



FCC PART 15C TEST REPORT No.23T04Z80263-09

for

BLU Products, Inc.

Smart Phone

B170D

FCC ID:YHLBLUB170D

with

Hardware Version: V1.0

Software Version: BLU_B170D_V14.0.01.05.01.01_FSec

Issued Date: 2023-11-28

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
23T04Z80263-09	Rev.0	1st edition	2023-11-15
23T04Z80263-09	Rev.1	Adding the Loop Antenna in P11 Adding the description "In total, three EUT elevation positions are measured" in P27 Add the polts for Output power, Duty cycle and Peak Power Spectral Density. Adding the "Automatically discontinued Transmission" in P10	2023-11-28

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(huayuan North Road)

Address: No. 52, Huayuan North Road, Haidian District, Beijing,
P. R. China100191

Radiated testing Location: CTTL(BDA)

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

1.3. TestingEnvironment

Normal Temperature: 15-35°C

Relative Humidity: 20-75%

1.4. Project date

Testing Start Date: 2023-11-11

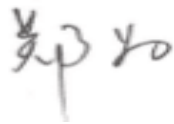
Testing End Date: 2023-11-06

1.5. Signature



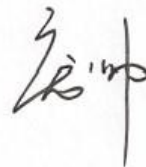
Yao Xingyu

(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: BLU Products, Inc.
Address: 8600 NW 36th Street, Suite #200, Doral, FL 33166
City: Doral
Postal Code: /
Country: US
Telephone: 305.715.7171
Fax: 305.436.8819

2.2. Manufacturer Information

Company Name: BLU Products, Inc.
Address: 8600 NW 36th Street, Suite #200, Doral, FL 33166
City: Doral
Postal Code: /
Country: US
Telephone: 305.715.7171
Fax: 305.436.8819

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

3.1. About EUT

Description	Smart Phone
Model name	B170D
FCC ID	YHLBLUB170D
WLAN Frequency Band	ISM Band: 5725MHz~5850MHz
Type of modulation	OFDM
Nominal Voltage	3.85V
Extreme High Voltage	4.40V
Extreme Low Voltage	3.60V

3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version	Date of receipt
UT28a	359979710002223	V1.0	BLU_B170D_V14.0.01.05.01.01_FSec	2023-10-12
UT16a	359979710001274	V1.0	BLU_B170D_V14.0.01.05.01.01_FSec	2023-10-12

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

UT16a is used for Conduction test, UT28a is used for Radiation test.

3.3. Internal Identification of AE used during the test

AE ID*	Description	Note	Manufacturer
AE1	Battery	C926547500P	Hunan Gaoyuan Battery Co., LTD
AE2	Charger	US-SP-2000	ShenZhen BaiJunDa Electronic CO.,LTD.
AE3	USB cable	CL2105-4	Dongguan Yuwei Electronic Technology Co., Ltd.

*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 Smart Phone 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 CFR 47, Part 15, Subpart C and E:	
FCC Part15	15.205 Restricted bands of operation; 15.209 Radiated emission limits, general requirements; 15.407 General technical requirements	2021
ANSI C63.10	Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz	2013
UNII: KDB 789033 D02	General U-NII Test Procedures New Rules v02r01	2017-12

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	Sub-clause of IC	Verdict
Maximum Peak Output Power	15.407 (a)	/	P
Peak Power Spectral Density	15.407 (a)	/	P
Occupied 6dB Bandwidth	15.407 (e)	/	P
Band Edges Compliance - Conducted& Radiated	15.407 (b)	/	P
Transmitter Spurious Emission - Radiated	15.407, 15.205, 15.209	/	P
AC Powerline Conducted Emission	15.107, 15.207	/	P
Automatically discontinued Transmission(note 1)	15.407	/	NA

Note 1: The device can automatically discontinue transmission in case of either absence of information to transmitter operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met.

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	3.85V
Humidity	44%

7. Test Facilities Utilized

Conducted test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Period	Calibration Due date
1	Vector Signal Analyzer	FSQ40	200089	Rohde & Schwarz	1 year	2024-07-04
2	LISN	ENV216	101200	Rohde & Schwarz	1 year	2024-06-05
3	Test Receiver	ESCI	100344	Rohde & Schwarz	1 year	2024-02-28
4	Attenuator	10dB/2W	/	Rosenberger	/	/
5	Shielding Room	S81	/	ETS-Lindgren	/	/

Radiated emission test system

FACT3-5

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Period	Calibration Due date
1	Test Receiver	ESW44	103015	R&S	1 year	2024-02-11
2	EMI Antenna	VULB9163	9163-235	Schwarzbeck	1 year	2024-06-10
3	EMI Antenna	3117	00139065	ETS	1 year	2024-09-13
4	Test Receiver	LB-180400 -25-C-KF	211008400 0006	A-INFO	1 year	2024-03-02
5	Loop Antenna	HFH2-Z2	829324/00 7	R&S	2 year	2024-12-23

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	/
$30\text{MHz} \leq f \leq 1\text{GHz}$	5.29
$1\text{GHz} \leq f \leq 18\text{GHz}$	5.62
$18\text{GHz} \leq f \leq 40\text{GHz}$	3.52

