 ~ 5320MHz:

4 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

Channel	Frequency	Channel	Frequency
52	5260 MHz	60	5300 MHz
56	5280 MHz	64	5320 MHz

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

Channel	Frequency	Channel	Frequency
54	5270 MHz	62	5310 MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
58	5290MHz

For 5500 ~ 5700MHz:

11 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

Channel	Frequency	Channel	Frequency
100	5500 MHz	124	5620 MHz
104	5520 MHz	128	5640 MHz
108	5540 MHz	132	5660 MHz
112	5560 MHz	136	5680 MHz
116	5580 MHz	140	5700 MHz
120	5600 MHz		

5 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

Channel	Frequency	Channel	Frequency
102	5510 MHz	126	5630 MHz
110	5550 MHz	134	5670 MHz
118	5590 MHz		

2 channels are provided for 802.11ac (VHT80):

Channel	Frequency	Channel	Frequency
106	5530 MHz	122	5610 MHz

For 5745 ~ 5825MHz:

5 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

Channel	Frequency	Channel	Frequency
149	5745MHz	161	5805MHz
153	5765MHz	165	5825MHz
157	5785MHz		

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

Channel	Frequency	Channel	Frequency
151	5755MHz	159	5795MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
155	5775MHz

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT Configure Mode	Applicable to				Description
	RE≥1G	RE<1G	PLC	APCM	
-	√	√	√	√	-

Where RE≥1G: Radiated Emission above 1GHz & Bandedge Measurement

RE<1G: Radiated Emission below 1GHz

PLC: Power Line Conducted Emission

APCM: Antenna Port Conducted Measurement

Note:

- The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **Y-plane**.
- Radiated emission test (below 1GHz) and power line conducted emission test items chosen the worst maximum power.

Radiated Emission Test (Above 1GHz):

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)
-	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	6.0
	802.11n (HT20)		36 to 48	36, 40, 48	OFDM	6.5
	802.11n (HT40)		38 to 46	38, 46	OFDM	13.5
	802.11ac (VHT80)		42	42	OFDM	29.3
-	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0
	802.11n (HT20)		52 to 64	52, 60, 64	OFDM	6.5
	802.11n (HT40)		54 to 62	54, 62	OFDM	13.5
	802.11ac (VHT80)		58	58	OFDM	29.3
-	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	6.0
	802.11n (HT20)		100 to 140	100, 116, 140	OFDM	6.5
	802.11n (HT40)		102 to 134	102, 110, 134	OFDM	13.5
	802.11ac (VHT80)		106 to 122	106, 122	OFDM	29.3
-	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6.0
	802.11n (HT20)		149 to 165	149, 157, 165	OFDM	6.5
	802.11n (HT40)		151 to 159	151, 159	OFDM	13.5
	802.11ac (VHT80)		155	155	OFDM	29.3

Radiated Emission Test (Below 1GHz):

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)
-	802.11n (HT20)	5180-5240	36 to 48	100	OFDM	6.0
-	802.11n (HT20)	5260-5320	52 to 64		OFDM	6.0
-	802.11n (HT20)	5500-5700	100 to 140		OFDM	6.0
-	802.11n (HT20)	5745-5825	149 to 165		OFDM	6.0

Power Line Conducted Emission Test:

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)
-	802.11n (HT20)	5180-5240	36 to 48	100	OFDM	6.0
-	802.11n (HT20)	5260-5320	52 to 64		OFDM	6.0
-	802.11n (HT20)	5500-5700	100 to 140		OFDM	6.0
-	802.11n (HT20)	5745-5825	149 to 165		OFDM	6.0

Antenna Port Conducted Measurement:

- ☒ This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.
- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)
-	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	6.0
	802.11n (HT20)		36 to 48	36, 40, 48	OFDM	6.5
	802.11n (HT40)		38 to 46	38, 46	OFDM	13.5
	802.11ac (VHT20)		36 to 48	36, 40, 48	OFDM	7.5
	802.11ac (VHT40)		38 to 46	38, 46	OFDM	15.0
	802.11ac (VHT80)		42	42	OFDM	29.3
-	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0
	802.11n (HT20)		52 to 64	52, 60, 64	OFDM	6.5
	802.11n (HT40)		54 to 62	54, 62	OFDM	13.5
	802.11ac (VHT20)		52 to 64	52, 60, 64	OFDM	7.5
	802.11ac (VHT40)		54 to 62	54, 62	OFDM	15.0
	802.11ac (VHT80)		58	58	OFDM	29.3
-	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	6.0
	802.11n (HT20)		100 to 140	100, 116, 140	OFDM	6.5
	802.11n (HT40)		102 to 134	102, 110, 134	OFDM	13.5
	802.11ac (VHT20)		100 to 140	100, 116, 140	OFDM	7.5
	802.11ac (VHT40)		102 to 134	102, 110, 134	OFDM	15.0
	802.11ac (VHT80)		106 to 122	106, 122	OFDM	29.3
-	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6.0
	802.11n (HT20)		149 to 165	149, 157, 165	OFDM	6.5
	802.11n (HT40)		151 to 159	151, 159	OFDM	13.5
	802.11ac (VHT20)		149 to 165	149, 157, 165	OFDM	7.5
	802.11ac (VHT40)		151 to 159	151, 159	OFDM	15.0
	802.11ac (VHT80)		155	155	OFDM	29.3

Test Condition:

Applicable to	Environmental Conditions	Input Power	Tested by
RE $\geq$ 1G	21 deg. C, 71% RH	120Vac, 60Hz	Thomas Cheng
RE<1G	19 deg. C, 65% RH	120Vac, 60Hz	Thomas Cheng
PLC	21 deg. C, 66% RH	120Vac, 60Hz	Thomas Cheng
APCM	25 deg. C, 60% RH	120Vac, 60Hz	Jisyong Wang

3.3 Duty Cycle of Test Signal

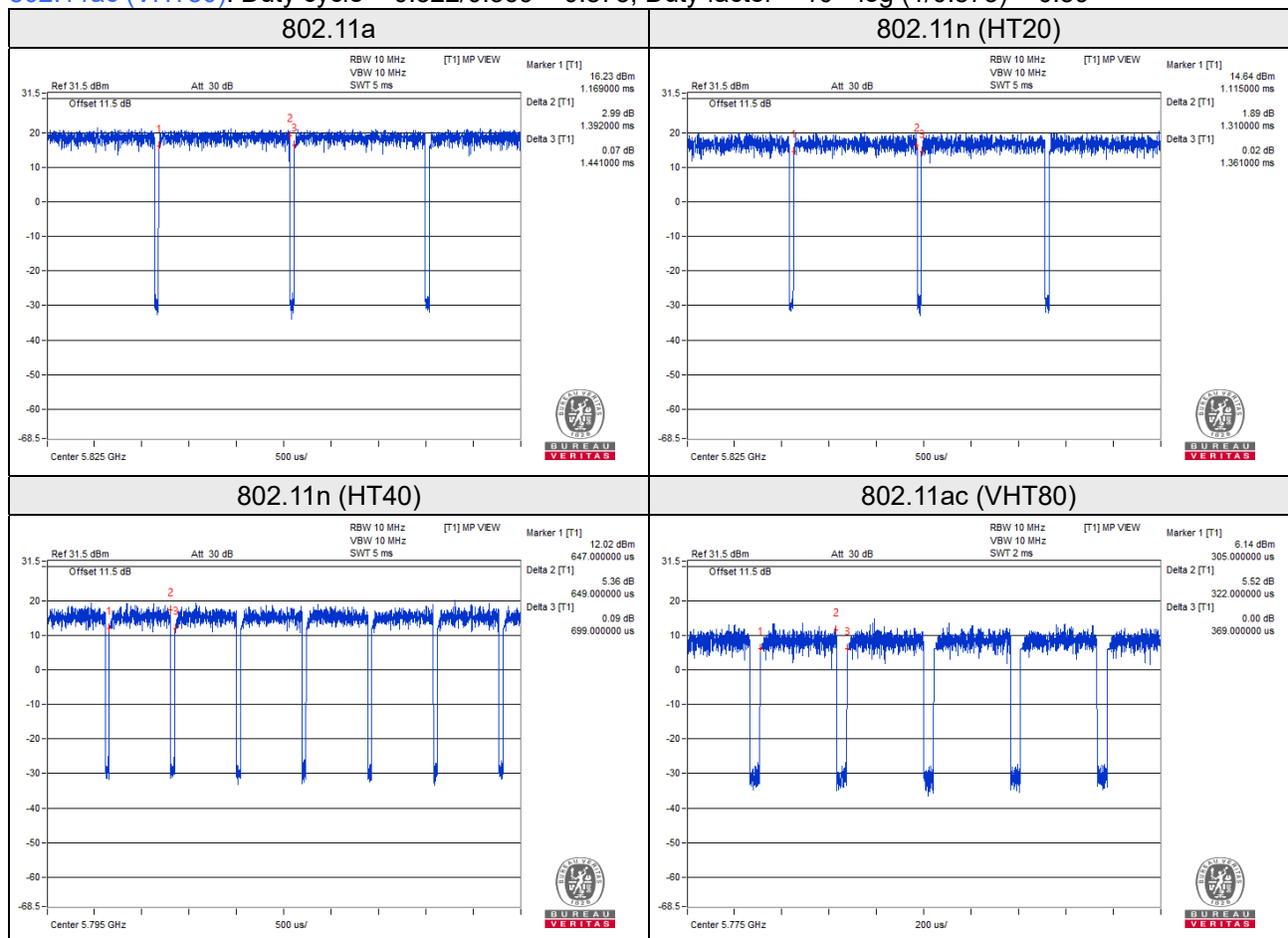
Duty cycle of test signal is < 98%, duty factor is required.

802.11a: Duty cycle = 1.392/1.441 = 0.966, Duty factor = 10 * log (1/0.966) = 0.15

802.11n (HT20): Duty cycle = 1.310/1.361 = 0.963, Duty factor = 10 * log (1/0.963) = 0.17

802.11n (HT40): Duty cycle = 0.649/0.699 = 0.928, Duty factor = 10 * log (1/0.928) = 0.32

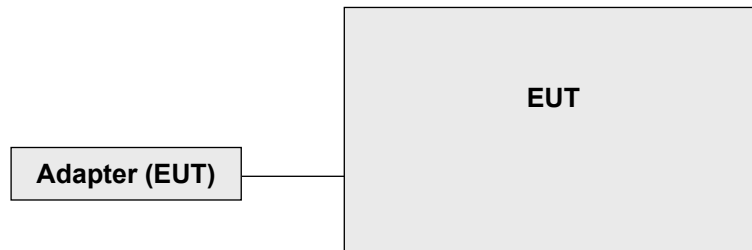
802.11ac (VHT80): Duty cycle = 0.322/0.369 = 0.873, Duty factor = 10 * log (1/0.873) = 0.59



3.4 Description of Support Units

The EUT has been tested as an independent unit.

3.4.1 Configuration of System under Test



3.5 General Description of Applied Standards and References

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards and references:

Test standard:

FCC Part 15, Subpart E (15.407)

ANSI C63.10:2013

All test items have been performed and recorded as per the above standards.

References Test Guidance:

KDB 789033 D02 General UNII Test Procedure New Rules v02r01

All test items have been performed as a reference to the above KDB test guidance.

4 Test Types and Results

4.1 Radiated Emission and Bandedge Measurement

4.1.1 Limits of Radiated Emission and Bandedge Measurement

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table.

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

Note:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

Limits of unwanted emission out of the restricted bands

Applicable To		Limit	
789033 D02 General UNII Test Procedure New Rules v02r01		Field Strength at 3m	
		PK: 74 (dBμV/m)	AV: 54 (dBμV/m)
Frequency Band	Applicable To	EIRP Limit	Equivalent Field Strength at 3m
5150~5250 MHz	15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2(dBμV/m)
5250~5350 MHz	15.407(b)(2)		
5470~5725 MHz	15.407(b)(3)		
5725~5850 MHz	15.407(b)(4)(i)	PK: -27 (dBm/MHz) ^{*1} PK: 10 (dBm/MHz) ^{*2} PK: 15.6 (dBm/MHz) ^{*3} PK: 27 (dBm/MHz) ^{*4}	PK: 68.2(dBμV/m) ^{*1} PK: 105.2 (dBμV/m) ^{*2} PK: 110.8(dBμV/m) ^{*3} PK: 122.2 (dBμV/m) ^{*4}
^{*1} beyond 75 MHz or more above of the band edge. ^{*3} below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.		^{*2} below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above. ^{*4} from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.	

Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = \frac{1000000 \sqrt{30P}}{3} \mu\text{V/m, where P is the eirp (Watts).}$$

4.1.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer Agilent	N9010A	MY52220314	Dec. 03, 2021	Dec. 02, 2022
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	101261	Apr. 12, 2021	Apr. 11, 2022
Broadband Horn Antenna SCHWARZBECK	BBHA 9170	148	Nov. 14, 2021	Nov. 13, 2022
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-969	Nov. 14, 2021	Nov. 13, 2022
BILOG Antenna SCHWARZBECK	VULB 9168	9168-472	Oct. 28, 2021	Oct. 27, 2022
Fixed Attenuator WOKEN	MDCS18N-10	MDCS18N-10-01	Apr. 13, 2021	Apr. 12, 2022
MXG Vector signal generator Agilent	N5182B	MY53050430	Nov. 25, 2021	Nov. 24, 2022
Loop Antenna TESEQ	HLA 6121	45745	Jul. 21, 2021	Jul. 20, 2022
Preamplifier EMCI	EMC001340	980201	Sep. 15, 2021	Sep. 14, 2022
Preamplifier EMCI	EMC 012645	980115	Oct. 05, 2021	Oct. 04, 2022
Preamplifier EMCI	EMC 184045	980116	Oct. 05, 2021	Oct. 04, 2022
Preamplifier EMCI	EMC 330H	980112	Oct. 05, 2021	Oct. 04, 2022
Peak Power Analyzer KEYSIGHT	8990B	MY51000485	Jan. 18, 2022	Jan. 17, 2023
Wideband Power Sensor KEYSIGHT	N1923A	MY58020002	Jan. 17, 2022	Jan. 16, 2023
RF Coaxial Cable EMCI	EMC104-SM-SM-800 0	171005	Oct. 05, 2021	Oct. 04, 2022
RF Coaxial Cable HUBER+SUHNNER	SUCOFLEX 104	EMC104-SM-SM-1000 (140807)	Oct. 05, 2021	Oct. 04, 2022
RF Coaxial Cable WOKEN	8D-FB	Cable-Ch10-01	Oct. 05, 2021	Oct. 04, 2022
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
Software BV ADT	E3 6.120103	NA	NA	NA
Antenna Tower MF	MFA-440H	NA	NA	NA
Turn Table MF	MFT-201SS	NA	NA	NA
Antenna Tower & Turn Table Controller MF	MF-7802	NA	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Chamber 10.

4.1.3 Test Procedures

For Radiated emission below 30MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.

For Radiated emission above 30MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

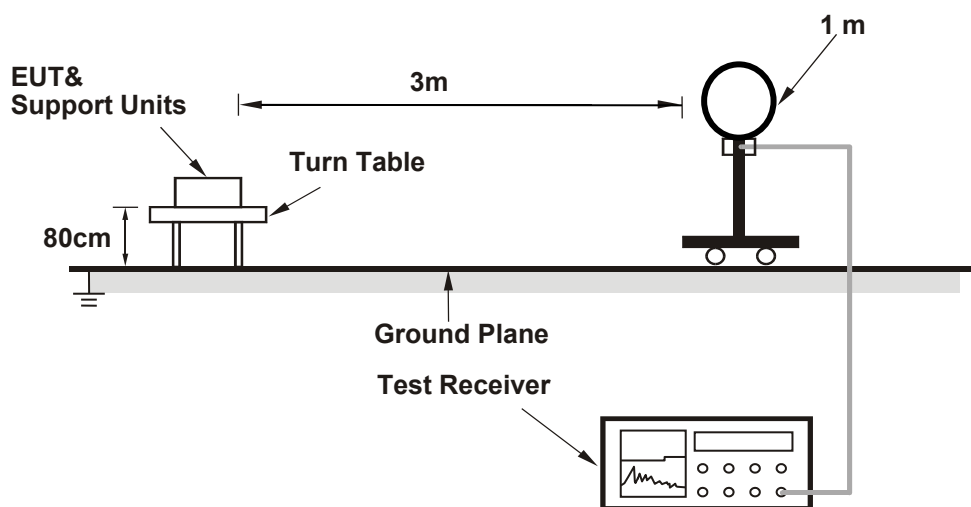
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle < 98%) or 10Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1GHz. (802.11a: RBW = 1MHz, VBW = 1kHz; 802.11n (HT20): RBW = 1MHz, VBW = 1kHz; 802.11n (HT40): RBW = 1MHz, VBW = 3kHz; 802.11ac (VHT80): RBW = 1MHz, VBW = 10kHz)
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 Deviation from Test Standard

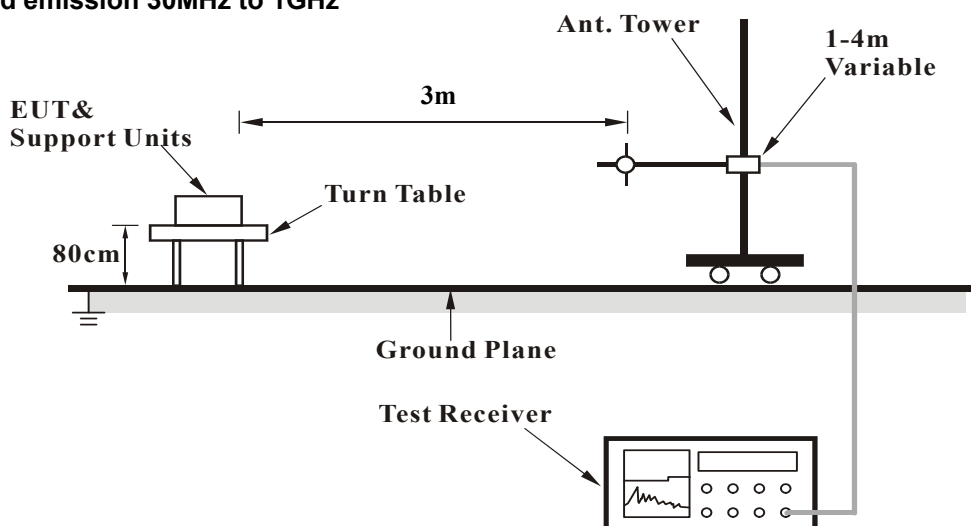
No deviation.

4.1.5 Test Setup

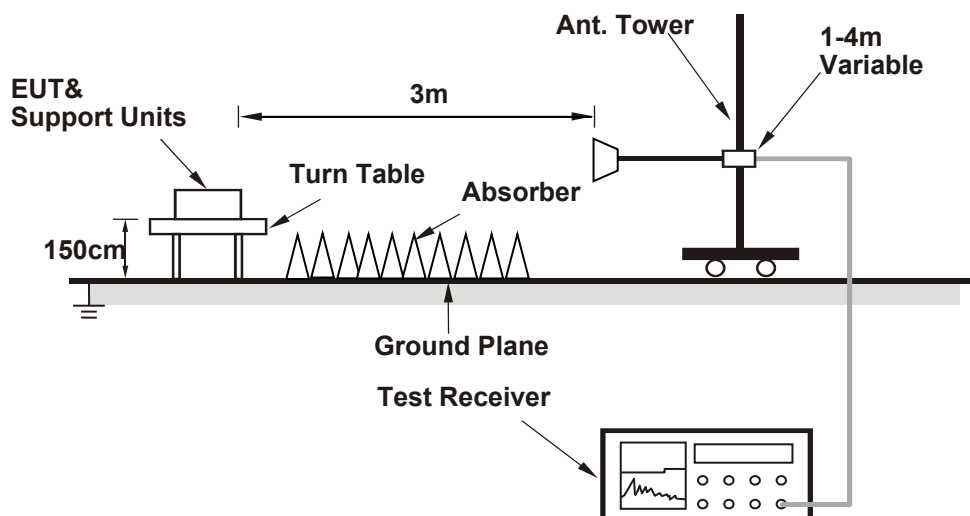
For Radiated emission below 30MHz



For Radiated emission 30MHz to 1GHz



For Radiated emission above 1GHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.1.6 EUT Operating Conditions

- a. Set the EUT under transmission condition continuously at specific channel frequency.

4.1.7 Test Results

Above 1GHz data:

RF Mode	TX 802.11a	Channel	CH 36 : 5180 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	52.60 PK	74.00	-21.40	2.59 H	340	69.30	-16.70
2	5150.00	42.00 AV	54.00	-12.00	2.59 H	340	58.70	-16.70
3	*5180.00	98.40 PK			2.59 H	340	62.10	36.30
4	*5180.00	91.00 AV			2.59 H	340	54.70	36.30
5	#10360.00	54.50 PK	68.20	-13.70	2.26 H	170	58.70	-4.20
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	57.70 PK	74.00	-16.30	2.40 V	225	74.40	-16.70
2	5150.00	46.90 AV	54.00	-7.10	2.40 V	225	63.60	-16.70
3	*5180.00	105.00 PK			2.40 V	225	68.70	36.30
4	*5180.00	97.00 AV			2.40 V	225	60.70	36.30
5	#10360.00	54.90 PK	68.20	-13.30	1.03 V	229	59.10	-4.20

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11a	Channel	CH 40 : 5200 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	99.40 PK			2.50 H	335	63.10	36.30
2	*5200.00	91.80 AV			2.50 H	335	55.50	36.30
3	#10400.00	54.30 PK	68.20	-13.90	1.42 H	337	58.20	-3.90
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	104.00 PK			2.43 V	232	67.70	36.30
2	*5200.00	95.80 AV			2.43 V	232	59.50	36.30
3	#10400.00	55.70 PK	68.20	-12.50	2.38 V	62	59.60	-3.90

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11a	Channel	CH 48 : 5240 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	98.50 PK			2.36 H	345	62.20	36.30
2	*5240.00	91.80 AV			2.36 H	345	55.50	36.30
3	5350.00	50.50 PK	74.00	-23.50	2.36 H	345	67.00	-16.50
4	5350.00	40.20 AV	54.00	-13.80	2.36 H	345	56.70	-16.50
5	#10480.00	55.30 PK	68.20	-12.90	1.49 H	206	59.20	-3.90
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	103.00 PK			2.38 V	224	66.70	36.30
2	*5240.00	95.30 AV			2.38 V	224	59.00	36.30
3	5350.00	50.40 PK	74.00	-23.60	2.38 V	224	66.90	-16.50
4	5350.00	40.20 AV	54.00	-13.80	2.38 V	224	56.70	-16.50
5	#10480.00	55.40 PK	68.20	-12.80	1.94 V	202	59.30	-3.90

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11a	Channel	CH 52 : 5260 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	50.90 PK	74.00	-23.10	1.98 H	3	67.60	-16.70
2	5150.00	40.70 AV	54.00	-13.30	1.98 H	3	57.40	-16.70
3	*5260.00	100.60 PK			1.98 H	3	64.40	36.20
4	*5260.00	91.70 AV			1.98 H	3	55.50	36.20
5	5350.00	50.60 PK	74.00	-23.40	1.98 H	3	67.10	-16.50
6	5350.00	40.20 AV	54.00	-13.80	1.98 H	3	56.70	-16.50
7	#10520.00	54.50 PK	68.20	-13.70	1.23 H	199	58.40	-3.90
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	51.70 PK	74.00	-22.30	2.38 V	232	68.40	-16.70
2	5150.00	40.60 AV	54.00	-13.40	2.38 V	232	57.30	-16.70
3	*5260.00	101.10 PK			2.38 V	232	64.90	36.20
4	*5260.00	94.50 AV			2.38 V	232	58.30	36.20
5	5350.00	50.10 PK	74.00	-23.90	2.38 V	232	66.60	-16.50
6	5350.00	44.70 AV	54.00	-9.30	2.38 V	232	61.20	-16.50
7	#10520.00	55.30 PK	68.20	-12.90	1.82 V	188	59.20	-3.90

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	TX 802.11a	Channel	CH 60 : 5300 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	95.80 PK			3.09 H	6	59.70	36.10
2	*5300.00	88.30 AV			3.09 H	6	52.20	36.10
3	5350.00	50.90 PK	74.00	-23.10	3.09 H	6	67.40	-16.50
4	5350.00	40.30 AV	54.00	-13.70	3.09 H	6	56.80	-16.50
5	10600.00	54.60 PK	74.00	-19.40	1.56 H	223	58.30	-3.70
6	10600.00	43.90 AV	54.00	-10.10	1.56 H	223	47.60	-3.70
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	101.60 PK			2.77 V	233	65.50	36.10
2	*5300.00	93.30 AV			2.77 V	233	57.20	36.10
3	5350.00	51.00 PK	74.00	-23.00	2.77 V	233	67.50	-16.50
4	5350.00	40.50 AV	54.00	-13.50	2.77 V	233	57.00	-16.50
5	10600.00	55.50 PK	74.00	-18.50	2.00 V	231	59.20	-3.70
6	10600.00	44.60 AV	54.00	-9.40	2.00 V	231	48.30	-3.70

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.

