

FCC Test Report

Report No.: RFCDVB-WTW-P22100008-2

FCC ID: QYLAX211NG

Test Model: AX211NGW

Received Date: Oct. 11, 2022

Test Date: Nov. 01, 2022 ~ Feb. 01, 2023

Issued Date: Feb. 02, 2023

Applicant: Getac Technology Corporation.

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
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FCC Registration / 788550 / TW0003

Designation Number (1):

FCC Registration / 281270 / TW0032

Designation Number (2):



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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.....	8
3.2.1 Test Mode Applicability and Tested Channel Detail.....	10
3.3 Duty Cycle of Test Signal.....	12
3.4 Description of Support Units.....	13
3.4.1 Configuration of System under Test.....	13
3.5 General Description of Applied Standards and References.....	13
4 Test Types and Results	14
4.1 Radiated Emission and Bandedge Measurement.....	14
4.1.1 Limits of Radiated Emission and Bandedge Measurement.....	14
4.1.2 Test Instruments.....	15
4.1.3 Test Procedures.....	16
4.1.4 Deviation from Test Standard.....	16
4.1.5 Test Setup.....	17
4.1.6 EUT Operating Conditions.....	18
4.1.7 Test Results.....	19
4.2 Conducted Emission Measurement.....	65
4.2.1 Limits of Conducted Emission Measurement.....	65
4.2.2 Test Instruments.....	65
4.2.3 Test Procedures.....	66
4.2.4 Deviation from Test Standard.....	66
4.2.5 Test Setup.....	66
4.2.6 EUT Operating Conditions.....	66
4.2.7 Test Results.....	67
4.3 Transmit Power Measurement.....	69
4.3.1 Limits of Transmit Power Measurement.....	69
4.3.2 Test Setup.....	69
4.3.3 Test Instruments.....	69
4.3.4 Test Procedure.....	69
4.3.5 EUT Operating Conditions.....	69
4.3.6 Test Result.....	70
4.4 Contention Based Protocol Measurement.....	76
4.4.1 Limits of Contention Based Protocol Measurement.....	76
4.4.2 Test Setup.....	76
4.4.3 Test Instruments.....	76
4.4.4 Test Procedure.....	77
4.4.5 EUT Operating Condition.....	77
4.4.6 Test Results.....	78
5 Pictures of Test Arrangements	90
Annex A - Band Edge Measurement	91
Appendix – Information of the Testing Laboratories	95

Release Control Record


Issue No.	Description	Date Issued
RFCDVB-WTW-P22100008-2	Original release.	Feb. 02, 2023

1 Certificate of Conformity

Product: Wireless Module
Brand: Getac
Test Model: AX211NGW
Sample Status: Engineering sample
Applicant: Getac Technology Corporation.
Test Date: Nov. 01, 2022 ~ Feb. 01, 2023
Standards: 47 CFR FCC Part 15, Subpart E (Section 15.407)
ANSI C6310-2013

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 :  , **Date:** Feb. 02, 2023
Polly Chien / Specialist

Approved by :  , **Date:** Feb. 02, 2023
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 -14.00dB at 0.38600MHz.
15.407(b)(6)(9)	Radiated Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -0.6dB at 7125.00MHz.
15.407(b)(7)	In-Band Emission (Mask)	N/A	Refer to Note
15.407(a)(8)	Max Average Transmit Power	Pass	Meet the requirement of limit.
15.407(a)(10)	Emission Bandwidth Measurement	N/A	Refer to Note
15.407(a)(8)	Peak Power Spectral Density	N/A	Refer to Note
15.407 (d)(6)	Contention-based Protocol.	Pass	Meet the requirement of limit.
15.407(g)	Frequency Stability	N/A	Refer to Note
15.407(a)(7)(8)	Dual Client- Proper Power Adjustment	N/A	Device associates with low power indoor AP only.
15.407(d)(5)	Operational restrictions for 6 GHz U-NII devices	Pass	Declaration by applicant
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.TR38 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.

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	Specification	Expanded Uncertainty (k=2) (±)
AC Power Conducted Emissions	9 kHz ~ 30 MHz	2.79 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	3.00 dB
	30MHz ~ 200MHz	2.91 dB
	200MHz ~ 1000MHz	2.93 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	1.76 dB
	18 GHz ~ 40 GHz	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
Status of EUT	Engineering sample
Power Supply Rating	End-product: 19Vdc (from adapter) 11.1Vdc (from battery)
Modulation Type	1024QAM, 256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDMA
Modulation Technology	OFDMA
Transfer Rate	802.11ax: up to 2402Mbps
Operating Frequency	5955 ~ 6415MHz, 6435 ~ 6525MHz, 6525 ~ 6875MHz, 6875 ~ 7115MHz
Number of Channel	802.11ax (HE20): 59 802.11ax (HE40): 29 802.11ax (HE80): 14 802.11ax (HE160): 7
Output EIRP Power	5955 ~ 6415MHz: 19.275mW (EIRP: 15.77dBm / 37.757mW) 6435 ~ 6515MHz: 20.069mW (EIRP: 16.02dBm / 39.951mW) 6535 ~ 6855MHz: 18.540mW (EIRP: 15.67dBm / 36.907mW) 6875 ~ 7115MHz: 18.732mW (EIRP: 15.49dBm / 35.366mW)
Antenna Type	Refer to note
Antenna Connector	Refer to note
Accessory Device	Refer to note
Cable Supplied	NA

Note:

- 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)	

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

Modulation Mode	TX Function
802.11ax (HE20)	2TX
802.11ax (HE40)	2TX
802.11ax (HE80)	2TX
802.11ax (HE160)	2TX

3. 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.

4. 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.

5. 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 5925 ~ 6425MHz (U-NII-5 Band)

24 channels are provided for 802.11a, 802.11ax (HE20):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	5955 MHz	5	5975 MHz	9	5995 MHz	13	6015 MHz
17	6035 MHz	21	6055 MHz	25	6075 MHz	29	6095 MHz
33	6115 MHz	37	6135 MHz	41	6155 MHz	45	6175 MHz
49	6195 MHz	53	6215 MHz	57	6235 MHz	61	6255 MHz
65	6275 MHz	69	6295 MHz	73	6315 MHz	77	6335 MHz
81	6355 MHz	85	6375 MHz	89	6395 MHz	93	6415 MHz

12 channels are provided for 802.11ax (HE40):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
3	5965 MHz	11	6005 MHz	19	6045 MHz	27	6085 MHz
35	6125 MHz	43	6165 MHz	51	6205 MHz	59	6245 MHz
67	6285 MHz	75	6325 MHz	83	6365 MHz	91	6405 MHz

6 channel is provided for 802.11ax (HE80):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
7	5985 MHz	23	6065 MHz	39	6145 MHz	55	6225 MHz
71	6305 MHz	87	6385 MHz				

3 channels are provided for 802.11ax (HE160):

Channel	Frequency	Channel	Frequency	Channel	Frequency
15	6025 MHz	47	6185 MHz	79	6345 MHz

For 6425 ~ 6525MHz (U-NII-6 Band)

5 channels are provided for 802.11a, 802.11ax (HE20):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
97	6435 MHz	101	6455 MHz	105	6475 MHz	109	6495 MHz
113	6515 MHz						

3 channels are provided for 802.11ax (HE40):

Channel	Frequency	Channel	Frequency	Channel	Frequency
99	6445 MHz	107	6485 MHz	*115	6525 MHz

2 channel are provided for 802.11ax (HE80):

Channel	Frequency	Channel	Frequency
103	6465 MHz	*119	6545 MHz

1 channel is provided for 802.11ax (HE160):

Channel	Frequency
*111	6505 MHz

For 6525 ~ 6875MHz (U-NII-7 Band)

18 channels are provided for 802.11a, 802.11ax (HE20):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
117	6535 MHz	121	6555 MHz	125	6575 MHz	129	6595 MHz
133	6615 MHz	137	6635 MHz	141	6655 MHz	145	6675 MHz
149	6695 MHz	153	6715 MHz	157	6735 MHz	161	6755 MHz
165	6775 MHz	169	6795 MHz	173	6815 MHz	177	6835 MHz
181	6855 MHz	*185	6875 MHz				

9 channels are provided for 802.11ax (HE40):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
123	6565 MHz	131	6605 MHz	139	6645 MHz	147	6685 MHz
155	6725 MHz	163	6765 MHz	171	6805 MHz	179	6845 MHz
*187	6885 MHz						

4 channels are provided for 802.11ax (HE80):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
135	6625 MHz	151	6705 MHz	167	6785 MHz	*183	6865 MHz

2 channels are provided for 802.11ax (HE160):

Channel	Frequency	Channel	Frequency
143	6665 MHz	*175	6825 MHz

For 6875 ~ 7125MHz (U-NII-8 band):

12 channels are provided for 802.11a, 802.11ax (HE20):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
189	6895 MHz	193	6915 MHz	197	6935 MHz	201	6955 MHz
205	6975 MHz	209	6995 MHz	213	7015 MHz	217	7035 MHz
221	7055 MHz	225	7075 MHz	229	7095 MHz	233	7115 MHz

5 channels are provided for 802.11ax (HE40):

Channel	Frequency	Channel	Frequency	Channel	Frequency
195	6925 MHz	203	6965 MHz	211	7005 MHz
219	7045 MHz	227	7085 MHz		

2 channel is provided for 802.11ax (HE80):

Channel	Frequency	Channel	Frequency
199	6945 MHz	215	7025 MHz

1 channel is provided for 802.11ax (HE160):

Channel	Frequency
207	6985 MHz

Note: * mean this's straddle channel.

3.2.1 Test Mode Applicability and Tested Channel Detail

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

Where RE≥1G: Radiated Emission above 1GHz & Bandedge Measurement
 RE<1G: Radiated Emission below 1GHz
 PLC: Power Line Conducted Emission
 Power: Transmit Power Measurement
 CBP:Contention Based Protocol

Note: For radiated emission (below 1GHz) and power line conducted emission test items chosen the worst maximum fundamental emission level channel.

Radiated Emission Measurement (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.

Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate Parameter
802.11ax (HE20)	5955-6415	1 to 93	1, 45, 93	OFDMA	BPSK	HE0
	6435-6525	97 to 113	97, 105, 113	OFDMA	BPSK	HE0
	6525-6855	117 to 185	117, 149, 181	OFDMA	BPSK	HE0
	6875-7115	189 to 233	185, 209, 229, 233	OFDMA	BPSK	HE0
802.11ax (HE40)	5955-6415	3 to 91	3, 43, 91	OFDMA	BPSK	HE0
	6435-6525	99 to 115	99, 107, 115	OFDMA	BPSK	HE0
	6525-6855	123 to 187	123, 147, 155, 179	OFDMA	BPSK	HE0
	6875-7115	195 to 227	187, 211, 227	OFDMA	BPSK	HE0
802.11ax (HE80)	5955-6415	7 to 87	7, 39, 87	OFDMA	BPSK	HE0
	6435-6525	103 to 119	103, 119	OFDMA	BPSK	HE0
	6525-6855	135 to 183	135, 151, 167	OFDMA	BPSK	HE0
	6875-7115	199 to 215	183, 199, 215	OFDMA	BPSK	HE0
802.11ax (HE160)	5955-6415	15 to 79	15, 47, 79	OFDMA	BPSK	HE0
	6435-6525	111	111	OFDMA	BPSK	HE0
	6525-6855	143 to 175	143, 175	OFDMA	BPSK	HE0
	6875-7115	207	207	OFDMA	BPSK	HE0

Radiated Emission Measurement (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.

Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate Parameter
802.11ax (HE160)	5955-6415	15 to 79	111	OFDMA	BPSK	HE0
	6435-6525	111		OFDMA	BPSK	HE0
	6525-6855	143 to 175		OFDMA	BPSK	HE0
	6875-7115	207		OFDMA	BPSK	HE0

Power Line Conducted Emission Measurement:

- 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.

Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate Parameter
802.11ax (HE160)	5955-6415	15 to 79	111	OFDMA	BPSK	HE0
	6435-6525	111		OFDMA	BPSK	HE0
	6525-6855	143 to 175		OFDMA	BPSK	HE0
	6875-7115	207		OFDMA	BPSK	HE0

Transmit 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.

Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate Parameter
802.11ax (HE20)	5955-6415	1 to 93	1, 45, 93	OFDMA	BPSK	HE0
	6435-6525	97 to 113	97, 105, 113	OFDMA	BPSK	HE0
	6525-6855	117 to 185	117, 149, 181	OFDMA	BPSK	HE0
	6875-7115	189 to 233	185, 209, 233	OFDMA	BPSK	HE0
802.11ax (HE40)	5955-6415	3 to 91	3, 43, 91	OFDMA	BPSK	HE0
	6435-6525	99 to 115	99, 107	OFDMA	BPSK	HE0
	6525-6855	123 to 187	115, 123, 155, 179	OFDMA	BPSK	HE0
	6875-7115	195 to 227	187, 211, 227	OFDMA	BPSK	HE0
802.11ax (HE80)	5955-6415	7 to 87	7, 39, 87	OFDMA	BPSK	HE0
	6435-6525	103 to 119	103, 119	OFDMA	BPSK	HE0
	6525-6855	135 to 183	151, 183	OFDMA	BPSK	HE0
	6875-7115	199 to 215	199, 215	OFDMA	BPSK	HE0
802.11ax (HE160)	5955-6415	15 to 79	15, 47, 79	OFDMA	BPSK	HE0
	6435-6525	111	111	OFDMA	BPSK	HE0
	6525-6855	143 to 175	143, 175	OFDMA	BPSK	HE0
	6875-7115	207	207	OFDMA	BPSK	HE0

Contention Based Protocol Measurement:

- 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.

Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate Parameter
802.11ax (HE20)	5955-6415	1 to 93	45	OFDMA	BPSK	HE0
	6435-6525	97 to 113	105	OFDMA	BPSK	HE0
	6525-6855	117 to 185	149	OFDMA	BPSK	HE0
	6875-7115	189 to 233	209	OFDMA	BPSK	HE0
802.11ax (HE160)	5955-6415	15 to 79	47	OFDMA	BPSK	HE0
	6435-6525	111	111	OFDMA	BPSK	HE0
	6525-6855	143 to 175	143	OFDMA	BPSK	HE0
	6875-7115	207	207	OFDMA	BPSK	HE0

Test Condition:

Applicable to	Environmental Conditions	Input Power	Tested by
RE \geq 1G	21 deg. C, 73% RH, 23 deg. C, 67% RH	120Vac, 60Hz	Thomas Cheng, Adair Peng
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
CBP	23 deg. C, 64% RH	120Vac, 60Hz	Matthew Yang

3.3 Duty Cycle of Test Signal

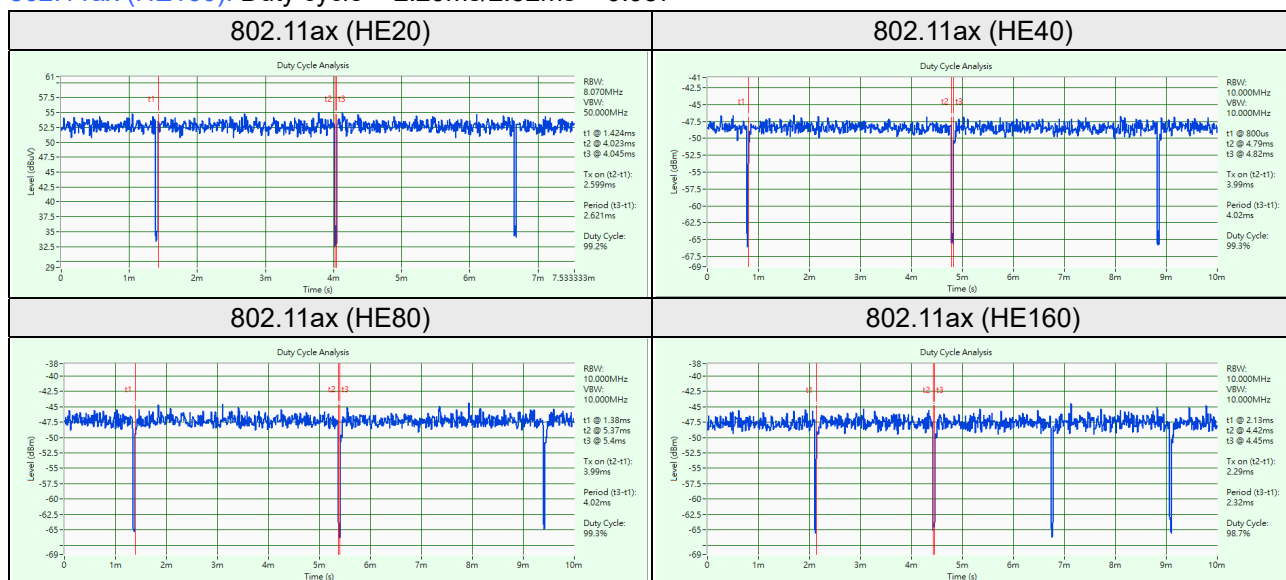
Duty cycle of test signal is $\geq 98\%$, duty factor is not required.

