

TEST REPORT

CERTIFICATE OF CONFORMITY

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

Report No.: RFBBQZ-WTW-P24100623-3

FCC ID: PY324300636

Product: NIGHTHAWK BE5000 WiFi 7 Router, NIGHTHAWK BE4300 WiFi 7 Router (refer to item 3.1 for more details)

Brand: NETGEAR

Model No.: RS150v2

Series Model: RS140, RS130 (refer to item 3.1 for more details)

Received Date: 2024/11/12

Test Date: 2024/12/16 ~ 2025/1/23

Issued Date: 2025/2/24

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., Kwei Shan Dist., Taoyuan City 33383,
Taiwan

FCC Registration / 788550 / TW0003

Designation Number:

Approved by: Jeremy Lin, **Date:** 2025/2/24
Jeremy Lin / Project Engineer

This test report consists of 53 pages in total. It may be duplicated completely for legal use with the approval of the applicant. It should not be reproduced except in full, without the written approval of our laboratory. The test results in the report only apply to the tested sample. The test results in this report are traceable to the national or international standards.

Prepared by : Polly Chien / Specialist



This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/> and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.

Table of Contents

Release Control Record	4
1 Certificate.....	5
2 Summary of Test Results	6
2.1 Measurement Uncertainty	6
2.2 Supplementary Information	6
3 General Information	7
3.1 General Description of EUT	7
3.2 Antenna Description of EUT	9
3.3 Channel List.....	10
3.4 Test Mode Applicability and Tested Channel Detail.....	11
3.5 Duty Cycle of Test Signal.....	12
3.6 Test Program Used and Operation Descriptions	14
3.7 Connection Diagram of EUT and Peripheral Devices	14
3.8 Configuration of Peripheral Devices and Cable Connections	14
4 Test Instruments	15
4.1 RF Output Power.....	15
4.2 Power Spectral Density	15
4.3 6 dB Bandwidth	15
4.4 AC Power Conducted Emissions	16
4.5 Unwanted Emissions below 1 GHz	17
4.6 Unwanted Emissions above 1 GHz.....	18
5 Limits of Test Items.....	19
5.1 RF Output Power.....	19
5.2 Power Spectral Density	19
5.3 6 dB Bandwidth	19
5.4 AC Power Conducted Emissions	19
5.5 Unwanted Emissions below 1 GHz	20
5.6 Unwanted Emissions above 1 GHz.....	20
6 Test Arrangements.....	21
6.1 RF Output Power.....	21
6.1.1 Test Setup	21
6.1.2 Test Procedure.....	21
6.2 Power Spectral Density	22
6.2.1 Test Setup	22
6.2.2 Test Procedure.....	22
6.3 6 dB Bandwidth	23
6.3.1 Test Setup	23
6.3.2 Test Procedure.....	23
6.4 AC Power Conducted Emissions	23
6.4.1 Test Setup	23
6.4.2 Test Procedure.....	23
6.5 Unwanted Emissions below 1 GHz	24
6.5.1 Test Setup	24
6.5.2 Test Procedure.....	25
6.6 Unwanted Emissions above 1 GHz.....	26
6.6.1 Test Setup	26
6.6.2 Test Procedure.....	26
7 Test Results of Test Item.....	27
7.1 RF Output Power.....	27
7.2 Power Spectral Density	29
7.3 6 dB Bandwidth	32
7.4 AC Power Conducted Emissions	34
7.5 Unwanted Emissions below 1 GHz	36

7.6	Unwanted Emissions above 1 GHz.....	38
8	Pictures of Test Arrangements	52
9	Information of the Testing Laboratories	53

Release Control Record

Issue No.	Description	Date Issued
RFBBQZ-WTW-P24100623-3	Original release.	2025/2/24

1 Certificate

Product: Nighthawk BE5000 WiFi 7 Router, Nighthawk BE4300 WiFi 7 Router (refer to item 3.1 for more details)

Brand: NETGEAR

Test Model: RS150v2

Series Model: RS140, RS130 (refer to item 3.1 for more details)

Sample Status: Engineering sample

Applicant and Manufacturer: NETGEAR, INC.

Test Date: 2024/12/16 ~ 2025/1/23

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 -4.26 dB at 0.36200 MHz
15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -9.1 dB at 37.03 MHz
15.407(b)(5) 15.407(b)(10)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -0.1 dB at 5925.00 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	NIGHTHAWK BE5000 WiFi 7 Router, NIGHTHAWK BE4300 WiFi 7 Router (Refer to note)
Brand	NETGEAR
Test Model	RS150v2
Series Model	RS140, RS130
Model Difference	Refer to note
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 3602.9 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: 3741.106 mW (35.73 dBm)
EUT Category	Indoor access point

Note:

1. The following product and models are as below. The model of the RS150v2 was chosen for final test.

Product	Model	remark
NIGHTHAWK BE5000 WiFi 7 Router	RS150v2	BE5000 2.4GHz (2 x 2): 0.7 Gbps 40/20 MHz, 4K QAM 5GHz (3 x 3): 4.3 Gbps 160 to 20MHz, 4K QAM
	RS140	BE5000 2.4GHz (2 x 2): 0.7 Gbps 40/20 MHz, 4K QAM 5GHz (3 x 3): 4.3 Gbps 160 to 20MHz, 4K QAM
NIGHTHAWK BE4300 WiFi 7 Router	RS130	BE4300 2.4GHz (2 x 2): 0.7 Gbps 40/20 MHz, 4K QAM 5GHz (3 x 3): 3.6 Gbps 160 to 20MHz, 1024K QA

2. The EUT uses following accessories.

Item	Brand	Model	Part Number	Specification
AC Adapter 1	NETGEAR	ADS-40FPC-12 12030E	332-11699-01	AC Input : 100-240V, 50/60 Hz, 1.0A DC Output : 12.0V, 2.5A, 30.0W DC Output Cable : 1.76M / 0core Plug : Changeable Manufacturer : Vietnam Honor High Tech Company Limited
AC Adapter 2	NETGEAR	2AED030FC	332-11712-01	AC Input : 100-240V, 50/60Hz, 1.0A DC Output : 12.0V, 2.5A, 30.0W DC Output Cable : 1.8M / 0core Plug : Changeable Manufacturer : Channel Well Technology(Guangzhou) Co., Ltd
Ethernet Cable	NETGEAR	N/A	-	Signal Line : 1.96M non-shielded and without core

3. Simultaneously transmission condition.

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

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 No.	Gain (dBi)	Antenna Type	Connector Type
	5850 MHz		
Ant. 0	3.78	Dipole	ipex(MHF)
Ant. 1	3.84	Dipole	ipex(MHF)
Ant. 2	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:

5 GHz Band		
Modulation Mode	Tx & Rx Configuration	
802.11a	3TX	3RX
802.11n (HT20)	3TX	3RX
802.11n (HT40)	3TX	3RX
802.11ac (VHT20)	3TX	3RX
802.11ac (VHT40)	3TX	3RX
802.11ac (VHT80)	3TX	3RX
802.11ac (VHT160)	3TX	3RX
802.11ax (HE20)	3TX	3RX
802.11ax (HE40)	3TX	3RX
802.11ax (HE80)	3TX	3RX
802.11ax (HE160)	3TX	3RX
802.11be (EHT20)	3TX	3RX
802.11be (EHT40)	3TX	3RX
802.11be (EHT80)	3TX	3RX
802.11be (EHT160)	3TX	3RX

Note:

1. All of modulation mode support beamforming function except 802.11a modulation mode.
2. The EUT support Beamforming and CDD mode, therefore both mode were investigated and the worst case scenario was identified. The worst case data were presented in test report.
3. The modulation and bandwidth are similar for 802.11n mode for 20 MHz (40 MHz), 802.11ac mode for 20 MHz (40 MHz, 80 MHz, 160 MHz), 802.11ax mode for 20 MHz (40 MHz, 80 MHz, 160 MHz) and 802.11be mode for 20 MHz (40 MHz, 80 MHz, 160 MHz). Therefore the investigated worst case is the representative mode in test report.
4. For 802.11ax/be, the EUT not support Partial RU (resource unit) 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	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
AC Power Conducted Emissions	802.11be (EHT80)	Beamforming	171	BPSK	MCS0
Unwanted Emissions below 1 GHz	802.11be (EHT80)	Beamforming	171	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

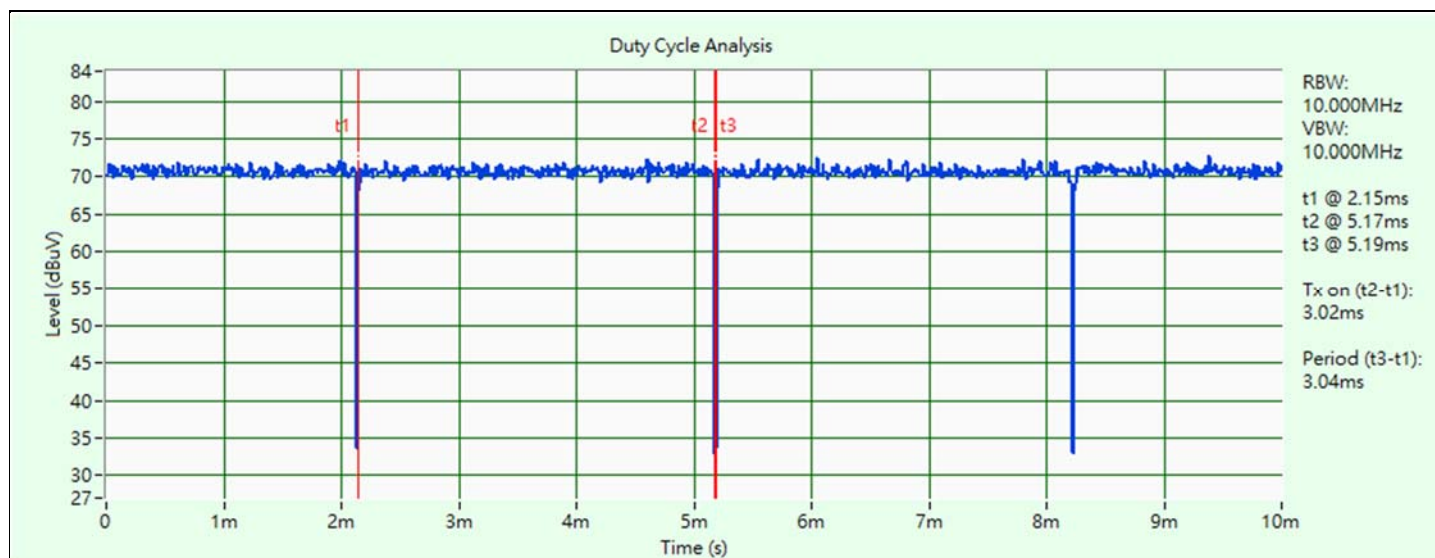
802.11a: Duty cycle = 3.02 ms / 3.04 ms x 100% = 99.3%