RF Mode	TX 802.11a	Channel	CH 64 : 5320 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	97.10 PK			2.08 H	3	61.00	36.10
2	*5320.00	89.50 AV			2.08 H	3	53.40	36.10
3	5350.00	54.10 PK	74.00	-19.90	2.08 H	3	70.60	-16.50
4	5350.00	42.40 AV	54.00	-11.60	2.08 H	3	58.90	-16.50
5	10640.00	55.20 PK	74.00	-18.80	1.32 H	187	58.80	-3.60
6	10640.00	44.00 AV	54.00	-10.00	1.32 H	187	47.60	-3.60
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	102.20 PK			2.56 V	231	66.10	36.10
2	*5320.00	94.20 AV			2.56 V	231	58.10	36.10
3	5350.00	57.00 PK	74.00	-17.00	2.56 V	231	73.50	-16.50
4	5350.00	44.50 AV	54.00	-9.50	2.56 V	231	61.00	-16.50
5	10640.00	55.50 PK	74.00	-18.50	1.85 V	197	59.10	-3.60
6	10640.00	44.70 AV	54.00	-9.30	1.85 V	197	48.30	-3.60

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.

RF Mode	TX 802.11a	Channel	CH 100 : 5500 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	53.60 PK	74.00	-20.40	2.22 H	326	69.70	-16.10
2	5460.00	41.60 AV	54.00	-12.40	2.22 H	326	57.70	-16.10
3	#5470.00	54.70 PK	68.20	-13.50	2.22 H	326	70.80	-16.10
4	*5500.00	95.40 PK			2.22 H	326	58.90	36.50
5	*5500.00	87.50 AV			2.22 H	326	51.00	36.50
6	11000.00	55.60 PK	74.00	-18.40	1.87 H	193	59.30	-3.70
7	11000.00	44.60 AV	54.00	-9.40	1.87 H	193	48.30	-3.70
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	55.80 PK	74.00	-18.20	2.41 V	221	71.90	-16.10
2	5460.00	42.80 AV	54.00	-11.20	2.41 V	221	58.90	-16.10
3	#5470.00	59.70 PK	68.20	-8.50	2.41 V	221	75.80	-16.10
4	*5500.00	100.30 PK			2.41 V	221	63.80	36.50
5	*5500.00	92.60 AV			2.41 V	221	56.10	36.50
6	11000.00	55.70 PK	74.00	-18.30	1.77 V	203	59.40	-3.70
7	11000.00	44.70 AV	54.00	-9.30	1.77 V	203	48.40	-3.70

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	TX 802.11a	Channel	CH 116 : 5580 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	52.40 PK	74.00	-21.60	3.62 H	318	68.50	-16.10
2	5460.00	40.70 AV	54.00	-13.30	3.62 H	318	56.80	-16.10
3	#5470.00	52.60 PK	68.20	-15.60	3.62 H	318	68.70	-16.10
4	*5580.00	96.80 PK			3.62 H	318	60.10	36.70
5	*5580.00	89.00 AV			3.62 H	318	52.30	36.70
6	11160.00	54.90 PK	74.00	-19.10	1.93 H	222	58.40	-3.50
7	11160.00	44.20 AV	54.00	-9.80	1.93 H	222	47.70	-3.50
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	52.00 PK	74.00	-22.00	2.28 V	218	68.10	-16.10
2	5460.00	40.90 AV	54.00	-13.10	2.28 V	218	57.00	-16.10
3	#5470.00	51.10 PK	68.20	-17.10	2.28 V	218	67.20	-16.10
4	*5580.00	99.60 PK			2.28 V	218	62.90	36.70
5	*5580.00	92.40 AV			2.28 V	218	55.70	36.70
6	11160.00	55.70 PK	74.00	-18.30	1.85 V	222	59.20	-3.50
7	11160.00	44.60 AV	54.00	-9.40	1.85 V	222	48.10	-3.50

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	TX 802.11a	Channel	CH 140 : 5700 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	97.80 PK			2.29 H	344	60.70	37.10
2	*5700.00	89.60 AV			2.29 H	344	52.50	37.10
3	#5725.00	59.00 PK	68.20	-9.20	2.29 H	344	74.70	-15.70
4	11400.00	55.90 PK	74.00	-18.10	1.63 H	235	58.40	-2.50
5	11400.00	45.20 AV	54.00	-8.80	1.63 H	235	47.70	-2.50
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	99.90 PK			2.20 V	198	62.80	37.10
2	*5700.00	91.60 AV			2.20 V	198	54.50	37.10
3	#5725.00	62.80 PK	68.20	-5.40	2.20 V	198	78.50	-15.70
4	11400.00	57.20 PK	74.00	-16.80	1.63 V	195	59.70	-2.50
5	11400.00	46.30 AV	54.00	-7.70	1.63 V	195	48.80	-2.50

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11a	Channel	CH 149 : 5745 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5603.20	53.90 PK	68.20	-14.30	2.22 H	349	70.00	-16.10
2	*5745.00	97.90 PK			2.22 H	349	60.90	37.00
3	*5745.00	90.00 AV			2.22 H	349	53.00	37.00
4	#5941.20	54.00 PK	68.20	-14.20	2.22 H	349	69.40	-15.40
5	11490.00	55.90 PK	74.00	-18.10	1.52 H	243	58.40	-2.50
6	11490.00	45.30 AV	54.00	-8.70	1.52 H	243	47.80	-2.50
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5634.80	53.60 PK	68.20	-14.60	2.25 V	220	69.50	-15.90
2	*5745.00	100.70 PK			2.25 V	220	63.70	37.00
3	*5745.00	93.10 AV			2.25 V	220	56.10	37.00
4	#5937.20	54.60 PK	68.20	-13.60	2.25 V	220	70.00	-15.40
5	11490.00	57.30 PK	74.00	-16.70	1.52 V	188	59.80	-2.50
6	11490.00	46.10 AV	54.00	-7.90	1.52 V	188	48.60	-2.50

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	TX 802.11a	Channel	CH 157 : 5785 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5609.20	53.50 PK	68.20	-14.70	2.21 H	347	69.60	-16.10
2	*5785.00	97.80 PK			2.21 H	347	60.80	37.00
3	*5785.00	89.90 AV			2.21 H	347	52.90	37.00
4	#5949.20	54.50 PK	68.20	-13.70	2.21 H	347	70.00	-15.50
5	11570.00	55.90 PK	74.00	-18.10	1.43 H	235	58.70	-2.80
6	11570.00	44.40 AV	54.00	-9.60	1.43 H	235	47.20	-2.80
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5613.20	54.40 PK	68.20	-13.80	2.26 V	196	70.40	-16.00
2	*5785.00	100.60 PK			2.26 V	196	63.60	37.00
3	*5785.00	92.70 AV			2.26 V	196	55.70	37.00
4	#5932.00	54.10 PK	68.20	-14.10	2.26 V	196	69.50	-15.40
5	11570.00	56.90 PK	74.00	-17.10	1.63 V	200	59.70	-2.80
6	11570.00	45.50 AV	54.00	-8.50	1.63 V	200	48.30	-2.80

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	TX 802.11a	Channel	CH 165 : 5825 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5608.00	53.50 PK	68.20	-14.70	2.09 H	349	69.60	-16.10
2	*5825.00	97.60 PK			2.09 H	349	60.40	37.20
3	*5825.00	89.80 AV			2.09 H	349	52.60	37.20
4	#5956.40	54.60 PK	68.20	-13.60	2.09 H	349	70.10	-15.50
5	11650.00	55.10 PK	74.00	-18.90	1.48 H	238	58.30	-3.20
6	11650.00	44.60 AV	54.00	-9.40	1.48 H	238	47.80	-3.20
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5614.00	53.70 PK	68.20	-14.50	2.27 V	214	69.70	-16.00
2	*5825.00	100.10 PK			2.27 V	214	62.90	37.20
3	*5825.00	92.40 AV			2.27 V	214	55.20	37.20
4	#5938.80	54.10 PK	68.20	-14.10	2.27 V	214	69.50	-15.40
5	11650.00	56.40 PK	74.00	-17.60	1.42 V	177	59.60	-3.20
6	11650.00	44.90 AV	54.00	-9.10	1.42 V	177	48.10	-3.20

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT20)	Channel	CH 36 : 5180 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	55.40 PK	74.00	-18.60	2.28 H	344	72.10	-16.70
2	5150.00	41.80 AV	54.00	-12.20	2.28 H	344	58.50	-16.70
3	*5180.00	98.90 PK			2.28 H	344	62.60	36.30
4	*5180.00	91.50 AV			2.28 H	344	55.20	36.30
5	#10360.00	53.20 PK	68.20	-15.00	1.34 H	352	57.40	-4.20
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	55.80 PK	74.00	-18.20	2.38 V	228	72.50	-16.70
2	5150.00	43.00 AV	54.00	-11.00	2.38 V	228	59.70	-16.70
3	*5180.00	102.50 PK			2.38 V	228	66.20	36.30
4	*5180.00	94.60 AV			2.38 V	228	58.30	36.30
5	#10360.00	54.20 PK	68.20	-14.00	2.35 V	254	58.40	-4.20

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT20)	Channel	CH 40 : 5200 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	99.20 PK			2.32 H	344	62.90	36.30
2	*5200.00	91.40 AV			2.32 H	344	55.10	36.30
3	#10400.00	53.70 PK	68.20	-14.50	1.52 H	241	57.60	-3.90
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	102.10 PK			2.51 V	229	65.80	36.30
2	*5200.00	94.30 AV			2.51 V	229	58.00	36.30
3	#10400.00	54.30 PK	68.20	-13.90	2.14 V	352	58.20	-3.90

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT20)	Channel	CH 48 : 5240 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	99.10 PK			2.21 H	346	62.80	36.30
2	*5240.00	90.90 AV			2.21 H	346	54.60	36.30
3	5350.00	51.20 PK	74.00	-22.80	2.21 H	346	67.70	-16.50
4	5350.00	40.30 AV	54.00	-13.70	2.21 H	346	56.80	-16.50
5	#10480.00	54.00 PK	68.20	-14.20	3.41 H	225	57.90	-3.90
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	101.50 PK			2.46 V	236	65.20	36.30
2	*5240.00	93.90 AV			2.46 V	236	57.60	36.30
3	5350.00	50.50 PK	74.00	-23.50	2.46 V	236	67.00	-16.50
4	5350.00	40.20 AV	54.00	-13.80	2.46 V	236	56.70	-16.50
5	#10480.00	54.50 PK	68.20	-13.70	2.34 V	147	58.40	-3.90

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT20)	Channel	CH 52 : 5260 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	50.80 PK	74.00	-23.20	2.29 H	345	67.50	-16.70
2	5150.00	40.40 AV	54.00	-13.60	2.29 H	345	57.10	-16.70
3	*5260.00	98.60 PK			2.29 H	345	62.40	36.20
4	*5260.00	90.50 AV			2.29 H	345	54.30	36.20
5	#10520.00	53.50 PK	68.20	-14.70	3.14 H	252	57.40	-3.90
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	50.70 PK	74.00	-23.30	2.22 V	236	67.40	-16.70
2	5150.00	40.90 AV	54.00	-13.10	2.22 V	236	57.60	-16.70
3	*5260.00	101.00 PK			2.22 V	236	64.80	36.20
4	*5260.00	93.10 AV			2.22 V	236	56.90	36.20
5	#10520.00	54.80 PK	68.20	-13.40	2.34 V	187	58.70	-3.90

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT20)	Channel	CH 60 : 5300 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	97.60 PK			2.28 H	346	61.50	36.10
2	*5300.00	89.70 AV			2.28 H	346	53.60	36.10
3	10600.00	53.70 PK	74.00	-20.30	2.36 H	247	57.40	-3.70
4	10600.00	43.90 AV	54.00	-10.10	2.36 H	247	47.60	-3.70
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5300.00	100.90 PK			2.42 V	228	64.80	36.10
2	*5300.00	93.00 AV			2.42 V	228	56.90	36.10
3	10600.00	55.00 PK	74.00	-19.00	1.46 V	321	58.70	-3.70
4	10600.00	44.50 AV	54.00	-9.50	1.46 V	321	48.20	-3.70

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.

RF Mode	TX 802.11n (HT20)	Channel	CH 64 : 5320 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	96.50 PK			2.24 H	346	60.40	36.10
2	*5320.00	88.90 AV			2.24 H	346	52.80	36.10
3	5350.00	54.30 PK	74.00	-19.70	2.24 H	346	70.80	-16.50
4	5350.00	41.30 AV	54.00	-12.70	2.24 H	346	57.80	-16.50
5	10640.00	53.80 PK	74.00	-20.20	1.84 H	332	57.40	-3.60
6	10640.00	44.20 AV	54.00	-9.80	1.84 H	332	47.80	-3.60
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5320.00	101.20 PK			2.54 V	224	65.10	36.10
2	*5320.00	92.20 AV			2.54 V	224	56.10	36.10
3	5350.00	57.20 PK	74.00	-16.80	2.54 V	224	73.70	-16.50
4	5350.00	42.20 AV	54.00	-11.80	2.54 V	224	58.70	-16.50
5	10640.00	54.70 PK	74.00	-19.30	2.31 V	147	58.30	-3.60
6	10640.00	45.10 AV	54.00	-8.90	2.31 V	147	48.70	-3.60

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.

RF Mode	TX 802.11n (HT20)	Channel	CH 100 : 5500 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	52.70 PK	74.00	-21.30	2.06 H	347	68.80	-16.10
2	5460.00	41.20 AV	54.00	-12.80	2.06 H	347	57.30	-16.10
3	#5470.00	56.20 PK	68.20	-12.00	2.06 H	347	72.30	-16.10
4	*5500.00	94.50 PK			2.06 H	347	58.00	36.50
5	*5500.00	86.80 AV			2.06 H	347	50.30	36.50
6	11000.00	53.40 PK	74.00	-20.60	3.74 H	212	57.10	-3.70
7	11000.00	43.90 AV	54.00	-10.10	3.74 H	212	47.60	-3.70
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	53.10 PK	74.00	-20.90	2.24 V	223	69.20	-16.10
2	5460.00	41.50 AV	54.00	-12.50	2.24 V	223	57.60	-16.10
3	#5470.00	57.00 PK	68.20	-11.20	2.24 V	223	73.10	-16.10
4	*5500.00	98.70 PK			2.24 V	223	62.20	36.50
5	*5500.00	90.80 AV			2.24 V	223	54.30	36.50
6	11000.00	54.60 PK	74.00	-19.40	3.21 V	141	58.30	-3.70
7	11000.00	43.40 AV	54.00	-10.60	3.21 V	141	47.10	-3.70

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT20)	Channel	CH 116 : 5580 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	95.00 PK			2.25 H	317	58.30	36.70
2	*5580.00	87.20 AV			2.25 H	317	50.50	36.70
3	11160.00	53.90 PK	74.00	-20.10	2.87 H	142	57.40	-3.50
4	11160.00	43.80 AV	54.00	-10.20	2.87 H	142	47.30	-3.50
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5580.00	98.60 PK			2.23 V	206	61.90	36.70
2	*5580.00	90.90 AV			2.23 V	206	54.20	36.70
3	11160.00	55.00 PK	74.00	-19.00	1.47 V	321	58.50	-3.50
4	11160.00	44.70 AV	54.00	-9.30	1.47 V	321	48.20	-3.50

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.

RF Mode	TX 802.11n (HT20)	Channel	CH 140 : 5700 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	95.00 PK			2.07 H	349	57.90	37.10
2	*5700.00	87.20 AV			2.07 H	349	50.10	37.10
3	#5725.00	57.30 PK	68.20	-10.90	2.07 H	349	73.00	-15.70
4	11400.00	54.90 PK	74.00	-19.10	3.21 H	274	57.40	-2.50
5	11400.00	45.40 AV	54.00	-8.60	3.21 H	274	47.90	-2.50
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5700.00	99.30 PK			2.21 V	195	62.20	37.10
2	*5700.00	90.90 AV			2.21 V	195	53.80	37.10
3	#5725.00	58.80 PK	68.20	-9.40	2.21 V	195	74.50	-15.70
4	11400.00	56.20 PK	74.00	-17.80	3.14 V	257	58.70	-2.50
5	11400.00	46.10 AV	54.00	-7.90	3.14 V	257	48.60	-2.50

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT20)	Channel	CH 149 : 5745 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5635.60	54.80 PK	68.20	-13.40	2.00 H	350	70.70	-15.90
2	*5745.00	95.60 PK			2.00 H	350	58.60	37.00
3	*5745.00	87.60 AV			2.00 H	350	50.60	37.00
4	#5967.20	54.70 PK	68.20	-13.50	2.00 H	350	70.20	-15.50
5	11490.00	55.30 PK	74.00	-18.70	2.37 H	111	57.80	-2.50
6	11490.00	45.10 AV	54.00	-8.90	2.37 H	111	47.60	-2.50
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5643.20	53.80 PK	68.20	-14.40	2.23 V	199	69.70	-15.90
2	*5745.00	98.90 PK			2.23 V	199	61.90	37.00
3	*5745.00	91.70 AV			2.23 V	199	54.70	37.00
4	#5932.00	55.10 PK	68.20	-13.10	2.23 V	199	70.50	-15.40
5	11490.00	55.80 PK	74.00	-18.20	3.17 V	226	58.30	-2.50
6	11490.00	45.80 AV	54.00	-8.20	3.17 V	226	48.30	-2.50

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT20)	Channel	CH 157 : 5785 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5616.00	53.70 PK	68.20	-14.50	2.01 H	351	69.70	-16.00
2	*5785.00	95.40 PK			2.01 H	351	58.40	37.00
3	*5785.00	87.20 AV			2.01 H	351	50.20	37.00
4	#5946.00	54.50 PK	68.20	-13.70	2.01 H	351	69.90	-15.40
5	11570.00	54.80 PK	74.00	-19.20	2.25 H	36	57.60	-2.80
6	11570.00	44.30 AV	54.00	-9.70	2.25 H	36	47.10	-2.80
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5626.80	53.50 PK	68.20	-14.70	2.10 V	197	69.40	-15.90
2	*5785.00	98.60 PK			2.10 V	197	61.60	37.00
3	*5785.00	90.80 AV			2.10 V	197	53.80	37.00
4	#5951.60	53.90 PK	68.20	-14.30	2.10 V	197	69.50	-15.60
5	11570.00	55.60 PK	74.00	-18.40	3.20 V	114	58.40	-2.80
6	11570.00	45.40 AV	54.00	-8.60	3.20 V	114	48.20	-2.80

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT20)	Channel	CH 165 : 5825 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5618.40	54.20 PK	68.20	-14.00	1.99 H	352	70.20	-16.00
2	*5825.00	95.60 PK			1.99 H	352	58.40	37.20
3	*5825.00	87.40 AV			1.99 H	352	50.20	37.20
4	#5966.40	54.90 PK	68.20	-13.30	1.99 H	352	70.40	-15.50
5	11650.00	54.20 PK	74.00	-19.80	3.23 H	257	57.40	-3.20
6	11650.00	44.10 AV	54.00	-9.90	3.23 H	257	47.30	-3.20
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5644.80	54.20 PK	68.20	-14.00	2.23 V	191	70.10	-15.90
2	*5825.00	98.50 PK			2.23 V	191	61.30	37.20
3	*5825.00	90.60 AV			2.23 V	191	53.40	37.20
4	#5945.20	54.70 PK	68.20	-13.50	2.23 V	191	70.10	-15.40
5	11650.00	55.50 PK	74.00	-18.50	3.65 V	241	58.70	-3.20
6	11650.00	45.40 AV	54.00	-8.60	3.65 V	241	48.60	-3.20

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT40)	Channel	CH 38 : 5190 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	60.10 PK	74.00	-13.90	2.41 H	2	76.80	-16.70
2	5150.00	43.70 AV	54.00	-10.30	2.41 H	2	60.40	-16.70
3	*5190.00	96.00 PK			2.41 H	2	59.70	36.30
4	*5190.00	88.60 AV			2.41 H	2	52.30	36.30
5	#10380.00	55.20 PK	68.20	-13.00	1.09 H	63	59.30	-4.10
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	63.80 PK	74.00	-10.20	2.38 V	217	80.50	-16.70
2	5150.00	48.40 AV	54.00	-5.60	2.38 V	217	65.10	-16.70
3	*5190.00	99.90 PK			2.38 V	217	63.60	36.30
4	*5190.00	92.30 AV			2.38 V	217	56.00	36.30
5	#10380.00	55.80 PK	68.20	-12.40	2.62 V	347	59.90	-4.10

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT40)	Channel	CH 46 : 5230 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	50.30 PK	74.00	-23.70	2.37 H	22	67.00	-16.70
2	5150.00	40.00 AV	54.00	-14.00	2.37 H	22	56.70	-16.70
3	*5230.00	94.70 PK			2.37 H	22	58.40	36.30
4	*5230.00	87.90 AV			2.37 H	22	51.60	36.30
5	#10460.00	54.70 PK	68.20	-13.50	3.02 H	105	58.60	-3.90
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	50.40 PK	74.00	-23.60	2.43 V	218	67.10	-16.70
2	5150.00	40.10 AV	54.00	-13.90	2.43 V	218	56.80	-16.70
3	*5230.00	99.10 PK			2.43 V	218	62.80	36.30
4	*5230.00	91.50 AV			2.43 V	218	55.20	36.30
5	#10460.00	55.90 PK	68.20	-12.30	2.14 V	355	59.80	-3.90

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT40)	Channel	CH 54 : 5270 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5270.00	93.80 PK			2.24 H	22	57.60	36.20
2	*5270.00	86.10 AV			2.24 H	22	49.90	36.20
3	5350.00	50.40 PK	74.00	-23.60	2.24 H	22	66.90	-16.50
4	5350.00	40.30 AV	54.00	-13.70	2.24 H	22	56.80	-16.50
5	#10540.00	56.50 PK	68.20	-11.70	3.34 H	253	60.40	-3.90
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5270.00	98.90 PK			2.41 V	221	62.70	36.20
2	*5270.00	91.50 AV			2.41 V	221	55.30	36.20
3	5350.00	50.60 PK	74.00	-23.40	2.41 V	221	67.10	-16.50
4	5350.00	40.80 AV	54.00	-13.20	2.41 V	221	57.30	-16.50
5	#10540.00	55.80 PK	68.20	-12.40	1.22 V	352	59.70	-3.90

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT40)	Channel	CH 62 : 5310 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5310.00	94.20 PK			2.30 H	23	58.10	36.10
2	*5310.00	86.40 AV			2.30 H	23	50.30	36.10
3	5350.00	57.20 PK	74.00	-16.80	2.30 H	23	73.70	-16.50
4	5350.00	44.40 AV	54.00	-9.60	2.30 H	23	60.90	-16.50
5	10620.00	55.80 PK	74.00	-18.20	2.47 H	164	59.50	-3.70
6	10620.00	44.60 AV	54.00	-9.40	2.47 H	164	48.30	-3.70
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5310.00	98.10 PK			2.34 V	223	62.00	36.10
2	*5310.00	90.40 AV			2.34 V	223	54.30	36.10
3	5350.00	59.70 PK	74.00	-14.30	2.34 V	223	76.20	-16.50
4	5350.00	47.20 AV	54.00	-6.80	2.34 V	223	63.70	-16.50
5	10620.00	56.10 PK	74.00	-17.90	1.85 V	337	59.80	-3.70
6	10620.00	44.70 AV	54.00	-9.30	1.85 V	337	48.40	-3.70

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.

