

Partial FCC Test Report

Report No.: RFCDVB-WTW-P22100008-1

FCC ID: QYLAX211NG

Test Model: AX211NGW

Received Date: Oct. 11, 2022

Test Date: Nov. 04 ~ Dec. 08, 2022

Issued Date: Dec. 26, 2022

Applicant: Getac Technology Corporation.

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

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



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Table of Contents

Release Control Record	3
1 Certificate of Conformity	4
2 Summary of Test Results	5
2.1 Measurement Uncertainty.....	5
2.2 Modification Record.....	5
3 General Information	6
3.1 General Description of EUT.....	6
3.2 Description of Test Modes.....	9
3.2.1 Test Mode Applicability and Tested Channel Detail.....	11
3.3 Duty Cycle of Test Signal.....	14
3.4 Description of Support Units.....	15
3.4.1 Configuration of System under Test.....	15
3.5 General Description of Applied Standards and References.....	15
4 Test Types and Results	16
4.1 Radiated Emission and Bandedge Measurement.....	16
4.1.1 Limits of Radiated Emission and Bandedge Measurement.....	16
4.1.2 Test Instruments.....	17
4.1.3 Test Procedures.....	18
4.1.4 Deviation from Test Standard.....	19
4.1.5 Test Setup.....	19
4.1.6 EUT Operating Conditions.....	20
4.1.7 Test Results.....	21
4.2 Conducted Emission Measurement.....	66
4.2.1 Limits of Conducted Emission Measurement.....	66
4.2.2 Test Instruments.....	66
4.2.3 Test Procedures.....	67
4.2.4 Deviation from Test Standard.....	67
4.2.5 Test Setup.....	67
4.2.6 EUT Operating Conditions.....	67
4.2.7 Test Results.....	68
4.3 Transmit Power Measurement.....	70
4.3.1 Limits of Transmit Power Measurement.....	70
4.3.2 Test Setup.....	70
4.3.3 Test Instruments.....	70
4.3.4 Test Procedure.....	71
4.3.5 Deviation from Test Standard.....	71
4.3.6 EUT Operating Conditions.....	71
4.3.7 Test Result.....	72
Annex A- Radiated Out of Band Emission (OOBE) Measurement (For U-NII-3 band)	84
Annex B- Band Edge Measurement	87
5 Pictures of Test Arrangements	99
Appendix – Information of the Testing Laboratories	100

Release Control Record

Issue No.	Description	Date Issued
RFCDVB-WTW-P22100008-1	Original release	Dec. 26, 2022

1 Certificate of Conformity

Product: Wireless Module
Brand: Getac
Test Model: AX211NGW
Sample Status: Engineering sample
Applicant: Getac Technology Corporation.
Test Date: Nov. 04 ~ Dec. 08, 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 : Polly Chien, **Date:** Dec. 26, 2022
Polly Chien / Specialist

Approved by : Jeremy Lin, **Date:** Dec. 26, 2022
Jeremy Lin / Project Engineer

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
FCC Clause	Test Item	Result	Remarks
15.407(b)(9)	AC Power Conducted Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -7.57dB at 0.41400MHz.
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 -1.3dB at 5470.00MHz.
15.407(a)(1/2/3)	Max Average Transmit Power	Pass	Meet the requirement of limit.
---	Occupied Bandwidth Measurement	-	Reference only.
15.407(a)(1/2/3)	Peak Power Spectral Density	N/A	Refer to Note
15.407(e)	6dB bandwidth	N/A	Refer to Note
15.407(g)	Frequency Stability	N/A	Refer to Note
15.203	Antenna Requirement	Pass	Antenna connector is I-PEX not a standard connector.

Note:

1. This report is a partial report, only test item of Conducted Emission, Radiated Emissions and Max Average Transmit Power were performed according to customer requirements. Other testing data please refer to Intel report no.: 200611-01.TR01, 200611-01.TR02 and 200611-01.TR03 for module (Brand: Intel® Wi-Fi 6E AX211, Model: AX211NGW).
2. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
3. For U-NII-3 band compliance with rule part 15.407(b)(4)(i), the OOB test plots were recorded in Annex A.
4. For U-NII-1, U-NII-2A and 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.

2.1 Measurement Uncertainty

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

Measurement	Frequency	Expanded Uncertainty (k=2) (±)
Conducted Emissions at mains ports	150kHz ~ 30MHz	2.79 dB
Radiated Emissions up to 1 GHz	9 kHz ~ 30 MHz	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	Wireless Module
Brand	Getac
Test Model	AX211NGW
Sample Status	Engineering sample
Power Supply Rating	End-product: 19Vdc (from adapter) 11.1Vdc (from battery)
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: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0 Mbps 802.11n: up to 300.0 Mbps 802.11ac: up to 1733.3 Mbps 802.11ax: up to 2402.0 Mbps
Operating Frequency	5180 ~ 5320 MHz, 5500 ~ 5720 MHz, 5745 ~ 5825 MHz
Number of Channel	5180 ~ 5320 MHz: 8 for 802.11a, 802.11n (HT20), 802.11ax (HE20) 4 for 802.11n (HT40), 802.11ax (HE40) 2 for 802.11ac (VHT80), 802.11ax (HE80) 1 for 802.11ac (VHT160), 802.11ax (HE160) 5500 ~ 5720 MHz: 12 for 802.11a, 802.11n (HT20), 802.11ax (HE20) 6 for 802.11n (HT40), 802.11ax (HE40) 3 for 802.11ac (VHT80), 802.11ax (HE80) 1 for 802.11ac (VHT160), 802.11ax (HE160) 5745 ~ 5825 MHz: 5 for 802.11a, 802.11n (HT20), 802.11ax (HE20) 2 for 802.11n (HT40), 802.11ax (HE40) 1 for 802.11ac (VHT80), 802.11ax (HE80)
Output Power	5180 ~ 5320MHz: 168.864mW 5500 ~ 5700MHz: 171.611mW 5745 ~ 5825MHz: 176.010mW
Antenna Type	Refer to note
Antenna Connector	Refer to note
Accessory Device	Refer to note
Cable Supplied	NA

Note:

1. The EUT is authorized for use in specific End-product. Please refer to below for more details.

Product	Brand	Model	Description
Notebook	Getac	V110	For marketing purpose.
		V110G7	
		V110Y (Y= 10 characters, Y can be 0 to 9, A to Z, a to z, "/", "\", "-", "_" or blank for marketing purpose)	

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

Modulation Mode	TX Function
802.11a	1TX
802.11n (HT20)	2TX
802.11n (HT40)	2TX
802.11ac (VHT80)	2TX
802.11ac (VHT160)	2TX
802.11ax (HE20)	2TX
802.11ax (HE40)	2TX
802.11ax (HE80)	2TX
802.11ax (HE160)	2TX

* The modulation and bandwidth are similar for 802.11n mode for HT20 / HT40 and 802.11ac mode for VHT80 / VHT160 and 802.11ax mode for HE20 / HE40 / HE80 / HE160, the EUT support OFDMA and Partial RU mode, therefore investigated worst case to representative mode in test report. (Final test mode refer section 3.2.1)

The End-product contains following accessory devices.

Product	Brand	Model	Description
Adapter 1	FSP	FSP065-RBBN3	I/P: 100-240 Vac, 50-60Hz, 1.5 A O/P: 19.0 Vdc, 3.42 A Power Line: 1.5m, with one core
Adapter 2	Getac	MTA190474W4	I/P: 100-240 Vac, 50-60Hz Hz, 1.6 A O/P: 19.0Vdc, 4.74A Power Line: 1.55m, with two cores
Battery	Getac	BP3S1P2100-S	Rating: 11.1Vdc, 2040mAh, 23Wh Typical name: 2100mAh, 24Wh

* After the pretesting, adapter 1 mode is found to be the worst case and therefore had been chosen for final test.

3. The EUT uses the following antennas.

Antenna Type		PIFA								
Antenna Connector		I-PEX								
Antenna Peak Gain (dBi)										
Ant.	BT	2400-2483.5MHz	5150-5250MHz	5250-5350MHz	5470-5725MHz	5725-5850MHz	5925-6425MHz	6425-6525MHz	6525-6875MHz	6875-7125MHz
Main	-	2.79	1.96	1.65	1.88	1.90	0.56	2.99	2.99	2.76
Aux.	2.31	2.31	1.76	1.31	2.07	2.90	2.92	1.48	2.29	2.29

* Detail antenna specification please refer to antenna datasheet and/an antenna gain measurement report.

4. The End-product configurations of all SKU are listed as below, and SKU2 was the worst case for final test

Part	Brand	Model	Specification	Configuration		
				SKU 1	SKU 2	SKU 3
CPU	Intel	Alder Lake	i5-1235U (Non Vpro)	V		V
			i7-1265U (Vpro)		V	
DDR	Kingston	---	16GB (8GB+8GB)	V		
		---	32GB (16GB+16GB)		V	
		---	64GB (32GB+32GB)			V
SSD	SSSTC	---	256GB	V		
		---	512GB		V	
		---	1TB			V
LCD Panel	AUO	G116HAN01	11.6"	V	V	V
Touchscreen	Getac	---	---	V	V	V
Finger Print	Egistec	---	---	V	V	V
WLAN Module	Intel	AX211NGW	---	V	V	V
GPS	GlobalSat	MC1010G	---	V	V	V
RFID Module	NXP	PN-7462	---		V	V
Digitizer Module	Getac	EMR116-UA00	---		V	V
Bottom Camera	FOXLINK	FN80AF-443H	---	V	V	V
	Chicony	CKAM816	---	V	V	V
Camera	FOXLINK	FN20FF-679H	---	V	V	V
IR Camera	FOXLINK	FN23FF-678H	---		V	V
Option Bay	Honeywell	N6703	Barcode	V		V
	Getac	---	SD Card reader		V	
	Getac	---	Smart Card		V	

3.2 Description of Test Modes

For 5180 ~ 5320MHz:

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

Channel	Frequency	Channel	Frequency
36	5180	52	5260
40	5200	56	5280
44	5220	60	5300
48	5240	64	5320

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

Channel	Frequency	Channel	Frequency
38	5190	54	5270
46	5230	62	5310

2 channel is provided for 802.11ac (VHT80) and 802.11ax (HE80):

Channel	Frequency	Channel	Frequency
42	5210	58	5290

1 channel is provided for 802.11ac (VHT160) and 802.11ax (HE160):

Channel	Frequency
50	5250

For 5500 ~ 5720MHz:

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

Channel	Frequency	Channel	Frequency
100	5500	124	5620
104	5520	128	5640
108	5540	132	5660
112	5560	136	5680
116	5580	140	5700
120	5600	144	5720

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

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

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

Channel	Frequency	Channel	Frequency
106	5530	138	5690
122	5610		

1 channel is provided for 802.11ac (VHT160) and 802.11ax (HE160):

Channel	Frequency
114	5570

For 5745 ~ 5825MHz:

5 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20) and 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) and 802.11ac (VHT40) and 802.11ax (HE40):

Channel	Frequency	Channel	Frequency
151	5755MHz	159	5795MHz

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

Channel	Frequency
155	5775MHz

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT Configure Mode	Applicable to				Description
	RE \geq 1G	RE<1G	PLC	Power	
-	√	√	√	√	-

Where RE \geq 1G: Radiated Emission above 1GHz & Bandedge Measurement
 RE<1G: Radiated Emission below 1GHz
 PLC: Power Line Conducted Emission
 Power: Maximum Output Power Measurement

Note: For radiated emission (below 1GHz) and power line conducted emission 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	5180-5240	36 to 48	36, 40, 48	OFDM	6.0
	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
	802.11ax (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
	802.11ax (HE160)		50	50	OFDMA	MCS0
-	802.11a	5500-5720	100 to 140	100, 116, 140	OFDM	6.0
	802.11ax (HE20)		100 to 140	100, 116, 140, 144	OFDMA	MCS0
	802.11ax (HE40)		102 to 134	102, 110, 134, 142	OFDMA	MCS0
	802.11ax (HE80)		106 to 138	106, 122, 138	OFDMA	MCS0
	802.11ax (HE160)		114	114	OFDMA	MCS0
-	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6.0
	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)
-	802.11ax (HE20)	5180-5240	36, 40, 48	165	OFDMA	MCS0
		5250-5320	52, 60, 64		OFDMA	MCS0
		5500-5700	100 to 140		OFDMA	MCS0
		5745-5825	149, 157, 165		OFDMA	MCS0

Power Line Conducted Emission Test:

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

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)
-	802.11ax (HE20)	5180-5240	36, 40, 48	165	OFDMA	MCS0
		5250-5320	52, 60, 64		OFDMA	MCS0
		5500-5700	100 to 140		OFDMA	MCS0
		5745-5825	149, 157, 165		OFDMA	MCS0

Conducted Power Measurement:

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

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)
-	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	6.0
	802.11n (HT20)		36 to 48	36, 40, 48	OFDM	HT8
	802.11n (HT40)		38 to 46	38, 46	OFDM	HT8
	802.11ac (VHT80)		42	42	OFDM	VHT0
	802.11ax (HE20)		36 to 48	36, 40, 48	OFDMA	HE0
	802.11ax (HE40)		38 to 46	38, 46	OFDMA	HE0
	802.11ax (HE80)		42	42	OFDMA	HE0
-	802.11a	5250-5320	52 to 64	52, 60, 64	OFDM	6.0
	802.11n (HT20)		52 to 64	52, 60, 64	OFDM	HT8
	802.11n (HT40)		54 to 62	54, 62	OFDM	HT8
	802.11ac (VHT80)		58	OFDM	OFDM	VHT0
	802.11ac (VHT160)		50	OFDM	OFDM	VHT0
	802.11ax (HE20)		52 to 64	52, 60, 64	OFDMA	HE0
	802.11ax (HE40)		54 to 62	54, 62	OFDMA	HE0
	802.11ax (HE80)		58	58	OFDMA	HE0
	802.11ax (HE160)		50	50	OFDMA	HE0
-	802.11a	5500-5720	100 to 140	100, 116, 140	OFDM	6.0
	802.11n (HT20)		100 to 140	100, 116, 140, 144	OFDM	HT8
	802.11n (HT40)		102 to 134	102, 110, 134, 142	OFDM	HT8
	802.11ac (VHT80)		106 to 138	106, 122, 138	OFDM	VHT0
	802.11ac (VHT160)		114	114	OFDM	VHT0
	802.11ax (HE20)		100 to 140	100, 116, 140, 144	OFDMA	HE0
	802.11ax (HE40)		102 to 134	102, 110, 134, 142	OFDMA	HE0
	802.11ax (HE80)		106 to 138	106, 122, 138	OFDMA	HE0
	802.11ax (HE160)		114	114	OFDMA	HE0

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)
-	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6.0
	802.11n (HT20)		149 to 165	149, 157, 165	OFDM	HT8
	802.11n (HT40)		151 to 159	151, 159	OFDM	HT8
	802.11ac (VHT80)		155	155	OFDM	VHT0
	802.11ax (HE20)		149 to 165	149, 157, 165	OFDMA	HE0
	802.11ax (HE40)		151 to 159	151, 159	OFDMA	HE0
	802.11ax (HE80)		155	155	OFDMA	HE0

Test Condition:

Applicable to	Environmental Conditions	Input Power	Tested by
RE \geq 1G	21 deg. C, 73% RH	120Vac, 60Hz	Adair Peng, Rex Wang
RE<1G	23 deg. C, 67% RH	120Vac, 60Hz	Adair Peng
PLC	25 deg. C, 75% RH	120Vac, 60Hz	Rex Wang
Power	25 deg. C, 60% RH	120Vac, 60Hz	Alan Wu

3.3 Duty Cycle of Test Signal

Duty cycle of test signal is > 98 %, duty factor is not required.

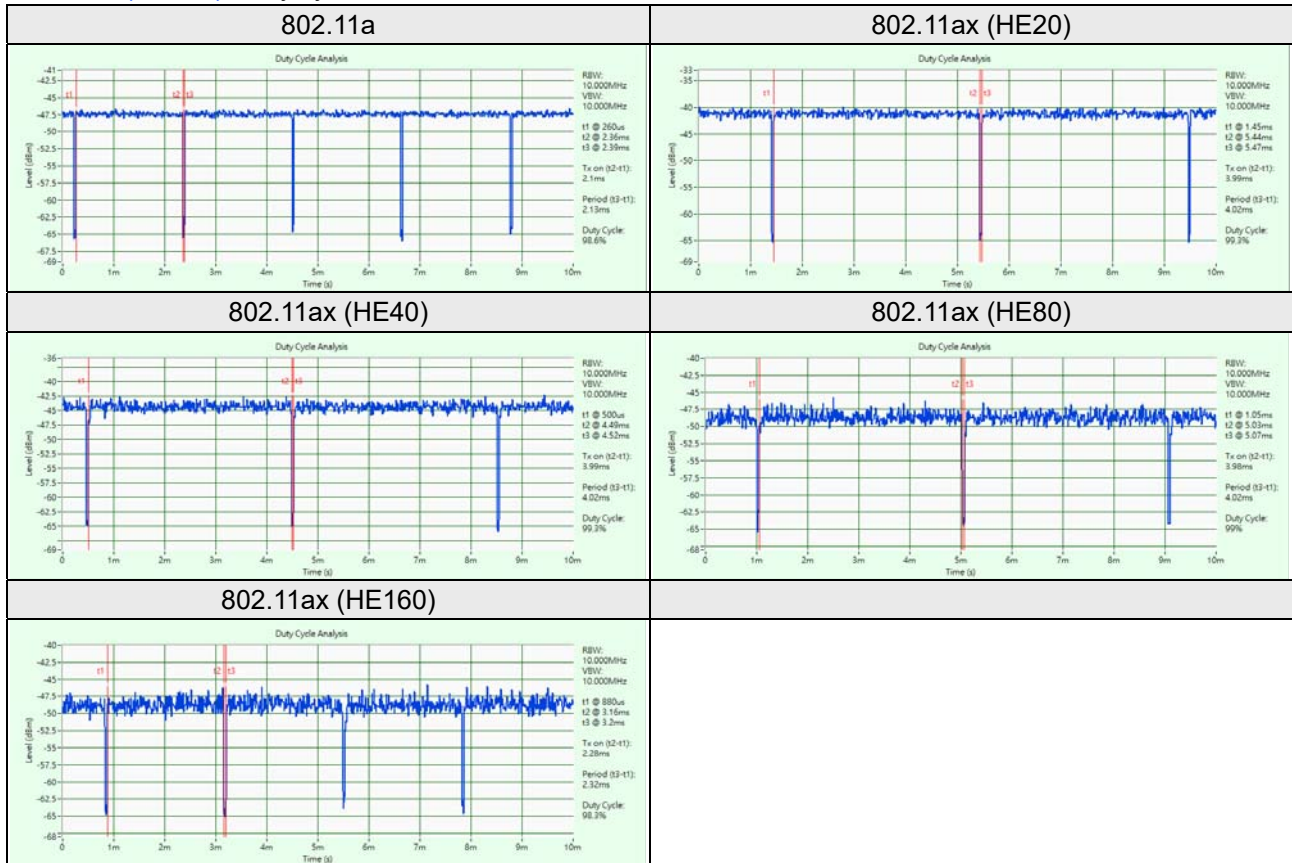
802.11a: Duty cycle = 2.10ms/2.13ms = 0.986

802.11ax (HE20): Duty cycle = 3.99ms/4.02ms = 0.993

802.11ax (HE40): Duty cycle = 3.99ms/4.02ms = 0.993

802.11ax (HE80): Duty cycle = 3.98ms/4.02ms = 0.990

802.11ax (HE160): Duty cycle = 2.28ms/2.32ms = 0.983



3.4 Description of Support Units

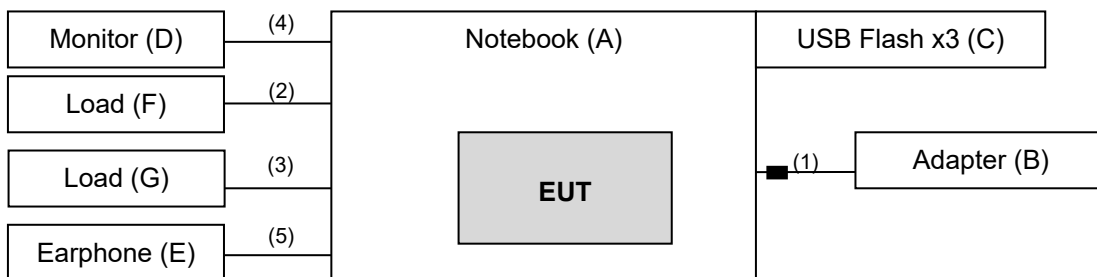
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Notebook	Getac	V110G7	N/A	N/A	Provided by Client
B.	Adapter	FSP	FSP065-RBBN3	N/A	N/A	Provided by Client
C.	USB Flash x3	SanDisk	SDDDC3-032G	N/A	N/A	Provided by Lab
D.	Monitor	ASUS	VA24EHE	LCLMTF243824	N/A	Provided by Lab
E.	Earphone	Apple	MB77PFEB	N/A	N/A	Provided by Lab
F.	Load	N/A	N/A	N/A	N/A	Provided by Lab
G.	Load	N/A	N/A	N/A	N/A	Provided by Lab

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

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	DC Cable	1	1.5	N	1	Provided by Client
2.	RJ-45 Cable	1	1.5	N	0	Provided by Lab
3.	Console Cable	1	1	Y	0	Provided by Lab
4.	HDMI Cable	1	1	Y	0	Provided by Lab
5.	Earphone Cable	1	1.5	N	0	Provided by Lab

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 (dBuV/m)	AV: 54 (dBuV/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(dBuV/m)
5250~5350 MHz	15.407(b)(2)		
5470~5725 MHz	15.407(b)(3)		
5725~5850 MHz	<input checked="" type="checkbox"/> 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(dBuV/m) ^{*1} PK: 105.2 (dBuV/m) ^{*2} PK: 110.8(dBuV/m) ^{*3} PK: 122.2 (dBuV/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:

