

FCC Test Report

Report No.: RFBDTL-WTW-P21060469-1

FCC ID: VUI-TANG

Test Model: 84945296C

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Test Date: Mar. 17 ~ Apr. 13, 2022

Issued Date: May 18, 2022

Applicant: PEGATRON CORPORATION

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**FCC Registration /
Designation Number(1):** 788550 / TW0003

Test Location(2): No. 70, Wenming Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)

**FCC Registration /
Designation Number(2):** 281270 / TW0032



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Release Control Record

Issue No.	Description	Date Issued
RFBDTL-WTW-P21060469-1	Original release.	May 18, 2022

1 Certificate of Conformity

Product: Telematics & Network Gateway (TANG)

Brand: 

Test Model: 84945296C

Sample Status: DV

Applicant: PEGATRON CORPORATION

Test Date: Mar. 17 ~ Apr. 13, 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 : Pettie Chen , **Date:** May 18, 2022
Pettie Chen / Senior Specialist

Approved by : Jeremy Lin , **Date:** May 18, 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	NA	EUT is powered from DC
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 -2.97dB at 57.34MHz.
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 Fakra not a standard connector.

Note:

- For U-NII-3 band compliance with rule part 15.407(b)(4)(i), the OOB test plots were recorded in Annex A.
- 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.
- 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) (\pm)
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	3.00 dB
	30MHz ~ 200MHz	2.91 dB
	200MHz ~ 1000MHz	2.93 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	1.76 dB
	18GHz ~ 40GHz	1.77 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	Telematics & Network Gateway (TANG)
Brand	
Test Model	84945296C
Sample Status	DV
Power Supply Rating	9-16Vdc
Modulation Type	256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM 1024QAM, 256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDMA
Modulation Technology	OFDM, OFDMA
Transfer Rate	802.11a: 54/48/36/24/18/12/9/6Mbps 802.11n: up to 300Mbps 802.11ac: up to 866.7Mbps 802.11ax: up to 1201.0Mbps
Operating Frequency	5180 ~ 5240MHz, 5260 ~ 5320MHz, 5500 ~ 5720MHz, 5745 ~ 5825MHz
Number of Channel	5180 ~ 5240MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 4 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 2 802.11ac (VHT80), 802.11ax (HE80): 1 5260 ~ 5320MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 4 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 2 802.11ac (VHT80), 802.11ax (HE80): 1 5500 ~ 5720MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 12 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 6 802.11ac (VHT80), 802.11ax (HE80): 3 5745 ~ 5825MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 5 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 2 802.11ac (VHT80), 802.11ax (HE80): 1
Output Power	5180 ~ 5240MHz: 28.103mW 5260 ~ 5320MHz: 26.352mW 5500 ~ 5720MHz: 29.154mW 5745 ~ 5825MHz: 25.516mW
Antenna Type	Refer to note
Antenna Connector	Refer to note
Accessory Device	NA
Cable Supplied	NA

Note:

1. The EUT incorporates a MIMO function. Physically, the EUT provides 2 completed transmitters and 2 receivers.

Modulation Mode	TX Function
802.11a	2TX
802.11n (HT20)	2TX
802.11n (HT40)	2TX
802.11ac (VHT20)	2TX
802.11ac (VHT40)	2TX
802.11ac (VHT80)	2TX
802.11ax (HE20)	2TX
802.11ax (HE40)	2TX
802.11ax (HE80)	2TX

* The bandwidth and modulation are similar for HT20/HT40 on 802.11n mode and VHT20/VHT40 on 802.11ac mode and HE20/HE40 on 802.11ax mode. The bandwidth and modulation are similar for VHT80 on 802.11ac mode and HE80 on 802.11ax mode. Therefore the investigated worst case is the representative mode in test report. (Final test mode refer section 3.2.1)

2. The antenna information is listed as below.

Type	PIFA				
Connector	Fakra				
Model	85115088				
Frequency (GHz)	2.4~2.4835	5.15~5.25	5.25~5.35	5.47~5.725	5.725~5.85
Gain (dBi)	1.7	1.8	2.7	2.4	1.5

* 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. The EUT contains certified LTE module (Brand: Quectel, Model: AG521R-NA (FCC ID: VUI-DAV001)).

3.2 Description of Test Modes

For 5180 ~ 5240MHz:

4 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20):

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), 802.11ax (HE40):

Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz

1 channels are provided for 802.11ac (VHT80), 802.11ax (HE80):

Channel	Frequency
42	5210MHz

For 5260 ~ 5320MHz:

4 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20):

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), 802.11ax (HE40):

Channel	Frequency	Channel	Frequency
54	5270 MHz	62	5310 MHz

1 channels are provided for 802.11ac (VHT80), 802.11ax (HE80):

Channel	Frequency
58	5290MHz

For 5500 ~ 5720MHz:

12 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20):

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	144	5720 MHz

6 channels are provided for 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40):

Channel	Frequency	Channel	Frequency
102	5510 MHz	126	5630 MHz
110	5550 MHz	134	5670 MHz
118	5590 MHz	142	5710 MHz

3 channels are provided for 802.11ac (VHT80), 802.11ax (HE80):

Channel	Frequency	Channel	Frequency
106	5530 MHz	122	5610 MHz
138	5690 MHz		

For 5745 ~ 5825MHz:

5 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20):

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), 802.11ax (HE40):

Channel	Frequency	Channel	Frequency
151	5755MHz	159	5795MHz

1 channel is provided for 802.11ac (VHT80), 802.11ax (HE80):

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	
-	√	√	Note 2	√	-

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:

1. The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on Z-plane (antenna).
2. No need to concern of PLC due to the EUT is powered from DC.
3. For radiated emission (below 1GHz) test items chosen the worst maximum fundamental emission level channel.

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	5180-5250	36 to 48	36, 40, 48	OFDM	6.0
	802.11n (HT20)		36 to 48	36, 40, 48	OFDM	MCS0
	802.11n (HT40)		38 to 46	38, 46	OFDM	MCS0
	802.11ac (VHT80)		42	42	OFDM	MCS0
	802.11ax (HE20)		36 to 48	36, 40, 48	OFDMA	MCS0
	802.11ax (HE40)		38 to 46	38, 46	OFDMA	MCS0
	802.11ax (HE80)		42	42	OFDMA	MCS0
-	802.11a	5250-5320	52 to 64	52, 60, 64	OFDM	6.0
	802.11n (HT20)		52 to 64	52, 60, 64	OFDM	MCS0
	802.11n (HT40)		54 to 62	54, 62	OFDM	MCS0
	802.11ac (VHT80)		58	58	OFDM	MCS0
	802.11ax (HE20)		52 to 64	52, 60, 64	OFDMA	MCS0
	802.11ax (HE40)		54 to 62	54, 62	OFDMA	MCS0
	802.11ax (HE80)		58	58	OFDMA	MCS0
-	802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	6.0
	802.11n (HT20)		100 to 144	100, 116, 140, 144	OFDM	MCS0
	802.11n (HT40)		102 to 142	102, 110, 134, 142	OFDM	MCS0
	802.11ac (VHT80)		106 to 138	106, 122, 138	OFDM	MCS0
	802.11ax (HE20)		100 to 144	100, 116, 140, 144	OFDMA	MCS0
	802.11ax (HE40)		102 to 142	102, 110, 134, 142	OFDMA	MCS0
	802.11ax (HE80)		106 to 138	106, 122, 138	OFDMA	MCS0
-	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6.0
	802.11n (HT20)		149 to 165	149, 157, 165	OFDM	MCS0
	802.11n (HT40)		151 to 159	151, 159	OFDM	MCS0
	802.11ac (VHT80)		155	155	OFDM	MCS0
	802.11ax (HE20)		149 to 165	149, 157, 165	OFDMA	MCS0
	802.11ax (HE40)		151 to 159	151, 159	OFDMA	MCS0
	802.11ax (HE80)		155	155	OFDMA	MCS0

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)	5180-5250	36 to 48	144	OFDMA	MCS0
	802.11n (HT20)	5250-5320	52 to 64		OFDMA	MCS0
	802.11n (HT20)	5500-5720	100 to 144		OFDMA	MCS0
	802.11n (HT20)	5745-5825	149 to 165		OFDMA	MCS0

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	5180-5250	36 to 48	36, 40, 48	OFDM	6.0
	802.11n (HT20)		36 to 48	36, 40, 48	OFDM	MCS0
	802.11n (HT40)		38 to 46	38, 46	OFDM	MCS0
	802.11ac (VHT80)		42	42	OFDM	MCS0
	802.11ax (HE20)		36 to 48	36, 40, 48	OFDMA	MCS0
	802.11ax (HE40)		38 to 46	38, 46	OFDMA	MCS0
	802.11ax (HE80)		42	42	OFDMA	MCS0
-	802.11a	5250-5320	52 to 64	52, 60, 64	OFDM	6.0
	802.11n (HT20)		52 to 64	52, 60, 64	OFDM	MCS0
	802.11n (HT40)		54 to 62	54, 62	OFDM	MCS0
	802.11ac (VHT80)		58	58	OFDM	MCS0
	802.11ax (HE20)		52 to 64	52, 60, 64	OFDMA	MCS0
	802.11ax (HE40)		54 to 62	54, 62	OFDMA	MCS0
	802.11ax (HE80)		58	58	OFDMA	MCS0
-	802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	6.0
	802.11n (HT20)		100 to 144	100, 116, 140, 144	OFDM	MCS0
	802.11n (HT40)		102 to 142	102, 110, 134, 142	OFDM	MCS0
	802.11ac (VHT80)		106 to 138	106, 122, 138	OFDM	MCS0
	802.11ax (HE20)		100 to 144	100, 116, 140, 144	OFDMA	MCS0
	802.11ax (HE40)		102 to 142	102, 110, 134, 142	OFDMA	MCS0
	802.11ax (HE80)		106 to 138	106, 122, 138	OFDMA	MCS0
-	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6.0
	802.11n (HT20)		149 to 165	149, 157, 165	OFDM	MCS0
	802.11n (HT40)		151 to 159	151, 159	OFDM	MCS0
	802.11ac (VHT80)		155	155	OFDM	MCS0
	802.11ax (HE20)		149 to 165	149, 157, 165	OFDMA	MCS0
	802.11ax (HE40)		151 to 159	151, 159	OFDMA	MCS0
	802.11ax (HE80)		155	155	OFDMA	MCS0

Test Condition:

Applicable to	Environmental Conditions	Input Power (System)	Tested by
RE \geq 1G	22 deg. C, 64% RH	12Vdc	Tim Chen Hans Wu
RE $<$ 1G	21 deg. C, 67% RH	12Vdc	Tim Chen
APCM	25 deg. C, 60% RH	12Vdc	Chris Lin

3.3 Duty Cycle of Test Signal

Duty cycle of test signal is $\geq 98\%$, duty factor is not required.

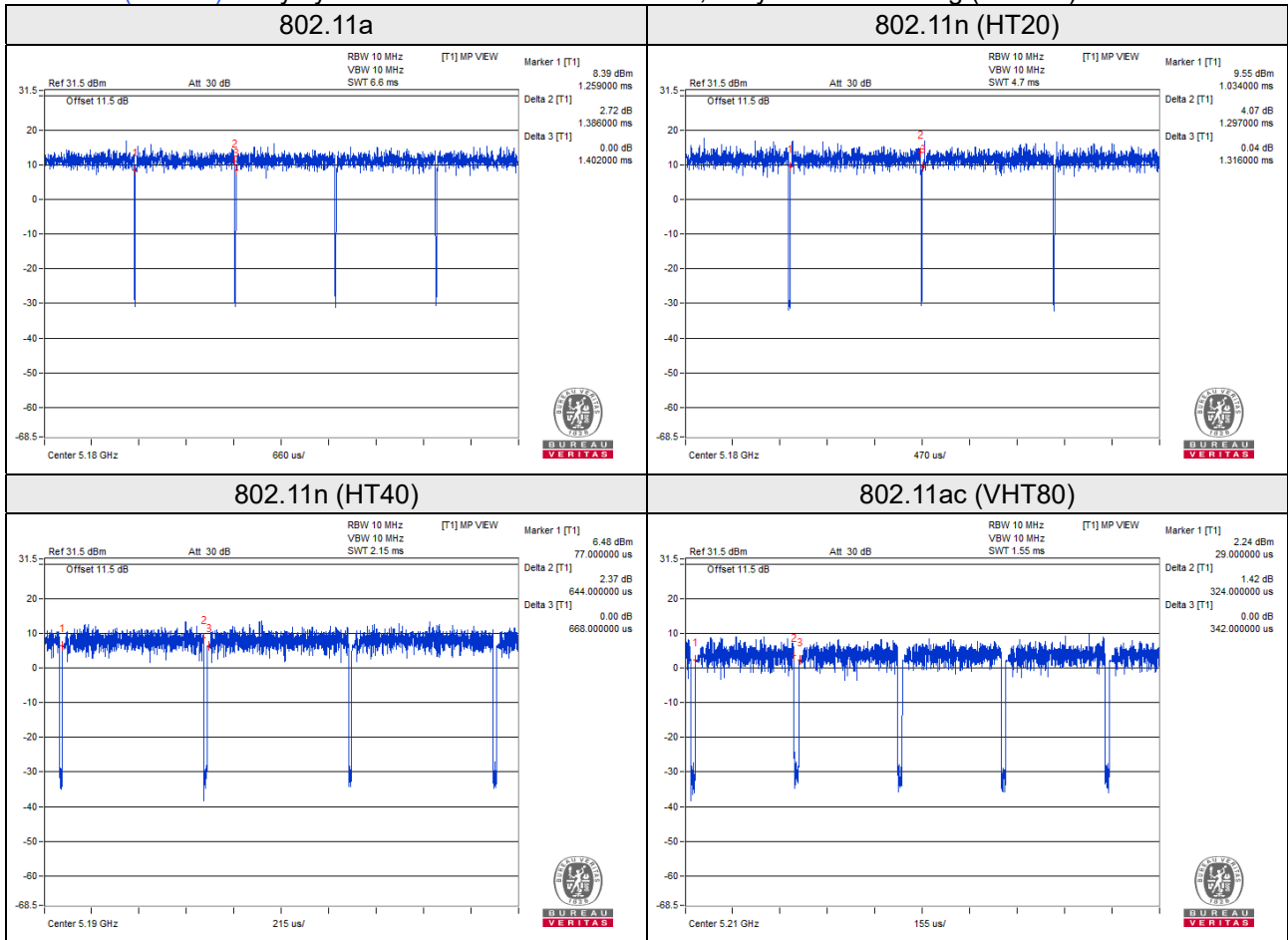
Duty cycle of test signal is $< 98\%$, duty factor is required.

802.11a: Duty cycle = 1.386ms/1.402ms = 0.989

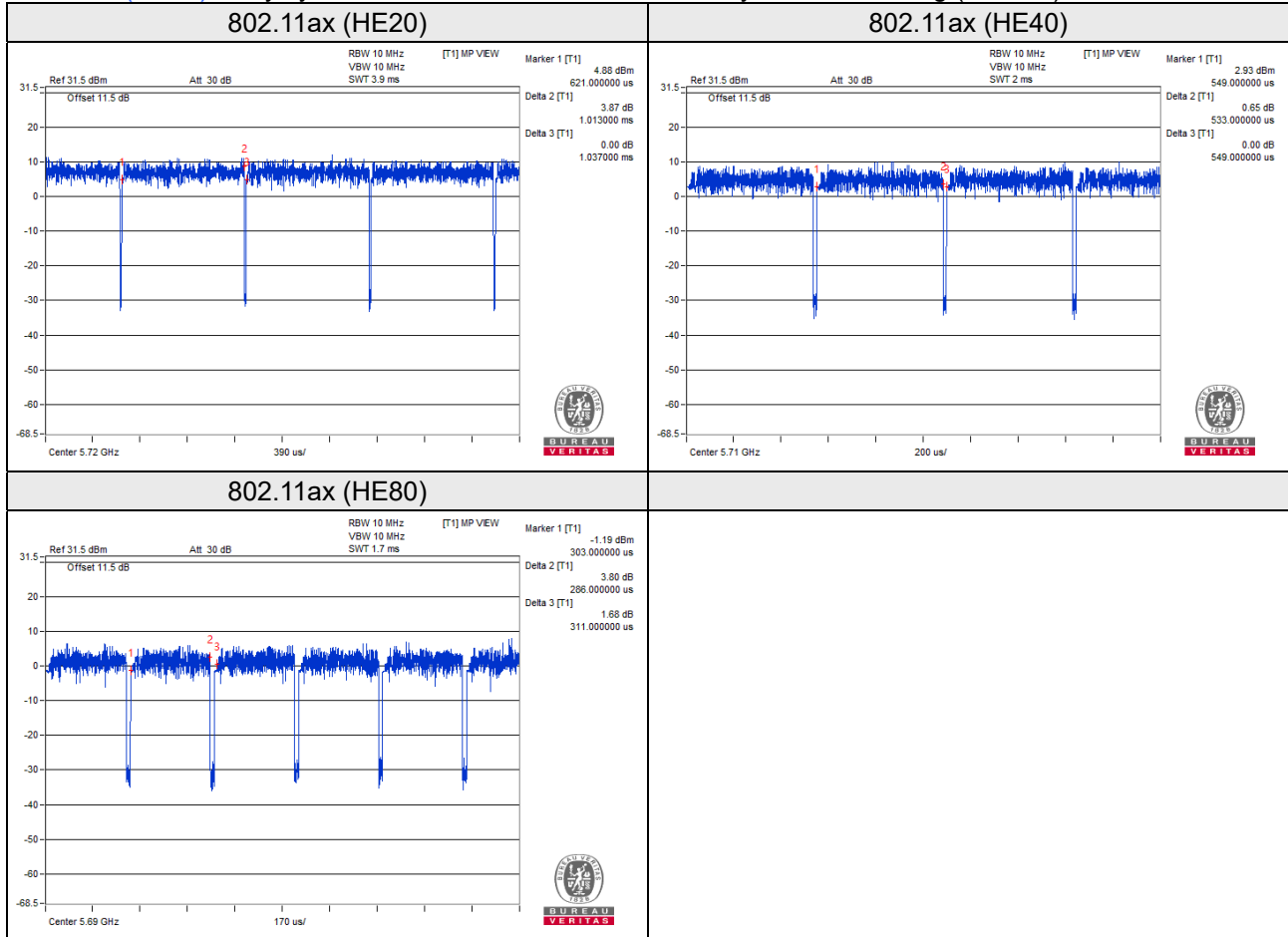
802.11n (HT20): Duty cycle = 1.297ms/1.316ms = 0.986

802.11n (HT40): Duty cycle = 0.644ms/0.668ms = 0.964, Duty factor = $10 * \log (1/0.964) = 0.16$

802.11ac (VHT80): Duty cycle = 0.324ms/0.342ms = 0.947, Duty factor = $10 * \log (1/0.947) = 0.23$



802.11ax (HE20): Duty cycle = 1.013ms/1.037ms = 0.977, Duty factor = $10 * \log(1/0.977) = 0.10$
 802.11ax (HE40): Duty cycle = 0.533ms/0.549ms = 0.971, Duty factor = $10 * \log(1/0.971) = 0.13$
 802.11ax (HE80): Duty cycle = 0.286ms/0.311ms = 0.920, Duty factor = $10 * \log(1/0.920) = 0.36$



3.4 Description of Support Units

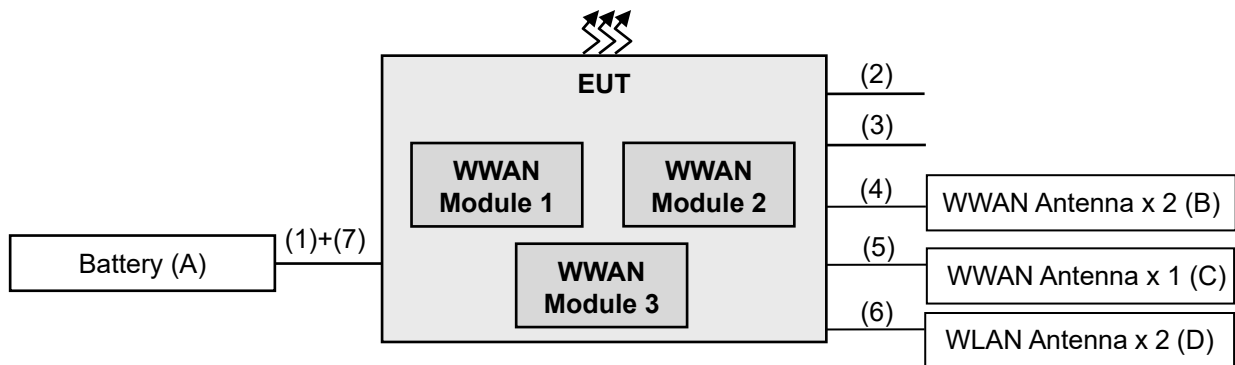
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Battery	YUASA	75D23R-CMF II	NA	NA	-
B.	WWAN Antenna x 2	Continental	85004262	NA	NA	Provided by client
C.	WWAN Antenna x 1	Continental	85004261	NA	NA	Provided by client
D.	WLAN Antenna x 2	TE	85115088	NA	NA	Provided by client

Note: All power cords of the above support units are non-shielded (1.8m).

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	Power cable	1	2	N	0	Provided by client 2M (With Power Supply 0.85M Cable, 0.3M Cable, 1.8M Cable)
2.	Combo B cable	1	5.2	N	0	Provided by client
3.	Combo A cable	1	5.2	N	0	Provided by client
4.	Rosenberger Harness_TANG LTE	2	2.35	N	0	Provided by client
5.	Rosenberger Harness_TANG LTE/GNSS	1	2.35	N	0	Provided by client
6.	Rosenberger Harness_TANG WiFi	2	0.15	N	0	Provided by client
7.	Power cable	1	2	N	0	-

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

KDB 662911 D01 Multiple Transmitter Output 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.		^{*2} below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.	
^{*3} below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 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
Test Receiver Rohde & Schwarz	ESR3	102783	Dec. 21, 2021	Dec. 20, 2022
Spectrum Analyzer KEYSIGHT	N9020B	MY60110513	Dec. 24, 2021	Dec. 23, 2022
BILOG Antenna SCHWARZBECK	VULB9168	9168-1214	Oct. 27, 2021	Oct. 26, 2022
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-1170	Nov. 14, 2021	Nov. 13, 2022
HORN Antenna SCHWARZBECK	BBHA 9170	9170-995	Nov. 14, 2021	Nov. 13, 2022
Loop Antenna EMCI	EM-6879	269	Sep. 16, 2021	Sep. 15, 2022
Loop Antenna TESEQ	HLA 6121	45745	Jul. 21, 2021	Jul. 20, 2022
Preamplifier EMCI	EMC330N	980798	Jan. 17, 2022	Jan. 16, 2023
Preamplifier EMCI	EMC118A45SE	980809	Dec. 30, 2021	Dec. 29, 2022
Preamplifier EMCI	EMC184045SE	980786	Jan. 17, 2022	Jan. 16, 2023
RF signal cable EMCI	EMC104-SM-SM-(90 00+2000+1000)	201244+ 201232+ 210103	Jan. 17, 2022	Jan. 16, 2023
RF signal cable EMCI	EMCCFD400-NM-N M-(9000+300+500)	201251+ 201249+ 201248	Jan. 17, 2022	Jan. 16, 2023
RF signal cable EMCI	EMC101G-KM-KM-(5000+3000+2000)	201261+201258+ 201249	Jan. 17, 2022	Jan. 16, 2023
Software BV ADT	ADT_Radiated_V7.6 .15.9.5	NA	NA	NA
Antenna Tower Max-Full	MFA-515BSN	NA	NA	NA
Turn Table Max-Full	MFT-201SS	NA	NA	NA
Turn Table Controller Max-Full	MF-7802BS	MF780208676	NA	NA
USB Wideband Power Sensor KEYSIGHT	U2021XA	MY55050005/MY55190 004/MY55190007/MY5 5210005	Jul. 12, 2021	Jul. 11, 2022

- 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 WM Chamber 9.

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:

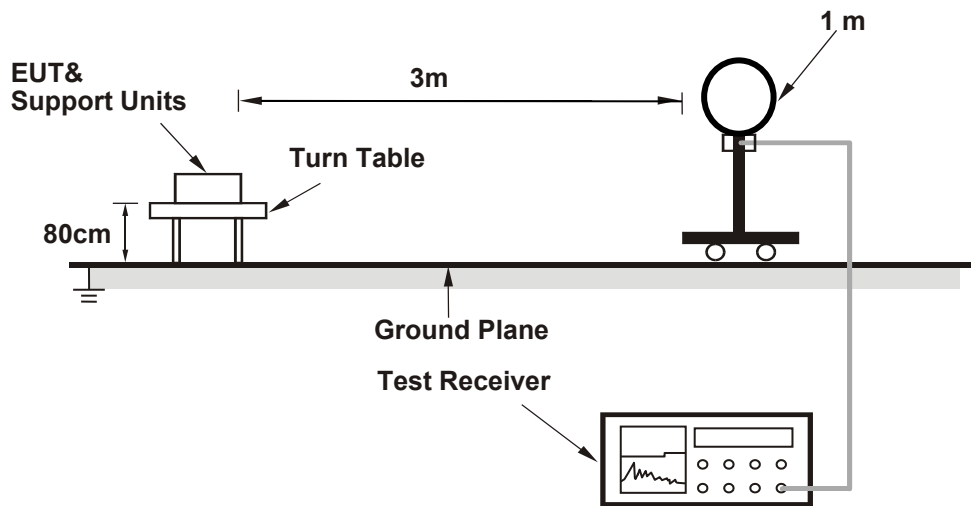
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
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 = 10Hz; 802.11n (HT20): RBW = 1MHz, VBW = 10kHz; 802.11n (HT40): RBW = 1MHz, VBW = 3kHz; 802.11ac (VHT80): RBW = 1MHz, VBW = 10kHz; 802.11ax (HE20): RBW = 1MHz, VBW = 1kHz; 802.11ax (HE40): RBW = 1MHz, VBW = 3kHz; 802.11ax (HE80): 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

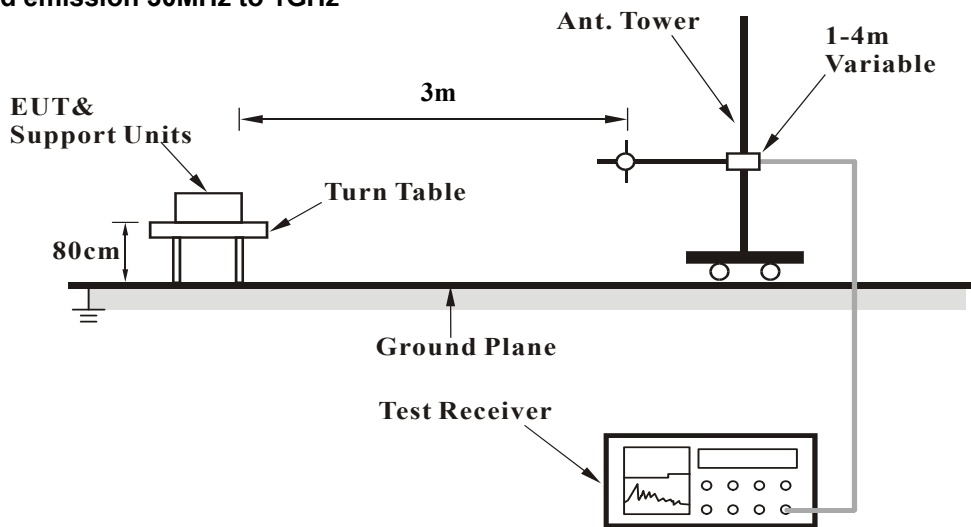
No deviation.

4.1.5 Test Setup

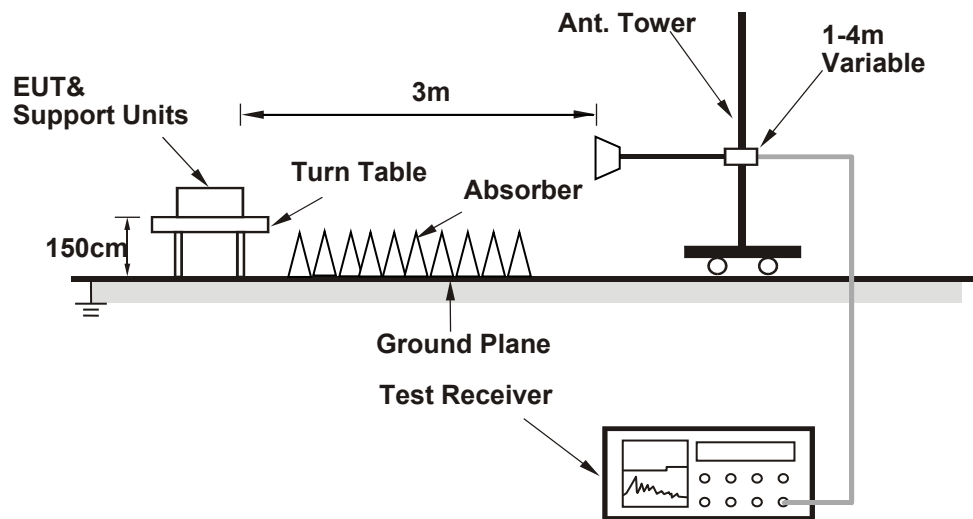
For Radiated emission below 30MHz



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

- 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	57.72 PK	74.00	-16.28	1.00 H	149	54.86	2.86
2	5150.00	47.89 AV	54.00	-6.11	1.00 H	149	45.03	2.86
3	*5180.00	100.73 PK			1.00 H	149	60.39	40.34
4	*5180.00	93.99 AV			1.00 H	149	53.65	40.34
5	#10360.00	55.80 PK	68.20	-12.40	1.55 H	62	47.86	7.94
6	#10360.00	47.68 AV	54.00	-6.32	1.55 H	62	39.74	7.94
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	57.20 PK	74.00	-16.80	1.17 V	200	54.34	2.86
2	5150.00	47.67 AV	54.00	-6.33	1.17 V	200	44.81	2.86
3	*5180.00	104.66 PK			1.17 V	200	64.32	40.34
4	*5180.00	97.33 AV			1.17 V	200	56.99	40.34
5	#10360.00	56.43 PK	68.20	-11.77	2.14 V	360	48.49	7.94
6	#10360.00	47.97 AV	54.00	-6.03	2.14 V	360	40.03	7.94

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	101.98 PK			1.29 H	155	61.66	40.32
2	*5200.00	94.41 AV			1.29 H	155	54.09	40.32
3	#10400.00	55.55 PK	68.20	-12.65	1.59 H	62	47.62	7.93
4	#10400.00	47.18 AV	54.00	-6.82	1.59 H	62	39.25	7.93

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	105.47 PK			2.45 V	183	65.15	40.32
2	*5200.00	97.04 AV			2.45 V	183	56.72	40.32
3	#10400.00	56.08 PK	68.20	-12.12	1.68 V	295	48.15	7.93
4	#10400.00	47.91 AV	54.00	-6.09	1.68 V	295	39.98	7.93

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	102.88 PK			1.25 H	155	62.74	40.14
2	*5240.00	94.43 AV			1.25 H	155	54.29	40.14
3	5350.00	57.95 PK	74.00	-16.05	1.25 H	155	55.62	2.33
4	5350.00	47.00 AV	54.00	-7.00	1.25 H	155	44.67	2.33
5	#10480.00	54.95 PK	68.20	-13.25	2.66 H	58	47.16	7.79
6	#10480.00	46.96 AV	54.00	-7.04	2.66 H	58	39.17	7.79

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	103.38 PK			1.42 V	154	63.24	40.14
2	*5240.00	95.68 AV			1.42 V	154	55.54	40.14
3	5350.00	57.72 PK	74.00	-16.28	1.42 V	154	55.39	2.33
4	5350.00	47.24 AV	54.00	-6.76	1.42 V	154	44.91	2.33
5	#10480.00	56.35 PK	68.20	-11.85	2.20 V	159	48.56	7.79
6	#10480.00	47.15 AV	54.00	-6.85	2.20 V	159	39.36	7.79

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	*5260.00	102.22 PK			1.27 H	156	62.17	40.05
2	*5260.00	94.12 AV			1.27 H	156	54.07	40.05
3	5350.00	57.85 PK	74.00	-16.15	1.27 H	154	55.52	2.33
4	5350.00	47.28 AV	54.00	-6.72	1.27 H	154	44.95	2.33
5	#10520.00	54.94 PK	68.20	-13.26	1.68 H	57	47.15	7.79
6	#10520.00	46.93 AV	54.00	-7.07	1.68 H	57	39.14	7.79

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	*5260.00	104.01 PK			1.44 V	154	63.96	40.05
2	*5260.00	96.20 AV			1.44 V	154	56.15	40.05
3	5350.00	57.29 PK	74.00	-16.71	1.44 V	154	54.96	2.33
4	5350.00	46.95 AV	54.00	-7.05	1.44 V	154	44.62	2.33
5	#10520.00	55.98 PK	68.20	-12.22	1.68 V	95	48.19	7.79
6	#10520.00	47.51 AV	54.00	-6.49	1.68 V	95	39.72	7.79

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	101.48 PK			1.00 H	130	61.58	39.90
2	*5300.00	93.66 AV			1.00 H	130	53.76	39.90
3	10600.00	55.17 PK	74.00	-18.83	1.59 H	48	47.19	7.98
4	10600.00	47.18 AV	54.00	-6.82	1.59 H	48	39.20	7.98

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	103.58 PK			2.78 V	183	63.68	39.90
2	*5300.00	95.82 AV			2.78 V	183	55.92	39.90
3	10600.00	56.14 PK	74.00	-17.86	2.22 V	105	48.16	7.98
4	10600.00	47.16 AV	54.00	-6.84	2.22 V	105	39.18	7.98

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	102.11 PK			1.00 H	217	62.19	39.92
2	*5320.00	93.78 AV			1.00 H	217	53.86	39.92
3	5350.00	58.56 PK	74.00	-15.44	1.00 H	217	56.23	2.33
4	5350.00	47.17 AV	54.00	-6.83	1.00 H	217	44.84	2.33
5	10640.00	56.56 PK	74.00	-17.44	1.64 H	23	48.63	7.93
6	10640.00	46.97 AV	54.00	-7.03	1.64 H	23	39.04	7.93

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	103.96 PK			1.37 V	182	64.04	39.92
2	*5320.00	96.43 AV			1.37 V	182	56.51	39.92
3	5350.00	59.22 PK	74.00	-14.78	1.37 V	182	56.89	2.33
4	5350.00	47.45 AV	54.00	-6.55	1.37 V	182	45.12	2.33
5	10640.00	56.09 PK	74.00	-17.91	1.58 V	64	48.16	7.93
6	10640.00	46.90 AV	54.00	-7.10	1.58 V	64	38.97	7.93

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	58.06 PK	74.00	-15.94	2.36 H	142	55.71	2.35
2	5460.00	47.27 AV	54.00	-6.73	2.36 H	142	44.92	2.35
3	#5470.00	58.34 PK	68.20	-9.86	2.36 H	142	55.97	2.37
4	*5500.00	99.84 PK			2.36 H	142	59.75	40.09
5	*5500.00	91.86 AV			2.36 H	142	51.77	40.09
6	11000.00	56.91 PK	74.00	-17.09	1.26 H	158	49.03	7.88
7	11000.00	46.62 AV	54.00	-7.38	1.26 H	158	38.74	7.88

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	58.22 PK	74.00	-15.78	1.08 V	178	55.87	2.35
2	5460.00	47.38 AV	54.00	-6.62	1.08 V	178	45.03	2.35
3	#5470.00	58.58 PK	68.20	-9.62	1.08 V	178	56.21	2.37
4	*5500.00	104.83 PK			1.08 V	178	64.74	40.09
5	*5500.00	96.51 AV			1.08 V	178	56.42	40.09
6	11000.00	58.18 PK	74.00	-15.82	1.96 V	240	50.30	7.88
7	11000.00	47.10 AV	54.00	-6.90	1.96 V	240	39.22	7.88

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	*5580.00	101.10 PK			2.33 H	143	60.42	40.68
2	*5580.00	92.77 AV			2.33 H	143	52.09	40.68
3	11160.00	57.06 PK	74.00	-16.94	1.37 H	111	48.56	8.50
4	11160.00	47.21 AV	54.00	-6.79	1.37 H	111	38.71	8.50

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	104.10 PK			1.08 V	173	63.42	40.68
2	*5580.00	96.21 AV			1.08 V	173	55.53	40.68
3	11160.00	58.03 PK	74.00	-15.97	1.36 V	309	49.53	8.50
4	11160.00	47.78 AV	54.00	-6.22	1.36 V	309	39.28	8.50

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 802.11a	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	100.59 PK			2.09 H	131	59.31	41.28
2	*5700.00	92.64 AV			2.09 H	131	51.36	41.28
3	#5725.00	61.11 PK	68.20	-7.09	2.09 H	131	57.34	3.77
4	11400.00	57.88 PK	74.00	-16.12	1.34 H	216	48.98	8.90
5	11400.00	47.14 AV	54.00	-6.86	1.34 H	216	38.24	8.90

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	*5700.00	105.17 PK			2.08 V	163	63.89	41.28
2	*5700.00	96.82 AV			2.08 V	163	55.54	41.28
3	#5725.00	61.38 PK	68.20	-6.82	2.08 V	163	57.61	3.77
4	11400.00	58.18 PK	74.00	-15.82	1.55 V	162	49.28	8.90
5	11400.00	48.21 AV	54.00	-5.79	1.55 V	162	39.31	8.90

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 144 : 5720 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	*5720.00	100.15 PK			2.16 H	133	58.76	41.39
2	*5720.00	92.39 AV			2.16 H	133	51.00	41.39
3	#5850.00	59.01 PK	68.20	-9.19	2.16 H	133	55.11	3.90
4	11440.00	57.75 PK	74.00	-16.25	1.20 H	205	48.76	8.99
5	11440.00	47.34 AV	54.00	-6.66	1.20 H	205	38.35	8.99

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	*5720.00	105.04 PK			1.86 V	179	63.65	41.39
2	*5720.00	97.71 AV			1.86 V	179	56.32	41.39
3	#5850.00	59.56 PK	68.20	-8.64	1.86 V	179	55.66	3.90
4	11440.00	58.32 PK	74.00	-15.68	1.62 V	184	49.33	8.99
5	11440.00	48.14 AV	54.00	-5.86	1.62 V	184	39.15	8.99

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	#5601.60	59.08 PK	68.20	-9.12	2.55 H	137	55.94	3.14
2	*5745.00	98.90 PK			2.55 H	137	57.36	41.54
3	*5745.00	91.21 AV			2.55 H	137	49.67	41.54
4	#5976.00	59.71 PK	68.20	-8.49	2.55 H	137	55.48	4.23
5	11490.00	58.35 PK	74.00	-15.65	1.35 H	198	49.26	9.09
6	11490.00	47.49 AV	54.00	-6.51	1.35 H	198	38.40	9.09

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	#5624.40	58.20 PK	68.20	-10.00	1.69 V	171	54.86	3.34
2	*5745.00	103.74 PK			1.69 V	171	62.20	41.54
3	*5745.00	95.56 AV			1.69 V	171	54.02	41.54
4	#5980.00	58.77 PK	68.20	-9.43	1.69 V	171	54.49	4.28
5	11490.00	57.54 PK	74.00	-16.46	1.54 V	178	48.45	9.09
6	11490.00	47.16 AV	54.00	-6.84	1.54 V	178	38.07	9.09

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	#5636.80	57.96 PK	68.20	-10.24	2.46 H	144	54.51	3.45
2	*5785.00	98.03 PK			2.46 H	144	56.47	41.56
3	*5785.00	90.40 AV			2.46 H	144	48.84	41.56
4	#5982.80	59.22 PK	68.20	-8.98	2.46 H	144	54.93	4.29
5	11570.00	58.00 PK	74.00	-16.00	1.32 H	200	48.86	9.14
6	11570.00	47.25 AV	54.00	-6.75	1.32 H	200	38.11	9.14

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	#5639.20	58.27 PK	68.20	-9.93	1.67 V	171	54.80	3.47
2	*5785.00	103.90 PK			1.67 V	171	62.34	41.56
3	*5785.00	95.15 AV			1.67 V	171	53.59	41.56
4	#5988.00	59.41 PK	68.20	-8.79	1.67 V	171	55.07	4.34
5	11570.00	57.69 PK	74.00	-16.31	1.53 V	167	48.55	9.14
6	11570.00	47.50 AV	54.00	-6.50	1.53 V	167	38.36	9.14

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	#5642.00	58.05 PK	68.20	-10.15	2.43 H	146	54.56	3.49
2	*5825.00	98.38 PK			2.43 H	146	56.81	41.57
3	*5825.00	90.17 AV			2.43 H	146	48.60	41.57
4	#5930.00	59.20 PK	68.20	-9.00	2.43 H	146	55.28	3.92
5	11650.00	57.82 PK	74.00	-16.18	1.33 H	186	48.82	9.00
6	11650.00	47.07 AV	54.00	-6.93	1.33 H	186	38.07	9.00

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	#5648.00	58.25 PK	68.20	-9.95	1.68 V	172	54.71	3.54
2	*5825.00	101.81 PK			1.68 V	172	60.24	41.57
3	*5825.00	94.14 AV			1.68 V	172	52.57	41.57
4	#5956.80	58.77 PK	68.20	-9.43	1.68 V	172	54.70	4.07
5	11650.00	57.39 PK	74.00	-16.61	1.51 V	160	48.39	9.00
6	11650.00	47.46 AV	54.00	-6.54	1.51 V	160	38.46	9.00

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 802.11n (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	59.08 PK	74.00	-14.92	2.26 H	124	56.22	2.86
2	5150.00	48.49 AV	54.00	-5.51	2.26 H	124	45.63	2.86
3	*5180.00	102.10 PK			2.26 H	124	61.76	40.34
4	*5180.00	93.51 AV			2.26 H	124	53.17	40.34
5	#10360.00	57.56 PK	68.20	-10.64	1.36 H	188	49.62	7.94

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	59.51 PK	74.00	-14.49	1.56 V	184	56.65	2.86
2	5150.00	48.58 AV	54.00	-5.42	1.56 V	184	45.72	2.86
3	*5180.00	105.37 PK			1.56 V	184	65.03	40.34
4	*5180.00	97.55 AV			1.56 V	184	57.21	40.34
5	#10360.00	57.04 PK	68.20	-11.16	1.61 V	172	49.10	7.94

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	101.92 PK			2.29 H	125	61.60	40.32
2	*5200.00	94.10 AV			2.29 H	125	53.78	40.32
3	#10400.00	57.50 PK	68.20	-10.70	1.42 H	197	49.57	7.93

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	105.56 PK			1.58 V	182	65.24	40.32
2	*5200.00	97.70 AV			1.58 V	182	57.38	40.32
3	#10400.00	56.96 PK	68.20	-11.24	1.66 V	184	49.03	7.93

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	101.28 PK			2.40 H	113	61.14	40.14
2	*5240.00	92.59 AV			2.40 H	113	52.45	40.14
3	5350.00	57.69 PK	74.00	-16.31	2.40 H	113	55.36	2.33
4	5350.00	47.14 AV	54.00	-6.86	2.40 H	113	44.81	2.33
5	#10480.00	57.09 PK	68.20	-11.11	1.14 H	179	49.30	7.79

