



FCC PART 15E TEST REPORT No.25T04Z100772-003

for

WESTALA TECHNOLOGIES INC.

Wi-Fi7 Wall Plate AP

WS-AP72W

FCC ID: 2BQVXWSAP72W

with

Hardware Version: Ver.C

Software Version: AP72W_1.0.XX

Issued Date: 2025-09-09

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of CTTL.

Test Laboratory:

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
25T04Z100772-003	Rev.0	1st edition	2025-08-04
25T04Z100772-003	Rev.1	Add information in P7. Add DG gain in P13. Add note in P16. Add the test instrument (antenna) information for radiation measurements below 30MHz in P10. Add the 30MHz-1GHz test results in P24. Add the note for below 30MHz and above 18GHz in P24.	2025-09-03
25T04Z100772-003	Rev.2	Add The note for equipment in P10. Add KDB 662911 in P8. Update address in P6. Update the testing start date in P5. Update calibration period for equipment in P10.	2025-09-09

Note: the latest revision of the test report supersedes all previous version.

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1. Test Laboratory

1.1. Introduction & Accreditation

Telecommunication Technology Labs, CAICT is an ISO/IEC 17025:2017 accredited test laboratory under American Association for Laboratory Accreditation (A2LA) with lab code 7049.01, and is also an FCC accredited test laboratory (CN1349), and ISED accredited test laboratory (CAB identifier:CN0066). The detail accreditation scope can be found on A2LA website.

1.2. Testing Location

Conducted testing Location:CTTL(Gaolizhang Road)

Address: Cuihu Cloud Center, No.1, Gaolizhang Road, Wenquan,
Haidian District, Beijing, China

Radiated testing Location: CTTL(BDA)

Address: No.18A, Kangding Street, Beijing Economic-Technology
Development Area, Beijing, P. R. China 100176

1.3. Testing Environment

Normal Temperature: 15-35°C

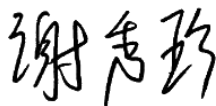
Relative Humidity: 20-75%

1.4. Project date

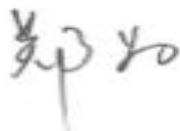
Testing Start Date: 2025-05-12

Testing End Date: 2025-07-04

1.5. Signature



Xie Xiuzhen
(Prepared this test report)



Zheng Wei
(Reviewed this test report)



Pang Shuai
(Approved this test report)



2. Client Information

2.1. Applicant Information

Company Name: WESTALA TECHNOLOGIES INC.
Address: 13930 Willow Bend Dr, Frisco TX 75035, United States
Contact: Robert HAN
Email: robert.han@westalatech.com
Telephone: 469-274-4814
Fax: /

2.2. Manufacturer Information

Company Name: WESTALA TECHNOLOGIES INC.
Address: 13930 Willow Bend Dr, Frisco TX 75035, United States
Contact: Robert HAN
Email: robert.han@westalatech.com
Telephone: 469-274-4814
Fax: /

3. Equipment Under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

Description	Wi-Fi7 Wall Plate AP
Model name	WS-AP72W
FCC ID	2BQVXWSAP72W
WLAN Frequency Band	ISM Band: 5725MHz~5850MHz
Type of modulation	OFDM
Normal Voltage	48V
Extreme High Voltage	57V
Extreme Low Voltage	40V
Partial RU	Not Support
Wi-Fi Mode	802.11a/n/ac/ax/be
Bandwidth	20M/40M/80M

3.2. Internal Identification of EUT used during the test

EUT ID*	IMEI	HW Version	SW Version	Date of receipt
UT01a	1106000012258100001	Ver.C	AP72W_1.0.XX	2025-04-15
UT02a	1106000012258100002	Ver.C	AP72W_1.0.XX	2025-05-26
UT05a	1106000012258100003	Ver.C	AP72W_1.0.XX	2025-05-22

*EUT ID: is used to identify the test sample in the lab internally.

UT01a/02a is used for Conduction test, UT05a is used for Radiation test.

3.3. Internal Identification of AE used during the test

AE ID*	Description	Type	SN
AE1	POE adapter	/	/

*AE ID: is used to identify the test sample in the lab internally.

3.4. General Description

Equipment Under Test (EUT) is a model of Wi-Fi7 Wall Plate AP with integrated antenna. It consists of normal options: Battery and Charger.

Manual and specifications of the EUT were provided to fulfil the test.

Samples undergoing test were selected by the Client.

4. Reference Documents

4.1. Documents supplied by applicant

EUT feature information is supplied by the applicant or manufacturer, which is the basis of testing.

4.2. Reference Documents for testing

The following documents listed in this section are referred for testing.

FCC Part15	FCC CFR 47, Part 15, Subpart C and E:	
	15.205 Restricted bands of operation;	
	15.207 Conducted limits;	2021
	15.209 Radiated emission limits, general requirements;	
ANSI C63.10	15.407 General technical requirements.	
	Methods of Measurement of Radio-Noise Emissions from	
	Low-Voltage Electrical and Electronic Equipment in the	2013
UNII: KDB 789033 D02	Range of 9 kHz to 40 GHz	
	General U-NII Test Procedures New Rules v02r01	2017-12
KDB 662911 D01	Emissions Testing of Transmitters with Multiple Outputs in the Same Band(e.g., MIMO, Smart Antenna, etc)	2013-10

Note:UNII: KDB 789033 D02 is not in the scope of ISO/IEC 17025 accreditation by A2LA.

5. Laboratory Environment

Conducted RF performance testing is performed in shielding room.

EMC performance testing is performed in Semi-anechoic chamber.

6. Test Results

6.1. Summary of Test Results

SUMMARY OF MEASUREMENT RESULTS	Sub-clause of Part15C/E	Sub-clause of IC	Verdict
Maximum Peak Output Power	15.407 (a)	/	P
Peak Power Spectral Density	15.407 (a)	/	P
6dB Emission Bandwidth	15.407 (e)	/	P
Band Edges Compliance - Radiated	15.407, 15.205, 15.209	/	P
Transmitter Spurious Emission - Radiated	15.407, 15.205, 15.209	/	P
AC Powerline Conducted Emission	15.207	/	P

Please refer to **ANNEX A** for detail.

Terms used in Verdict column

P	Pass, The EUT complies with the essential requirements in the standard.
NM	Not measured, The test was not measured by CTTL
NA	Not Applicable, The test was not applicable
F	Fail, The EUT does not comply with the essential requirements in the standard

6.2. Statements

CTTL has evaluated the test cases as listed in section 6.1 of this report for the EUT specified in section 3 according to the standards or reference documents listed in section 4.

This report only deals with the WLAN function among the features described in section 3.

6.3. Test Conditions

For this report, all the test cases are tested under normal temperature and normal voltage, and also under norm humidity, the specific condition is shown as follows:

Temperature	26°C
Voltage	48V
Humidity	44%

7. Test Facilities Utilized

Conducted test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Period	Calibration Due date
1	Vector Signal Analyzer	FSW67	104051	Rohde & Schwarz	13 months	2026-06-09
2	LISN	ENV216	101459	Rohde & Schwarz	12 months	2026-05-07
3	Test Receiver	ESCI 3	100766	Rohde & Schwarz	12 months	2026-05-07
4	Attenuator	10dB/2W	/	Rosenberger	/	/

Radiated emission test system

3 m Anechoic Chamber 2

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Period	Calibration Due date
1	Test Receiver(note)	ESU26	100376	Rohde & Schwarz	12 months	2026-06-20
2	Antenna	HFH2-Z2	829324/007	Rohde & Schwarz	12 months	2026-01-04
3	BiLog Antenna	VULB9163	01177	Schwarzbeck	12 months	2025-11-19
4	Dual-Ridge Waveguide Horn Antenna	3117	00119021	ETS-Lindgren	12 months	2025-09-08
5	Spectrum Analyzer	FSV40	101047	Rohde & Schwarz	12 months	2025-07-18
6	Antenna	LB-180400-25-C-KF	J211060826	A-INFO	12 months	2025-07-24

Note: The equipment used after 2025.06.21

BDA

Test Item	Test Software and Version	Software Vendor
Band Edges Compliance - Radiated	EMC32 V8.53.0	R&S
Transmitter Spurious Emission - Radiated	EMC32 V8.53.0	R&S
AC Powerline Conducted Emission	EMC32 V8.53.0	R&S

8. Measurement Uncertainty

8.1. Transmitter Output Power

Measurement Uncertainty: 0.387dB,k=1.96

8.2. Peak Power Spectral Density

Measurement Uncertainty: 0.705dB,k=1.96

8.3. 6dB Emission Bandwidth

Measurement Uncertainty: 60.80Hz,k=1.96

8.4. Band Edges Compliance

Measurement Uncertainty : 0.62dB,k=1.96

8.5. Spurious Emissions

Conducted (k=1.96)

Frequency Range	Uncertainty(dB)
$30\text{MHz} \leq f \leq 2\text{GHz}$	1.22
$2\text{GHz} \leq f \leq 3.6\text{GHz}$	1.22
$3.6\text{GHz} \leq f \leq 8\text{GHz}$	1.22
$8\text{GHz} \leq f \leq 12.75\text{GHz}$	1.51
$12.75\text{GHz} \leq f \leq 26\text{GHz}$	1.51
$26\text{GHz} \leq f \leq 40\text{GHz}$	1.59

Radiated (k=2)

Frequency Range	Uncertainty(dB)
9kHz-30MHz	/
$30\text{MHz} \leq f \leq 1\text{GHz}$	5.73
$1\text{GHz} \leq f \leq 18\text{GHz}$	5.58
$18\text{GHz} \leq f \leq 40\text{GHz}$	3.37

8.6. AC Power-line Conducted Emission

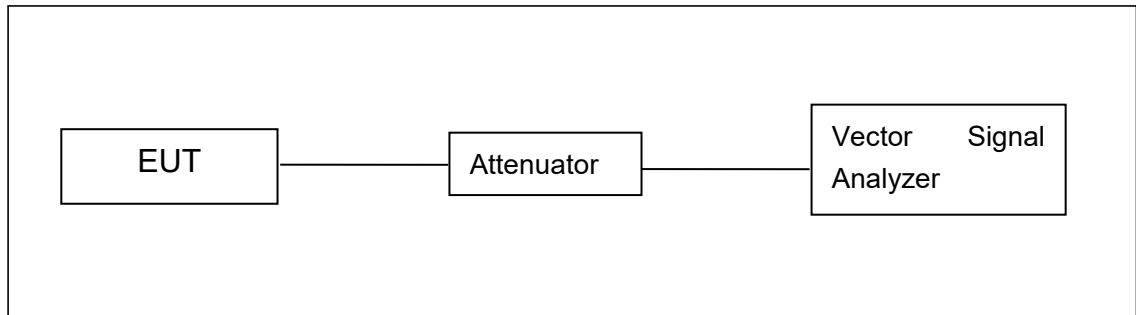
Measurement Uncertainty : 3.10dB,k=2

ANNEX A: MEASUREMENT RESULTS

A.1. Measurement Method

A.1.1. Conducted Measurements

- 1). Connect the EUT to the test system correctly.
- 2). Set the EUT to the required work mode.
- 3). Set the EUT to the required channel.
- 4). Set the spectrum analyzer to start measurement.
- 5). Record the values. Vector Signal Analyzer

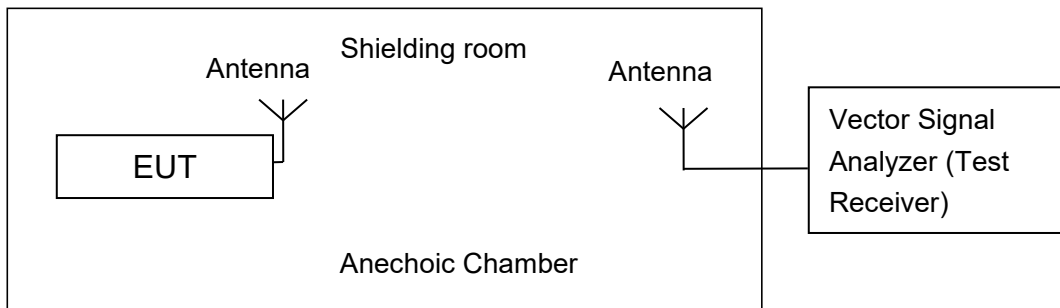


A.1.2. Radiated Emission Measurements

In the case of radiated emission, the used settings are as follows,

Sweep frequency from 30 MHz to 1GHz, RBW = 100 kHz, VBW = 300 kHz;

Sweep frequency from 1 GHz to 26GHz, RBW = 1MHz, VBW = 3MHz;



The measurement is made according to ANSI C63.10.

The radiated emission test is performed in semi-anechoic chamber. The distance from the EUT to the reference point of measurement antenna is 3m. The test is carried out on both vertical and horizontal polarization and only maximization result of both polarizations is kept. During the test, the turntable is rotated 360° and the measurement antenna is moved from 1m to 4m to get the maximization result.

A.2. Maximum Peak Output Power

Measurement Limit and Method:

Standard	Limit (dBm)
FCC CRF Part 15.407(a)	< 30

Set span to encompass the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.

Set RBW = 1 MHz.

Set VBW ≥ 3 MHz.

Number of points in sweep ≥ 2 × span / RBW.

Sweep time = auto.

Detector = power averaging (rms)

Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed to ensure that the average accurately represents the true average over the on and off periods of the transmitter.

Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument's band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1 MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal. Add 10 log (1/x), where x is the duty cycle

A.2.1 Antenna Gain

Fre(MHz)	CH1(dBi)	CH2(dBi)	DG Gain
5745	1.77	2.64	5.23
5755	1.77	2.64	5.23
5775	1.77	2.64	5.23
5785	1.73	2.54	5.15
5795	1.73	2.54	5.15
5825	2.44	2.92	5.69

For mimo, only support BF mode, power and PSD directional gain is calculated as:

Directional gain = 10 log [(10^{G₁/20} + 10^{G₂/20} + ... + 10^{G_n/20})² /NANT] dBi. NANT = number of transmit antennas, NSS = number of spatial streams. (The worst case directional gain will occur when NSS = 1)

A.2.2. Maximum Average Output Power-Conducted

EUT ID: UT01a

Measurement Results:

802.11a mode

Mode	Data Rate (Mbps)	Port	Test Result (dBm)		
			5745MHz (Ch149)	5785MHz (Ch157)	5825MHz (Ch165)

802.11a	6	CH1	19.79	20.06	20.22
		CH2	19.36	19.72	19.91

The data rate 6Mbps is selected as worst condition, and the following cases are performed with this condition.

