

TEST REPORT

CERTIFICATE OF CONFORMITY

Standard: 47 CFR FCC Part 15, Subpart E (Section 15.407)
Report No.: RFBCUN-WTW-P23120641-1
FCC ID: H8NAPM7210
Product: AT&T Internet Air™ for Business Wi-Fi Extender
Brand: AT&T
Model No.: APM7210D
Received Date: 2023/12/26
Test Date: 2024/1/11 ~ 2024/2/1
Issued Date: 2024/2/20
Applicant: ASKEY COMPUTER CORP.
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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
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FCC Registration / 788550 / TW0003
Designation Number:

Approved by: _____

Jeremy Lin

Jeremy Lin / Project Engineer

, Date: _____

2024/2/20

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Prepared by : Celine Chou / Senior Specialist



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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	8
3.3 Channel List.....	9
3.4 Test Mode Applicability and Tested Channel Detail.....	10
3.5 Duty Cycle of Test Signal.....	11
3.6 Test Program Used and Operation Descriptions	13
3.7 Connection Diagram of EUT and Peripheral Devices	13
3.8 Configuration of Peripheral Devices and Cable Connections	13
4 Test Instruments	14
4.1 RF Output Power.....	14
4.2 Power Spectral Density	14
4.3 6 dB Bandwidth	14
4.4 Occupied Bandwidth.....	14
4.5 Frequency Stability	15
4.6 AC Power Conducted Emissions	15
4.7 Unwanted Emissions below 1 GHz	16
4.8 Unwanted Emissions above 1 GHz.....	17
5 Limits of Test Items.....	18
5.1 RF Output Power.....	18
5.2 Power Spectral Density	18
5.3 6 dB Bandwidth	18
5.4 Occupied Bandwidth.....	18
5.5 Frequency Stability	18
5.6 AC Power Conducted Emissions	19
5.7 Unwanted Emissions below 1 GHz	19
5.8 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	21
6.2.1 Test Setup	21
6.2.2 Test Procedure.....	21
6.3 6 dB Bandwidth	22
6.3.1 Test Setup	22
6.3.2 Test Procedure.....	22
6.4 Occupied Bandwidth.....	22
6.4.1 Test Setup	22
6.4.2 Test Procedure.....	22
6.5 Frequency Stability	22
6.5.1 Test Setup	22
6.5.2 Test Procedure.....	23
6.6 AC Power Conducted Emissions	24
6.6.1 Test Setup	24
6.6.2 Test Procedure.....	24
6.7 Unwanted Emissions below 1 GHz	25
6.7.1 Test Setup	25
6.7.2 Test Procedure.....	26

6.8	Unwanted Emissions above 1 GHz.....	27
6.8.1	Test Setup	27
6.8.2	Test Procedure	27
7	Test Results of Test Item	28
7.1	RF Output Power.....	28
7.2	Power Spectral Density	30
7.3	6 dB Bandwidth	35
7.4	Occupied Bandwidth.....	37
7.5	Frequency Stability	43
7.6	AC Power Conducted Emissions	44
7.7	Unwanted Emissions below 1 GHz	46
7.8	Unwanted Emissions above 1 GHz.....	48
8	Pictures of Test Arrangements	77
9	Information of the Testing Laboratories	78

Release Control Record

Issue No.	Description	Date Issued
RFBCUN-WTW-P23120641-1	Original release.	2024/2/20

1 Certificate

Product: AT&T Internet Air™ for Business Wi-Fi Extender

Brand: AT&T

Test Model: APM7210D

Sample Status: Engineering sample

Applicant: ASKEY COMPUTER CORP.

Test Date: 2024/1/11 ~ 2024/2/1

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

Measurement ANSI C63.10-2013

procedure: 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)(1) 15.407(a)(2) 15.407(a)(3)	RF Output Power	Pass	Meet the requirement of limit.
15.407(a)(1) 15.407(a)(2) 15.407(a)(3)	Power Spectral Density	Pass	Meet the requirement of limit.
15.407(e)	6 dB Bandwidth	Pass	Meet the requirement of limit. (U-NII-3 Band only)
---	Occupied Bandwidth	-	Reference only.
15.407(g)	Frequency Stability	Pass	Meet the requirement of limit.
15.407(b)(9)	AC Power Conducted Emissions	Pass	Minimum passing margin is -10.23 dB at 0.15000 MHz
15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -4.6 dB at 133.45 MHz
15.407(b) (1/10) 15.407(b) (2/10) 15.407(b) (3/10) 15.407(b) (4(i)/10)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -0.4 dB at 5150.00 MHz
15.203	Antenna Requirement	Pass	Antenna connector is U.FL not a standard connector.

Notes: 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 (±)
26 dB Bandwidth	-	206.5 Hz
RF Output Power	-	1.371 dB
Power Spectral Density	-	1.017 dB
6 dB Bandwidth	-	206.5 Hz
Occupied Bandwidth	-	72 Hz
AC Power Conducted Emissions	9 kHz ~ 30 MHz	2.88 dB
Unwanted Emissions below 1 GHz	30 MHz ~ 1 GHz	2.02 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	1.01 dB
	18 GHz ~ 40 GHz	1.15 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	AT&T Internet Air™ for Business Wi-Fi Extender
Brand	AT&T
Test Model	APM7210D
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 only 1024QAM for OFDMA in 11ax mode only 4096QAM for OFDMA in 11be EHT mode
Modulation Technology	OFDM, OFDMA
Transfer Rate	802.11a: up to 54 Mbps 802.11n: up to 300 Mbps 802.11ac: up to 866.7 Mbps 802.11ax: up to 1200 Mbps 802.11be: up to 1442 Mbps
Operating Frequency	5.18 GHz ~ 5.24 GHz 5.745 GHz ~ 5.825 GHz
Number of Channel	802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20), 802.11be (EHT20): 9 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40), 802.11be (EHT40): 4 802.11ac (VHT80), 802.11ax (HE80), 802.11be (EHT80): 2
Output Power	5.18 GHz ~ 5.24 GHz: 561.959 mW (27.50 dBm) 5.745 GHz ~ 5.825 GHz: 608.946 mW (27.85 dBm)
EUT Category	Indoor Access Point

Note:

1. The EUT uses following accessories.

AC Adapter 1		
Brand	Model	Specification
MASS POWER	S030-1C120250VU	AC Input: 100-240 Vac, 50/60 Hz, 0.8 A DC Output: 12.0 Vdc, 2.5 A DC Output Cable: 1.52 m without core

2. Simultaneously transmission condition.

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

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

3. 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
	2400 MHz	2450 MHz	2500 MHz	5150 MHz	5500 MHz	5850 MHz		
Ant 11	4.02	3.91	4.56	-	-	-	PCB	U.FL
Ant 12	4.31	3.79	3.51	-	-	-	PCB	U.FL
Ant 13	-	-	-	4.19	4.45	4.18	PCB	U.FL
Ant 14	-	-	-	4.54	3.95	4.76	PCB	U.FL

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

2. The EUT incorporates a MIMO function:

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

Note:

1. 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), 802.11ax mode for 20 MHz (40 MHz, 80 MHz) and 802.11be mode for 20 MHz (40 MHz, 80 MHz) therefore the manufacturer will control the power for 802.11n/ac/ax mode is same as the 802.11be mode or more lower than it and investigated worst case to representative mode in test report.
2. For 802.11ax and 802.11be, the EUT not support Partial RU (resource unit) and channel puncturing/bandwidth reduction mechanisms.
3. The EUT does not support beamforming function.

3.3 Channel List

FOR 5180 ~ 5240 MHz

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

Channel	Frequency	Channel	Frequency
36	5180 MHz	44	5220 MHz
40	5200 MHz	48	5240 MHz

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

Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz

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

Channel	Frequency
42	5210 MHz

FOR 5745 ~ 5825 MHz:

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

Channel	Frequency	Channel	Frequency
149	5745 MHz	161	5805 MHz
153	5765 MHz	165	5825 MHz
157	5785 MHz		

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

Channel	Frequency	Channel	Frequency
151	5755 MHz	159	5795 MHz

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

Channel	Frequency
155	5775 MHz

3.4 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	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:	The EUT is designed to be positioned on the Z-axis only.

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

Test Item	Mode	Tested Channel	Modulation	Data Rate Parameter
RF Output Power / Power Spectral Density	802.11a	36, 40, 48, 149, 157, 165	BPSK	6Mb/s
	802.11be (EHT20)	36, 40, 48, 149, 157, 165	BPSK	MCS0
	802.11be (EHT40)	38, 46, 151, 159	BPSK	MCS0
	802.11be (EHT80)	42, 155	BPSK	MCS0
6 dB Bandwidth	802.11a	149, 157, 165	BPSK	6Mb/s
	802.11be (EHT20)	149, 157, 165	BPSK	MCS0
	802.11be (EHT40)	151, 159	BPSK	MCS0
	802.11be (EHT80)	155	BPSK	MCS0
Occupied Bandwidth	802.11a	36, 40, 48, 149, 157, 165	BPSK	6Mb/s
	802.11be (EHT20)	36, 40, 48, 149, 157, 165	BPSK	MCS0
	802.11be (EHT40)	38, 46, 151, 159	BPSK	MCS0
	802.11be (EHT80)	42, 155	BPSK	MCS0
Frequency Stability	802.11a	36	un-modulation	-
AC Power Conducted Emissions	802.11be (EHT20)	165	BPSK	MCS0
Unwanted Emissions below 1 GHz	802.11be (EHT20)	165	BPSK	MCS0
Unwanted Emissions above 1 GHz	802.11a	36, 40, 48, 149, 157, 165	BPSK	6Mb/s
	802.11be (EHT20)	36, 40, 48, 149, 157, 165	BPSK	MCS0
	802.11be (EHT40)	38, 46, 151, 159	BPSK	MCS0
	802.11be (EHT80)	42, 155	BPSK	MCS0

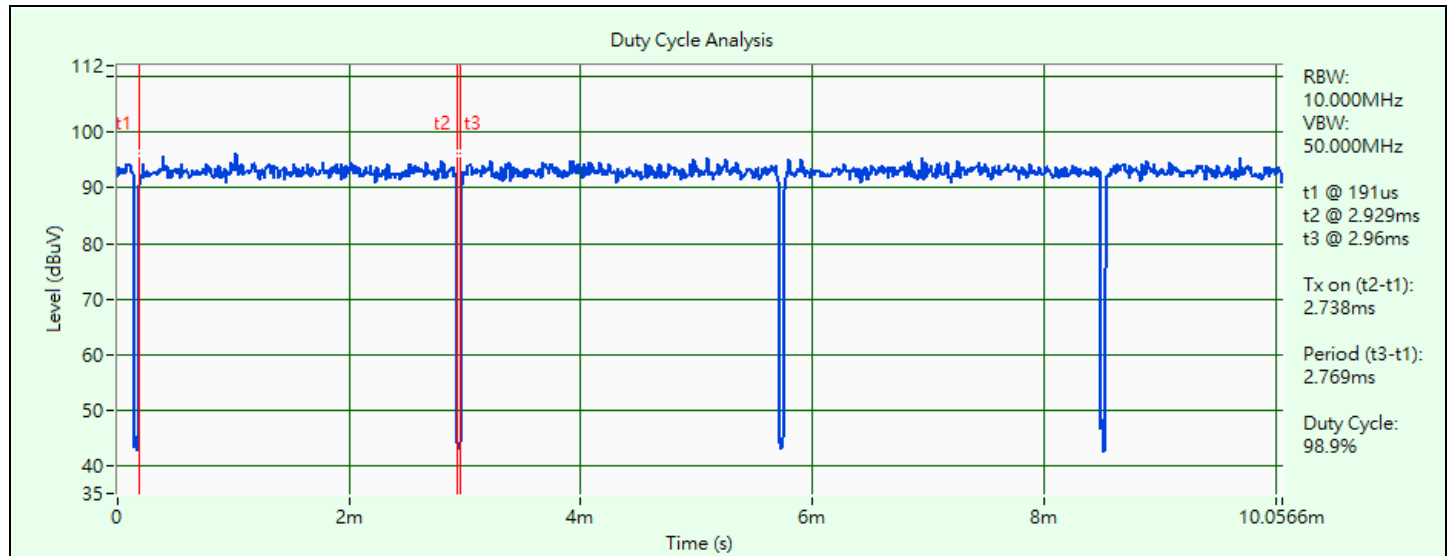
3.5 Duty Cycle of Test Signal

802.11a: Duty cycle = 2.738 ms / 2.769 ms x 100% = 98.9%

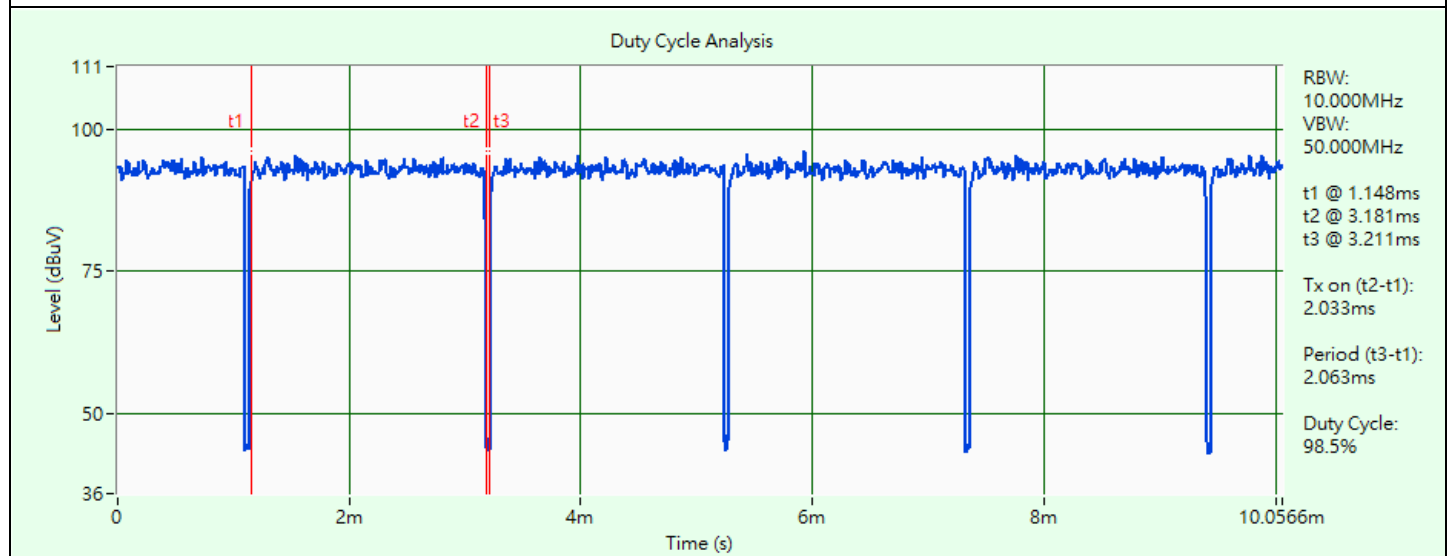
802.11be (EHT20): Duty cycle = 2.033 ms / 2.063 ms x 100% = 98.5%

802.11be (EHT40): Duty cycle = 2.023 ms / 2.053 ms x 100% = 98.5%

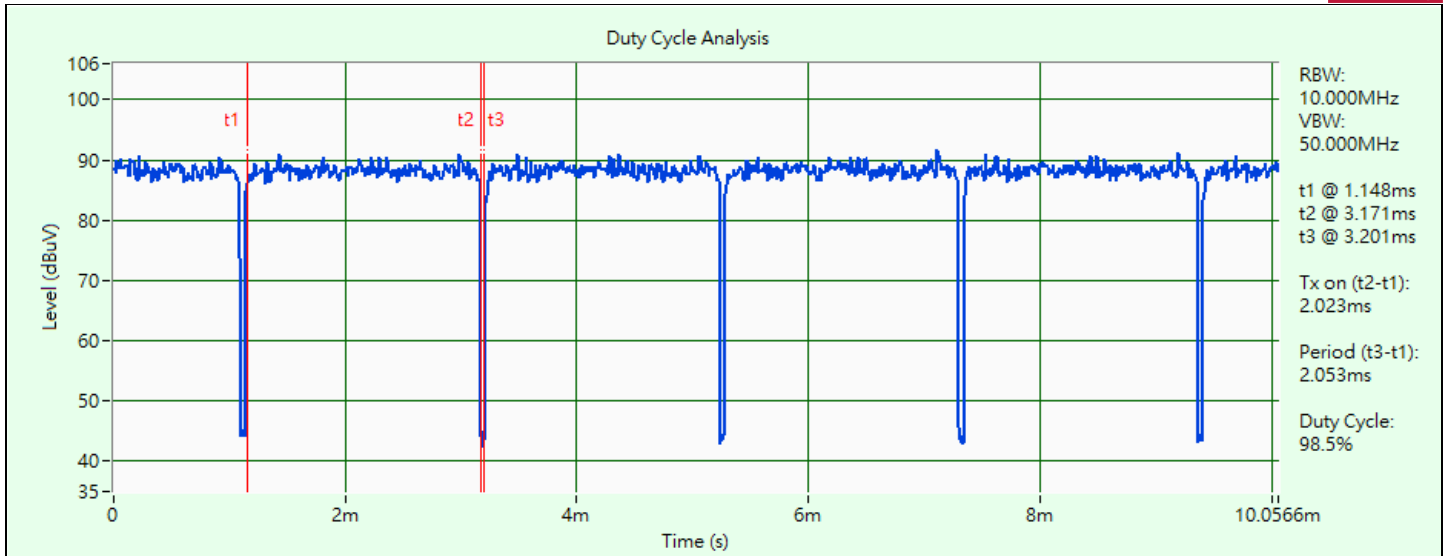
802.11be (EHT80): Duty cycle = 1.932 ms / 1.963 ms x 100% = 98.4%



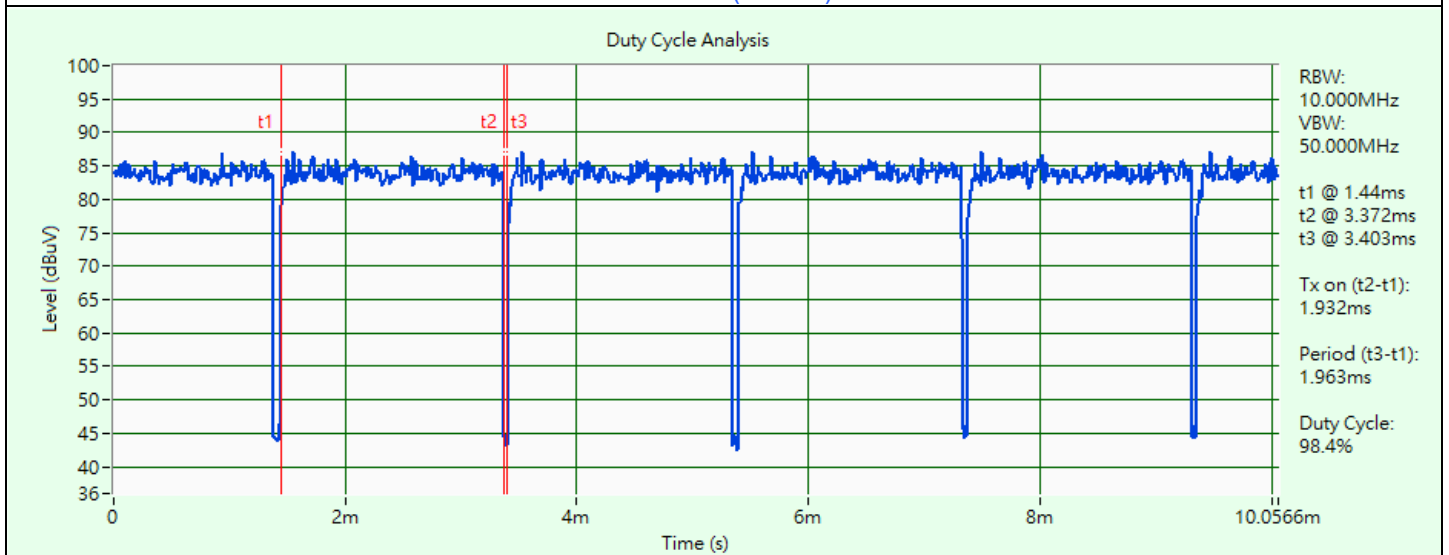
802.11a



802.11be (EHT20)