802.11be (EHT20) Beamforming: Duty cycle = 2.87 ms / 2.89 ms x 100% = 99.3%

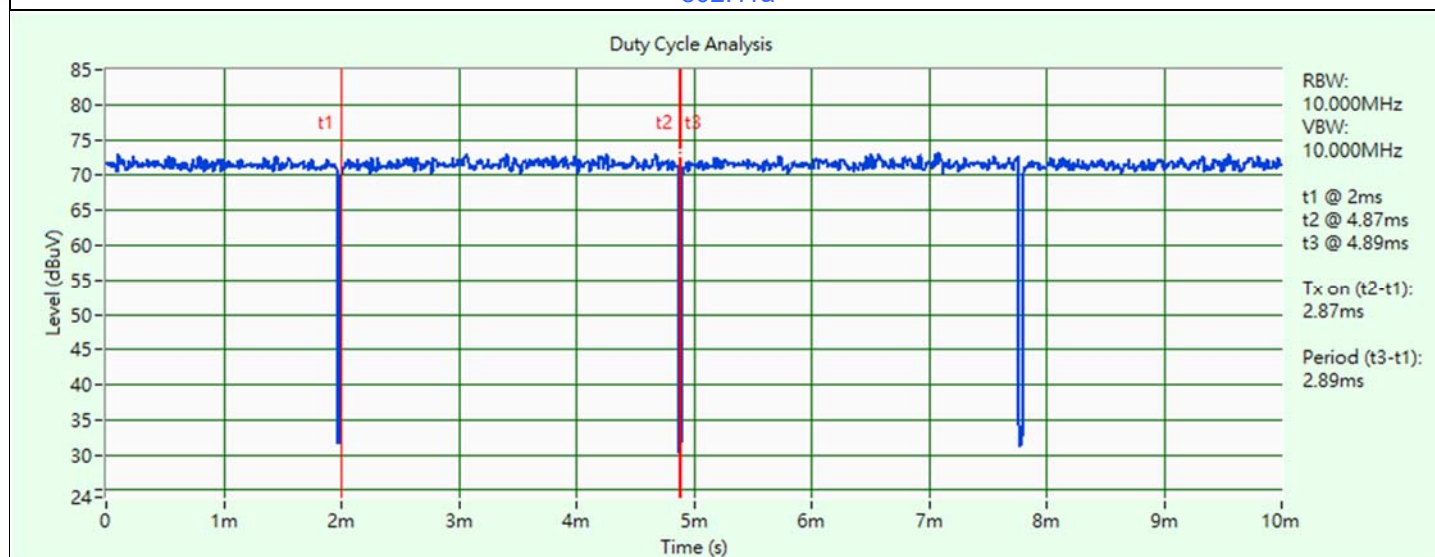
802.11be (EHT40) Beamforming: Duty cycle = 2.86 ms / 2.87 ms x 100% = 99.7%

