

TEST REPORT

CERTIFICATE OF CONFORMITY

Standard: 47 CFR FCC Part 15, Subpart E (Section 15.407)

Report No.: RFBIDS-WTW-P26020410-2

FCC ID: U2M-IAP2301AV2

Product: Ceiling Mount Access Point

Brand: Senao

Model No.: IAP2301AV2

Series Model: ECW510v2 (refer to item 3.1 for more details)

Received Date: 2026/2/23

Test Date: 2026/3/26 ~ 2026/4/10

Issued Date: 2026/5/22

Applicant: Senao Networks, Inc.

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lin Kou Laboratories

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Test Location(2): No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, Taiwan

FCC Registration / Test Location:281270 / TW0032 for Test Location(1)

Designation Number: 788550 / TW0003 for Test Location(2)

Approved by:

Jeremy Lin

Jeremy Lin / Project Engineer

, Date:

2026/5/22

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Prepared by : Gina Liu / Specialist



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Release Control Record

Issue No.	Description	Date Issued
RFBDYS-WTW-P26020410-2	Original release.	2026/5/22

1 Certificate

Product: Ceiling Mount Access Point

Brand: Senao

Test Model: IAP2301Av2

Series Model: ECW510v2 (refer to item 3.1 for more details)

Sample Status: Engineering sample

Applicant: Senao Networks, Inc.

Test Date: 2026/3/26 ~ 2026/4/10

Standard: 47 CFR FCC Part 15, Subpart E (Section 15.407)

Measurement ANSI C63.10-2020

procedure: KDB 291074 D02 EMC Measurement v01

KDB 789033 D02 General UNII Test Procedure New Rules v02r01

KDB 662911 D01 Multiple Transmitter Output v02r01

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.

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
Clause	Test Item	Result	Remark
15.407(a)(3)	RF Output Power	Pass	Meet the requirement of limit.
15.407(a)(3)	Power Spectral Density	Pass	Meet the requirement of limit.
15.407(b)(9)	AC Power Conducted Emissions	Pass	Minimum passing margin is -7.00 dB at 0.52568 MHz
15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -3.5 dB at 43.58 MHz
15.407(b)(5) 15.407(b)(10)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -7.7 dB at 5650.00 MHz
15.407(e)	6 dB Bandwidth	Pass	Meet the requirement of limit.
15.203	Antenna Requirement	Pass	No antenna connector is used.

Note: 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) (±)
RF Output Power	-	1.371 dB
Power Spectral Density	-	1.017 dB
6 dB Bandwidth	-	206.5 Hz
AC Power Conducted Emissions	9 kHz ~ 30 MHz	2.88 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	3 dB
	30 MHz ~ 1 GHz	2.93 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	1.76 dB
	18 GHz ~ 40 GHz	1.77 dB

The other instruments specified are routine verified to remain within the calibrated levels, no measurement uncertainty is required to be calculated.

2.2 Supplementary Information

There is not any deviation from the test standards for the test method, and no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	Ceiling Mount Access Point
Brand	Senao
Test Model	IAP2301Av2
Series Model	ECW510v2
Model Difference	For marketing purpose
Status of EUT	Engineering sample
Power Supply Rating	12 Vdc from adapter 54 Vdc from POE
Modulation Type	64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode 1024QAM for OFDMA in 11ax mode 4096QAM for OFDMA in 11be mode
Modulation Technology	OFDM, OFDMA
Transfer Rate	Up to 2882.4 Mbps
Operating Frequency	5.815 GHz ~ 5.885 GHz
Number of Channel	802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20), 802.11be (EHT20):3 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40), 802.11be (EHT40):2 802.11ac (VHT80), 802.11ax (HE80), 802.11be (EHT80):1 802.11ac (VHT160), 802.11ax (HE160), 802.11be (EHT160):1
Output Power	EIRP: 2351.461 mW (33.71 dBm)
EUT Category	Indoor access point

Note:

1. The EUT uses following support units.

Item	Brand	Model	Specification
AC Adapter	SPC	ZZU1588-200120-2A	AC Input: 100-240V-1.5A Max DC Output: 12V, 2.0A
POE	EnGenius	EPA5060XBT	AC Input: 100-240Vac, 1.5A, 50~60Hz DC Output: 54V, 1.11A PIN 3,4,5,6: 54V PIN 1,2,7,8: RETURN

2. There are WLAN (2.4 GHz & 5 GHz & 5.9 GHz) technology used for the EUT.

3. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

Antenna NO.	RF Chain NO.	Antenna Net Gain(dBi)	Frequency range	Antenna Type	Connector Type
ANT1	0	3.9	2.4 GHz ~ 2.4835 GHz	PIFA	ipex(MHF)
ANT2	1	3.9	2.4 GHz ~ 2.4835 GHz	PIFA	ipex(MHF)
ANT1	0	2.8	5.15 GHz ~ 5.25 GHz	PIFA	ipex(MHF)
			5.25 GHz ~ 5.35 GHz	PIFA	ipex(MHF)
		2.9	5.47 GHz ~ 5.725 GHz	PIFA	ipex(MHF)
		3.6	5.725 GHz ~ 5.85 GHz	PIFA	ipex(MHF)
		3.6	5.85 GHz ~ 5.895 GHz	PIFA	ipex(MHF)
ANT2	1	3.8	5.15 GHz ~ 5.25 GHz	PIFA	ipex(MHF)
			5.25 GHz ~ 5.35 GHz	PIFA	ipex(MHF)
		4.7	5.47 GHz ~ 5.725 GHz	PIFA	ipex(MHF)
		4.1	5.725 GHz ~ 5.85 GHz	PIFA	ipex(MHF)
		4.1	5.85 GHz ~ 5.895 GHz	PIFA	ipex(MHF)

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

2. The EUT incorporates a MIMO function:

5 GHz Band		
Modulation Mode	TX & RX Configuration	
802.11a	2TX	2RX
802.11n (HT20)	2TX	2RX
802.11n (HT40)	2TX	2RX
802.11ac (VHT20)	2TX	2RX
802.11ac (VHT40)	2TX	2RX
802.11ac (VHT80)	2TX	2RX
802.11ac (VHT160)	2TX	2RX
802.11ax (HE20)	2TX	2RX
802.11ax (HE40)	2TX	2RX
802.11ax (HE80)	2TX	2RX
802.11ax (HE160)	2TX	2RX
802.11be (EHT20)	2TX	2RX
802.11be (EHT40)	2TX	2RX
802.11be (EHT80)	2TX	2RX
802.11be (EHT160)	2TX	2RX

Note:

1. All of modulation mode support beamforming function except 802.11a modulation mode.
2. The EUT support Beamforming and CDD mode, therefore both mode were investigated and the worst case scenario was identified. The worst case data were presented in test report.
3. The modulation and bandwidth are similar for 802.11n mode for 20 MHz (40 MHz), 802.11ac mode for 20 MHz (40 MHz, 80 MHz, 160 MHz), 802.11ax mode for 20 MHz (40 MHz, 80 MHz, 160 MHz) and 802.11be mode for 20 MHz (40 MHz, 80 MHz, 160 MHz). Therefore the investigated worst case is the representative mode in test report.

3.3 Channel List

3 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20), 802.11be (EHT20):

Channel	Frequency	Channel	Frequency	Channel	Frequency
*169	5845 MHz	173	5865 MHz	177	5885 MHz

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40), 802.11be (EHT40):

Channel	Frequency	Channel	Frequency
*167	5835 MHz	175	5875 MHz

1 channel is provided for 802.11ac (VHT80), 802.11ax (HE80), 802.11be (EHT80):

Channel	Frequency
*171	5855 MHz

1 channel is provided for 802.11ac (VHT160), 802.11ax (HE160), 802.11be (EHT160):

Channel	Frequency
*163	5815 MHz

Note: * U-NII-3 & -4 span channels.

3.4 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	EUT can be used in the following ways: X-axis / Y-axis / Z-axis. Pre-scan these ways and find the worst case as a representative test condition.
Worst Case:	X-axis / Y-axis / Z-axis Worst Condition: Y-axis

Following channel(s) was (were) selected for the final test as listed below:

Test Item	EUT Configure Mode	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter
RF Output Power	A	802.11a	CDD	169, 173, 177	BPSK	6Mb/s
		802.11be (EHT20)	Beamforming	169, 173, 177	BPSK	MCS0
		802.11be (EHT40)	Beamforming	167, 175	BPSK	MCS0
		802.11be (EHT80)	Beamforming	171	BPSK	MCS0
		802.11be (EHT160)	Beamforming	163	BPSK	MCS0
Power Spectral Density	A	802.11a	CDD	169, 173, 177	BPSK	6Mb/s
		802.11be (EHT20)	Beamforming	169, 173, 177	BPSK	MCS0
		802.11be (EHT40)	Beamforming	167, 175	BPSK	MCS0
		802.11be (EHT80)	Beamforming	171	BPSK	MCS0
		802.11be (EHT160)	Beamforming	163	BPSK	MCS0
6 dB Bandwidth	A	802.11a	CDD	169, 173, 177	BPSK	6Mb/s
		802.11be (EHT20)	Beamforming	169, 173, 177	BPSK	MCS0
		802.11be (EHT40)	Beamforming	167, 175	BPSK	MCS0
		802.11be (EHT80)	Beamforming	171	BPSK	MCS0
		802.11be (EHT160)	Beamforming	163	BPSK	MCS0
AC Power Conducted Emissions	A, B	802.11be (EHT40)	Beamforming	167	BPSK	MCS0
Unwanted Emissions below 1 GHz	A, B	802.11be (EHT40)	Beamforming	167	BPSK	MCS0
Unwanted Emissions above 1 GHz	B	802.11a	CDD	169, 173, 177	BPSK	6Mb/s
		802.11be (EHT20)	Beamforming	169, 173, 177	BPSK	MCS0
		802.11be (EHT40)	Beamforming	167, 175	BPSK	MCS0
		802.11be (EHT80)	Beamforming	171	BPSK	MCS0
		802.11be (EHT160)	Beamforming	163	BPSK	MCS0
EUT Configure Mode:	A	Adapter mode				
	B	POE mode				

3.5 Duty Cycle of Test Signal

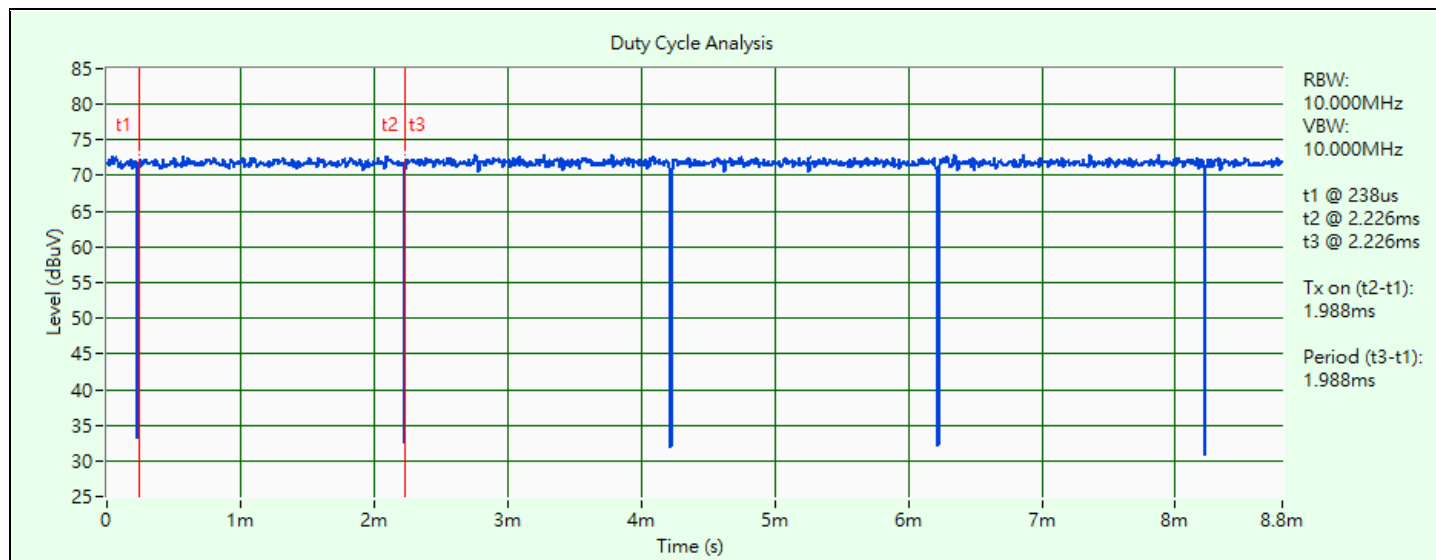
802.11a: Duty cycle = 1.988 ms / 1.988 ms x 100% = 100.0%

802.11be (EHT20) Beamforming: Duty cycle = 5.481 ms / 5.502 ms x 100% = 99.6%

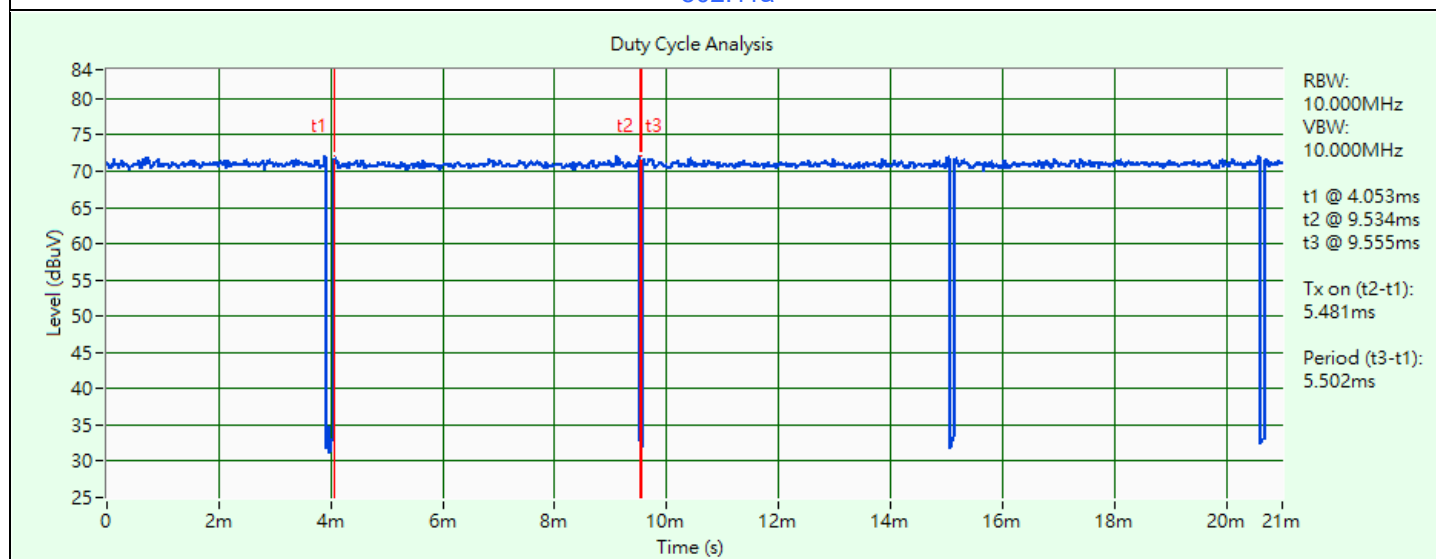
802.11be (EHT40) Beamforming: Duty cycle = 5.498 ms / 5.569 ms x 100% = 98.7%