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

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. 20, 2022	Oct. 19, 2023
HORN Antenna RF SPIN	DRH18-E	210101A18E	Nov. 14, 2021	Nov. 13, 2022
HORN Antenna SCHWARZBECK	BBHA 9170	9170-1048	Nov. 14, 2021	Nov. 13, 2022
Loop Antenna EMCI	EM-6879	269	Sep. 19, 2022	Sep. 18, 2023
Loop Antenna TESEQ	HLA 6121	45745	Jul. 27, 2022	Jul. 26, 2023
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-(9000+3000+1000)	201244+ 201232+ 210103	Jan. 17, 2022	Jan. 16, 2023
RF signal cable EMCI	EMCCFD400-NM-NM-(9000+300+500)	201251+ 201249+ 201248	Jan. 17, 2022	Jan. 16, 2023
RF signal cable EMCI	EMC101G-KM-KM-(5000+3000+2000)	201261+201258+ 201255	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
Peak Power Analyzer KEYSIGHT	8990B	MY51000485	Jan. 18, 2022	Jan. 17, 2023
Wideband Power Sensor KEYSIGHT	N1923A	MY58020002	Jan. 17, 2022	Jan. 16, 2023

- 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.
 3. Tested date: Nov. 04 ~ Nov. 10, 2022

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:

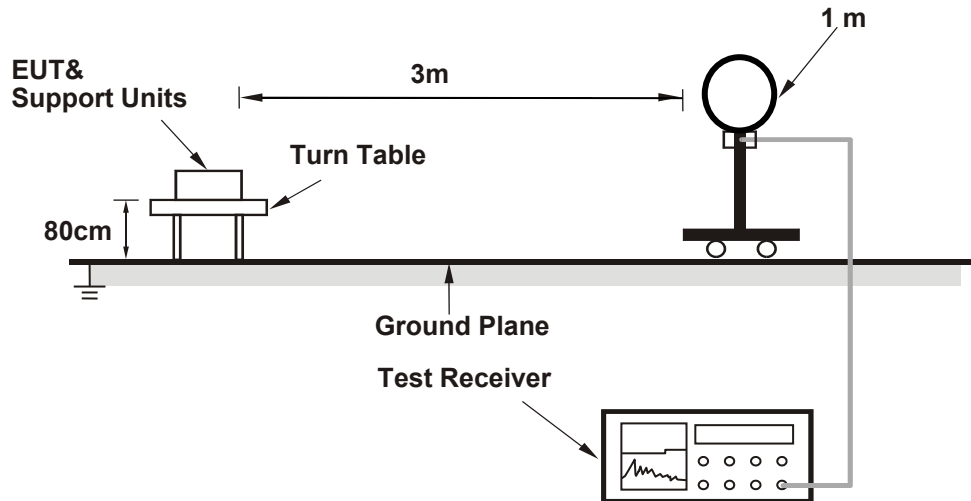
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
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. (RBW = 1MHz, VBW = 10Hz)
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 Deviation from Test Standard

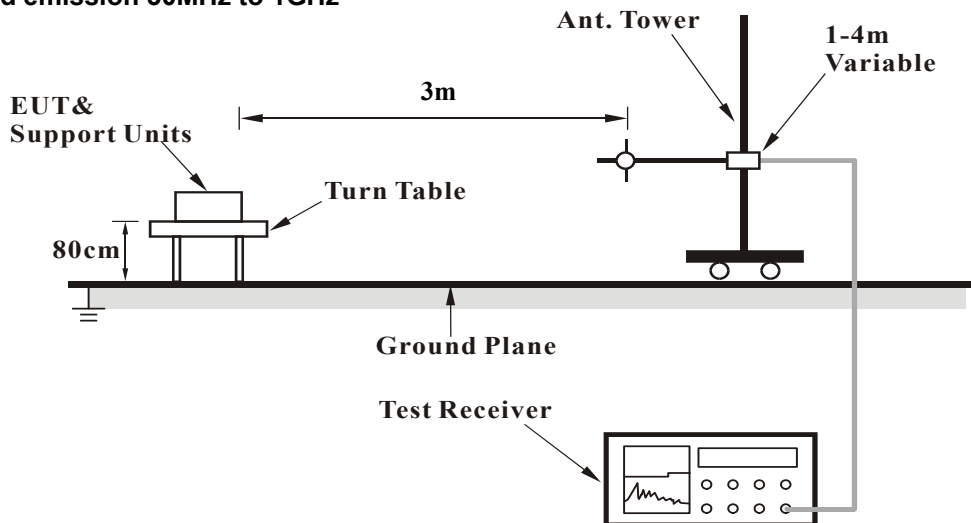
No deviation.

4.1.5 Test Setup

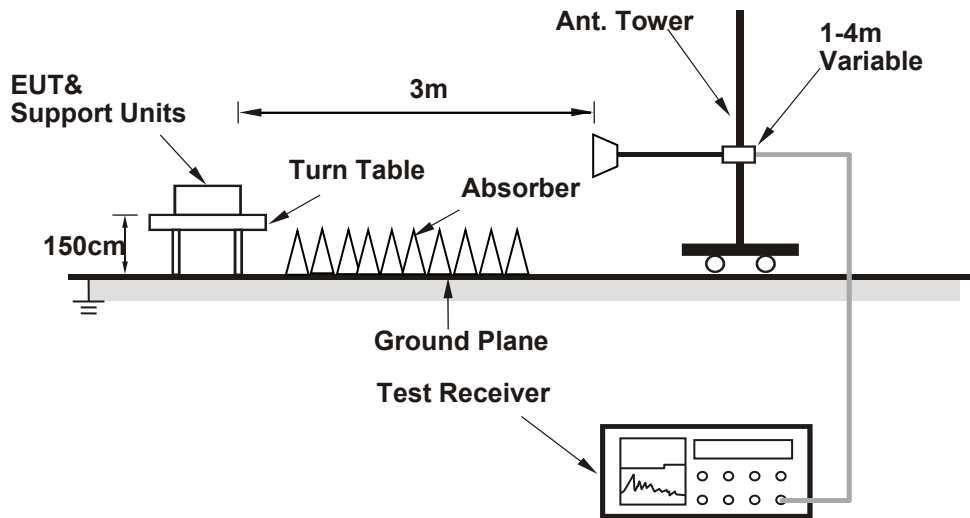
For Radiated emission below 30MHz



For Radiated emission 30MHz to 1GHz



For Radiated emission above 1GHz



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

4.1.6 EUT Operating Conditions

- a. 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	61.0 PK	74.0	-13.0	3.71 H	262	39.8	21.2
2	5150.00	47.8 AV	54.0	-6.2	3.71 H	262	26.6	21.2
3	*5180.00	110.7 PK			3.71 H	262	69.1	41.6
4	*5180.00	100.7 AV			3.71 H	262	59.1	41.6
5	#10360.00	63.3 PK	68.2	-4.9	3.15 H	206	38.7	24.6

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	61.2 PK	74.0	-12.8	2.29 V	73	40.0	21.2
2	5150.00	48.0 AV	54.0	-6.0	2.29 V	73	26.8	21.2
3	*5180.00	111.7 PK			2.29 V	73	70.1	41.6
4	*5180.00	101.5 AV			2.29 V	73	59.9	41.6
5	#10360.00	63.5 PK	68.2	-4.7	1.93 V	125	38.9	24.6

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	112.4 PK			3.68 H	260	70.8	41.6
2	*5200.00	101.9 AV			3.68 H	260	60.3	41.6
3	#10400.00	63.4 PK	68.2	-4.8	3.18 H	202	38.8	24.6

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	113.3 PK			2.29 V	73	71.7	41.6
2	*5200.00	102.8 AV			2.29 V	73	61.2	41.6
3	#10400.00	63.7 PK	68.2	-4.5	1.97 V	129	39.1	24.6

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	111.8 PK			3.69 H	260	70.3	41.5
2	*5240.00	102.2 AV			3.69 H	260	60.7	41.5
3	5350.00	60.6 PK	74.0	-13.4	3.69 H	260	39.5	21.1
4	5350.00	47.1 AV	54.0	-6.9	3.69 H	260	26.0	21.1
5	#10480.00	63.9 PK	68.2	-4.3	3.18 H	209	38.8	25.1

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	113.4 PK			2.28 V	75	71.9	41.5
2	*5240.00	103.1 AV			2.28 V	75	61.6	41.5
3	5350.00	60.8 PK	74.0	-13.2	2.28 V	75	39.7	21.1
4	5350.00	47.3 AV	54.0	-6.7	2.28 V	75	26.2	21.1
5	#10480.00	64.1 PK	68.2	-4.1	1.93 V	125	39.0	25.1

Remarks:

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

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

Antenna Polarity & Test Distance : Horizontal at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	60.8 PK	74.0	-13.2	3.68 H	264	39.6	21.2
2	5150.00	47.5 AV	54.0	-6.5	3.68 H	264	26.3	21.2
3	*5260.00	111.9 PK			3.68 H	264	70.5	41.4
4	*5260.00	102.0 AV			3.68 H	264	60.6	41.4
5	#10520.00	64.0 PK	68.2	-4.2	3.08 H	211	38.8	25.2

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	60.9 PK	74.0	-13.1	2.28 V	76	39.7	21.2
2	5150.00	47.6 AV	54.0	-6.4	2.28 V	76	26.4	21.2
3	*5260.00	112.7 PK			2.28 V	76	71.3	41.4
4	*5260.00	102.9 AV			2.28 V	76	61.5	41.4
5	#10520.00	64.1 PK	68.2	-4.1	1.97 V	127	38.9	25.2

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	110.7 PK			3.75 H	265	69.7	41.0
2	*5300.00	100.3 AV			3.75 H	265	59.3	41.0
3	10600.00	63.4 PK	74.0	-10.6	3.18 H	212	38.2	25.2
4	10600.00	49.7 AV	54.0	-4.3	3.18 H	212	24.5	25.2

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	111.7 PK			2.20 V	77	70.7	41.0
2	*5300.00	101.3 AV			2.20 V	77	60.3	41.0
3	10600.00	63.6 PK	74.0	-10.4	1.91 V	122	38.4	25.2
4	10600.00	49.8 AV	54.0	-4.2	1.91 V	122	24.6	25.2

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	110.7 PK			3.73 H	263	69.7	41.0
2	*5320.00	100.2 AV			3.73 H	263	59.2	41.0
3	5350.00	62.0 PK	74.0	-12.0	3.73 H	263	40.9	21.1
4	5350.00	48.6 AV	54.0	-5.4	3.73 H	263	27.5	21.1
5	10640.00	64.1 PK	74.0	-9.9	3.09 H	207	38.4	25.7
6	10640.00	50.1 AV	54.0	-3.9	3.09 H	207	24.4	25.7

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	111.3 PK			2.22 V	76	70.3	41.0
2	*5320.00	101.2 AV			2.22 V	76	60.2	41.0
3	5350.00	64.1 PK	74.0	-9.9	2.22 V	76	43.0	21.1
4	5350.00	49.0 AV	54.0	-5.0	2.22 V	76	27.9	21.1
5	10640.00	64.2 PK	74.0	-9.8	1.93 V	124	38.5	25.7
6	10640.00	50.2 AV	54.0	-3.8	1.93 V	124	24.5	25.7

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	61.2 PK	74.0	-12.8	1.82 H	210	39.1	22.1
2	5460.00	48.6 AV	54.0	-5.4	1.82 H	210	26.5	22.1
3	#5470.00	62.9 PK	68.2	-5.3	1.82 H	210	40.8	22.1
4	*5500.00	110.2 PK			1.82 H	210	68.2	42.0
5	*5500.00	98.1 AV			1.82 H	210	56.1	42.0
6	11000.00	65.3 PK	74.0	-8.7	3.05 H	214	38.6	26.7
7	11000.00	49.3 AV	54.0	-4.7	3.05 H	214	22.6	26.7

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	61.5 PK	74.0	-12.5	2.26 V	82	39.4	22.1
2	5460.00	49.2 AV	54.0	-4.8	2.26 V	82	27.1	22.1
3	#5470.00	66.9 PK	68.2	-1.3	2.26 V	82	44.8	22.1
4	*5500.00	112.2 PK			2.26 V	82	70.2	42.0
5	*5500.00	99.8 AV			2.26 V	82	57.8	42.0
6	11000.00	65.9 PK	74.0	-8.1	1.96 V	123	39.2	26.7
7	11000.00	50.0 AV	54.0	-4.0	1.96 V	123	23.3	26.7

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	110.2 PK			1.86 H	211	68.4	41.8
2	*5580.00	98.1 AV			1.86 H	211	56.3	41.8
3	11160.00	65.1 PK	74.0	-8.9	3.14 H	208	38.6	26.5
4	11160.00	49.1 AV	54.0	-4.9	3.14 H	208	22.6	26.5

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	111.1 PK			2.10 V	84	69.3	41.8
2	*5580.00	99.0 AV			2.10 V	84	57.2	41.8
3	11160.00	65.5 PK	74.0	-8.5	1.96 V	124	39.0	26.5
4	11160.00	49.5 AV	54.0	-4.5	1.96 V	124	23.0	26.5

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	111.0 PK			1.97 H	209	68.8	42.2
2	*5700.00	98.8 AV			1.97 H	209	56.6	42.2
3	#5725.00	64.3 PK	68.2	-3.9	1.97 H	209	41.8	22.5
4	11400.00	66.2 PK	74.0	-7.8	3.06 H	211	38.4	27.8
5	11400.00	49.6 AV	54.0	-4.4	3.06 H	211	21.8	27.8

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	112.4 PK			2.11 V	82	70.2	42.2
2	*5700.00	100.2 AV			2.11 V	82	58.0	42.2
3	#5725.00	64.8 PK	68.2	-3.4	2.11 V	82	42.3	22.5
4	11400.00	67.1 PK	74.0	-6.9	1.94 V	123	39.3	27.8
5	11400.00	49.9 AV	54.0	-4.1	1.94 V	123	22.1	27.8

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	#5624.80	60.2 PK	68.2	-8.0	2.16 H	207	38.2	22.0
2	*5745.00	109.9 PK			2.16 H	207	67.5	42.4
3	*5745.00	99.6 AV			2.16 H	207	57.2	42.4
4	#5987.60	62.0 PK	68.2	-6.2	2.16 H	207	38.9	23.1
5	11490.00	66.4 PK	74.0	-7.6	3.18 H	193	38.6	27.8
6	11490.00	49.6 AV	54.0	-4.4	3.18 H	193	21.8	27.8

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	#5642.80	60.6 PK	68.2	-7.6	2.07 V	83	38.5	22.1
2	*5745.00	110.6 PK			2.07 V	83	68.2	42.4
3	*5745.00	100.8 AV			2.07 V	83	58.4	42.4
4	#5968.40	61.2 PK	68.2	-7.0	2.07 V	83	38.1	23.1
5	11490.00	66.6 PK	74.0	-7.4	2.09 V	118	38.8	27.8
6	11490.00	49.9 AV	54.0	-4.1	2.09 V	118	22.1	27.8

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	#5641.20	61.2 PK	68.2	-7.0	2.12 H	205	39.1	22.1
2	*5785.00	109.6 PK			2.12 H	205	66.9	42.7
3	*5785.00	99.9 AV			2.12 H	205	57.2	42.7
4	#5970.40	62.6 PK	68.2	-5.6	2.12 H	205	39.5	23.1
5	11570.00	66.5 PK	74.0	-7.5	3.08 H	202	38.7	27.8
6	11570.00	49.9 AV	54.0	-4.1	3.08 H	202	22.1	27.8

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	#5646.00	60.7 PK	68.2	-7.5	2.18 V	86	38.6	22.1
2	*5785.00	110.9 PK			2.18 V	86	68.2	42.7
3	*5785.00	100.9 AV			2.18 V	86	58.2	42.7
4	#5968.00	62.2 PK	68.2	-6.0	2.18 V	86	39.1	23.1
5	11570.00	66.8 PK	74.0	-7.2	2.03 V	123	39.0	27.8
6	11570.00	50.1 AV	54.0	-3.9	2.03 V	123	22.3	27.8

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	#5632.80	61.0 PK	68.2	-7.2	2.11 H	203	38.9	22.1
2	*5825.00	110.1 PK			2.11 H	203	67.3	42.8
3	*5825.00	99.8 AV			2.11 H	203	57.0	42.8
4	#5978.40	61.4 PK	68.2	-6.8	2.11 H	203	38.3	23.1
5	11650.00	66.0 PK	74.0	-8.0	3.13 H	204	38.8	27.2
6	11650.00	49.5 AV	54.0	-4.5	3.13 H	204	22.3	27.2

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	#5631.60	61.5 PK	68.2	-6.7	2.19 V	85	39.4	22.1
2	*5825.00	111.2 PK			2.19 V	85	68.4	42.8
3	*5825.00	100.8 AV			2.19 V	85	58.0	42.8
4	#5983.20	62.2 PK	68.2	-6.0	2.19 V	85	39.1	23.1
5	11650.00	66.3 PK	74.0	-7.7	1.97 V	118	39.1	27.2
6	11650.00	49.7 AV	54.0	-4.3	1.97 V	118	22.5	27.2

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 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	61.1 PK	74.0	-12.9	3.69 H	257	39.9	21.2
2	5150.00	47.6 AV	54.0	-6.4	3.69 H	257	26.4	21.2
3	*5180.00	112.6 PK			3.69 H	257	71.0	41.6
4	*5180.00	100.6 AV			3.69 H	257	59.0	41.6
5	#10360.00	63.6 PK	68.2	-4.6	3.23 H	222	39.0	24.6

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	61.0 PK	74.0	-13.0	1.97 V	273	39.8	21.2
2	5150.00	47.5 AV	54.0	-6.5	1.97 V	273	26.3	21.2
3	*5180.00	110.5 PK			1.97 V	273	68.9	41.6
4	*5180.00	98.4 AV			1.97 V	273	56.8	41.6
5	#10360.00	63.4 PK	68.2	-4.8	2.37 V	315	38.8	24.6

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	113.3 PK			3.68 H	255	71.7	41.6
2	*5200.00	101.2 AV			3.68 H	255	59.6	41.6
3	#10400.00	63.8 PK	68.2	-4.4	3.26 H	225	39.2	24.6

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	111.2 PK			1.95 V	270	69.6	41.6
2	*5200.00	99.2 AV			1.95 V	270	57.6	41.6
3	#10400.00	63.5 PK	68.2	-4.7	2.40 V	321	38.9	24.6

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	113.8 PK			3.67 H	259	72.3	41.5
2	*5240.00	101.2 AV			3.67 H	259	59.7	41.5
3	5350.00	60.1 PK	74.0	-13.9	3.67 H	259	39.0	21.1
4	5350.00	46.8 AV	54.0	-7.2	3.67 H	259	25.7	21.1
5	#10480.00	64.1 PK	68.2	-4.1	3.18 H	221	39.0	25.1

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	111.3 PK			1.95 V	272	69.8	41.5
2	*5240.00	99.2 AV			1.95 V	272	57.7	41.5
3	5350.00	59.9 PK	74.0	-14.1	1.95 V	272	38.8	21.1
4	5350.00	46.6 AV	54.0	-7.4	1.95 V	272	25.5	21.1
5	#10480.00	63.9 PK	68.2	-4.3	2.40 V	311	38.8	25.1

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	60.6 PK	74.0	-13.4	3.42 H	253	39.4	21.2
2	5150.00	47.3 AV	54.0	-6.7	3.42 H	253	26.1	21.2
3	*5260.00	112.4 PK			3.42 H	253	71.0	41.4
4	*5260.00	100.6 AV			3.42 H	253	59.2	41.4
5	#10520.00	64.0 PK	68.2	-4.2	3.12 H	225	38.8	25.2

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	60.4 PK	74.0	-13.6	2.00 V	276	39.2	21.2
2	5150.00	47.1 AV	54.0	-6.9	2.00 V	276	25.9	21.2
3	*5260.00	110.8 PK			2.00 V	276	69.4	41.4
4	*5260.00	98.6 AV			2.00 V	276	57.2	41.4
5	#10520.00	63.9 PK	68.2	-4.3	2.29 V	309	38.7	25.2

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	110.2 PK			3.57 H	258	69.2	41.0
2	*5300.00	97.3 AV			3.57 H	258	56.3	41.0
3	10600.00	63.5 PK	74.0	-10.5	3.02 H	226	38.3	25.2
4	10600.00	50.0 AV	54.0	-4.0	3.02 H	226	24.8	25.2

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	108.0 PK			1.91 V	269	67.0	41.0
2	*5300.00	95.2 AV			1.91 V	269	54.2	41.0
3	10600.00	63.4 PK	74.0	-10.6	2.29 V	320	38.2	25.2
4	10600.00	49.7 AV	54.0	-4.3	2.29 V	320	24.5	25.2

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	110.3 PK			2.67 H	253	69.3	41.0
2	*5320.00	97.4 AV			2.67 H	253	56.4	41.0
3	5350.00	60.1 PK	74.0	-13.9	2.67 H	253	39.0	21.1
4	5350.00	46.9 AV	54.0	-7.1	2.67 H	253	25.8	21.1
5	10640.00	64.2 PK	74.0	-9.8	3.11 H	222	38.5	25.7
6	10640.00	50.4 AV	54.0	-3.6	3.11 H	222	24.7	25.7

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	107.5 PK			1.91 V	277	66.5	41.0
2	*5320.00	95.3 AV			1.91 V	277	54.3	41.0
3	5350.00	59.9 PK	74.0	-14.1	1.91 V	277	38.8	21.1
4	5350.00	46.7 AV	54.0	-7.3	1.91 V	277	25.6	21.1
5	10640.00	64.1 PK	74.0	-9.9	2.29 V	317	38.4	25.7
6	10640.00	50.2 AV	54.0	-3.8	2.29 V	317	24.5	25.7

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	61.1 PK	74.0	-12.9	3.21 H	252	39.0	22.1
2	5460.00	47.9 AV	54.0	-6.1	3.21 H	252	25.8	22.1
3	#5470.00	60.5 PK	68.2	-7.7	3.21 H	252	38.4	22.1
4	*5500.00	112.7 PK			3.21 H	252	70.7	42.0
5	*5500.00	100.5 AV			3.21 H	252	58.5	42.0
6	11000.00	65.0 PK	74.0	-9.0	3.08 H	221	38.3	26.7
7	11000.00	49.6 AV	54.0	-4.4	2.52 H	311	22.9	26.7

