TEST REPORT

CERTIFICATE OF CONFORMITY

Standard:	**47 CFR FCC Part 15, Subpart E (Section 15.407)**
Report No.:	RFBBQZ-WTW-P24020177-3
FCC ID:	PY324100620
Product:	NIGHTHAWK BE12000 WiFi 7 Router
Brand:	NETGEAR
Model No.:	RS500
Received Date:	2024/2/16
Test Date:	2024/6/5 ~ 2024/6/17
Issued Date:	2024/7/9
Applicant and Manufacturer:	NETGEAR, INC.
Address:	350 East Plumeria Drive San Jose CA 95134
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Lin Kou Laboratories
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
Test Location:	No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kewi Shan Dist., Taoyuan City 33383, Taiwan
FCC Registration / Designation Number:	788550 / TW0003

Approved by: Jeremy Lin , **Date:** 2024/7/9

Jeremy Lin / Project Engineer

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Prepared by : Lena Wang / Specialist

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Release Control Record

Issue No.	Description	Date Issued
RFBBQZ-WTW-P24020177-3	Original Release	2024/7/9

1 Certificate

Product:	NIGHTHAWK BE12000 WiFi 7 Router
Brand:	NETGEAR
Test Model:	RS500
Sample Status:	Engineering Sample
Applicant and Manufacturer:	NETGEAR, INC.
Test Date:	2024/6/5 ~ 2024/6/17
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 -18.91 dB at 0.17400 MHz
15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -2.3 dB at 51.34 MHz
15.407(b)(5) 15.407(b)(10)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -1.0 dB at 5636.70 MHz
15.407(e)	6 dB Bandwidth	Pass	Meet the requirement of limit.
15.407(g)	Frequency Stability	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 GHz ~ 18 GHz	2.29 dB
Power Spectral Density	1 GHz ~ 18 GHz	2.29 dB
6 dB Bandwidth	-	206.5 Hz
Frequency Stability	-	0.176 ppm
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	NIGHTHAWK BE12000 WiFi 7 Router
Brand	NETGEAR
Test Model	RS500
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	Up to 5764 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: 3837.072 mW (35.84 dBm)
EUT Category	Indoor access point

Note:

1. The EUT uses following accessories.

Item	Brand	Model	Part Number	Specification
AC Adapter 1	NETGEAR	ADS-45FIC-12 12042E	332-11664-02	AC Input : 100-240V ~ 50/60Hz 1.5A DC Output : 12.0V 3.5A 42.0W DC Output Cable : 1.8M / 0core Plug : US, EU, AU Manufacturer: VIETNAM HONOR HIGH TECH COMPANY LIMITED
AC Adapter 2	NETGEAR	AD2150M20	332-11500-05	AC Input : 100-240V ~ 50/60 Hz 1.0A DC Output : 12V 3.5A 42.0W DC Output Cable : 1.8M / 0core Plug : US, EU, AU Manufacturer: PI ELECTRONICS (VIETNAM) COMPANY LIMITED
AC Adapter 3	NETGEAR	AD2150F10	332-11494-02	AC Input : 100-120V ~ 50/60Hz 1.0A DC Output : 12V 3.5A DC Output Cable : 1.8M / 0core Plug : US Manufacturer: PI ELECTRONICS (VIETNAM) COMPANY LIMITED
Ethernet Cable	NETGEAR	N/A	-	Signal Line : 1.95M

2. Simultaneously transmission condition.

Condition	Technology		
1	WLAN (2.4GHz)	WLAN (5GHz)	WLAN (6GHz)
Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.			

3. The EUT has two DR filters and the characteristics of the DR filter are the same and meet the pin-for-pin compatible. After pre-scanning, the first DR filter is used as the final test.

DR Filter	Description
1st DR Filter	DFJ6610CA30 (SY01166101J91F31C)
2nd DR Filter	DFJ6610DA30 (SY01166101J91H41C)

4. 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.	Gain (dBi)	Antenna Type	Connector Type
	5850 MHz		
ANT 1	3.78	Dipole	ipex(MHF)
ANT 2	3.84	Dipole	ipex(MHF)
ANT 3	4.20	Dipole	ipex(MHF)
ANT 4	3.00	Dipole	ipex(MHF)

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

2. The EUT incorporates a MIMO function:

Modulation Mode	Tx & Rx Configuration	
802.11a	4TX	4RX
802.11n (HT20)	4TX	4RX
802.11n (HT40)	4TX	4RX
802.11ac (VHT20)	4TX	4RX
802.11ac (VHT40)	4TX	4RX
802.11ac (VHT80)	4TX	4RX
802.11ac (VHT160)	4TX	4RX
802.11ax (HE20)	4TX	4RX
802.11ax (HE40)	4TX	4RX
802.11ax (HE80)	4TX	4RX
802.11ax (HE160)	4TX	4RX
802.11be (EHT20)	4TX	4RX
802.11be (EHT40)	4TX	4RX
802.11be (EHT80)	4TX	4RX
802.11be (EHT160)	4TX	4RX

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, 160MHz), 802.11ax mode for 20 MHz (40 MHz, 80 MHz, 160MHz), and 802.11be mode for 20 MHz (40 MHz, 80 MHz, 160MHz), therefore the manufacturer will control the power for 802.11n/ac/ax mode is the same as the 802.11be or lower than it and investigated worst case to representative mode in test report.
4. For 802.11ax/be, the EUT not support Partial RU (resource unit) 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

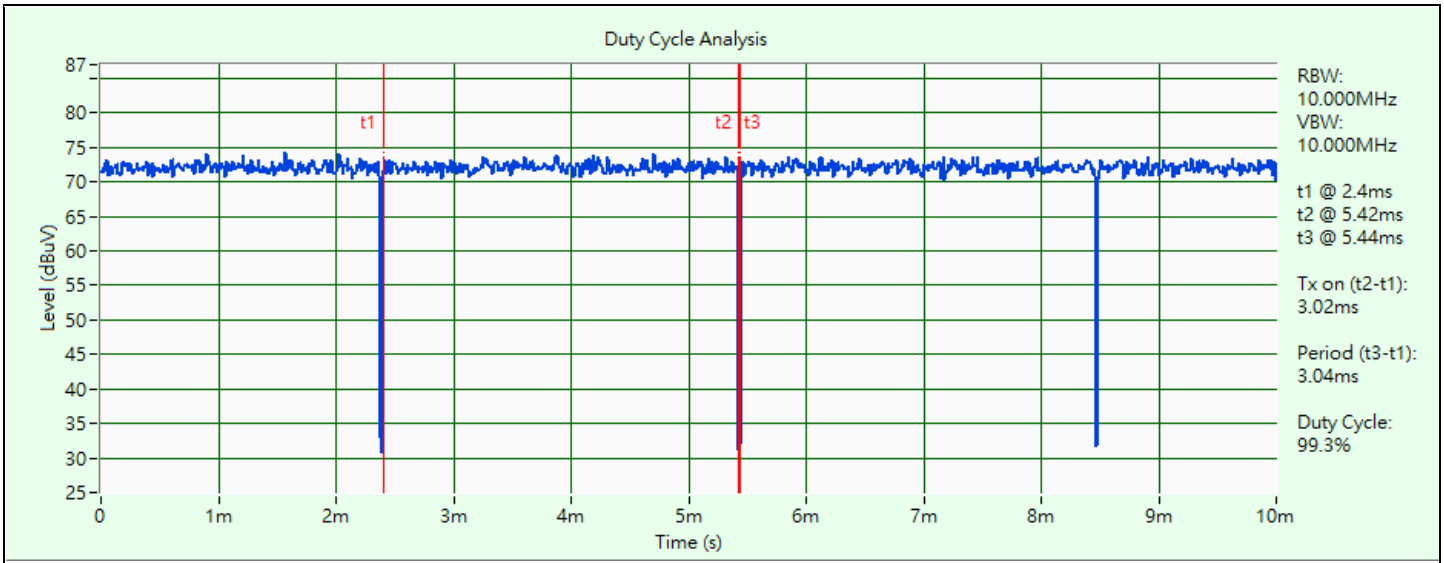
Pre-Scan:	1. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
Worst Case:	1. AC Adapter 1 and AC Adapter 2 and AC Adapter 3 Worst Condition: AC Adapter 3 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:

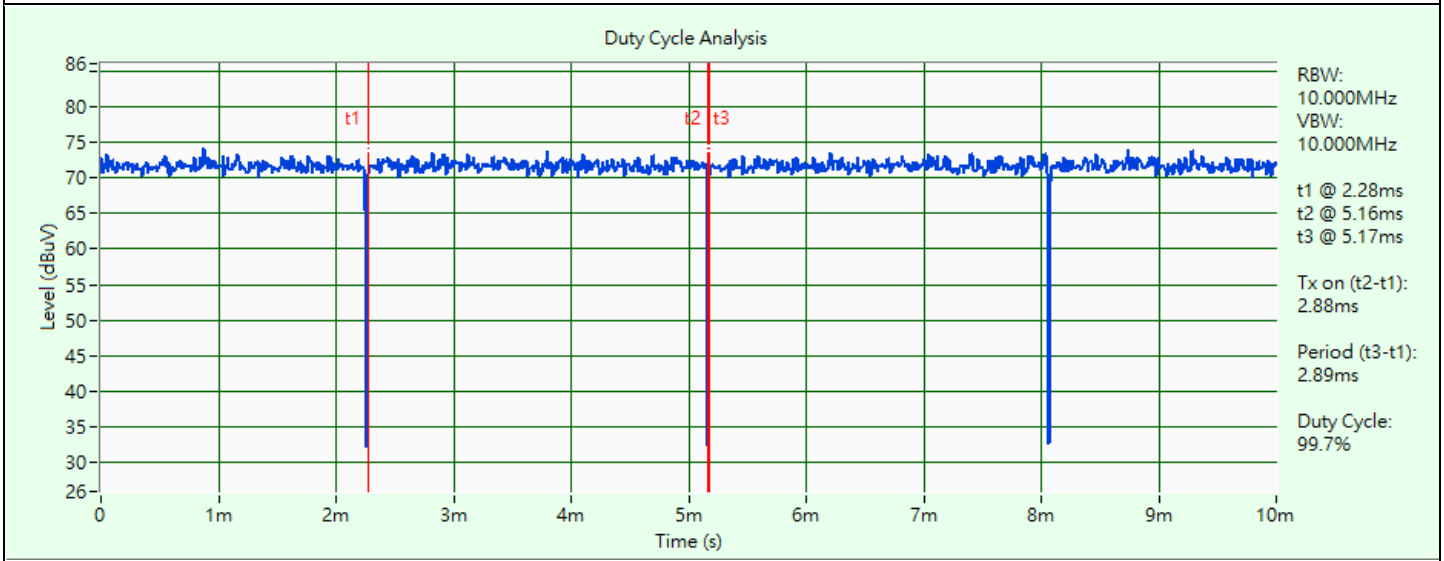
Test Item	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter
RF Output Power	802.11a	CDD	169, 173, 177	BPSK	6Mb/s
	802.11be (EHT20)	Beamforming	169, 173, 177	BPSK	MCS0
	802.11be (EHT40)	Beamforming	167, 175	BPSK	MCS0
	802.11be (EHT80)	Beamforming	171	BPSK	MCS0
	802.11be (EHT160)	Beamforming	163	BPSK	MCS0
Power Spectral Density	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	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
Frequency Stability	802.11a	-	177	un-modulation	-
AC Power Conducted Emissions	802.11be (EHT40)	Beamforming	167	BPSK	MCS0
Unwanted Emissions below 1 GHz	802.11be (EHT40)	Beamforming	167	BPSK	MCS0
Unwanted Emissions above 1 GHz	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
Note: Partial RU (resource unit), channel puncturing and bandwidth reduction mechanisms are not supported.					