802.11n-HT20 mode

Mode	Data Rate (Mbps)	Port	Test Result (dBm)		
			5745MHz (Ch149)	5785MHz (Ch157)	5825MHz (Ch165)
802.11n20	MCS0	CH1	17.06	17.32	17.62
		CH2	16.71	16.96	17.18
		MIMO	19.90	20.15	20.42

The data rate MCS0 is selected as worst condition, and the following cases are performed with this condition.

802.11ac-VHT20 mode

Mode	Data Rate (Mbps)	Port	Test Result (dBm)		
			5745MHz (Ch149)	5785MHz (Ch157)	5825MHz (Ch165)
802.11ac20	MCS0	CH1	17.06	17.31	17.76
		CH2	16.66	16.86	17.12
		MIMO	19.87	20.10	20.46

The data rate MCS0 is selected as worst condition, and the following cases are performed with this condition.

802.11ax-HE20 mode

Mode	Data Rate (Mbps)	Port	Test Result (dBm)		
			5745MHz (Ch149)	5785MHz (Ch157)	5825MHz (Ch165)
802.11ax20	MCS0	CH1	17.17	17.41	17.84
		CH2	16.75	16.88	17.16
		MIMO	19.98	20.16	20.52

The data rate MCS0 is selected as worst condition, and the following cases are performed with this condition.

802.11be-EHT20 mode

Mode	Data Rate (Mbps)	Port	Test Result (dBm)		
			5745MHz (Ch149)	5785MHz (Ch157)	5825MHz (Ch165)
802.11be20	MCS0	CH1	17.19	17.43	17.79
		CH2	16.85	16.94	17.28
		MIMO	20.03	20.20	20.55

The data rate MCS0 is selected as worst condition, and the following cases are performed with this condition.

802.11n-HT40 mode

Mode	Data Rate (Index)	Port	Test Result (dBm)	
			5755MHz (Ch151)	5795MHz (Ch159)
802.11n (40MHz)	MCS0	CH1	17.64	18.06
		CH2	17.07	17.42
		MIMO	20.37	20.76

The data rate MCS0 is selected as worst condition, and the following cases are performed with this condition.

802.11ac-VHT40 mode

Mode	Data Rate (Index)	Port	Test Result (dBm)	
			5755MHz (Ch151)	5795MHz (Ch159)
802.11ac (40MHz)	MCS0	CH1	17.70	18.05
		CH2	17.06	17.46
		MIMO	20.40	20.78

The data rate MCS0 is selected as worst condition, and the following cases are performed with this condition.

802.11ax-HE40 mode

Mode	Data Rate (Index)	Port	Test Result (dBm)	
			5755MHz (Ch151)	5795MHz (Ch159)
802.11ax (40MHz)	MCS0	CH1	17.72	18.08
		CH2	17.04	17.46
		MIMO	20.40	20.79

The data rate MCS0 is selected as worst condition, and the following cases are performed with this condition.

802.11be-EHT40 mode

Mode	Data Rate (Index)	Port	Test Result (dBm)	
			5755MHz (Ch151)	5795MHz (Ch159)
802.11be (40MHz)	MCS0	CH1	17.68	18.02
		CH2	16.97	17.42
		MIMO	20.35	20.74

The data rate MCS0 is selected as worst condition, and the following cases are performed with this condition.

802.11ac-VHT80 mode

Mode	Data Rate (Index)	Port	Test Result (dBm)
			5775MHz

			(Ch155)
802.11ac (80MHz)	MCS0	CH1	15.75
		CH2	15.58
		MIMO	18.68

The data rate MCS0 is selected as worst condition, and the following cases are performed with this condition.

802.11ax-HE80 mode

Mode	Data Rate (Index)	Port	Test Result (dBm)
			5775MHz (Ch155)
802.11ax (80MHz)	MCS0	CH1	15.34
		CH2	15.09
		MIMO	18.23

The data rate MCS0 is selected as worst condition, and the following cases are performed with this condition.

802.11be-EHT80 mode

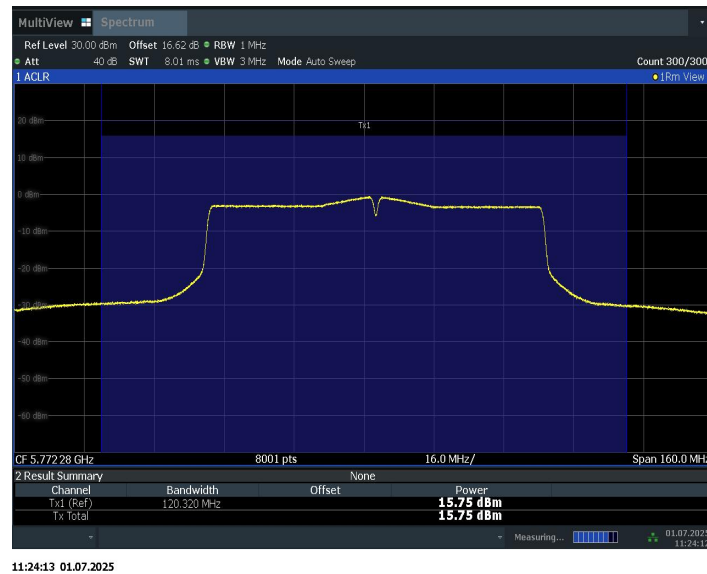
Mode	Data Rate (Index)	Port	Test Result (dBm)
			5775MHz (Ch155)
802.11abe (80MHz)	MCS0	CH1	16.26
		CH2	15.98
		MIMO	19.13

The data rate MCS0 is selected as worst condition, and the following cases are performed with this condition.

The duty cycle of all mode are equal or greater than 98%.

Note:

1. 802.11a only support siso mode, and CH1 port was selected as the worst condition, and the following cases are performed with this condition.
2. 802.11ax/be only support full RU mode
3. For mimo mode, the power of 802.11be-EHT20(802.11be-EHT40, 802.11be-EHT80) mode was selected as the worst condition, the following cases are performed with this condition.



Output Power: 802.11ac80 5775MHz(CH1)

Conclusion: PASS

A.3. Peak Power Spectral Density

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.407(a)	< 30 dBm/500 kHz

Set span to encompass the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.

Set RBW = 500 kHz.

Set VBW ≥ 3 MHz.

Number of points in sweep ≥ 2 × span / RBW.

Sweep time = auto.

Detector = power averaging (rms)

Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed to ensure that the average accurately represents the true average over the on and off periods of the transmitter. Use the peak search function on the instrument to find the peak of the spectrum and record its value. Add 10 log (1/x), where x is the duty cycle.

Measurement Uncertainty:

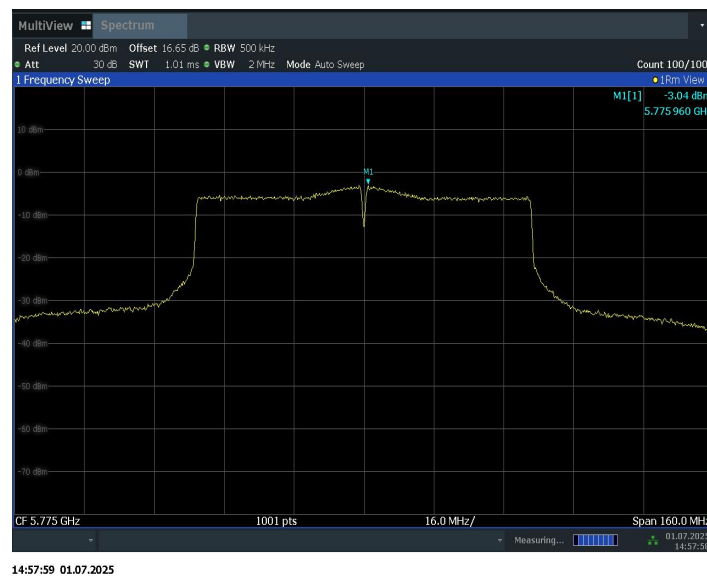
Measurement Uncertainty	0.75dB
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EUT ID: UT01a

Measurement Results:

Mode	Port	Channel	Power Spectral Density (dBm/500kHz)
802.11a	CH1	149	6.50
		157	7.01
		165	7.32
802.11be20	CH1	149	4.09
	CH2		3.90
	MIMO		7.01
	CH1	157	4.41
	CH2		3.92
	MIMO		7.18
	CH1	165	4.88
	CH2		4.26
	MIMO		7.59
802.11be40	CH1	151	1.87
	CH2		1.11
	MIMO		4.52
	CH1	159	2.28
	CH2		1.63
	MIMO		4.98
802.11be80	CH1	155	-3.04
	CH2		-3.05
	MIMO		-0.03

Conclusion: PASS



Power Spectral Density: 802.11be80 5775MHz(CH1)

A.4. 6dB Emission Bandwidth

Measurement Limit:

Standard	Limit (kHz)
FCC 47 CFR Part 15.407 (e)	≥ 500

Set RBW = 100 kHz.

Set the video bandwidth (VBW) ≥ 3 × RBW.

Detector = Peak.

Trace mode = max hold.

Sweep = auto couple.

Allow the trace to stabilize.

Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

Measurement Uncertainty:

Measurement Uncertainty	60.80Hz
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EUT ID: UT01a

Measurement Result:

SISO-CH1

TestMode	Frequency[MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]
11A	5745	15.36	5737.20	5752.56
	5785	15.56	5777.20	5792.76
	5825	15.48	5817.24	5832.72

MIMO-CH1

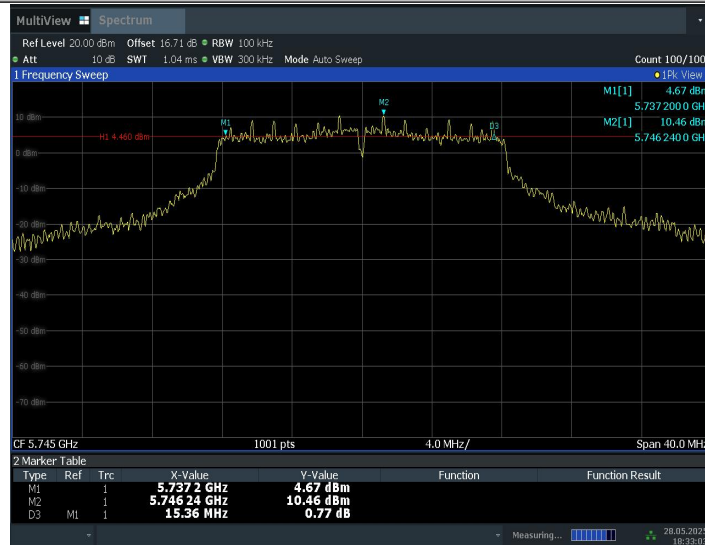
The power of CH1 is greater than CH2.

TestMode	Frequency[MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]
11BE20	5745	18.60	5735.60	5754.20
	5785	18.52	5775.68	5794.20
	5825	18.48	5815.76	5834.24
11BE40	5755	37.52	5736.12	5773.64
	5795	37.76	5776.20	5813.96
11BE80	5775	75.68	5737.88	5813.56

Conclusion: PASS

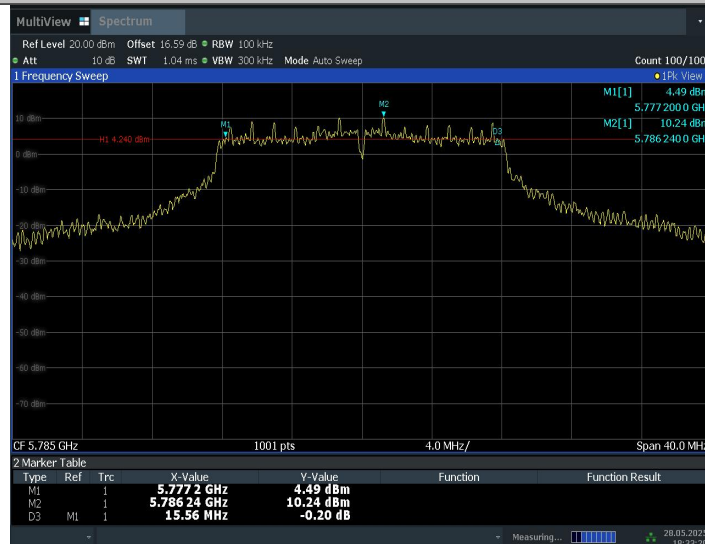
Test graphs as below:

11A_Ant1_5745



18:33:04 28.05.2025

11A_Ant1_5785



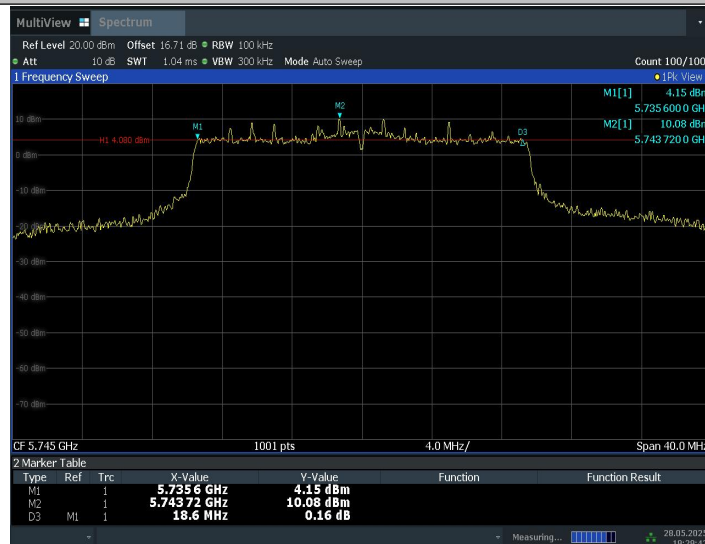
18:33:20 28.05.2025

11A_Ant1_5825



18:33:33 28.05.2025

11BE20_Ant1_5745



19:29:43 28.05.2025

11BE20_Ant1_5785



19:30:39 28.05.2025

11BE20_Ant1_5825



19:31:29 28.05.2025

11BE40_Ant1_5755



19:50:20 28.05.2025

11BE40_Ant1_5795



19:51:18 28.05.2025

11AX80MIMO_Ant1_5775



13:18:39 01.07.2025

A.5. Transmitter Spurious Emission

A.5.1 Transmitter Spurious Emission - Radiated

Measurement Limit:

Standard	Frequency (MHz)	Limit (dBm/MHz)
FCC 47 CFR Part 15.407	5725MHz~5850MHz	< -27

The measurement is made according to ANSI C63.10 .