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	61.0 PK	74.0	-13.0	2.25 V	288	38.9	22.1
2	5460.00	47.8 AV	54.0	-6.2	2.25 V	288	25.7	22.1
3	#5470.00	60.4 PK	68.2	-7.8	2.25 V	288	38.3	22.1
4	*5500.00	111.7 PK			2.25 V	288	69.7	42.0
5	*5500.00	99.5 AV			2.25 V	288	57.5	42.0
6	11000.00	64.8 PK	74.0	-9.2	2.43 V	315	38.1	26.7
7	11000.00	49.5 AV	54.0	-4.5	2.43 V	315	22.8	26.7

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	112.0 PK			3.30 H	250	70.2	41.8
2	*5580.00	99.8 AV			3.30 H	250	58.0	41.8
3	11160.00	65.0 PK	74.0	-9.0	2.58 H	307	38.5	26.5
4	11160.00	49.6 AV	54.0	-4.4	2.58 H	307	23.1	26.5

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	111.1 PK			2.29 V	281	69.3	41.8
2	*5580.00	98.7 AV			2.29 V	281	56.9	41.8
3	11160.00	64.9 PK	74.0	-9.1	2.37 V	319	38.4	26.5
4	11160.00	49.4 AV	54.0	-4.6	2.37 V	319	22.9	26.5

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	113.3 PK			2.92 H	254	71.1	42.2
2	*5700.00	100.3 AV			2.92 H	254	58.1	42.2
3	#5725.00	63.6 PK	68.2	-4.6	2.92 H	254	41.1	22.5
4	11400.00	66.4 PK	74.0	-7.6	2.61 H	302	38.6	27.8
5	11400.00	50.3 AV	54.0	-3.7	2.61 H	302	22.5	27.8

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	111.3 PK			2.31 V	285	69.1	42.2
2	*5700.00	99.2 AV			2.31 V	285	57.0	42.2
3	#5725.00	63.3 PK	68.2	-4.9	2.31 V	285	40.8	22.5
4	11400.00	66.2 PK	74.0	-7.8	2.38 V	318	38.4	27.8
5	11400.00	50.0 AV	54.0	-4.0	2.38 V	318	22.2	27.8

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	#5470.00	61.8 PK	68.2	-6.4	3.02 H	256	39.7	22.1
2	*5720.00	111.3 PK			3.02 H	256	69.0	42.3
3	*5720.00	98.3 AV			3.02 H	256	56.0	42.3
4	#5850.00	61.9 PK	68.2	-6.3	3.02 H	256	38.9	23.0
5	11440.00	66.7 PK	74.0	-7.3	2.65 H	308	38.9	27.8
6	11440.00	50.2 AV	54.0	-3.8	2.65 H	308	22.4	27.8

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	#5470.00	61.6 PK	68.2	-6.6	2.28 V	290	39.5	22.1
2	*5720.00	109.5 PK			2.28 V	290	67.2	42.3
3	*5720.00	97.3 AV			2.28 V	290	55.0	42.3
4	#5850.00	61.8 PK	68.2	-6.4	2.28 V	290	38.8	23.0
5	11400.00	66.5 PK	74.0	-7.5	2.39 V	317	38.7	27.8
6	11400.00	49.9 AV	54.0	-4.1	2.39 V	317	22.1	27.8

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	#5649.60	60.8 PK	68.2	-7.4	2.88 H	254	38.7	22.1
2	*5745.00	114.2 PK			2.88 H	254	71.8	42.4
3	*5745.00	102.3 AV			2.88 H	254	59.9	42.4
4	#5957.60	62.7 PK	68.2	-5.5	2.88 H	254	39.6	23.1
5	11490.00	66.5 PK	74.0	-7.5	2.59 H	307	38.7	27.8
6	11490.00	50.1 AV	54.0	-3.9	2.59 H	307	22.3	27.8

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	#5602.00	61.8 PK	68.2	-6.4	2.40 V	287	39.9	21.9
2	*5745.00	112.7 PK			2.40 V	287	70.3	42.4
3	*5745.00	101.0 AV			2.40 V	287	58.6	42.4
4	#5946.80	62.6 PK	68.2	-5.6	2.40 V	287	39.7	22.9
5	11490.00	66.3 PK	74.0	-7.7	2.28 V	324	38.5	27.8
6	11490.00	49.9 AV	54.0	-4.1	2.28 V	324	22.1	27.8

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	#5609.60	61.7 PK	68.2	-6.5	2.99 H	253	39.8	21.9
2	*5785.00	114.7 PK			2.99 H	253	72.0	42.7
3	*5785.00	102.4 AV			2.99 H	253	59.7	42.7
4	#5957.60	62.8 PK	68.2	-5.4	2.99 H	253	39.7	23.1
5	11570.00	66.4 PK	74.0	-7.6	2.61 H	303	38.6	27.8
6	11570.00	49.9 AV	54.0	-4.1	2.61 H	303	22.1	27.8

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	#5627.60	61.5 PK	68.2	-6.7	2.39 V	289	39.5	22.0
2	*5785.00	113.4 PK			2.39 V	289	70.7	42.7
3	*5785.00	101.3 AV			2.39 V	289	58.6	42.7
4	#5941.20	62.5 PK	68.2	-5.7	2.39 V	289	39.6	22.9
5	11570.00	66.3 PK	74.0	-7.7	2.27 V	312	38.5	27.8
6	11570.00	49.8 AV	54.0	-4.2	2.27 V	312	22.0	27.8

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	#5613.20	62.1 PK	68.2	-6.1	3.14 H	252	40.2	21.9
2	*5825.00	113.6 PK			3.14 H	252	70.8	42.8
3	*5825.00	102.0 AV			3.14 H	252	59.2	42.8
4	#5946.80	62.9 PK	68.2	-5.3	3.14 H	252	40.0	22.9
5	11650.00	66.2 PK	74.0	-7.8	2.58 H	300	39.0	27.2
6	11650.00	49.7 AV	54.0	-4.3	2.58 H	300	22.5	27.2

Antenna Polarity & Test Distance : Vertical at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5626.00	61.8 PK	68.2	-6.4	2.43 V	287	39.8	22.0
2	*5825.00	112.7 PK			2.43 V	287	69.9	42.8
3	*5825.00	100.8 AV			2.43 V	287	58.0	42.8
4	#5992.40	62.9 PK	68.2	-5.3	2.43 V	287	39.8	23.1
5	11650.00	66.0 PK	74.0	-8.0	2.29 V	311	38.8	27.2
6	11650.00	49.6 AV	54.0	-4.4	2.29 V	311	22.4	27.2

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	61.6 PK	74.0	-12.4	3.73 H	257	40.4	21.2
2	5150.00	47.7 AV	54.0	-6.3	3.73 H	257	26.5	21.2
3	*5190.00	108.5 PK			3.73 H	257	66.9	41.6
4	*5190.00	95.5 AV			3.73 H	257	53.9	41.6
5	#10380.00	63.2 PK	68.2	-5.0	3.13 H	225	38.6	24.6

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	61.3 PK	74.0	-12.7	1.92 V	276	40.1	21.2
2	5150.00	47.6 AV	54.0	-6.4	1.92 V	276	26.4	21.2
3	*5190.00	105.8 PK			1.92 V	276	64.2	41.6
4	*5190.00	93.4 AV			1.92 V	276	51.8	41.6
5	#10380.00	63.1 PK	68.2	-5.1	2.40 V	312	38.5	24.6

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	111.0 PK			3.44 H	257	69.5	41.5
2	*5230.00	98.6 AV			3.44 H	257	57.1	41.5
3	5350.00	60.2 PK	74.0	-13.8	3.44 H	257	39.1	21.1
4	5350.00	47.1 AV	54.0	-6.9	3.44 H	257	26.0	21.1
5	#10460.00	63.9 PK	68.2	-4.3	3.08 H	221	38.9	25.0

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	109.6 PK			1.93 V	272	68.1	41.5
2	*5230.00	96.5 AV			1.93 V	272	55.0	41.5
3	5350.00	59.9 PK	74.0	-14.1	1.93 V	272	38.8	21.1
4	5350.00	46.9 AV	54.0	-7.1	1.93 V	272	25.8	21.1
5	#10460.00	63.6 PK	68.2	-4.6	2.29 V	317	38.6	25.0

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	5150.00	61.4 PK	74.0	-12.6	3.59 H	255	40.2	21.2
2	5150.00	47.4 AV	54.0	-6.6	3.59 H	255	26.2	21.2
3	*5270.00	110.7 PK			3.59 H	255	69.4	41.3
4	*5270.00	98.2 AV			3.59 H	255	56.9	41.3
5	#10540.00	64.1 PK	68.2	-4.1	3.13 H	225	38.7	25.4

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	61.2 PK	74.0	-12.8	1.95 V	275	40.0	21.2
2	5150.00	47.2 AV	54.0	-6.8	1.95 V	275	26.0	21.2
3	*5270.00	108.7 PK			1.95 V	275	67.4	41.3
4	*5270.00	96.1 AV			1.95 V	275	54.8	41.3
5	#10540.00	63.9 PK	68.2	-4.3	2.29 V	317	38.5	25.4

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	105.6 PK			3.58 H	276	64.6	41.0
2	*5310.00	92.8 AV			3.58 H	276	51.8	41.0
3	5350.00	60.1 PK	74.0	-13.9	3.58 H	276	39.0	21.1
4	5350.00	49.2 AV	54.0	-4.8	3.58 H	276	28.1	21.1
5	10620.00	64.2 PK	74.0	-9.8	3.17 H	221	38.7	25.5
6	10620.00	49.7 AV	54.0	-4.3	3.17 H	221	24.2	25.5

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	103.5 PK			1.91 V	278	62.5	41.0
2	*5310.00	90.7 AV			1.91 V	278	49.7	41.0
3	5350.00	60.0 PK	74.0	-14.0	1.91 V	278	38.9	21.1
4	5350.00	48.4 AV	54.0	-5.6	1.91 V	278	27.3	21.1
5	10620.00	64.0 PK	74.0	-10.0	2.43 V	311	38.5	25.5
6	10620.00	49.5 AV	54.0	-4.5	2.43 V	311	24.0	25.5

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	61.3 PK	74.0	-12.7	3.05 H	253	39.2	22.1
2	5460.00	48.2 AV	54.0	-5.8	3.05 H	253	26.1	22.1
3	#5470.00	62.4 PK	68.2	-5.8	3.05 H	253	40.3	22.1
4	*5510.00	107.0 PK			3.05 H	253	65.1	41.9
5	*5510.00	94.7 AV			3.05 H	253	52.8	41.9
6	11020.00	65.4 PK	74.0	-8.6	2.72 H	299	38.7	26.7
7	11020.00	49.3 AV	54.0	-4.7	2.72 H	299	22.6	26.7

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	61.1 PK	74.0	-12.9	2.35 V	287	39.0	22.1
2	5460.00	48.1 AV	54.0	-5.9	2.35 V	287	26.0	22.1
3	#5470.00	62.2 PK	68.2	-6.0	2.35 V	287	40.1	22.1
4	*5510.00	105.9 PK			2.35 V	287	64.0	41.9
5	*5510.00	93.8 AV			2.35 V	287	51.9	41.9
6	11020.00	65.2 PK	74.0	-8.8	2.45 V	318	38.5	26.7
7	11020.00	49.1 AV	54.0	-4.9	2.45 V	318	22.4	26.7

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	106.8 PK			2.97 H	255	64.9	41.9
2	*5550.00	94.5 AV			2.97 H	255	52.6	41.9
3	11100.00	65.1 PK	74.0	-8.9	2.69 H	302	38.6	26.5
4	11100.00	48.9 AV	54.0	-5.1	2.69 H	302	22.4	26.5

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	105.7 PK			2.42 V	289	63.8	41.9
2	*5550.00	93.4 AV			2.42 V	289	51.5	41.9
3	11100.00	65.0 PK	74.0	-9.0	2.42 V	322	38.5	26.5
4	11100.00	48.7 AV	54.0	-5.3	2.42 V	322	22.2	26.5

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	110.5 PK			3.08 H	256	68.4	42.1
2	*5670.00	98.0 AV			3.08 H	256	55.9	42.1
3	#5725.00	63.4 PK	68.2	-4.8	3.08 H	256	40.9	22.5
4	11340.00	66.0 PK	74.0	-8.0	2.64 H	303	38.9	27.1
5	11340.00	49.6 AV	54.0	-4.4	2.64 H	303	22.5	27.1

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	109.5 PK			2.43 V	285	67.4	42.1
2	*5670.00	96.9 AV			2.43 V	285	54.8	42.1
3	#5725.00	63.2 PK	68.2	-5.0	2.43 V	285	40.7	22.5
4	11340.00	65.8 PK	74.0	-8.2	2.46 V	312	38.7	27.1
5	11340.00	49.4 AV	54.0	-4.6	2.46 V	312	22.3	27.1

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	#5470.00	61.3 PK	68.2	-6.9	2.79 H	254	39.2	22.1
2	*5710.00	108.4 PK			2.79 H	254	66.1	42.3
3	*5710.00	95.4 AV			2.79 H	254	53.1	42.3
4	#5850.00	62.8 PK	68.2	-5.4	2.79 H	254	39.8	23.0
5	11420.00	66.8 PK	74.0	-7.2	2.69 H	309	39.0	27.8
6	11420.00	49.8 AV	54.0	-4.2	2.69 H	309	22.0	27.8

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	#5470.00	61.1 PK	68.2	-7.1	2.52 V	290	39.0	22.1
2	*5710.00	106.7 PK			2.52 V	290	64.4	42.3
3	*5710.00	94.3 AV			2.52 V	290	52.0	42.3
4	#5850.00	62.6 PK	68.2	-5.6	2.52 V	290	39.6	23.0
5	11420.00	66.5 PK	74.0	-7.5	2.39 V	312	38.7	27.8
6	11420.00	49.7 AV	54.0	-4.3	2.39 V	312	21.9	27.8

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	#5636.40	61.5 PK	68.2	-6.7	2.88 H	256	39.4	22.1
2	*5755.00	111.7 PK			2.88 H	256	69.3	42.4
3	*5755.00	98.7 AV			2.88 H	256	56.3	42.4
4	#5926.80	62.5 PK	68.2	-5.7	2.88 H	256	39.5	23.0
5	11510.00	66.8 PK	74.0	-7.2	2.62 H	307	38.8	28.0
6	11510.00	50.0 AV	54.0	-4.0	2.62 H	307	22.0	28.0

Antenna Polarity & Test Distance : Vertical at 3 m

No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5614.40	61.4 PK	68.2	-6.8	2.52 V	285	39.4	22.0
2	*5755.00	110.4 PK			2.52 V	285	68.0	42.4
3	*5755.00	97.5 AV			2.52 V	285	55.1	42.4
4	#5960.80	63.2 PK	68.2	-5.0	2.52 V	285	40.1	23.1
5	11510.00	66.7 PK	74.0	-7.3	2.41 V	314	38.7	28.0
6	11510.00	49.8 AV	54.0	-4.2	2.41 V	314	21.8	28.0

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	#5616.40	61.2 PK	68.2	-7.0	3.09 H	255	39.2	22.0
2	*5795.00	112.3 PK			3.09 H	255	69.6	42.7
3	*5795.00	99.0 AV			3.09 H	255	56.3	42.7
4	#5957.20	63.1 PK	68.2	-5.1	3.09 H	255	40.0	23.1
5	11590.00	66.7 PK	74.0	-7.3	2.65 H	302	39.0	27.7
6	11590.00	49.8 AV	54.0	-4.2	2.65 H	302	22.1	27.7

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	#5611.20	61.9 PK	68.2	-6.3	2.68 V	284	40.0	21.9
2	*5795.00	111.0 PK			2.68 V	284	68.3	42.7
3	*5795.00	97.7 AV			2.68 V	284	55.0	42.7
4	#5995.20	62.5 PK	68.2	-5.7	2.68 V	284	39.4	23.1
5	11590.00	66.4 PK	74.0	-7.6	2.34 V	323	38.7	27.7
6	11590.00	49.5 AV	54.0	-4.5	2.34 V	323	21.8	27.7

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	61.1 PK	74.0	-12.9	3.63 H	257	39.9	21.2
2	5150.00	48.0 AV	54.0	-6.0	3.63 H	257	26.8	21.2
3	*5210.00	105.2 PK			3.63 H	257	63.7	41.5
4	*5210.00	92.7 AV			3.63 H	257	51.2	41.5
5	#10420.00	63.4 PK	68.2	-4.8	3.12 H	224	38.7	24.7

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	60.8 PK	74.0	-13.2	1.91 V	270	39.6	21.2
2	5150.00	47.6 AV	54.0	-6.4	1.91 V	270	26.4	21.2
3	*5210.00	103.2 PK			1.91 V	270	61.7	41.5
4	*5210.00	90.6 AV			1.91 V	270	49.1	41.5
5	#10420.00	63.2 PK	68.2	-5.0	2.30 V	310	38.5	24.7

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	104.7 PK			3.56 H	254	63.6	41.1
2	*5290.00	91.3 AV			3.56 H	254	50.2	41.1
3	5350.00	60.4 PK	74.0	-13.6	3.56 H	254	39.3	21.1
4	5350.00	47.9 AV	54.0	-6.1	3.56 H	254	26.8	21.1
5	#10580.00	63.9 PK	68.2	-4.3	3.18 H	221	38.6	25.3

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	102.4 PK			1.91 V	277	61.3	41.1
2	*5290.00	89.1 AV			1.91 V	277	48.0	41.1
3	5350.00	60.3 PK	74.0	-13.7	1.91 V	277	39.2	21.1
4	5350.00	47.7 AV	54.0	-6.3	1.91 V	277	26.6	21.1
5	#10580.00	63.7 PK	68.2	-4.5	2.27 V	310	38.4	25.3

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	65.3 PK	74.0	-8.7	3.18 H	252	43.2	22.1
2	5460.00	52.3 AV	54.0	-1.7	3.18 H	252	30.2	22.1
3	#5470.00	65.5 PK	68.2	-2.7	3.18 H	252	43.4	22.1
4	*5530.00	105.4 PK			3.18 H	252	63.5	41.9
5	*5530.00	93.5 AV			3.18 H	252	51.6	41.9
6	11060.00	65.2 PK	74.0	-8.8	2.58 H	305	38.6	26.6
7	11060.00	49.1 AV	54.0	-4.9	2.58 H	305	22.5	26.6

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	64.9 PK	74.0	-9.1	2.42 V	285	42.8	22.1
2	5460.00	50.8 AV	54.0	-3.2	2.42 V	285	28.7	22.1
3	#5470.00	65.1 PK	68.2	-3.1	2.42 V	285	43.0	22.1
4	*5530.00	104.4 PK			2.42 V	285	62.5	41.9
5	*5530.00	92.5 AV			2.42 V	285	50.6	41.9
6	11060.00	65.1 PK	74.0	-8.9	2.33 V	315	38.5	26.6
7	11060.00	49.0 AV	54.0	-5.0	2.33 V	315	22.4	26.6

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	108.9 PK			2.67 H	255	67.2	41.7
2	*5610.00	95.7 AV			2.67 H	255	54.0	41.7
3	#5725.00	61.8 PK	68.2	-6.4	2.67 H	255	39.3	22.5
4	11220.00	65.7 PK	74.0	-8.3	2.55 H	309	39.0	26.7
5	11220.00	49.1 AV	54.0	-4.9	2.55 H	309	22.4	26.7

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	107.3 PK			2.37 V	285	65.6	41.7
2	*5610.00	94.2 AV			2.37 V	285	52.5	41.7
3	#5725.00	61.5 PK	68.2	-6.7	2.37 V	285	39.0	22.5
4	11220.00	65.5 PK	74.0	-8.5	2.33 V	315	38.8	26.7
5	11220.00	48.9 AV	54.0	-5.1	2.33 V	315	22.2	26.7

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	#5470.00	61.5 PK	68.2	-6.7	2.89 H	254	39.4	22.1
2	*5690.00	106.4 PK			2.89 H	254	64.2	42.2
3	*5690.00	93.0 AV			2.89 H	254	50.8	42.2
4	#5850.00	62.1 PK	68.2	-6.1	2.89 H	254	39.1	23.0
5	11380.00	66.4 PK	74.0	-7.6	2.59 H	300	38.8	27.6
6	11380.00	49.7 AV	54.0	-4.3	2.59 H	300	22.1	27.6

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	#5470.00	61.3 PK	68.2	-6.9	2.27 V	287	39.2	22.1
2	*5690.00	104.7 PK			2.27 V	287	62.5	42.2
3	*5690.00	92.0 AV			2.27 V	287	49.8	42.2
4	#5850.00	62.0 PK	68.2	-6.2	2.27 V	287	39.0	23.0
5	11380.00	66.2 PK	74.0	-7.8	2.32 V	322	38.6	27.6
6	11380.00	49.6 AV	54.0	-4.4	2.32 V	322	22.0	27.6

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	#5647.60	62.5 PK	68.2	-5.7	2.75 H	254	40.4	22.1
2	*5775.00	108.1 PK			2.75 H	254	65.5	42.6
3	*5775.00	95.2 AV			2.75 H	254	52.6	42.6
4	#5969.60	63.3 PK	68.2	-4.9	2.75 H	254	40.2	23.1
5	11550.00	66.7 PK	74.0	-7.3	2.54 H	298	38.8	27.9
6	11550.00	49.7 AV	54.0	-4.3	2.54 H	298	21.8	27.9

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	#5638.80	62.3 PK	68.2	-5.9	2.38 V	287	40.2	22.1
2	*5775.00	107.0 PK			2.38 V	287	64.4	42.6
3	*5775.00	94.2 AV			2.38 V	287	51.6	42.6
4	#5946.00	62.2 PK	68.2	-6.0	2.38 V	287	39.3	22.9
5	11550.00	66.6 PK	74.0	-7.4	2.39 V	323	38.7	27.9
6	11550.00	49.5 AV	54.0	-4.5	2.39 V	323	21.6	27.9

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 (HE160)	Channel	CH 50 : 5250 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	61.2 PK	74.0	-12.8	3.47 H	257	40.0	21.2
2	5150.00	47.9 AV	54.0	-6.1	3.47 H	257	26.7	21.2
3	*5250.00	100.6 PK			3.47 H	257	59.1	41.5
4	*5250.00	87.6 AV			3.47 H	257	46.1	41.5
5	5350.00	61.0 PK	74.0	-13.0	3.47 H	257	39.9	21.1
6	5350.00	47.3 AV	54.0	-6.7	3.47 H	257	26.2	21.1
7	#10500.00	64.0 PK	68.2	-4.2	3.21 H	220	38.8	25.2

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	61.1 PK	74.0	-12.9	1.90 V	269	39.9	21.2
2	5150.00	47.8 AV	54.0	-6.2	1.90 V	269	26.6	21.2
3	*5250.00	98.3 PK			1.90 V	269	56.8	41.5
4	*5250.00	85.6 AV			1.90 V	269	44.1	41.5
5	5350.00	60.8 PK	74.0	-13.2	1.90 V	269	39.7	21.1
6	5350.00	47.1 AV	54.0	-6.9	1.90 V	269	26.0	21.1
7	#10500.00	63.8 PK	68.2	-4.4	2.30 V	317	38.6	25.2

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 (HE160)	Channel	CH 114 : 5570 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	63.9 PK	74.0	-10.1	3.07 H	253	41.8	22.1
2	5460.00	51.5 AV	54.0	-2.5	3.07 H	253	29.4	22.1
3	#5470.00	64.4 PK	68.2	-3.8	3.07 H	253	42.3	22.1
4	*5570.00	101.1 PK			3.07 H	253	59.2	41.9
5	*5570.00	89.1 AV			3.07 H	253	47.2	41.9
6	#5725.00	64.4 PK	68.2	-3.8	3.07 H	253	41.9	22.5
7	11140.00	65.6 PK	74.0	-8.4	2.62 H	298	39.0	26.6
8	11140.00	49.3 AV	54.0	-4.7	2.62 H	298	22.7	26.6

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	63.6 PK	74.0	-10.4	2.40 V	285	41.5	22.1
2	5460.00	51.1 AV	54.0	-2.9	2.40 V	285	29.0	22.1
3	#5470.00	64.1 PK	68.2	-4.1	2.40 V	285	42.0	22.1
4	*5570.00	100.2 PK			2.40 V	285	58.3	41.9
5	*5570.00	88.2 AV			2.40 V	285	46.3	41.9
6	#5725.00	64.1 PK	68.2	-4.1	2.40 V	285	41.6	22.5
7	11140.00	65.3 PK	74.0	-8.7	2.51 V	315	38.7	26.6
8	11140.00	49.0 AV	54.0	-5.0	2.51 V	315	22.4	26.6

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.