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	104.24 PK			1.64 V	178	64.10	40.14
2	*5240.00	95.82 AV			1.64 V	178	55.68	40.14
3	5350.00	57.95 PK	74.00	-16.05	1.64 V	178	55.62	2.33
4	5350.00	47.01 AV	54.00	-6.99	1.64 V	178	44.68	2.33
5	#10480.00	57.14 PK	68.20	-11.06	1.56 V	179	49.35	7.79

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	59.14 PK	74.00	-14.86	2.21 H	125	56.28	2.86
2	5150.00	48.38 AV	54.00	-5.62	2.21 H	125	45.52	2.86
3	*5260.00	101.37 PK			2.21 H	125	61.32	40.05
4	*5260.00	93.51 AV			2.21 H	125	53.46	40.05
5	#10520.00	57.17 PK	68.20	-11.03	1.41 H	172	49.38	7.79

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	58.60 PK	74.00	-15.40	1.40 V	183	55.74	2.86
2	5150.00	48.57 AV	54.00	-5.43	1.40 V	183	45.71	2.86
3	*5260.00	105.10 PK			1.40 V	183	65.05	40.05
4	*5260.00	97.16 AV			1.40 V	183	57.11	40.05
5	#10520.00	57.28 PK	68.20	-10.92	1.72 V	168	49.49	7.79

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	100.44 PK			2.29 H	125	60.54	39.90
2	*5300.00	92.59 AV			2.29 H	125	52.69	39.90
3	10600.00	57.33 PK	74.00	-16.67	1.38 H	175	49.35	7.98
4	10600.00	46.62 AV	54.00	-7.38	1.38 H	175	38.64	7.98

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	104.18 PK			1.52 V	180	64.28	39.90
2	*5300.00	96.65 AV			1.52 V	180	56.75	39.90
3	10600.00	56.71 PK	74.00	-17.29	1.62 V	165	48.73	7.98
4	10600.00	46.82 AV	54.00	-7.18	1.62 V	165	38.84	7.98

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	101.07 PK			2.57 H	148	61.15	39.92
2	*5320.00	93.10 AV			2.57 H	148	53.18	39.92
3	5350.00	57.13 PK	74.00	-16.87	2.57 H	148	54.80	2.33
4	5350.00	47.32 AV	54.00	-6.68	2.57 H	148	44.99	2.33
5	10640.00	57.21 PK	74.00	-16.79	1.44 H	190	49.28	7.93
6	10640.00	46.70 AV	54.00	-7.30	1.44 H	190	38.77	7.93

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	103.51 PK			1.57 V	169	63.59	39.92
2	*5320.00	96.41 AV			1.57 V	169	56.49	39.92
3	5350.00	57.80 PK	74.00	-16.20	1.57 V	169	55.47	2.33
4	5350.00	47.09 AV	54.00	-6.91	1.57 V	169	44.76	2.33
5	10640.00	56.69 PK	74.00	-17.31	1.57 V	183	48.76	7.93
6	10640.00	46.15 AV	54.00	-7.85	1.57 V	183	38.22	7.93

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	58.49 PK	74.00	-15.51	2.18 H	208	56.14	2.35
2	5460.00	47.99 AV	54.00	-6.01	2.18 H	208	45.64	2.35
3	#5470.00	58.40 PK	68.20	-9.80	2.18 H	208	56.03	2.37
4	*5500.00	98.43 PK			2.18 H	208	58.34	40.09
5	*5500.00	90.32 AV			2.18 H	208	50.23	40.09
6	11000.00	56.41 PK	74.00	-17.59	1.28 H	161	48.53	7.88
7	11000.00	46.28 AV	54.00	-7.72	1.28 H	161	38.40	7.88

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	58.37 PK	74.00	-15.63	1.48 V	183	56.02	2.35
2	5460.00	48.04 AV	54.00	-5.96	1.48 V	183	45.69	2.35
3	#5470.00	59.47 PK	68.20	-8.73	1.48 V	183	57.10	2.37
4	*5500.00	103.05 PK			1.48 V	183	62.96	40.09
5	*5500.00	95.68 AV			1.48 V	183	55.59	40.09
6	11000.00	56.70 PK	74.00	-17.30	1.73 V	180	48.82	7.88
7	11000.00	46.52 AV	54.00	-7.48	1.73 V	180	38.64	7.88

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	99.44 PK			2.21 H	203	58.76	40.68
2	*5580.00	91.12 AV			2.21 H	203	50.44	40.68
3	11160.00	57.20 PK	74.00	-16.80	1.23 H	169	48.70	8.50
4	11160.00	47.02 AV	54.00	-6.98	1.23 H	169	38.52	8.50

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	103.78 PK			1.50 V	176	63.10	40.68
2	*5580.00	96.40 AV			1.50 V	176	55.72	40.68
3	11160.00	57.36 PK	74.00	-16.64	1.77 V	192	48.86	8.50
4	11160.00	47.25 AV	54.00	-6.75	1.77 V	192	38.75	8.50

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	98.78 PK			2.43 H	145	57.50	41.28
2	*5700.00	91.54 AV			2.43 H	145	50.26	41.28
3	#5725.00	58.94 PK	68.20	-9.26	2.43 H	145	55.17	3.77
4	11400.00	57.52 PK	74.00	-16.48	1.35 H	172	48.62	8.90
5	11400.00	47.56 AV	54.00	-6.44	1.35 H	172	38.66	8.90

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	*5700.00	104.56 PK			2.29 V	187	63.28	41.28
2	*5700.00	97.00 AV			2.29 V	187	55.72	41.28
3	#5725.00	58.89 PK	68.20	-9.31	2.29 V	187	55.12	3.77
4	11400.00	57.92 PK	74.00	-16.08	1.82 V	193	49.02	8.90
5	11400.00	48.37 AV	54.00	-5.63	1.82 V	193	39.47	8.90

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 144 : 5720 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	*5720.00	98.73 PK			2.29 H	213	57.34	41.39
2	*5720.00	91.28 AV			2.29 H	213	49.89	41.39
3	#5850.00	58.59 PK	68.20	-9.61	2.29 H	213	54.69	3.90
4	11440.00	57.67 PK	74.00	-16.33	1.35 H	168	48.68	8.99
5	11440.00	47.59 AV	54.00	-6.41	1.35 H	168	38.60	8.99

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	*5720.00	105.61 PK			2.29 V	186	64.22	41.39
2	*5720.00	98.01 AV			2.29 V	186	56.62	41.39
3	#5850.00	58.74 PK	68.20	-9.46	2.29 V	186	54.84	3.90
4	11440.00	58.70 PK	74.00	-15.30	1.76 V	195	49.71	8.99
5	11440.00	47.99 AV	54.00	-6.01	1.76 V	195	39.00	8.99

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	#5645.20	58.57 PK	68.20	-9.63	2.30 H	137	55.05	3.52
2	*5745.00	99.25 PK			2.30 H	137	57.71	41.54
3	*5745.00	91.24 AV			2.30 H	137	49.70	41.54
4	#5964.00	59.19 PK	68.20	-9.01	2.30 H	137	55.06	4.13
5	11490.00	58.56 PK	74.00	-15.44	1.30 H	175	49.47	9.09
6	11490.00	47.94 AV	54.00	-6.06	1.30 H	175	38.85	9.09

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	#5636.00	58.77 PK	68.20	-9.43	2.29 V	188	55.34	3.43
2	*5745.00	104.35 PK			2.29 V	188	62.81	41.54
3	*5745.00	96.66 AV			2.29 V	188	55.12	41.54
4	#5938.40	58.88 PK	68.20	-9.32	2.29 V	188	54.92	3.96
5	11490.00	58.31 PK	74.00	-15.69	1.84 V	195	49.22	9.09
6	11490.00	47.84 AV	54.00	-6.16	1.84 V	195	38.75	9.09

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	#5635.20	58.23 PK	68.20	-9.97	2.32 H	145	54.80	3.43
2	*5785.00	98.08 PK			2.32 H	145	56.52	41.56
3	*5785.00	90.62 AV			2.32 H	145	49.06	41.56
4	#5973.20	58.62 PK	68.20	-9.58	2.32 H	145	54.40	4.22
5	11570.00	57.95 PK	74.00	-16.05	1.35 H	170	48.81	9.14
6	11570.00	47.68 AV	54.00	-6.32	1.35 H	170	38.54	9.14

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	#5610.40	57.91 PK	68.20	-10.29	2.36 V	187	54.69	3.22
2	*5785.00	103.42 PK			2.36 V	187	61.86	41.56
3	*5785.00	95.70 AV			2.36 V	187	54.14	41.56
4	#5933.60	59.45 PK	68.20	-8.75	2.36 V	187	55.52	3.93
5	11570.00	58.04 PK	74.00	-15.96	1.73 V	184	48.90	9.14
6	11570.00	47.89 AV	54.00	-6.11	1.73 V	184	38.75	9.14

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	#5624.80	58.35 PK	68.20	-9.85	2.22 H	146	55.01	3.34
2	*5825.00	96.18 PK			2.22 H	146	54.61	41.57
3	*5825.00	89.29 AV			2.22 H	146	47.72	41.57
4	#5960.00	58.74 PK	68.20	-9.46	2.22 H	146	54.64	4.10
5	11650.00	57.29 PK	74.00	-16.71	1.14 H	169	48.29	9.00
6	11650.00	47.30 AV	54.00	-6.70	1.14 H	169	38.30	9.00

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	#5620.00	58.08 PK	68.20	-10.12	2.34 V	182	54.78	3.30
2	*5825.00	104.42 PK			2.34 V	182	62.85	41.57
3	*5825.00	96.73 AV			2.34 V	182	55.16	41.57
4	#5944.80	58.72 PK	68.20	-9.48	2.34 V	182	54.73	3.99
5	11650.00	57.58 PK	74.00	-16.42	1.76 V	186	48.58	9.00
6	11650.00	47.41 AV	54.00	-6.59	1.76 V	186	38.41	9.00

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 802.11n (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	59.74 PK	74.00	-14.26	2.01 H	160	56.88	2.86
2	5150.00	49.21 AV	54.00	-4.79	2.01 H	160	46.35	2.86
3	*5190.00	97.00 PK			2.01 H	160	56.67	40.33
4	*5190.00	88.58 AV			2.01 H	160	48.25	40.33
5	#10380.00	56.61 PK	68.20	-11.59	1.65 H	257	48.67	7.94

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	59.98 PK	74.00	-14.02	1.27 V	184	57.12	2.86
2	5150.00	49.37 AV	54.00	-4.63	1.27 V	184	46.51	2.86
3	*5190.00	101.00 PK			1.27 V	184	60.67	40.33
4	*5190.00	93.26 AV			1.27 V	184	52.93	40.33
5	#10380.00	57.15 PK	68.20	-11.05	1.93 V	143	49.21	7.94

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	*5230.00	97.76 PK			2.48 H	153	57.58	40.18
2	*5230.00	89.39 AV			2.48 H	153	49.21	40.18
3	#10460.00	56.35 PK	68.20	-11.85	1.11 H	192	48.53	7.82

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	*5230.00	100.91 PK			1.03 V	191	60.73	40.18
2	*5230.00	92.89 AV			1.03 V	191	52.71	40.18
3	#10460.00	57.24 PK	68.20	-10.96	1.00 V	179	49.42	7.82

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	96.32 PK			1.28 H	153	56.31	40.01
2	*5270.00	88.47 AV			1.28 H	153	48.46	40.01
3	#10540.00	56.26 PK	68.20	-11.94	1.51 H	172	48.42	7.84

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	100.64 PK			1.30 V	189	60.63	40.01
2	*5270.00	92.73 AV			1.30 V	189	52.72	40.01
3	#10540.00	57.18 PK	68.20	-11.02	1.84 V	236	49.34	7.84

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	96.04 PK			2.30 H	153	56.13	39.91
2	*5310.00	87.76 AV			2.30 H	153	47.85	39.91
3	5350.00	58.88 PK	74.00	-15.12	2.30 H	153	56.55	2.33
4	5350.00	48.30 AV	54.00	-5.70	2.30 H	153	45.97	2.33
5	10620.00	56.74 PK	74.00	-17.26	1.33 H	126	48.79	7.95
6	10620.00	46.51 AV	54.00	-7.49	1.33 H	126	38.56	7.95

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	99.34 PK			1.50 V	188	59.43	39.91
2	*5310.00	91.33 AV			1.50 V	188	51.42	39.91
3	5350.00	59.26 PK	74.00	-14.74	1.50 V	188	56.93	2.33
4	5350.00	48.46 AV	54.00	-5.54	1.50 V	188	46.13	2.33
5	10620.00	57.20 PK	74.00	-16.80	1.89 V	233	49.25	7.95
6	10620.00	46.91 AV	54.00	-7.09	1.89 V	233	38.96	7.95

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	58.58 PK	74.00	-15.42	1.29 H	150	56.23	2.35
2	5460.00	49.76 AV	54.00	-4.24	1.29 H	150	47.41	2.35
3	#5470.00	58.71 PK	68.20	-9.49	1.29 H	150	56.34	2.37
4	*5510.00	94.42 PK			1.29 H	150	54.25	40.17
5	*5510.00	86.62 AV			1.29 H	150	46.45	40.17
6	11020.00	56.45 PK	74.00	-17.55	2.16 H	335	48.48	7.97
7	11020.00	46.49 AV	54.00	-7.51	2.16 H	335	38.52	7.97

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	58.80 PK	74.00	-15.20	1.39 V	188	56.45	2.35
2	5460.00	49.83 AV	54.00	-4.17	1.39 V	188	47.48	2.35
3	#5470.00	59.15 PK	68.20	-9.05	1.39 V	188	56.78	2.37
4	*5510.00	99.15 PK			1.39 V	188	58.98	40.17
5	*5510.00	91.90 AV			1.39 V	188	51.73	40.17
6	11020.00	56.94 PK	74.00	-17.06	1.08 V	63	48.97	7.97
7	11020.00	47.09 AV	54.00	-6.91	1.08 V	63	39.12	7.97

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	96.23 PK			1.25 H	156	55.73	40.50
2	*5550.00	88.19 AV			1.25 H	156	47.69	40.50
3	11100.00	57.05 PK	74.00	-16.95	1.27 H	304	48.68	8.37
4	11100.00	46.56 AV	54.00	-7.44	1.27 H	304	38.19	8.37

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	99.67 PK			1.40 V	185	59.17	40.50
2	*5550.00	92.35 AV			1.40 V	185	51.85	40.50
3	11100.00	57.72 PK	74.00	-16.28	1.94 V	225	49.35	8.37
4	11100.00	47.27 AV	54.00	-6.73	1.94 V	225	38.90	8.37

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	95.99 PK			2.26 H	152	54.74	41.25
2	*5670.00	87.53 AV			2.26 H	152	46.28	41.25
3	#5725.00	60.62 PK	68.20	-7.58	2.26 H	152	56.85	3.77
4	11340.00	57.22 PK	74.00	-16.78	1.50 H	200	48.34	8.88
5	11340.00	47.49 AV	54.00	-6.51	1.50 H	200	38.61	8.88

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	99.42 PK			2.31 V	187	58.17	41.25
2	*5670.00	91.99 AV			2.31 V	187	50.74	41.25
3	#5725.00	61.15 PK	68.20	-7.05	2.31 V	187	57.38	3.77
4	11340.00	58.33 PK	74.00	-15.67	1.02 V	108	49.45	8.88
5	11340.00	48.14 AV	54.00	-5.86	1.02 V	108	39.26	8.88

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 142 : 5710 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	*5710.00	95.36 PK			2.02 H	132	54.03	41.33
2	*5710.00	87.64 AV			2.02 H	132	46.31	41.33
3	#5850.00	60.66 PK	68.20	-7.54	2.02 H	132	56.76	3.90
4	11420.00	57.36 PK	74.00	-16.64	1.00 H	101	48.42	8.94
5	11420.00	47.31 AV	54.00	-6.69	1.00 H	101	38.37	8.94

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	*5710.00	100.42 PK			2.32 V	188	59.09	41.33
2	*5710.00	92.80 AV			2.32 V	188	51.47	41.33
3	#5850.00	60.84 PK	68.20	-7.36	2.32 V	188	56.94	3.90
4	11420.00	57.56 PK	74.00	-16.44	2.37 V	291	48.62	8.94
5	11420.00	47.75 AV	54.00	-6.25	2.37 V	291	38.81	8.94

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	#5624.80	59.23 PK	68.20	-8.97	1.88 H	157	55.89	3.34
2	*5755.00	94.84 PK			1.88 H	157	53.28	41.56
3	*5755.00	87.45 AV			1.88 H	157	45.89	41.56
4	#5944.40	59.28 PK	68.20	-8.92	1.88 H	157	55.30	3.98
5	11510.00	57.37 PK	74.00	-16.63	1.07 H	8	48.26	9.11
6	11510.00	47.26 AV	54.00	-6.74	1.07 H	8	38.15	9.11

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	#5619.20	59.11 PK	68.20	-9.09	2.28 V	188	55.82	3.29
2	*5755.00	100.17 PK			2.28 V	188	58.61	41.56
3	*5755.00	92.81 AV			2.28 V	188	51.25	41.56
4	#5940.00	59.25 PK	68.20	-8.95	2.28 V	188	55.28	3.97
5	11510.00	57.56 PK	74.00	-16.44	1.65 V	128	48.45	9.11
6	11510.00	47.54 AV	54.00	-6.46	1.65 V	128	38.43	9.11

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. 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	#5631.60	58.03 PK	68.20	-10.17	1.80 H	163	54.63	3.40
2	*5795.00	94.40 PK			1.80 H	163	52.84	41.56
3	*5795.00	86.99 AV			1.80 H	163	45.43	41.56
4	#5952.00	59.45 PK	68.20	-8.75	1.80 H	163	55.41	4.04
5	11590.00	57.88 PK	74.00	-16.12	1.16 H	137	48.73	9.15
6	11590.00	47.84 AV	54.00	-6.16	1.16 H	137	38.69	9.15

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	#5632.00	58.51 PK	68.20	-9.69	2.45 V	188	55.10	3.41
2	*5795.00	99.90 PK			2.45 V	188	58.34	41.56
3	*5795.00	92.08 AV			2.45 V	188	50.52	41.56
4	#5944.00	59.05 PK	68.20	-9.15	2.45 V	188	55.07	3.98
5	11590.00	58.38 PK	74.00	-15.62	1.67 V	305	49.23	9.15
6	11590.00	48.32 AV	54.00	-5.68	1.67 V	305	39.17	9.15

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	59.30 PK	74.00	-14.70	2.38 H	153	56.44	2.86
2	5150.00	49.59 AV	54.00	-4.41	2.38 H	153	46.73	2.86
3	*5210.00	91.06 PK			2.38 H	153	50.79	40.27
4	*5210.00	82.83 AV			2.38 H	153	42.56	40.27
5	#10420.00	56.42 PK	68.20	-11.78	1.42 H	301	48.53	7.89

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	59.75 PK	74.00	-14.25	1.98 V	192	56.89	2.86
2	5150.00	49.88 AV	54.00	-4.12	1.98 V	192	47.02	2.86
3	*5210.00	95.10 PK			1.98 V	192	54.83	40.27
4	*5210.00	86.93 AV			1.98 V	192	46.66	40.27
5	#10420.00	56.78 PK	68.20	-11.42	1.11 V	169	48.89	7.89

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	90.92 PK			1.25 H	153	50.98	39.94
2	*5290.00	83.37 AV			1.25 H	153	43.43	39.94
3	5350.00	58.70 PK	74.00	-15.30	1.25 H	153	56.37	2.33
4	5350.00	49.05 AV	54.00	-4.95	1.25 H	153	46.72	2.33
5	#10580.00	56.77 PK	68.20	-11.43	1.00 H	32	48.83	7.94

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	94.17 PK			1.40 V	187	54.23	39.94
2	*5290.00	86.98 AV			1.40 V	187	47.04	39.94
3	5350.00	58.87 PK	74.00	-15.13	1.40 V	187	56.54	2.33
4	5350.00	49.16 AV	54.00	-4.84	1.40 V	187	46.83	2.33
5	#10580.00	57.06 PK	68.20	-11.14	1.62 V	274	49.12	7.94

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	58.39 PK	74.00	-15.61	2.25 H	156	56.04	2.35
2	5460.00	48.78 AV	54.00	-5.22	2.25 H	156	46.43	2.35
3	#5470.00	59.13 PK	68.20	-9.07	2.55 H	156	56.76	2.37
4	*5530.00	89.57 PK			2.25 H	156	49.23	40.34
5	*5530.00	81.81 AV			2.25 H	156	41.47	40.34
6	11060.00	56.77 PK	74.00	-17.23	1.95 H	234	48.60	8.17
7	11060.00	46.40 AV	54.00	-7.60	1.95 H	234	38.23	8.17

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	58.58 PK	74.00	-15.42	1.28 V	187	56.23	2.35
2	5460.00	49.02 AV	54.00	-4.98	1.28 V	187	46.67	2.35
3	#5470.00	59.31 PK	68.20	-8.89	1.28 V	187	56.94	2.37
4	*5530.00	94.08 PK			1.28 V	187	53.74	40.34
5	*5530.00	86.96 AV			1.28 V	187	46.62	40.34
6	11060.00	57.20 PK	74.00	-16.80	2.01 V	52	49.03	8.17
7	11060.00	46.92 AV	54.00	-7.08	2.01 V	52	38.75	8.17

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	*5610.00	90.54 PK			2.17 H	156	49.65	40.89
2	*5610.00	82.92 AV			2.17 H	156	42.03	40.89
3	11220.00	57.07 PK	74.00	-16.93	1.08 H	178	48.43	8.64
4	11220.00	46.85 AV	54.00	-7.15	1.08 H	178	38.21	8.64

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	*5610.00	94.70 PK			1.24 V	184	53.81	40.89
2	*5610.00	87.44 AV			1.24 V	184	46.55	40.89
3	11220.00	57.35 PK	74.00	-16.65	1.99 V	61	48.71	8.64
4	11220.00	47.24 AV	54.00	-6.76	1.99 V	61	38.60	8.64

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 138 : 5690 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	*5690.00	90.69 PK			2.33 H	152	49.43	41.26
2	*5690.00	82.94 AV			2.33 H	152	41.68	41.26
3	#5850.00	60.33 PK	68.20	-7.87	2.33 H	152	56.43	3.90
4	11380.00	57.20 PK	74.00	-16.80	1.39 H	128	48.31	8.89
5	11380.00	47.27 AV	54.00	-6.73	1.39 H	128	38.38	8.89

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	*5690.00	94.01 PK			2.09 V	188	52.75	41.26
2	*5690.00	86.99 AV			2.09 V	188	45.73	41.26
3	#5850.00	60.74 PK	68.20	-7.46	2.09 V	188	56.84	3.90
4	11380.00	57.72 PK	74.00	-16.28	1.92 V	30	48.83	8.89
5	11380.00	47.53 AV	54.00	-6.47	1.92 V	30	38.64	8.89

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	#5624.00	59.06 PK	68.20	-9.14	2.22 H	152	55.73	3.33
2	*5775.00	89.24 PK			2.22 H	152	47.68	41.56
3	*5775.00	81.89 AV			2.22 H	152	40.33	41.56
4	#5964.80	60.24 PK	68.20	-7.96	2.22 H	152	56.09	4.15
5	11550.00	57.66 PK	74.00	-16.34	1.74 H	213	48.52	9.14
6	11550.00	47.32 AV	54.00	-6.68	1.74 H	213	38.18	9.14

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	#5640.80	58.34 PK	68.20	-9.86	2.02 V	174	54.86	3.48
2	*5775.00	93.24 PK			2.02 V	174	51.68	41.56
3	*5775.00	85.98 AV			2.02 V	174	44.42	41.56
4	#5962.00	60.26 PK	68.20	-7.94	2.02 V	174	56.14	4.12
5	11550.00	58.17 PK	74.00	-15.83	1.42 V	132	49.03	9.14
6	11550.00	47.90 AV	54.00	-6.10	1.42 V	132	38.76	9.14

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 802.11ax (HE20)	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	59.57 PK	74.00	-14.43	1.12 H	37	56.71	2.86
2	5150.00	48.53 AV	54.00	-5.47	1.12 H	37	45.67	2.86
3	*5180.00	97.18 PK			1.12 H	37	56.84	40.34
4	*5180.00	86.74 AV			1.12 H	37	46.40	40.34
5	#10360.00	56.89 PK	68.20	-11.31	2.11 H	185	48.95	7.94

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	59.18 PK	74.00	-14.82	1.45 V	171	56.32	2.86
2	5150.00	48.36 AV	54.00	-5.64	1.45 V	171	45.50	2.86
3	*5180.00	102.48 PK			1.45 V	171	62.14	40.34
4	*5180.00	91.72 AV			1.45 V	171	51.38	40.34
5	#10360.00	56.66 PK	68.20	-11.54	1.54 V	193	48.72	7.94

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 802.11ax (HE20)	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	97.29 PK			1.13 H	35	56.97	40.32
2	*5200.00	86.87 AV			1.13 H	35	46.55	40.32
3	#10400.00	56.99 PK	68.20	-11.21	2.08 H	172	49.06	7.93

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	102.62 PK			1.46 V	167	62.30	40.32
2	*5200.00	91.84 AV			1.46 V	167	51.52	40.32
3	#10400.00	56.81 PK	68.20	-11.39	1.53 V	200	48.88	7.93

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 802.11ax (HE20)	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	97.99 PK			1.00 H	41	57.85	40.14
2	*5240.00	87.22 AV			1.00 H	41	47.08	40.14
3	5350.00	58.03 PK	74.00	-15.97	1.00 H	41	55.70	2.33
4	5350.00	47.22 AV	54.00	-6.78	1.00 H	41	44.89	2.33
5	#10480.00	57.12 PK	68.20	-11.08	2.04 H	191	49.33	7.79

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	102.77 PK			1.52 V	172	62.63	40.14
2	*5240.00	91.93 AV			1.52 V	172	51.79	40.14
3	5350.00	57.60 PK	74.00	-16.40	1.52 V	172	55.27	2.33
4	5350.00	46.97 AV	54.00	-7.03	1.52 V	172	44.64	2.33
5	#10480.00	56.70 PK	68.20	-11.50	1.60 V	212	48.91	7.79

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 802.11ax (HE20)	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	60.14 PK	74.00	-13.86	1.16 H	56	57.28	2.86
2	5150.00	48.30 AV	54.00	-5.70	1.16 H	56	45.44	2.86
3	*5260.00	95.20 PK			1.16 H	56	55.15	40.05
4	*5260.00	85.72 AV			1.16 H	56	45.67	40.05
5	#10520.00	56.41 PK	68.20	-11.79	2.08 H	177	48.62	7.79

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	58.79 PK	74.00	-15.21	1.16 V	190	55.93	2.86
2	5150.00	48.39 AV	54.00	-5.61	1.16 V	190	45.53	2.86
3	*5260.00	101.59 PK			1.16 V	190	61.54	40.05
4	*5260.00	92.36 AV			1.16 V	190	52.31	40.05
5	#10520.00	56.89 PK	68.20	-11.31	1.56 V	187	49.10	7.79

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 802.11ax (HE20)	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	95.20 PK			1.14 H	47	55.30	39.90
2	*5300.00	85.72 AV			1.14 H	47	45.82	39.90
3	10600.00	56.80 PK	74.00	-17.20	2.13 H	184	48.82	7.98
4	10600.00	46.43 AV	54.00	-7.57	2.13 H	184	38.45	7.98

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	101.52 PK			1.14 V	185	61.62	39.90
2	*5300.00	92.17 AV			1.14 V	185	52.27	39.90
3	10600.00	57.21 PK	74.00	-16.79	1.50 V	182	49.23	7.98
4	10600.00	47.15 AV	54.00	-6.85	1.50 V	182	39.17	7.98

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 802.11ax (HE20)	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	97.36 PK			1.24 H	154	57.44	39.92
2	*5320.00	87.41 AV			1.24 H	154	47.49	39.92
3	5350.00	58.49 PK	74.00	-15.51	1.24 H	154	56.16	2.33
4	5350.00	47.16 AV	54.00	-6.84	1.24 H	154	44.83	2.33
5	10640.00	57.76 PK	74.00	-16.24	2.24 H	194	49.83	7.93
6	10640.00	47.34 AV	54.00	-6.66	2.24 H	194	39.41	7.93

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	102.31 PK			1.07 V	154	62.39	39.92
2	*5320.00	92.59 AV			1.07 V	154	52.67	39.92
3	5350.00	57.77 PK	74.00	-16.23	1.07 V	154	55.44	2.33
4	5350.00	47.24 AV	54.00	-6.76	1.07 V	154	44.91	2.33
5	10640.00	57.58 PK	74.00	-16.42	1.54 V	182	49.65	7.93
6	10640.00	47.33 AV	54.00	-6.67	1.54 V	182	39.40	7.93

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 802.11ax (HE20)	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	58.15 PK	74.00	-15.85	1.37 H	148	55.80	2.35
2	5460.00	48.27 AV	54.00	-5.73	1.37 H	148	45.92	2.35
3	#5470.00	57.51 PK	68.20	-10.69	1.37 H	148	55.14	2.37
4	*5500.00	95.39 PK			1.37 H	148	55.30	40.09
5	*5500.00	85.95 AV			1.37 H	148	45.86	40.09
6	11000.00	57.72 PK	74.00	-16.28	2.16 H	185	49.84	7.88
7	11000.00	47.54 AV	54.00	-6.46	2.16 H	185	39.66	7.88

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	57.81 PK	74.00	-16.19	1.07 V	136	55.46	2.35
2	5460.00	48.09 AV	54.00	-5.91	1.07 V	136	45.74	2.35
3	#5470.00	56.94 PK	68.20	-11.26	1.07 V	136	54.57	2.37
4	*5500.00	101.67 PK			1.07 V	136	61.58	40.09
5	*5500.00	91.42 AV			1.07 V	136	51.33	40.09
6	11000.00	57.30 PK	74.00	-16.70	1.60 V	185	49.42	7.88
7	11000.00	46.99 AV	54.00	-7.01	1.60 V	185	39.11	7.88

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 802.11ax (HE20)	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	95.89 PK			1.29 H	152	55.21	40.68
2	*5580.00	86.31 AV			1.29 H	152	45.63	40.68
3	11160.00	58.22 PK	74.00	-15.78	2.20 H	178	49.72	8.50
4	11160.00	47.93 AV	54.00	-6.07	2.20 H	178	39.43	8.50

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	102.02 PK			1.13 V	129	61.34	40.68
2	*5580.00	91.77 AV			1.13 V	129	51.09	40.68
3	11160.00	57.95 PK	74.00	-16.05	1.75 V	168	49.45	8.50
4	11160.00	47.73 AV	54.00	-6.27	1.75 V	168	39.23	8.50

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 802.11ax (HE20)	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	96.30 PK			1.45 H	155	55.02	41.28
2	*5700.00	86.40 AV			1.45 H	155	45.12	41.28
3	#5725.00	58.66 PK	68.20	-9.54	1.45 H	155	54.89	3.77
4	11400.00	58.62 PK	74.00	-15.38	2.08 H	176	49.72	8.90
5	11400.00	48.23 AV	54.00	-5.77	2.08 H	176	39.33	8.90

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	*5700.00	101.51 PK			1.48 V	174	60.23	41.28
2	*5700.00	90.92 AV			1.48 V	174	49.64	41.28
3	#5725.00	58.51 PK	68.20	-9.69	1.48 V	174	54.74	3.77
4	11400.00	58.42 PK	74.00	-15.58	1.63 V	178	49.52	8.90
5	11400.00	48.11 AV	54.00	-5.89	1.63 V	178	39.21	8.90

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 802.11ax (HE20)	Channel	CH 144 : 5720 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	*5720.00	95.66 PK			1.49 H	151	54.27	41.39
2	*5720.00	86.15 AV			1.49 H	151	44.76	41.39
3	#5850.00	59.49 PK	68.20	-8.71	1.49 H	151	55.59	3.90
4	11440.00	58.35 PK	74.00	-15.65	2.14 H	162	49.36	8.99
5	11440.00	47.99 AV	54.00	-6.01	2.14 H	162	39.00	8.99

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	*5720.00	101.71 PK			1.38 V	174	60.32	41.39
2	*5720.00	91.54 AV			1.38 V	174	50.15	41.39
3	#5850.00	59.75 PK	68.20	-8.45	1.38 V	174	55.85	3.90
4	11440.00	58.59 PK	74.00	-15.41	1.73 V	182	49.60	8.99
5	11440.00	48.53 AV	54.00	-5.47	1.73 V	182	39.54	8.99

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 802.11ax (HE20)	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	#5647.60	57.98 PK	68.20	-10.22	1.45 H	151	54.45	3.53
2	*5745.00	95.39 PK			1.45 H	151	53.85	41.54
3	*5745.00	85.56 AV			1.45 H	151	44.02	41.54
4	#5952.40	58.39 PK	68.20	-9.81	1.45 H	151	54.35	4.04
5	11490.00	58.71 PK	74.00	-15.29	2.14 H	165	49.62	9.09
6	11490.00	48.20 AV	54.00	-5.80	2.14 H	165	39.11	9.09

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	#5629.60	57.49 PK	68.20	-10.71	1.58 V	171	54.11	3.38
2	*5745.00	101.24 PK			1.58 V	171	59.70	41.54
3	*5745.00	91.06 AV			1.58 V	171	49.52	41.54
4	#5990.00	59.02 PK	68.20	-9.18	1.58 V	171	54.66	4.36
5	11490.00	58.77 PK	74.00	-15.23	1.70 V	165	49.68	9.09
6	11490.00	48.59 AV	54.00	-5.41	1.70 V	165	39.50	9.09

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 802.11ax (HE20)	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	#5626.40	58.34 PK	68.20	-9.86	1.83 H	151	54.98	3.36
2	*5785.00	96.10 PK			1.83 H	151	54.54	41.56
3	*5785.00	85.52 AV			1.83 H	151	43.96	41.56
4	#5926.40	59.78 PK	68.20	-8.42	1.83 H	151	55.88	3.90
5	11570.00	58.73 PK	74.00	-15.27	2.11 H	173	49.59	9.14
6	11570.00	48.12 AV	54.00	-5.88	2.11 H	173	38.98	9.14

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	#5621.60	58.46 PK	68.20	-9.74	1.57 V	172	55.15	3.31
2	*5785.00	101.18 PK			1.57 V	172	59.62	41.56
3	*5785.00	90.84 AV			1.57 V	172	49.28	41.56
4	#5992.80	60.01 PK	68.20	-8.19	1.57 V	172	55.62	4.39
5	11570.00	59.00 PK	74.00	-15.00	1.77 V	183	49.86	9.14
6	11570.00	48.57 AV	54.00	-5.43	1.77 V	183	39.43	9.14

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 802.11ax (HE20)	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	#5643.60	57.73 PK	68.20	-10.47	1.84 H	158	54.22	3.51
2	*5825.00	94.73 PK			1.84 H	158	53.16	41.57
3	*5825.00	83.65 AV			1.84 H	158	42.08	41.57
4	#5954.00	58.80 PK	68.20	-9.40	1.84 H	158	54.75	4.05
5	11650.00	57.56 PK	74.00	-16.44	2.00 H	175	48.56	9.00
6	11650.00	47.34 AV	54.00	-6.66	2.00 H	175	38.34	9.00

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	#5630.00	58.01 PK	68.20	-10.19	1.93 V	186	54.63	3.38
2	*5825.00	100.57 PK			1.93 V	186	59.00	41.57
3	*5825.00	90.05 AV			1.93 V	186	48.48	41.57
4	#5944.80	59.46 PK	68.20	-8.74	1.93 V	186	55.47	3.99
5	11650.00	58.10 PK	74.00	-15.90	1.65 V	194	49.10	9.00
6	11650.00	47.60 AV	54.00	-6.40	1.65 V	194	38.60	9.00

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 802.11ax (HE40)	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	57.90 PK	74.00	-16.10	2.34 H	151	55.04	2.86
2	5150.00	48.38 AV	54.00	-5.62	2.34 H	151	45.52	2.86
3	*5190.00	97.45 PK			2.34 H	151	57.12	40.33
4	*5190.00	87.14 AV			2.34 H	151	46.81	40.33
5	#10380.00	56.45 PK	68.20	-11.75	1.29 H	201	48.51	7.94

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	59.92 PK	74.00	-14.08	2.32 V	142	57.06	2.86
2	5150.00	49.69 AV	54.00	-4.31	2.32 V	142	46.83	2.86
3	*5190.00	100.18 PK			2.32 V	142	59.85	40.33
4	*5190.00	89.61 AV			2.32 V	142	49.28	40.33
5	#10380.00	56.87 PK	68.20	-11.33	2.02 V	315	48.93	7.94

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 802.11ax (HE40)	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	*5230.00	97.84 PK			2.31 H	155	57.66	40.18
2	*5230.00	86.89 AV			2.31 H	155	46.71	40.18
3	#10460.00	56.44 PK	68.20	-11.76	1.11 H	165	48.62	7.82

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	*5230.00	100.30 PK			2.28 V	143	60.12	40.18
2	*5230.00	89.71 AV			2.28 V	143	49.53	40.18
3	#10460.00	56.71 PK	68.20	-11.49	1.58 V	43	48.89	7.82

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 802.11ax (HE40)	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	96.97 PK			2.30 H	150	56.96	40.01
2	*5270.00	86.22 AV			2.30 H	150	46.21	40.01
3	#10540.00	56.48 PK	68.20	-11.72	1.32 H	212	48.64	7.84

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	99.46 PK			2.35 V	144	59.45	40.01
2	*5270.00	90.60 AV			2.35 V	144	50.59	40.01
3	#10540.00	56.81 PK	68.20	-11.39	1.77 V	259	48.97	7.84

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 802.11ax (HE40)	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	96.46 PK			2.14 H	152	56.55	39.91
2	*5310.00	86.76 AV			2.14 H	152	46.85	39.91
3	5350.00	57.74 PK	74.00	-16.26	2.14 H	152	55.41	2.33
4	5350.00	47.59 AV	54.00	-6.41	2.14 H	152	45.26	2.33
5	10620.00	56.41 PK	74.00	-17.59	1.62 H	127	48.46	7.95
6	10620.00	46.14 AV	54.00	-7.86	1.62 H	127	38.19	7.95

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	99.10 PK			1.33 V	152	59.19	39.91
2	*5310.00	88.98 AV			1.33 V	152	49.07	39.91
3	5350.00	58.75 PK	74.00	-15.25	1.33 V	152	56.42	2.33
4	5350.00	48.50 AV	54.00	-5.50	1.33 V	152	46.17	2.33
5	10620.00	56.65 PK	74.00	-17.35	1.20 V	60	48.70	7.95
6	10620.00	46.77 AV	54.00	-7.23	1.20 V	60	38.82	7.95

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 802.11ax (HE40)	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	58.72 PK	74.00	-15.28	1.62 H	153	56.37	2.35
2	5460.00	49.61 AV	54.00	-4.39	1.62 H	153	47.26	2.35
3	#5470.00	58.88 PK	68.20	-9.32	1.62 H	153	56.51	2.37
4	*5510.00	96.98 PK			1.62 H	153	56.81	40.17
5	*5510.00	86.01 AV			1.62 H	153	45.84	40.17
6	11020.00	56.60 PK	74.00	-17.40	1.01 H	137	48.63	7.97
7	11020.00	46.68 AV	54.00	-7.32	1.01 H	137	38.71	7.97

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	58.99 PK	74.00	-15.01	1.08 V	173	56.64	2.35
2	5460.00	49.28 AV	54.00	-4.72	1.08 V	173	46.93	2.35
3	#5470.00	59.22 PK	68.20	-8.98	1.08 V	173	56.85	2.37
4	*5510.00	99.00 PK			1.08 V	173	58.83	40.17
5	*5510.00	88.58 AV			1.08 V	173	48.41	40.17
6	11020.00	56.78 PK	74.00	-17.22	1.11 V	215	48.81	7.97
7	11020.00	47.04 AV	54.00	-6.96	1.11 V	215	39.07	7.97

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 802.11ax (HE40)	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	97.32 PK			1.59 H	151	56.82	40.50
2	*5550.00	87.73 AV			1.59 H	151	47.23	40.50
3	11100.00	56.90 PK	74.00	-17.10	1.99 H	216	48.53	8.37
4	11100.00	46.74 AV	54.00	-7.26	1.99 H	216	38.37	8.37

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	98.84 PK			1.10 V	172	58.34	40.50
2	*5550.00	89.22 AV			1.10 V	172	48.72	40.50
3	11100.00	57.21 PK	74.00	-16.79	1.02 V	143	48.84	8.37
4	11100.00	46.93 AV	54.00	-7.07	1.02 V	143	38.56	8.37

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 802.11ax (HE40)	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	97.58 PK			2.02 H	153	56.33	41.25
2	*5670.00	86.27 AV			2.02 H	153	45.02	41.25
3	#5725.00	60.30 PK	68.20	-7.90	2.02 H	153	56.53	3.77
4	11340.00	57.26 PK	74.00	-16.74	1.61 H	333	48.38	8.88
5	11340.00	47.12 AV	54.00	-6.88	1.61 H	333	38.24	8.88

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	100.01 PK			1.40 V	169	58.76	41.25
2	*5670.00	89.50 AV			1.40 V	169	48.25	41.25
3	#5725.00	60.89 PK	68.20	-7.31	1.40 V	169	57.12	3.77
4	11340.00	58.02 PK	74.00	-15.98	1.12 V	303	49.14	8.88
5	11340.00	47.96 AV	54.00	-6.04	1.12 V	303	39.08	8.88

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 802.11ax (HE40)	Channel	CH 142 : 5710 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	*5710.00	97.63 PK			2.20 H	154	56.30	41.33
2	*5710.00	86.57 AV			2.20 H	154	45.24	41.33
3	#5850.00	60.35 PK	68.20	-7.85	2.20 H	154	56.45	3.90
4	11420.00	57.26 PK	74.00	-16.74	1.66 H	197	48.32	8.94
5	11420.00	47.45 AV	54.00	-6.55	1.66 H	197	38.51	8.94

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	*5710.00	100.74 PK			1.92 V	171	59.41	41.33
2	*5710.00	89.94 AV			1.92 V	171	48.61	41.33
3	#5850.00	61.11 PK	68.20	-7.09	1.92 V	171	57.21	3.90
4	11420.00	57.82 PK	74.00	-16.18	1.21 V	104	48.88	8.94
5	11420.00	47.99 AV	54.00	-6.01	1.21 V	104	39.05	8.94

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 802.11ax (HE40)	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	#5639.60	59.23 PK	68.20	-8.97	2.10 H	154	55.76	3.47
2	*5755.00	95.32 PK			2.10 H	154	53.76	41.56
3	*5755.00	85.29 AV			2.10 H	154	43.73	41.56
4	#5928.00	59.30 PK	68.20	-8.90	2.10 H	154	55.39	3.91
5	11510.00	57.75 PK	74.00	-16.25	1.11 H	303	48.64	9.11
6	11510.00	47.33 AV	54.00	-6.67	1.11 H	303	38.22	9.11

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	57.85 PK	68.20	-10.35	2.01 V	172	54.36	3.49
2	*5755.00	99.20 PK			2.01 V	172	57.64	41.56
3	*5755.00	89.59 AV			2.01 V	172	48.03	41.56
4	#5927.20	58.38 PK	68.20	-9.82	2.01 V	172	54.47	3.91
5	11510.00	57.87 PK	74.00	-16.13	1.00 V	23	48.76	9.11
6	11510.00	47.60 AV	54.00	-6.40	1.00 V	23	38.49	9.11