3.5 Duty Cycle of Test Signal

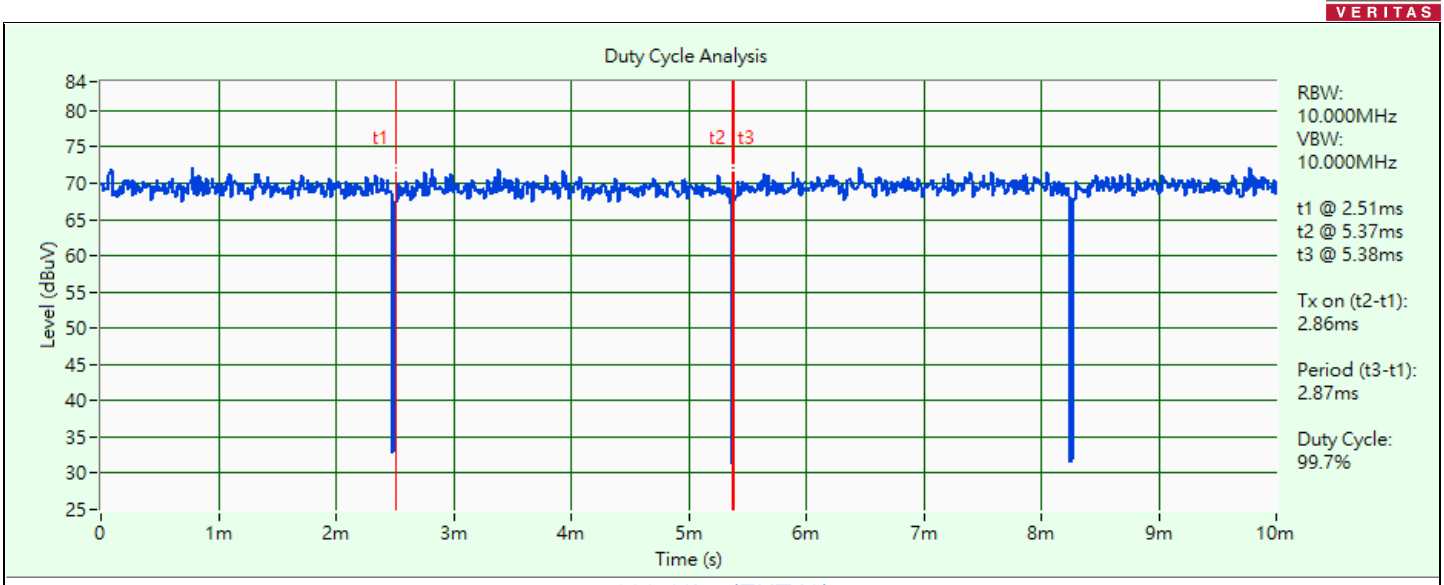
802.11a: Duty cycle = 3.02 ms / 3.04 ms x 100% = 99.3%
802.11be (EHT20): Duty cycle = 2.88 ms / 2.89 ms x 100% = 99.7%
802.11be (EHT40): Duty cycle = 2.86 ms / 2.87 ms x 100% = 99.7%
802.11be (EHT80): Duty cycle = 2.86 ms / 2.87 ms x 100% = 99.7%
802.11be (EHT160): Duty cycle = 2.85 ms / 2.86 ms x 100% = 99.7%



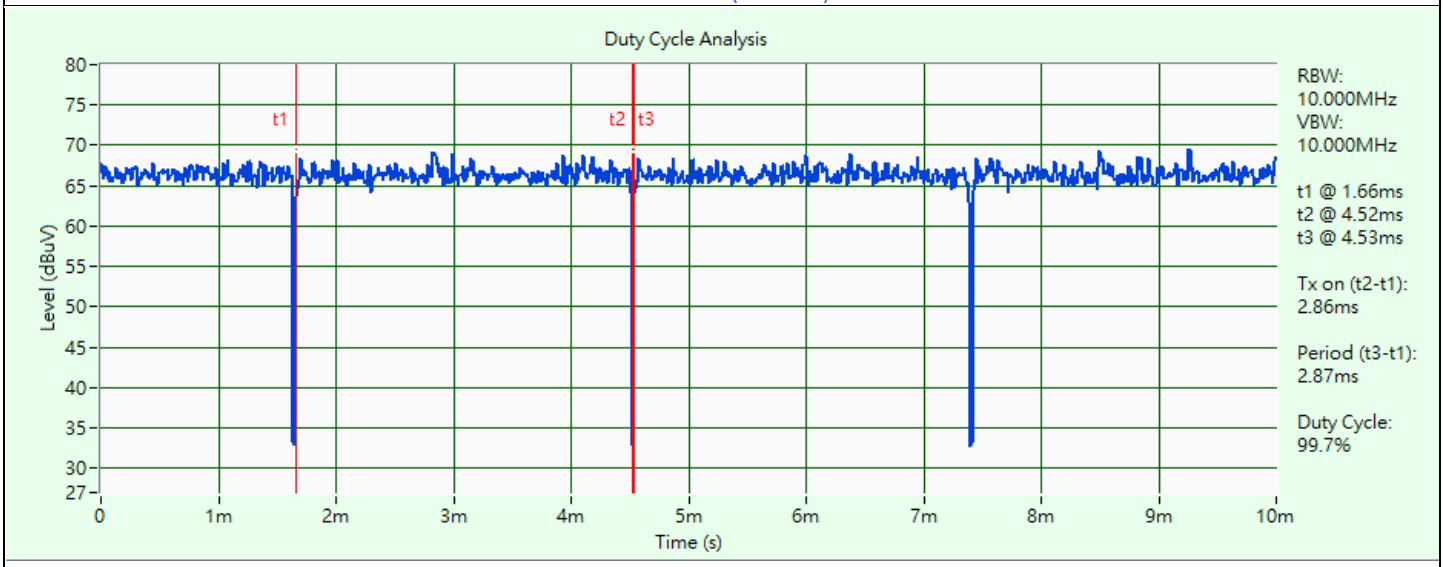
802.11a



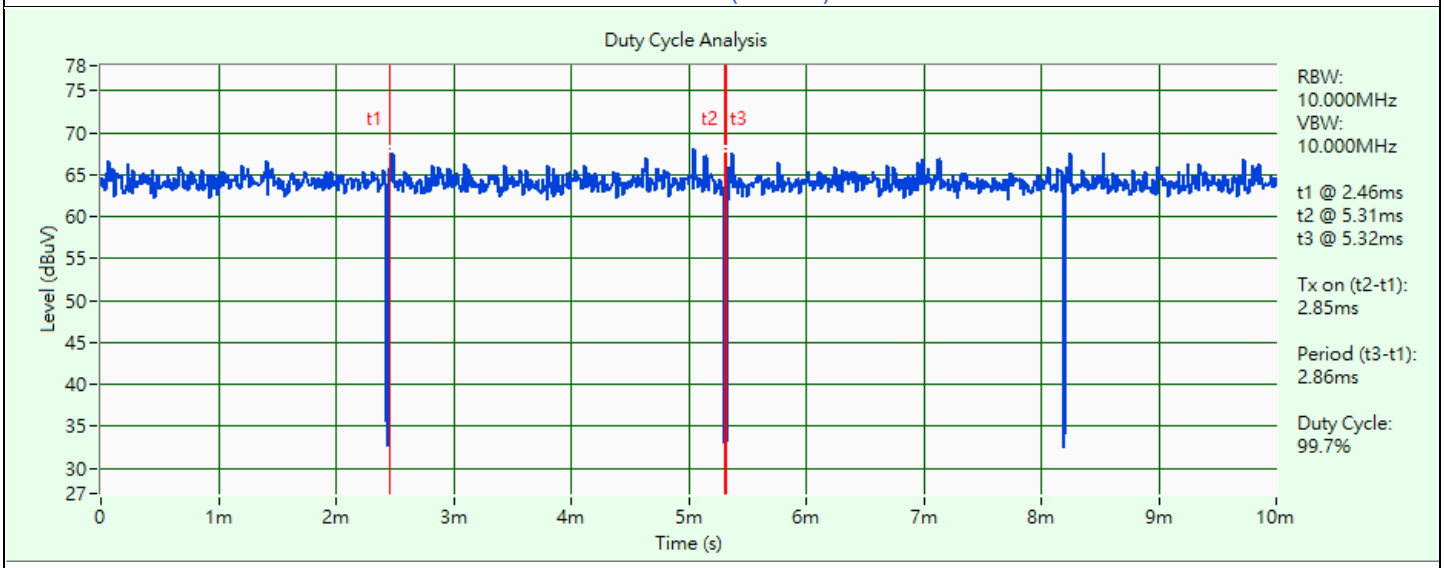
802.11be (EHT20)



802.11be (EHT40)



802.11be (EHT80)

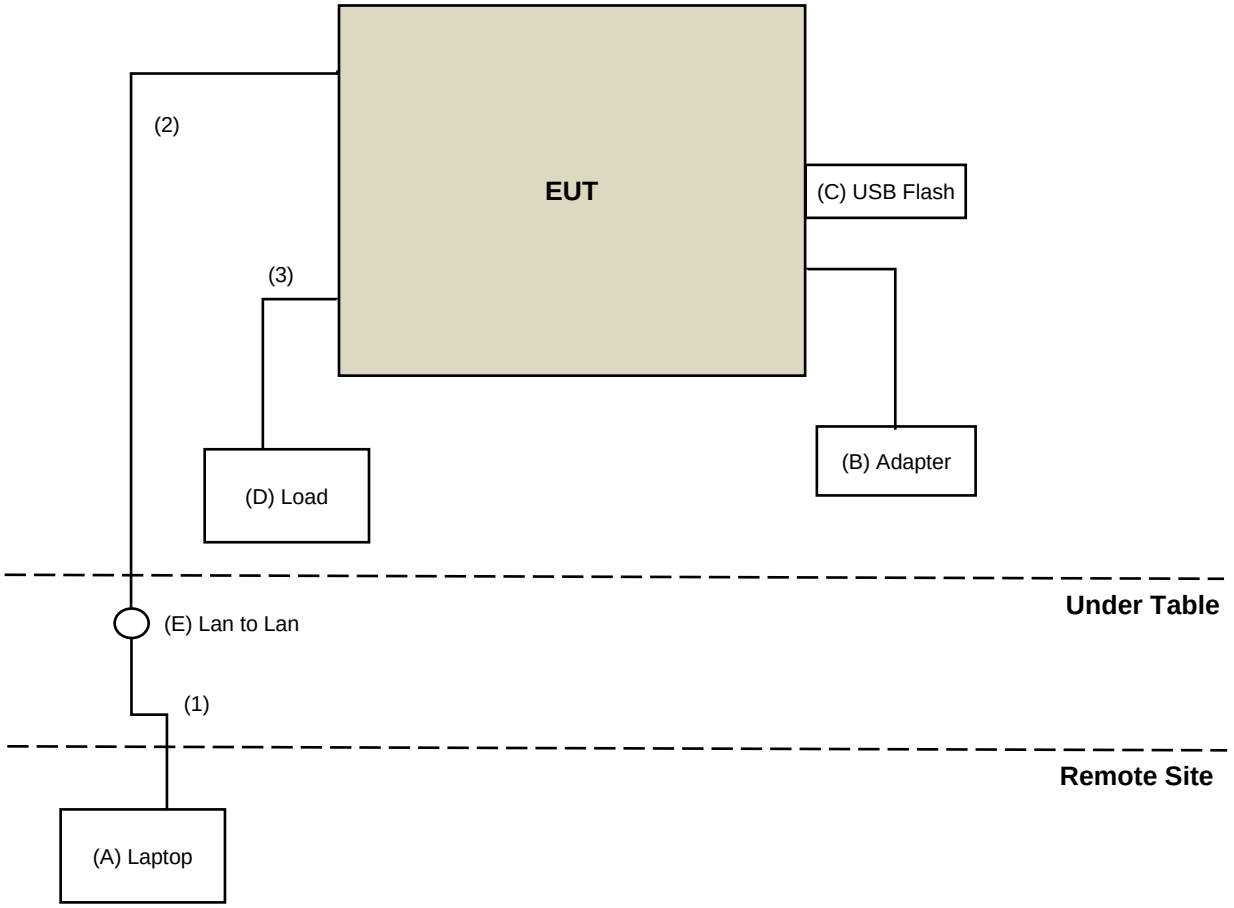


802.11be (EHT160)

3.6 Test Program Used and Operation Descriptions

Controlling software accessMTool_REL_3_2_1_5 has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.7 Connection Diagram of EUT and Peripheral Devices



3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Laptop	DELL	E5430	2RL3YW1	N/A	Provided by Lab
B	Adapter	NETGEAR	AD2150F10	N/A	N/A	Accessory of EUT
C	USB Flash	SanDisk	N/A	N/A	N/A	Provided by Lab
D	Load	N/A	N/A	N/A	N/A	Provided by Lab
E	Lan to Lan	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	10	N	N	Provided by Lab
2	RJ-45 Cable	1	1.95	N	N/A	Accessory of EUT
3	RJ-45 Cable	4	1.5	N	N	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	2023/12/7	2024/12/6
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-408	2023/11/12	2024/11/11
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
	Sucoflex 104	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: 2024/6/17

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	101105	2024/2/27	2025/2/26
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: 2024/6/17

4.4 Frequency Stability

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
AC Power Supply JIN YIH Technology	6905S	1720444	N/A	N/A
Digital Multimeter Fluke	87III	70360742	2023/7/6	2024/7/5
Signal & Spectrum Analyzer R&S	FSV3044	101105	2024/2/27	2025/2/26
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A
Temperature & Humidity Chamber Terchy	HRM-120RF	931022	2023/12/19	2024/12/18