RF Mode	TX 802.11n (HT40)	Channel	CH 102 : 5510 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	53.50 PK	74.00	-20.50	2.28 H	23	69.60	-16.10
2	5460.00	42.80 AV	54.00	-11.20	2.28 H	23	58.90	-16.10
3	#5470.00	57.40 PK	68.20	-10.80	2.28 H	23	73.50	-16.10
4	*5510.00	91.60 PK			2.28 H	23	55.10	36.50
5	*5510.00	83.80 AV			2.28 H	23	47.30	36.50
6	11020.00	55.40 PK	74.00	-18.60	1.61 H	356	59.10	-3.70
7	11020.00	45.00 AV	54.00	-9.00	1.61 H	356	48.70	-3.70
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	57.50 PK	74.00	-16.50	2.25 V	226	73.60	-16.10
2	5460.00	44.40 AV	54.00	-9.60	2.25 V	226	60.50	-16.10
3	#5470.00	62.70 PK	68.20	-5.50	2.25 V	226	78.80	-16.10
4	*5510.00	96.60 PK			2.25 V	226	60.10	36.50
5	*5510.00	89.10 AV			2.25 V	226	52.60	36.50
6	11020.00	56.20 PK	74.00	-17.80	3.03 V	252	59.90	-3.70
7	11020.00	45.10 AV	54.00	-8.90	3.03 V	252	48.80	-3.70

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT40)	Channel	CH 110 : 5550 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5550.00	92.20 PK			2.18 H	23	55.50	36.70
2	*5550.00	84.40 AV			2.18 H	23	47.70	36.70
3	11100.00	55.60 PK	74.00	-18.40	3.21 H	252	59.10	-3.50
4	11100.00	45.30 AV	54.00	-8.70	3.21 H	252	48.80	-3.50
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5550.00	97.30 PK			2.25 V	221	60.60	36.70
2	*5550.00	89.10 AV			2.25 V	221	52.40	36.70
3	11100.00	56.30 PK	74.00	-17.70	1.84 V	149	59.80	-3.50
4	11100.00	45.60 AV	54.00	-8.40	1.84 V	149	49.10	-3.50

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.

RF Mode	TX 802.11n (HT40)	Channel	CH 134 : 5670 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5670.00	91.40 PK			1.87 H	24	54.40	37.00
2	*5670.00	84.30 AV			1.87 H	24	47.30	37.00
3	#5725.00	53.80 PK	68.20	-14.40	1.87 H	24	69.50	-15.70
4	11340.00	56.50 PK	74.00	-17.50	3.09 H	231	59.40	-2.90
5	11340.00	45.70 AV	54.00	-8.30	3.09 H	231	48.60	-2.90
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5670.00	96.80 PK			2.31 V	194	59.80	37.00
2	*5670.00	89.10 AV			2.31 V	194	52.10	37.00
3	#5725.00	57.70 PK	68.20	-10.50	2.31 V	194	73.40	-15.70
4	11340.00	56.60 PK	74.00	-17.40	1.78 V	345	59.50	-2.90
5	11340.00	45.60 AV	54.00	-8.40	1.78 V	345	48.50	-2.90

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT40)	Channel	CH 151 : 5755 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5640.00	54.40 PK	68.20	-13.80	2.25 H	5	70.30	-15.90
2	*5755.00	91.70 PK			2.25 H	5	54.70	37.00
3	*5755.00	83.90 AV			2.25 H	5	46.90	37.00
4	#5942.80	55.10 PK	68.20	-13.10	2.25 H	5	70.50	-15.40
5	11510.00	57.40 PK	74.00	-16.60	1.81 H	347	60.10	-2.70
6	11510.00	46.20 AV	54.00	-7.80	1.81 H	347	48.90	-2.70
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5620.00	54.50 PK	68.20	-13.70	2.25 V	191	70.50	-16.00
2	*5755.00	96.50 PK			2.25 V	191	59.50	37.00
3	*5755.00	88.30 AV			2.25 V	191	51.30	37.00
4	#5945.20	54.90 PK	68.20	-13.30	2.25 V	191	70.30	-15.40
5	11510.00	57.20 PK	74.00	-16.80	2.59 V	86	59.90	-2.70
6	11510.00	45.60 AV	54.00	-8.40	2.59 V	86	48.30	-2.70

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	TX 802.11n (HT40)	Channel	CH 159 : 5795 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5614.40	54.90 PK	68.20	-13.30	2.21 H	5	70.90	-16.00
2	*5795.00	91.60 PK			2.21 H	5	54.60	37.00
3	*5795.00	84.40 AV			2.21 H	5	47.40	37.00
4	#5932.80	54.70 PK	68.20	-13.50	2.21 H	5	70.10	-15.40
5	11590.00	56.70 PK	74.00	-17.30	2.24 H	112	59.70	-3.00
6	11590.00	45.60 AV	54.00	-8.40	2.24 H	112	48.60	-3.00
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5637.20	54.80 PK	68.20	-13.40	2.22 V	214	70.70	-15.90
2	*5795.00	96.50 PK			2.22 V	214	59.50	37.00
3	*5795.00	88.70 AV			2.22 V	214	51.70	37.00
4	#5940.80	55.50 PK	68.20	-12.70	2.22 V	214	70.90	-15.40
5	11590.00	56.30 PK	74.00	-17.70	2.72 V	319	59.30	-3.00
6	11590.00	45.30 AV	54.00	-8.70	2.72 V	319	48.30	-3.00

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ac (VHT80)	Channel	CH 42 : 5210 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	52.60 PK	74.00	-21.40	2.27 H	23	69.30	-16.70
2	5150.00	42.10 AV	54.00	-11.90	2.27 H	23	58.80	-16.70
3	*5210.00	89.50 PK			2.27 H	23	53.20	36.30
4	*5210.00	82.00 AV			2.27 H	23	45.70	36.30
5	#10420.00	54.10 PK	68.20	-14.10	3.41 H	327	58.10	-4.00
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	57.50 PK	74.00	-16.50	2.32 V	233	74.20	-16.70
2	5150.00	45.60 AV	54.00	-8.40	2.32 V	233	62.30	-16.70
3	*5210.00	94.00 PK			2.32 V	233	57.70	36.30
4	*5210.00	86.40 AV			2.32 V	233	50.10	36.30
5	#10420.00	56.30 PK	68.20	-11.90	1.83 V	210	60.30	-4.00

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ac (VHT80)	Channel	CH 58 : 5290 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5290.00	88.40 PK			2.33 H	23	52.30	36.10
2	*5290.00	80.70 AV			2.33 H	23	44.60	36.10
3	5350.00	53.70 PK	74.00	-20.30	2.33 H	23	70.20	-16.50
4	5350.00	42.50 AV	54.00	-11.50	2.33 H	23	59.00	-16.50
5	#10580.00	54.90 PK	68.20	-13.30	2.21 H	167	58.70	-3.80
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5290.00	92.70 PK			2.32 V	232	56.60	36.10
2	*5290.00	84.90 AV			2.32 V	232	48.80	36.10
3	5350.00	55.40 PK	74.00	-18.60	2.32 V	232	71.90	-16.50
4	5350.00	44.30 AV	54.00	-9.70	2.32 V	232	60.80	-16.50
5	#10580.00	55.40 PK	68.20	-12.80	2.86 V	238	59.20	-3.80

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ac (VHT80)	Channel	CH 106 : 5530 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	52.80 PK	74.00	-21.20	2.16 H	23	68.90	-16.10
2	5460.00	43.10 AV	54.00	-10.90	2.16 H	23	59.20	-16.10
3	#5470.00	53.20 PK	68.20	-15.00	2.16 H	23	69.30	-16.10
4	*5530.00	86.20 PK			2.16 H	23	49.60	36.60
5	*5530.00	77.90 AV			2.16 H	23	41.30	36.60
6	11060.00	55.00 PK	74.00	-19.00	3.05 H	318	58.60	-3.60
7	11060.00	44.70 AV	54.00	-9.30	3.05 H	318	48.30	-3.60
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	56.40 PK	74.00	-17.60	1.99 V	200	72.50	-16.10
2	5460.00	45.50 AV	54.00	-8.50	1.99 V	200	61.60	-16.10
3	#5470.00	57.50 PK	68.20	-10.70	1.99 V	200	73.60	-16.10
4	*5530.00	90.70 PK			1.99 V	200	54.10	36.60
5	*5530.00	82.60 AV			1.99 V	200	46.00	36.60
6	11060.00	55.40 PK	74.00	-18.60	2.59 V	83	59.00	-3.60
7	11060.00	44.80 AV	54.00	-9.20	2.59 V	83	48.40	-3.60

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ac (VHT80)	Channel	CH 122 : 5610 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	51.20 PK	74.00	-22.80	2.36 H	23	67.30	-16.10
2	5460.00	41.70 AV	54.00	-12.30	2.36 H	23	57.80	-16.10
3	#5470.00	51.30 PK	68.20	-16.90	2.36 H	23	67.40	-16.10
4	*5610.00	86.10 PK			2.36 H	23	49.40	36.70
5	*5610.00	79.00 AV			2.36 H	23	42.30	36.70
6	#5725.00	53.00 PK	68.20	-15.20	2.36 H	23	68.70	-15.70
7	11220.00	55.10 PK	74.00	-18.90	2.50 H	254	58.50	-3.40
8	11220.00	45.20 AV	54.00	-8.80	2.50 H	254	48.60	-3.40
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5460.00	51.10 PK	74.00	-22.90	2.08 V	203	67.20	-16.10
2	5460.00	41.80 AV	54.00	-12.20	2.08 V	203	57.90	-16.10
3	#5470.00	51.30 PK	68.20	-16.90	2.08 V	203	67.40	-16.10
4	*5610.00	90.10 PK			2.08 V	203	53.40	36.70
5	*5610.00	82.40 AV			2.08 V	203	45.70	36.70
6	#5725.00	53.10 PK	68.20	-15.10	2.08 V	203	68.80	-15.70
7	11220.00	54.70 PK	74.00	-19.30	1.15 V	273	58.10	-3.40
8	11220.00	45.30 AV	54.00	-8.70	1.15 V	273	48.70	-3.40

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ac (VHT80)	Channel	CH 155 : 5775 MHz
Frequency Range	1GHz ~ 40GHz	Detector Function	Peak (PK) Average (AV)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5646.00	54.10 PK	68.20	-14.10	2.38 H	27	69.90	-15.80
2	*5775.00	87.10 PK			2.38 H	27	50.10	37.00
3	*5775.00	78.80 AV			2.38 H	27	41.80	37.00
4	#5944.40	54.90 PK	68.20	-13.30	2.38 H	27	70.30	-15.40
5	11550.00	56.60 PK	74.00	-17.40	2.64 H	273	59.40	-2.80
6	11550.00	45.40 AV	54.00	-8.60	2.64 H	273	48.20	-2.80
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5640.40	54.30 PK	68.20	-13.90	2.35 V	215	70.20	-15.90
2	*5775.00	91.10 PK			2.35 V	215	54.10	37.00
3	*5775.00	82.60 AV			2.35 V	215	45.60	37.00
4	#5966.00	54.80 PK	68.20	-13.40	2.35 V	215	70.30	-15.50
5	11550.00	56.70 PK	74.00	-17.30	1.18 V	228	59.50	-2.80
6	11550.00	45.80 AV	54.00	-8.20	1.18 V	228	48.60	-2.80

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.
6. " # " : The radiated frequency is out of the restricted band.

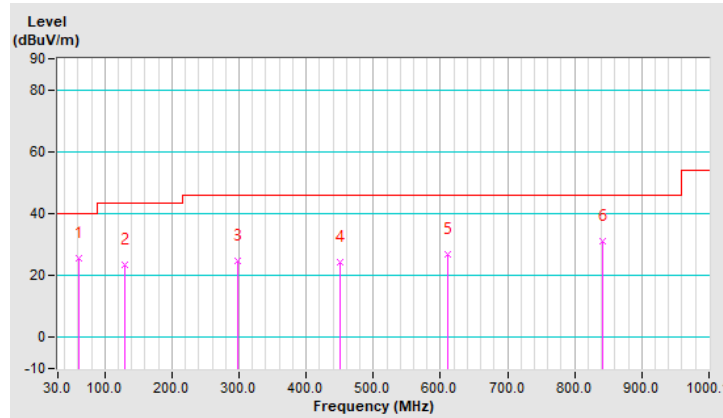
Below 1GHz Worst-Case Data:

RF Mode	TX 802.11n (HT20)	Channel	CH 100 : 5500 MHz
Frequency Range	30MHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	62.01	25.68 QP	40.00	-14.32	1.95 H	233	39.34	-13.66
2	128.95	23.49 QP	43.50	-20.01	3.94 H	280	36.95	-13.46
3	298.72	24.61 QP	46.00	-21.39	1.65 H	12	36.78	-12.17
4	450.05	24.48 QP	46.00	-21.52	3.41 H	253	31.87	-7.39
5	611.09	26.95 QP	46.00	-19.05	1.12 H	259	30.15	-3.20
6	841.00	31.20 QP	46.00	-14.80	1.59 H	348	30.09	1.11

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

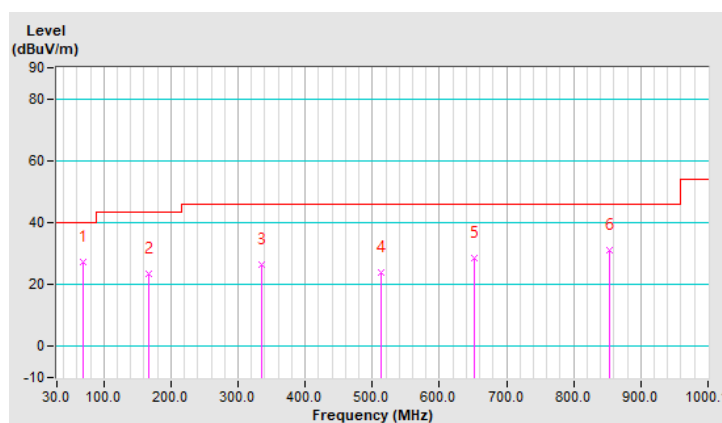


RF Mode	TX 802.11n (HT20)	Channel	CH 100 : 5500 MHz
Frequency Range	30MHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	69.77	27.26 QP	40.00	-12.74	2.71 V	135	42.21	-14.95
2	167.75	23.57 QP	43.50	-19.93	2.29 V	117	36.49	-12.92
3	334.61	26.31 QP	46.00	-19.69	2.97 V	158	37.03	-10.72
4	512.14	23.81 QP	46.00	-22.19	2.26 V	126	29.70	-5.89
5	652.80	28.37 QP	46.00	-17.63	3.06 V	337	30.93	-2.56
6	853.61	31.03 QP	46.00	-14.97	1.82 V	311	29.96	1.07

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB).
3. The other emission levels were very low against the limit of frequency range 30MHz ~ 1000MHz.
4. Margin value = Emission Level – Limit value.
5. The emission levels were very low against the limit of frequency range 9kHz ~ 30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



4.2 Conducted Emission Measurement

4.2.1 Limits of Conducted Emission Measurement

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

Note: 1. The lower limit shall apply at the transition frequencies.

2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

4.2.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESCI	100613	Dec. 03, 2021	Dec. 02, 2022
RF signal cable Woken	5D-FB	Cable-cond1-01	Jan. 15, 2022	Jan. 14, 2023
LISN ROHDE & SCHWARZ (EUT)	ENV216	101196	Apr. 26, 2021	Apr. 25, 2022
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Sep. 07, 2021	Sep. 06, 2022
Software ADT	BV ADT_Conc_ V7.3.7.4	NA	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

2. The test was performed in HwaYa Shielded Room 1.

3. The VCCI Site Registration No. is C-12040.

4.2.3 Test Procedures

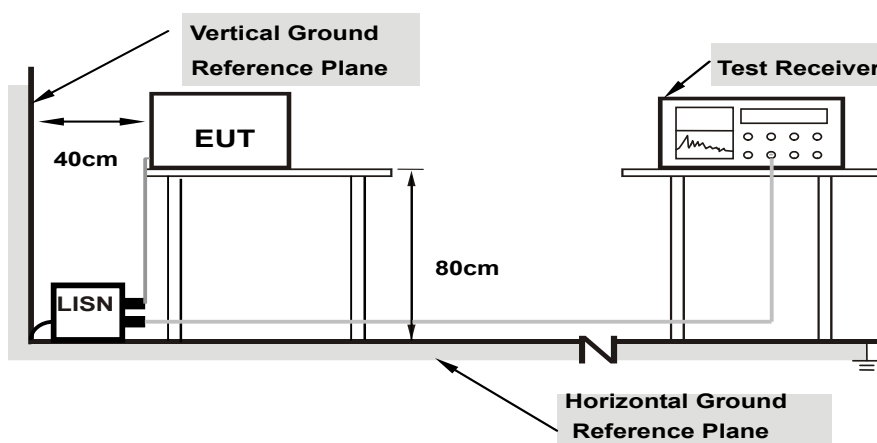
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

Note: The resolution bandwidth and video bandwidth of test receiver is 9kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15MHz-30MHz.

4.2.4 Deviation from Test Standard

No deviation.

4.2.5 Test Setup



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

For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.2.6 EUT Operating Conditions

Same as 4.1.6.

4.2.7 Test Results

Worst-case data:

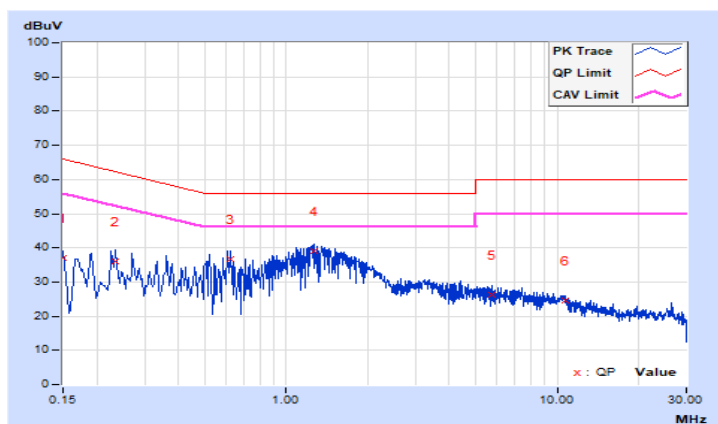
802.11n (HT20)

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.77	27.35	16.30	37.12	26.07	66.00	56.00	-28.88	-29.93
2	0.23400	9.81	26.37	16.21	36.18	26.02	62.31	52.31	-26.13	-26.29
3	0.62200	9.88	26.80	19.54	36.68	29.42	56.00	46.00	-19.32	-16.58
4	1.27000	9.93	28.96	17.85	38.89	27.78	56.00	46.00	-17.11	-18.22
5	5.74200	10.04	16.33	8.33	26.37	18.37	60.00	50.00	-33.63	-31.63
6	10.69000	10.12	14.33	6.55	24.45	16.67	60.00	50.00	-35.55	-33.33

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

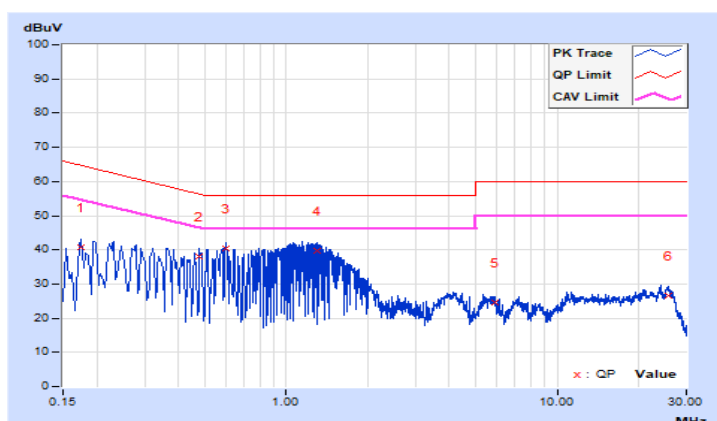


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17400	9.84	30.79	15.63	40.63	25.47	64.77	54.77	-24.14	-29.30
2	0.47800	9.95	28.21	13.07	38.16	23.02	56.37	46.37	-18.21	-23.35
3	0.59800	9.96	30.30	18.30	40.26	28.26	56.00	46.00	-15.74	-17.74
4	1.30200	10.01	29.67	14.71	39.68	24.72	56.00	46.00	-16.32	-21.28
5	5.87400	10.12	14.59	5.98	24.71	16.10	60.00	50.00	-35.29	-33.90
6	25.71400	10.31	16.30	7.55	26.61	17.86	60.00	50.00	-33.39	-32.14

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.



4.3 Transmit Power Measurement

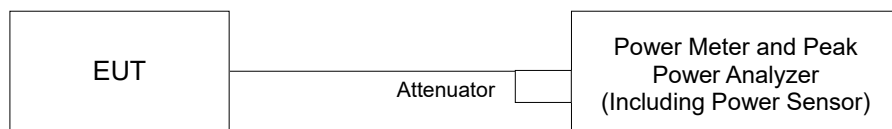
4.3.1 Limits of Transmit Power Measurement

Operation Band	EUT Category		Limit
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p $\leq$ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
		Indoor Access Point	1 Watt (30 dBm)
	✓	Mobile and Portable client device	250mW (24 dBm)
U-NII-2A		✓	250mW (24 dBm) or 11 dBm+10 log B*
U-NII-2C		✓	250mW (24 dBm) or 11 dBm+10 log B*
U-NII-3		✓	1 Watt (30 dBm)

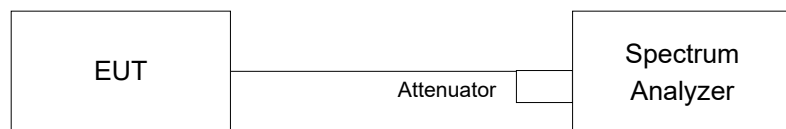
*B is the 26 dB emission bandwidth in megahertz

4.3.2 Test Setup

For Power Output



For 26dB Bandwidth



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

For Average Power Measurement

Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst and set the detector to average. Duty factor is not added to measured value.

For 26dB Bandwidth

- a. Set RBW = approximately 1% of the emission bandwidth.
- b. Set the VBW $\geq 3 \times$ RBW.
- c. Detector = Peak.
- d. Trace mode = max hold.
- e. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

4.3.5 Deviation from Test Standard

No deviation.