802.11be (EHT40)

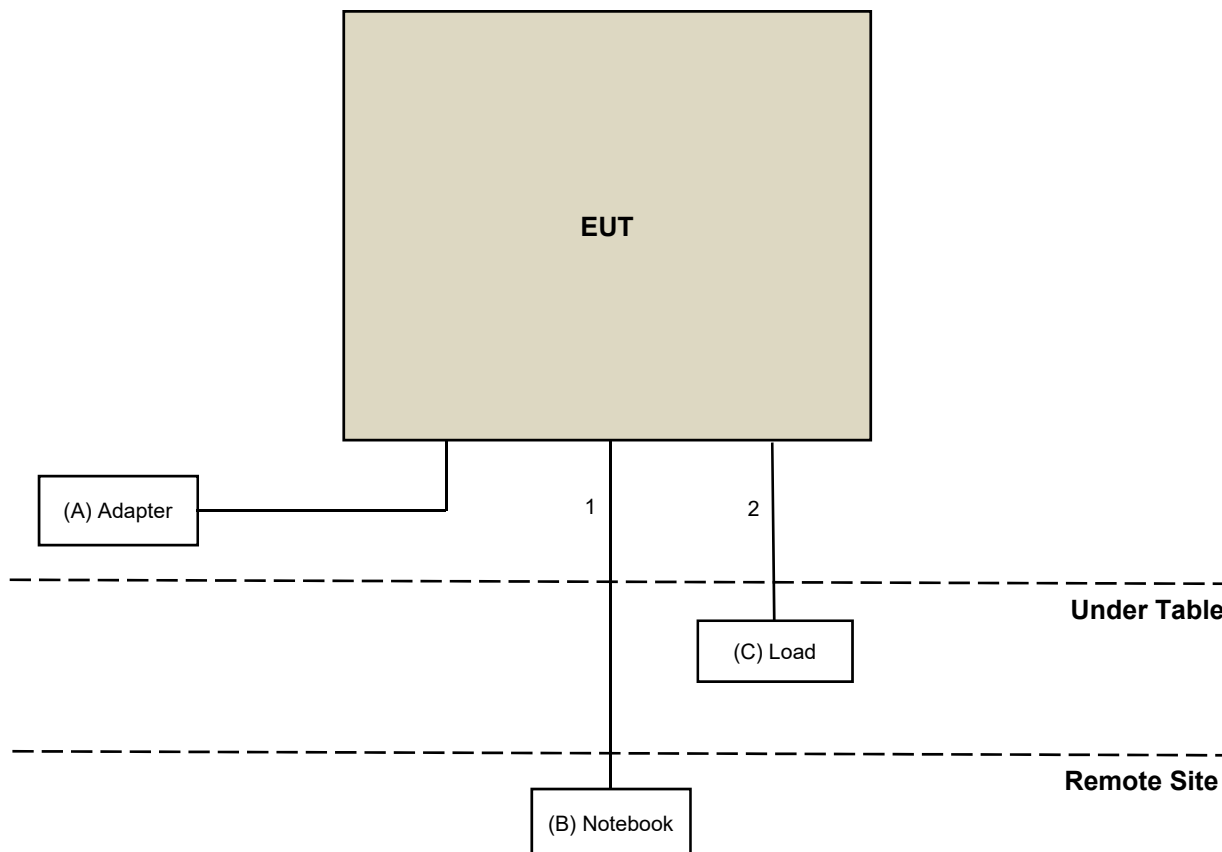


802.11be (EHT80)

3.6 Test Program Used and Operation Descriptions

Controlling software MT7990 QA 0.0.2.99 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	MASS POWER	S030-1C120250VU	WTW231228/014Q14N13	N/A	Accessory of EUT
B	Notebook	Lenovo	TP00048A	N/A	N/A	Provided by Lab
C	Load	N/A	N/A	N/A	N/A	Provided by Lab

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

4 Test Instruments

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

4.1 RF Output Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Signal & Spectrum Analyzer R&S	FSV3044	101504	2023/6/5	2024/6/4
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A
Peak Power Analyzer Keysight	8990B	MY51000485	2024/1/21	2025/1/20
Wideband Power Sensor Keysight	N1923A	MY58020002	2024/1/18	2025/1/17

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2024/1/22

4.2 Power Spectral Density

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Signal & Spectrum Analyzer R&S	FSV3044	101504	2023/6/5	2024/6/4
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: 2024/1/22

4.3 6 dB Bandwidth

Refer to section 4.2 to get information of the instruments.

4.4 Occupied Bandwidth

Refer to section 4.2 to get information of the instruments.

4.5 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	87-III	70360742	2023/7/6	2024/7/5
Signal & Spectrum Analyzer R&S	FSV3044	101504	2023/6/5	2024/6/4
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: 2024/1/22

4.6 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	ESR3	102783	2023/12/13	2024/12/12
Fixed Attenuator SGH	BNC10W10dB	PAD-COND2-01	2023/9/2	2024/9/1
LISN R&S	ESH2-Z5	100100	2023/3/7	2024/3/6
	ESH3-Z5	100312	2023/9/12	2024/9/11
RF Coaxial Cable Woken	5D-FB	Cable-cond2-01	2023/9/2	2024/9/1
Software BVADT	BVADT_Cond_ V7.3.7.4	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 2.
2. Tested Date: 2024/1/29 ~ 2024/2/1

4.7 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower Max-Full	UNAT_5+	PAD-CH6-01	N/A	N/A
Antenna Tower Controller Max-Full	MF-7802	N/A	N/A	N/A
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-616	2023/10/18	2024/10/17
MXE EMI Receiver Agilent	N9038A	MY52260177	2023/9/15	2024/9/14
Preamplifier Agilent	310N	187226	2023/6/13	2024/6/12
PXA Signal Analyzer Keysight	N9030A	MY54490561	2023/7/25	2024/7/24
RF Coaxial Cable ETS-Lindgren	EMC104-SM-SM-10000	Cable-CH1-01(RFC-SMS-100-SMS-120+RFC-SMS-100-SMS-4)	2023/6/13	2024/6/12
	RFC-SMS-100-SMS-24-IN	Cable-CH1-02(RFC-SMS-100-SMS-24)	2023/6/13	2024/6/12
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table Max-Full	TT-1510	N/A	N/A	N/A
Turn Table Controller Max-Full	MF-7802	N/A	N/A	N/A

Notes:

1. The test was performed in XD - 966 chamber 6.
2. Tested Date: 2024/1/13 ~ 2024/1/29

4.8 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower Max-Full	UNAT_5+	PAD-CH6-01	N/A	N/A
Antenna Tower Controller Max-Full	MF-7802	N/A	N/A	N/A
Boresight antenna tower fixture BV	BAF-02	8	N/A	N/A
Horn Antenna ETS-Lindgren	3117	00143293	2023/11/12	2024/11/11
Horn Antenna Schwarzbeck	BBHA 9170	BBHA9170241	2023/10/16	2024/10/15
MXE EMI Receiver Agilent	N9038A	MY52260177	2023/9/15	2024/9/14
Preamplifier Agilent	83017A	MY39501373	2023/6/13	2024/6/12
Preamplifier EMCI	EMC 184045	980116	2023/9/27	2024/9/26
PXA Signal Analyzer Keysight	N9030A	MY54490561	2023/7/25	2024/7/24
RF Coaxial Cable ETS-Lindgren	EMC104-SM-SM-10000	Cable-CH1-01(RFC-SMS-100-SMS-120+RFC-SMS-100-SMS-4)	2023/6/13	2024/6/12
	RFC-SMS-100-SMS-24-IN	Cable-CH1-02(RFC-SMS-100-SMS-24)	2023/6/13	2024/6/12
RF Coaxial Cable HUBER+SUHNER	SUCOFLEX 104	CABLE-CH9-(250795/4)	2024/1/6	2025/1/5
RF Coaxial Cable HUBER+SUHNER&EMCI	SUCOFLEX 104& EMC104-SM-SM8000	CABLE-CH9-02 (248780+171006)	2024/1/6	2025/1/5
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table Max-Full	TT-1510	N/A	N/A	N/A
Turn Table Controller Max-Full	MF-7802	N/A	N/A	N/A

Notes:

1. The test was performed in XD - 966 chamber 6.
2. Tested Date: 2024/1/11 ~ 2024/1/13

5 Limits of Test Items

5.1 RF Output Power

Operation Band	EUT Category	Limit
U-NII-1	Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p $\leq$ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
	Fixed point-to-point Access Point	1 Watt (30 dBm)
	Indoor Access Point	1 Watt (30 dBm)
	Mobile and Portable client device	250mW (24 dBm)

Operation Band	Limit
U-NII-3	1 Watt (30 dBm)

Per KDB 662911 D01 Multiple Transmitter Output Method of conducted output power measurement on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;

Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT} ;

Array Gain = $5 \log(N_{ANT}/N_{SS})$ dB or 3 dB, whichever is less, for 20-MHz channel widths with $N_{ANT} \geq 5$.

For power measurements on all other devices: Array Gain = $10 \log(N_{ANT}/N_{SS})$ dB.

5.2 Power Spectral Density

Operation Band	EUT Category	Limit
U-NII-1	Outdoor Access Point	17 dBm/MHz
	Fixed point-to-point Access Point	
	Indoor Access Point	
	Mobile and Portable client device	11 dBm/MHz

Operation Band	Limit
U-NII-3	30 dBm/500 kHz

5.3 6 dB Bandwidth

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

5.4 Occupied Bandwidth

The results are for reference only.

5.5 Frequency Stability

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

5.6 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.

5.7 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).

5.8 Unwanted Emissions above 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)
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).
3. For frequencies above 1000 MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20 dB under any condition of modulation.

Limits of unwanted emission out of the restricted bands

Applicable To	Limit	
789033 D02 General UNII Test Procedure New Rules v02r01	Field Strength at 3 m	
	PK: 74 (dBμV/m)	AV: 54 (dBμV/m)

For transmitters operating in the 5.15-5.25 GHz band:

Applicable To	EIRP Limit	Equivalent Field Strength at 3 m
15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m)

For transmitters operating in the 5.725-5.850 GHz band:

Applicable To	EIRP Limit	Equivalent Field Strength at 3 m
15.407(b)(4)(i)	PK: -27 (dBm/MHz) ^{*1}	PK: 68.2 (dBμV/m) ^{*1}
	PK: 10 (dBm/MHz) ^{*2}	PK: 105.2 (dBμV/m) ^{*2}
	PK: 15.6 (dBm/MHz) ^{*3}	PK: 110.8 (dBμV/m) ^{*3}
	PK: 27 (dBm/MHz) ^{*4}	PK: 122.2 (dBμV/m) ^{*4}

^{*1} beyond 75 MHz or more above of the band edge.

^{*2} below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.

^{*3} below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.

^{*4} from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

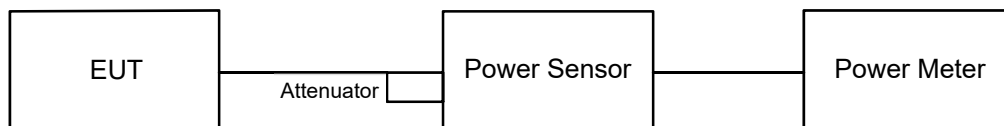
Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

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

6 Test Arrangements

6.1 RF Output Power

6.1.1 Test Setup

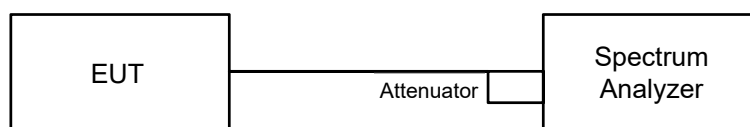


6.1.2 Test Procedure

Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst and set the detector to average. Duty factor is not added to measured value.

6.2 Power Spectral Density

6.2.1 Test Setup



6.2.2 Test Procedure

For specified measurement bandwidth 1 MHz:

Method SA-1

- Set span to encompass the entire 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

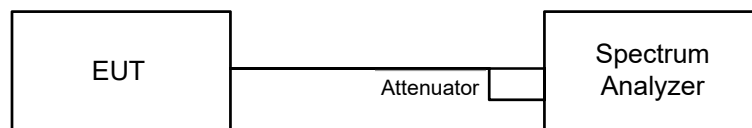
For specified measurement bandwidth 500 kHz:

Method SA-1

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 300 kHz, Set VBW $\geq$ 1 MHz, Detector = RMS
- Scale the observed power level to an equivalent value in 500 kHz by adjusting (increasing) the measured power by a bandwidth correction factor (BWCF) where $\text{BWCF} = 10\log(500 \text{ kHz}/300 \text{ kHz})$
- 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

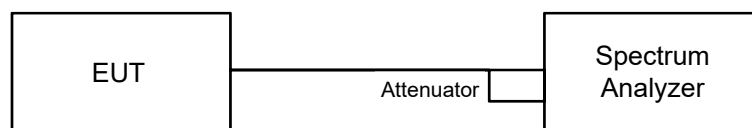


6.3.2 Test Procedure

- 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 Occupied Bandwidth

6.4.1 Test Setup

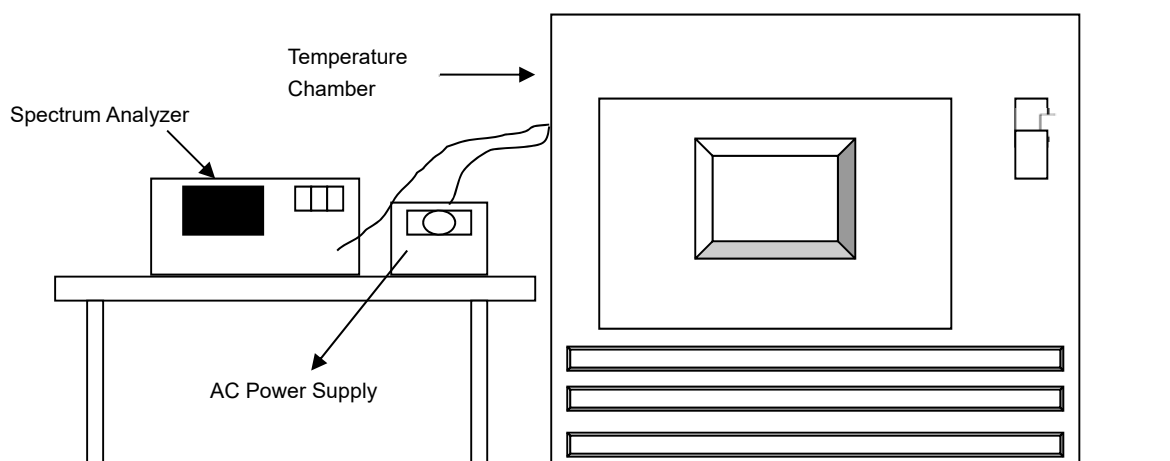


6.4.2 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with resolution bandwidth in the range of 1% to 5% of the anticipated emission bandwidth, and a video bandwidth at least 3x the resolution bandwidth and set the detector to Sampling. The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean power of a given emission.

6.5 Frequency Stability

6.5.1 Test Setup

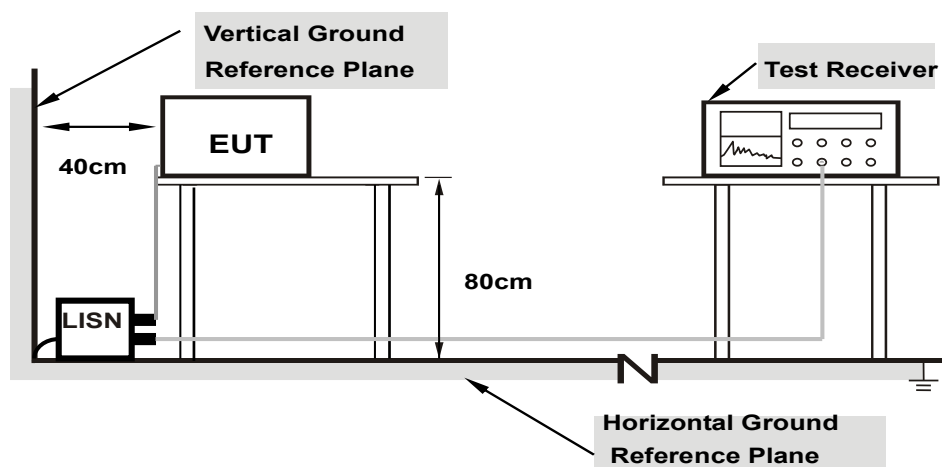


6.5.2 Test Procedure

- 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.

6.6 AC Power Conducted Emissions

6.6.1 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).

6.6.2 Test Procedure

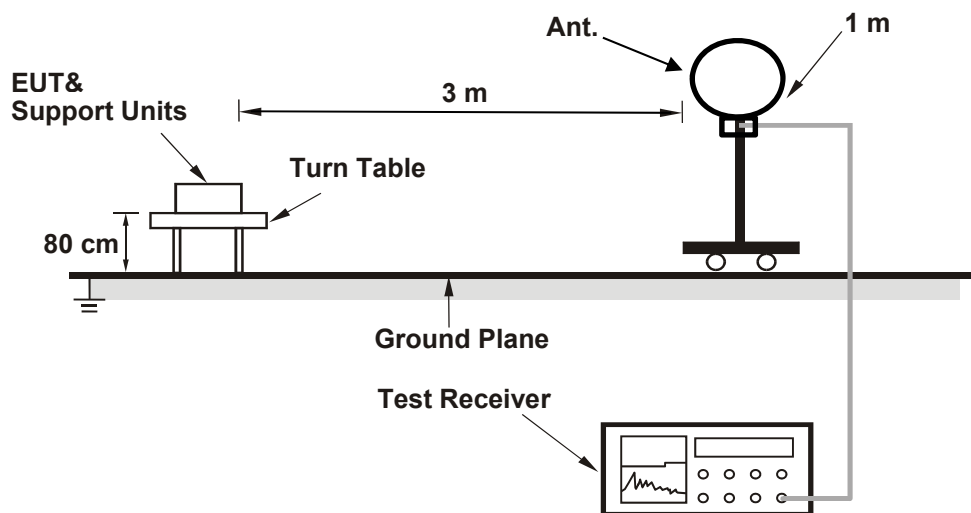
- The EUT was placed on a 0.8 meter to the top of table and placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The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

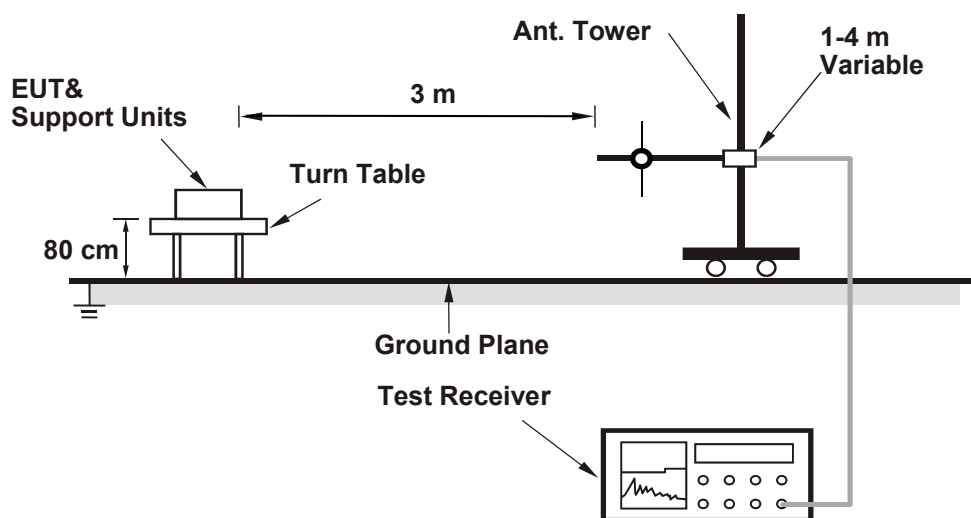
6.7 Unwanted Emissions below 1 GHz

6.7.1 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).