802.11be (EHT80) Beamforming: Duty cycle = 2.86 ms / 2.87 ms x 100% = 99.7%

802.11be (EHT160) Beamforming: Duty cycle = 2.85 ms / 2.87 ms x 100% = 99.3%

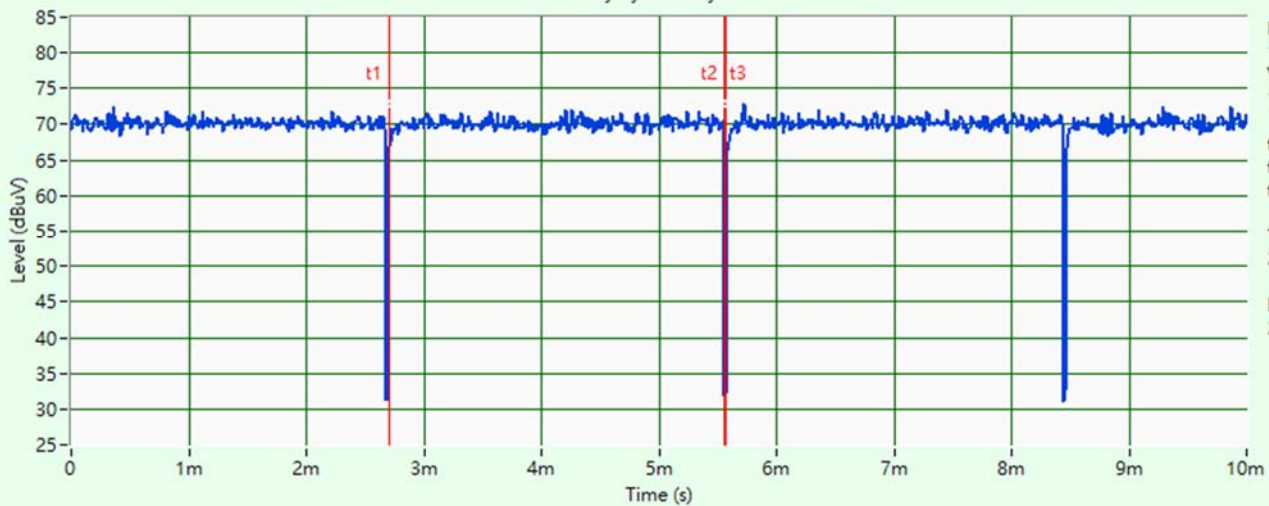


802.11a



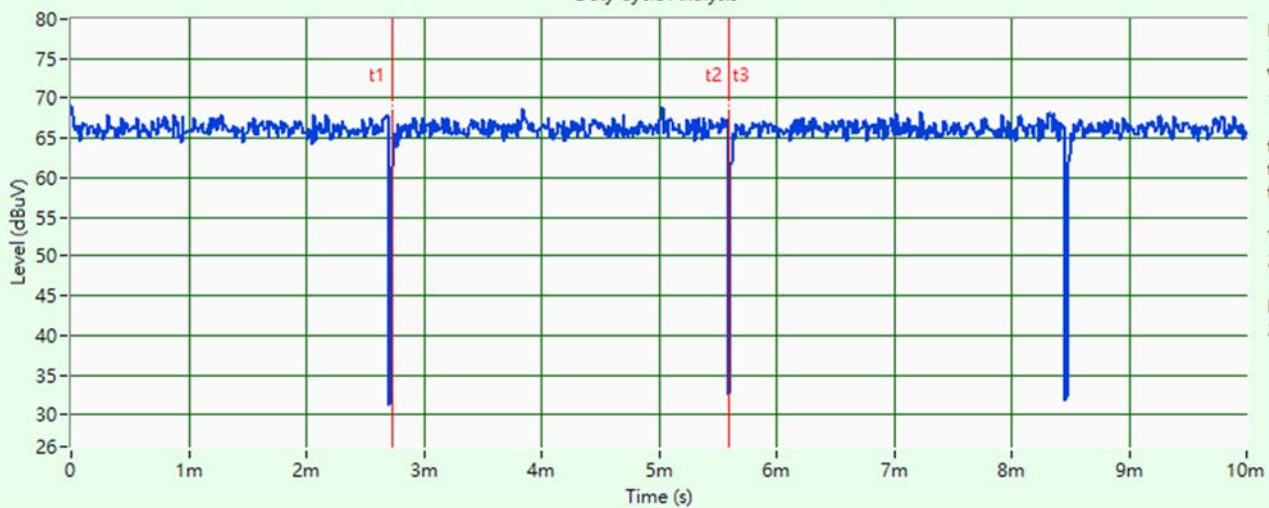
802.11be (EHT20) Beamforming

Duty Cycle Analysis



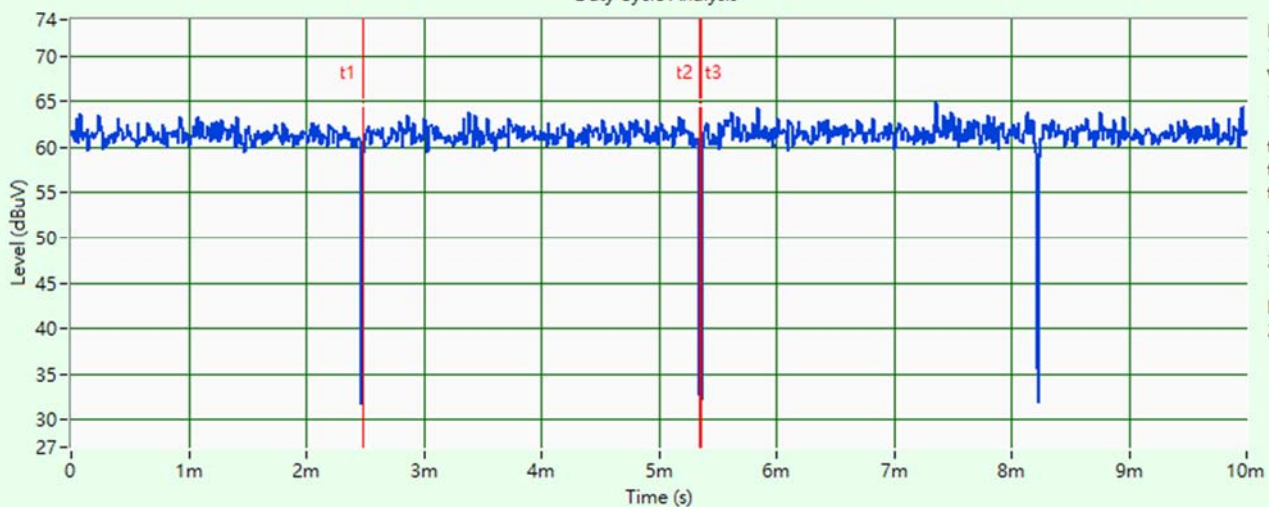
802.11be (EHT40) Beamforming

Duty Cycle Analysis



802.11be (EHT80) Beamforming

Duty Cycle Analysis

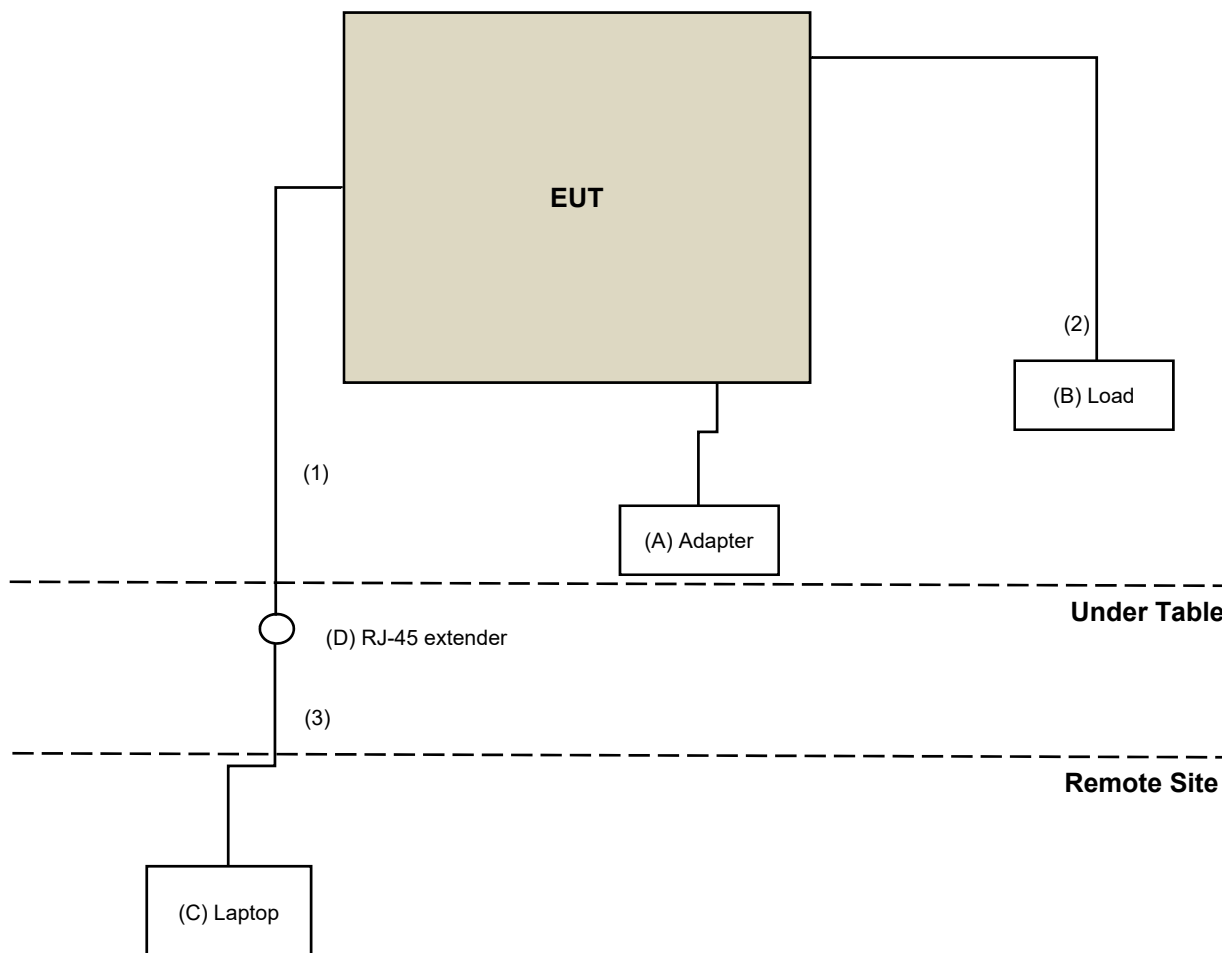


802.11be (EHT160) Beamforming

3.6 Test Program Used and Operation Descriptions

Controlling software Manual Tool 3.3.0.8 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	Adapter	NETGEAR	2AED030FC	332-11712-01	N/A	Supplied by applicant
B	Load	N/A	N/A	N/A	N/A	Provided by Lab
C	Laptop	DELL	E5430	2RL3YW1	N/A	Provided by Lab
D	RJ-45 extender	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	1.96	No	N/A	Accessory of EUT
2	RJ-45 Cable	3	1.5	No	N/A	Provided by Lab
3	RJ-45 Cable	1	10	No	N/A	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: 2025/1/11 ~ 2025/1/23

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: 2025/1/11

4.4 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohm terminal resistance HUBER+SUHNER	E1-011277	02	2024/10/25	2025/10/24
	E1-011313	11	2024/2/1	2025/1/31
	E1-011595	21	2024/3/8	2025/3/7
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: 2025/1/13

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: 2025/1/10

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: 2024/12/16 ~ 2024/12/17

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:

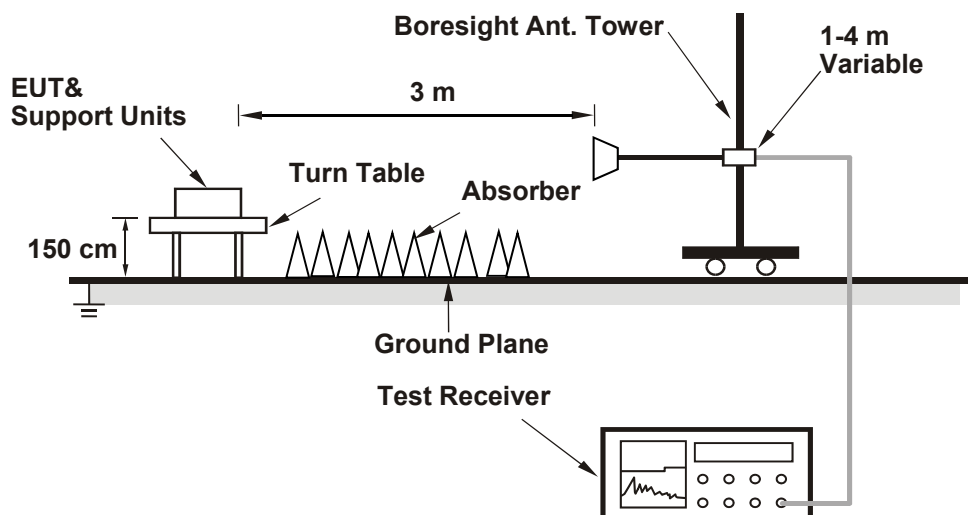
The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

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

6 Test Arrangements

6.1 RF Output Power

6.1.1 Test Setup



6.1.2 Test Procedure

- 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:

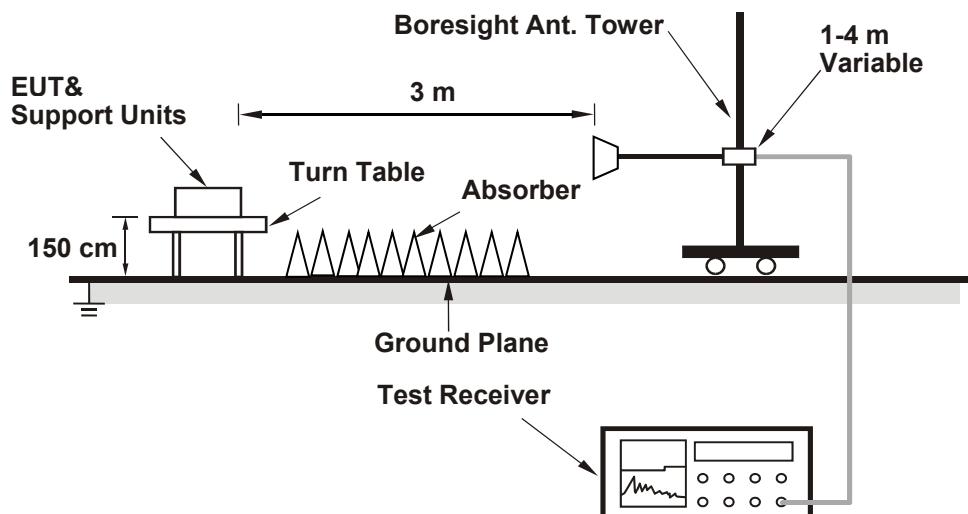
Method SA-1

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz, Set VBW ≥ 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

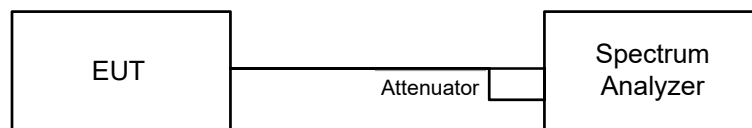
Spectrum analyzer setting as below:

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

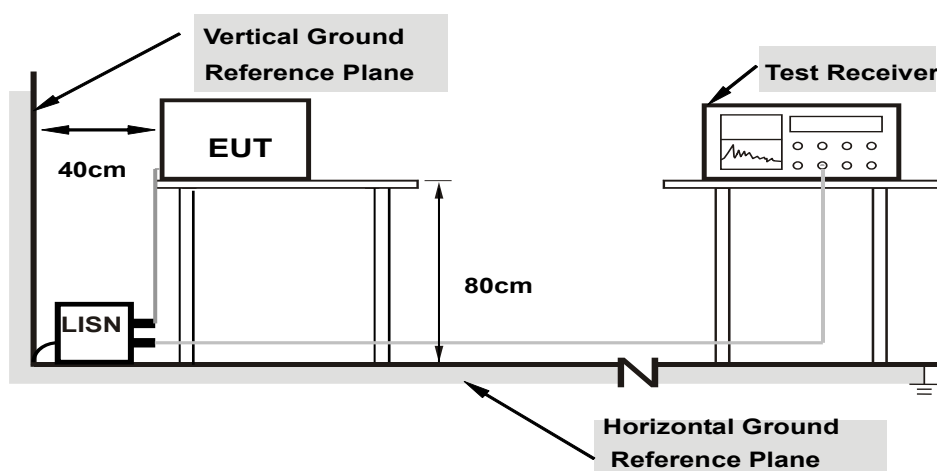


6.3.2 Test Procedure

- 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

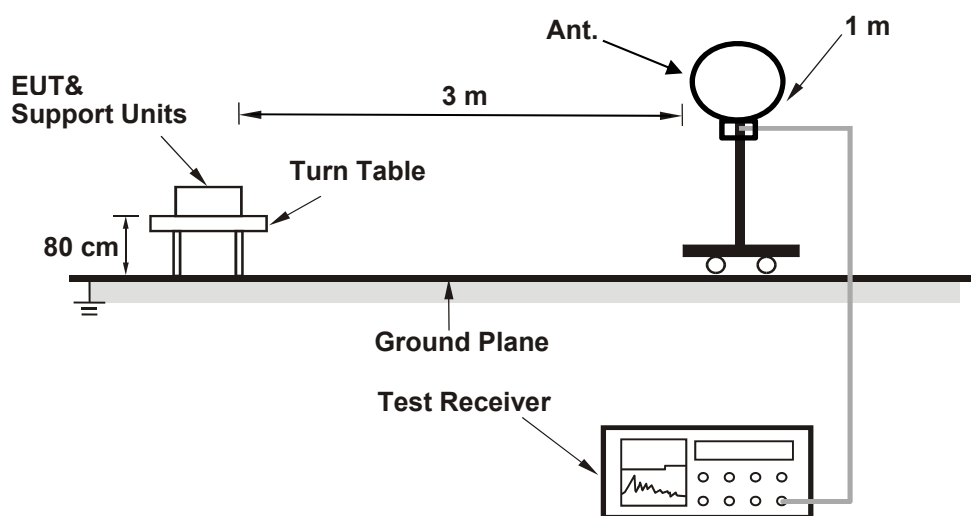
- The EUT was placed on a 0.8 meter to the top of table and placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The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

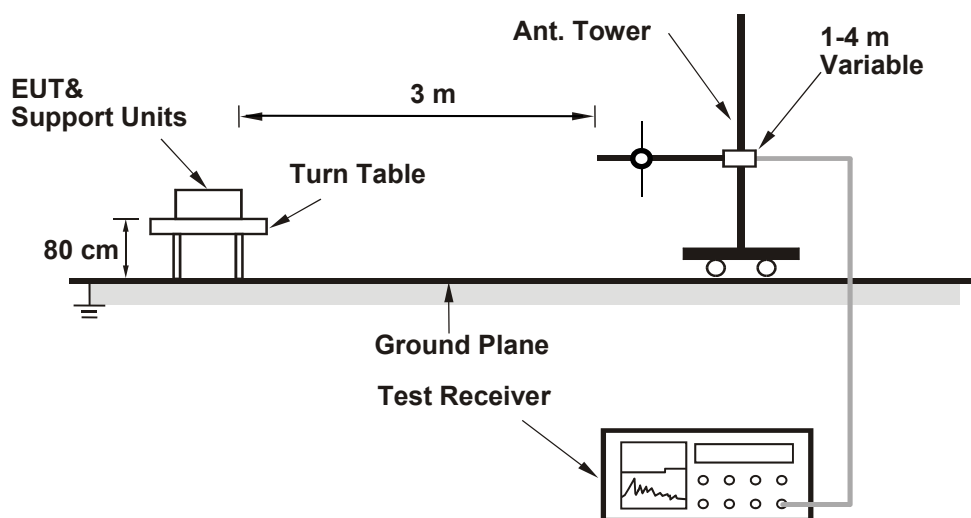
6.5 Unwanted Emissions below 1 GHz

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

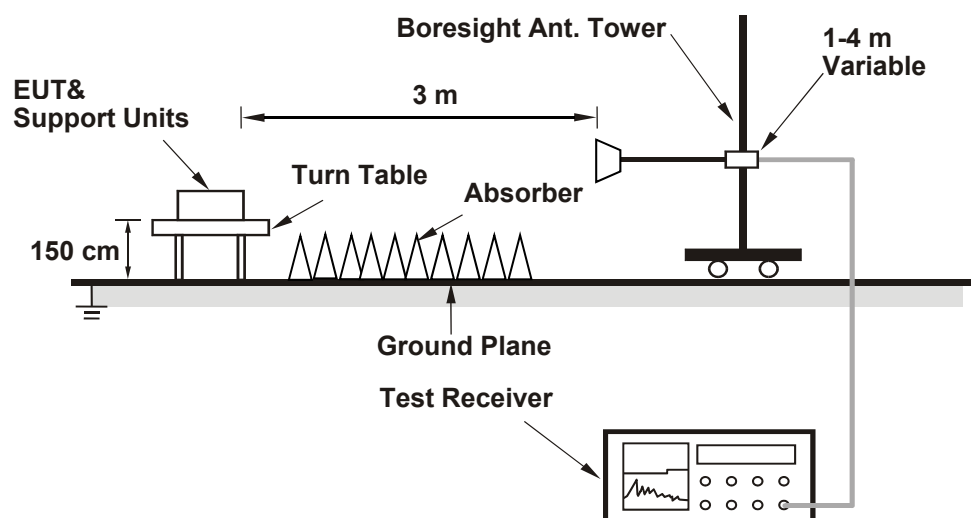
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the 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:	Chris Lin
--------------	----------------	---------------------------	--------------	------------	-----------

