

TEST REPORT

CERTIFICATE OF CONFORMITY

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

Report No.: RFBBQZ-WTW-P24080648-2

FCC ID: PY324400641

Product: Orbi Router, Orbi Satellite

Brand: NETGEAR

Model No.: RBE371

Series Model: RBE370

Received Date: 2024/10/24

Test Date: 2025/2/12 ~ 2025/3/31

Issued Date: 2025/5/20

Applicant and Manufacturer: NETGEAR, Inc.

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

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FCC Registration / 788550 / TW0003

Designation Number:

Approved by: Jeremy Lin, **Date:** 2025/5/20
Jeremy Lin / Project Engineer

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Prepared by : Celine Chou / Senior Specialist



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Release Control Record

Issue No.	Description	Date Issued
RFBBQZ-WTW-P24080648-2	Original release.	2025/5/20

1 Certificate

Product: Orbi Router, Orbi Satellite

Brand: NETGEAR

Test Model: RBE371

Series Model: RBE370

Sample Status: Engineering sample

Applicant and Manufacturer: NETGEAR, Inc.

Test Date: 2025/2/12 ~ 2025/3/31

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

Measurement procedure: ANSI C63.10-2013
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 -13.00 dB at 0.17708 MHz
15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -7.7 dB at 46.49 MHz
15.407(b)(5) 15.407(b)(10)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -0.1 dB at 5650.00 MHz
15.407(e)	6 dB Bandwidth	Pass	Meet the requirement of limit.
15.203	Antenna Requirement	Pass	Antenna connector is ipex(MHF) not a standard connector.

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:

Parameter	Specification	Uncertainty (±)
RF Output Power	1 GHz ~ 18 GHz	2.29 dB
Power Spectral Density	1 GHz ~ 18 GHz	2.29 dB
6 dB Bandwidth	-	206.5 Hz
AC Power Conducted Emissions	9 kHz ~ 30 MHz	2.90 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	3.59 dB
	30 MHz ~ 1 GHz	3.64 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	2.29 dB
	18 GHz ~ 40 GHz	2.29 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	Orbi Router, Orbi Satellite
Brand	NETGEAR
Test Model	RBE371
Series Model	RBE370
Status of EUT	Engineering sample
Power Supply Rating	12 Vdc from adapter
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	802.11a: up to 54 Mbps 802.11n: up to 300 Mbps 802.11ac: up to 1733.3 Mbps 802.11ax: up to 2401.9 Mbps 802.11be: 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: 2985.383 mW (34.75 dBm)
EUT Category	Indoor access point

Note:

1. All models are listed as below.

Product Description	Model	Difference
Orbi Router	RBE371	DFS mode: Master mode NAND Flash 512 MB 2.5G Ethernet port *1 2.5G Internet port *1
Orbi Satellite	RBE370	DFS mode: Mesh mode NAND Flash 256 MB 2.5G Ethernet port *1

*RBE371 and RBE370 share same PCB/layout/antenna design.

2. The EUT uses following accessories.

AC Adapter 1	Brand	NETGEAR
	Model	ADS-18FQC-12 12018E
	Part Number	332-11762-01
	AC Input	100-240 Vac, 50/60 Hz, 0.7 A
	DC Output	12 Vdc, 1.5 A
	DC Output Cable	1.8 m non-shielded and without core
AC Adapter 2	Brand	NETGEAR
	Model	2AAJ018FC
	Part Number	332-11757-01
	AC Input	100-240 Vac, 50/60 Hz, 0.6 A
	DC Output	12 Vdc, 1.5 A
	DC Output Cable	1.85 m non-shielded and without core
Ethernet Cable	Brand	NETGEAR
	Signal Line	1.97 m non-shielded and without core

3. Simultaneously transmission condition.

Condition	Technology	
1	WLAN (2.4 GHz)	WLAN (5 GHz / 5.9 GHz)

Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.

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

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

Antenna Type	Connector Type	Frequency Range	Antenna Gain (dBi)	
			Ant. 0	Ant. 1
Dipole	ipex(MHF)	5850 ~ 5895 MHz	4.80	4.72

* 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 manufacturer will control the power for 802.11n/ac/ax mode is same as the 802.11be mode or lower than it. Therefore the investigated worst case is the representative mode in test report.
4. The EUT device modulation technique OFDMA does not support partial RUs (resource units) and channel puncturing/bandwidth reduction mechanisms.

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:	1. For Unwanted Emission (below 1GHz) and AC Power Conducted Emissions items: AC Adapter 1 and AC Adapter 2. Pre-scan these modes and find the worst case as a representative test condition. 2. 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).
Worst Case:	1. AC Adapter 1 and AC Adapter 2 Worst Condition: AC Adapter 2 2. The EUT is designed to be positioned on the Z-Plane only.

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	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
Power Spectral Density	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
6 dB Bandwidth	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
AC Power Conducted Emissions	A, B	802.11be (EHT80)	Beamforming	171	BPSK	MCS0
Unwanted Emissions below 1 GHz	A, B	802.11be (EHT80)	Beamforming	171	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	EUT (Model: RBE370) powered by AC Adapter 2				
	B	EUT (Model: RBE371) powered by AC Adapter 2				

3.5 Duty Cycle of Test Signal

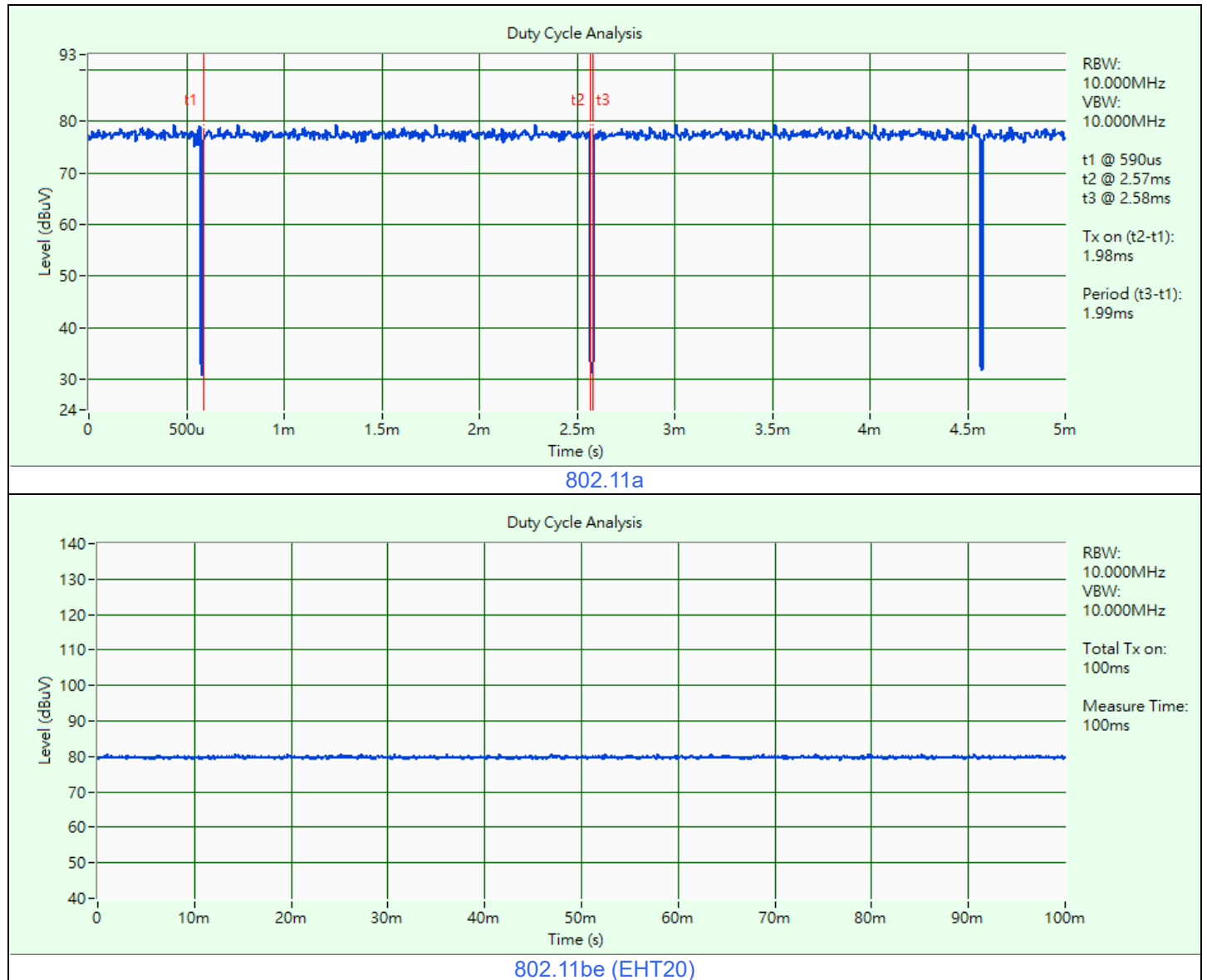
802.11a: Duty cycle = $1.98 \text{ ms} / 1.99 \text{ ms} \times 100\% = 99.5\%$

802.11be (EHT20): Duty cycle = $100 \text{ ms} / 100 \text{ ms} \times 100\% = 100.0\%$

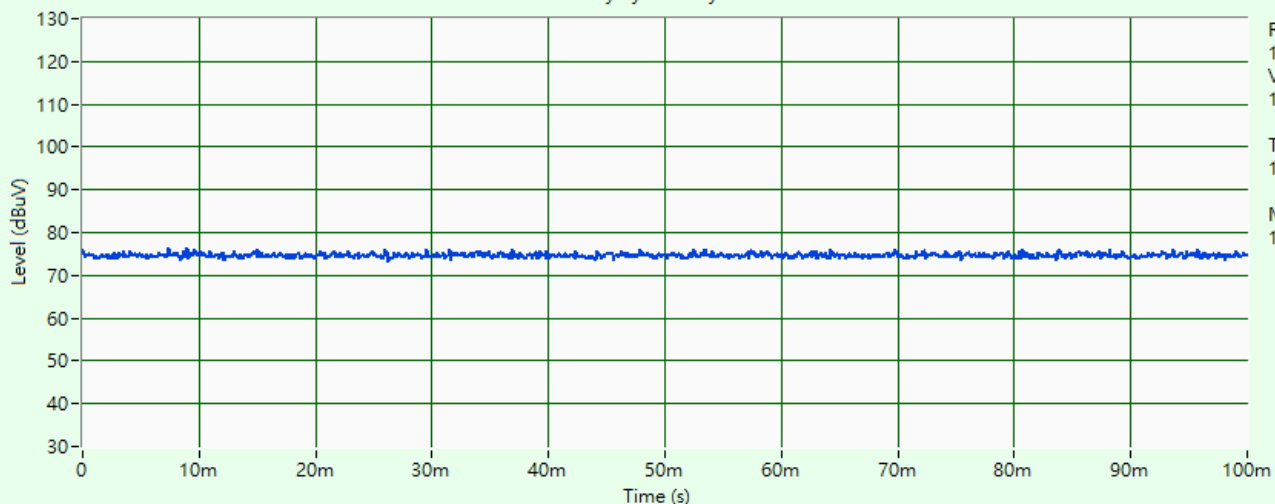
802.11be (EHT40): Duty cycle = $100 \text{ ms} / 100 \text{ ms} \times 100\% = 100.0\%$

802.11be (EHT80): Duty cycle = $100 \text{ ms} / 100 \text{ ms} \times 100\% = 100.0\%$

802.11be (EHT160): Duty cycle = $100 \text{ ms} / 100 \text{ ms} \times 100\% = 100.0\%$