802.11ax (HE20): Duty cycle = 2.599ms/2.621ms = 0.992

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

802.11ax (HE80): Duty cycle = 3.99ms/4.02ms = 0.993

802.11ax (HE160): Duty cycle = 2.29ms/2.32ms = 0.987



3.4 Description of Support Units

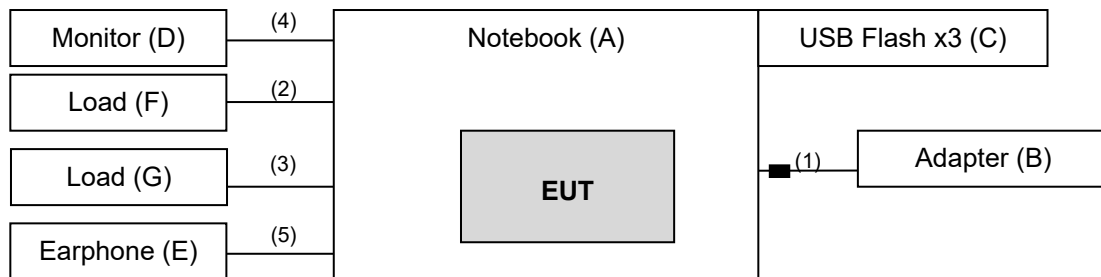
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

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 987594 D02 EMC Measurement v01r01

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

Frequencies (MHz)	EIRP Limit	Equivalent Field Strength at 3m
5925MHz > F > 7125MHz	Peak:-7 (dBm/MHz)	88.2(dBμV/m)
	Average: -27 (dBm/MHz)	68.2(dBμV/m)

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

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

4.1.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver Rohde & Schwarz	ESR3	102783	Dec. 21, 2021	Dec. 20, 2022
Spectrum Analyzer KEYSIGHT	N9020B	MY60110513	Dec. 24, 2021	Dec. 23, 2022
BILOG Antenna SCHWARZBECK	VULB9168	9168-1214	Oct. 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-(9 000+3000+1000)	201244+ 201232+ 210103	Jan. 17, 2022	Jan. 16, 2023
RF signal cable EMCI	EMCCFD400-NM-N M-(9000+300+500)	201251+ 201249+ 201248	Jan. 17, 2022	Jan. 16, 2023
RF signal cable EMCI	EMC101G-KM-KM- (5000+3000+2000)	201261+201258+ 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. 01 ~ 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:

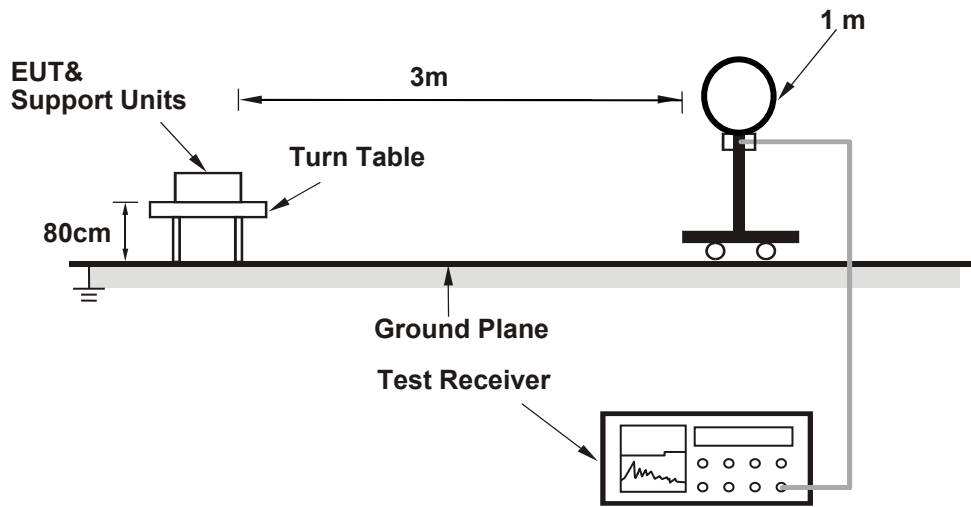
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
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

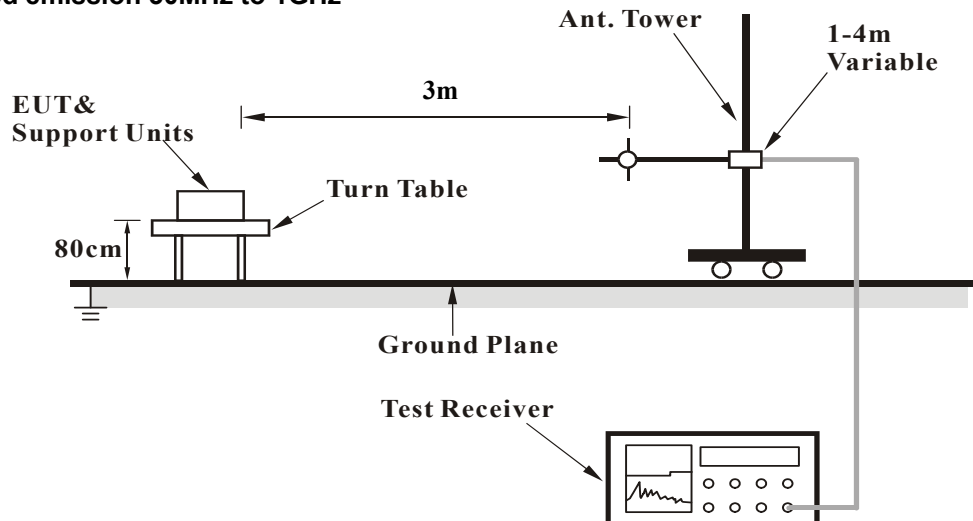
No deviation.

4.1.5 Test Setup

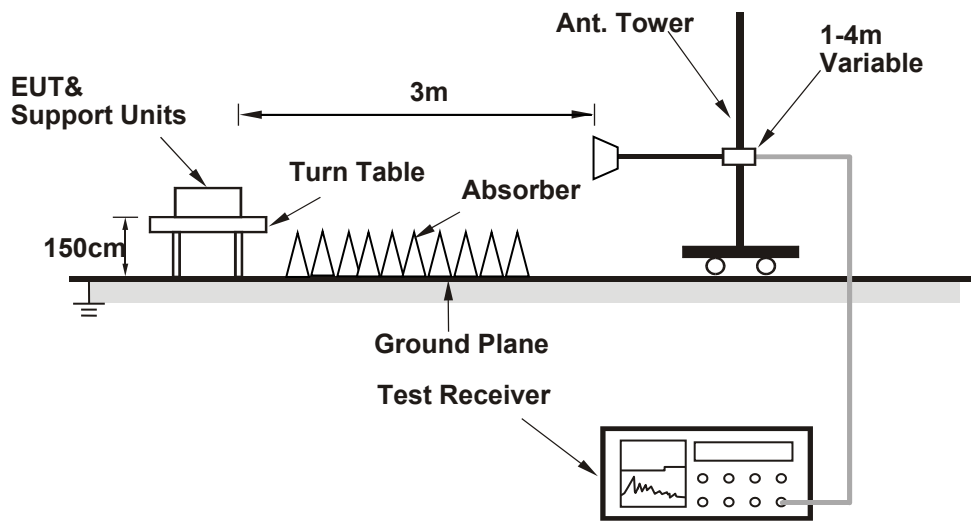
For Radiated emission below 30MHz



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

4.1.7 Test Results

Above 1GHz data:

RF Mode	TX 802.11ax (HE20)	Channel	CH 1 : 5955 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	#5925.00	56.2 PK	88.2	-32.0	1.75 H	77	65.7	-9.5
2	#5925.00	44.9 AV	68.2	-23.3	1.75 H	77	54.4	-9.5
3	*5955.00	93.7 PK			1.75 H	77	52.2	41.5
4	*5955.00	83.6 AV			1.75 H	77	42.1	41.5
5	11910.00	56.9 PK	74.0	-17.1	1.17 H	93	53.6	3.3
6	11910.00	46.5 AV	54.0	-7.5	1.17 H	93	43.2	3.3
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	#5925.00	55.8 PK	88.2	-32.4	1.66 V	177	65.3	-9.5
2	#5925.00	44.8 AV	68.2	-23.4	1.66 V	177	54.3	-9.5
3	*5955.00	92.9 PK			1.66 V	177	51.4	41.5
4	*5955.00	82.8 AV			1.66 V	177	41.3	41.5
5	11910.00	56.7 PK	74.0	-17.3	3.52 V	148	53.4	3.3
6	11910.00	46.3 AV	54.0	-7.7	3.52 V	148	43.0	3.3

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 802.11ax (HE20)	Channel	CH 45 : 6175 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	*6175.00	94.0 PK			1.82 H	286	50.4	43.6
2	*6175.00	83.8 AV			1.82 H	286	40.2	43.6
3	12350.00	57.8 PK	74.0	-16.2	3.30 H	45	54.2	3.6
4	12350.00	47.2 AV	54.0	-6.8	3.30 H	45	43.6	3.6

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	*6175.00	93.0 PK			1.71 V	175	49.4	43.6
2	*6175.00	82.9 AV			1.71 V	175	39.3	43.6
3	12350.00	56.9 PK	74.0	-17.1	2.97 V	323	53.3	3.6
4	12350.00	46.7 AV	54.0	-7.3	2.97 V	323	43.1	3.6

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.

RF Mode	TX 802.11ax (HE20)	Channel	CH 93 : 6415 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	*6415.00	93.4 PK			4.00 H	122	48.9	44.5
2	*6415.00	83.2 AV			4.00 H	122	38.7	44.5
3	#12830.00	59.0 PK	88.2	-29.2	2.80 H	217	54.5	4.5
4	#12830.00	48.6 AV	68.2	-19.6	2.80 H	217	44.1	4.5

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	*6415.00	92.4 PK			1.61 V	179	47.9	44.5
2	*6415.00	82.3 AV			1.61 V	179	37.8	44.5
3	#12830.00	58.4 PK	88.2	-29.8	1.28 V	52	53.9	4.5
4	#12830.00	48.1 AV	68.2	-20.1	1.28 V	52	43.6	4.5

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.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ax (HE20)	Channel	CH 97 : 6435 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	*6435.00	94.5 PK			3.37 H	360	49.8	44.7
2	*6435.00	84.3 AV			3.37 H	360	39.6	44.7
3	#12870.00	58.4 PK	88.2	-29.8	1.60 H	170	53.7	4.7
4	#12870.00	48.7 AV	68.2	-19.5	1.60 H	170	44.0	4.7

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	*6435.00	93.4 PK			1.75 V	182	48.7	44.7
2	*6435.00	83.3 AV			1.75 V	182	38.6	44.7
3	#12870.00	58.0 PK	88.2	-30.2	2.78 V	344	53.3	4.7
4	#12870.00	48.2 AV	68.2	-20.0	2.78 V	344	43.5	4.7

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 105 : 6475 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	*6475.00	94.2 PK			3.36 H	0	49.3	44.9
2	*6475.00	84.0 AV			3.36 H	0	39.1	44.9
3	#12950.00	58.4 PK	88.2	-29.8	2.95 H	139	53.8	4.6
4	#12950.00	48.8 AV	68.2	-19.4	2.95 H	139	44.2	4.6

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	*6475.00	93.3 PK			1.62 V	193	48.4	44.9
2	*6475.00	83.1 AV			1.62 V	193	38.2	44.9
3	#12950.00	58.2 PK	88.2	-30.0	1.45 V	208	53.6	4.6
4	#12950.00	48.5 AV	68.2	-19.7	1.45 V	208	43.9	4.6

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 113 : 6515 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	*6515.00	94.4 PK			3.54 H	327	49.3	45.1
2	*6515.00	84.2 AV			3.54 H	327	39.1	45.1
3	#13030.00	58.9 PK	88.2	-29.3	1.83 H	194	54.2	4.7
4	#13030.00	48.4 AV	68.2	-19.8	1.83 H	194	43.7	4.7

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	*6515.00	93.4 PK			1.69 V	175	48.3	45.1
2	*6515.00	83.3 AV			1.69 V	175	38.2	45.1
3	#13030.00	58.3 PK	88.2	-29.9	3.40 V	337	53.6	4.7
4	#13030.00	48.2 AV	68.2	-20.0	3.40 V	337	43.5	4.7

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 117 : 6535 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	*6535.00	93.8 PK			1.18 H	162	48.6	45.2
2	*6535.00	83.6 AV			1.18 H	162	38.4	45.2
3	#13070.00	59.0 PK	88.2	-29.2	1.86 H	329	54.4	4.6
4	#13070.00	48.5 AV	68.2	-19.7	1.86 H	329	43.9	4.6

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	*6535.00	92.7 PK			1.68 V	172	47.5	45.2
2	*6535.00	82.6 AV			1.68 V	172	37.4	45.2
3	#13070.00	58.5 PK	88.2	-29.7	1.10 V	319	53.9	4.6
4	#13070.00	48.1 AV	68.2	-20.1	1.10 V	319	43.5	4.6

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 149 : 6695 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	*6695.00	93.5 PK			1.17 H	5	48.3	45.2
2	*6695.00	83.3 AV			1.17 H	5	38.1	45.2
3	13390.00	60.9 PK	74.0	-13.1	1.22 H	209	54.6	6.3
4	13390.00	49.7 AV	54.0	-4.3	1.22 H	209	43.4	6.3

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	*6695.00	92.5 PK			1.67 V	180	47.3	45.2
2	*6695.00	82.4 AV			1.67 V	180	37.2	45.2
3	13390.00	60.1 PK	74.0	-13.9	1.65 V	227	53.8	6.3
4	13390.00	49.5 AV	54.0	-4.5	1.65 V	227	43.2	6.3

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.

RF Mode	TX 802.11ax (HE20)	Channel	CH 181 : 6855 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	*6855.00	93.6 PK			1.22 H	338	47.7	45.9
2	*6855.00	83.4 AV			1.22 H	338	37.5	45.9
3	#13710.00	61.1 PK	88.2	-27.1	1.15 H	152	54.4	6.7
4	#13710.00	50.8 AV	68.2	-17.4	1.15 H	152	44.1	6.7

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	*6855.00	92.5 PK			1.62 V	184	46.6	45.9
2	*6855.00	82.4 AV			1.62 V	184	36.5	45.9
3	#13710.00	60.4 PK	88.2	-27.8	3.04 V	210	53.7	6.7
4	#13710.00	50.5 AV	68.2	-17.7	3.04 V	210	43.8	6.7

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 185 : 6875 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	*6875.00	93.6 PK			1.33 H	14	47.5	46.1
2	*6875.00	83.4 AV			1.33 H	14	37.3	46.1
3	#13750.00	61.6 PK	88.2	-26.6	1.12 H	122	54.6	7.0
4	#13750.00	51.3 AV	68.2	-16.9	1.12 H	122	44.3	7.0

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	*6875.00	92.6 PK			1.70 V	196	46.5	46.1
2	*6875.00	82.5 AV			1.70 V	196	36.4	46.1
3	#13750.00	60.8 PK	88.2	-27.4	3.19 V	68	53.8	7.0
4	#13750.00	50.8 AV	68.2	-17.4	3.19 V	68	43.8	7.0

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 (HE20)	Channel	CH 209 : 6995 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	*6995.00	93.7 PK			1.24 H	13	47.1	46.6
2	*6995.00	83.5 AV			1.24 H	13	36.9	46.6
3	#13990.00	62.6 PK	88.2	-25.6	2.42 H	130	54.7	7.9
4	#13990.00	51.8 AV	68.2	-16.4	2.42 H	130	43.9	7.9

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	*6995.00	92.6 PK			1.70 V	182	46.0	46.6
2	*6995.00	82.5 AV			1.70 V	182	35.9	46.6
3	#13990.00	61.2 PK	88.2	-27.0	2.48 V	44	53.3	7.9
4	#13990.00	51.4 AV	68.2	-16.8	2.48 V	44	43.5	7.9

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 (HE20)	Channel	CH 229 : 7095 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	*7095.00	93.3 PK			1.26 H	16	45.7	47.6
2	*7095.00	83.1 AV			1.26 H	16	35.5	47.6
3	#14190.00	63.2 PK	88.2	-25.0	2.10 H	160	54.1	9.1
4	#14190.00	53.2 AV	68.2	-15.0	2.10 H	160	44.1	9.1

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	*7095.00	92.3 PK			1.60 V	165	44.7	47.6
2	*7095.00	82.2 AV			1.60 V	165	34.6	47.6
3	#14190.00	62.7 PK	88.2	-25.5	3.05 V	135	53.6	9.1
4	#14190.00	52.8 AV	68.2	-15.4	3.05 V	135	43.7	9.1

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 233 : 7115 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	*7115.00	89.8 PK			1.05 H	351	42.2	47.6
2	*7115.00	79.4 AV			1.05 H	351	31.8	47.6
3	#7125.00	79.4 PK	88.2	-8.8	1.05 H	351	82.3	-2.9
4	#7125.00	67.6 AV	68.2	-0.6	1.05 H	351	70.5	-2.9
5	#14230.00	63.5 PK	88.2	-24.7	1.06 H	69	54.3	9.2
6	#14230.00	53.0 AV	68.2	-15.2	1.06 H	69	43.8	9.2

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	*7115.00	88.9 PK			2.27 V	26	41.3	47.6
2	*7115.00	79.0 AV			2.27 V	26	31.4	47.6
3	#7125.00	61.6 PK	88.2	-26.6	2.27 V	26	64.5	-2.9
4	#7125.00	53.6 AV	68.2	-14.6	2.27 V	26	56.5	-2.9
5	#14230.00	62.7 PK	88.2	-25.5	3.33 V	192	53.5	9.2
6	#14230.00	52.4 AV	68.2	-15.8	3.33 V	192	43.2	9.2

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 3 : 5965 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	#5925.00	57.9 PK	88.2	-30.3	1.32 H	175	50.8	7.1
2	#5925.00	44.8 AV	68.2	-23.4	1.32 H	175	37.7	7.1
3	*5965.00	96.6 PK			1.32 H	175	55.4	41.2
4	*5965.00	82.8 AV			1.32 H	175	41.6	41.2
5	11930.00	57.3 PK	74.0	-16.7	1.16 H	104	40.6	16.7
6	11930.00	44.3 AV	54.0	-9.7	1.16 H	104	27.6	16.7

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	#5925.00	47.5 PK	88.2	-40.7	1.44 V	50	40.4	7.1
2	#5925.00	44.4 AV	68.2	-23.8	1.44 V	50	37.3	7.1
3	*5965.00	93.9 PK			1.44 V	50	52.7	41.2
4	*5965.00	81.4 AV			1.44 V	50	40.2	41.2
5	11930.00	57.1 PK	74.0	-16.9	3.55 V	146	40.4	16.7
6	11930.00	44.0 AV	54.0	-10.0	3.55 V	146	27.3	16.7

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 43 : 6165 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	*6165.00	95.4 PK			1.14 H	172	53.4	42.0
2	*6165.00	82.5 AV			1.14 H	172	40.5	42.0
3	12330.00	57.0 PK	74.0	-17.0	1.15 H	96	40.3	16.7
4	12330.00	44.2 AV	54.0	-9.8	1.15 H	96	27.5	16.7