4.3.6 EUT Operating Conditions

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.3.7 Test Result

Power Output:

802.11a

Chan.	Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	42.756	16.31	24.00	Pass
40	5200	43.652	16.40	24.00	Pass
48	5240	42.658	16.30	24.00	Pass
52	5260	43.251	16.36	24.00	Pass
60	5300	43.053	16.34	24.00	Pass
64	5320	42.658	16.30	24.00	Pass
100	5500	41.591	16.19	24.00	Pass
116	5580	44.463	16.48	24.00	Pass
140	5700	43.451	16.38	24.00	Pass
149	5745	43.652	16.40	30.00	Pass
157	5785	44.055	16.44	30.00	Pass
165	5825	42.170	16.25	30.00	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. $11\text{dBm} + 10\log(22.89) = 24.59 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(21.67) = 24.35 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(25.49) = 25.06 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(23.90) = 24.78 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(24.39) = 24.87 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(25.13) = 25.00 > 24\text{dBm}$

802.11n (HT20)

Chan.	Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	34.514	15.38	24.00	Pass
40	5200	34.356	15.36	24.00	Pass
48	5240	34.594	15.39	24.00	Pass
52	5260	34.834	15.42	24.00	Pass
60	5300	34.995	15.44	24.00	Pass
64	5320	34.754	15.41	24.00	Pass
100	5500	35.400	15.49	24.00	Pass
116	5580	35.318	15.48	24.00	Pass
140	5700	35.156	15.46	24.00	Pass
149	5745	34.435	15.37	30.00	Pass
157	5785	34.277	15.35	30.00	Pass
165	5825	34.356	15.36	30.00	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. $11\text{dBm} + 10\log(20.77) = 24.17 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(20.80) = 24.18 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(22.79) = 24.57 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(22.02) = 24.42 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(20.84) = 24.18 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(20.67) = 24.15 > 24\text{dBm}$

802.11n (HT40)

Chan.	Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Pass / Fail
38	5190	34.277	15.35	24.00	Pass
46	5230	34.514	15.38	24.00	Pass
54	5270	34.754	15.41	24.00	Pass
62	5310	34.914	15.43	24.00	Pass
102	5510	35.075	15.45	24.00	Pass
110	5550	35.318	15.48	24.00	Pass
134	5670	35.237	15.47	24.00	Pass
151	5755	34.834	15.42	30.00	Pass
159	5795	34.594	15.39	30.00	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. $11\text{dBm} + 10\log(43.93) = 27.42 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(45.03) = 27.53 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(50.50) = 28.03 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(48.82) = 27.88 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(51.76) = 28.13 > 24\text{dBm}$

802.11ac (VHT20)

Chan.	Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	24.604	13.91	24.00	Pass
40	5200	24.434	13.88	24.00	Pass
48	5240	24.491	13.89	24.00	Pass
52	5260	24.322	13.86	24.00	Pass
60	5300	24.660	13.92	24.00	Pass
64	5320	24.547	13.90	24.00	Pass
100	5500	25.003	13.98	24.00	Pass
116	5580	24.889	13.96	24.00	Pass
140	5700	24.946	13.97	24.00	Pass
149	5745	24.717	13.93	30.00	Pass
157	5785	24.491	13.89	30.00	Pass
165	5825	24.378	13.87	30.00	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. $11\text{dBm} + 10\log(20.77) = 24.17 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(20.80) = 24.18 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(22.79) = 24.57 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(22.02) = 24.42 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(20.84) = 24.18 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(20.67) = 24.15 > 24\text{dBm}$

802.11ac (VHT40)

Chan.	Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Pass / Fail
38	5190	24.660	13.92	24.00	Pass
46	5230	24.774	13.94	24.00	Pass
54	5270	24.604	13.91	24.00	Pass
62	5310	24.378	13.87	24.00	Pass
102	5510	24.831	13.95	24.00	Pass
110	5550	25.003	13.98	24.00	Pass
134	5670	24.547	13.90	24.00	Pass
151	5755	24.491	13.89	30.00	Pass
159	5795	24.210	13.84	30.00	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. $11\text{dBm} + 10\log(43.93) = 27.42 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(45.03) = 27.53 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(50.50) = 28.03 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(48.82) = 27.88 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(51.76) = 28.13 > 24\text{dBm}$

802.11ac (VHT80)

Chan.	Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Pass / Fail
42	5210	19.588	12.92	24.00	Pass
58	5290	19.634	12.93	24.00	Pass
106	5530	19.770	12.96	24.00	Pass
122	5610	19.861	12.98	24.00	Pass
155	5775	19.364	12.87	30.00	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. $11\text{dBm} + 10\log(82.05) = 30.14 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(82.21) = 30.14 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(81.84) = 30.12 > 24\text{dBm}$

26dB Bandwidth:

802.11a

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)
52	5260	22.89
60	5300	21.67
64	5320	25.49
100	5500	23.90
116	5580	24.39
140	5700	25.13

802.11n (HT20)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)
52	5260	20.77
60	5300	20.80
64	5320	22.79
100	5500	22.02
116	5580	20.84
140	5700	20.67

802.11n (HT40)

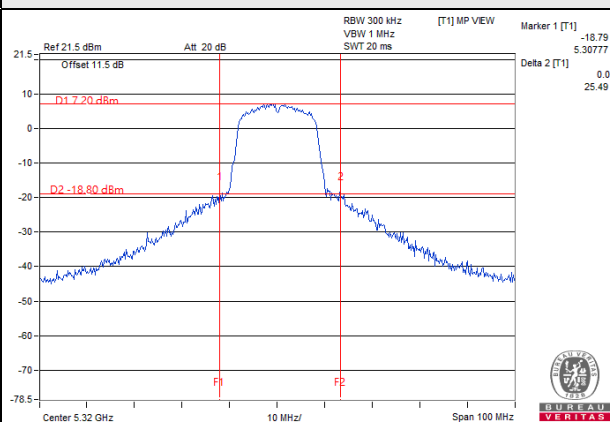
Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)
54	5270	43.93
62	5310	45.03
102	5510	50.50
110	5550	48.82
134	5670	51.76

802.11ac (VHT80)

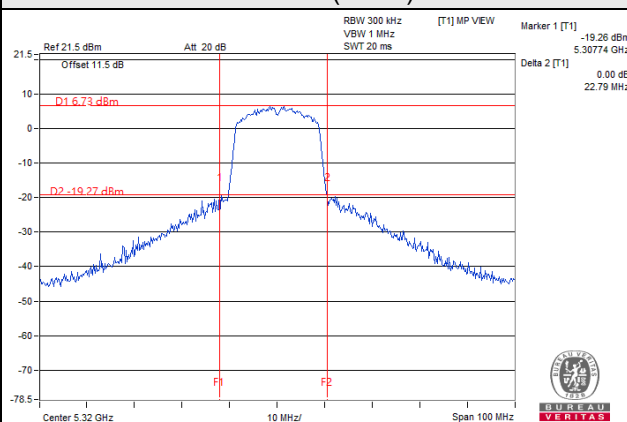
Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)
58	5290	82.05
106	5530	82.21
122	5610	81.84

Spectrum Plot of Worst Value

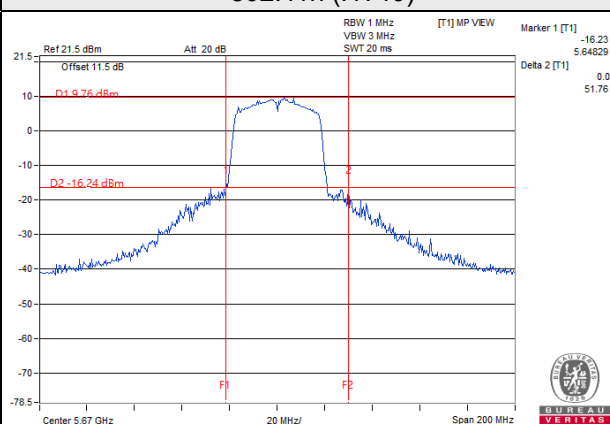
802.11a



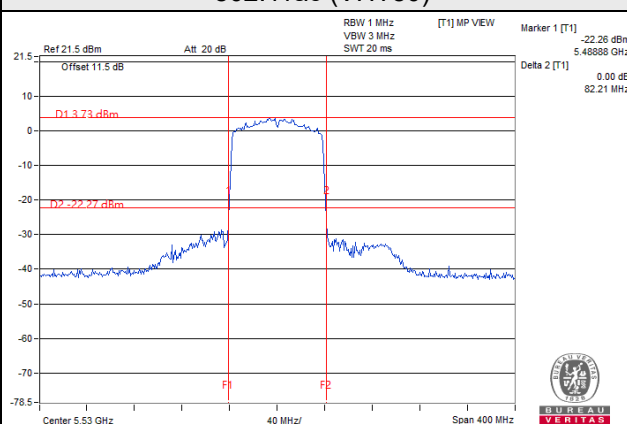
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)



EUT Average Power

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	16.36	43.251
5470~5725	16.48	44.463

802.11n (HT20)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	15.44	34.995
5470~5725	15.49	35.400

802.11n (HT40)

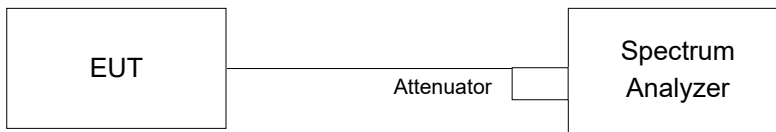
Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	15.43	34.914
5470~5725	15.48	35.318

802.11ac (VHT80)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	12.93	19.634
5470~5725	12.98	19.861

4.4 Occupied Bandwidth Measurement

4.4.1 Test Setup



4.4.2 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.4.3 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with resolution bandwidth in the range of 1% to 5% of the anticipated emission bandwidth, and a video bandwidth at least 3x the resolution bandwidth and set the detector to sampling. The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 % of the total mean power of a given emission.

4.4.4 Test Result

802.11a

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
36	5180	16.92
40	5200	16.80
48	5240	16.80
52	5260	16.80
60	5300	16.68
64	5320	16.92
100	5500	16.92
116	5580	16.80
140	5700	16.92
149	5745	16.80
157	5785	16.92
165	5825	16.80

802.11n (HT20)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
36	5180	17.76
40	5200	17.88
48	5240	17.76
52	5260	17.76
60	5300	17.76
64	5320	17.88
100	5500	17.76
116	5580	17.76
140	5700	17.64
149	5745	17.88
157	5785	17.64
165	5825	17.64

802.11n (HT40)

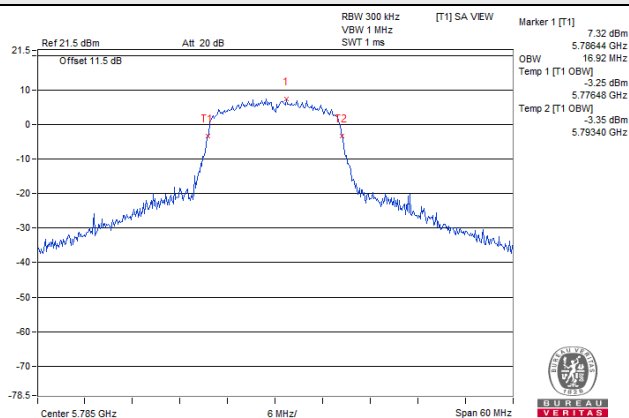
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
38	5190	36.24
46	5230	36.48
54	5270	36.48
62	5310	36.36
102	5510	36.48
110	5550	36.36
134	5670	36.36
151	5755	36.36
159	5795	36.48

802.11ac (VHT80)

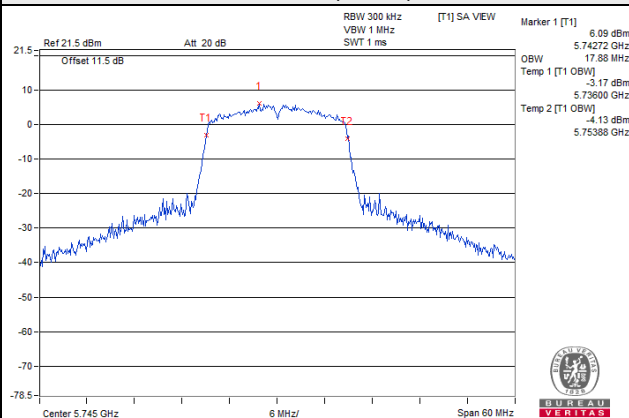
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
42	5210	75.60
58	5290	75.36
106	5530	75.12
122	5610	75.36
155	5775	75.60

Spectrum Plot of Worst Value

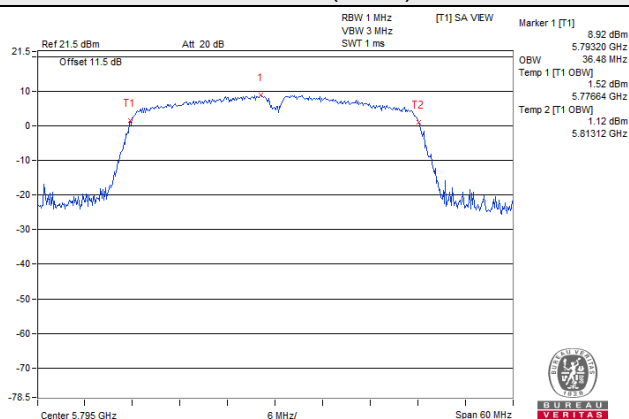
802.11a



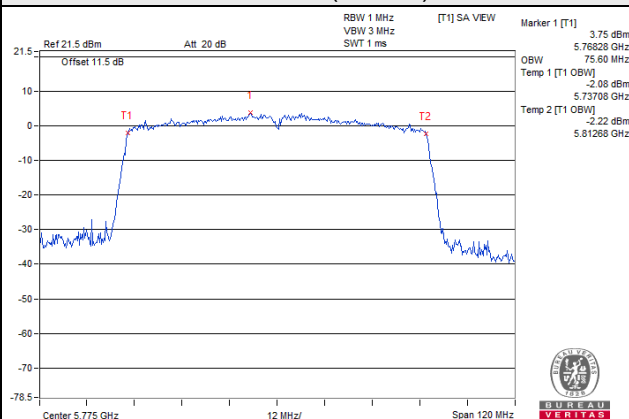
802.11n (HT20)



802.11n (HT40)

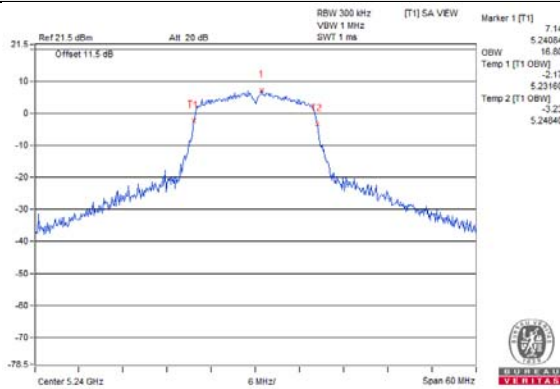


802.11ac (VHT80)

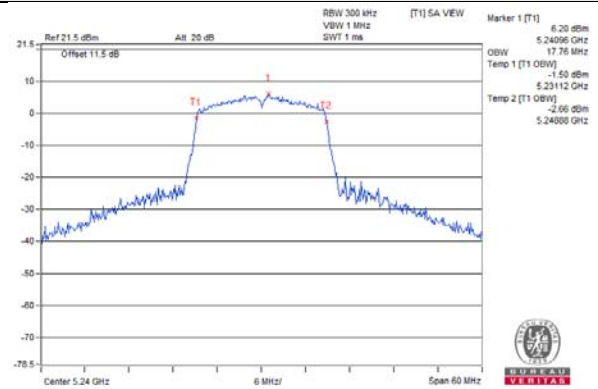


Spectrum Plot for near By DFS Band

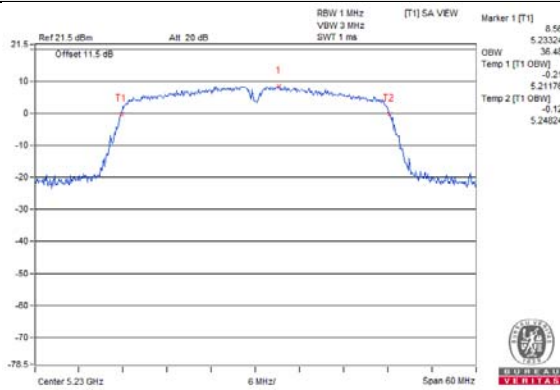
802.11a / CH 48



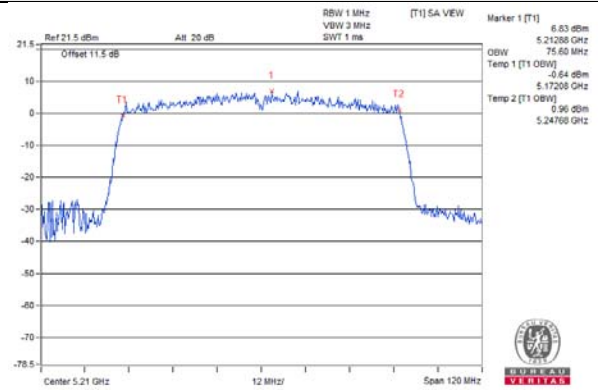
802.11n (HT20) / CH 48



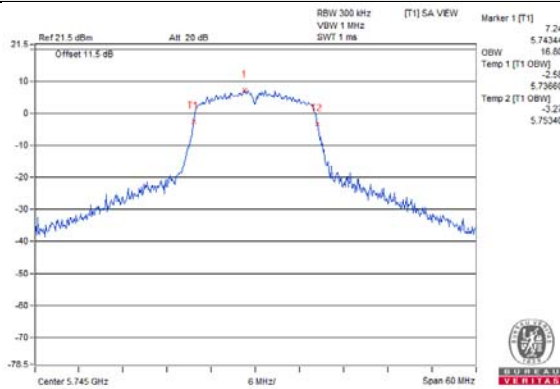
802.11n (HT40) / CH 46



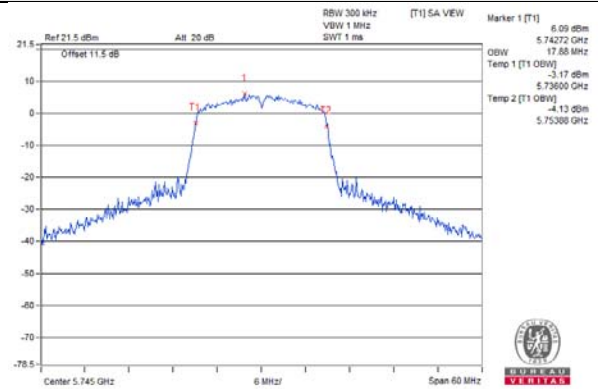
802.11ac (VHT80) / CH 42



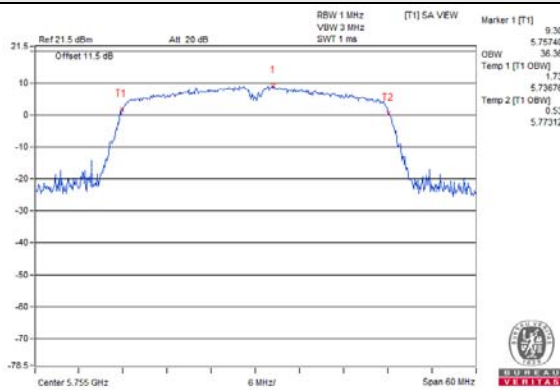
802.11a / CH 149



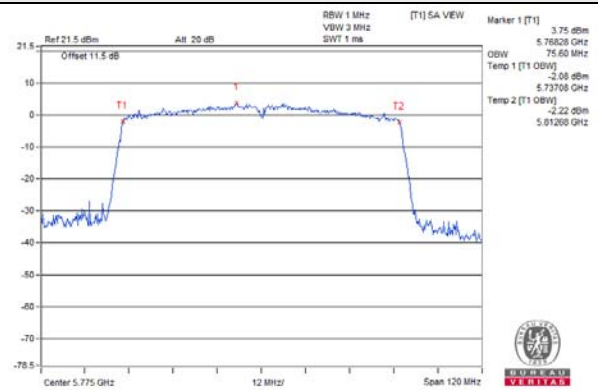
802.11n (HT20) / CH 149



802.11n (HT40) / CH 151



802.11ac (VHT80) / CH 155

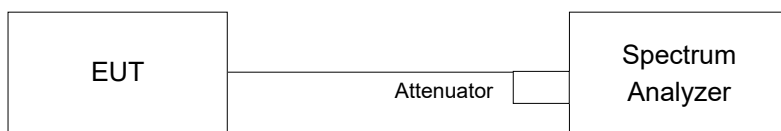


4.5 Peak Power Spectral Density Measurement

4.5.1 Limits of Peak Power Spectral Density Measurement

Operation Band	EUT Category		Limit
U-NII-1		Outdoor Access Point	17dBm/ MHz
		Fixed point-to-point Access Point	
		Indoor Access Point	
	√	Mobile and Portable client device	11dBm/ MHz
U-NII-2A	√		11dBm/ MHz
U-NII-2C	√		11dBm/ MHz
U-NII-3	√		30dBm/ 500kHz

4.5.2 Test Setup



4.5.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.5.4 Test Procedures

For U-NII-1, U-NII-2A and U-NII-2C band:

Duty cycle of test signal is < 98%

Using method SA-2

- a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
- b. Set RBW = 1MHz, Set VBW $\geq$ 3 MHz, Detector = RMS
- c. Set Channel power measure = 1MHz
- d. Sweep time = auto, trigger set to "free run".
- e. Trace average at least 100 traces in power averaging mode.
- f. Record the max value and add 10 log (1/duty cycle)

For U-NII-3 band:

Duty cycle of test signal is < 98%

- a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
- b. Set RBW = 300 kHz, Set VBW $\geq$ 1 MHz, Detector = RMS
- c. Use the peak marker function to determine the maximum power level in any 300 kHz band segment within the fundamental EBW.
- d. Scale the observed power level to an equivalent value in 500 kHz by adjusting (increasing) the measured power by a bandwidth correction factor (BWCF) where $BWCF = 10\log(500 \text{ kHz} / 300 \text{ kHz})$
- e. Sweep time = auto, trigger set to "free run".
- f. Trace average at least 100 traces in power averaging mode.
- g. Record the max value and add 10 log (1/duty cycle)

4.5.5 Deviation from Test Standard

No deviation.

4.5.6 EUT Operating Conditions

Same as 4.3.6.