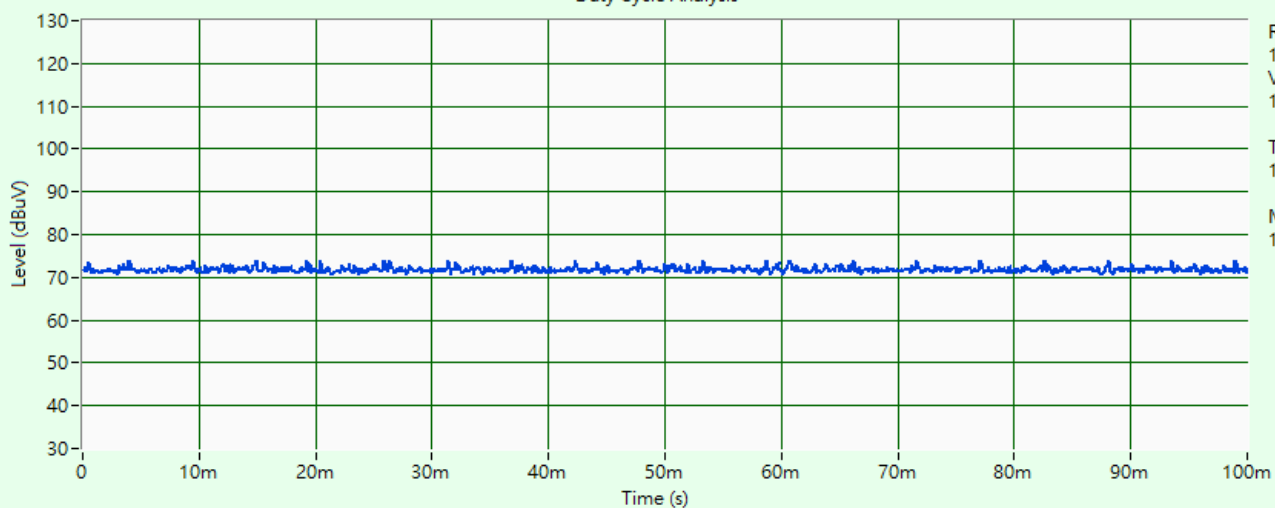


Duty Cycle Analysis



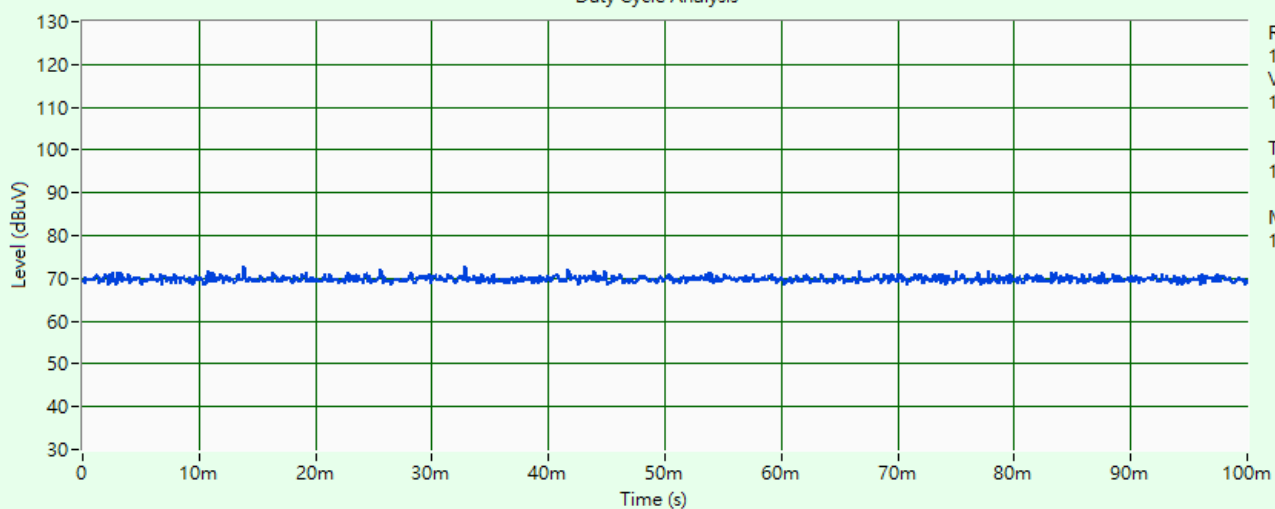
802.11be (EHT40)

Duty Cycle Analysis



802.11be (EHT80)

Duty Cycle Analysis



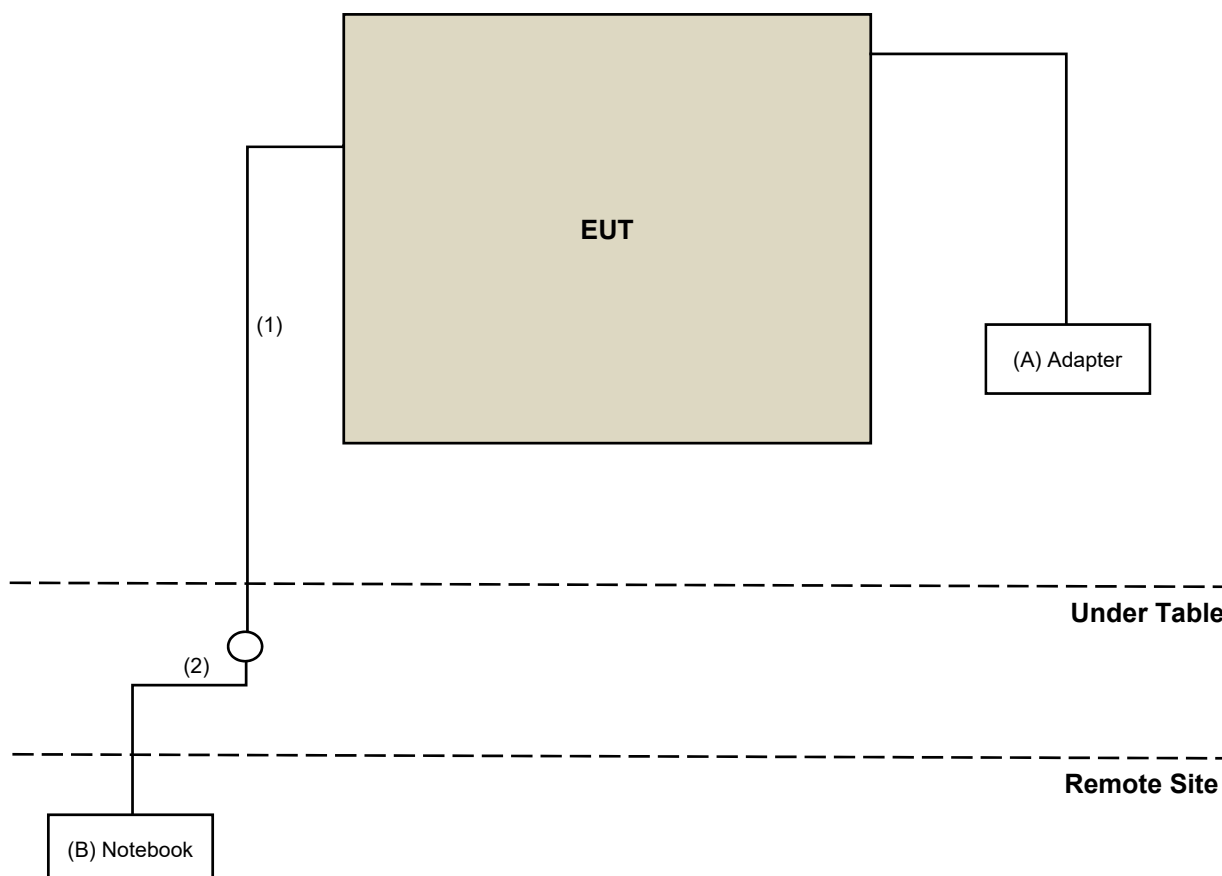
802.11be (EHT160)

3.6 Test Program Used and Operation Descriptions

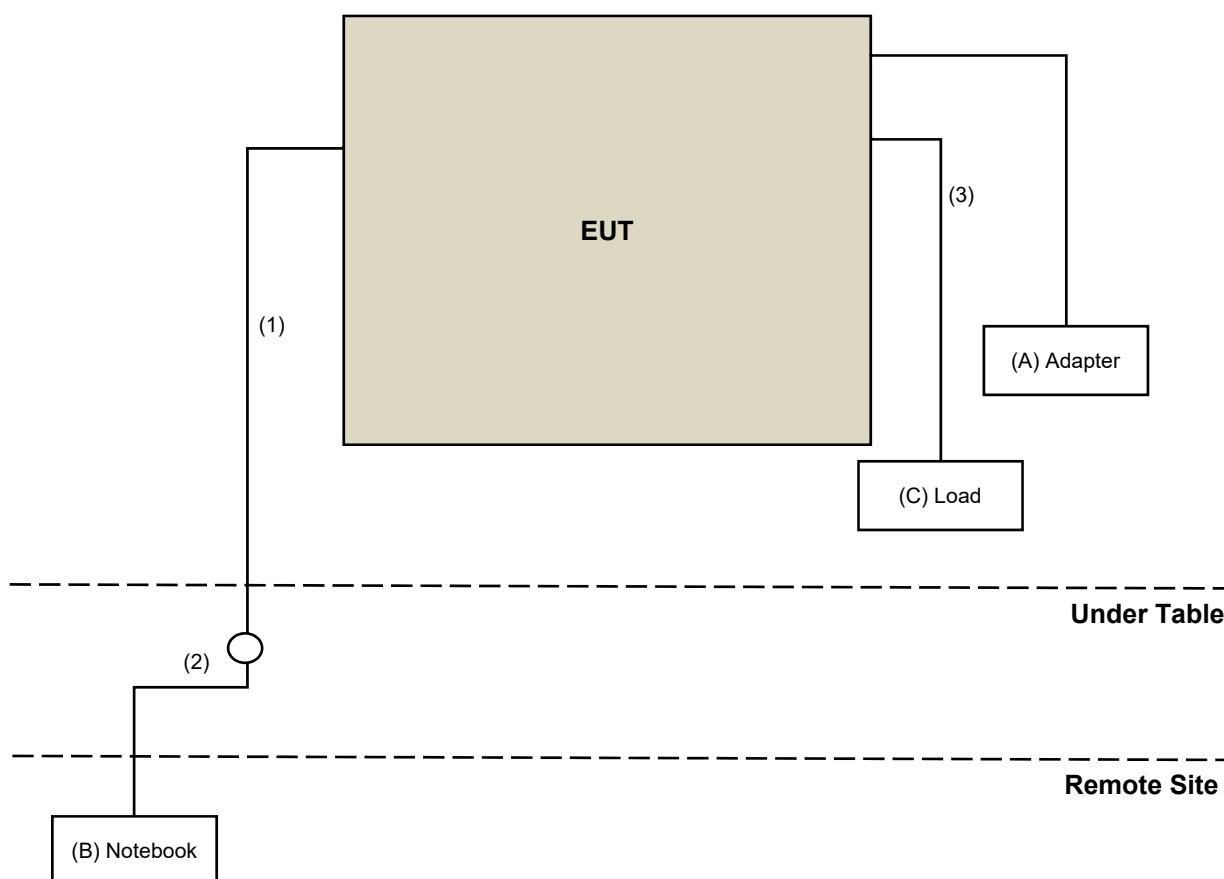
Controlling software QSPR Version 5.0-00202 has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.7 Connection Diagram of EUT and Peripheral Devices

Test Mode A



Test Mode B



3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Adapter	NETGEAR	2AAJ018FC	N/A	N/A	Supplied by applicant
B	Notebook	DELL	E5430	2RL3YW1	N/A	Provided by Lab
C	Load	N/A	N/A	N/A	N/A	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	RJ-45 Cable	1	1.97	N	0	Supplied by applicant
2	RJ-45 Cable	1	10	N	0	Provided by Lab
3	RJ-45 Cable	1	1.5	N	0	Provided by Lab

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
Antenna Tower inn-co GmbH	MA 4000	010303	N/A	N/A
EMI Test Receiver R&S	ESR3	102782	2024/12/10	2025/12/9
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-408	2024/11/10	2025/11/9
Preamplifier Keysight	83017A	MY53270295	2024/5/1	2025/4/30
RF Coaxial Cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH4-03(250724)	2024/5/1	2025/4/30
		MY 13380+295012/04	2024/5/1	2025/4/30
Signal & Spectrum Analyzer R&S	FSW43	101582	2024/4/12	2025/4/11
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table BV ADT	TT100	TT93021705	N/A	N/A
Turn Table Controller BV ADT	SC100	SC93021705	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 3.
2. Tested Date: 2025/3/31

4.2 Power Spectral Density

Refer to section 4.1 to get the tested date and information of the instruments.

4.3 6 dB Bandwidth

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Signal & Spectrum Analyzer R&S	FSV3044	101504	2024/6/18	2025/6/17
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2025/3/28

4.4 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohm terminal resistance	E1-011279	04	2024/11/28	2025/11/27
	E1-011280	05	2024/11/28	2025/11/27
	E1-011311	09	2024/11/28	2025/11/27
DC-LISN Schwarzbeck	NNBM 8126G	8126G-069	2024/11/5	2025/11/4
EMI Test Receiver R&S	ESCI	100613	2024/11/25	2025/11/24
Fixed Attenuator Mini-Circuits	HAT-10+	PAD-COND1-01	2025/1/5	2026/1/4
LISN R&S	ENV216	101826	2024/3/25	2025/3/24
	ESH3-Z5	100311	2024/9/5	2025/9/4
RF Coaxial Cable Woken	5D-FB	Cable-cond1-01	2025/1/5	2026/1/4
Software BVADT	BVADT_Cond_ V7.4.1.0	N/A	N/A	N/A
V-LISN Schwarzbeck	NNBL 8226-2	8226-142	2024/8/28	2025/8/27

Notes:

1. The test was performed in HY - Conduction 1.
2. Tested Date: 2025/3/5

4.5 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower inn-co GmbH	MA 4000	010303	N/A	N/A
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-155	2024/10/14	2025/10/13
EMI Test Receiver R&S	ESR3	102782	2024/12/10	2025/12/9
Loop Antenna TESEQ	HLA 6121	45745	2024/8/21	2025/8/20
Preamplifier Agilent	8447D	2944A10631	2024/5/1	2025/4/30
Preamplifier EMCI	EMC001340	980201	2024/9/24	2025/9/23
RF Coaxial Cable Woken	8D-FB	Cable-CH4-01	2024/7/6	2025/7/5
Signal & Spectrum Analyzer R&S	FSW43	101582	2024/4/12	2025/4/11
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table BV ADT	TT100	TT93021705	N/A	N/A
Turn Table Controller BV ADT	SC100	SC93021705	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 3.
2. Tested Date: 2025/3/4

4.6 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower inn-co GmbH	MA 4000	010303	N/A	N/A
Boresight antenna tower fixture BV	BAF-02	5	N/A	N/A
EMI Test Receiver R&S	ESR3	102782	2024/12/10	2025/12/9
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-408	2024/11/10	2025/11/9
	BBHA 9170	9170-480	2024/11/10	2025/11/9
		BBHA9170241	2024/10/18	2025/10/17
		BBHA9170243	2024/11/10	2025/11/9
Preamplifier EMCI	EMC 184045	980116	2024/9/24	2025/9/23
Preamplifier Keysight	83017A	MY53270295	2024/5/1	2025/4/30
RF Coaxial Cable EMCI	EMC102-KM-KM-600	150928	2024/7/6	2025/7/5
	EMC102-KM-KM-3000	150929	2024/7/6	2025/7/5
RF Coaxial Cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH4-03(250724)	2024/5/1	2025/4/30
		MY 13380+295012/04	2024/5/1	2025/4/30
Signal & Spectrum Analyzer R&S	FSW43	101582	2024/4/12	2025/4/11
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table BV ADT	TT100	TT93021705	N/A	N/A
Turn Table Controller BV ADT	SC100	SC93021705	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 3.
2. Tested Date: 2025/2/12

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.	