In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

Limit in restricted band:

Frequency of emission (MHz)	Field strength (uV/m)	Field strength (dBμV/m)	Measurement distance(m)
30-88	100	40.0	3

88-216	150	43.5	3
216-960	200	46.0	3
Above 960	500	54.0	3

Measurement Results:

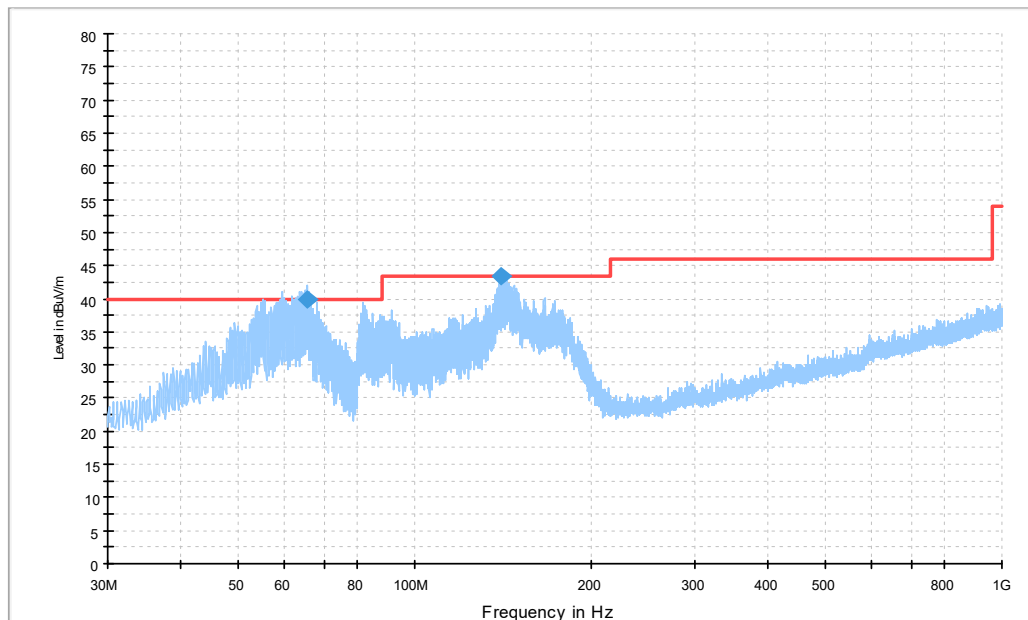
Note:

A "reference path loss" is established and the A_{Rpl} is the attenuation of "reference path loss", and including the gain of receive antenna, the gain of the preamplifier, the cable loss.

P_{Mea} is the field strength recorded from the instrument.

Note:

1. The spurious emission above 18G is noise only.
2. All emissions below 30MHz are more than 20dB below the limit.
3. All SISO and MIMO emissions have been checked, only the worst cases were reported.



Transmitter Spurious Emission - Radiated (Power): 30MHz - 1GHz

Frequency (MHz)	QuasiPeak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBuV/m)
65.776000	39.8	100.0	V	16.0	-2.6	0.2	40.0
140.680000	43.3	100.0	V	86.0	-4.7	0.2	43.5

Conclusion: PASS

Average Results:

802.11a

Channel 149

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5449.550	46.42	-22.60	34.50	34.53	54.00	7.58	H
5456.150	47.23	-22.53	34.48	35.28	54.00	6.77	H
11490.200	34.38	-28.28	38.09	24.58	54.00	19.62	V
17854.250	38.89	-21.26	40.55	19.60	54.00	15.11	H
17890.000	38.93	-20.98	40.51	19.41	54.00	15.07	V
17954.350	39.02	-20.88	40.55	19.35	54.00	14.98	H

Channel 165

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5434.100	45.51	-22.52	34.44	33.60	54.00	8.49	H
5440.100	45.65	-22.55	34.46	33.74	54.00	8.35	H
11650.250	34.84	-28.40	38.50	24.74	54.00	19.16	H
17787.150	38.70	-21.33	40.59	19.45	54.00	15.30	H
17880.650	39.03	-20.95	40.52	19.47	54.00	14.97	H
17950.500	39.20	-20.83	40.55	19.48	54.00	14.80	V

Average Results:

802.11n-HT20

Channel 149

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5449.850	46.28	-22.61	34.50	34.39	54.00	7.72	H
5455.850	46.84	-22.53	34.48	34.89	54.00	7.16	H
11490.400	34.42	-28.29	38.09	24.62	54.00	19.58	H
17788.000	38.70	-21.33	40.59	19.45	54.00	15.30	H
17879.200	39.15	-20.98	40.52	19.61	54.00	14.85	H
17948.000	39.24	-20.95	40.55	19.64	54.00	14.76	V

Channel 165

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5434.100	45.52	-22.52	34.44	33.61	54.00	8.48	H
5440.250	45.69	-22.55	34.46	33.78	54.00	8.31	H
11650.400	34.91	-28.39	38.50	24.80	54.00	19.09	H
17787.200	38.91	-21.33	40.59	19.66	54.00	15.09	H
17892.800	39.25	-21.03	40.51	19.78	54.00	14.75	H
17950.400	39.46	-20.83	40.55	19.74	54.00	14.54	H

Average Results:
802.11n-HT40

Channel 151

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5450.300	46.06	-22.60	34.50	34.17	54.00	7.94	H
5459.900	46.13	-22.48	34.46	34.15	54.00	7.87	H
11510.000	34.98	-28.38	38.14	25.22	54.00	19.02	H
17789.000	38.97	-21.33	40.59	19.72	54.00	15.03	H
17886.150	39.46	-20.97	40.51	19.92	54.00	14.54	H
17952.150	39.60	-20.85	40.55	19.90	54.00	14.40	H

Channel 159

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5408.450	45.64	-22.44	34.33	33.75	54.00	8.36	H
5428.250	45.61	-22.51	34.41	33.71	54.00	8.39	H
11589.750	35.55	-27.73	38.46	24.82	54.00	18.45	V
17848.750	39.26	-21.25	40.55	19.96	54.00	14.74	H
17886.150	39.35	-20.97	40.51	19.80	54.00	14.65	H
17953.250	39.58	-20.87	40.55	19.89	54.00	14.42	V

Average Results:

802.11ac-HT20

Channel 149

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5449.100	46.37	-22.60	34.50	34.47	54.00	7.63	H
5456.150	46.91	-22.53	34.48	34.96	54.00	7.09	H
11490.200	34.76	-28.28	38.09	24.95	54.00	19.24	V
17782.200	39.06	-21.34	40.58	19.82	54.00	14.94	H
17885.600	39.44	-20.97	40.51	19.89	54.00	14.56	V
17948.850	39.65	-20.89	40.55	19.99	54.00	14.35	H

Channel 165

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5432.750	45.54	-22.52	34.43	33.63	54.00	8.46	H
5439.800	45.65	-22.55	34.46	33.74	54.00	8.35	H
11650.250	35.20	-28.40	38.50	25.10	54.00	18.80	H
17846.000	39.22	-21.26	40.55	19.93	54.00	14.78	V
17883.950	39.33	-20.96	40.52	19.78	54.00	14.67	H
17949.950	39.47	-20.83	40.55	19.74	54.00	14.53	H

Average Results:
802.11ac-HT40

Channel 151

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5449.850	46.02	-22.61	34.50	34.12	54.00	7.98	H
5459.900	46.18	-22.48	34.46	34.20	54.00	7.82	H
11510.000	34.92	-28.38	38.14	25.16	54.00	19.08	V
17789.900	38.80	-21.33	40.59	19.54	54.00	15.20	H
17886.700	39.23	-20.97	40.51	19.69	54.00	14.77	V
17949.950	39.56	-20.83	40.55	19.84	54.00	14.44	H

Channel 159

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5407.100	45.82	-22.46	34.33	33.94	54.00	8.18	H
5428.100	45.68	-22.51	34.41	33.78	54.00	8.32	H
11589.750	35.64	-27.73	38.46	24.91	54.00	18.36	H
17890.000	39.34	-20.98	40.51	19.81	54.00	14.66	H
17950.500	39.70	-20.83	40.55	19.98	54.00	14.30	V
17959.300	39.40	-20.95	40.56	19.79	54.00	14.60	H

Average Results:
802.11ac-HT80

Channel 155

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5430.800	46.25	-22.51	34.42	34.34	54.00	7.75	H
5459.900	46.49	-22.48	34.46	34.51	54.00	7.51	H
11550.150	35.14	-28.20	38.30	25.04	54.00	18.86	V
17750.300	38.91	-21.66	40.55	20.03	54.00	15.09	V
17882.850	39.35	-20.96	40.52	19.80	54.00	14.65	H
17950.500	39.60	-20.83	40.55	19.88	54.00	14.40	H

Average Results:

802.11ax-HT20

Channel 149

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5448.500	46.4	-22.6	34.5	34.53	54.0	7.6	H
5456.000	47.3	-22.5	34.5	35.33	54.0	6.7	H
11490.200	34.8	-28.3	38.1	24.95	54.0	19.2	H
17845.450	39.1	-21.3	40.6	19.83	54.0	14.9	V
17890.000	39.4	-21.0	40.5	19.87	54.0	14.6	H
17954.350	39.4	-20.9	40.6	19.76	54.0	14.6	H

Channel 165

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5408.750	45.6	-22.4	34.3	33.68	54.0	8.4	H
5421.050	45.5	-22.5	34.4	33.62	54.0	8.5	H
11650.250	35.3	-28.4	38.5	25.22	54.0	18.7	H
17861.950	39.3	-21.3	40.5	20.00	54.0	14.8	H
17886.150	39.4	-21.0	40.5	19.88	54.0	14.6	H
17951.050	39.6	-20.8	40.6	19.88	54.0	14.4	H

Average Results:
802.11ax-HT40

Channel 151

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5449.700	45.9	-22.6	34.5	34.03	54.0	8.1	H
5459.900	46.0	-22.5	34.5	34.03	54.0	8.0	H
11510.000	35.3	-28.4	38.1	25.56	54.0	18.7	H
17859.200	39.2	-21.3	40.5	19.94	54.0	14.8	H
17882.300	39.3	-21.0	40.5	19.73	54.0	14.7	H
17948.850	39.6	-20.9	40.5	19.91	54.0	14.4	H

Channel 159

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5412.350	45.8	-22.4	34.3	33.84	54.0	8.3	H
5427.650	45.7	-22.5	34.4	33.77	54.0	8.3	H
11589.750	35.7	-27.7	38.5	24.99	54.0	18.3	H
17859.750	39.2	-21.3	40.5	19.94	54.0	14.8	V
17889.450	39.4	-21.0	40.5	19.84	54.0	14.6	H
17951.050	39.7	-20.8	40.6	19.96	54.0	14.3	H

Average Results:
802.11ax-HT80

Channel 155

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5433.200	46.1	-22.5	34.4	34.19	54.0	7.9	H
5459.000	46.1	-22.5	34.5	34.15	54.0	7.9	H
11550.150	35.2	-28.2	38.3	25.06	54.0	18.8	V
17854.250	39.3	-21.3	40.5	19.98	54.0	14.7	H
17891.650	39.4	-21.0	40.5	19.89	54.0	14.6	H
17949.400	39.7	-20.9	40.5	20.03	54.0	14.3	H

Average Results:

802.11be-HT20

Channel 149

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5455.400	46.5	-22.5	34.5	34.53	54.0	7.5	H
5458.100	46.6	-22.5	34.5	34.62	54.0	7.4	H
11490.200	34.8	-28.3	38.1	24.95	54.0	19.2	H
17848.750	39.3	-21.2	40.6	19.99	54.0	14.7	H
17873.500	39.4	-21.2	40.5	20.06	54.0	14.6	V
17953.250	39.6	-20.9	40.6	19.96	54.0	14.4	H

Channel 165

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5450.300	45.3	-22.6	34.5	33.44	54.0	8.7	H
5457.650	45.3	-22.5	34.5	33.31	54.0	8.7	H
11650.250	35.4	-28.4	38.5	25.25	54.0	18.6	H
17845.450	39.1	-21.3	40.6	19.85	54.0	14.9	V
17886.150	39.5	-21.0	40.5	19.91	54.0	14.5	H
17953.800	39.5	-20.9	40.6	19.82	54.0	14.5	H

Average Results:
802.11be-HT40

Channel 151

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5458.550	45.0	-22.5	34.5	33.00	54.0	9.0	H
5459.600	44.9	-22.5	34.5	32.93	54.0	9.1	H
11510.000	35.6	-28.4	38.1	25.85	54.0	18.4	H
17852.600	39.3	-21.2	40.5	19.95	54.0	14.7	H
17886.150	39.5	-21.0	40.5	20.00	54.0	14.5	V
17949.400	39.6	-20.9	40.5	19.91	54.0	14.4	H

Channel 159

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5455.100	45.1	-22.5	34.5	33.14	54.0	8.9	H
5458.550	45.2	-22.5	34.5	33.19	54.0	8.8	H
11589.750	35.9	-27.7	38.5	25.19	54.0	18.1	H
17853.700	39.3	-21.3	40.5	19.97	54.0	14.7	H
17889.450	39.4	-21.0	40.5	19.91	54.0	14.6	H
17951.050	39.8	-20.8	40.6	20.10	54.0	14.2	V

Average Results:
802.11be-HT80

Channel 155

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5449.550	45.6	-22.6	34.5	33.71	54.0	8.4	H
5457.650	45.8	-22.5	34.5	33.84	54.0	8.2	H
11550.150	35.4	-28.2	38.3	25.27	54.0	18.6	H
17853.150	39.2	-21.3	40.5	19.92	54.0	14.8	V
17886.700	39.5	-21.0	40.5	19.94	54.0	14.5	H
17959.300	39.5	-20.9	40.6	19.85	54.0	14.5	H

Peak Results:
802.11a

Channel 149

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5650.408	61.02	-22.52	34.70	48.84	68.50	7.49	H
5654.336	60.98	-22.54	34.67	48.85	71.41	10.43	H
11490.750	46.41	-28.31	38.09	36.63	74.00	27.59	V
17236.050	49.89	-22.37	40.86	31.39	68.20	18.31	H
17260.250	52.52	-22.15	40.84	33.84	68.20	15.68	V
17288.300	52.78	-22.09	40.81	34.06	68.20	15.42	H