8.6. AC Power-line Conducted Emission

Measurement Uncertainty : 3.10dB,k=2

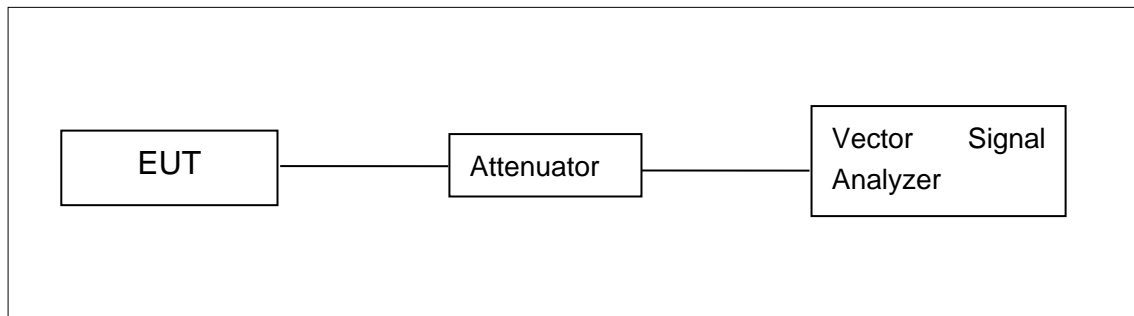


ANNEX A: MEASUREMENT RESULTS

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

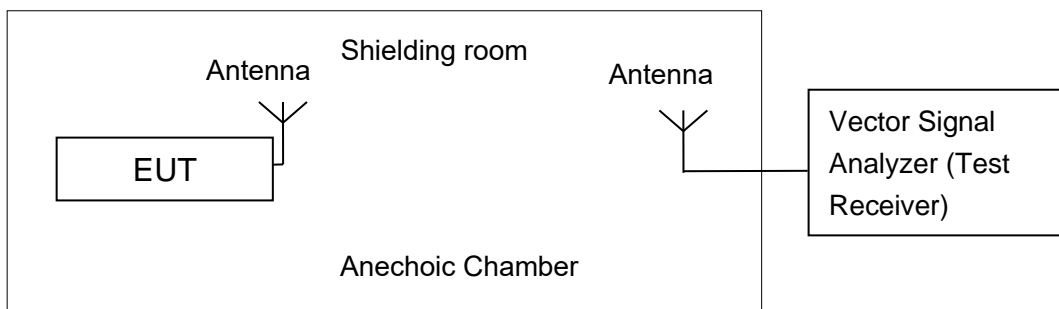


A.1.2. Radiated Emission Measurements

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 \geq 3 MHz.

Number of points in sweep $\geq 2 \times$ 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

Antenna gain is -4.0dBi and the value is supplied by the applicant or manufacturer.

A.2.2. Maximum Average Output Power-Conducted

EUT ID: UT16a

Measurement Results:

802.11a mode

Mode	Data Rate (Mbps)	Test Result (dBm)		
		5745MHz (Ch149)	5785MHz (Ch157)	5825MHz (Ch165)
802.11a	6	17.55	17.21	17.16
	9	/	/	/
	12	/	/	/
	18	/	/	/
	24	/	/	/
	36	/	/	/
	48	/	/	/
	54	/	/	/

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 (Index)	Test Result (dBm)		
		5745MHz (Ch149)	5785MHz (Ch157)	5825MHz (Ch165)
802.11n (20MHz)	MCS0	16.61	16.76	16.54
	MCS1	/	/	/
	MCS2	/	/	/
	MCS3	/	/	/
	MCS4	/	/	/
	MCS5	/	/	/
	MCS6	/	/	/
	MCS7	/	/	/

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

802.11ac-HT20 mode

Mode	Data Rate (Index)	Test Result (dBm)		
		5745MHz (Ch149)	5785MHz (Ch157)	5825MHz (Ch165)
802.11ac (20MHz)	MCS0	17.82	17.66	17.52
	MCS1	/	/	/
	MCS2	/	/	/
	MCS3	/	/	/
	MCS4	/	/	/
	MCS5	/	/	/
	MCS6	/	/	/
	MCS7	/	/	/
	MCS8	/	/	/

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)	Test Result (dBm)	
		5755MHz (Ch151)	5795MHz (Ch159)
802.11n (40MHz)	MCS0	15.65	15.42
	MCS1	/	/
	MCS2	/	/
	MCS3	/	/
	MCS4	/	/
	MCS5	/	/
	MCS6	/	/
	MCS7	/	/

The data rate MSC0 is selected as worst condition, and the following cases are performed with this condition.

802.11ac-HT40 mode

Mode	Data Rate (Index)	Test Result (dBm)	
		5755MHz (Ch151)	5795MHz (Ch159)
802.11ac (40MHz)	MCS0	16.63	16.64
	MCS1	/	/
	MCS2	/	/
	MCS3	/	/
	MCS4	/	/
	MCS5	/	/
	MCS6	/	/
	MCS7	/	/
	MCS8	/	/
	MCS9	/	/

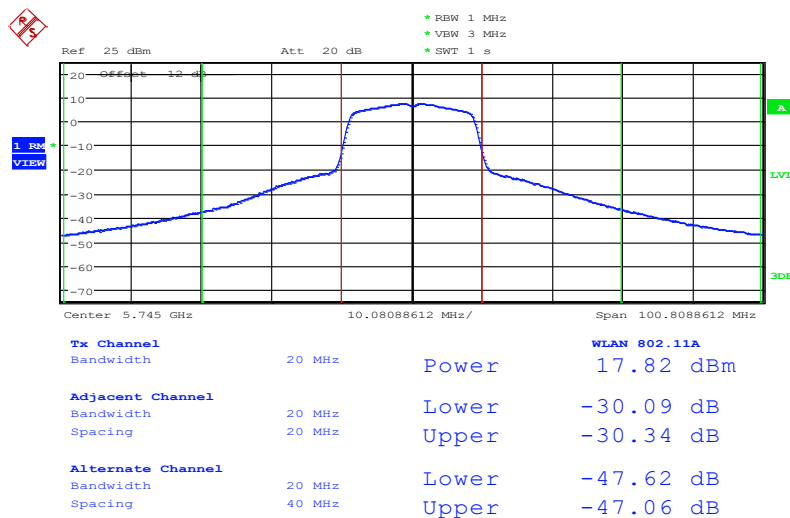
The data rate MSC0 is selected as worst condition, and the following cases are performed with this condition.