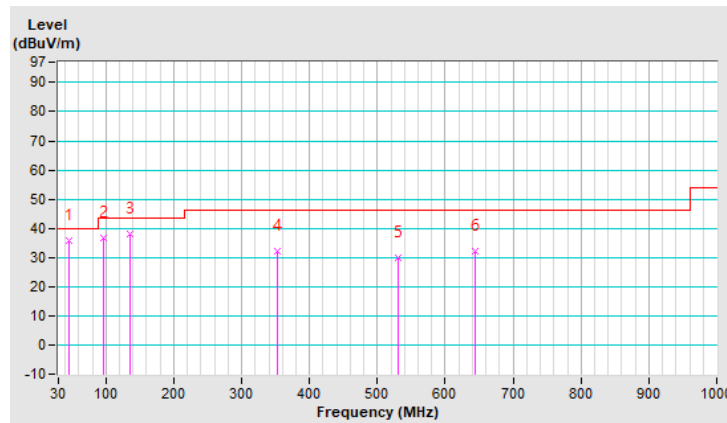
Below 1GHz Worst-Case Data:

RF Mode	TX 802.11ax (HE20)	Channel	CH 165 : 5825 MHz
Frequency Range	30MHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	46.49	35.8 QP	40.0	-4.2	2.00 H	146	44.9	-9.1
2	95.96	36.6 QP	43.5	-6.9	1.01 H	18	51.0	-14.4
3	135.73	38.0 QP	43.5	-5.5	1.01 H	323	47.8	-9.8
4	353.01	32.1 QP	46.0	-13.9	1.50 H	241	38.1	-6.0
5	530.52	29.9 QP	46.0	-16.1	1.01 H	191	31.9	-2.0
6	644.01	32.2 QP	46.0	-13.8	1.50 H	288	31.7	0.5

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.

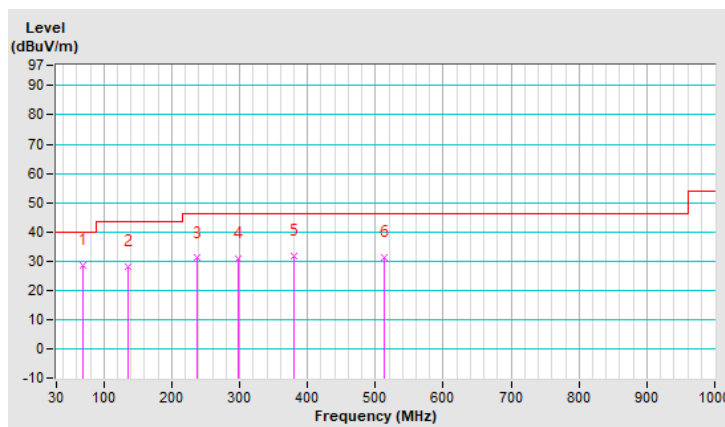


RF Mode	TX 802.11ax (HE20)	Channel	CH 165 : 5825 MHz
Frequency Range	30MHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	68.80	28.5 QP	40.0	-11.5	1.99 V	110	39.5	-11.0
2	135.73	28.3 QP	43.5	-15.2	1.49 V	13	38.1	-9.8
3	236.61	31.0 QP	46.0	-15.0	1.99 V	7	40.8	-9.8
4	298.69	31.0 QP	46.0	-15.0	1.00 V	100	38.0	-7.0
5	380.17	31.7 QP	46.0	-14.3	1.00 V	100	37.0	-5.3
6	513.06	31.3 QP	46.0	-14.7	1.00 V	7	33.6	-2.3

Remarks:

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



4.2 Conducted Emission Measurement

4.2.1 Limits of Conducted Emission Measurement

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

Note: 1. The lower limit shall apply at the transition frequencies.
 2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

4.2.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESR3	102412	Jan. 22, 2022	Jan. 21, 2023
RF signal cable (with 10dB PAD) Woken	5D-FB	Cable-cond2-01	Sep. 03, 2022	Sep. 02, 2023
LISN/AMN ROHDE & SCHWARZ (EUT)	ESH2-Z5	100100	Feb. 17, 2022	Feb. 16, 2023
LISN/AMN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100312	Sep. 22, 2022	Sep. 21, 2023
Software ADT	BV ADT_Cond_ V7.3.7.4	NA	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 2. The test was performed in HwaYa Shielded Room 2 (Conduction 2).
 3. The VCCI Site Registration No. is C-12047.
 4. Tested date: Nov. 17, 2022

4.2.3 Test Procedures

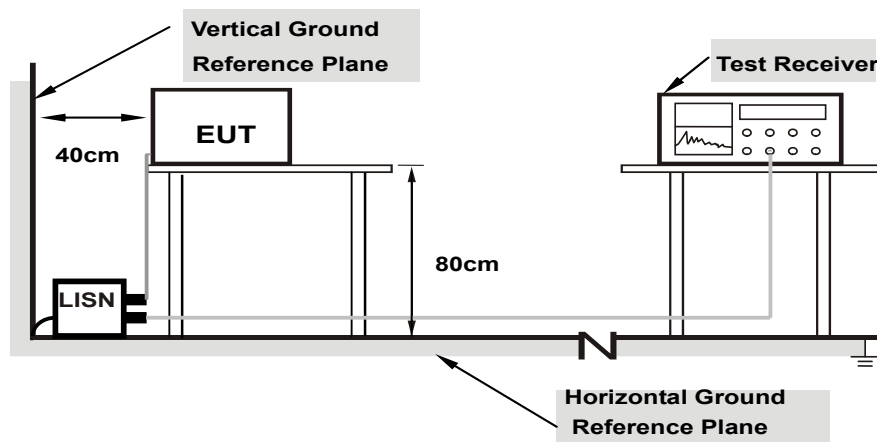
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance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

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

4.2.4 Deviation from Test Standard

No deviation.

4.2.5 Test Setup



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

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

4.2.6 EUT Operating Conditions

Same as 4.1.6.

4.2.7 Test Results

Worst-case data:

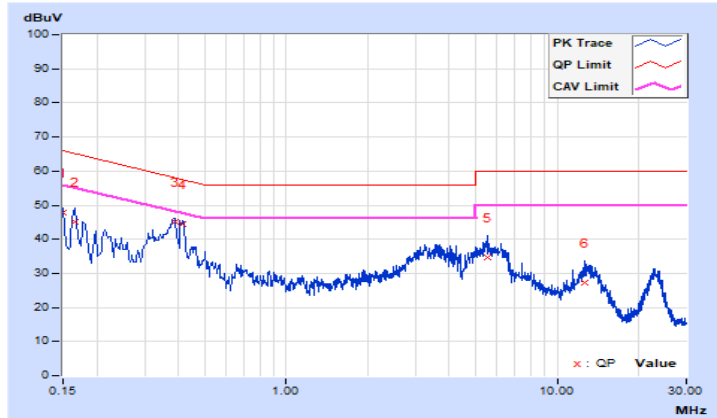
802.11ax (HE20)

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.15000	10.12	37.56	25.12	47.68	35.24	66.00
2	0.16579	10.13	35.03	23.83	45.16	33.96	65.17	55.17	-20.01	-21.21
3	0.38930	10.16	34.85	27.10	45.01	37.26	58.08	48.08	-13.07	-10.82
4	0.41400	10.16	34.22	29.84	44.38	40.00	57.57	47.57	-13.19	-7.57
5	5.52200	10.27	24.56	18.47	34.83	28.74	60.00	50.00	-25.17	-21.26
6	12.71800	10.33	16.85	10.34	27.18	20.67	60.00	50.00	-32.82	-29.33

Remarks:

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

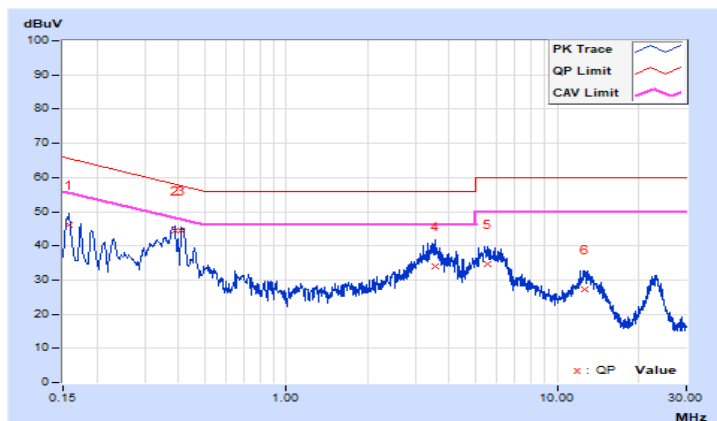


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.15800	10.13	36.09	24.43	46.22	34.56	65.57
2	0.38827	10.17	34.17	25.45	44.34	35.62	58.10	48.10	-13.76	-12.48
3	0.41000	10.17	34.19	26.84	44.36	37.01	57.65	47.65	-13.29	-10.64
4	3.53400	10.27	23.66	17.55	33.93	27.82	56.00	46.00	-22.07	-18.18
5	5.56200	10.30	24.36	18.25	34.66	28.55	60.00	50.00	-25.34	-21.45
6	12.65400	10.41	16.85	10.59	27.26	21.00	60.00	50.00	-32.74	-29.00

Remarks:

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



4.3 Transmit Power Measurement

4.3.1 Limits of Transmit Power Measurement

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

*B is the 26 dB emission bandwidth in megahertz

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

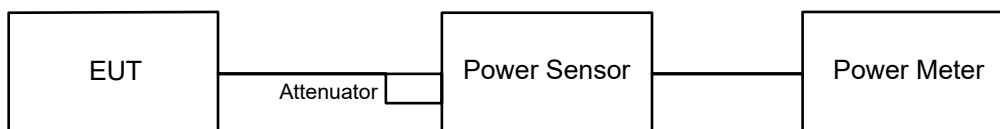
Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;

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

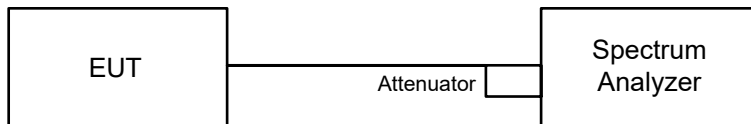
Array Gain = $5 \log(N_{ANT}/N_{SS})$ dB or 3 dB, whichever is less for 20-MHz channel widths with $N_{ANT} \geq 5$.

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

4.3.2 Test Setup



For channel straddling:



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

For Average Power Measurement

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

For channel straddling:

Method SA-1

- a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
- b. Set RBW = 1 MHz, Set VBW \geq 3 MHz, Detector = RMS
- c. Sweep points \geq $[2 \times \text{span} / \text{RBW}]$. (This gives bin-to-bin spacing \leq RBW / 2, so that narrowband signals are not lost between frequency bins.)
- d. Sweep time = auto, trigger set to "free run".
- e. Trace average at least 100 traces in power averaging mode.
- f. Record the max value

Note: When measuring straddle channel power, use compute power by integrating the spectrum across the 26 dB EBW or 99% OBW of the signal using the instrument's band power measurement function, with band limits set equal to the EBW or OBW band edges. If the instrument does not have a band power function, then sum the spectrum levels (in power units) at 1 MHz intervals extending across the 26 dB EBW or 99% OBW of the spectrum.

4.3.5 Deviation from Test Standard

No deviation.

4.3.6 EUT Operating Conditions

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

4.3.7 Test Result

Power Output:

Chain 0

802.11a

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	92.257	19.65	24	Pass
40	5200	120.504	20.81	24	Pass
48	5240	123.595	20.92	24	Pass
52	5260	123.880	20.93	24	Pass
60	5300	103.039	20.13	24	Pass
64	5320	107.647	20.32	24	Pass
100	5500	103.514	20.15	24	Pass
116	5580	100.000	20.00	24	Pass
140	5700	101.391	20.06	24	Pass
149	5745	120.226	20.80	30	Pass
157	5785	117.490	20.70	30	Pass
165	5825	122.180	20.87	30	Pass

802.11n (HT20)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	79.799	19.02	24	Pass
40	5200	116.145	20.65	24	Pass
48	5240	112.980	20.53	24	Pass
52	5260	115.878	20.64	24	Pass
60	5300	102.565	20.11	24	Pass
64	5320	101.859	20.08	24	Pass
100	5500	103.992	20.17	24	Pass
116	5580	95.719	19.81	24	Pass
140	5700	97.949	19.91	24	Pass
144	5720 (U-NII-2C)	95.060	19.78	24	Pass
144	5720 (U-NII-3)	17.989	12.55	30	Pass
149	5745	121.899	20.86	30	Pass
157	5785	121.899	20.86	30	Pass
165	5825	118.304	20.73	30	Pass

802.11n (HT40)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
38	5190	78.524	18.95	24	Pass
46	5230	125.893	21.00	24	Pass
54	5270	114.815	20.60	24	Pass
62	5310	61.094	17.86	24	Pass
102	5510	82.035	19.14	24	Pass
110	5550	81.096	19.09	24	Pass
134	5670	103.992	20.17	24	Pass
142	5710 (U-NII-2C)	110.408	20.43	24	Pass
142	5710 (U-NII-3)	7.015	8.46	30	Pass
151	5755	127.938	21.07	30	Pass
159	5795	122.744	20.89	30	Pass

802.11ac (VHT80)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
42	5210	77.446	18.89	24	Pass
58	5290	59.429	17.74	24	Pass
106	5530	85.310	19.31	24	Pass
122	5610	118.577	20.74	24	Pass
138	5690 (U-NII-2C)	111.944	20.49	24	Pass
138	5690 (U-NII-3)	2.642	4.22	30	Pass
155	5775	98.628	19.94	30	Pass

802.11ac (VHT160)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
50	5250 (U-NII-1)	20.797	13.18	24	Pass
50	5250 (U-NII-2A)	20.324	13.08	24	Pass
114	5570	39.174	15.93	24	Pass

802.11ax (HE20)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	86.896	19.39	24	Pass
40	5200	114.551	20.59	24	Pass
48	5240	116.681	20.67	24	Pass
52	5260	117.490	20.70	24	Pass
60	5300	98.628	19.94	24	Pass
64	5320	100.231	20.01	24	Pass
100	5500	98.401	19.93	24	Pass
116	5580	96.161	19.83	24	Pass
140	5700	107.152	20.30	24	Pass
144	5720 (U-NII-2C)	99.083	19.96	24	Pass
144	5720 (U-NII-3)	23.121	13.64	30	Pass
149	5745	118.577	20.74	30	Pass
157	5785	122.180	20.87	30	Pass
165	5825	116.950	20.68	30	Pass

802.11ax (HE40)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
38	5190	80.353	19.05	24	Pass
46	5230	123.88	20.93	24	Pass
54	5270	115.878	20.64	24	Pass
62	5310	62.661	17.97	24	Pass
102	5510	83.946	19.24	24	Pass
110	5550	82.035	19.14	24	Pass
134	5670	104.232	20.18	24	Pass
142	5710 (U-NII-2C)	110.154	20.42	24	Pass
142	5710 (U-NII-3)	6.637	8.22	30	Pass
151	5755	116.413	20.66	30	Pass
159	5795	119.399	20.77	30	Pass

802.11ax (HE80)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
42	5210	88.920	19.49	24	Pass
58	5290	59.566	17.75	24	Pass
106	5530	78.705	18.96	24	Pass
122	5610	118.032	20.72	24	Pass
138	5690 (U-NII-2C)	113.763	20.56	24	Pass
138	5690 (U-NII-3)	3.155	4.99	30	Pass
155	5775	91.622	19.62	30	Pass

802.11ax (HE160)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
50	5250 (U-NII-1)	18.155	12.59	24	Pass
50	5250 (U-NII-2A)	17.989	12.55	24	Pass
114	5570	34.995	15.44	24	Pass

Chain 1
802.11a

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	65.013	18.13	24	Pass
40	5200	91.622	19.62	24	Pass
48	5240	92.045	19.64	24	Pass
52	5260	89.743	19.53	24	Pass
60	5300	74.131	18.70	24	Pass
64	5320	75.509	18.78	24	Pass
100	5500	86.696	19.38	24	Pass
116	5580	86.696	19.38	24	Pass
140	5700	85.901	19.34	24	Pass
149	5745	86.497	19.37	30	Pass
157	5785	85.507	19.32	30	Pass
165	5825	85.114	19.30	30	Pass

802.11n (HT20)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	59.429	17.74	24	Pass
40	5200	89.331	19.51	24	Pass
48	5240	92.470	19.66	24	Pass
52	5260	90.991	19.59	24	Pass
60	5300	73.282	18.65	24	Pass
64	5320	73.621	18.67	24	Pass
100	5500	86.099	19.35	24	Pass
116	5580	85.704	19.33	24	Pass
140	5700	85.901	19.34	24	Pass
144	5720 (U-NII-2C)	93.541	19.71	24	Pass
144	5720 (U-NII-3)	17.660	12.47	30	Pass
149	5745	85.704	19.33	30	Pass
157	5785	85.704	19.33	30	Pass
165	5825	85.114	19.30	30	Pass

802.11n (HT40)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
38	5190	52.000	17.16	24	Pass
46	5230	93.111	19.69	24	Pass
54	5270	93.325	19.70	24	Pass
62	5310	41.210	16.15	24	Pass
102	5510	47.643	16.78	24	Pass
110	5550	46.666	16.69	24	Pass
134	5670	85.704	19.33	24	Pass
142	5710 (U-NII-2C)	114.288	20.58	24	Pass
142	5710 (U-NII-3)	7.015	8.46	30	Pass
151	5755	88.920	19.49	30	Pass
159	5795	87.902	19.44	30	Pass

802.11ac (VHT80)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
42	5210	48.865	16.89	24	Pass
58	5290	59.293	17.73	24	Pass
106	5530	61.802	17.91	24	Pass
122	5610	85.704	19.33	24	Pass
138	5690 (U-NII-2C)	83.368	19.21	24	Pass
138	5690 (U-NII-3)	2.529	4.03	30	Pass
155	5775	68.707	18.37	30	Pass

802.11ac (VHT160)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
50	5250 (U-NII-1)	25.823	14.12	24	Pass
50	5250 (U-NII-2A)	25.235	14.02	24	Pass
114	5570	36.898	15.67	24	Pass

802.11ax (HE20)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	71.285	18.53	24	Pass
40	5200	92.683	19.67	24	Pass
48	5240	90.991	19.59	24	Pass
52	5260	90.573	19.57	24	Pass
60	5300	70.307	18.47	24	Pass
64	5320	71.121	18.52	24	Pass
100	5500	86.099	19.35	24	Pass
116	5580	85.507	19.32	24	Pass
140	5700	86.298	19.36	24	Pass
144	5720 (U-NII-2C)	74.989	18.75	24	Pass
144	5720 (U-NII-3)	13.740	11.38	30	Pass
149	5745	86.497	19.37	30	Pass
157	5785	85.310	19.31	30	Pass
165	5825	85.901	19.34	30	Pass

802.11ax (HE40)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
38	5190	51.523	17.12	24	Pass
46	5230	75.336	18.77	24	Pass
54	5270	93.111	19.69	24	Pass
62	5310	48.865	16.89	24	Pass
102	5510	67.608	18.30	24	Pass
110	5550	67.608	18.30	24	Pass
134	5670	85.507	19.32	24	Pass
142	5710 (U-NII-2C)	76.736	18.85	24	Pass
142	5710 (U-NII-3)	5.200	7.16	30	Pass
151	5755	86.099	19.35	30	Pass
159	5795	85.901	19.34	30	Pass

802.11ax (HE80)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
42	5210	55.719	17.46	24	Pass
58	5290	56.105	17.49	24	Pass
106	5530	60.534	17.82	24	Pass
122	5610	85.310	19.31	24	Pass
138	5690 (U-NII-2C)	78.524	18.95	24	Pass
138	5690 (U-NII-3)	2.582	4.12	30	Pass
155	5775	69.024	18.39	30	Pass

802.11ax (HE160)