Channel 165

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5922.052	60.91	-22.03	34.80	48.14	70.38	9.47	H
5924.172	61.09	-22.02	34.80	48.31	68.81	7.72	H
11651.900	47.30	-28.27	38.50	37.08	74.00	26.70	H
17278.400	52.55	-22.24	40.82	33.98	68.20	15.65	H
17475.300	51.14	-21.84	40.78	32.21	68.20	17.06	H
17545.700	52.88	-21.10	40.75	33.23	68.20	15.32	V

Peak Results:
802.11n-HT20

Channel 149

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5651.173	60.77	-22.53	34.69	48.61	69.07	12.62	H
5657.458	61.58	-22.55	34.64	49.48	73.72	12.79	H
11490.200	46.00	-28.28	38.09	36.19	74.00	28.00	H
16965.450	51.44	-22.19	41.20	32.43	68.20	16.76	H
17234.950	50.43	-22.36	40.86	31.93	68.20	17.77	H
17540.200	52.79	-20.64	40.76	32.67	68.20	15.41	V

Channel 165

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5922.343	61.29	-22.03	34.80	48.51	70.17	8.88	H
5924.442	61.44	-22.02	34.80	48.66	68.61	7.17	H
11652.450	47.38	-28.23	38.50	37.12	74.00	26.62	H
16827.400	52.08	-22.45	41.40	33.14	68.20	16.12	H
17179.950	52.76	-22.26	40.92	34.10	68.20	15.44	H
17653.500	53.00	-21.31	40.59	33.72	68.20	15.20	H

Peak Results:
802.11n-HT40

Channel 151

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5655.422	61.69	-22.54	34.66	49.58	72.21	10.52	H
5676.076	73.36	-22.30	34.49	61.17	87.50	14.13	H
11510.550	48.11	-28.37	38.14	38.34	74.00	25.89	H
16441.850	51.97	-23.17	40.98	34.15	68.20	16.23	H
16911.000	51.84	-22.29	41.37	32.76	68.20	16.36	H
17266.300	50.20	-22.18	40.83	31.55	68.20	18.00	H

Channel 159

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5922.177	57.82	-22.03	34.80	45.05	70.29	12.47	H
5923.597	57.80	-22.02	34.80	45.03	69.24	11.44	H
11590.300	46.69	-27.73	38.46	35.96	74.00	27.31	V
16644.800	52.96	-22.70	41.34	34.31	68.20	15.24	H
17132.100	52.16	-22.24	40.97	33.44	68.20	16.04	H
17384.000	49.93	-21.86	40.72	31.07	68.20	18.27	V

Peak Results:
802.11ac-HT20

Channel 149

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5650.201	60.08	-22.52	34.70	47.90	68.35	12.13	H
5651.236	60.77	-22.53	34.69	48.61	69.11	14.26	H
11490.750	46.67	-28.31	38.09	36.89	74.00	27.33	V
17236.050	51.86	-22.37	40.86	33.37	68.20	16.34	H
17531.950	53.02	-21.42	40.77	33.67	68.20	15.18	V
17544.050	53.03	-20.96	40.76	33.24	68.20	15.17	H

Channel 165

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5922.677	61.31	-22.03	34.80	48.54	69.92	8.61	H
5924.488	61.21	-22.02	34.80	48.44	68.58	7.36	H
11649.700	47.38	-28.42	38.50	37.30	74.00	26.62	H
17475.300	50.09	-21.84	40.78	31.15	68.20	18.11	V
17515.450	52.29	-21.89	40.78	33.40	68.20	15.91	H
17540.200	52.51	-20.64	40.76	32.39	68.20	15.69	H

Peak Results:
802.11ac-HT40

Channel 151

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5650.713	59.40	-22.53	34.69	47.23	68.73	9.33	H
5659.890	62.42	-22.56	34.62	50.35	75.52	13.10	H
11509.450	47.53	-28.39	38.14	37.78	74.00	26.47	V
17259.700	52.88	-22.15	40.84	34.20	68.20	15.32	H
17264.650	50.86	-22.17	40.84	32.19	68.20	17.34	V
17438.450	52.55	-21.73	40.74	33.54	68.20	15.65	H

Channel 159

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5924.235	58.47	-22.02	34.80	45.70	68.77	10.29	H
5924.943	58.84	-22.02	34.80	46.06	68.24	9.40	H
11588.100	48.06	-27.80	38.45	37.42	74.00	25.94	H
16720.150	52.46	-22.60	41.40	33.66	68.20	15.74	H
17384.550	50.84	-21.85	40.72	31.97	68.20	17.37	V
17542.950	52.73	-20.87	40.76	32.84	68.20	15.48	H

Peak Results:
802.11ac-HT80

Channel 155

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5664.271	74.76	-22.53	34.59	62.70	78.76	4.00	H
5666.163	77.34	-22.51	34.57	65.29	80.16	2.82	H
11552.350	47.72	-28.26	38.31	37.66	74.00	26.28	V
17024.300	53.15	-22.22	41.08	34.29	68.20	15.05	V
17325.150	49.79	-22.09	40.77	31.10	68.20	18.41	H
17667.250	54.24	-21.26	40.57	34.93	68.20	13.96	H

Peak Results:

802.11ax-HT20

Channel 149

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5651.386	62.2	-22.5	34.7	50.01	69.2	12.1	H
5654.186	62.2	-22.5	34.7	50.09	71.3	14.3	H
11488.550	47.1	-28.3	38.1	37.32	74.0	26.9	H
17235.500	50.5	-22.4	40.9	31.96	68.2	17.7	V
17260.250	52.1	-22.2	40.8	33.37	68.2	16.1	H
17537.450	53.3	-20.9	40.8	33.43	68.2	14.9	H

Channel 165

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5923.028	61.6	-22.0	34.8	48.85	69.7	8.0	H
5923.925	62.2	-22.0	34.8	49.44	69.0	6.8	H
11650.250	46.7	-28.4	38.5	36.58	74.0	27.3	H
16868.100	52.5	-22.5	41.4	33.56	68.2	15.7	H
17260.250	52.6	-22.2	40.8	33.95	68.2	15.6	H
17474.750	50.3	-21.8	40.8	31.40	68.2	17.9	H

Peak Results:

802.11ax-HT40

Channel 151

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5650.897	61.8	-22.5	34.7	49.67	68.9	7.0	H
5664.645	70.8	-22.5	34.6	58.76	79.0	8.2	H
11510.000	47.2	-28.4	38.1	37.42	74.0	26.8	H
17159.600	52.5	-22.4	40.9	33.96	68.2	15.7	H
17265.750	51.1	-22.2	40.8	32.49	68.2	17.1	H
17542.400	52.8	-20.8	40.8	32.84	68.2	15.4	H

Channel 159

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5923.580	58.5	-22.0	34.8	45.70	69.3	10.8	H
5924.759	58.4	-22.0	34.8	45.60	68.4	10.0	H
11589.750	47.0	-27.7	38.5	36.29	74.0	27.0	H
17112.300	53.0	-22.3	41.0	34.33	68.2	15.2	V
17371.900	52.3	-21.8	40.7	33.42	68.2	15.9	H
17385.650	50.9	-21.9	40.7	32.00	68.2	17.3	H

Peak Results:

802.11ax-HT80

Channel 155

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5661.218	73.8	-22.5	34.6	61.74	76.5	2.7	H
5667.405	76.4	-22.5	34.6	64.35	81.1	4.7	H
11550.150	46.9	-28.2	38.3	36.80	74.0	27.1	V
16880.200	52.1	-22.0	41.4	32.73	68.2	16.1	H
17324.600	50.7	-22.1	40.8	31.99	68.2	17.5	H
17543.500	52.5	-20.9	40.8	32.68	68.2	15.7	H

Peak Results:

802.11be-HT20

Channel 149

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5650.334	61.7	-22.5	34.7	49.50	68.4	12.1	H
5650.546	61.5	-22.5	34.7	49.37	68.6	14.3	H
11490.750	48.0	-28.3	38.1	38.17	74.0	26.0	H
17103.500	53.0	-22.3	41.0	34.31	68.2	15.2	H
17233.850	50.7	-22.4	40.9	32.15	68.2	17.5	V
17381.250	52.6	-21.9	40.7	33.72	68.2	15.6	H

Channel 165

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5924.897	60.8	-22.0	34.8	48.05	68.3	7.4	H
5924.994	60.6	-22.0	34.8	47.80	68.2	7.6	H
11651.350	48.6	-28.3	38.5	38.40	74.0	25.4	H
17051.250	52.8	-22.5	41.0	34.17	68.2	15.5	V
17464.850	52.7	-21.7	40.8	33.72	68.2	15.5	H
17474.750	50.7	-21.8	40.8	31.74	68.2	17.5	H

Peak Results:
802.11be-HT40

Channel 151

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5650.253	59.6	-22.5	34.7	47.38	68.4	8.8	H
5650.380	59.8	-22.5	34.7	47.62	68.5	8.7	H
11512.200	47.8	-28.3	38.1	38.02	74.0	26.2	H
17053.450	52.6	-22.5	41.0	33.97	68.2	15.6	H
17265.200	50.6	-22.2	40.8	31.91	68.2	17.6	V
17539.650	52.6	-20.7	40.8	32.48	68.2	15.6	H

Channel 159

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5924.902	56.1	-22.0	34.8	43.35	68.3	12.1	H
5924.989	56.5	-22.0	34.8	43.67	68.2	11.8	H
11589.200	47.6	-27.8	38.5	36.88	74.0	26.4	H
16796.600	52.5	-22.8	41.4	33.92	68.2	15.7	H
16823.550	52.6	-22.6	41.4	33.76	68.2	15.6	H
17384.000	50.3	-21.9	40.7	31.47	68.2	17.9	V

Peak Results:
802.11be-HT80

Channel 155

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5662.886	75.4	-22.5	34.6	63.37	77.7	2.3	H
5664.559	76.5	-22.5	34.6	64.43	79.0	2.5	H
11547.950	48.1	-28.2	38.3	38.05	74.0	25.9	H
16643.150	52.3	-22.7	41.3	33.60	68.2	15.9	V
17325.150	50.4	-22.1	40.8	31.69	68.2	17.8	H
17539.650	52.2	-20.7	40.8	32.12	68.2	16.0	H

A.6. Band Edges Compliance

A6.1 Band Edges - Radiated

Measurement Limit:

Standard	Limit (dBm/MHz)	
FCC 47 CFR Part 15.407	at the band edge	27
	at 5 MHz above or below the band edge	15.6
	at 25 MHz above or below the band edge	10
	at 75 MHz or more above or below the band edge	-27
	Note: increasing linearly from point to point.	

The measurement is made according to KDB 789033 D02

In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

Measurement Result:

Mode	Channel	Test Results	Conclusion
802.11a	5745 MHz	Fig.1	P
	5825 MHz	Fig.2	P
802.11n HT20	5745 MHz	Fig.3	P
	5825 MHz	Fig.4	P
802.11n HT40	5755 MHz	Fig.5	P
	5795 MHz	Fig.6	P
802.11ac HT20	5745 MHz	Fig.7	P
	5825 MHz	Fig.8	P
802.11ac HT40	5755 MHz	Fig.9	P
	5795 MHz	Fig.10	P
802.11ac HT80	5775 MHz	Fig.11	P
	5775 MHz	Fig.12	P
802.11ax HT20	5745 MHz	Fig.13	P
	5825 MHz	Fig.14	P
802.11ax HT40	5755 MHz	Fig.15	P
	5795 MHz	Fig.16	P
802.11ax HT80	5775 MHz	Fig.17	P
	5775 MHz	Fig.18	P
802.11be HT20	5745 MHz	Fig.19	P
	5825 MHz	Fig.20	P
802.11be HT40	5755 MHz	Fig.21	P
	5795 MHz	Fig.22	P
802.11be HT80	5775 MHz	Fig.23	P
	5775 MHz	Fig.24	P

Conclusion: PASS
Test graphs as below:

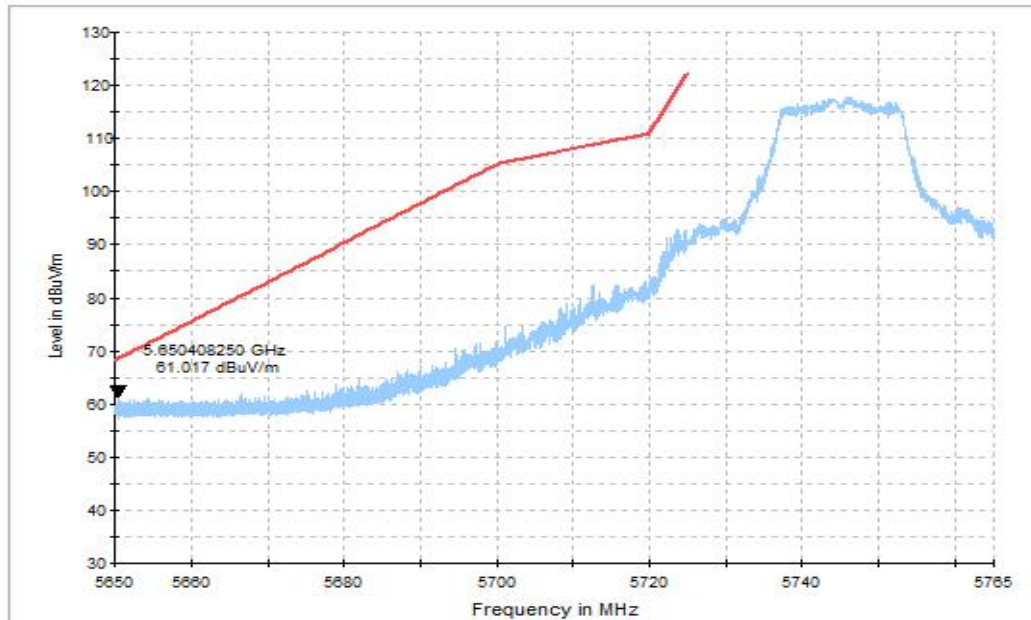


Fig. 1 Band Edges (802.11a Ch149,5745MHz)