6.7.2 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

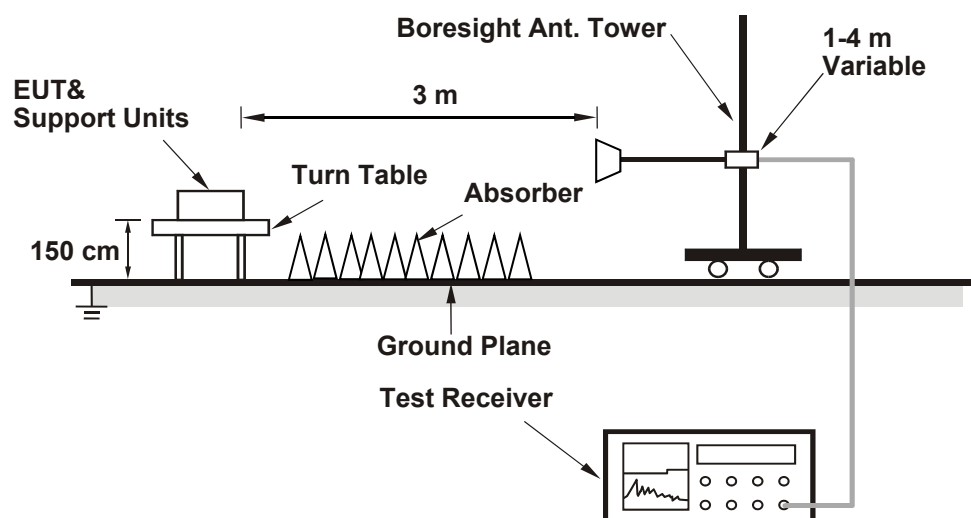
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the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

6.8 Unwanted Emissions above 1 GHz

6.8.1 Test Setup



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

6.8.2 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:	Matthew Yang
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802.11a

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	21.75	21.15	279.940	24.47	30	Pass
40	5200	22.85	22.55	372.640	25.71	30	Pass
48	5240	22.94	22.61	379.178	25.79	30	Pass
149	5745	22.81	22.35	362.776	25.60	30	Pass
157	5785	22.85	22.36	364.939	25.62	30	Pass
165	5825	22.89	22.46	370.734	25.69	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 4.54 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-3, the maximum gain is 4.76 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11be (EHT20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	21.09	20.70	246.018	23.91	30	Pass
40	5200	24.65	24.20	554.770	27.44	30	Pass
48	5240	24.90	24.03	561.959	27.50	30	Pass
149	5745	24.78	24.56	586.367	27.68	30	Pass
157	5785	24.85	24.70	600.613	27.79	30	Pass
165	5825	24.90	24.77	608.946	27.85	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 4.54 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-3, the maximum gain is 4.76 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11be (EHT40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
38	5190	20.37	19.85	205.498	23.13	30	Pass
46	5230	22.35	22.01	330.646	25.19	30	Pass
151	5755	22.44	21.93	331.343	25.20	30	Pass
159	5795	22.49	22.03	337.007	25.28	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 4.54 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-3, the maximum gain is 4.76 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11be (EHT80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
42	5210	19.40	18.87	164.187	22.15	30	Pass
155	5775	22.11	21.73	311.491	24.93	30	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 4.54 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-3, the maximum gain is 4.76 dBi < 6 dBi, so the output power limit shall not be reduced.

7.2 Power Spectral Density

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

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1			
36	5180	8.77	8.04	11.43	15.62	Pass
40	5200	9.80	9.47	12.65	15.62	Pass
48	5240	9.75	9.57	12.67	15.62	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. For U-NII-1, the directional gain is 7.38 dBi > 6dBi, so the power density limit shall be reduced to $17-(7.38-6) = 15.62$ dBm/MHz.

802.11be (EHT20)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1			
36	5180	7.89	7.70	10.81	15.62	Pass
40	5200	11.51	11.22	14.38	15.62	Pass
48	5240	11.79	10.93	14.39	15.62	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. For U-NII-1, the directional gain is 7.38 dBi > 6dBi, so the power density limit shall be reduced to $17-(7.38-6) = 15.62$ dBm/MHz.

802.11be (EHT40)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1			
38	5190	4.39	3.68	7.06	15.62	Pass
46	5230	6.27	5.96	9.13	15.62	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. For U-NII-1, the directional gain is 7.38 dBi > 6dBi, so the power density limit shall be reduced to $17-(7.38-6) = 15.62$ dBm/MHz.

802.11be (EHT80)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1			
42	5210	0.33	-0.21	3.08	15.62	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. For U-NII-1, the directional gain is 7.38 dBi > 6dBi, so the power density limit shall be reduced to $17 - (7.38 - 6) = 15.62$ dBm/MHz.

802.11a

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)		Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1				
149	5745	2.23	1.70	4.98	7.20	28.51	Pass
157	5785	2.26	1.74	5.02	7.24	28.51	Pass
165	5825	2.29	1.88	5.10	7.32	28.51	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. For U-NII-3, the directional gain is 7.49 dBi > 6 dBi, so the power density limit shall be reduced to $30 - (7.49 - 6) = 28.51$ dBm/500kHz.

802.11be (EHT20)

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)		Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1				
149	5745	4.37	4.09	7.24	9.46	28.51	Pass
157	5785	4.46	4.21	7.35	9.57	28.51	Pass
165	5825	4.52	4.35	7.45	9.67	28.51	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. For U-NII-3, the directional gain is 7.49 dBi > 6 dBi, so the power density limit shall be reduced to $30 - (7.49 - 6) = 28.51$ dBm/500kHz.

802.11be (EHT40)

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)		Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1				
151	5755	-2.53	-3.00	0.25	2.47	28.51	Pass
159	5795	-2.50	-2.89	0.32	2.54	28.51	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. For U-NII-3, the directional gain is 7.49 dBi > 6 dBi, so the power density limit shall be reduced to $30 - (7.49 - 6) = 28.51$ dBm/500kHz.

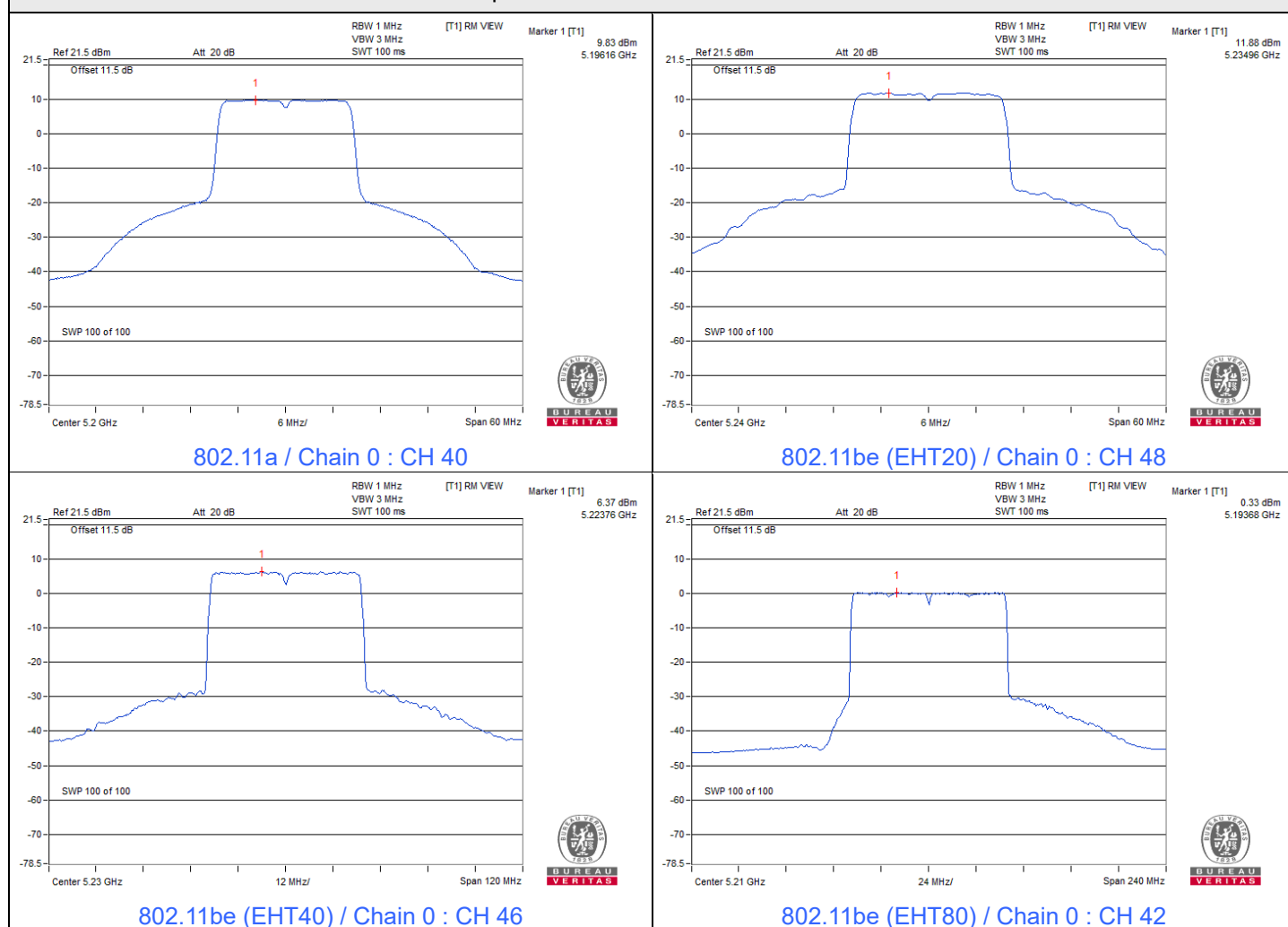
802.11be (EHT80)

Chan.	Chan. Freq. (MHz)	PSD (dBm/300kHz)		Total PSD (dBm/300kHz)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1				
155	5775	-6.18	-6.55	-3.35	-1.13	28.51	Pass

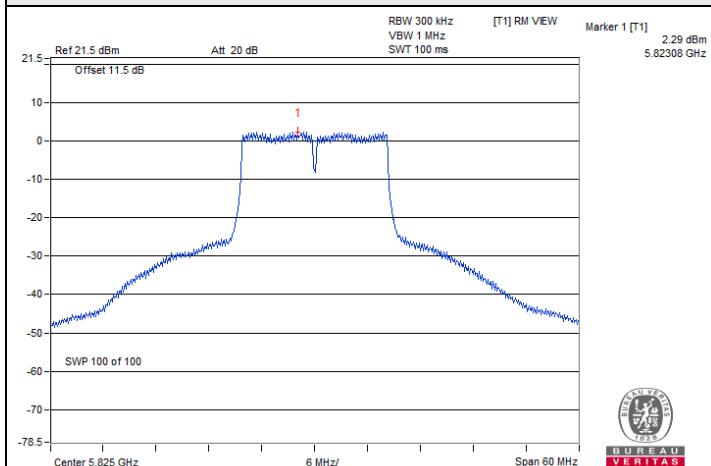
Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. For U-NII-3, the directional gain is 7.49 dBi > 6 dBi, so the power density limit shall be reduced to $30 - (7.49 - 6) = 28.51 \text{ dBm/500kHz}$.

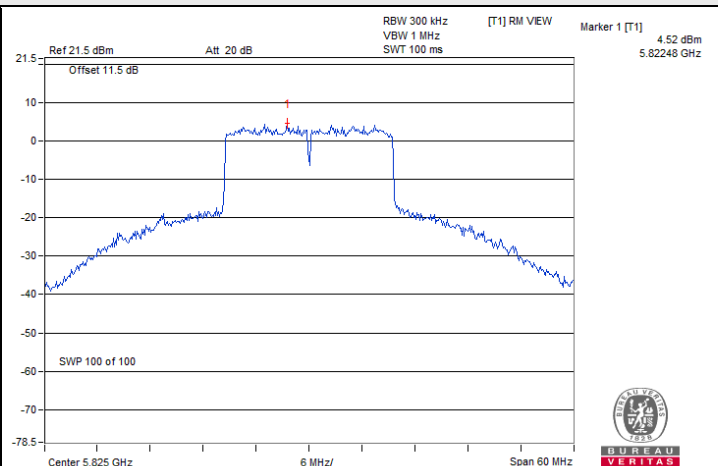
Spectrum Plot of Maximum Value



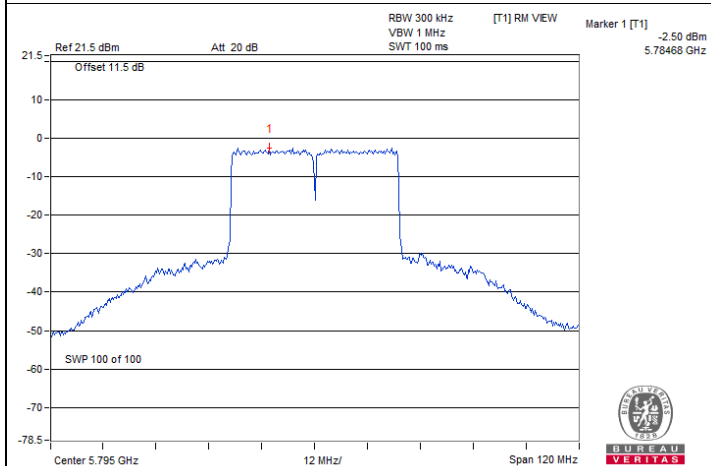
Spectrum Plot of Maximum Value



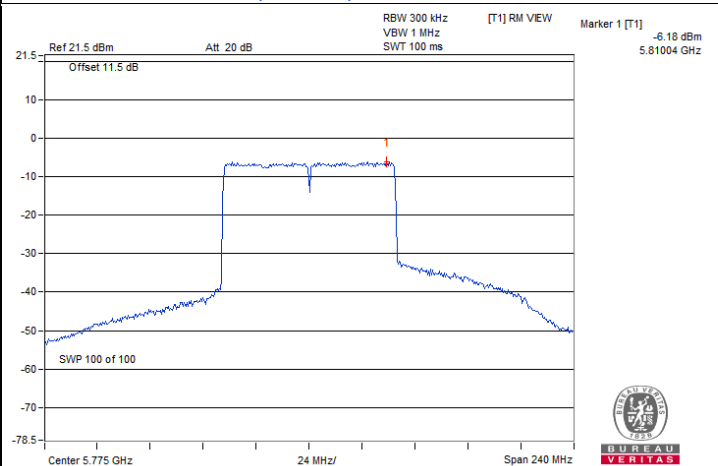
802.11a / Chain 0 : CH 165



802.11be (EHT20) / Chain 0 : CH 165



802.11be (EHT40) / Chain 0 : CH 159



802.11be (EHT80) / Chain 0 : CH 155

7.3 6 dB Bandwidth

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

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
149	5745	16.39	16.41	0.5	Pass
157	5785	16.40	16.42	0.5	Pass
165	5825	16.41	16.43	0.5	Pass

802.11be (EHT20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
149	5745	18.53	18.83	0.5	Pass
157	5785	18.50	18.72	0.5	Pass
165	5825	19.00	18.75	0.5	Pass

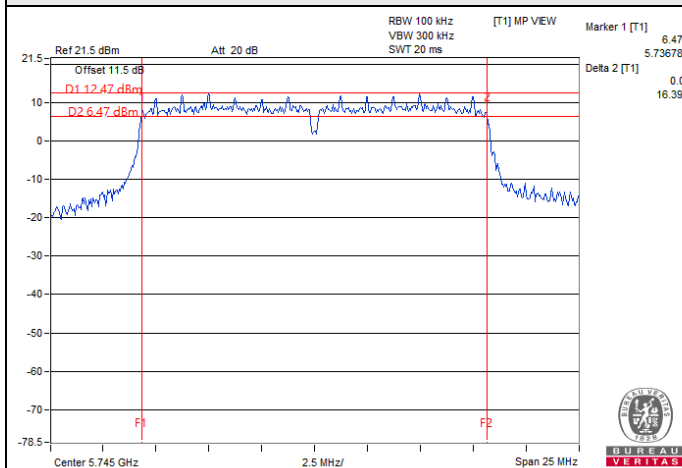
802.11be (EHT40)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
151	5755	38.18	38.12	0.5	Pass
159	5795	38.12	38.02	0.5	Pass

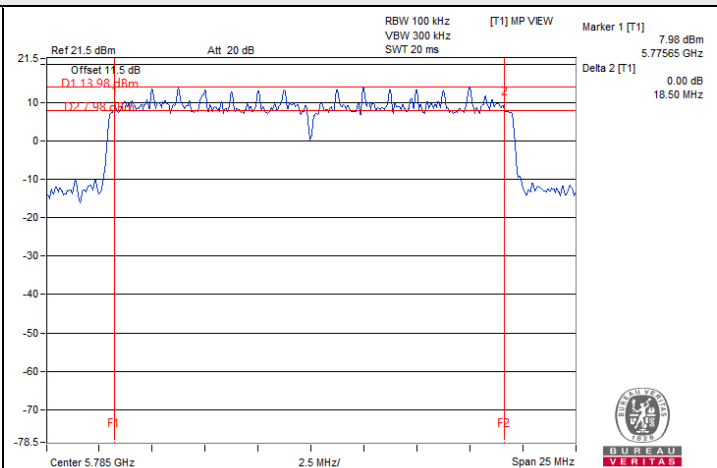
802.11be (EHT80)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
155	5775	78.00	77.97	0.5	Pass