802.11be (EHT80) Beamforming: Duty cycle = 5.499 ms / 5.593 ms x 100% = 98.3%

802.11be (EHT160) Beamforming: Duty cycle = 5.481 ms / 5.535 ms x 100% = 99.0%

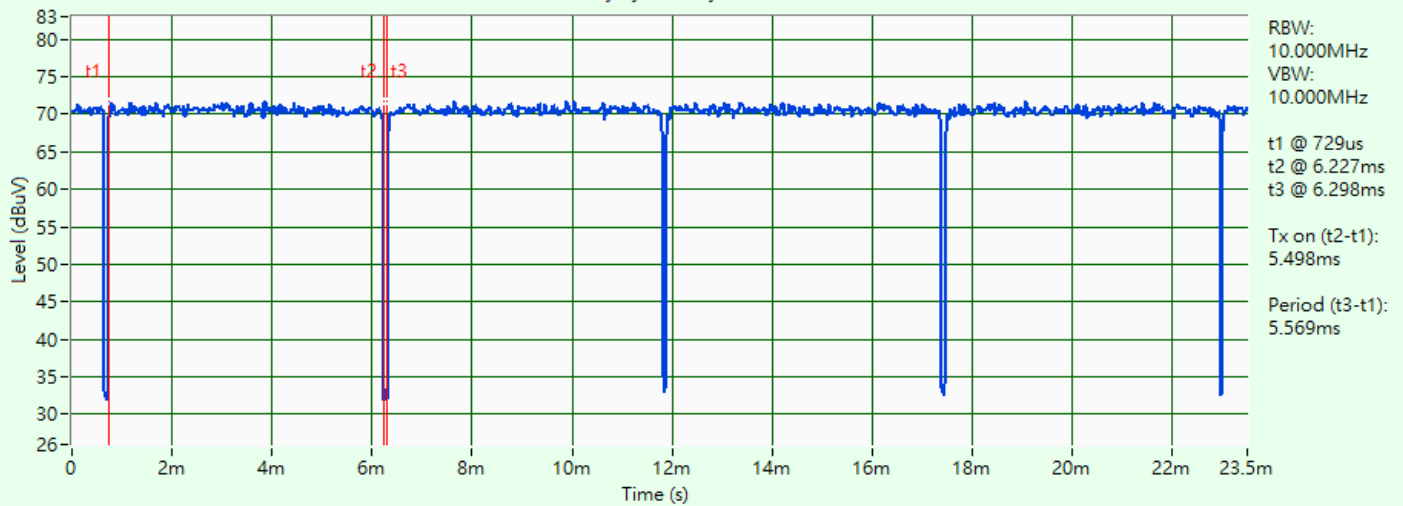


802.11a



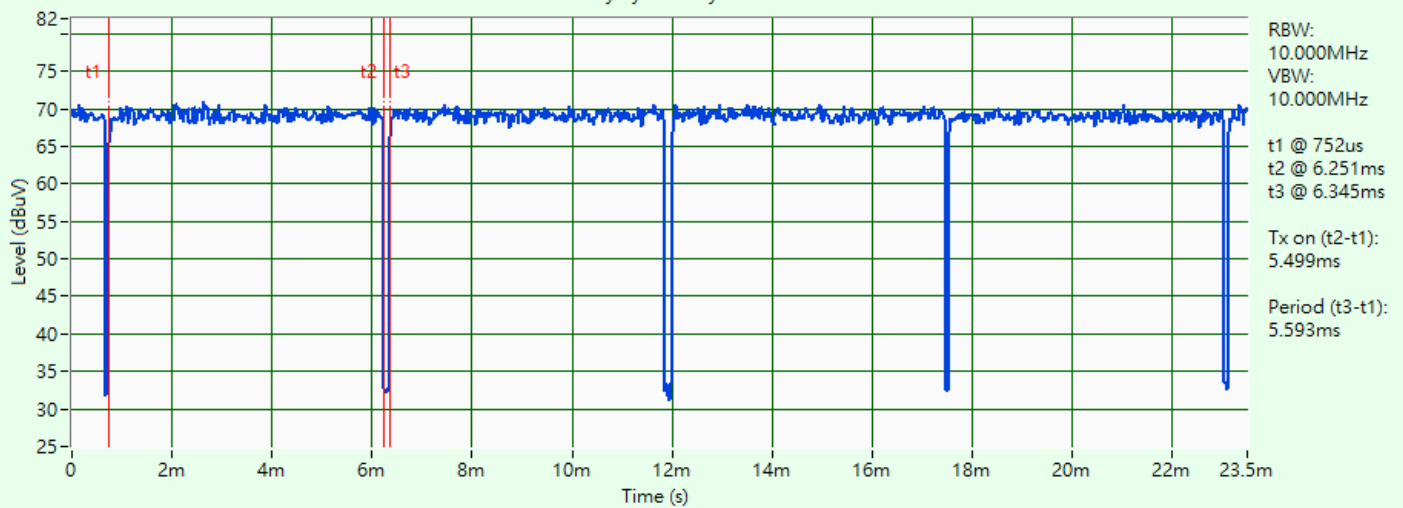
802.11be (EHT20) Beamforming

Duty Cycle Analysis



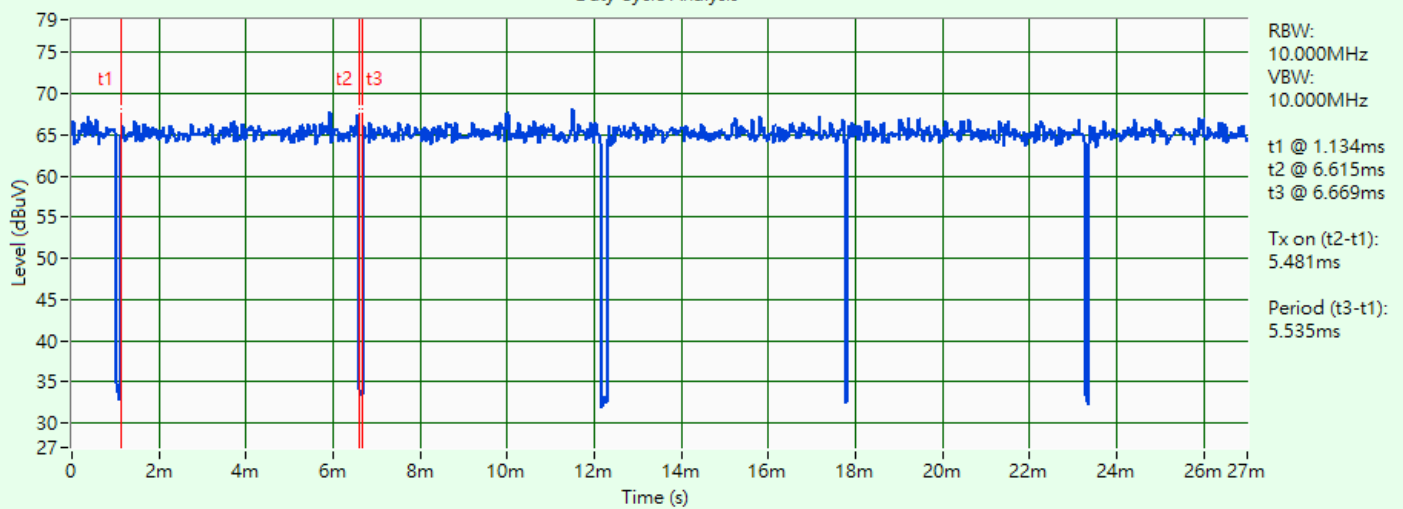
802.11be (EHT40) Beamforming

Duty Cycle Analysis



802.11be (EHT80) Beamforming

Duty Cycle Analysis



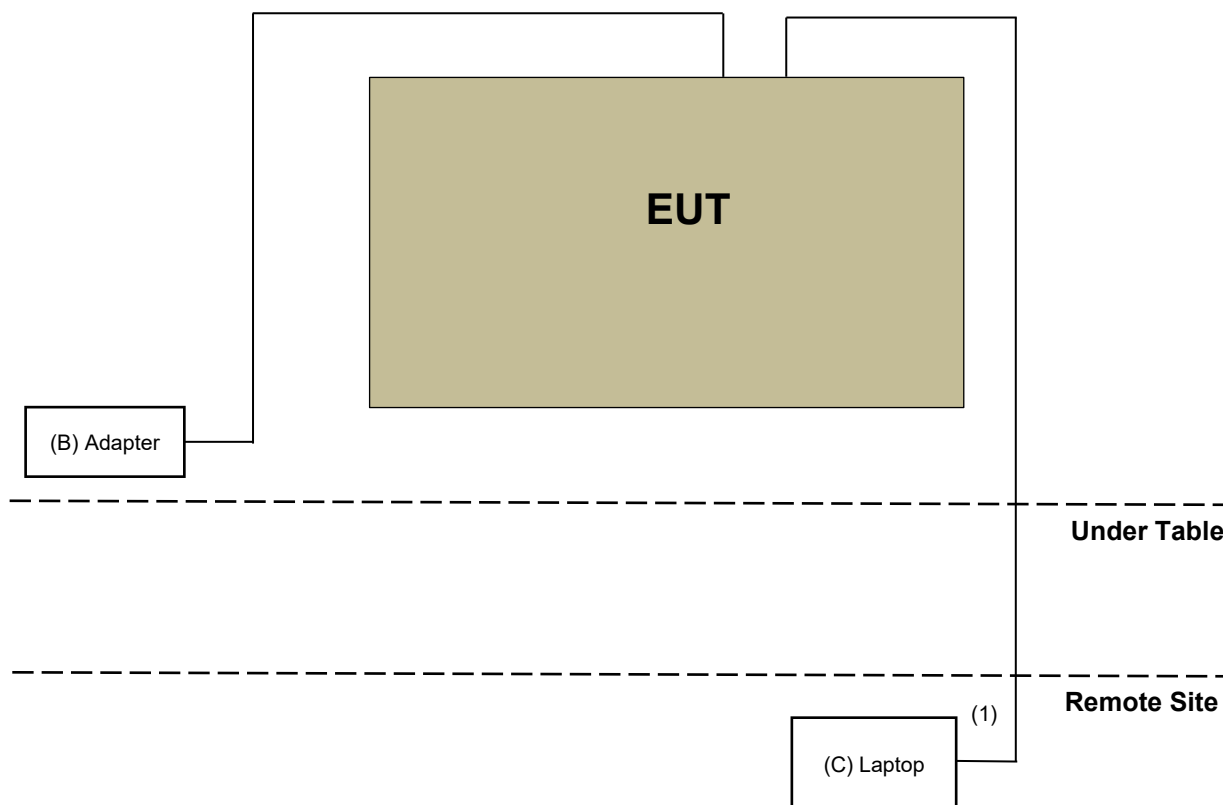
802.11be (EHT160) Beamforming

3.6 Test Program Used and Operation Descriptions

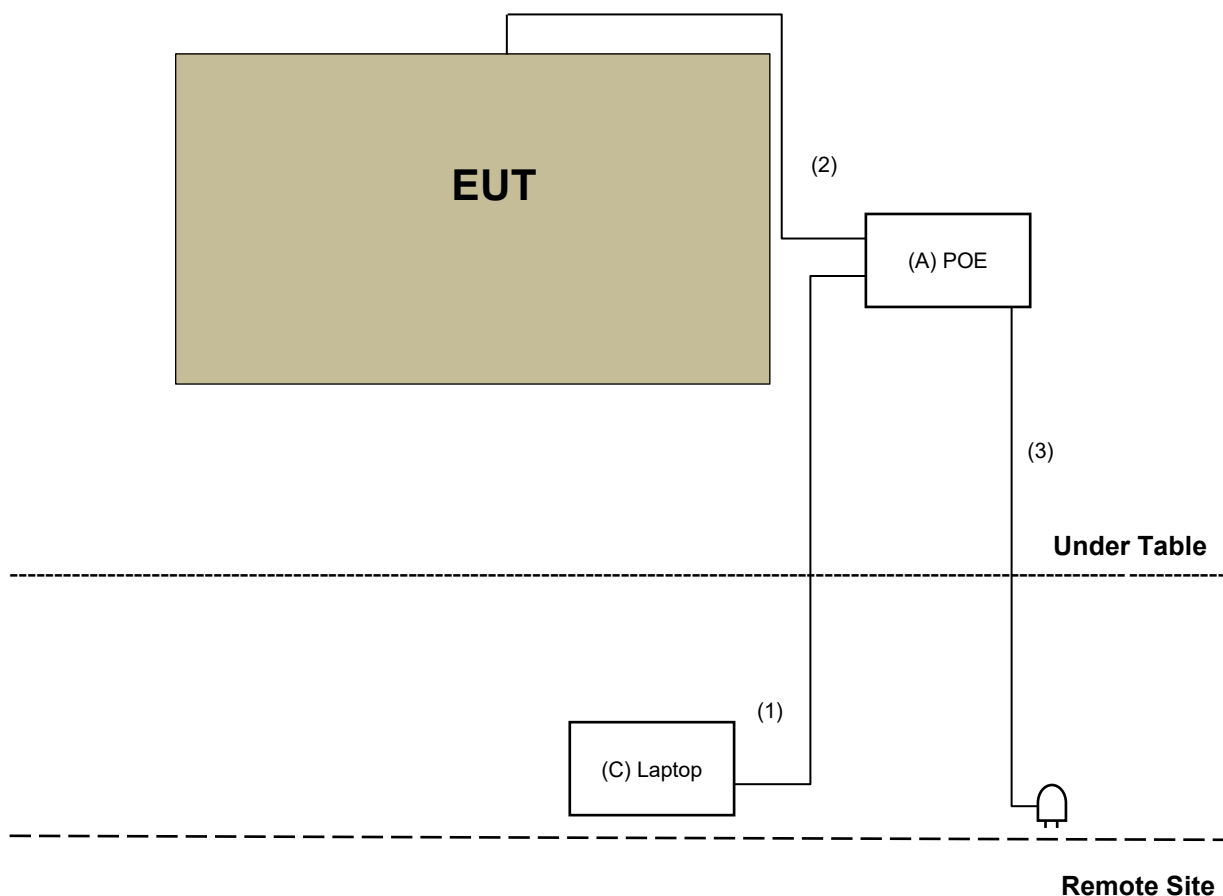
Controlling software QSPR Version 6.00.00234.1 has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.7 Connection Diagram of EUT and Peripheral Devices

Mode A



Mode B



3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	POE	Senao Networks INC	EPA5060XBT	NA	NA	Supplied by applicant
B	Adapter	Senao Networks INC	ZZU1588-200120-2A	NA	NA	Supplied by applicant
C	Laptop	DELL	potiplex_9010	NA	NA	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	RJ-45 Cable	1	10	N	0	Provided by Lab
2	RJ-45 Cable	1	1.5	N	0	Provided by Lab
3	AC Cable	1	0.5	N	0	Supplied by applicant

4 Test Instruments

The calibration interval of the all test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.1 RF Output Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Fixed Attenuator Woken	00800A1K01A-10	00800A1K01A-10-01	2025/5/23	2026/5/22
Peak Power Analyzer Keysight	8990B	MY51000538	2025/5/23	2026/5/22
USB Power Sensor Anritsu	MA24408A	12994	2025/12/5	2026/12/4
Wideband Power Sensor Keysight	N1923A	MY58200003	2025/5/29	2026/5/28

Notes:

1. The test was performed in HY - Oven room(Hwaya).
2. Tested Date: 2026/4/10

4.2 Power Spectral Density

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Fixed Attenuator Woken	00800A1K01A-10	00800A1K01A-10-01	2025/5/23	2026/5/22
MXA Signal Analyzer Keysight	N9020B	MY60110462	2025/4/22	2026/4/21
Signal & Spectrum Analyzer R&S	FSV3044	101504	2025/6/18	2026/6/17
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in HY - Oven room(Hwaya).
2. Tested Date: 2026/4/10

4.3 6 dB Bandwidth

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Fixed Attenuator Woken	00800A1K01A-10	00800A1K01A-10-01	2025/5/23	2026/5/22
Signal & Spectrum Analyzer R&S	FSV3044	101504	2025/6/18	2026/6/17
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in HY - Oven room(Hwaya).
2. Tested Date: 2026/4/10

4.4 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohm terminal resistance	E1-011279	04	2025/12/4	2026/12/3
	E1-011280	05	2025/12/4	2026/12/3
	E1-011311	09	2025/12/4	2026/12/3
DC LISN Schwarzbeck	NNBM 8126G	8126G-069	2025/11/3	2026/11/2
Diode Pulse Limiter Schwarzbeck	VTSD 9561 F-N	01445	2025/4/27	2026/4/26
EMI Test Receiver R&S	ESCI	100613	2025/11/27	2026/11/26
Extension Power Line EMCI	EMCI-EXP-EU-US	023	2026/3/6	2027/3/5
LISN R&S	ENV216	101826	2026/3/6	2027/3/5
	ESH3-Z5	100311	2025/8/28	2026/8/27
RF Coaxial Cable Woken	5D-FB	Cable-cond1-01	2026/1/3	2027/1/2
Software BVADT	BVADT_Conc_ V7.4.1.0	N/A	N/A	N/A
V-LISN Schwarzbeck	NNBL 8226-2	8226-142	2025/8/27	2026/8/26

Notes:

1. The test was performed in HY - Conduction 1.
2. Tested Date: 2026/3/26

4.5 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower Max-Full	MFT-151SS-0.5T	N/A	N/A	N/A
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-1213	2025/9/18	2026/9/17
Loop Antenna TESEQ	HLA 6121	45745	2025/9/1	2026/8/31
MXE EMI Receiver Keysight	N9038B	MY60180019	2026/1/14	2027/1/13
Preamplifier EMCI	EMC330N	980782	2026/1/13	2027/1/12
RF Coaxial Cable EMCI	EMCCFD400-NM-NM-500	201233	2026/1/13	2027/1/12
	EMCCFD400-NM-NM-3000	201235	2026/1/13	2027/1/12
	EMCCFD400-NM-NM-9000	201236(with PAD)	2026/1/13	2027/1/12
Signal & Spectrum Analyzer R&S	FSW43	101867	2026/2/11	2027/2/10
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table Max-Full	MF-7802BS	N/A	N/A	N/A
Turn Table Controller Max-Full	MF-7802BS	MF780208674	N/A	N/A

Notes:

1. The test was performed in WM - 966 chamber 8(Wenming).
2. Tested Date: 2026/3/30 ~ 2026/4/2

4.6 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower Max-Full	MFT-151SS-0.5T	N/A	N/A	N/A
Horn Antenna RFSPIN	DRH18-E	210103A18E	2025/11/9	2026/11/8
Horn Antenna Schwarzbeck	BBHA 9170	9170-1049	2025/11/9	2026/11/8
MXE EMI Receiver Keysight	N9038B	MY60180019	2026/1/14	2027/1/13
Preamplifier EMCI	EMC118A45SE	980808	2025/12/24	2026/12/23
	EMC184045SE	980788	2026/1/13	2027/1/12
RF Coaxial Cable EMCI	EMC101G-KM-KM-2000	201254	2026/1/13	2027/1/12
		201255	2026/1/13	2027/1/12
	EMC101G-KM-KM-5000	201261	2026/1/13	2027/1/12
	EMC104-SM-SM-1000	210102	2026/1/13	2027/1/12
	EMC104-SM-SM-3000	201231	2026/1/13	2027/1/12
	EMC104-SM-SM-9000	201243	2026/1/13	2027/1/12
Signal & Spectrum Analyzer R&S	FSW43	101867	2026/2/11	2027/2/10
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table Max-Full	MF-7802BS	N/A	N/A	N/A
Turn Table Controller Max-Full	MF-7802BS	MF780208674	N/A	N/A

Notes:

1. The test was performed in WM - 966 chamber 8(Wenming).
2. Tested Date: 2026/3/27 ~ 2026/3/31

5 Limits of Test Items

5.1 RF Output Power

Device Category	Limit (Max Average Power)
Indoor access point	EIRP 36 dBm
Subordinate device	EIRP 36 dBm
Client device	EIRP 30 dBm
Note: For all U-NII-4 and U-NII-3 & -4 span channels shall met above EIRP values.	