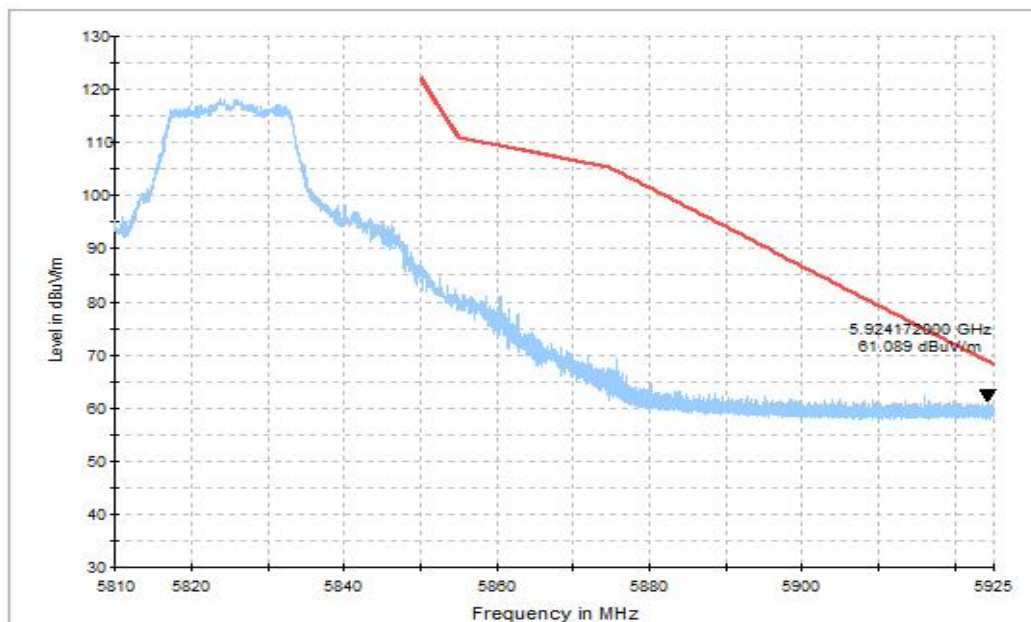


Fig. 2 Band Edges (802.11a Ch165, 5825MHz)

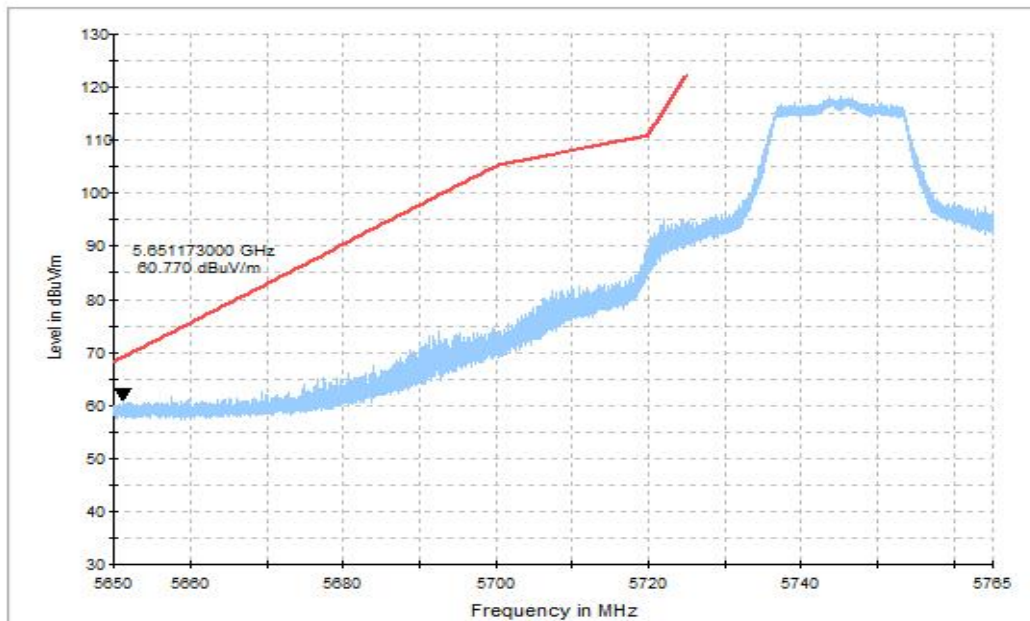


Fig. 3 Band Edges (802.11n-HT20 Ch149, 5745MHz)

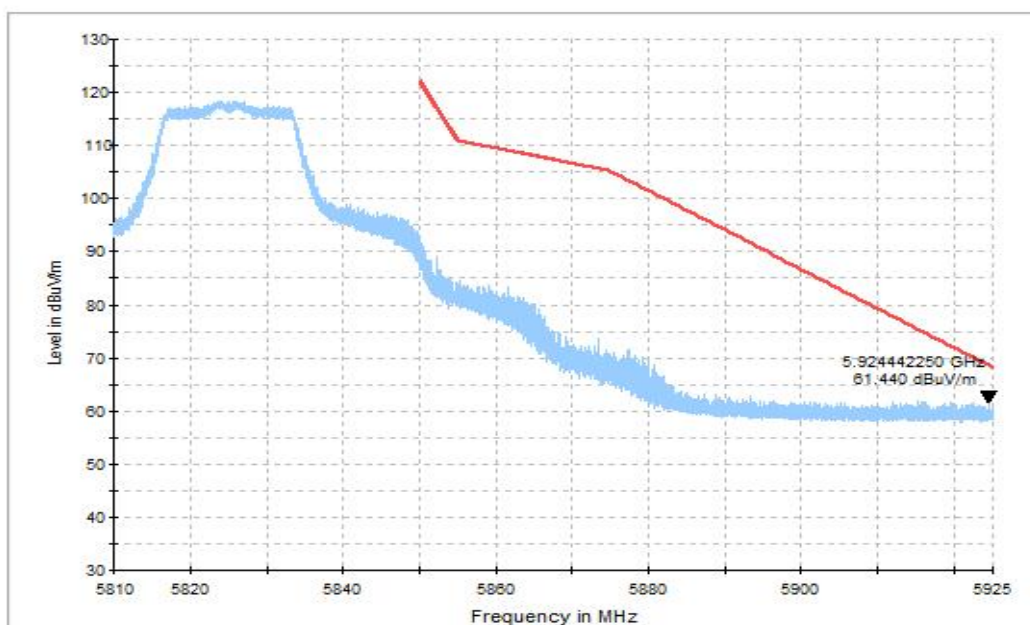


Fig. 4 Band Edges (802.11n-HT20 Ch165, 5825MHz)

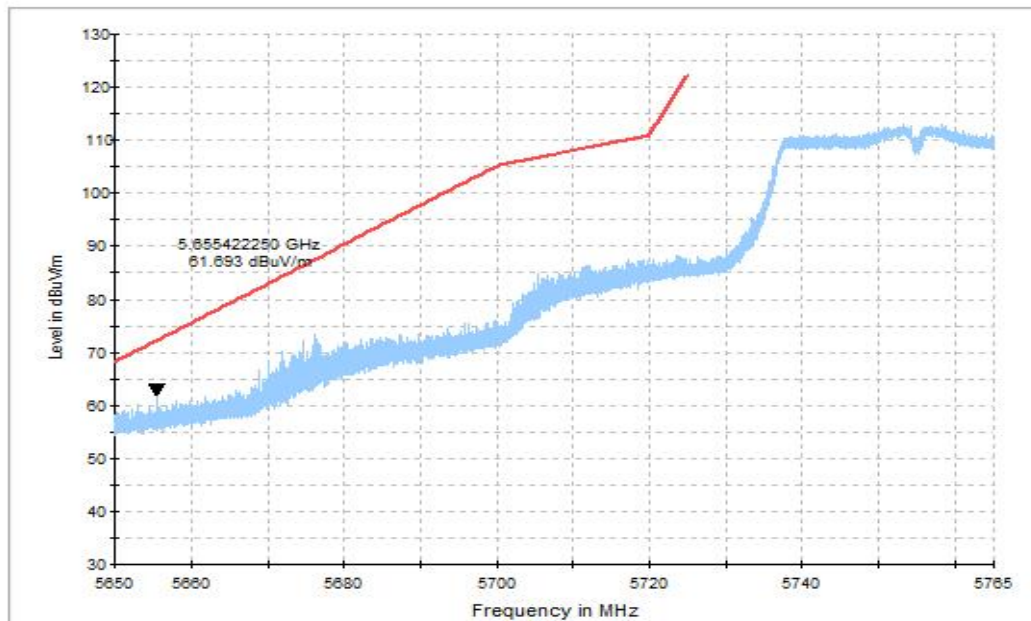


Fig. 5 Band Edges (802.11n-HT40 Ch151, 5755MHz)

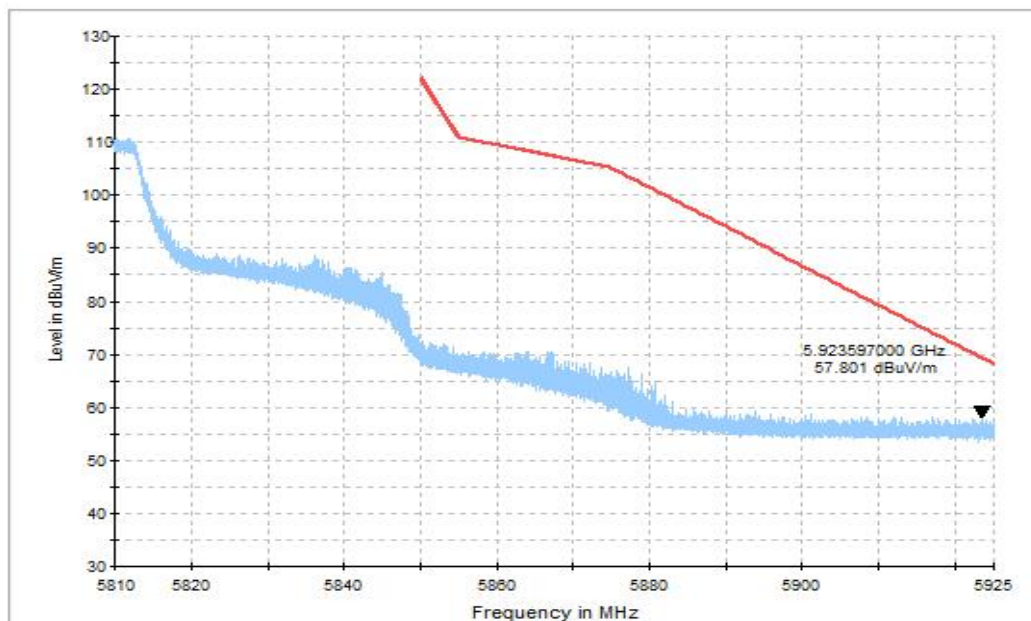


Fig. 6 Band Edges (802.11n-HT40 Ch159, 5795MHz)

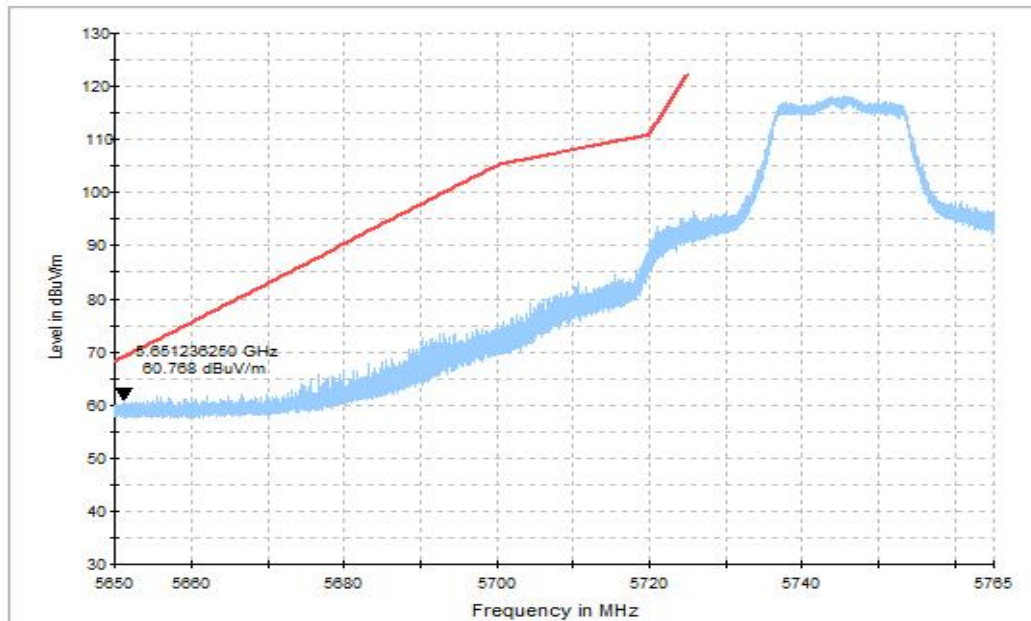


Fig. 7 Band Edges (802.11ac-HT20 Ch149, 5745MHz)

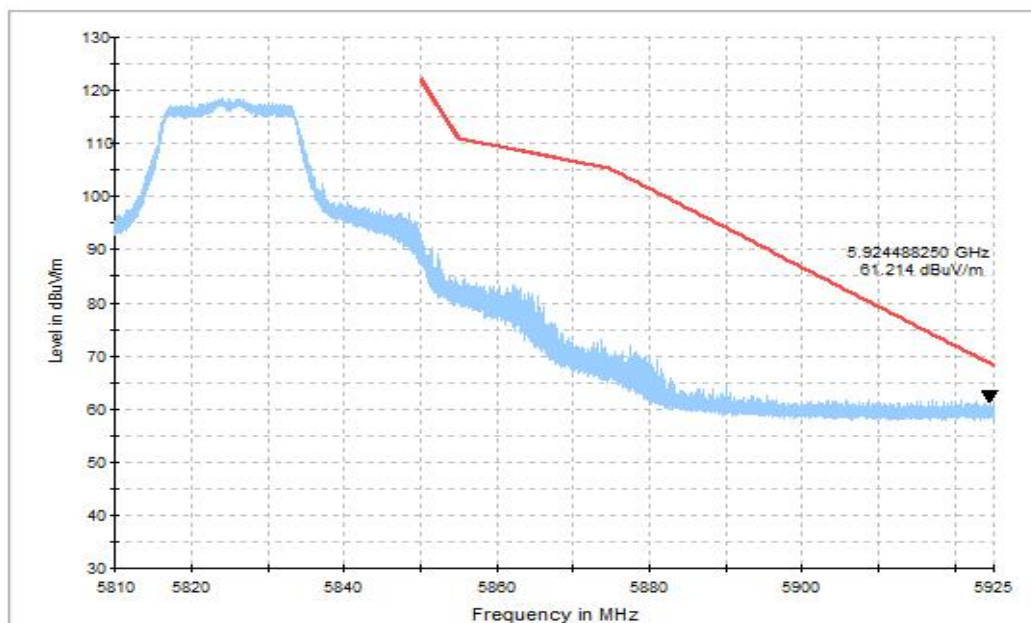


Fig. 8 Band Edges (802.11ac-HT20 Ch165, 5825MHz)