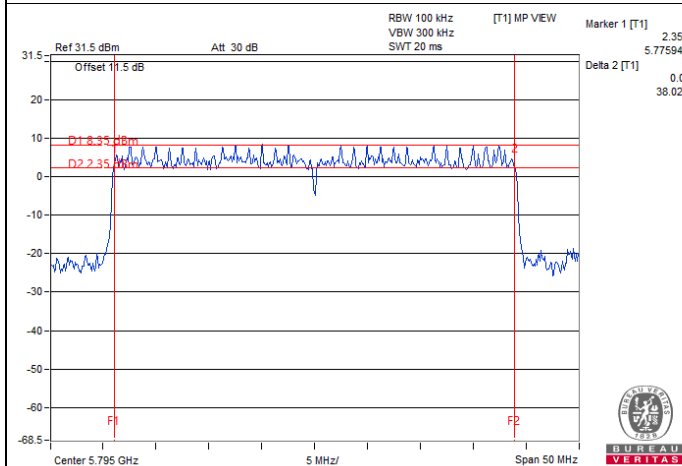
Spectrum Plot of Minimum Value



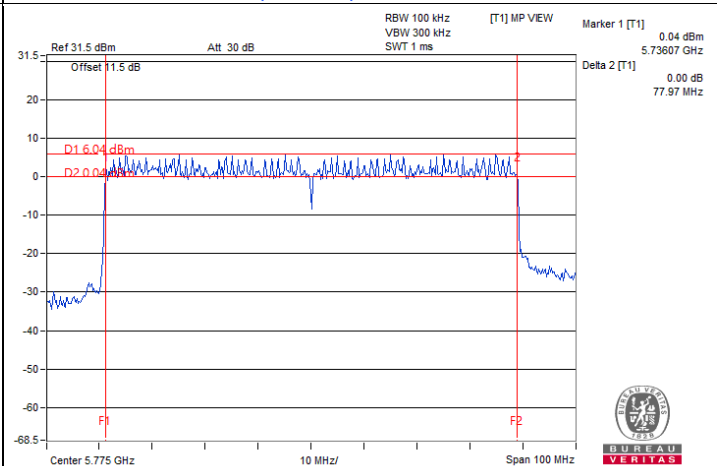
802.11a / Chain 0 : CH 149



802.11be (EHT20) / Chain 0 : CH 157



802.11be (EHT40) / Chain 1 : CH 159



802.11be (EHT80) / Chain 1 : CH 155

7.4 Occupied Bandwidth

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

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	16.68	16.68
40	5200	16.68	16.68
48	5240	16.68	16.56
149	5745	16.80	16.56
157	5785	16.68	16.56
165	5825	16.92	16.68

802.11be (EHT20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	19.08	19.08
40	5200	19.08	19.32
48	5240	19.08	19.08
149	5745	19.80	19.08
157	5785	19.20	19.08
165	5825	19.68	19.08

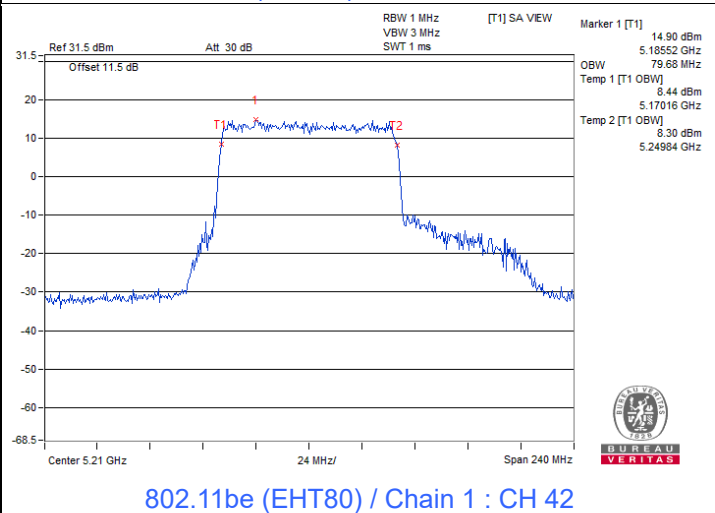
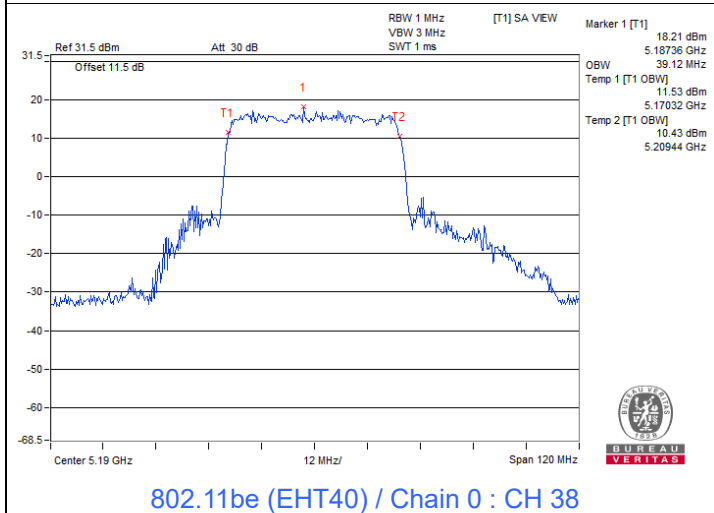
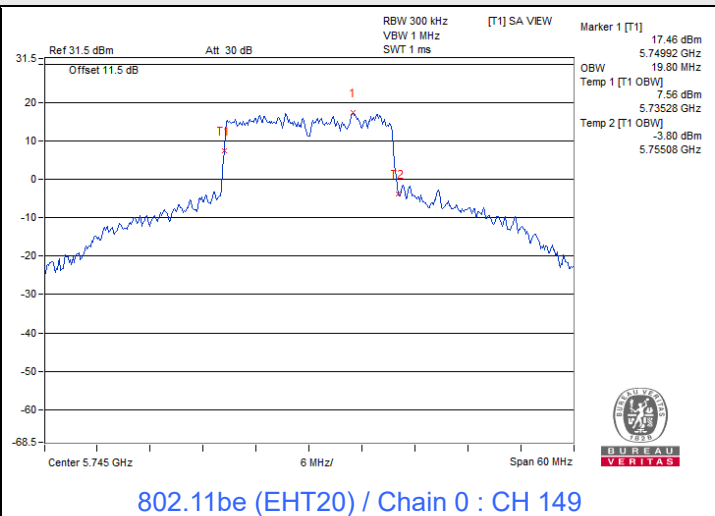
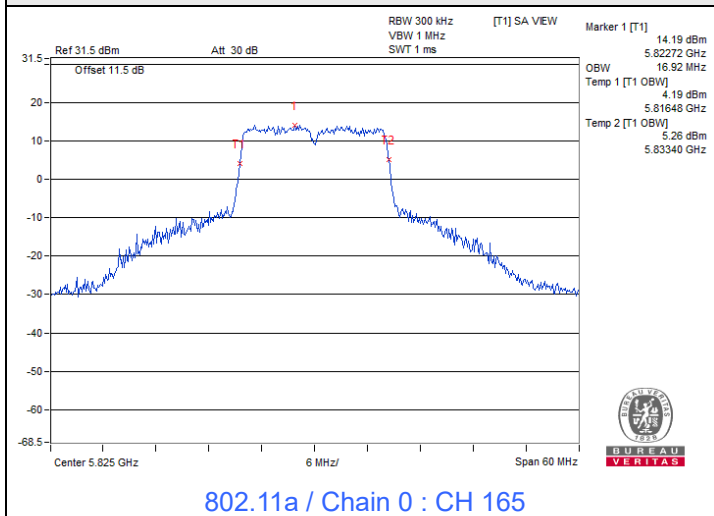
802.11be (EHT40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
38	5190	39.12	39.12
46	5230	38.16	38.16
151	5755	38.40	38.16
159	5795	38.40	38.40

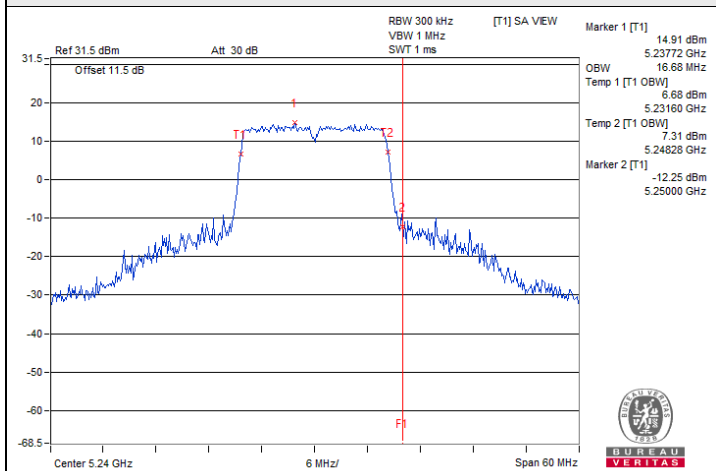
802.11be (EHT80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
42	5210	79.20	79.68
155	5775	77.76	77.76

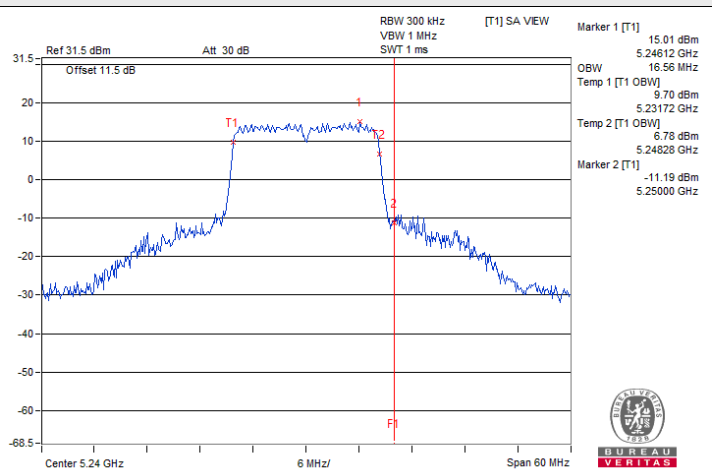
Spectrum Plot of Maximum Value



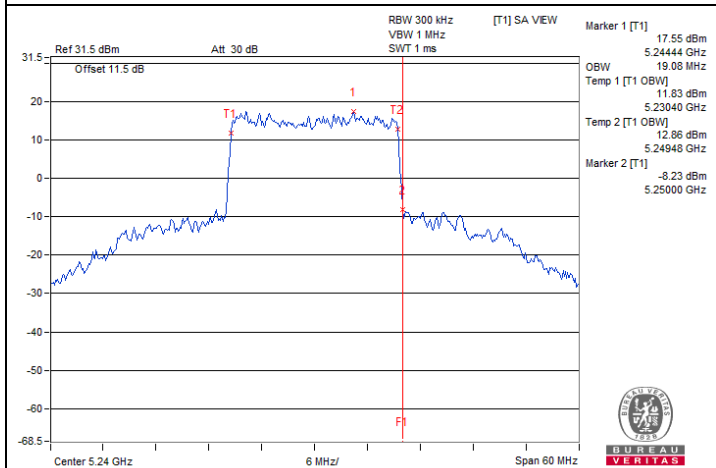
Spectrum Plot for nearby DFS band (DFS is required, if 99% OCP straddle into U-NII-2A)



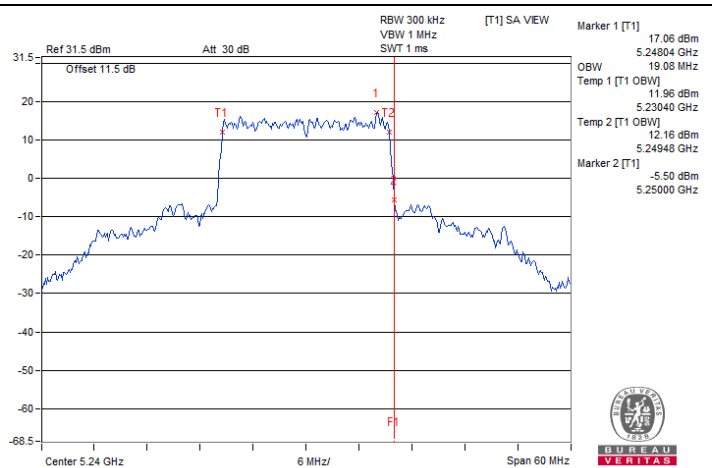
802.11a / Chain 0 : CH 48



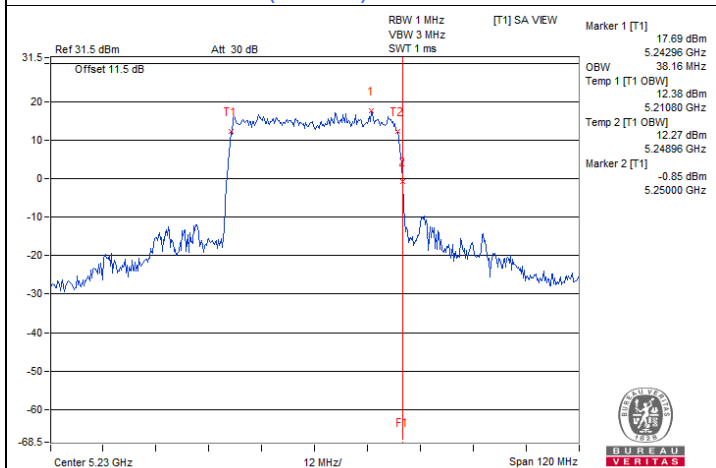
802.11a / Chain 1 : CH 48



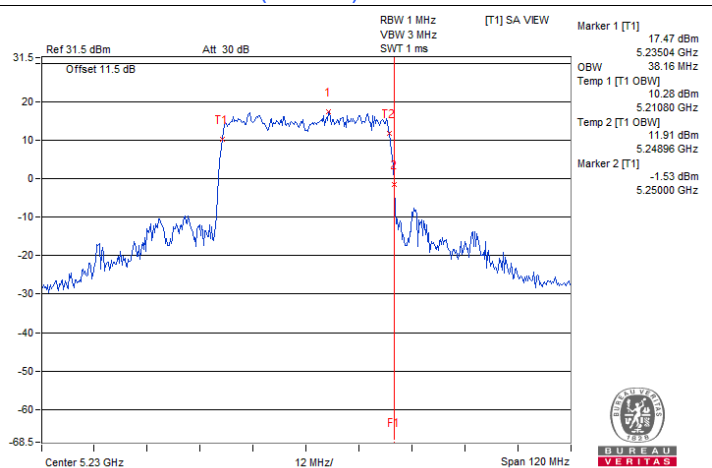
802.11be (EHT20) / Chain 0 : CH 48



802.11be (EHT20) / Chain 1 : CH 48

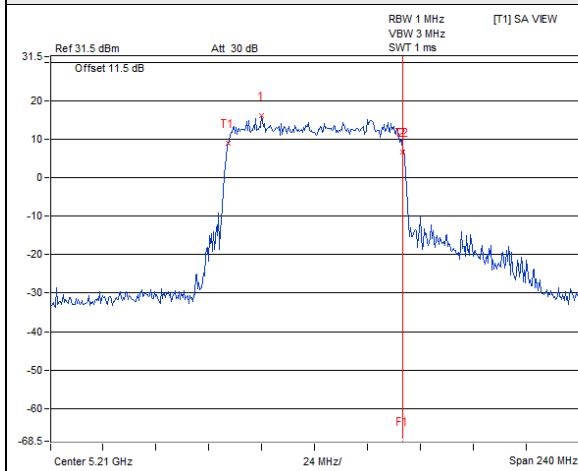


802.11be (EHT40) / Chain 0 : CH 46

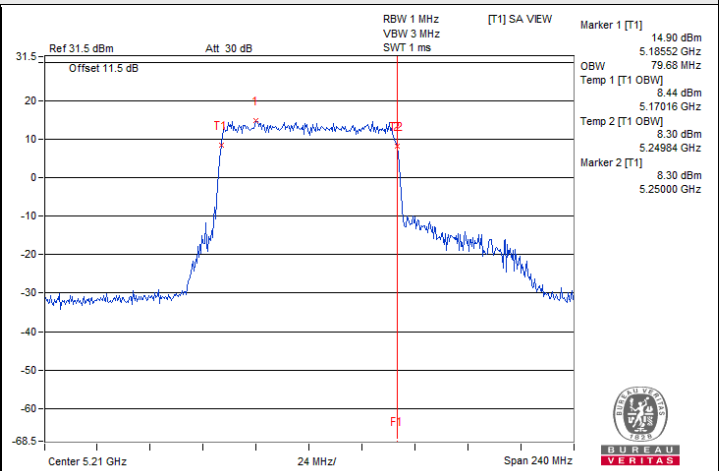


802.11be (EHT40) / Chain 1 : CH 46

Spectrum Plot for nearby DFS band (DFS is required, if 99% OCP straddle into U-NII-2A)



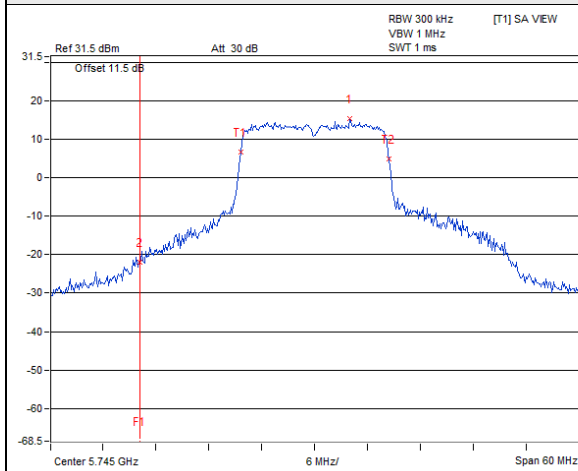
802.11be (EHT80) / Chain 0 : CH 42



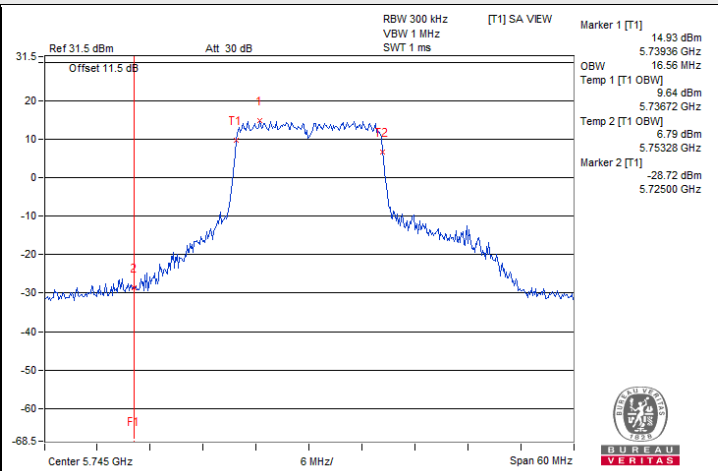
802.11be (EHT80) / Chain 1 : CH 42



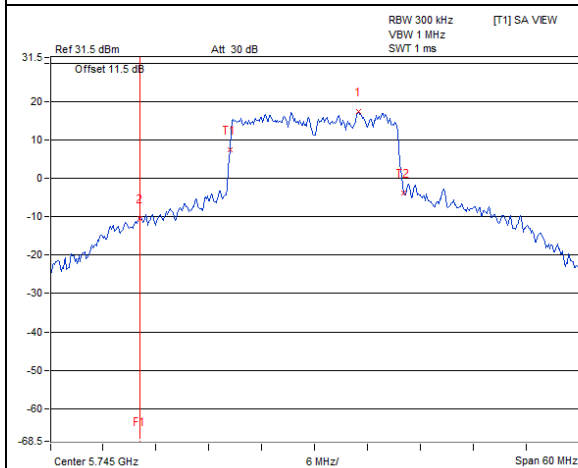
Spectrum Plot for nearby DFS band (DFS is required, if 99% OCP straddle into U-NII-2C)