4.5.7 Test Results

For U-NII-1, U-NII-2A and U-NII-2C band:

802.11a

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
36	5180	3.26	0.15	3.41	11.00	Pass
40	5200	3.43	0.15	3.58	11.00	Pass
48	5240	3.30	0.15	3.45	11.00	Pass
52	5260	3.25	0.15	3.40	11.00	Pass
60	5300	3.32	0.15	3.47	11.00	Pass
64	5320	3.27	0.15	3.42	11.00	Pass
100	5500	3.17	0.15	3.32	11.00	Pass
116	5580	3.44	0.15	3.59	11.00	Pass
140	5700	3.33	0.15	3.48	11.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT20)

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
36	5180	2.20	0.17	2.37	11.00	Pass
40	5200	2.33	0.17	2.50	11.00	Pass
48	5240	2.29	0.17	2.46	11.00	Pass
52	5260	2.45	0.17	2.62	11.00	Pass
60	5300	2.41	0.17	2.58	11.00	Pass
64	5320	2.47	0.17	2.64	11.00	Pass
100	5500	2.44	0.17	2.61	11.00	Pass
116	5580	2.40	0.17	2.57	11.00	Pass
140	5700	2.46	0.17	2.63	11.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT40)

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
38	5190	-0.54	0.32	-0.22	11.00	Pass
46	5230	-0.66	0.32	-0.34	11.00	Pass
54	5270	-0.66	0.32	-0.34	11.00	Pass
62	5310	-0.59	0.32	-0.27	11.00	Pass
102	5510	-0.59	0.32	-0.27	11.00	Pass
110	5550	-0.64	0.32	-0.32	11.00	Pass
134	5670	-0.47	0.32	-0.15	11.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

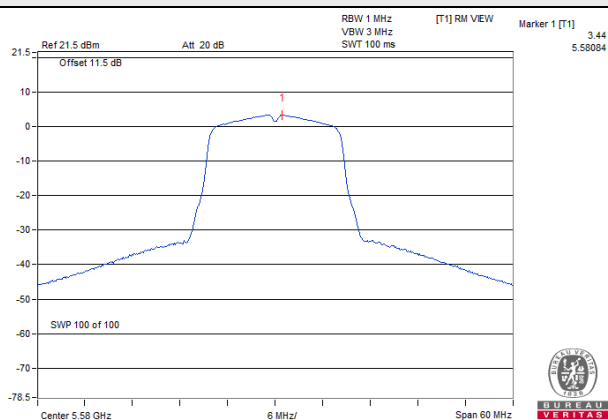
802.11ac (VHT80)

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
42	5210	-6.18	0.59	-5.59	11.00	Pass
58	5290	-6.09	0.59	-5.50	11.00	Pass
106	5530	-6.16	0.59	-5.57	11.00	Pass
122	5610	-6.12	0.59	-5.53	11.00	Pass

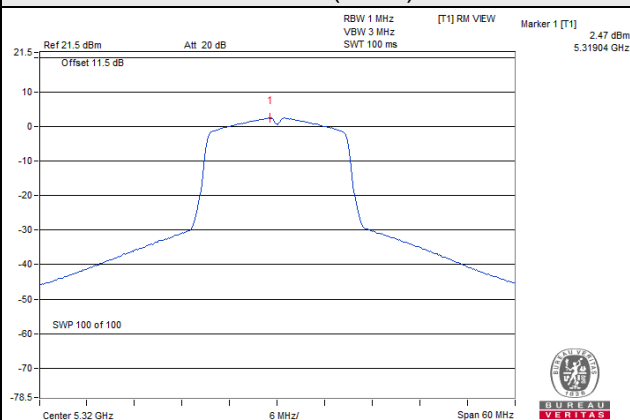
Note: Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

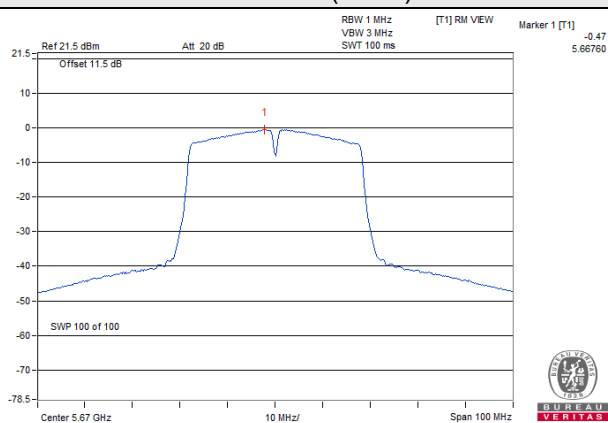
802.11a



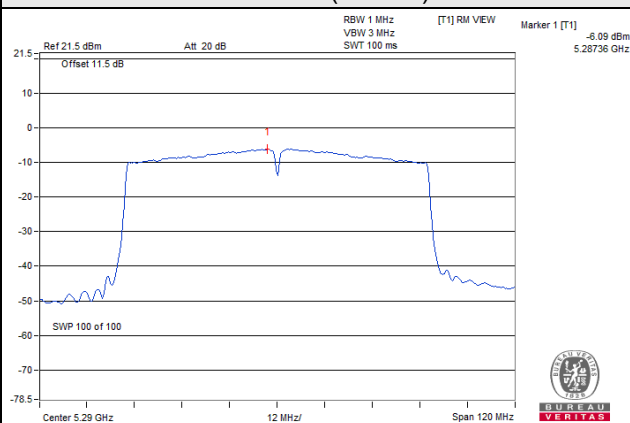
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)



For U-NII-3 band:

802.11a

Chan.	Freq. (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	Total PSD with Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
		(dBm/300kHz)	(dBm/500kHz)				
149	5745	-5.06	-2.84	0.15	-2.69	30.00	Pass
157	5785	-4.87	-2.65	0.15	-2.50	30.00	Pass
165	5825	-5.18	-2.96	0.15	-2.81	30.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT20)

Chan.	Freq. (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	Total PSD with Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
		(dBm/300kHz)	(dBm/500kHz)				
149	5745	-6.43	-4.21	0.17	-4.04	30.00	Pass
157	5785	-6.76	-4.54	0.17	-4.37	30.00	Pass
165	5825	-6.63	-4.41	0.17	-4.24	30.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT40)

Chan.	Freq. (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	Total PSD with Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
		(dBm/300kHz)	(dBm/500kHz)				
151	5755	-9.54	-7.32	0.32	-7.00	30.00	Pass
159	5795	-9.69	-7.47	0.32	-7.15	30.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

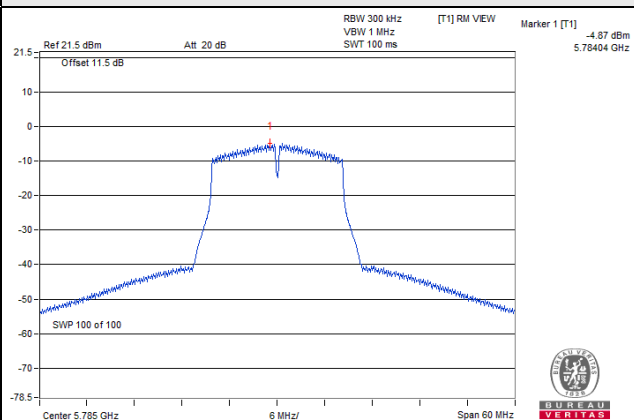
802.11ac (VHT80)

Chan.	Freq. (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	Total PSD with Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
		(dBm/300kHz)	(dBm/500kHz)				
155	5775	-15.44	-13.22	0.59	-12.63	30.00	Pass

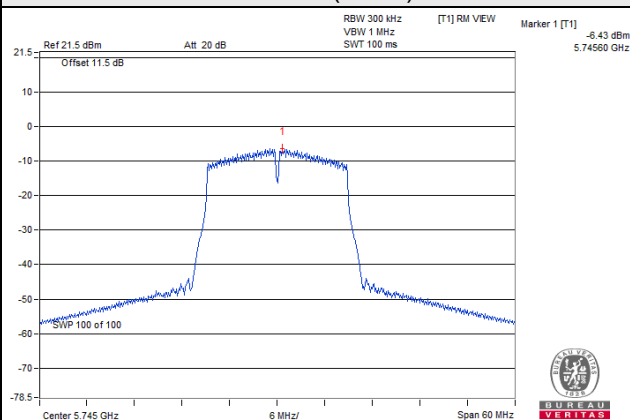
Note: Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

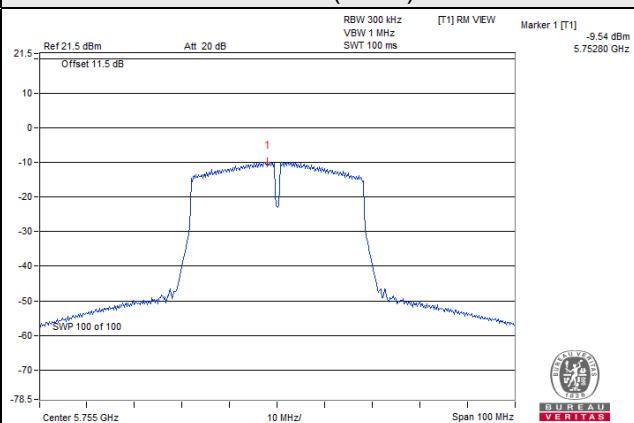
802.11a



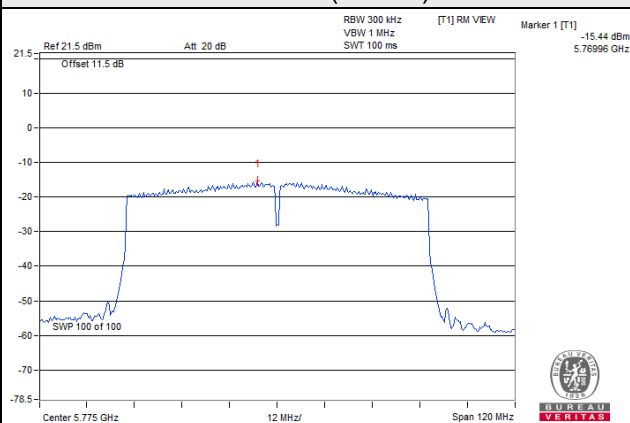
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)

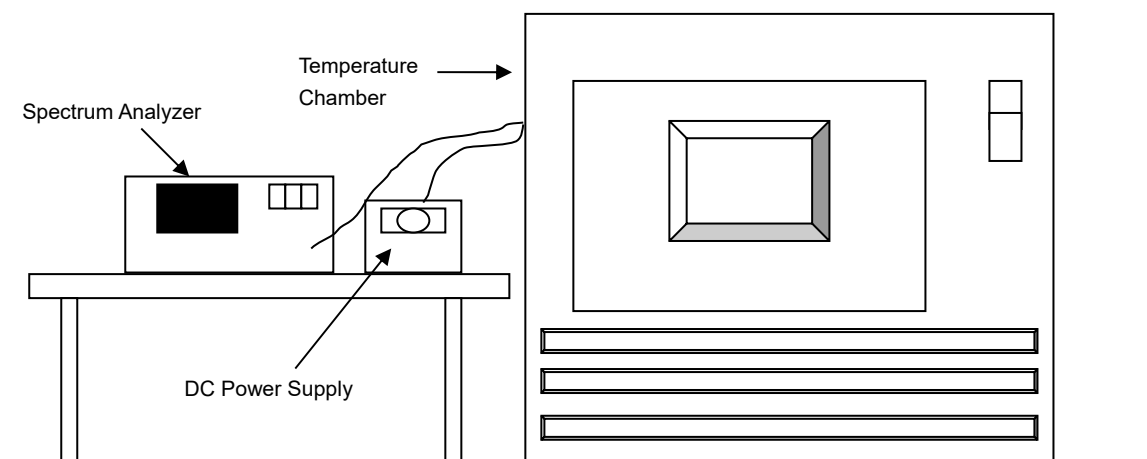


4.6 Frequency Stability

4.6.1 Limits of Frequency Stability Measurement

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

4.6.2 Test Setup



4.6.3 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100040	Sep. 15, 2021	Sep. 14, 2022
Standard Temperature And Humidity Chamber TERCHY	HRM-120RF	931022	Jan. 03, 2022	Jan. 02, 2023
Digital Multimeter Fluke	87-III	70360755	Jul. 08, 2021	Jul. 07, 2022
DC Power Supply TOPWARD	6306A	727263	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.6.4 Test Procedure

- The EUT was placed inside the environmental test chamber and powered by nominal DC voltage.
- Turn the EUT on and couple its output to a spectrum analyzer.
- Turn the EUT off and set the chamber to the highest temperature specified.
- Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.
- Repeat step d with every 10 degrees reduction until the lowest temperature achieved.
- The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

4.6.5 Deviation from Test Standard

No deviation.

4.6.6 EUT Operating Condition

Set the EUT transmit at un-modulation mode to test frequency stability.

4.6.7 Test Results

Frequency Stability Versus Temp.									
Operating Frequency: 5180MHz									
Temp. (°C)	Power Supply (Vdc)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
50	3.85	5179.9908	Pass	5179.9915	Pass	5179.9932	Pass	5179.9907	Pass
40	3.85	5179.9791	Pass	5179.9778	Pass	5179.98	Pass	5179.978	Pass
30	3.85	5180.0246	Pass	5180.0255	Pass	5180.0234	Pass	5180.0232	Pass
20	3.85	5180.0081	Pass	5180.0075	Pass	5180.0082	Pass	5180.0061	Pass
10	3.85	5179.9875	Pass	5179.9854	Pass	5179.9878	Pass	5179.9851	Pass
5	3.85	5179.9895	Pass	5179.9872	Pass	5179.9894	Pass	5179.9865	Pass

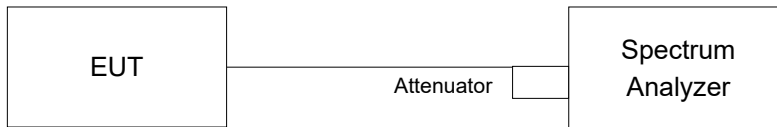
Frequency Stability Versus Voltage									
Operating Frequency: 5180MHz									
Temp. (°C)	Power Supply (Vdc)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
20	4.4275	5180.0135	Pass	5180.0123	Pass	5180.0135	Pass	5180.0125	Pass
	3.85	5180.0081	Pass	5180.0075	Pass	5180.0082	Pass	5180.0061	Pass
	3.2725	5180.0122	Pass	5180.0129	Pass	5180.0082	Pass	5180.0116	Pass

4.7 6dB Bandwidth Measurement

4.7.1 Limits of 6dB Bandwidth Measurement

The minimum of 6dB Bandwidth Measurement is 0.5MHz.

4.7.2 Test Setup



4.7.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.7.4 Test Procedure

- Set resolution bandwidth (RBW) = 100kHz
- Set the video bandwidth (VBW) $\geq 3 \times$ RBW, Detector = Peak.
- Trace mode = max hold.
- Sweep = auto couple.
- Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission

4.7.5 Deviation from Test Standard

No deviation.

4.7.6 EUT Operating Condition

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.7.7 Test Results

802.11a

Chan.	Freq. (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
149	5745	15.15	0.50	Pass
157	5785	15.19	0.50	Pass
165	5825	15.37	0.50	Pass

802.11n (HT20)

Chan.	Freq. (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
149	5745	15.20	0.50	Pass
157	5785	15.19	0.50	Pass
165	5825	15.39	0.50	Pass

802.11n (HT40)

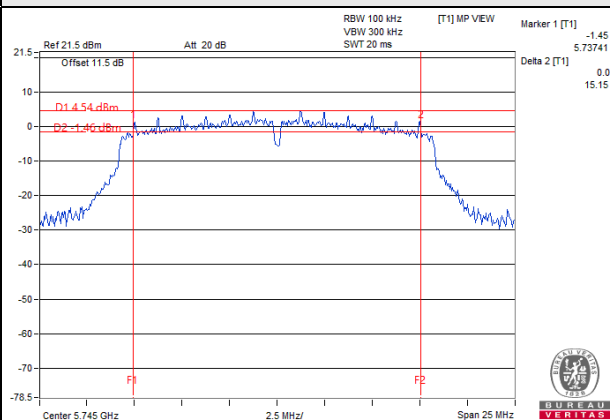
Chan.	Freq. (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
151	5755	35.24	0.50	Pass
159	5795	35.26	0.50	Pass

802.11ac (VHT80)

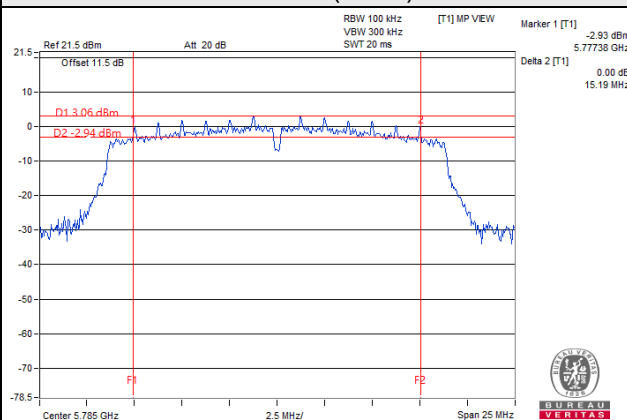
Chan.	Freq. (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
155	5775	75.41	0.50	Pass

Spectrum Plot of Worst Value

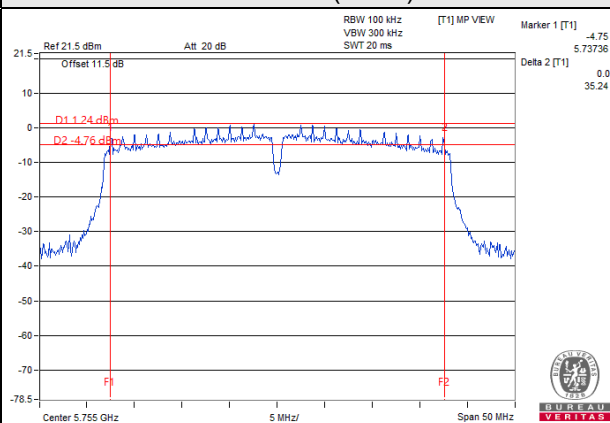
802.11a



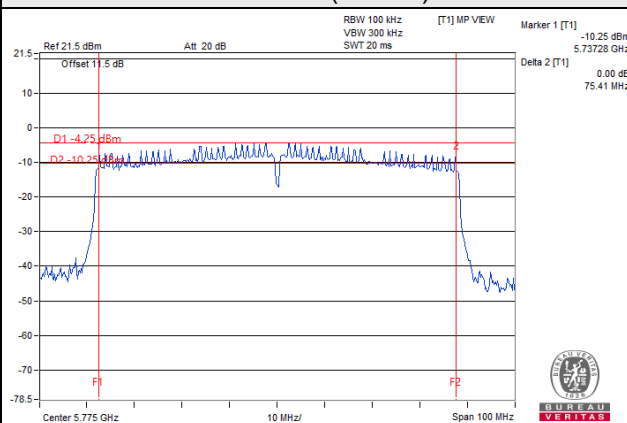
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)

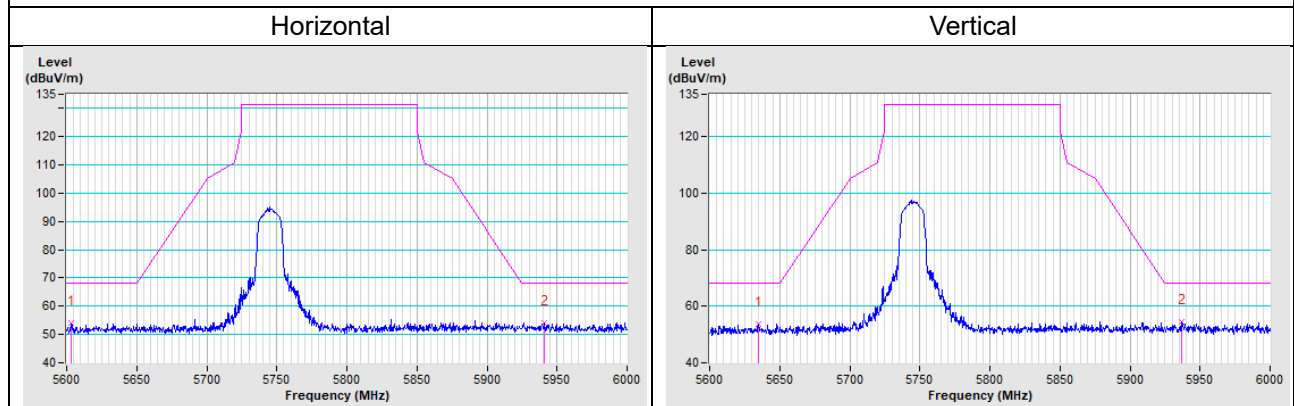


5 Pictures of Test Arrangements

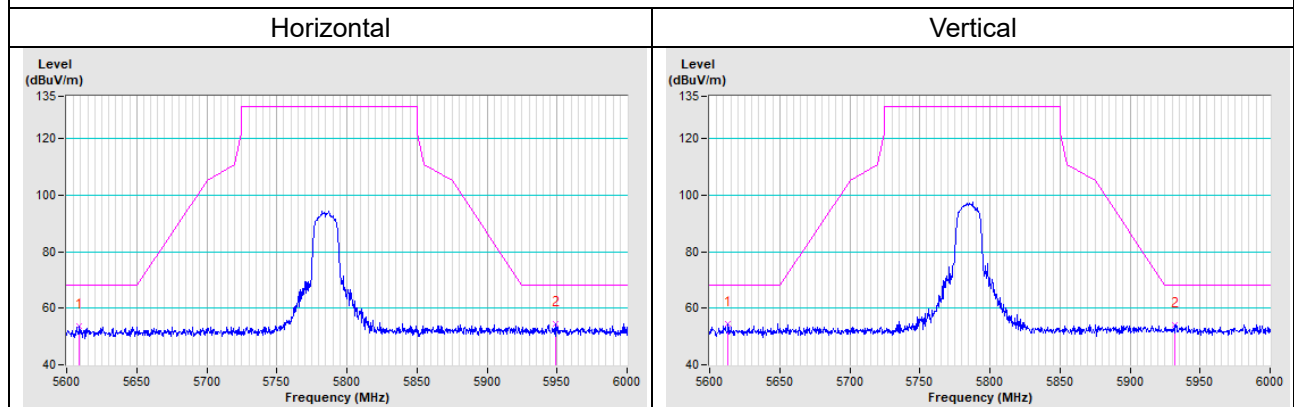
Please refer to the attached file (Test Setup Photo).

Annex A - Radiated Out of Band Emission (OOBE) Measurement (For U-NII-3 band)