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. 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 802.11ax (HE40)	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	#5644.00	58.37 PK	68.20	-9.83	1.94 H	154	54.86	3.51
2	*5795.00	95.55 PK			1.94 H	154	53.99	41.56
3	*5795.00	85.02 AV			1.94 H	154	43.46	41.56
4	#5946.80	59.14 PK	68.20	-9.06	1.94 H	154	55.14	4.00
5	11590.00	57.83 PK	74.00	-16.17	1.02 H	179	48.68	9.15
6	11590.00	47.67 AV	54.00	-6.33	1.02 H	179	38.52	9.15

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	#5645.20	58.66 PK	68.20	-9.54	1.98 V	173	55.14	3.52
2	*5795.00	99.23 PK			1.98 V	173	57.67	41.56
3	*5795.00	89.19 AV			1.98 V	173	47.63	41.56
4	#5948.40	58.73 PK	68.20	-9.47	1.98 V	173	54.72	4.01
5	11590.00	57.89 PK	74.00	-16.11	1.35 V	201	48.74	9.15
6	11590.00	48.10 AV	54.00	-5.90	1.35 V	201	38.95	9.15

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 802.11ax (HE80)	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	59.37 PK	74.00	-14.63	2.12 H	153	56.51	2.86
2	5150.00	48.45 AV	54.00	-5.55	2.12 H	153	45.59	2.86
3	*5210.00	93.39 PK			2.12 H	153	53.12	40.27
4	*5210.00	83.71 AV			2.12 H	153	43.44	40.27
5	#10420.00	56.71 PK	68.20	-11.49	1.01 H	39	48.82	7.89

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	59.79 PK	74.00	-14.21	1.15 V	191	56.93	2.86
2	5150.00	49.97 AV	54.00	-4.03	1.15 V	191	47.11	2.86
3	*5210.00	96.78 PK			1.15 V	191	56.51	40.27
4	*5210.00	87.33 AV			1.15 V	191	47.06	40.27
5	#10420.00	56.92 PK	68.20	-11.28	1.04 V	208	49.03	7.89

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 802.11ax (HE80)	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	92.39 PK			2.25 H	156	52.45	39.94
2	*5290.00	83.00 AV			2.25 H	156	43.06	39.94
3	5350.00	58.75 PK	74.00	-15.25	2.25 H	156	56.42	2.33
4	5350.00	49.14 AV	54.00	-4.86	2.25 H	156	46.81	2.33
5	#10580.00	56.57 PK	68.20	-11.63	1.23 H	56	48.63	7.94

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	96.47 PK			1.10 V	192	56.53	39.94
2	*5290.00	87.48 AV			1.10 V	192	47.54	39.94
3	5350.00	59.08 PK	74.00	-14.92	1.10 V	192	56.75	2.33
4	5350.00	49.17 AV	54.00	-4.83	1.10 V	192	46.84	2.33
5	#10580.00	56.97 PK	68.20	-11.23	1.02 V	161	49.03	7.94

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 802.11ax (HE80)	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	58.58 PK	74.00	-15.42	2.09 H	157	56.23	2.35
2	5460.00	48.81 AV	54.00	-5.19	2.09 H	157	46.46	2.35
3	#5470.00	59.16 PK	68.20	-9.04	2.09 H	157	56.79	2.37
4	*5530.00	91.57 PK			2.09 H	157	51.23	40.34
5	*5530.00	82.31 AV			2.09 H	157	41.97	40.34
6	11060.00	56.69 PK	74.00	-17.31	1.98 H	222	48.52	8.17
7	11060.00	46.60 AV	54.00	-7.40	1.98 H	222	38.43	8.17

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	58.67 PK	74.00	-15.33	1.34 V	202	56.32	2.35
2	5460.00	49.09 AV	54.00	-4.91	1.34 V	202	46.74	2.35
3	#5470.00	59.25 PK	68.20	-8.95	1.34 V	202	56.88	2.37
4	*5530.00	94.58 PK			1.34 V	202	54.24	40.34
5	*5530.00	85.09 AV			1.34 V	202	44.75	40.34
6	11060.00	57.29 PK	74.00	-16.71	2.03 V	54	49.12	8.17
7	11060.00	46.96 AV	54.00	-7.04	2.03 V	54	38.79	8.17

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 802.11ax (HE80)	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	*5610.00	92.12 PK			2.16 H	158	51.23	40.89
2	*5610.00	82.64 AV			2.16 H	158	41.75	40.89
3	11220.00	57.20 PK	74.00	-16.80	1.09 H	146	48.56	8.64
4	11220.00	47.03 AV	54.00	-6.97	1.09 H	146	38.39	8.64

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	*5610.00	95.75 PK			1.12 V	195	54.86	40.89
2	*5610.00	85.97 AV			1.12 V	195	45.08	40.89
3	11220.00	57.51 PK	74.00	-16.49	2.01 V	303	48.87	8.64
4	11220.00	47.56 AV	54.00	-6.44	2.01 V	303	38.92	8.64

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 802.11ax (HE80)	Channel	CH 138 : 5690 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	*5690.00	92.11 PK			2.02 H	157	50.85	41.26
2	*5690.00	83.34 AV			2.02 H	157	42.08	41.26
3	#5850.00	60.56 PK	68.20	-7.64	2.02 H	157	56.66	3.90
4	11380.00	57.25 PK	74.00	-16.75	1.43 H	264	48.36	8.89
5	11380.00	47.18 AV	54.00	-6.82	1.43 H	264	38.29	8.89

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	*5690.00	97.31 PK			1.81 V	192	56.05	41.26
2	*5690.00	87.00 AV			1.81 V	192	45.74	41.26
3	#5850.00	60.67 PK	68.20	-7.53	1.81 V	192	56.77	3.90
4	11380.00	57.81 PK	74.00	-16.19	1.56 V	208	48.92	8.89
5	11380.00	47.31 AV	54.00	-6.69	1.56 V	208	38.42	8.89

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 802.11ax (HE80)	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	#5629.20	58.82 PK	68.20	-9.38	2.06 H	157	55.44	3.38
2	*5775.00	91.64 PK			2.06 H	157	50.08	41.56
3	*5775.00	82.37 AV			2.06 H	157	40.81	41.56
4	#5952.40	59.26 PK	68.20	-8.94	2.06 H	157	55.22	4.04
5	11550.00	57.81 PK	74.00	-16.19	1.72 H	109	48.67	9.14
6	11550.00	47.56 AV	54.00	-6.44	1.72 H	109	38.42	9.14

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	#5625.60	58.24 PK	68.20	-9.96	1.78 V	191	54.89	3.35
2	*5775.00	96.12 PK			1.78 V	191	54.56	41.56
3	*5775.00	87.62 AV			1.78 V	191	46.06	41.56
4	#5954.00	59.05 PK	68.20	-9.15	1.78 V	191	55.00	4.05
5	11550.00	58.08 PK	74.00	-15.92	1.53 V	117	48.94	9.14
6	11550.00	47.96 AV	54.00	-6.04	1.53 V	117	38.82	9.14

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.

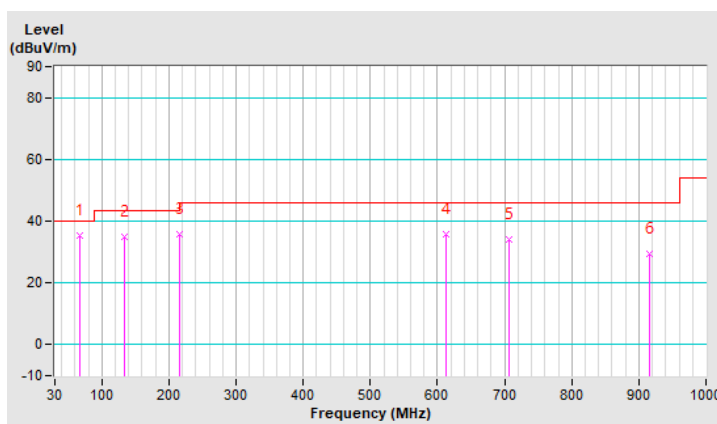
Below 1GHz Worst-Case Data:

RF Mode	TX 802.11n (HT20)	Channel	CH 144 : 5720 MHz
Frequency Range	9kHz ~ 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	66.86	35.17 QP	40.00	-4.83	2.23 H	209	49.80	-14.63
2	132.82	35.12 QP	43.50	-8.38	1.41 H	245	49.19	-14.07
3	215.27	35.83 QP	43.50	-7.67	1.08 H	123	52.19	-16.36
4	612.00	35.73 QP	46.00	-10.27	1.11 H	229	40.89	-5.16
5	707.06	33.99 QP	46.00	-12.01	1.09 H	306	37.89	-3.90
6	915.61	29.56 QP	46.00	-16.44	1.01 H	54	30.67	-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.

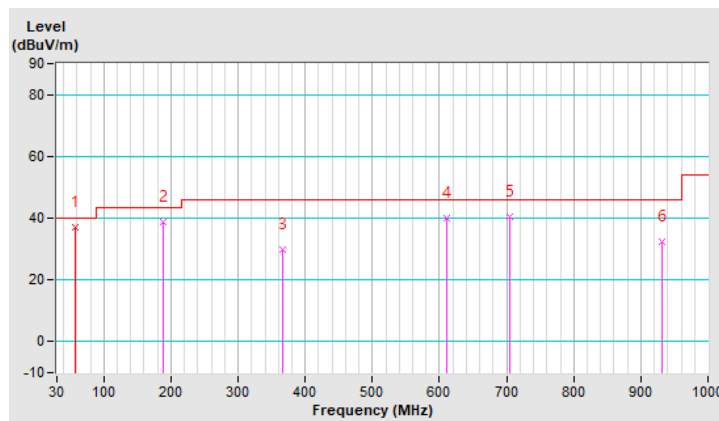


RF Mode	TX 802.11n (HT20)	Channel	CH 144 : 5720 MHz
Frequency Range	9kHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

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	57.34	37.03 QP	40.00	-2.97	1.02 V	225	50.72	-13.69
2	188.11	38.87 QP	43.50	-4.63	1.00 V	207	54.56	-15.69
3	365.62	29.81 QP	46.00	-16.19	1.44 V	158	40.70	-10.89
4	610.06	39.92 QP	46.00	-6.08	1.01 V	36	45.07	-5.15
5	704.15	40.50 QP	46.00	-5.50	1.59 V	217	44.41	-3.91
6	931.13	32.38 QP	46.00	-13.62	1.09 V	32	33.14	-0.76

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 Transmit Power Measurement

4.2.1 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

Per KDB 662911 Method of conducted output power measurement on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;

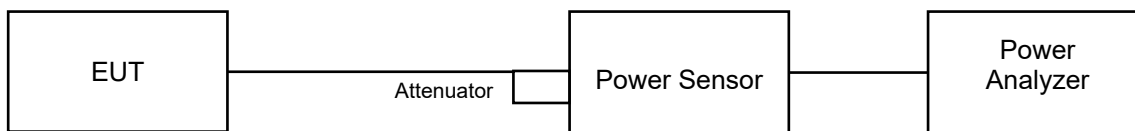
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT} ;

Array Gain = $5 \log(N_{ANT}/N_{SS})$ dB or 3 dB, whichever is less for 20-MHz channel widths with $N_{ANT} \geq 5$.

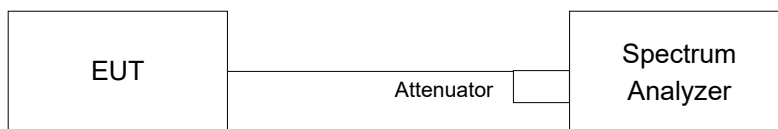
For power measurements on all other devices: Array Gain = $10 \log(N_{ANT}/N_{SS})$ dB.

4.2.2 Test Setup

For Power Output



For 26dB Bandwidth and power output of transmission above 5.725 GHz where the EBW crosses 5.725 GHz



4.2.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.2.4 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 transmission above 5.725 GHz where the EBW crosses 5.725 GHz

For channel aggregation (channel 138, 142, 144) measurement refer to KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Section II E 2 b) method SA-1.

For 26dB Bandwidth

- a. Set RBW = approximately 1% of the emission bandwidth.
- b. Set the VBW > 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%.

4.2.5 Deviation from Test Standard

No deviation.

4.2.6 EUT Operating Conditions

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

4.2.7 Test Result

Power Output:

802.11a

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	10.08	11.14	23.188	13.65	24.00	Pass
40	5200	10.65	11.57	25.969	14.14	24.00	Pass
48	5240	12.01	10.87	28.103	14.49	24.00	Pass
52	5260	11.70	10.38	25.705	14.10	24.00	Pass
60	5300	11.38	10.56	25.117	14.00	24.00	Pass
64	5320	10.63	11.70	26.352	14.21	24.00	Pass
100	5500	11.25	11.62	27.856	14.45	24.00	Pass
116	5580	10.71	12.34	28.916	14.61	24.00	Pass
140	5700	12.09	9.92	25.998	14.15	24.00	Pass
144	5720 (For U-NII-2C)	9.18	6.97	13.257	11.22	22.78	Pass
144	5720 (For U-NII-3)	3.04	1.38	3.388	5.30	30.00	Pass
149	5745	11.20	10.81	25.233	14.02	30.00	Pass
157	5785	11.27	9.53	22.371	13.50	30.00	Pass
165	5825	10.65	8.26	18.313	12.63	30.00	Pass

Note:

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

Chain 0

1. $11\text{dBm} + 10\log(20.22) = 24.05 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(20.11) = 24.03 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(20.20) = 24.05 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(20.10) = 24.03 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(20.26) = 24.06 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(20.24) = 24.06 > 24\text{dBm}$
7. $11\text{dBm} + 10\log(5725.00 - 5709.90) = 22.78 < 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(20.45) = 24.10 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(20.37) = 24.08 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(20.47) = 24.11 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(20.56) = 24.13 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(20.46) = 24.10 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(20.65) = 24.14 > 24\text{dBm}$
7. $11\text{dBm} + 10\log(5725.00 - 5709.76) = 22.82 < 24\text{dBm}$

802.11n (HT20)

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	10.16	11.76	25.372	14.04	24.00	Pass
40	5200	10.74	11.40	25.662	14.09	24.00	Pass
48	5240	11.82	10.97	27.708	14.43	24.00	Pass
52	5260	11.57	10.51	25.601	14.08	24.00	Pass
60	5300	10.94	10.57	23.819	13.77	24.00	Pass
64	5320	10.74	11.59	26.279	14.20	24.00	Pass
100	5500	11.06	11.87	28.146	14.49	24.00	Pass
116	5580	10.62	12.46	29.154	14.65	24.00	Pass
140	5700	12.09	9.82	25.775	14.11	24.00	Pass
144	5720 (For U-NII-2C)	8.67	7.56	13.064	11.16	22.80	Pass
144	5720 (For U-NII-3)	3.06	1.99	3.604	5.57	30.00	Pass
149	5745	11.31	10.79	25.516	14.07	30.00	Pass
157	5785	11.68	9.46	23.554	13.72	30.00	Pass
165	5825	10.64	9.77	21.072	13.24	30.00	Pass

Note:

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

Chain 0

1. $11\text{dBm} + 10\log(20.42) = 24.10 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(20.40) = 24.09 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(20.73) = 24.16 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(20.46) = 24.10 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(20.28) = 24.07 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(20.36) = 24.08 > 24\text{dBm}$
7. $11\text{dBm} + 10\log(5725.00 - 5709.84) = 22.80 < 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(20.39) = 24.09 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(20.88) = 24.19 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(21.01) = 24.22 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(21.07) = 24.23 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(20.57) = 24.13 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(20.49) = 24.11 > 24\text{dBm}$
7. $11\text{dBm} + 10\log(5725.00 - 5709.80) = 22.81 < 24\text{dBm}$

802.11n (HT40)

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	9.48	10.33	19.661	12.94	24.00	Pass
46	5230	10.79	10.25	22.588	13.54	24.00	Pass
54	5270	10.19	9.53	19.421	12.88	24.00	Pass
62	5310	9.95	9.85	19.546	12.91	24.00	Pass
102	5510	10.41	11.26	24.356	13.87	24.00	Pass
110	5550	10.46	11.43	25.017	13.98	24.00	Pass
134	5670	10.79	9.19	20.294	13.07	24.00	Pass
142	5710 (For U-NII-2C)	7.27	7.25	11.039	10.43	24.00	Pass
142	5710 (For U-NII-3)	-2.33	-2.29	1.219	0.86	30.00	Pass
151	5755	10.44	9.64	20.271	13.07	30.00	Pass
159	5795	10.52	8.14	17.788	12.50	30.00	Pass

Note:

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

Chain 0

- $11\text{dBm} + 10\log(41.20) = 27.14 > 24\text{dBm}$
- $11\text{dBm} + 10\log(41.10) = 27.13 > 24\text{dBm}$
- $11\text{dBm} + 10\log(41.14) = 27.14 > 24\text{dBm}$
- $11\text{dBm} + 10\log(42.98) = 27.33 > 24\text{dBm}$
- $11\text{dBm} + 10\log(42.12) = 27.24 > 24\text{dBm}$
- $11\text{dBm} + 10\log(5725.00 - 5689.49) = 26.50 > 24\text{dBm}$

Chain 1

- $11\text{dBm} + 10\log(41.46) = 27.17 > 24\text{dBm}$
- $11\text{dBm} + 10\log(41.25) = 27.15 > 24\text{dBm}$
- $11\text{dBm} + 10\log(42.04) = 27.23 > 24\text{dBm}$
- $11\text{dBm} + 10\log(41.42) = 27.17 > 24\text{dBm}$
- $11\text{dBm} + 10\log(41.91) = 27.22 > 24\text{dBm}$
- $11\text{dBm} + 10\log(5725.00 - 5689.31) = 26.52 > 24\text{dBm}$

802.11ac (VHT80)

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	8.26	8.55	13.860	11.42	24.00	Pass
58	5290	8.23	8.03	13.006	11.14	24.00	Pass
106	5530	8.23	9.71	16.007	12.04	24.00	Pass
122	5610	8.09	9.65	15.667	11.95	24.00	Pass
138	5690 (For U-NII-2C)	5.47	4.53	6.715	8.27	24.00	Pass
138	5690 (For U-NII-3)	-7.47	-8.30	0.345	-4.62	30.00	Pass
155	5775	8.93	7.00	12.828	11.08	30.00	Pass

Note:

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

Chain 0

1. $11\text{dBm} + 10\log(82.42) = 30.16 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(82.36) = 30.15 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(82.42) = 30.16 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(5725.00 - 5648.69) = 29.82 > 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(82.40) = 30.15 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(82.52) = 30.16 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(82.43) = 30.16 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(5725.00 - 5648.70) = 29.82 > 24\text{dBm}$

802.11ax (HE20)

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	6.20	7.72	10.084	10.04	24.00	Pass
40	5200	6.81	7.91	10.977	10.40	24.00	Pass
48	5240	8.06	6.99	11.398	10.57	24.00	Pass
52	5260	7.67	6.90	10.746	10.31	24.00	Pass
60	5300	7.14	7.43	10.710	10.30	24.00	Pass
64	5320	7.38	7.63	11.264	10.52	24.00	Pass
100	5500	6.69	8.50	11.746	10.70	24.00	Pass
116	5580	6.62	8.80	12.178	10.86	24.00	Pass
140	5700	8.03	6.38	10.698	10.29	24.00	Pass
144	5720 (For U-NII-2C)	3.31	4.78	5.271	7.22	22.86	Pass
144	5720 (For U-NII-3)	-1.84	-0.50	1.583	1.99	30.00	Pass
149	5745	7.70	6.93	10.820	10.34	30.00	Pass
157	5785	8.02	5.42	9.822	9.92	30.00	Pass
165	5825	6.91	3.97	7.404	8.69	30.00	Pass

Note:

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

Chain 0

1. $11\text{dBm} + 10\log(20.56) = 24.13 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(20.76) = 24.17 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(20.99) = 24.22 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(20.71) = 24.16 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(20.74) = 24.16 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(20.88) = 24.19 > 24\text{dBm}$
7. $11\text{dBm} + 10\log(5725.00 - 5709.63) = 22.86 < 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(20.79) = 24.17 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(20.70) = 24.15 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(20.88) = 24.19 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(20.69) = 24.15 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(20.93) = 24.20 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(20.89) = 24.19 > 24\text{dBm}$
7. $11\text{dBm} + 10\log(5725.00 - 5709.62) = 22.86 < 24\text{dBm}$

802.11ax (HE40)

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	6.42	7.86	10.495	10.21	24.00	Pass
46	5230	7.87	7.53	11.786	10.71	24.00	Pass
54	5270	7.60	6.80	10.541	10.23	24.00	Pass
62	5310	7.29	7.47	10.943	10.39	24.00	Pass
102	5510	7.27	8.37	12.204	10.87	24.00	Pass
110	5550	7.43	8.99	13.459	11.29	24.00	Pass
134	5670	8.22	6.45	11.053	10.43	24.00	Pass
142	5710 (For U-NII-2C)	5.59	5.50	7.386	8.68	24.00	Pass
142	5710 (For U-NII-3)	-3.89	-3.99	0.832	-0.80	30.00	Pass
151	5755	7.75	6.51	10.434	10.18	30.00	Pass
159	5795	7.68	5.06	9.068	9.58	30.00	Pass

Note:

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

Chain 0

1. $11\text{dBm} + 10\log(41.86) = 27.21 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.50) = 27.28 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(41.90) = 27.22 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(41.94) = 27.22 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(42.14) = 27.24 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(5725.00 - 5689.23) = 26.53 > 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(42.43) = 27.27 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.11) = 27.24 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(42.03) = 27.23 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(41.95) = 27.22 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(41.83) = 27.21 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(5725.00 - 5689.00) = 26.56 > 24\text{dBm}$

802.11ax (HE80)

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	7.32	7.66	11.230	10.50	24.00	Pass
58	5290	7.38	7.45	11.029	10.43	24.00	Pass
106	5530	7.45	8.88	13.286	11.23	24.00	Pass
122	5610	7.30	8.88	13.097	11.17	24.00	Pass
138	5690 (For U-NII-2C)	5.93	5.88	8.471	9.28	24.00	Pass
138	5690 (For U-NII-3)	-6.66	-6.71	0.467	-3.31	30.00	Pass
155	5775	8.02	6.32	10.624	10.26	30.00	Pass

Note:

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

Chain 0

1. $11\text{dBm} + 10\log(81.82) = 30.12 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(81.78) = 30.12 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(81.59) = 30.11 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(5725.00 - 5649.13) = 29.80 > 24\text{dBm}$

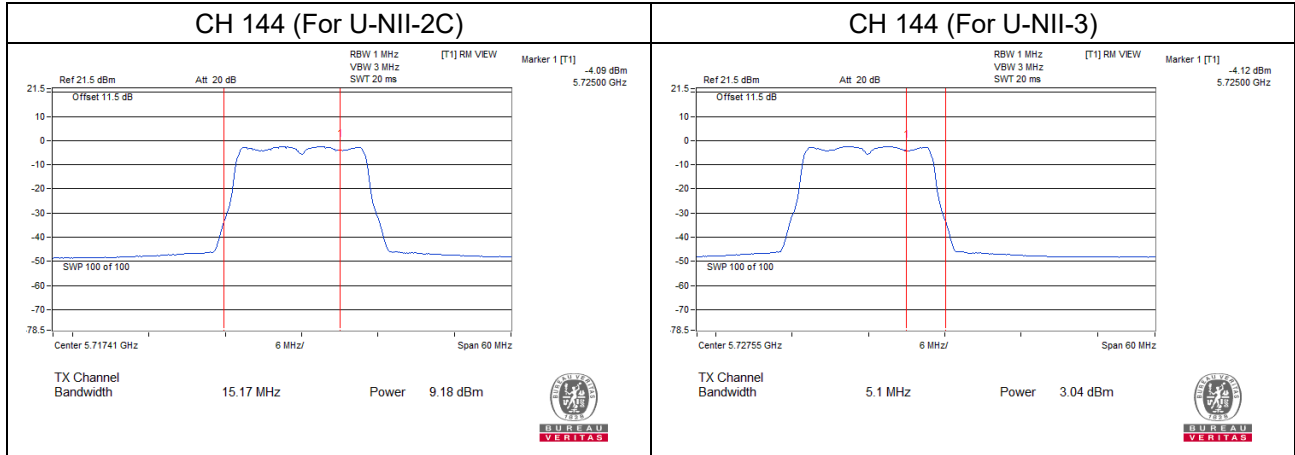
Chain 1

1. $11\text{dBm} + 10\log(81.87) = 30.13 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(81.98) = 30.13 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(81.68) = 30.12 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(5725.00 - 5649.04) = 29.80 > 24\text{dBm}$

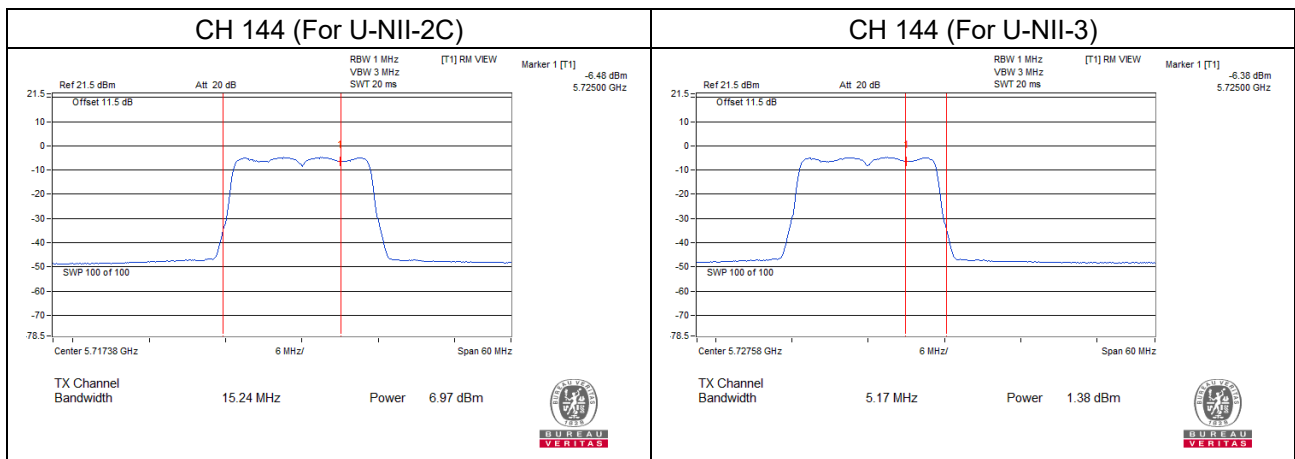
Straddle channel power plots:

802.11a

Chain 0

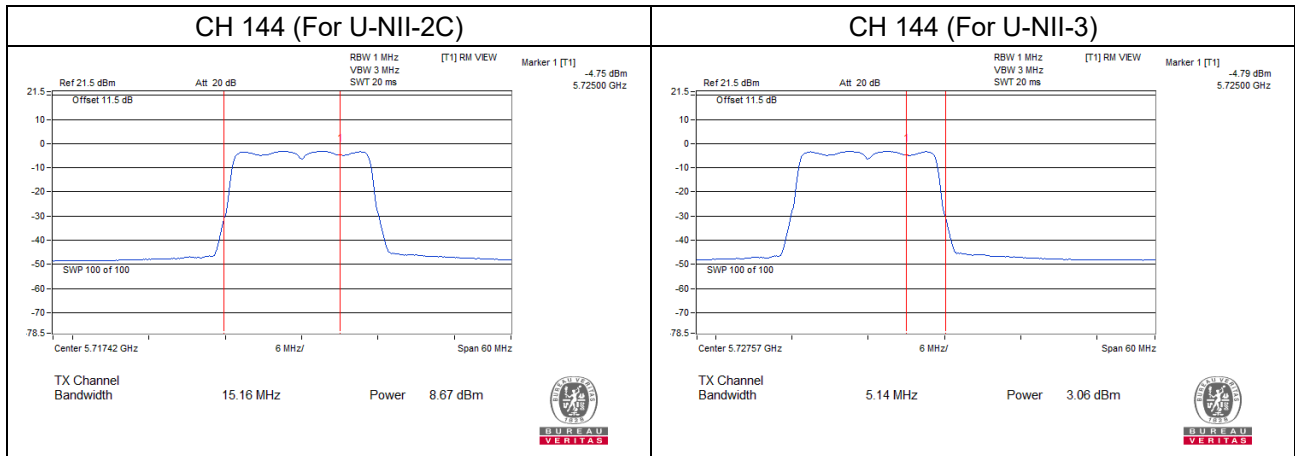


Chain 1

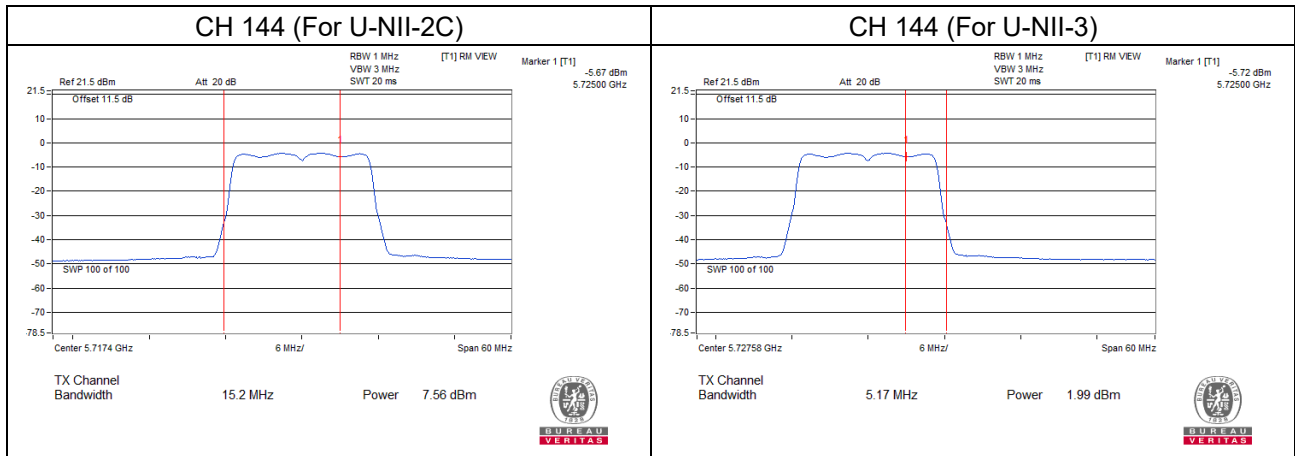


802.11n (HT20)

Chain 0

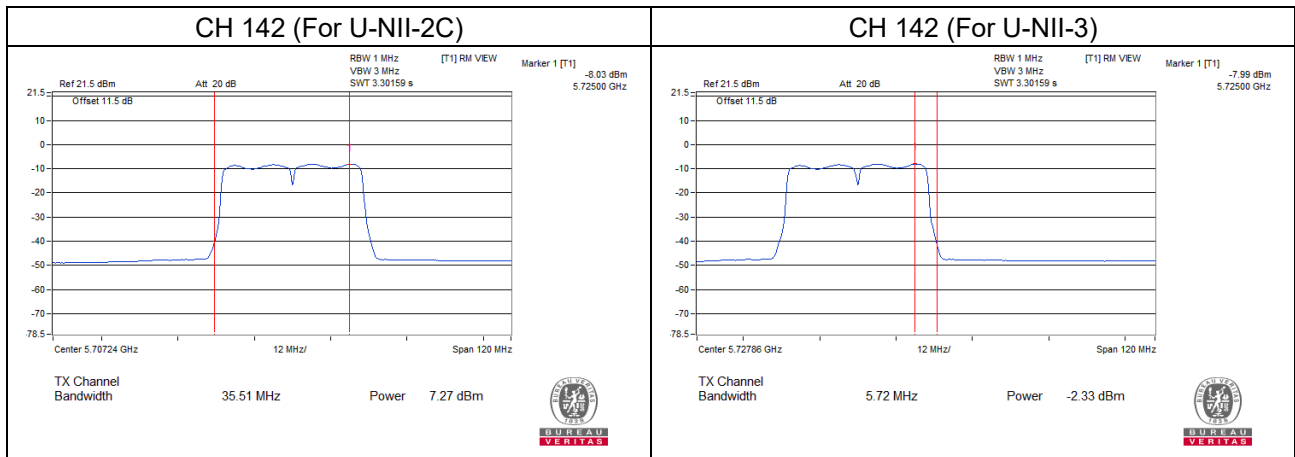


Chain 1

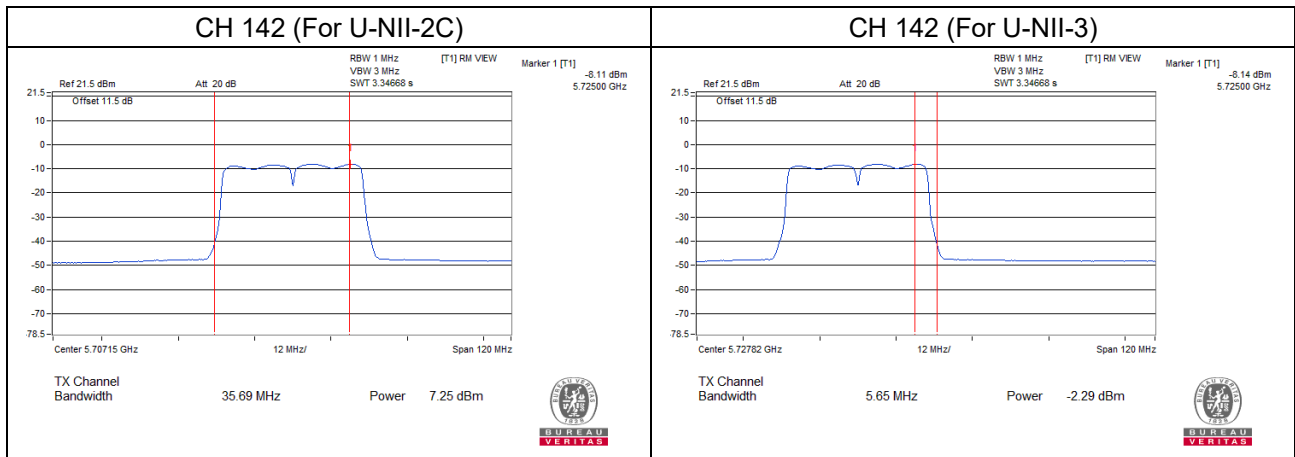


802.11n (HT40)

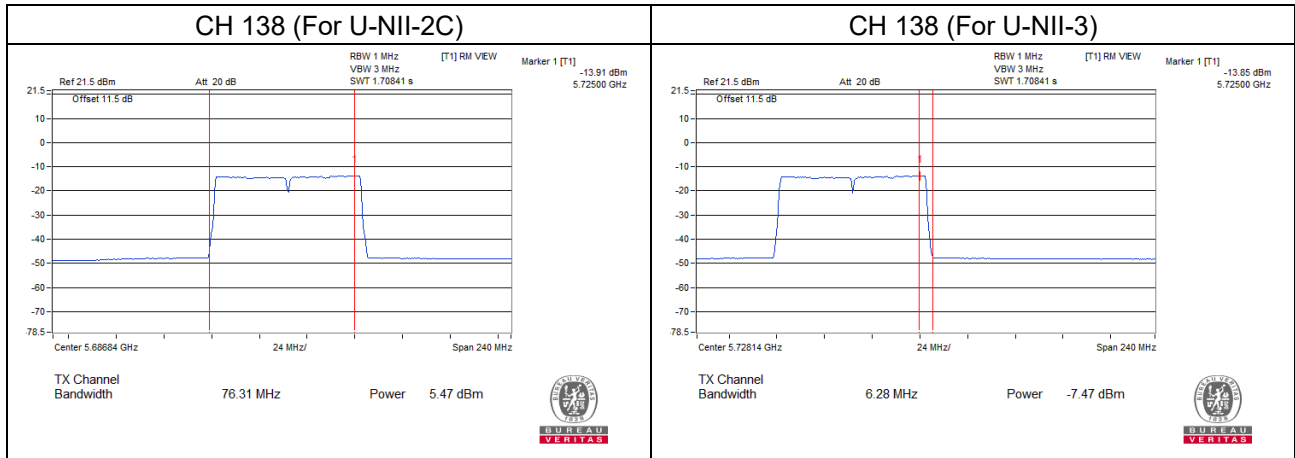
Chain 0



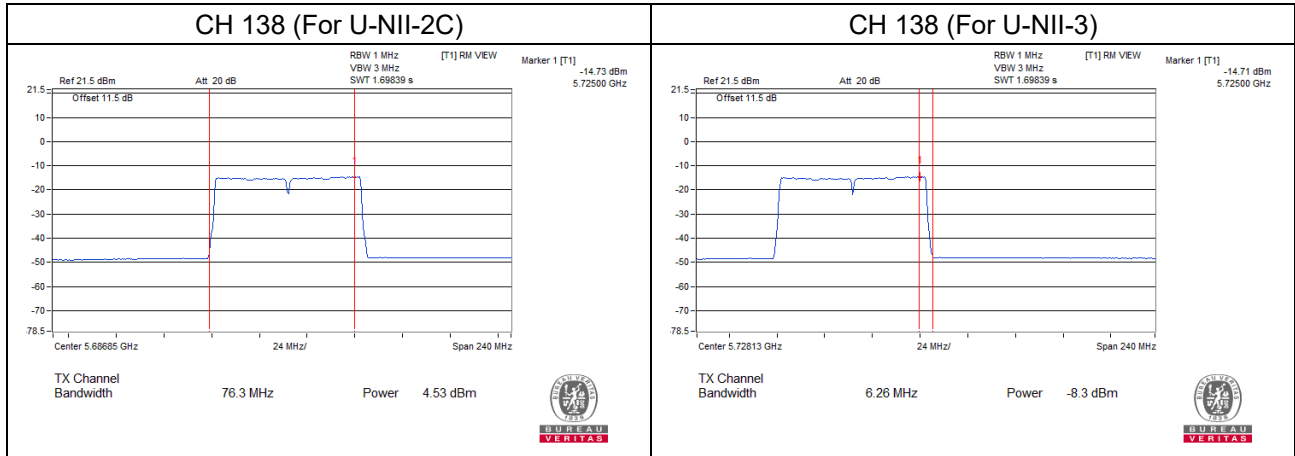
Chain 1



802.11ac (VHT80)
Chain 0

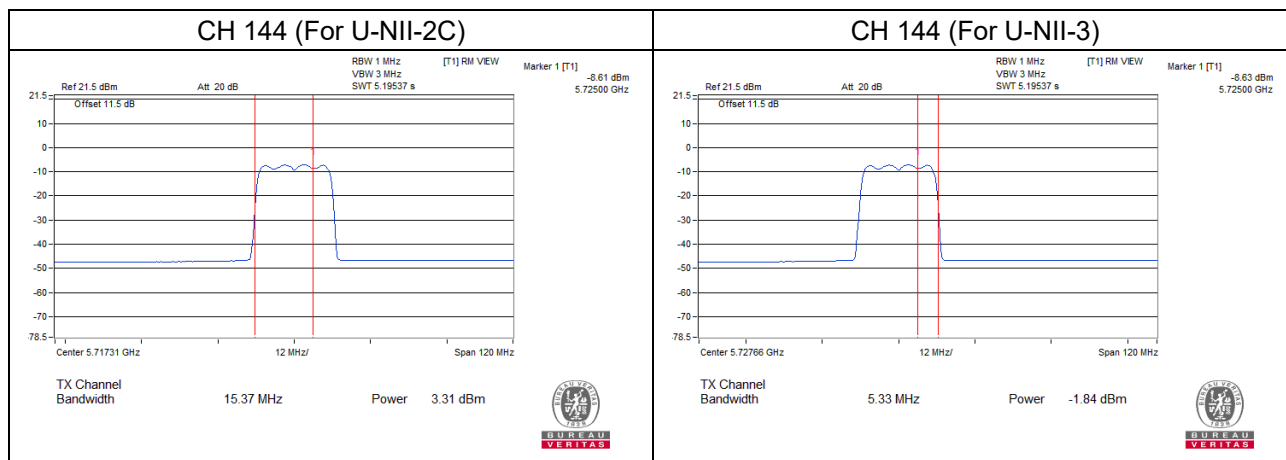


Chain 1

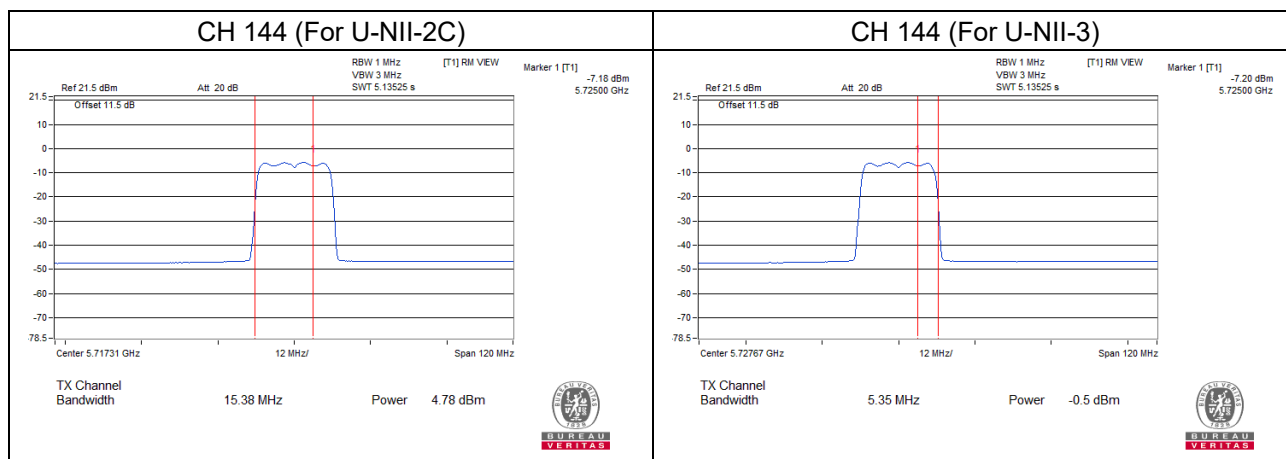


802.11ax (HE20)