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
50	5250 (U-NII-1)	13.397	11.27	24	Pass
50	5250 (U-NII-2A)	13.032	11.15	24	Pass
114	5570	37.844	15.78	24	Pass

MIMO

802.11n (HT20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	16.98	17.00	100.007	20.00	24	Pass
40	5200	17.92	17.93	124.031	20.94	24	Pass
48	5240	17.70	17.83	119.558	20.78	24	Pass
52	5260	18.23	18.20	132.597	21.23	24	Pass
60	5300	17.23	17.31	106.660	20.28	24	Pass
64	5320	17.28	17.39	108.284	20.35	24	Pass
100	5500	18.31	18.49	138.396	21.41	24	Pass
116	5580	18.22	18.40	135.519	21.32	24	Pass
140	5700	18.48	18.50	141.264	21.50	24	Pass
144	5720 (U-NII-2C)	16.68	16.73	93.656	19.72	24	Pass
144	5720 (U-NII-3)	9.58	9.81	18.650	12.71	30	Pass
149	5745	19.47	19.41	175.809	22.45	30	Pass
157	5785	19.44	19.45	176.007	22.46	30	Pass
165	5825	19.43	19.43	175.400	22.44	30	Pass

802.11n (HT40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	16.20	16.18	83.182	19.20	24	Pass
46	5230	19.51	19.44	177.233	22.49	24	Pass
54	5270	19.81	19.81	191.439	22.82	24	Pass
62	5310	16.35	16.36	86.403	19.37	24	Pass
102	5510	17.39	17.37	109.403	20.39	24	Pass
110	5550	17.29	17.17	105.682	20.24	24	Pass
134	5670	19.38	19.41	173.993	22.41	24	Pass
142	5710 (U-NII-2C)	17.33	17.42	109.283	20.39	24	Pass
142	5710 (U-NII-3)	4.99	5.06	6.361	8.04	30	Pass
151	5755	18.92	18.98	157.051	21.96	30	Pass
159	5795	19.44	19.48	176.618	22.47	30	Pass

802.11ac (VHT80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	16.28	16.27	84.826	19.29	24	Pass
58	5290	16.38	16.30	86.109	19.35	24	Pass
106	5530	17.23	17.18	105.084	20.22	24	Pass
122	5610	18.94	18.87	155.433	21.92	24	Pass
138	5690 (U-NII-2C)	17.55	17.46	112.604	20.52	24	Pass
138	5690 (U-NII-3)	1.61	1.16	2.755	4.40	30	Pass
155	5775	18.14	18.22	131.537	21.19	30	Pass

802.11ac (VHT160)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
50	5250 (U-NII-1)	9.67	9.52	18.222	12.61	24	Pass
50	5250 (U-NII-2A)	9.55	9.44	17.806	12.51	24	Pass
114	5570	13.87	13.90	48.925	16.90	24	Pass

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	17.58	17.74	116.709	20.67	24	Pass
40	5200	18.47	18.72	144.780	21.61	24	Pass
48	5240	18.77	18.67	148.956	21.73	24	Pass
52	5260	18.62	18.68	146.568	21.66	24	Pass
60	5300	16.84	16.80	96.161	19.83	24	Pass
64	5320	16.90	16.86	97.507	19.89	24	Pass
100	5500	18.62	18.80	148.636	21.72	24	Pass
116	5580	18.39	18.52	140.281	21.47	24	Pass
140	5700	18.46	18.60	142.589	21.54	24	Pass
144	5720 (U-NII-2C)	16.75	16.86	95.844	19.82	24	Pass
144	5720 (U-NII-3)	9.94	9.98	19.817	12.97	30	Pass
149	5745	19.42	19.47	176.010	22.46	30	Pass
157	5785	19.48	19.38	175.412	22.44	30	Pass
165	5825	19.41	19.43	174.997	22.43	30	Pass

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	15.35	15.21	67.466	18.29	24	Pass
46	5230	18.81	18.90	153.657	21.87	24	Pass
54	5270	19.24	19.29	168.864	22.28	24	Pass
62	5310	15.82	15.93	77.369	18.89	24	Pass
102	5510	16.83	16.96	97.854	19.91	24	Pass
110	5550	16.71	16.90	95.940	19.82	24	Pass
134	5670	19.37	19.30	171.611	22.35	24	Pass
142	5710 (U-NII-2C)	17.08	17.19	103.411	20.15	24	Pass
142	5710 (U-NII-3)	5.52	5.59	7.187	8.57	30	Pass
151	5755	18.71	18.75	149.291	21.74	30	Pass
159	5795	19.38	19.42	174.195	22.41	30	Pass

802.11ax (HE80)

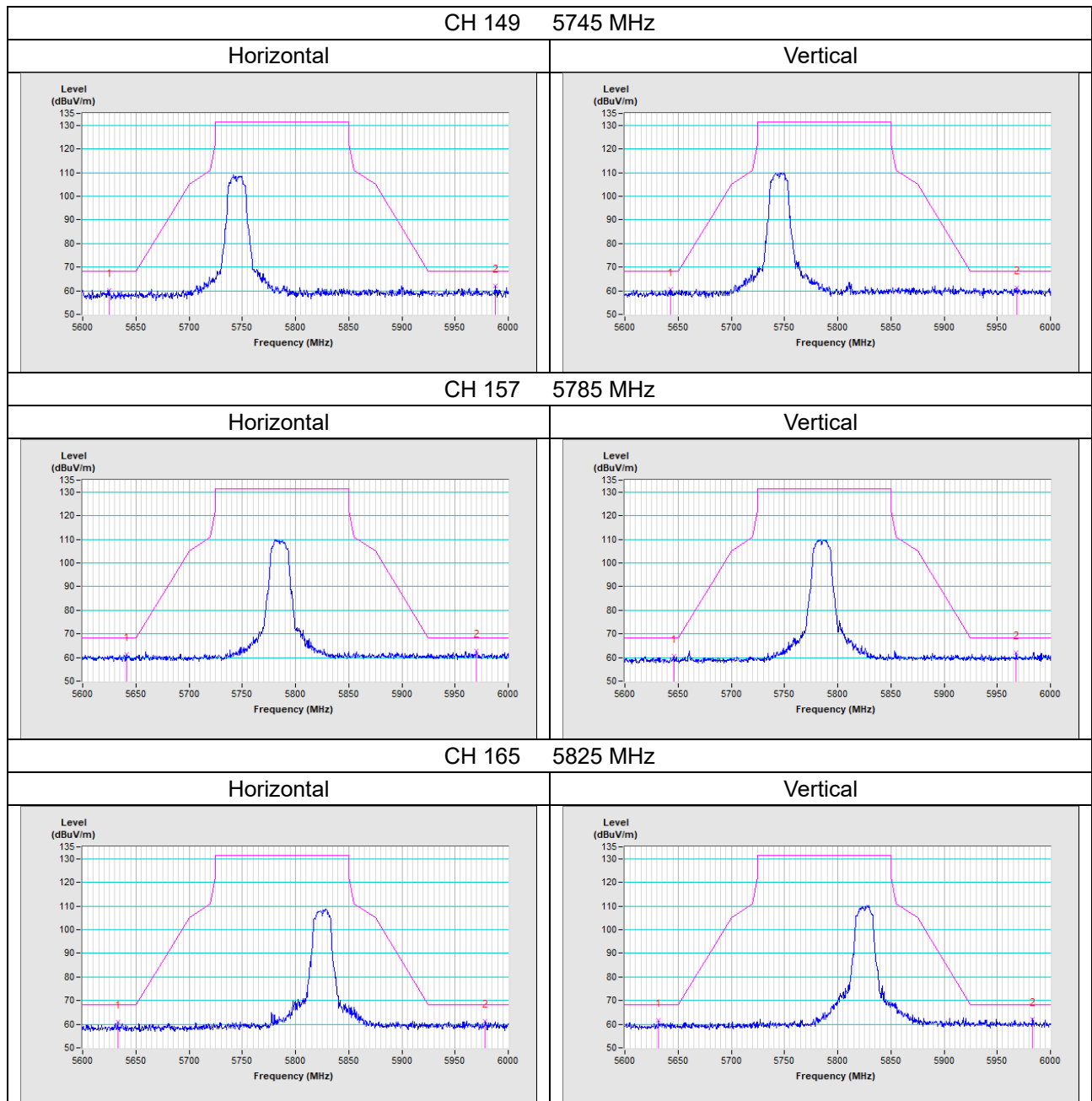
Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	16.21	16.29	84.343	19.26	24	Pass
58	5290	15.87	15.91	77.631	18.90	24	Pass
106	5530	17.06	17.05	101.515	20.07	24	Pass
122	5610	18.73	18.69	148.605	21.72	24	Pass
138	5690 (U-NII-2C)	17.44	17.39	110.290	20.43	24	Pass
138	5690 (U-NII-3)	1.80	1.78	3.020	4.80	30	Pass
155	5775	18.21	18.20	132.291	21.22	30	Pass

802.11ax (HE160)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
50	5250 (U-NII-1)	9.91	9.81	19.367	12.87	24	Pass
50	5250 (U-NII-2A)	9.81	9.71	18.926	12.77	24	Pass
114	5570	14.94	14.90	62.092	17.93	24	Pass

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

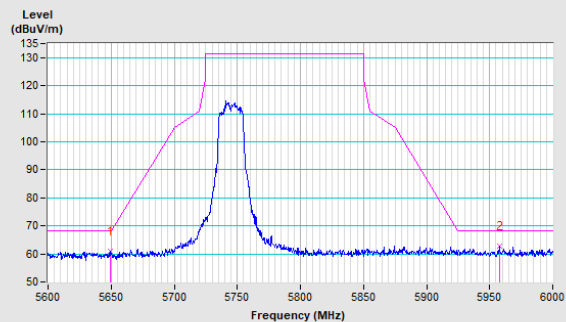
802.11a



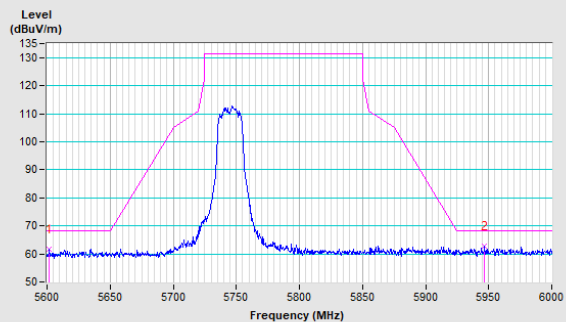
802.11ax (HE20)

CH 149 5745 MHz

Horizontal

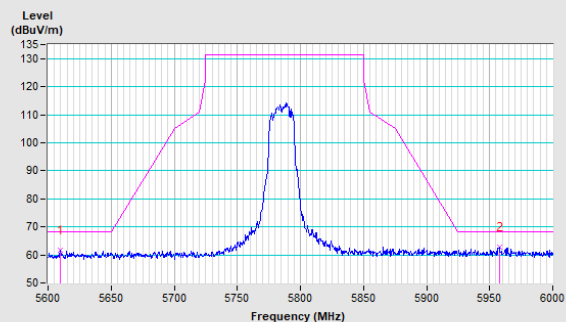


Vertical

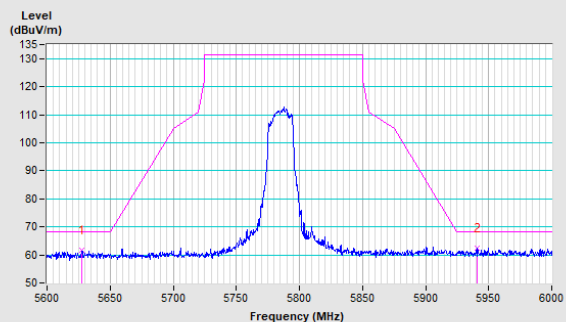


CH 157 5785 MHz

Horizontal

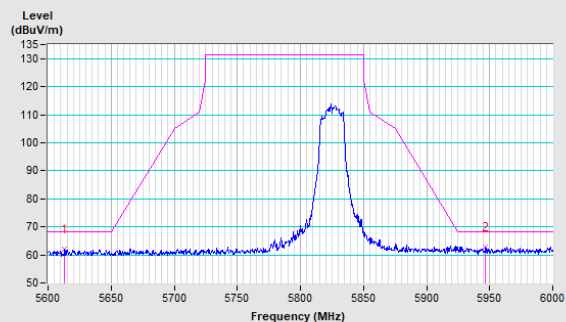


Vertical

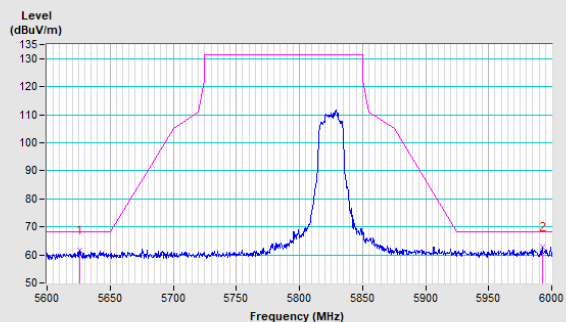


CH 165 5825 MHz

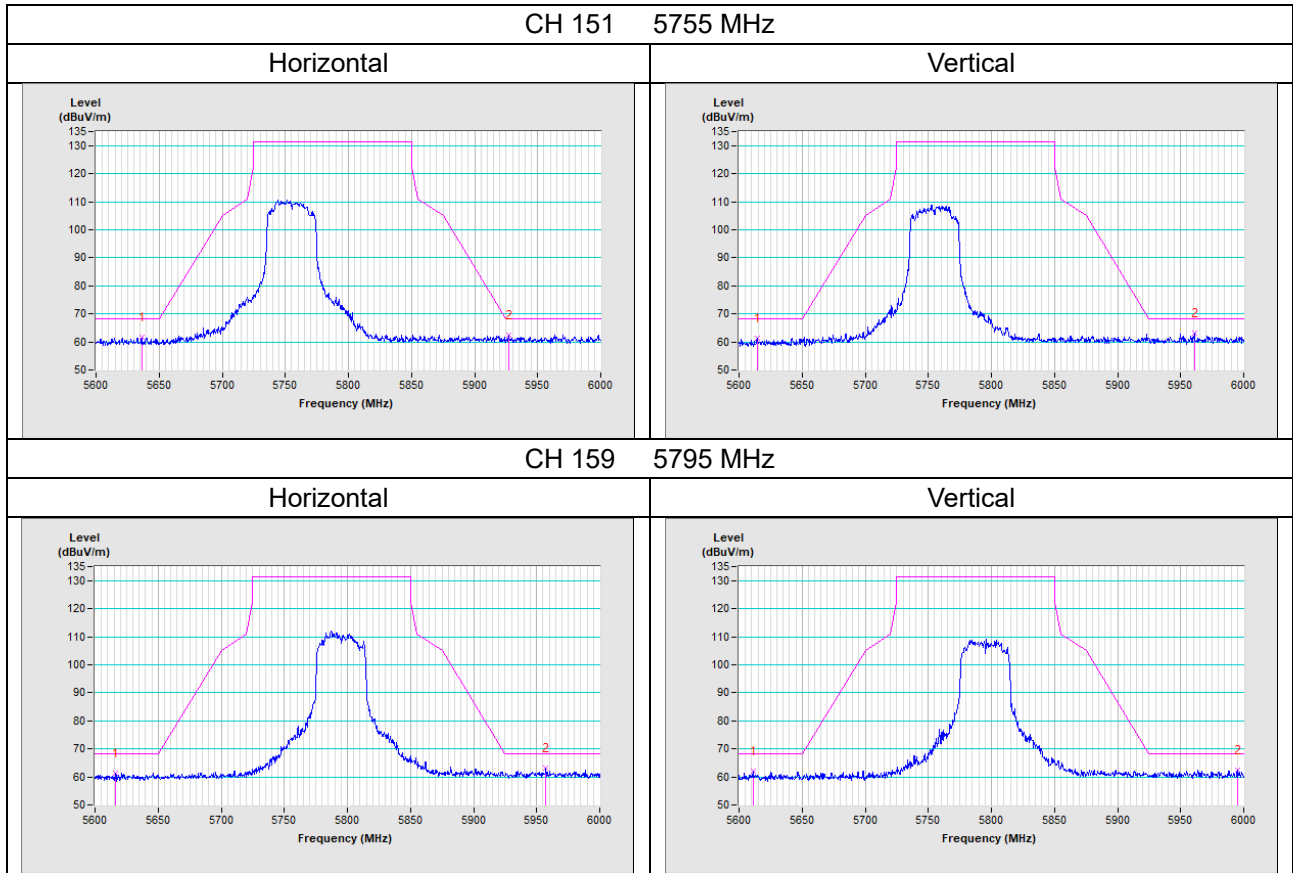
Horizontal



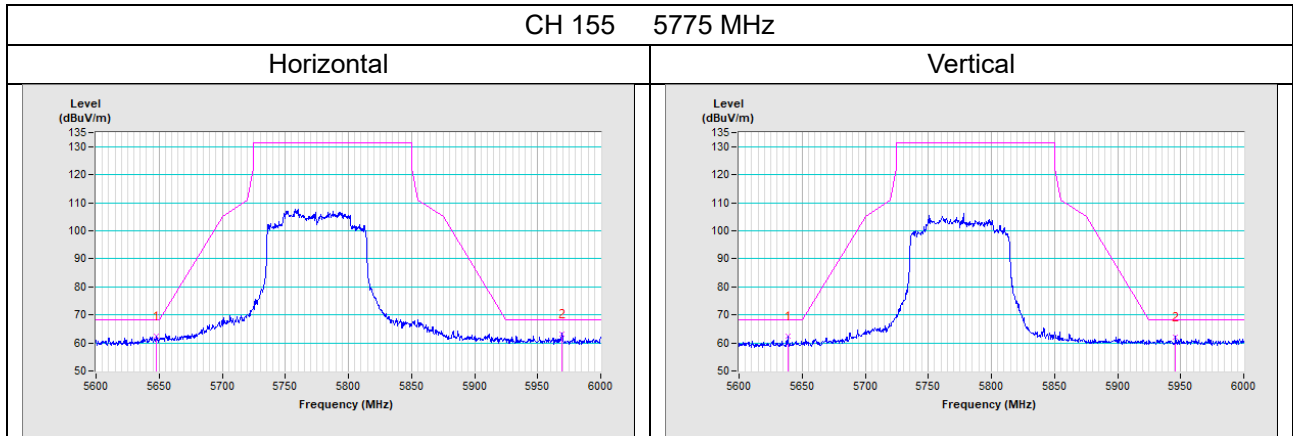
Vertical



802.11ax (HE40)



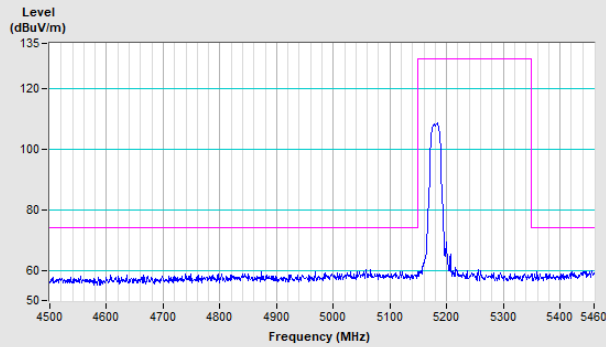
802.11ax (HE80)



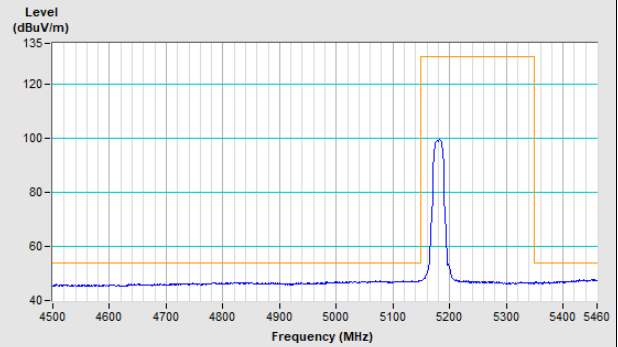
Annex B- Band Edge Measurement

802.11a Channel 36

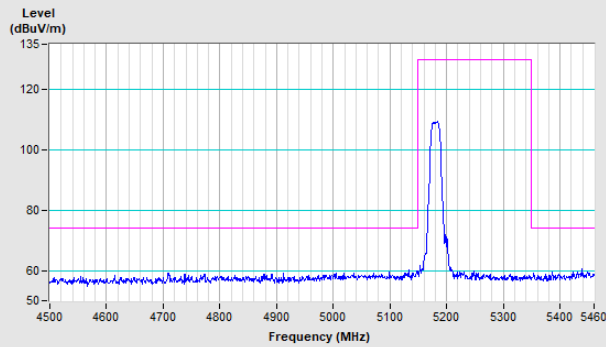
Horizontal (Peak)



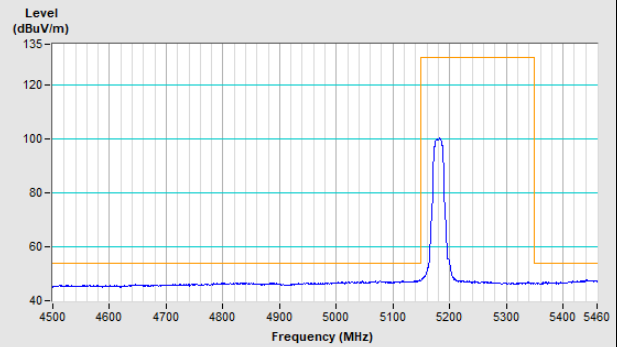
Horizontal (Average)



Vertical (Peak)

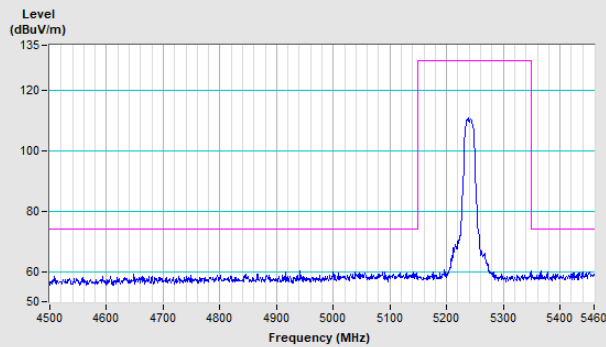


Vertical (Average)