802.11a

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
169	5845	125.41	-95.23	1042.317	30.18	36	Pass
173	5865	125.35	-95.23	1028.016	30.12	36	Pass
177	5885	125.40	-95.23	1039.92	30.17	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	129.61	-95.23	2741.574	34.38	36	Pass
173	5865	129.58	-95.23	2722.701	34.35	36	Pass
177	5885	129.49	-95.23	2666.859	34.26	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	130.66	-95.23	3491.403	35.43	36	Pass
175	5875	129.70	-95.23	2798.981	34.47	36	Pass

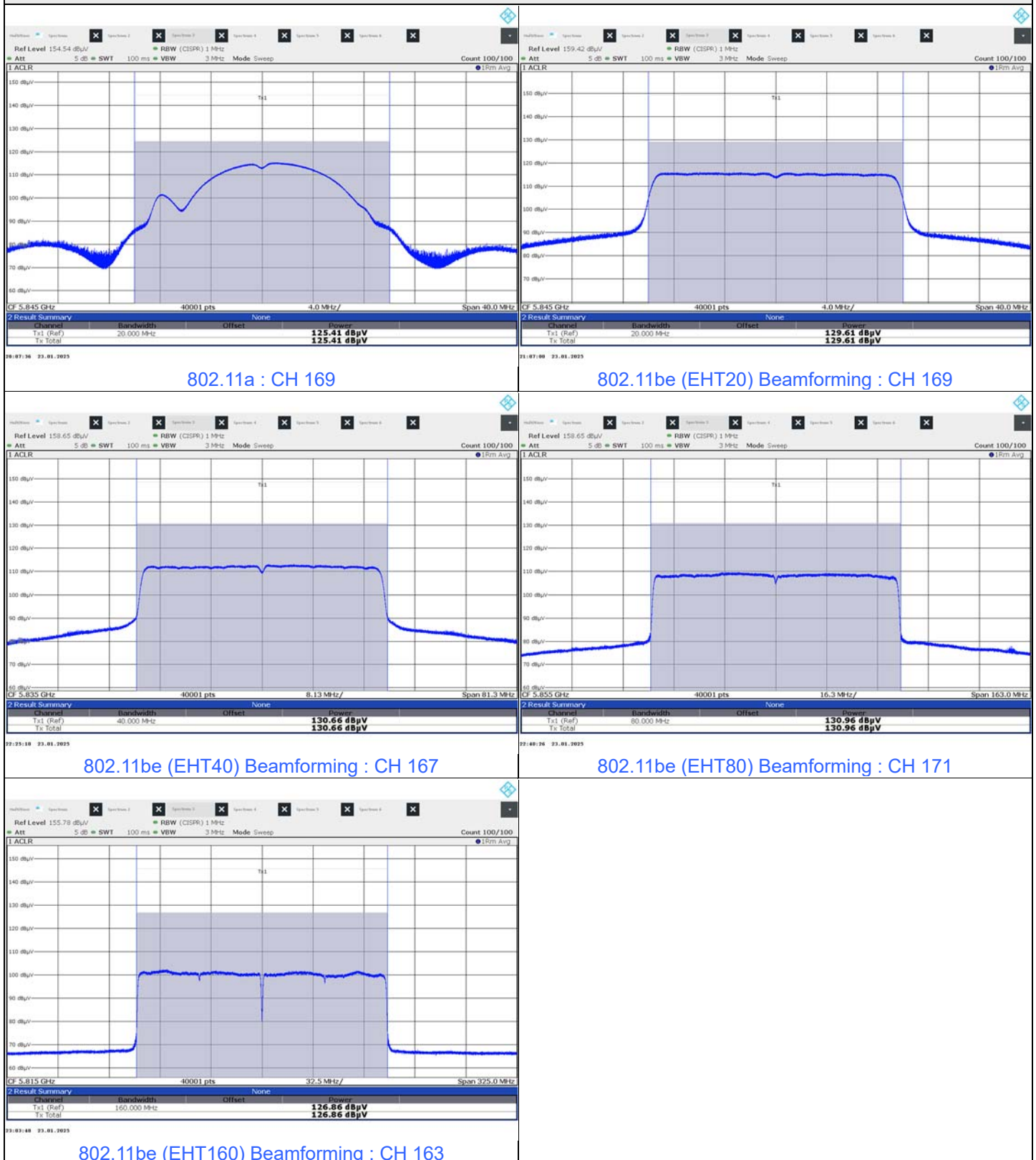
802.11be (EHT80) Beamforming

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
171	5855	130.96	-95.23	3741.106	35.73	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	126.86	-95.23	1455.459	31.63	36	Pass

Spectrum Plot of Maximum Value



7.2 Power Spectral Density

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Chris Lin
--------------	----------------	---------------------------	--------------	------------	-----------

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	114.69	-95.23	19.46	20	Pass
173	5865	115.11	-95.23	19.88	20	Pass
177	5885	114.62	-95.23	19.39	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	114.96	-95.23	19.73	20	Pass
173	5865	115.11	-95.23	19.88	20	Pass
177	5885	114.75	-95.23	19.52	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	113.19	-95.23	17.96	20	Pass
175	5875	111.58	-95.23	16.35	20	Pass

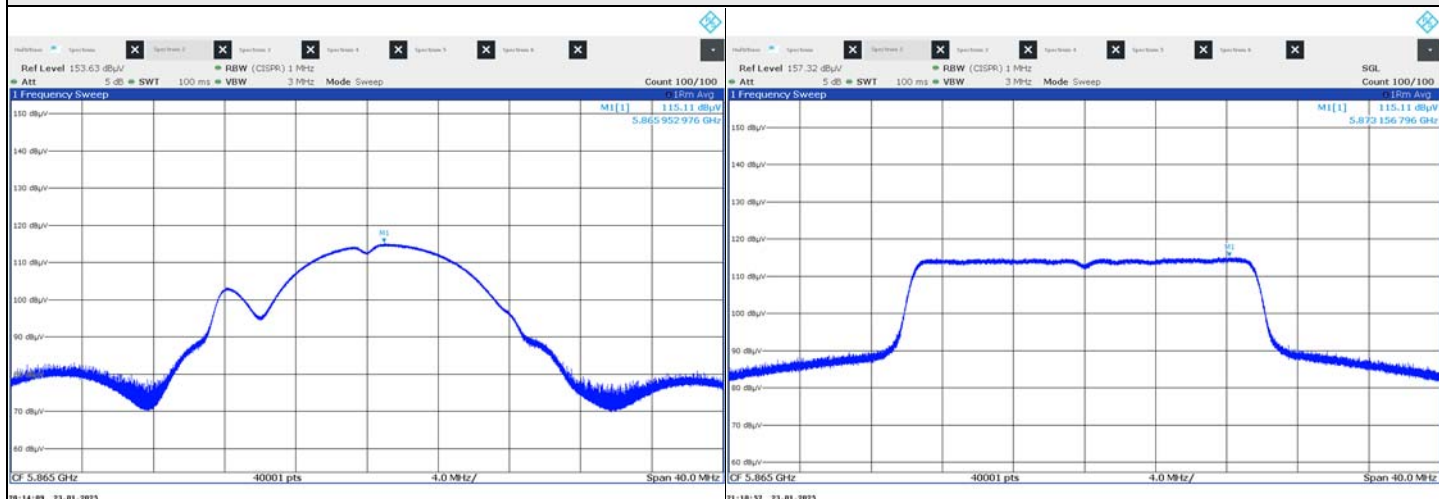
802.11be (EHT80) Beamforming

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
171	5855	109.62	-95.23	14.39	20	Pass

802.11be (EHT160) Beamforming

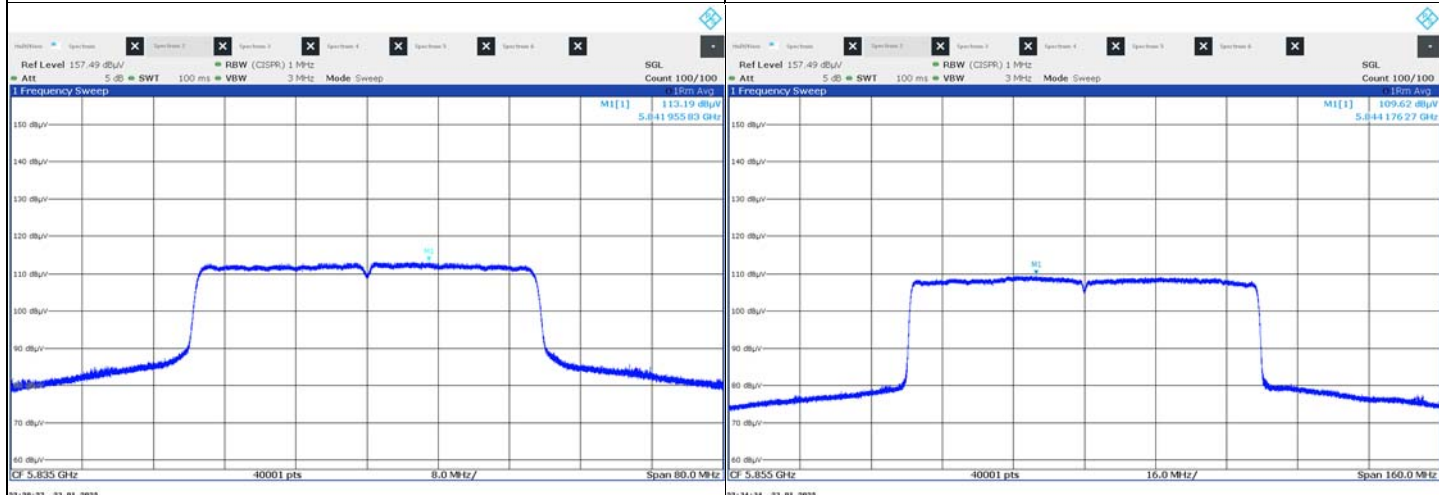
Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
163	5815	102.25	-95.23	7.02	20	Pass