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2024/6/17

4.5 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohm terminal resistance HUBER+SUHNER	E1-011315	13	2023/11/22	2024/11/21
50 ohm terminal resistance	E1-011279	04	2023/11/22	2024/11/21
	E1-011280	05	2023/11/22	2024/11/21
DC-LISN Schwarzbeck	NNBM 8126G	8126G-069	2023/11/7	2024/11/6
EMI Test Receiver R&S	ESCI	100613	2023/12/4	2024/12/3
Fixed Attenuator Mini-Circuits	HAT-10+	PAD-COND1-01	2024/1/6	2025/1/5
LISN R&S	ENV216	101826	2024/3/25	2025/3/24
	ESH3-Z5	100311	2023/9/6	2024/9/5
RF Coaxial Cable Woken	5D-FB	Cable-cond1-01	2024/1/6	2025/1/5
Software BVADT	BVADT_Cond_ V7.4.1.0	N/A	N/A	N/A
V-LISN Schwarzbeck	NNBL 8226-2	8226-142	2023/8/31	2024/8/30

Notes:

1. The test was performed in HY - Conduction 1.
2. Tested Date: 2024/6/5

4.6 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	2023/10/13	2024/10/12
EMI Test Receiver R&S	ESR3	102782	2023/12/7	2024/12/6
Loop Antenna Electro-Metrics	EM-6879	269	2023/9/23	2024/9/22
Loop Antenna TESEQ	HLA 6121	45745	2023/8/8	2024/8/7
Preamplifier Agilent	8447D	2944A10631	2024/5/1	2025/4/30
Preamplifier EMCI	EMC001340	980201	2023/9/27	2024/9/26
RF Coaxial Cable Woken	8D-FB	Cable-CH4-01	2023/7/8	2024/7/7
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: 2024/6/6

4.7 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	2023/12/7	2024/12/6
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-408	2023/11/12	2024/11/11
	BBHA 9170	9170-480	2023/11/12	2024/11/11
		BBHA9170241	2023/10/16	2024/10/15
		BBHA9170243	2023/11/12	2024/11/11
Preamplifier EMCI	EMC 184045	980116	2023/9/27	2024/9/26
Preamplifier Keysight	83017A	MY53270295	2024/5/1	2025/4/30
RF Coaxial Cable EMCI	EMC102-KM-KM-600	150928	2023/7/8	2024/7/7
	EMC102-KM-KM-3000	150929	2023/7/8	2024/7/7
RF Coaxial Cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH4-03(250724)	2024/5/1	2025/4/30
	Sucoflex 104	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: 2024/6/5 ~ 2024/6/6

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 Frequency Stability

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

5.5 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.

5.6 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).

5.7 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:

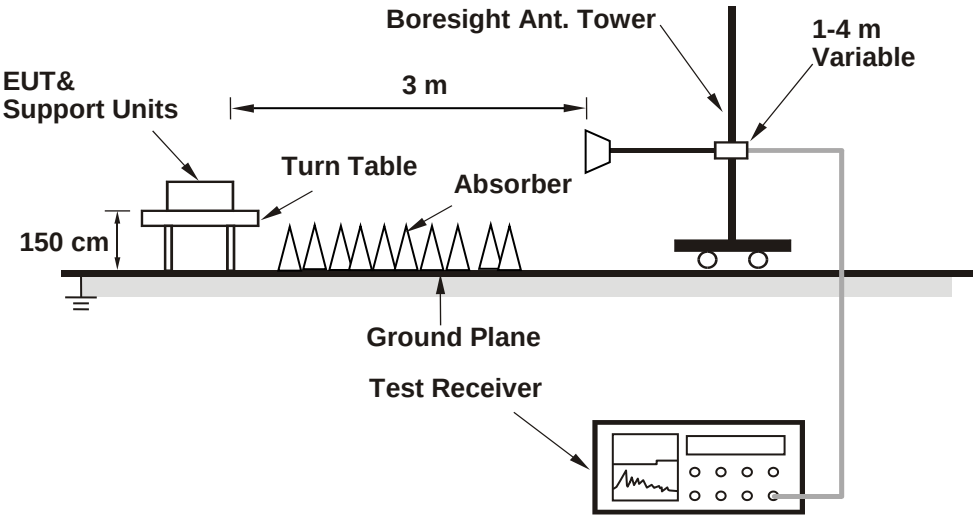
The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = \frac{1000000\sqrt{30P}}{3}$$ μV/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

a. 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.

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. 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.

e. Follow ANSI C63.10 section 12.7.3, EIRP Value (dBm) = Field Strength Value (dBuV / m) + Correction Factor @ 3 m.

f. Correction Factor (dB) @ 3 m = 20log(D) – 104.77 = -95.23 dB; where D is the measurement distance @3 m.

Spectrum analyzer setting as below:
Method SA-1

a. Set span to encompass the entire emission bandwidth (EBW) of the signal.

b. Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS

c. Sweep points ≥ [2 × span / RBW]. (This gives bin-to-bin spacing ≤ RBW / 2, so that narrowband signals are not lost between frequency bins.)

d. Sweep time = auto, trigger set to “free run”.

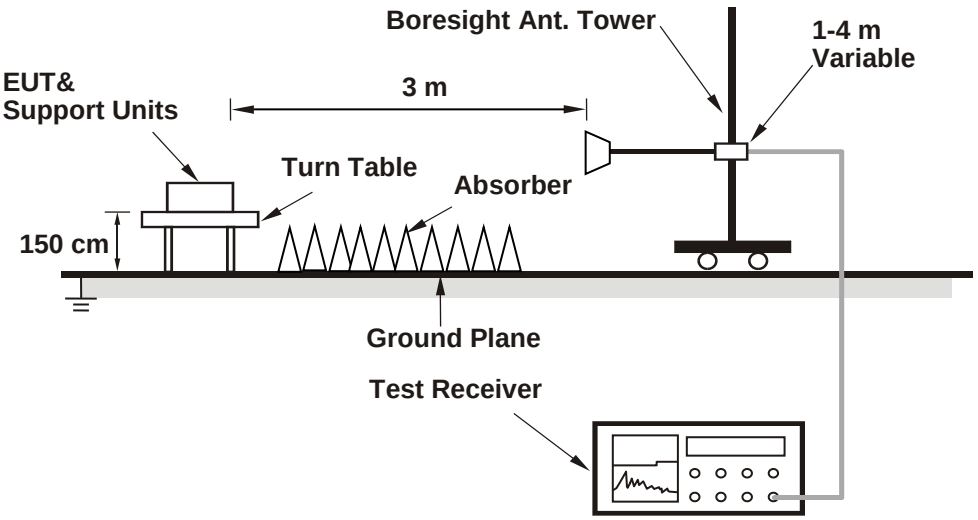
e. Trace average at least 100 traces in power averaging mode.

f. Record the max value

Note: When measuring 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

a. 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.

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. 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.

e. Follow ANSI C63.10 section 12.7.3, EIRP Value (dBm) = Field Strength Value (dBuV/m) + Correction Factor @ 3 m.

f. Correction Factor (dB) @ 3 m = 20log(D) – 104.77; where D is the measurement distance @3 m = -95.23 dB

Spectrum analyzer setting as below:
Method SA-1

a. Set span to encompass the entire emission bandwidth (EBW) of the signal.

b. Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS

c. Sweep points ≥ [2 × span / RBW]. (This gives bin-to-bin spacing ≤ RBW / 2, so that narrowband signals are not lost between frequency bins.)

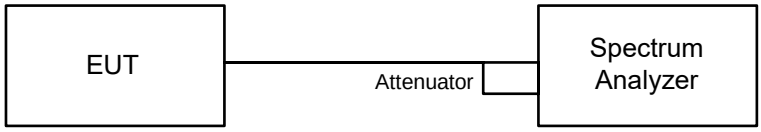
d. Sweep time = auto, trigger set to “free run”.

e. Trace average at least 100 traces in power averaging mode.

f. Record the max value

6.3 6 dB Bandwidth

6.3.1 Test Setup

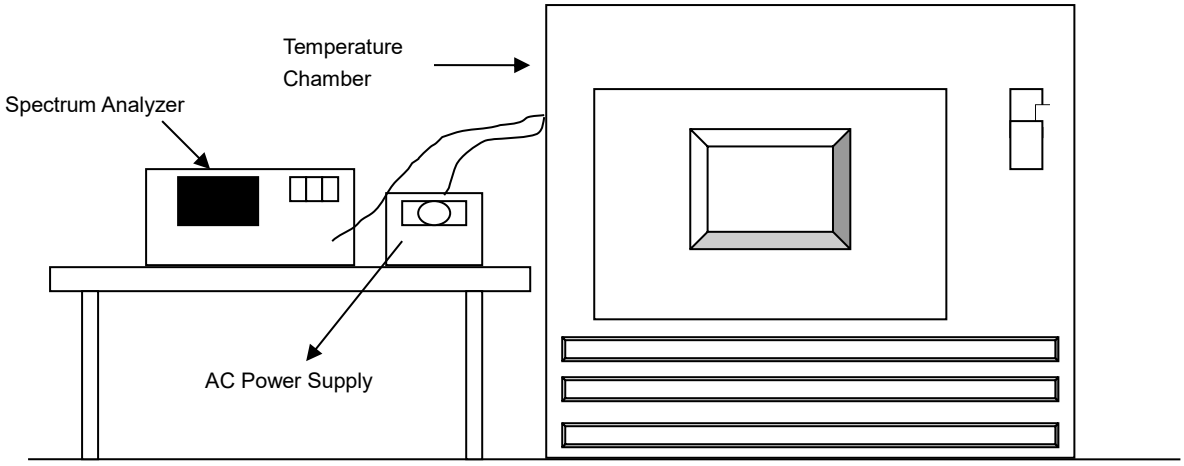


6.3.2 Test Procedure

a. Set resolution bandwidth (RBW) = 100 kHz.
b. Set the video bandwidth (VBW) ≥ 3 x RBW, Detector = Peak.
c. Trace mode = max hold.
d. Sweep = auto couple.
e. 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 Frequency Stability

6.4.1 Test Setup

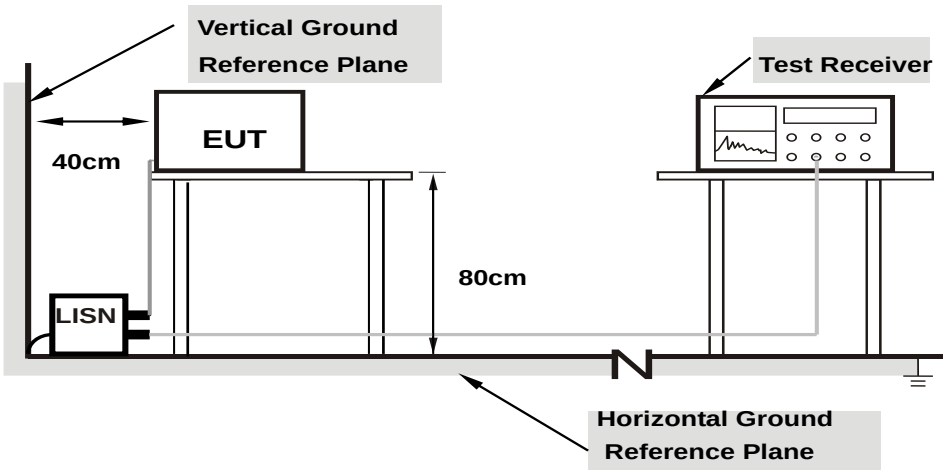


6.4.2 Test Procedure

a. The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.
b. Turn the EUT on and couple its output to a spectrum analyzer.
c. Turn the EUT off and set the chamber to the highest temperature specified.
d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 Minutes.
e. Repeat step (d) with the temperature chamber set to the next desired temperature until measurements down to the lowest specified temperature have been completed.
f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 Minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

6.5 AC Power Conducted Emissions

6.5.1 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).

6.5.2 Test Procedure

a. 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.

b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

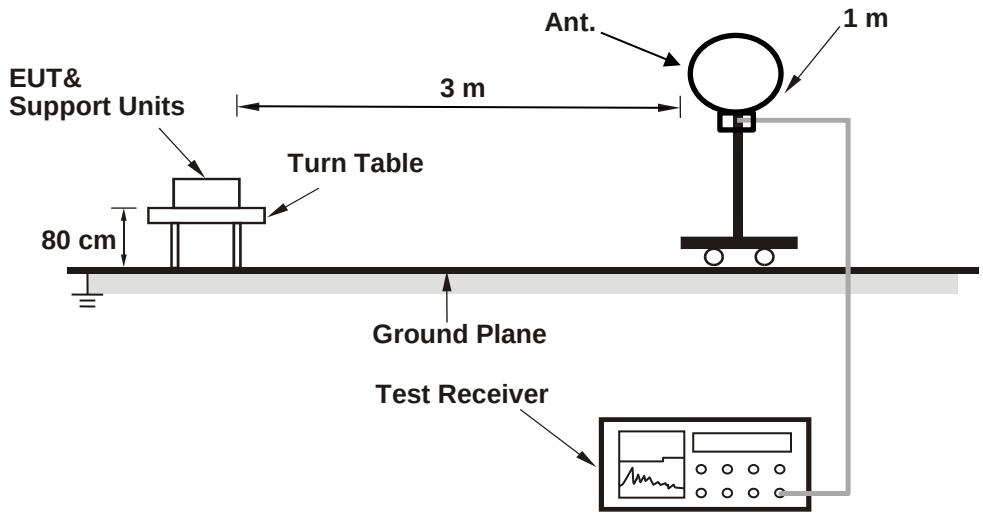
c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

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.