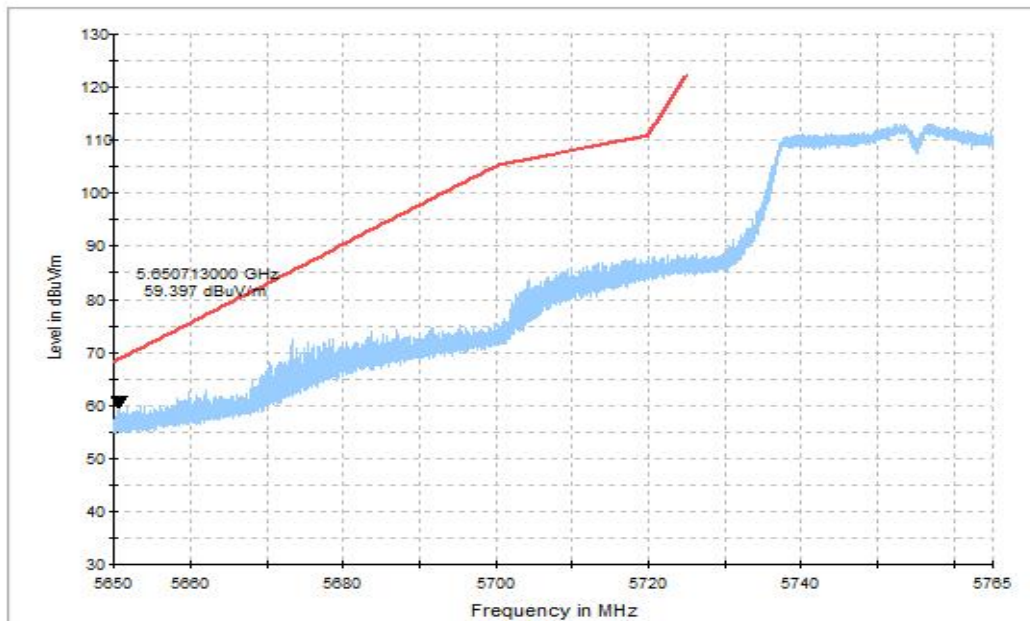


Fig. 9 Band Edges (802.11ac-HT40 Ch151, 5755MHz)

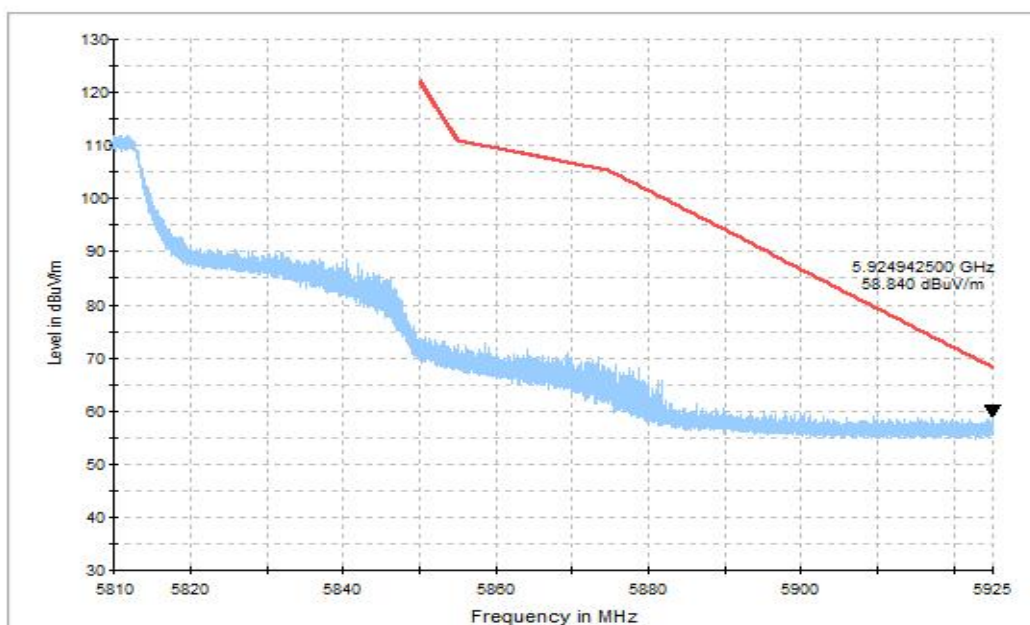


Fig. 10 Band Edges (802.11ac-HT40 Ch159, 5795MHz)

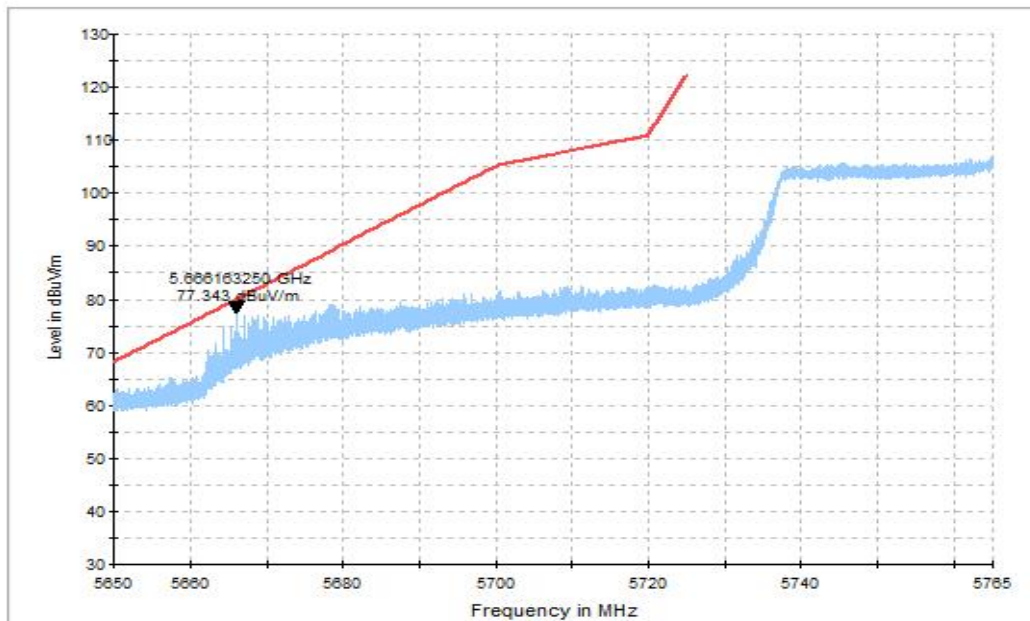


Fig. 11 Band Edges (802.11ac-HT80 Ch155, 5775MHz)

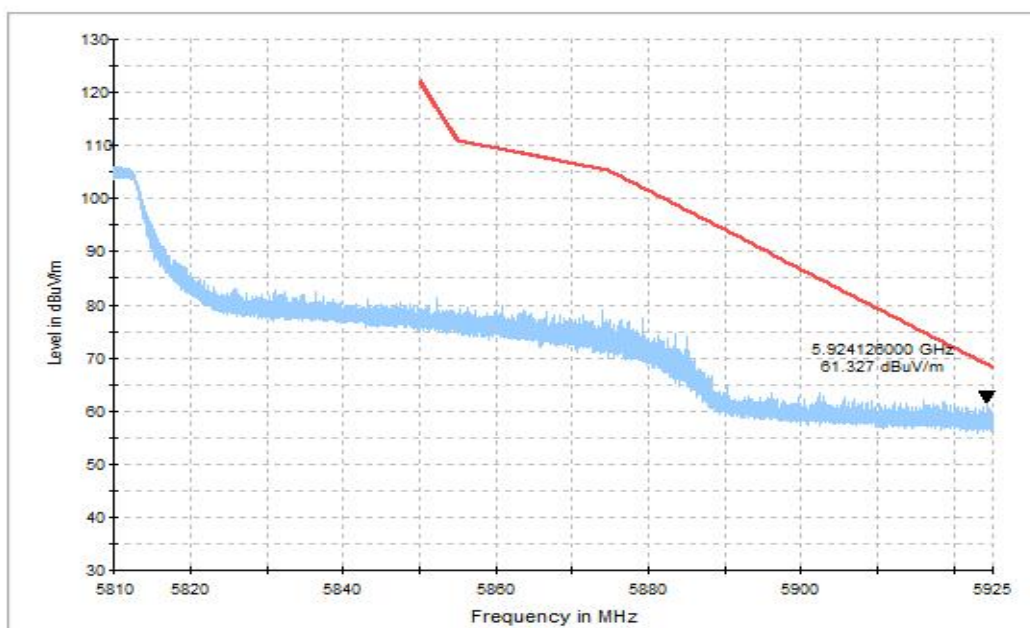


Fig. 12 Band Edges (802.11ac-HT80 Ch155, 5775MHz)

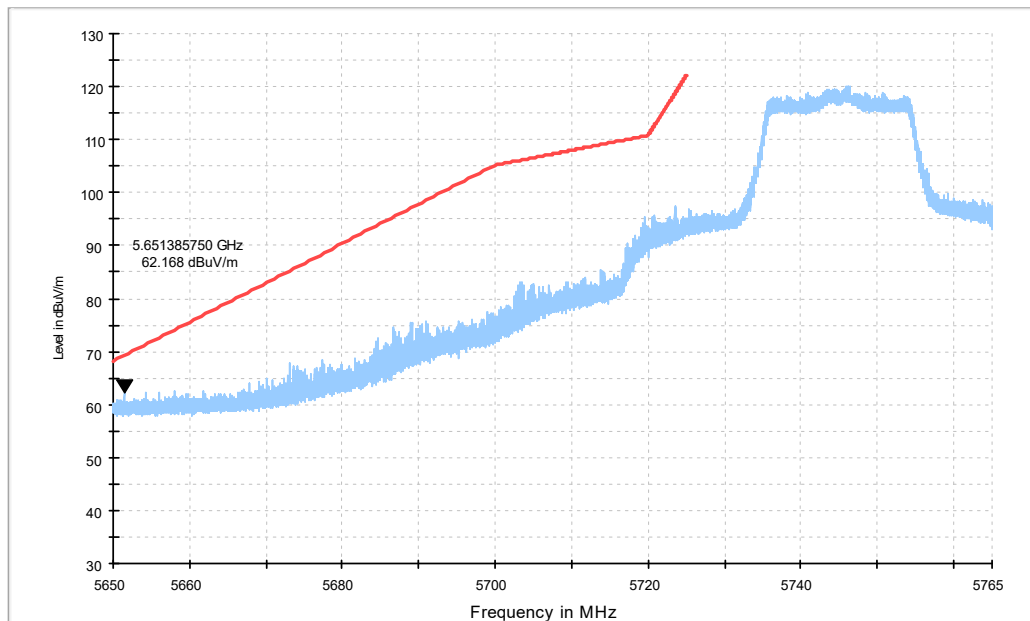


Fig. 13 Band Edges (802.11ax-HT20 Ch149, 5745MHz)

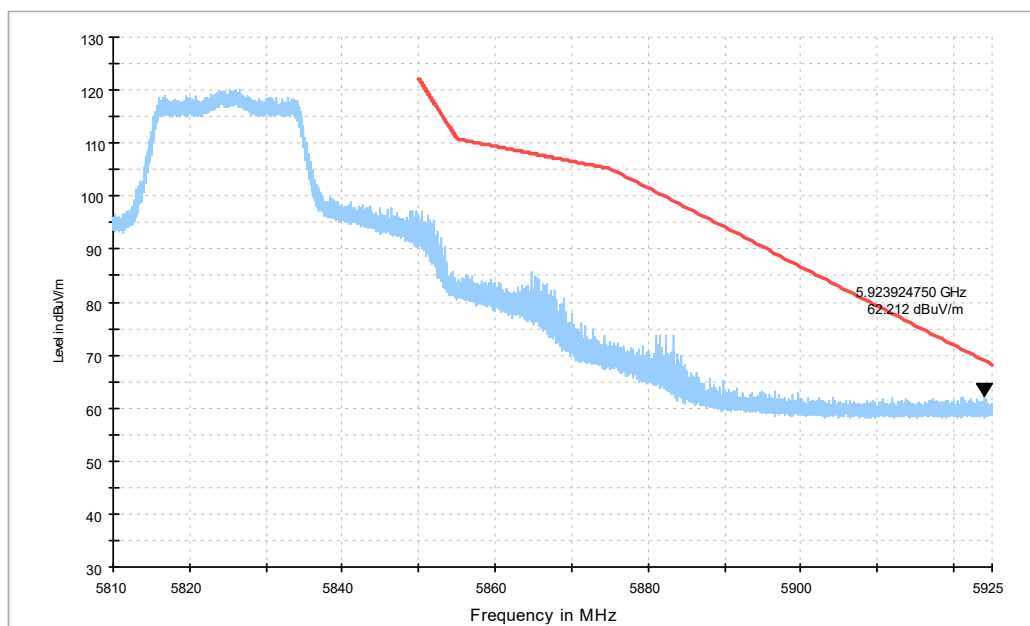


Fig. 14 Band Edges (802.11ax-HT20 Ch165, 5825MHz)

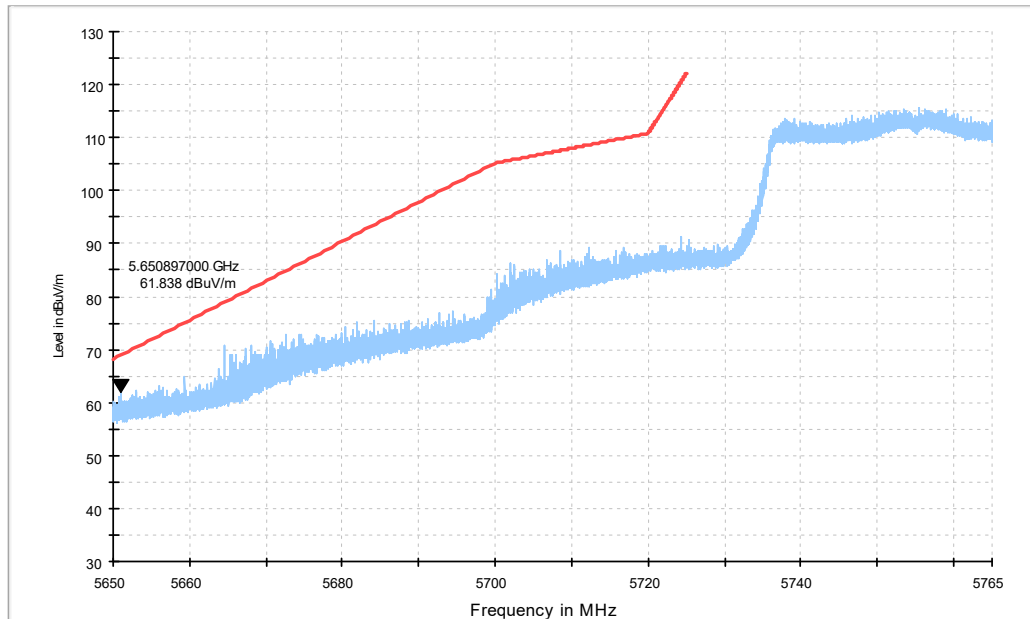


Fig. 15 Band Edges (802.11ax-HT40 Ch151, 5755MHz)