Spectrum Plot of Maximum Value



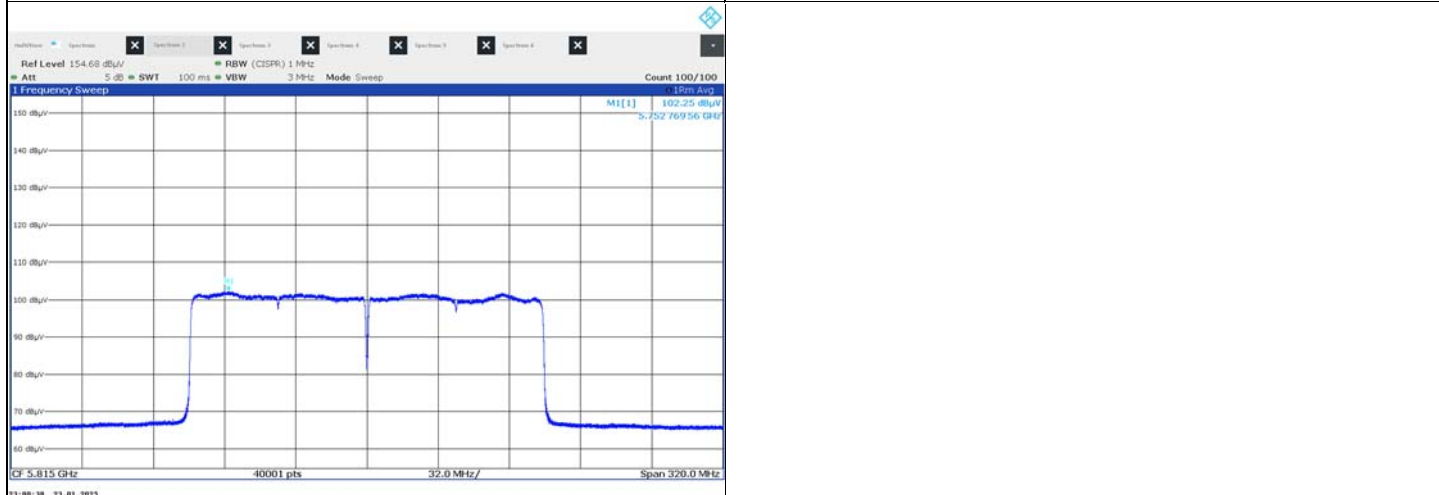
802.11a : CH 173

802.11be (EHT20) Beamforming : CH 173



802.11be (EHT40) Beamforming : CH 167

802.11be (EHT80) Beamforming : CH 171



802.11be (EHT160) Beamforming : CH 163

7.3 6 dB Bandwidth

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Chris Lin
--------------	----------------	---------------------------	--------------	------------	-----------

802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)			Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2		
169	5845	16.37	16.37	16.39	0.5	Pass
173	5865	16.38	16.37	16.38	0.5	Pass
177	5885	16.38	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		
169	5845	19.09	19.02	19.04	0.5	Pass
173	5865	19.06	19.01	19.07	0.5	Pass
177	5885	19.10	19.02	19.06	0.5	Pass

802.11be (EHT40) Beamforming

Channel	Frequency (MHz)	6dB Bandwidth (MHz)			Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2		
167	5835	37.92	37.97	38.04	0.5	Pass
175	5875	38.01	37.90	37.93	0.5	Pass

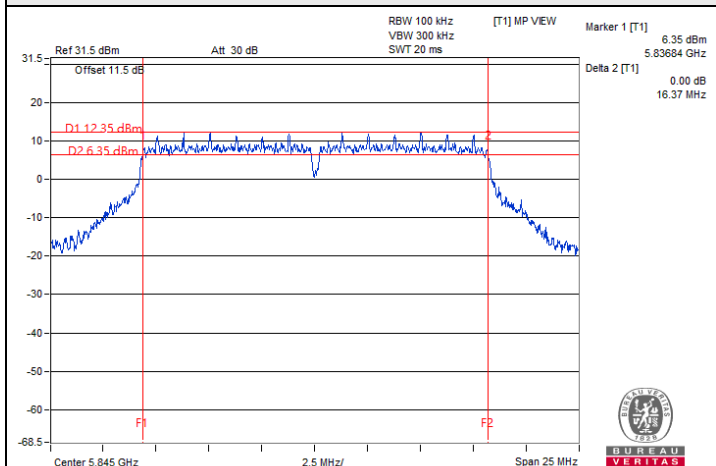
802.11be (EHT80) Beamforming

Channel	Frequency (MHz)	6dB Bandwidth (MHz)			Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2		
171	5855	77.96	77.75	77.61	0.5	Pass

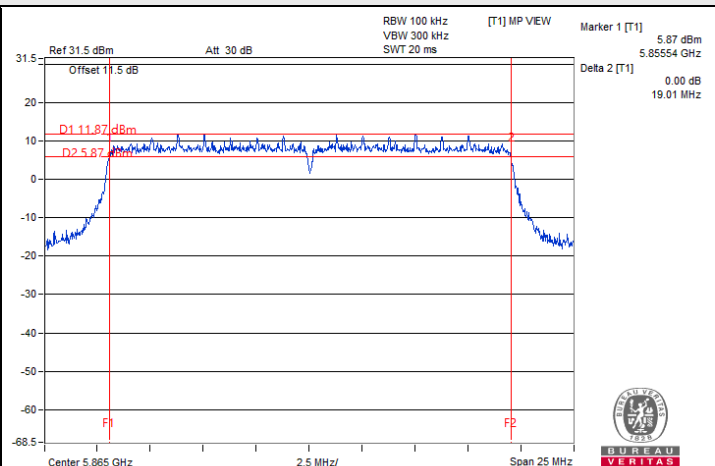
802.11be (EHT160) Beamforming

Channel	Frequency (MHz)	6dB Bandwidth (MHz)			Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1	Chain 2		
163	5815	157.87	157.85	158.07	0.5	Pass

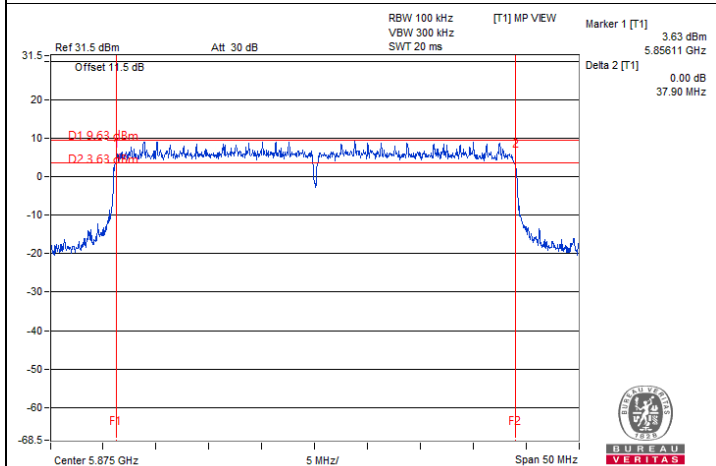
Spectrum Plot of Minimum Value



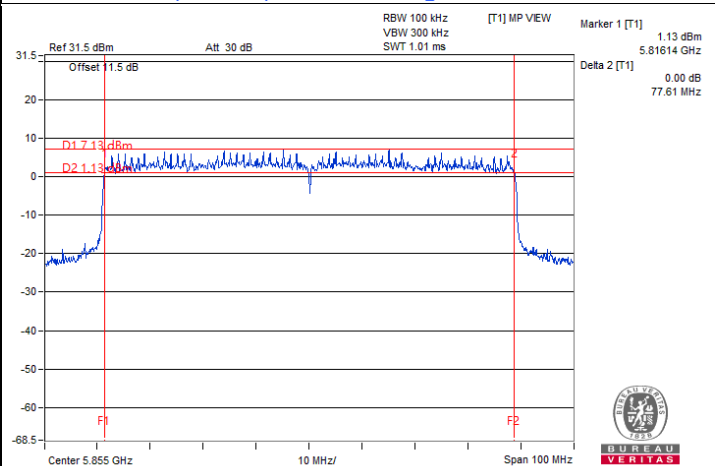
802.11a / Chain 0 : CH 169



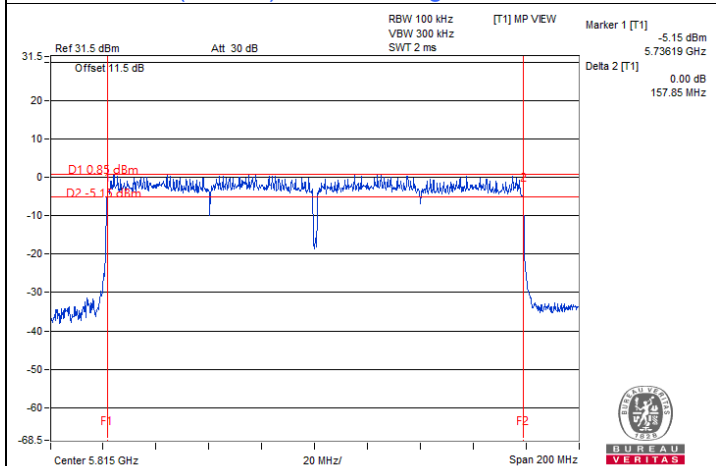
802.11be (EHT20) Beamforming / Chain 1 : CH 173



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



802.11be (EHT80) Beamforming / Chain 2 : CH 171



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

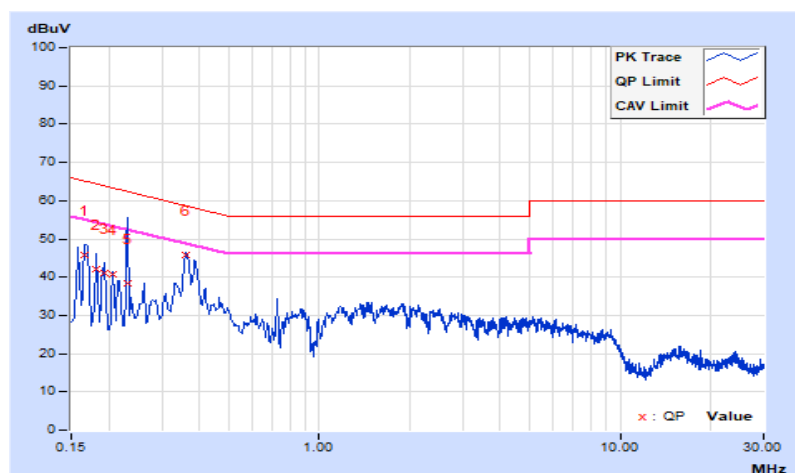
7.4 AC Power Conducted Emissions

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, 75 % 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	0.16600	9.76	35.89	19.71	45.65	29.47	65.16	55.16	-19.51	-25.69
2	0.18200	9.76	32.48	17.96	42.24	27.72	64.39	54.39	-22.15	-26.67
3	0.19400	9.76	31.45	15.55	41.21	25.31	63.86	53.86	-22.65	-28.55
4	0.20600	9.76	30.92	15.70	40.68	25.46	63.37	53.37	-22.69	-27.91
5	0.23000	9.78	28.65	17.18	38.43	26.96	62.45	52.45	-24.02	-25.49
6	0.36200	9.85	35.78	34.57	45.63	44.42	58.68	48.68	-13.05	-4.26

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

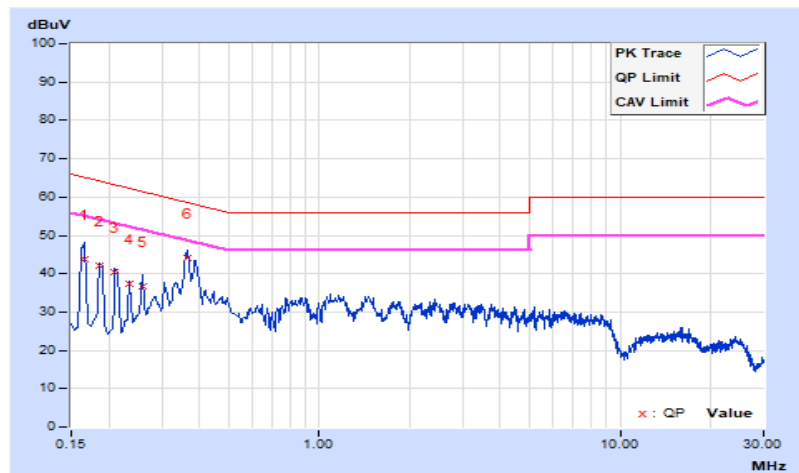


RF Mode	802.11be (EHT80)	Channel	CH 171 : 5855 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75 % RH
Tested By	Luis Lee		