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:

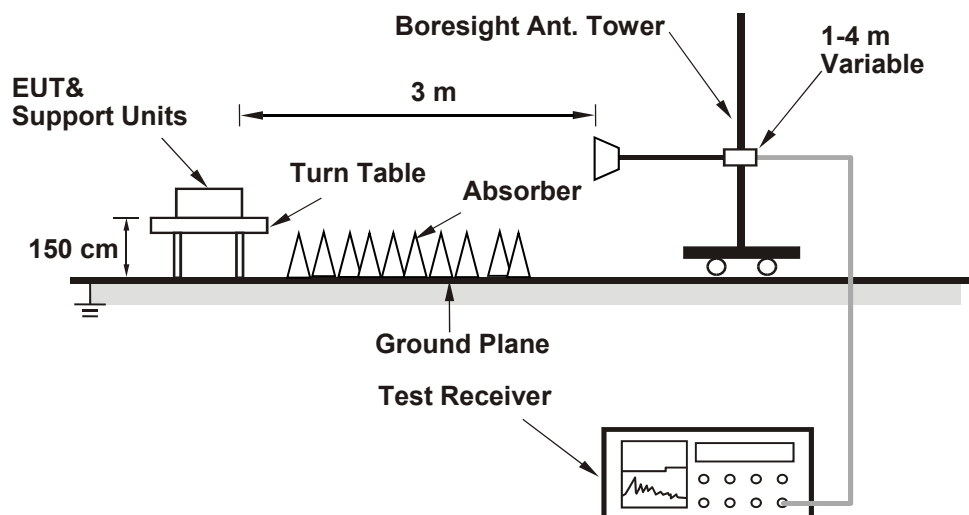
The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

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

6 Test Arrangements

6.1 RF Output Power

6.1.1 Test Setup



6.1.2 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.
- Perform a field strength measurement and record the worse read value, is the field strength value via a spectrum reading obtained corrected for antenna factor, cable loss and pre-amplifier factor and then mathematically convert the measured field strength level to EIRP level.
- Follow ANSI C63.10 section 12.7.3, $EIRP \text{ Value (dBm)} = \text{Field Strength Value (dBuV / m)} + \text{Correction Factor @ 3 m}$.
- $\text{Correction Factor (dB) @ 3 m} = 20\log(D) - 104.77 = -95.23 \text{ dB}$; where D is the measurement distance @3 m.

Spectrum analyzer setting as below:

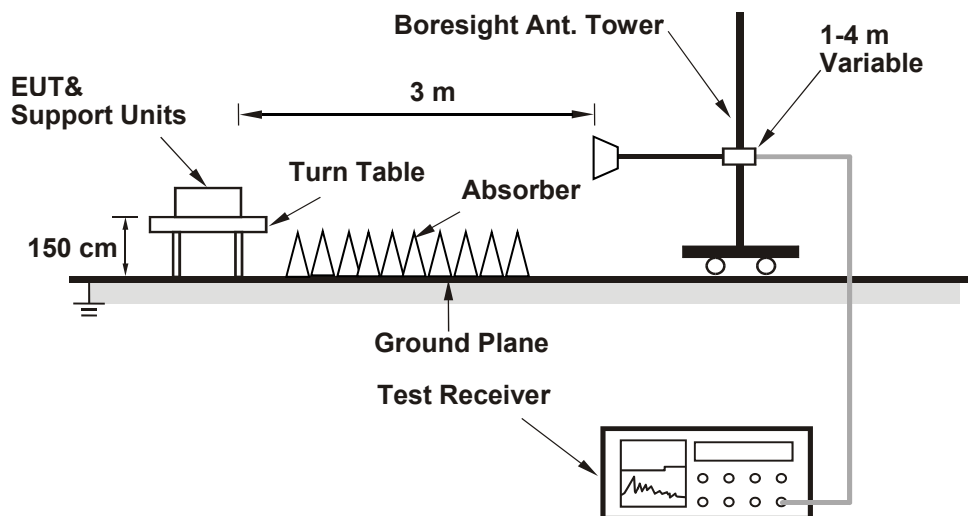
Method SA-1

- Set span to encompass the entire emission bandwidth (EBW) 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

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

6.2 Power Spectral Density

6.2.1 Test Setup



6.2.2 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.
- Perform a field strength measurement and record the worse read value, is the field strength value via a spectrum reading obtained corrected for antenna factor, cable loss and pre-amplifier factor and then mathematically convert the measured field strength level to EIRP level.
- Follow ANSI C63.10 section 12.7.3, $EIRP \text{ Value (dBm)} = \text{Field Strength Value (dBuV/m)} + \text{Correction Factor @ 3 m}$.
- $\text{Correction Factor (dB) @ 3 m} = 20\log(D) - 104.77$; where D is the measurement distance @3 m = -95.23 dB

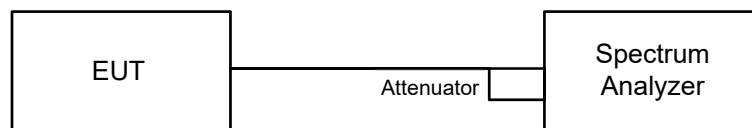
Spectrum analyzer setting as below:

Method SA-1

- Set span to encompass the entire emission bandwidth (EBW) 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

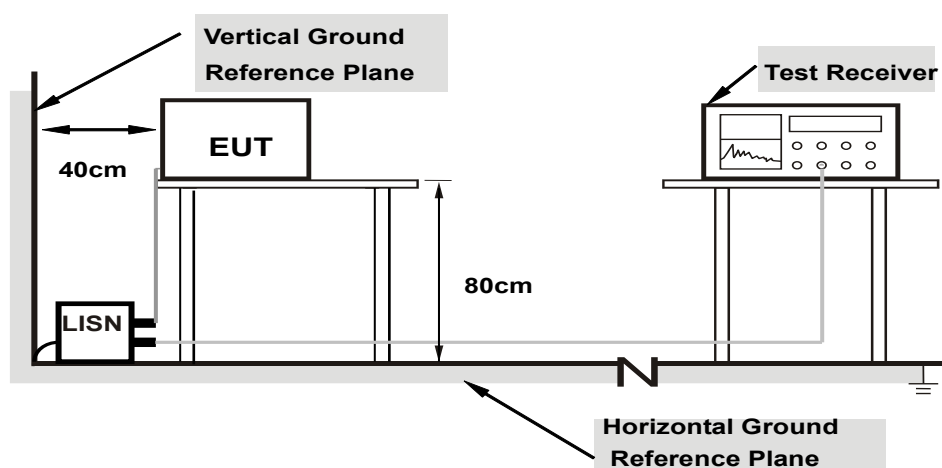


6.3.2 Test Procedure

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

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

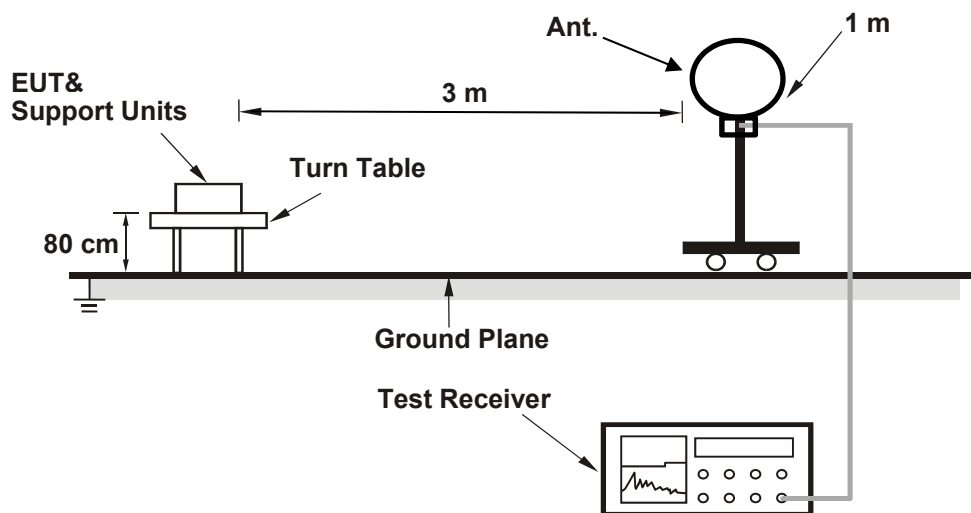
- The EUT was placed on a 0.8 meter to the top of table and placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The 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.

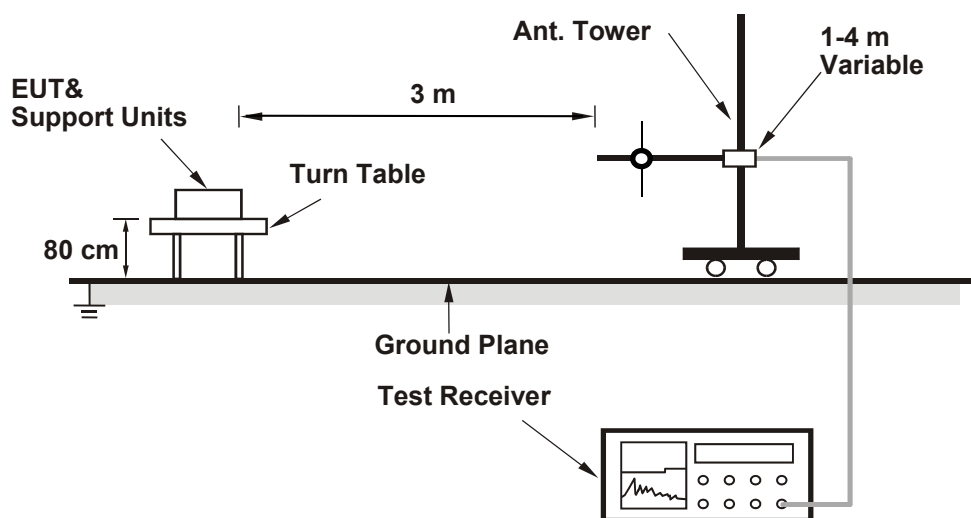
6.5 Unwanted Emissions below 1 GHz

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, 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

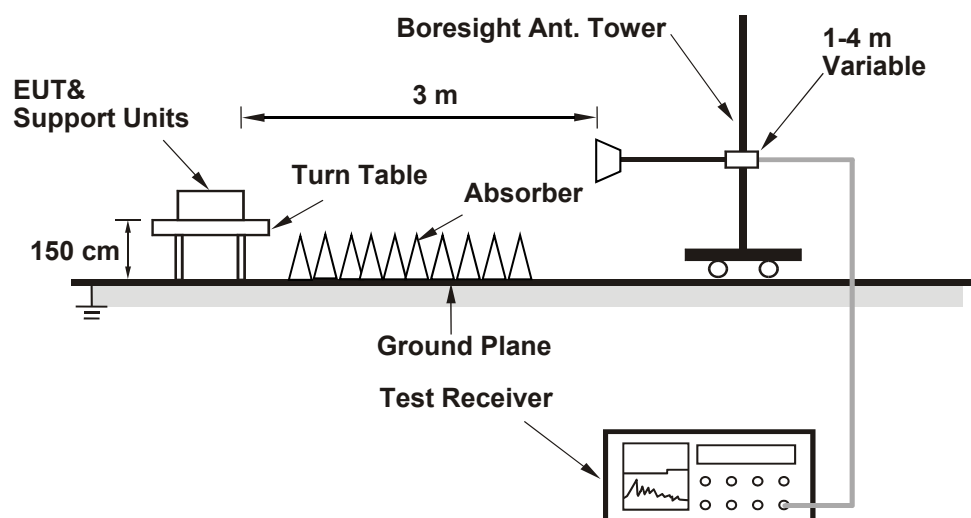
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the 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 detect function and specified bandwidth with maximum hold mode when the test frequency is below 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.
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

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Ivan Tseng
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802.11a

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
169	5845	123.66	-95.23	696.627	28.43	36	Pass
173	5865	123.44	-95.23	662.217	28.21	36	Pass
177	5885	125.90	-95.23	1166.81	30.67	36	Pass

802.11be (EHT20) Beamforming

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
169	5845	127.14	-95.23	1552.387	31.91	36	Pass
173	5865	127.10	-95.23	1538.155	31.87	36	Pass
177	5885	129.85	-95.23	2897.344	34.62	36	Pass