Chain 0

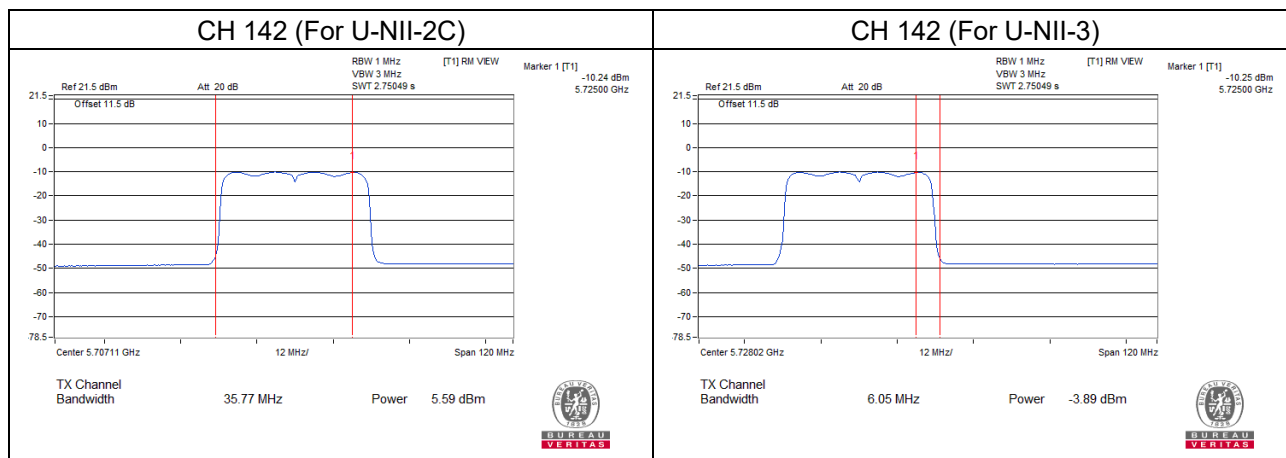


Chain 1

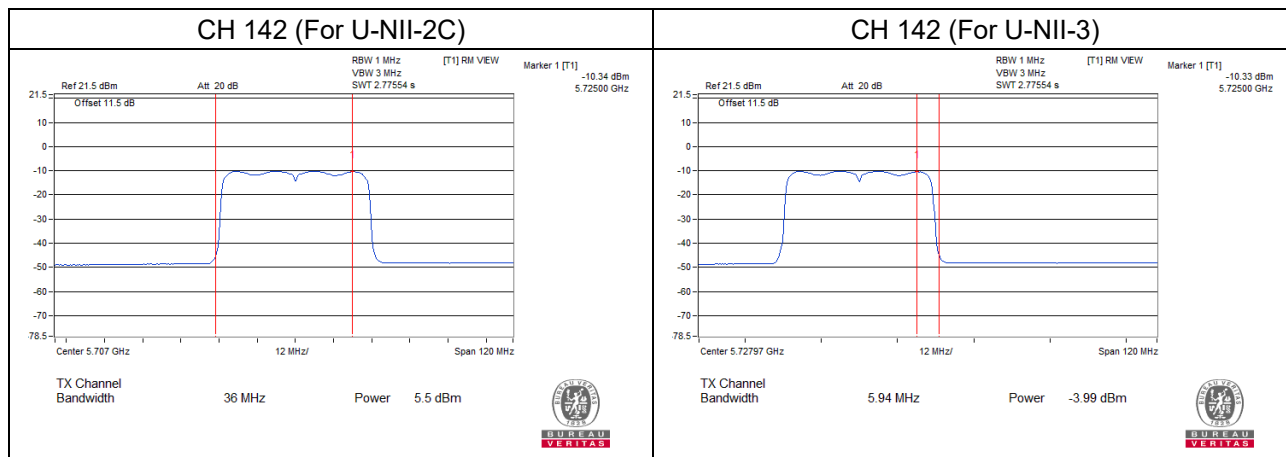


802.11ax (HE40)

Chain 0

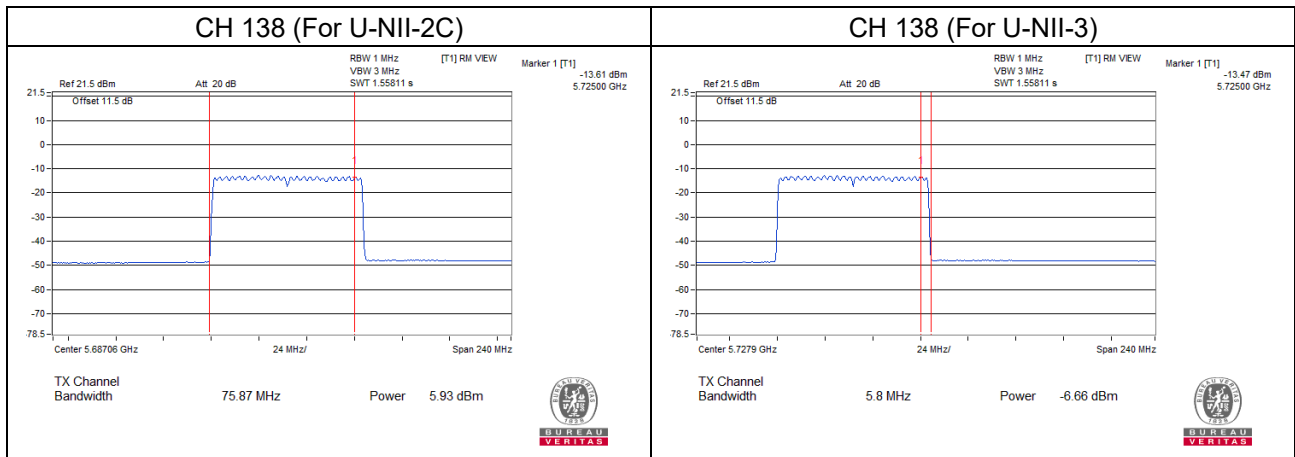


Chain 1

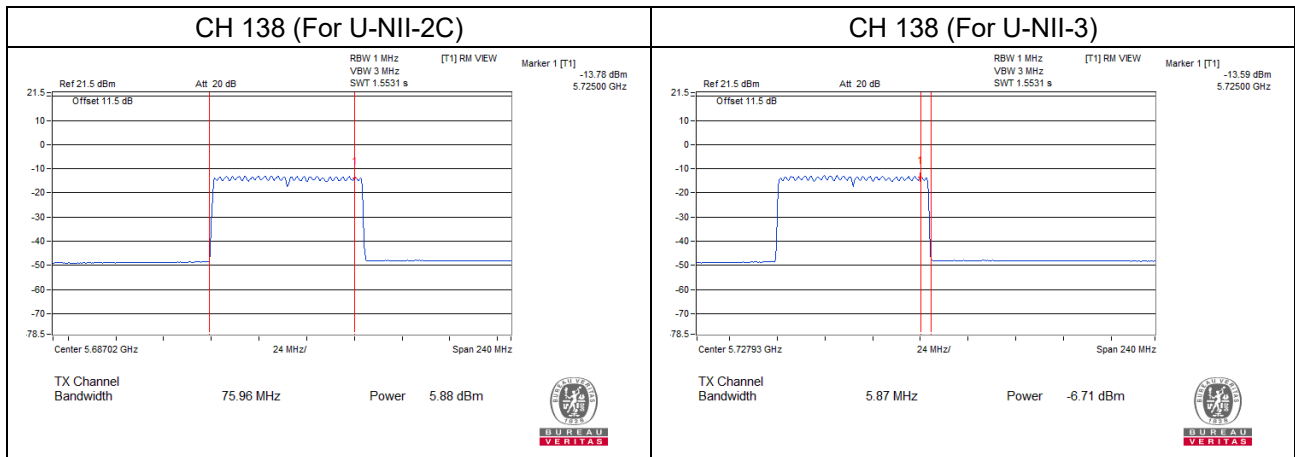


802.11ax (HE80)

Chain 0



Chain 1



26dB Bandwidth:

802.11a

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	20.22	20.45
60	5300	20.11	20.37
64	5320	20.20	20.47
100	5500	20.10	20.56
116	5580	20.26	20.46
140	5700	20.24	20.65
144	5720 (For U-NII-2C)	15.10	15.24

For CH144 (U-NII-2C Band): The 26dBc bandwidth below 5725MHz = 5725MHz - Marker 1

802.11n (HT20)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	20.42	20.39
60	5300	20.40	20.88
64	5320	20.73	21.01
100	5500	20.46	21.07
116	5580	20.28	20.57
140	5700	20.36	20.49
144	5720 (For U-NII-2C)	15.16	15.20

For CH144 (U-NII-2C Band): The 26dBc bandwidth below 5725MHz = 5725MHz - Marker 1

802.11n (HT40)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
54	5270	41.20	41.46
62	5310	41.10	41.25
102	5510	41.14	42.04
110	5550	42.98	41.42
134	5670	42.12	41.91
142	5710 (For U-NII-2C)	35.51	35.69

For CH142 (U-NII-2C Band): The 26dBc bandwidth below 5725MHz = 5725MHz - Marker 1

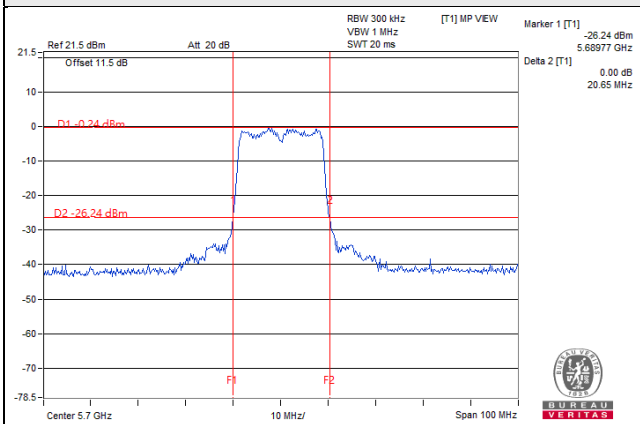
802.11ac (VHT80)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
58	5290	82.42	82.40
106	5530	82.36	82.52
122	5610	82.42	82.43
138	5690 (For U-NII-2C)	76.31	76.30

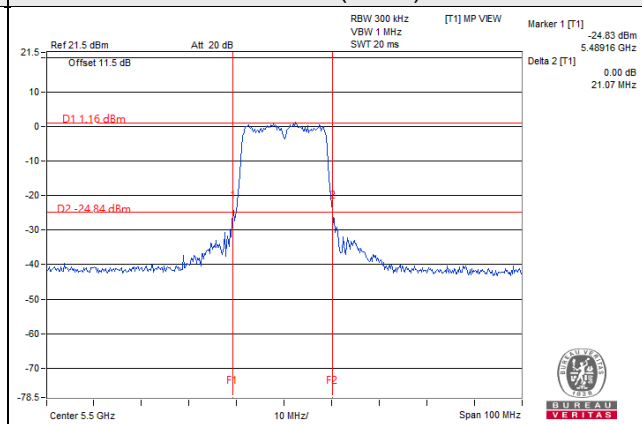
For CH138 (U-NII-2C Band): The 26dBc bandwidth below 5725MHz = 5725MHz - Marker 1

Spectrum Plot of Worst Value

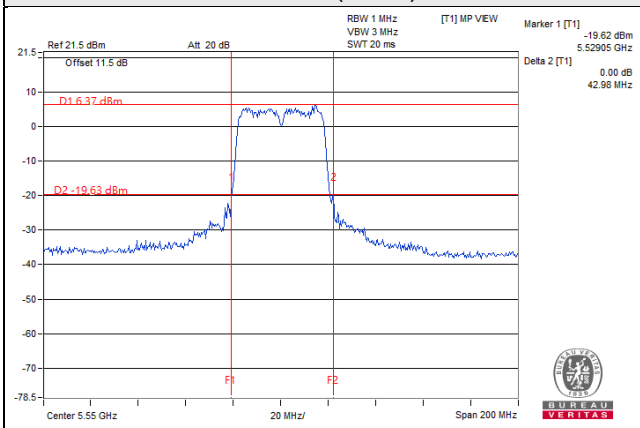
802.11a



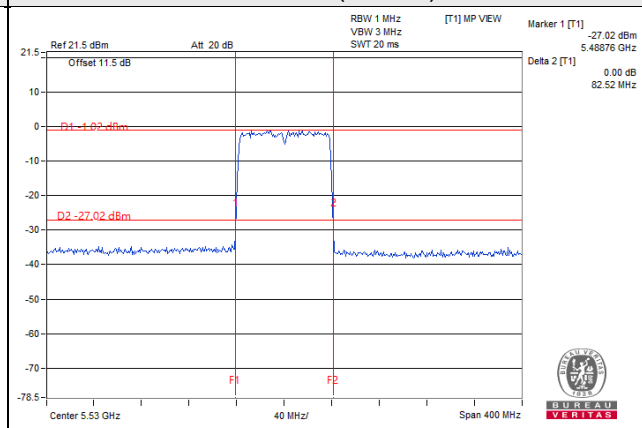
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)



802.11ax (HE20)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	20.56	20.79
60	5300	20.76	20.70
64	5320	20.99	20.88
100	5500	20.71	20.69
116	5580	20.74	20.93
140	5700	20.88	20.89
144	5720 (For U-NII-2C)	15.37	15.38

For CH144 (U-NII-2C Band): The 26dBc bandwidth below 5725MHz = 5725MHz - Marker 1

802.11ax (HE40)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
54	5270	41.86	42.43
62	5310	42.50	42.11
102	5510	41.90	42.03
110	5550	41.94	41.95
134	5670	42.14	41.83
142	5710 (For U-NII-2C)	35.77	36.00

For CH142 (U-NII-2C Band): The 26dBc bandwidth below 5725MHz = 5725MHz - Marker 1

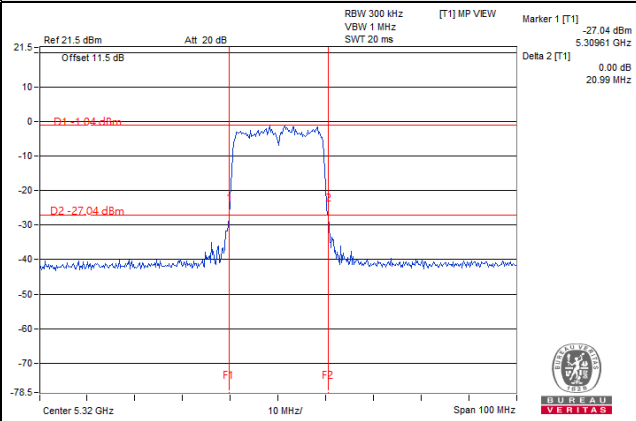
802.11ax (HE80)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
58	5290	81.82	81.87
106	5530	81.78	81.98
122	5610	81.59	81.68
138	5690 (For U-NII-2C)	75.87	75.96

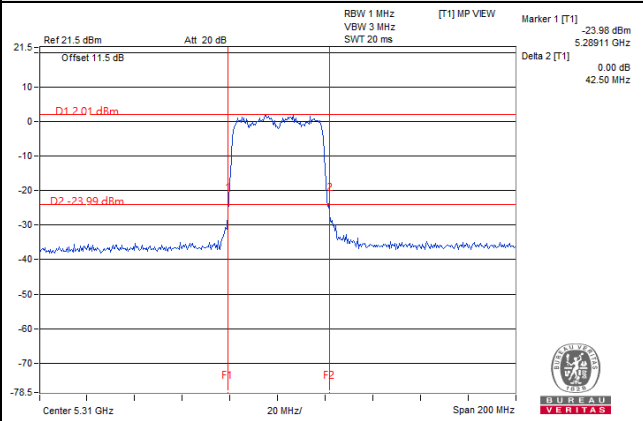
For CH138 (U-NII-2C Band): The 26dBc bandwidth below 5725MHz = 5725MHz - Marker 1

Spectrum Plot of Worst Value

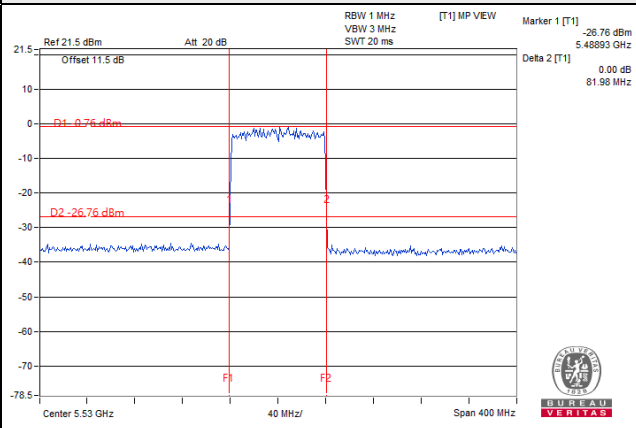
802.11ax (HE20)



802.11ax (HE40)



802.11ax (HE80)



EUT Average Power

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	26.352	14.21
5470~5725	28.916	14.61

802.11n (HT20)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	26.279	14.20
5470~5725	29.154	14.65

802.11n (HT40)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	19.546	12.91
5470~5725	25.017	13.98

802.11ac (VHT80)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	13.006	11.14
5470~5725	16.007	12.04

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	11.264	10.52
5470~5725	12.178	10.86

802.11ax (HE40)

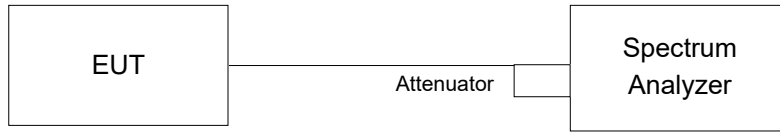
Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	10.943	10.39
5470~5725	13.459	11.29

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	11.029	10.43
5470~5725	13.286	11.23

4.3 Occupied Bandwidth Measurement

4.3.1 Test Setup



4.3.2 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.3 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.

4.3.4 Test Result

802.11a

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	16.80	17.64
40	5200	16.80	17.64
48	5240	16.80	17.64
52	5260	16.80	17.64
60	5300	16.80	17.64
64	5320	16.80	17.64
100	5500	16.80	17.64
116	5580	16.92	17.64
140	5700	16.80	17.64
144	5720 (For U-NII-2C)	13.40	13.88
144	5720 (For U-NII-3)	3.28	3.76
149	5745	16.80	17.64
157	5785	16.92	17.64
165	5825	16.80	17.64

For CH144 (U-NII-2C Band): The Occupied bandwidth below 5725MHz = 5725MHz - Temp 1

For CH144 (U-NII-3 Band): The Occupied bandwidth above 5725MHz = Temp 2 - 5725MHz

802.11n (HT20)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	17.64	17.64
40	5200	17.64	17.64
48	5240	17.64	17.64
52	5260	17.64	17.64
60	5300	17.64	17.64
64	5320	17.64	17.64
100	5500	17.64	17.64
116	5580	17.64	17.64
140	5700	17.64	17.64
144	5720 (For U-NII-2C)	13.88	13.88
144	5720 (For U-NII-3)	3.88	3.76
149	5745	17.64	17.64
157	5785	17.64	17.64
165	5825	17.64	17.64

For CH144 (U-NII-2C Band): The Occupied bandwidth below 5725MHz = 5725MHz - Temp 1

For CH144 (U-NII-3 Band): The Occupied bandwidth above 5725MHz = Temp 2 - 5725MHz

802.11n (HT40)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
38	5190	36.60	36.48
46	5230	36.48	36.48
54	5270	36.48	36.72
62	5310	36.48	36.36
102	5510	36.48	36.48
110	5550	36.48	36.48
134	5670	36.24	36.72
142	5710 (For U-NII-2C)	33.24	33.24
142	5710 (For U-NII-3)	3.24	3.24
151	5755	36.48	36.24
159	5795	36.60	36.60

For CH142 (U-NII-2C Band): The Occupied bandwidth below 5725MHz = 5725MHz - Temp 1

For CH142 (U-NII-3 Band): The Occupied bandwidth above 5725MHz = Temp 2 - 5725MHz

802.11ac (VHT80)

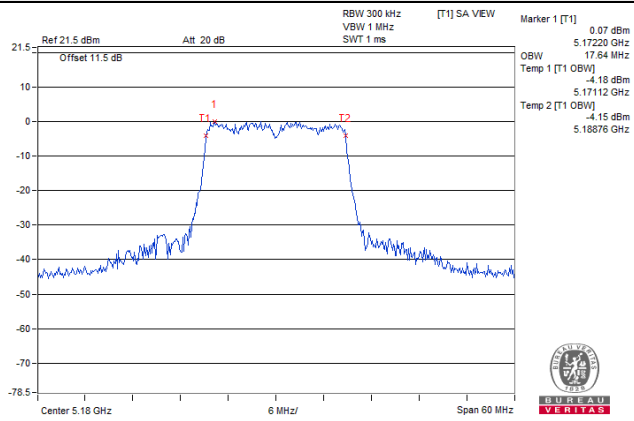
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
42	5210	77.28	77.28
58	5290	76.32	76.32
106	5530	76.32	76.32
122	5610	76.32	76.08
138	5690 (For U-NII-2C)	73.40	73.40
138	5690 (For U-NII-3)	2.92	3.40
155	5775	76.32	76.32

For CH138 (U-NII-2C Band): The Occupied bandwidth below 5725MHz = 5725MHz - Temp 1

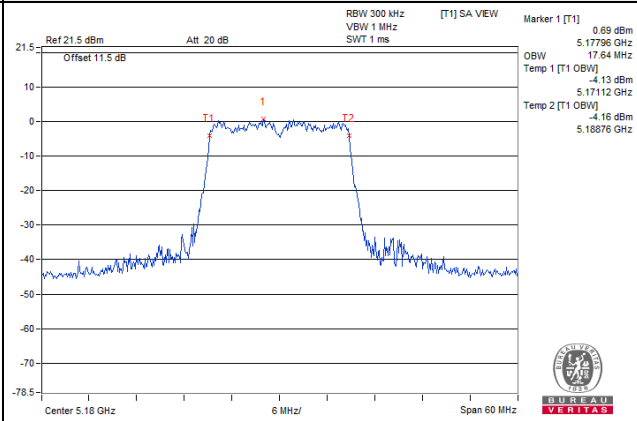
For CH138 (U-NII-3 Band): The Occupied bandwidth above 5725MHz = Temp 2 - 5725MHz

Spectrum Plot of Worst Value

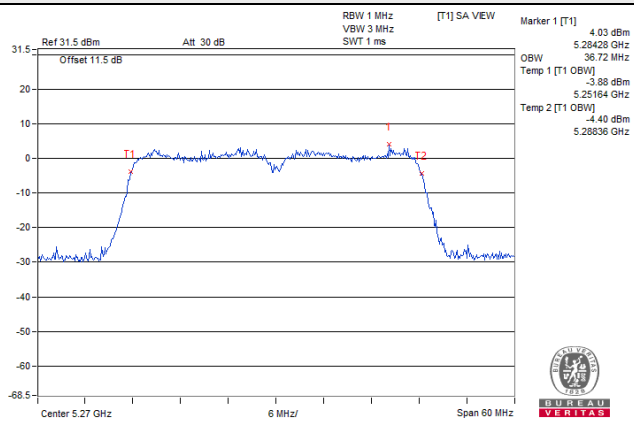
802.11a



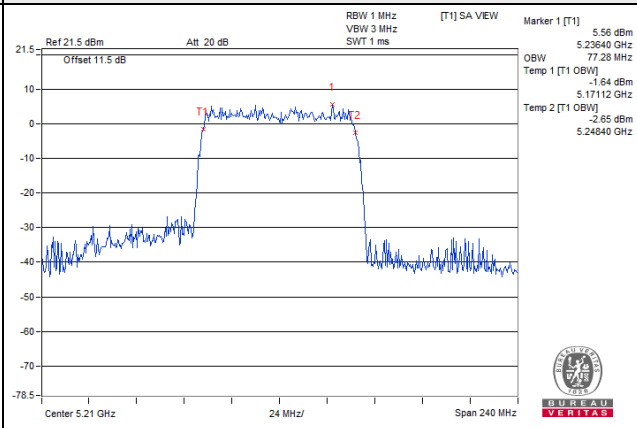
802.11n (HT20)



802.11n (HT40)

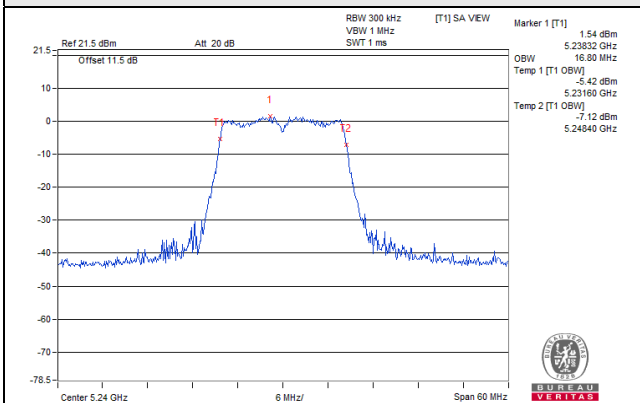


802.11ac (VHT80)

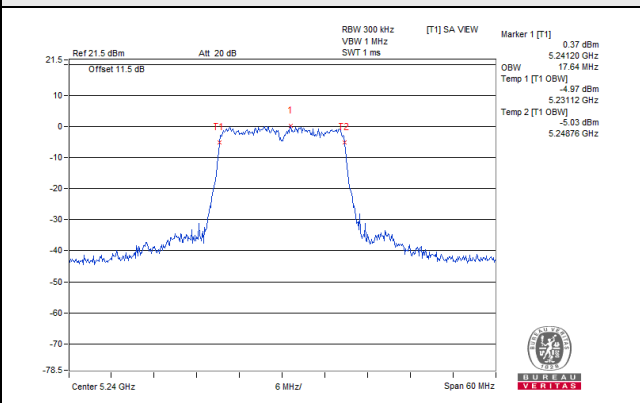


Spectrum Plot for near By DFS Band

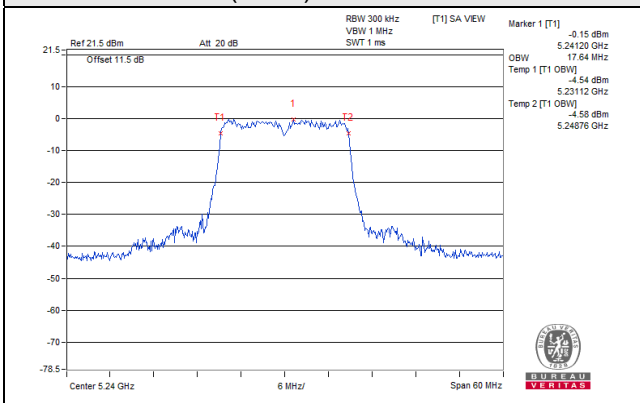
802.11a / Chain 0 / CH 48



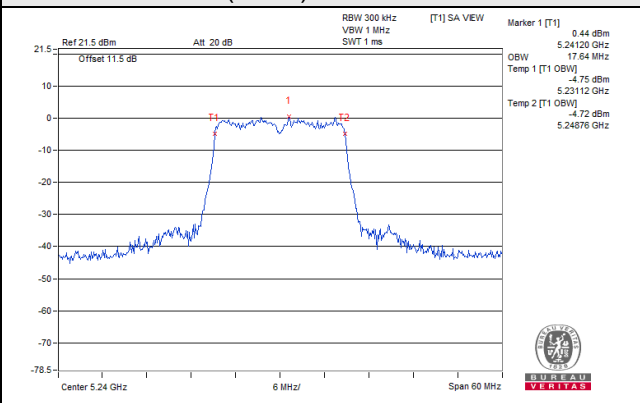
802.11a / Chain 1 / CH 48



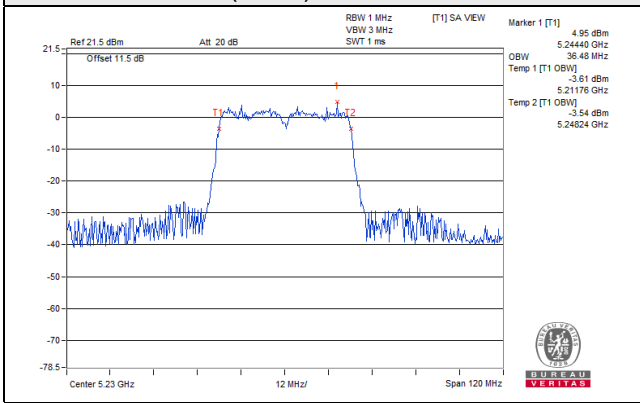
802.11n (HT20) / Chain 0 / CH 48



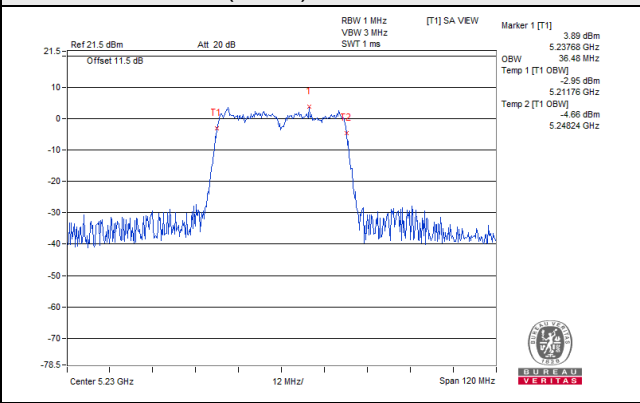
802.11n (HT20) / Chain 1 / CH 48



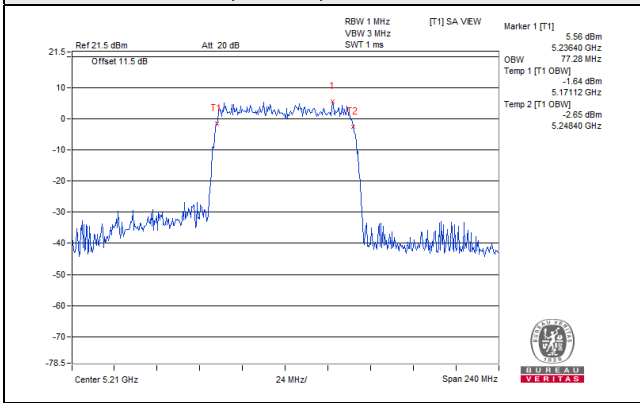
802.11n (HT40) / Chain 0 / CH 46



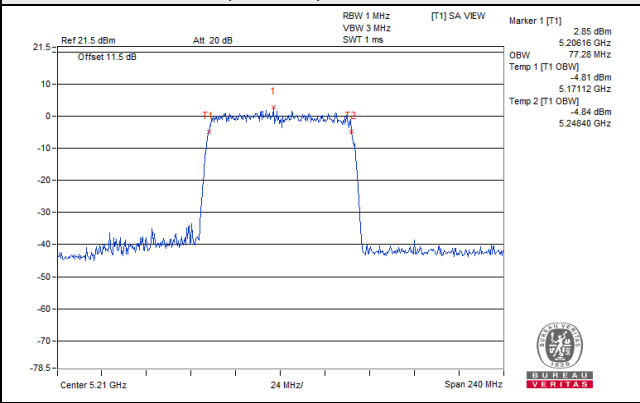
802.11n (HT40) / Chain 1 / CH 46



802.11ac (VHT80) / Chain 0 / CH 42

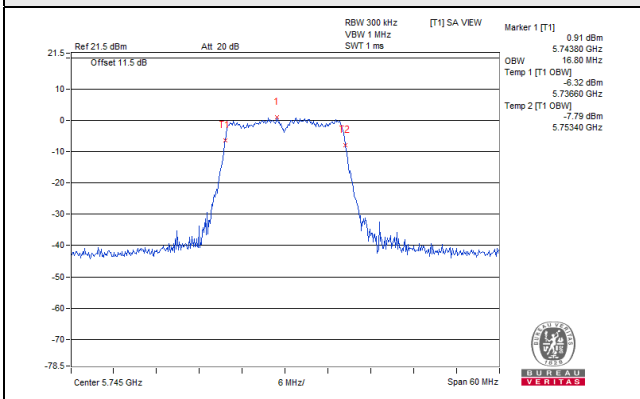


802.11ac (VHT80) / Chain 1 / CH 42

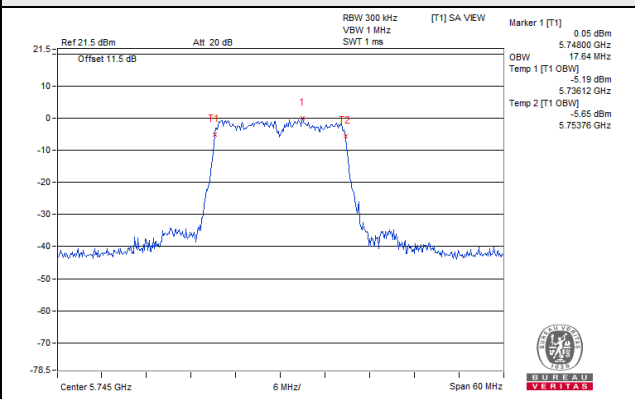


Spectrum Plot for near By DFS Band

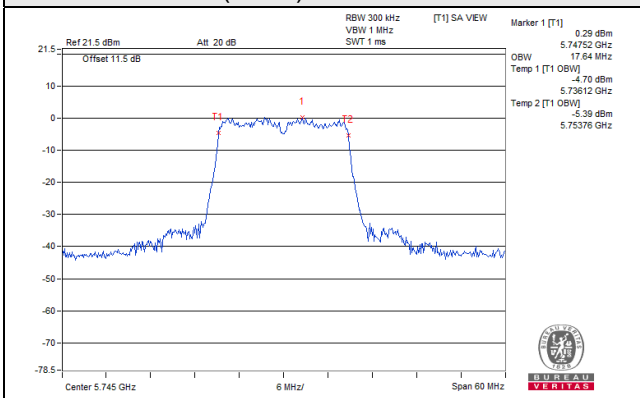
802.11a / Chain 0 / CH 149



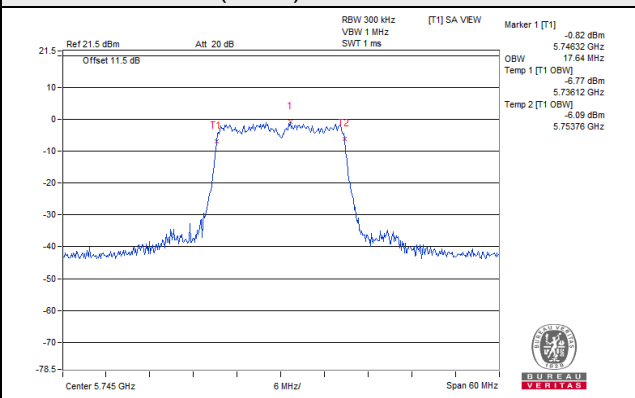
802.11a / Chain 1 / CH 149



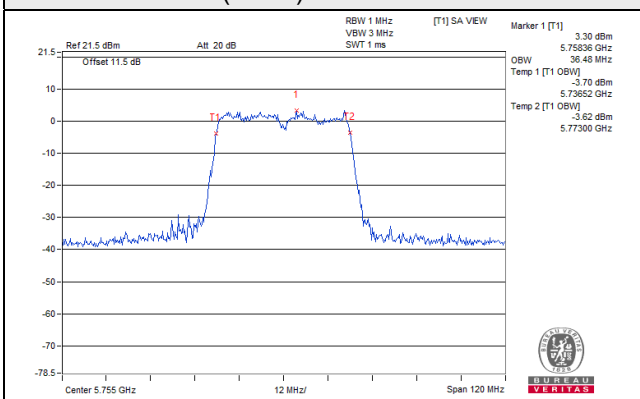
802.11n (HT20) / Chain 0 / CH 149



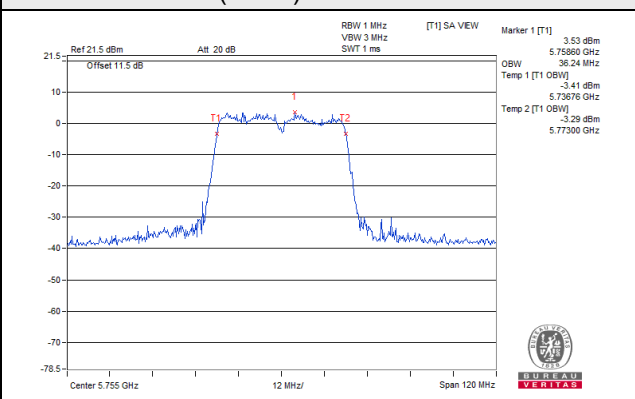
802.11n (HT20) / Chain 1 / CH 149



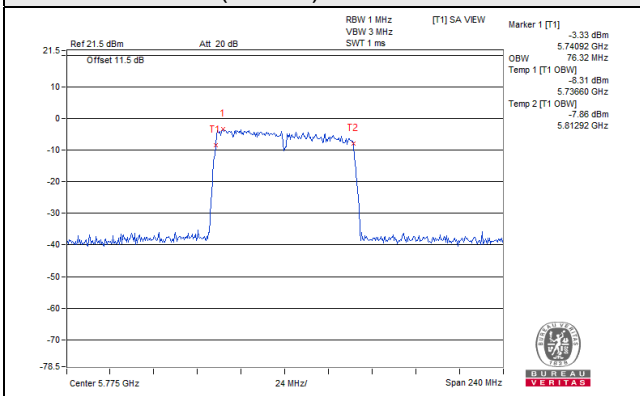
802.11n (HT40) / Chain 0 / CH 151



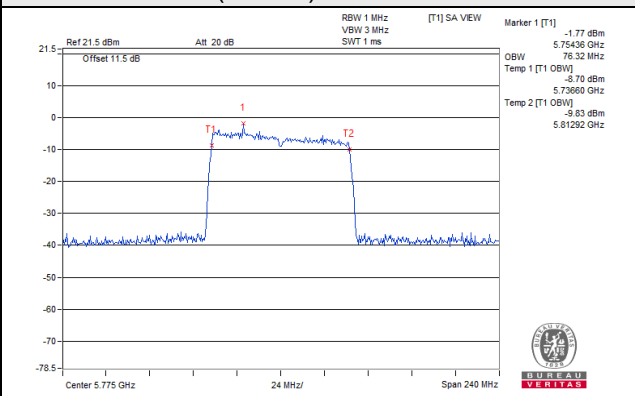
802.11n (HT40) / Chain 1 / CH 151



802.11ac (VHT80) / Chain 0 / CH 155



802.11ac (VHT80) / Chain 1 / CH 155



802.11ax (HE20)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	18.84	18.84
40	5200	18.84	18.84
48	5240	18.84	18.84
52	5260	18.84	18.84
60	5300	18.84	18.84
64	5320	18.84	18.84
100	5500	18.84	18.84
116	5580	18.84	18.84
140	5700	18.84	18.84
144	5720 (For U-NII-2C)	14.48	14.48
144	5720 (For U-NII-3)	4.36	4.36
149	5745	18.84	18.84
157	5785	18.84	18.84
165	5825	18.84	18.84

For CH144 (U-NII-2C Band): The Occupied bandwidth below 5725MHz = 5725MHz - Temp 1

For CH144 (U-NII-3 Band): The Occupied bandwidth above 5725MHz = Temp 2 - 5725MHz

802.11ax (HE40)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
38	5190	37.80	37.92
46	5230	37.92	37.68
54	5270	37.80	37.92
62	5310	37.92	37.80
102	5510	37.80	37.80
110	5550	37.68	37.92
134	5670	37.92	37.68
142	5710 (For U-NII-2C)	33.96	33.96
142	5710 (For U-NII-3)	3.72	3.96
151	5755	37.92	37.92
159	5795	37.80	37.80

For CH142 (U-NII-2C Band): The Occupied bandwidth below 5725MHz = 5725MHz - Temp 1

For CH142 (U-NII-3 Band): The Occupied bandwidth above 5725MHz = Temp 2 - 5725MHz

802.11ax (HE80)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
42	5210	78.72	79.20
58	5290	77.76	77.76
106	5530	77.76	77.76
122	5610	78.00	77.76
138	5690 (For U-NII-2C)	73.88	73.88
138	5690 (For U-NII-3)	3.88	3.88
155	5775	77.28	77.76

For CH138 (U-NII-2C Band): The Occupied bandwidth below 5725MHz = 5725MHz - Temp 1

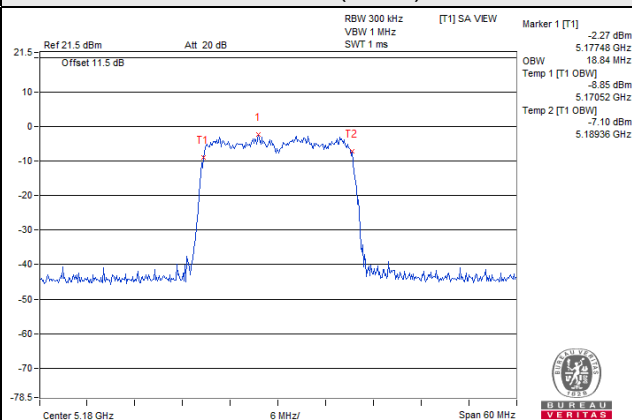
For CH138 (U-NII-3 Band): The Occupied bandwidth above 5725MHz = Temp 2 - 5725MHz



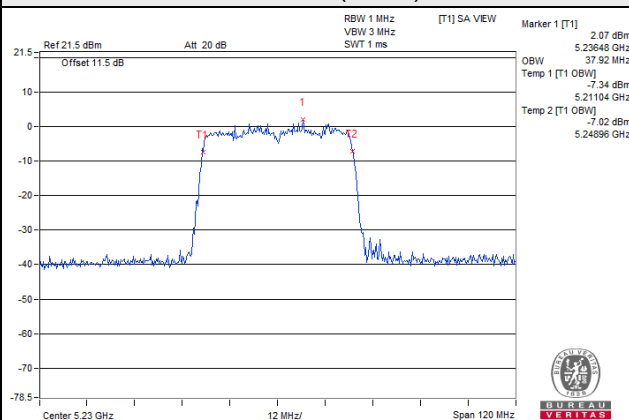
BUREAU
VERITAS

Spectrum Plot of Worst Value

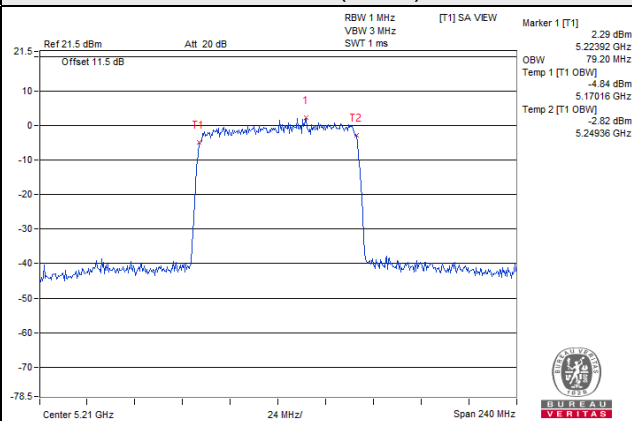
802.11ax (HE20)



802.11ax (HE40)

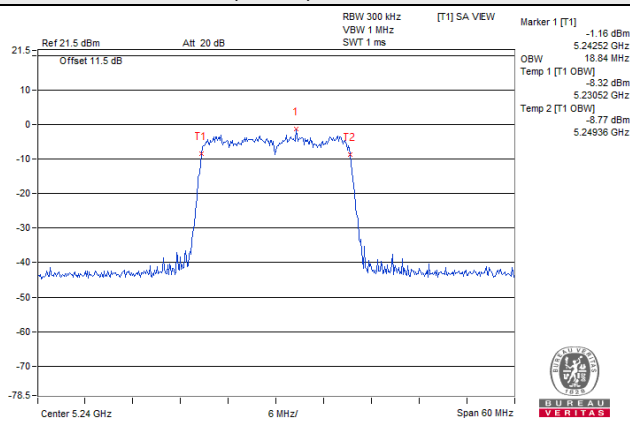


802.11ax (HE80)