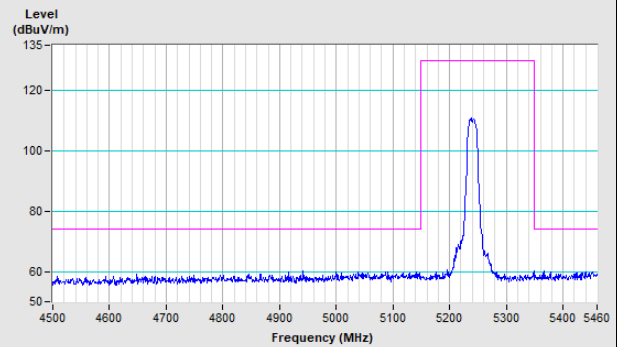


802.11a Channel 48

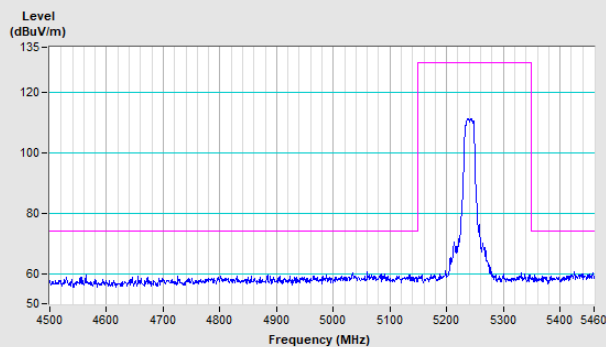
Horizontal (Peak)



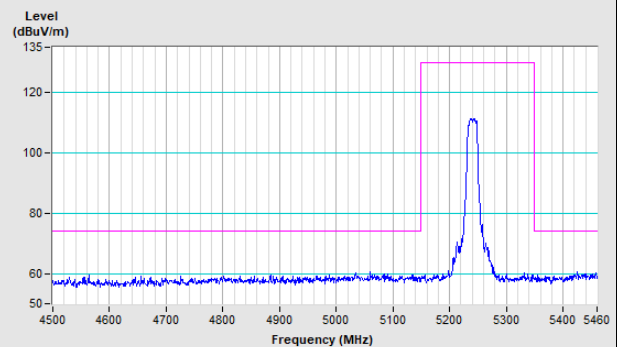
Horizontal (Average)



Vertical (Peak)

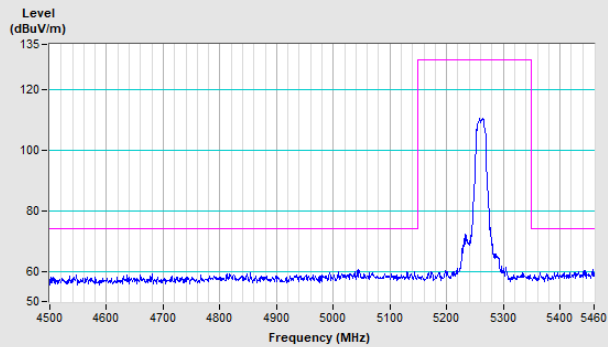


Vertical (Average)

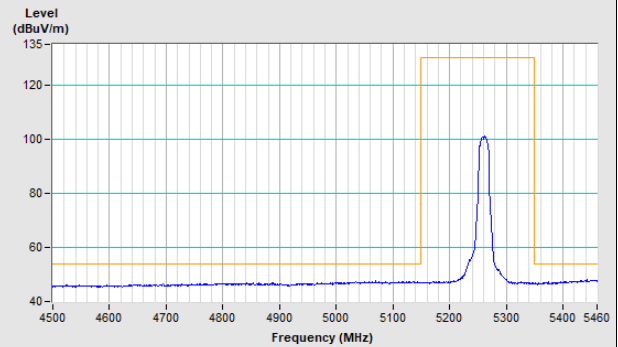


802.11a Channel 52

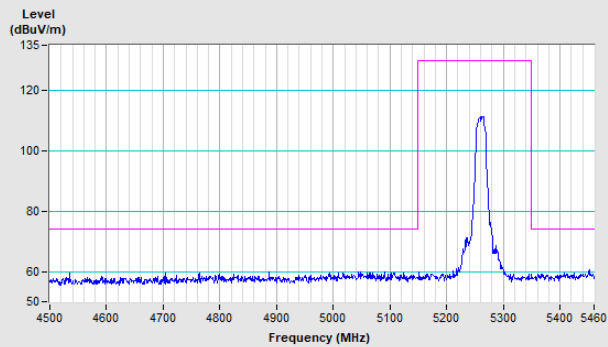
Horizontal (Peak)



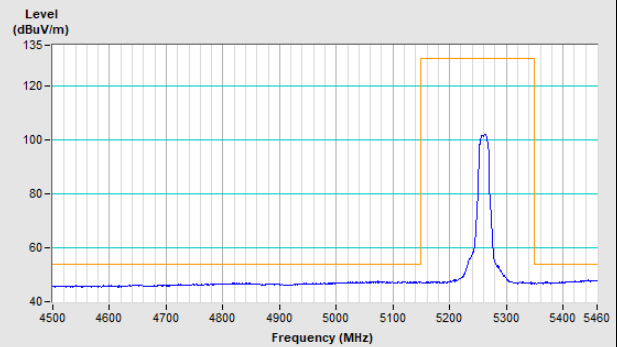
Horizontal (Average)



Vertical (Peak)

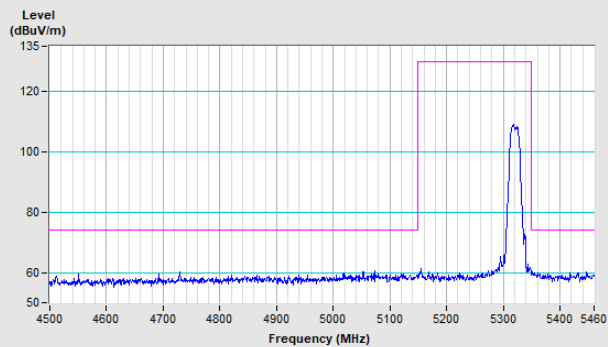


Vertical (Average)

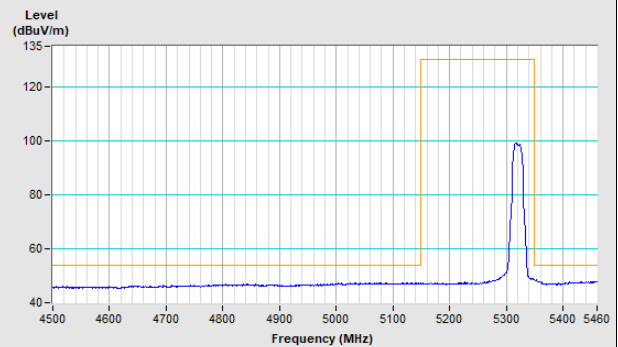


802.11a Channel 64

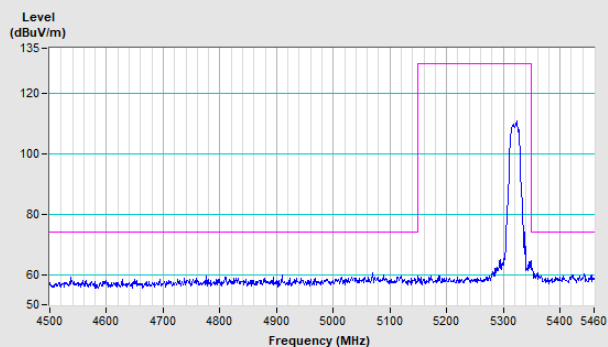
Horizontal (Peak)



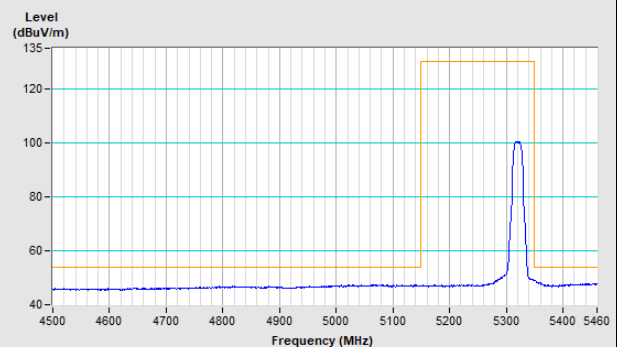
Horizontal (Average)



Vertical (Peak)

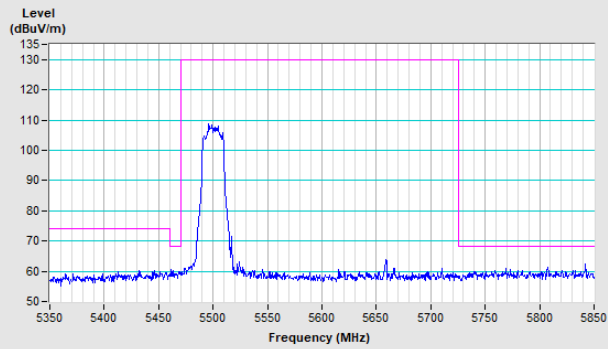


Vertical (Average)

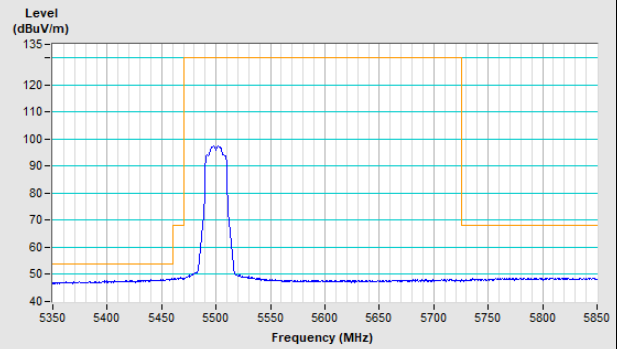


802.11a Channel 100

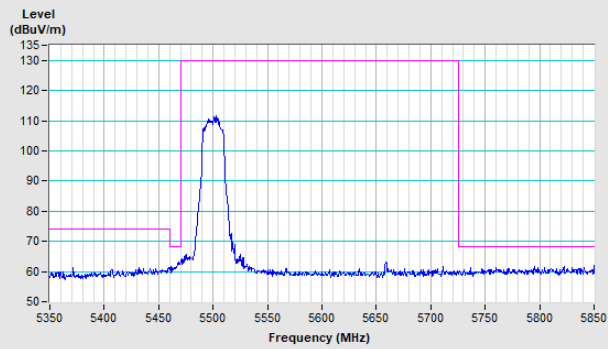
Horizontal (Peak)



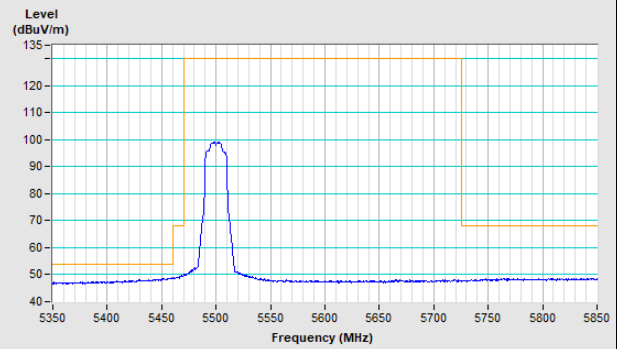
Horizontal (Average)



Vertical (Peak)

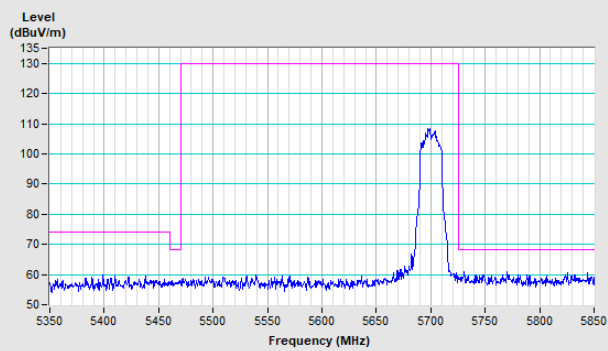


Vertical (Average)

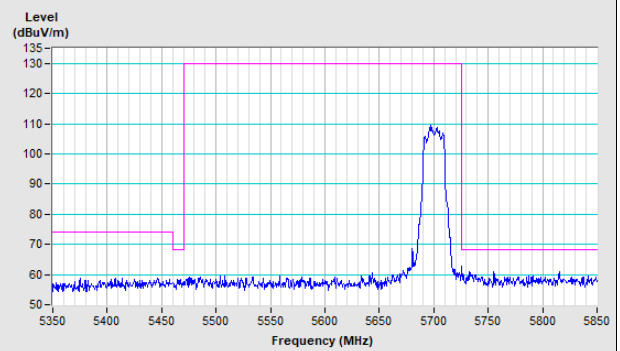


802.11a Channel 140

Horizontal (Peak)

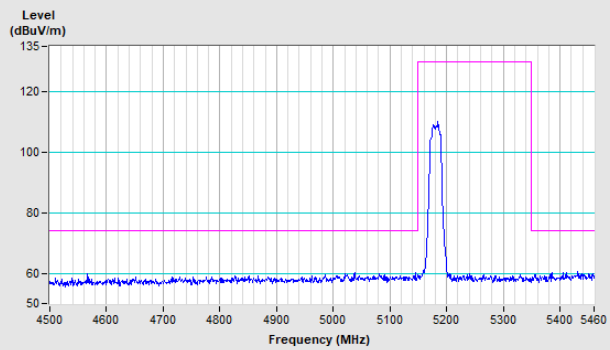


Vertical (Peak)

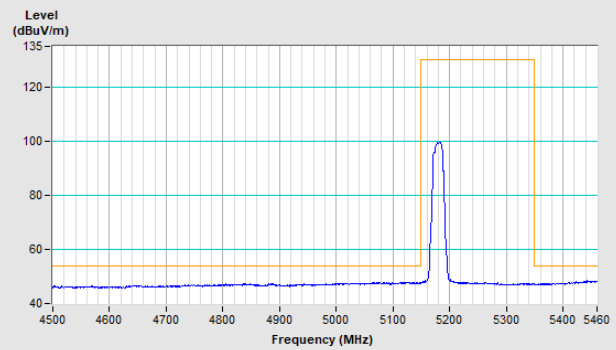


802.11ax (HE20) Channel 36

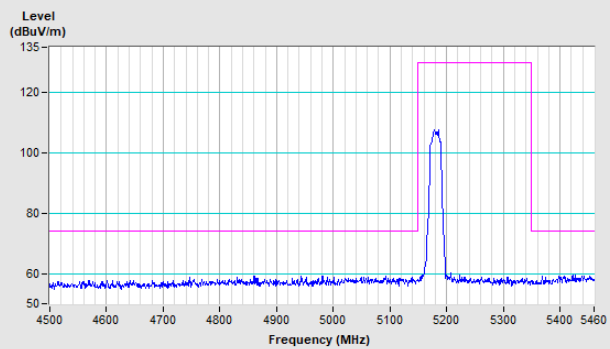
Horizontal (Peak)



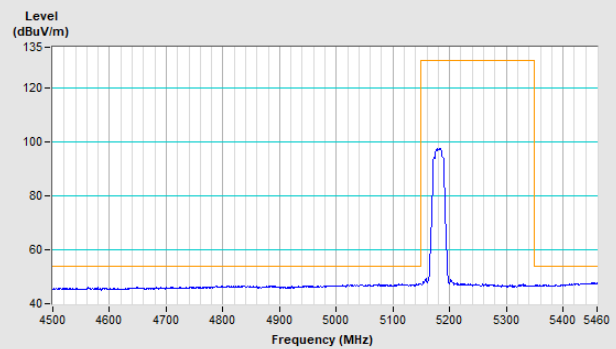
Horizontal (Average)



Vertical (Peak)

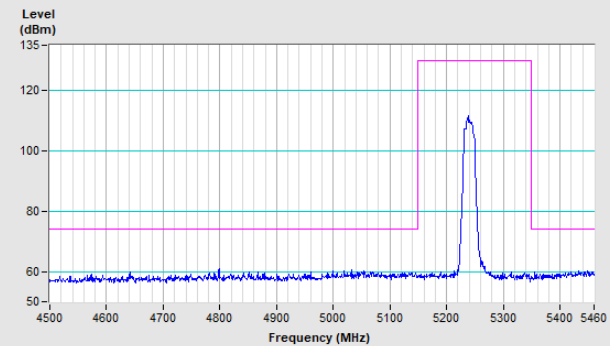


Vertical (Average)

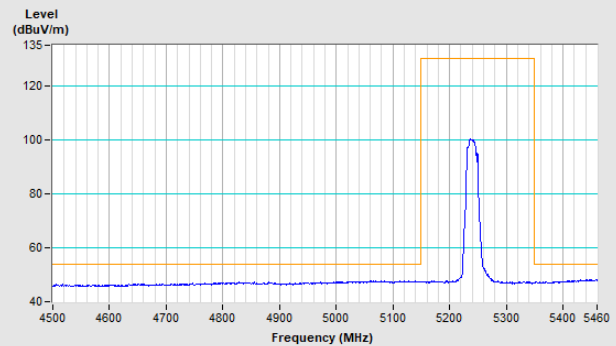


802.11ax (HE20) Channel 48

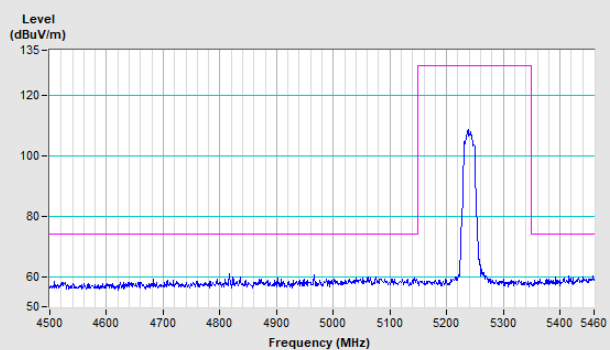
Horizontal (Peak)



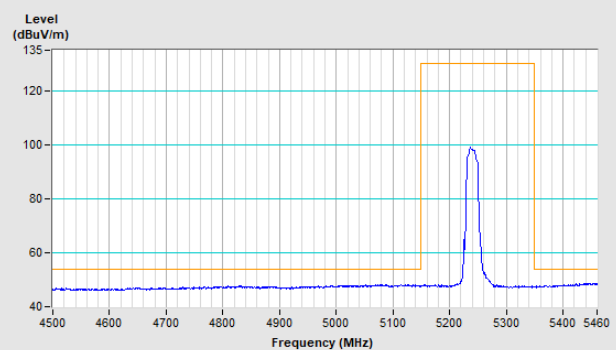
Horizontal (Average)



Vertical (Peak)

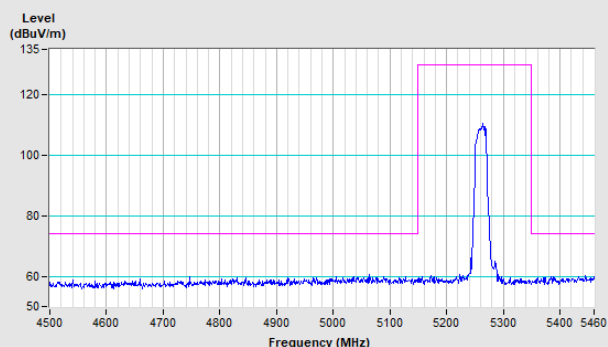


Vertical (Average)

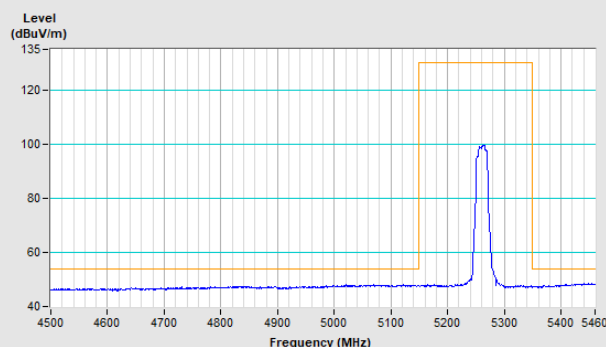


802.11ax (HE20) Channel 52

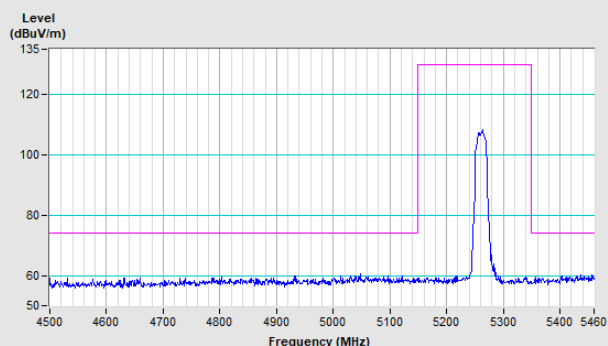
Horizontal (Peak)



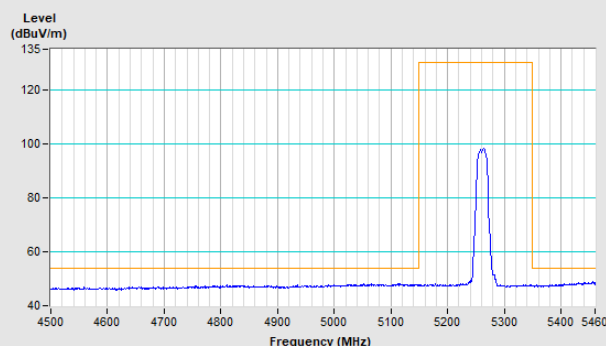
Horizontal (Average)



Vertical (Peak)

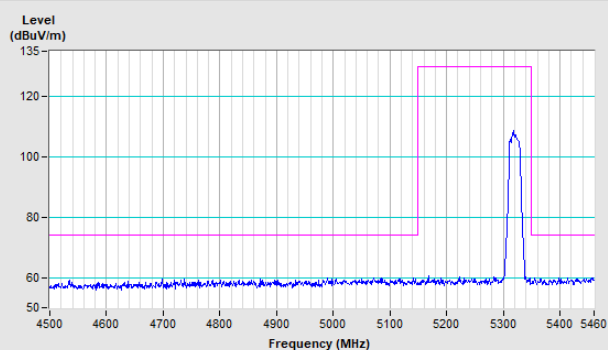


Vertical (Average)