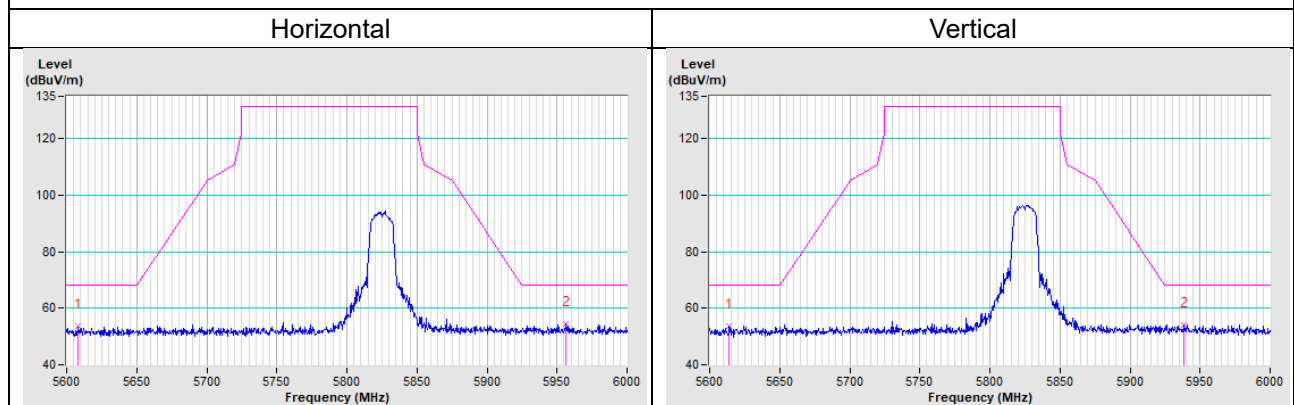
802.11a CH 149 : 5745 MHz



802.11a CH 157 : 5785 MHz

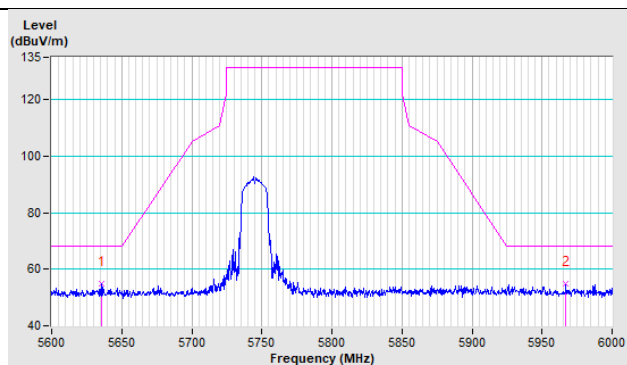


802.11a CH 165 : 5825 MHz

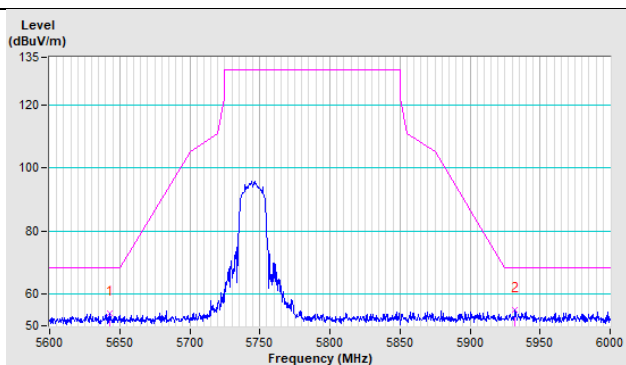


802.11n (HT20) CH 149 : 5745 MHz

Horizontal

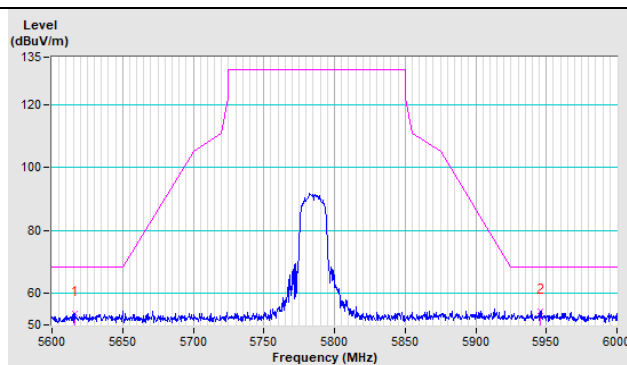


Vertical

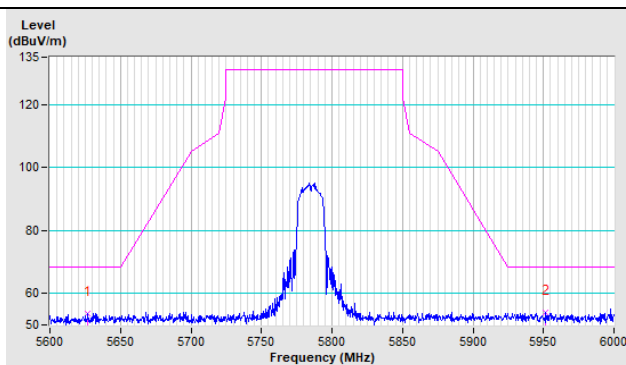


802.11n (HT20) CH 157 : 5785 MHz

Horizontal

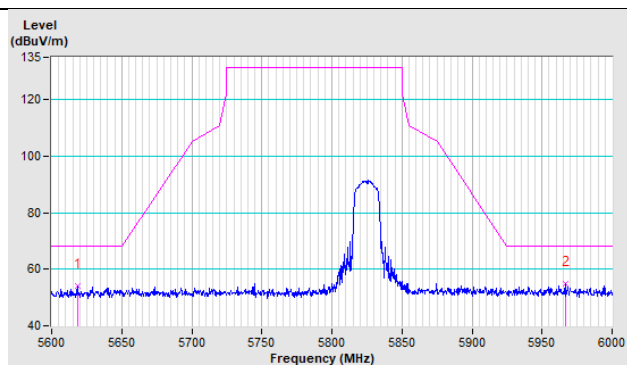


Vertical

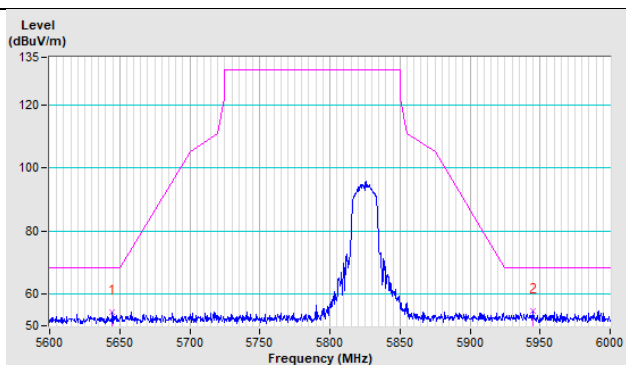


802.11n (HT20) CH 165 : 5825 MHz

Horizontal

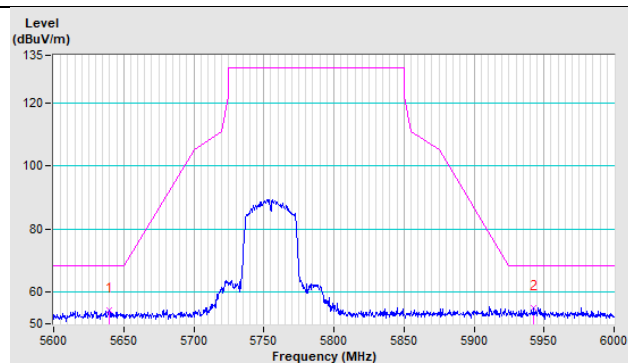


Vertical

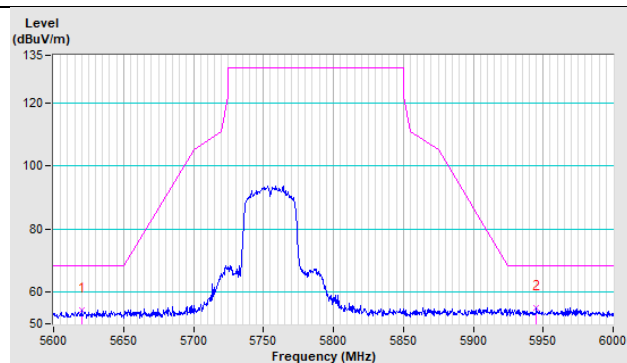


802.11n (HT40) CH 151 : 5755 MHz

Horizontal

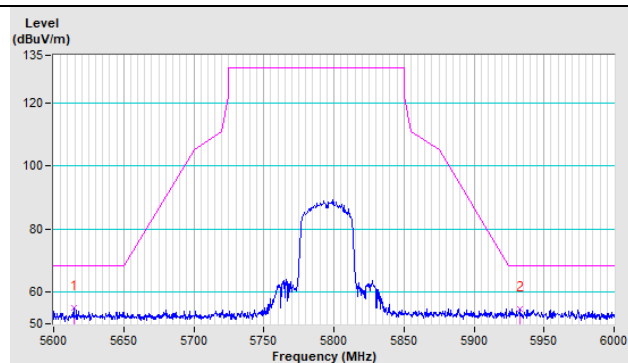


Vertical

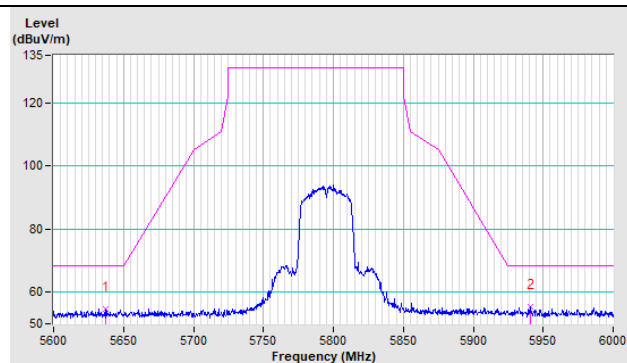


802.11n (HT40) CH 159 : 5795 MHz

Horizontal

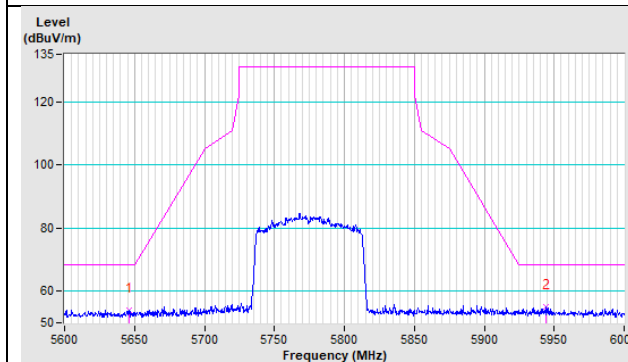


Vertical

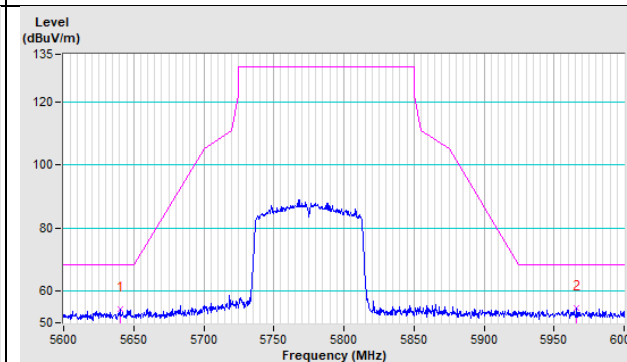


802.11ac (VHT80) CH 155 : 5775 MHz

Horizontal



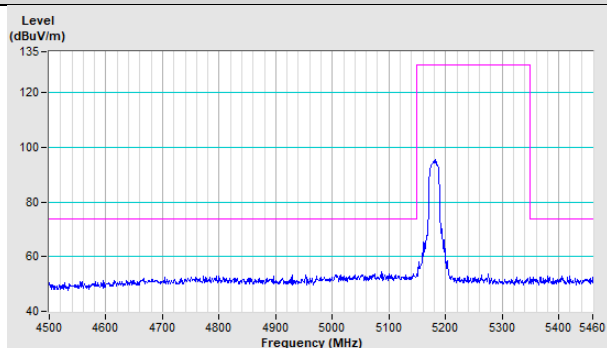
Vertical



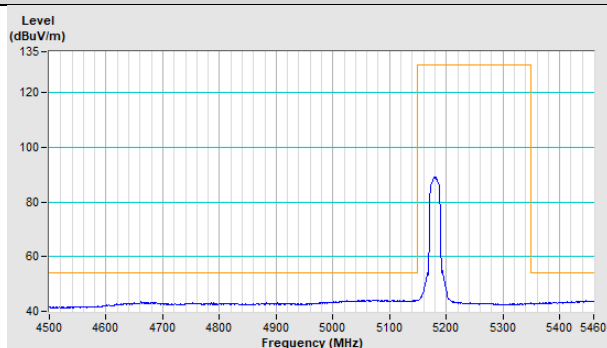
Annex B - Band Edge Measurement

802.11a Channel 36

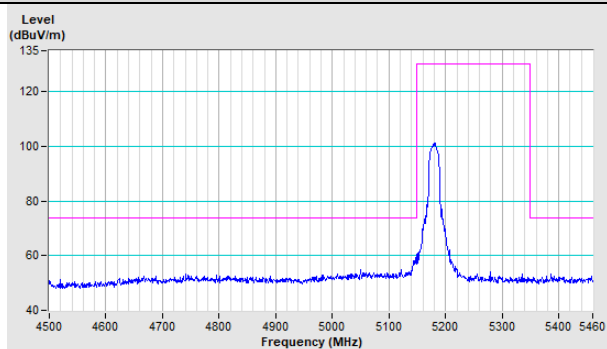
Horizontal (Peak)



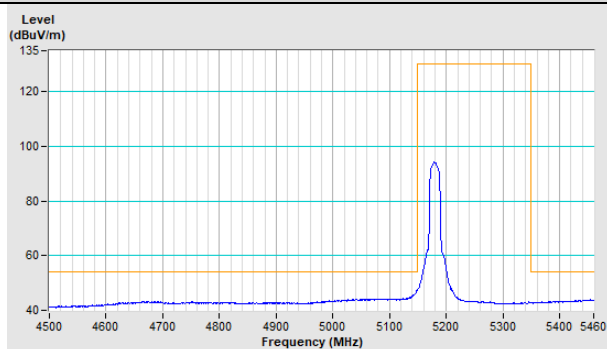
Horizontal (Average)



Vertical (Peak)

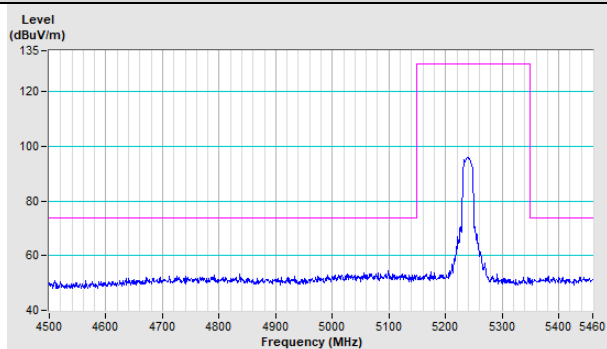


Vertical (Average)

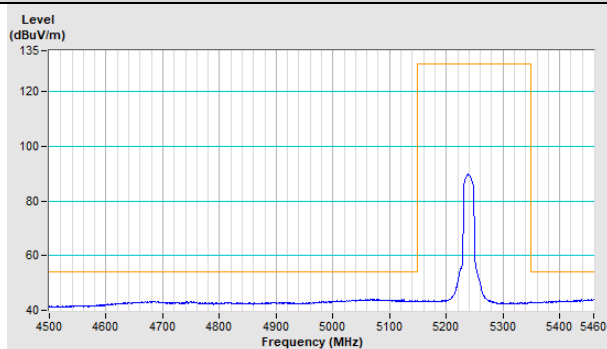


802.11a Channel 48

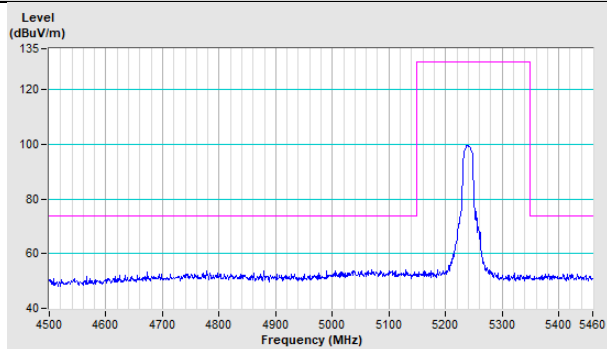
Horizontal (Peak)



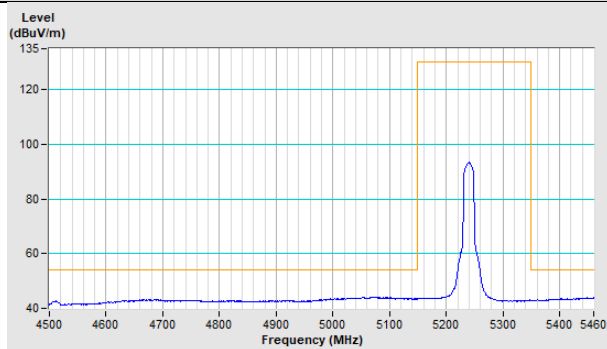
Horizontal (Average)



Vertical (Peak)

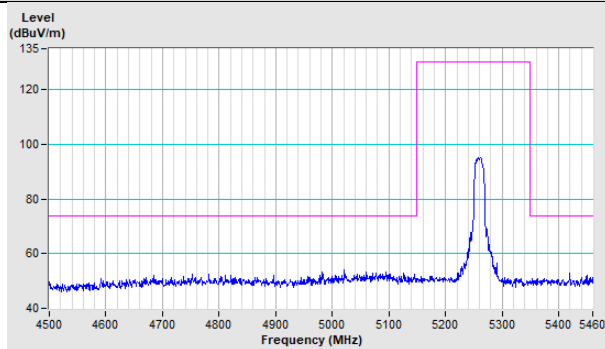


Vertical (Average)

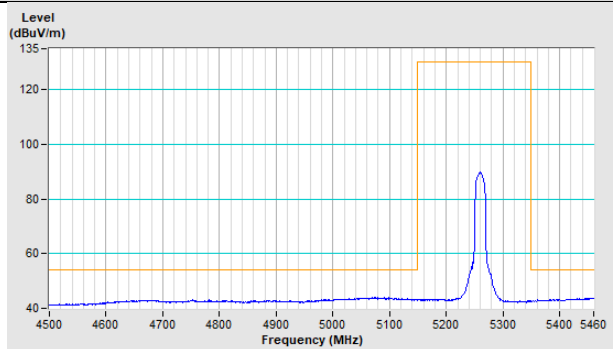


802.11a Channel 52

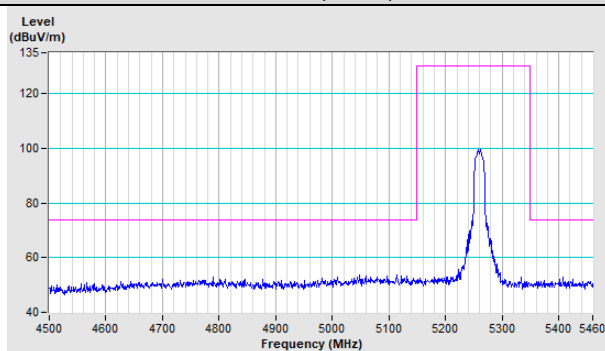
Horizontal (Peak)



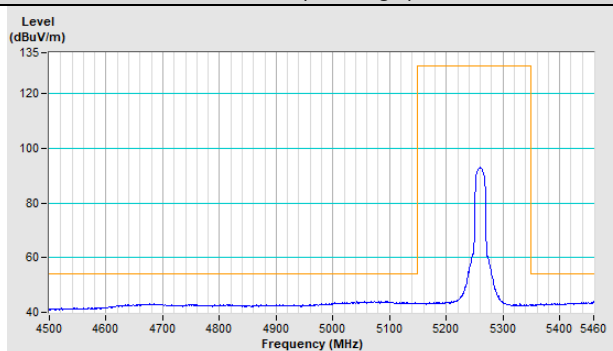
Horizontal (Average)



Vertical (Peak)

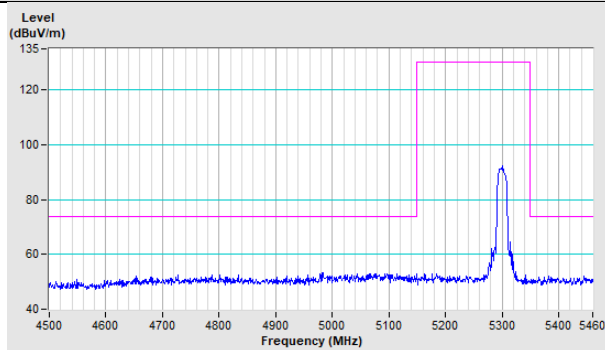


Vertical (Average)

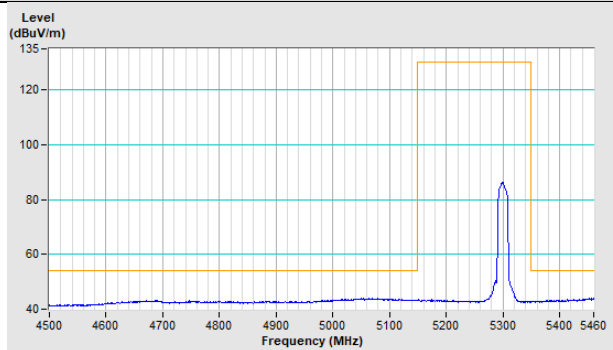


802.11a Channel 60

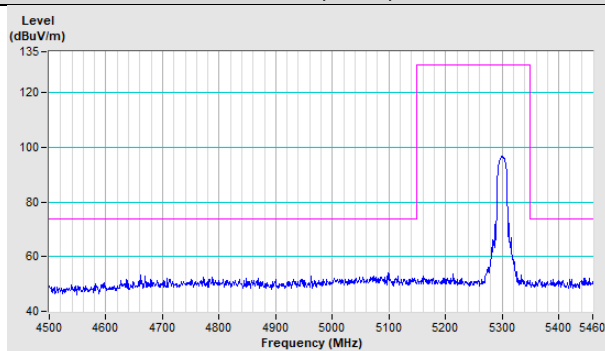
Horizontal (Peak)



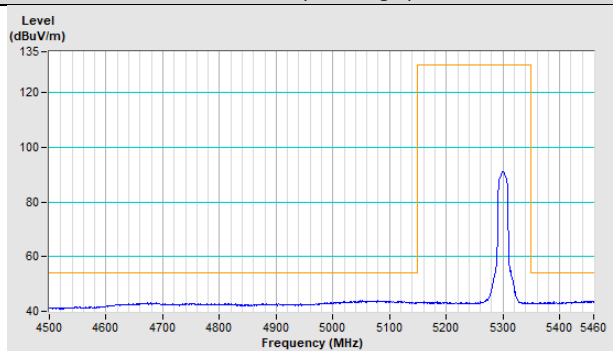
Horizontal (Average)



Vertical (Peak)

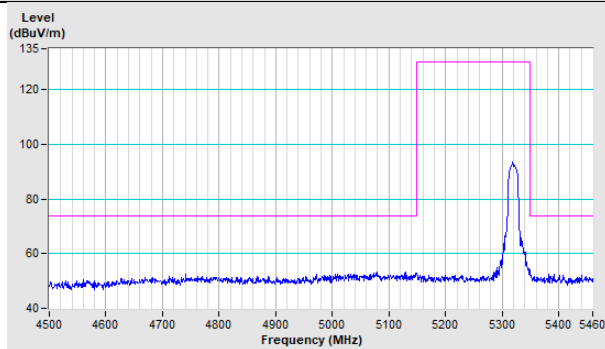


Vertical (Average)

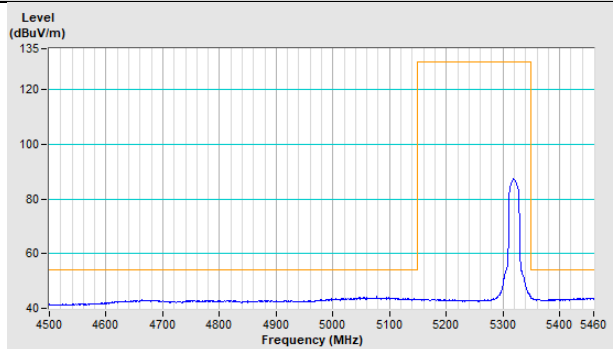


802.11a Channel 64

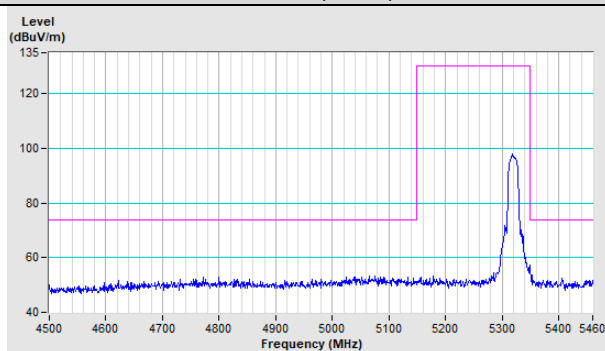
Horizontal (Peak)



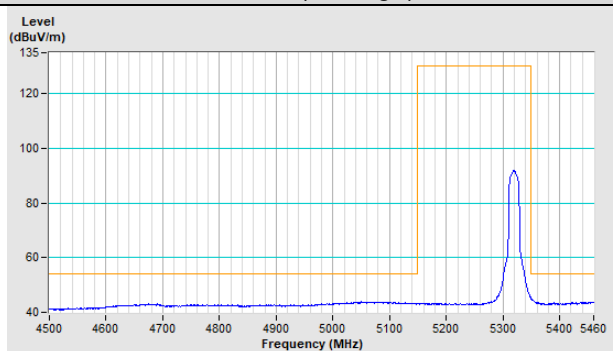
Horizontal (Average)



Vertical (Peak)

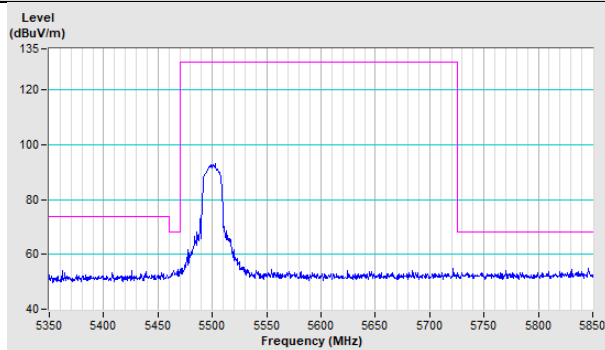


Vertical (Average)

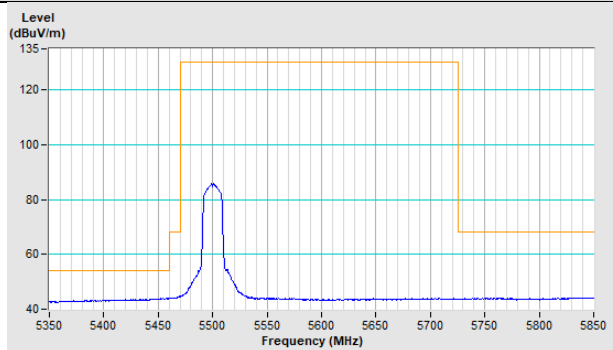


802.11a Channel 100

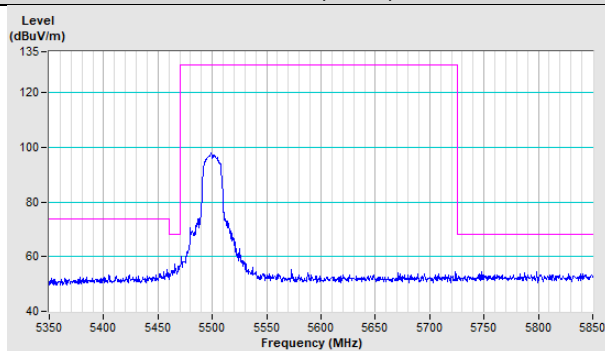
Horizontal (Peak)



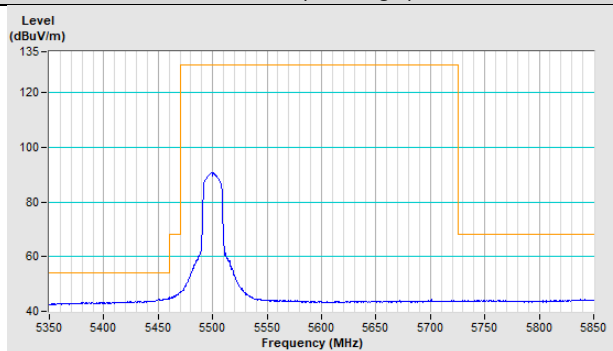
Horizontal (Average)



Vertical (Peak)

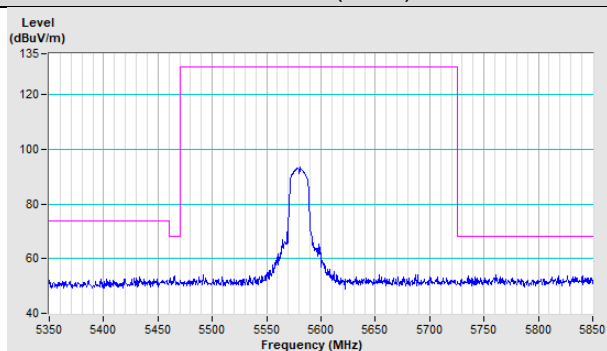


Vertical (Average)