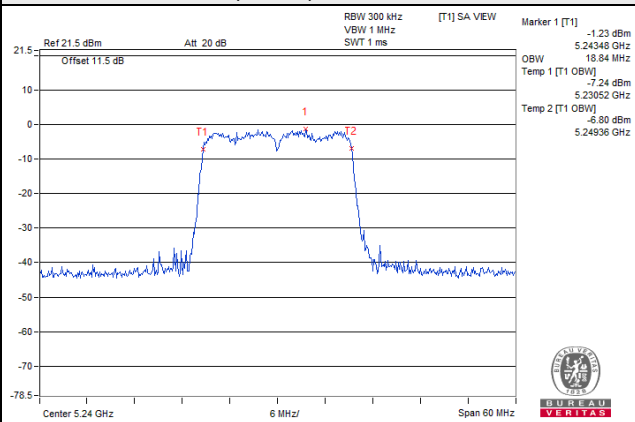


Spectrum Plot for near By DFS Band

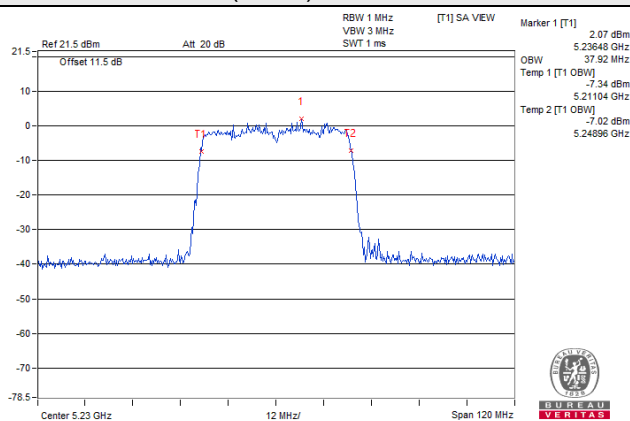
802.11ax (HE20) / Chain 0 / CH 48



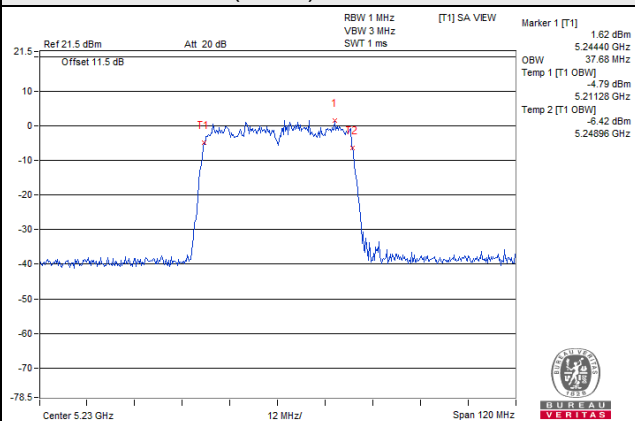
802.11ax (HE20) / Chain 1 / CH 48



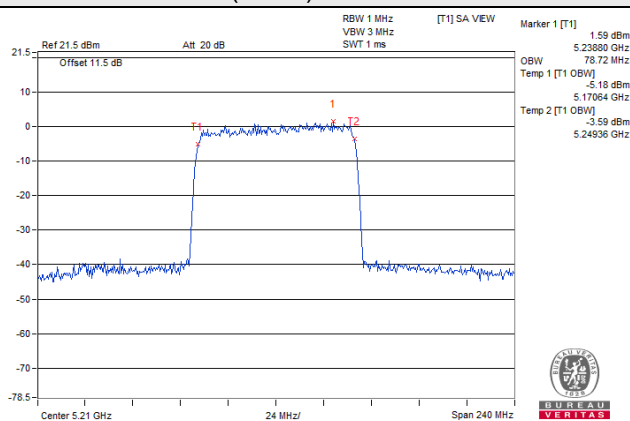
802.11ax (HE40) / Chain 0 / CH 46



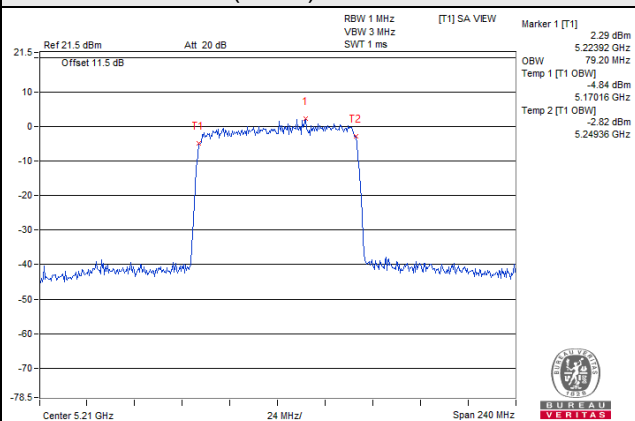
802.11ax (HE40) / Chain 1 / CH 46



802.11ax (HE80) / Chain 0 / CH 42

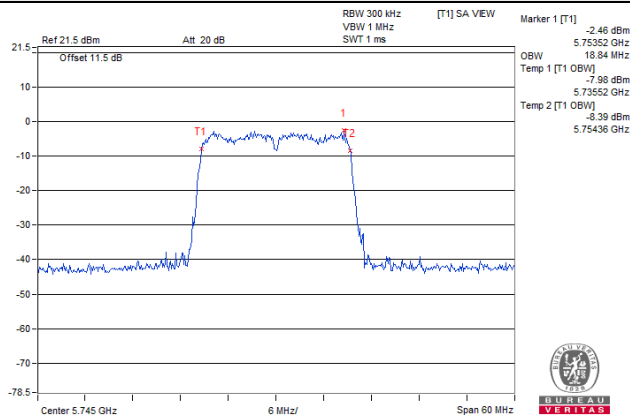


802.11ax (HE80) / Chain 1 / CH 42

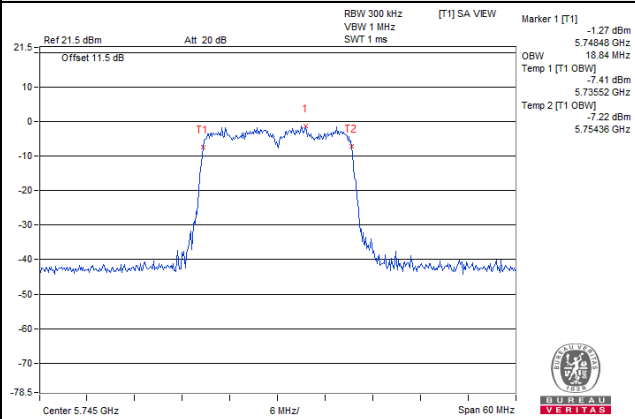


Spectrum Plot for near By DFS Band

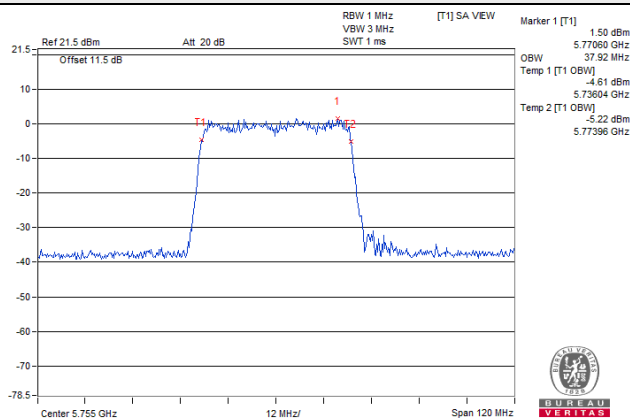
802.11ax (HE20) / Chain 0 / CH 149



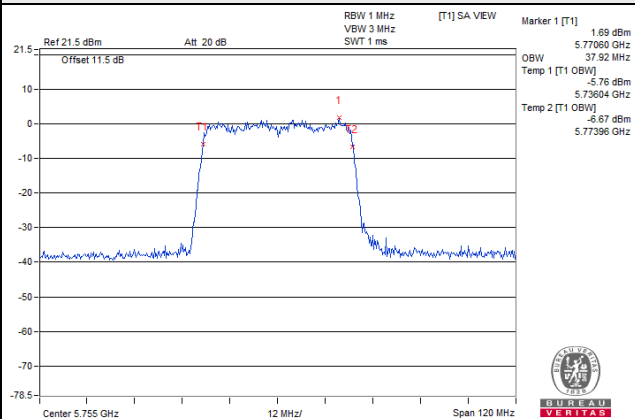
802.11ax (HE20) / Chain 1 / CH 149



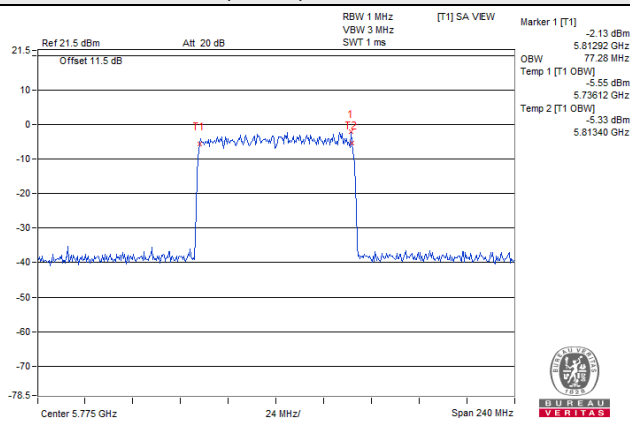
802.11ax (HE40) / Chain 0 / CH 151



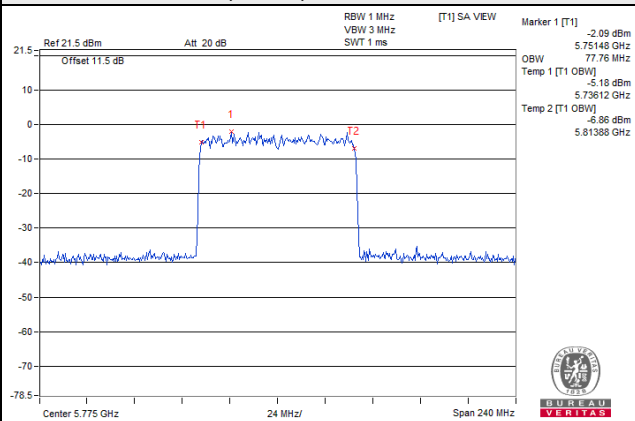
802.11ax (HE40) / Chain 1 / CH 151



802.11ax (HE80) / Chain 0 / CH 155



802.11ax (HE80) / Chain 1 / CH 155

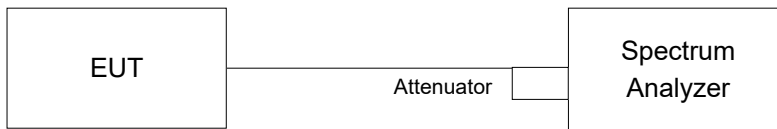


4.4 Peak Power Spectral Density Measurement

4.4.1 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

4.4.2 Test Setup



4.4.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.4.4 Test Procedures

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

Duty cycle of test signal is $\geq 98\%$

Using method SA-1

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 1MHz, Set VBW ≥ 3 MHz, Detector = RMS.
- 3) Set Channel power measure = 1MHz.
- 4) Sweep time = auto, trigger set to "free run".
- 5) Trace average at least 100 traces in power averaging mode.
- 6) Record the max value.

Duty cycle of test signal is $< 98\%$

Using method SA-2

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 1MHz, Set VBW ≥ 3 MHz, Detector = RMS.
- 3) Set Channel power measure = 1MHz.
- 4) Sweep time = auto, trigger set to "free run".
- 5) Trace average at least 100 traces in power averaging mode.
- 6) Record the max value and add $10 \log (1/\text{duty cycle})$.

For U-NII-3 band

Duty cycle $\geq 98\%$

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 300 kHz, Set VBW ≥ 1 MHz, Detector = RMS.
- 3) Use the peak marker function to determine the maximum power level in any 300 kHz band segment within the fundamental EBW.
- 4) 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 $BWCF = 10\log(500 \text{ kHz} / 300 \text{ kHz})$.
- 5) Sweep time = auto, trigger set to "free run".
- 6) Trace average at least 100 traces in power averaging mode.
- 7) Record the max value.

Duty cycle $< 98\%$

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 300 kHz, Set VBW ≥ 1 MHz, Detector = RMS
- 3) Use the peak marker function to determine the maximum power level in any 300 kHz band segment within the fundamental EBW.
- 4) 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 $BWCF = 10\log(500 \text{ kHz}/300\text{kHz})$
- 5) Sweep time = auto, trigger set to "free run".
- 6) Trace average at least 100 traces in power averaging mode.
- 7) Record the max value and add $10 \log (1/\text{duty cycle})$

4.4.5 Deviation from Test Standard

No deviation.

4.4.6 EUT Operating Conditions

Same as 4.3.6.

4.4.7 Test Results

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

802.11a

Chan.	Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1			
36	5180	-2.83	-1.74	0.76	11.00	Pass
40	5200	-2.31	-1.42	1.17	11.00	Pass
48	5240	-0.96	-2.18	1.48	11.00	Pass
52	5260	-1.21	-2.57	1.17	11.00	Pass
60	5300	-1.64	-2.38	1.02	11.00	Pass
64	5320	-2.38	-1.24	1.24	11.00	Pass
100	5500	-1.84	-1.25	1.48	11.00	Pass
116	5580	-2.26	-0.56	1.68	11.00	Pass
140	5700	-0.96	-3.07	1.12	11.00	Pass
144	5720 (For U-NII-2C)	-1.12	-2.73	1.16	11.00	Pass

Note:

- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- 5180-5250MHz: Directional gain = 1.8dBi + 10log(2)=4.81dBi < 6dBi, so the power density limit not need to reduce.
- 5250-5320MHz: Directional gain = 2.7dBi + 10log(2)=5.71dBi < 6dBi, so the power density limit not need to reduce.
- 5500-5720MHz: Directional gain = 2.4dBi + 10log(2)=5.41dBi < 6dBi, so the power density limit not need to reduce.

802.11n (HT20)

Chan.	Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1			
36	5180	-2.86	-1.41	0.94	11.00	Pass
40	5200	-2.20	-1.58	1.13	11.00	Pass
48	5240	-1.07	-2.10	1.46	11.00	Pass
52	5260	-1.45	-2.42	1.10	11.00	Pass
60	5300	-2.08	-2.38	0.78	11.00	Pass
64	5320	-2.23	-1.43	1.20	11.00	Pass
100	5500	-1.92	-1.16	1.49	11.00	Pass
116	5580	-2.33	-0.49	1.70	11.00	Pass
140	5700	-0.81	-3.15	1.19	11.00	Pass
144	5720 (For U-NII-2C)	-1.02	-2.67	1.24	11.00	Pass

Note:

- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- 5180-5250MHz: Directional gain = $1.8\text{dBi} + 10\log(2) = 4.81\text{dBi} < 6\text{dBi}$, so the power density limit not need to reduce.
- 5250-5320MHz: Directional gain = $2.7\text{dBi} + 10\log(2) = 5.71\text{dBi} < 6\text{dBi}$, so the power density limit not need to reduce.
- 5500-5720MHz: Directional gain = $2.4\text{dBi} + 10\log(2) = 5.41\text{dBi} < 6\text{dBi}$, so the power density limit not need to reduce.
- 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)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
38	5190	-6.46	-5.50	0.16	-2.78	11.00	Pass
46	5230	-5.30	-5.75	0.16	-2.35	11.00	Pass
54	5270	-5.81	-6.39	0.16	-2.92	11.00	Pass
62	5310	-6.21	-6.15	0.16	-3.01	11.00	Pass
102	5510	-5.48	-4.66	0.16	-1.88	11.00	Pass
110	5550	-5.59	-6.03	0.16	-2.63	11.00	Pass
134	5670	-5.22	-6.77	0.16	-2.76	11.00	Pass
142	5710 (For U-NII-2C)	-7.52	-6.84	0.16	-4.00	11.00	Pass

Note:

- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- 5180-5250MHz: Directional gain = 1.8dBi + 10log(2)=4.81dBi < 6dBi, so the power density limit not need to reduce.
- 5250-5320MHz: Directional gain = 2.7dBi + 10log(2)=5.71dBi < 6dBi, so the power density limit not need to reduce.
- 5500-5720MHz: Directional gain = 2.4dBi + 10log(2)=5.41dBi < 6dBi, so the power density limit not need to reduce.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT80)

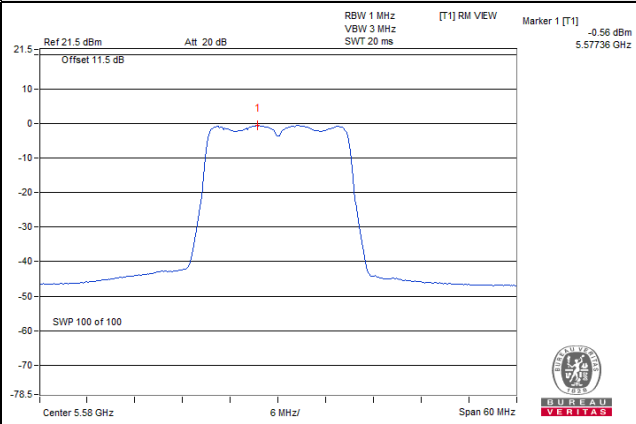
Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
42	5210	-10.61	-10.39	0.23	-7.26	11.00	Pass
58	5290	-10.66	-10.64	0.23	-7.41	11.00	Pass
106	5530	-10.65	-12.70	0.23	-8.31	11.00	Pass
122	5610	-10.74	-9.34	0.23	-6.74	11.00	Pass
138	5690 (For U-NII-2C)	-9.90	-11.36	0.23	-7.33	11.00	Pass

Note:

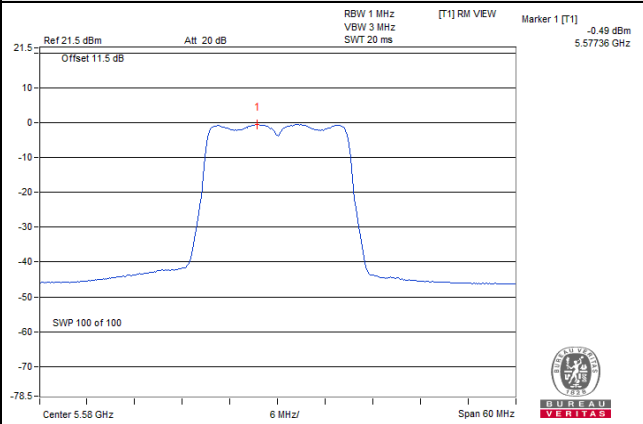
- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- 5180-5250MHz: Directional gain = 1.8dBi + 10log(2)=4.81dBi < 6dBi, so the power density limit not need to reduce.
- 5250-5320MHz: Directional gain = 2.7dBi + 10log(2)=5.71dBi < 6dBi, so the power density limit not need to reduce.
- 5500-5720MHz: Directional gain = 2.4dBi + 10log(2)=5.41dBi < 6dBi, so the power density limit not need to reduce.
- Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

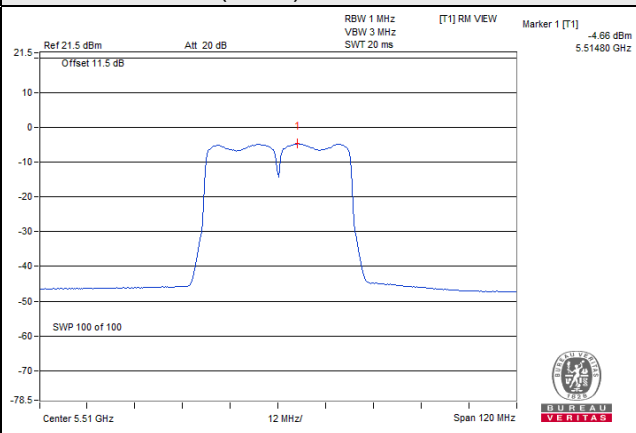
802.11a / Chain 1 / CH 116



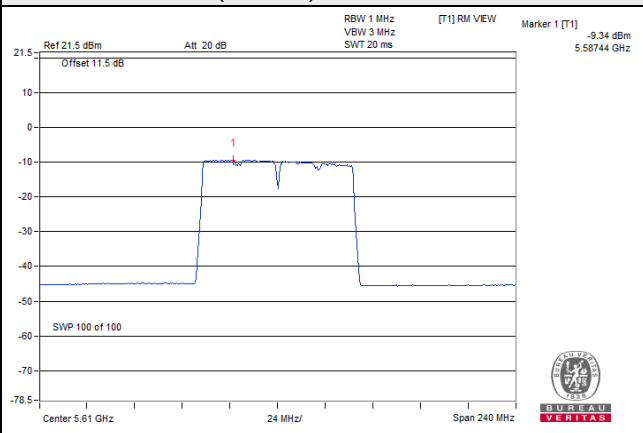
802.11n (HT20) / Chain 1 / CH 116



802.11n (HT40) / Chain 1 / CH 102



802.11ac (VHT80) / Chain 1 / CH 122



802.11ax (HE20)

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
36	5180	-6.71	-5.84	0.10	-3.14	11.00	Pass
40	5200	-6.05	-5.11	0.10	-2.44	11.00	Pass
48	5240	-4.94	-6.06	0.10	-2.35	11.00	Pass
52	5260	-5.29	-6.14	0.10	-2.58	11.00	Pass
60	5300	-5.81	-5.47	0.10	-2.53	11.00	Pass
64	5320	-5.54	-5.26	0.10	-2.29	11.00	Pass
100	5500	-6.41	-4.49	0.10	-2.23	11.00	Pass
116	5580	-6.31	-4.19	0.10	-2.01	11.00	Pass
140	5700	-4.86	-6.68	0.10	-2.57	11.00	Pass
144	5720 (For U-NII-2C)	-5.13	-6.21	0.10	-2.53	11.00	Pass

Note:

- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- 5180-5250MHz: Directional gain = $1.8\text{dBi} + 10\log(2)=4.81\text{dBi} < 6\text{dBi}$, so the power density limit not need to reduce.
- 5250-5320MHz: Directional gain = $2.7\text{dBi} + 10\log(2)=5.71\text{dBi} < 6\text{dBi}$, so the power density limit not need to reduce.
- 5500-5720MHz: Directional gain = $2.4\text{dBi} + 10\log(2)=5.41\text{dBi} < 6\text{dBi}$, so the power density limit not need to reduce.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
38	5190	-9.59	-7.94	0.13	-5.55	11.00	Pass
46	5230	-8.06	-8.36	0.13	-5.07	11.00	Pass
54	5270	-8.38	-9.26	0.13	-5.66	11.00	Pass
62	5310	-8.73	-8.47	0.13	-5.46	11.00	Pass
102	5510	-8.74	-7.64	0.13	-5.01	11.00	Pass
110	5550	-8.42	-7.01	0.13	-4.52	11.00	Pass
134	5670	-7.82	-9.52	0.13	-5.45	11.00	Pass
142	5710 (For U-NII-2C)	-7.91	-9.48	0.13	-5.48	11.00	Pass

Note:

- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- 5180-5250MHz: Directional gain = 1.8dBi + 10log(2)=4.81dBi < 6dBi, so the power density limit not need to reduce.
- 5250-5320MHz: Directional gain = 2.7dBi + 10log(2)=5.71dBi < 6dBi, so the power density limit not need to reduce.
- 5500-5720MHz: Directional gain = 2.4dBi + 10log(2)=5.41dBi < 6dBi, so the power density limit not need to reduce.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

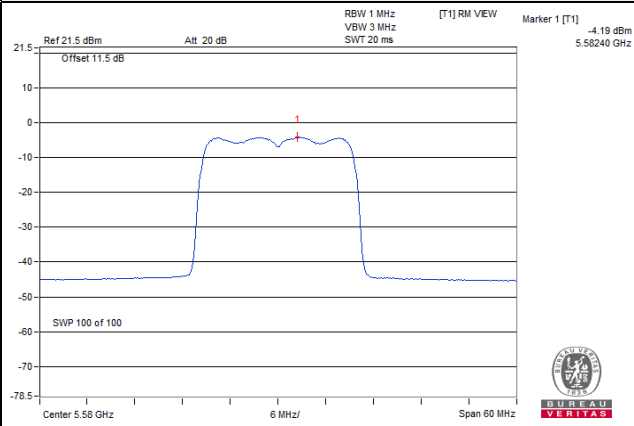
Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
42	5210	-11.46	-11.33	0.36	-8.02	11.00	Pass
58	5290	-11.58	-11.43	0.36	-8.13	11.00	Pass
106	5530	-11.57	-10.09	0.36	-7.40	11.00	Pass
122	5610	-11.68	-10.12	0.36	-7.46	11.00	Pass
138	5690 (For U-NII-2C)	-10.70	-12.38	0.36	-8.09	11.00	Pass

Note:

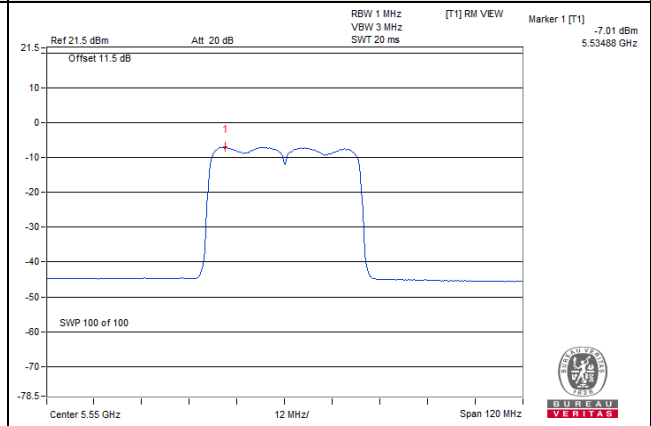
- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- 5180-5250MHz: Directional gain = 1.8dBi + 10log(2)=4.81dBi < 6dBi, so the power density limit not need to reduce.
- 5250-5320MHz: Directional gain = 2.7dBi + 10log(2)=5.71dBi < 6dBi, so the power density limit not need to reduce.
- 5500-5720MHz: Directional gain = 2.4dBi + 10log(2)=5.41dBi < 6dBi, so the power density limit not need to reduce.
- Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

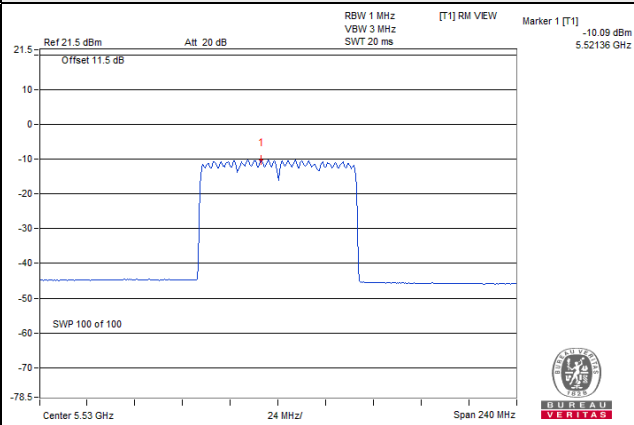
802.11ax (HE20) / Chain 1 / CH 116



802.11ax (HE40) / Chain 1 / CH 110



802.11ax (HE80) / Chain 1 / CH 106



For U-NII-3 band:

802.11a

TX chain	Chan.	Freq. (MHz)	PSD		10 log (N=2) dB	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)				
0	144	5720 (For U-NII-3)	-11.23	-9.01	3.01	-6.00	30.00	Pass
	149	5745	-11.77	-9.55	3.01	-6.54	30.00	Pass
	157	5785	-11.27	-9.05	3.01	-6.04	30.00	Pass
	165	5825	-12.12	-9.90	3.01	-6.89	30.00	Pass
1	144	5720 (For U-NII-3)	-13.68	-11.46	3.01	-8.45	30.00	Pass
	149	5745	-13.17	-10.95	3.01	-7.94	30.00	Pass
	157	5785	-14.72	-12.50	3.01	-9.49	30.00	Pass
	165	5825	-15.60	-13.38	3.01	-10.37	30.00	Pass

Note:

- Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure value and add $10 \log (N_{ANT})$ dB.
- Directional gain = $1.5\text{dBi} + 10\log(2) = 4.51\text{dBi} < 6\text{dBi}$, so the power density limit not need to reduce.

802.11n (HT20)

TX chain	Chan.	Freq. (MHz)	PSD		10 log (N=2) dB	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)				
0	144	5720 (For U-NII-3)	-13.17	-10.95	3.01	-7.94	30.00	Pass
	149	5745	-14.81	-12.59	3.01	-9.58	30.00	Pass
	157	5785	-14.32	-12.10	3.01	-9.09	30.00	Pass
	165	5825	-15.48	-13.26	3.01	-10.25	30.00	Pass
1	144	5720 (For U-NII-3)	-14.78	-12.56	3.01	-9.55	30.00	Pass
	149	5745	-15.00	-12.78	3.01	-9.77	30.00	Pass
	157	5785	-16.90	-14.68	3.01	-11.67	30.00	Pass
	165	5825	-16.42	-14.20	3.01	-11.19	30.00	Pass

Note:

- Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure value and add $10 \log (N_{ANT})$ dB.
- Directional gain = $1.5\text{dBi} + 10\log(2) = 4.51\text{dBi} < 6\text{dBi}$, so the power density limit not need to reduce.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT40)

TX chain	Chan.	Freq. (MHz)	PSD W/O Duty Factor		10 log (N=2) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	142	5710 (For U-NII-3)	-17.01	-14.79	3.01	0.16	-11.62	30.00	Pass
	151	5755	-17.40	-15.18	3.01	0.16	-12.01	30.00	Pass
	159	5795	-17.81	-15.59	3.01	0.16	-12.42	30.00	Pass
1	142	5710 (For U-NII-3)	-17.23	-15.01	3.01	0.16	-11.84	30.00	Pass
	151	5755	-18.00	-15.78	3.01	0.16	-12.61	30.00	Pass
	159	5795	-18.86	-16.64	3.01	0.16	-13.47	30.00	Pass

Note:

1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure value and add $10 \log (N_{ANT})$ dB.
2. Directional gain = $1.5\text{dBi} + 10\log(2) = 4.51\text{dBi} < 6\text{dBi}$, so the power density limit not need to reduce.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT80)

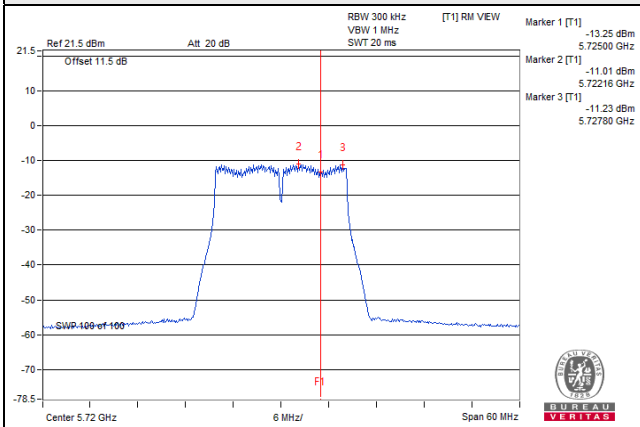
TX chain	Chan.	Freq. (MHz)	PSD W/O Duty Factor		10 log (N=2) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	138	5690 (For U-NII-3)	-22.78	-20.56	3.01	0.23	-17.32	30.00	Pass
	155	5775	-22.11	-19.89	3.01	0.23	-16.65	30.00	Pass
1	138	5690 (For U-NII-3)	-23.68	-21.46	3.01	0.23	-18.22	30.00	Pass
	155	5775	-23.07	-20.85	3.01	0.23	-17.61	30.00	Pass

Note:

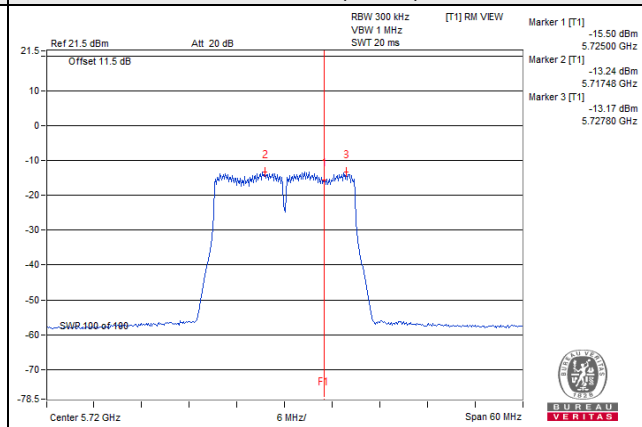
1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure value and add $10 \log (N_{ANT})$ dB.
2. Directional gain = $1.5\text{dBi} + 10\log(2) = 4.51\text{dBi} < 6\text{dBi}$, so the power density limit not need to reduce.
3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

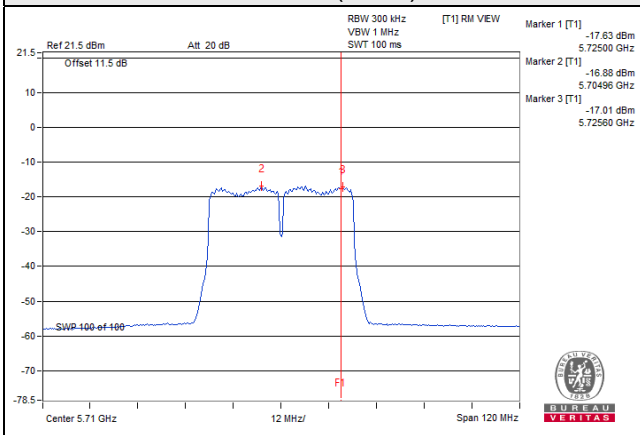
802.11a



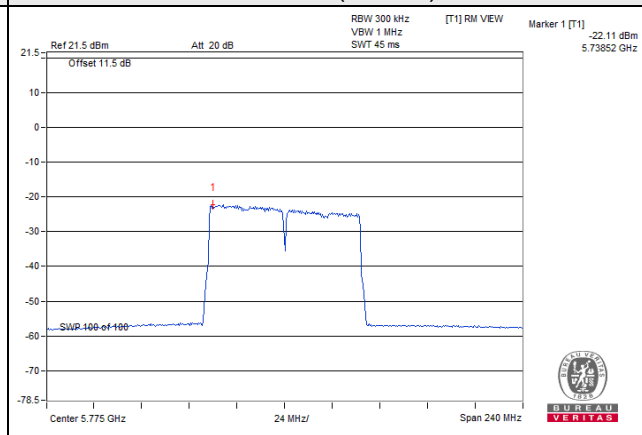
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)



802.11ax (HE20)

TX chain	Chan.	Freq. (MHz)	PSD W/O Duty Factor		10 log (N=2) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	144	5720 (For U-NII-3)	-17.91	-15.69	3.01	0.10	-12.58	30.00	Pass
	149	5745	-17.40	-15.18	3.01	0.10	-12.07	30.00	Pass
	157	5785	-16.01	-13.79	3.01	0.10	-10.68	30.00	Pass
	165	5825	-17.69	-15.47	3.01	0.10	-12.36	30.00	Pass
1	144	5720 (For U-NII-3)	-16.64	-14.42	3.01	0.10	-11.31	30.00	Pass
	149	5745	-18.15	-15.93	3.01	0.10	-12.82	30.00	Pass
	157	5785	-19.10	-16.88	3.01	0.10	-13.77	30.00	Pass
	165	5825	-21.07	-18.85	3.01	0.10	-15.74	30.00	Pass

Note:

- Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure value and add $10 \log (N_{ANT})$ dB.
- Directional gain = $1.5\text{dBi} + 10\log(2) = 4.51\text{dBi} < 6\text{dBi}$, so the power density limit not need to reduce.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

TX chain	Chan.	Freq. (MHz)	PSD W/O Duty Factor		10 log (N=2) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	142	5710 (For U-NII-3)	-19.43	-17.21	3.01	0.13	-14.07	30.00	Pass
	151	5755	-19.02	-16.80	3.01	0.13	-13.66	30.00	Pass
	159	5795	-18.89	-16.67	3.01	0.13	-13.53	30.00	Pass
1	142	5710 (For U-NII-3)	-19.52	-17.30	3.01	0.13	-14.16	30.00	Pass
	151	5755	-18.69	-16.47	3.01	0.13	-13.33	30.00	Pass
	159	5795	-19.74	-17.52	3.01	0.13	-14.38	30.00	Pass

Note:

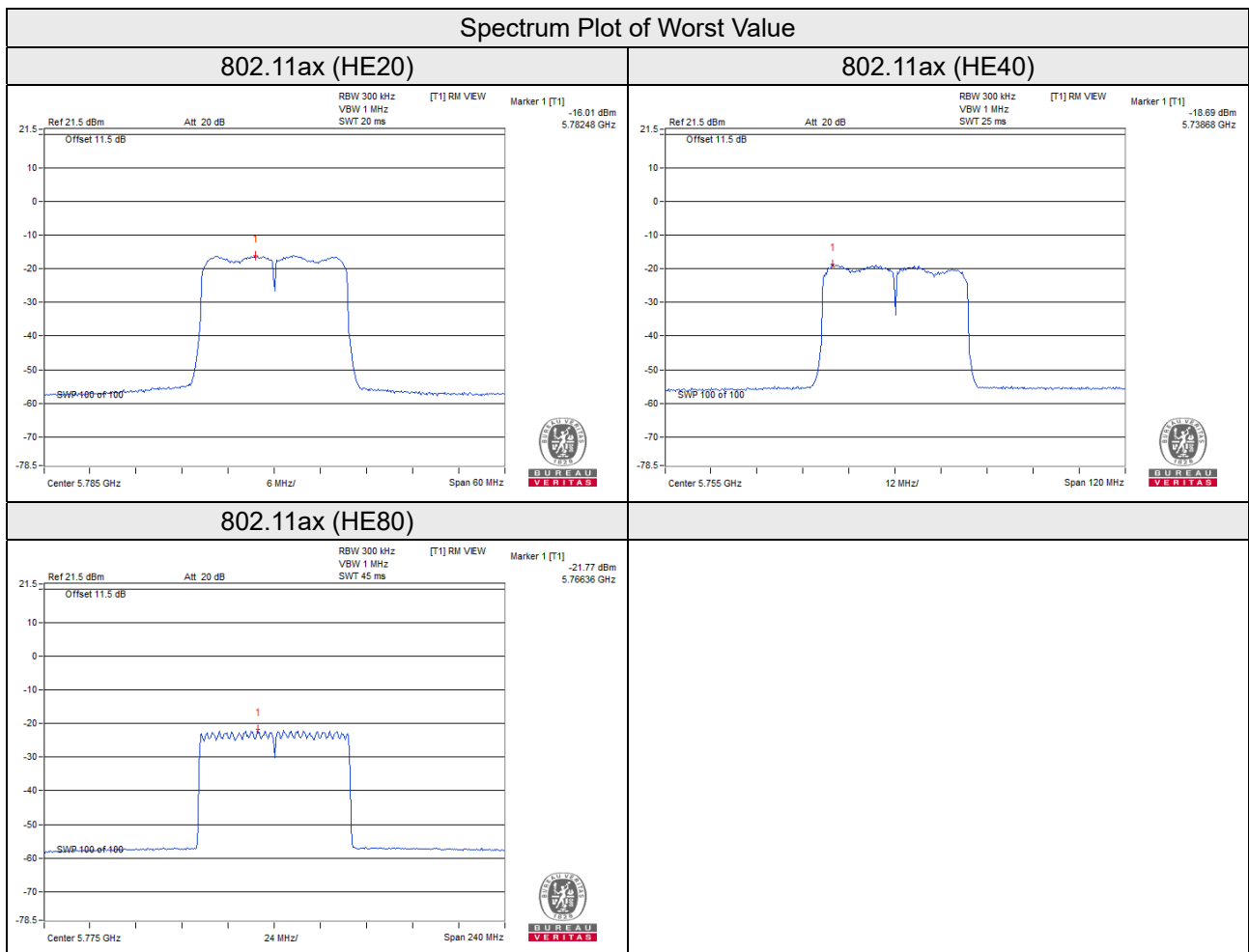
- Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure value and add $10 \log (N_{ANT})$ dB.
- Directional gain = $1.5\text{dBi} + 10\log(2) = 4.51\text{dBi} < 6\text{dBi}$, so the power density limit not need to reduce.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

TX chain	Chan.	Freq. (MHz)	PSD W/O Duty Factor		10 log (N=2) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	138	5690 (For U-NII-3)	-22.71	-20.49	3.01	0.36	-17.12	30.00	Pass
	155	5775	-21.77	-19.55	3.01	0.36	-16.18	30.00	Pass
1	138	5690 (For U-NII-3)	-22.84	-20.62	3.01	0.36	-17.25	30.00	Pass
	155	5775	-22.80	-20.58	3.01	0.36	-17.21	30.00	Pass

Note:

- Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure value and add 10 log (N_{ANT}) dB.
- Directional gain = 1.5dBi + 10log(2)= 4.51dBi < 6dBi, so the power density limit not need to reduce.
- Refer to section 3.3 for duty cycle spectrum plot.

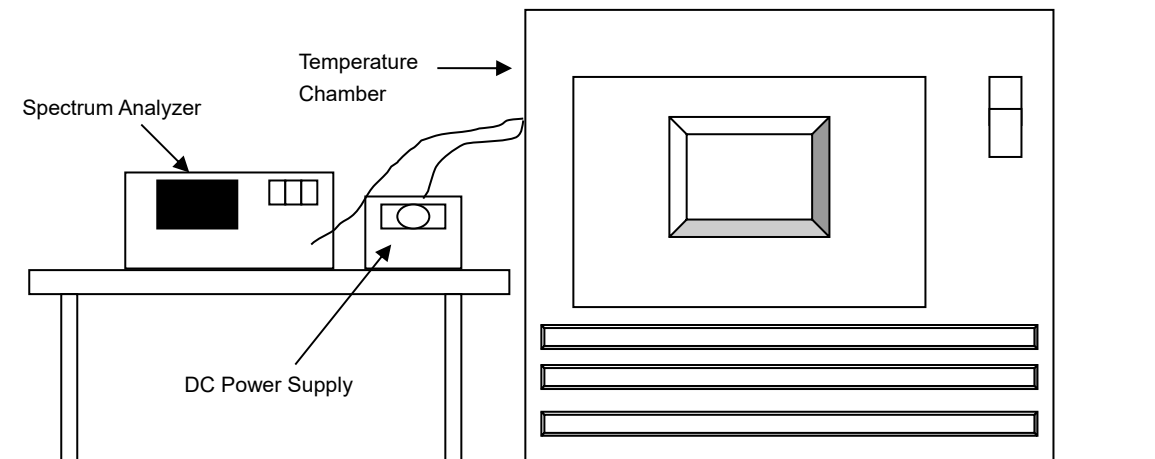


4.5 Frequency Stability

4.5.1 Limits of Frequency Stability Measurement

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

4.5.2 Test Setup



4.5.3 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100269	Jun. 07, 2021	Jun. 06, 2022
Standard Temperature And Humidity Chamber TERCHY	MHU-225AU	920842	Jun. 15, 2021	Jun. 14, 2022
Three-phase coupling / decoupling network TESEQ	CDN 3063	4006	Mar. 08, 2022	Mar. 07, 2023
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.

2. Tested date: Apr. 11, 2022

4.5.4 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.

4.5.5 Deviation from Test Standard

No deviation.