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	0.16600	9.72	34.01	18.63	43.73	28.35	65.16	55.16	-21.43	-26.81
2	0.18600	9.72	32.46	16.68	42.18	26.40	64.21	54.21	-22.03	-27.81
3	0.21000	9.74	30.51	14.13	40.25	23.87	63.21	53.21	-22.96	-29.34
4	0.23400	9.76	27.58	15.01	37.34	24.77	62.31	52.31	-24.97	-27.54
5	0.25800	9.78	27.02	19.30	36.80	29.08	61.50	51.50	-24.70	-22.42
6	0.36600	9.88	34.20	31.61	44.08	41.49	58.59	48.59	-14.51	-7.10

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



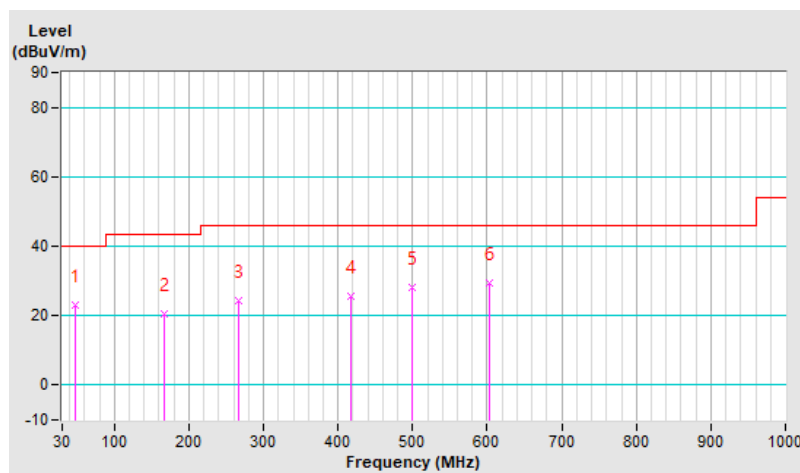
7.5 Unwanted Emissions below 1 GHz

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, 67 % 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	46.87	22.9 QP	40.0	-17.1	1.50 H	318	32.0	-9.1
2	166.36	20.6 QP	43.5	-22.9	1.50 H	318	29.4	-8.8
3	266.17	24.4 QP	46.0	-21.6	1.00 H	273	32.8	-8.4
4	418.00	25.6 QP	46.0	-20.4	1.00 H	29	30.8	-5.2
5	499.54	28.2 QP	46.0	-17.8	1.00 H	12	31.8	-3.6
6	602.16	29.5 QP	46.0	-16.5	1.00 H	339	30.7	-1.2

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.

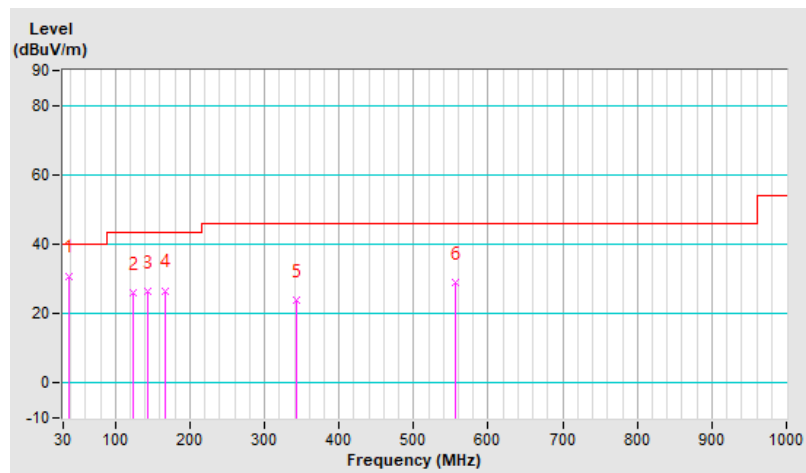


RF Mode	802.11be (EHT80)	Channel	CH 171 : 5855 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 67 % RH
Tested By	Luis Lee		

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	37.03	30.9 QP	40.0	-9.1	1.00 V	176	40.7	-9.8
2	124.19	25.9 QP	43.5	-17.6	1.00 V	58	36.5	-10.6
3	142.46	26.6 QP	43.5	-16.9	1.99 V	192	35.6	-9.0
4	166.36	26.7 QP	43.5	-16.8	1.00 V	334	35.5	-8.8
5	342.09	23.9 QP	46.0	-22.1	1.99 V	6	30.5	-6.6
6	555.77	28.9 QP	46.0	-17.1	1.99 V	261	31.5	-2.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



7.6 Unwanted Emissions above 1 GHz

RF Mode	802.11a	Channel	CH 169 : 5845 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 66 % RH
Tested By	Luis Lee/TitanHSU		

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	1.48 H	107	47.8	13.5
2	*5845.00	115.1 PK			1.48 H	107	70.4	44.7
3	*5845.00	105.6 AV			1.48 H	107	60.9	44.7
4	#5895.00	62.2 PK	110.2	-48.0	1.48 H	107	48.2	14.0
5	#5925.00	62.6 PK	88.2	-25.6	1.48 H	107	48.5	14.1
6	11690.00	60.4 PK	74.0	-13.6	1.82 H	311	38.0	22.4
7	11690.00	47.6 AV	54.0	-6.4	1.82 H	311	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	61.5 PK	68.2	-6.7	1.62 V	358	48.0	13.5
2	*5845.00	123.2 PK			1.62 V	358	78.5	44.7
3	*5845.00	113.8 AV			1.62 V	358	69.1	44.7
4	#5895.00	73.1 PK	110.2	-37.1	1.62 V	358	59.1	14.0
5	#5925.00	62.7 PK	88.2	-25.5	1.62 V	358	48.6	14.1
6	11690.00	60.8 PK	74.0	-13.2	1.44 V	159	38.4	22.4
7	11690.00	48.0 AV	54.0	-6.0	1.44 V	159	25.6	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 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/TitanHSU		

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	1.48 H	107	48.0	13.5
2	*5865.00	115.0 PK			1.48 H	107	70.2	44.8
3	*5865.00	105.4 AV			1.48 H	107	60.6	44.8
4	#5895.00	65.0 PK	110.2	-45.2	1.48 H	107	51.0	14.0
5	#5925.00	61.3 PK	88.2	-26.9	1.48 H	107	47.2	14.1
6	11730.00	60.2 PK	74.0	-13.8	1.85 H	312	38.0	22.2
7	11730.00	47.3 AV	54.0	-6.7	1.85 H	312	25.1	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	61.9 PK	68.2	-6.3	1.80 V	358	48.4	13.5
2	*5865.00	123.8 PK			1.80 V	358	79.0	44.8
3	*5865.00	113.9 AV			1.80 V	358	69.1	44.8
4	#5895.00	85.7 PK	110.2	-24.5	1.80 V	358	71.7	14.0
5	#5925.00	69.4 PK	88.2	-18.8	1.80 V	358	55.3	14.1
6	11730.00	60.6 PK	74.0	-13.4	2.56 V	155	38.4	22.2
7	11730.00	47.9 AV	54.0	-6.1	2.56 V	155	25.7	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	23 °C, 66 % RH
Tested By	Luis Lee/TitanHSU		

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	1.45 H	107	47.0	13.5
2	*5885.00	115.3 PK			1.45 H	107	70.4	44.9
3	*5885.00	105.7 AV			1.45 H	107	60.8	44.9
4	#5895.00	96.3 PK	110.2	-13.9	1.45 H	107	82.3	14.0
5	#5925.00	63.3 PK	88.2	-24.9	1.45 H	107	49.2	14.1
6	11770.00	60.0 PK	74.0	-14.0	1.82 H	318	38.0	22.0
7	11770.00	47.1 AV	54.0	-6.9	1.82 H	318	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	61.7 PK	68.2	-6.5	1.61 V	354	48.2	13.5
2	*5885.00	123.2 PK			1.61 V	354	78.3	44.9
3	*5885.00	113.6 AV			1.61 V	354	68.7	44.9
4	#5895.00	97.9 PK	110.2	-12.3	1.61 V	354	83.9	14.0
5	#5925.00	80.5 PK	88.2	-7.7	1.61 V	354	66.4	14.1
6	11770.00	60.4 PK	74.0	-13.6	2.55 V	161	38.4	22.0
7	11770.00	47.7 AV	54.0	-6.3	2.55 V	161	25.7	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/TitanHSU		

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	1.70 H	115	48.0	13.5
2	*5845.00	118.7 PK			1.70 H	115	74.0	44.7
3	*5845.00	108.7 AV			1.70 H	115	64.0	44.7
4	#5895.00	61.6 PK	110.2	-48.6	1.70 H	115	47.6	14.0
5	#5925.00	61.9 PK	88.2	-26.3	1.70 H	115	47.8	14.1
6	11690.00	60.5 PK	74.0	-13.5	1.87 H	312	38.1	22.4
7	11690.00	47.4 AV	54.0	-6.6	1.87 H	312	25.0	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	62.2 PK	68.2	-6.0	1.28 V	360	48.7	13.5
2	*5845.00	125.8 PK			1.28 V	360	81.1	44.7
3	*5845.00	114.3 AV			1.28 V	360	69.6	44.7
4	#5895.00	69.4 PK	110.2	-40.8	1.28 V	360	55.4	14.0
5	#5925.00	63.0 PK	88.2	-25.2	1.28 V	360	48.9	14.1
6	11690.00	60.9 PK	74.0	-13.1	1.42 V	169	38.5	22.4
7	11690.00	47.9 AV	54.0	-6.1	1.42 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	23 °C, 66 % RH
Tested By	Luis Lee/TitanHSU		

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	1.55 H	114	48.0	13.5
2	*5865.00	118.4 PK			1.55 H	114	73.6	44.8
3	*5865.00	107.0 AV			1.55 H	114	62.2	44.8
4	#5895.00	64.0 PK	110.2	-46.2	1.55 H	114	50.0	14.0
5	#5925.00	61.8 PK	88.2	-26.4	1.55 H	114	47.7	14.1
6	11730.00	60.2 PK	74.0	-13.8	1.89 H	312	38.0	22.2
7	11730.00	47.2 AV	54.0	-6.8	1.89 H	312	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	61.7 PK	68.2	-6.5	1.50 V	358	48.2	13.5
2	*5865.00	125.7 PK			1.50 V	358	80.9	44.8
3	*5865.00	114.2 AV			1.50 V	358	69.4	44.8
4	#5895.00	71.0 PK	110.2	-39.2	1.50 V	358	57.0	14.0
5	#5925.00	67.3 PK	88.2	-20.9	1.50 V	358	53.2	14.1
6	11730.00	60.6 PK	74.0	-13.4	1.45 V	172	38.4	22.2
7	11730.00	47.6 AV	54.0	-6.4	1.45 V	172	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	23 °C, 66 % RH
Tested By	Luis Lee/TitanHSU		