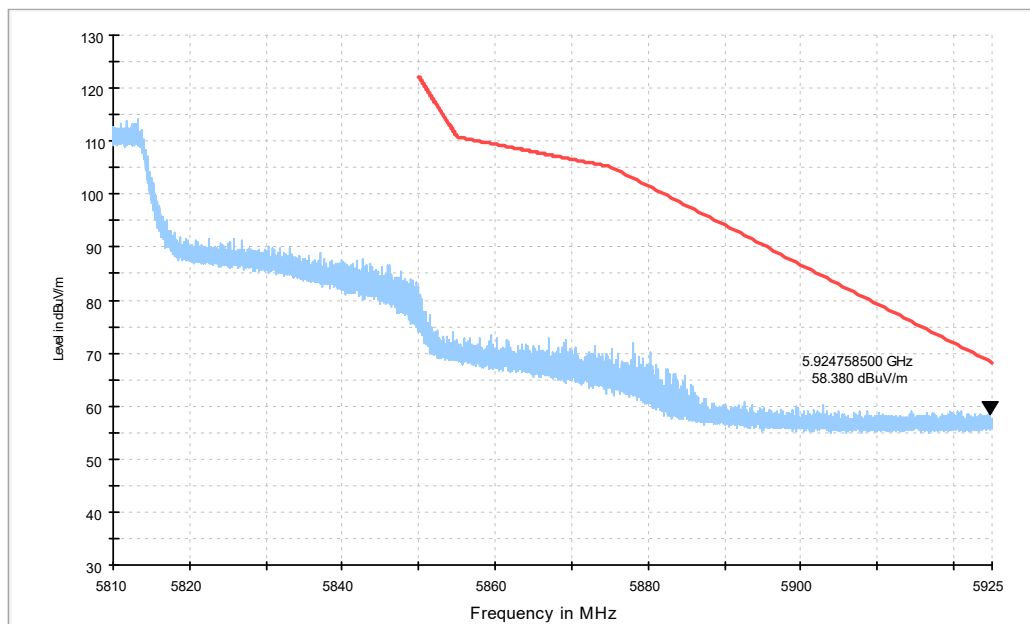


Fig. 16 Band Edges (802.11ax-HT40 Ch159, 5795MHz)

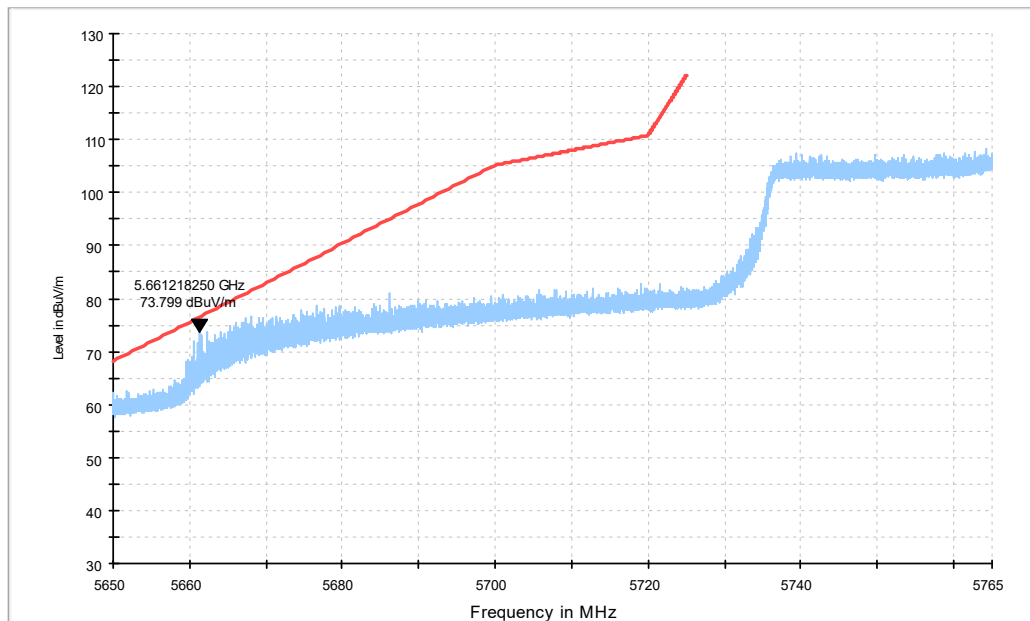


Fig. 17 Band Edges (802.11ax-HT80 Ch155, 5775MHz)

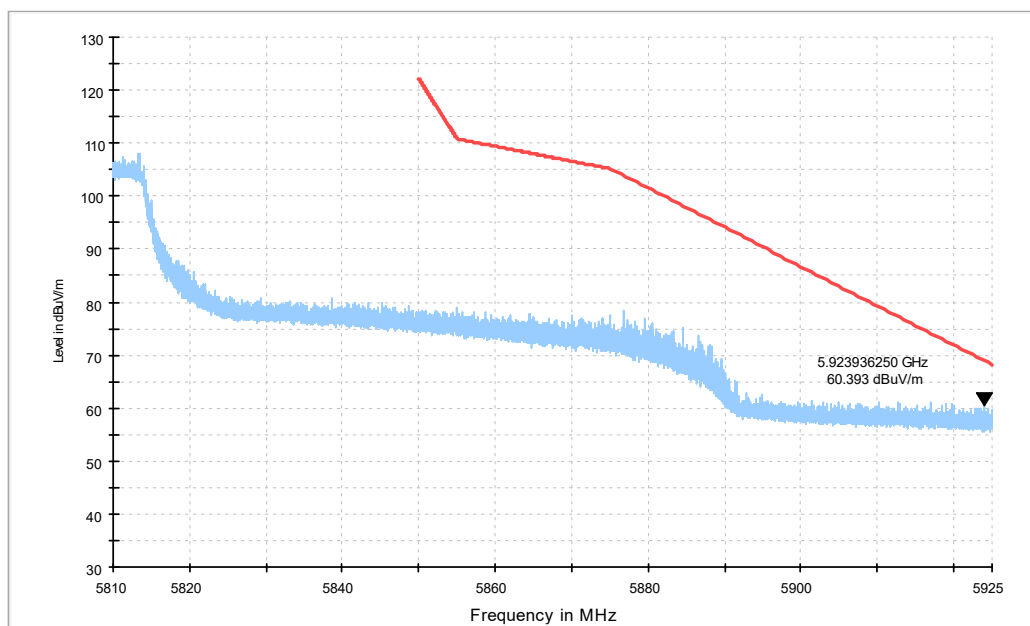


Fig. 18 Band Edges (802.11ax-HT80 Ch155, 5775MHz)

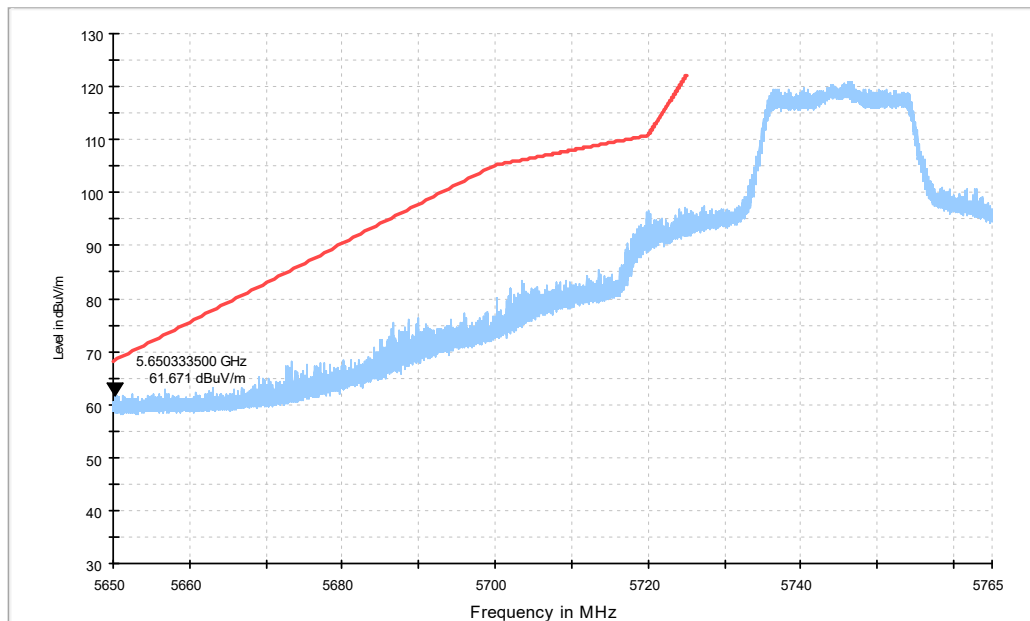


Fig. 19 Band Edges (802.11be-HT20 Ch149, 5745MHz)

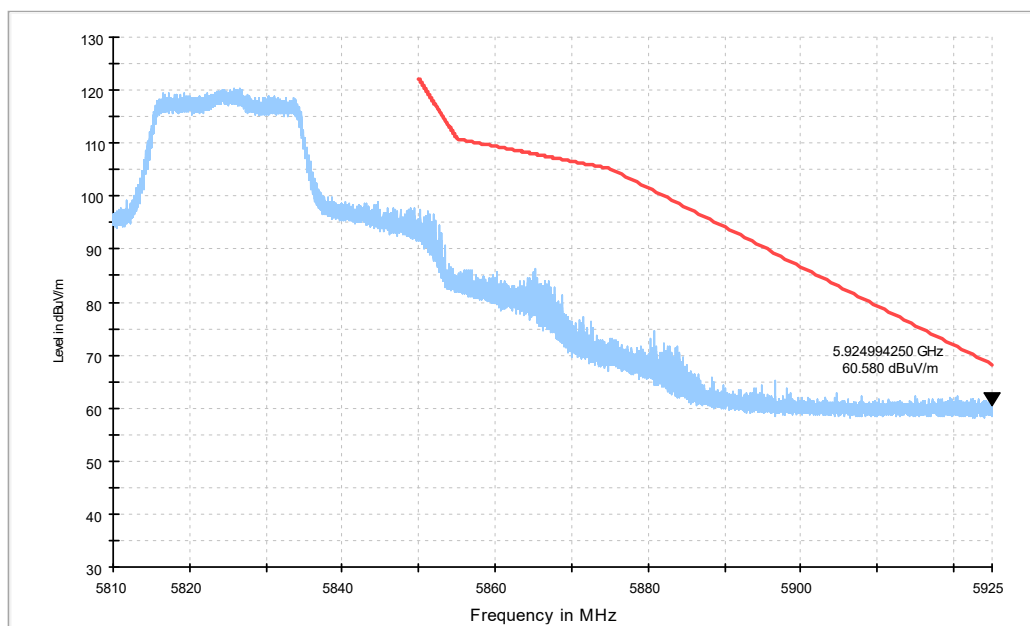


Fig. 20 Band Edges (802.11be-HT20 Ch165, 5825MHz)

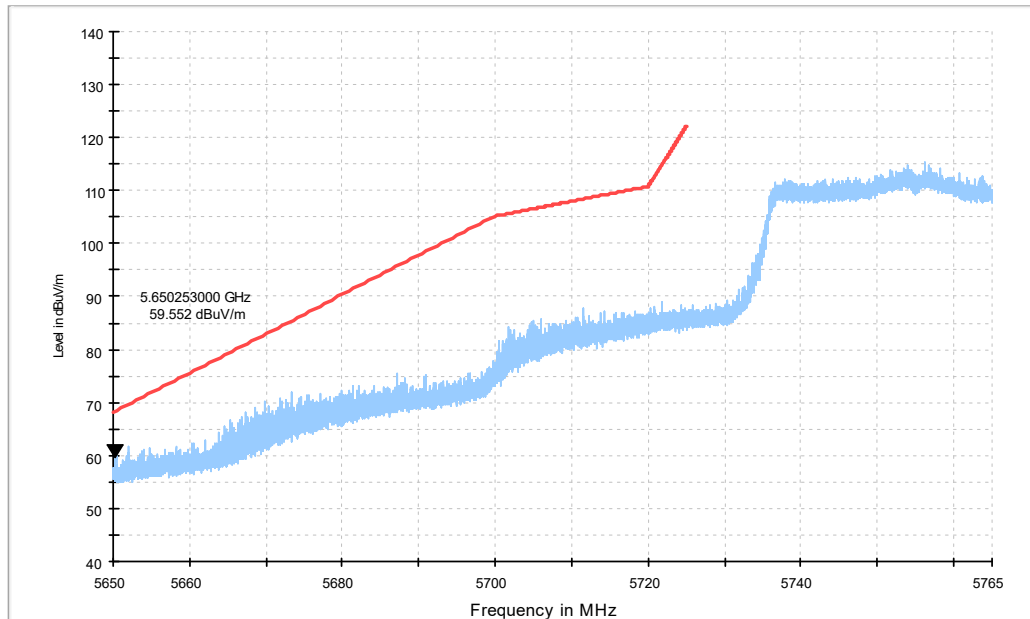


Fig. 21 Band Edges (802.11be-HT40 Ch151, 5755MHz)