802.11ac-HT80 mode

Mode	Data Rate (Index)	Test Result (dBm)
		5775MHz (Ch155)
802.11ac (80MHz)	MCS0	15.45
	MCS1	/
	MCS2	/
	MCS3	/
	MCS4	/
	MCS5	/
	MCS6	/
	MCS7	/
	MCS8	/
MCS9	/	

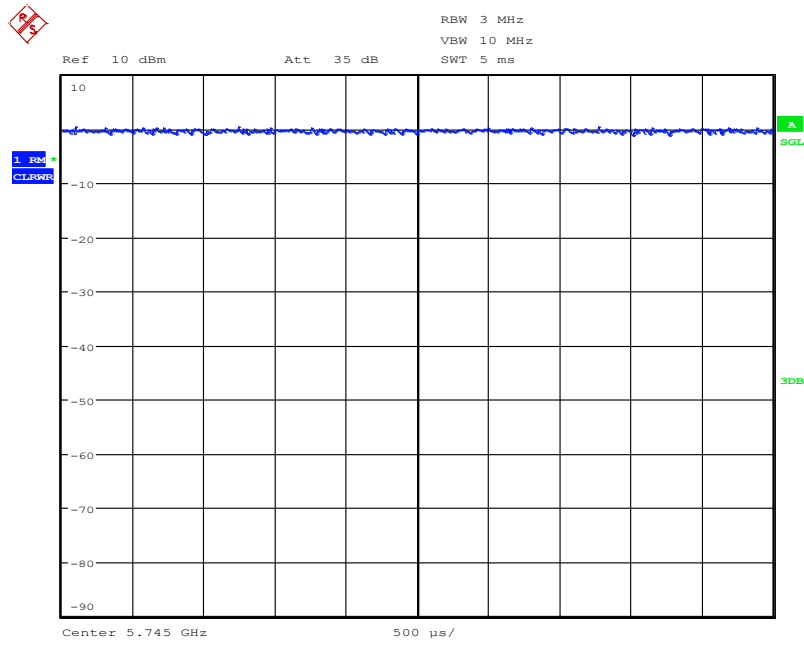
The data rate MSC0 is selected as worst condition, and the following cases are performed with this condition.

The duty cycle of all mode are 100%.



Date: 1.NOV.2023 17:49:53

Maximum output Power:11ac20 CH149



Date: 1.NOV.2023 17:50:23

Duty cycle:11ac20 CH149

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.

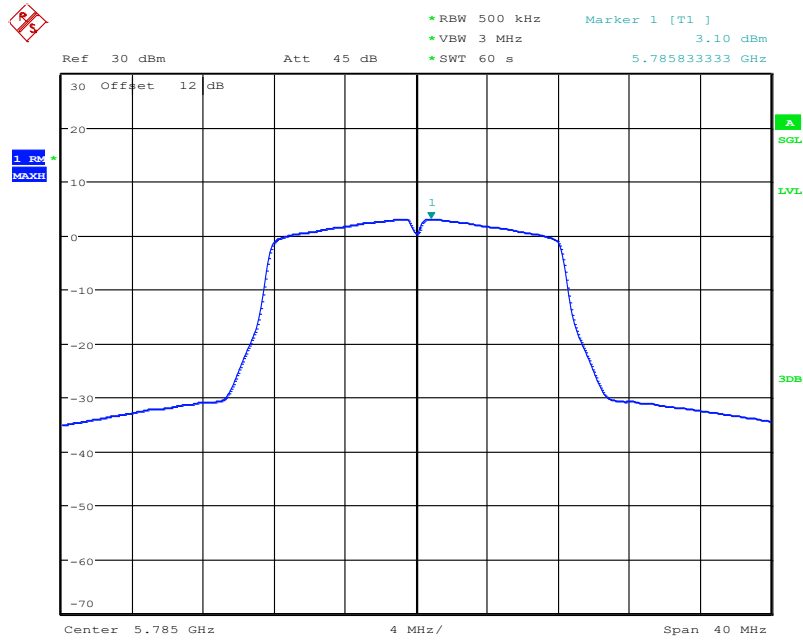
Measurement Uncertainty:

Measurement Uncertainty	0.75dB
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EUT ID: UT16a

Measurement Results:

Mode	Channel	Power Spectral Density (dBm/500kHz)	Conclusion
802.11a	149	3.04	P
	157	3.10	P
	165	3.03	P
802.11ac HT20	149	2.98	P
	157	2.71	P
	165	2.45	P
802.11ac HT40	151	-0.98	P
	159	-1.29	P
802.11ac HT80	155	-5.59	P



Date: 2.NOV.2023 13:52:42

Peak Power Spectral Density:11a CH157

Conclusion: PASS

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:

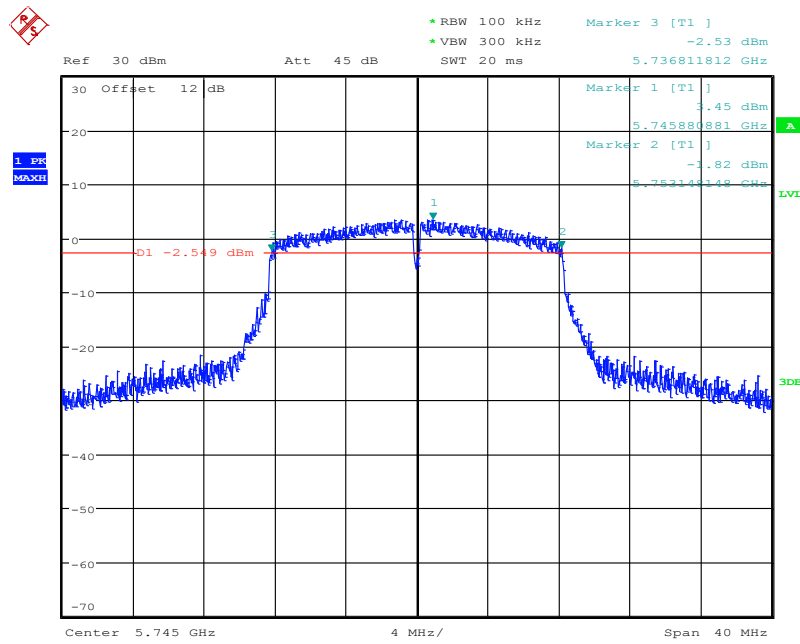
Measurement Uncertainty	60.80Hz
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EUT ID: UT16a

Measurement Result:

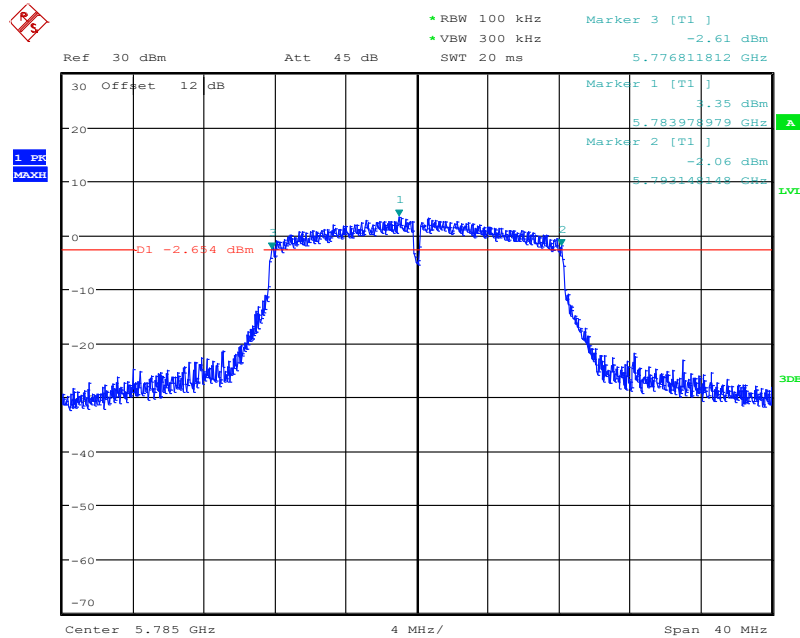
Mode	Channel	6dB Emission Bandwidth (MHz)		conclusion
802.11a	149	Fig.1	16.34	P
	157	Fig.2	16.34	P
	165	Fig.3	16.32	P
802.11ac (VHT20)	149	Fig.4	17.56	P
	157	Fig.5	17.58	P
	165	Fig.6	17.58	P
802.11ac (VHT40)	151	Fig.7	36.08	P
	159	Fig.8	36.28	P
802.11ac (VHT80)	155	Fig.9	76.40	P

Test graphs as below:



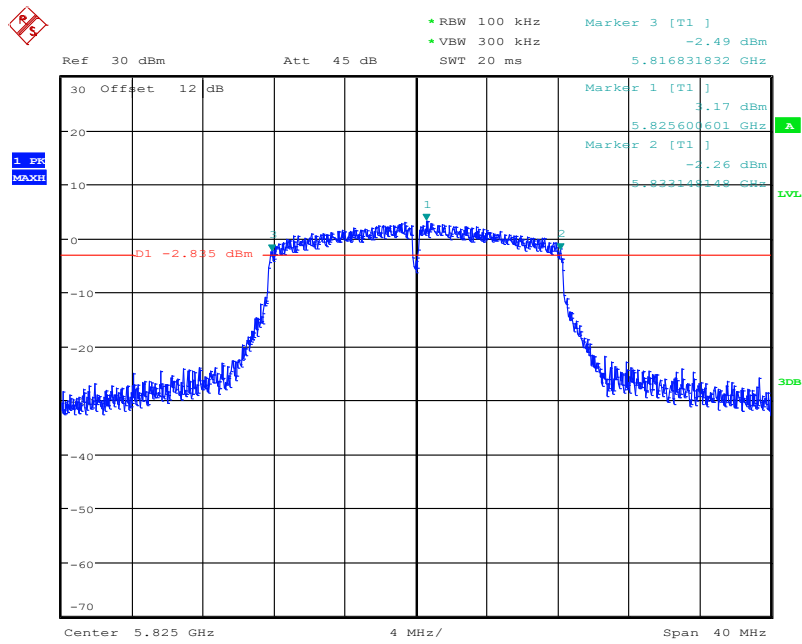
Date: 2.NOV.2023 14:08:49

Fig. 1 6dB Emission Bandwidth (802.11a, Ch 149)



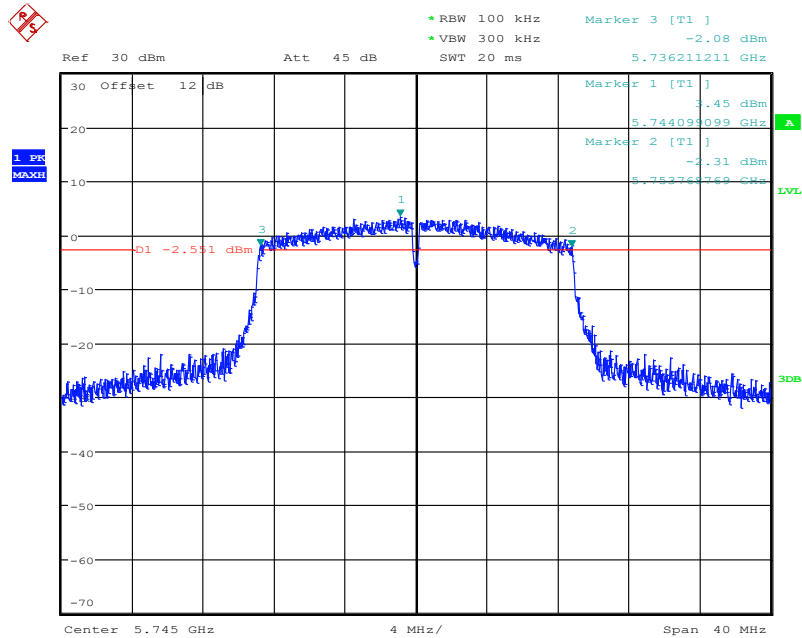
Date: 2.NOV.2023 14:09:25

Fig. 2 6dB Emission Bandwidth (802.11a, Ch 157)