802.11be (EHT40) Beamforming

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
167	5835	129.59	-95.23	2728.978	34.36	36	Pass
175	5875	129.92	-95.23	2944.422	34.69	36	Pass

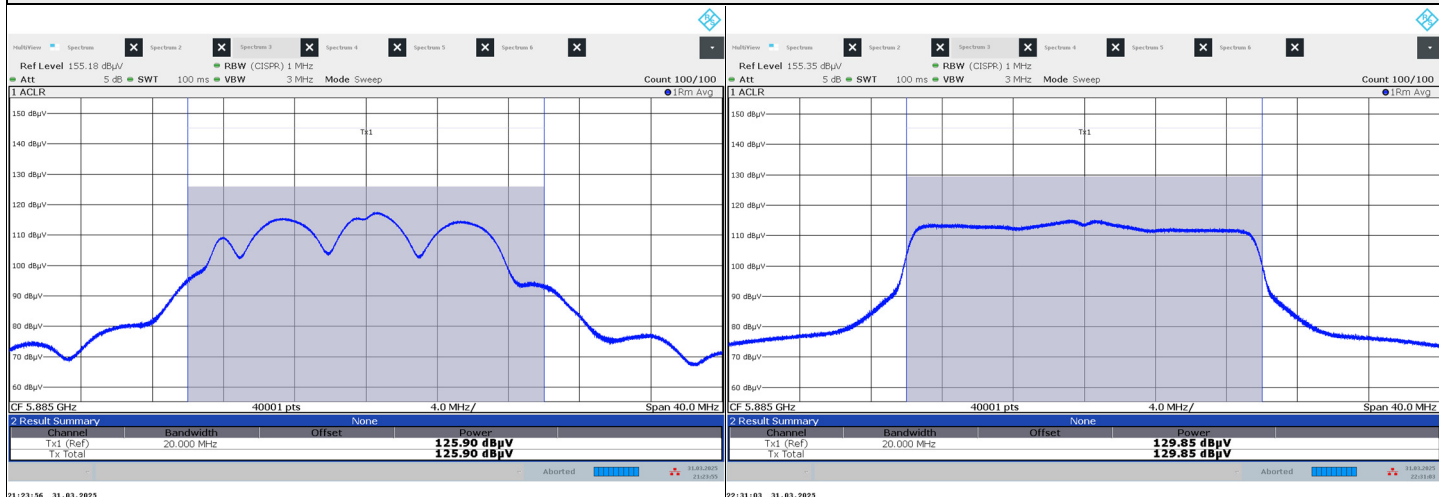
802.11be (EHT80) Beamforming

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
171	5855	129.98	-95.23	2985.383	34.75	36	Pass

802.11be (EHT160) Beamforming

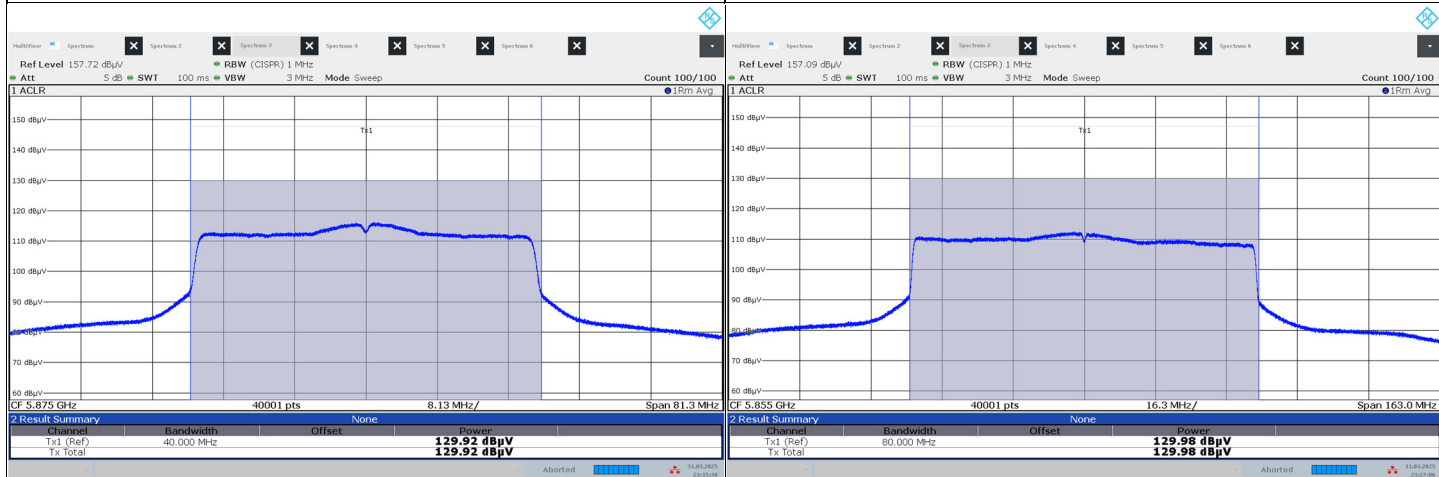
Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
163	5815	122.16	-95.23	493.174	26.93	36	Pass

Spectrum Plot of Maximum Value



802.11a : CH 177

802.11be (EHT20) : CH 177



802.11be (EHT40) : CH 175

802.11be (EHT80) : CH 171



802.11be (EHT160) : CH 163

7.2 Power Spectral Density

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Ivan Tseng
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802.11a

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
169	5845	115.14	-95.23	19.91	20	Pass
173	5865	115.12	-95.23	19.89	20	Pass
177	5885	115.10	-95.23	19.87	20	Pass

802.11be (EHT20)

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
169	5845	115.15	-95.23	19.92	20	Pass
173	5865	115.12	-95.23	19.89	20	Pass
177	5885	115.18	-95.23	19.95	20	Pass

802.11be (EHT40)

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
167	5835	115.16	-95.23	19.93	20	Pass
175	5875	115.14	-95.23	19.91	20	Pass

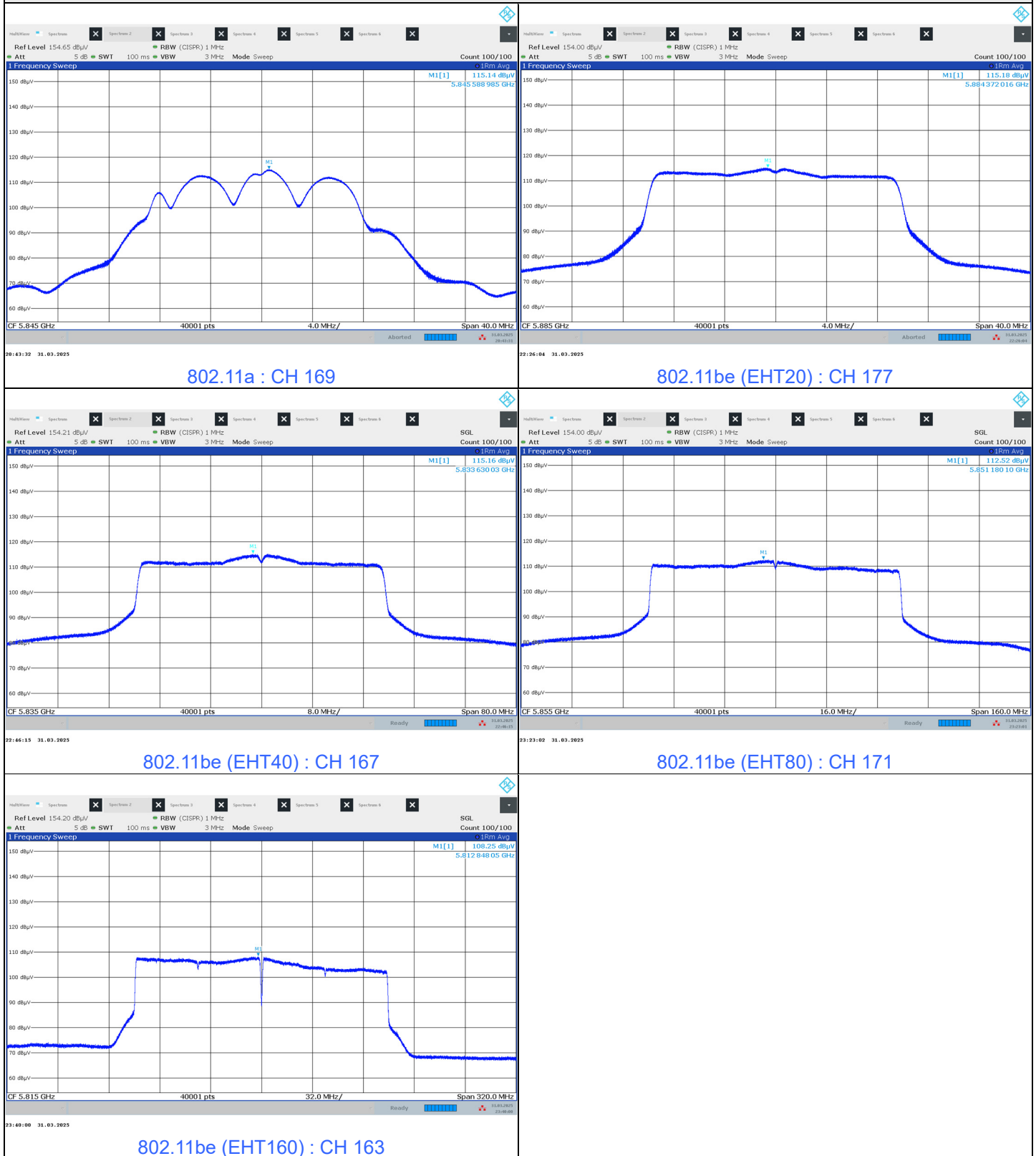
802.11be (EHT80)

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
171	5855	112.52	-95.23	17.29	20	Pass

802.11be (EHT160)

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
163	5815	108.25	-95.23	13.02	20	Pass

Spectrum Plot of Maximum Value



7.3 6 dB Bandwidth

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Ivan Tseng
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802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
169	5845	16.30	15.14	0.5	Pass
173	5865	16.29	15.11	0.5	Pass
177	5885	16.07	15.12	0.5	Pass

802.11be (EHT20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
169	5845	19.04	17.31	0.5	Pass
173	5865	19.02	17.90	0.5	Pass
177	5885	19.04	17.54	0.5	Pass

802.11be (EHT40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
167	5835	37.69	38.26	0.5	Pass
175	5875	36.85	37.96	0.5	Pass

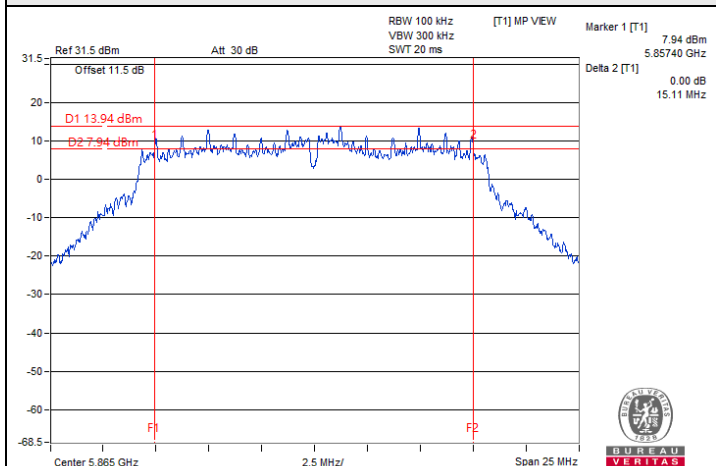
802.11be (EHT80)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
171	5855	76.67	74.83	0.5	Pass

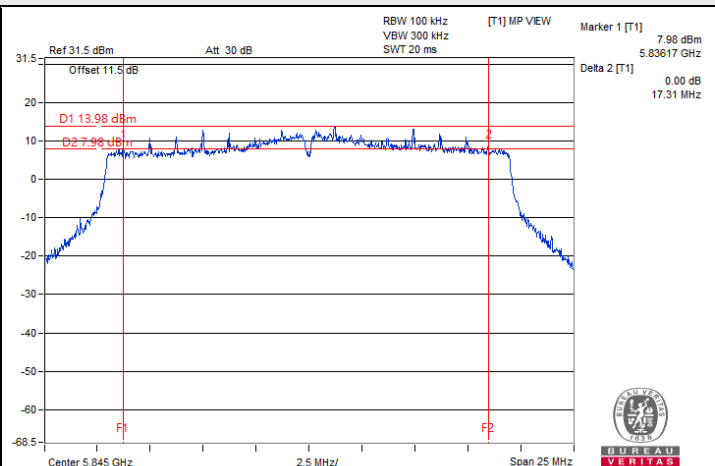
802.11be (EHT160)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
163	5815	156.86	154.38	0.5	Pass