4.5.6 EUT Operating Condition

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

4.5.7 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
85	12	5179.9841	Pass	5179.9831	Pass	5179.9815	Pass	5179.9831	Pass
80	12	5179.9824	Pass	5179.9798	Pass	5179.9800	Pass	5179.9810	Pass
70	12	5179.9743	Pass	5179.9766	Pass	5179.9725	Pass	5179.9725	Pass
60	12	5180.0115	Pass	5180.0089	Pass	5180.0098	Pass	5180.0090	Pass
50	12	5179.9998	Pass	5180.0009	Pass	5180.0009	Pass	5179.9996	Pass
40	12	5180.0054	Pass	5180.0057	Pass	5180.0044	Pass	5180.0038	Pass
30	12	5179.9877	Pass	5179.9901	Pass	5179.9878	Pass	5179.9863	Pass
20	12	5179.9934	Pass	5179.9924	Pass	5179.9922	Pass	5179.9945	Pass
10	12	5180.0265	Pass	5180.0270	Pass	5180.0236	Pass	5180.0227	Pass
0	12	5179.9783	Pass	5179.9736	Pass	5179.9766	Pass	5179.9752	Pass
-10	12	5180.0223	Pass	5180.0231	Pass	5180.0243	Pass	5180.0217	Pass
-20	12	5179.9995	Pass	5180.0003	Pass	5180.0025	Pass	5179.9996	Pass
-30	12	5179.9868	Pass	5179.9895	Pass	5179.9853	Pass	5179.9894	Pass
-40	12	5179.9856	Pass	5179.9815	Pass	5179.9833	Pass	5179.9836	Pass

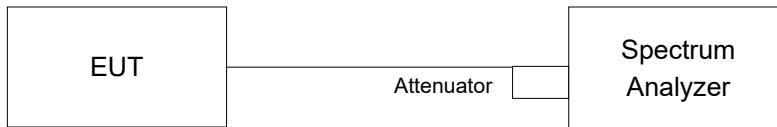
Frequency Stability Versus Voltage									
Operating Frequency: 5180MHz									
Temp. (°C)	Power Supply (Vdc)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
20	13.8	5179.9865	Pass	5179.9869	Pass	5179.9879	Pass	5179.9898	Pass
	12	5179.9934	Pass	5179.9924	Pass	5179.9922	Pass	5179.9945	Pass
	10.2	5179.9903	Pass	5179.9881	Pass	5179.9896	Pass	5179.9920	Pass

4.6 6dB Bandwidth Measurement

4.6.1 Limits of 6dB Bandwidth Measurement

The minimum of 6dB Bandwidth Measurement is 0.5MHz.

4.6.2 Test Setup



4.6.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.6.4 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

4.6.5 Deviation from Test Standard

No deviation.

4.6.6 EUT Operating Condition

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

4.6.7 Test Results

802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
144	5720 (For U-NII-3)	3.17	3.77	0.50	Pass
149	5745	16.40	17.61	0.50	Pass
157	5785	16.41	17.59	0.50	Pass
165	5825	16.40	17.59	0.50	Pass

For CH144 (U-NII-3 Band): The 6dB bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz

802.11n (HT20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
144	5720 (For U-NII-3)	3.76	3.77	0.50	Pass
149	5745	17.61	17.62	0.50	Pass
157	5785	17.61	17.62	0.50	Pass
165	5825	17.59	17.61	0.50	Pass

For CH144 (U-NII-3 Band): The 6dB bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz

802.11n (HT40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
142	5710 (For U-NII-3)	2.68	2.82	0.50	Pass
151	5755	35.67	35.56	0.50	Pass
159	5795	35.89	35.88	0.50	Pass

For CH142 (U-NII-3 Band): The 6dB bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz

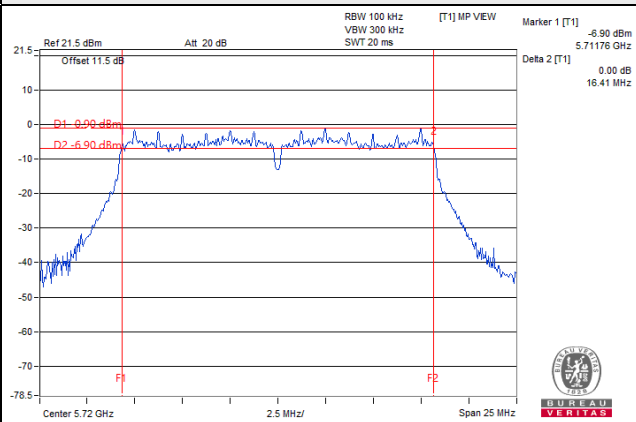
802.11ac (VHT80)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
138	5690 (For U-NII-3)	3.26	3.29	0.50	Pass
155	5775	76.02	76.00	0.50	Pass

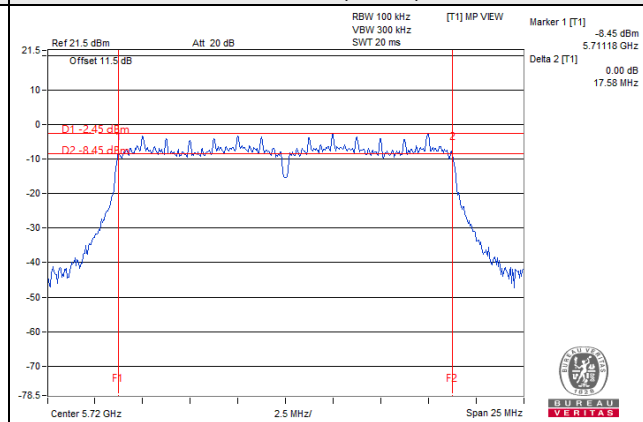
For CH138 (U-NII-3 Band): The 6dB bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz

Spectrum Plot of Worst Value

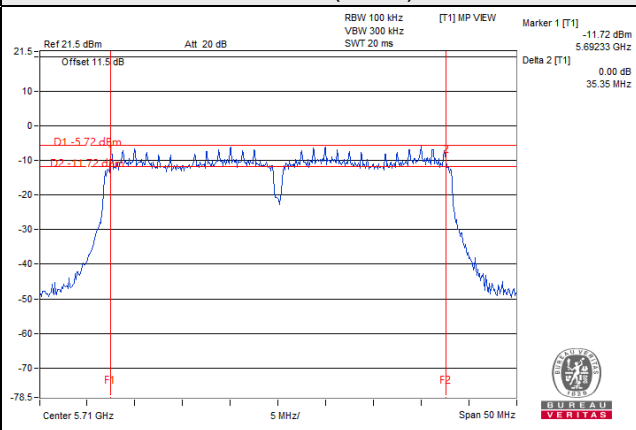
802.11a



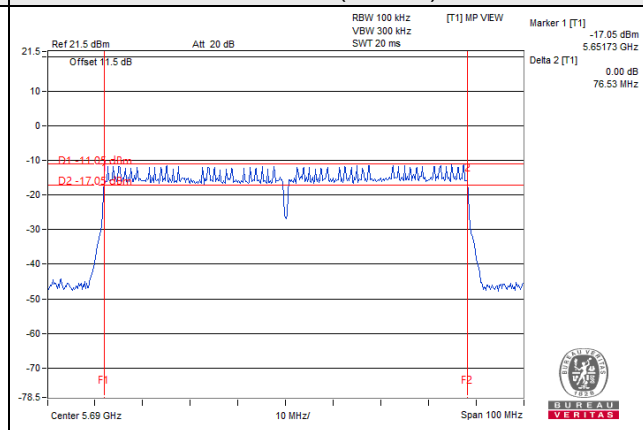
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)



802.11ax (HE20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
144	5720 (For U-NII-3)	4.18	4.23	0.50	Pass
149	5745	18.42	18.53	0.50	Pass
157	5785	18.49	18.49	0.50	Pass
165	5825	18.49	18.42	0.50	Pass

For CH144 (U-NII-3 Band): The 6dB bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz

802.11ax (HE40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
142	5710 (For U-NII-3)	3.19	3.70	0.50	Pass
151	5755	37.10	37.00	0.50	Pass
159	5795	37.02	36.81	0.50	Pass

For CH142 (U-NII-3 Band): The 6dB bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz

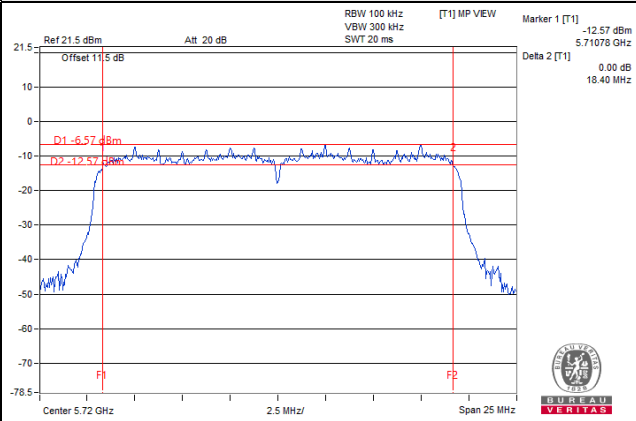
802.11ax (HE80)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
138	5690 (For U-NII-3)	4.17	4.10	0.50	Pass
155	5775	78.31	78.29	0.50	Pass

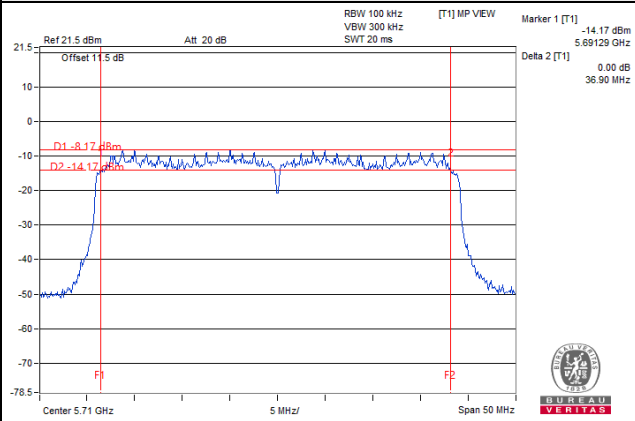
For CH138 (U-NII-3 Band): The 6dB bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz

Spectrum Plot of Worst Value

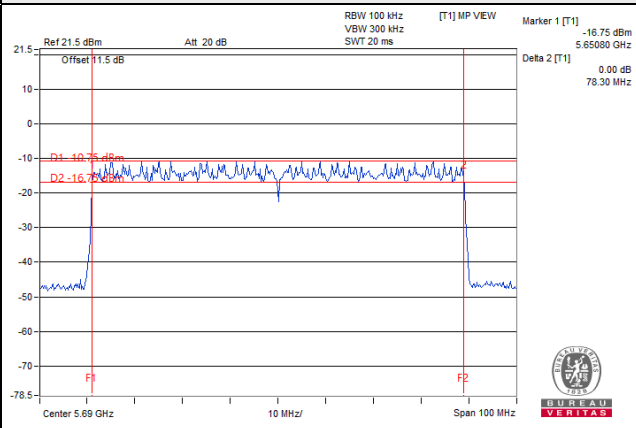
802.11ax (HE20)



802.11ax (HE40)



802.11ax (HE80)

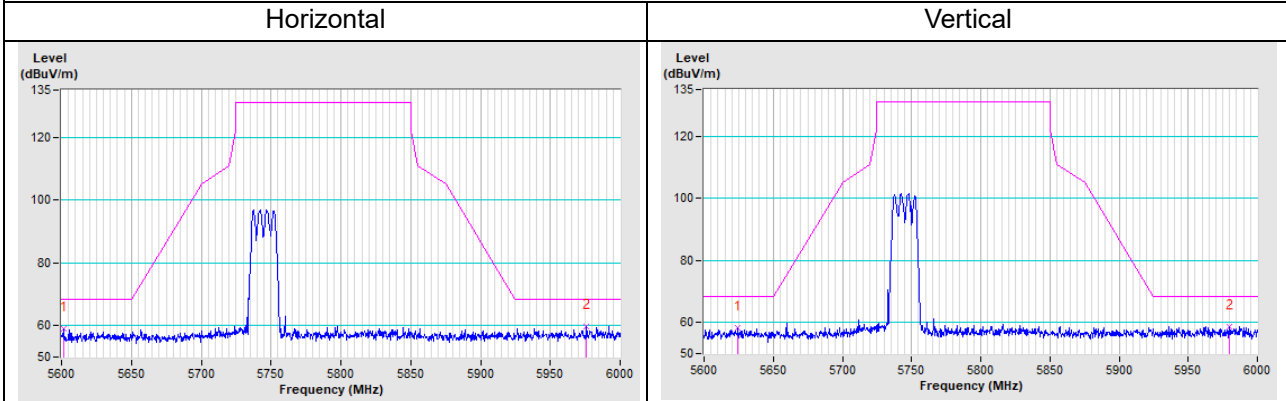


5 Pictures of Test Arrangements

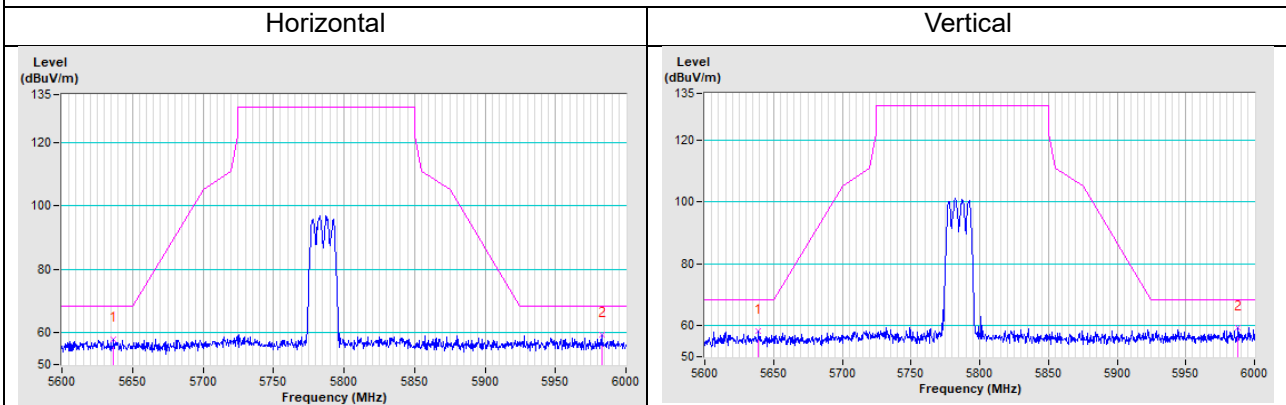
Please refer to the attached file (Test Setup Photo).

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

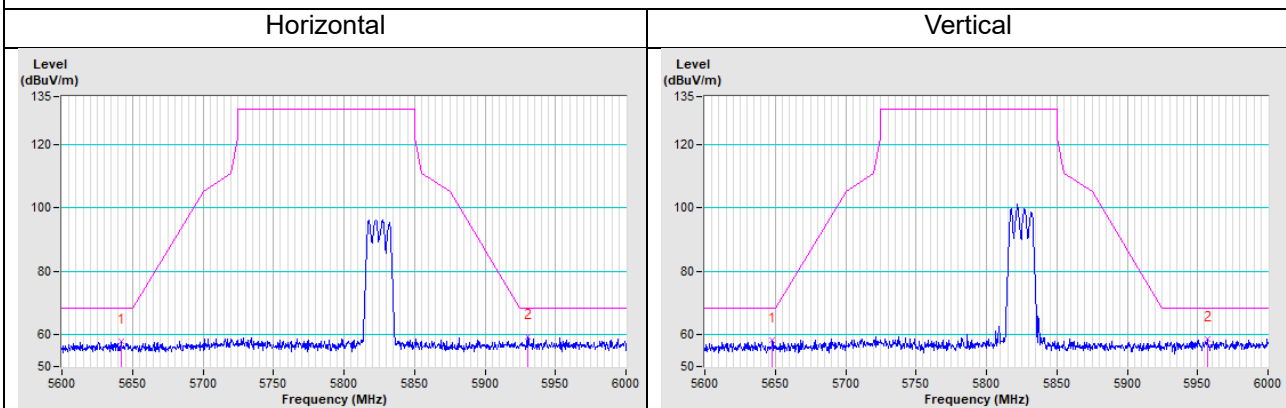
802.11a CH 149 : 5745 MHz



802.11a CH 157 : 5785 MHz



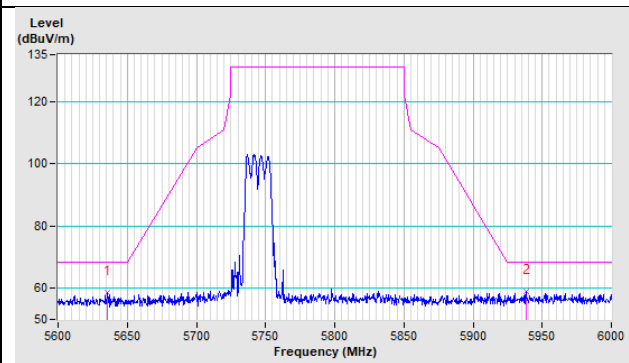
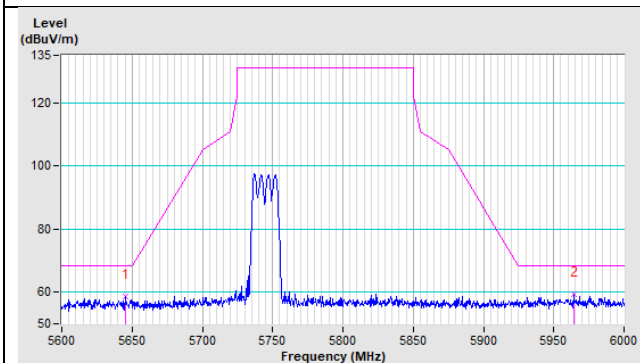
802.11a CH 165 : 5825 MHz



802.11n (HT20) CH 149 : 5745 MHz

Horizontal

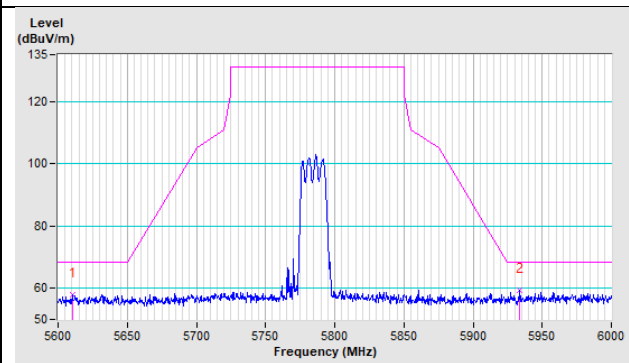
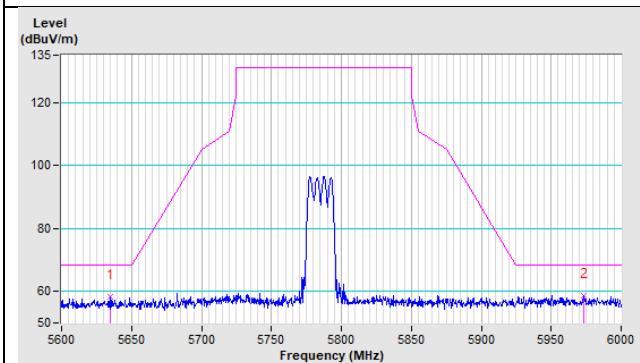
Vertical



802.11n (HT20) CH 157 : 5785 MHz

Horizontal

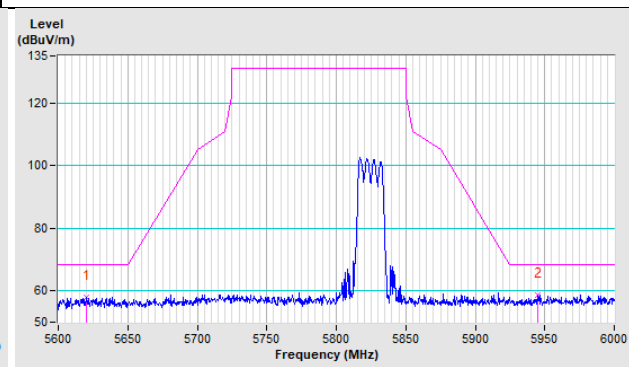
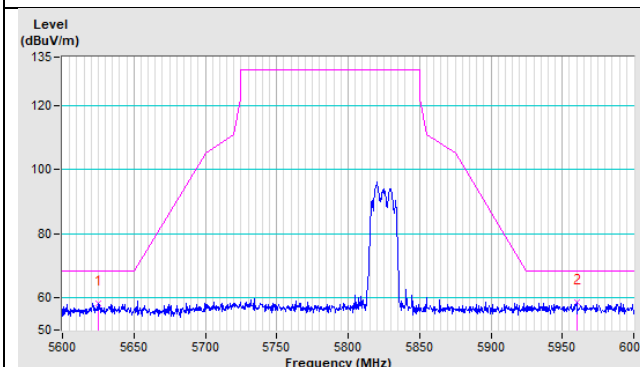
Vertical



802.11n (HT20) CH 165 : 5825 MHz

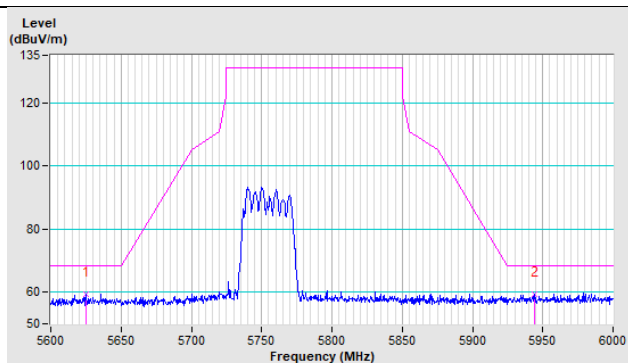
Horizontal

Vertical

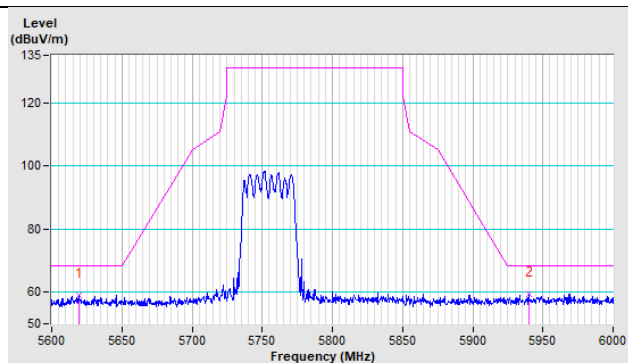


802.11n (HT40) CH 151 : 5755 MHz

Horizontal

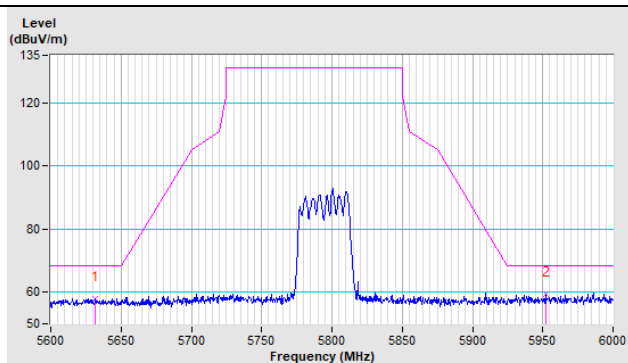


Vertical

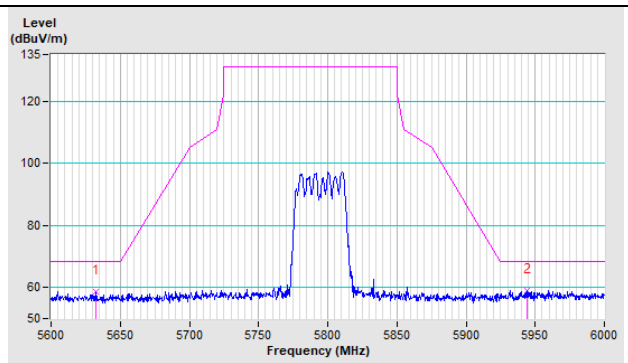


802.11n (HT40) CH 159 : 5795 MHz

Horizontal

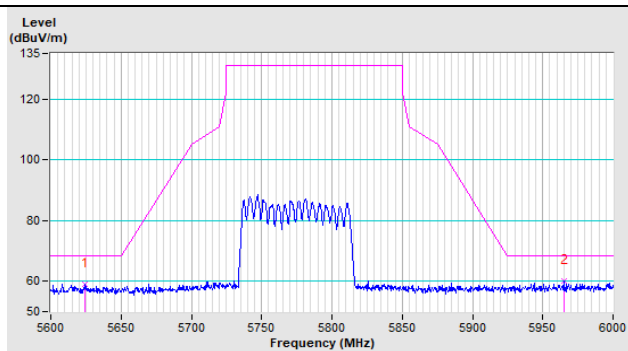


Vertical

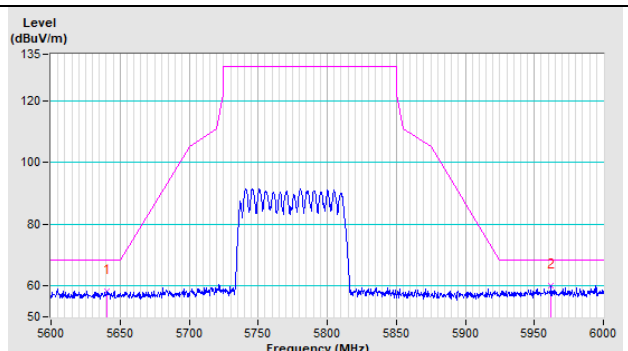


802.11ac (VHT80) CH 155 : 5775 MHz

Horizontal

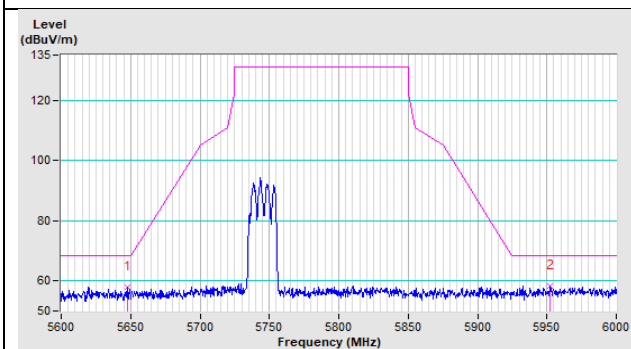


Vertical

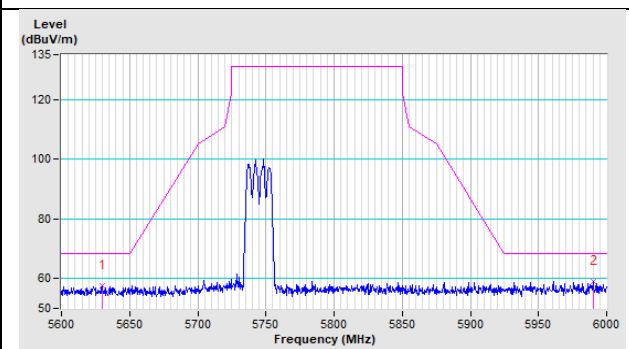


802.11ax (HE20) CH 149 : 5745 MHz

Horizontal

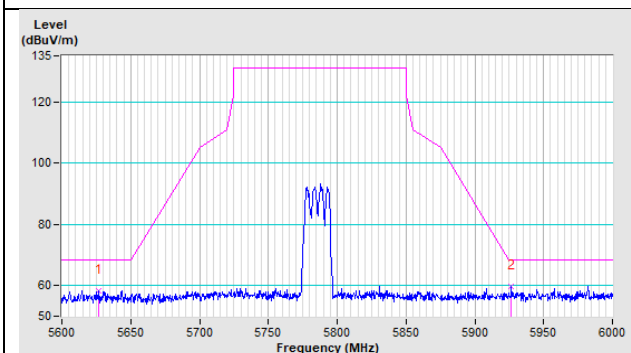


Vertical

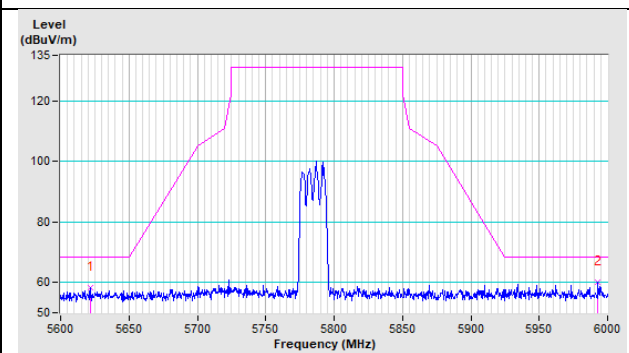


802.11ax (HE20) CH 157 : 5785 MHz

Horizontal

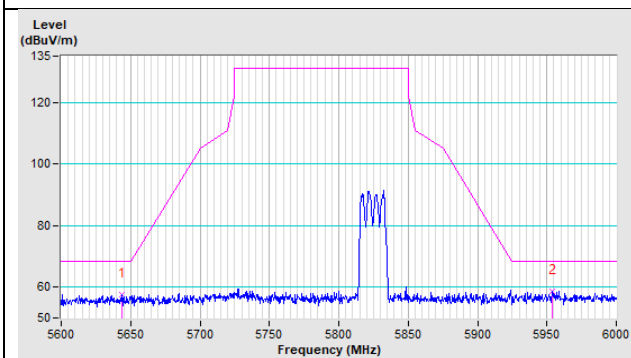


Vertical

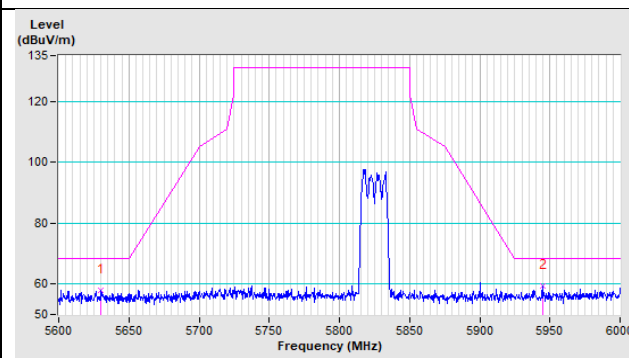


802.11ax (HE20) CH 165 : 5825 MHz

Horizontal

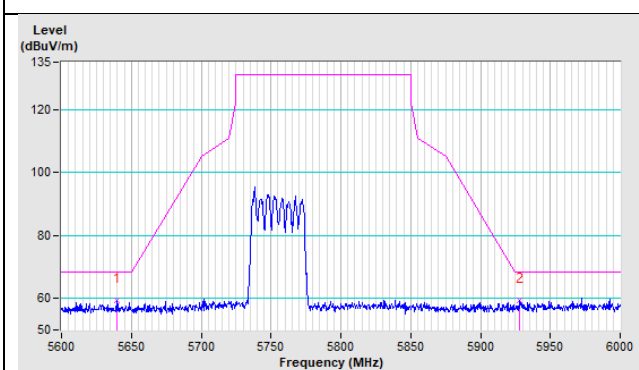


Vertical

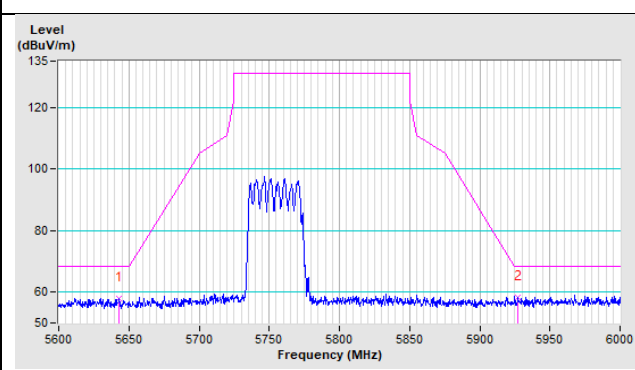


802.11ax (HE40) CH 151 : 5755 MHz

Horizontal

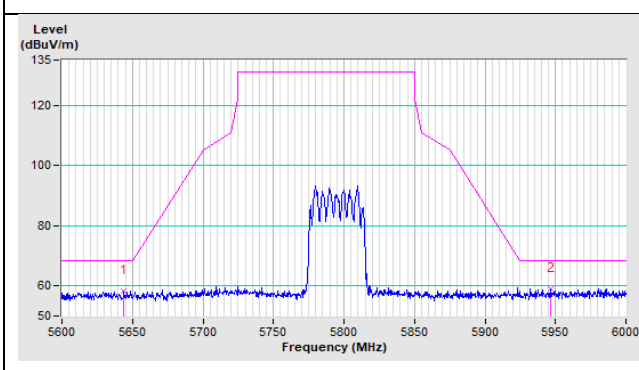


Vertical

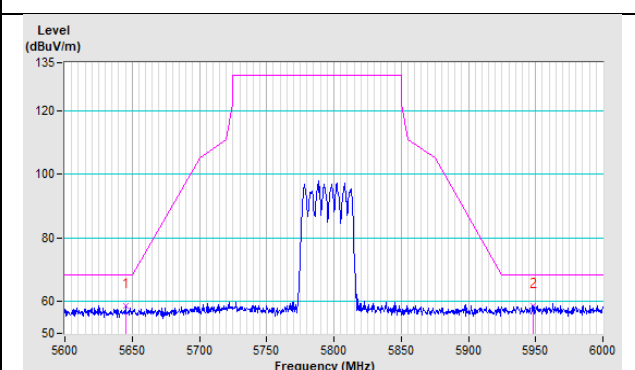


802.11ax (HE40) CH 159 : 5795 MHz

Horizontal

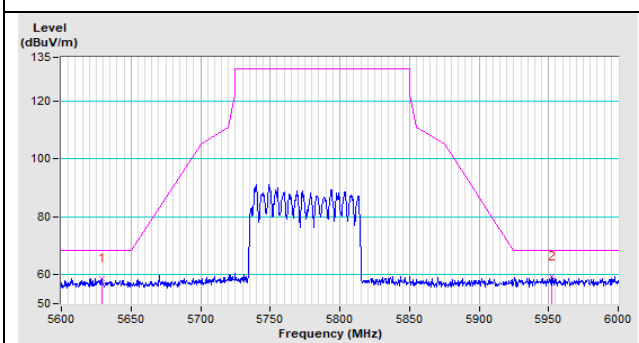


Vertical

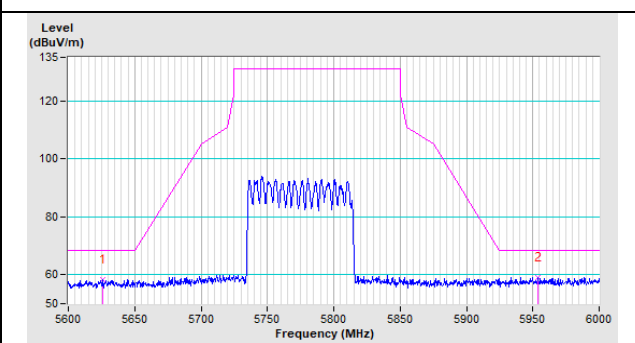


802.11ax (HE80) CH 155 : 5775 MHz

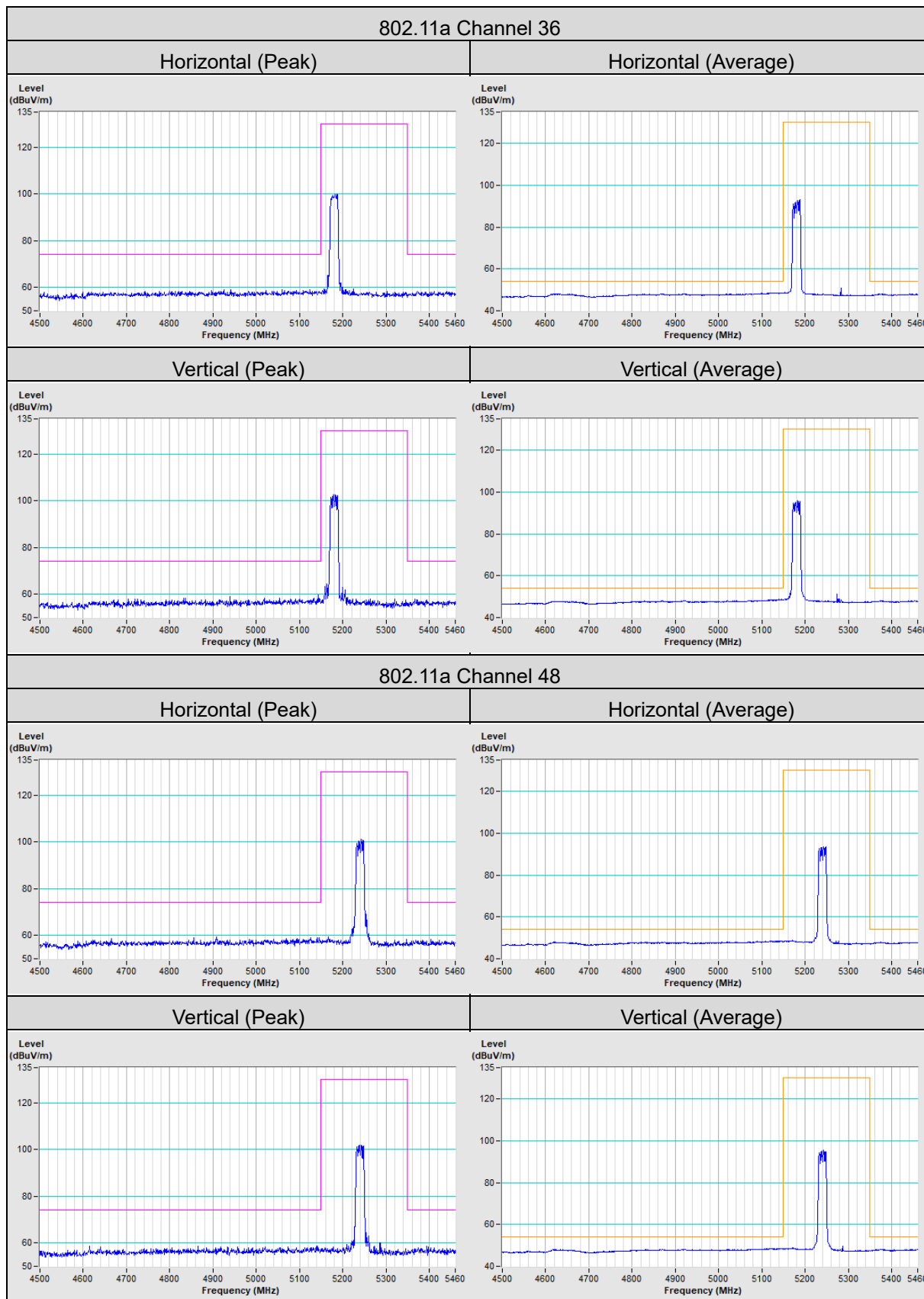
Horizontal



Vertical

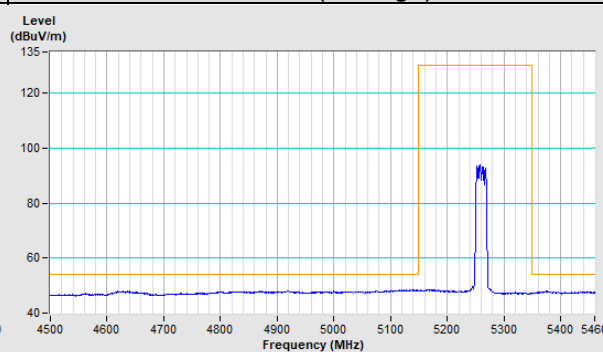
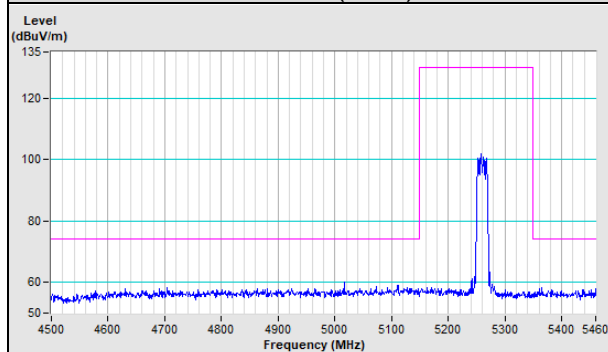


Annex B - Band Edge Measurement

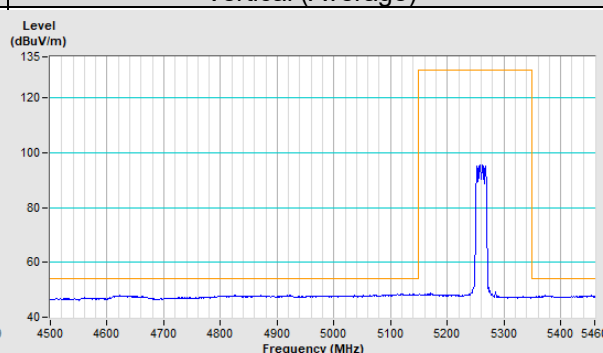
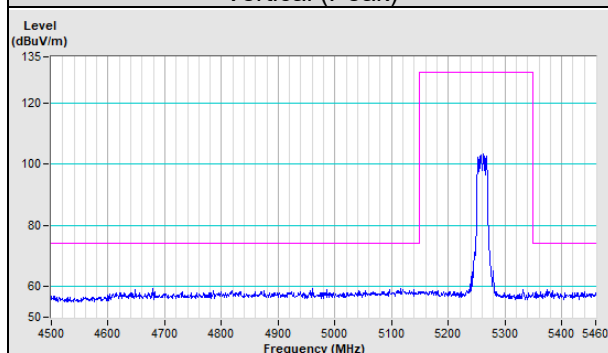


802.11a Channel 52

Horizontal (Peak)	Horizontal (Average)
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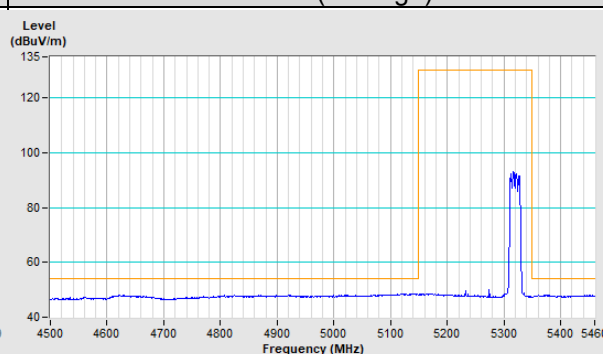
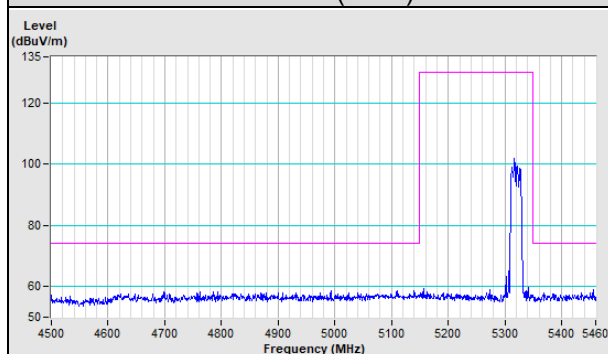


Vertical (Peak)	Vertical (Average)
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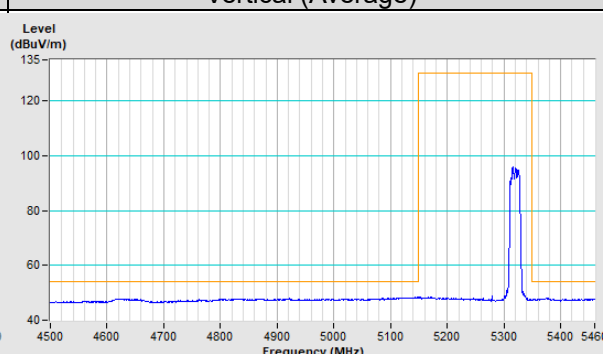
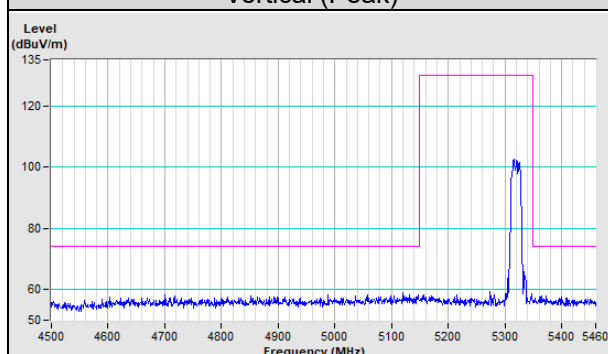