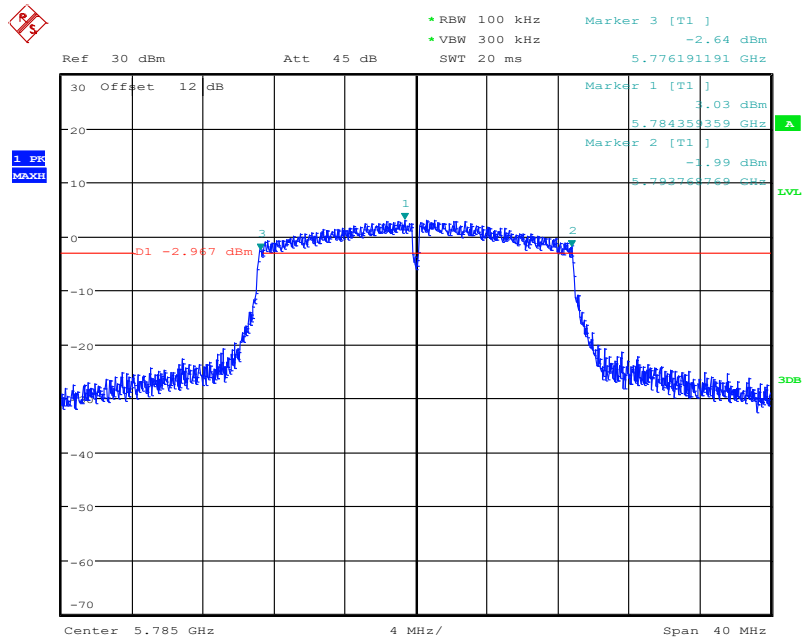
Date: 2.NOV.2023 14:10:08

Fig. 3 6dB Emission Bandwidth (802.11a, Ch 165)



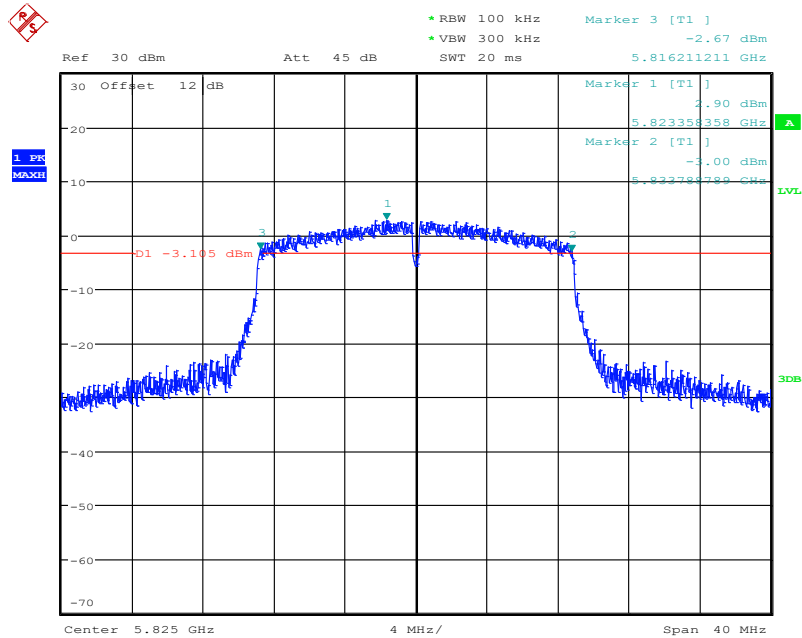
Date: 2.NOV.2023 14:05:19

Fig. 4 6dB Emission Bandwidth (802.11ac-VHT20, Ch 149)



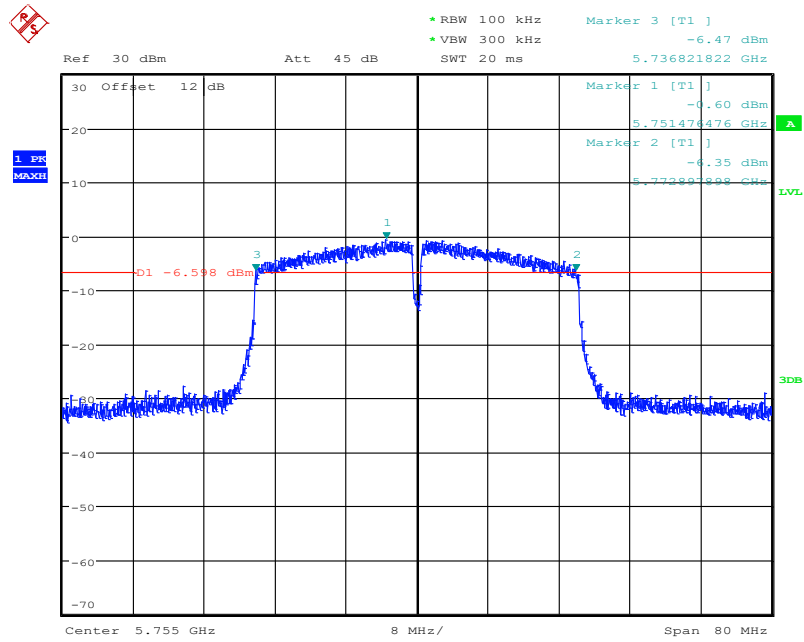
Date: 2.NOV.2023 14:05:55

Fig. 5 6dB Emission Bandwidth (802.11ac-VHT20, Ch 157)



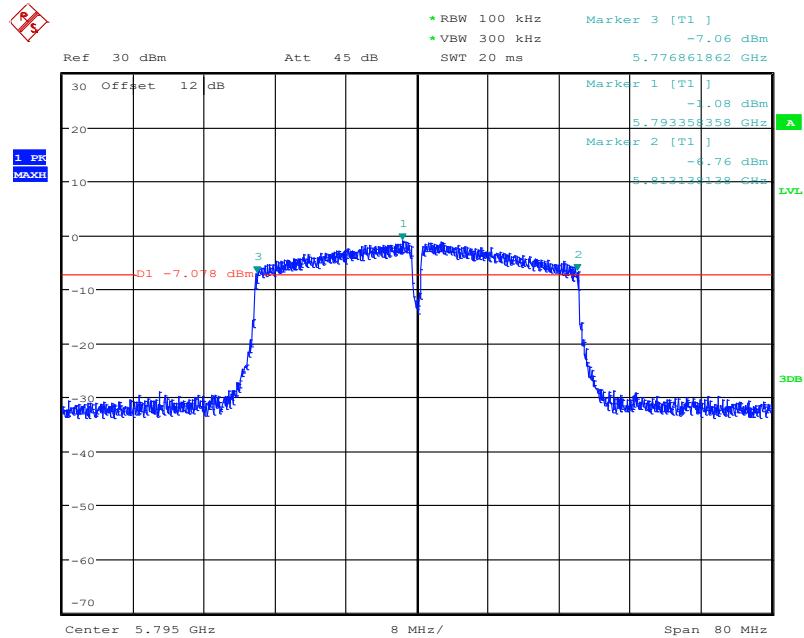
Date: 2.NOV.2023 14:06:29

Fig. 6 6dB Emission Bandwidth (802.11ac-VHT20, Ch 165)