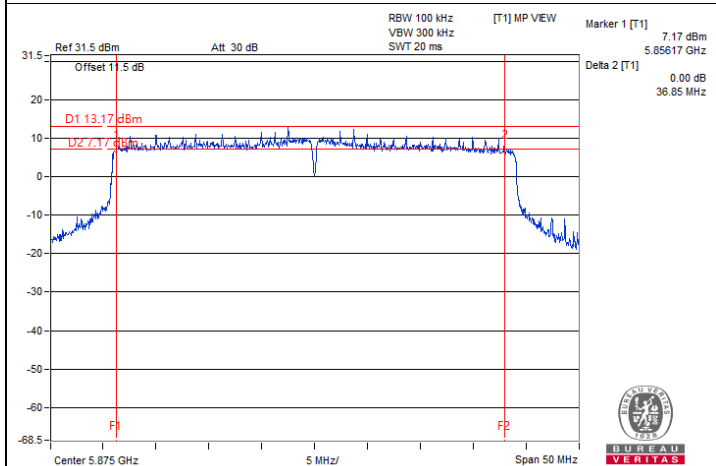
Spectrum Plot of Minimum Value



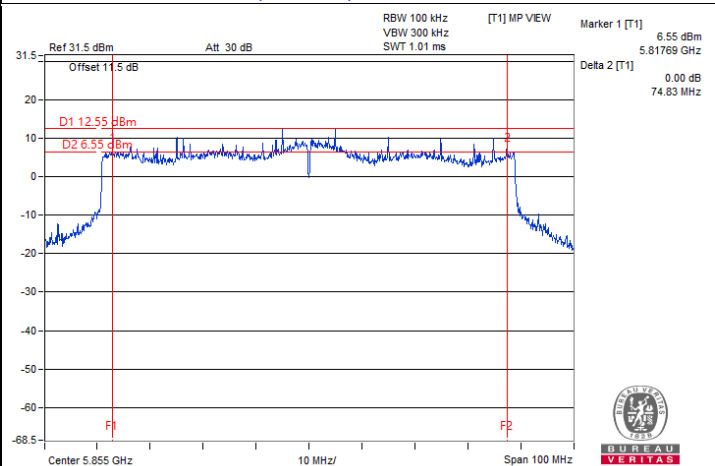
802.11a / Chain 1 : CH 173



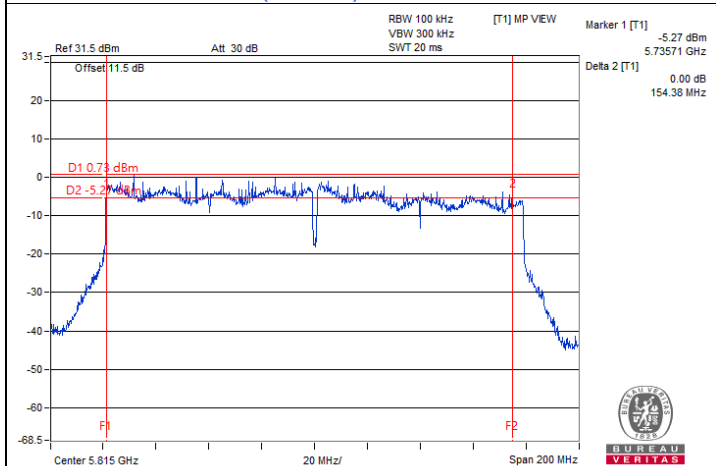
802.11be (EHT20) / Chain 1 : CH 169



802.11be (EHT40) / Chain 0 : CH 175



802.11be (EHT80) / Chain 1 : CH 171



802.11be (EHT160) / Chain 1 : CH 163

7.4 AC Power Conducted Emissions

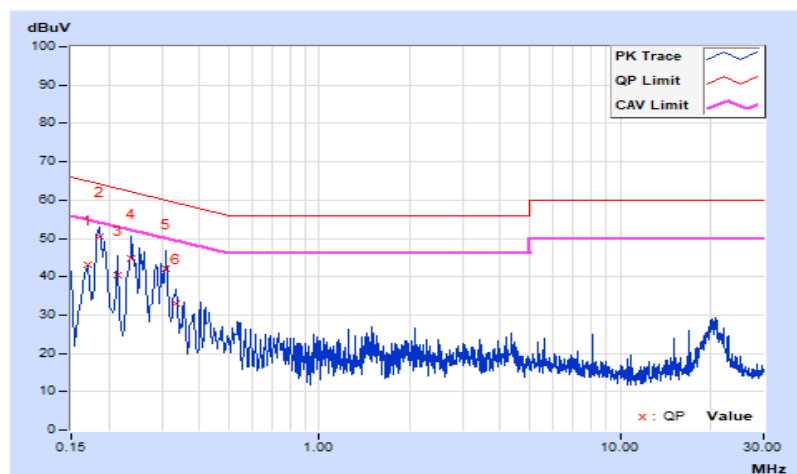
Test Mode A

RF Mode	802.11be (EHT80)	Channel	CH 171 : 5855 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, 70 % RH
Tested By	Luis 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	0.16977	9.69	33.38	22.94	43.07	32.63	64.97	54.97	-21.90	-22.34
2	0.18600	9.68	40.76	31.25	50.44	40.93	64.21	54.21	-13.77	-13.28
3	0.21400	9.68	30.76	14.43	40.44	24.11	63.05	53.05	-22.61	-28.94
4	0.23800	9.69	35.23	24.74	44.92	34.43	62.17	52.17	-17.25	-17.74
5	0.31000	9.70	32.50	22.48	42.20	32.18	59.97	49.97	-17.77	-17.79
6	0.33400	9.70	23.29	15.38	32.99	25.08	59.35	49.35	-26.36	-24.27

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

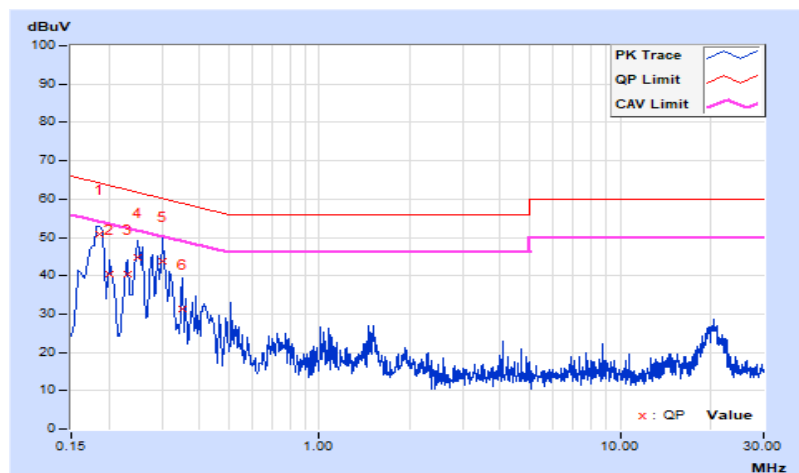


RF Mode	802.11be (EHT80)	Channel	CH 171 : 5855 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 70 % RH
Tested By	Luis Lee		

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	0.18519	9.67	41.19	31.49	50.86	41.16	64.25	54.25	-13.39	-13.09
2	0.20200	9.67	30.58	16.35	40.25	26.02	63.53	53.53	-23.28	-27.51
3	0.22985	9.68	30.75	20.65	40.43	30.33	62.46	52.46	-22.03	-22.13
4	0.25000	9.68	35.22	25.94	44.90	35.62	61.76	51.76	-16.86	-16.14
5	0.30151	9.70	34.15	23.22	43.85	32.92	60.20	50.20	-16.35	-17.28
6	0.35000	9.71	21.56	11.11	31.27	20.82	58.96	48.96	-27.69	-28.14

Remarks:

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



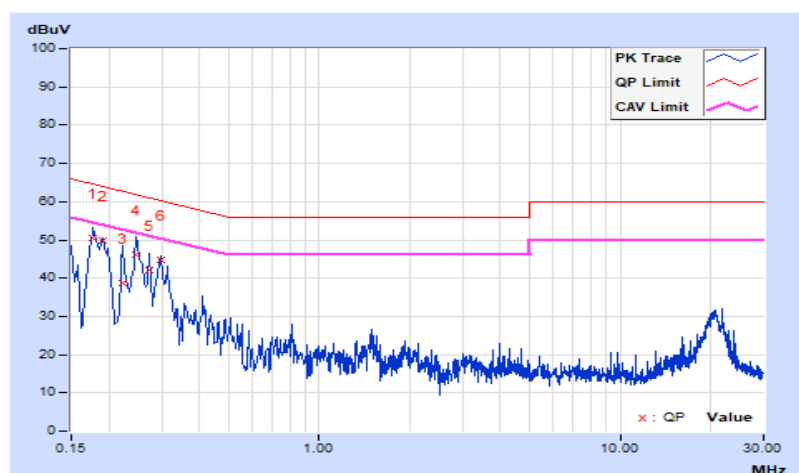
Test Mode B

RF Mode	802.11be (EHT80)	Channel	CH 171 : 5855 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, 70 % RH
Tested By	Luis 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	0.17800	9.68	40.70	31.43	50.38	41.11	64.58	54.58	-14.20	-13.47
2	0.19000	9.68	40.16	29.73	49.84	39.41	64.04	54.04	-14.20	-14.63
3	0.22200	9.68	28.96	13.44	38.64	23.12	62.74	52.74	-24.10	-29.62
4	0.24600	9.69	36.44	25.30	46.13	34.99	61.89	51.89	-15.76	-16.90
5	0.27400	9.69	32.41	15.14	42.10	24.83	61.00	51.00	-18.90	-26.17
6	0.29800	9.69	35.20	23.35	44.89	33.04	60.30	50.30	-15.41	-17.26

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

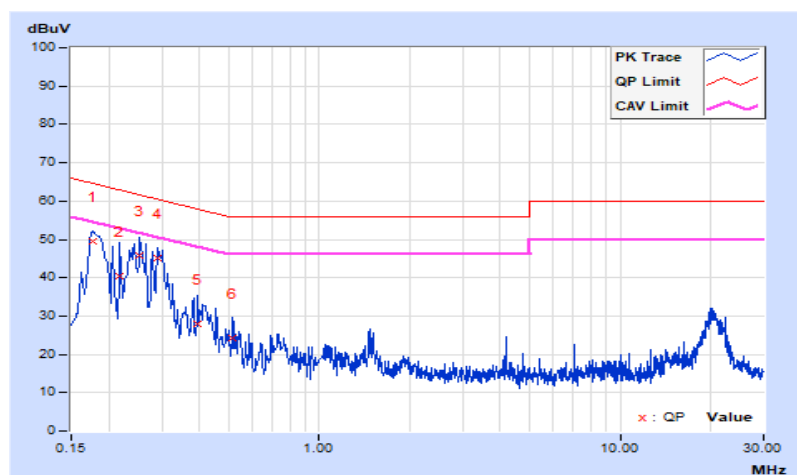


RF Mode	802.11be (EHT80)	Channel	CH 171 : 5855 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 70 % RH
Tested By	Luis Lee		

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	0.17708	9.67	39.99	31.95	49.66	41.62	64.62	54.62	-14.96	-13.00
2	0.21800	9.68	30.78	13.39	40.46	23.07	62.89	52.89	-22.43	-29.82
3	0.25400	9.69	35.99	26.00	45.68	35.69	61.63	51.63	-15.95	-15.94
4	0.29000	9.70	35.46	22.96	45.16	32.66	60.52	50.52	-15.36	-17.86
5	0.39400	9.73	18.08	6.11	27.81	15.84	57.98	47.98	-30.17	-32.14
6	0.51400	9.75	14.36	5.21	24.11	14.96	56.00	46.00	-31.89	-31.04

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



7.5 Unwanted Emissions below 1 GHz

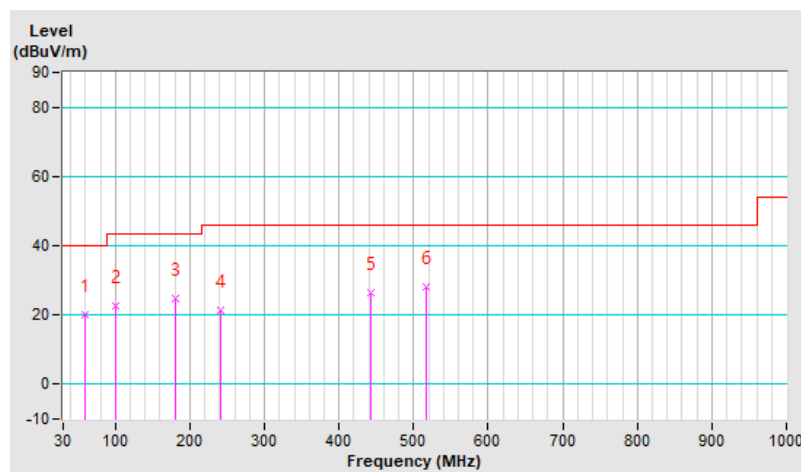
Test Mode A

RF Mode	802.11be (EHT80)	Channel	CH 171 : 5855 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 69 % RH
Tested By	Luis Lee		

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	59.10	20.0 QP	40.0	-20.0	1.00 H	228	29.3	-9.3
2	100.81	22.6 QP	43.5	-20.9	1.49 H	138	35.8	-13.2
3	180.35	24.6 QP	43.5	-18.9	1.00 H	267	34.4	-9.8
4	241.46	21.2 QP	46.0	-24.8	1.00 H	255	30.9	-9.7
5	443.22	26.4 QP	46.0	-19.6	1.49 H	296	30.8	-4.4
6	517.91	28.1 QP	46.0	-17.9	1.00 H	6	31.3	-3.2

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 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.