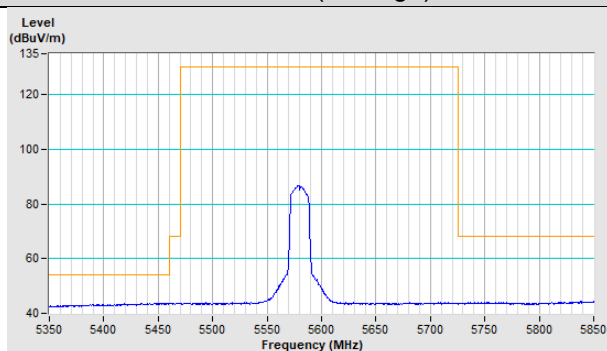


802.11a Channel 116

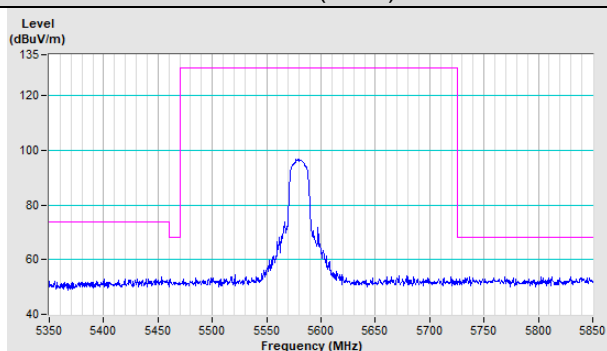
Horizontal (Peak)



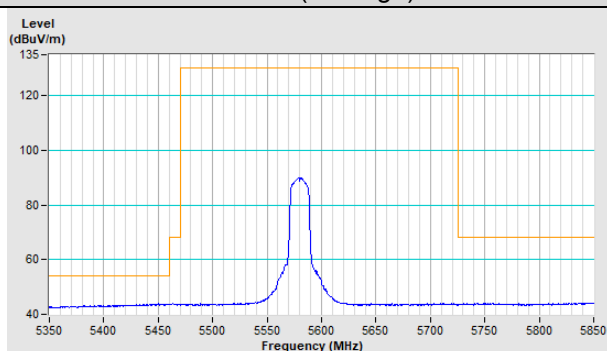
Horizontal (Average)



Vertical (Peak)

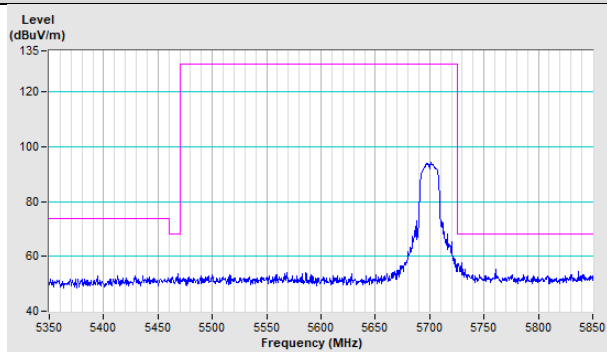


Vertical (Average)

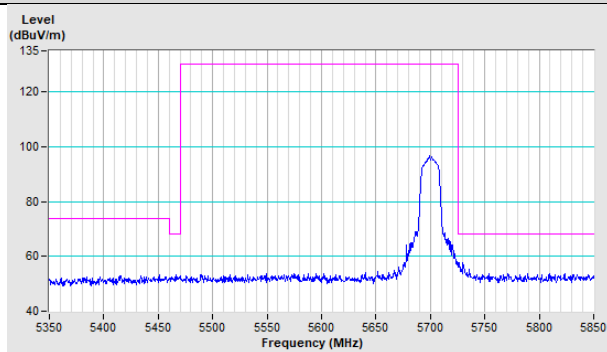


802.11a Channel 140

Horizontal (Peak)

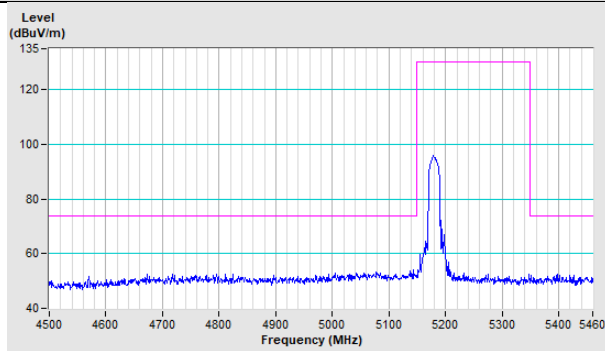


Vertical (Peak)

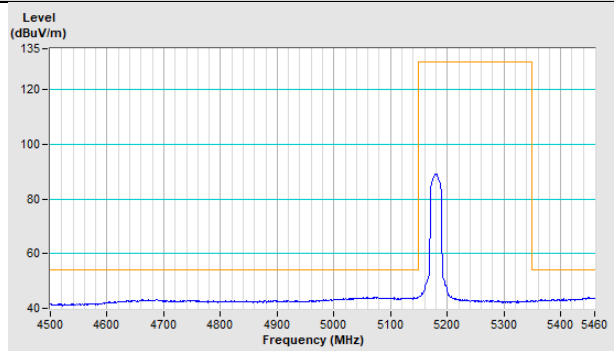


802.11n (HT20) Channel 36

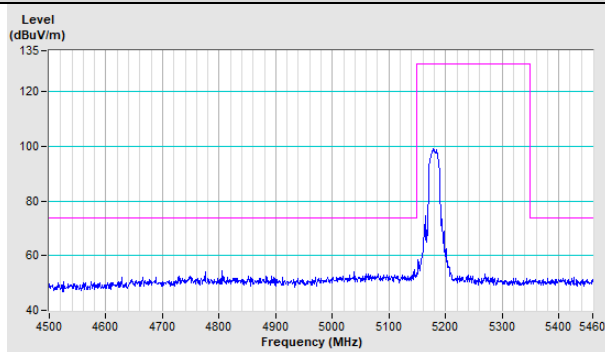
Horizontal (Peak)



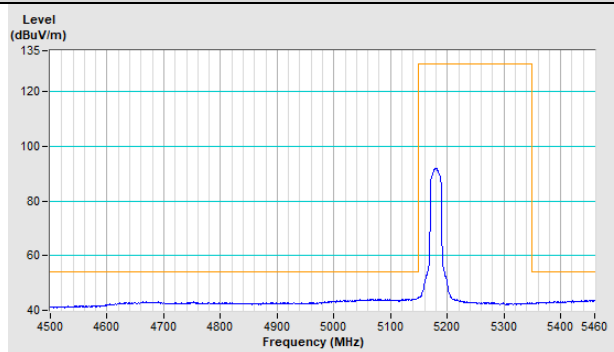
Horizontal (Average)



Vertical (Peak)

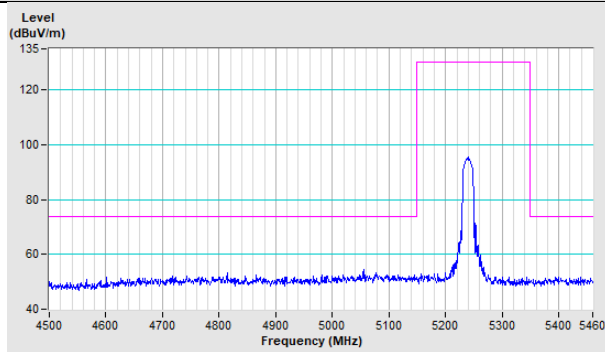


Vertical (Average)

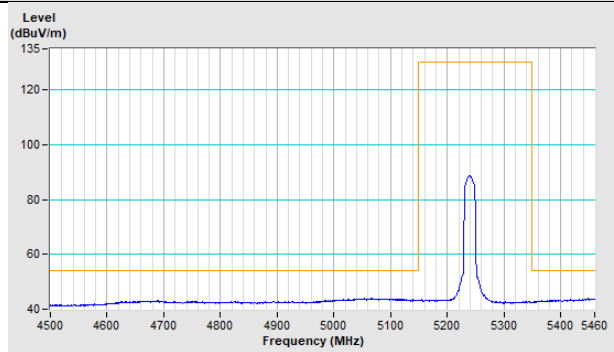


802.11n (HT20) Channel 48

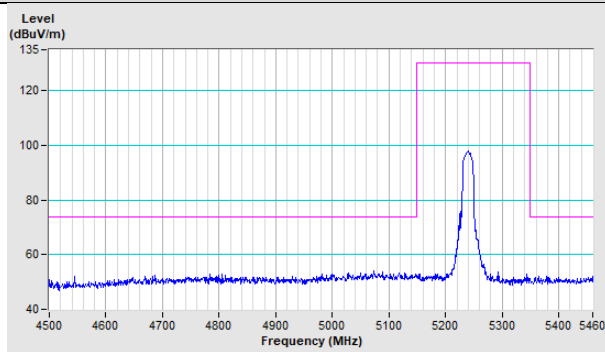
Horizontal (Peak)



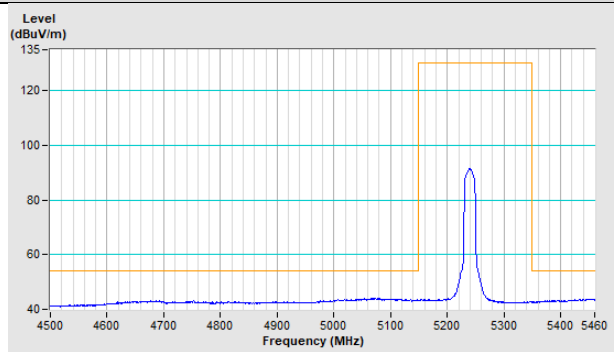
Horizontal (Average)



Vertical (Peak)

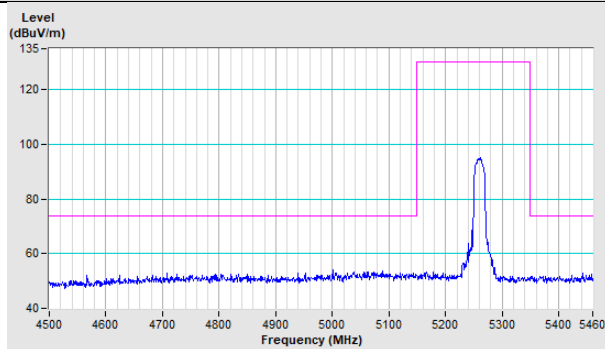


Vertical (Average)

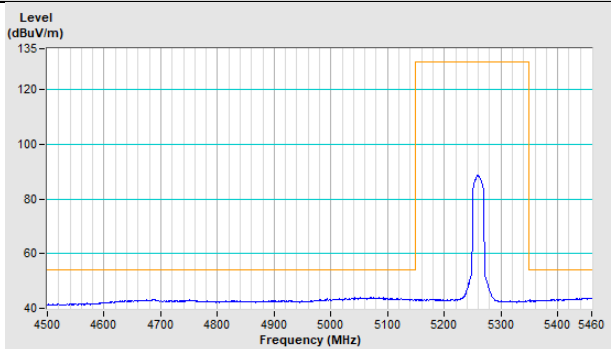


802.11n (HT20) Channel 52

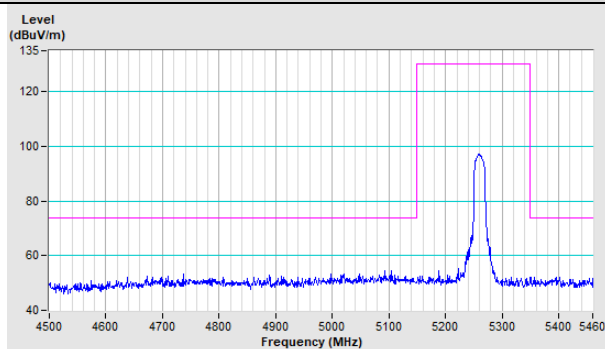
Horizontal (Peak)



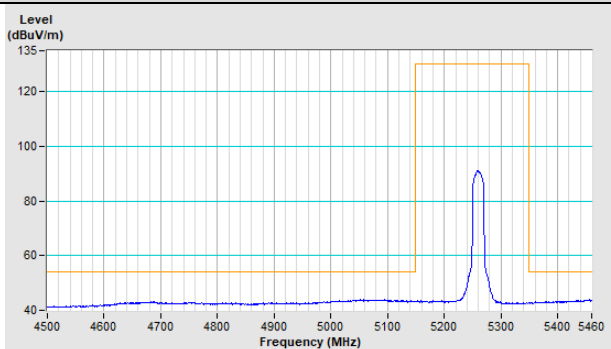
Horizontal (Average)



Vertical (Peak)

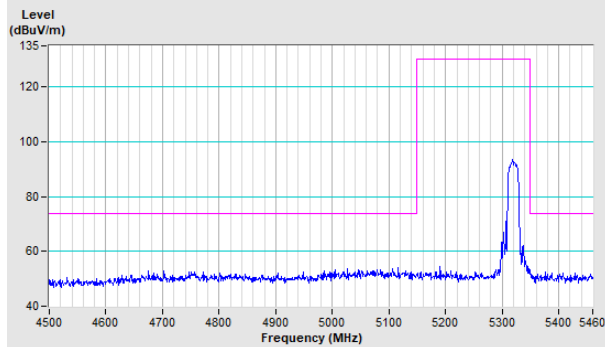


Vertical (Average)

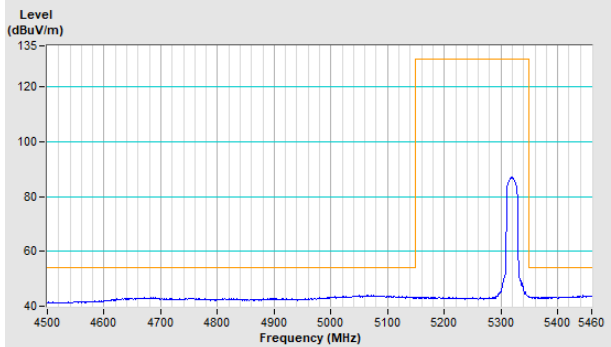


802.11n (HT20) Channel 64

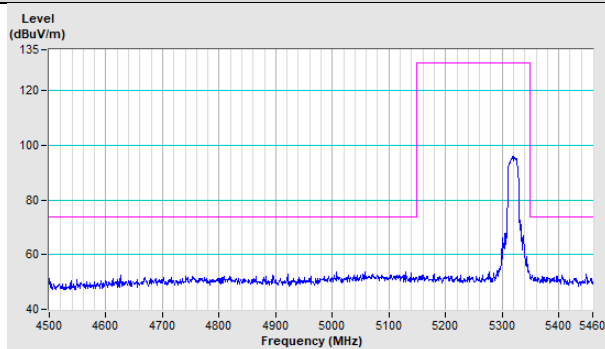
Horizontal (Peak)



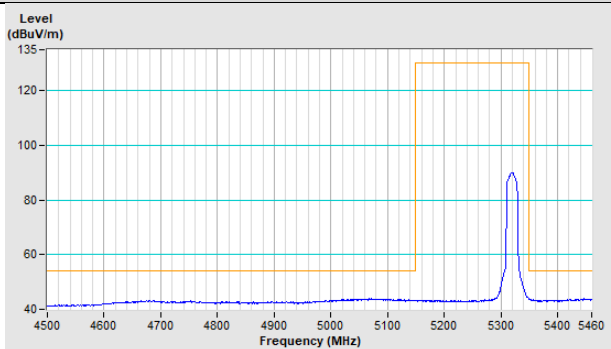
Horizontal (Average)



Vertical (Peak)

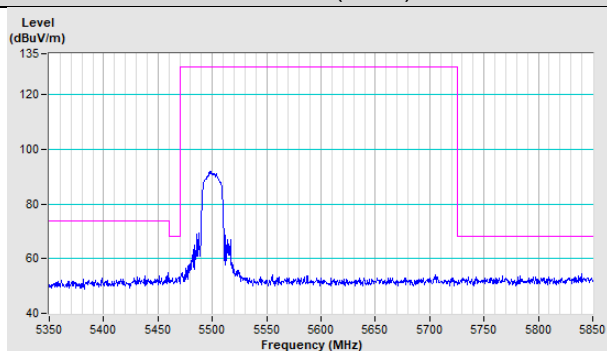


Vertical (Average)

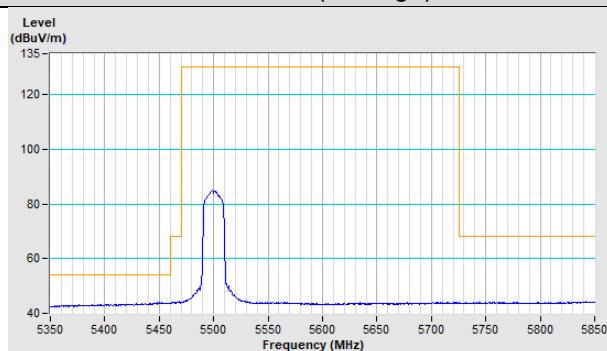


802.11n (HT20) Channel 100

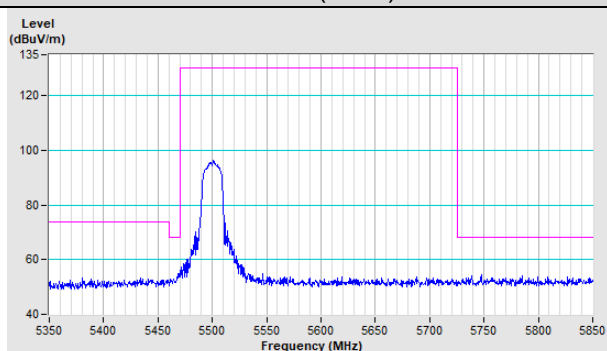
Horizontal (Peak)



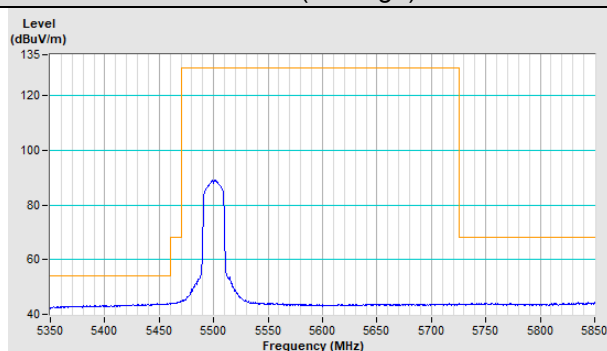
Horizontal (Average)



Vertical (Peak)

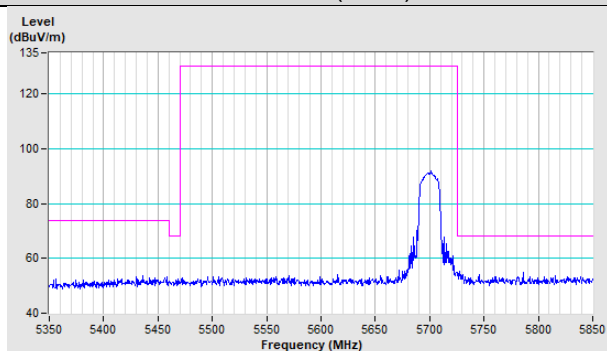


Vertical (Average)

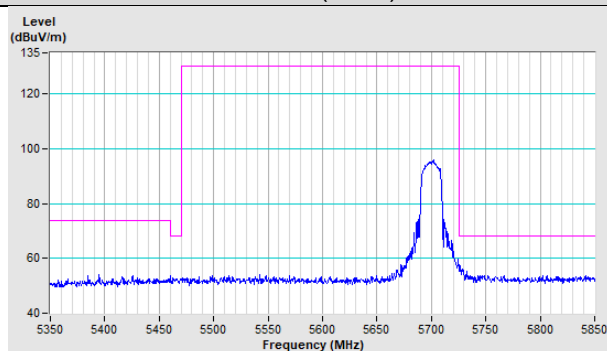


802.11n (HT20) Channel 140

Horizontal (Peak)

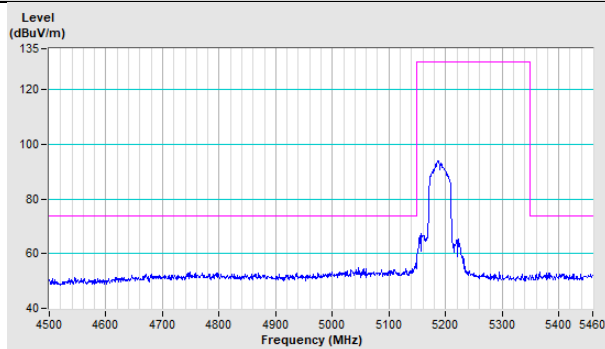


Vertical (Peak)

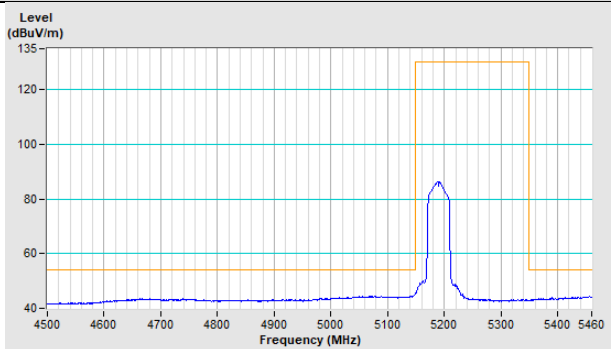


802.11n (HT40) Channel 38

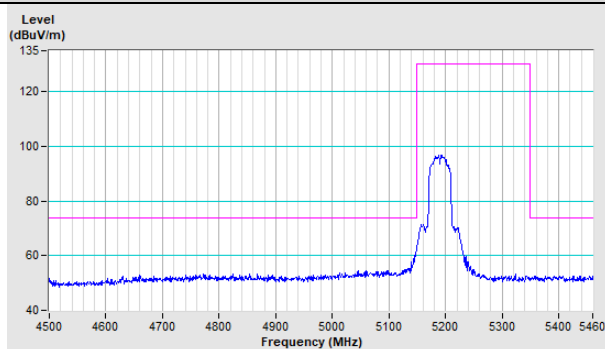
Horizontal (Peak)



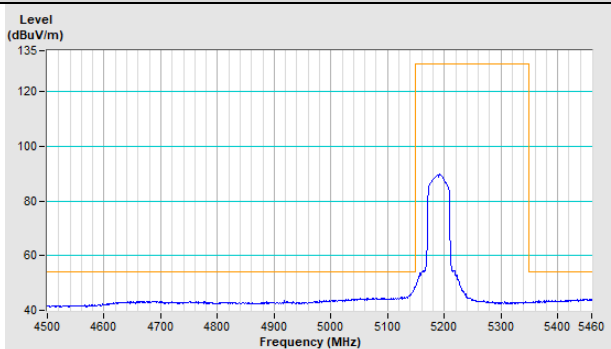
Horizontal (Average)



Vertical (Peak)

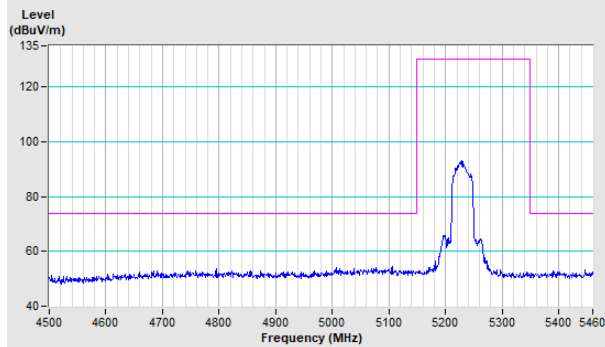


Vertical (Average)