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.

5.2 Power Spectral Density

Device Category	Limit
Indoor access point	EIRP 20 dBm/MHz
Subordinate device	EIRP 20 dBm/MHz
Client device	EIRP 14 dBm/MHz
Note: For all U-NII-4 and U-NII-3 & -4 span channels shall met above EIRP values.	

5.3 6 dB Bandwidth

Within the 5.725-5.850 GHz and 5.850-5.895 GHz bands, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

5.4 AC Power Conducted Emissions

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

Notes:

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 0.50 MHz.

5.5 Unwanted Emissions below 1 GHz

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

Notes:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).

5.6 Unwanted Emissions above 1 GHz

- (i) For an indoor access point or subordinate device, all emissions at or above 5.895 GHz shall not exceed an e.i.r.p. of 15 dBm/MHz and shall decrease linearly to an e.i.r.p. of -7 dBm/MHz at or above 5.925 GHz.
- (ii) For a client device, all emissions at or above 5.895 GHz shall not exceed an e.i.r.p. of -5 dBm/MHz and shall decrease linearly to an e.i.r.p. of -27 dBm/MHz at or above 5.925 GHz.
- (iii) For a client device or indoor access point or subordinate device, all emissions below 5.725 GHz shall not exceed an e.i.r.p. of -27 dBm/MHz at 5.65 GHz increasing linearly to 10 dBm/MHz at 5.7 GHz, and from 5.7 GHz increasing linearly to a level of 15.6 dBm/MHz at 5.72 GHz, and from 5.72 GHz increasing linearly to a level of 27 dBm/MHz at 5.725 GHz.

Note:

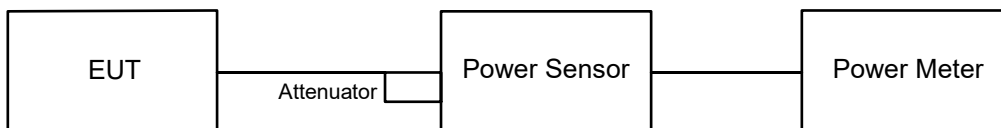
The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

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

6 Test Arrangements

6.1 RF Output Power

6.1.1 Test Setup

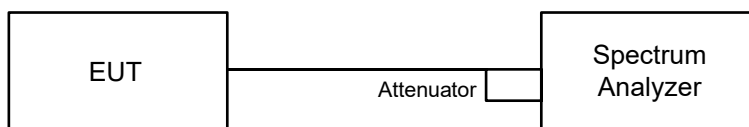


6.1.2 Test Procedure

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 and set the detector to average. Duty factor is not added to measured value.

6.2 Power Spectral Density

6.2.1 Test Setup



6.2.2 Test Procedure

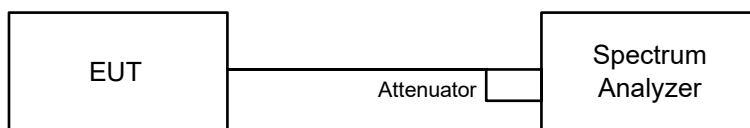
For specified measurement bandwidth 1 MHz:

Method SA-1

- Set span to encompass the entire 99% OBW of the signal.
- Set RBW = 1 MHz, Set VBW $\geq$ 3 MHz, Detector = RMS.
- Sweep points $\geq [2 \times \text{span} / \text{RBW}]$. (This gives bin-to-bin spacing $\leq \text{RBW} / 2$, so that narrowband signals are not lost between frequency bins.)
- Sweep time = auto, trigger set to "free run".
- Trace average at least 100 traces in power averaging mode.
- Record the max value

6.3 6 dB Bandwidth

6.3.1 Test Setup

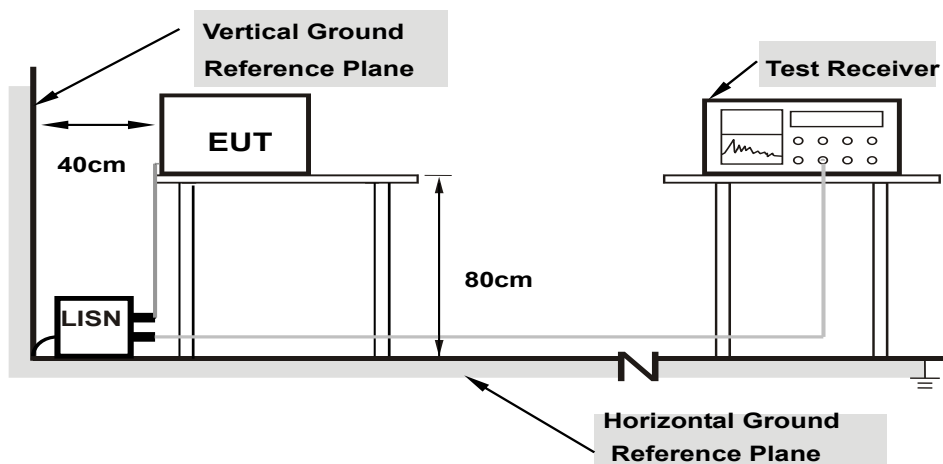


6.3.2 Test Procedure

- a. Set RBW = 100 kHz.
- b. Set the VBW $\geq [3 \times \text{RBW}]$.
- c. Detector = peak.
- d. Trace mode = max-hold.
- e. Sweep = No faster than coupled (auto) time.
- f. Allow the trace to stabilize.
- g. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

6.4 AC Power Conducted Emissions

6.4.1 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).

6.4.2 Test Procedure

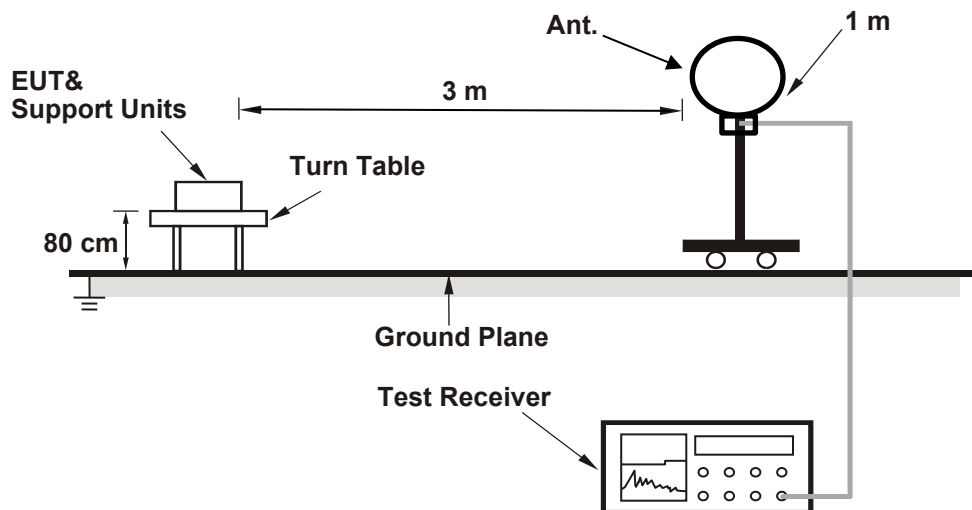
- Exploratory ac power-line conducted emission measurements: The EUT shall be operated on the mid channel and in the mode with highest output power unless the fundamental operates in the AC power-line emission test range then the EUT shall be operated in the range of typical modes of operation.
- The EUT was placed on a 0.8 meter to the top of table and 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/ 50 uH 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 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

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

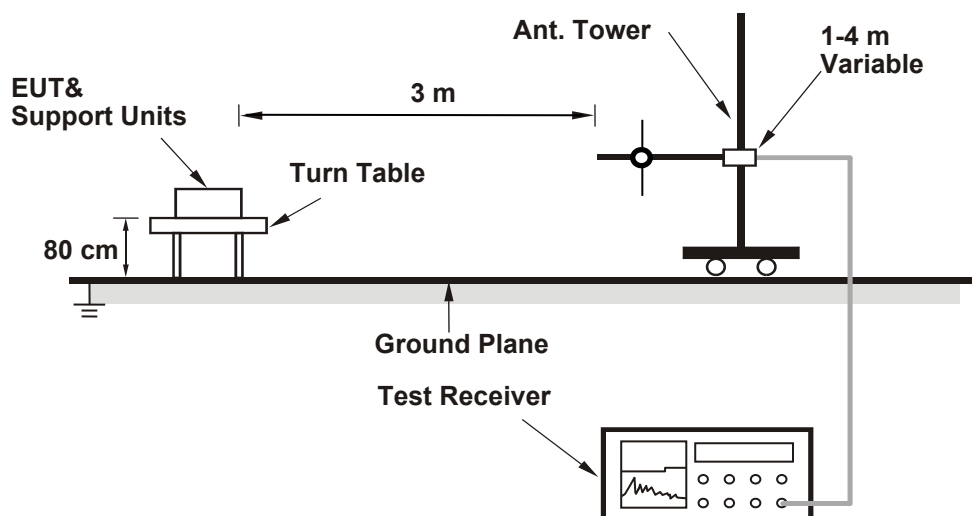
6.5 Unwanted Emissions below 1 GHz

6.5.1 Test Setup

For Radiated emission below 30 MHz



For Radiated emission above 30 MHz



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

6.5.2 Test Procedure

For Radiated emission below 30 MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters 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. 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 (however, peak detector measurements may be used to determine compliance with QP requirements), except for the frequency band (9 kHz to 90 kHz and 110 kHz to 490 kHz) set to average detect function and peak detect function.

Notes:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 200 Hz at frequency below 150 kHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9 kHz or 10 kHz at frequency (150 kHz to 30 MHz).
3. All modes of operation were investigated and the worst-case emissions are reported.

For Radiated emission above 30 MHz

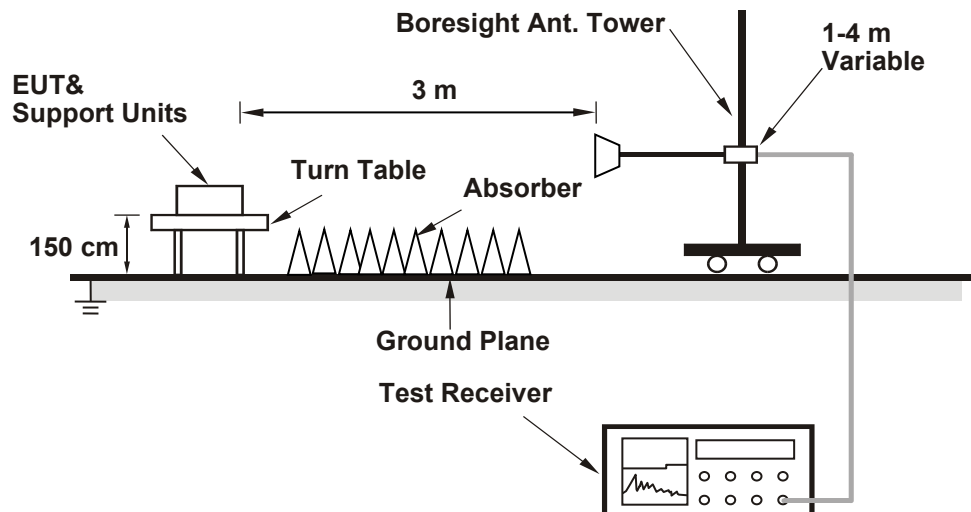
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the 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(QP) detect function, Average(AV) detect function, Peak(PK) detect function and specified bandwidth with maximum hold mode when the test frequencies less than or equal to 1 GHz.

Notes:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1 GHz (however, peak detector measurements may be used to determine compliance with QP requirements).
2. All modes of operation were investigated and the worst-case emissions are reported.

6.6 Unwanted Emissions above 1 GHz

6.6.1 Test Setup



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

6.6.2 Test Procedure

- The EUT was placed on the top of a rotating table 1.5 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The 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.
- 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.
- The test-receiver system was set to peak and average detects 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.

Notes:

- The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) and Average detection (AV) at frequency above 1 GHz.
- For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is $\geq 1/T$ (Duty cycle $< 98\%$) or 10 Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1 GHz.
- All modes of operation were investigated and the worst-case emissions are reported.

7 Test Results of Test Item

7.1 RF Output Power

Environmental Conditions:	25°C, 60% RH	Tested By:	Gary Lin
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802.11a

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
169	5845	23.04	23.98	451.407	26.55	4.10	1160.295	30.65	36	Pass
173	5865	22.91	24.16	456.049	26.59	4.10	1172.226	30.69	36	Pass
177	5885	23.10	24.14	463.592	26.66	4.10	1191.615	30.76	36	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. The maximum gain is 4.1 dBi.

802.11be (EHT20) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Directional Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
169	5845	23.21	24.12	467.637	26.70	6.86	2269.389	33.56	36	Pass
173	5865	23.01	24.02	452.334	26.55	6.86	2195.125	33.41	36	Pass
177	5885	23.34	24.12	474	26.76	6.86	2300.267	33.62	36	Pass

Notes:

1. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
2. The directional gain is 6.86 dBi.

802.11be (EHT40) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Directional Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
167	5835	23.57	24.10	484.549	26.85	6.86	2351.461	33.71	36	Pass
175	5875	23.43	23.91	466.329	26.69	6.86	2263.041	33.55	36	Pass

Notes:

1. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
2. The directional gain is 6.86 dBi.

802.11be (EHT80) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Directional Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
171	5855	23.21	23.81	449.848	26.53	6.86	2183.061	33.39	36	Pass

Notes:

1. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
2. The directional gain is 6.86 dBi.

802.11be (EHT160) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Directional Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
163	5815	20.59	21.64	260.433	24.16	6.86	1263.851	31.02	36	Pass

Notes:

1. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
2. The directional gain is 6.86 dBi.

7.2 Power Spectral Density

Environmental Conditions:	25°C, 60% RH	Tested By:	Gary Lin
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802.11a

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
169	5845	8.91	10.25	12.64	6.86	19.5	20	Pass
173	5865	8.94	9.97	12.50	6.86	19.36	20	Pass
177	5885	9.18	10.01	12.63	6.86	19.49	20	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. The directional gain is 6.86 dBi.

802.11be (EHT20) Beamforming

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
169	5845	8.16	9.07	11.65	6.86	18.51	20	Pass
173	5865	8.16	9.31	11.78	6.86	18.64	20	Pass
177	5885	8.64	9.38	12.04	6.86	18.9	20	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. The directional gain is 6.86 dBi.

802.11be (EHT40) Beamforming

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
167	5835	6.11	6.72	9.44	6.86	16.3	20	Pass
175	5875	6.25	6.71	9.50	6.86	16.36	20	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. The directional gain is 6.86 dBi.

802.11be (EHT80) Beamforming

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
171	5855	3.06	3.92	6.52	6.86	13.38	20	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. The directional gain is 6.86 dBi.

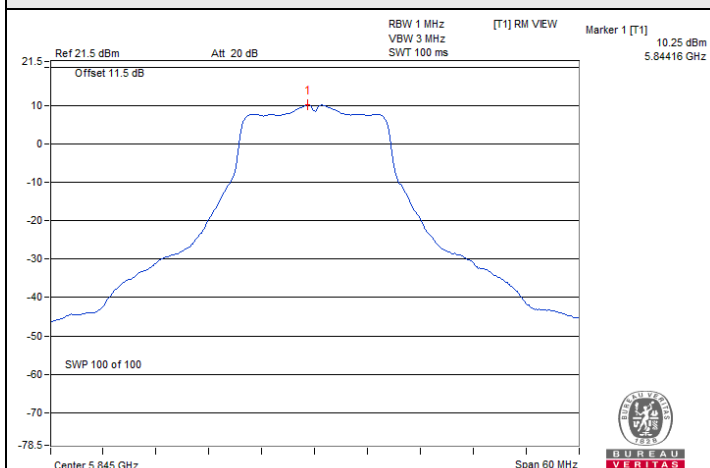
802.11be (EHT160) Beamforming

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
163	5815	-3.29	-1.95	0.44	6.86	7.3	20	Pass

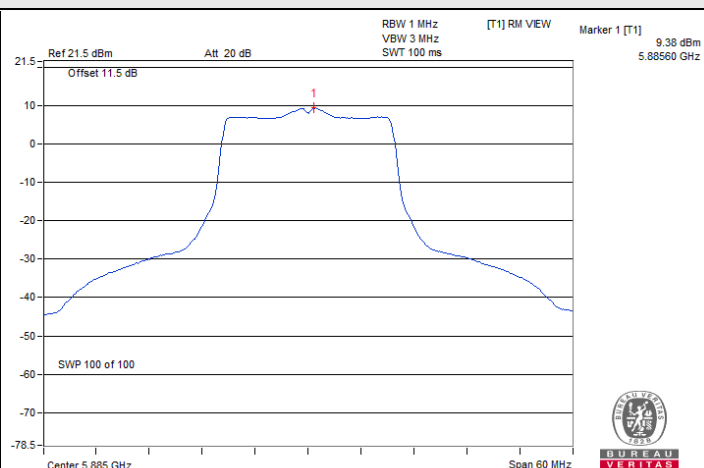
Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. The directional gain is 6.86 dBi.