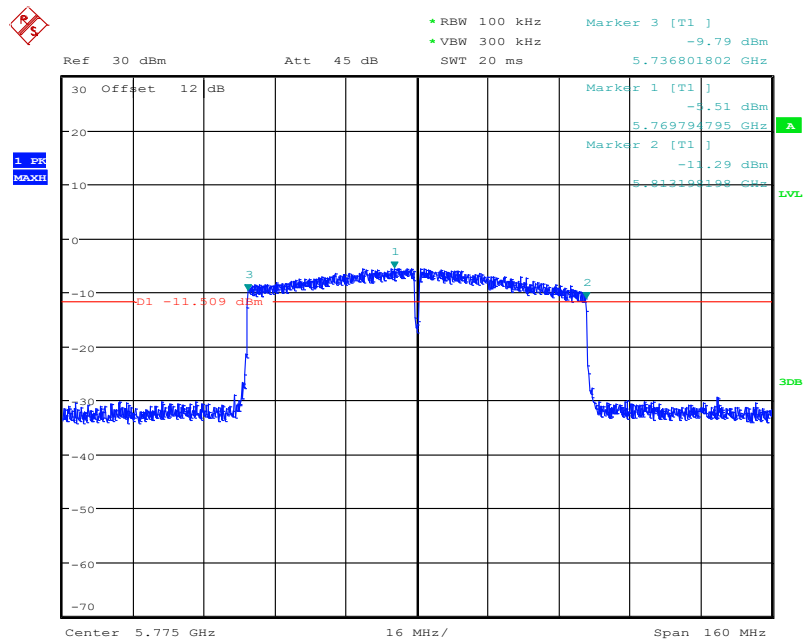
Date: 2.NOV.2023 14:07:06

Fig. 7 6dB Emission Bandwidth (802.11ac-VHT40, Ch 151)



Date: 2.NOV.2023 14:08:06

Fig. 8 6dB Emission Bandwidth (802.11ac-VHT40, Ch 159)



Date: 2.NOV.2023 14:04:32

Fig. 9 6dB Emission Bandwidth (802.11ac-VHT80, Ch 155)

Conclusion: PASS

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:

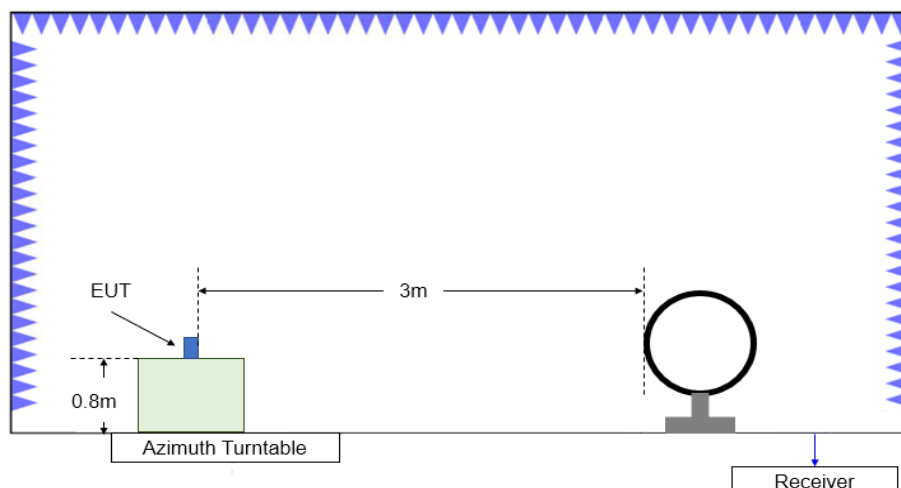
Frequency of emission (MHz)	Field strength (uV/m)	Field strength (dBµV/m)	Measurement distance(m)
30-88	100	40.0	3
88-216	150	43.5	3
216-960	200	46.0	3
Above 960	500	54.0	3

Test Condition

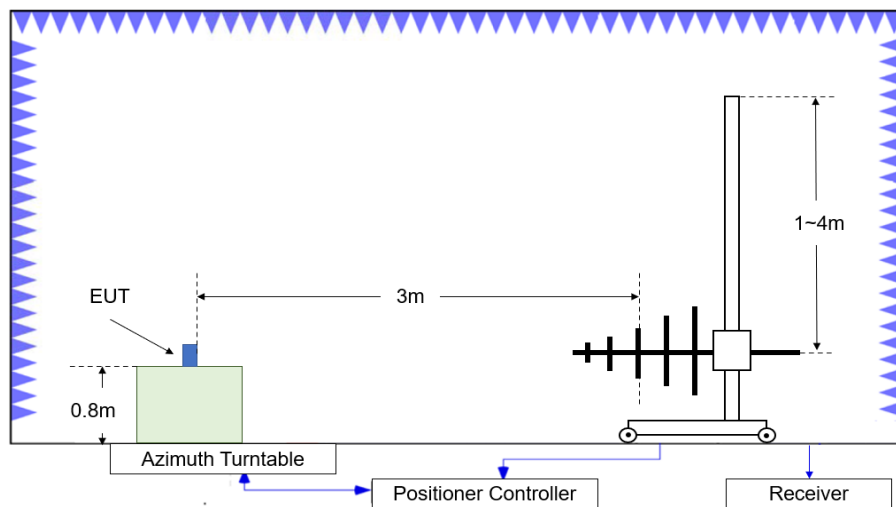
The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

Frequency of emission (MHz)	RBW/VBW	Sweep Time(s)
30-1000	100KHz/300KHz	5
1000-4000	1MHz/3MHz	15
4000-18000	1MHz/3MHz	40
18000-26500	1MHz/3MHz	20