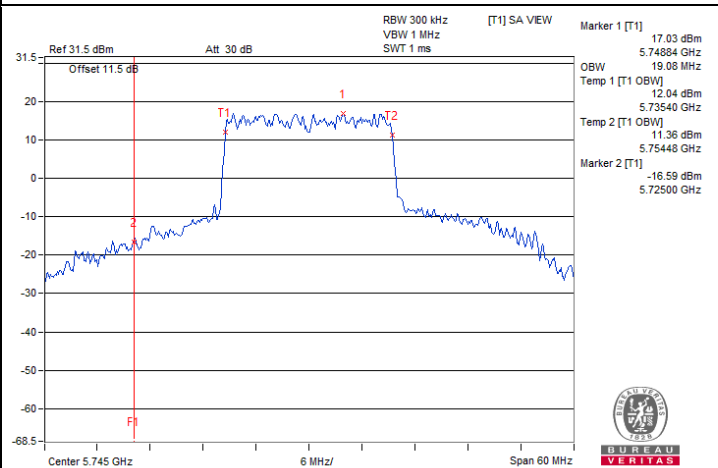
802.11a / Chain 0 : CH 149



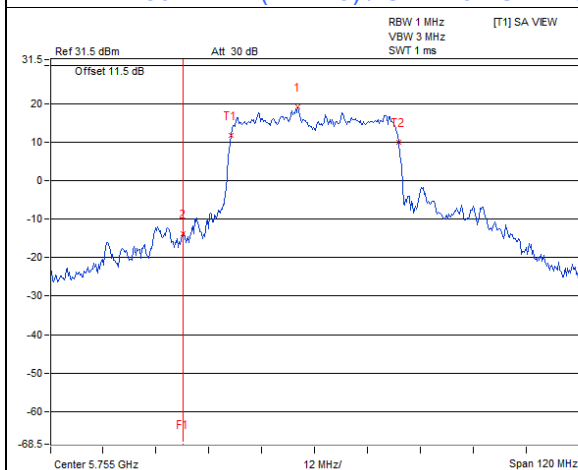
802.11a / Chain 1 : CH 149



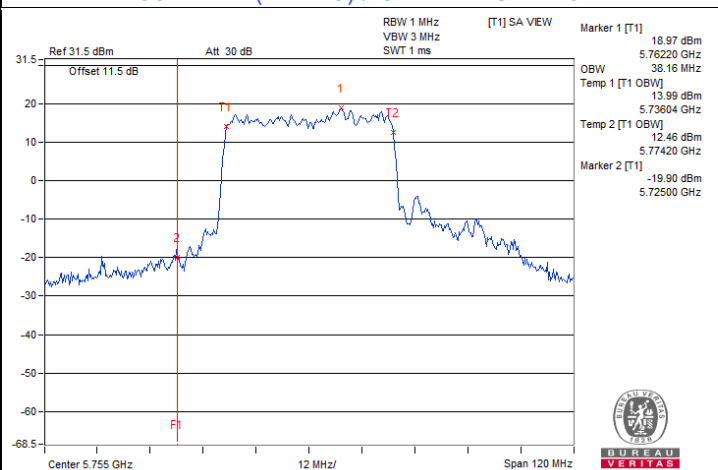
802.11be (EHT20) / Chain 0 : CH 149



802.11be (EHT20) / Chain 1 : CH 149

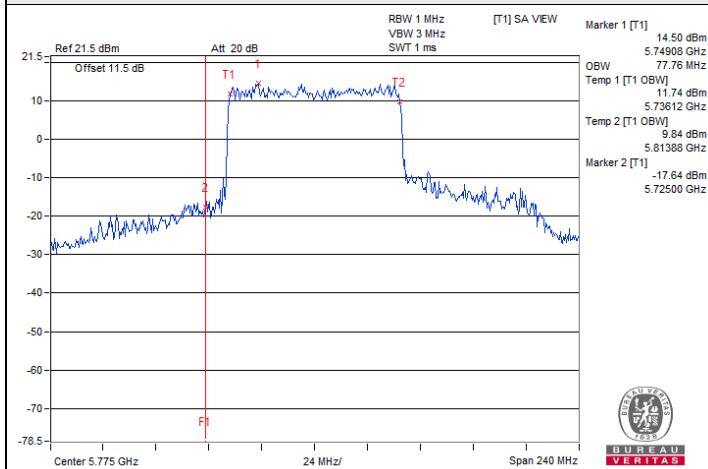


802.11be (EHT40) / Chain 0 : CH 151

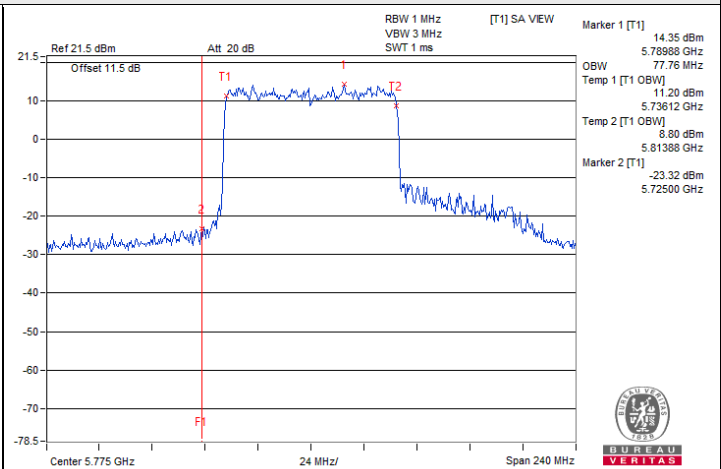


802.11be (EHT40) / Chain 1 : CH 151

Spectrum Plot for nearby DFS band (DFS is required, if 99% OCP straddle into U-NII-2C)



802.11be (EHT80) / Chain 0 : CH 155



802.11be (EHT80) / Chain 1 : CH 155

7.5 Frequency Stability

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Matthew Yang
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Frequency Stability Versus Temperature									
Operating Frequency: 5180 MHz									
Temp. (°C)	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
45	120	5179.9933	Pass	5179.9922	Pass	5179.9942	Pass	5179.9933	Pass
40	120	5179.9797	Pass	5179.9807	Pass	5179.979	Pass	5179.979	Pass
30	120	5179.9754	Pass	5179.973	Pass	5179.9752	Pass	5179.9764	Pass
20	120	5179.9867	Pass	5179.9833	Pass	5179.9871	Pass	5179.9875	Pass
10	120	5179.9985	Pass	5179.9982	Pass	5179.9976	Pass	5179.9994	Pass
0	120	5179.9962	Pass	5179.9932	Pass	5179.9957	Pass	5179.9963	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5180 MHz									
Temp. (°C)	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	5179.9947	Pass	5179.9899	Pass	5179.9913	Pass	5179.9935	Pass
	120	5179.9867	Pass	5179.9833	Pass	5179.9871	Pass	5179.9875	Pass
	102	5179.9948	Pass	5179.9906	Pass	5179.99	Pass	5179.993	Pass

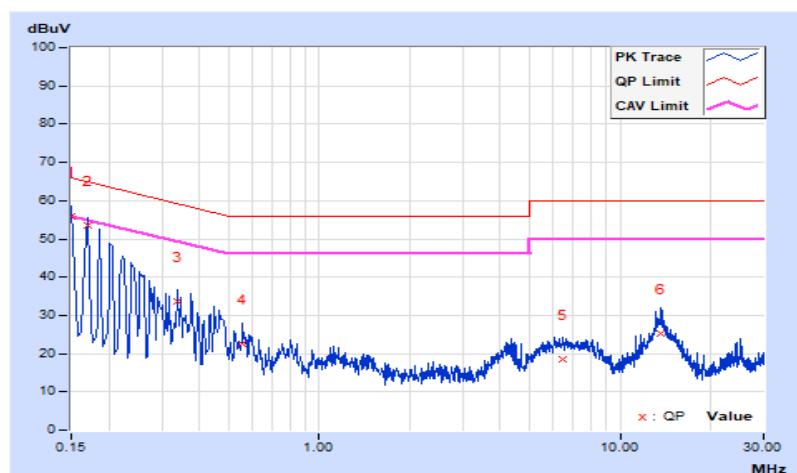
7.6 AC Power Conducted Emissions

RF Mode	802.11be (EHT20)	Channel	CH 165 : 5825 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	22°C, 67% RH
Tested By	Vincent Chen		

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	0.15000	10.37	45.40	23.56	55.77	33.93	66.00	56.00	-10.23	-22.07
2	0.17000	10.38	43.28	24.06	53.66	34.44	64.96	54.96	-11.30	-20.52
3	0.33800	10.46	23.29	9.81	33.75	20.27	59.25	49.25	-25.50	-28.98
4	0.55800	10.50	12.10	3.11	22.60	13.61	56.00	46.00	-33.40	-32.39
5	6.46200	10.69	7.69	2.48	18.38	13.17	60.00	50.00	-41.62	-36.83
6	13.67000	10.81	14.30	9.12	25.11	19.93	60.00	50.00	-34.89	-30.07

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

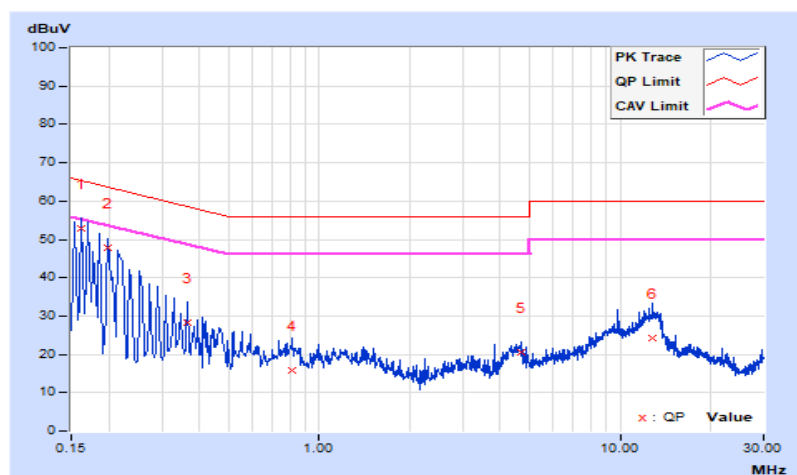


RF Mode	802.11be (EHT20)	Channel	CH 165 : 5825 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	22°C, 67% RH
Tested By	Vincent Chen		

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	0.16200	10.41	42.62	22.53	53.03	32.94	65.36	55.36	-12.33	-22.42
2	0.19800	10.44	37.38	18.91	47.82	29.35	63.69	53.69	-15.87	-24.34
3	0.36600	10.51	17.80	4.47	28.31	14.98	58.59	48.59	-30.28	-33.61
4	0.81400	10.55	5.25	1.60	15.80	12.15	56.00	46.00	-40.20	-33.85
5	4.67800	10.74	9.93	3.90	20.67	14.64	56.00	46.00	-35.33	-31.36
6	12.86600	10.93	13.48	8.31	24.41	19.24	60.00	50.00	-35.59	-30.76

Remarks:

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



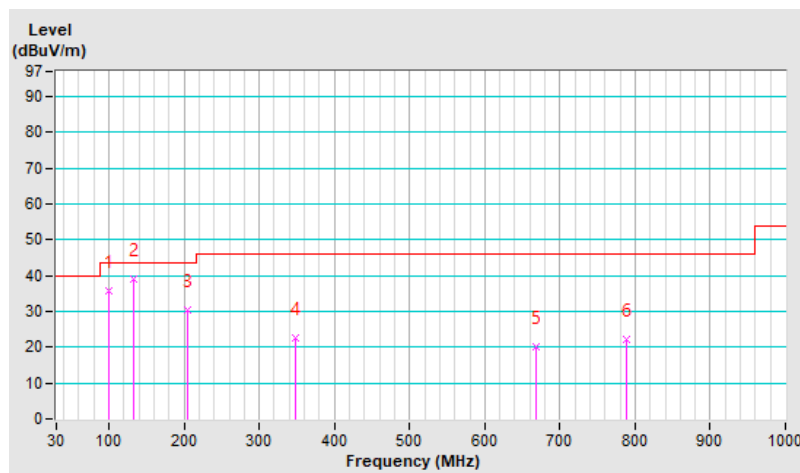
7.7 Unwanted Emissions below 1 GHz

RF Mode	802.11be (EHT20)	Channel	CH 165 : 5825 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

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	99.40	35.6 QP	43.5	-7.9	1.74 H	114	57.9	-22.3
2	133.45	38.9 QP	43.5	-4.6	1.54 H	209	57.5	-18.6
3	204.00	30.3 QP	43.5	-13.2	1.56 H	209	51.2	-20.9
4	348.99	22.7 QP	46.0	-23.3	1.54 H	111	38.8	-16.1
5	668.95	20.0 QP	46.0	-26.0	1.45 H	200	29.5	-9.5
6	788.82	22.2 QP	46.0	-23.8	1.03 H	106	29.6	-7.4

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.

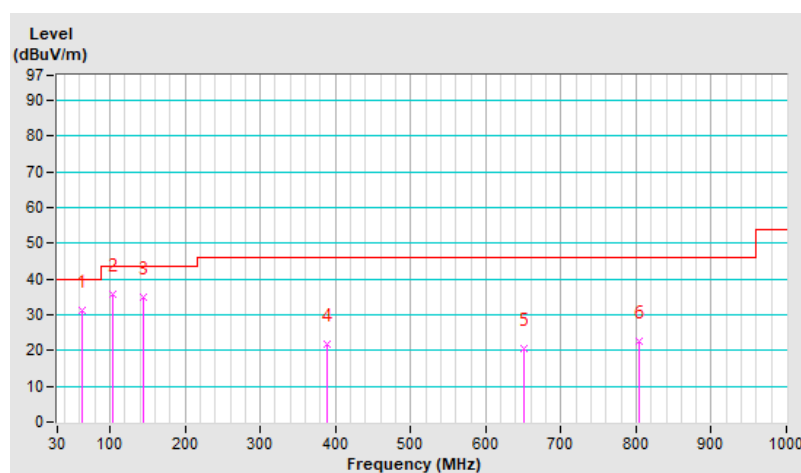


RF Mode	802.11be (EHT20)	Channel	CH 165 : 5825 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25°C, 60% RH
Tested By	Charles Hsiao		

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	62.25	31.1 QP	40.0	-8.9	1.44 V	188	49.9	-18.8
2	103.36	35.6 QP	43.5	-7.9	1.59 V	287	57.3	-21.7
3	144.00	35.1 QP	43.5	-8.4	1.29 V	248	53.0	-17.9
4	388.21	21.6 QP	46.0	-24.4	1.53 V	333	36.4	-14.8
5	649.91	20.4 QP	46.0	-25.6	1.89 V	99	29.9	-9.5
6	804.45	22.8 QP	46.0	-23.2	1.11 V	127	29.8	-7.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.



7.8 Unwanted Emissions above 1 GHz

RF Mode	802.11a	Channel	CH 36 : 5180 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	25°C, 60% RH
Tested By	Charles Hsiao		

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	5150.00	59.2 PK	74.0	-14.8	1.78 H	170	46.2	13.0
2	5150.00	48.1 AV	54.0	-5.9	1.78 H	170	35.1	13.0
3	*5180.00	112.0 PK			1.78 H	170	69.1	42.9
4	*5180.00	105.2 AV			1.78 H	170	62.3	42.9
5	#10360.00	55.8 PK	68.2	-12.4	1.15 H	328	37.0	18.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	63.0 PK	74.0	-11.0	1.77 V	241	50.0	13.0
2	5150.00	53.6 AV	54.0	-0.4	1.77 V	241	40.6	13.0
3	*5180.00	116.1 PK			1.80 V	240	73.2	42.9
4	*5180.00	109.6 AV			1.80 V	240	66.7	42.9
5	#10360.00	56.6 PK	68.2	-11.6	1.15 V	127	37.8	18.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, 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 40 : 5200 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	25°C, 60% RH
Tested By	Charles Hsiao		

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	*5200.00	114.1 PK			1.78 H	170	71.2	42.9
2	*5200.00	107.4 AV			1.78 H	170	64.5	42.9
3	#10400.00	56.1 PK	68.2	-12.1	1.51 H	154	37.3	18.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	118.0 PK			1.80 V	240	75.1	42.9
2	*5200.00	111.2 AV			1.80 V	240	68.3	42.9
3	#10400.00	56.5 PK	68.2	-11.7	1.64 V	333	37.7	18.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, 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 48 : 5240 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	25°C, 60% RH
Tested By	Charles Hsiao		

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	*5240.00	113.3 PK			1.78 H	170	70.3	43.0
2	*5240.00	106.2 AV			1.78 H	170	63.2	43.0
3	5350.00	55.8 PK	74.0	-18.2	1.78 H	170	42.4	13.4
4	5350.00	45.7 AV	54.0	-8.3	1.78 H	170	32.3	13.4
5	#10480.00	55.9 PK	68.2	-12.3	1.65 H	222	37.4	18.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	117.4 PK			1.77 V	240	74.4	43.0
2	*5240.00	110.1 AV			1.77 V	240	67.1	43.0
3	5350.00	56.0 PK	74.0	-18.0	1.77 V	240	42.6	13.4
4	5350.00	45.9 AV	54.0	-8.1	1.77 V	240	32.5	13.4
5	#10480.00	56.3 PK	68.2	-11.9	1.45 V	3	37.8	18.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, 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 149 : 5745 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	25°C, 60% RH
Tested By	Charles Hsiao		

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	#5620.02	57.0 PK	68.2	-11.2	1.76 H	114	43.6	13.4
2	*5745.00	112.2 PK			1.76 H	114	68.6	43.6
3	*5745.00	105.4 AV			1.76 H	114	61.8	43.6
4	#5983.98	57.2 PK	68.2	-11.0	1.76 H	114	42.9	14.3
5	11490.00	56.0 PK	74.0	-18.0	1.56 H	348	36.2	19.8
6	11490.00	46.6 AV	54.0	-7.4	1.56 H	348	26.8	19.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5603.20	59.8 PK	68.2	-8.4	2.19 V	236	46.4	13.4
2	*5745.00	117.2 PK			2.19 V	236	73.6	43.6
3	*5745.00	110.1 AV			2.19 V	236	66.5	43.6
4	#5952.75	58.9 PK	68.2	-9.3	2.19 V	236	44.6	14.3
5	11490.00	56.4 PK	74.0	-17.6	1.59 V	349	36.6	19.8
6	11490.00	47.2 AV	54.0	-6.8	1.59 V	349	27.4	19.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.