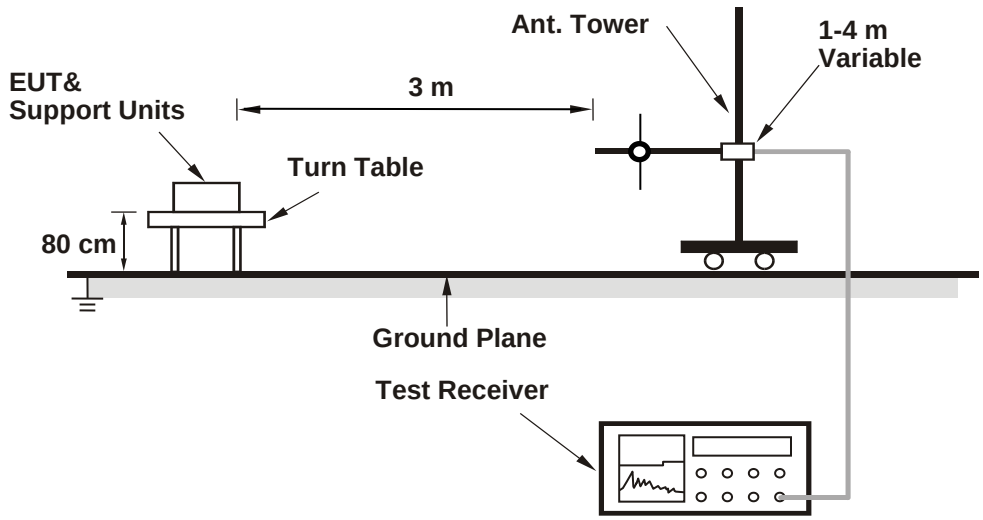
6.6 Unwanted Emissions below 1 GHz

6.6.1 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).

6.6.2 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.

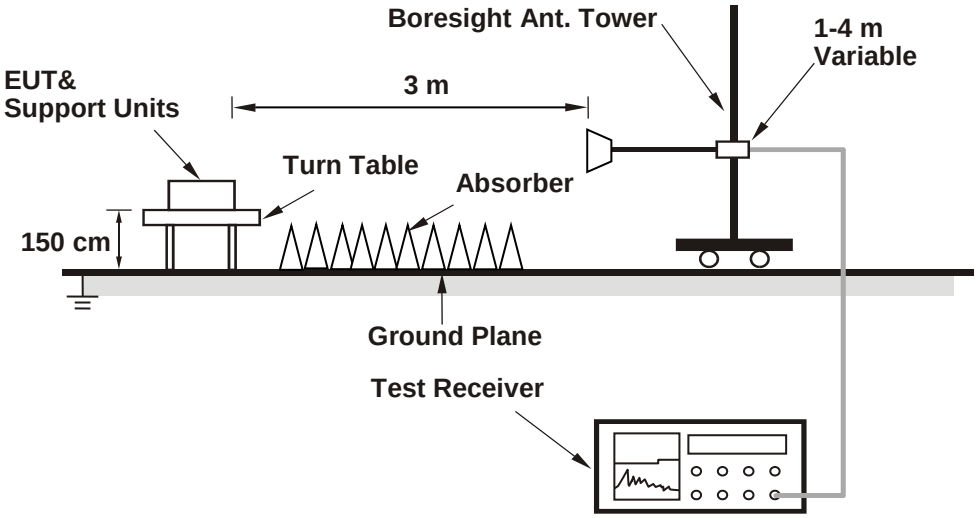
e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

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.

6.7 Unwanted Emissions above 1 GHz

6.7.1 Test Setup



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

6.7.2 Test Procedure

a. 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.

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 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:

1. 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.
2. For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is ≥ 1/T (Duty cycle < 98%) or 10 Hz (Duty cycle ≥ 98%) for Average detection (AV) at frequency above 1 GHz.
3. 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:	Jisyong Wang

802.11a CDD

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
169	5845	125.87	-95.23	1158.777	30.64	36	Pass
173	5865	125.32	-95.23	1020.939	30.09	36	Pass
177	5885	125.35	-95.23	1028.016	30.12	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	130.14	-95.23	3097.419	34.91	36	Pass
173	5865	129.53	-95.23	2691.535	34.30	36	Pass
177	5885	129.62	-95.23	2747.894	34.39	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	131.07	-95.23	3837.072	35.84	36	Pass
175	5875	130.85	-95.23	3647.539	35.62	36	Pass

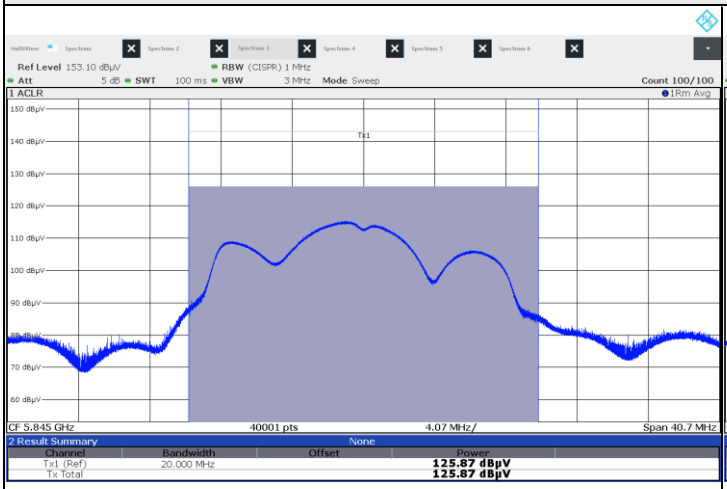
802.11be (EHT80) Beamforming

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
171	5855	130.89	-95.23	3681.29	35.66	36	Pass

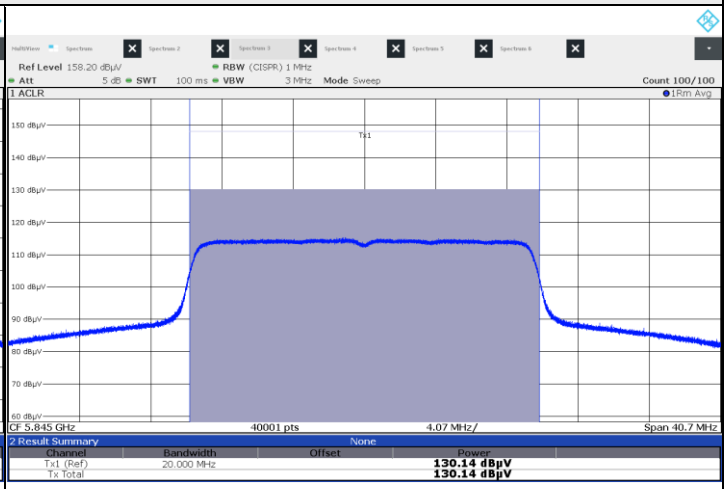
802.11be (EHT160) Beamforming

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
163	5815	127.40	-95.23	1648.162	32.17	36	Pass

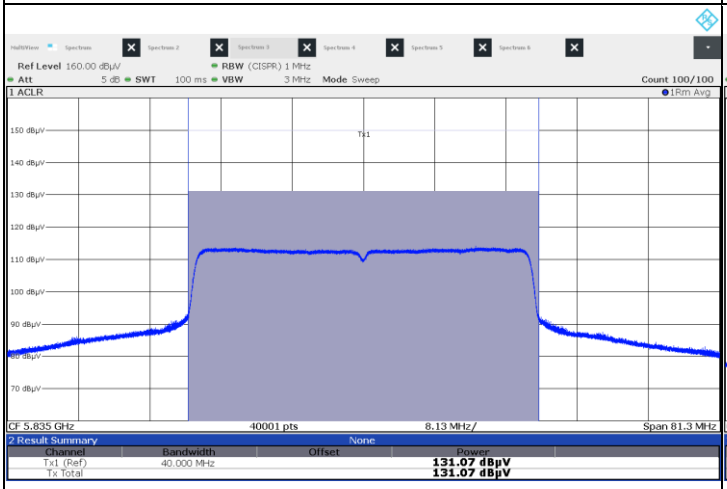
Spectrum Plot of Maximum Value



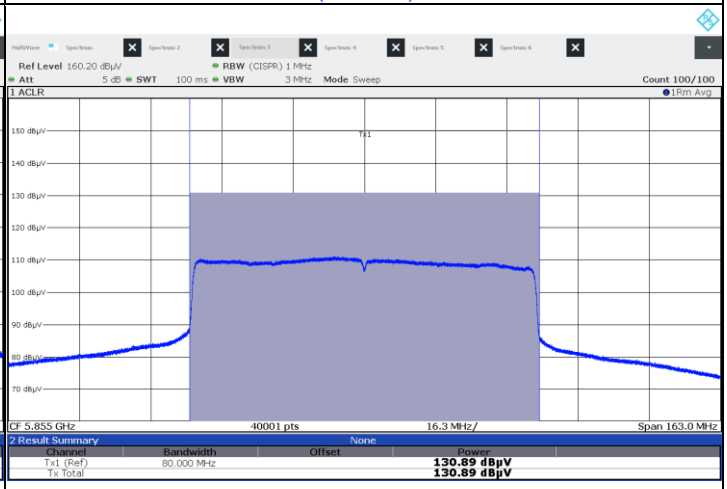
802.11a : CH 169



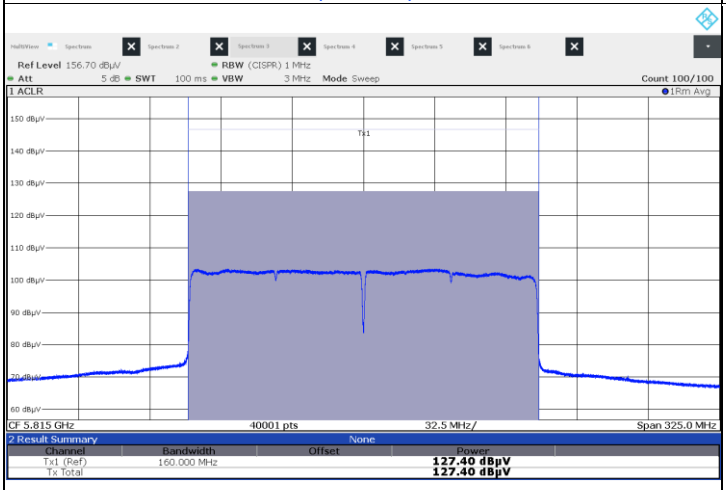
802.11be (EHT20) : CH 169



802.11be (EHT40) : CH 167



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:	Jisyong Wang

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	115.11	-95.23	19.88	20	Pass
177	5885	115.12	-95.23	19.89	20	Pass

802.11be (EHT20) Beamforming

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
169	5845	115.16	-95.23	19.93	20	Pass
173	5865	115.15	-95.23	19.92	20	Pass
177	5885	115.13	-95.23	19.90	20	Pass

802.11be (EHT40) Beamforming

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
167	5835	113.70	-95.23	18.47	20	Pass
175	5875	113.35	-95.23	18.12	20	Pass

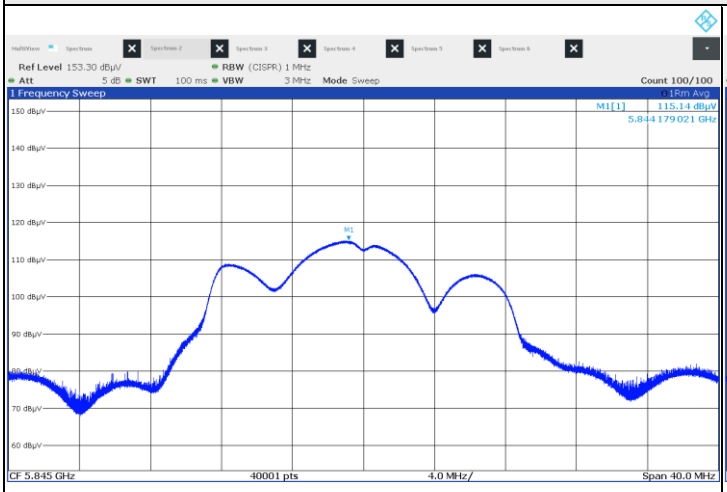
802.11be (EHT80) Beamforming

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
171	5855	110.82	-95.23	15.59	20	Pass