802.11a Channel 64

Horizontal (Peak)	Horizontal (Average)
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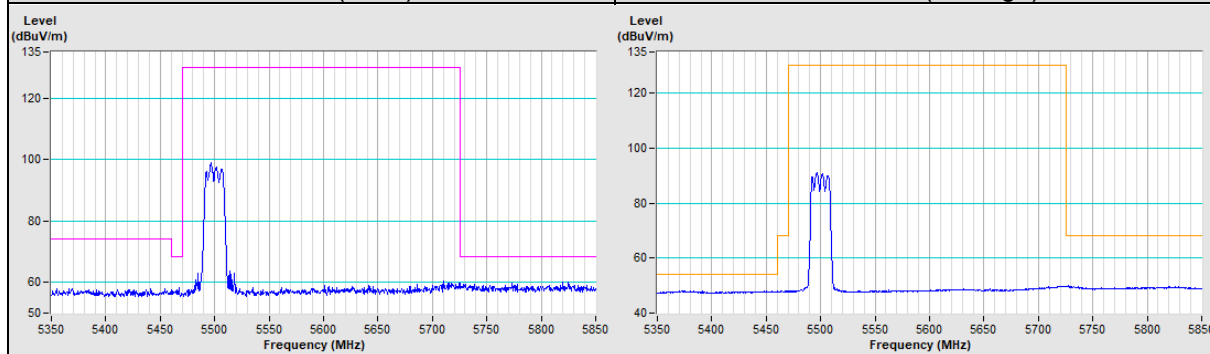


Vertical (Peak)	Vertical (Average)
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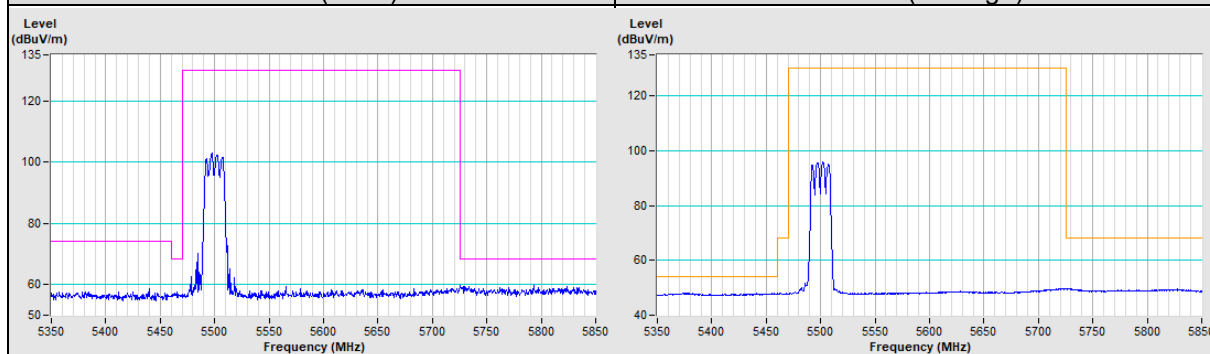


802.11a Channel 100

Horizontal (Peak) Horizontal (Average)

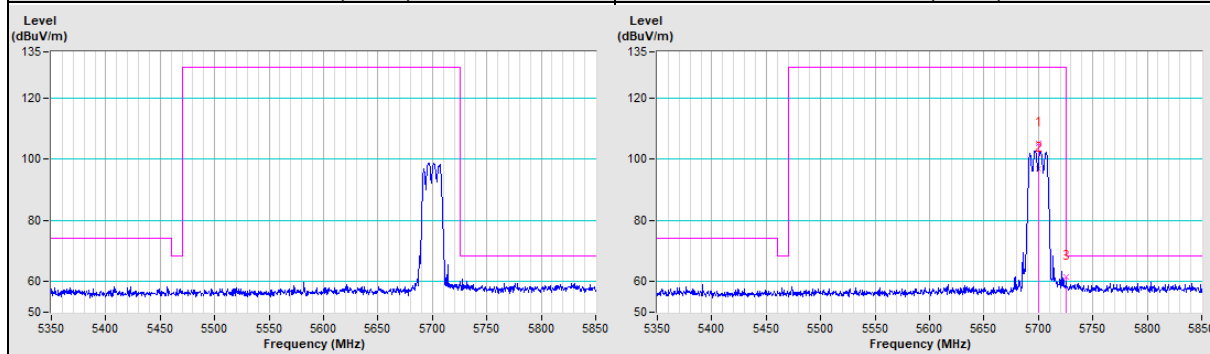


Vertical (Peak) Vertical (Average)



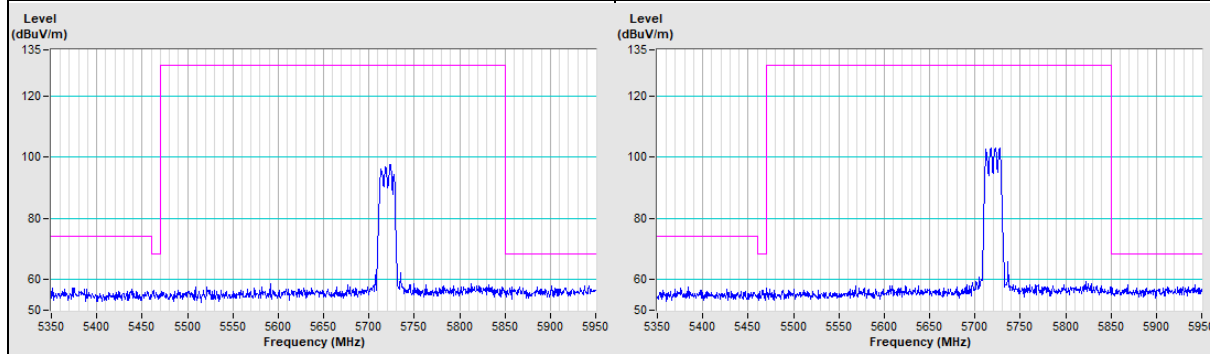
802.11a Channel 140

Horizontal (Peak) Vertical (Peak)



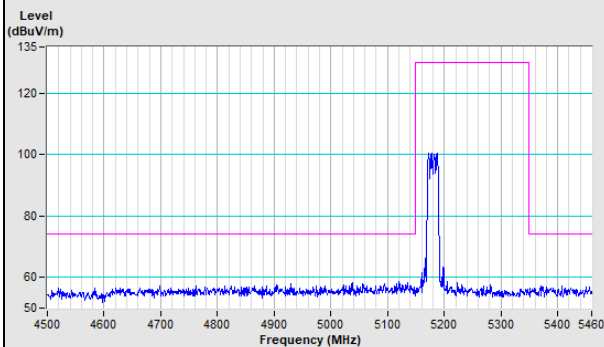
802.11a Channel 144

Horizontal (Peak) Vertical (Peak)

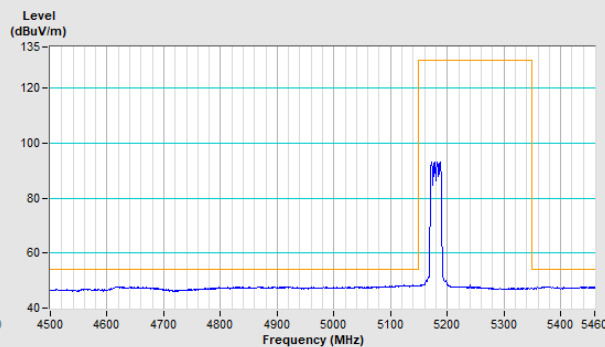


802.11n (HT20) Channel 36

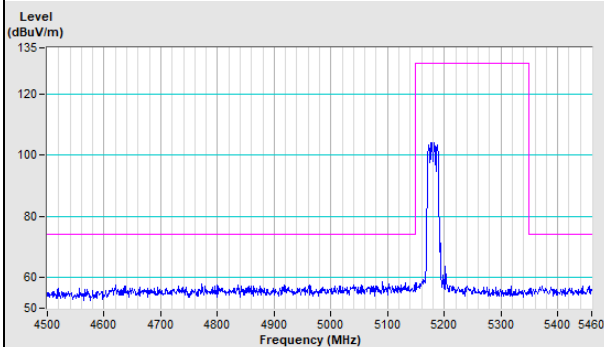
Horizontal (Peak)



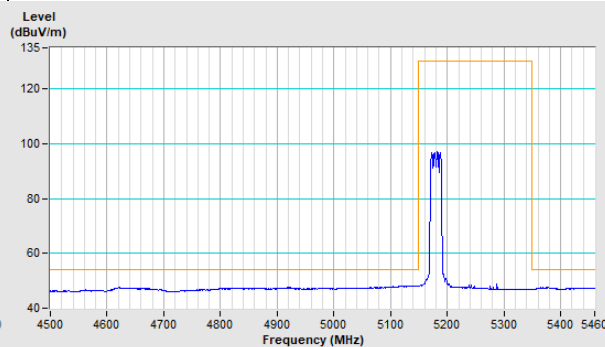
Horizontal (Average)



Vertical (Peak)

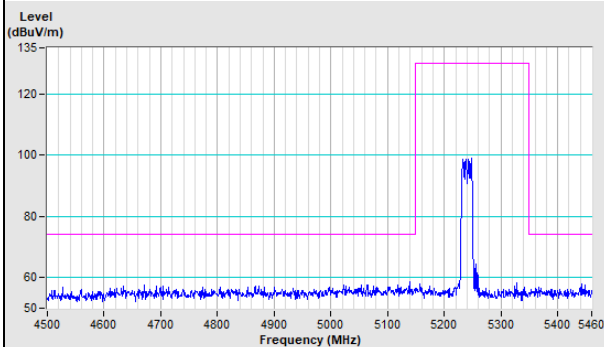


Vertical (Average)

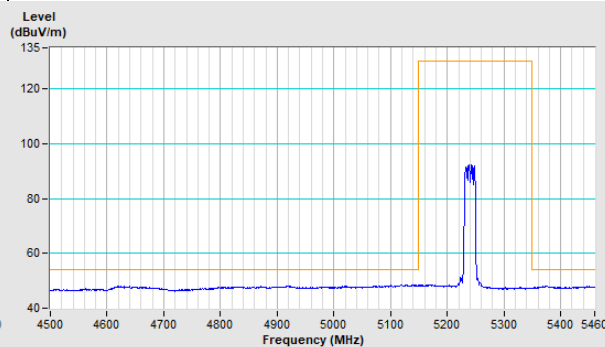


802.11n (HT20) Channel 48

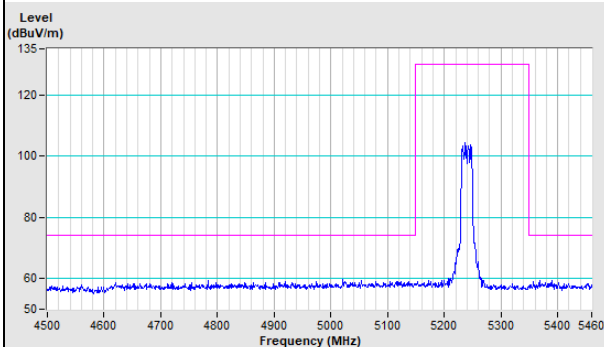
Horizontal (Peak)



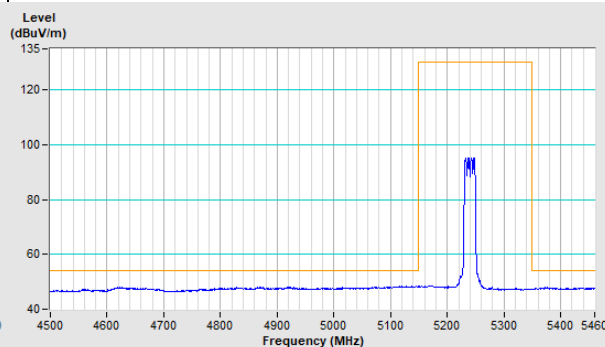
Horizontal (Average)



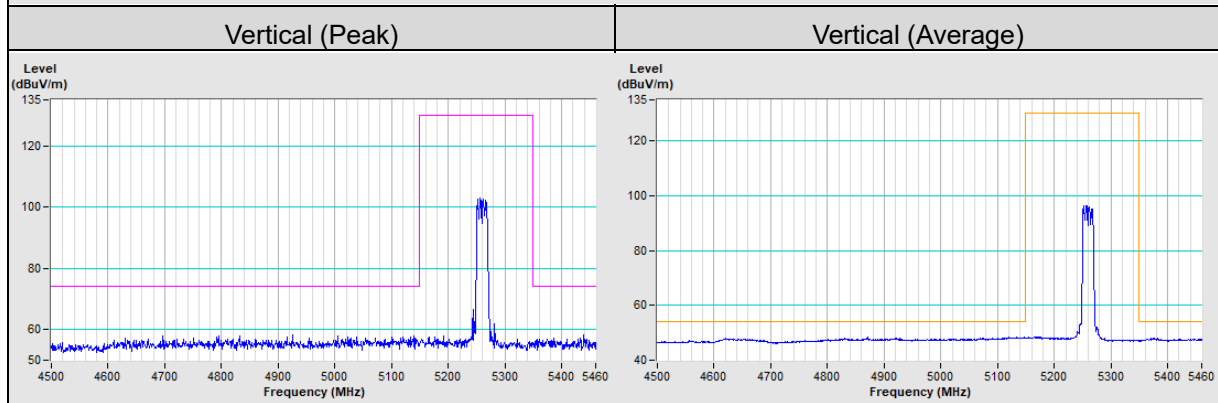
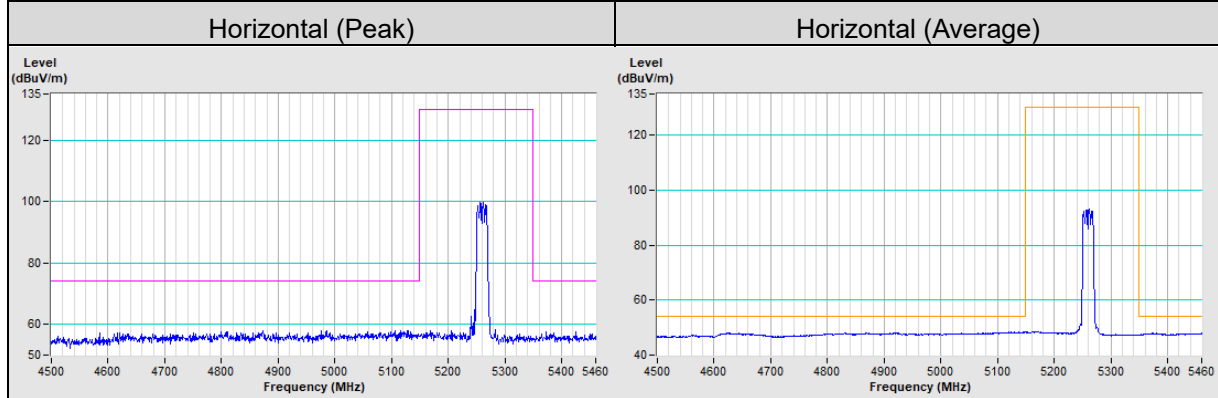
Vertical (Peak)



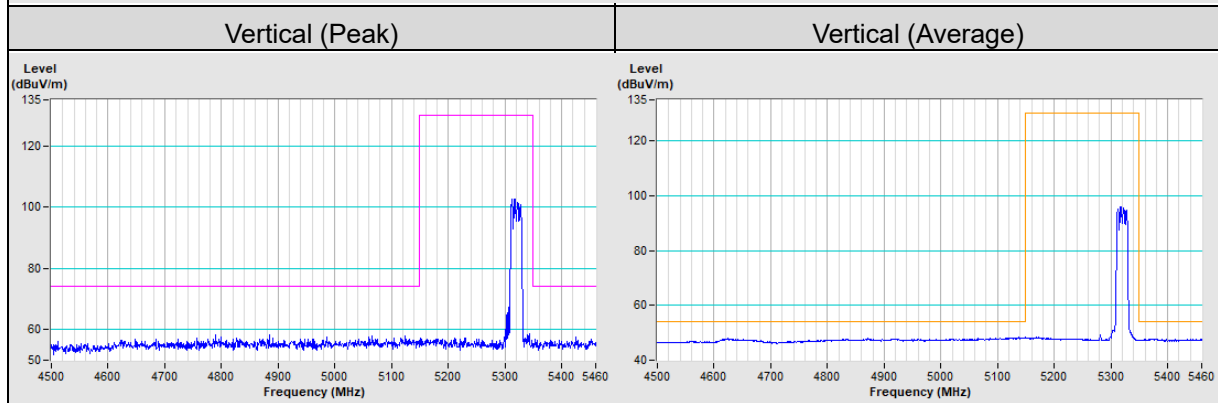
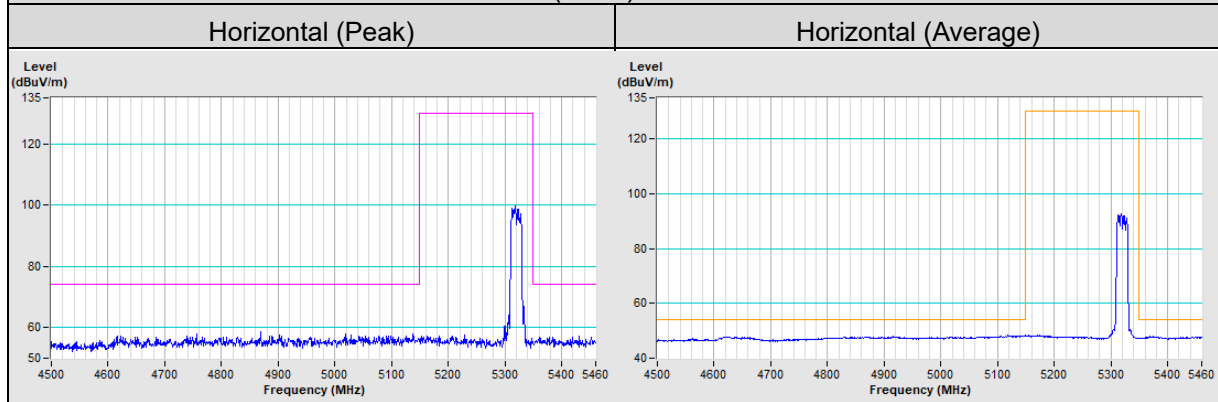
Vertical (Average)



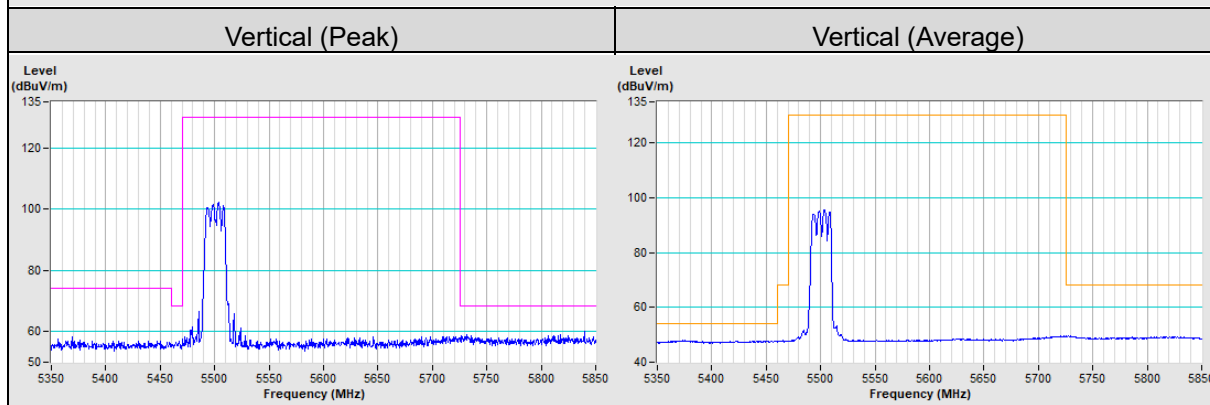
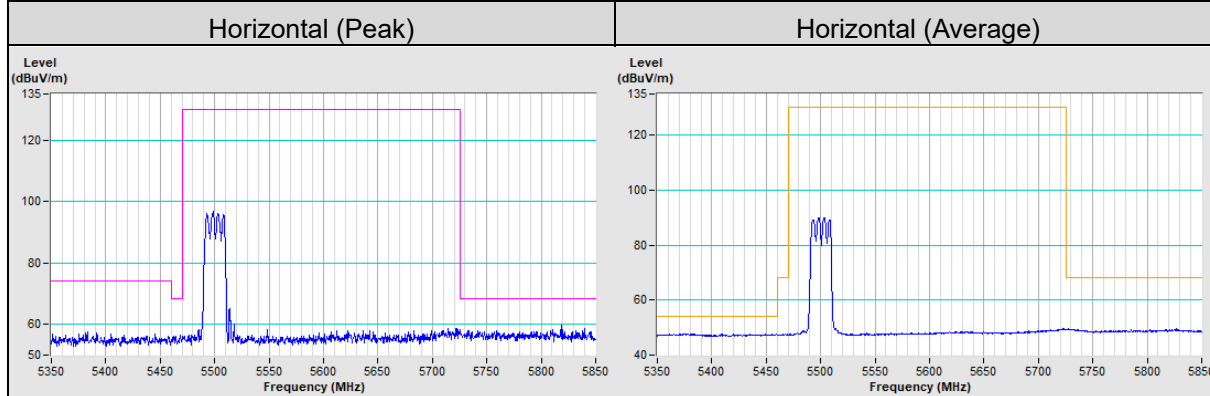
802.11n (HT20) Channel 52



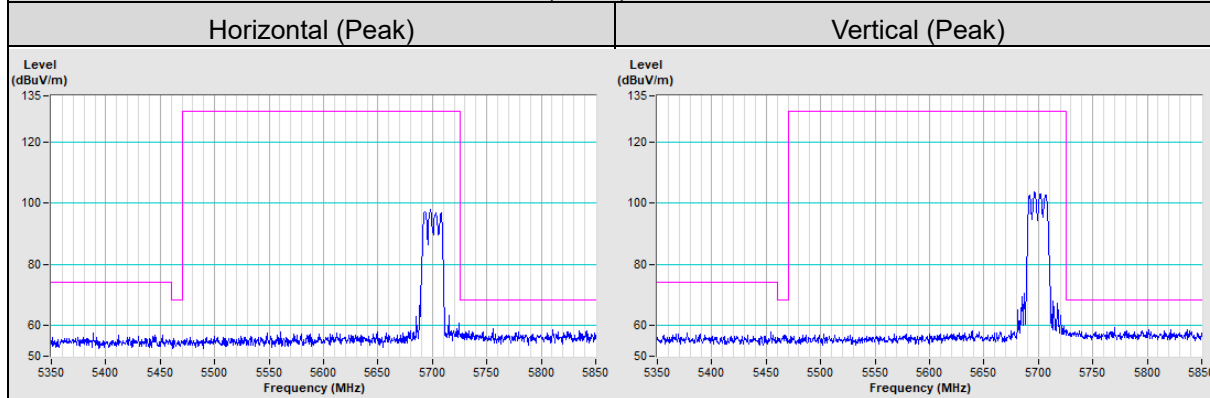
802.11n (HT20) Channel 64



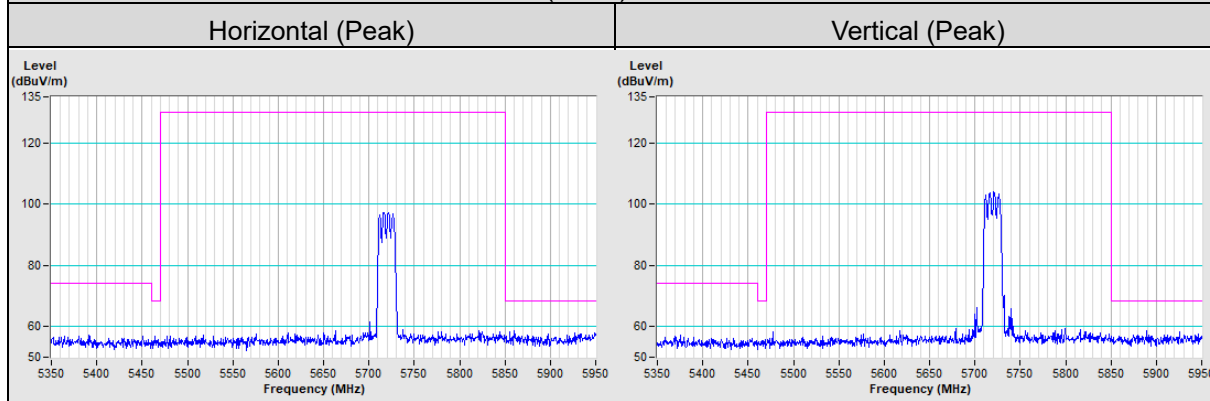
802.11n (HT20) Channel 100



802.11n (HT20) Channel 140

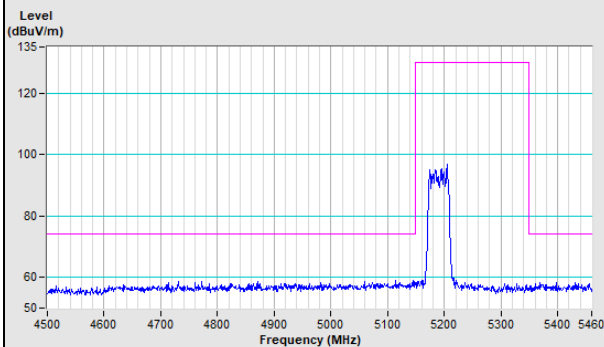


802.11n (HT20) Channel 144

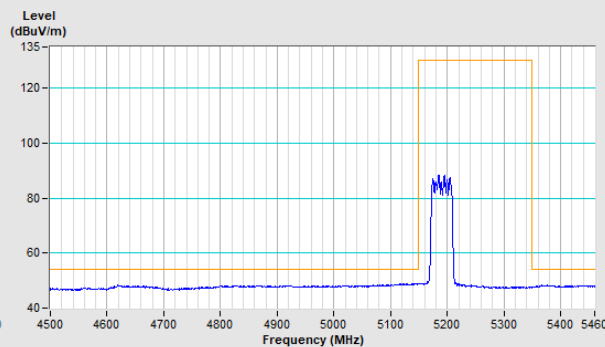


802.11n (HT40) Channel 38

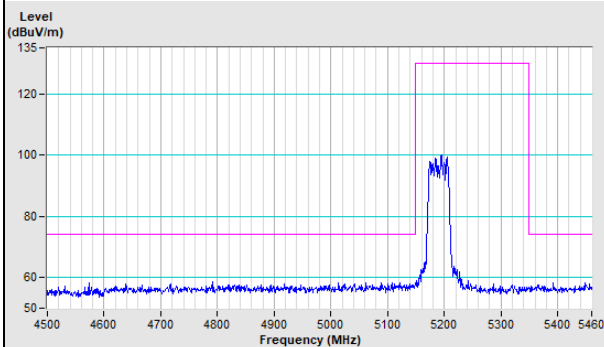
Horizontal (Peak)



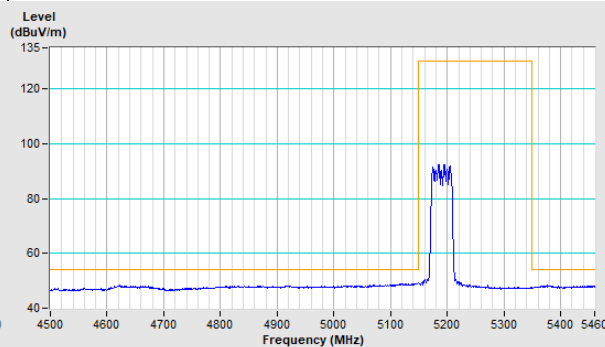
Horizontal (Average)



Vertical (Peak)

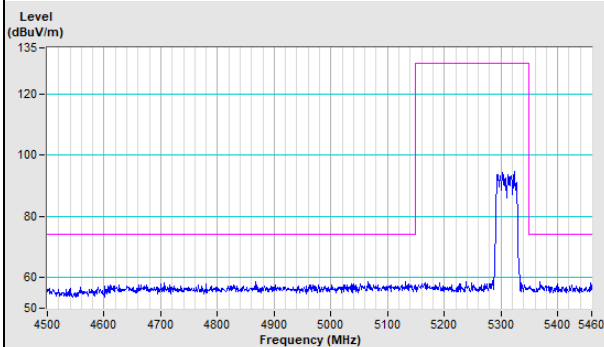


Vertical (Average)

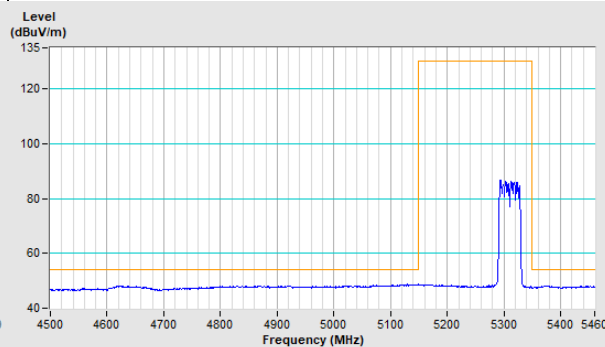


802.11n (HT40) Channel 62

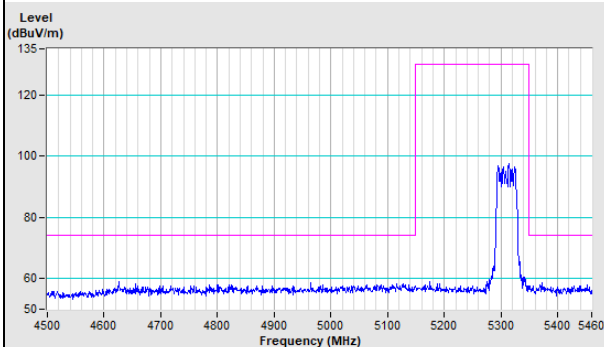
Horizontal (Peak)



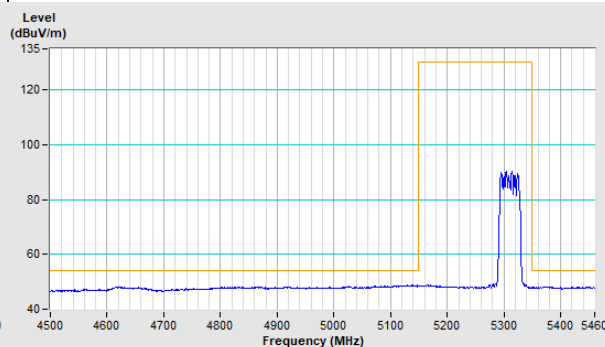
Horizontal (Average)



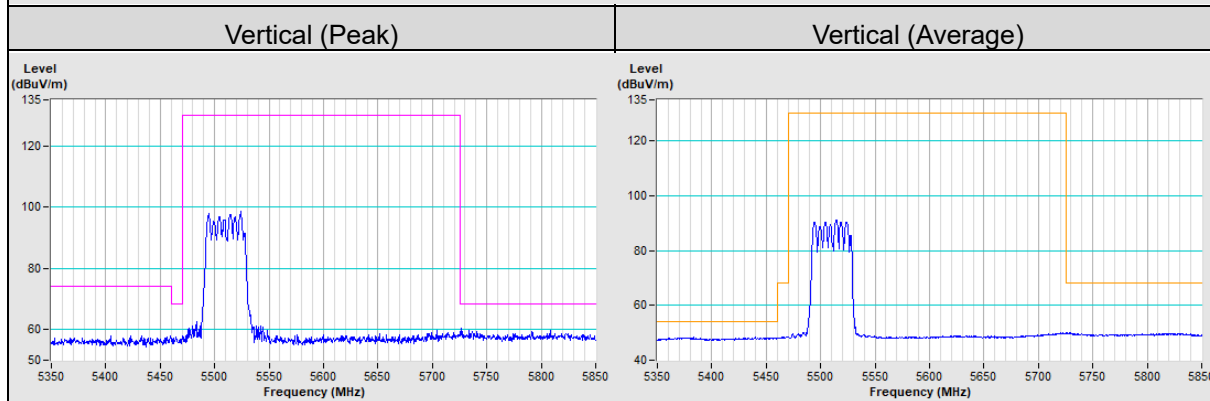
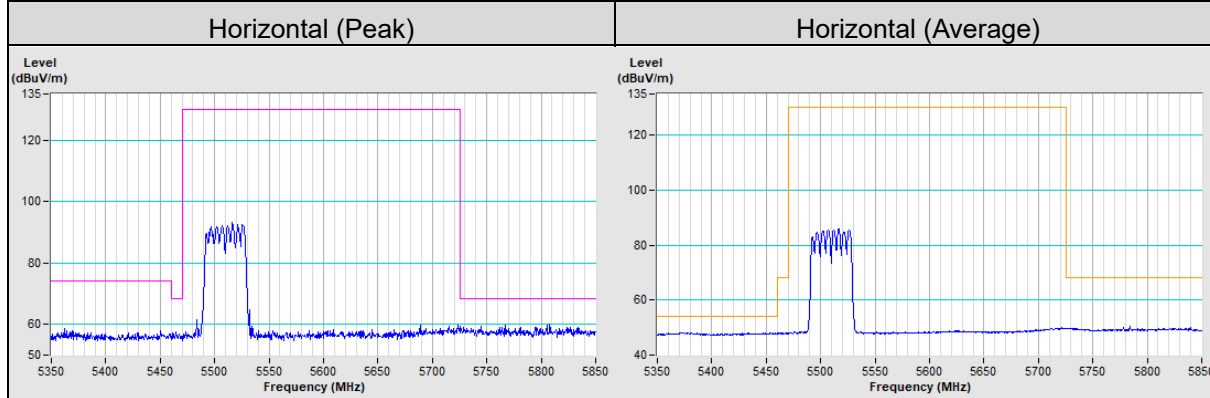
Vertical (Peak)



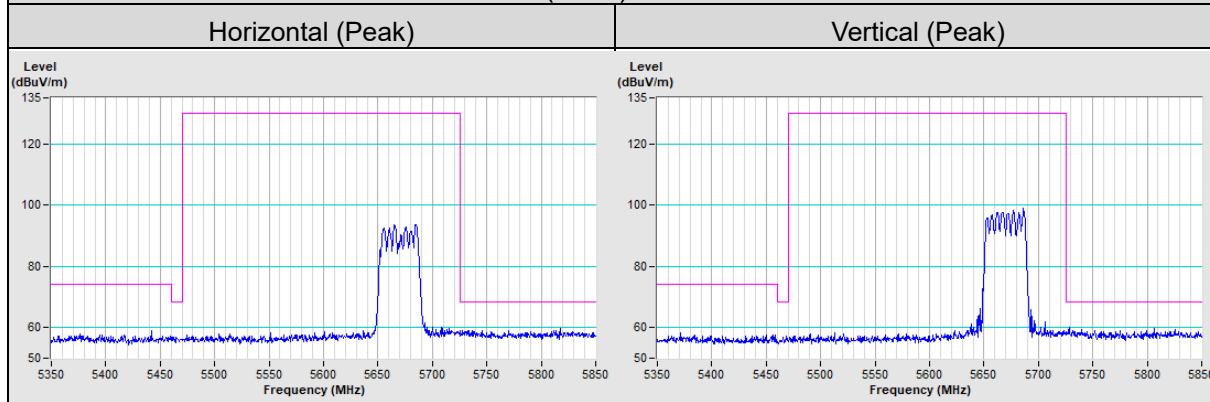
Vertical (Average)



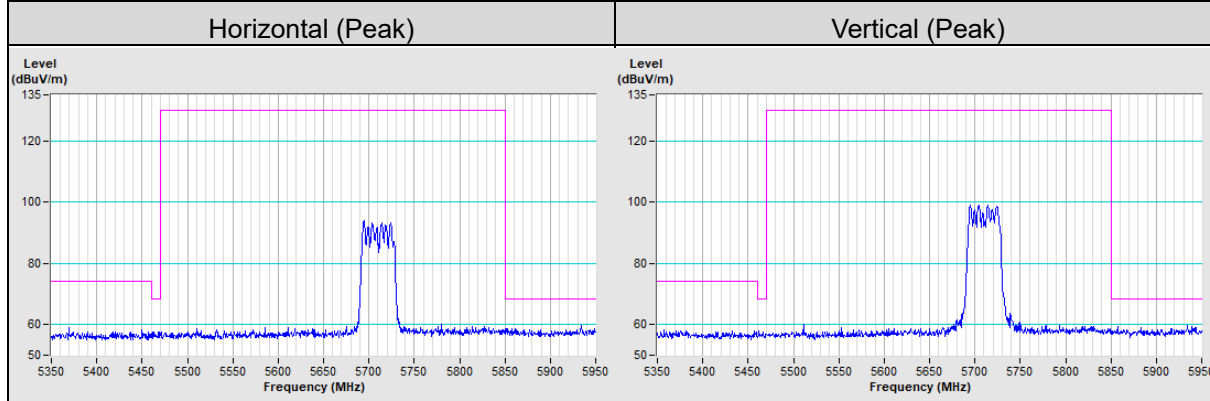
802.11n (HT40) Channel 102



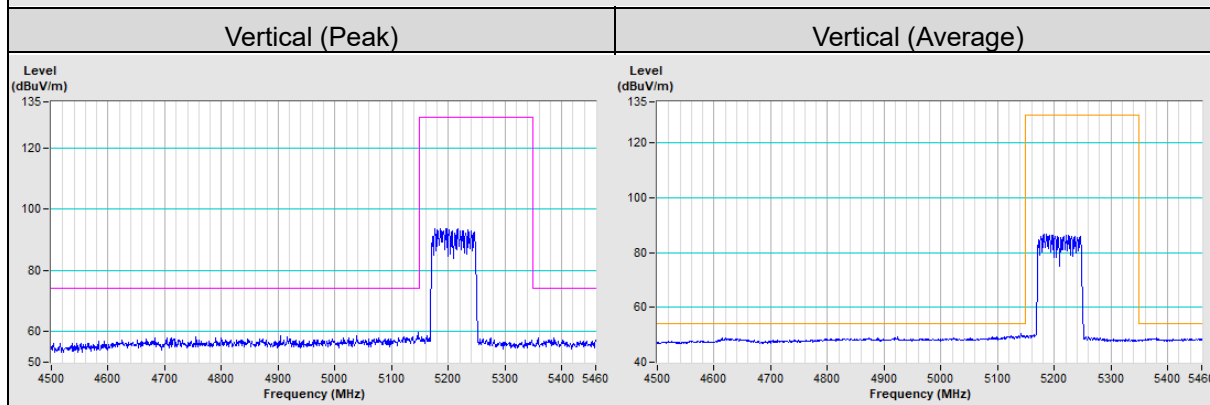
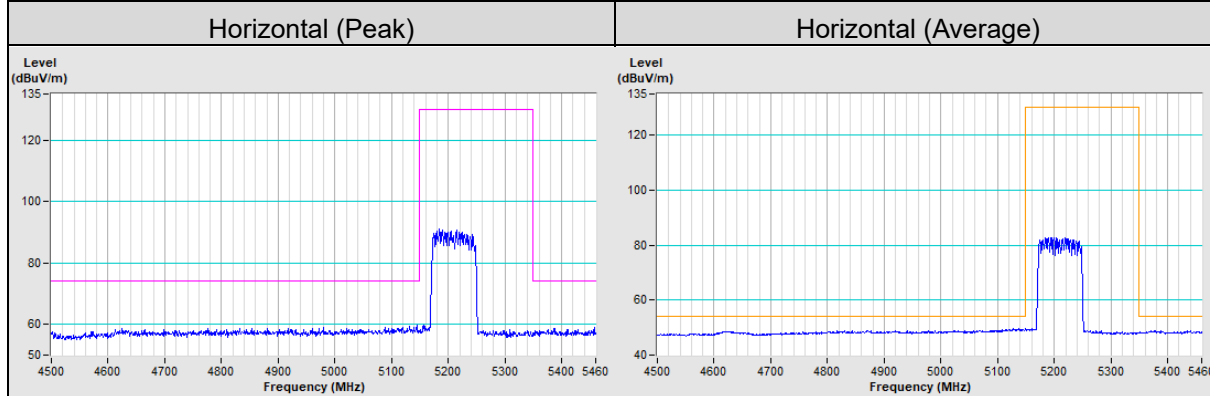
802.11n (HT40) Channel 134



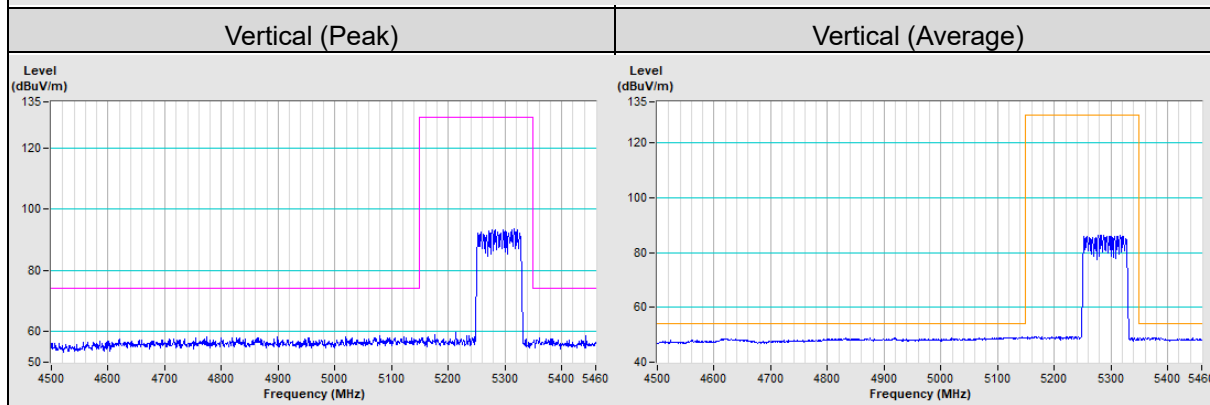
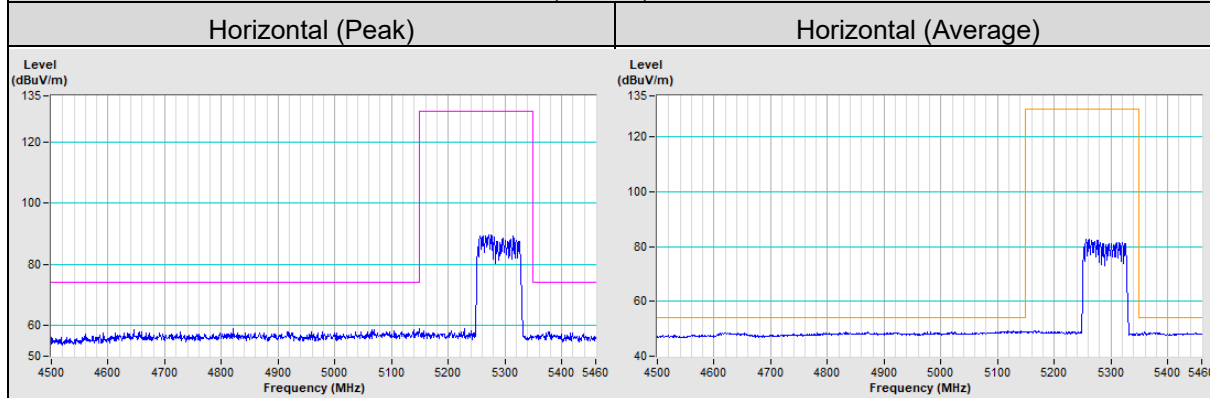
802.11n (HT40) Channel 142