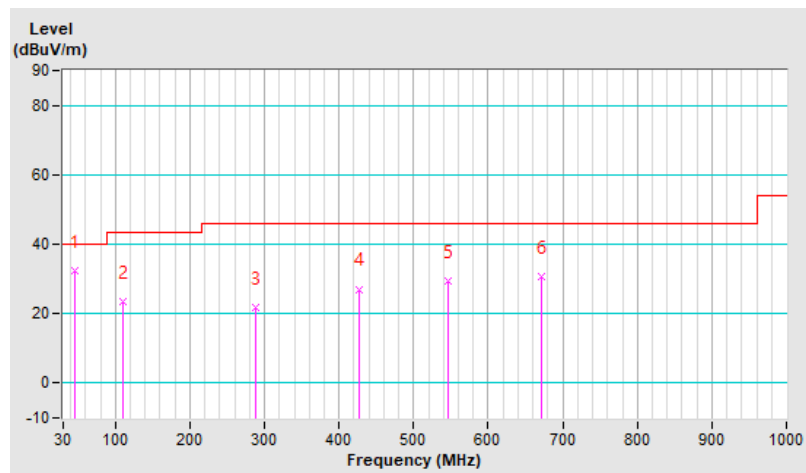


RF Mode	802.11be (EHT80)	Channel	CH 171 : 5855 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 69 % RH
Tested By	Luis Lee		

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	46.49	32.3 QP	40.0	-7.7	1.01 V	7	41.3	-9.0
2	109.54	23.4 QP	43.5	-20.1	1.01 V	303	35.4	-12.0
3	288.02	21.7 QP	46.0	-24.3	1.01 V	16	29.2	-7.5
4	427.70	27.1 QP	46.0	-18.9	1.01 V	16	32.0	-4.9
5	546.04	29.4 QP	46.0	-16.6	1.01 V	115	32.2	-2.8
6	672.14	30.5 QP	46.0	-15.5	1.50 V	306	30.4	0.1

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 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.



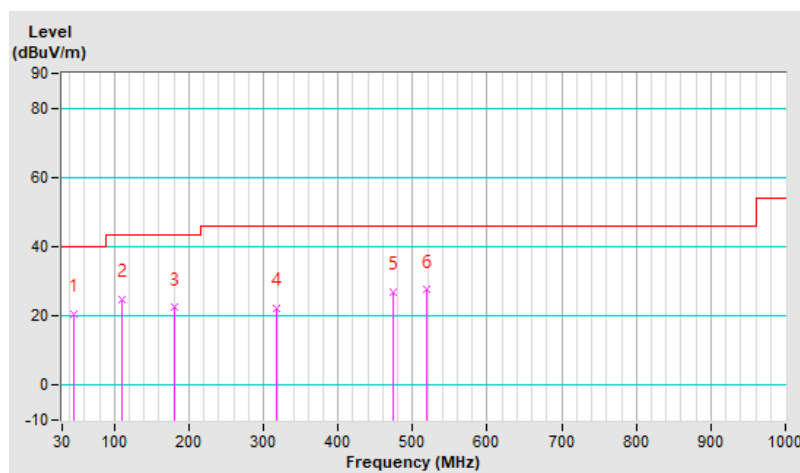
Test Mode B

RF Mode	802.11be (EHT80)	Channel	CH 171 : 5855 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 69 % RH
Tested By	Luis Lee		

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	45.52	20.6 QP	40.0	-19.4	1.50 H	132	29.6	-9.0
2	110.51	24.8 QP	43.5	-18.7	1.50 H	270	36.7	-11.9
3	180.35	22.4 QP	43.5	-21.1	1.01 H	247	32.2	-9.8
4	318.09	22.1 QP	46.0	-23.9	1.01 H	91	28.9	-6.8
5	474.26	26.9 QP	46.0	-19.1	1.50 H	132	30.9	-4.0
6	519.85	27.5 QP	46.0	-18.5	1.50 H	29	30.7	-3.2

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 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.

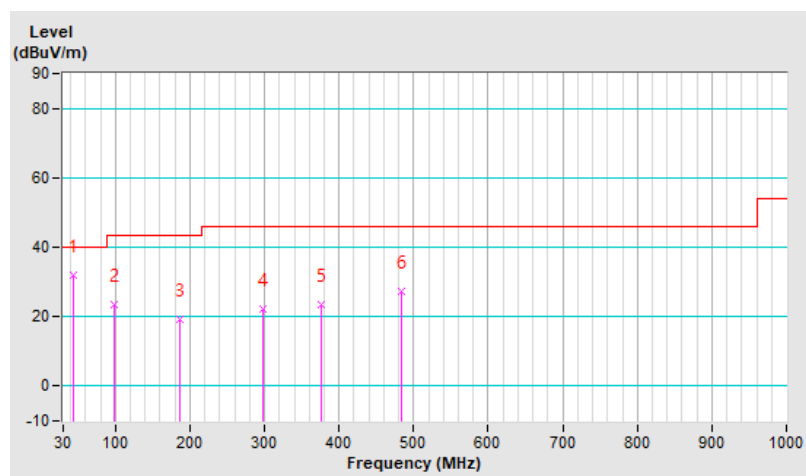


RF Mode	802.11be (EHT80)	Channel	CH 171 : 5855 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 69 % RH
Tested By	Luis Lee		

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	32.1 QP	40.0	-7.9	1.49 V	250	41.2	-9.1
2	98.87	23.5 QP	43.5	-20.0	1.00 V	250	36.9	-13.4
3	187.14	19.4 QP	43.5	-24.1	1.49 V	94	30.0	-10.6
4	298.69	22.0 QP	46.0	-24.0	1.49 V	189	29.3	-7.3
5	375.32	23.6 QP	46.0	-22.4	1.00 V	42	29.6	-6.0
6	483.96	27.4 QP	46.0	-18.6	1.00 V	324	31.3	-3.9

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 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	24 °C, 69 % RH
Tested By	Titan Hsu		

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	61.3 PK	68.2	-6.9	1.75 H	242	47.8	13.5
2	*5845.00	115.2 PK			1.75 H	242	70.5	44.7
3	*5845.00	106.4 AV			1.75 H	242	61.7	44.7
4	#5895.00	62.8 PK	110.2	-47.4	1.75 H	242	48.8	14.0
5	#5925.00	61.7 PK	88.2	-26.5	1.75 H	242	47.6	14.1
6	11690.00	59.7 PK	74.0	-14.3	3.11 H	182	37.3	22.4
7	11690.00	47.3 AV	54.0	-6.7	3.11 H	182	24.9	22.4
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	#5650.00	61.5 PK	68.2	-6.7	1.10 V	346	48.0	13.5
2	*5845.00	124.4 PK			1.10 V	346	79.7	44.7
3	*5845.00	114.6 AV			1.10 V	346	69.9	44.7
4	#5895.00	63.0 PK	110.2	-47.2	1.10 V	346	49.0	14.0
5	#5925.00	62.0 PK	88.2	-26.2	1.10 V	346	47.9	14.1
6	11690.00	60.3 PK	74.0	-13.7	2.22 V	163	37.9	22.4
7	11690.00	47.8 AV	54.0	-6.2	2.22 V	163	25.4	22.4

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, 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	24 °C, 69 % RH
Tested By	Titan Hsu		

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	60.5 PK	68.2	-7.7	1.76 H	244	47.0	13.5
2	*5865.00	114.3 PK			1.76 H	244	69.5	44.8
3	*5865.00	105.0 AV			1.76 H	244	60.2	44.8
4	#5895.00	62.0 PK	110.2	-48.2	1.76 H	244	48.0	14.0
5	#5925.00	61.9 PK	88.2	-26.3	1.76 H	244	47.8	14.1
6	11730.00	59.4 PK	74.0	-14.6	3.08 H	189	37.2	22.2
7	11730.00	47.0 AV	54.0	-7.0	3.08 H	189	24.8	22.2
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	#5650.00	60.7 PK	68.2	-7.5	1.20 V	342	47.2	13.5
2	*5865.00	123.1 PK			1.20 V	342	78.3	44.8
3	*5865.00	114.2 AV			1.20 V	342	69.4	44.8
4	#5895.00	63.7 PK	110.2	-46.5	1.20 V	342	49.7	14.0
5	#5925.00	62.1 PK	88.2	-26.1	1.20 V	342	48.0	14.1
6	11730.00	60.0 PK	74.0	-14.0	2.21 V	163	37.8	22.2
7	11730.00	47.5 AV	54.0	-6.5	2.21 V	163	25.3	22.2

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, 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 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	24 °C, 69 % RH
Tested By	Titan Hsu		

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	1.77 H	240	46.9	13.5
2	*5885.00	116.0 PK			1.77 H	240	71.1	44.9
3	*5885.00	106.9 AV			1.77 H	240	62.0	44.9
4	#5895.00	92.0 PK	110.2	-18.2	1.77 H	240	78.0	14.0
5	#5925.00	60.9 PK	88.2	-27.3	1.77 H	240	46.8	14.1
6	11770.00	59.3 PK	74.0	-14.7	3.11 H	185	37.3	22.0
7	11770.00	46.8 AV	54.0	-7.2	3.11 H	185	24.8	22.0
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	#5650.00	61.3 PK	68.2	-6.9	1.11 V	344	47.8	13.5
2	*5885.00	125.0 PK			1.11 V	344	80.1	44.9
3	*5885.00	115.8 AV			1.11 V	344	70.9	44.9
4	#5895.00	102.0 PK	110.2	-8.2	1.11 V	344	88.0	14.0
5	#5925.00	64.9 PK	88.2	-23.3	1.11 V	344	50.8	14.1
6	11770.00	59.8 PK	74.0	-14.2	2.29 V	152	37.8	22.0
7	11770.00	47.2 AV	54.0	-6.8	2.29 V	152	25.2	22.0

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, 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	24 °C, 69 % RH
Tested By	Titan Hsu		

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	60.7 PK	68.2	-7.5	1.67 H	246	47.2	13.5
2	*5845.00	118.0 PK			1.67 H	246	73.3	44.7
3	*5845.00	105.5 AV			1.67 H	246	60.8	44.7
4	#5895.00	62.5 PK	110.2	-47.7	1.67 H	246	48.5	14.0
5	#5925.00	61.7 PK	88.2	-26.5	1.67 H	246	47.6	14.1
6	11690.00	59.9 PK	74.0	-14.1	3.05 H	189	37.5	22.4
7	11690.00	47.6 AV	54.0	-6.4	3.05 H	189	25.2	22.4
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	#5650.00	60.7 PK	68.2	-7.5	1.15 V	345	47.2	13.5
2	*5845.00	125.8 PK			1.15 V	345	81.1	44.7
3	*5845.00	113.9 AV			1.15 V	345	69.2	44.7
4	#5895.00	70.0 PK	110.2	-40.2	1.15 V	345	56.0	14.0
5	#5925.00	62.3 PK	88.2	-25.9	1.15 V	345	48.2	14.1
6	11690.00	60.2 PK	74.0	-13.8	2.25 V	169	37.8	22.4
7	11690.00	47.9 AV	54.0	-6.1	2.25 V	169	25.5	22.4

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, 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	24 °C, 69 % RH
Tested By	Titan Hsu		

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	60.9 PK	68.2	-7.3	1.62 H	246	47.4	13.5
2	*5865.00	118.3 PK			1.62 H	246	73.5	44.8
3	*5865.00	105.9 AV			1.62 H	246	61.1	44.8
4	#5895.00	67.7 PK	110.2	-42.5	1.62 H	246	53.7	14.0
5	#5925.00	62.1 PK	88.2	-26.1	1.62 H	246	48.0	14.1
6	11730.00	59.5 PK	74.0	-14.5	3.11 H	192	37.3	22.2
7	11730.00	47.2 AV	54.0	-6.8	3.11 H	192	25.0	22.2
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	#5650.00	61.0 PK	68.2	-7.2	1.15 V	344	47.5	13.5
2	*5865.00	125.5 PK			1.15 V	344	80.7	44.8
3	*5865.00	113.7 AV			1.15 V	344	68.9	44.8
4	#5895.00	77.8 PK	110.2	-32.4	1.15 V	344	63.8	14.0
5	#5925.00	68.3 PK	88.2	-19.9	1.15 V	344	54.2	14.1
6	11730.00	59.9 PK	74.0	-14.1	2.30 V	165	37.7	22.2
7	11730.00	47.6 AV	54.0	-6.4	2.30 V	165	25.4	22.2

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, 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 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	24 °C, 69 % RH
Tested By	Titan Hsu		

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	60.5 PK	68.2	-7.7	1.23 H	249	47.0	13.5
2	*5885.00	116.6 PK			1.23 H	249	71.7	44.9
3	*5885.00	104.3 AV			1.23 H	249	59.4	44.9
4	#5895.00	99.5 PK	110.2	-10.7	1.23 H	249	85.5	14.0
5	#5925.00	70.3 PK	88.2	-17.9	1.23 H	249	56.2	14.1
6	11770.00	59.6 PK	74.0	-14.4	3.12 H	192	37.6	22.0
7	11770.00	47.1 AV	54.0	-6.9	3.12 H	192	25.1	22.0
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	#5650.00	60.5 PK	68.2	-7.7	1.24 V	349	47.0	13.5
2	*5885.00	125.9 PK			1.24 V	349	81.0	44.9
3	*5885.00	114.2 AV			1.24 V	349	69.3	44.9
4	#5895.00	102.8 PK	110.2	-7.4	1.24 V	349	88.8	14.0
5	#5925.00	71.6 PK	88.2	-16.6	1.24 V	349	57.5	14.1
6	11770.00	60.0 PK	74.0	-14.0	2.26 V	167	38.0	22.0
7	11770.00	47.5 AV	54.0	-6.5	2.26 V	167	25.5	22.0