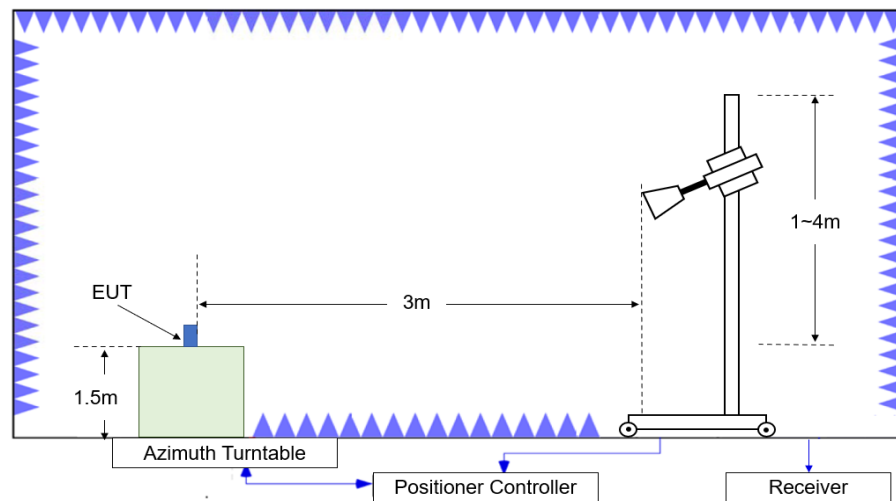
Test setup



Test Site Diagram (9kHz-30MHz)



Test Site Diagram (30MHz-1GHz)



Test Site Diagram (1GHz-40GHz)

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.

Test note

1. Investigation has been done on all modes and modulations/data rates. In total, three EUT elevation positions are measured. Only the radiated emissions of the configuration that produced the worst case emissions are reported in this section.
2. Spurious emissions for all channels were investigated and almost the same below 1GHz. According to FCC 47 CFR §15.31, emission levels are not report much lower than the limit by over 20dB
3. Measurement frequencies were performed from 9 kHz to the 10th harmonic of highest fundamental frequency or 40GHz, whichever is lower.

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)
5455.200	42.65	-23.00	33.61	32.04	54.00	11.35	V
5457.600	42.72	-22.97	33.62	32.07	54.00	11.28	H
11490.000	34.18	-30.15	38.98	25.34	54.00	19.82	V
15865.000	35.78	-25.49	38.67	22.61	54.00	18.22	H
17956.000	39.81	-24.18	41.81	22.18	54.00	14.19	H
17990.000	39.85	-24.29	41.88	22.25	54.00	14.15	H

Channel 157

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)
5456.400	42.71	-22.99	33.61	32.08	54.00	11.29	V
5458.000	42.77	-22.96	33.62	32.11	54.00	11.23	H
11570.000	34.19	-30.11	38.93	25.36	54.00	19.81	V
15848.500	35.83	-25.35	38.65	22.54	54.00	18.17	V
17895.000	39.42	-24.15	41.70	21.87	54.00	14.58	H
17985.000	39.99	-24.27	41.87	22.40	54.00	14.01	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)
5456.000	42.64	-22.99	33.61	32.02	54.00	11.36	H
5458.000	42.75	-22.96	33.62	32.09	54.00	11.25	H
11650.000	34.29	-29.97	38.85	25.41	54.00	19.71	H
15860.500	35.77	-25.45	38.66	22.56	54.00	18.23	V
17931.500	39.60	-24.15	41.76	21.99	54.00	14.40	H
17986.000	39.74	-24.28	41.87	22.15	54.00	14.26	V

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)
5458.400	42.74	-22.95	33.62	32.08	54.00	11.26	V
5456.800	42.68	-22.98	33.61	32.05	54.00	11.32	H
11490.000	34.16	-30.15	38.98	25.32	54.00	19.84	V
15861.000	35.85	-25.45	38.66	22.65	54.00	18.15	H
17929.000	39.70	-24.15	41.76	22.09	54.00	14.30	V
17986.000	39.94	-24.28	41.87	22.35	54.00	14.06	H

Channel 157

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)
5453.600	42.62	-23.03	33.61	32.04	54.00	11.38	V
5455.600	42.71	-23.00	33.61	32.10	54.00	11.29	H
11570.000	34.35	-30.11	38.93	25.53	54.00	19.65	V
15854.000	36.04	-25.38	38.65	22.77	54.00	17.96	H
17924.000	39.67	-24.15	41.75	22.07	54.00	14.33	V
17958.500	39.95	-24.19	41.82	22.32	54.00	14.05	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)
5445.200	42.49	-23.14	33.57	32.06	54.00	11.51	V
5451.200	42.67	-23.07	33.60	32.14	54.00	11.33	V
11650.000	34.00	-29.97	38.85	25.12	54.00	20.00	V
15827.500	35.77	-25.46	38.63	22.61	54.00	18.23	V
17959.000	39.91	-24.19	41.82	22.29	54.00	14.09	V
17985.000	39.79	-24.27	41.87	22.20	54.00	14.21	H

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)
5455.200	42.65	-23.00	33.61	32.05	54.00	11.35	V
5458.000	42.78	-22.96	33.62	32.12	54.00	11.22	H
11510.000	34.65	-30.13	38.99	25.80	54.00	19.35	H
15868.500	35.80	-25.53	38.67	22.67	54.00	18.20	H
17822.000	39.41	-24.01	41.70	21.72	54.00	14.59	H
17986.500	39.93	-24.28	41.87	22.33	54.00	14.07	V

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)
5454.800	42.71	-23.01	33.61	32.11	54.00	11.29	H
5458.800	42.84	-22.95	33.62	32.17	54.00	11.16	V
11590.000	34.23	-30.23	38.91	25.55	54.00	19.77	V
15867.000	35.80	-25.51	38.67	22.65	54.00	18.20	V
17955.000	39.92	-24.18	41.81	22.29	54.00	14.08	V
17990.500	39.73	-24.29	41.88	22.14	54.00	14.27	V

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)
5454.800	42.64	-23.01	33.61	32.04	54.00	11.36	V
5458.800	42.79	-22.95	33.62	32.11	54.00	11.21	H
11490.000	34.33	-30.15	38.98	25.50	54.00	19.67	H
15861.000	35.82	-25.45	38.66	22.61	54.00	18.18	V
17957.500	39.94	-24.19	41.82	22.31	54.00	14.06	V
17989.500	39.91	-24.29	41.88	22.32	54.00	14.09	V