RF Mode	802.11a	Channel	CH 157 : 5785 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	25°C, 60% RH
Tested By	Charles Hsiao		

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	#5618.42	56.9 PK	68.2	-11.3	1.76 H	114	43.5	13.4
2	*5785.00	112.4 PK			1.76 H	114	68.8	43.6
3	*5785.00	105.3 AV			1.76 H	114	61.7	43.6
4	#5986.39	57.6 PK	68.2	-10.6	1.76 H	114	43.3	14.3
5	11570.00	56.6 PK	74.0	-17.4	1.57 H	222	36.6	20.0
6	11570.00	47.0 AV	54.0	-7.0	1.57 H	222	27.0	20.0
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	#5621.62	58.0 PK	68.2	-10.2	2.09 V	228	44.6	13.4
2	*5785.00	115.5 PK			2.09 V	228	71.9	43.6
3	*5785.00	108.0 AV			2.09 V	228	64.4	43.6
4	#5953.15	57.7 PK	68.2	-10.5	2.09 V	228	43.4	14.3
5	11570.00	57.3 PK	74.0	-16.7	1.03 V	200	37.3	20.0
6	11570.00	47.4 AV	54.0	-6.6	1.03 V	200	27.4	20.0

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	802.11a	Channel	CH 165 : 5825 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	25°C, 60% RH
Tested By	Charles Hsiao		

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	#5613.61	57.1 PK	68.2	-11.1	1.76 H	114	43.7	13.4
2	*5825.00	112.4 PK			1.76 H	114	68.7	43.7
3	*5825.00	105.3 AV			1.76 H	114	61.6	43.7
4	#5988.39	57.1 PK	68.2	-11.1	1.76 H	114	42.8	14.3
5	11650.00	57.0 PK	74.0	-17.0	1.57 H	214	37.1	19.9
6	11650.00	46.9 AV	54.0	-7.1	1.57 H	214	27.0	19.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5642.04	58.2 PK	68.2	-10.0	2.09 V	228	45.0	13.2
2	*5825.00	115.6 PK			2.09 V	228	71.9	43.7
3	*5825.00	108.4 AV			2.09 V	228	64.7	43.7
4	#5970.77	58.8 PK	68.2	-9.4	2.09 V	228	44.5	14.3
5	11650.00	57.4 PK	74.0	-16.6	1.59 V	206	37.5	19.9
6	11650.00	47.2 AV	54.0	-6.8	1.59 V	206	27.3	19.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, 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 36 : 5180 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	25°C, 60% RH
Tested By	Charles Hsiao		

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	5150.00	59.2 PK	74.0	-14.8	1.78 H	170	46.2	13.0
2	5150.00	48.3 AV	54.0	-5.7	1.78 H	170	35.3	13.0
3	*5180.00	113.7 PK			1.78 H	170	70.8	42.9
4	*5180.00	103.6 AV			1.78 H	170	60.7	42.9
5	#10360.00	55.9 PK	68.2	-12.3	1.64 H	111	37.1	18.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	62.1 PK	74.0	-11.9	2.03 V	242	49.1	13.0
2	5150.00	52.8 AV	54.0	-1.2	2.03 V	242	39.8	13.0
3	*5180.00	116.1 PK			2.00 V	240	73.2	42.9
4	*5180.00	106.2 AV			2.00 V	240	63.3	42.9
5	#10360.00	56.4 PK	68.2	-11.8	1.19 V	349	37.6	18.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, 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 40 : 5200 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	25°C, 60% RH
Tested By	Charles Hsiao		

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	*5200.00	116.3 PK			1.78 H	170	73.4	42.9
2	*5200.00	106.5 AV			1.78 H	170	63.6	42.9
3	#10400.00	56.1 PK	68.2	-12.1	1.45 H	295	37.3	18.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5200.00	120.2 PK			2.00 V	240	77.3	42.9
2	*5200.00	110.4 AV			2.00 V	240	67.5	42.9
3	#10400.00	56.8 PK	68.2	-11.4	1.14 V	144	38.0	18.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, 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 48 : 5240 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	25°C, 60% RH
Tested By	Charles Hsiao		

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	*5240.00	115.6 PK			1.78 H	170	72.6	43.0
2	*5240.00	105.5 AV			1.78 H	170	62.5	43.0
3	5350.00	55.7 PK	74.0	-18.3	1.78 H	170	42.3	13.4
4	5350.00	45.8 AV	54.0	-8.2	1.78 H	170	32.4	13.4
5	#10480.00	55.9 PK	68.2	-12.3	1.58 H	347	37.4	18.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	119.8 PK			2.43 V	250	76.8	43.0
2	*5240.00	109.8 AV			2.43 V	250	66.8	43.0
3	5350.00	56.1 PK	74.0	-17.9	2.43 V	250	42.7	13.4
4	5350.00	46.0 AV	54.0	-8.0	2.43 V	250	32.6	13.4
5	#10480.00	56.5 PK	68.2	-11.7	1.64 V	177	38.0	18.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, 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 149 : 5745 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	25°C, 60% RH
Tested By	Charles Hsiao		

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	#5637.64	56.9 PK	68.2	-11.3	1.76 H	114	43.6	13.3
2	*5745.00	115.1 PK			1.76 H	114	71.5	43.6
3	*5745.00	105.5 AV			1.76 H	114	61.9	43.6
4	#5989.99	56.8 PK	68.2	-11.4	1.76 H	114	42.5	14.3
5	11490.00	57.5 PK	74.0	-16.5	1.67 H	226	37.7	19.8
6	11490.00	47.4 AV	54.0	-6.6	1.67 H	226	27.6	19.8
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5638.44	59.1 PK	68.2	-9.1	2.19 V	244	45.8	13.3
2	*5745.00	119.1 PK			2.19 V	244	75.5	43.6
3	*5745.00	109.4 AV			2.19 V	244	65.8	43.6
4	#5994.39	57.6 PK	68.2	-10.6	2.19 V	244	43.3	14.3
5	11490.00	57.9 PK	74.0	-16.1	1.67 V	9	38.1	19.8
6	11490.00	47.8 AV	54.0	-6.2	1.67 V	9	28.0	19.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, 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 157 : 5785 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	25°C, 60% RH
Tested By	Charles Hsiao		

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	#5646.05	56.9 PK	68.2	-11.3	1.76 H	114	43.6	13.3
2	*5785.00	115.2 PK			1.76 H	114	71.6	43.6
3	*5785.00	107.7 AV			1.76 H	114	64.1	43.6
4	#5947.55	57.0 PK	68.2	-11.2	1.76 H	114	42.7	14.3
5	11570.00	57.5 PK	74.0	-16.5	1.68 H	226	37.5	20.0
6	11570.00	47.6 AV	54.0	-6.4	1.68 H	226	27.6	20.0
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	#5646.85	57.4 PK	68.2	-10.8	2.19 V	236	44.1	13.3
2	*5785.00	119.0 PK			2.19 V	236	75.4	43.6
3	*5785.00	109.2 AV			2.19 V	236	65.6	43.6
4	#5948.75	57.5 PK	68.2	-10.7	2.19 V	236	43.2	14.3
5	11570.00	57.7 PK	74.0	-16.3	1.65 V	263	37.7	20.0
6	11570.00	47.6 AV	54.0	-6.4	1.65 V	263	27.6	20.0

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 165 : 5825 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	25°C, 60% RH
Tested By	Charles Hsiao		

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	#5614.01	56.6 PK	68.2	-11.6	1.75 H	108	43.2	13.4
2	*5825.00	114.7 PK			1.75 H	108	71.0	43.7
3	*5825.00	104.6 AV			1.75 H	108	60.9	43.7
4	#5983.58	56.6 PK	68.2	-11.6	1.75 H	108	42.3	14.3
5	11650.00	57.5 PK	74.0	-16.5	1.45 H	259	37.6	19.9
6	11650.00	47.4 AV	54.0	-6.6	1.45 H	259	27.5	19.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5636.44	58.5 PK	68.2	-9.7	2.19 V	247	45.2	13.3
2	*5825.00	118.1 PK			2.19 V	247	74.4	43.7
3	*5825.00	108.6 AV			2.19 V	247	64.9	43.7
4	#5993.19	58.6 PK	68.2	-9.6	2.19 V	247	44.3	14.3
5	11650.00	57.8 PK	74.0	-16.2	1.15 V	2	37.9	19.9
6	11650.00	47.7 AV	54.0	-6.3	1.15 V	2	27.8	19.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, 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 38 : 5190 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	25°C, 60% RH
Tested By	Charles Hsiao		

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	5150.00	58.3 PK	74.0	-15.7	1.78 H	170	45.3	13.0
2	5150.00	48.0 AV	54.0	-6.0	1.78 H	170	35.0	13.0
3	*5190.00	109.3 PK			1.78 H	170	66.4	42.9
4	*5190.00	99.8 AV			1.78 H	170	56.9	42.9
5	5350.00	55.9 PK	74.0	-18.1	1.78 H	170	42.5	13.4
6	5350.00	45.9 AV	54.0	-8.1	1.78 H	170	32.5	13.4
7	#10380.00	56.0 PK	68.2	-12.2	1.11 H	111	37.3	18.7
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	5150.00	62.1 PK	74.0	-11.9	2.05 V	241	49.1	13.0
2	5150.00	53.4 AV	54.0	-0.6	2.05 V	241	40.4	13.0
3	*5190.00	113.3 PK			2.00 V	240	70.4	42.9
4	*5190.00	103.6 AV			2.00 V	240	60.7	42.9
5	5350.00	55.6 PK	74.0	-18.4	2.00 V	240	42.2	13.4
6	5350.00	45.8 AV	54.0	-8.2	2.00 V	240	32.4	13.4
7	#10380.00	56.2 PK	68.2	-12.0	1.45 V	279	37.5	18.7

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 46 : 5230 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	25°C, 60% RH
Tested By	Charles Hsiao		

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	5150.00	61.7 PK	74.0	-12.3	1.78 H	170	48.7	13.0
2	5150.00	49.8 AV	54.0	-4.2	1.78 H	170	36.8	13.0
3	*5230.00	110.1 PK			1.78 H	170	67.1	43.0
4	*5230.00	100.2 AV			1.78 H	170	57.2	43.0
5	5350.00	56.2 PK	74.0	-17.8	1.78 H	170	42.8	13.4
6	5350.00	46.0 AV	54.0	-8.0	1.78 H	170	32.6	13.4
7	#10460.00	55.7 PK	68.2	-12.5	1.45 H	294	37.2	18.5
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5150.00	64.9 PK	74.0	-9.1	2.00 V	240	51.9	13.0
2	5150.00	50.8 AV	54.0	-3.2	2.00 V	240	37.8	13.0
3	*5230.00	114.2 PK			2.00 V	240	71.2	43.0
4	*5230.00	104.1 AV			2.00 V	240	61.1	43.0
5	5350.00	56.2 PK	74.0	-17.8	2.00 V	240	42.8	13.4
6	5350.00	46.1 AV	54.0	-7.9	2.00 V	240	32.7	13.4
7	#10460.00	56.3 PK	68.2	-11.9	1.68 V	326	37.8	18.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency, 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 151 : 5755 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	25°C, 60% RH
Tested By	Charles Hsiao		

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	#5615.62	55.4 PK	68.2	-12.8	1.75 H	114	42.0	13.4
2	*5755.00	110.7 PK			1.75 H	114	67.1	43.6
3	*5755.00	100.6 AV			1.75 H	114	57.0	43.6
4	#5994.39	55.6 PK	68.2	-12.6	1.75 H	114	41.3	14.3
5	11510.00	57.5 PK	74.0	-16.5	1.59 H	208	37.6	19.9
6	11510.00	47.2 AV	54.0	-6.8	1.59 H	208	27.3	19.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5638.84	58.2 PK	68.2	-10.0	2.19 V	244	44.9	13.3
2	*5755.00	114.7 PK			2.19 V	244	71.1	43.6
3	*5755.00	104.8 AV			2.19 V	244	61.2	43.6
4	#5985.99	56.4 PK	68.2	-11.8	2.19 V	244	42.1	14.3
5	11510.00	57.6 PK	74.0	-16.4	1.64 V	111	37.7	19.9
6	11510.00	47.4 AV	54.0	-6.6	1.64 V	111	27.5	19.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, 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 159 : 5795 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	25°C, 60% RH
Tested By	Charles Hsiao		

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	#5626.03	56.4 PK	68.2	-11.8	1.75 H	282	43.1	13.3
2	*5795.00	111.0 PK			1.75 H	282	67.4	43.6
3	*5795.00	101.1 AV			1.75 H	282	57.5	43.6
4	#5953.55	55.9 PK	68.2	-12.3	1.75 H	282	41.6	14.3
5	11590.00	57.3 PK	74.0	-16.7	1.65 H	200	37.3	20.0
6	11590.00	47.1 AV	54.0	-6.9	1.65 H	200	27.1	20.0
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	#5607.21	56.7 PK	68.2	-11.5	2.25 V	246	43.3	13.4
2	*5795.00	114.3 PK			2.25 V	246	70.7	43.6
3	*5795.00	104.5 AV			2.25 V	246	60.9	43.6
4	#5995.60	56.5 PK	68.2	-11.7	2.25 V	246	42.2	14.3
5	11590.00	57.6 PK	74.0	-16.4	1.14 V	120	37.6	20.0
6	11590.00	47.7 AV	54.0	-6.3	1.14 V	120	27.7	20.0

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 42 : 5210 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	25°C, 60% RH
Tested By	Charles Hsiao		

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	5150.00	60.9 PK	74.0	-13.1	1.78 H	170	47.9	13.0
2	5150.00	48.1 AV	54.0	-5.9	1.78 H	170	35.1	13.0
3	*5210.00	106.0 PK			1.78 H	170	63.1	42.9
4	*5210.00	96.0 AV			1.78 H	170	53.1	42.9
5	5350.00	56.1 PK	74.0	-17.9	1.78 H	170	42.7	13.4
6	5350.00	45.9 AV	54.0	-8.1	1.78 H	170	32.5	13.4
7	#10420.00	55.7 PK	68.2	-12.5	1.57 H	5	37.0	18.7
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	5150.00	63.3 PK	74.0	-10.7	2.00 V	240	50.3	13.0
2	5150.00	53.5 AV	54.0	-0.5	2.00 V	240	40.5	13.0
3	*5210.00	110.0 PK			2.01 V	241	67.1	42.9
4	*5210.00	100.1 AV			2.01 V	241	57.2	42.9
5	5350.00	56.3 PK	74.0	-17.7	2.01 V	241	42.9	13.4
6	5350.00	46.2 AV	54.0	-7.8	2.01 V	241	32.8	13.4
7	#10420.00	56.4 PK	68.2	-11.8	1.45 V	144	37.7	18.7

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 (EHT80)	Channel	CH 155 : 5775 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	25°C, 60% RH
Tested By	Charles Hsiao		

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	#5630.83	65.5 PK	68.2	-2.7	1.75 H	282	52.2	13.3
2	*5775.00	107.1 PK			1.75 H	282	63.5	43.6
3	*5775.00	97.6 AV			1.75 H	282	54.0	43.6
4	#5933.13	64.6 PK	68.2	-3.6	1.75 H	282	50.5	14.1
5	11550.00	57.3 PK	74.0	-16.7	1.67 H	356	37.4	19.9
6	11550.00	47.2 AV	54.0	-6.8	1.67 H	356	27.3	19.9
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5616.42	65.3 PK	68.2	-2.9	2.25 V	249	51.9	13.4
2	*5775.00	110.6 PK			2.25 V	249	67.0	43.6
3	*5775.00	100.3 AV			2.25 V	249	56.7	43.6
4	#5938.34	66.0 PK	68.2	-2.2	2.25 V	250	51.9	14.1
5	11550.00	57.5 PK	74.0	-16.5	1.57 V	144	37.6	19.9
6	11550.00	47.4 AV	54.0	-6.6	1.57 V	144	27.5	19.9

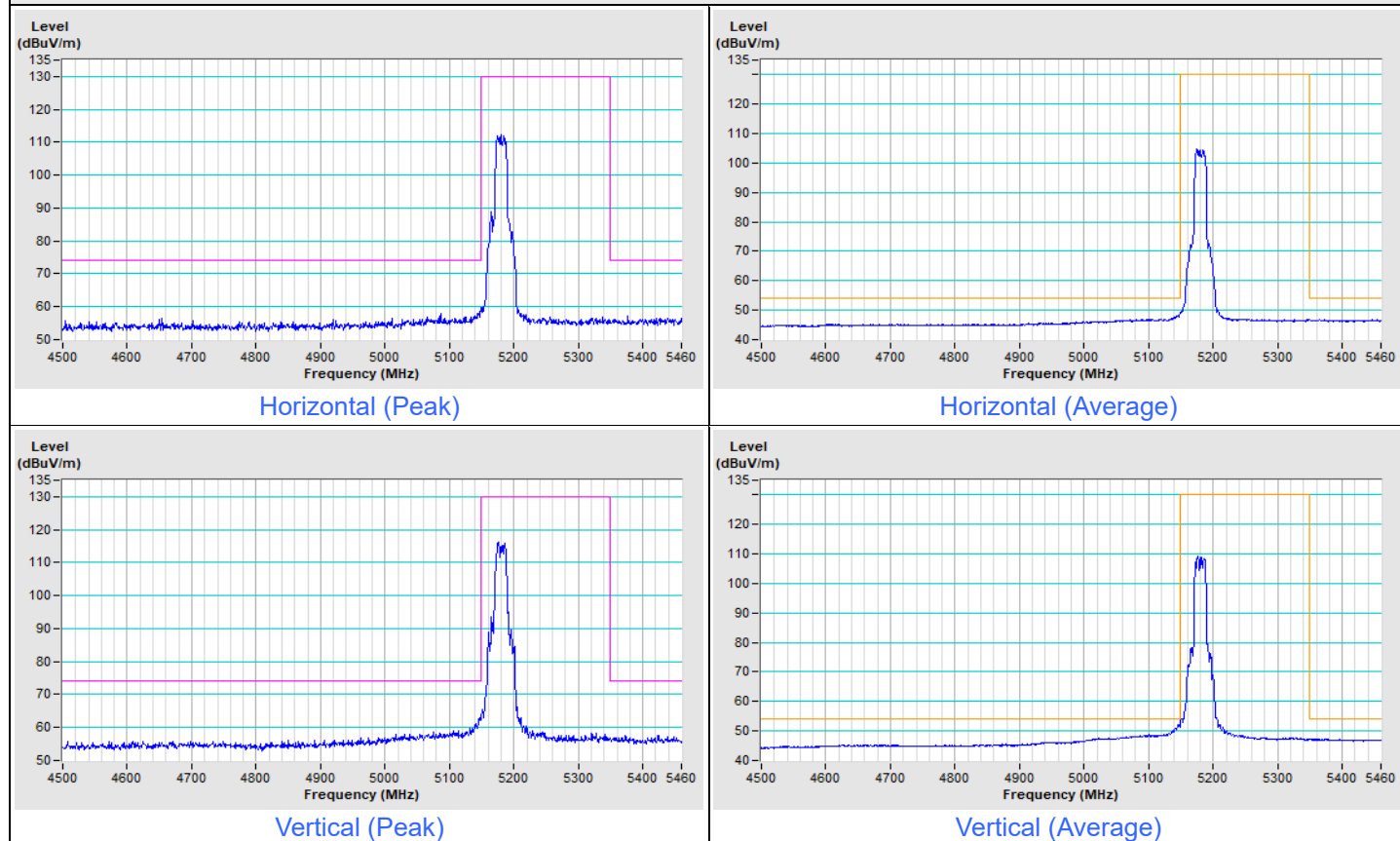
Remarks:

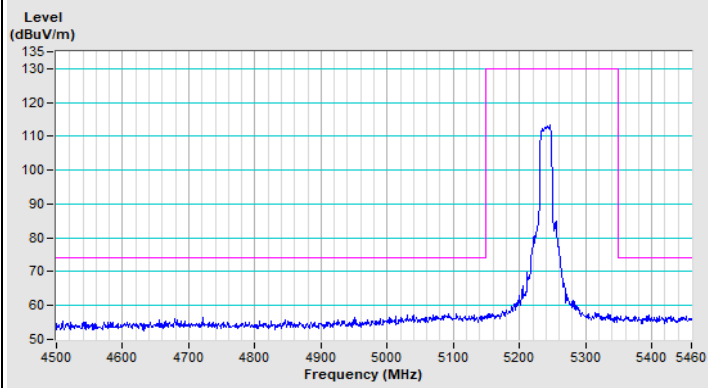
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

Plot of Band Edge

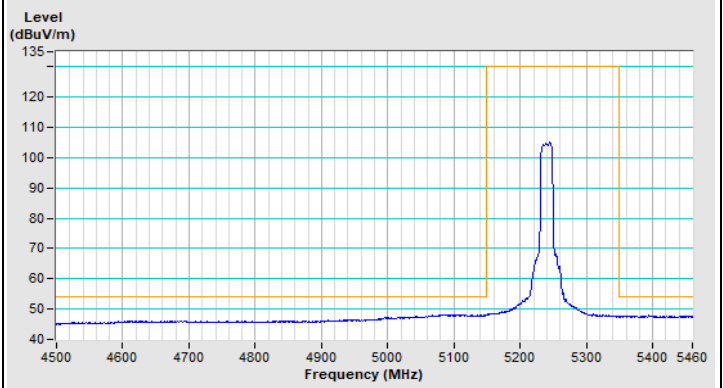
Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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802.11a Channel 36