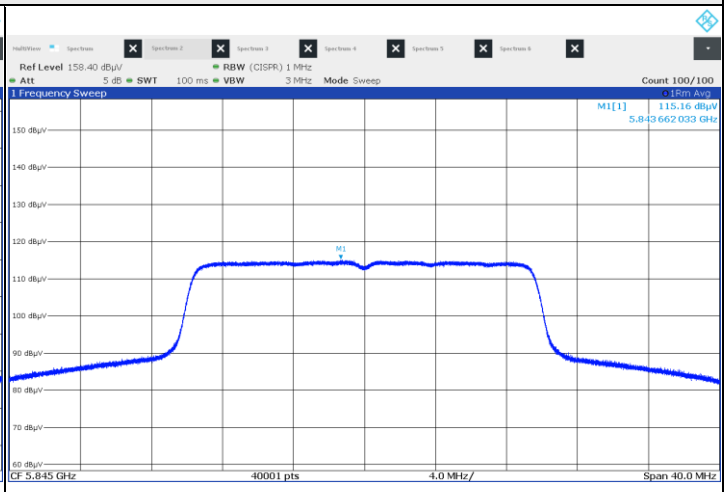
802.11be (EHT160) Beamforming

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
163	5815	103.63	-95.23	8.40	20	Pass

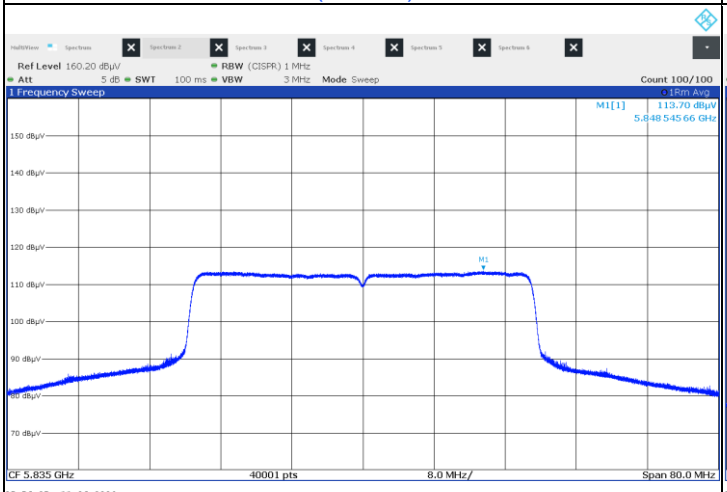
Spectrum Plot of Maximum Value



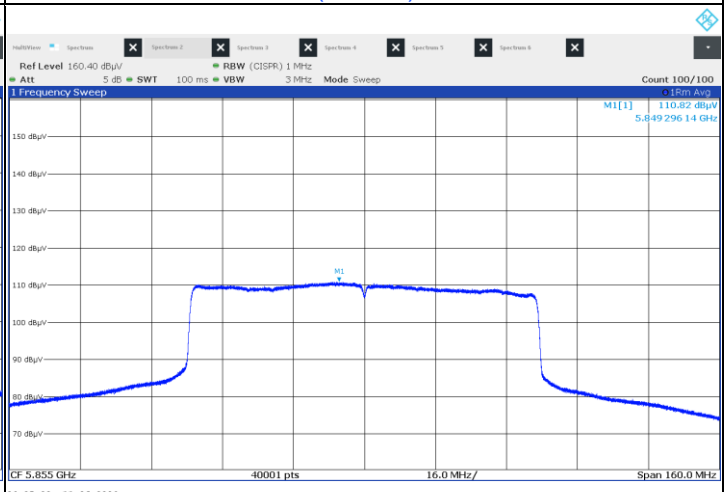
802.11be (EHT20) : CH 169



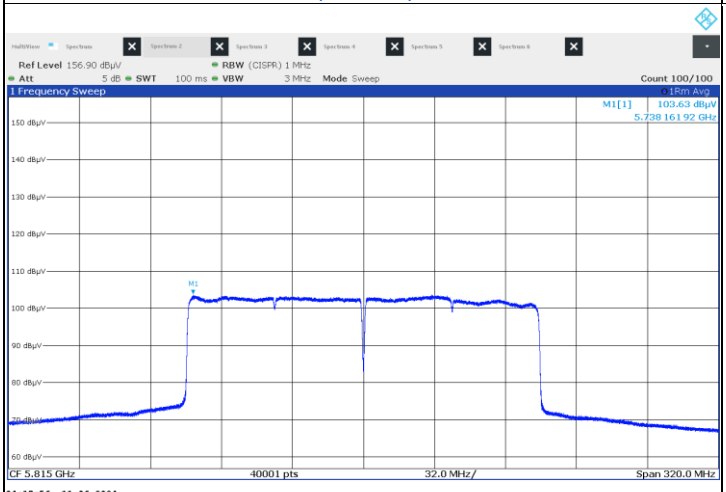
802.11be (EHT20) : CH 169



802.11be (EHT40) : CH 167



802.11be (EHT80) : CH 171



802.11be (EHT160) : CH 163

7.3 6 dB Bandwidth

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Jisyong Wang

802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
169	5845	16.41	16.41	16.39	16.40	0.5	Pass
173	5865	16.39	16.39	16.39	16.40	0.5	Pass
177	5885	16.39	16.40	16.38	16.38	0.5	Pass

802.11be (EHT20) Beamforming

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
169	5845	19.07	19.03	19.06	19.06	0.5	Pass
173	5865	19.06	19.04	19.07	19.05	0.5	Pass
177	5885	19.04	19.05	19.03	19.01	0.5	Pass

802.11be (EHT40) Beamforming

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
167	5835	38.02	38.03	37.89	38.06	0.5	Pass
175	5875	37.99	37.78	37.69	37.93	0.5	Pass

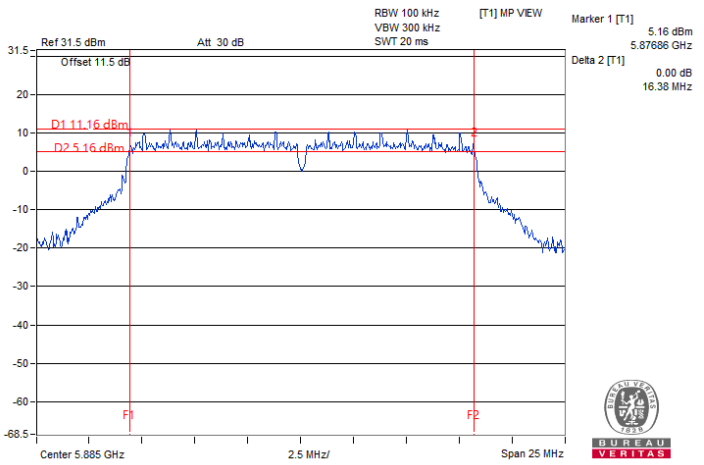
802.11be (EHT80) Beamforming

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
171	5855	77.52	77.77	77.31	77.34	0.5	Pass

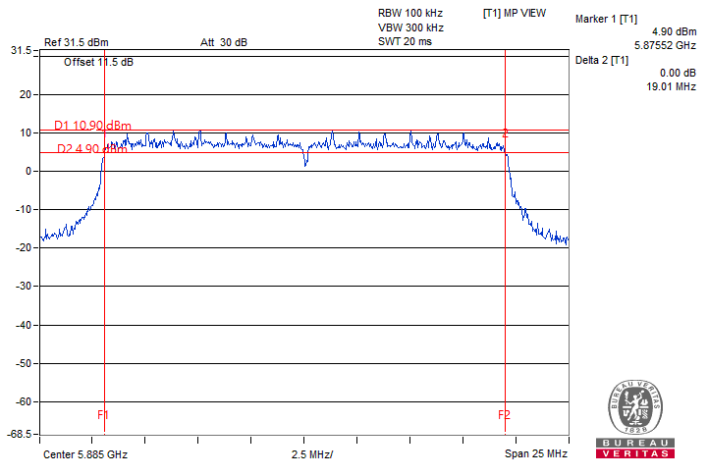
802.11be (EHT160) Beamforming

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2	Chain 3		
163	5815	157.33	157.77	157.20	157.55	0.5	Pass

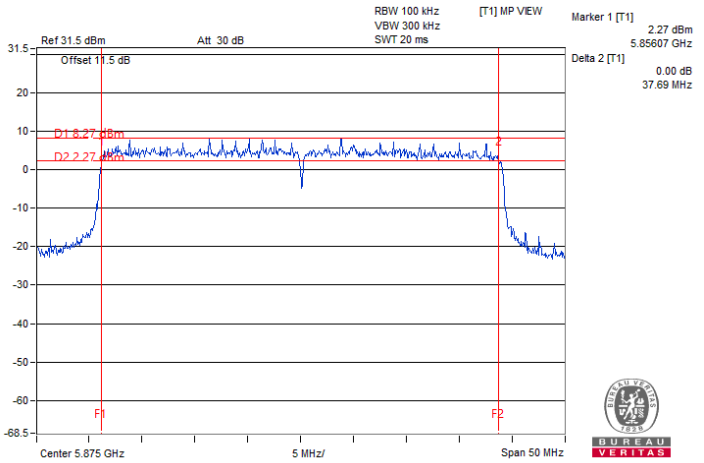
Spectrum Plot of Minimum Value



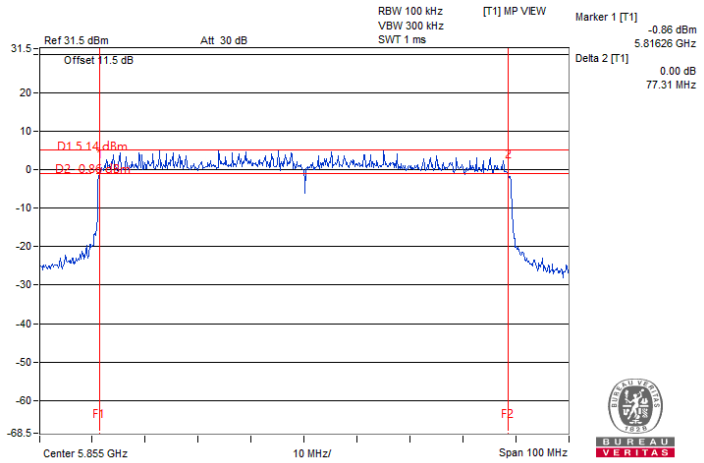
802.11a / Chain 2 : CH 177



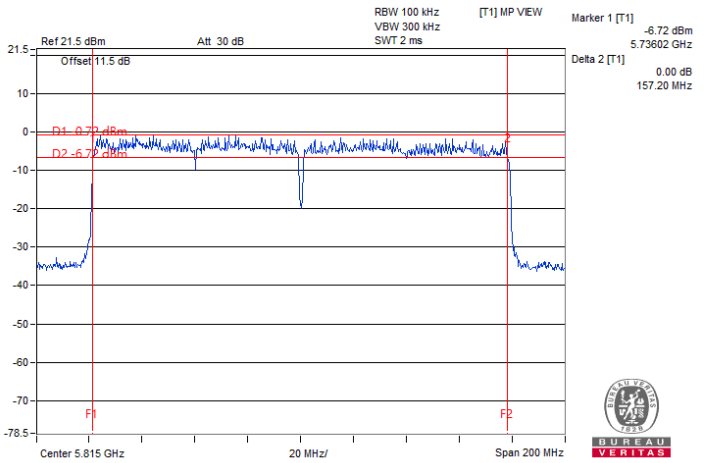
802.11be (EHT20) / Chain 3 : CH 177



802.11be (EHT40) / Chain 2 : CH 175



802.11be (EHT80) / Chain 2 : CH 171



802.11be (EHT160) / Chain 2 : CH 163

7.4 Frequency Stability

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Jisyong Wang

Frequency Stability Versus Temperature									
Operating Frequency: 5865 MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result
40	120	5864.9771	Pass	5864.9782	Pass	5864.9776	Pass	5864.9809	Pass
30	120	5864.987	Pass	5864.9835	Pass	5864.9856	Pass	5864.985	Pass
20	120	5864.976	Pass	5864.977	Pass	5864.977	Pass	5864.9741	Pass
10	120	5864.9958	Pass	5864.995	Pass	5864.9958	Pass	5864.9992	Pass
0	120	5864.9741	Pass	5864.9701	Pass	5864.9705	Pass	5864.9708	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5865 MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result	Measured Frequency (MHz)	Test Result
20	138	5864.9721	Pass	5864.9679	Pass	5864.9729	Pass	5864.9711	Pass
	120	5864.976	Pass	5864.977	Pass	5864.977	Pass	5864.9741	Pass
	102	5864.9688	Pass	5864.9711	Pass	5864.9684	Pass	5864.969	Pass