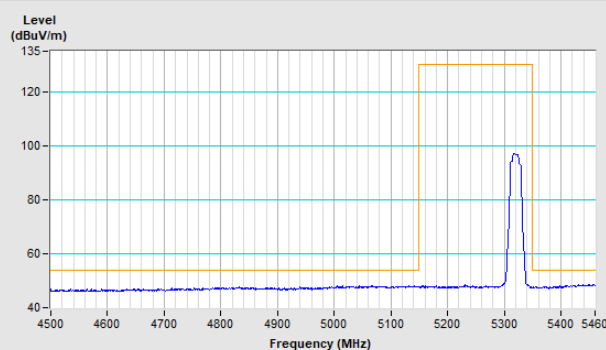


802.11ax (HE20) Channel 64

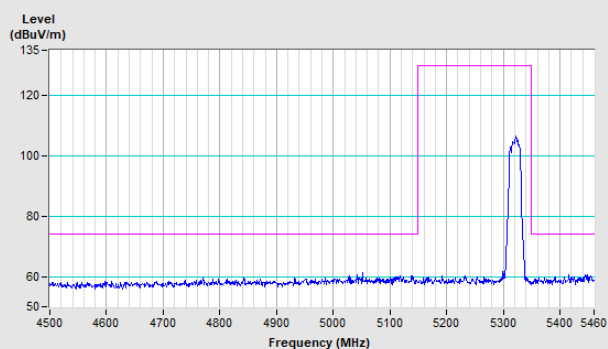
Horizontal (Peak)



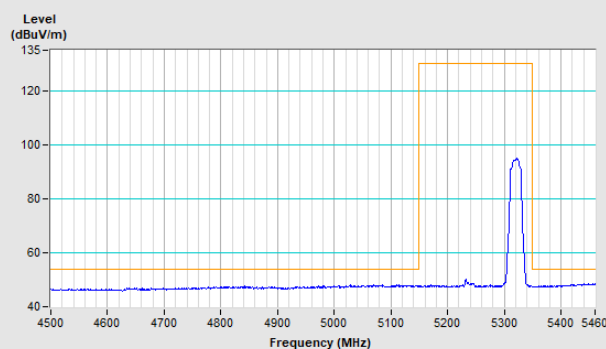
Horizontal (Average)



Vertical (Peak)

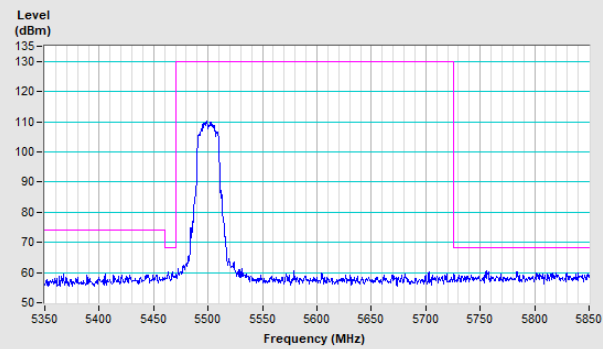


Vertical (Average)

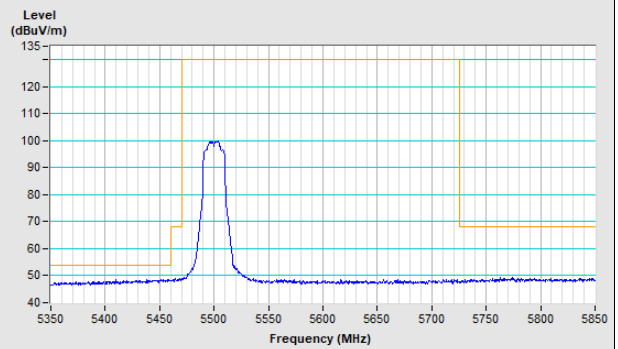


802.11ax (HE20) Channel 100

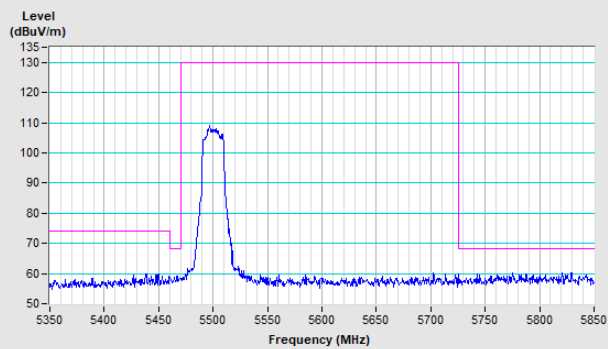
Horizontal (Peak)



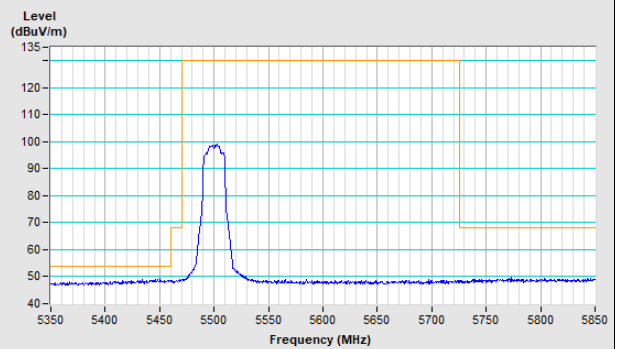
Horizontal (Average)



Vertical (Peak)

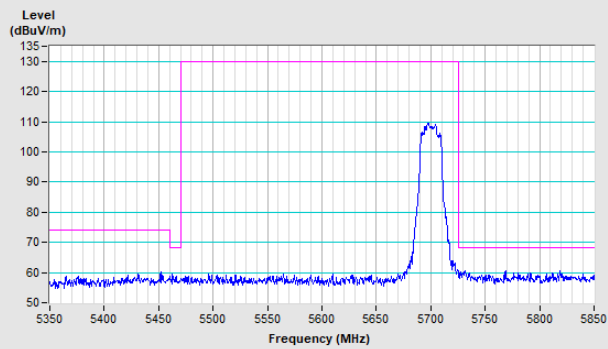


Vertical (Average)

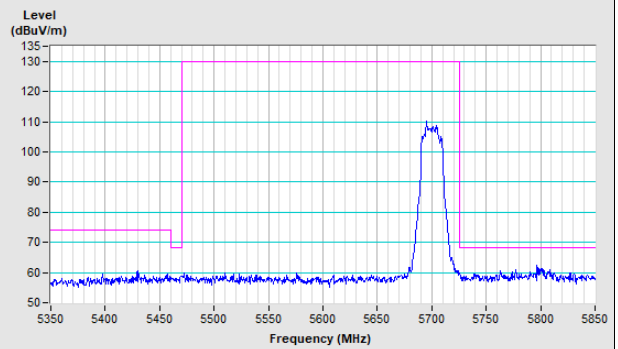


802.11ax (HE20) Channel 140

Horizontal (Peak)

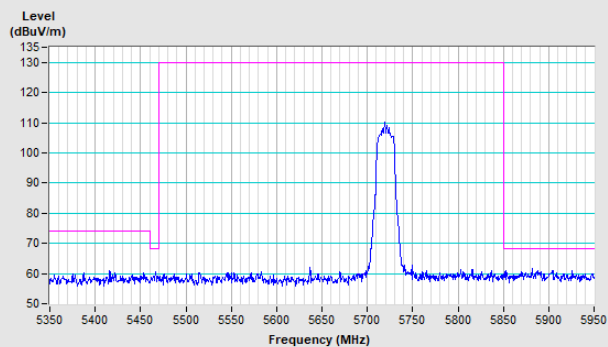


Vertical (Peak)

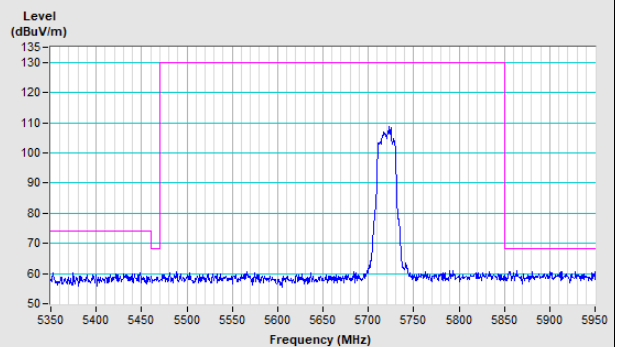


802.11ax (HE20) Channel 144

Horizontal (Peak)

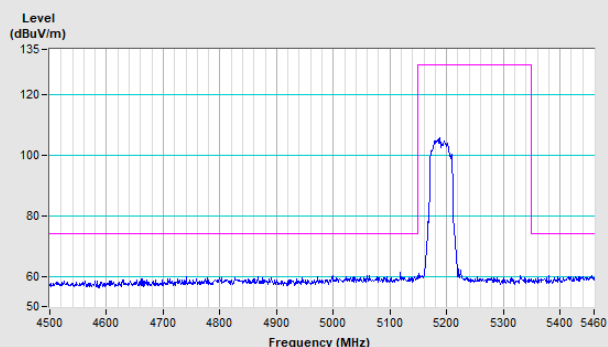


Vertical (Peak)

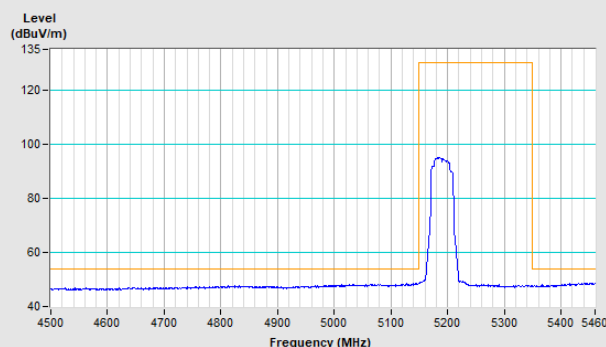


802.11ax (HE40) Channel 38

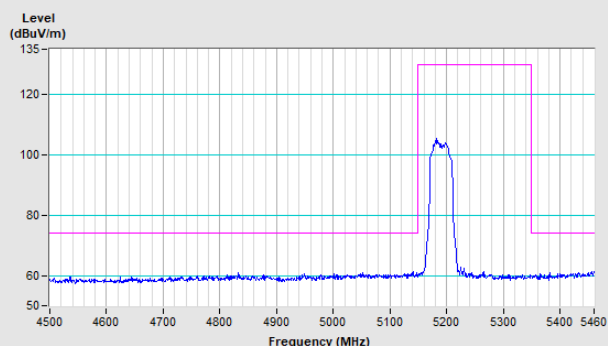
Horizontal (Peak)



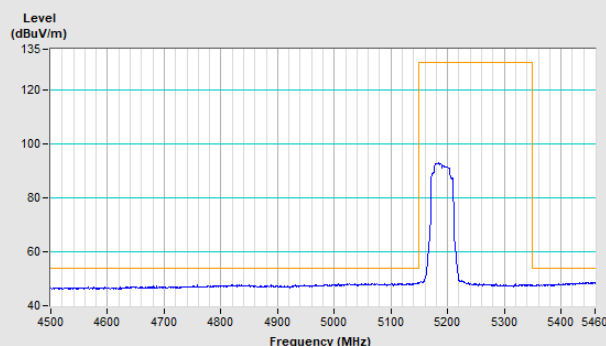
Horizontal (Average)



Vertical (Peak)

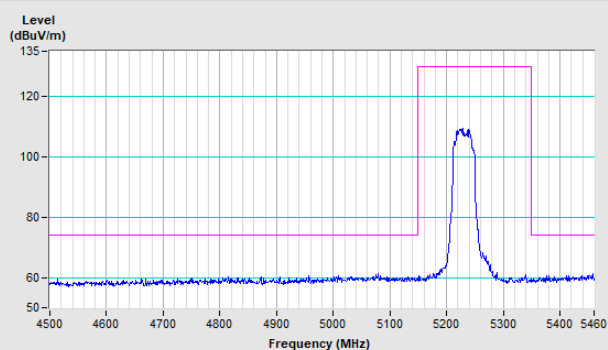


Vertical (Average)

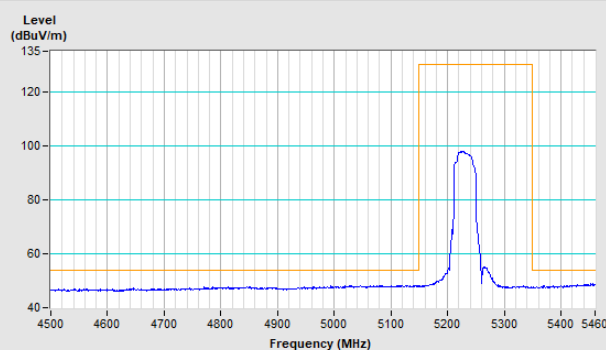


802.11ax (HE40) Channel 46

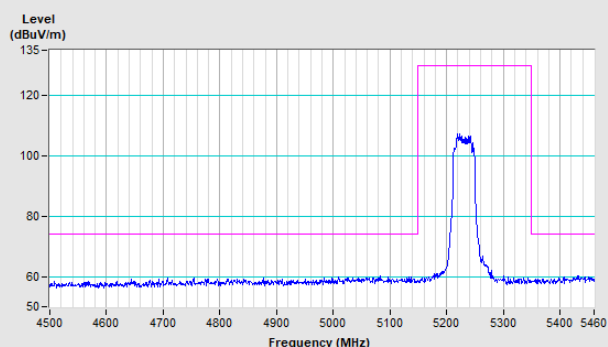
Horizontal (Peak)



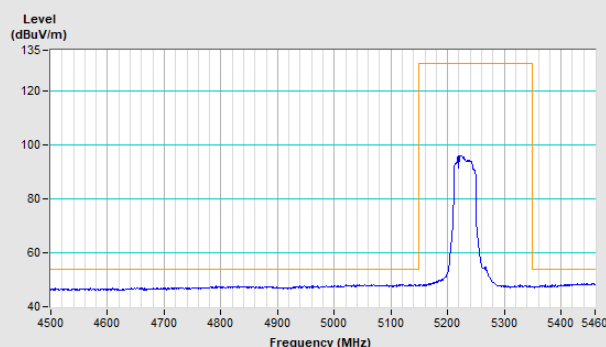
Horizontal (Average)



Vertical (Peak)

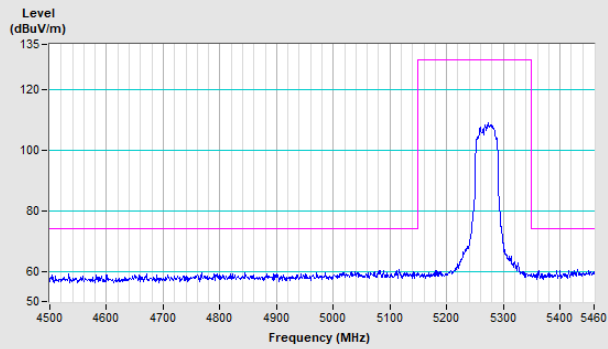


Vertical (Average)

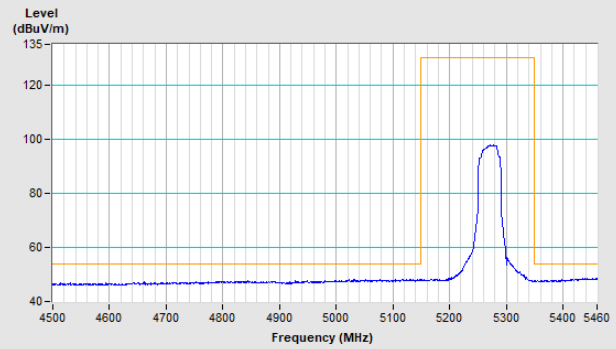


802.11ax (HE40) Channel 54

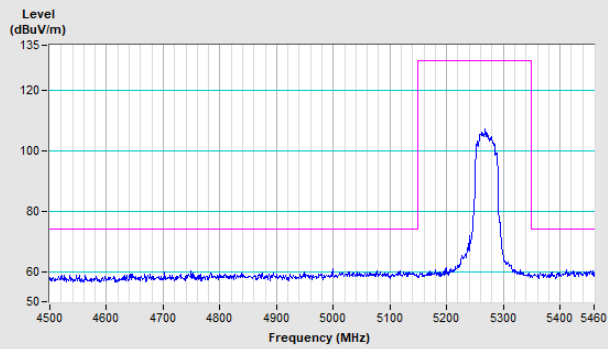
Horizontal (Peak)



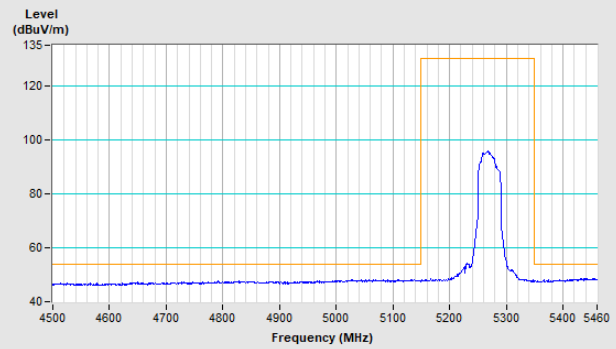
Horizontal (Average)



Vertical (Peak)

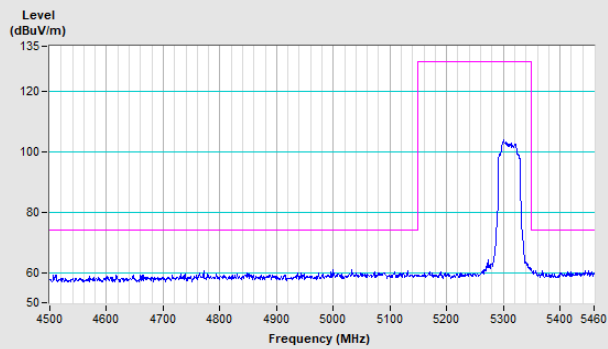


Vertical (Average)

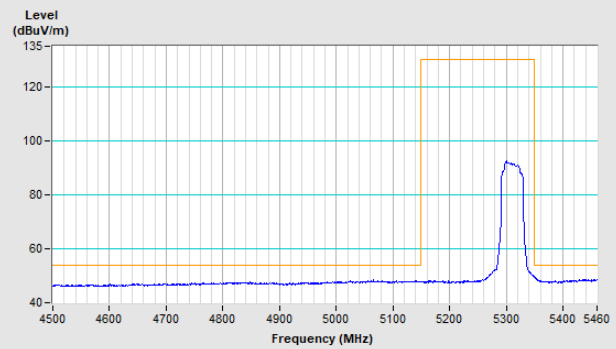


802.11ax (HE40) Channel 62

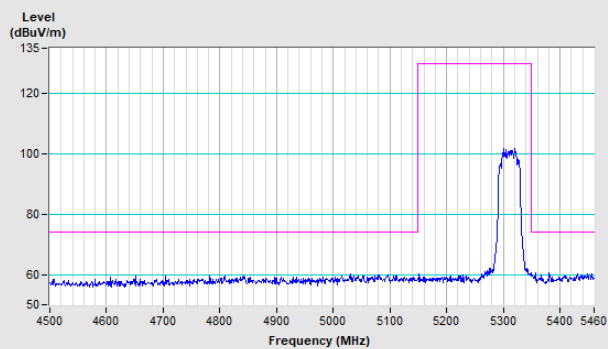
Horizontal (Peak)



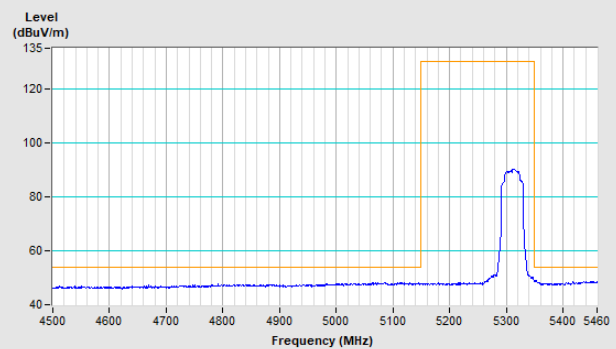
Horizontal (Average)



Vertical (Peak)

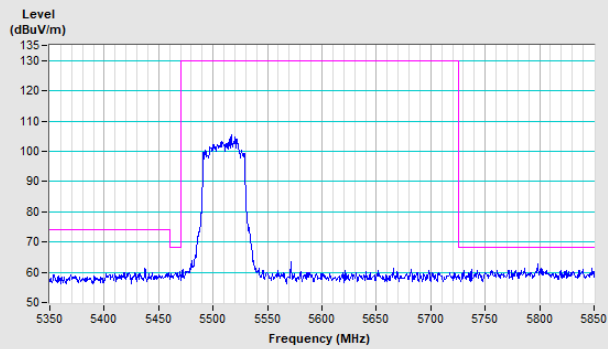


Vertical (Average)

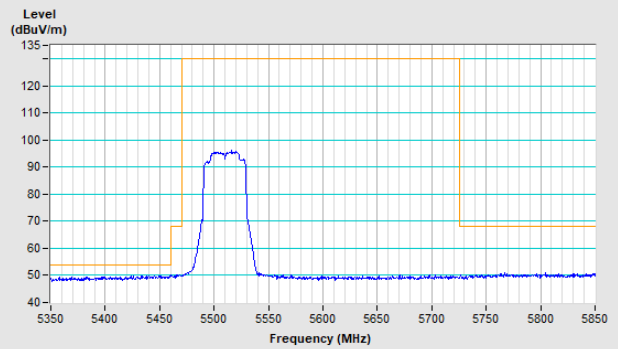


802.11ax (HE40) Channel 102

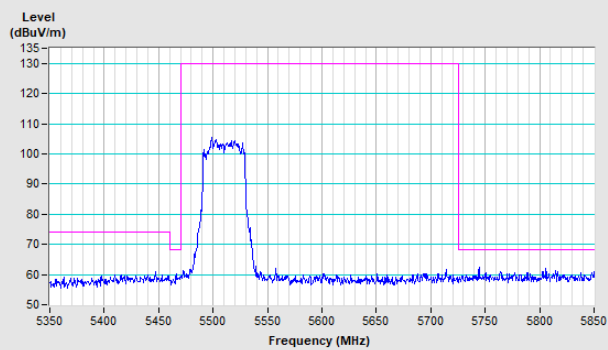
Horizontal (Peak)