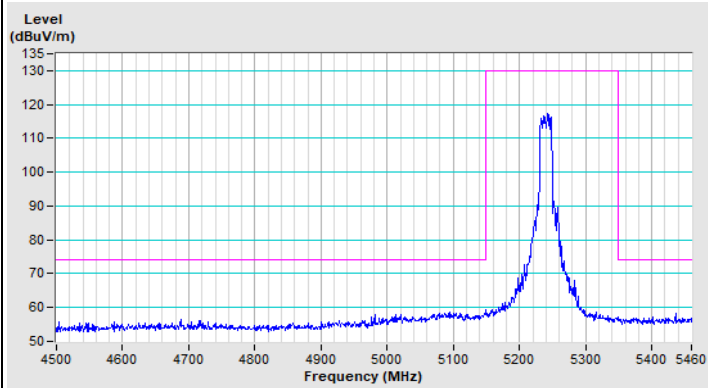


802.11a Channel 48

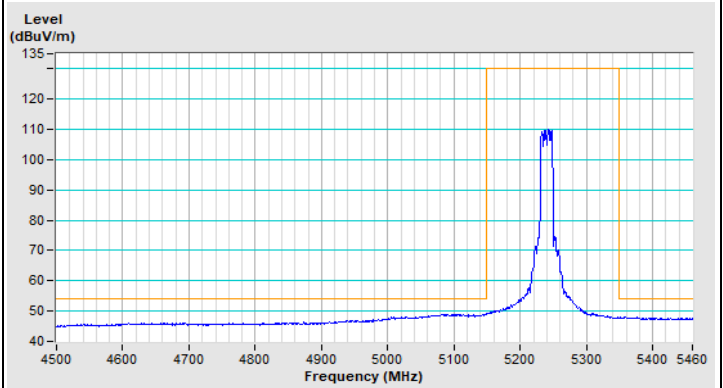
Horizontal (Peak)



Horizontal (Average)



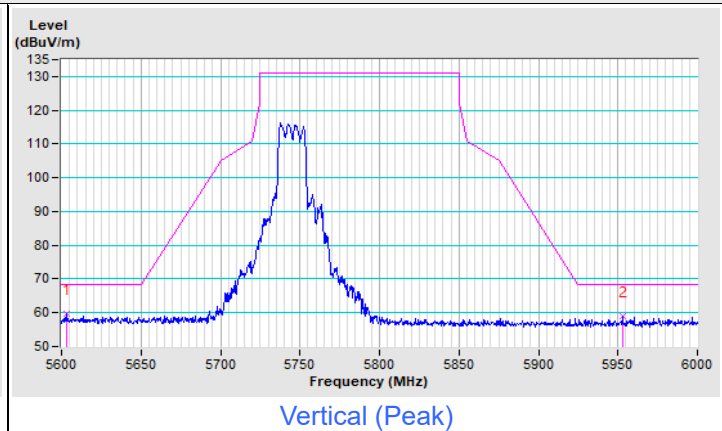
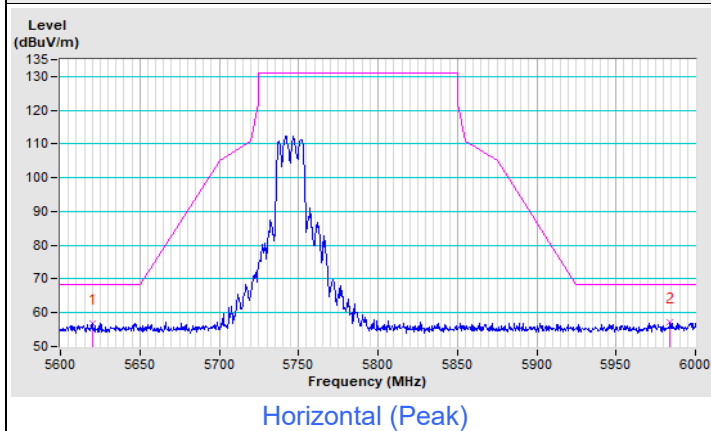
Vertical (Peak)



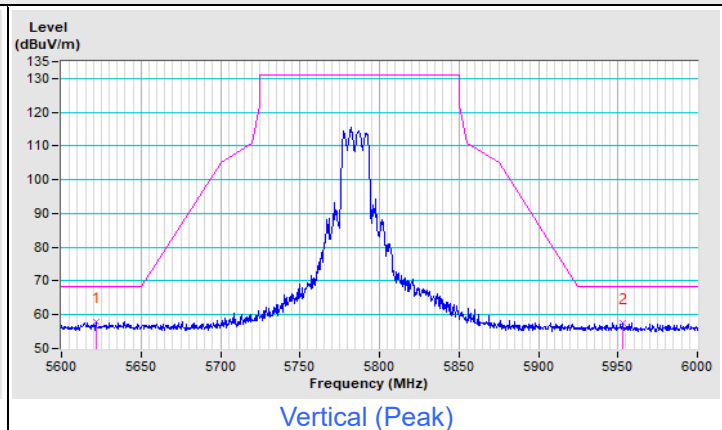
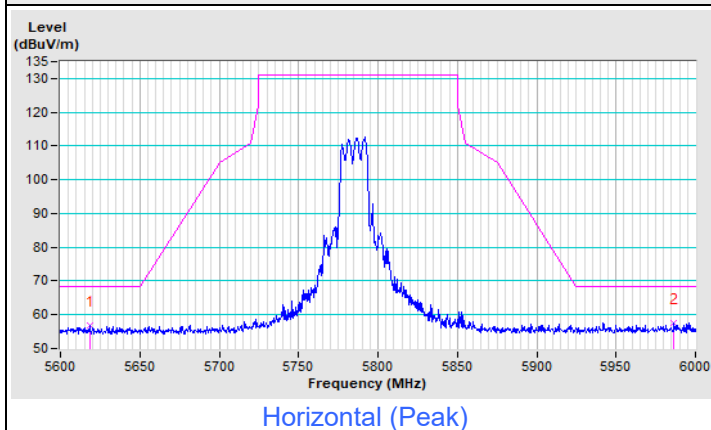
Vertical (Average)

Frequency Range	5.6 GHz ~ 6 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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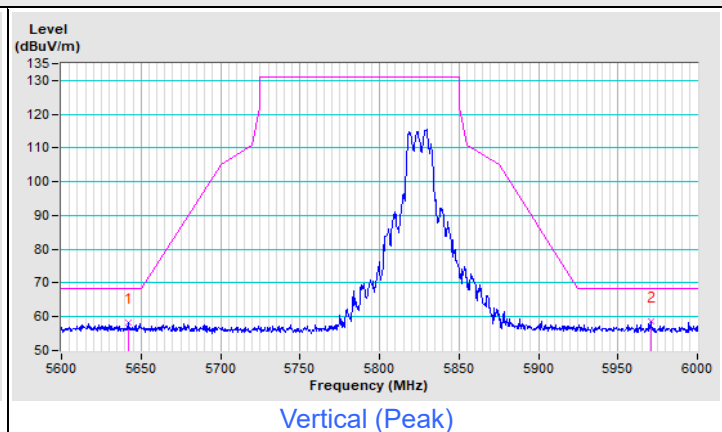
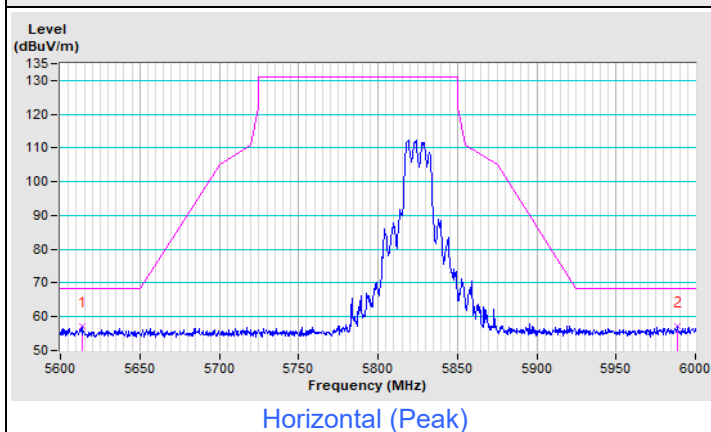
802.11a Channel 149



802.11a Channel 157

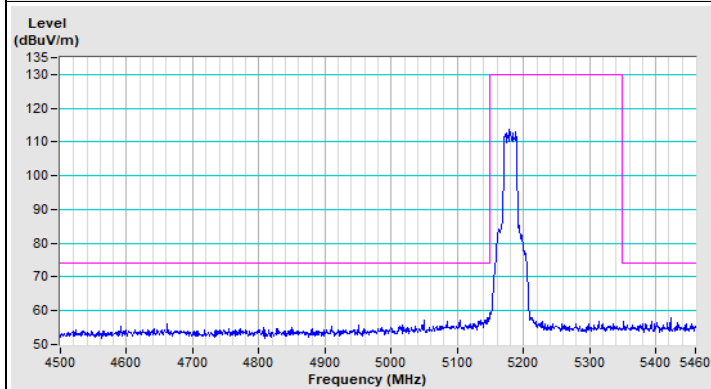


802.11a Channel 165

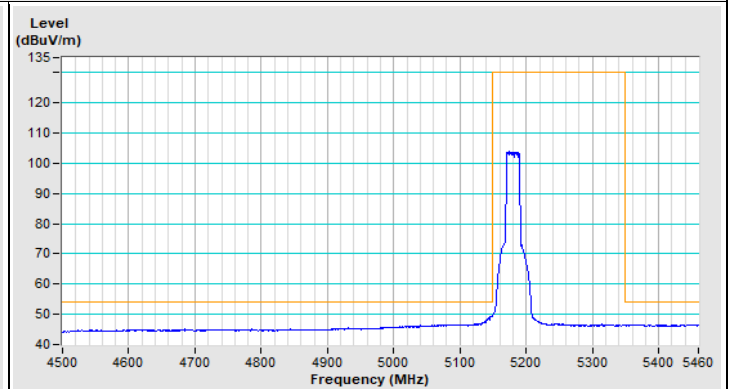


Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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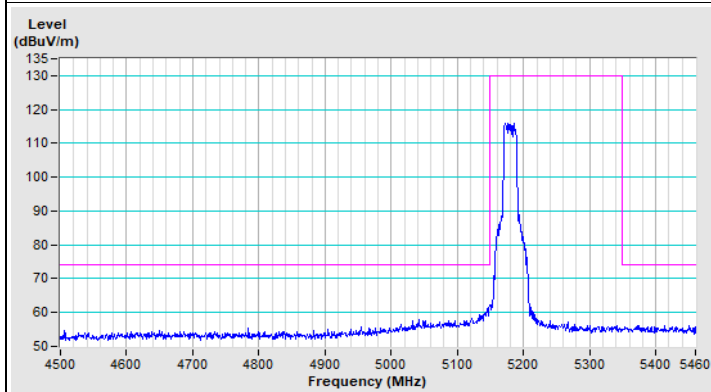
802.11be (EHT20) Channel 36



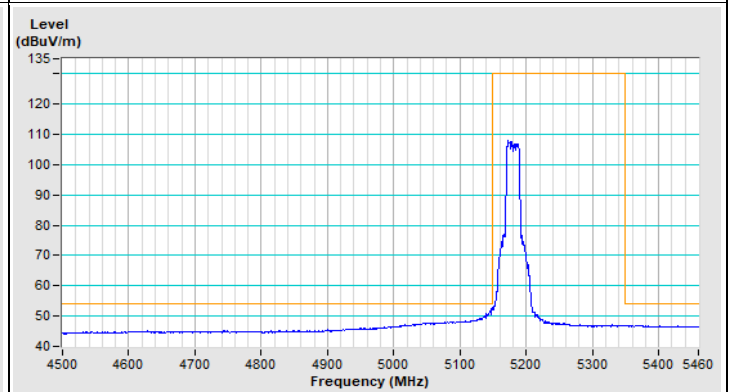
Horizontal (Peak)



Horizontal (Average)

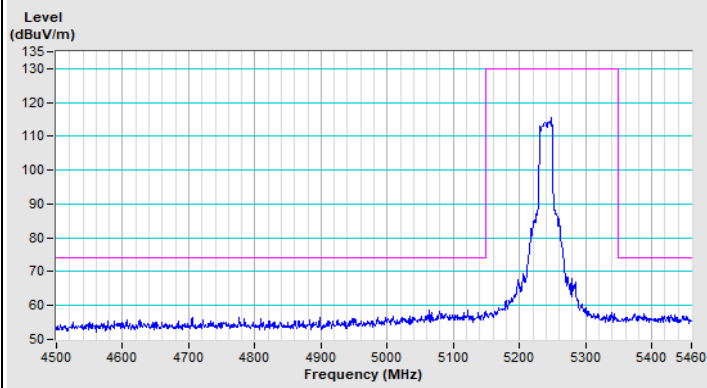


Vertical (Peak)

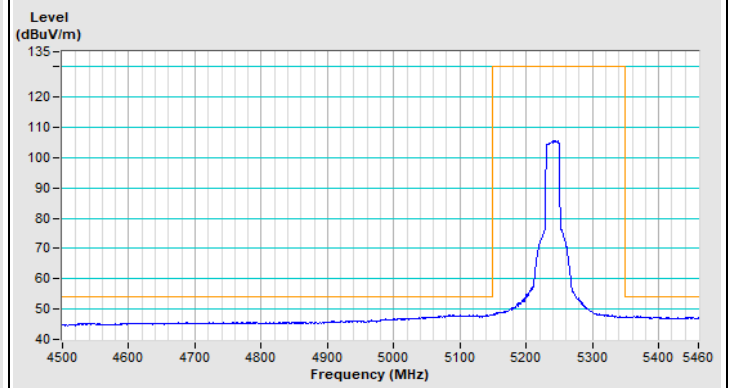


Vertical (Average)

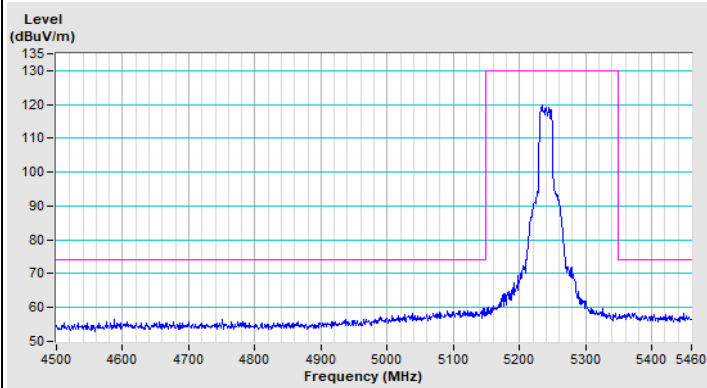
802.11be (EHT20) Channel 48



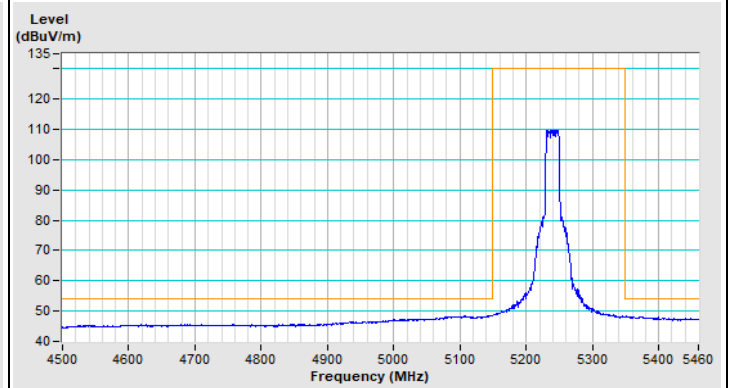
Horizontal (Peak)



Horizontal (Average)



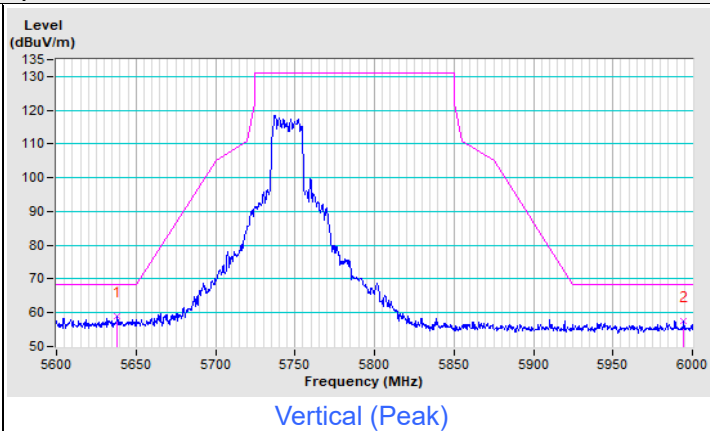
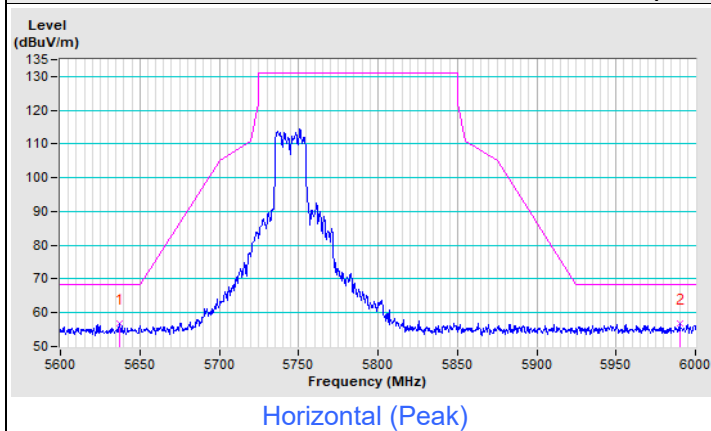
Vertical (Peak)



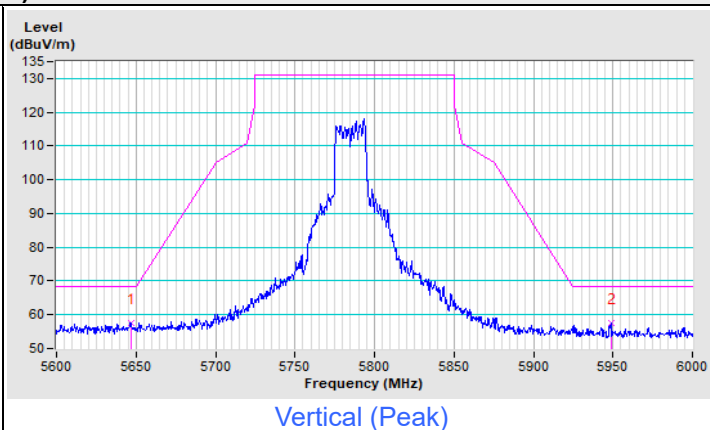
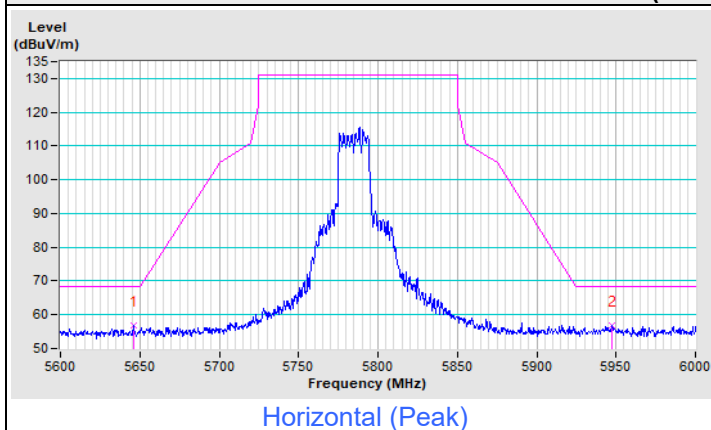
Vertical (Average)