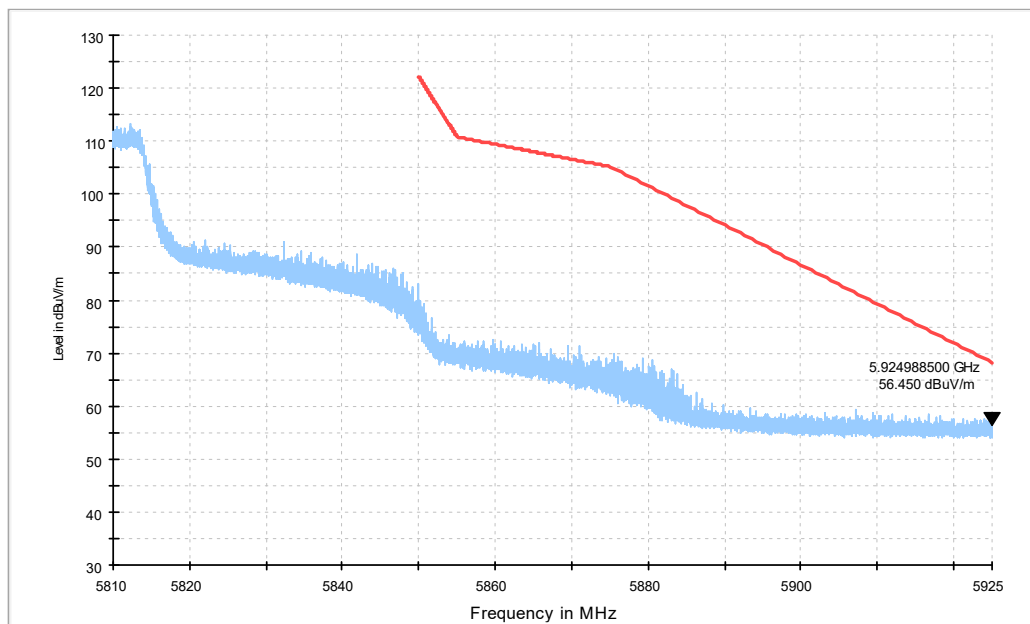


Fig. 22 Band Edges (802.11be-HT40 Ch159, 5795MHz)

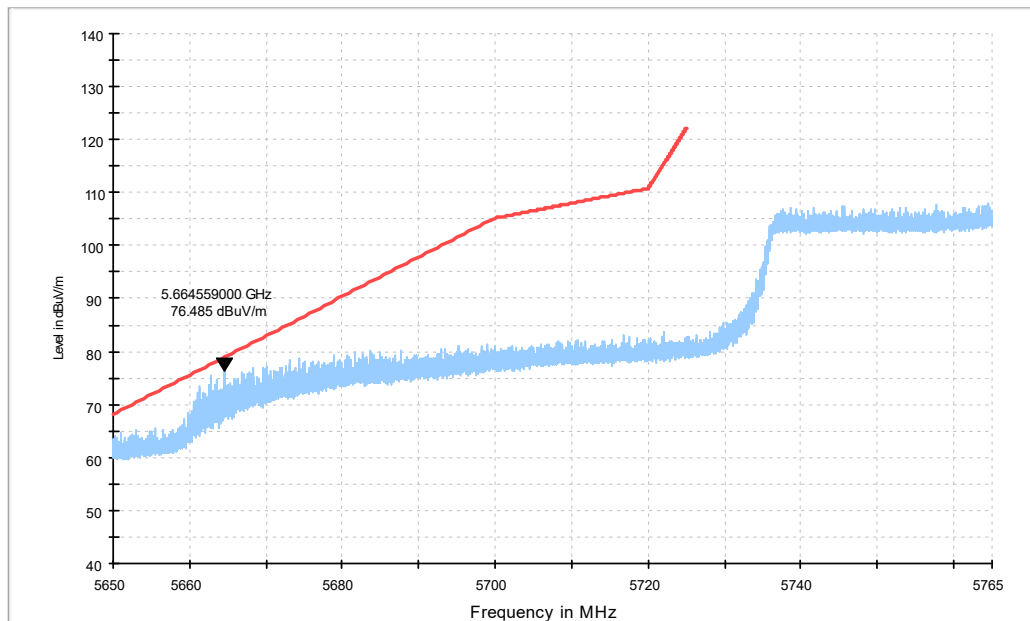


Fig. 23 Band Edges (802.11be-HT80 Ch155, 5775MHz)

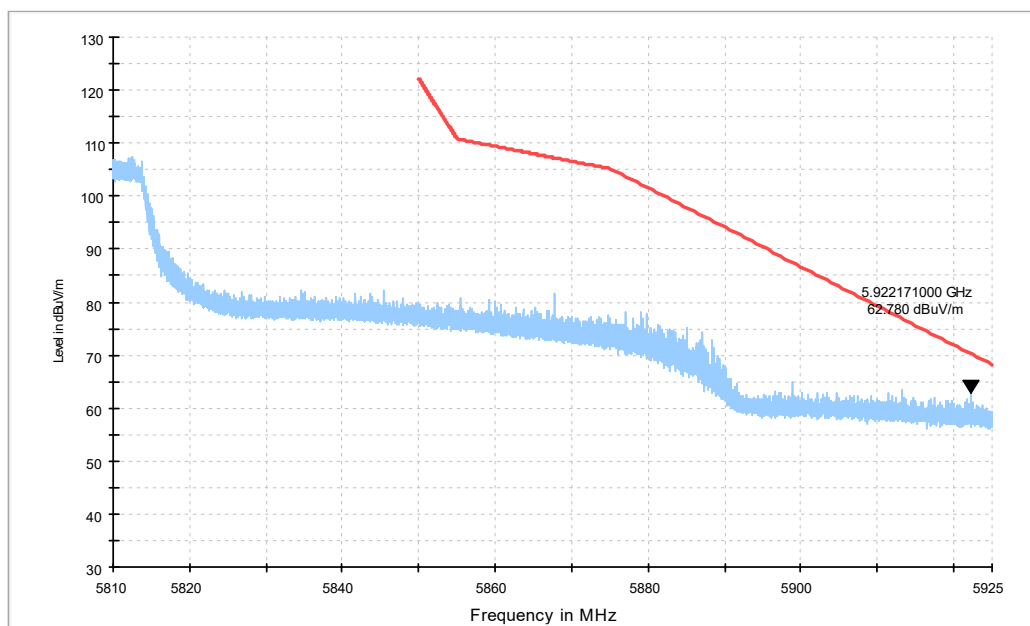


Fig. 24 Band Edges (802.11be-HT80 Ch155, 5775MHz)

A.7. AC Powerline Conducted Emission

Method of Measurement: See ANSI C63.10-2013-clause 6.2

- 1 The one EUT cable configuration and arrangement and mode of operation that produced the emission with the highest amplitude relative to the limit is selected for the final measurement, while applying the appropriate modulating signal to the EUT.
- 2 If the EUT is relocated from an exploratory test site to a final test site, the highest emissions shall be remaximized at the final test location before final ac power-line conducted emission measurements are performed.
- 3 The final test on all current-carrying conductors of all of the power cords to the equipment that comprises the EUT (but not the cords associated with other non-EUT equipment in the system) is then performed for the full frequency range for which the EUT is being tested for compliance without further variation of the EUT arrangement, cable positions, or EUT mode of operation.
- 4 If the EUT is comprised of equipment units that have their own separate ac power connections, e.g., floor-standing equipment with independent power cords for each shelf that are able to connect directly to the ac power network, each current-carrying conductor of one unit is measured while the other units are connected to a second (or more) LISN(s). All units shall be separately measured. If a power strip is provided by the manufacturer, to supply all of the units making up the EUT, only the conductors in the power cord of the power strip shall be measured.
- 5 If the EUT uses a detachable antenna, these measurements shall be made with a suitable dummy load connected to the antenna output terminals; otherwise, the tests shall be made with the antenna connected and, if adjustable, fully extended. When measuring the ac conducted emissions from a device that operates between 150 kHz and 30 MHz a non-detachable antenna may be replaced with a dummy load for the measurements within the fundamental emission band of the transmitter, but only for those measurements.³⁶ Record the six highest EUT emissions relative to the limit of each of the current-carrying conductors of the power cords of the equipment that comprises the EUT over the frequency range specified by the procuring or regulatory agency. Diagram or photograph the test setup that was used. See Clause 8 for full reporting requirements.

Test Condition:

Voltage (V)	Frequency (Hz)
120	60

Measurement Result and limit:
WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Result (dBμV)		Conclusion
		With charger		
		11a mode	Idle	
0.15 to 0.5	66 to 56	Fig.25	Fig.26	P
0.5 to 5	56			
5 to 30	60			
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

WLAN (Average Limit)

Frequency range (MHz)	Average Limit (dBμV)	Result (dBμV)		Conclusion
		With charger		
		11a mode	Idle	
0.15 to 0.5	56 to 46	Fig.25	Fig.26	P
0.5 to 5	46			
5 to 30	50			
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

Conclusion: PASS
Test graphs as below:

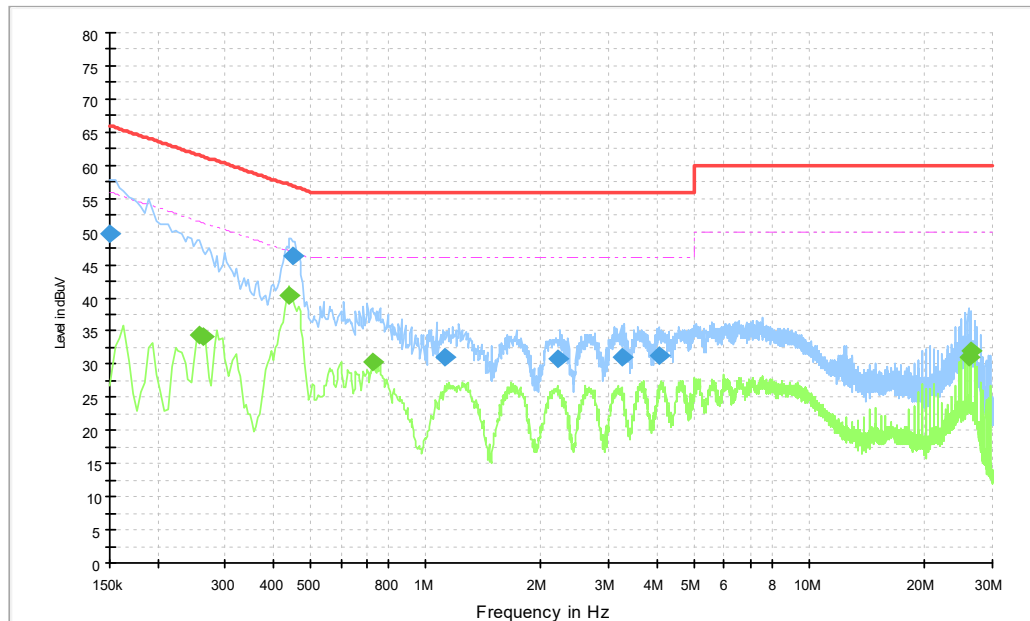


Fig.25 Conducted Emission(802.11a, Ch40, TX)

Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.150000	49.6	L1	20.2	16.4	66.0
0.451000	46.3	N	20.2	10.5	56.9
1.117000	31.2	N	20.0	24.8	56.0
2.206000	30.8	N	20.0	25.2	56.0
3.250000	31.0	L1	19.9	25.0	56.0
4.046500	31.4	L1	19.9	24.6	56.0

Final Result 2

Frequency (MHz)	Average (dBμV)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.257500	34.4	N	20.0	17.1	51.5
0.262000	34.2	N	20.1	17.2	51.4
0.442000	40.3	N	20.1	6.7	47.0
0.725500	30.3	N	20.1	15.7	46.0
25.930000	30.9	L1	20.1	19.1	50.0
26.411500	32.0	L1	20.1	18.0	50.0

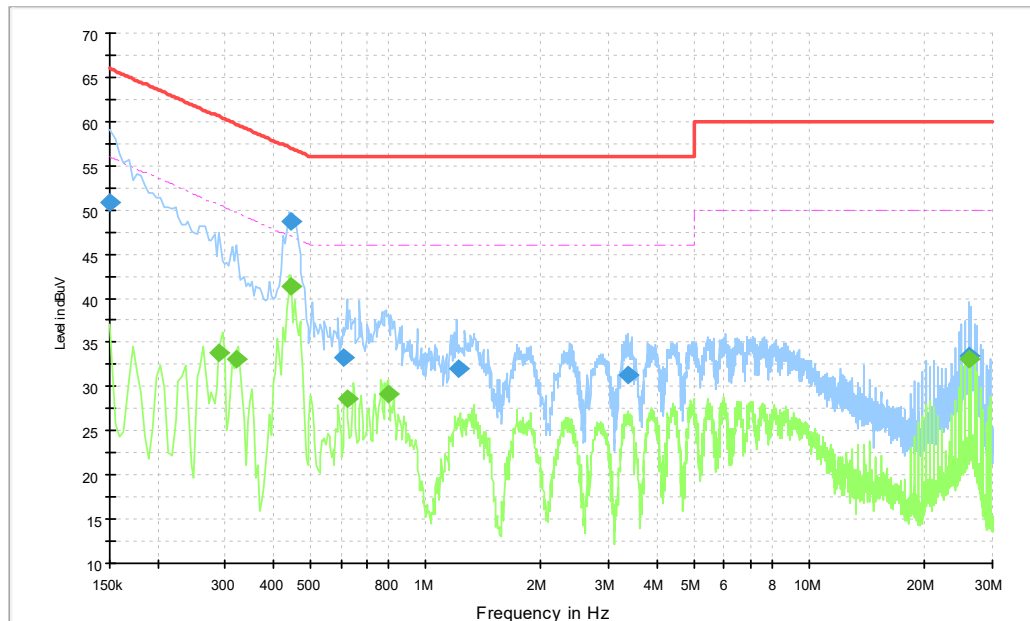


Fig.26 Conducted Emission(802.11a, IDLE)

Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.150000	50.9	N	20.2	15.1	66.0
0.446500	48.7	N	20.1	8.3	56.9
0.608500	33.3	N	20.1	22.7	56.0
1.211500	32.0	N	20.0	24.0	56.0
3.376000	31.3	L1	19.8	24.7	56.0
25.943500	33.4	L1	20.1	26.6	60.0

Final Result 2

Frequency (MHz)	Average (dBμV)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.289000	33.7	N	20.1	16.8	50.6
0.320500	33.2	N	20.1	16.5	49.7
0.446500	41.4	L1	20.1	5.6	46.9
0.622000	28.7	N	20.1	17.3	46.0
0.797500	29.2	N	20.1	16.8	46.0
25.939000	33.1	L1	20.1	16.9	50.0

A.8. Antenna Requirement

The antenna of the device is permanently attached. There are no provisions for connection to an external antenna.

The unit complies with the requirement of FCC Part 15.203.

ANNEX B: EUT parameters

Disclaimer: The antenna gain and worse case provided by the client may affect the validity of the measurement results in this report, and the client shall bear the impact and consequences arising therefrom.

ANNEX C: Accreditation Certificate



*** END OF REPORT BODY ***