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	1.54 H	107	47.8	13.5
2	*5885.00	119.9 PK			1.54 H	107	75.0	44.9
3	*5885.00	109.5 AV			1.54 H	107	64.6	44.9
4	#5895.00	95.0 PK	110.2	-15.2	1.54 H	107	81.0	14.0
5	#5925.00	63.1 PK	88.2	-25.1	1.54 H	107	49.0	14.1
6	11770.00	60.0 PK	74.0	-14.0	1.88 H	312	38.0	22.0
7	11770.00	46.7 AV	54.0	-7.3	1.88 H	312	24.7	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	61.7 PK	68.2	-6.5	1.70 V	2	48.2	13.5
2	*5885.00	126.1 PK			1.70 V	2	81.2	44.9
3	*5885.00	114.3 AV			1.70 V	2	69.4	44.9
4	#5895.00	108.2 PK	110.2	-2.0	1.70 V	2	94.2	14.0
5	#5925.00	64.1 PK	88.2	-24.1	1.70 V	2	50.0	14.1
6	11770.00	60.5 PK	74.0	-13.5	1.45 V	165	38.5	22.0
7	11770.00	47.4 AV	54.0	-6.6	1.45 V	165	25.4	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/TitanHSU		

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	1.58 H	108	48.0	13.5
2	*5835.00	120.3 PK			1.58 H	108	75.6	44.7
3	*5835.00	108.5 AV			1.58 H	108	63.8	44.7
4	#5895.00	65.4 PK	110.2	-44.8	1.58 H	108	51.4	14.0
5	#5925.00	62.3 PK	88.2	-25.9	1.58 H	108	48.2	14.1
6	11670.00	60.5 PK	74.0	-13.5	1.97 H	316	38.0	22.5
7	11670.00	47.3 AV	54.0	-6.7	1.97 H	316	24.8	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	62.3 PK	68.2	-5.9	1.40 V	2	48.8	13.5
2	*5835.00	124.8 PK			1.40 V	2	80.1	44.7
3	*5835.00	111.8 AV			1.40 V	2	67.1	44.7
4	#5895.00	81.0 PK	110.2	-29.2	1.40 V	2	67.0	14.0
5	#5925.00	74.1 PK	88.2	-14.1	1.40 V	2	60.0	14.1
6	11670.00	60.9 PK	74.0	-13.1	1.46 V	166	38.4	22.5
7	11670.00	47.8 AV	54.0	-6.2	1.46 V	166	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	23 °C, 66 % RH
Tested By	Luis Lee/TitanHSU		

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	1.70 H	112	48.0	13.5
2	*5875.00	117.9 PK			1.70 H	112	73.1	44.8
3	*5875.00	106.0 AV			1.70 H	112	61.2	44.8
4	#5895.00	88.2 PK	110.2	-22.0	1.70 H	112	74.2	14.0
5	#5925.00	76.5 PK	88.2	-11.7	1.70 H	112	62.4	14.1
6	11750.00	60.0 PK	74.0	-14.0	1.92 H	302	38.0	22.0
7	11750.00	46.7 AV	54.0	-7.3	1.92 H	302	24.7	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	62.0 PK	68.2	-6.2	1.50 V	360	48.5	13.5
2	*5875.00	123.7 PK			1.50 V	360	78.9	44.8
3	*5875.00	110.8 AV			1.50 V	360	66.0	44.8
4	#5895.00	102.7 PK	110.2	-7.5	1.50 V	360	88.7	14.0
5	#5925.00	84.9 PK	88.2	-3.3	1.50 V	360	70.8	14.1
6	11750.00	60.3 PK	74.0	-13.7	1.42 V	162	38.3	22.0
7	11750.00	47.3 AV	54.0	-6.7	1.42 V	162	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	23 °C, 66 % RH
Tested By	Luis Lee/TitanHSU		

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	61.7 PK	68.2	-6.5	1.56 H	111	48.2	13.5
2	*5855.00	116.8 PK			1.56 H	111	72.1	44.7
3	*5855.00	104.7 AV			1.56 H	111	60.0	44.7
4	#5895.00	86.8 PK	110.2	-23.4	1.56 H	111	72.8	14.0
5	#5925.00	76.1 PK	88.2	-12.1	1.56 H	111	62.0	14.1
6	11710.00	60.2 PK	74.0	-13.8	1.89 H	312	38.0	22.2
7	11710.00	46.9 AV	54.0	-7.1	1.89 H	312	24.7	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	63.0 PK	68.2	-5.2	1.32 V	2	49.5	13.5
2	*5855.00	122.7 PK			1.32 V	2	78.0	44.7
3	*5855.00	108.2 AV			1.32 V	2	63.5	44.7
4	#5895.00	99.4 PK	110.2	-10.8	1.32 V	2	85.4	14.0
5	#5925.00	88.1 PK	88.2	-0.1	1.32 V	2	74.0	14.1
6	11710.00	60.4 PK	74.0	-13.6	1.45 V	165	38.2	22.2
7	11710.00	47.4 AV	54.0	-6.6	1.45 V	165	25.2	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	23 °C, 66 % RH
Tested By	Luis Lee/TitanHSU		

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	64.5 PK	68.2	-3.7	1.61 H	112	51.0	13.5
2	*5815.00	111.6 PK			1.61 H	112	66.8	44.8
3	*5815.00	97.1 AV			1.61 H	112	52.3	44.8
4	#5895.00	80.2 PK	110.2	-30.0	1.61 H	112	66.2	14.0
5	#5925.00	68.1 PK	88.2	-20.1	1.61 H	112	54.0	14.1
6	11630.00	60.7 PK	74.0	-13.3	1.92 H	311	38.0	22.7
7	11630.00	47.5 AV	54.0	-6.5	1.92 H	311	24.8	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	67.5 PK	68.2	-0.7	1.28 V	2	54.0	13.5
2	*5815.00	115.8 PK			1.28 V	2	71.0	44.8
3	*5815.00	101.3 AV			1.28 V	2	56.5	44.8
4	#5895.00	92.6 PK	110.2	-17.6	1.28 V	2	78.6	14.0
5	#5925.00	74.6 PK	88.2	-13.6	1.28 V	2	60.5	14.1
6	11630.00	60.9 PK	74.0	-13.1	1.45 V	159	38.2	22.7
7	11630.00	47.9 AV	54.0	-6.1	1.45 V	159	25.2	22.7

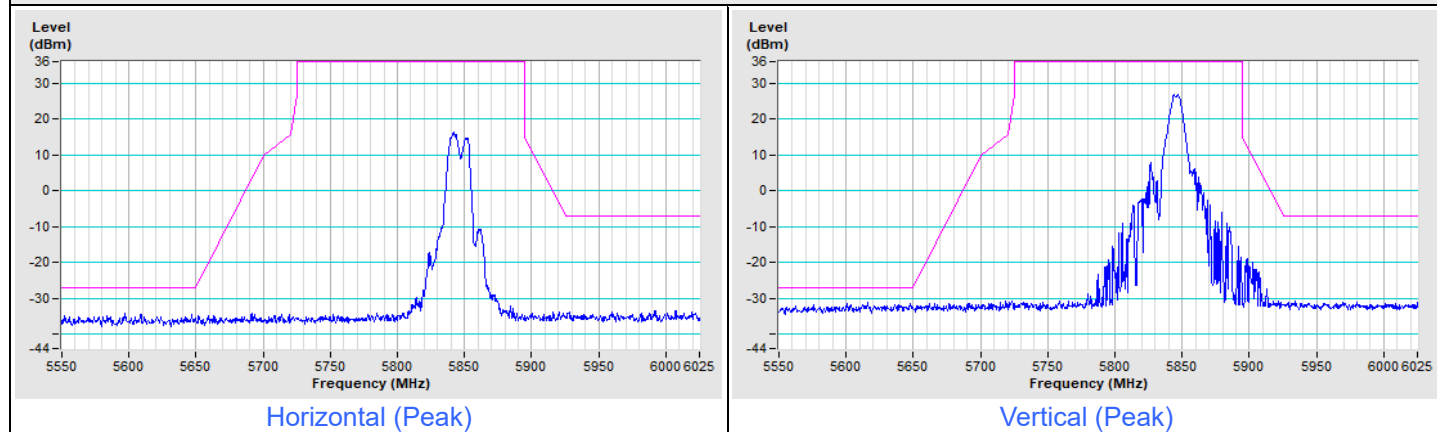
Remarks:

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.

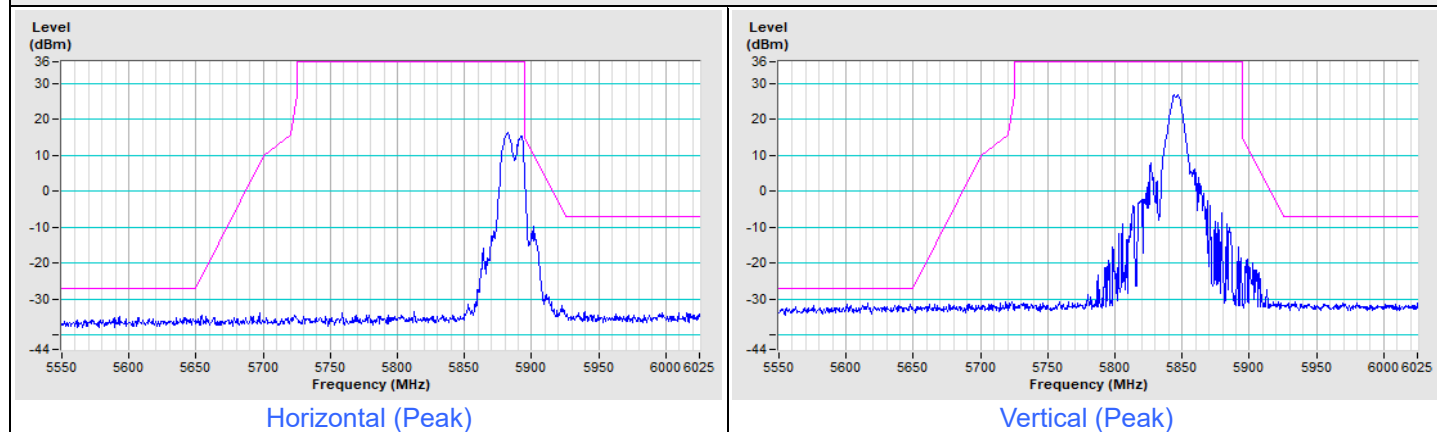
Plot of Band Edge

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

802.11a Channel 169

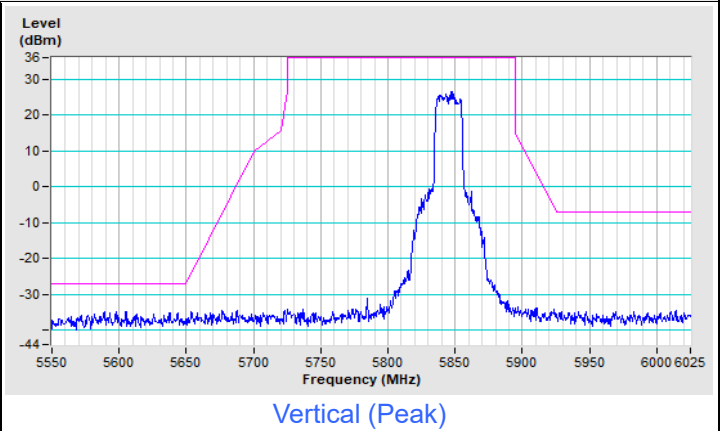
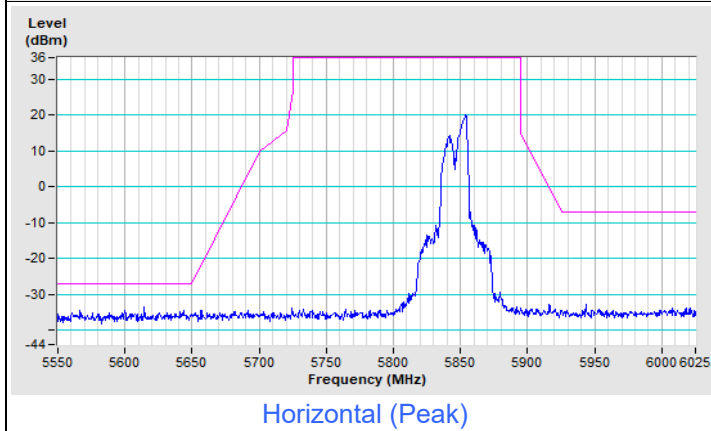