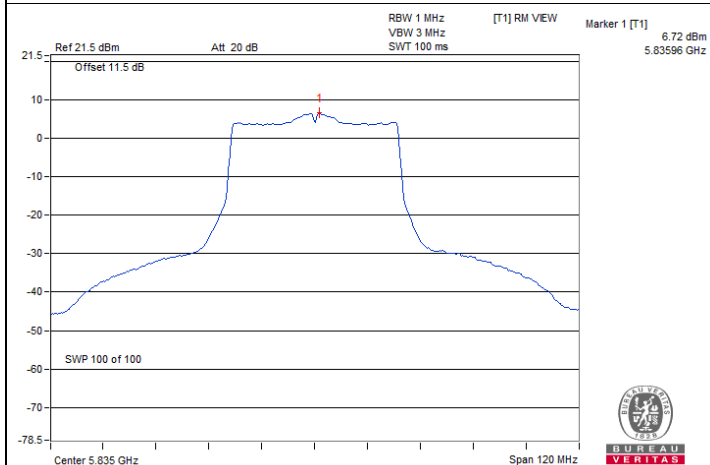
Spectrum Plot of Maximum Value



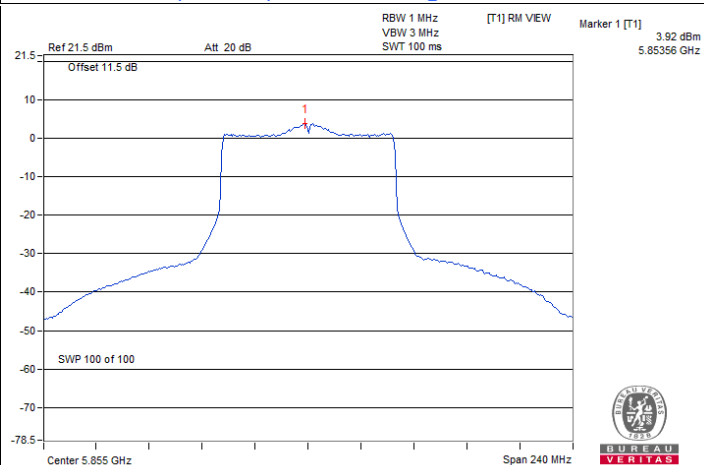
802.11a / Chain 1: CH 169



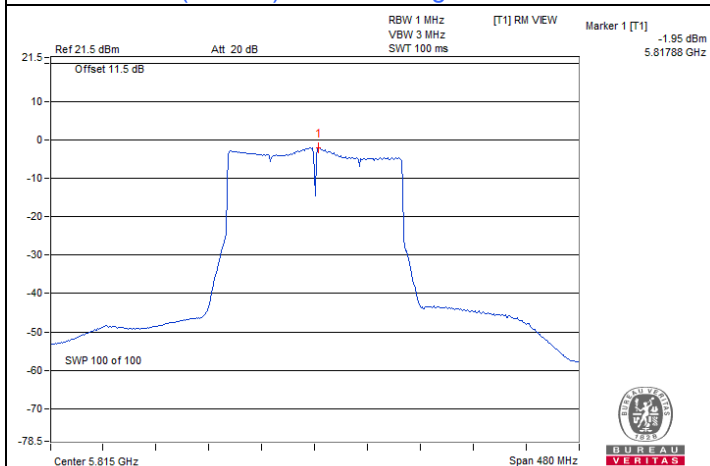
802.11be (EHT20) Beamforming / Chain 1: CH 177



802.11be (EHT40) Beamforming / Chain 1: CH 167



802.11be (EHT80) Beamforming / Chain 1: CH 171



802.11be (EHT160) Beamforming / Chain 1: CH 163

7.3 6 dB Bandwidth

Environmental Conditions:	25°C, 60% RH	Tested By:	Gary Lin
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802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
169	5845	16.31	15.57	0.5	Pass
173	5865	15.94	15.95	0.5	Pass
177	5885	15.59	15.69	0.5	Pass

802.11be (EHT20) Beamforming

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
169	5845	18.73	18.80	0.5	Pass
173	5865	18.95	18.42	0.5	Pass
177	5885	18.93	18.81	0.5	Pass

802.11be (EHT40) Beamforming

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
167	5835	38.26	38.28	0.5	Pass
175	5875	38.28	38.21	0.5	Pass

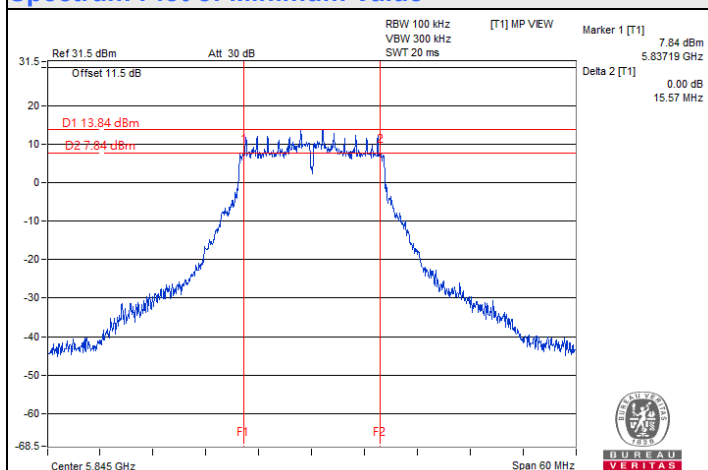
802.11be (EHT80) Beamforming

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
171	5855	76.18	77.68	0.5	Pass

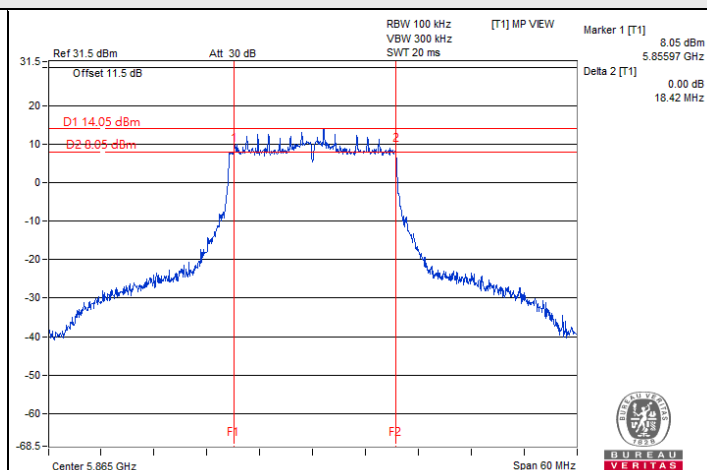
802.11be (EHT160) Beamforming

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
163	5815	157.71	158.52	0.5	Pass

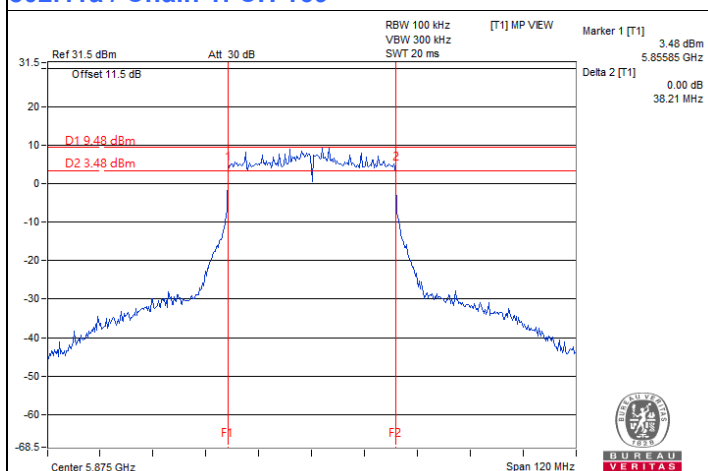
Spectrum Plot of Minimum Value



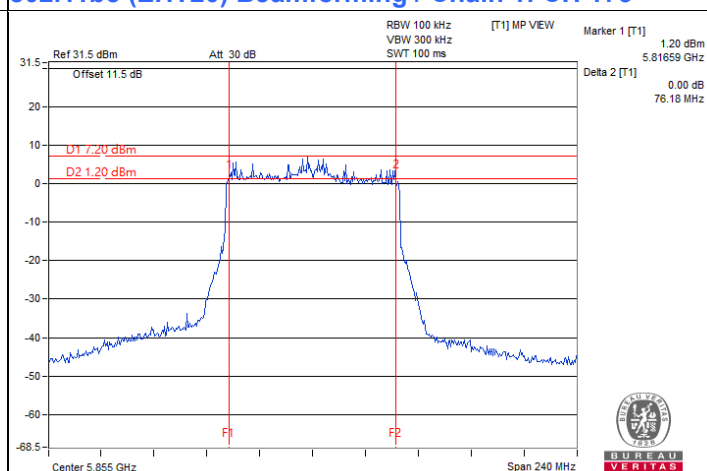
802.11a / Chain 1: CH 169



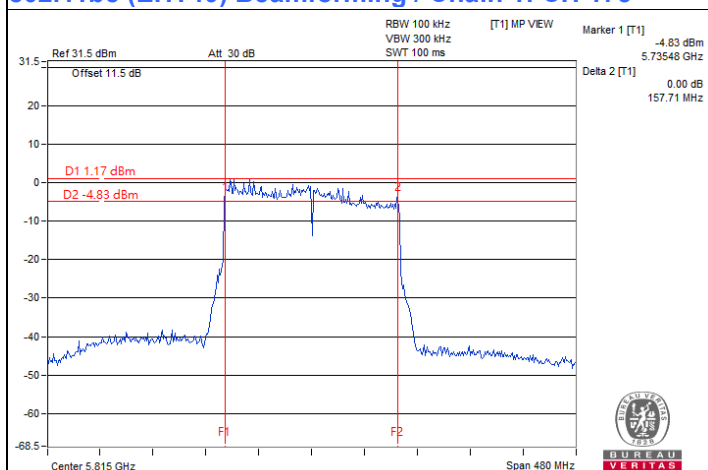
802.11be (EHT20) Beamforming / Chain 1: CH 173



802.11be (EHT40) Beamforming / Chain 1: CH 175



802.11be (EHT80) Beamforming / Chain 0: CH 171



802.11be (EHT160) Beamforming / Chain 0: CH 163

7.4 AC Power Conducted Emissions

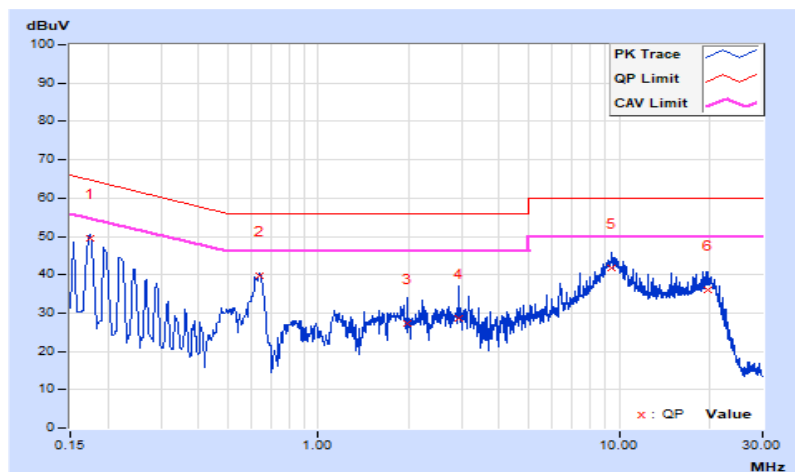
Mode A

RF Mode	802.11be (EHT40)	Channel	CH 167 : 5835 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Edison Lee		

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17384	9.77	39.71	22.90	49.48	32.67	64.77	54.77	-15.29	-22.10
2	0.63885	9.79	30.01	21.95	39.80	31.74	56.00	46.00	-16.20	-14.26
3	1.97800	9.88	17.42	8.49	27.30	18.37	56.00	46.00	-28.70	-27.63
4	2.93000	9.89	18.66	10.58	28.55	20.47	56.00	46.00	-27.45	-25.53
5	9.42200	9.96	31.70	26.21	41.66	36.17	60.00	50.00	-18.34	-13.83
6	19.75400	10.10	25.80	20.90	35.90	31.00	60.00	50.00	-24.10	-19.00

Remarks:

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

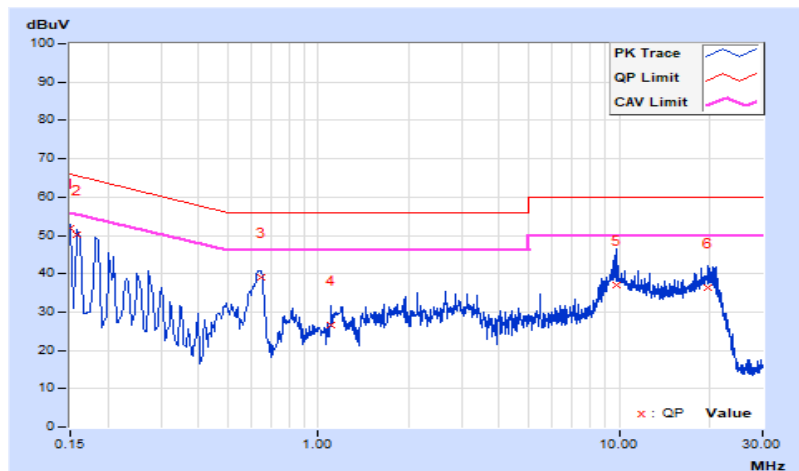


RF Mode	802.11be (EHT40)	Channel	CH 167 : 5835 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Edison Lee		

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.79	42.15	24.65	51.94	34.44	66.00	56.00	-14.06	-21.56
2	0.15800	9.79	40.40	21.83	50.19	31.62	65.57	55.57	-15.38	-23.95
3	0.65000	9.79	29.40	23.07	39.19	32.86	56.00	46.00	-16.81	-13.14
4	1.10600	9.80	16.83	7.03	26.63	16.83	56.00	46.00	-29.37	-29.17
5	9.86600	10.01	27.08	21.38	37.09	31.39	60.00	50.00	-22.91	-18.61
6	19.71000	10.28	26.02	21.17	36.30	31.45	60.00	50.00	-23.70	-18.55

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



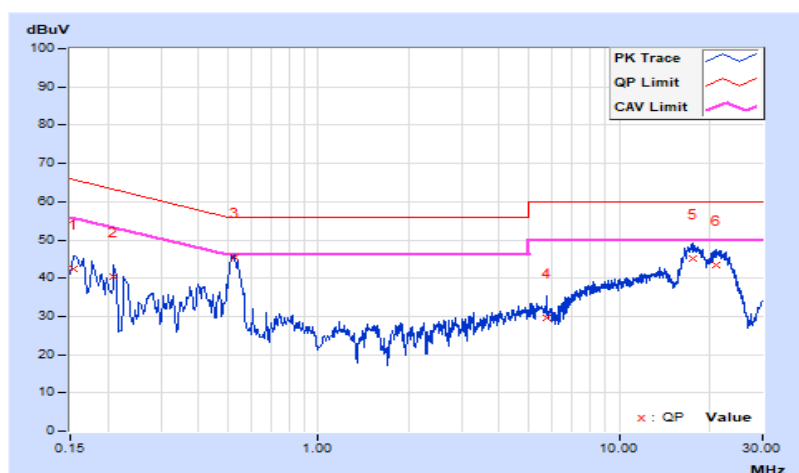
Mode B

RF Mode	802.11be (EHT40)	Channel	CH 167 : 5835 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Edison Lee		

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15400	9.78	32.65	25.46	42.43	35.24	65.78	55.78	-23.35	-20.54
2	0.21000	9.76	30.62	18.68	40.38	28.44	63.21	53.21	-22.83	-24.77
3	0.52568	9.79	35.78	29.18	45.57	38.97	56.00	46.00	-10.43	-7.03
4	5.77000	9.93	19.55	12.80	29.48	22.73	60.00	50.00	-30.52	-27.27
5	17.51800	10.07	35.02	29.04	45.09	39.11	60.00	50.00	-14.91	-10.89
6	21.03800	10.09	33.23	26.87	43.32	36.96	60.00	50.00	-16.68	-13.04

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

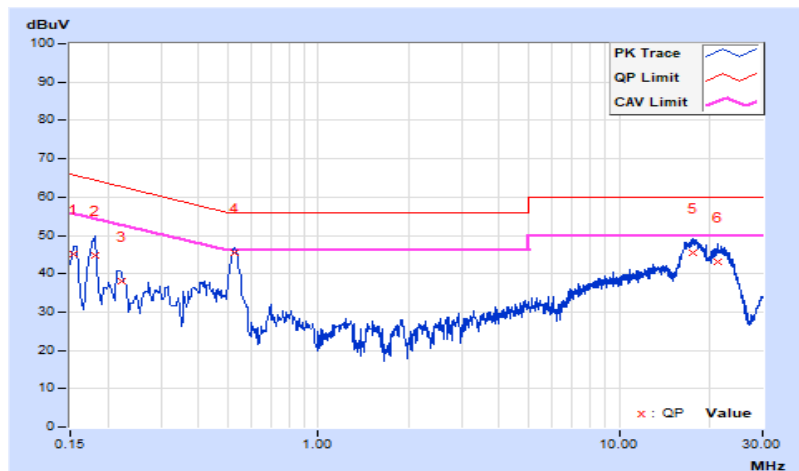


RF Mode	802.11be (EHT40)	Channel	CH 167 : 5835 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Edison Lee		