Frequency Range	5.6 GHz ~ 6 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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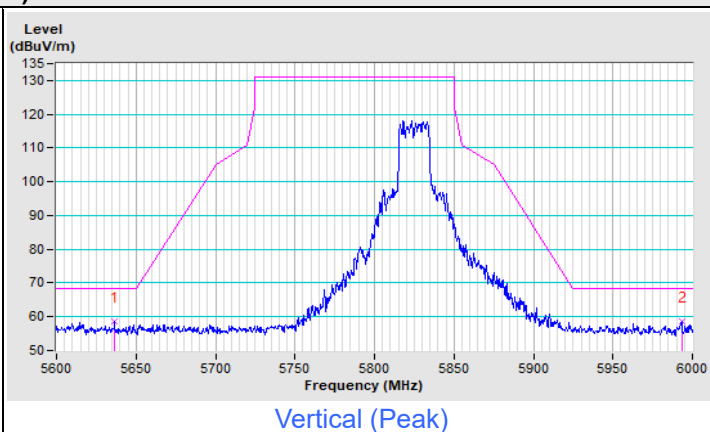
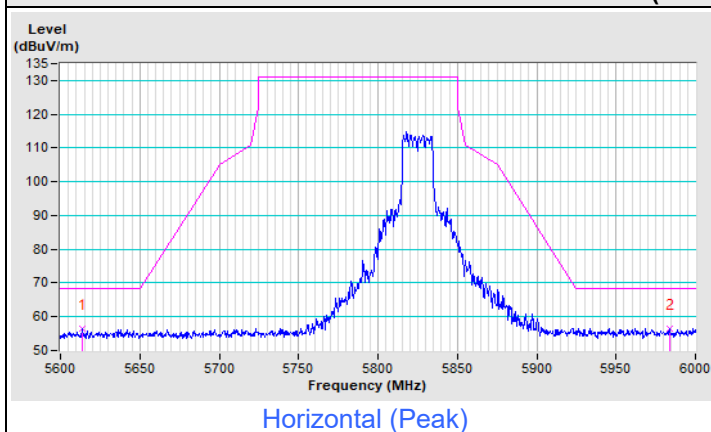
802.11be (EHT20) Channel 149



802.11be (EHT20) Channel 157

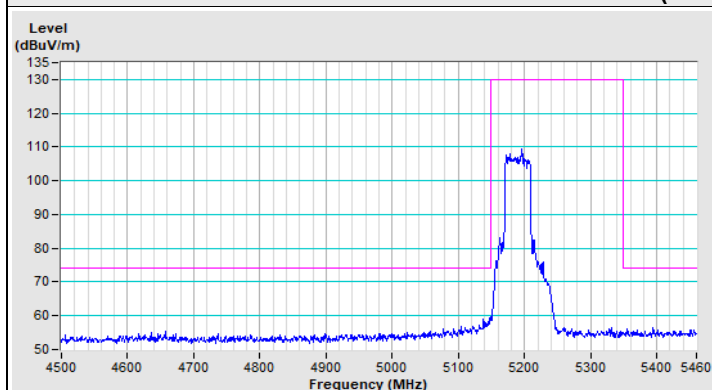


802.11be (EHT20) Channel 165

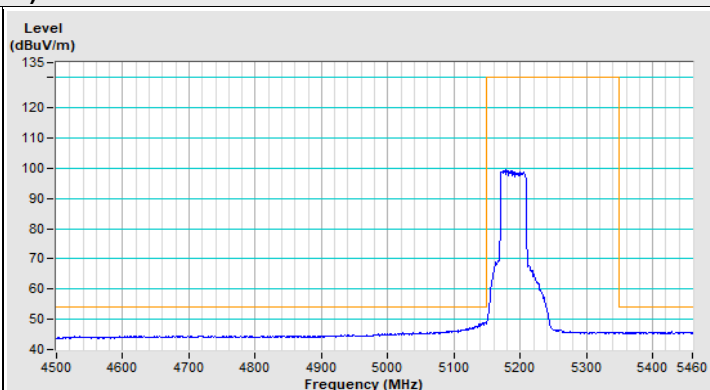


Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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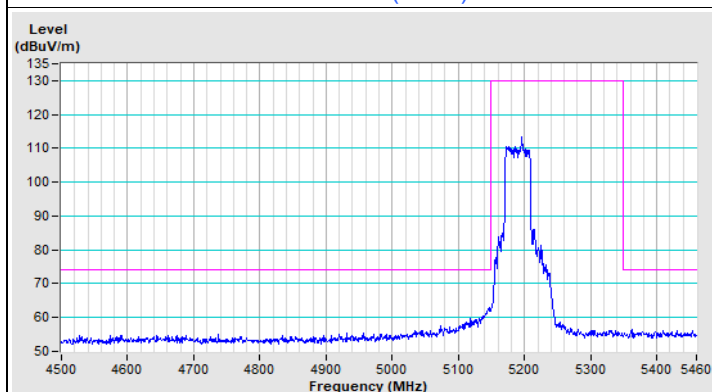
802.11be (EHT40) Channel 38



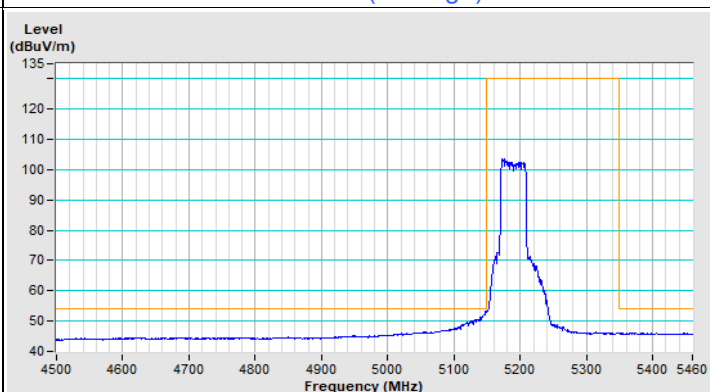
Horizontal (Peak)



Horizontal (Average)

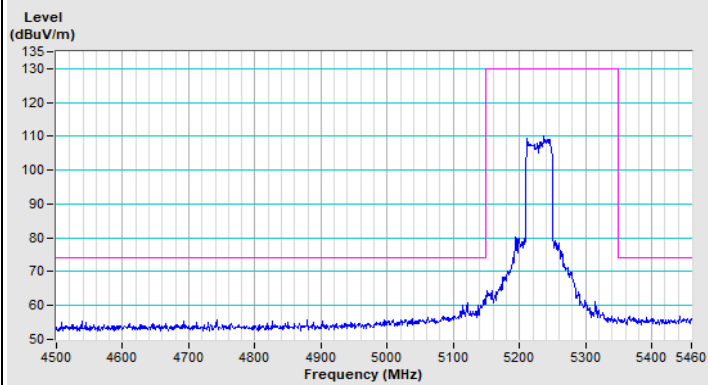


Vertical (Peak)

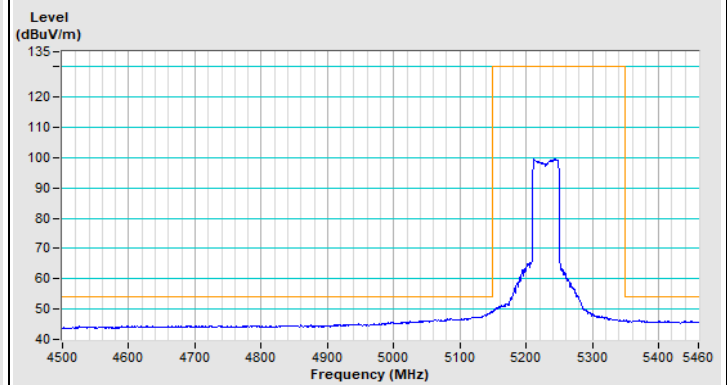


Vertical (Average)

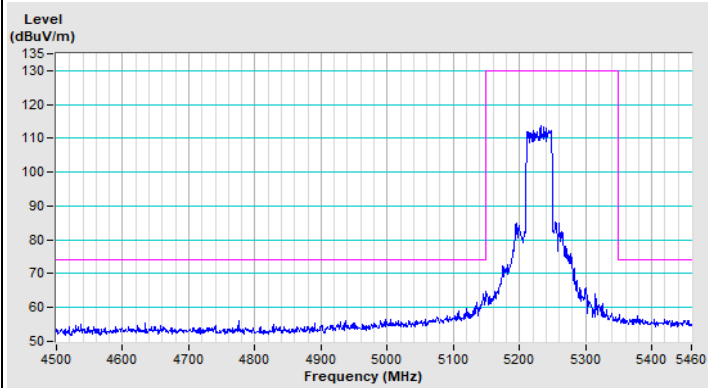
802.11be (EHT40) Channel 46



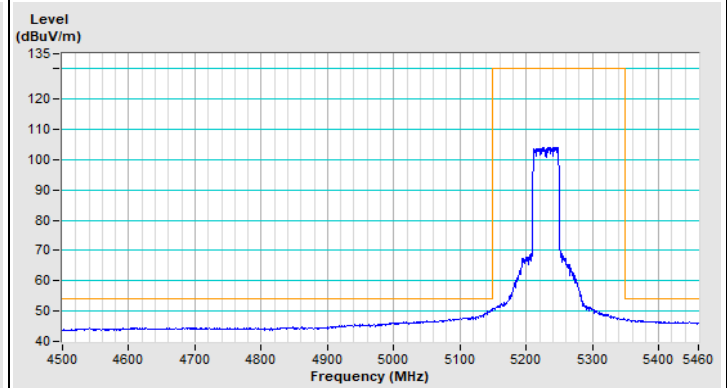
Horizontal (Peak)



Horizontal (Average)



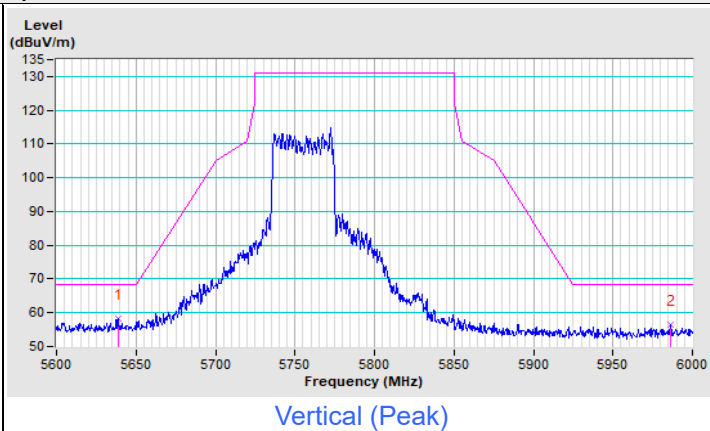
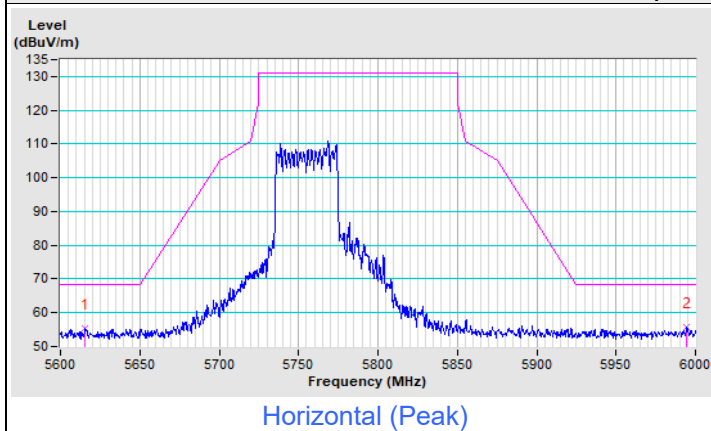
Vertical (Peak)



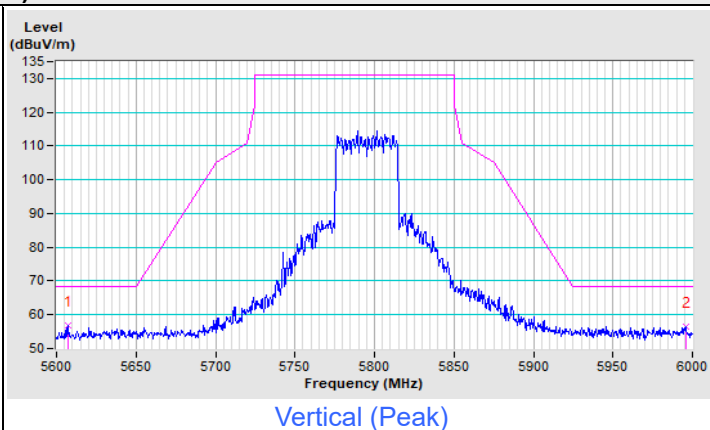
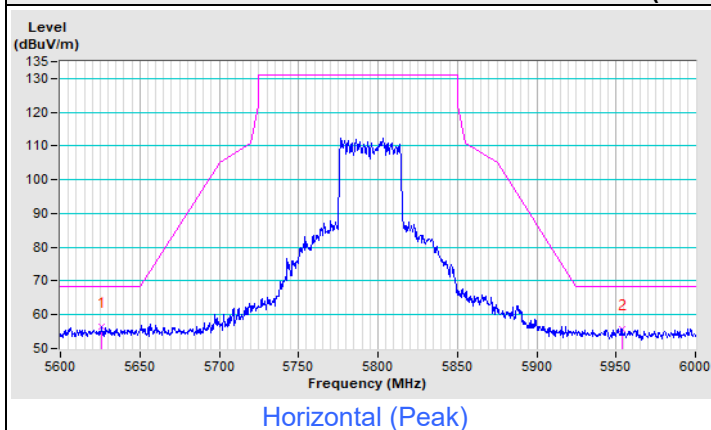
Vertical (Average)

Frequency Range	5.6 GHz ~ 6 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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802.11be (EHT40) Channel 151

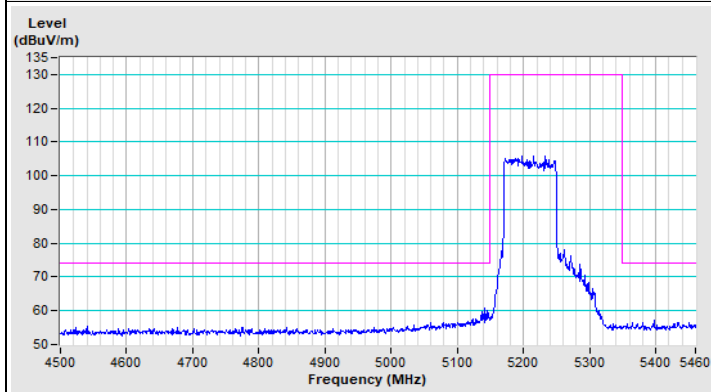


802.11be (EHT40) Channel 159

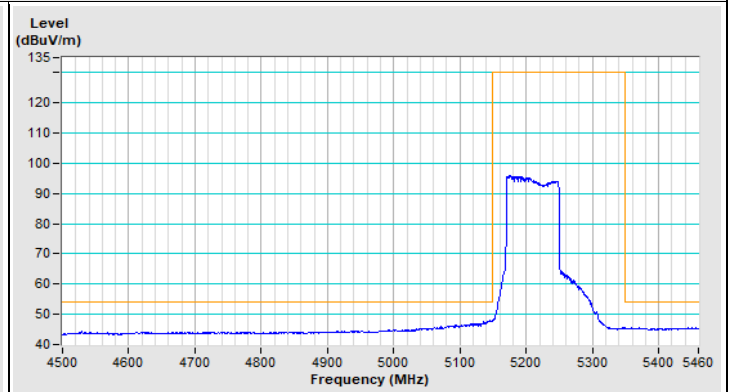


Frequency Range	4.5 GHz ~ 5.46 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
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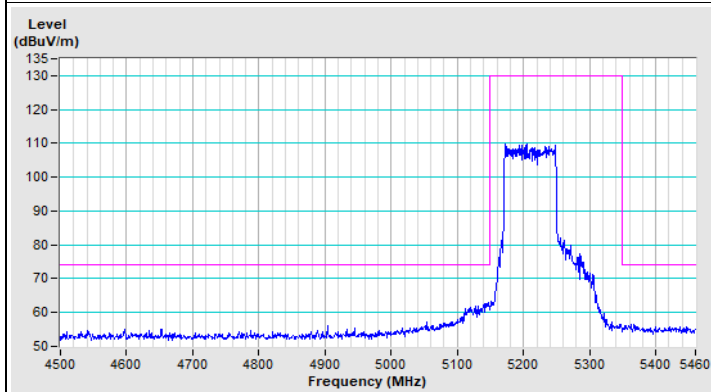
802.11be (EHT80) Channel 42



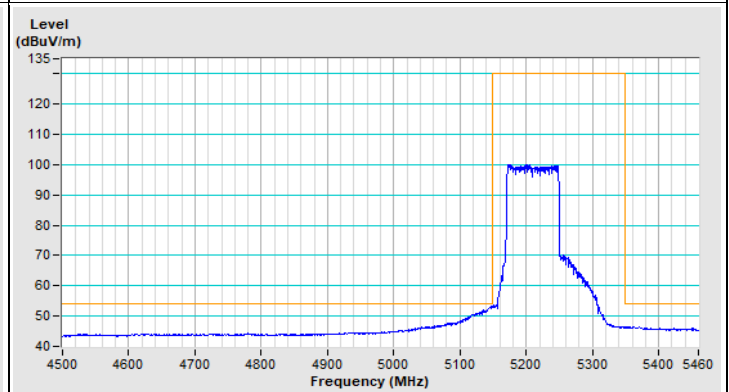
Horizontal (Peak)



Horizontal (Average)



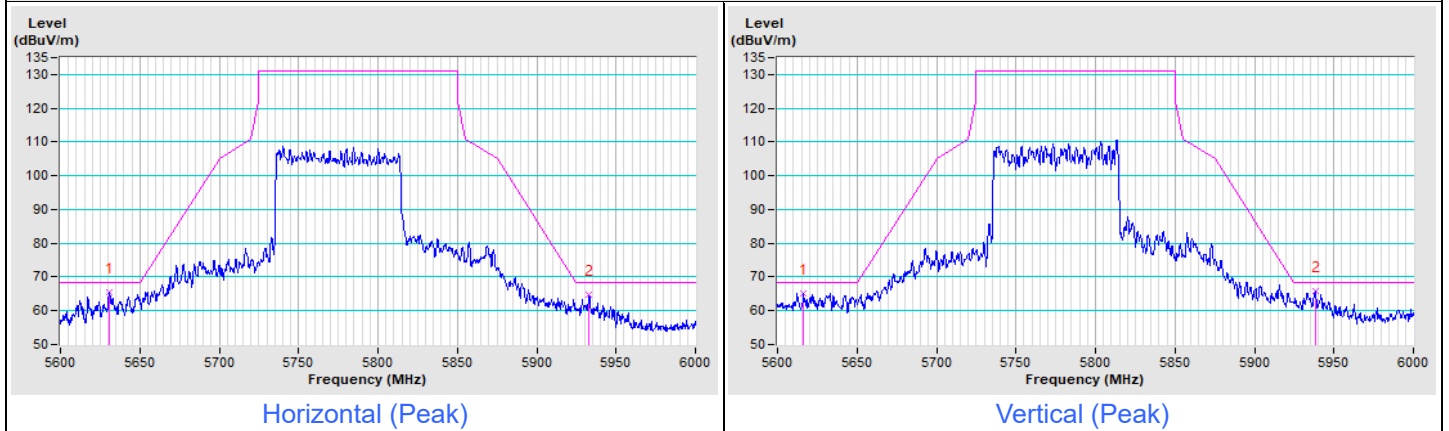
Vertical (Peak)



Vertical (Average)

Frequency Range	5.6 GHz ~ 6 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak
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802.11be (EHT80) Channel 155



8 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo)

9 Information of the Testing Laboratories

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

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

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

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