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	*6165.00	94.2 PK			1.46 V	43	52.2	42.0
2	*6165.00	81.3 AV			1.46 V	43	39.3	42.0
3	12330.00	56.7 PK	74.0	-17.3	3.46 V	150	40.0	16.7
4	12330.00	43.8 AV	54.0	-10.2	3.46 V	150	27.1	16.7

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 (HE40)	Channel	CH 91 : 6405 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	*6405.00	97.4 PK			4.00 H	19	54.4	43.0
2	*6405.00	84.6 AV			4.00 H	19	41.6	43.0
3	#12810.00	58.6 PK	88.2	-29.6	1.15 H	119	40.9	17.7
4	#12810.00	45.5 AV	68.2	-22.7	1.15 H	119	27.8	17.7

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	*6405.00	95.5 PK			1.68 V	65	52.5	43.0
2	*6405.00	83.1 AV			1.68 V	65	40.1	43.0
3	#12810.00	58.3 PK	88.2	-29.9	3.49 V	138	40.6	17.7
4	#12810.00	45.2 AV	68.2	-23.0	3.49 V	138	27.5	17.7

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 99 : 6445 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	*6445.00	98.5 PK			4.00 H	62	55.2	43.3
2	*6445.00	85.4 AV			4.00 H	62	42.1	43.3
3	#12890.00	59.0 PK	88.2	-29.2	1.28 H	100	41.2	17.8
4	#12890.00	45.6 AV	68.2	-22.6	1.28 H	100	27.8	17.8

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	*6445.00	96.7 PK			1.68 V	72	53.4	43.3
2	*6445.00	83.8 AV			1.68 V	72	40.5	43.3
3	#12890.00	58.8 PK	88.2	-29.4	3.55 V	143	41.0	17.8
4	#12890.00	45.4 AV	68.2	-22.8	3.55 V	143	27.6	17.8

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 107 : 6485 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	*6485.00	98.2 PK			4.00 H	53	54.9	43.3
2	*6485.00	85.2 AV			4.00 H	53	41.9	43.3
3	#12970.00	58.8 PK	88.2	-29.4	1.24 H	103	40.8	18.0
4	#12970.00	46.2 AV	68.2	-22.0	1.24 H	103	28.2	18.0

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	*6485.00	96.1 PK			1.52 V	50	52.8	43.3
2	*6485.00	84.2 AV			1.52 V	50	40.9	43.3
3	#12970.00	58.6 PK	88.2	-29.6	3.49 V	144	40.6	18.0
4	#12970.00	45.5 AV	68.2	-22.7	3.49 V	144	27.5	18.0

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 115 : 6525 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	*6525.00	98.3 PK			4.00 H	54	55.1	43.2
2	*6525.00	85.0 AV			4.00 H	54	41.8	43.2
3	#13050.00	59.3 PK	88.2	-28.9	1.60 H	97	41.3	18.0
4	#13050.00	45.9 AV	68.2	-22.3	1.60 H	97	27.9	18.0

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	*6525.00	97.2 PK			1.43 V	51	54.0	43.2
2	*6525.00	84.4 AV			1.43 V	51	41.2	43.2
3	#13050.00	58.8 PK	88.2	-29.4	3.53 V	149	40.8	18.0
4	#13050.00	45.5 AV	68.2	-22.7	3.53 V	149	27.5	18.0

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 123 : 6565 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	*6565.00	98.1 PK			4.00 H	55	54.9	43.2
2	*6565.00	85.2 AV			4.00 H	55	42.0	43.2
3	#13130.00	59.0 PK	88.2	-29.2	1.17 H	104	40.9	18.1
4	#13130.00	46.0 AV	68.2	-22.2	1.17 H	104	27.9	18.1

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	*6565.00	96.6 PK			1.62 V	50	53.4	43.2
2	*6565.00	84.2 AV			1.62 V	50	41.0	43.2
3	#13130.00	58.7 PK	88.2	-29.5	3.55 V	145	40.6	18.1
4	#13130.00	45.5 AV	68.2	-22.7	3.55 V	145	27.4	18.1

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 147 : 6685 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	*6685.00	98.2 PK			3.99 H	53	54.4	43.8
2	*6685.00	85.4 AV			3.99 H	53	41.6	43.8
3	13370.00	59.8 PK	74.0	-14.2	1.14 H	100	40.8	19.0
4	13370.00	46.8 AV	54.0	-7.2	1.14 H	100	27.8	19.0

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	*6685.00	97.3 PK			1.55 V	58	53.5	43.8
2	*6685.00	84.9 AV			1.55 V	58	41.1	43.8
3	13370.00	59.6 PK	74.0	-14.4	3.56 V	147	40.6	19.0
4	13370.00	46.6 AV	54.0	-7.4	3.56 V	147	27.6	19.0

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.

RF Mode	TX 802.11ax (HE40)	Channel	CH 155 : 6725 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	*6725.00	98.3 PK			4.00 H	62	54.6	43.7
2	*6725.00	85.5 AV			4.00 H	62	41.8	43.7
3	#13450.00	60.1 PK	88.2	-28.1	1.19 H	102	40.8	19.3
4	#13450.00	47.0 AV	68.2	-21.2	1.19 H	102	27.7	19.3

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	*6725.00	97.0 PK			1.45 V	44	53.3	43.7
2	*6725.00	84.4 AV			1.45 V	44	40.7	43.7
3	#13450.00	59.7 PK	88.2	-28.5	3.55 V	144	40.4	19.3
4	#13450.00	46.7 AV	68.2	-21.5	3.55 V	144	27.4	19.3

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 802.11ax (HE40)	Channel	CH 179 : 6845 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	*6845.00	99.4 PK			4.00 H	52	55.1	44.3
2	*6845.00	86.3 AV			4.00 H	52	42.0	44.3
3	#13690.00	60.4 PK	88.2	-27.8	1.16 H	104	40.9	19.5
4	#13690.00	47.3 AV	68.2	-20.9	1.16 H	104	27.8	19.5

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	*6845.00	98.5 PK			1.55 V	49	54.2	44.3
2	*6845.00	84.7 AV			1.55 V	149	40.4	44.3
3	#13690.00	60.2 PK	88.2	-28.0	3.62 V	147	40.7	19.5
4	#13690.00	46.9 AV	68.2	-21.3	3.62 V	147	27.4	19.5

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.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ax (HE40)	Channel	CH 187 : 6885 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	*6885.00	97.4 PK			2.43 H	320	53.4	44.0
2	*6885.00	83.8 AV			2.43 H	320	39.8	44.0
3	#13770.00	61.3 PK	88.2	-26.9	1.18 H	106	41.5	19.8
4	#13770.00	47.7 AV	68.2	-20.5	1.18 H	106	27.9	19.8

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	*6885.00	96.3 PK			1.45 V	50	52.3	44.0
2	*6885.00	83.1 AV			1.45 V	50	39.1	44.0
3	#13770.00	60.7 PK	88.2	-27.5	3.57 V	154	40.9	19.8
4	#13770.00	47.4 AV	68.2	-20.8	3.57 V	154	27.6	19.8

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 211 : 7005 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	*7005.00	99.0 PK			2.39 H	320	54.3	44.7
2	*7005.00	86.0 AV			2.39 H	320	41.3	44.7
3	#14005.00	61.9 PK	88.2	-26.3	1.20 H	106	41.2	20.7
4	#14005.00	48.1 AV	68.2	-20.1	1.20 H	106	27.4	20.7

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	*7005.00	97.9 PK			1.50 V	47	53.2	44.7
2	*7005.00	85.2 AV			1.50 V	47	40.5	44.7
3	#14005.00	61.2 PK	88.2	-27.0	3.48 V	144	40.5	20.7
4	#14005.00	47.9 AV	68.2	-20.3	3.48 V	144	27.2	20.7

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 227 : 7085 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	*7085.00	99.3 PK			2.39 H	320	53.5	45.8
2	*7085.00	86.3 AV			2.39 H	320	40.5	45.8
3	#7125.00	62.2 PK	88.2	-26.0	2.39 H	320	51.3	10.9
4	#7125.00	48.8 AV	68.2	-19.4	2.39 H	320	37.9	10.9
5	#14170.00	62.2 PK	88.2	-26.0	1.13 H	108	40.9	21.3
6	#14170.00	49.2 AV	68.2	-19.0	1.13 H	108	27.9	21.3

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	*7085.00	97.6 PK			3.08 V	309	51.8	45.8
2	*7085.00	84.7 AV			3.08 V	309	38.9	45.8
3	#7125.00	61.8 PK	88.2	-26.4	3.08 V	309	50.9	10.9
4	#7125.00	48.6 AV	68.2	-19.6	3.08 V	309	37.7	10.9
5	#14170.00	61.9 PK	88.2	-26.3	3.55 V	149	40.6	21.3
6	#14170.00	48.9 AV	68.2	-19.3	3.55 V	149	27.6	21.3

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 802.11ax (HE80)	Channel	CH 7 : 5985 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	#5925.00	57.6 PK	88.2	-30.6	2.34 H	175	50.5	7.1
2	#5925.00	44.6 AV	68.2	-23.6	2.34 H	175	37.5	7.1
3	*5985.00	98.4 PK			2.34 H	175	57.2	41.2
4	*5985.00	85.1 AV			2.34 H	175	43.9	41.2
5	11970.00	57.9 PK	74.0	-16.1	1.14 H	99	41.2	16.7
6	11970.00	44.5 AV	54.0	-9.5	1.14 H	99	27.8	16.7

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	#5925.00	57.5 PK	88.2	-30.7	1.79 V	3	50.4	7.1
2	#5925.00	44.4 AV	68.2	-23.8	1.79 V	3	37.3	7.1
3	*5985.00	96.2 PK			1.79 V	3	55.0	41.2
4	*5985.00	82.9 AV			1.79 V	3	41.7	41.2
5	11970.00	57.0 PK	74.0	-17.0	3.57 V	155	40.3	16.7
6	11970.00	44.1 AV	54.0	-9.9	3.57 V	155	27.4	16.7

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 (HE80)	Channel	CH 39 : 6145 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	*6145.00	98.2 PK			2.36 H	175	56.3	41.9
2	*6145.00	85.4 AV			2.36 H	175	43.5	41.9
3	12290.00	58.0 PK	74.0	-16.0	1.16 H	100	41.1	16.9
4	12290.00	44.8 AV	54.0	-9.2	1.16 H	100	27.9	16.9

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	*6145.00	96.0 PK			1.72 V	2	54.1	41.9
2	*6145.00	83.4 AV			1.72 V	2	41.5	41.9
3	12290.00	57.7 PK	74.0	-16.3	3.56 V	148	40.8	16.9
4	12290.00	44.6 AV	54.0	-9.4	3.56 V	148	27.7	16.9

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.

RF Mode	TX 802.11ax (HE80)	Channel	CH 87 : 6385 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	*6385.00	99.4 PK			2.34 H	174	56.6	42.8
2	*6385.00	86.5 AV			2.34 H	174	43.7	42.8
3	#12770.00	58.4 PK	88.2	-29.8	1.15 H	106	40.9	17.5
4	#12770.00	45.3 AV	68.2	-22.9	1.15 H	106	27.8	17.5

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	*6385.00	96.6 PK			1.75 V	3	53.8	42.8
2	*6385.00	84.5 AV			1.75 V	3	41.7	42.8
3	#12770.00	58.1 PK	88.2	-30.1	3.55 V	153	40.6	17.5
4	#12770.00	44.9 AV	68.2	-23.3	3.55 V	153	27.4	17.5

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.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ax (HE80)	Channel	CH 103 : 6465 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	*6465.00	99.9 PK			3.89 H	168	56.5	43.4
2	*6465.00	87.0 AV			3.89 H	168	43.6	43.4
3	#12930.00	57.4 PK	88.2	-30.8	1.52 H	123	39.5	17.9
4	#12930.00	44.7 AV	68.2	-23.5	1.52 H	123	26.8	17.9

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	*6465.00	98.0 PK			1.60 V	117	54.6	43.4
2	*6465.00	85.2 AV			1.60 V	117	41.8	43.4
3	#12930.00	57.2 PK	88.2	-31.0	2.09 V	156	39.3	17.9
4	#12930.00	44.5 AV	68.2	-23.7	2.09 V	156	26.6	17.9

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 (HE80)	Channel	CH 119 : 6545 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	*6545.00	99.5 PK			3.96 H	174	56.4	43.1
2	*6545.00	86.6 AV			3.96 H	174	43.5	43.1
3	#13090.00	57.8 PK	88.2	-30.4	1.60 H	120	39.7	18.1
4	#13090.00	45.1 AV	68.2	-23.1	1.60 H	120	27.0	18.1

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	*6545.00	97.9 PK			1.69 V	120	54.8	43.1
2	*6545.00	85.1 AV			1.69 V	120	42.0	43.1
3	#13090.00	57.6 PK	88.2	-30.6	2.21 V	163	39.5	18.1
4	#13090.00	44.7 AV	68.2	-23.5	2.21 V	163	26.6	18.1

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 (HE80)	Channel	CH 135 : 6625 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	*6625.00	99.2 PK			3.87 H	169	55.6	43.6
2	*6625.00	86.3 AV			3.87 H	169	42.7	43.6
3	13250.00	58.4 PK	74.0	-15.6	1.58 H	129	39.9	18.5
4	13250.00	45.4 AV	54.0	-8.6	1.58 H	129	26.9	18.5

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	*6625.00	97.5 PK			1.72 V	119	53.9	43.6
2	*6625.00	84.6 AV			1.72 V	119	41.0	43.6
3	13250.00	58.1 PK	74.0	-15.9	2.28 V	152	39.6	18.5
4	13250.00	45.1 AV	54.0	-8.9	2.28 V	152	26.6	18.5

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 (HE80)	Channel	CH 151 : 6705 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	*6705.00	99.1 PK			3.90 H	165	55.3	43.8
2	*6705.00	86.2 AV			3.90 H	165	42.4	43.8
3	#13410.00	58.9 PK	88.2	-29.3	1.65 H	121	39.6	19.3
4	#13410.00	46.0 AV	68.2	-22.2	1.65 H	121	26.7	19.3

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	*6705.00	97.2 PK			1.71 V	111	53.4	43.8
2	*6705.00	84.3 AV			1.71 V	111	40.5	43.8
3	#13410.00	58.8 PK	88.2	-29.4	2.16 V	150	39.5	19.3
4	#13410.00	45.8 AV	68.2	-22.4	2.16 V	150	26.5	19.3

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 802.11ax (HE80)	Channel	CH 167 : 6785 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	*6785.00	99.0 PK			3.77 H	163	55.2	43.8
2	*6785.00	86.0 AV			3.77 H	163	42.2	43.8
3	#13570.00	59.4 PK	88.2	-28.8	1.61 H	129	39.5	19.9
4	#13570.00	46.4 AV	68.2	-21.8	1.61 H	129	26.5	19.9

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	*6785.00	97.3 PK			1.57 V	118	53.5	43.8
2	*6785.00	84.4 AV			1.57 V	118	40.6	43.8
3	#13570.00	58.8 PK	88.2	-29.4	2.01 V	169	38.9	19.9
4	#13570.00	45.8 AV	68.2	-22.4	2.01 V	169	25.9	19.9

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 (HE80)	Channel	CH 183 : 6865 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	*6865.00	99.3 PK			3.93 H	167	55.1	44.2
2	*6865.00	86.4 AV			3.93 H	167	42.2	44.2
3	#13730.00	59.2 PK	88.2	-29.0	1.71 H	125	39.7	19.5
4	#13730.00	46.1 AV	68.2	-22.1	1.71 H	125	26.6	19.5

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	*6865.00	97.5 PK			1.72 V	117	53.3	44.2
2	*6865.00	84.5 AV			1.72 V	117	40.3	44.2
3	#13730.00	59.0 PK	88.2	-29.2	2.18 V	152	39.5	19.5
4	#13730.00	46.0 AV	68.2	-22.2	2.18 V	152	26.5	19.5

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.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	TX 802.11ax (HE80)	Channel	CH 199 : 6945 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	*6945.00	99.9 PK			3.03 H	174	56.0	43.9
2	*6945.00	87.4 AV			3.03 H	174	43.5	43.9
3	#13890.00	60.3 PK	88.2	-27.9	1.85 H	120	39.9	20.4
4	#13890.00	47.1 AV	68.2	-21.1	1.85 H	120	26.7	20.4

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	*6945.00	98.4 PK			1.91 V	128	54.5	43.9
2	*6945.00	85.8 AV			1.91 V	128	41.9	43.9
3	#13890.00	60.0 PK	88.2	-28.2	2.28 V	151	39.6	20.4
4	#13890.00	46.8 AV	68.2	-21.4	2.28 V	151	26.4	20.4

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 (HE80)	Channel	CH 215 : 7025 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	*7025.00	99.8 PK			3.28 H	169	54.7	45.1
2	*7025.00	87.3 AV			3.28 H	169	42.2	45.1
3	#7125.00	62.4 PK	88.2	-25.8	3.28 H	169	51.5	10.9
4	#7125.00	48.9 AV	68.2	-19.3	3.28 H	169	38.0	10.9
5	#14050.00	60.6 PK	88.2	-27.6	1.77 H	125	39.7	20.9
6	#14050.00	47.5 AV	68.2	-20.7	1.77 H	125	26.6	20.9

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	*7025.00	98.0 PK			1.52 V	112	52.9	45.1
2	*7025.00	85.5 AV			1.52 V	112	40.4	45.1
3	#7125.00	61.9 PK	88.2	-26.3	1.52 V	112	51.0	10.9
4	#7125.00	48.8 AV	68.2	-19.4	1.52 V	112	37.9	10.9
5	#14050.00	60.5 PK	88.2	-27.7	2.03 V	152	39.6	20.9
6	#14050.00	47.4 AV	68.2	-20.8	2.03 V	152	26.5	20.9

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 15 : 6025 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	#5925.00	58.7 PK	88.2	-29.5	3.09 H	177	51.6	7.1
2	#5925.00	45.7 AV	68.2	-22.5	3.09 H	177	38.6	7.1
3	*6025.00	97.8 PK			3.09 H	177	56.4	41.4
4	*6025.00	85.0 AV			3.09 H	177	43.6	41.4
5	12050.00	58.0 PK	74.0	-16.0	1.82 H	121	41.2	16.8
6	12050.00	44.7 AV	54.0	-9.3	1.82 H	121	27.9	16.8

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	#5925.00	58.6 PK	88.2	-29.6	1.75 V	111	51.5	7.1
2	#5925.00	45.4 AV	68.2	-22.8	1.75 V	111	38.3	7.1
3	*6025.00	95.7 PK			1.75 V	111	54.3	41.4
4	*6025.00	83.0 AV			1.75 V	111	41.6	41.4
5	12050.00	57.6 PK	74.0	-16.4	2.35 V	166	40.8	16.8
6	12050.00	44.3 AV	54.0	-9.7	2.35 V	166	27.5	16.8

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 (HE160)	Channel	CH 47 : 6185 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	*6185.00	98.0 PK			3.23 H	169	56.0	42.0
2	*6185.00	85.2 AV			3.23 H	169	43.2	42.0
3	12370.00	58.1 PK	74.0	-15.9	1.77 H	128	41.5	16.6
4	12370.00	44.2 AV	54.0	-9.8	1.77 H	128	27.6	16.6

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	*6185.00	96.2 PK			1.81 V	125	54.2	42.0
2	*6185.00	83.4 AV			1.81 V	125	41.4	42.0
3	12370.00	57.8 PK	74.0	-16.2	2.27 V	159	41.2	16.6
4	12370.00	43.9 AV	54.0	-10.1	2.27 V	159	27.3	16.6

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.