802.11ac (VHT80) Channel 42

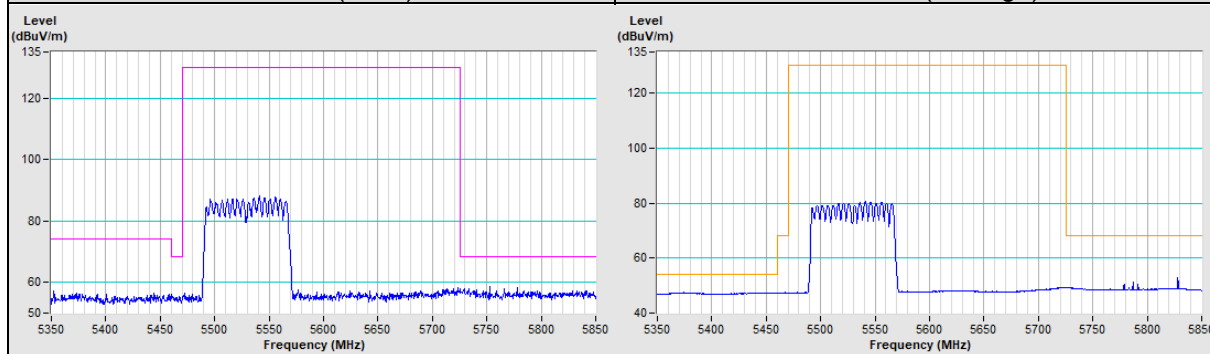


802.11ac (VHT80) Channel 58

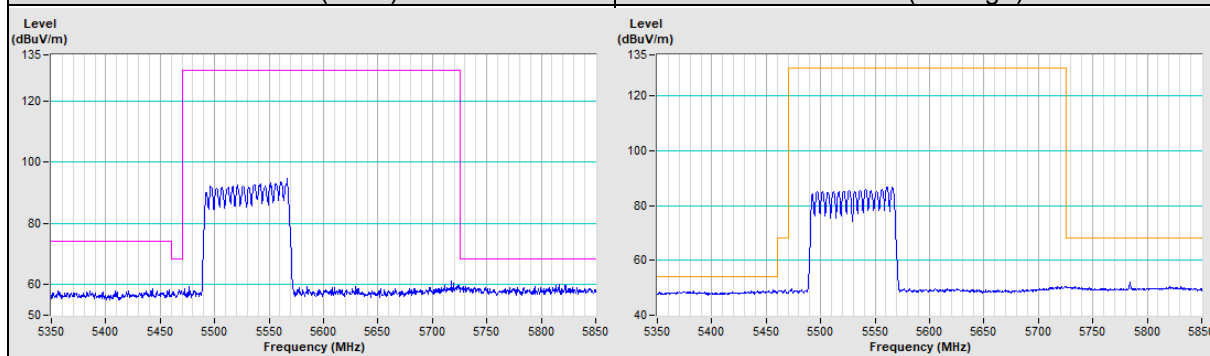


802.11ac (VHT80) Channel 106

Horizontal (Peak)	Horizontal (Average)
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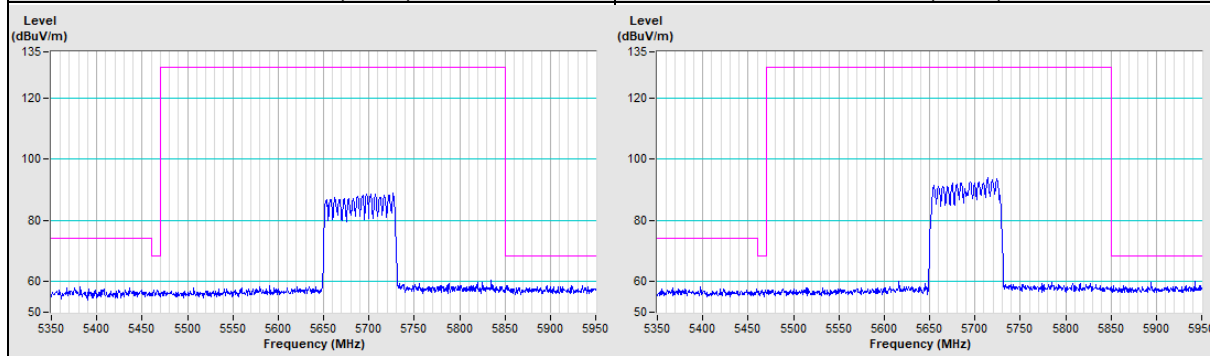


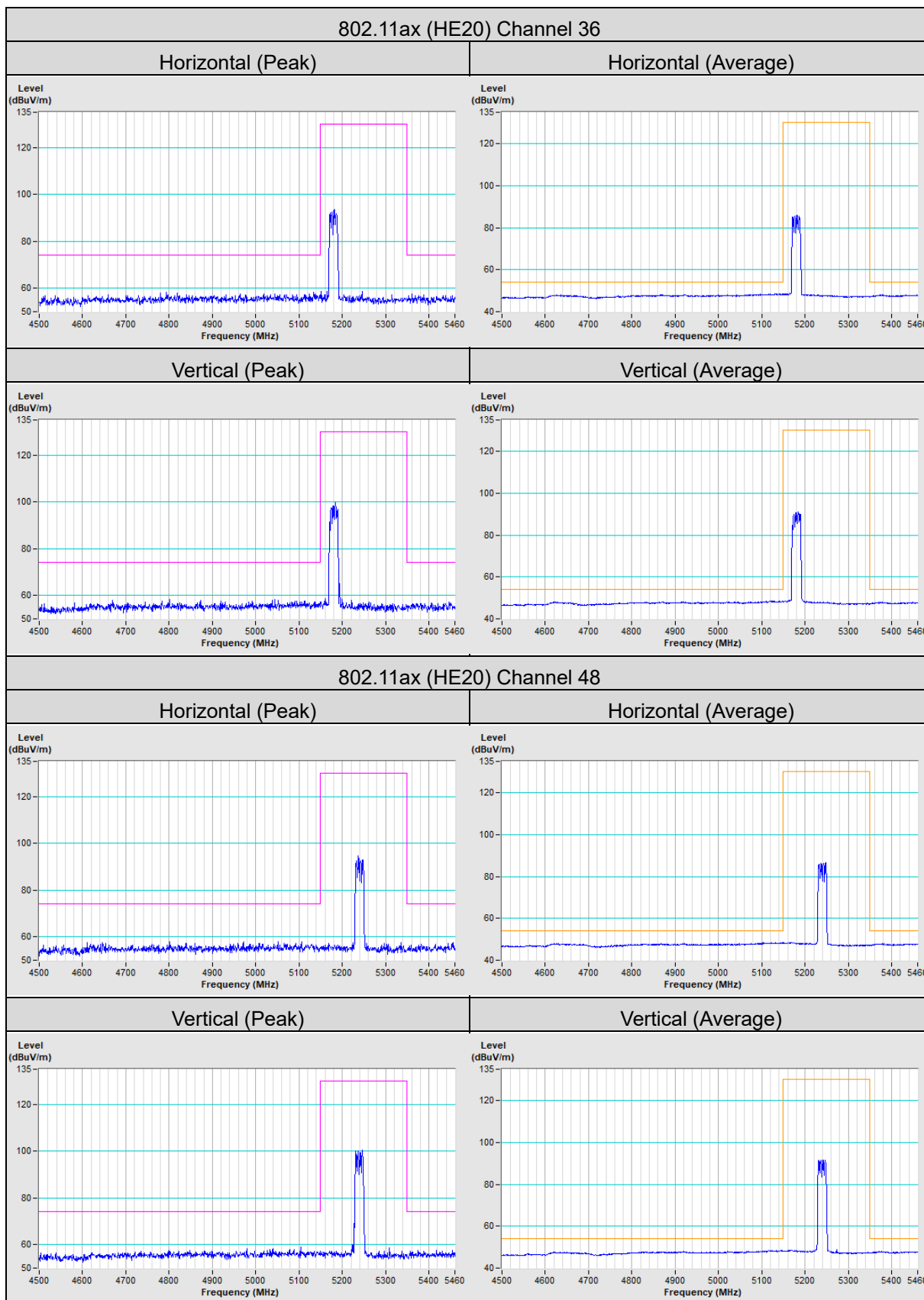
Vertical (Peak)	Vertical (Average)
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802.11ac (VHT80) Channel 138

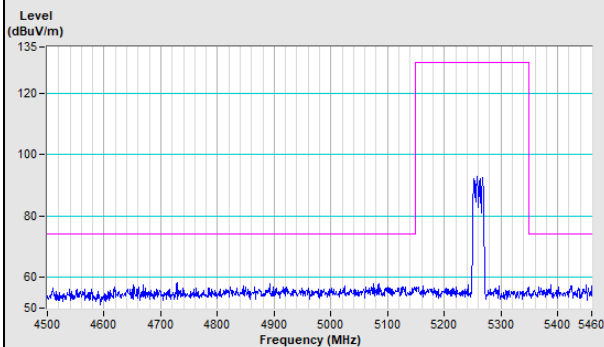
Horizontal (Peak)	Vertical (Peak)
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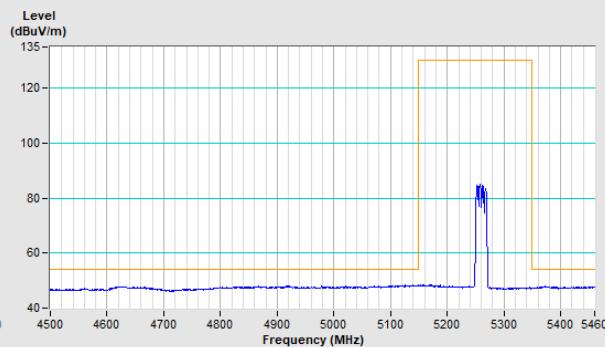


802.11ax (HE20) Channel 52

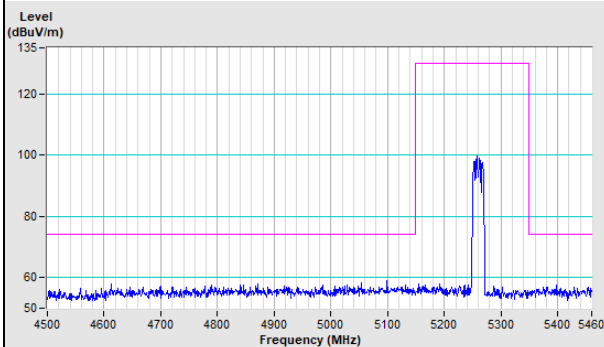
Horizontal (Peak)



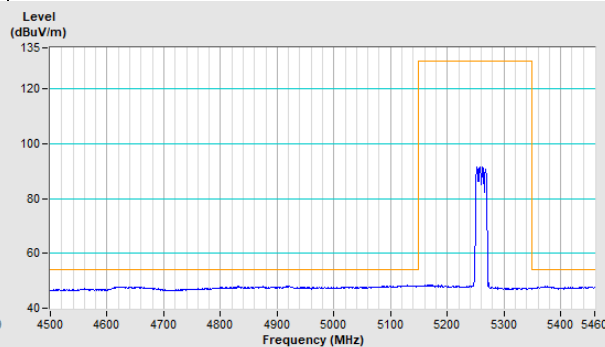
Horizontal (Average)



Vertical (Peak)

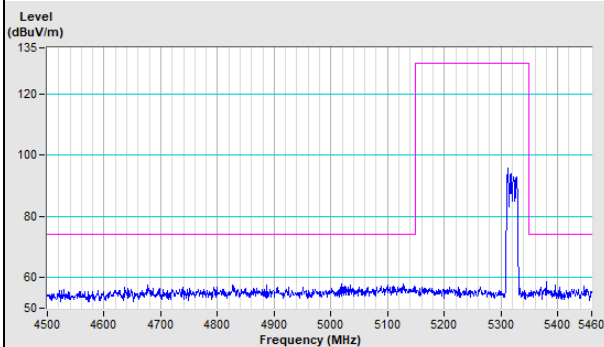


Vertical (Average)

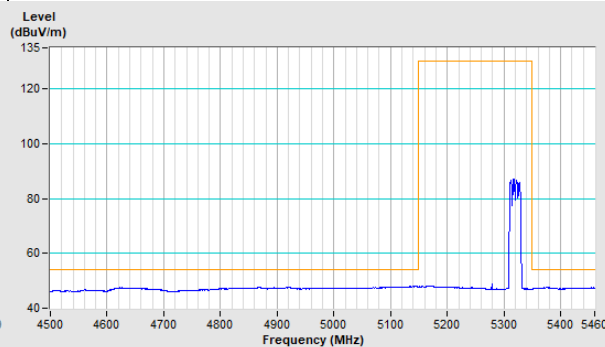


802.11ax (HE20) Channel 64

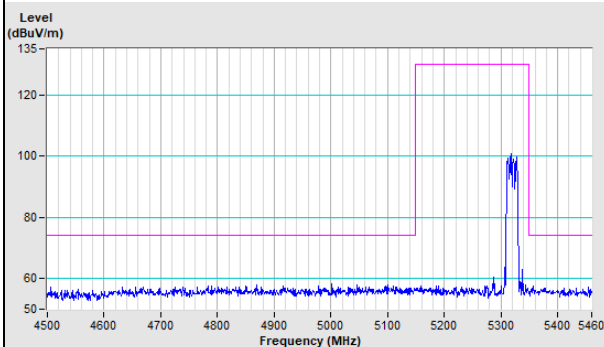
Horizontal (Peak)



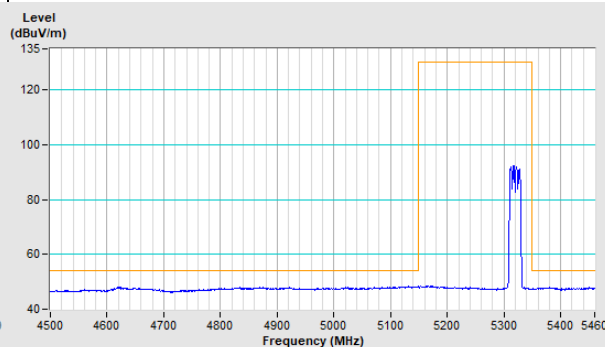
Horizontal (Average)



Vertical (Peak)

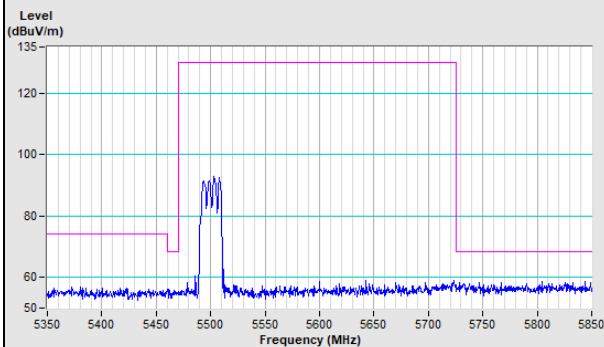


Vertical (Average)

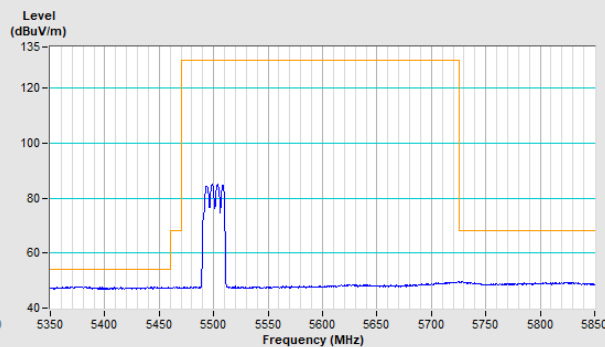


802.11ax (HE20) Channel 100

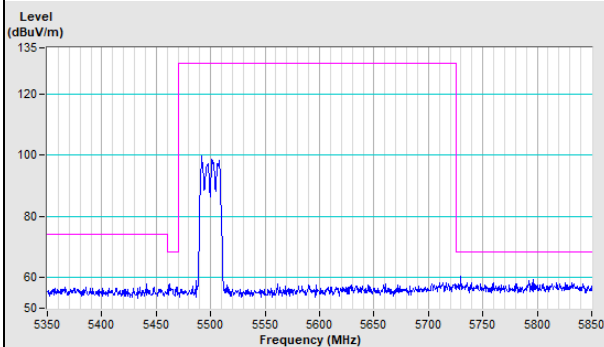
Horizontal (Peak)



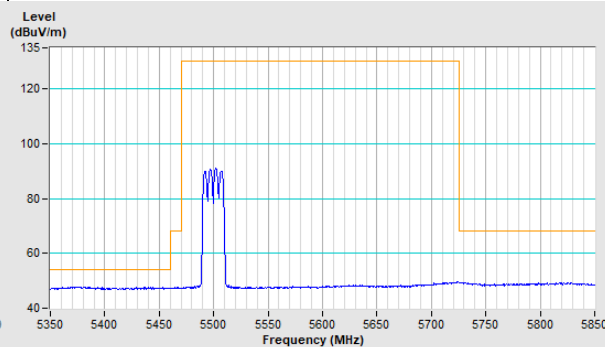
Horizontal (Average)



Vertical (Peak)

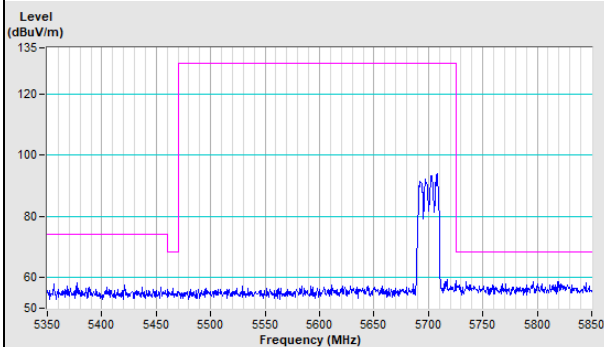


Vertical (Average)

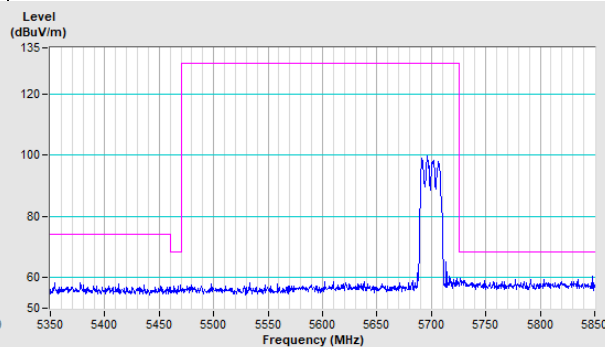


802.11ax (HE20) Channel 140

Horizontal (Peak)

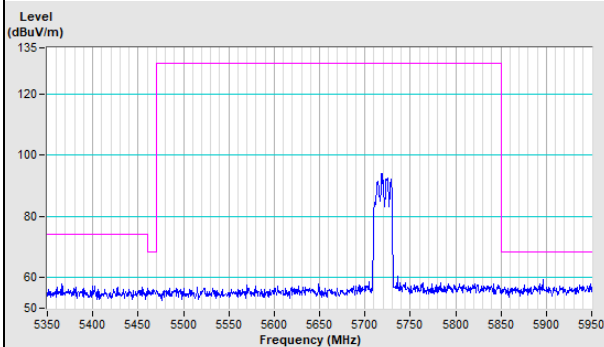


Vertical (Peak)

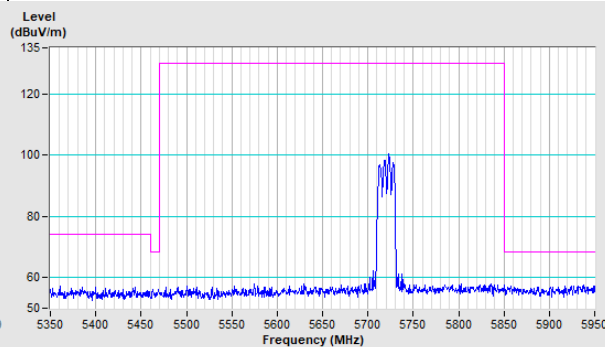


802.11ax (HE20) Channel 144

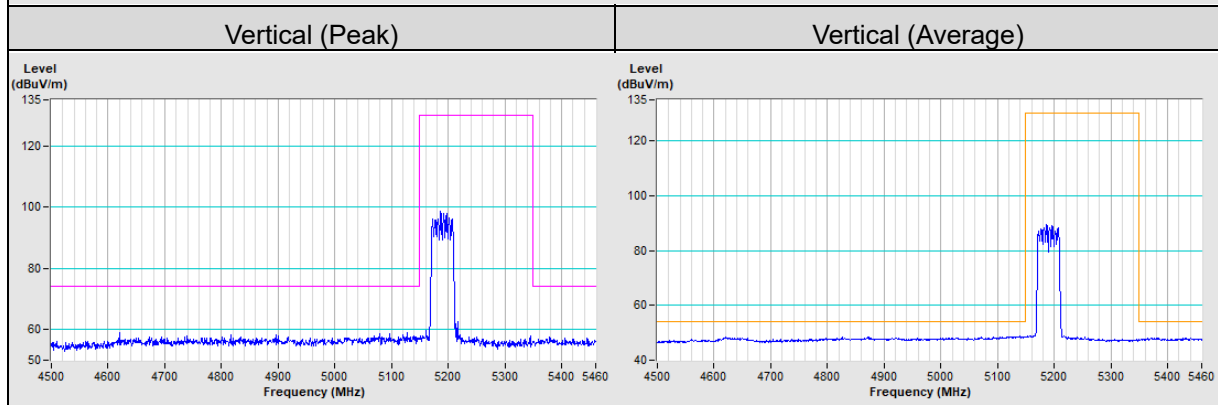
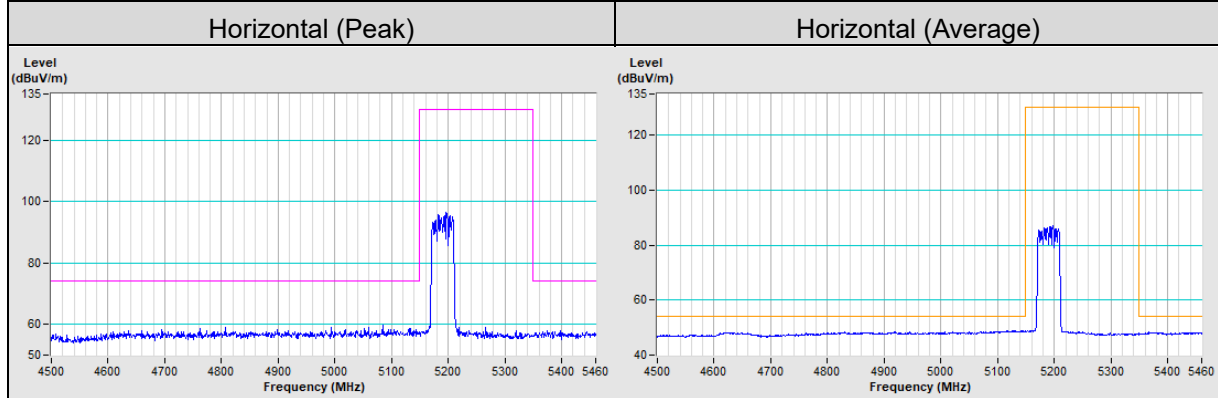
Horizontal (Peak)



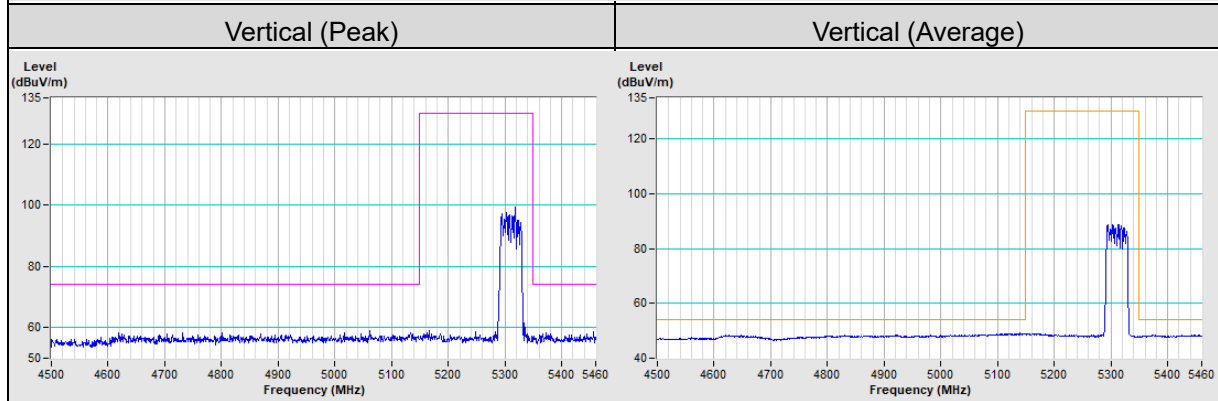
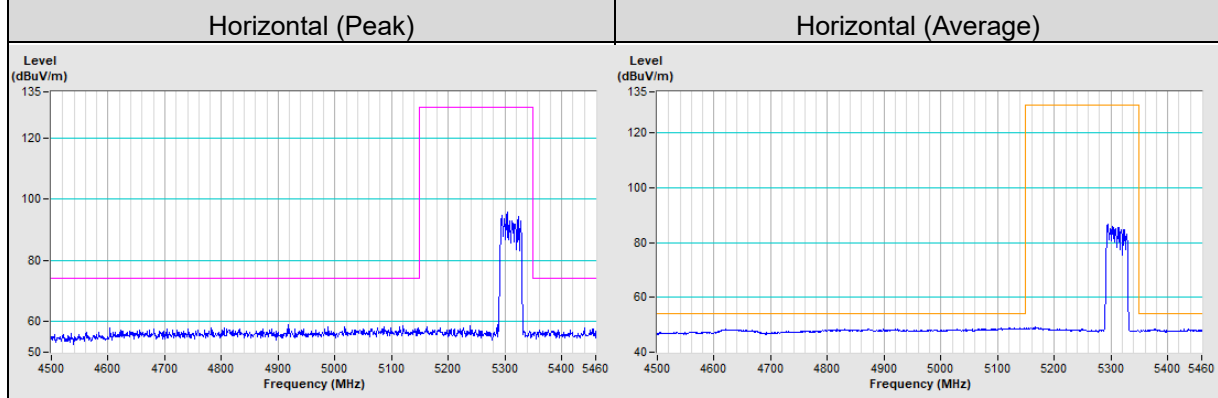
Vertical (Peak)



802.11ax (HE40) Channel 38

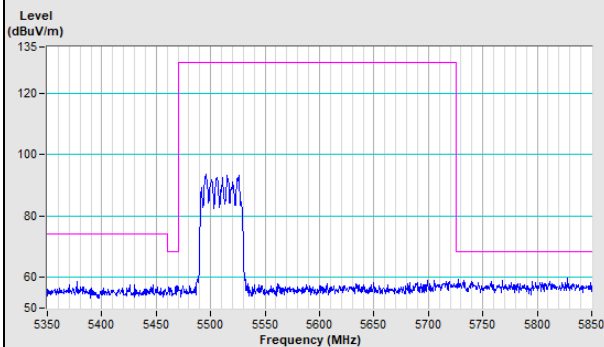


802.11ax (HE40) Channel 62

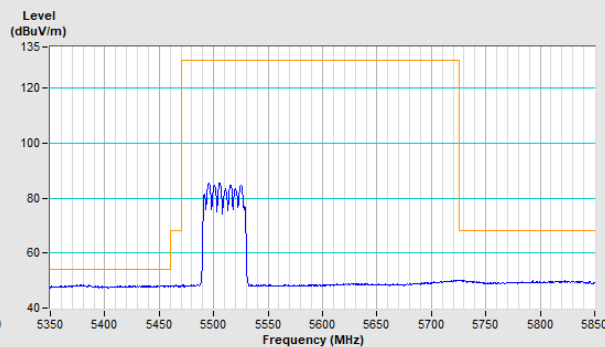


802.11ax (HE40) Channel 102

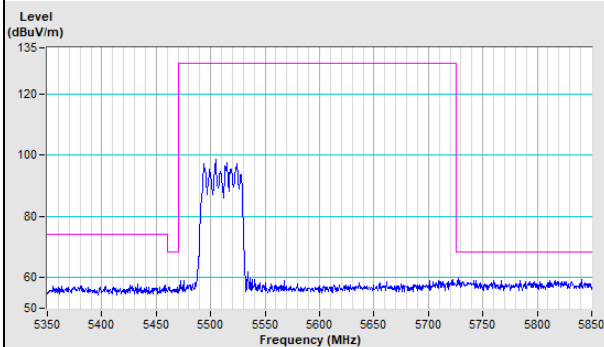
Horizontal (Peak)



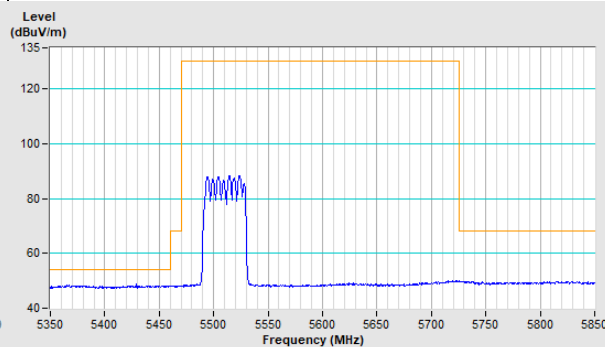
Horizontal (Average)



Vertical (Peak)

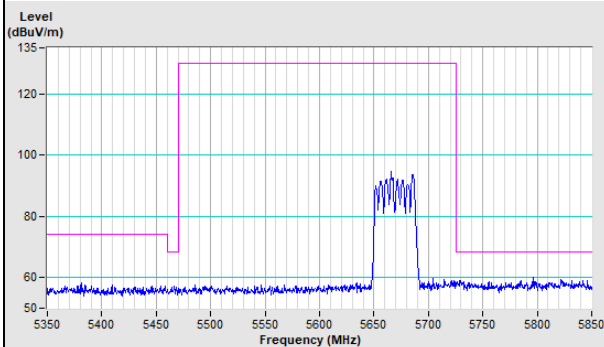


Vertical (Average)

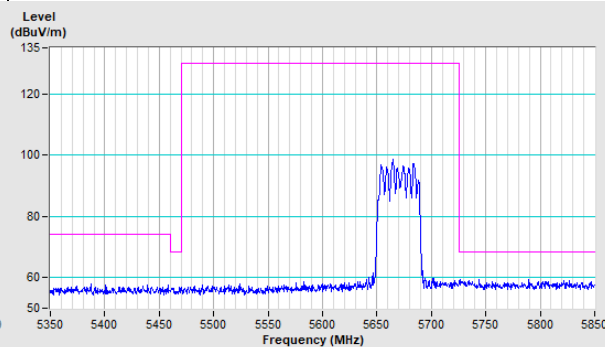


802.11ax (HE40) Channel 134

Horizontal (Peak)

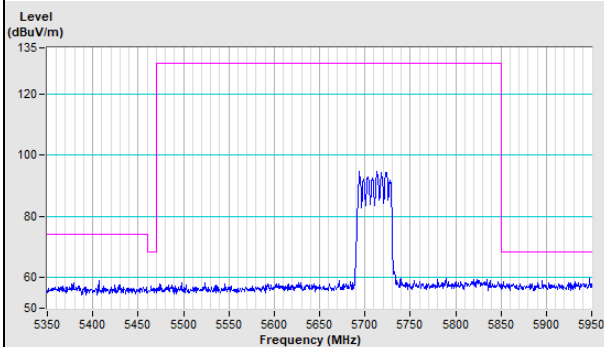


Vertical (Peak)

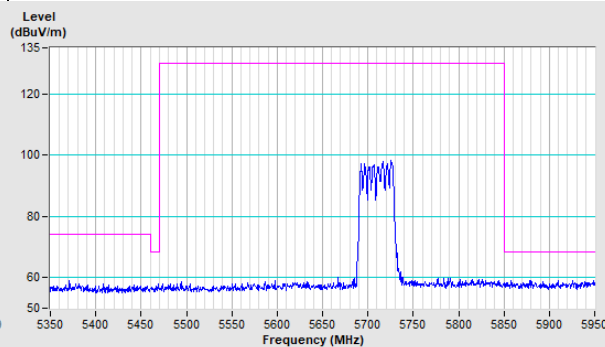


802.11ax (HE40) Channel 142

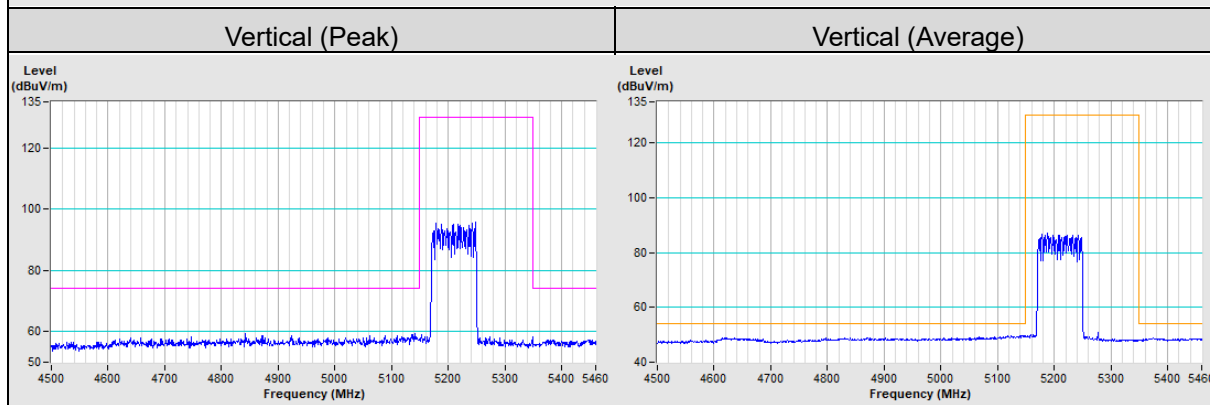
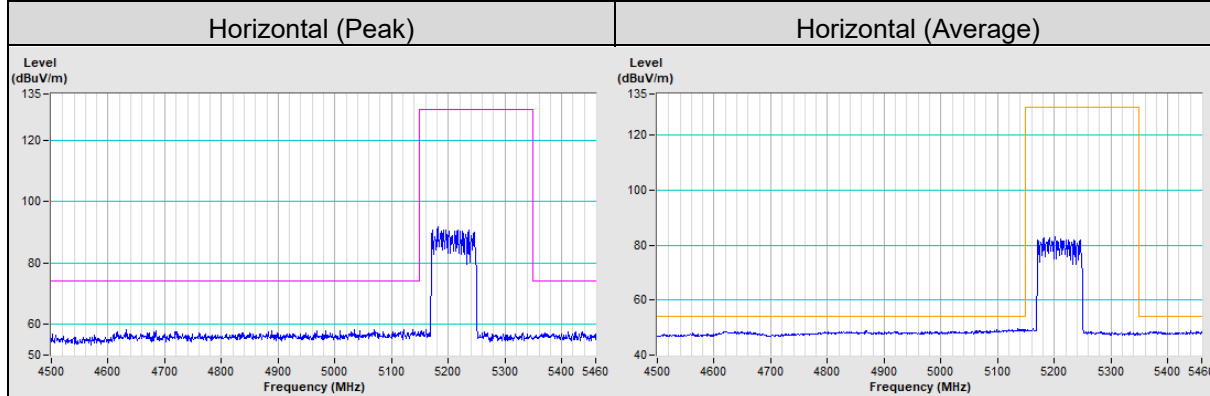
Horizontal (Peak)



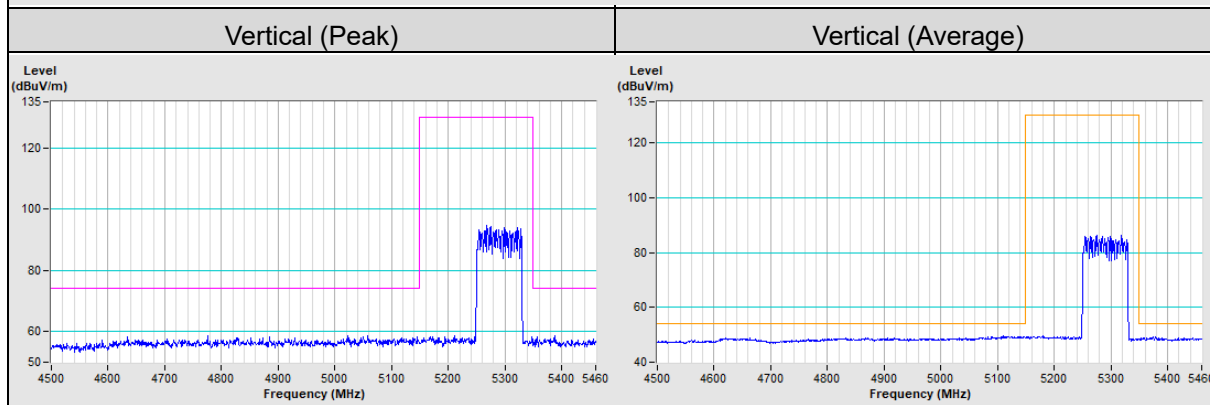
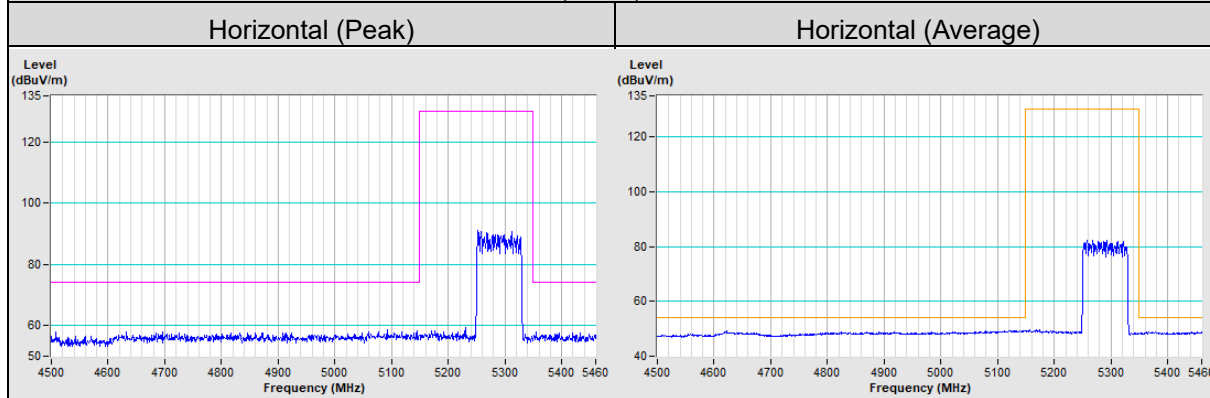
Vertical (Peak)



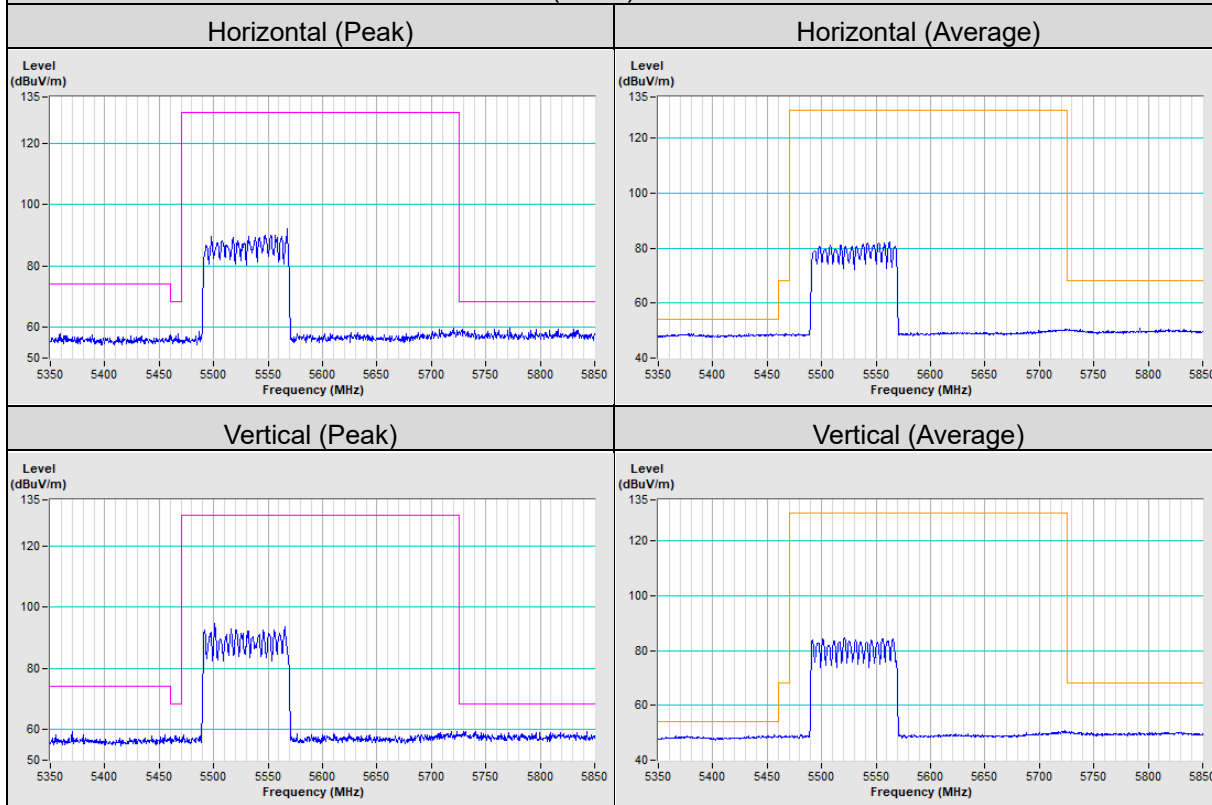
802.11ax (HE80) Channel 42



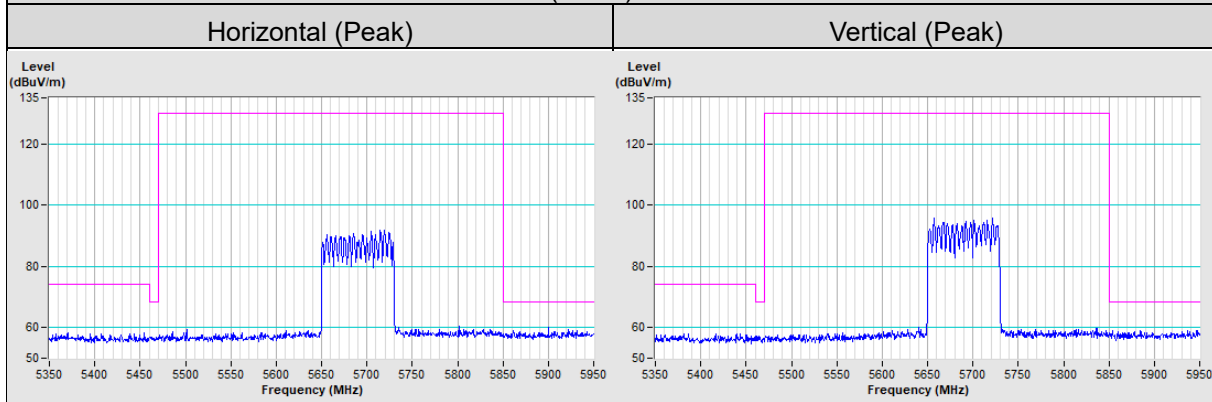
802.11ax (HE80) Channel 58



802.11ax (HE80) Channel 106



802.11ax (HE80) Channel 138



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.

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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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