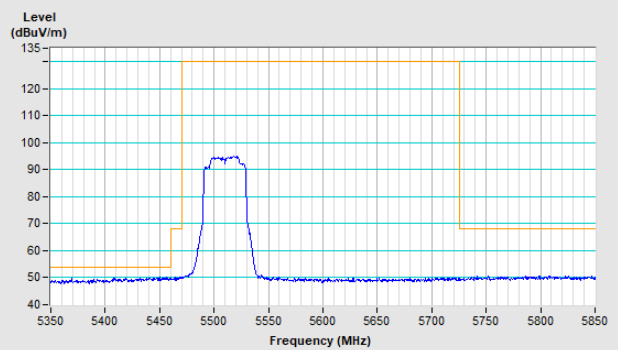
Horizontal (Average)



Vertical (Peak)

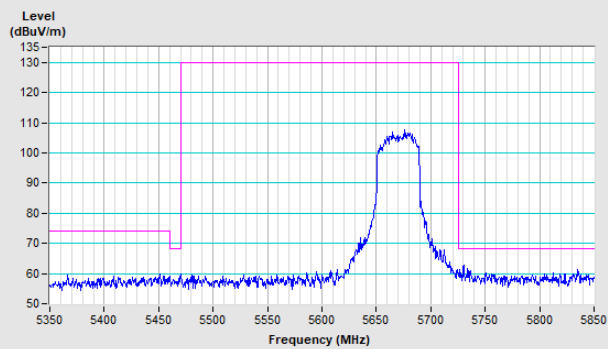


Vertical (Average)

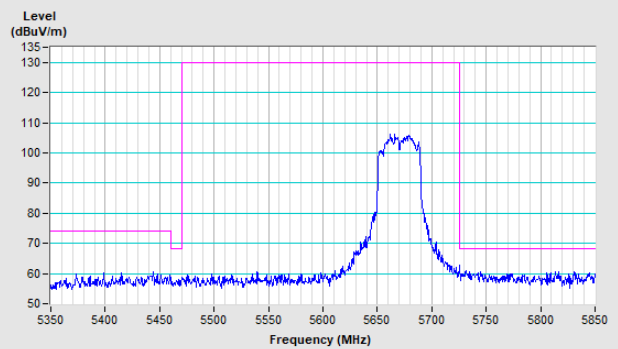


802.11ax (HE40) Channel 134

Horizontal (Peak)

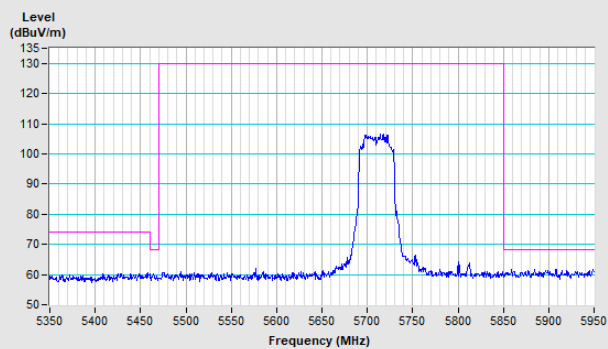


Vertical (Peak)

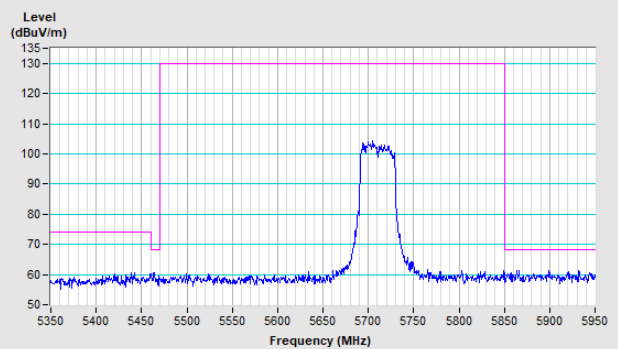


802.11ax (HE40) Channel 142

Horizontal (Peak)

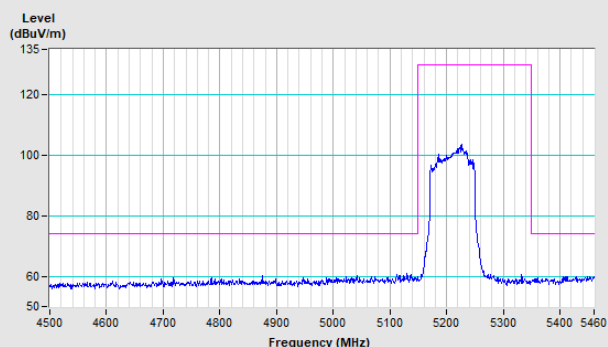


Vertical (Peak)

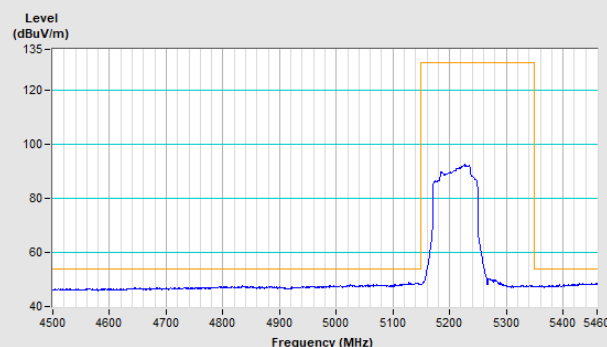


802.11ax (HE80) Channel 42

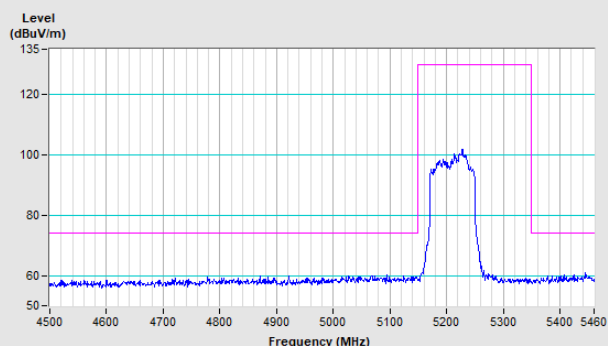
Horizontal (Peak)



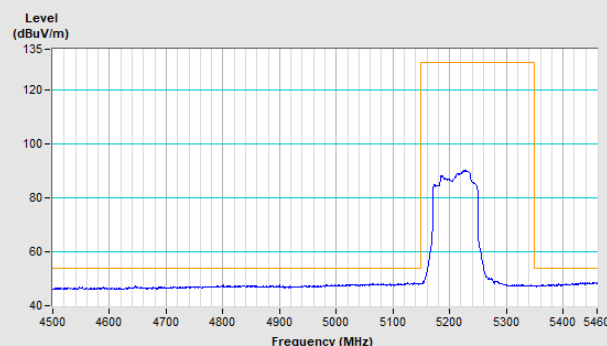
Horizontal (Average)



Vertical (Peak)

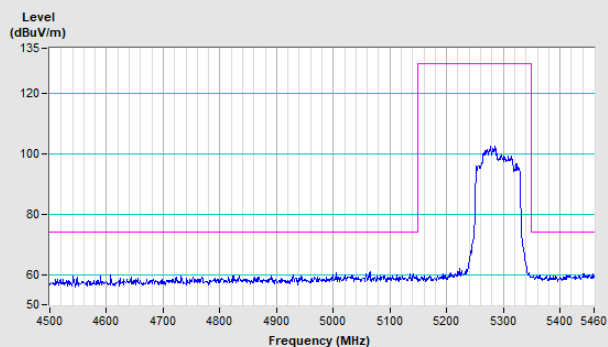


Vertical (Average)

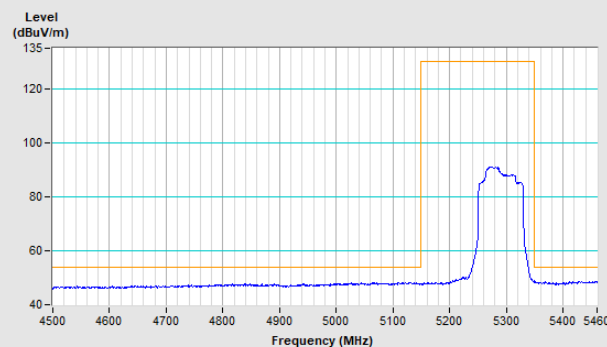


802.11ax (HE80) Channel 58

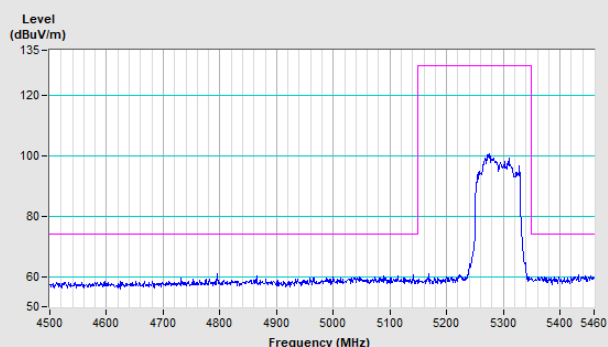
Horizontal (Peak)



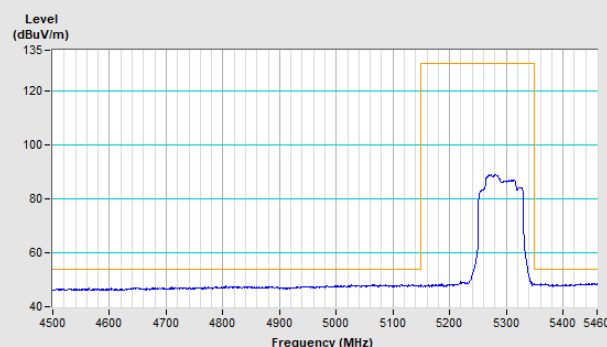
Horizontal (Average)



Vertical (Peak)

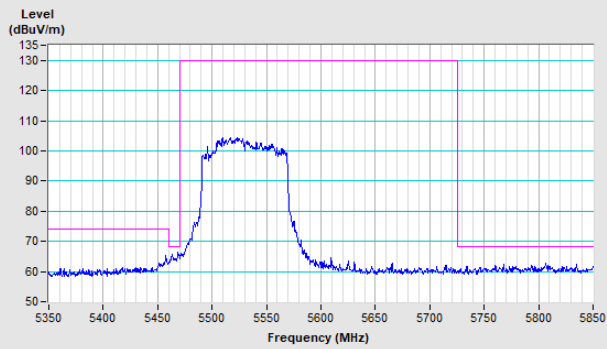


Vertical (Average)

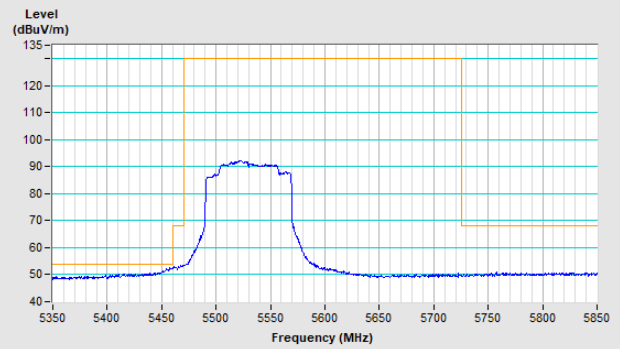


802.11ax (HE80) Channel 106

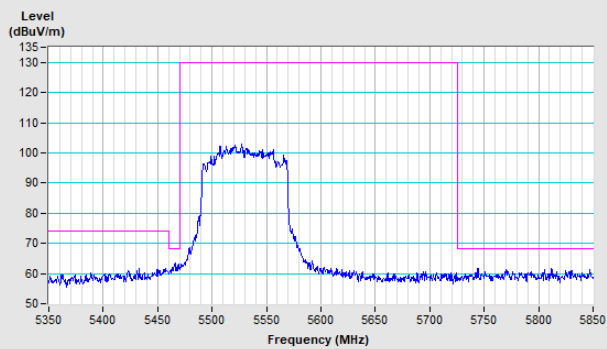
Horizontal (Peak)



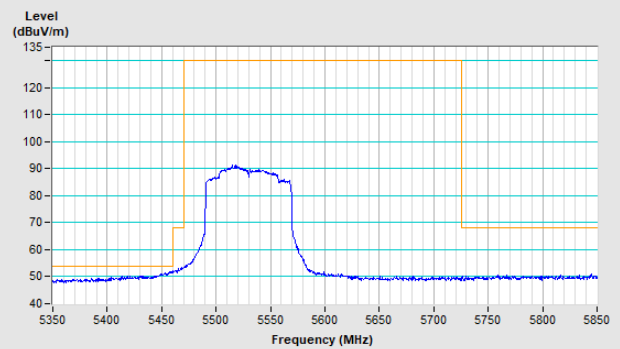
Horizontal (Average)



Vertical (Peak)

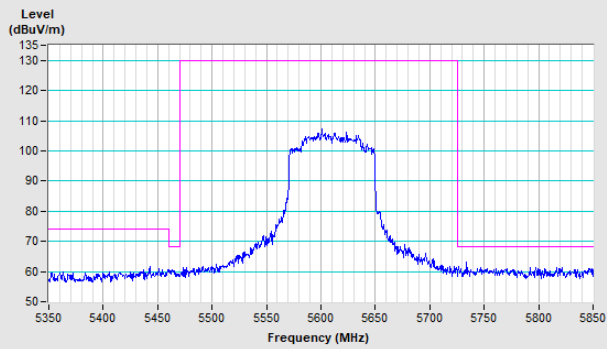


Vertical (Average)

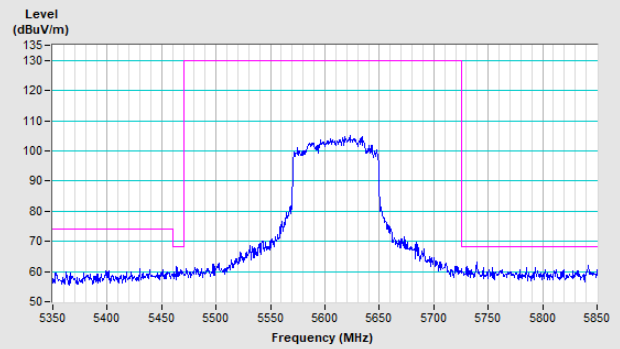


802.11ax (HE80) Channel 122

Horizontal (Peak)

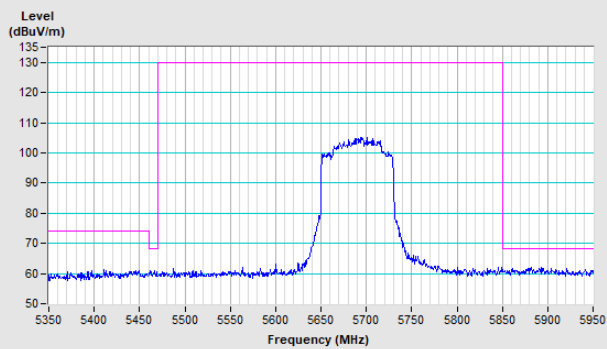


Vertical (Peak)

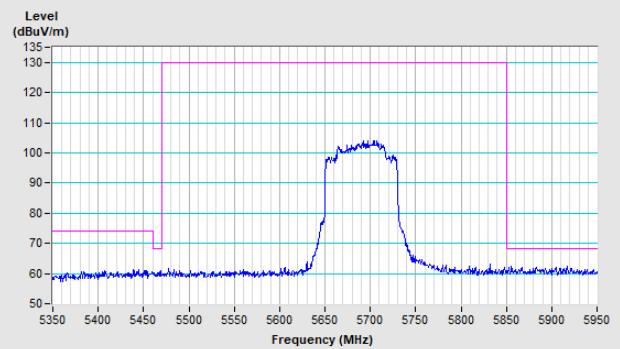


802.11ax (HE80) Channel 138

Horizontal (Peak)

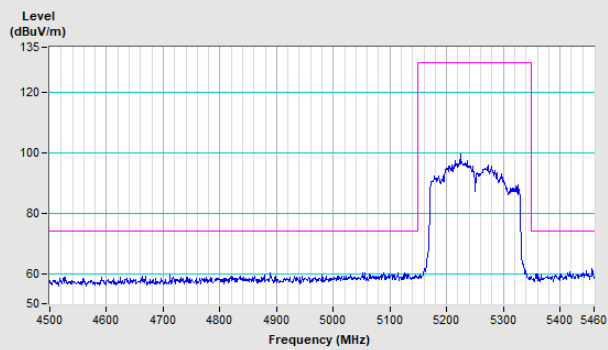


Vertical (Peak)

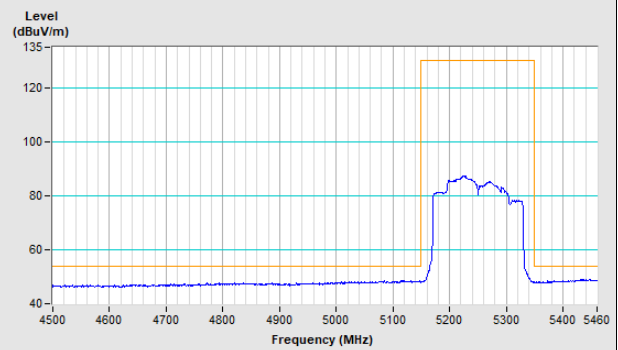


802.11ax (HE160) Channel 50

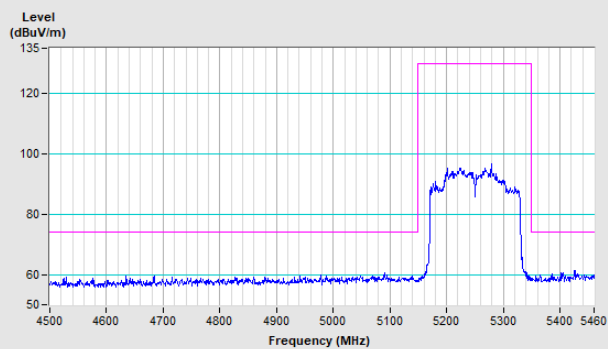
Horizontal (Peak)



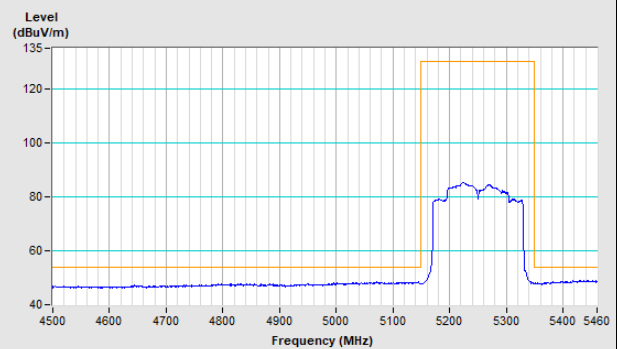
Horizontal (Average)



Vertical (Peak)

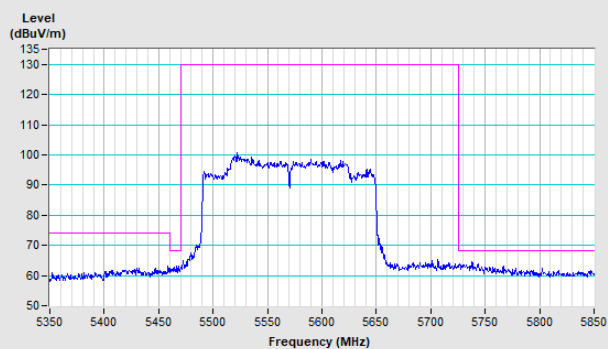


Vertical (Average)

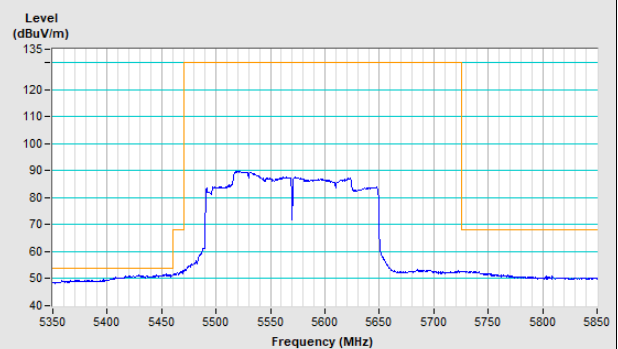


802.11ax (HE160) Channel 114

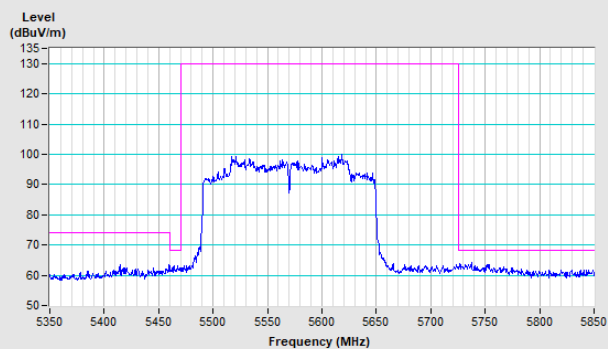
Horizontal (Peak)



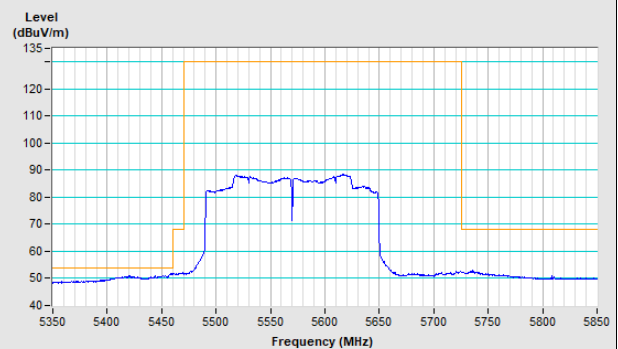
Horizontal (Average)



Vertical (Peak)



Vertical (Average)



5 Pictures of Test Arrangements

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

Appendix – Information of the Testing Laboratories

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

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

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Web Site: www.bureauveritas-adt.com

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

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