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, 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	24 °C, 69 % RH
Tested By	Titan Hsu		

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	60.7 PK	68.2	-7.5	1.54 H	241	47.2	13.5
2	*5835.00	118.1 PK			1.54 H	241	73.4	44.7
3	*5835.00	107.4 AV			1.54 H	241	62.7	44.7
4	#5895.00	68.3 PK	110.2	-41.9	1.54 H	241	54.3	14.0
5	#5925.00	63.8 PK	88.2	-24.4	1.54 H	241	49.7	14.1
6	11670.00	60.0 PK	74.0	-14.0	3.15 H	195	37.5	22.5
7	11670.00	47.6 AV	54.0	-6.4	3.15 H	195	25.1	22.5
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	62.3 PK	68.2	-5.9	1.33 V	344	48.8	13.5
2	*5835.00	125.9 PK			1.33 V	344	81.2	44.7
3	*5835.00	112.7 AV			1.33 V	344	68.0	44.7
4	#5895.00	79.9 PK	110.2	-30.3	1.33 V	344	65.9	14.0
5	#5925.00	70.1 PK	88.2	-18.1	1.33 V	344	56.0	14.1
6	11670.00	60.3 PK	74.0	-13.7	2.21 V	165	37.8	22.5
7	11670.00	47.8 AV	54.0	-6.2	2.21 V	165	25.3	22.5

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 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	24 °C, 69 % RH
Tested By	Titan Hsu		

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	60.7 PK	68.2	-7.5	1.70 H	246	47.2	13.5
2	*5875.00	117.0 PK			1.70 H	246	72.2	44.8
3	*5875.00	105.2 AV			1.70 H	246	60.4	44.8
4	#5895.00	96.8 PK	110.2	-13.4	1.70 H	246	82.8	14.0
5	#5925.00	86.8 PK	88.2	-1.4	1.70 H	246	72.7	14.1
6	11750.00	59.3 PK	74.0	-14.7	3.19 H	182	37.3	22.0
7	11750.00	47.0 AV	54.0	-7.0	3.19 H	182	25.0	22.0
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	#5650.00	61.7 PK	68.2	-6.5	1.38 V	346	48.2	13.5
2	*5875.00	125.4 PK			1.38 V	346	80.6	44.8
3	*5875.00	114.8 AV			1.38 V	346	70.0	44.8
4	#5895.00	105.0 PK	110.2	-5.2	1.38 V	346	91.0	14.0
5	#5925.00	87.0 PK	88.2	-1.2	1.38 V	346	72.9	14.1
6	11750.00	59.7 PK	74.0	-14.3	2.22 V	163	37.7	22.0
7	11750.00	47.3 AV	54.0	-6.7	2.22 V	163	25.3	22.0

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, 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	24 °C, 69 % RH
Tested By	Titan Hsu		

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	61.5 PK	68.2	-6.7	1.49 H	246	48.0	13.5
2	*5855.00	115.8 PK			1.49 H	246	71.1	44.7
3	*5855.00	102.6 AV			1.49 H	246	57.9	44.7
4	#5895.00	91.3 PK	110.2	-18.9	1.49 H	246	77.3	14.0
5	#5925.00	83.6 PK	88.2	-4.6	1.49 H	246	69.5	14.1
6	11710.00	59.4 PK	74.0	-14.6	3.11 H	195	37.2	22.2
7	11710.00	47.0 AV	54.0	-7.0	3.11 H	195	24.8	22.2
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	#5650.00	68.1 PK	68.2	-0.1	1.30 V	344	54.6	13.5
2	*5855.00	124.6 PK			1.30 V	344	79.9	44.7
3	*5855.00	114.1 AV			1.30 V	344	69.4	44.7
4	#5895.00	99.8 PK	110.2	-10.4	1.30 V	344	85.8	14.0
5	#5925.00	88.0 PK	88.2	-0.2	1.30 V	344	73.9	14.1
6	11710.00	59.7 PK	74.0	-14.3	2.20 V	160	37.5	22.2
7	11710.00	47.3 AV	54.0	-6.7	2.20 V	160	25.1	22.2

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, 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	24 °C, 69 % RH
Tested By	Titan Hsu		

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	62.4 PK	68.2	-5.8	1.60 H	244	48.9	13.5
2	*5815.00	105.8 PK			1.60 H	244	61.0	44.8
3	*5815.00	89.8 AV			1.60 H	244	45.0	44.8
4	#5895.00	78.7 PK	110.2	-31.5	1.60 H	244	64.7	14.0
5	#5925.00	66.1 PK	88.2	-22.1	1.60 H	244	52.0	14.1
6	11630.00	59.9 PK	74.0	-14.1	3.19 H	187	37.2	22.7
7	11630.00	47.7 AV	54.0	-6.3	3.19 H	187	25.0	22.7
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	#5650.00	68.0 PK	68.2	-0.2	1.27 V	345	54.5	13.5
2	*5815.00	111.2 PK			1.27 V	345	66.4	44.8
3	*5815.00	98.4 AV			1.27 V	345	53.6	44.8
4	#5895.00	87.5 PK	110.2	-22.7	1.27 V	345	73.5	14.0
5	#5925.00	68.3 PK	88.2	-19.9	1.27 V	345	54.2	14.1
6	11630.00	60.2 PK	74.0	-13.8	2.32 V	167	37.5	22.7
7	11630.00	47.9 AV	54.0	-6.1	2.32 V	167	25.2	22.7

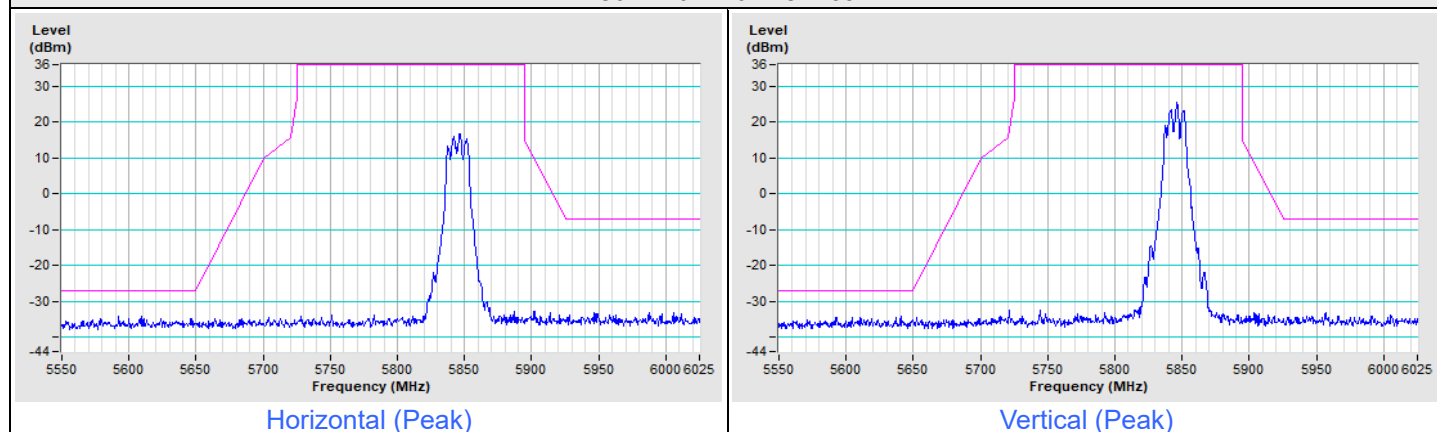
Remarks:

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

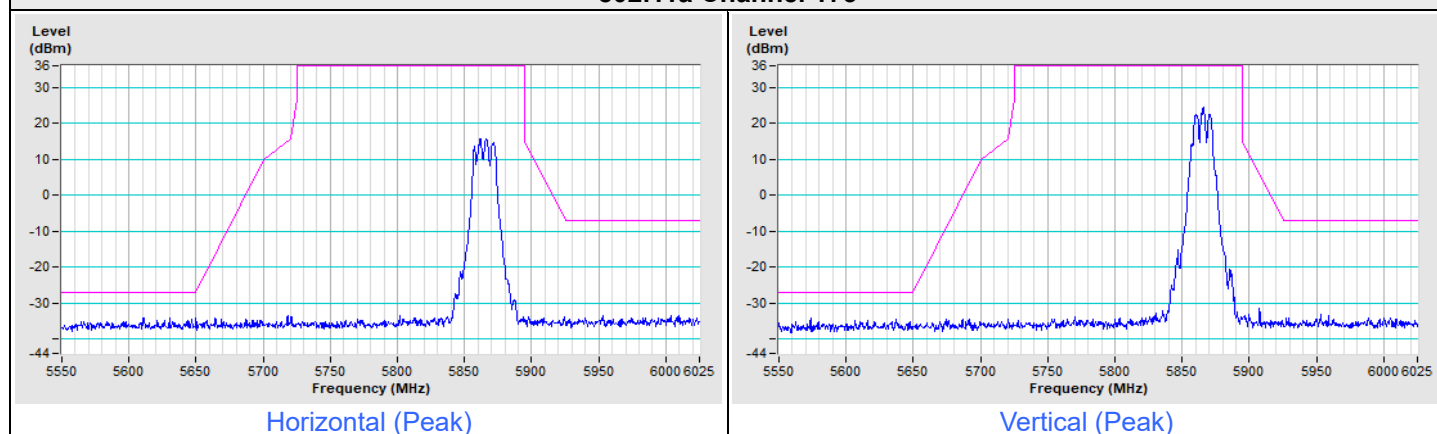
Plot of Band Edge

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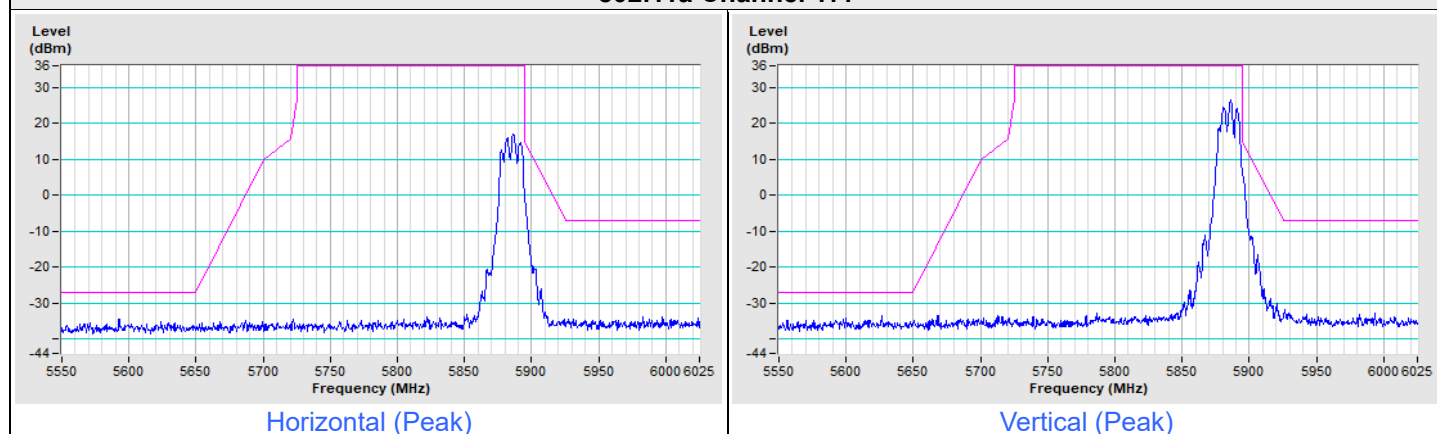
802.11a Channel 169