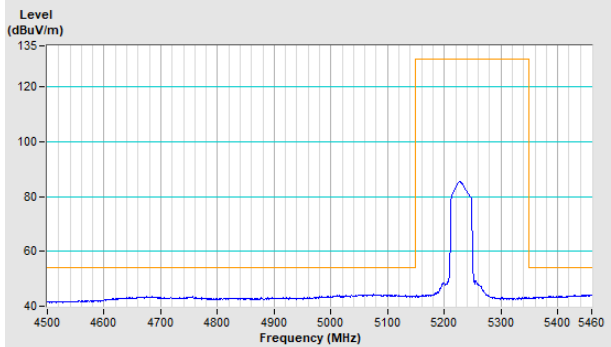


802.11n (HT40) Channel 46

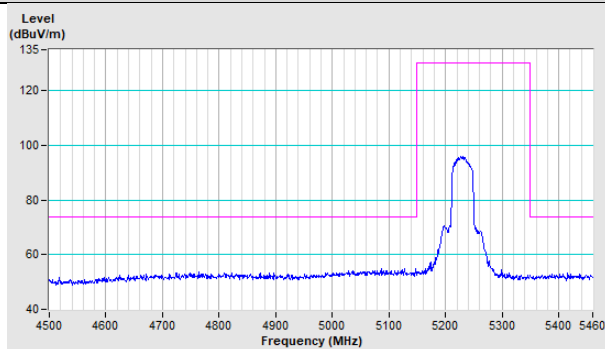
Horizontal (Peak)



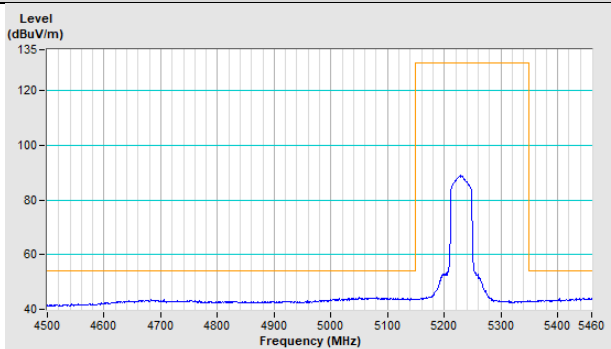
Horizontal (Average)



Vertical (Peak)

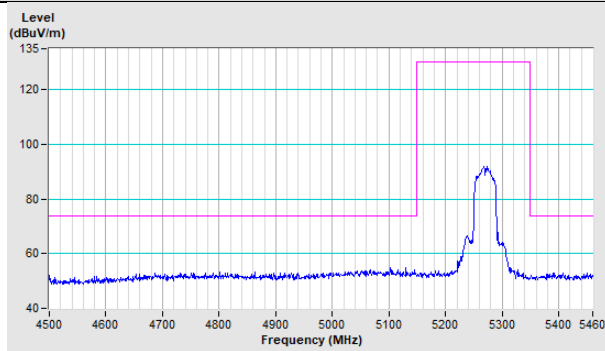


Vertical (Average)

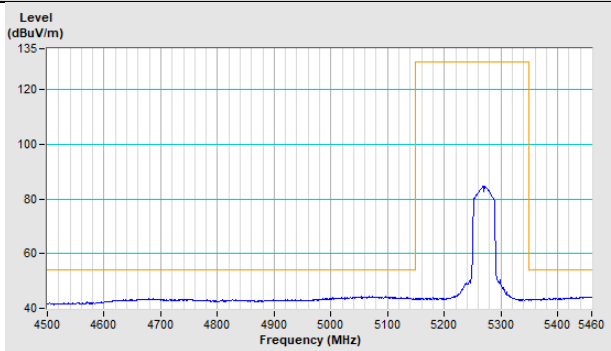


802.11n (HT40) Channel 54

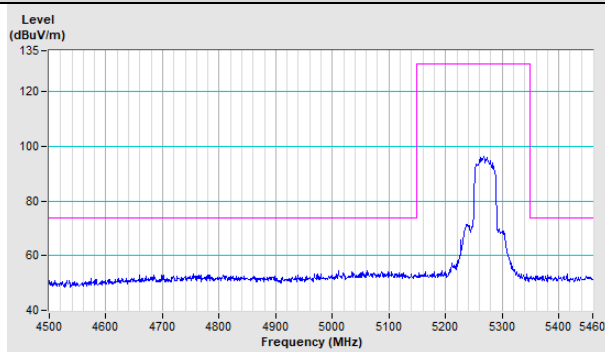
Horizontal (Peak)



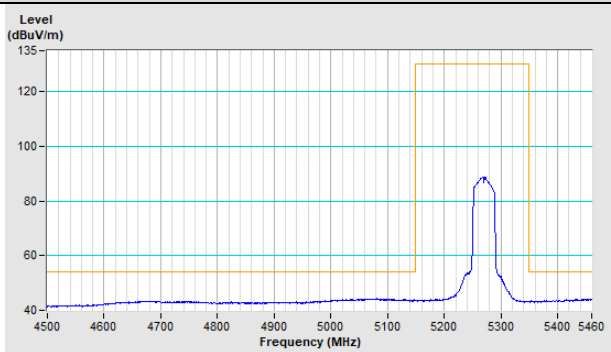
Horizontal (Average)



Vertical (Peak)

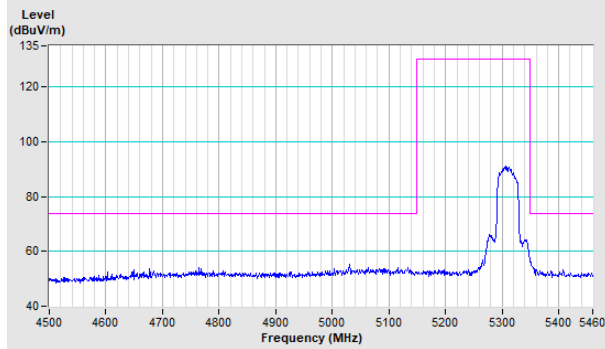


Vertical (Average)

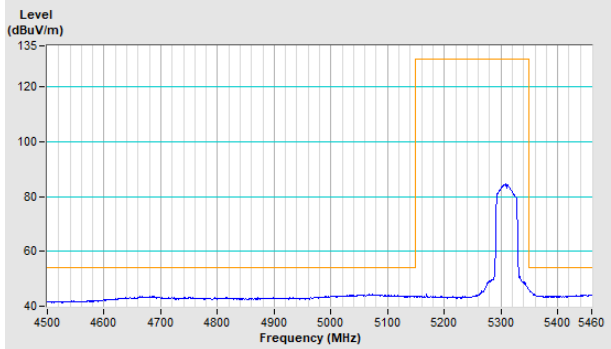


802.11n (HT40) Channel 62

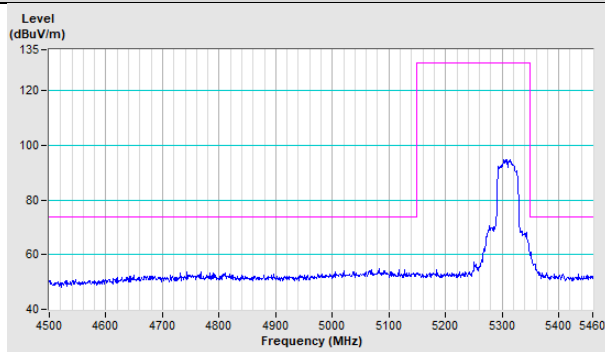
Horizontal (Peak)



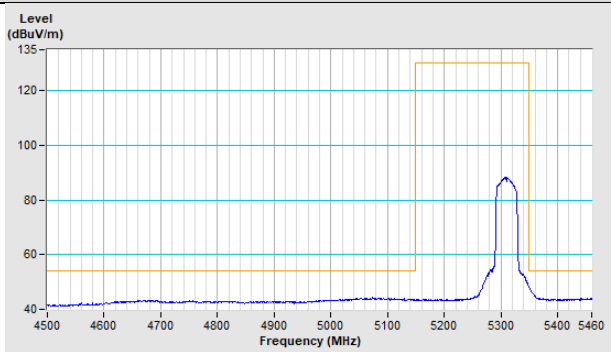
Horizontal (Average)



Vertical (Peak)

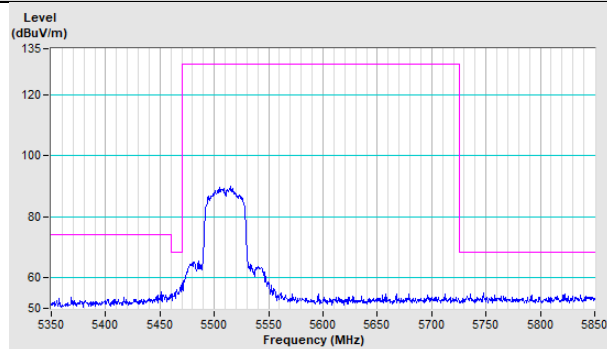


Vertical (Average)

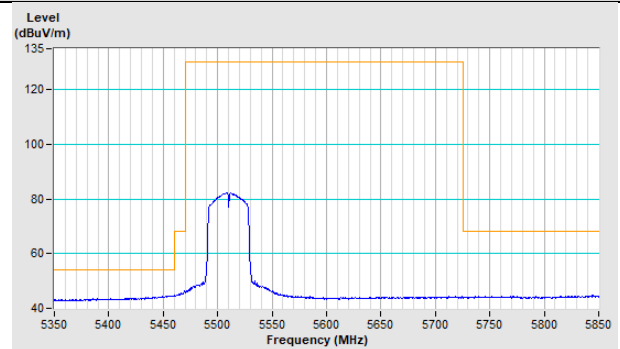


802.11n (HT40) Channel 102

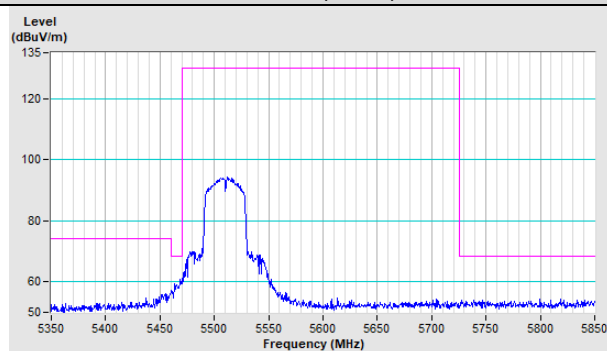
Horizontal (Peak)



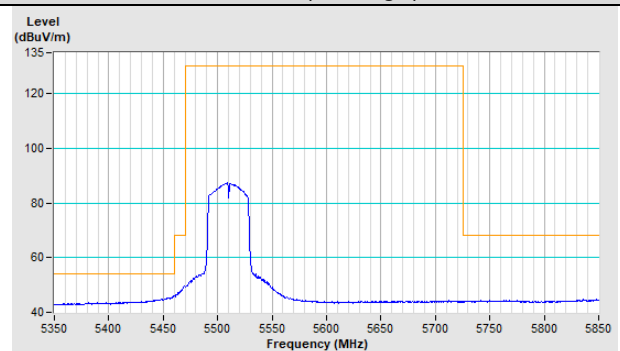
Horizontal (Average)



Vertical (Peak)

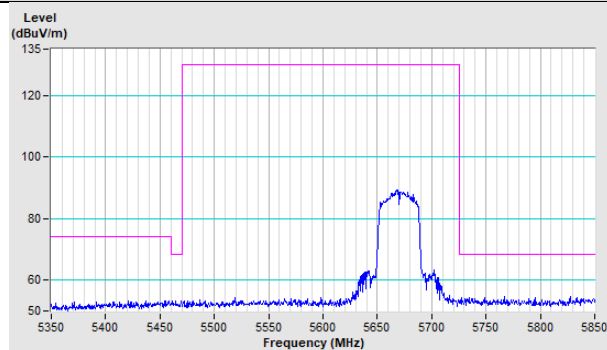


Vertical (Average)

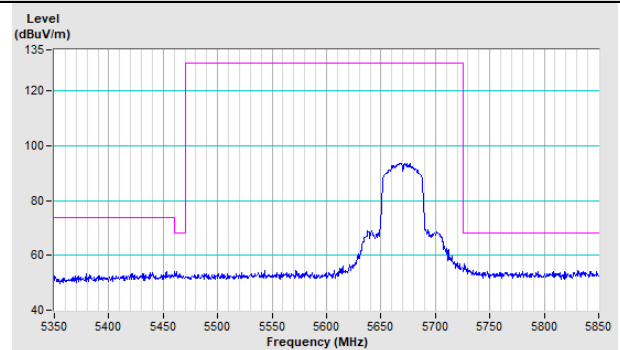


802.11n (HT40) Channel 134

Horizontal (Peak)

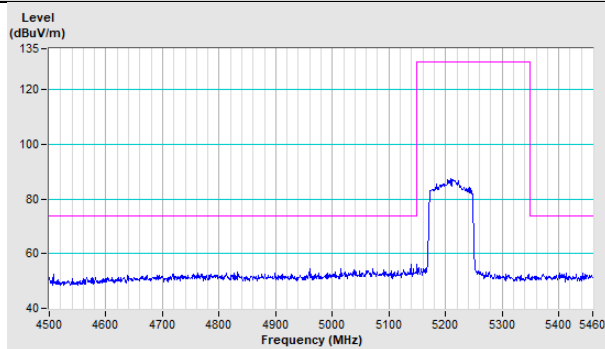


Vertical (Peak)

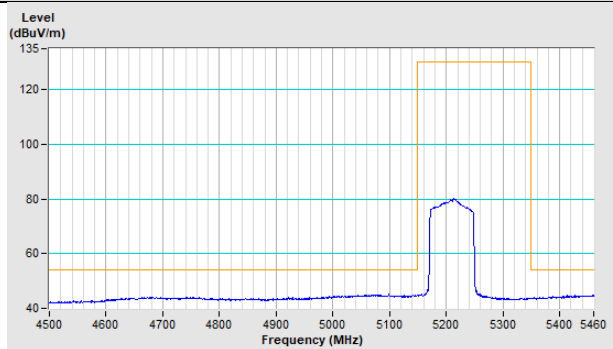


802.11ac (VHT80) Channel 42

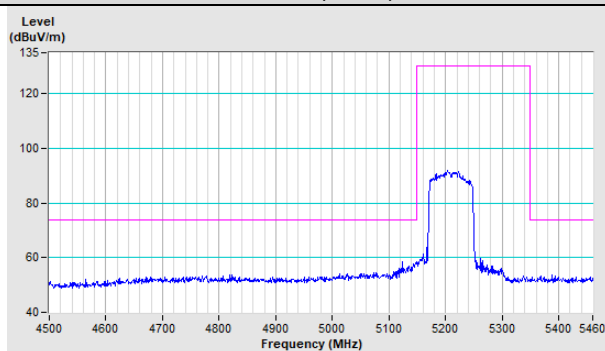
Horizontal (Peak)



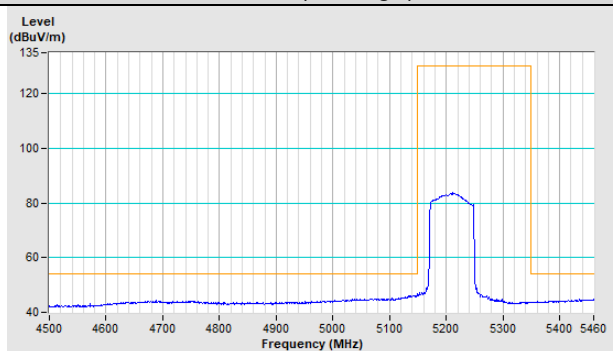
Horizontal (Average)



Vertical (Peak)

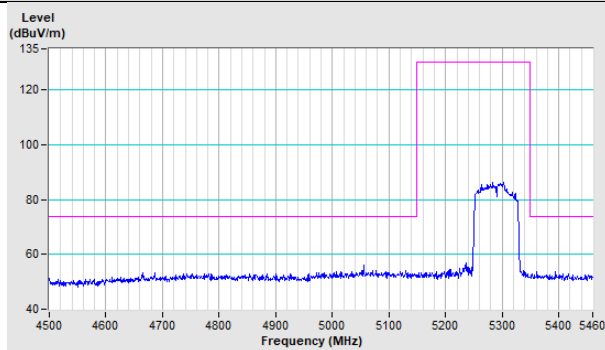


Vertical (Average)

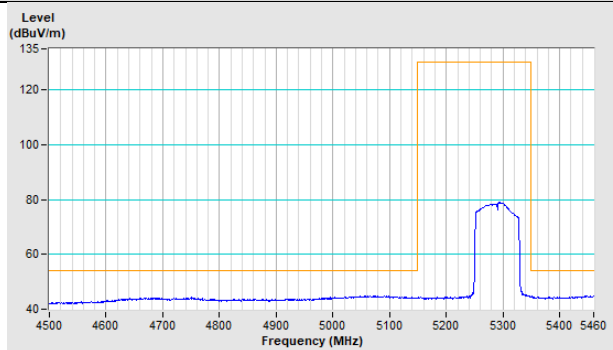


802.11ac (VHT80) Channel 58

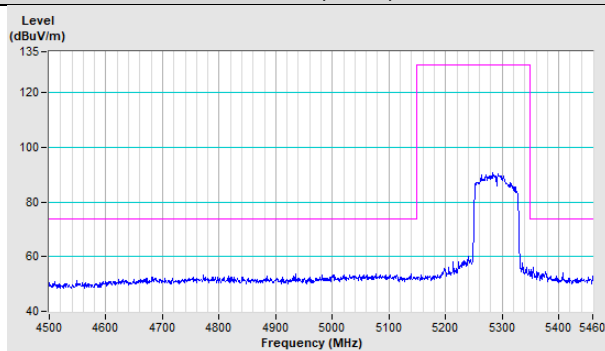
Horizontal (Peak)



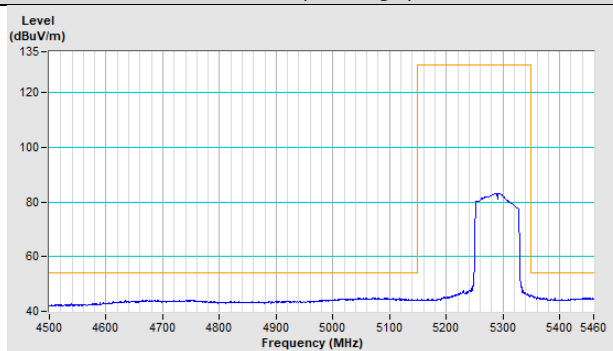
Horizontal (Average)



Vertical (Peak)

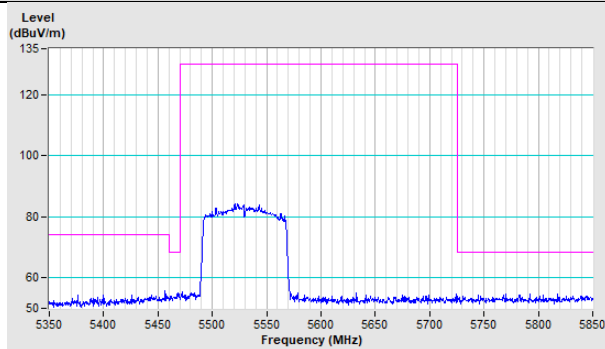


Vertical (Average)

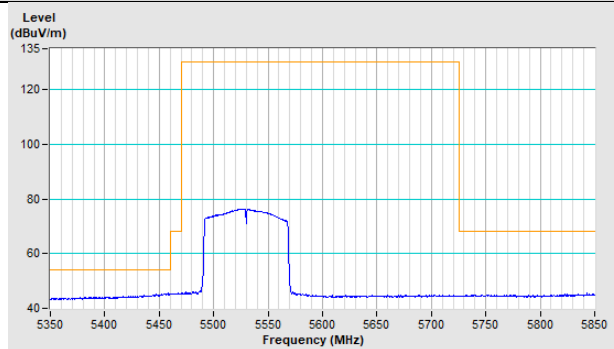


802.11ac (VHT80) Channel 106

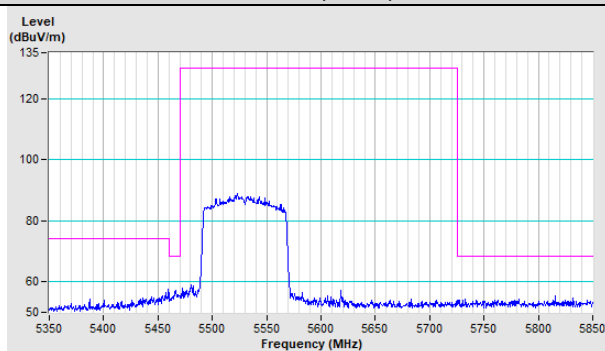
Horizontal (Peak)



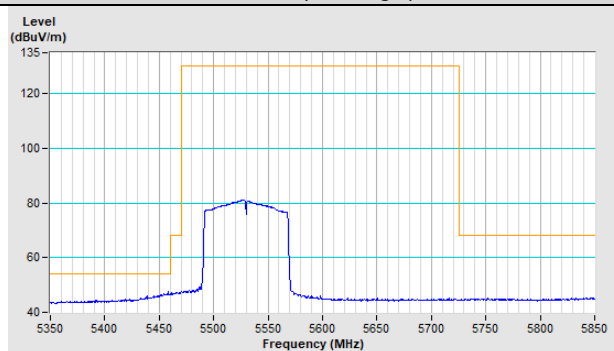
Horizontal (Average)



Vertical (Peak)

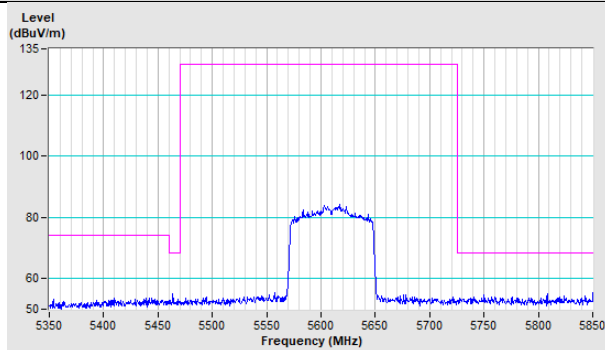


Vertical (Average)

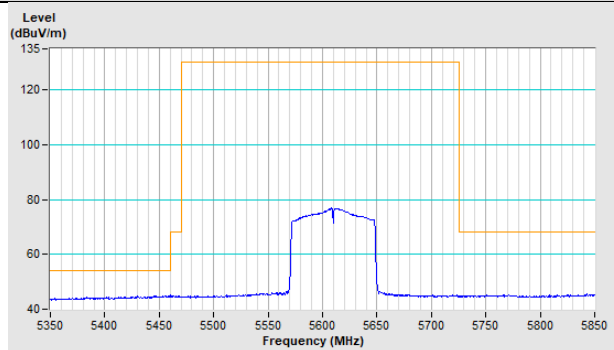


802.11ac (VHT80) Channel 122

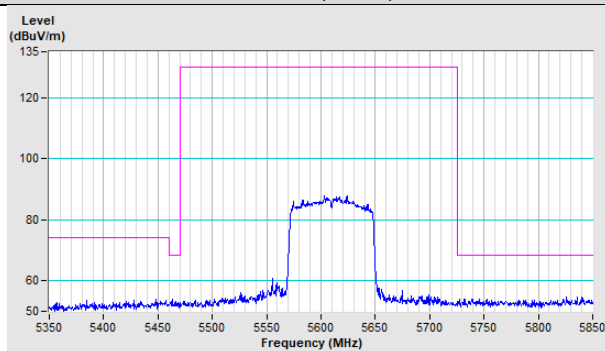
Horizontal (Peak)



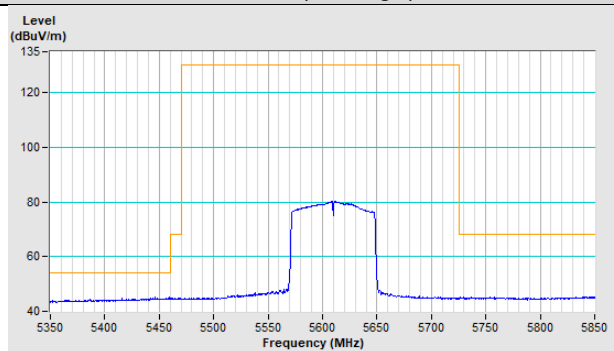
Horizontal (Average)



Vertical (Peak)



Vertical (Average)



Appendix – Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are FCC recognized accredited test firms and accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

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Web Site: www.bureauveritas-adt.com

The address and road map of all our labs can be found in our web site also.

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