RF Mode	TX 802.11ax (HE160)	Channel	CH 79 : 6345 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	*6345.00	98.1 PK			3.12 H	175	55.8	42.3
2	*6345.00	85.3 AV			3.12 H	175	43.0	42.3
3	12690.00	57.8 PK	74.0	-16.2	1.71 H	125	40.7	17.1
4	12690.00	44.3 AV	54.0	-9.7	1.71 H	125	27.2	17.1

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	*6345.00	96.3 PK			1.67 V	123	54.0	42.3
2	*6345.00	83.6 AV			1.67 V	123	41.3	42.3
3	12690.00	57.6 PK	74.0	-16.4	2.42 V	158	40.5	17.1
4	12690.00	44.1 AV	54.0	-9.9	2.42 V	158	27.0	17.1

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.

RF Mode	TX 802.11ax (HE160)	Channel	CH 111 : 6505 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	*6505.00	98.8 PK			3.25 H	167	55.5	43.3
2	*6505.00	85.9 AV			3.25 H	167	42.6	43.3
3	#13010.00	58.6 PK	88.2	-29.6	1.73 H	120	40.5	18.1
4	#13010.00	44.8 AV	68.2	-23.4	1.73 H	120	26.7	18.1

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	*6505.00	97.0 PK			1.63 V	119	53.7	43.3
2	*6505.00	84.2 AV			1.63 V	119	40.9	43.3
3	#13010.00	58.5 PK	88.2	-29.7	2.27 V	159	40.4	18.1
4	#13010.00	44.6 AV	68.2	-23.6	2.27 V	159	26.5	18.1

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 (HE160)	Channel	CH 143 : 6665 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	*6665.00	98.5 PK			3.37 H	170	54.7	43.8
2	*6665.00	85.6 AV			3.37 H	170	41.8	43.8
3	13330.00	59.0 PK	74.0	-15.0	1.77 H	123	40.2	18.8
4	13330.00	45.1 AV	54.0	-8.9	1.77 H	123	26.3	18.8

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	*6665.00	96.7 PK			1.60 V	118	52.9	43.8
2	*6665.00	83.8 AV			1.60 V	118	40.0	43.8
3	13330.00	58.8 PK	74.0	-15.2	2.21 V	165	40.0	18.8
4	13330.00	45.0 AV	54.0	-9.0	2.21 V	165	26.2	18.8

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.

RF Mode	TX 802.11ax (HE160)	Channel	CH 175 : 6825 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	*6825.00	98.3 PK			3.45 H	164	54.2	44.1
2	*6825.00	85.4 AV			3.45 H	164	41.3	44.1
3	#13650.00	59.6 PK	88.2	-28.6	1.81 H	125	39.9	19.7
4	#13650.00	46.0 AV	68.2	-22.2	1.81 H	125	26.3	19.7

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	*6825.00	96.4 PK			1.63 V	121	52.3	44.1
2	*6825.00	83.6 AV			1.63 V	121	39.5	44.1
3	#13650.00	59.4 PK	88.2	-28.8	2.42 V	155	39.7	19.7
4	#13650.00	45.8 AV	68.2	-22.4	2.42 V	155	26.1	19.7

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 (HE160)	Channel	CH 207 : 6985 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	*6985.00	98.6 PK			3.14 H	194	54.2	44.4
2	*6985.00	85.7 AV			3.14 H	194	41.3	44.4
3	#7125.00	65.1 PK	88.2	-23.1	3.14 H	194	54.2	10.9
4	#7125.00	51.6 AV	68.2	-16.6	3.14 H	194	40.7	10.9
5	#13970.00	60.5 PK	88.2	-27.7	1.65 H	127	39.9	20.6
6	#13970.00	46.8 AV	68.2	-21.4	1.65 H	127	26.2	20.6

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	*6985.00	95.7 PK			1.80 V	118	51.3	44.4
2	*6985.00	83.3 AV			1.80 V	118	38.9	44.4
3	#7125.00	63.8 PK	88.2	-24.4	1.80 V	118	52.9	10.9
4	#7125.00	51.1 AV	68.2	-17.1	1.80 V	118	40.2	10.9
5	#13970.00	60.4 PK	88.2	-27.8	2.29 V	161	39.8	20.6
6	#13970.00	46.6 AV	68.2	-21.6	2.29 V	161	26.0	20.6

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.

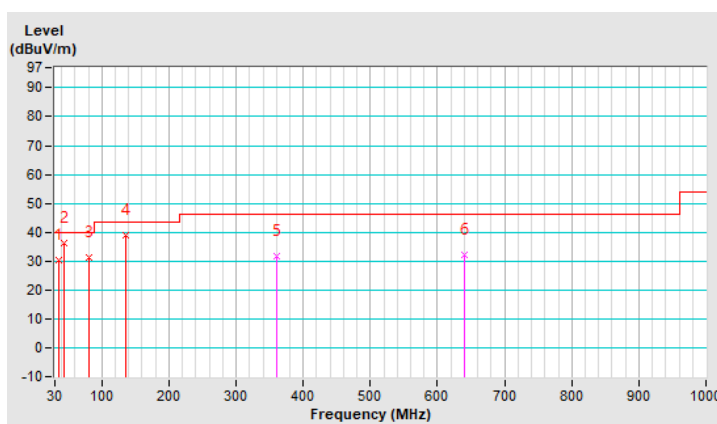
Below 1GHz Worst-Case Data:

RF Mode	TX 802.11ax (HE160)	Channel	CH 111 : 6505 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	35.66	30.2 QP	40.0	-9.8	1.00 H	205	40.5	-10.3
2	44.04	36.2 QP	40.0	-3.8	1.00 H	229	45.6	-9.4
3	80.01	31.2 QP	40.0	-8.8	1.00 H	321	44.8	-13.6
4	136.00	39.0 QP	43.5	-4.5	1.48 H	13	48.7	-9.7
5	359.80	31.7 QP	46.0	-14.3	1.00 H	243	37.6	-5.9
6	640.13	32.0 QP	46.0	-14.0	1.00 H	6	31.5	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. Margin value = Emission Level – Limit value.
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
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.

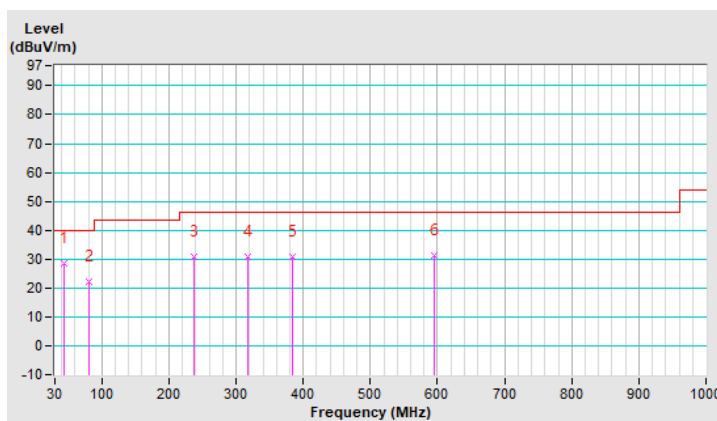


RF Mode	TX 802.11ax (HE160)	Channel	CH 111 : 6505 MHz
Frequency Range	30MHz ~ 1GHz	Detector Function	Quasi-Peak (QP)

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	44.55	28.7 QP	40.0	-11.3	1.01 V	13	38.1	-9.4
2	81.41	22.4 QP	40.0	-17.6	1.01 V	13	36.3	-13.9
3	237.58	30.7 QP	46.0	-15.3	1.01 V	42	40.4	-9.7
4	317.12	31.0 QP	46.0	-15.0	1.51 V	9	37.5	-6.5
5	383.08	30.9 QP	46.0	-15.1	1.01 V	109	36.1	-5.2
6	595.51	31.2 QP	46.0	-14.8	1.51 V	3	31.8	-0.6

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 of frequency range 30MHz~1000MHz.
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

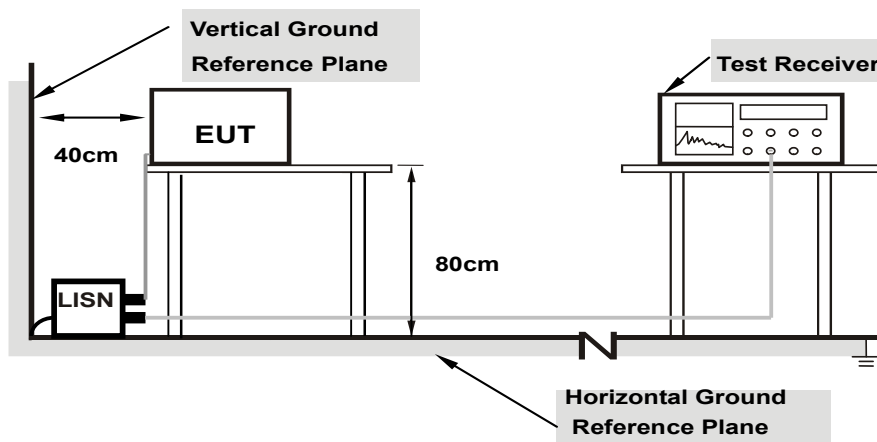
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance 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:

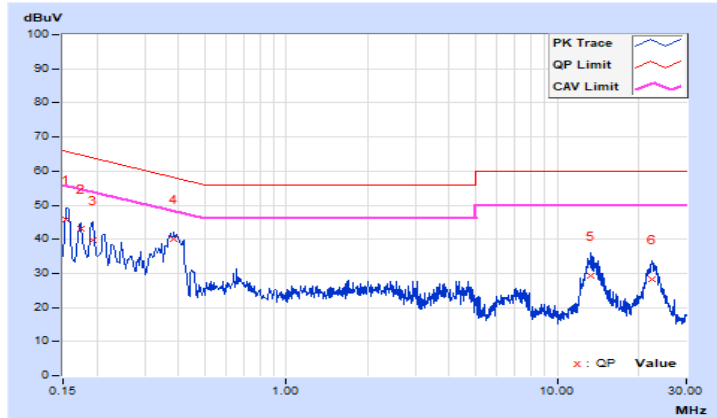
802.11ax (HE160)

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	0.15400	10.12	35.69	23.87	45.81	33.99	65.78
2	0.17384	10.13	32.91	23.02	43.04	33.15	64.77	54.77	-21.73	-21.62
3	0.19316	10.14	29.66	18.67	39.80	28.81	63.90	53.90	-24.10	-25.09
4	0.38600	10.16	30.03	23.99	40.19	34.15	58.15	48.15	-17.96	-14.00
5	13.36600	10.34	18.91	10.67	29.25	21.01	60.00	50.00	-30.75	-28.99
6	22.30600	10.36	18.05	10.87	28.41	21.23	60.00	50.00	-31.59	-28.77

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.

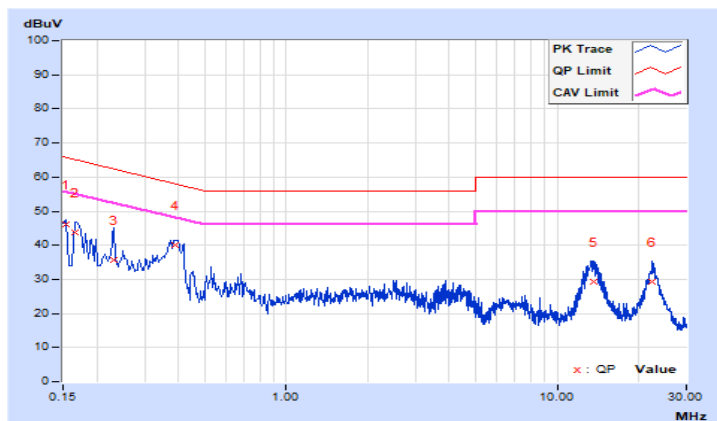


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
-------	-------------	-------------------	--------------------------------

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	0.15400	10.13	35.97	24.31	46.10	34.44	65.78
2	0.16600	10.14	33.64	21.82	43.78	31.96	65.16	55.16	-21.38	-23.20
3	0.23000	10.15	25.53	16.81	35.68	26.96	62.45	52.45	-26.77	-25.49
4	0.38725	10.17	29.85	23.59	40.02	33.76	58.12	48.12	-18.10	-14.36
5	13.72200	10.44	18.95	10.01	29.39	20.45	60.00	50.00	-30.61	-29.55
6	22.45000	10.50	18.64	11.74	29.14	22.24	60.00	50.00	-30.86	-27.76

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

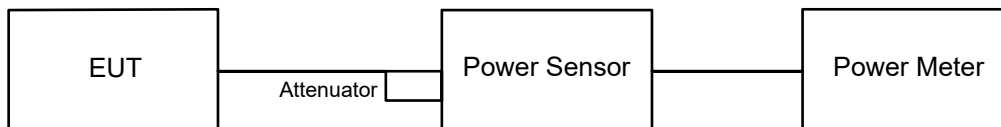
Operation Band	EUT Category	Limit
		Max Average Power
U-NII-5 U-NII-6 U-NII-7 U-NII-8	Client Devices (controlled of an indoor AP)	EIRP 24 dBm

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



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

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. Duty factor is not added to measured value.

4.3.5 EUT Operating Conditions

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

4.3.6 Test Result

Chain 0

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)	Average Power (mW)	Max. Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Pass / Fail
1	5955	2.831	4.52	2.92	5.545	7.44	24	Pass
45	6175	2.529	4.03	2.92	4.954	6.95	24	Pass
93	6415	2.559	4.08	2.92	5.013	7.00	24	Pass
97	6435	3.013	4.79	1.48	4.236	6.27	24	Pass
105	6475	3.119	4.94	1.48	4.385	6.42	24	Pass
113	6515	2.979	4.74	1.48	4.189	6.22	24	Pass
117	6535	2.564	4.09	2.29	4.344	6.38	24	Pass
149	6695	2.871	4.58	2.29	4.864	6.87	24	Pass
181	6855	2.483	3.95	2.29	4.207	6.24	24	Pass
185	6875	2.742	4.38	2.29	4.646	6.67	24	Pass
209	6995	2.754	4.40	2.29	4.666	6.69	24	Pass
233	7115	1.050	0.21	2.29	1.779	2.50	24	Pass

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)	Average Power (mW)	Max. Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Pass / Fail
3	5965	5.164	7.13	2.92	10.115	10.05	24	Pass
43	6165	5.200	7.16	2.92	10.186	10.08	24	Pass
91	6405	5.702	7.56	2.92	11.169	10.48	24	Pass
99	6445	5.984	7.77	1.48	8.414	9.25	24	Pass
107	6485	6.138	7.88	1.48	8.630	9.36	24	Pass
115	6525	6.053	7.82	2.29	10.256	10.11	24	Pass
123	6565	5.984	7.77	2.29	10.139	10.06	24	Pass
155	6725	5.470	7.38	2.29	9.268	9.67	24	Pass
179	6845	5.370	7.30	2.29	9.099	9.59	24	Pass
187	6885	5.546	7.44	2.29	9.397	9.73	24	Pass
211	7005	5.636	7.51	2.29	9.549	9.80	24	Pass
227	7085	5.741	7.59	2.29	9.727	9.88	24	Pass

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)	Average Power (mW)	Max. Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Pass / Fail
7	5985	9.931	9.97	2.92	19.453	12.89	24	Pass
39	6145	10.046	10.02	2.92	19.679	12.94	24	Pass
87	6385	9.528	9.79	2.92	18.664	12.71	24	Pass
103	6465	10.889	10.37	1.48	15.31	11.85	24	Pass
119	6545	10.839	10.35	2.29	18.365	12.64	24	Pass
151	6705	9.616	9.83	2.29	16.293	12.12	24	Pass
183	6865	9.908	9.96	2.29	16.787	12.25	24	Pass
199	6945	11.015	10.42	2.29	18.663	12.71	24	Pass
215	7025	9.616	9.83	2.29	16.293	12.12	24	Pass

802.11ax (HE160)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)	Average Power (mW)	Max. Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Pass / Fail
15	6025	19.275	12.85	2.92	37.757	15.77	24	Pass
47	6185	18.664	12.71	2.92	36.56	15.63	24	Pass
79	6345	18.365	12.64	2.92	35.974	15.56	24	Pass
111	6505	19.815	12.97	1.48	27.861	14.45	24	Pass
143	6665	17.258	12.37	2.29	29.241	14.66	24	Pass
175	6825	18.578	12.69	2.29	31.477	14.98	24	Pass
207	6985	19.055	12.80	2.29	32.286	15.09	24	Pass