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15400	9.79	35.32	25.79	45.11	35.58	65.78	55.78	-20.67	-20.20
2	0.18180	9.77	34.95	22.45	44.72	32.22	64.40	54.40	-19.68	-22.18
3	0.22200	9.76	28.37	16.45	38.13	26.21	62.74	52.74	-24.61	-26.53
4	0.52568	9.79	35.81	29.21	45.60	39.00	56.00	46.00	-10.40	-7.00
5	17.60200	10.22	35.30	29.45	45.52	39.67	60.00	50.00	-14.48	-10.33
6	21.38600	10.28	32.98	26.72	43.26	37.00	60.00	50.00	-16.74	-13.00

Remarks:

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



7.5 Unwanted Emissions below 1 GHz

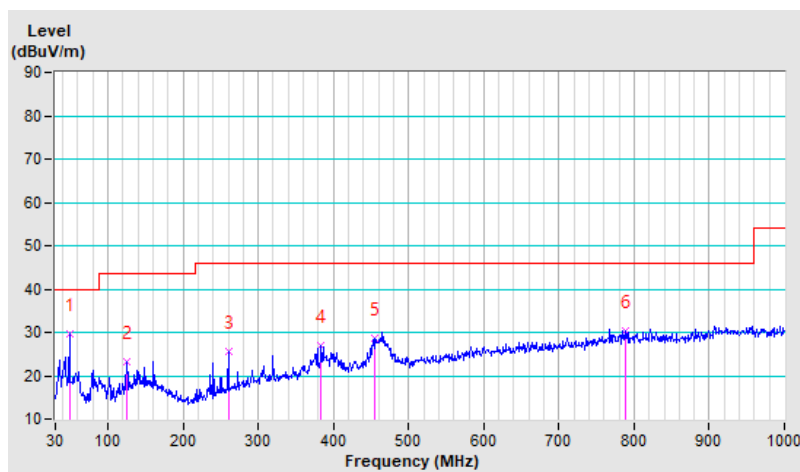
Mode A

RF Mode	802.11be (EHT40)	Channel	CH 167 : 5835 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120 kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67% RH
Tested By	Tony Wu		

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	48.43	29.8 QP	40.0	-10.2	1.99 H	227	42.5	-12.7
2	125.06	23.3 QP	43.5	-20.2	1.99 H	278	37.6	-14.3
3	259.89	25.6 QP	46.0	-20.4	1.99 H	19	39.0	-13.4
4	383.08	26.8 QP	46.0	-19.2	1.00 H	142	36.5	-9.7
5	455.83	28.5 QP	46.0	-17.5	1.99 H	160	35.8	-7.3
6	787.57	30.3 QP	46.0	-15.7	1.99 H	18	31.0	-0.7

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 of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

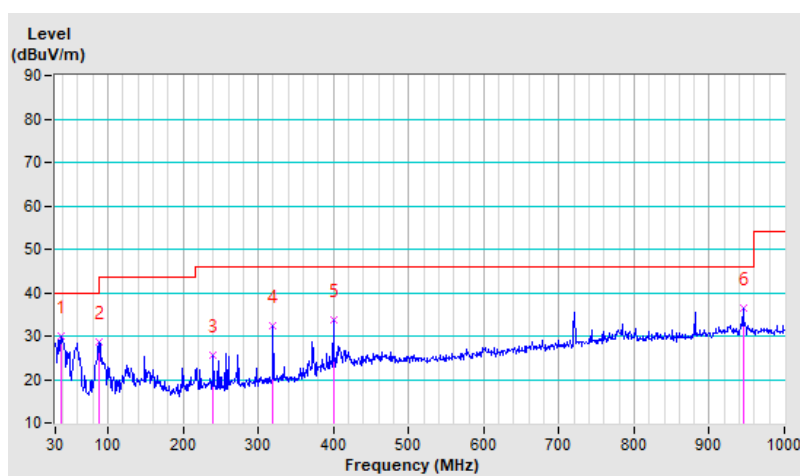


RF Mode	802.11be (EHT40)	Channel	CH 167 : 5835 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120 kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67% RH
Tested By	Tony Wu		

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	36.79	29.9 QP	40.0	-10.1	1.40 V	183	43.4	-13.5
2	88.20	28.6 QP	43.5	-14.9	1.55 V	204	47.4	-18.8
3	239.52	25.5 QP	46.0	-20.5	1.93 V	226	39.6	-14.1
4	320.03	32.4 QP	46.0	-13.6	1.12 V	140	43.6	-11.2
5	399.57	33.8 QP	46.0	-12.2	1.86 V	241	43.1	-9.3
6	944.71	36.4 QP	46.0	-9.6	1.60 V	225	35.0	1.4

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 of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



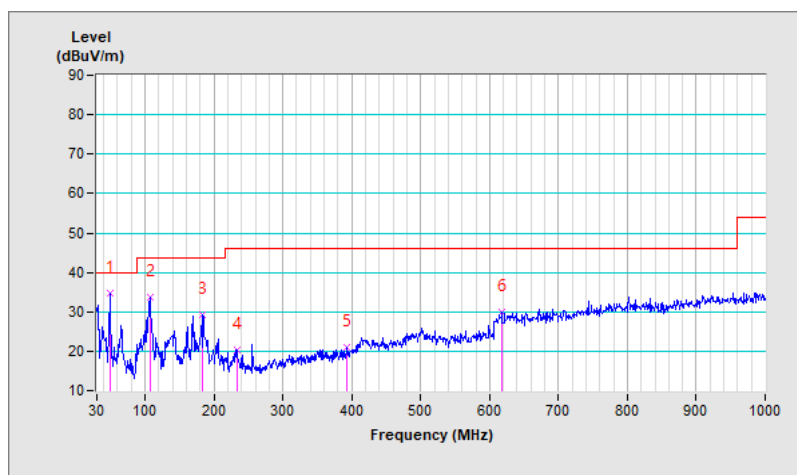
Mode B

RF Mode	802.11be (EHT40)	Channel	CH 167 : 5835 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120 kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Tony Wu		

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	48.43	34.7 QP	40.0	-5.3	1.00 H	28	47.3	-12.6
2	106.63	33.7 QP	43.5	-9.8	1.00 H	145	49.7	-16.0
3	183.26	29.3 QP	43.5	-14.2	1.00 H	187	43.5	-14.2
4	233.70	20.4 QP	46.0	-25.6	1.50 H	154	34.8	-14.4
5	393.75	21.1 QP	46.0	-24.9	1.50 H	179	30.3	-9.2
6	617.82	29.9 QP	46.0	-16.1	2.00 H	310	33.4	-3.5

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 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

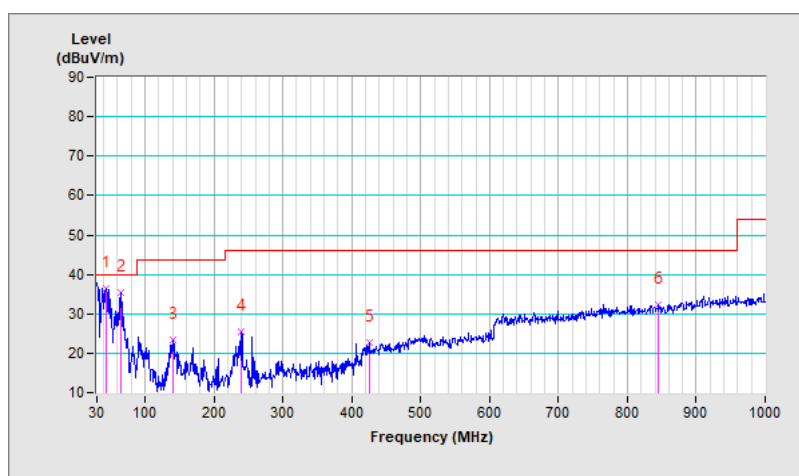


RF Mode	802.11be (EHT40)	Channel	CH 167 : 5835 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120 kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66% RH
Tested By	Tony Wu		

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	43.58	36.5 QP	40.0	-3.5	1.00 V	137	49.3	-12.8
2	63.95	35.5 QP	40.0	-4.5	1.00 V	234	49.5	-14.0
3	139.61	23.5 QP	43.5	-20.0	1.00 V	256	36.5	-13.0
4	239.52	25.4 QP	46.0	-20.6	1.50 V	29	39.4	-14.0
5	424.79	22.6 QP	46.0	-23.4	1.50 V	347	31.0	-8.4
6	844.80	32.3 QP	46.0	-13.7	2.00 V	38	32.6	-0.3

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 of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



7.6 Unwanted Emissions above 1 GHz

RF Mode	802.11a	Channel	CH 169 : 5845 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67% RH
Tested By	Tony Wu		

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	#5650.00	60.3 PK	68.2	-7.9	1.00 H	294	56.1	4.2
2	*5845.00	117.4 PK			1.00 H	294	75.5	41.9
3	*5845.00	107.0 AV			1.00 H	294	65.1	41.9
4	#5895.00	59.2 PK	130.2	-71.0	1.00 H	294	55.3	3.9
5	#5895.00	45.3 AV	110.2	-64.9	1.00 H	294	41.4	3.9
6	#5925.00	59.4 PK	108.2	-48.8	1.00 H	294	55.4	4.0
7	#5925.00	45.5 AV	88.2	-42.7	1.00 H	294	41.5	4.0
8	11690.00	58.7 PK	74.0	-15.3	2.55 H	28	48.2	10.5
9	11690.00	42.9 AV	54.0	-11.1	2.55 H	28	32.4	10.5
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	#5650.00	60.4 PK	68.2	-7.8	1.86 V	19	56.2	4.2
2	*5845.00	118.0 PK			1.86 V	19	76.1	41.9
3	*5845.00	108.1 AV			1.86 V	19	66.2	41.9
4	#5895.00	59.4 PK	130.2	-70.8	1.86 V	19	55.5	3.9
5	#5895.00	45.5 AV	110.2	-64.7	1.86 V	19	41.6	3.9
6	#5925.00	59.6 PK	108.2	-48.6	1.86 V	19	55.6	4.0
7	#5925.00	45.6 AV	88.2	-42.6	1.86 V	19	41.6	4.0
8	11690.00	59.0 PK	74.0	-15.0	1.77 V	58	48.5	10.5
9	11690.00	43.3 AV	54.0	-10.7	1.77 V	58	32.8	10.5

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, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11a	Channel	CH 173 : 5865 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67% RH
Tested By	Tony Wu		

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	*5865.00	117.4 PK			1.00 H	299	75.6	41.8
2	*5865.00	107.2 AV			1.00 H	299	65.4	41.8
3	11730.00	58.7 PK	74.0	-15.3	2.45 H	28	48.2	10.5
4	11730.00	42.8 AV	54.0	-11.2	2.45 H	28	32.3	10.5
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	*5865.00	118.7 PK			1.89 V	21	76.9	41.8
2	*5865.00	108.6 AV			1.89 V	21	66.8	41.8
3	11730.00	59.1 PK	74.0	-14.9	1.75 V	51	48.6	10.5
4	11730.00	43.2 AV	54.0	-10.8	1.75 V	51	32.7	10.5

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, the limit was restricted at the RF Output Power.

RF Mode	802.11a	Channel	CH 177 : 5885 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67% RH
Tested By	Tony Wu		

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	#5650.00	60.4 PK	68.2	-7.8	1.00 H	294	56.2	4.2
2	*5885.00	115.8 PK			1.00 H	294	74.1	41.7
3	*5885.00	106.1 AV			1.00 H	294	64.4	41.7
4	#5895.00	95.5 PK	130.2	-34.7	1.00 H	294	91.6	3.9
5	#5895.00	79.3 AV	110.2	-30.9	1.00 H	294	75.4	3.9
6	#5925.00	59.3 PK	108.2	-48.9	1.00 H	294	55.3	4.0
7	#5925.00	45.5 AV	88.2	-42.7	1.00 H	294	41.5	4.0
8	11770.00	58.7 PK	74.0	-15.3	2.54 H	28	48.2	10.5
9	11770.00	42.9 AV	54.0	-11.1	2.54 H	28	32.4	10.5
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	#5650.00	60.4 PK	68.2	-7.8	1.92 V	21	56.2	4.2
2	*5885.00	117.0 PK			1.92 V	21	75.3	41.7
3	*5885.00	107.4 AV			1.92 V	21	65.7	41.7
4	#5895.00	96.9 PK	130.2	-33.3	1.92 V	21	93.0	3.9
5	#5895.00	80.7 AV	110.2	-29.5	1.92 V	21	76.8	3.9
6	#5925.00	59.3 PK	108.2	-48.9	1.92 V	21	55.3	4.0
7	#5925.00	45.7 AV	88.2	-42.5	1.92 V	21	41.7	4.0
8	11770.00	59.1 PK	74.0	-14.9	1.77 V	52	48.6	10.5
9	11770.00	43.2 AV	54.0	-10.8	1.77 V	52	32.7	10.5

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, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11be (EHT20)	Channel	CH 169 : 5845 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67% RH
Tested By	Tony Wu		

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	#5650.00	60.2 PK	68.2	-8.0	1.00 H	294	56.0	4.2
2	*5845.00	118.3 PK			1.00 H	294	76.4	41.9
3	*5845.00	103.7 AV			1.00 H	294	61.8	41.9
4	#5895.00	59.3 PK	130.2	-70.9	1.00 H	294	55.4	3.9
5	#5895.00	45.6 AV	110.2	-64.6	1.00 H	294	41.7	3.9
6	#5925.00	58.6 PK	108.2	-49.6	1.00 H	294	54.6	4.0
7	#5925.00	45.5 AV	88.2	-42.7	1.00 H	294	41.5	4.0
8	11690.00	58.8 PK	74.0	-15.2	2.48 H	28	48.3	10.5
9	11690.00	42.6 AV	54.0	-11.4	2.48 H	28	32.1	10.5

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	#5650.00	60.3 PK	68.2	-7.9	1.92 V	23	56.1	4.2
2	*5845.00	119.0 PK			1.92 V	23	77.1	41.9
3	*5845.00	107.8 AV			1.92 V	23	65.9	41.9
4	#5895.00	59.8 PK	130.2	-70.4	1.92 V	23	55.9	3.9
5	#5895.00	45.7 AV	110.2	-64.5	1.92 V	23	41.8	3.9
6	#5925.00	60.0 PK	108.2	-48.2	1.92 V	23	56.0	4.0
7	#5925.00	45.6 AV	88.2	-42.6	1.92 V	23	41.6	4.0
8	11690.00	59.1 PK	74.0	-14.9	1.77 V	58	48.6	10.5
9	11690.00	43.0 AV	54.0	-11.0	1.77 V	58	32.5	10.5

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, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11be (EHT20)	Channel	CH 173 : 5865 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67% RH
Tested By	Tony Wu		

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	*5865.00	118.1 PK			1.00 H	298	76.3	41.8
2	*5865.00	108.0 AV			1.00 H	298	66.2	41.8
3	11730.00	58.6 PK	74.0	-15.4	2.44 H	28	48.1	10.5
4	11730.00	42.5 AV	54.0	-11.5	2.44 H	28	32.0	10.5
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	*5865.00	119.2 PK			1.88 V	25	77.4	41.8
2	*5865.00	109.4 AV			1.88 V	25	67.6	41.8
3	11730.00	59.1 PK	74.0	-14.9	1.77 V	55	48.6	10.5
4	11730.00	43.3 AV	54.0	-10.7	1.77 V	55	32.8	10.5

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, the limit was restricted at the RF Output Power.