802.11a Channel 177

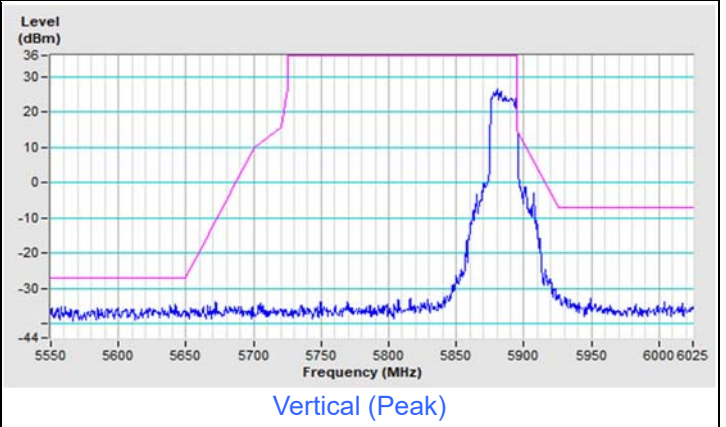
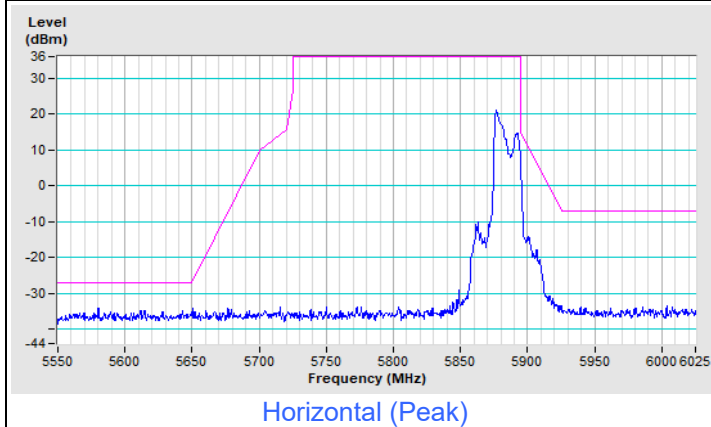


Frequency Range	5.55 GHz ~ 6.025 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
-----------------	----------------------	-------------------------------	----------------------------------

802.11be (EHT20) Channel 169

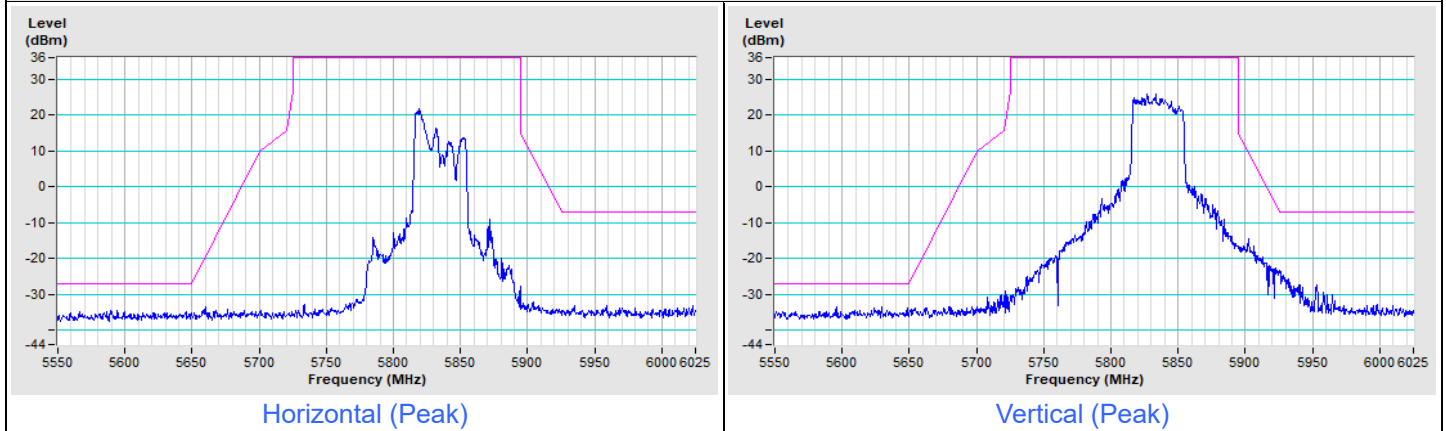


802.11be (EHT20) Channel 177

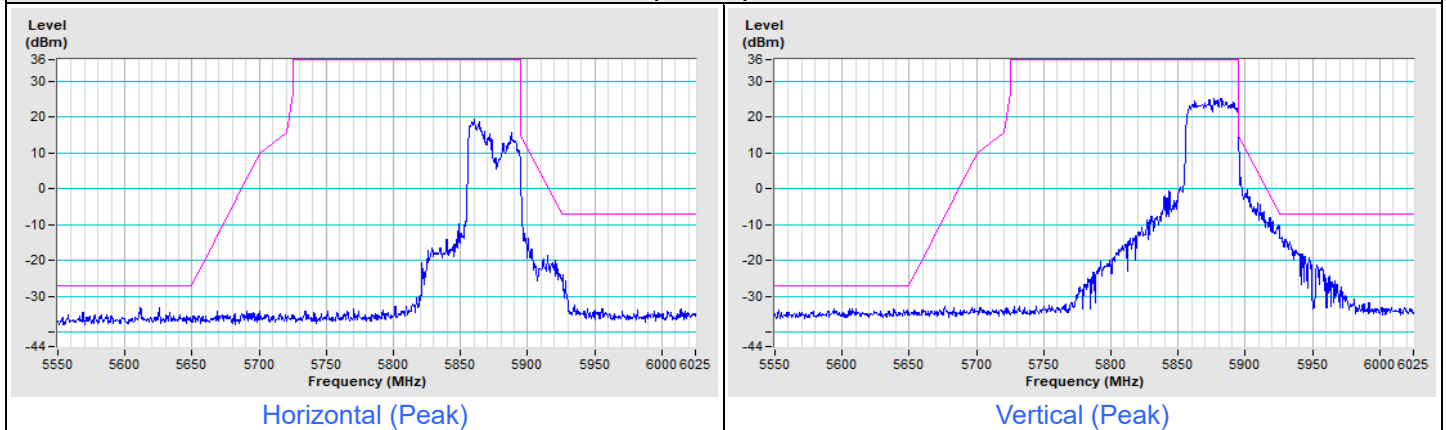


Frequency Range	5.55 GHz ~ 6.025 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
-----------------	----------------------	-------------------------------	----------------------------------

802.11be (EHT40) Channel 167

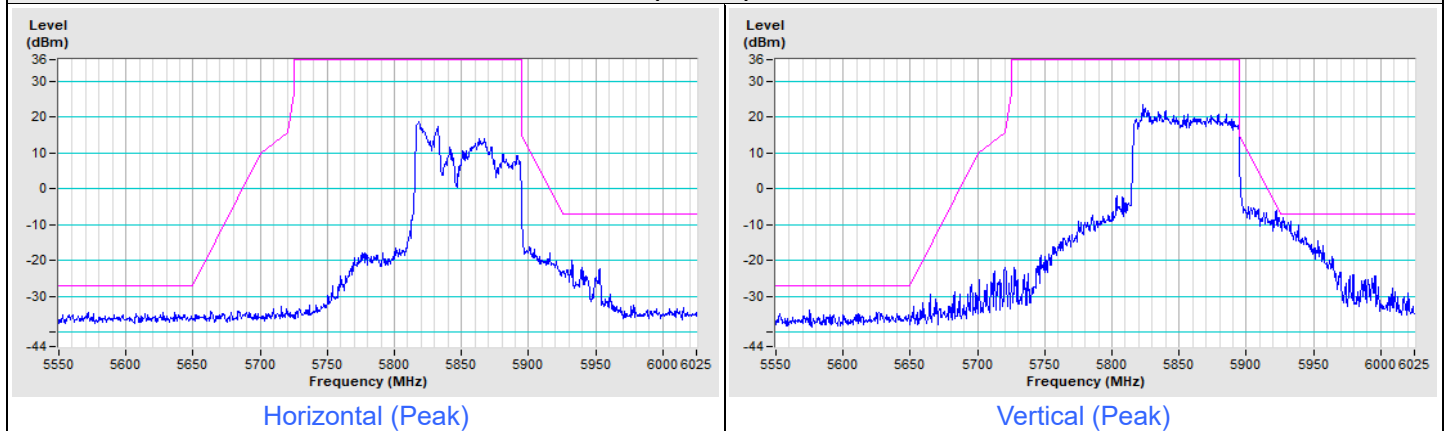


802.11be (EHT40) Channel 175



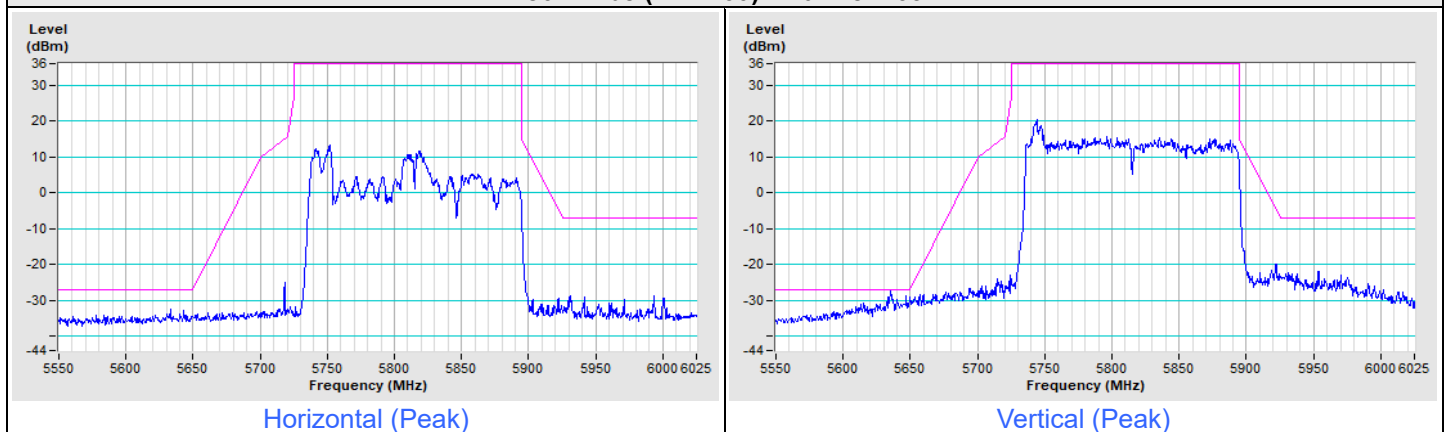
Frequency Range	5.55 GHz ~ 6.025 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
-----------------	----------------------	-------------------------------	----------------------------------

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
-----------------	----------------------	-------------------------------	----------------------------------

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:

Lin Kou EMC/RF Lab

Tel: 886-2-26052180

Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab

Tel: 886-3-6668565

Fax: 886-3-6668323

Hwa Ya EMC/RF/Safety Lab

Tel: 886-3-3183232

Fax: 886-3-3270892

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.

--- END ---