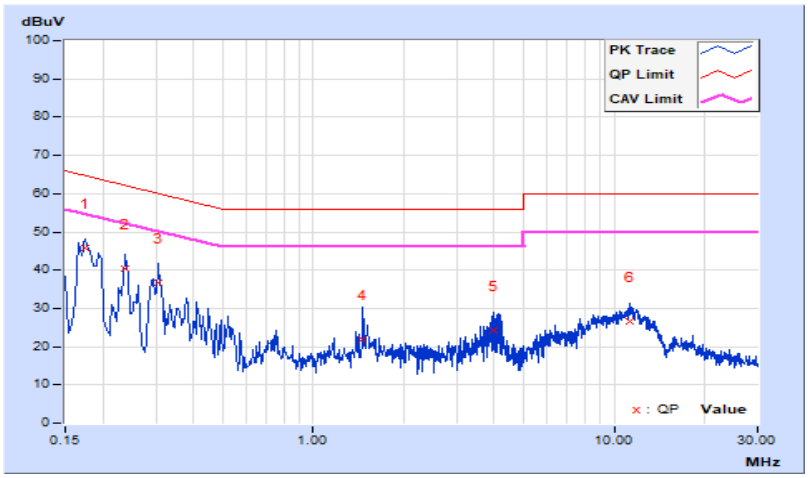
7.5 AC Power Conducted Emissions

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**	23 °C, 67 % RH
Tested By	Adair Peng		

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	**0.17400**	**9.72**	**36.14**	**25.02**	**45.86**	**34.74**	**64.77**	**54.77**	**-18.91**	**-20.03**
2	0.23800	9.74	30.79	20.08	40.53	29.82	62.17	52.17	-21.64	-22.35
3	0.30600	9.78	26.90	15.42	36.68	25.20	60.08	50.08	-23.40	-24.88
4	1.46200	9.92	11.99	4.54	21.91	14.46	56.00	46.00	-34.09	-31.54
5	3.99000	10.03	14.35	3.29	24.38	13.32	56.00	46.00	-31.62	-32.68
6	11.22600	10.18	16.54	10.09	26.72	20.27	60.00	50.00	-33.28	-29.73

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

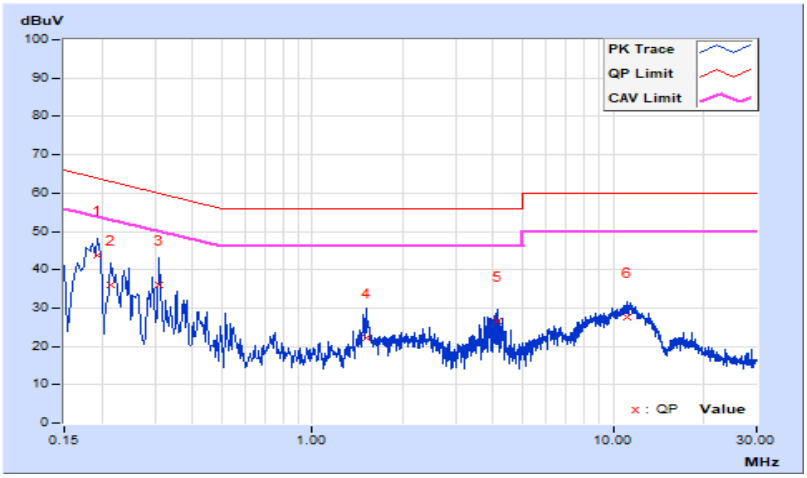


RF Mode	802.11be (EHT40)	Channel	CH 167：5835 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67 % RH
Tested By	Adair Peng		

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	0.19400	9.71	33.95	21.61	43.66	31.32	63.86	53.86	-20.20	-22.54
2	0.21400	9.72	26.32	13.57	36.04	23.29	63.05	53.05	-27.01	-29.76
3	0.31000	9.80	26.33	14.50	36.13	24.30	59.97	49.97	-23.84	-25.67
4	1.51400	9.95	12.19	5.30	22.14	15.25	56.00	46.00	-33.86	-30.75
5	4.12200	10.04	16.72	4.33	26.76	14.37	56.00	46.00	-29.24	-31.63
6	11.17400	10.27	17.42	11.08	27.69	21.35	60.00	50.00	-32.31	-28.65

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



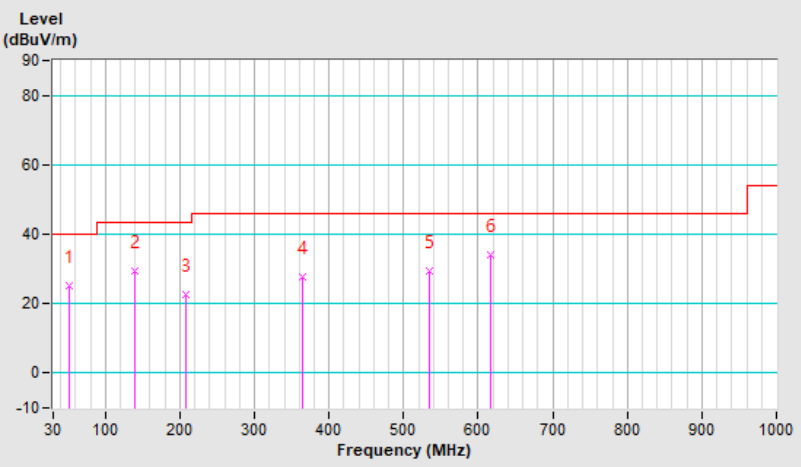
7.6 Unwanted Emissions below 1 GHz

RF Mode	802.11be (EHT40)	**Channel**	CH 167：5835 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, 66 % 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	52.31	25.0 QP	40.0	-15.0	1.00 H	216	33.6	-8.6
2	139.61	29.6 QP	43.5	-13.9	1.00 H	241	38.8	-9.2
3	208.48	22.5 QP	43.5	-21.0	1.00 H	301	34.0	-11.5
4	363.68	27.6 QP	46.0	-18.4	1.00 H	243	33.9	-6.3
5	535.37	29.2 QP	46.0	-16.8	1.00 H	216	32.4	-3.2
6	615.88	34.1 QP	46.0	-11.9	1.00 H	128	34.9	-0.8

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 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.

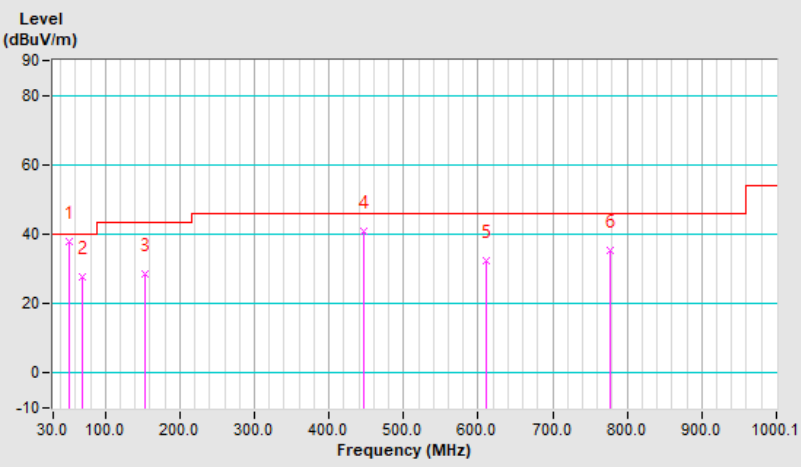


RF Mode	802.11be (EHT40)	Channel	CH 167：5835 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Luis Lee		

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	**51.34**	**37.7 QP**	**40.0**	**-2.3**	**1.00 V**	**219**	**46.3**	**-8.6**
2	68.80	27.8 QP	40.0	-12.2	1.50 V	188	38.5	-10.7
3	153.19	28.7 QP	43.5	-14.8	1.50 V	245	37.4	-8.7
4	446.13	41.0 QP	46.0	-5.0	1.00 V	295	45.7	-4.7
5	611.03	32.5 QP	46.0	-13.5	1.00 V	161	33.4	-0.9
6	776.90	35.4 QP	46.0	-10.6	1.00 V	295	33.1	2.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. 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.



7.7 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, 66 % 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	#5650.00	59.3 PK	68.2	-8.9	1.35 H	216	45.9	13.4
2	*5845.00	119.0 PK			1.35 H	216	74.3	44.7
3	*5845.00	109.2 AV			1.35 H	216	64.5	44.7
4	#5895.00	67.6 PK	110.2	-42.6	1.35 H	216	53.7	13.9
5	11690.00	60.7 PK	74.0	-13.3	1.79 H	284	38.0	22.7
6	11690.00	48.6 AV	54.0	-5.4	1.79 H	284	25.9	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	60.2 PK	68.2	-8.0	1.49 V	184	46.8	13.4
2	*5845.00	124.6 PK			1.49 V	184	79.9	44.7
3	*5845.00	114.3 AV			1.49 V	184	69.6	44.7
4	#5895.00	69.7 PK	110.2	-40.5	1.49 V	184	55.8	13.9
5	11690.00	61.4 PK	74.0	-12.6	2.23 V	190	38.7	22.7
6	11690.00	49.1 AV	54.0	-4.9	2.23 V	190	26.4	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.

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, 66 % 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	#5650.00	60.8 PK	68.2	-7.4	1.41 H	223	47.4	13.4
2	*5865.00	117.4 PK			1.41 H	223	72.6	44.8
3	*5865.00	107.2 AV			1.41 H	223	62.4	44.8
4	#5895.00	83.1 PK	110.2	-27.1	1.41 H	223	69.2	13.9
5	11730.00	60.0 PK	74.0	-14.0	1.84 H	289	37.6	22.4
6	11730.00	47.5 AV	54.0	-6.5	1.84 H	289	25.1	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	60.9 PK	68.2	-7.3	1.50 V	183	47.5	13.4
2	*5865.00	124.5 PK			1.50 V	183	79.7	44.8
3	*5865.00	113.9 AV			1.50 V	183	69.1	44.8
4	#5895.00	89.1 PK	110.2	-21.1	1.50 V	183	75.2	13.9
5	11730.00	61.2 PK	74.0	-12.8	2.26 V	185	38.8	22.4
6	11730.00	49.0 AV	54.0	-5.0	2.26 V	185	26.6	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 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, 66 % 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	#5650.00	60.4 PK	68.2	-7.8	1.38 H	211	47.0	13.4
2	*5885.00	118.1 PK			1.38 H	211	73.3	44.8
3	*5885.00	108.4 AV			1.38 H	211	63.6	44.8
4	#5895.00	98.8 PK	110.2	-11.4	1.38 H	211	84.9	13.9
5	#5925.00	78.5 PK	88.2	-9.7	1.38 H	211	64.6	13.9
6	11770.00	59.6 PK	74.0	-14.4	1.74 H	288	37.6	22.0
7	11770.00	47.7 AV	54.0	-6.3	1.74 H	288	25.7	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	60.9 PK	68.2	-7.3	1.79 V	141	47.5	13.4
2	*5885.00	124.4 PK			1.79 V	141	79.6	44.8
3	*5885.00	114.8 AV			1.79 V	141	70.0	44.8
4	#5895.00	104.0 PK	110.2	-6.2	1.79 V	141	90.1	13.9
5	#5925.00	83.6 PK	88.2	-4.6	1.79 V	141	69.7	13.9
6	11770.00	60.6 PK	74.0	-13.4	2.19 V	188	38.6	22.0
7	11770.00	48.5 AV	54.0	-5.5	2.19 V	188	26.5	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 (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, 66 % 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	#5650.00	59.4 PK	68.2	-8.8	1.33 H	212	46.0	13.4
2	*5845.00	120.8 PK			1.33 H	212	76.1	44.7
3	*5845.00	108.2 AV			1.33 H	212	63.5	44.7
4	#5895.00	60.9 PK	110.2	-49.3	1.33 H	212	47.0	13.9
5	11690.00	60.6 PK	74.0	-13.4	1.74 H	288	37.9	22.7
6	11690.00	48.6 AV	54.0	-5.4	1.74 H	288	25.9	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	60.9 PK	68.2	-7.3	1.44 V	194	47.5	13.4
2	*5845.00	127.1 PK			1.44 V	194	82.4	44.7
3	*5845.00	114.6 AV			1.44 V	194	69.9	44.7
4	#5895.00	61.5 PK	110.2	-48.7	1.44 V	194	47.6	13.9
5	11690.00	61.3 PK	74.0	-12.7	2.29 V	187	38.6	22.7
6	11690.00	49.5 AV	54.0	-4.5	2.29 V	187	26.8	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.