RF Mode	802.11be (EHT20)	Channel	CH 177 : 5885 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67% RH
Tested By	Tony Wu		

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	#5650.00	59.9 PK	68.2	-8.3	1.00 H	290	55.7	4.2
2	*5885.00	118.3 PK			1.00 H	290	76.6	41.7
3	*5885.00	105.1 AV			1.00 H	290	63.4	41.7
4	#5895.00	96.6 PK	130.2	-33.6	1.00 H	290	92.7	3.9
5	#5895.00	78.0 AV	110.2	-32.2	1.00 H	290	74.1	3.9
6	#5925.00	59.0 PK	108.2	-49.2	1.00 H	290	55.0	4.0
7	#5925.00	45.2 AV	88.2	-43.0	1.00 H	290	41.2	4.0
8	11770.00	58.7 PK	74.0	-15.3	2.51 H	28	48.2	10.5
9	11770.00	42.6 AV	54.0	-11.4	2.51 H	28	32.1	10.5

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	#5650.00	60.1 PK	68.2	-8.1	1.92 V	21	55.9	4.2
2	*5885.00	119.4 PK			1.92 V	21	77.7	41.7
3	*5885.00	107.5 AV			1.92 V	21	65.8	41.7
4	#5895.00	98.8 PK	130.2	-31.4	1.92 V	21	94.9	3.9
5	#5895.00	78.7 AV	110.2	-31.5	1.92 V	21	74.8	3.9
6	#5925.00	59.1 PK	108.2	-49.1	1.92 V	21	55.1	4.0
7	#5925.00	45.7 AV	88.2	-42.5	1.92 V	21	41.7	4.0
8	11770.00	59.0 PK	74.0	-15.0	1.72 V	53	48.5	10.5
9	11770.00	43.3 AV	54.0	-10.7	1.72 V	53	32.8	10.5

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, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11be (EHT40)	Channel	CH 167 : 5835 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67% RH
Tested By	Tony Wu		

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	#5650.00	60.4 PK	68.2	-7.8	1.99 H	14	56.2	4.2
2	*5835.00	113.5 PK			1.99 H	14	71.6	41.9
3	*5835.00	100.0 AV			1.99 H	14	58.1	41.9
4	#5895.00	59.2 PK	130.2	-71.0	1.99 H	14	55.3	3.9
5	#5895.00	45.4 AV	110.2	-64.8	1.99 H	14	41.5	3.9
6	#5925.00	59.9 PK	108.2	-48.3	1.99 H	14	55.9	4.0
7	#5925.00	47.0 AV	88.2	-41.2	1.99 H	14	43.0	4.0
8	11670.00	59.1 PK	74.0	-14.9	1.77 H	58	48.5	10.6
9	11670.00	43.2 AV	54.0	-10.8	1.77 H	58	32.6	10.6
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	#5650.00	59.8 PK	68.2	-8.4	1.99 V	14	55.6	4.2
2	*5835.00	114.6 PK			1.99 V	14	72.7	41.9
3	*5835.00	101.7 AV			1.99 V	14	59.8	41.9
4	#5895.00	59.8 PK	130.2	-70.4	1.99 V	14	55.9	3.9
5	#5895.00	45.6 AV	110.2	-64.6	1.99 V	14	41.7	3.9
6	#5925.00	60.4 PK	108.2	-47.8	1.99 V	14	56.4	4.0
7	#5925.00	45.5 AV	88.2	-42.7	1.99 V	14	41.5	4.0
8	11670.00	59.2 PK	74.0	-14.8	1.77 V	58	48.6	10.6
9	11670.00	43.1 AV	54.0	-10.9	1.77 V	58	32.5	10.6

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, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11be (EHT40)	Channel	CH 175 : 5875 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67% RH
Tested By	Tony Wu		

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	#5650.00	59.8 PK	68.2	-8.4	1.00 H	294	55.6	4.2
2	*5875.00	114.5 PK			1.00 H	294	72.8	41.7
3	*5875.00	101.2 AV			1.00 H	294	59.5	41.7
4	#5895.00	94.6 PK	130.2	-35.6	1.00 H	294	90.7	3.9
5	#5895.00	75.8 AV	110.2	-34.4	1.00 H	294	71.9	3.9
6	#5925.00	59.9 PK	108.2	-48.3	1.00 H	294	55.9	4.0
7	#5925.00	45.6 AV	88.2	-42.6	1.00 H	294	41.6	4.0
8	11750.00	58.7 PK	74.0	-15.3	2.44 H	28	48.2	10.5
9	11750.00	42.6 AV	54.0	-11.4	2.44 H	28	32.1	10.5

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	#5650.00	60.4 PK	68.2	-7.8	1.92 V	21	56.2	4.2
2	*5875.00	115.9 PK			1.92 V	21	74.2	41.7
3	*5875.00	103.3 AV			1.92 V	21	61.6	41.7
4	#5895.00	95.8 PK	130.2	-34.4	1.92 V	21	91.9	3.9
5	#5895.00	78.0 AV	110.2	-32.2	1.92 V	21	74.1	3.9
6	#5925.00	59.7 PK	108.2	-48.5	1.92 V	21	55.7	4.0
7	#5925.00	46.3 AV	88.2	-41.9	1.92 V	21	42.3	4.0
8	11750.00	59.1 PK	74.0	-14.9	1.77 V	55	48.6	10.5
9	11750.00	43.2 AV	54.0	-10.8	1.77 V	55	32.7	10.5

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, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11be (EHT80)	Channel	CH 171 : 5855 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67% RH
Tested By	Tony Wu		

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	#5650.00	60.2 PK	68.2	-8.0	1.00 H	294	56.0	4.2
2	*5855.00	111.7 PK			1.00 H	294	69.9	41.8
3	*5855.00	97.8 AV			1.00 H	294	56.0	41.8
4	#5895.00	90.6 PK	130.2	-39.6	1.00 H	294	86.7	3.9
5	#5895.00	72.5 AV	110.2	-37.7	1.00 H	294	68.6	3.9
6	#5925.00	60.4 PK	108.2	-47.8	1.00 H	294	56.4	4.0
7	#5925.00	46.8 AV	88.2	-41.4	1.00 H	294	42.8	4.0
8	11710.00	58.7 PK	74.0	-15.3	2.44 H	23	48.2	10.5
9	11710.00	42.9 AV	54.0	-11.1	2.44 H	23	32.4	10.5
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	#5650.00	60.5 PK	68.2	-7.7	1.92 V	21	56.3	4.2
2	*5855.00	113.0 PK			1.92 V	21	71.2	41.8
3	*5855.00	99.1 AV			1.92 V	21	57.3	41.8
4	#5895.00	94.8 PK	130.2	-35.4	1.92 V	21	90.9	3.9
5	#5895.00	74.1 AV	110.2	-36.1	1.92 V	21	70.2	3.9
6	#5925.00	58.8 PK	108.2	-49.4	1.92 V	21	54.8	4.0
7	#5925.00	47.7 AV	88.2	-40.5	1.92 V	21	43.7	4.0
8	11710.00	59.0 PK	74.0	-15.0	1.77 V	60	48.5	10.5
9	11710.00	43.2 AV	54.0	-10.8	1.77 V	60	32.7	10.5

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, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

RF Mode	802.11be (EHT160)	Channel	CH 163 : 5815 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67% RH
Tested By	Tony Wu		

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	#5650.00	52.5 PK	68.2	-15.7	3.77 H	181	48.3	4.2
2	*5815.00	107.9 PK			3.77 H	181	65.9	42.0
3	*5815.00	95.3 AV			3.77 H	181	53.3	42.0
4	#5895.00	86.4 PK	130.2	-43.8	3.77 H	181	82.5	3.9
5	#5895.00	65.5 AV	110.2	-44.7	3.77 H	181	61.6	3.9
6	#5925.00	62.4 PK	108.2	-45.8	3.77 H	181	58.4	4.0
7	#5925.00	49.0 AV	88.2	-39.2	3.77 H	181	45.0	4.0
8	11630.00	59.0 PK	74.0	-15.0	2.44 H	23	48.2	10.8
9	11630.00	43.0 AV	54.0	-11.0	2.44 H	23	32.2	10.8

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	#5650.00	58.1 PK	68.2	-10.1	1.51 V	1	53.9	4.2
2	*5815.00	112.6 PK			1.51 V	1	70.6	42.0
3	*5815.00	100.2 AV			1.51 V	1	58.2	42.0
4	#5895.00	91.3 PK	130.2	-38.9	1.51 V	1	87.4	3.9
5	#5895.00	68.4 AV	110.2	-41.8	1.51 V	1	64.5	3.9
6	#5925.00	64.1 PK	108.2	-44.1	1.51 V	1	60.1	4.0
7	#5925.00	50.0 AV	88.2	-38.2	1.51 V	1	46.0	4.0
8	11630.00	59.4 PK	74.0	-14.6	1.77 V	53	48.6	10.8
9	11630.00	43.2 AV	54.0	-10.8	1.77 V	53	32.4	10.8

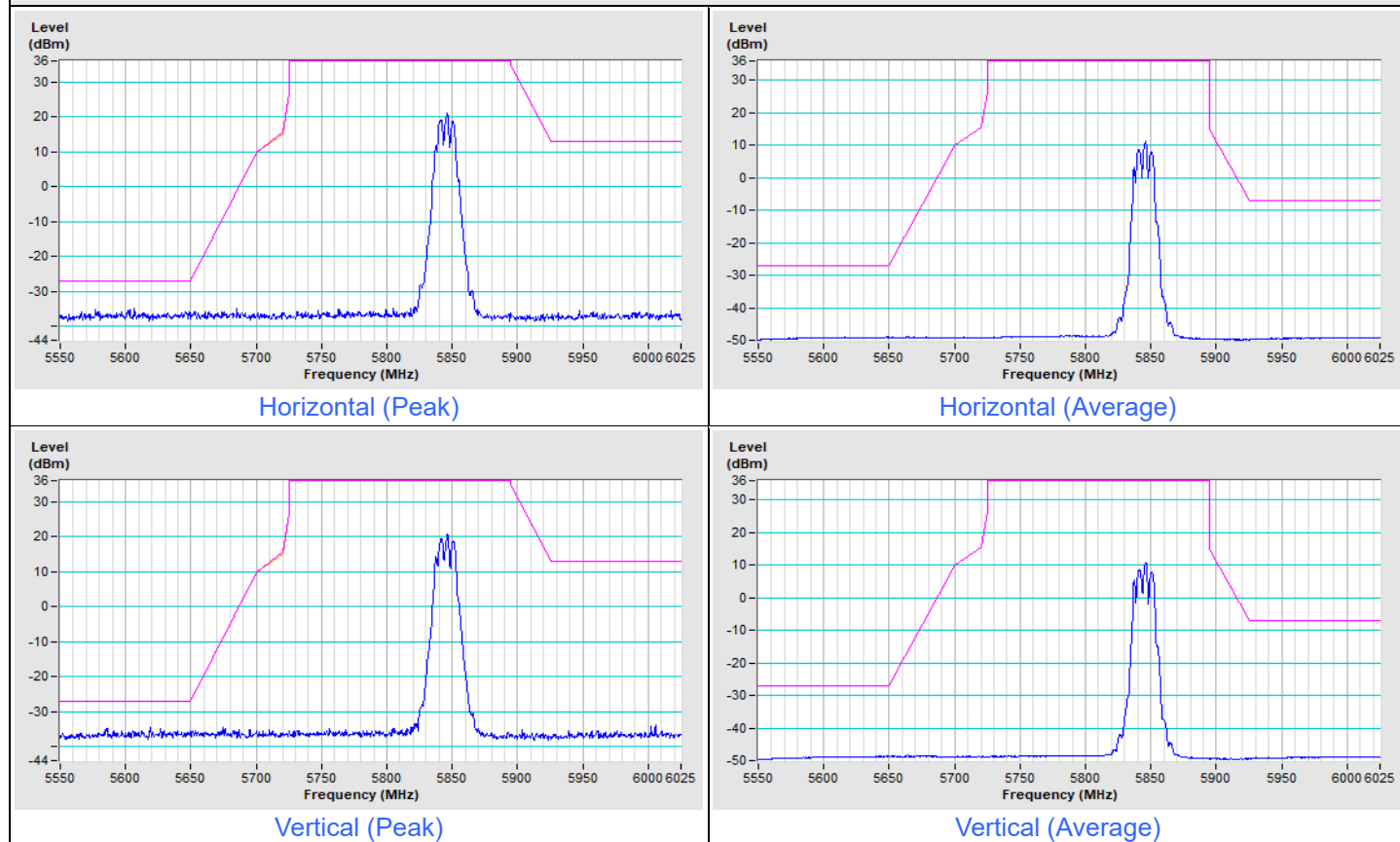
Remarks:

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, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

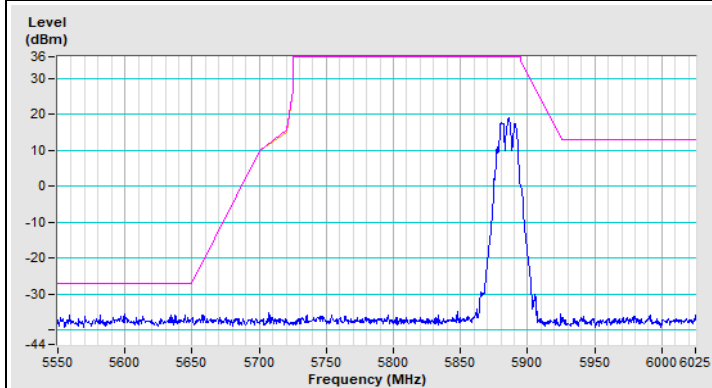
Plot of Band Edge

Frequency Range	5.55 GHz ~ 6.025 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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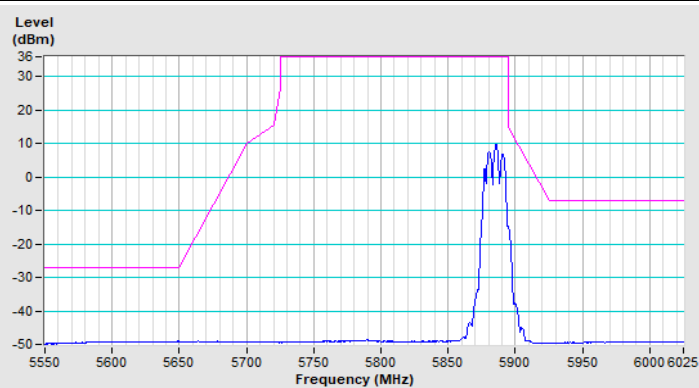
802.11a Channel 169



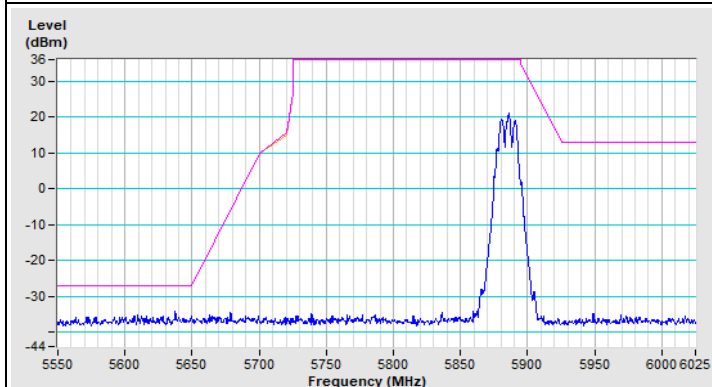
802.11a Channel 177



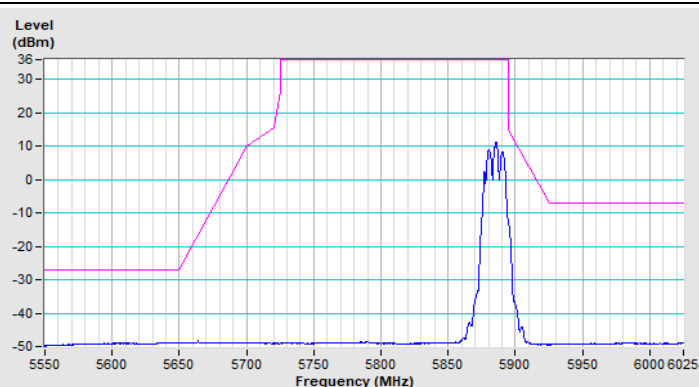
Horizontal (Peak)



Horizontal (Average)



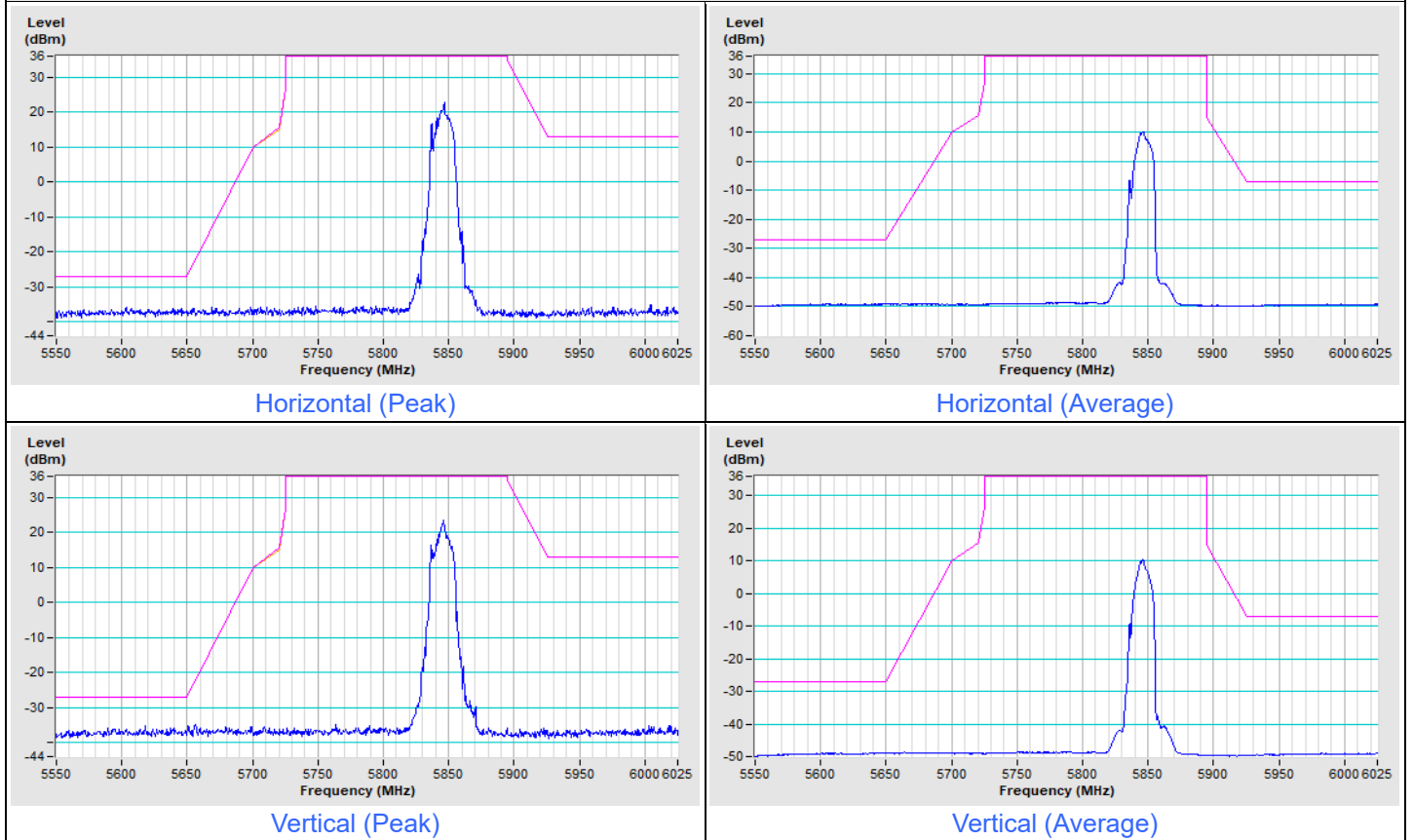
Vertical (Peak)