Chain 1

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)	Average Power (mW)	Max. Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Pass / Fail
1	5955	2.767	4.42	0.56	3.148	4.98	24	Pass
45	6175	2.825	4.51	0.56	3.214	5.07	24	Pass
93	6415	2.78	4.44	0.56	3.163	5.00	24	Pass
97	6435	3.041	4.83	2.99	6.054	7.82	24	Pass
105	6475	2.917	4.65	2.99	5.807	7.64	24	Pass
113	6515	2.858	4.56	2.99	5.689	7.55	24	Pass
117	6535	2.773	4.43	2.99	5.520	7.42	24	Pass
149	6695	2.636	4.21	2.99	5.247	7.20	24	Pass
181	6855	3.141	4.97	2.99	6.253	7.96	24	Pass
185	6875	3.133	4.96	2.99	6.237	7.95	24	Pass
209	6995	3.126	4.95	2.76	5.902	7.71	24	Pass
233	7115	1.148	0.60	2.76	2.167	3.36	24	Pass

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)	Average Power (mW)	Max. Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Pass / Fail
3	5965	6.194	7.92	0.56	7.046	8.48	24	Pass
43	6165	5.834	7.66	0.56	6.637	8.22	24	Pass
91	6405	5.984	7.77	0.56	6.808	8.33	24	Pass
99	6445	6.237	7.95	2.99	12.416	10.94	24	Pass
107	6485	5.929	7.73	2.99	11.803	10.72	24	Pass
115	6525	5.861	7.68	2.99	11.667	10.67	24	Pass
123	6565	5.689	7.55	2.99	11.325	10.54	24	Pass
155	6725	5.649	7.52	2.99	11.245	10.51	24	Pass
179	6845	5.598	7.48	2.99	11.144	10.47	24	Pass
187	6885	5.861	7.68	2.76	11.066	10.44	24	Pass
211	7005	5.916	7.72	2.76	11.169	10.48	24	Pass
227	7085	6.295	7.99	2.76	11.885	10.75	24	Pass

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)	Average Power (mW)	Max. Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Pass / Fail
7	5985	10.069	10.03	0.56	11.455	10.59	24	Pass
39	6145	10.280	10.12	0.56	11.695	10.68	24	Pass
87	6385	9.750	9.89	0.56	11.092	10.45	24	Pass
103	6465	10.691	10.29	2.99	21.282	13.28	24	Pass
119	6545	10.617	10.26	2.99	21.135	13.25	24	Pass
151	6705	9.484	9.77	2.99	18.880	12.76	24	Pass
183	6865	10.116	10.05	2.99	20.138	13.04	24	Pass
199	6945	11.041	10.43	2.76	20.845	13.19	24	Pass
215	7025	10.740	10.31	2.76	20.277	13.07	24	Pass

802.11ax (HE160)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)	Average Power (mW)	Max. Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Pass / Fail
15	6025	18.535	12.68	0.56	21.086	13.24	24	Pass
47	6185	17.498	12.43	0.56	19.906	12.99	24	Pass
79	6345	17.140	12.34	0.56	19.499	12.90	24	Pass
111	6505	19.588	12.92	2.99	38.993	15.91	24	Pass
143	6665	17.783	12.50	2.99	35.400	15.49	24	Pass
175	6825	18.535	12.68	2.99	36.897	15.67	24	Pass
207	6985	19.055	12.80	2.76	35.976	15.56	24	Pass

MIMO

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Max. Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
1	5955	1.03	1.00	2.527	4.03	2.92	4.950	6.95	24	Pass
45	6175	1.12	1.09	2.579	4.11	2.92	5.052	7.03	24	Pass
93	6415	0.79	0.78	2.396	3.79	2.92	4.693	6.71	24	Pass
97	6435	2.01	1.94	3.152	4.99	2.99	6.275	7.98	24	Pass
105	6475	1.75	1.69	2.972	4.73	2.99	5.916	7.72	24	Pass
113	6515	1.97	1.89	3.119	4.94	2.99	6.209	7.93	24	Pass
117	6535	1.21	1.25	2.655	4.24	2.99	5.285	7.23	24	Pass
149	6695	0.99	0.88	2.481	3.95	2.99	4.939	6.94	24	Pass
181	6855	1.15	1.06	2.580	4.12	2.99	5.136	7.11	24	Pass
185	6875	1.08	1.21	2.604	4.16	2.99	5.184	7.15	24	Pass
209	6995	1.35	1.30	2.714	4.34	2.76	5.124	7.10	24	Pass
233	7115	-2.25	-2.33	1.181	0.72	2.76	2.229	3.48	24	Pass

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Max. Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
3	5965	3.93	3.93	4.943	6.94	2.92	9.683	9.86	24	Pass
43	6165	3.85	3.75	4.798	6.81	2.92	9.399	9.73	24	Pass
91	6405	4.04	4.24	5.190	7.15	2.92	10.166	10.07	24	Pass
99	6445	4.74	4.59	5.856	7.68	2.99	11.657	10.67	24	Pass
107	6485	4.90	4.74	6.069	7.83	2.99	12.081	10.82	24	Pass
115	6525	5.01	4.97	6.310	8.00	2.99	12.561	10.99	24	Pass
123	6565	4.98	4.93	6.259	7.97	2.99	12.460	10.96	24	Pass
155	6725	3.90	3.84	4.876	6.88	2.99	9.707	9.87	24	Pass
179	6845	3.93	3.89	4.921	6.92	2.99	9.796	9.91	24	Pass
187	6885	4.47	4.56	5.657	7.53	2.76	10.680	10.29	24	Pass
211	7005	4.61	4.53	5.729	7.58	2.76	10.816	10.34	24	Pass
227	7085	4.75	4.57	5.850	7.67	2.76	11.045	10.43	24	Pass

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Max. Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
7	5985	6.99	6.86	9.853	9.94	2.92	19.3	12.86	24	Pass
39	6145	6.69	6.70	9.344	9.71	2.92	18.303	12.63	24	Pass
87	6385	6.78	6.67	9.409	9.74	2.92	18.431	12.66	24	Pass
103	6465	7.23	7.27	10.618	10.26	2.99	21.137	13.25	24	Pass
119	6545	7.11	7.19	10.376	10.16	2.99	20.655	13.15	24	Pass
151	6705	6.77	6.85	9.595	9.82	2.99	19.101	12.81	24	Pass
183	6865	6.87	6.75	9.596	9.82	2.99	19.103	12.81	24	Pass
199	6945	7.30	7.24	10.667	10.28	2.76	20.139	13.04	24	Pass
215	7025	7.07	7.10	10.222	10.10	2.76	19.299	12.86	24	Pass

802.11ax (HE160)

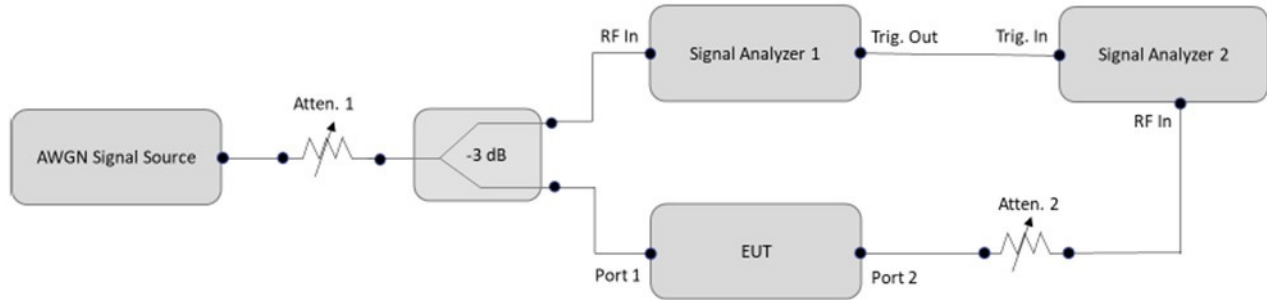
Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Max. Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Pass / Fail
		Chain 0	Chain 1							
15	6025	9.56	9.69	18.348	12.64	2.92	35.941	15.56	24	Pass
47	6185	9.61	9.75	18.582	12.69	2.92	36.399	15.61	24	Pass
79	6345	9.67	9.80	18.818	12.75	2.92	36.862	15.67	24	Pass
111	6505	10.03	10.00	20.069	13.03	2.99	39.951	16.02	24	Pass
143	6665	9.59	9.75	18.540	12.68	2.99	36.907	15.67	24	Pass
175	6825	9.64	9.66	18.451	12.66	2.99	36.730	15.65	24	Pass
207	6985	9.79	9.64	18.732	12.73	2.76	35.366	15.49	24	Pass

4.4 Contention Based Protocol Measurement

4.4.1 Limits of Contention Based Protocol Measurement

Unlicensed indoor low-power devices must detect co-channel radio frequency power that is at least -62 dBm (The threshold is referenced to a 0 dBi antenna gain.) or lower. Additionally, indoor low-power devices must detect co-channel energy with 90% or greater certainty.

4.4.2 Test Setup



4.4.3 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer R&S	FSW	102023	Nov. 08, 2022	Nov. 07, 2023
Spectrum Analyzer R&S	FSV40	101516	Mar. 07, 2022	Mar. 06, 2023
MXG X-Series RF Vector Signal Generator Agilent	N5182B	MY53050430	Dec. 29, 2022	Dec. 28, 2023
N5182BU KEYSIGHT	N5182BX07	MY59360198	Oct.14, 2022	Oct. 13, 2023
Power Splitter/combiner Mini-Circuits	ZFRSC-123-S+	F698501347_01	Jan. 26, 2022	Jan. 25, 2023

- Note:
1. The test was performed in Femtocell room.
 2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 3. Tested date: Jan. 23 ~ Feb. 01, 2023

4.4.4 Test Procedure

- a. Set the signal analyzer center frequency to the nominal EUT channel center frequency. The span range of the signal analyzer shall be between two times and five times the OBW of the EUT. Connect the output port of the EUT to the signal analyzer 2. Ensure that the attenuator 2 provides enough attenuation to not overload the signal analyzer 2 receiver.
- b. Monitoring the signal analyzer 2, verify the EUT is operating and transmitting with the parameters (set as following section 4.7.5 EUT operating condition).
- c. Determine number of times detection threshold test as following table,

If	Number of Tests	Placement of Incumbent Transmission
$BW_{EUT} \leq BW_{Inc}$	Once	Same as EUT transmission
$BW_{Inc} < BW_{EUT} \leq 2x BW_{Inc}$	Once	Contained within BW_{EUT}
$2x BW_{Inc} < BW_{EUT} \leq 4x BW_{Inc}$	Twice. (Incumbent transmission is contained within BW_{EUT})	Closely to the lower edge and upper edge of the EUT Channel
$BW_{EUT} > 4x BW_{Inc}$	Three times	Closely to the lower edge ,in the middle and upper edge of the EUT Channel

- d. Using an AWGN signal source, generate (but do not transmit, i.e., RF OFF) a 10 MHz-wide AWGN signal. Use step c table to determine the center frequency of the 10 MHz AWGN signal relative to the EUT's channel bandwidth and center frequency.
- e. Set the AWGN signal power to an extremely low level (more than 20 dB below the -62 dBm threshold). Connect the AWGN signal source, via a 3-dB splitter, to the signal analyzer 1 and the EUT.
- f. Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer 1.
- g. Monitor the signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.
- h. (Including all losses in the RF paths) Determine and record the AWGN signal power level (at the EUT's antenna port) at which the EUT ceased transmission. Repeat the procedure at least 10 times to verify the EUT can detect an AWGN signal with 90% (or better) level of certainty.
- i. Refer to step c table to determine number of times the detection threshold testing needs to be repeated. If testing is required more than once, then go back to step d, choose a different center frequency for the AWGN signal and repeat the process.

4.4.5 EUT Operating Condition

Set the EUT to transmit with a constant duty cycle and relative operating parameters which including power level, operating frequency, modulation and bandwidth.

4.4.6 Test Results

UNII Band 5:

Operation Mode	Channel Bandwidth (MHz)	Channel Number	Channel Freq. (MHz)	Injected Signal (AWGN)		Antenna Gain (dBi)	Path Loss (dB)	Adjusted Power (dBi)	Detection Limit	EUT TX Status
				Freq. (MHz)	Power (dBm)					
802.11ax	20	45	6175	6175	-70	-1.18	0	-68.82	-62	OFF
					-72	-1.18	0	-70.82	-62	Minimal
					-83.18	-1.18	0	-82	-62	ON
	160	47	6185	6110	-72	-1.18	0	-70.82	-62	OFF
					-74	-1.18	0	-72.82	-62	Minimal
					-83.18	-1.18	0	-82	-62	ON
				6185	-68	-1.18	0	-66.82	-62	OFF
					-71	-1.18	0	-69.82	-62	Minimal
					-83.18	-1.18	0	-82	-62	ON
				6260	-66	-1.18	0	-64.82	-62	OFF
					-69	-1.18	0	-67.82	-62	Minimal
					-83.18	-1.18	0	-82	-62	ON

Note: Adjusted Power = Injected Signal (AWGN) Power - Antenna Gain + Path Loss

*Antenna gain values include all the applicable path losses.

Contention Based Protocol Detection Probability															
Operation Mode	Channel Bandwidth (MHz)	AWGN Signal Freq. (MHz)	#01	#02	#03	#04	#05	#06	#07	#08	#09	#10	Detection Probability	Detection Limit	Test Result
802.11ax	20	6175	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
	160	6110	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
		6185	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
		6260	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass

UNII Band 6:

Operation Mode	Channel Bandwidth (MHz)	Channel Number	Channel Freq. (MHz)	Injected Signal (AWGN)		Antenna Gain (dBi)	Path Loss (dB)	Adjusted Power (dBi)	Detection Limit	EUT TX Status
				Freq. (MHz)	Power (dBm)					
802.11ax	20	105	6475	6475	-70	-0.48	0	-69.52	-62	OFF
					-74	-0.48	0	-73.52	-62	Minimal
					-82.48	-0.48	0	-82	-62	ON
	160	111	6505	6430	-70	-0.48	0	-69.52	-62	OFF
					-74	-0.48	0	-73.52	-62	Minimal
					-82.48	-0.48	0	-82	-62	ON
				6505	-68	-0.48	0	-67.52	-62	OFF
					-72	-0.48	0	-71.52	-62	Minimal
					-82.48	-0.48	0	-82	-62	ON
				6580	-66	-0.48	0	-65.52	-62	OFF
					-70	-0.48	0	-69.52	-62	Minimal
					-82.48	-0.48	0	-82	-62	ON

Note: Adjusted Power = Injected Signal (AWGN) Power - Antenna Gain + Path Loss

*Antenna gain values include all the applicable path losses.

UNII Band 6 (Radio3 6G CH3)

Contention Based Protocol Detection Probability															
Operation Mode	Channel Bandwidth (MHz)	AWGN Signal Freq. (MHz)	#01	#02	#03	#04	#05	#06	#07	#08	#09	#10	Detection Probability	Detection Limit	Test Result
802.11ax	20	6475	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
	160	6430	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
		6505	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
		6580	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass

UNII Band 7:

Operation Mode	Channel Bandwidth (MHz)	Channel Number	Channel Freq. (MHz)	Injected Signal (AWGN)		Antenna Gain (dBi)	Path Loss (dB)	Adjusted Power (dBi)	Detection Limit	EUT TX Status
				Freq. (MHz)	Power (dBm)					
802.11ax	20	149	6695	6695	-68	0.57	0	-68.57	-62	OFF
					-72	0.57	0	-72.57	-62	Minimal
					-81.43	0.57	0	-82	-62	ON
	160	143	6665	6590	-68	0.57	0	-68.57	-62	OFF
					-70	0.57	0	-70.57	-62	Minimal
					-81.43	0.57	0	-82	-62	ON
				6665	-70	0.57	0	-70.57	-62	OFF
					-74	0.57	0	-74.57	-62	Minimal
					-81.43	0.57	0	-82	-62	ON
				6740	-70	0.57	0	-70.57	-62	OFF
					-74	0.57	0	-74.57	-62	Minimal
					-81.43	0.57	0	-82	-62	ON

Note: Adjusted Power = Injected Signal (AWGN) Power - Antenna Gain + Path Loss

*Antenna gain values include all the applicable path losses.

UNII Band 7 (Radio3 6G CH3)

Contention Based Protocol Detection Probability															
Operation Mode	Channel Bandwidth (MHz)	AWGN Signal Freq. (MHz)	#01	#02	#03	#04	#05	#06	#07	#08	#09	#10	Detection Probability	Detection Limit	Test Result
802.11ax	20	6695	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
	160	6590	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
		6665	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
		6740	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass

UNII Band 8:

Operation Mode	Channel Bandwidth (MHz)	Channel Number	Channel Freq. (MHz)	Injected Signal (AWGN)		Antenna Gain (dBi)	Path Loss (dB)	Adjusted Power (dBi)	Detection Limit	EUT TX Status
				Freq. (MHz)	Power (dBm)					
802.11ax	20	209	6995	6995	-68	1.37	0	-69.37	-62	OFF
					-73	1.37	0	-74.37	-62	Minimal
					-80.63	1.37	0	-82	-62	ON
	160	207	6985	6910	-66	1.37	0	-67.37	-62	OFF
					-70	1.37	0	-71.37	-62	Minimal
					-80.63	1.37	0	-82	-62	ON
				6985	-68	1.37	0	-69.37	-62	OFF
					-72	1.37	0	-73.37	-62	Minimal
					-80.63	1.37	0	-82	-62	ON
				7060	-70	1.37	0	-71.37	-62	OFF
					-72	1.37	0	-73.37	-62	Minimal
					-80.63	1.37	0	-82	-62	ON

Note: Adjusted Power = Injected Signal (AWGN) Power - Antenna Gain + Path Loss

*Antenna gain values include all the applicable path losses.