802.11a Channel 173

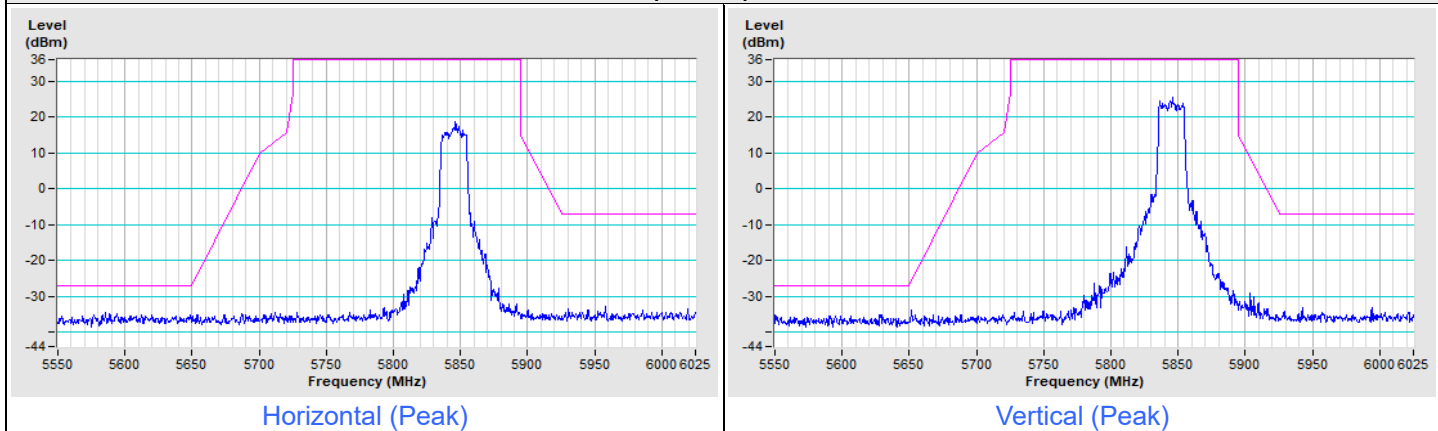


802.11a Channel 177

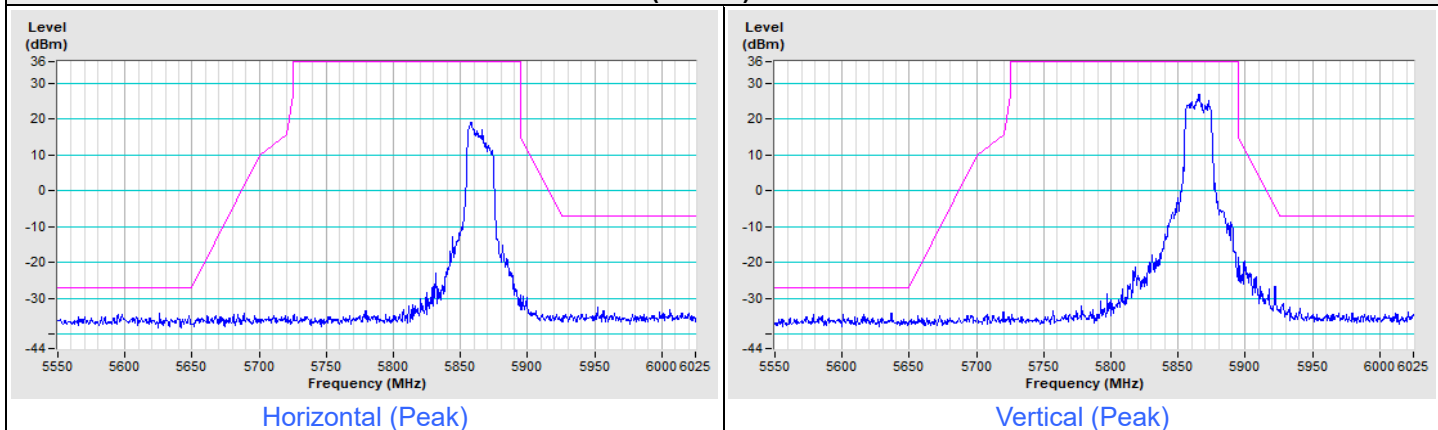


Frequency Range	5.55 GHz ~ 6.025 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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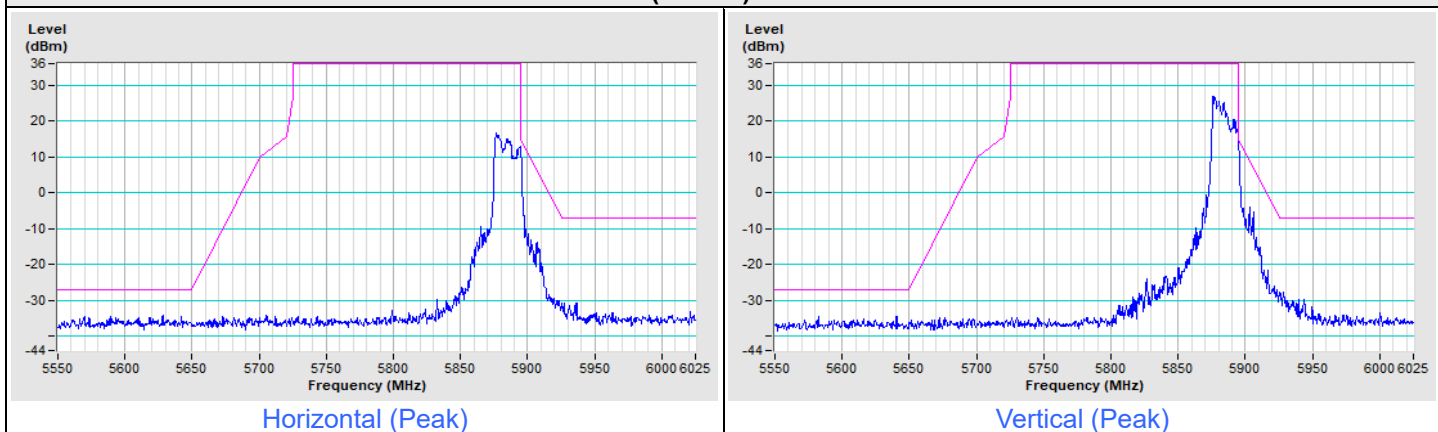
802.11be (EHT20) Channel 169



802.11be (EHT20) Channel 173

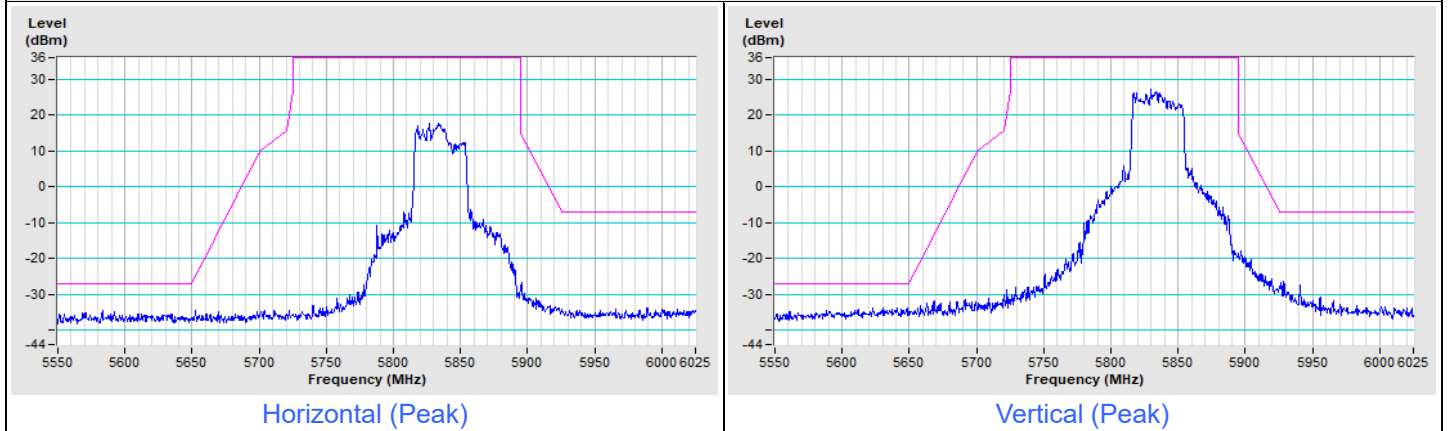


802.11be (EHT20) Channel 177

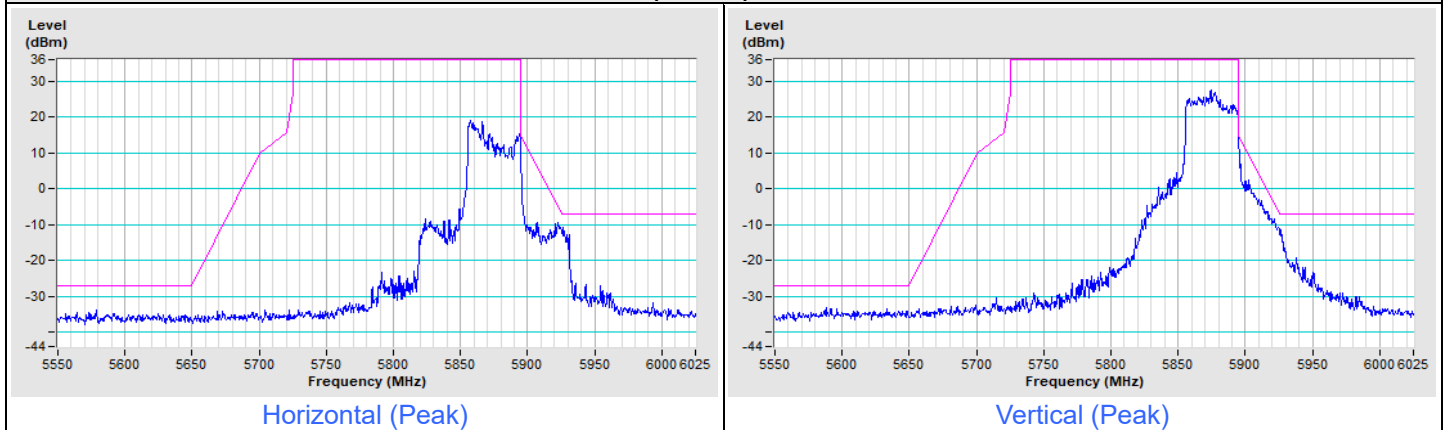


Frequency Range	5.55 GHz ~ 6.025 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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802.11be (EHT40) Channel 167

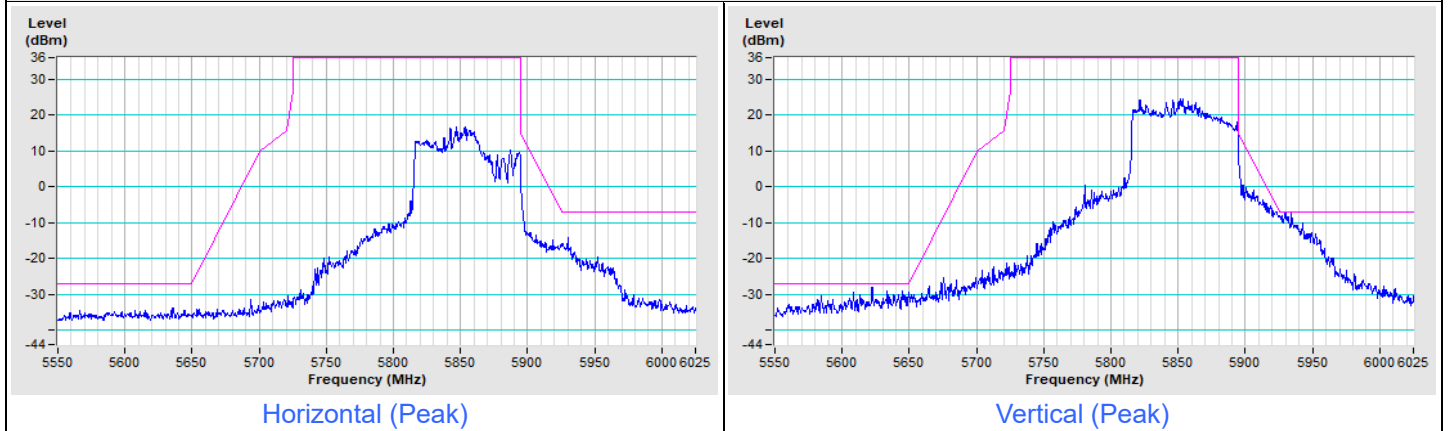


802.11be (EHT40) Channel 175



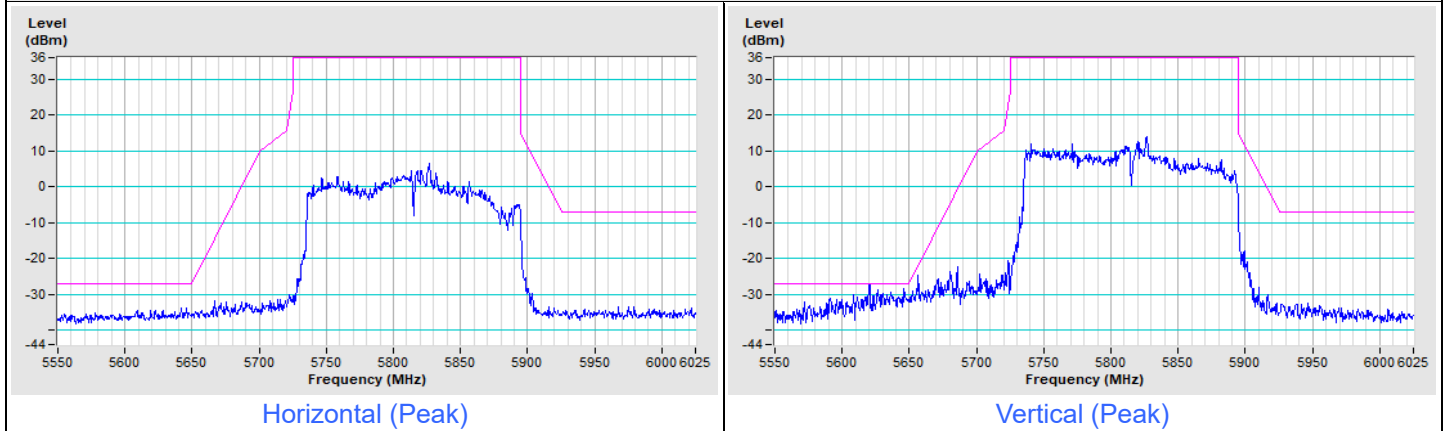
Frequency Range	5.55 GHz ~ 6.025 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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802.11be (EHT80) Channel 171



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



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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Web Site: <http://ee.bureauveritas.com.tw>

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

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