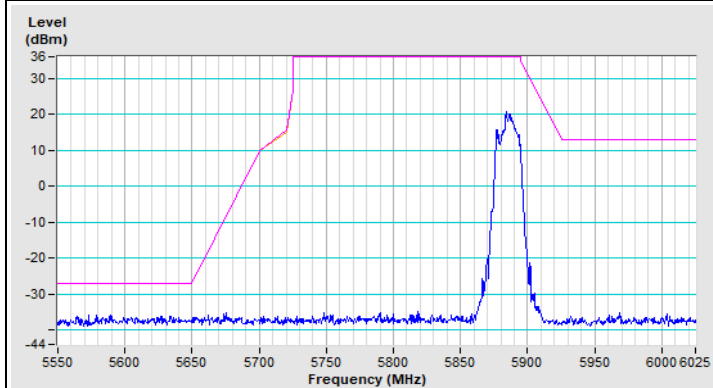
Vertical (Average)

Frequency Range	5.55 GHz ~ 6.025 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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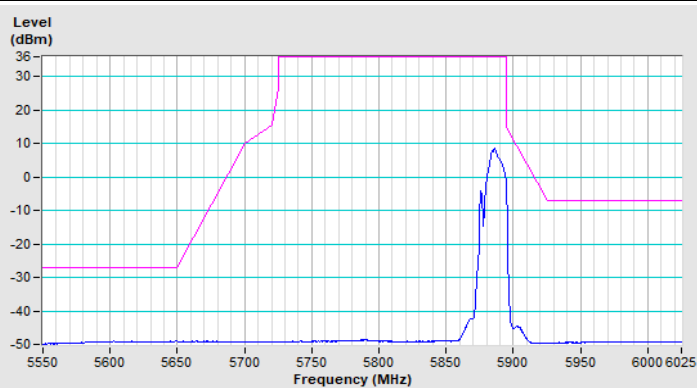
802.11be (EHT20) Channel 169



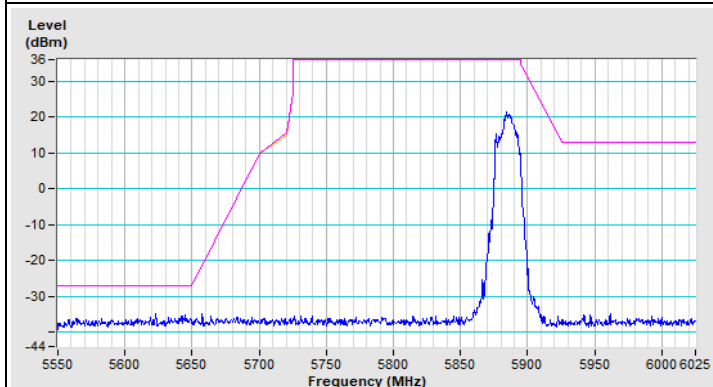
802.11be (EHT20) Channel 177



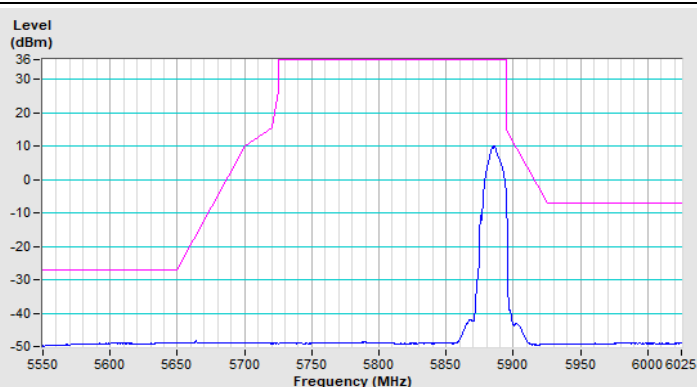
Horizontal (Peak)



Horizontal (Average)



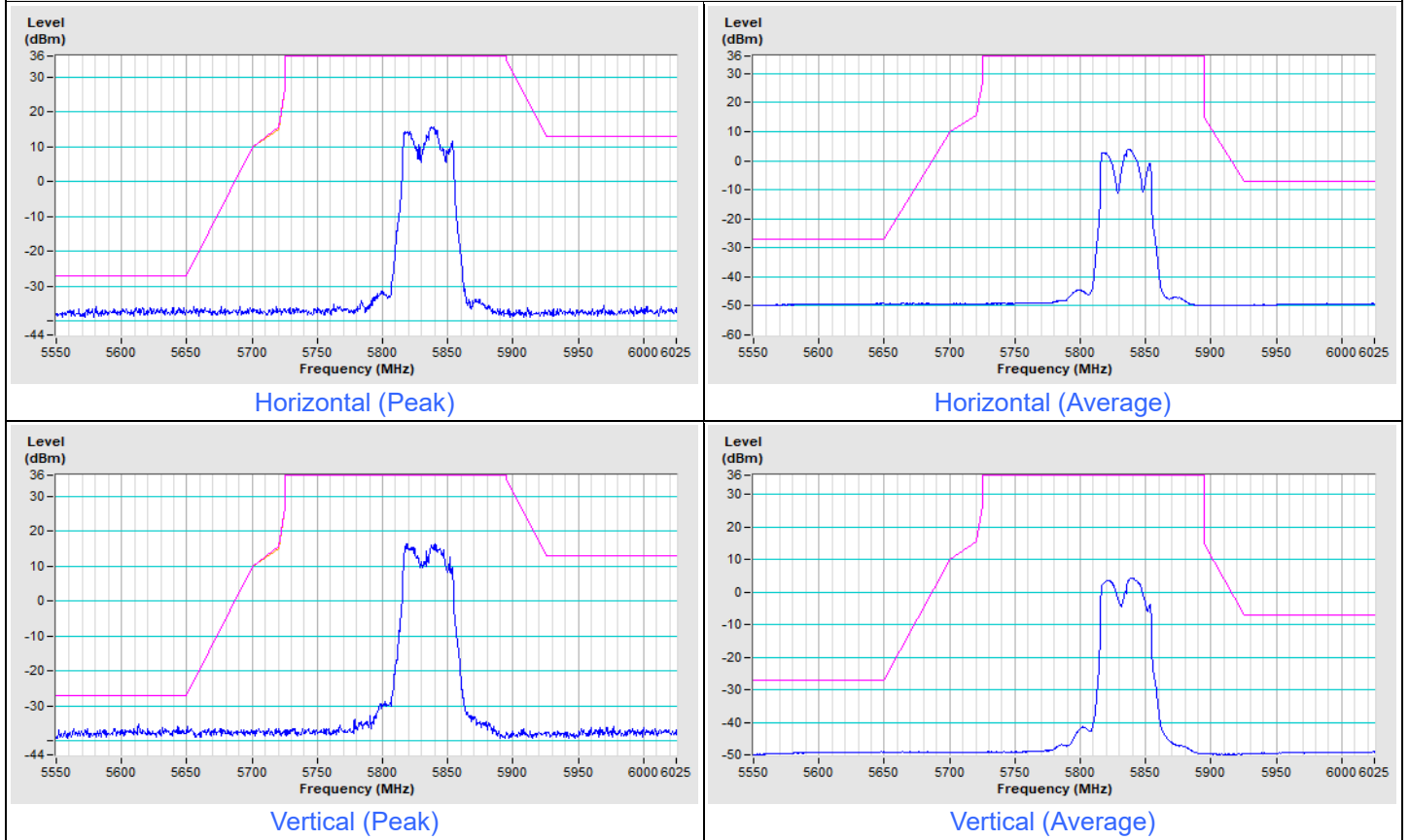
Vertical (Peak)



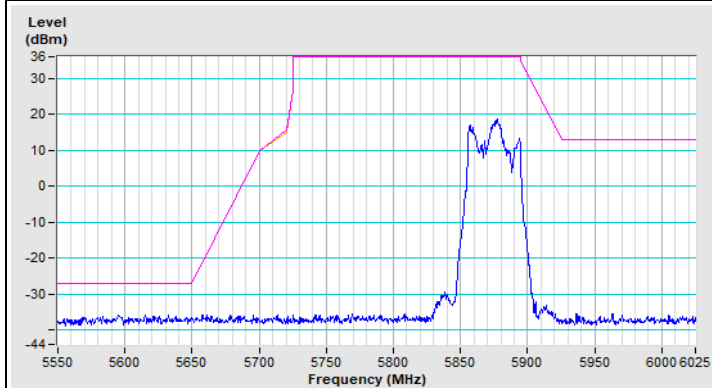
Vertical (Average)

Frequency Range	5.55 GHz ~ 6.025 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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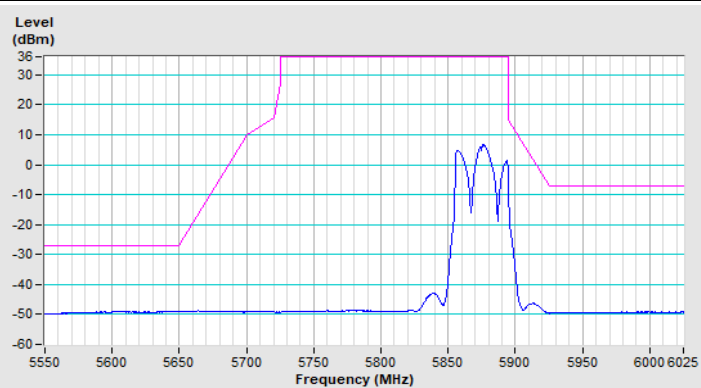
802.11be (EHT40) Channel 167



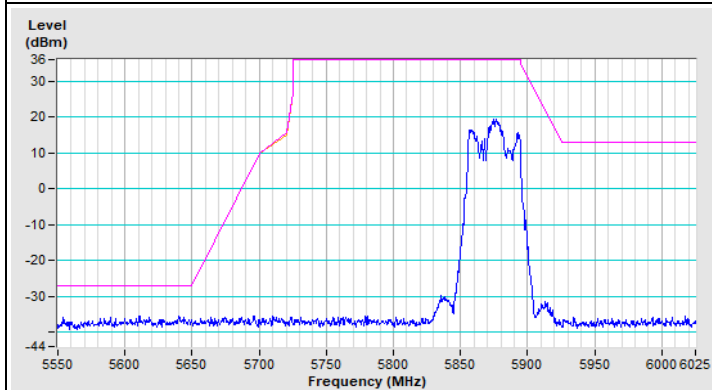
802.11be (EHT40) Channel 175



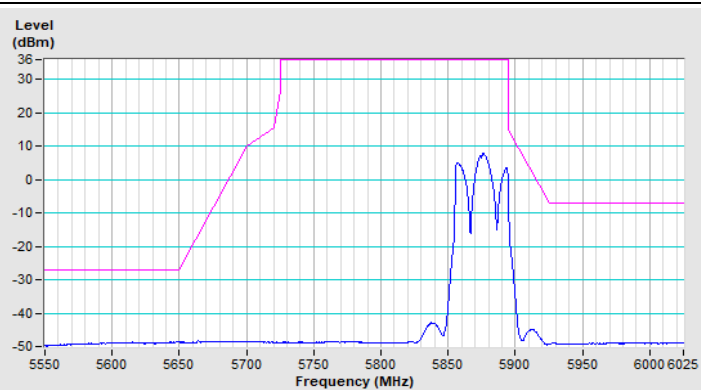
Horizontal (Peak)



Horizontal (Average)



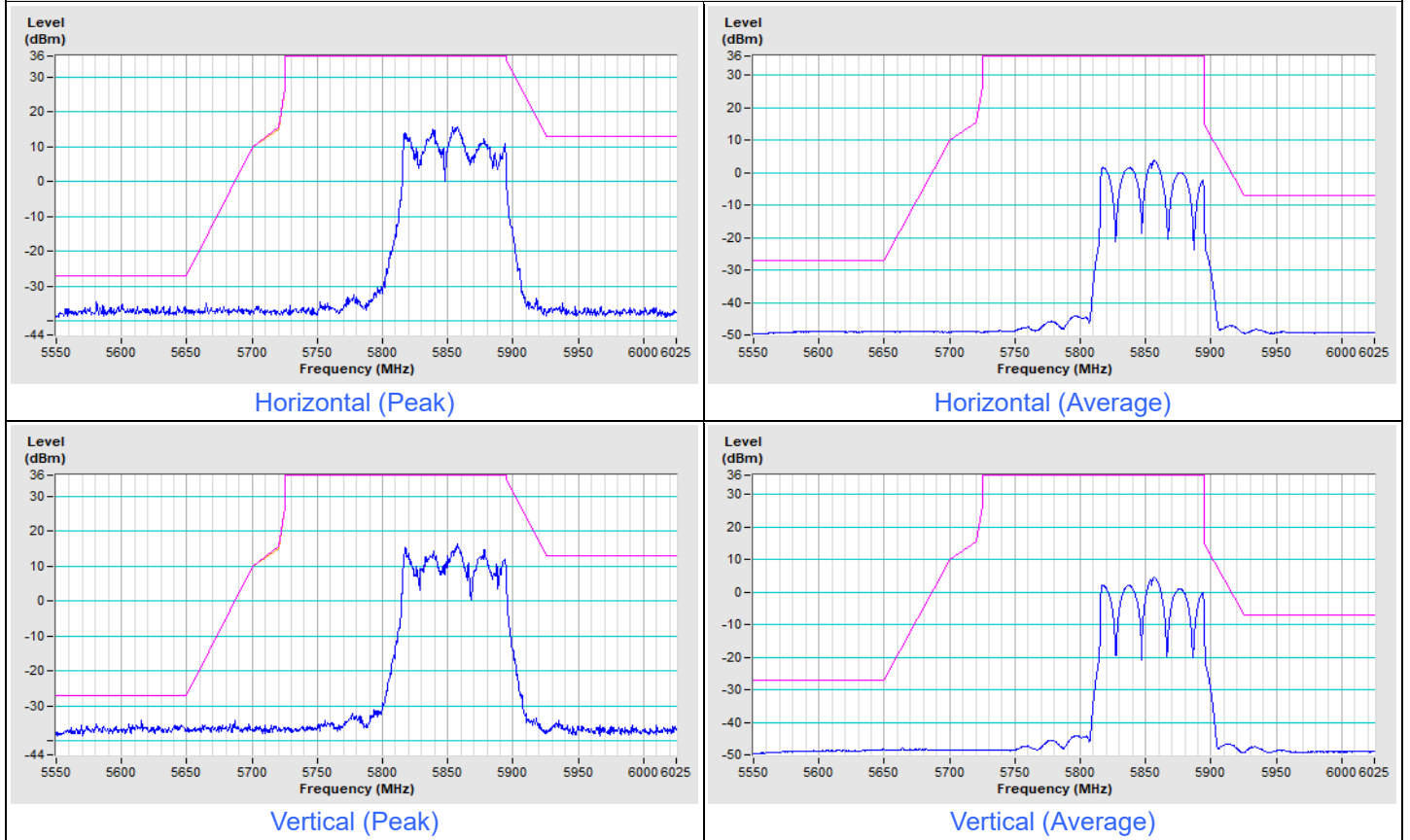
Vertical (Peak)



Vertical (Average)

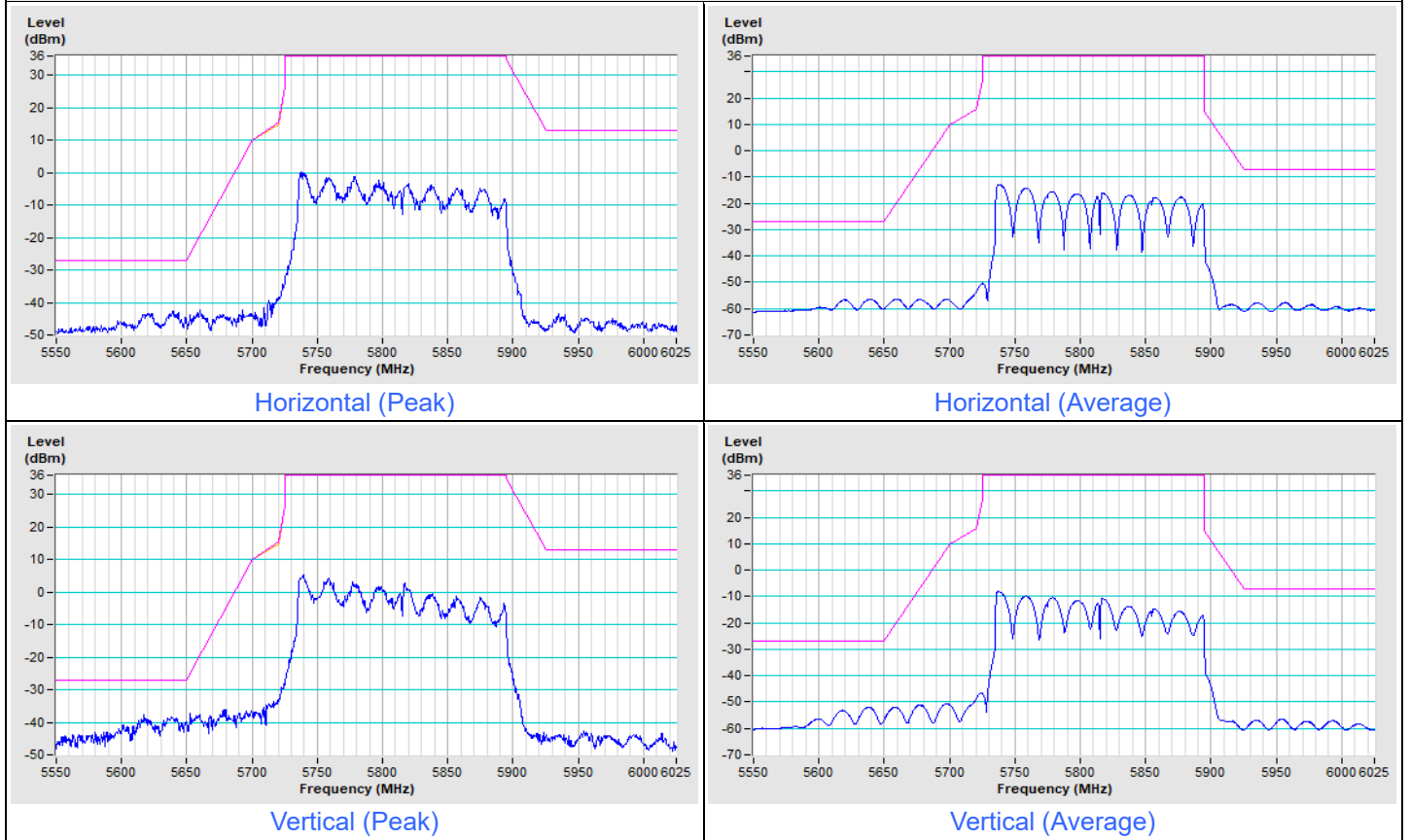
Frequency Range	5.55 GHz ~ 6.025 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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802.11be (EHT80) Channel 171