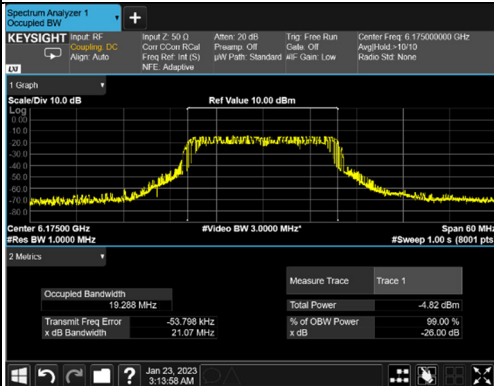
UNII Band 8 (Radio3 6G CH3)

Contention Based Protocol Detection Probability															
Operation Mode	Channel Bandwidth (MHz)	AWGN Signal Freq. (MHz)	#01	#02	#03	#04	#05	#06	#07	#08	#09	#10	Detection Probability	Detection Limit	Test Result
802.11ax	20	6995	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
	160	6910	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
		6985	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
		7060	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass

For U-NII-5 band

Plots of EUT Tx waveform

802.11ax (HE20) / CH 45

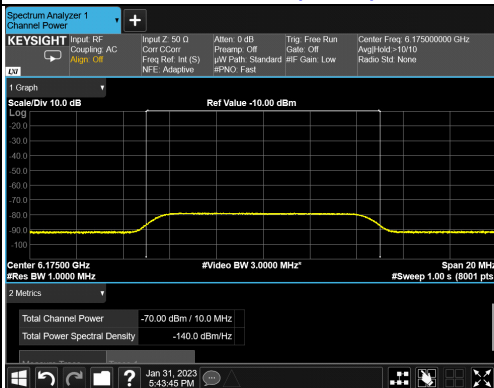


802.11ax (HE160) / CH 47

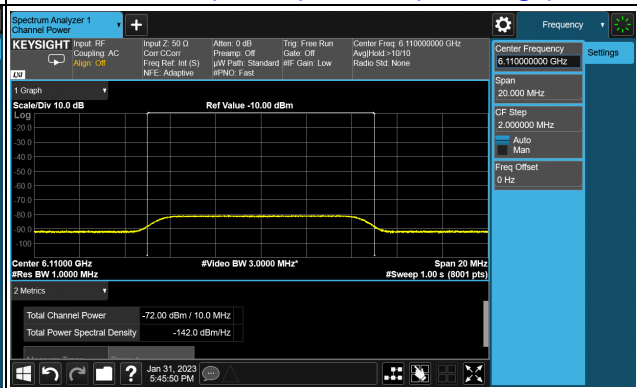


Plots of Incumbent signal (AWGN) Level

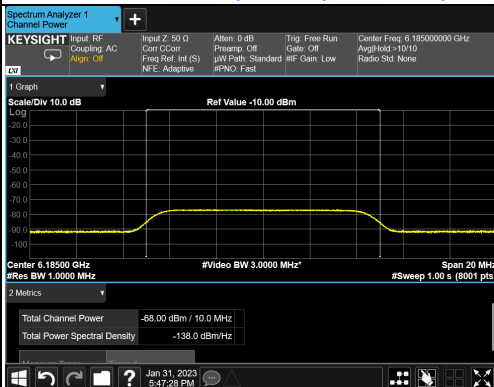
802.11ax (HE20) / CH 45



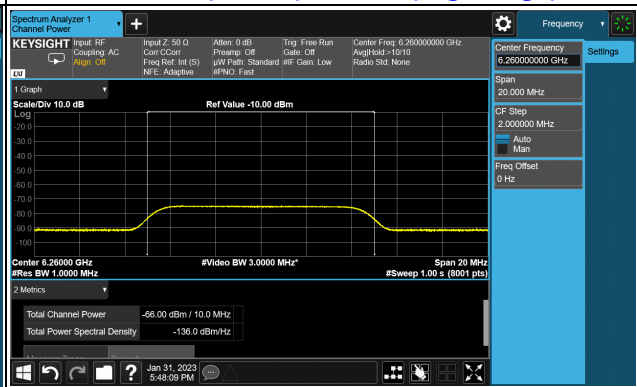
802.11ax (HE160) / CH 47 (Low Edge)



802.11ax (HE160) / CH 47 (Middle)

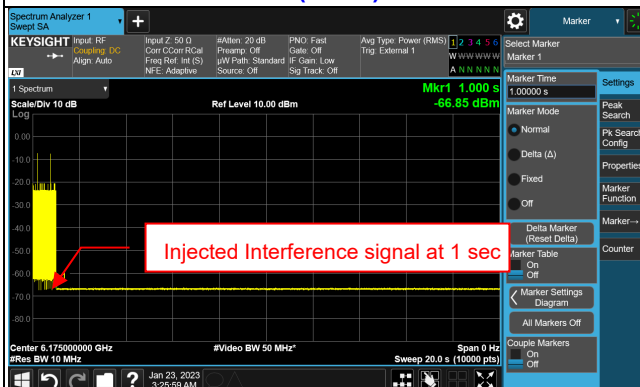


802.11ax (HE160) / CH 47 (High Edge)

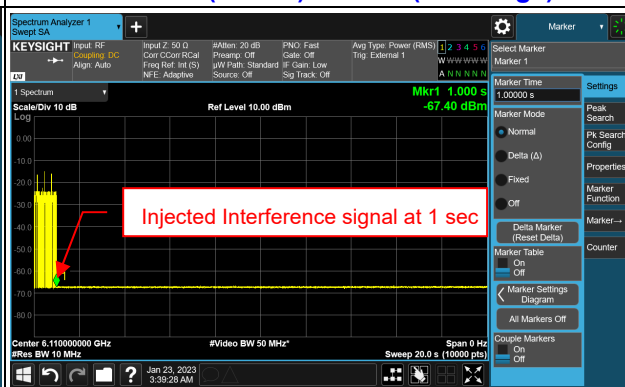


Plots of EUT ceased transmission in the time domain

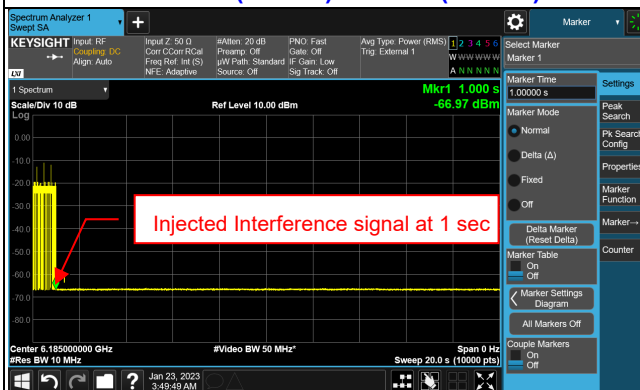
802.11ax (HE20) / CH 45



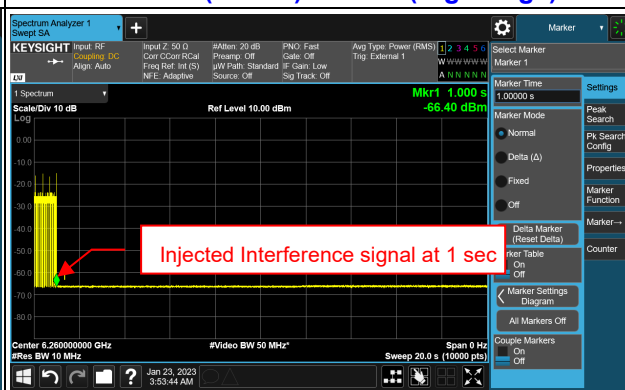
802.11ax (HE160) / CH 47 (Low Edge)



802.11ax (HE160) / CH 47 (Middle)



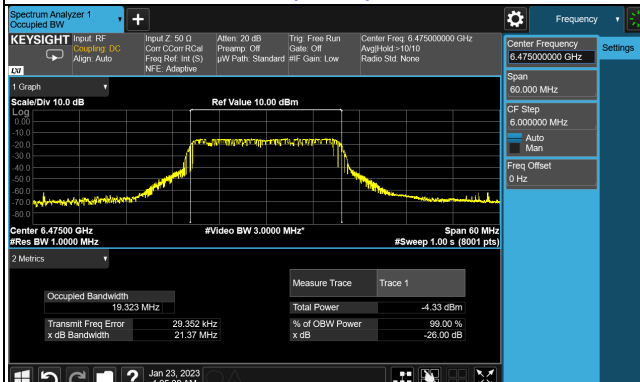
802.11ax (HE160) / CH 47 (High Edge)



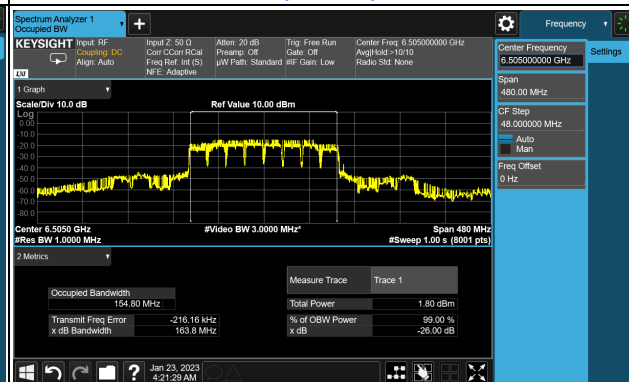
For U-NII-6 band

Plots of EUT Tx waveform

802.11ax (HE20) / CH 105

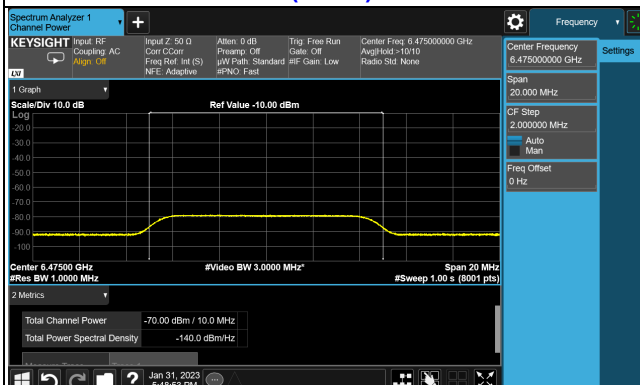


802.11ax (HE160) / CH 111

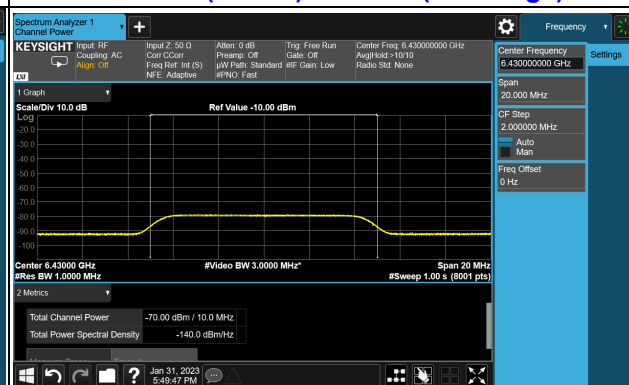


Plots of Incumbent signal (AWGN) Level

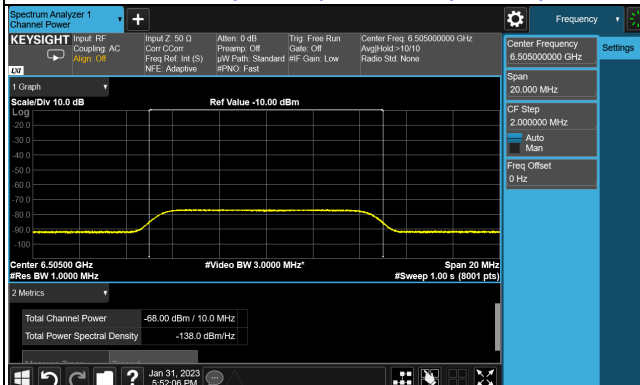
802.11ax (HE20) / CH 105



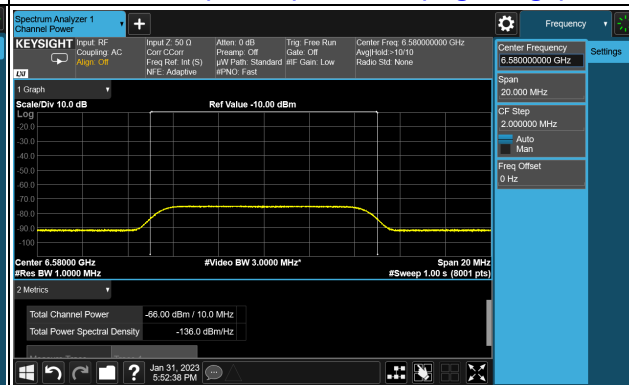
802.11ax (HE160) / CH 111 (Low Edge)



802.11ax (HE160) / CH 111 (Middle)

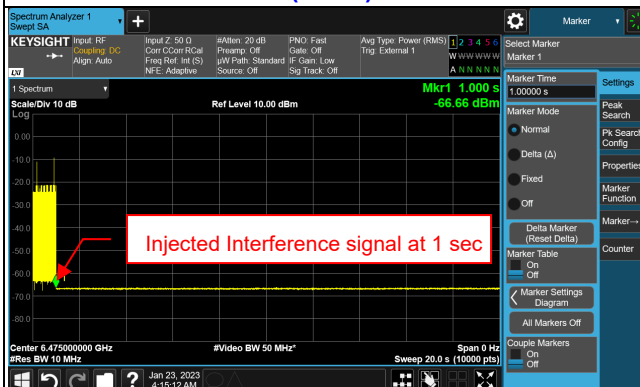


802.11ax (HE160) / CH 111 (High Edge)

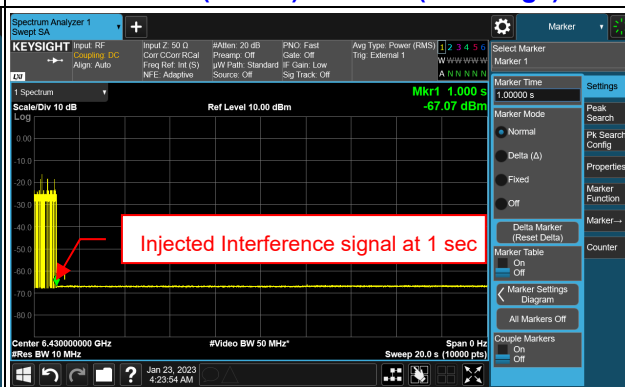


Plots of EUT ceased transmission in the time domain

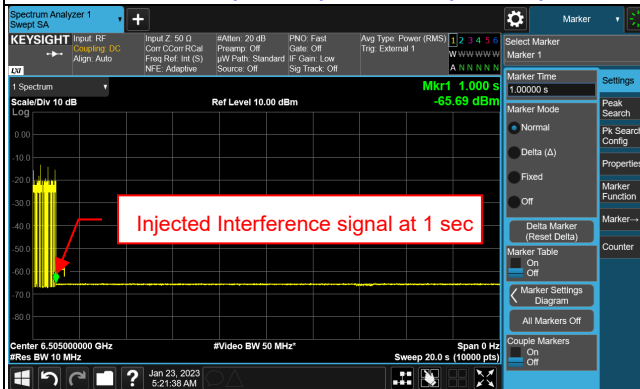
802.11ax (HE20) / CH 105



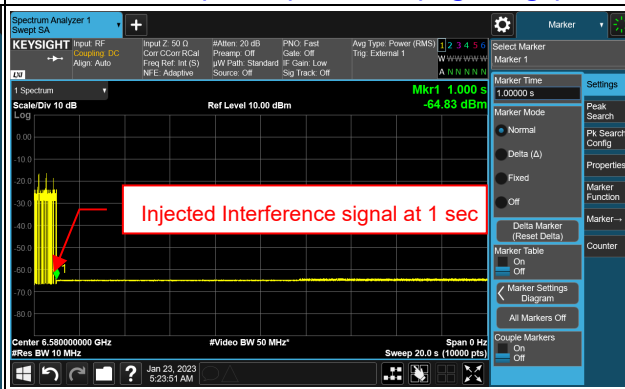
802.11ax (HE160) / CH 111 (Low Edge)



802.11ax (HE160) / CH 111 (Middle)



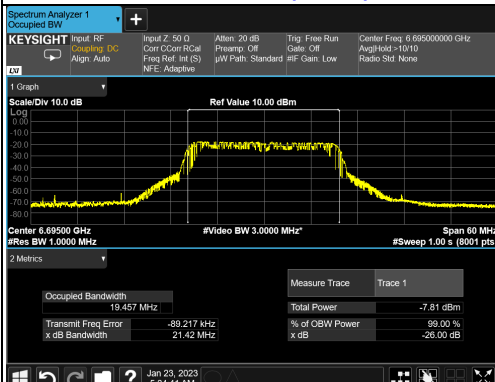
802.11ax (HE160) / CH 111 (High Edge)