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, 66 % 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	#5650.00	60.0 PK	68.2	-8.2	1.35 H	216	46.6	13.4
2	*5865.00	120.5 PK			1.35 H	216	75.7	44.8
3	*5865.00	107.3 AV			1.35 H	216	62.5	44.8
4	#5895.00	74.3 PK	110.2	-35.9	1.35 H	216	60.4	13.9
5	11730.00	60.1 PK	74.0	-13.9	1.76 H	284	37.7	22.4
6	11730.00	48.2 AV	54.0	-5.8	1.76 H	284	25.8	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	1.44 V	188	48.1	13.4
2	*5865.00	125.9 PK			1.44 V	188	81.1	44.8
3	*5865.00	114.2 AV			1.44 V	188	69.4	44.8
4	#5895.00	81.1 PK	110.2	-29.1	1.44 V	188	67.2	13.9
5	11730.00	61.2 PK	74.0	-12.8	2.31 V	187	38.8	22.4
6	11730.00	49.3 AV	54.0	-4.7	2.31 V	187	26.9	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 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, 66 % 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	#5650.00	59.8 PK	68.2	-8.4	1.39 H	208	46.4	13.4
2	*5885.00	120.5 PK			1.39 H	208	75.7	44.8
3	*5885.00	107.8 AV			1.39 H	208	63.0	44.8
4	#5895.00	101.5 PK	110.2	-8.7	1.39 H	208	87.6	13.9
5	#5925.00	68.2 PK	88.2	-20.0	1.39 H	208	54.3	13.9
6	11770.00	59.8 PK	74.0	-14.2	1.76 H	285	37.8	22.0
7	11770.00	47.7 AV	54.0	-6.3	1.76 H	285	25.7	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	61.0 PK	68.2	-7.2	1.46 V	191	47.6	13.4
2	*5885.00	127.0 PK			1.46 V	191	82.2	44.8
3	*5885.00	114.7 AV			1.46 V	191	69.9	44.8
4	#5895.00	108.2 PK	110.2	-2.0	1.46 V	191	94.3	13.9
5	#5925.00	72.7 PK	88.2	-15.5	1.46 V	191	58.8	13.9
6	11770.00	60.7 PK	74.0	-13.3	2.34 V	182	38.7	22.0
7	11770.00	48.9 AV	54.0	-5.1	2.34 V	182	26.9	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	23 °C, 66 % 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	#5650.00	59.6 PK	68.2	-8.6	1.36 H	215	46.2	13.4
2	*5835.00	118.8 PK			1.36 H	215	74.1	44.7
3	*5835.00	105.9 AV			1.36 H	215	61.2	44.7
4	#5895.00	75.3 PK	110.2	-34.9	1.36 H	215	61.4	13.9
5	#5925.00	63.9 PK	88.2	-24.3	1.36 H	215	50.0	13.9
6	11670.00	60.4 PK	74.0	-13.6	1.77 H	290	37.7	22.7
7	11670.00	48.3 AV	54.0	-5.7	1.77 H	290	25.6	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	61.2 PK	68.2	-7.0	1.47 V	194	47.8	13.4
2	*5835.00	125.5 PK			1.47 V	194	80.8	44.7
3	*5835.00	112.8 AV			1.47 V	194	68.1	44.7
4	#5895.00	81.4 PK	110.2	-28.8	1.47 V	194	67.5	13.9
5	#5925.00	68.5 PK	88.2	-19.7	1.47 V	194	54.6	13.9
6	11670.00	61.4 PK	74.0	-12.6	2.31 V	188	38.7	22.7
7	11670.00	49.5 AV	54.0	-4.5	2.31 V	188	26.8	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.

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, 66 % 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	#5650.00	59.5 PK	68.2	-8.7	1.31 H	210	46.1	13.4
2	*5875.00	118.4 PK			1.31 H	210	73.6	44.8
3	*5875.00	105.9 AV			1.31 H	210	61.1	44.8
4	#5895.00	92.1 PK	110.2	-18.1	1.31 H	210	78.2	13.9
5	#5925.00	75.8 PK	88.2	-12.4	1.31 H	210	61.9	13.9
6	11750.00	59.7 PK	74.0	-14.3	1.77 H	290	37.6	22.1
7	11750.00	47.9 AV	54.0	-6.1	1.77 H	290	25.8	22.1
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5650.00	61.1 PK	68.2	-7.1	1.44 V	196	47.7	13.4
2	*5875.00	125.2 PK			1.44 V	196	80.4	44.8
3	*5875.00	112.9 AV			1.44 V	196	68.1	44.8
4	#5895.00	96.6 PK	110.2	-13.6	1.44 V	196	82.7	13.9
5	#5925.00	80.4 PK	88.2	-7.8	1.44 V	196	66.5	13.9
6	11750.00	60.9 PK	74.0	-13.1	2.30 V	182	38.8	22.1
7	11750.00	48.8 AV	54.0	-5.2	2.30 V	182	26.7	22.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, 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, 66 % 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	#5650.00	59.7 PK	68.2	-8.5	1.28 H	207	46.3	13.4
2	*5855.00	115.2 PK			1.28 H	207	70.5	44.7
3	*5855.00	104.6 AV			1.28 H	207	59.9	44.7
4	#5895.00	91.7 PK	110.2	-18.5	1.28 H	207	77.8	13.9
5	#5925.00	76.9 PK	88.2	-11.3	1.28 H	207	63.0	13.9
6	11710.00	60.2 PK	74.0	-13.8	1.84 H	293	37.7	22.5
7	11710.00	48.3 AV	54.0	-5.7	1.84 H	293	25.8	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	61.1 PK	68.2	-7.1	1.36 V	192	47.7	13.4
2	*5855.00	121.2 PK			1.36 V	192	76.5	44.7
3	*5855.00	108.9 AV			1.36 V	192	64.2	44.7
4	#5895.00	96.5 PK	110.2	-13.7	1.36 V	192	82.6	13.9
5	#5925.00	81.2 PK	88.2	-7.0	1.36 V	192	67.3	13.9
6	11710.00	61.0 PK	74.0	-13.0	2.33 V	184	38.5	22.5
7	11710.00	49.4 AV	54.0	-4.6	2.33 V	184	26.9	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 (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, 66 % 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	#5650.00	63.3 PK	68.2	-4.9	1.30 H	216	49.9	13.4
2	*5815.00	111.4 PK			1.30 H	216	66.6	44.8
3	*5815.00	98.0 AV			1.30 H	216	53.2	44.8
4	#5895.00	87.5 PK	110.2	-22.7	1.30 H	216	73.6	13.9
5	#5925.00	66.7 PK	88.2	-21.5	1.30 H	216	52.8	13.9
6	11630.00	60.5 PK	74.0	-13.5	1.78 H	274	37.7	22.8
7	11630.00	48.4 AV	54.0	-5.6	1.78 H	274	25.6	22.8
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	**#5636.70**	**67.2 PK**	**68.2**	**-1.0**	**1.36 V**	**195**	**54.0**	**13.2**
2	*5815.00	116.2 PK			1.36 V	195	71.4	44.8
3	*5815.00	103.3 AV			1.36 V	195	58.5	44.8
4	#5895.00	92.6 PK	110.2	-17.6	1.36 V	195	78.7	13.9
5	#5925.00	69.3 PK	88.2	-18.9	1.36 V	195	55.4	13.9
6	11630.00	61.4 PK	74.0	-12.6	2.24 V	186	38.6	22.8
7	11630.00	49.5 AV	54.0	-4.5	2.24 V	186	26.7	22.8

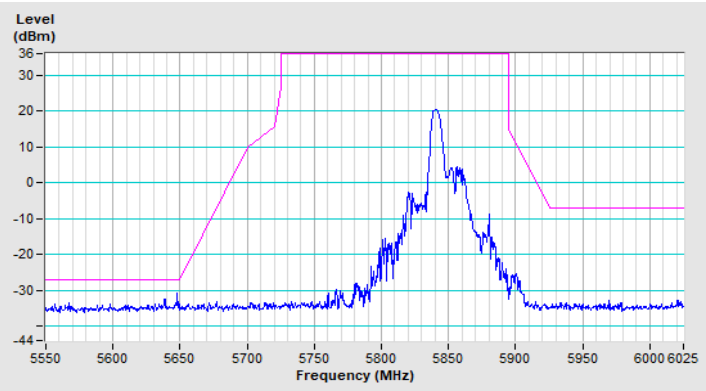
Remarks:

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.

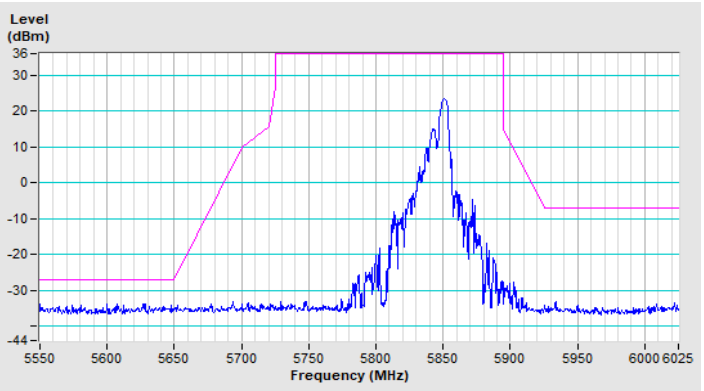
Plot of Band Edge

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

802.11a Channel 169

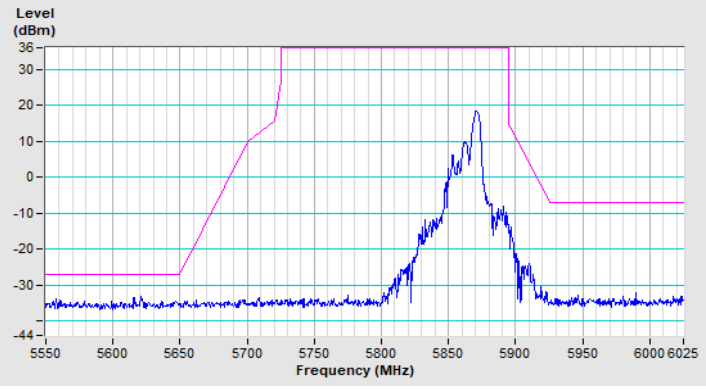


Horizontal (Peak)

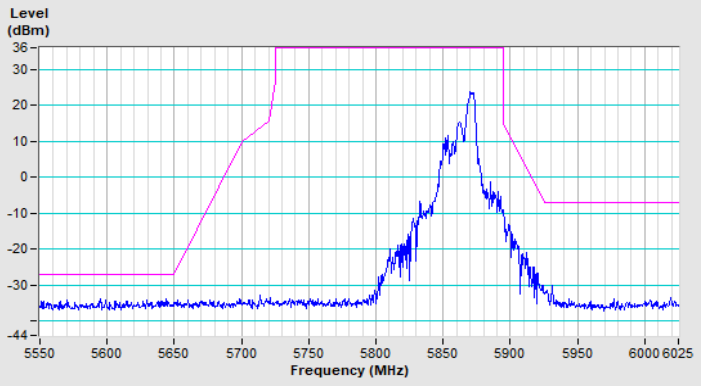


Vertical (Peak)

802.11a Channel 173

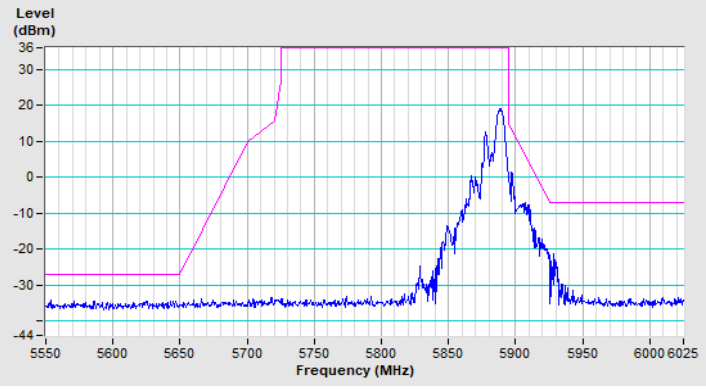


Horizontal (Peak)

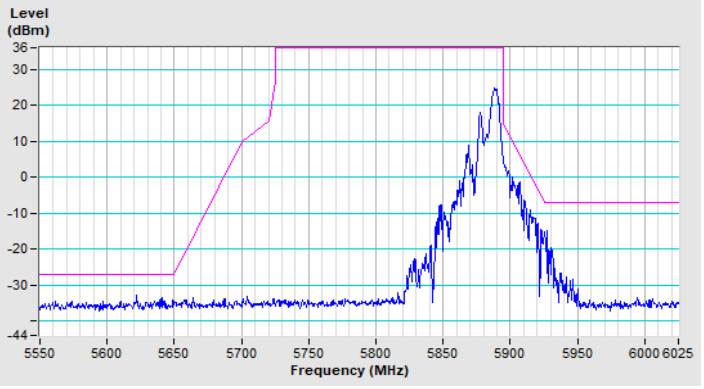


Vertical (Peak)

802.11a Channel 177



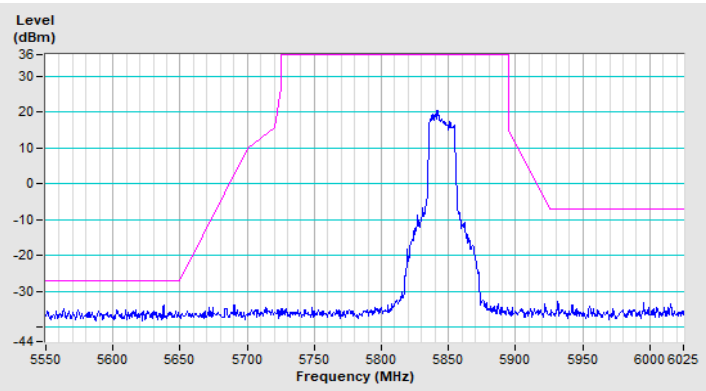
Horizontal (Peak)