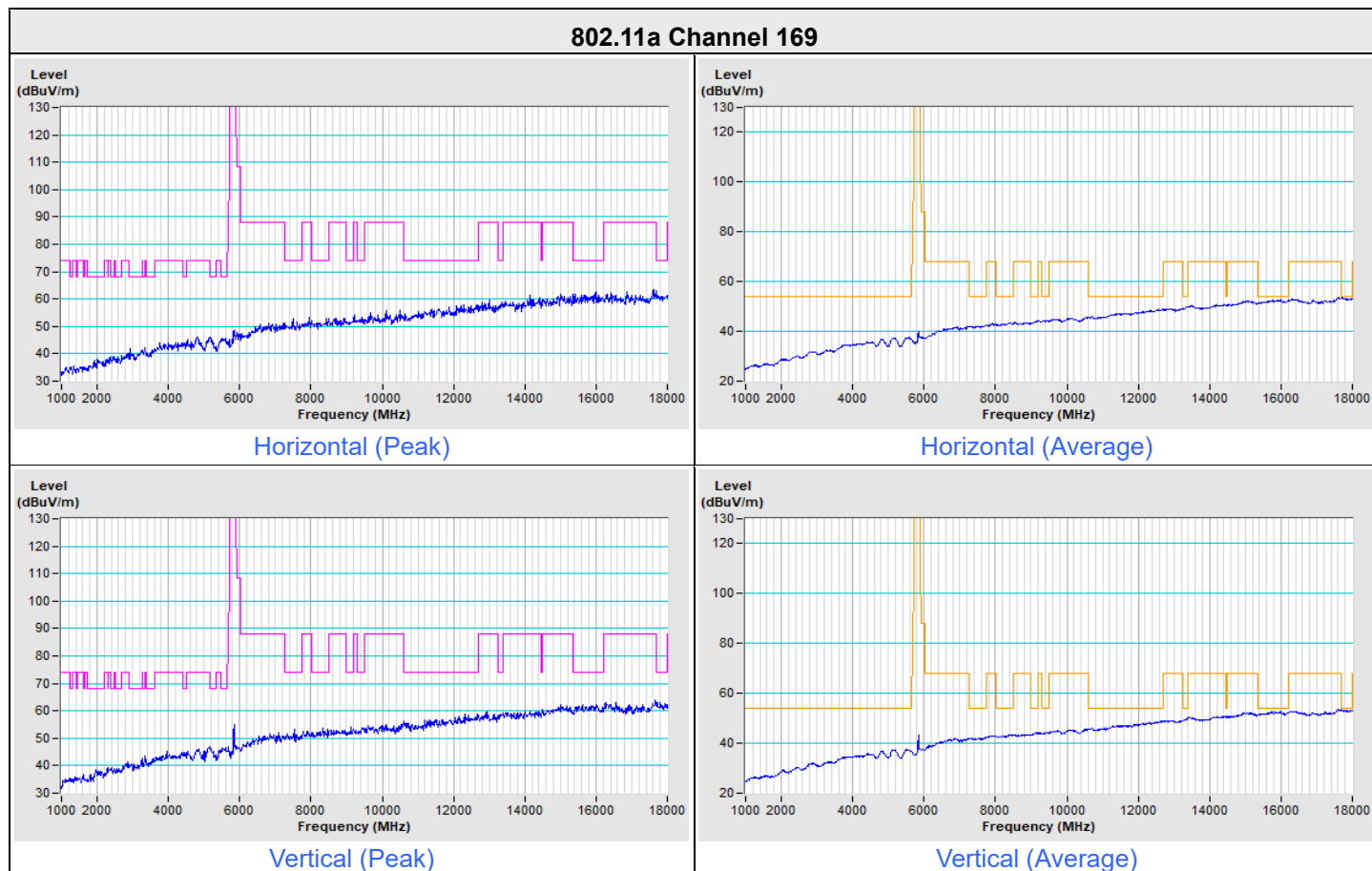
Frequency Range	5.55 GHz ~ 6.025 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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802.11be (EHT160) Channel 163



Plot of Other Emission

Frequency Range	1 GHz ~ 18 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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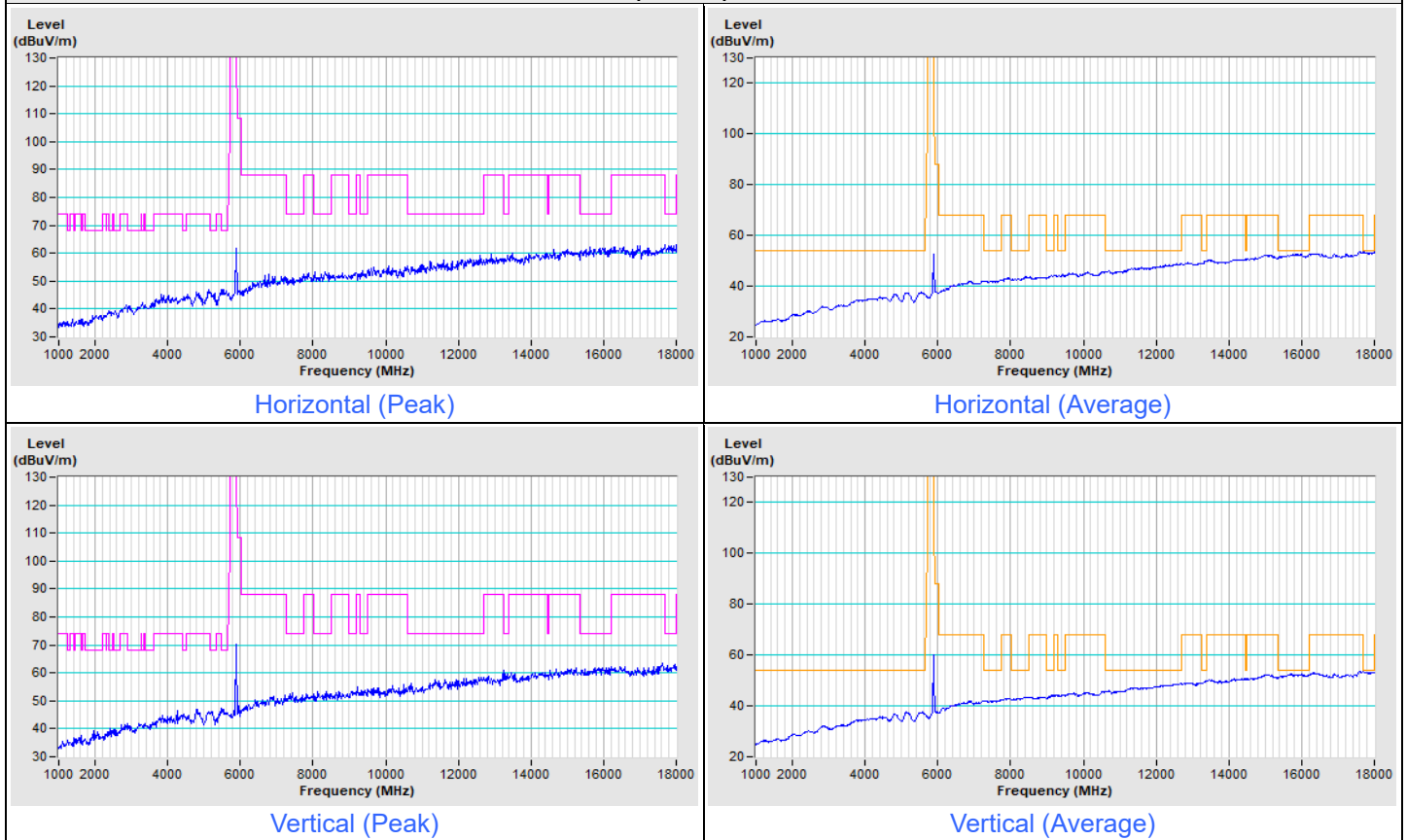


Notes:

- For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
- The frequency range 18 GHz ~ 40 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

Frequency Range	1 GHz ~ 18 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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802.11be (EHT20) Channel 177

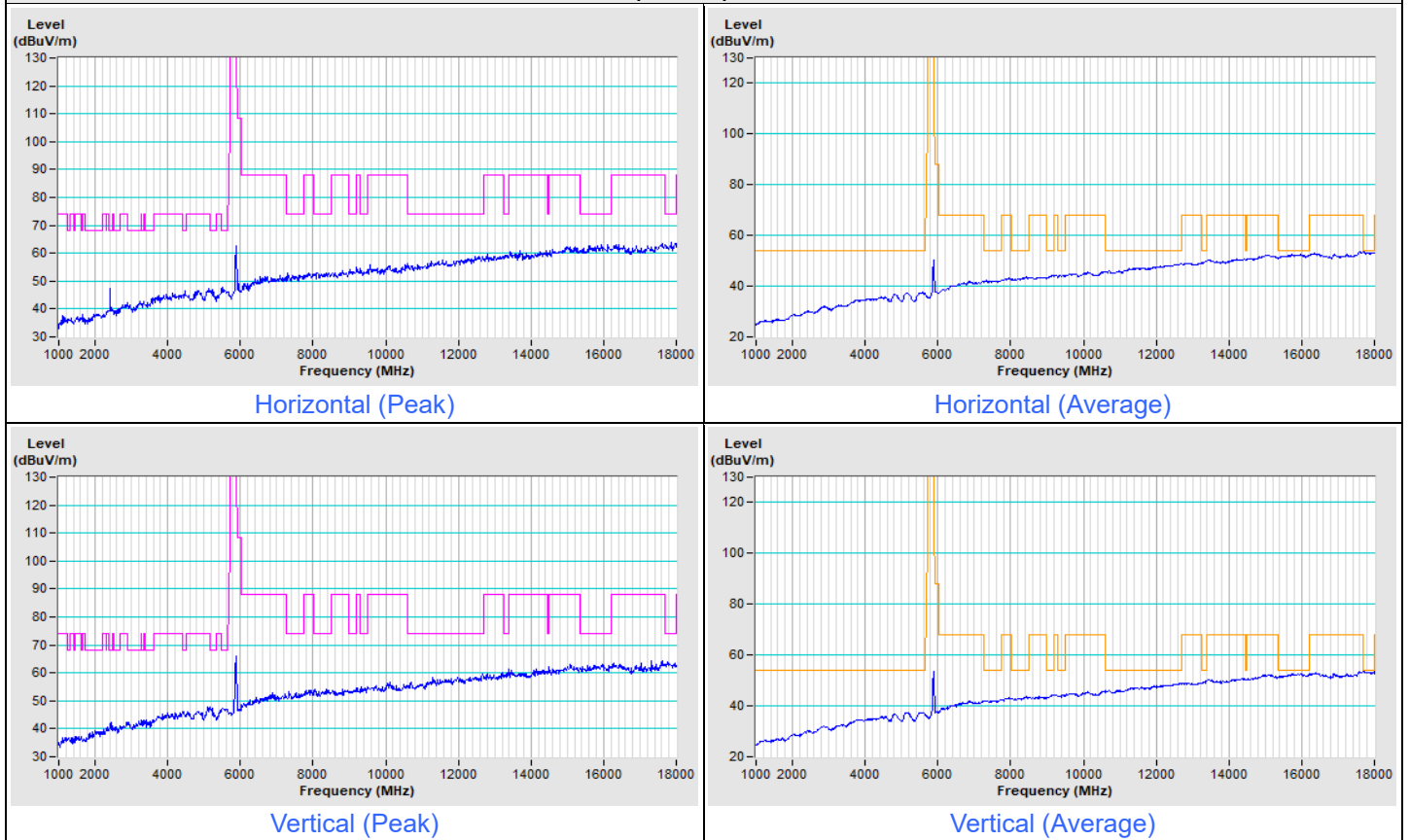


Notes:

1. For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
2. The frequency range 18 GHz ~ 40 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

Frequency Range	1 GHz ~ 18 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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802.11be (EHT40) Channel 175

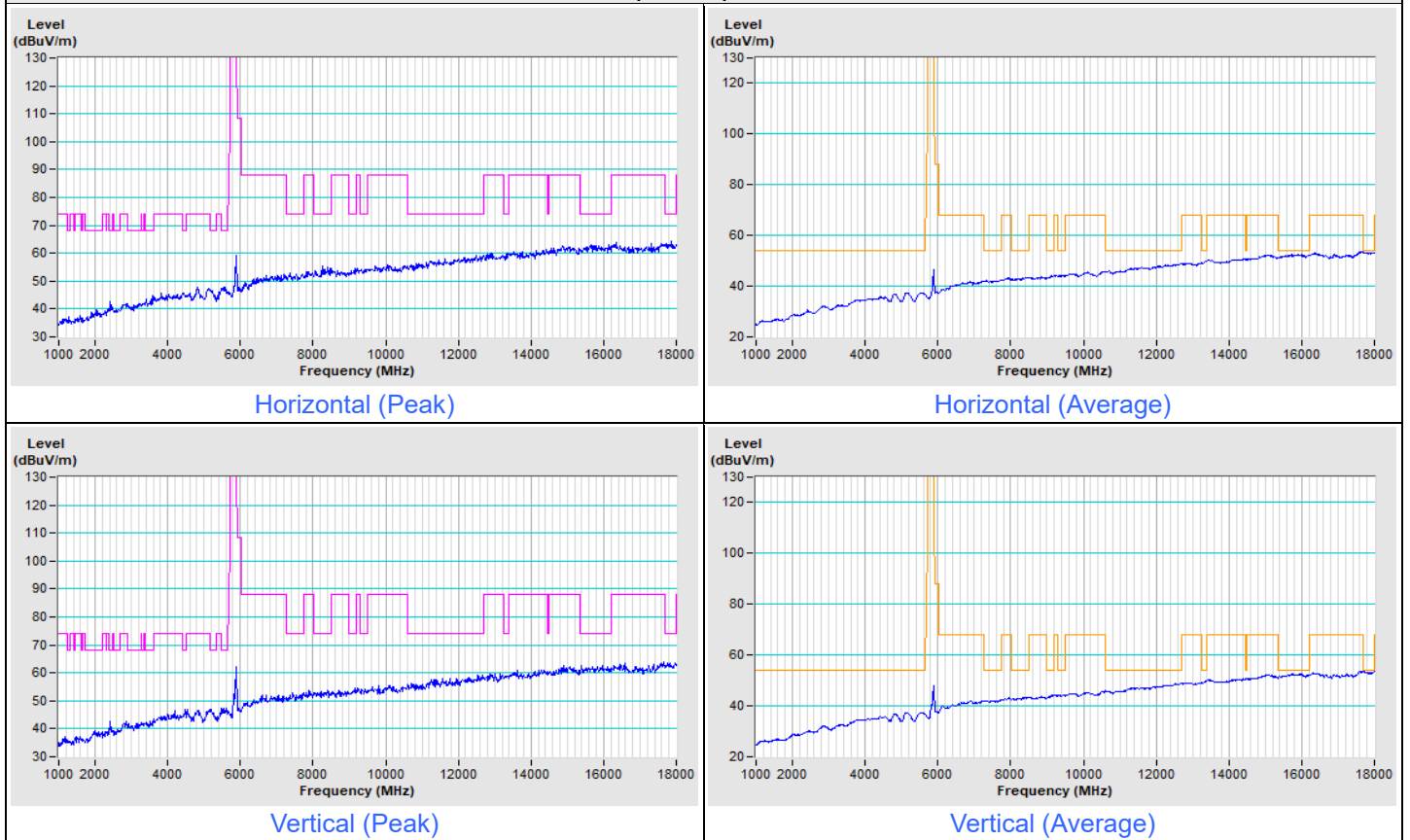


Notes:

1. For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
2. The frequency range 18 GHz ~ 40 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

Frequency Range	1 GHz ~ 18 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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802.11be (EHT80) Channel 171



Notes:

1. For radiated emission test data, complete spectral plots shall be presented in the report only for the worst-case scenarios of each mode within each operating frequency band.
2. The frequency range 18 GHz ~ 40 GHz: After investigation, no any emissions were found to exist, therefore they are not recorded in this report.

8 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo)

9 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 according to ISO/IEC 17025.

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

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

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