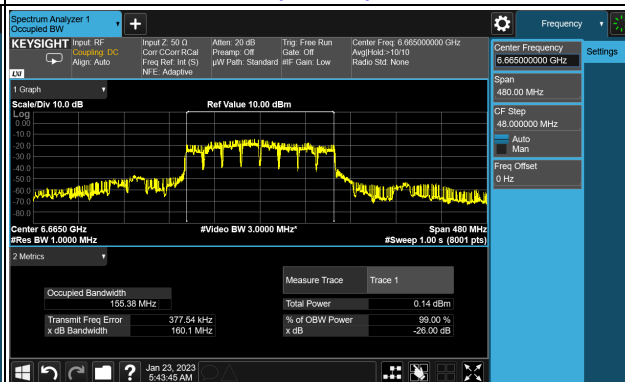
For U-NII-7 band

Plots of EUT Tx waveform

802.11ax (HE20) / CH 149

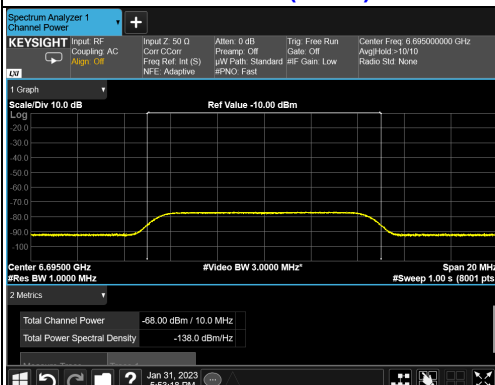


802.11ax (HE160) / CH 143

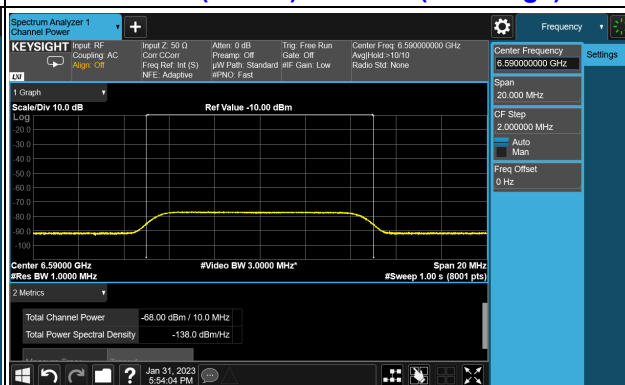


Plots of Incumbent signal (AWGN) Level

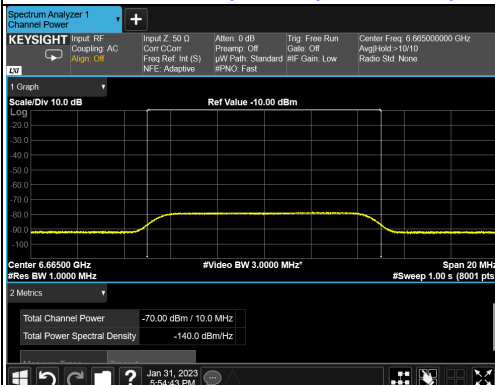
802.11ax (HE20) / CH 149



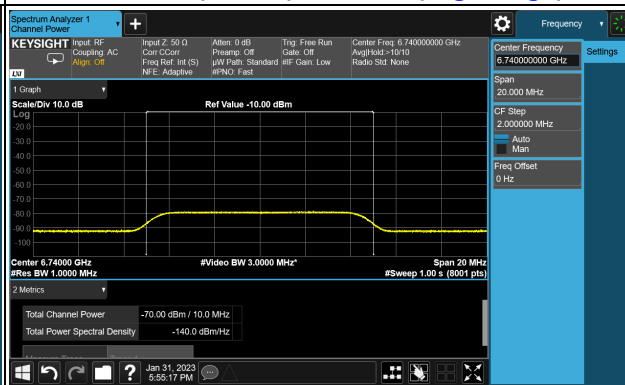
802.11ax (HE160) / CH 143 (Low Edge)



802.11ax (HE160) / CH 143 (Middle)

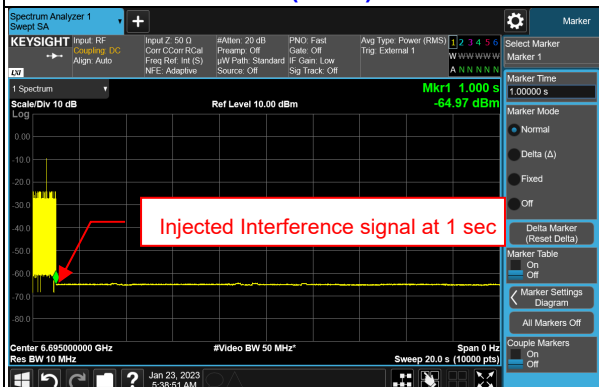


802.11ax (HE160) / CH 143 (High Edge)

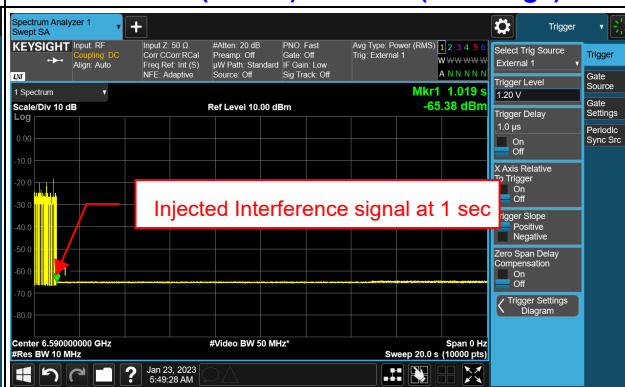


Plots of EUT ceased transmission in the time domain

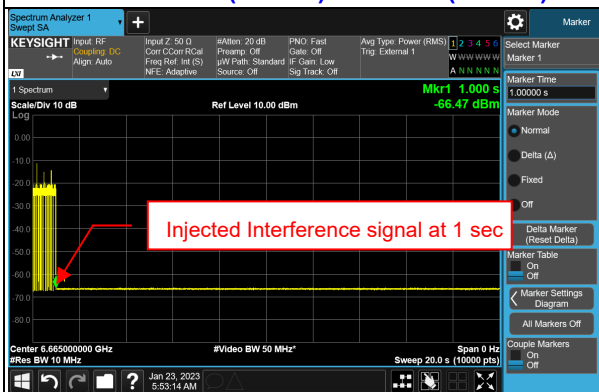
802.11ax (HE20) / CH 149



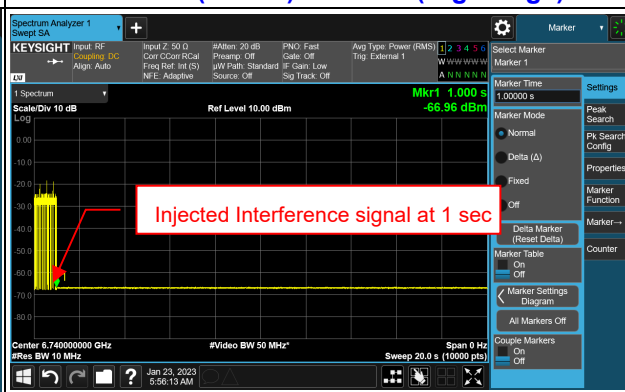
802.11ax (HE160) / CH 143 (Low Edge)



802.11ax (HE160) / CH 143 (Middle)

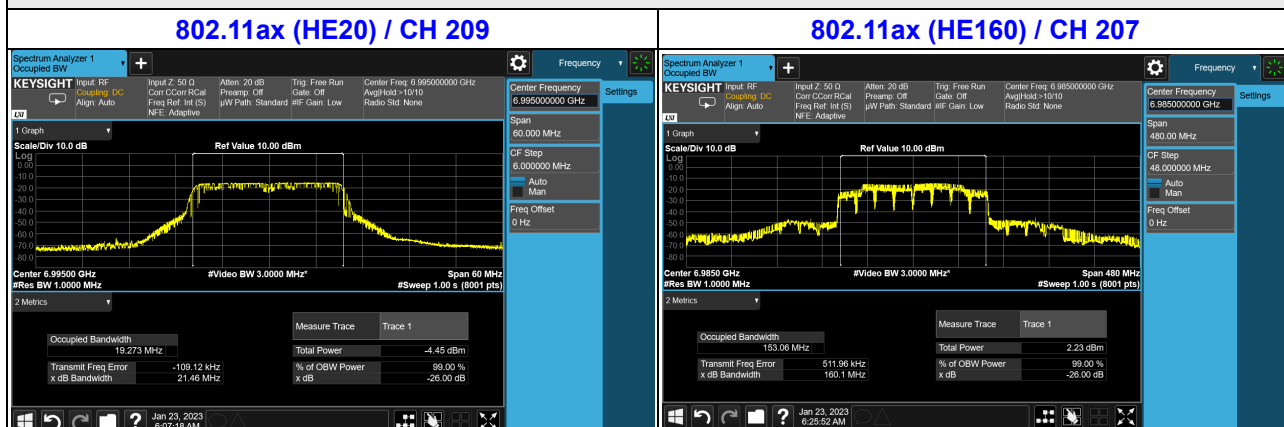


802.11ax (HE160) / CH 143 (High Edge)

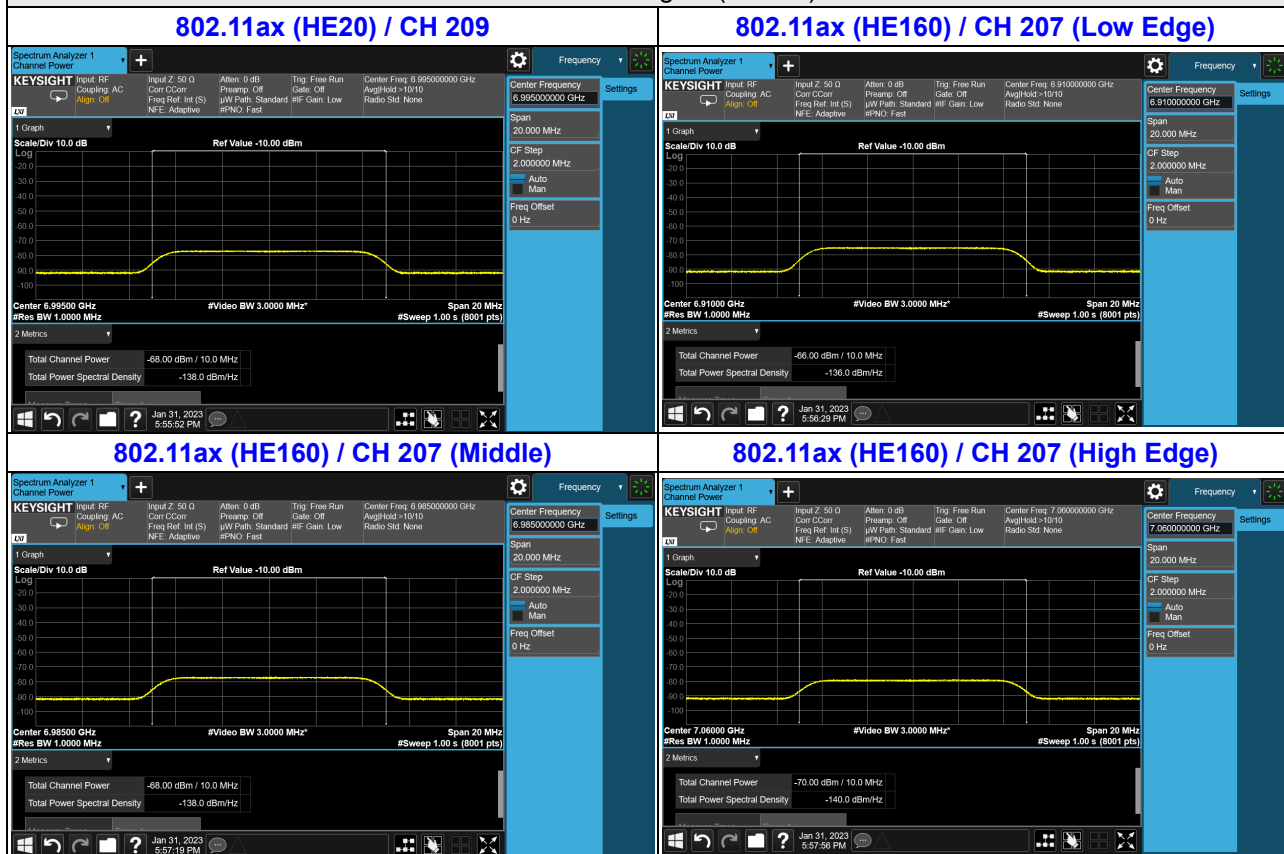


For U-NII-8 band

Plots of EUT Tx waveform

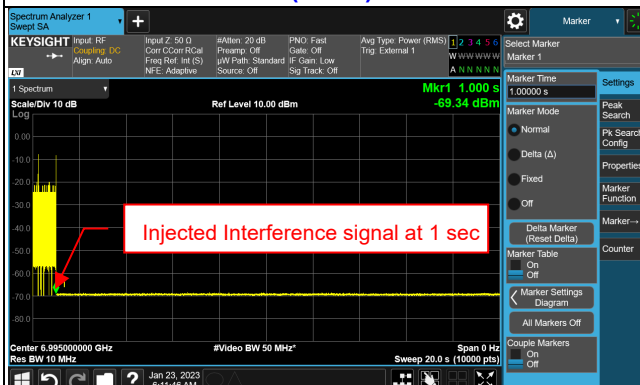


Plots of Incumbent signal (AWGN) Level

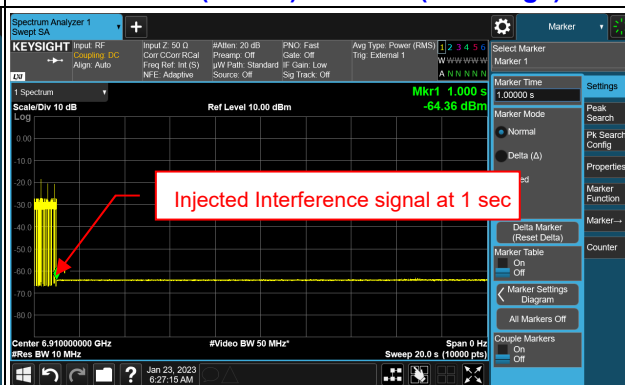


Plots of EUT ceased transmission in the time domain

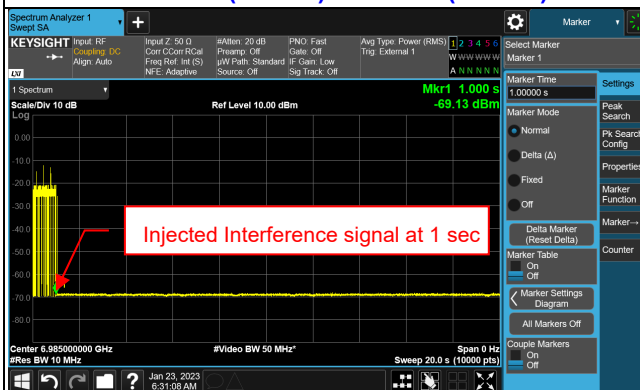
802.11ax (HE20) / CH 209



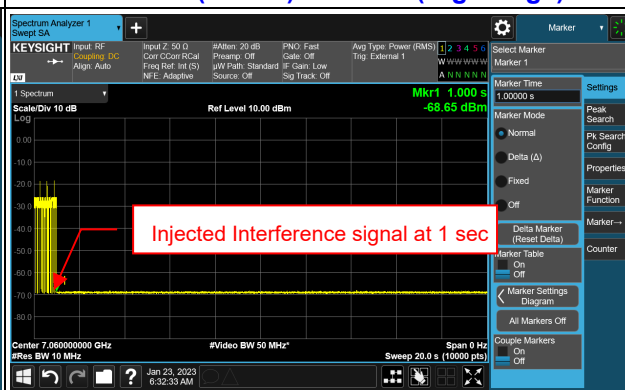
802.11ax (HE160) / CH 207 (Low Edge)



802.11ax (HE160) / CH 207 (Middle)



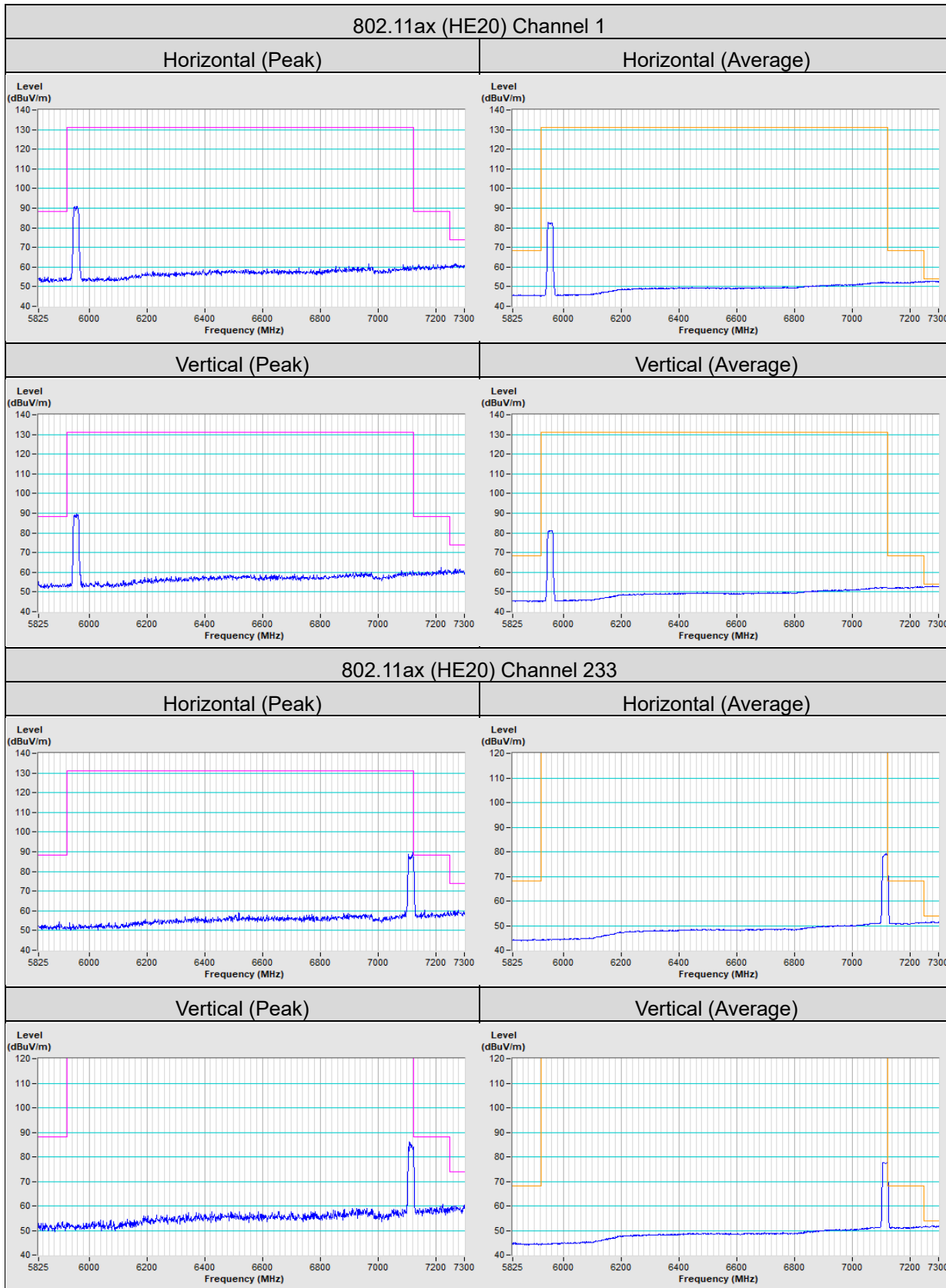
802.11ax (HE160) / CH 207 (High Edge)



5 Pictures of Test Arrangements

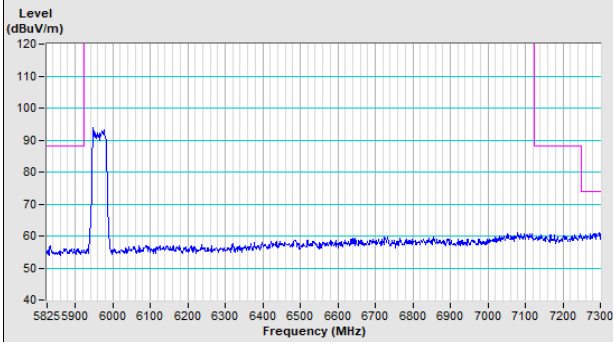
Please refer to the attached file (Test Setup Photo).