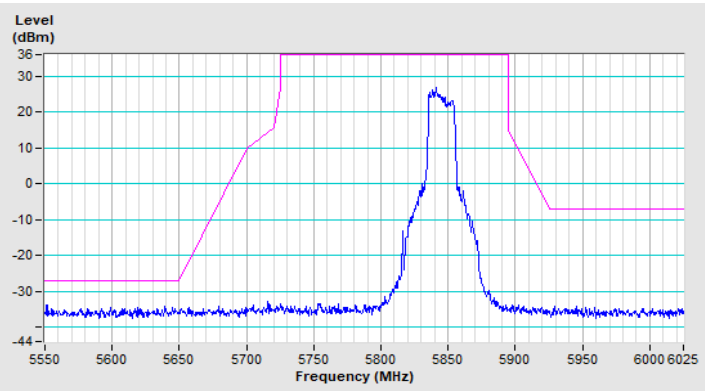
Vertical (Peak)

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

802.11be (EHT20) Channel 169

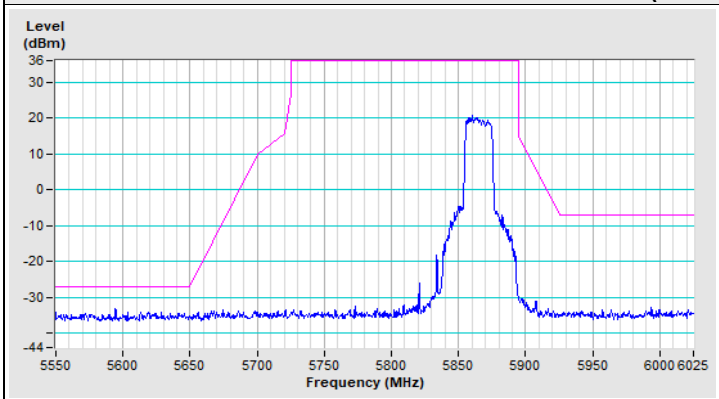


Horizontal (Peak)

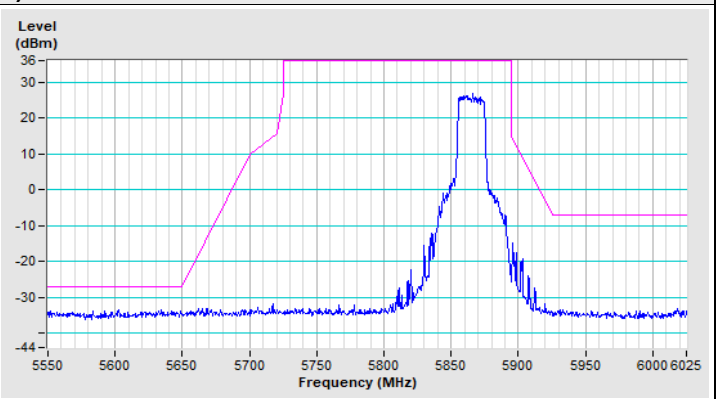


Vertical (Peak)

802.11be (EHT20) Channel 173

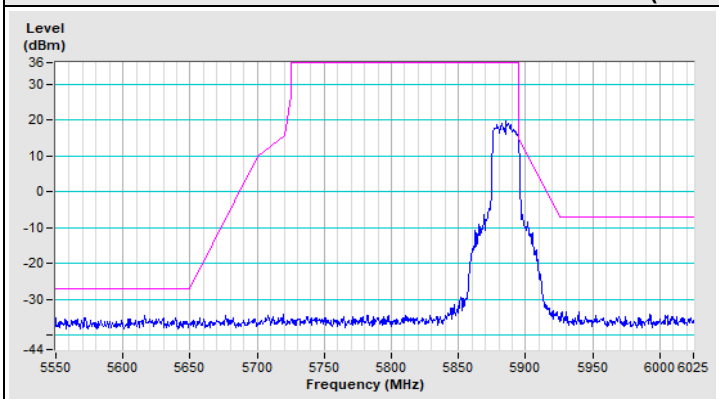


Horizontal (Peak)

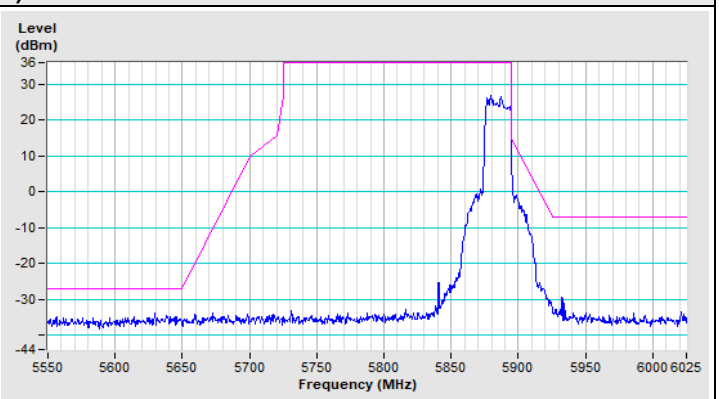


Vertical (Peak)

802.11be (EHT20) Channel 177



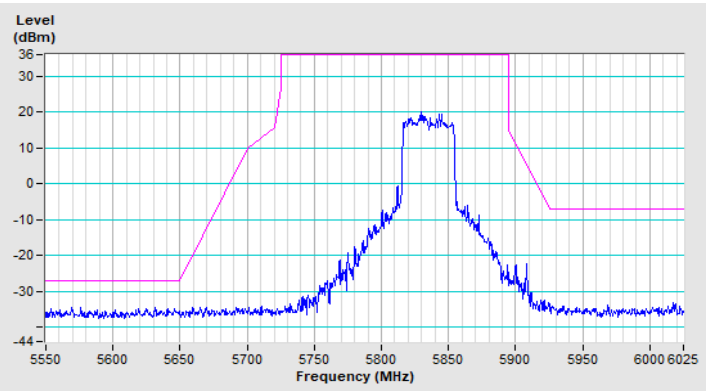
Horizontal (Peak)



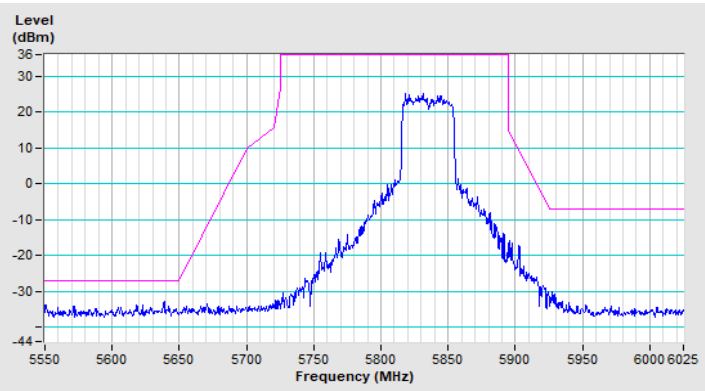
Vertical (Peak)

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

802.11be (EHT40) Channel 167

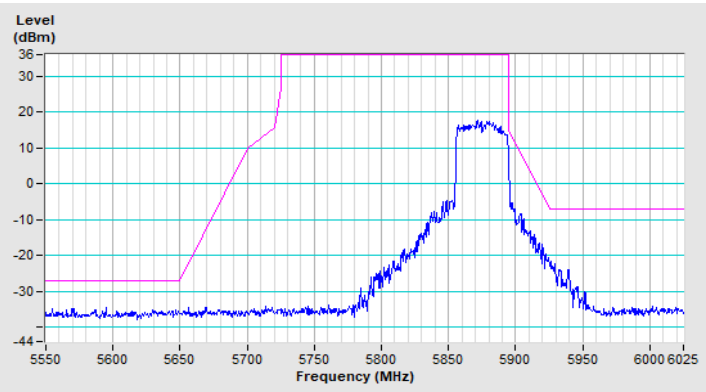


Horizontal (Peak)

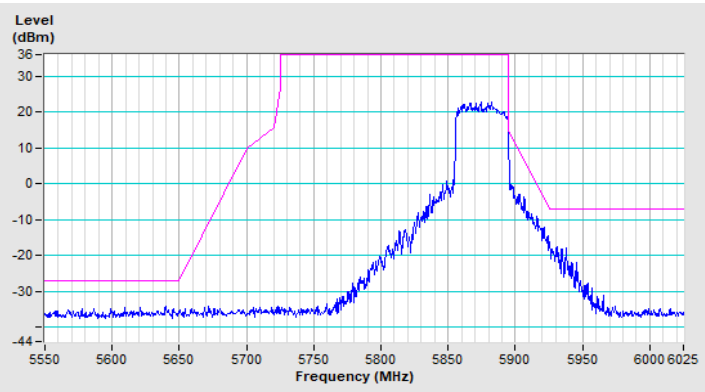


Vertical (Peak)

802.11be (EHT40) Channel 175



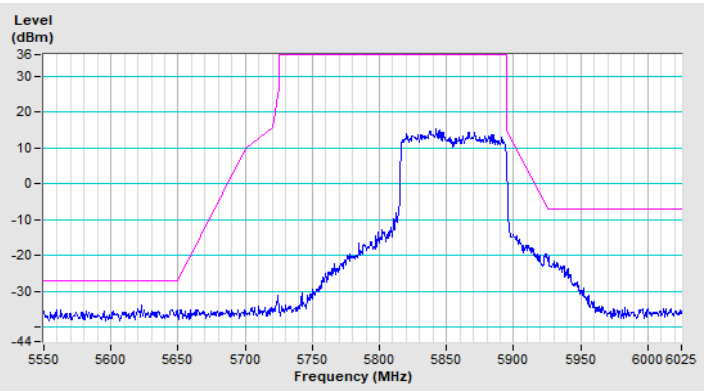
Horizontal (Peak)



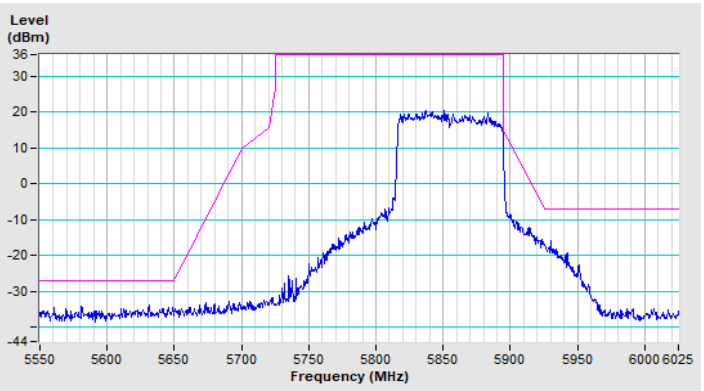
Vertical (Peak)

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

802.11be (EHT80) Channel 171



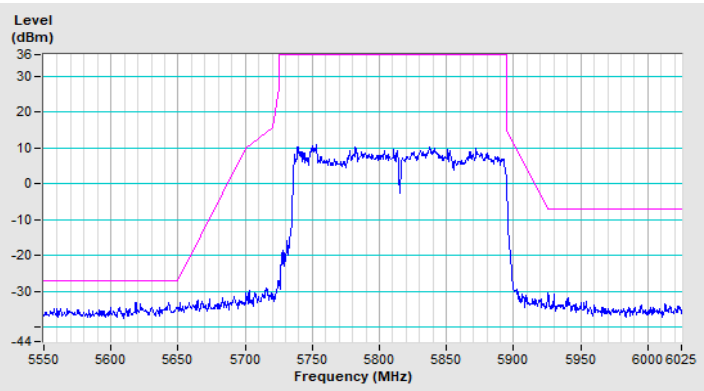
Horizontal (Peak)



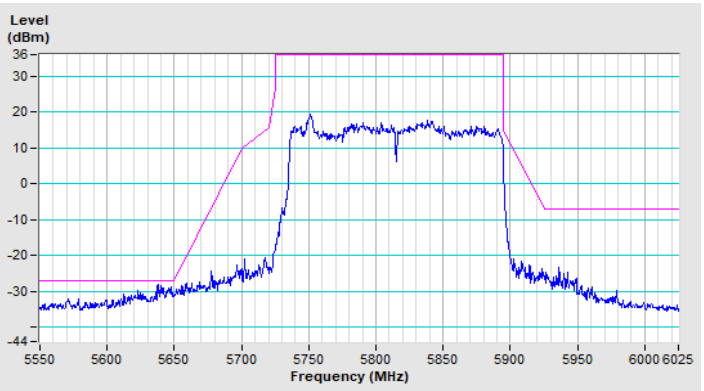
Vertical (Peak)

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

802.11be (EHT160) Channel 163



Horizontal (Peak)



Vertical (Peak)

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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Email: service.adt@bureauveritas.com
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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