Annex A - Band Edge Measurement

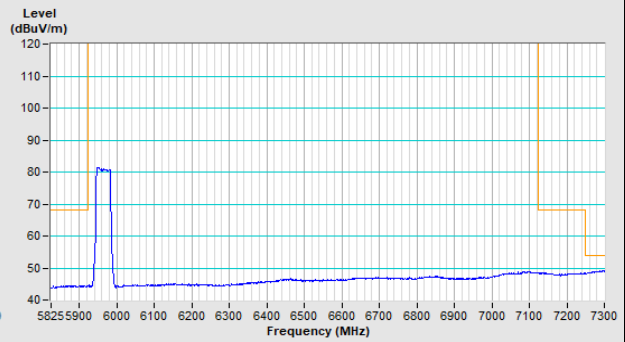


802.11ax (HE40) Channel 3

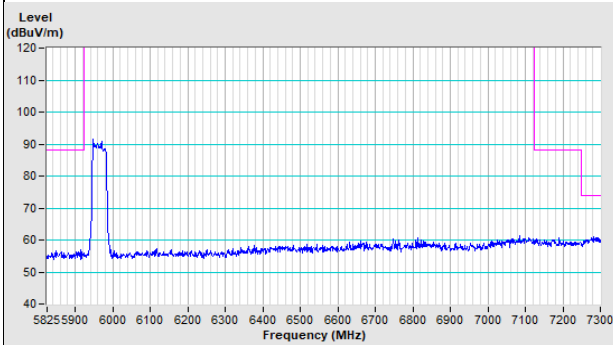
Horizontal (Peak)



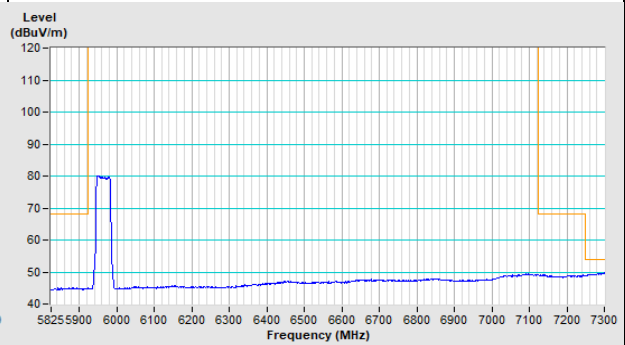
Horizontal (Average)



Vertical (Peak)

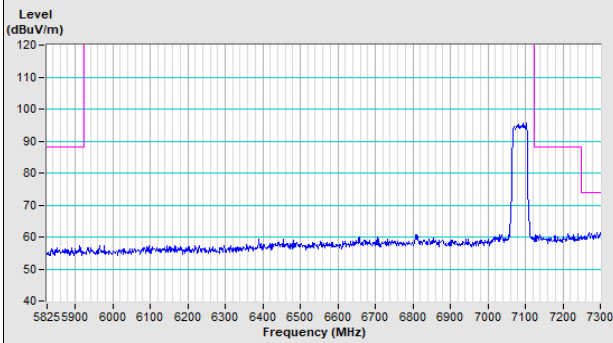


Vertical (Average)

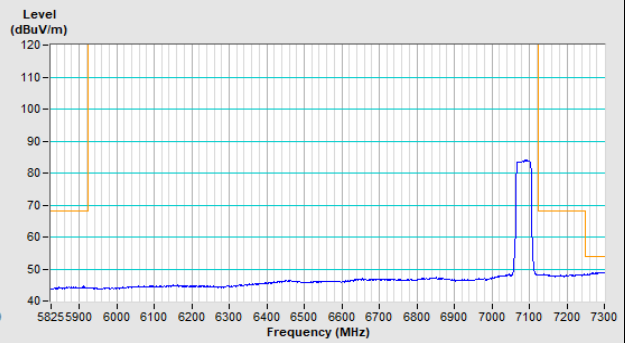


802.11ax (HE40) Channel 227

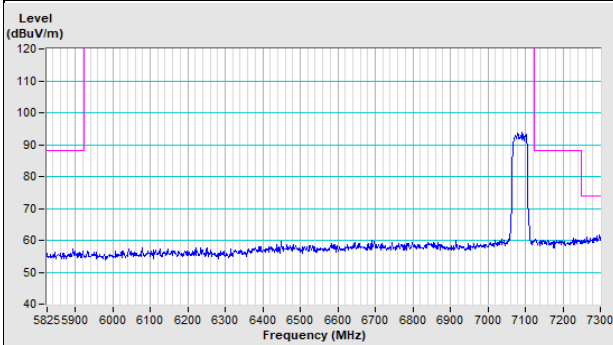
Horizontal (Peak)



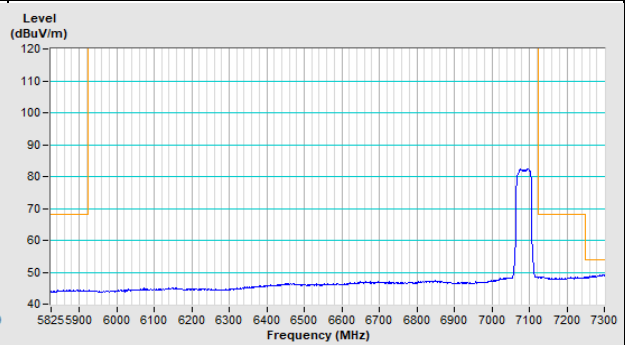
Horizontal (Average)



Vertical (Peak)

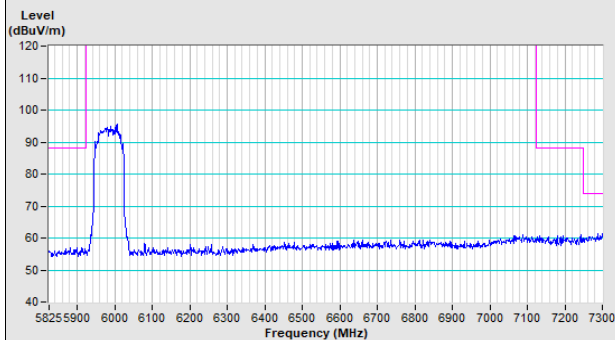


Vertical (Average)

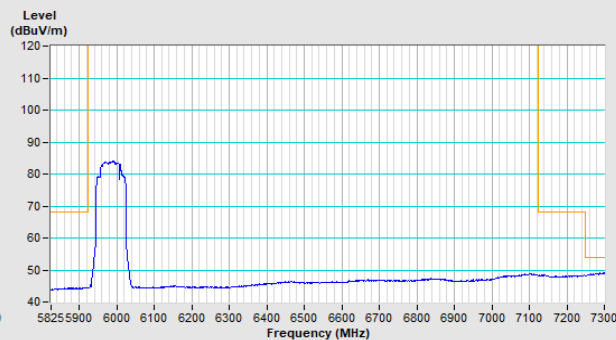


802.11ax (HE80) Channel 7

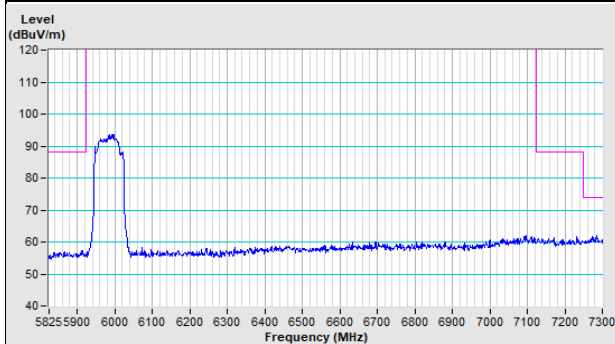
Horizontal (Peak)



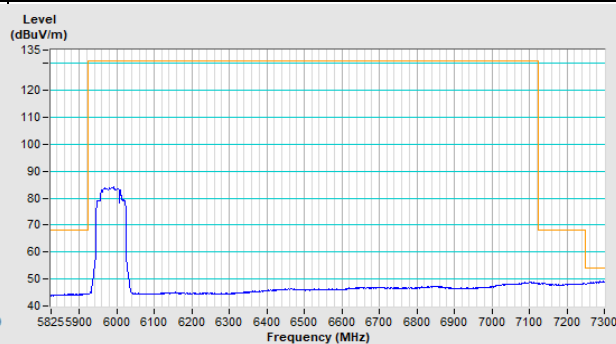
Horizontal (Average)



Vertical (Peak)

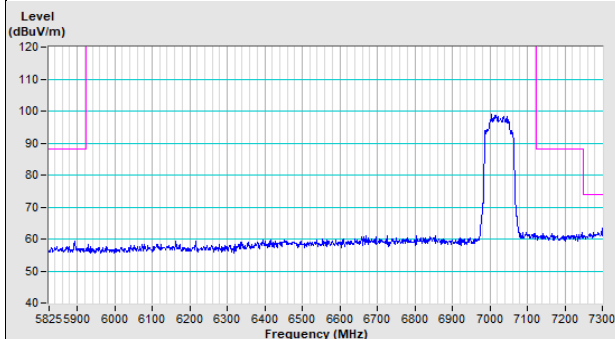


Vertical (Average)

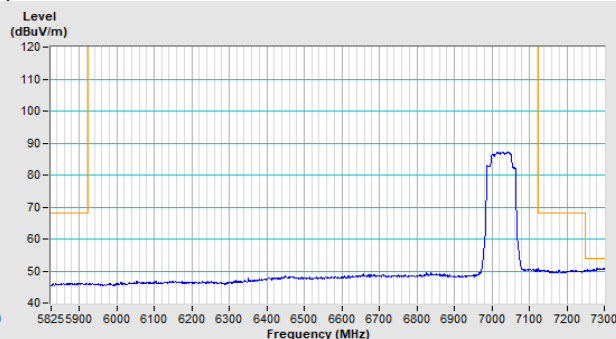


802.11ax (HE80) Channel 215

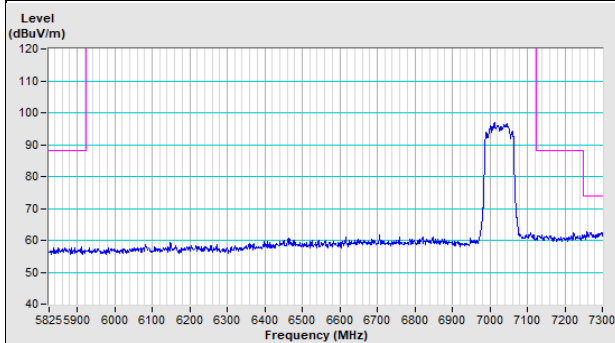
Horizontal (Peak)



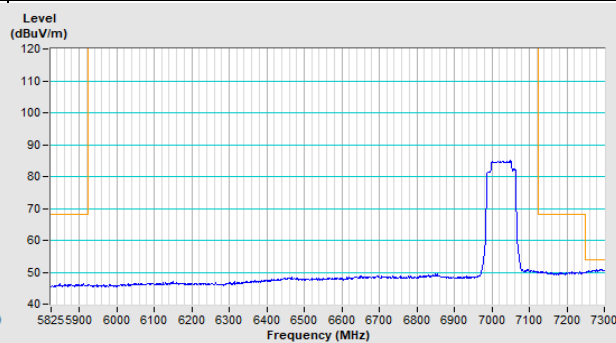
Horizontal (Average)



Vertical (Peak)

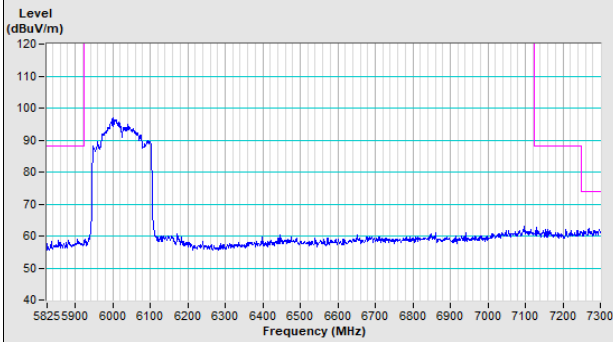


Vertical (Average)

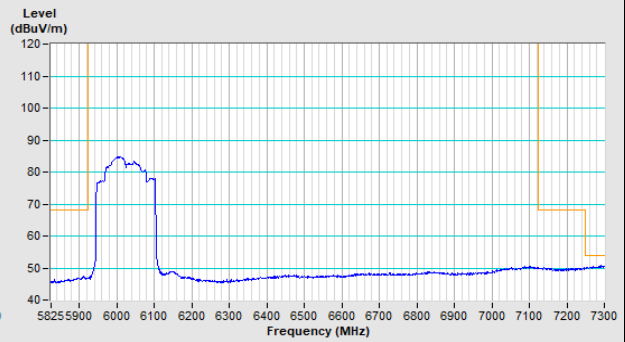


802.11ax (HE160) Channel 15

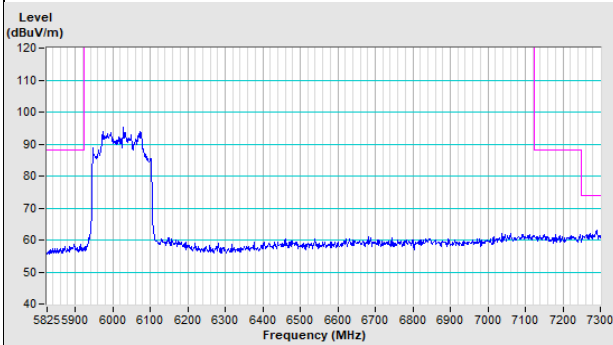
Horizontal (Peak)



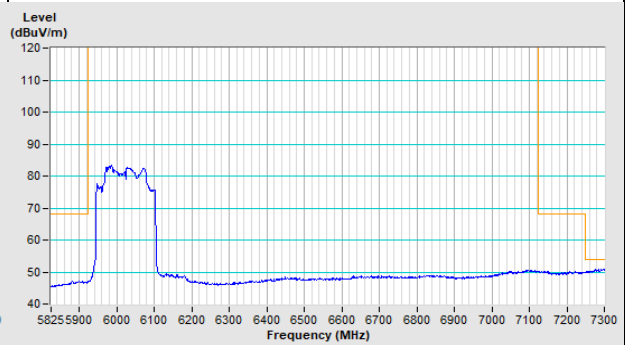
Horizontal (Average)



Vertical (Peak)

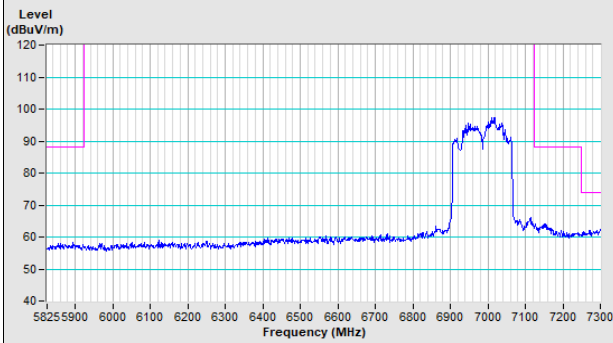


Vertical (Average)

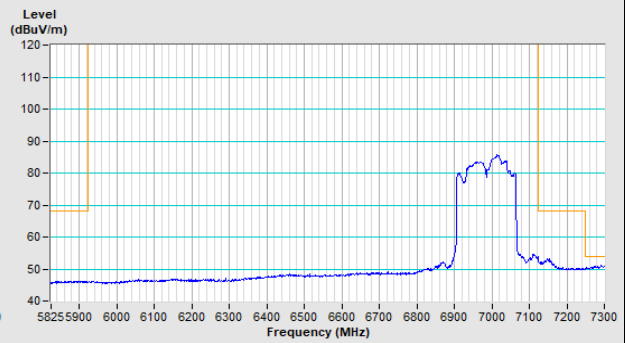


802.11ax (HE160) Channel 207

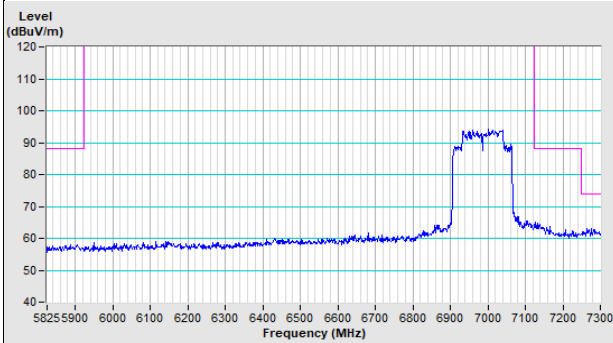
Horizontal (Peak)



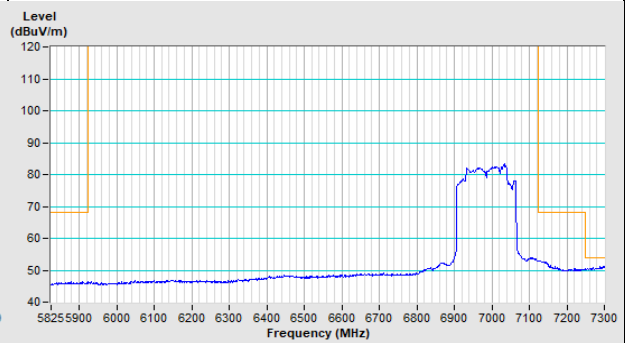
Horizontal (Average)



Vertical (Peak)



Vertical (Average)



Appendix – Information of the Testing Laboratories

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

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

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Email: service.adt@tw.bureauveritas.com

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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