Channel 157

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)
5456.800	42.74	-22.98	33.61	32.11	54.00	11.26	H
5460.000	42.80	-22.93	33.62	32.10	54.00	11.20	H
11570.000	34.45	-30.11	38.93	25.63	54.00	19.55	H
15830.500	35.77	-25.45	38.63	22.58	54.00	18.23	H
17959.000	40.02	-24.19	41.82	22.40	54.00	13.98	V
17989.000	39.99	-24.29	41.88	22.40	54.00	14.01	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)
5455.200	42.70	-23.00	33.61	32.09	54.00	11.30	H
5459.600	42.69	-22.93	33.62	32.00	54.00	11.31	H
11650.000	34.02	-29.97	38.85	25.13	54.00	19.98	V
15851.000	35.91	-25.35	38.65	22.62	54.00	18.09	V
17797.500	39.76	-23.87	41.70	21.93	54.00	14.24	V
17985.500	40.08	-24.27	41.87	22.48	54.00	13.92	H

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)
5453.200	42.73	-23.04	33.61	32.16	54.00	11.27	V
5456.400	42.68	-22.99	33.61	32.05	54.00	11.32	H
11510.000	34.68	-30.13	38.99	25.82	54.00	19.32	H
15857.000	36.02	-25.41	38.66	22.77	54.00	17.98	H
17798.000	39.62	-23.87	41.70	21.78	54.00	14.38	V
17962.000	39.91	-24.20	41.82	22.29	54.00	14.09	V

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)
5457.600	42.74	-22.97	33.62	32.09	54.00	11.26	H
5458.800	42.75	-22.95	33.62	32.08	54.00	11.25	H
11590.000	34.22	-30.23	38.91	25.54	54.00	19.78	V
15866.500	35.81	-25.51	38.67	22.66	54.00	18.19	H
17926.500	39.78	-24.15	41.75	22.18	54.00	14.22	H
17991.500	39.94	-24.29	41.88	22.35	54.00	14.06	H

802.11ac-HT80

Channel 155 L

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)
5452.400	40.7	-23.1	33.6	30.13	54.0	13.3	H
5458.800	42.7	-22.9	33.6	32.03	54.0	11.3	H
11550.000	34.1	-30.0	38.9	25.15	54.0	19.9	V
17757.000	39.3	-24.1	41.7	21.70	54.0	14.7	V
17891.500	39.5	-24.2	41.7	21.90	54.0	14.6	V
17708.000	39.2	-24.0	41.8	21.32	54.0	14.8	H

Channel 155 R

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)
5452.400	40.7	-23.1	33.6	30.13	54.0	13.3	H
5458.800	42.7	-22.9	33.6	32.03	54.0	11.3	H
11550.000	34.1	-30.0	38.9	25.15	54.0	19.9	V
17757.000	39.3	-24.1	41.7	21.70	54.0	14.7	V
17891.500	39.5	-24.2	41.7	21.90	54.0	14.6	V
17708.000	39.2	-24.0	41.8	21.32	54.0	14.8	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)
5650.325	56.30	-22.71	33.90	45.11	68.44	12.14	H
5650.400	56.63	-22.71	33.90	45.44	68.50	11.87	V
11490.000	45.13	-30.15	38.98	36.30	74.00	28.87	H
17235.000	49.96	-24.43	41.57	32.81	68.30	18.34	V
17461.500	52.89	-24.30	42.00	35.19	68.30	15.41	V
17676.500	52.81	-23.88	41.82	34.87	68.30	15.49	V

Channel 157

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)
5728.400	55.59	-22.64	34.06	44.18	68.30	12.71	H
5849.200	55.54	-22.80	34.50	43.84	68.30	12.76	H
11570.000	45.02	-30.11	38.93	36.20	74.00	28.98	V
17355.000	51.22	-24.39	41.87	33.75	68.30	17.08	V
17502.000	52.68	-24.07	42.00	34.75	68.30	15.62	V
17675.000	52.48	-23.88	41.82	34.54	68.30	15.82	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)
5924.900	56.87	-22.82	34.90	44.79	68.27	11.41	H
5925.000	56.68	-22.82	34.90	44.60	68.20	11.52	H
11650.000	45.10	-29.97	38.85	36.21	74.00	28.90	H
17475.000	51.82	-24.22	42.00	34.04	68.30	16.48	V
17596.000	52.48	-24.00	41.90	34.57	68.30	15.82	H
17651.500	52.48	-23.84	41.85	34.48	68.30	15.82	V

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)
5650.150	55.72	-22.71	33.90	44.53	68.31	12.59	V
5650.300	56.44	-22.71	33.90	45.25	68.42	11.98	H
11490.000	44.71	-30.15	38.98	35.87	74.00	29.29	H
17235.000	51.13	-24.43	41.57	33.99	68.30	17.17	H
17370.000	53.09	-24.39	41.91	35.57	68.30	15.21	V
17647.500	52.46	-23.85	41.85	34.46	68.30	15.84	H

Channel 157

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)
5657.600	56.01	-22.61	33.92	44.71	68.30	12.29	H
5863.200	56.34	-22.69	34.58	44.46	68.30	11.96	V
11570.000	44.78	-30.11	38.93	35.96	74.00	29.22	V
17355.000	49.89	-24.39	41.87	32.42	68.30	18.41	H
17455.500	52.82	-24.34	42.00	35.16	68.30	15.48	H
17600.500	53.10	-23.98	41.90	35.19	68.30	15.20	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)
5924.850	56.77	-22.83	34.90	44.70	68.31	11.54	V
5924.900	57.42	-22.82	34.90	45.34	68.27	10.86	V
11650.000	45.52	-29.97	38.85	36.63	74.00	28.48	H
17475.000	50.21	-24.22	42.00	32.42	68.30	18.09	H
17554.500	52.26	-24.19	41.95	34.50	68.30	16.04	V
17650.000	52.80	-23.84	41.85	34.79	68.30	15.50	V

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)
5650.725	56.98	-22.70	33.90	45.78	68.74	11.76	H
5651.100	56.02	-22.70	33.90	44.82	69.01	12.99	H
11510.000	46.05	-30.13	38.99	37.19	74.00	27.95	H
17265.000	50.54	-24.40	41.63	33.31	68.30	17.76	V
17491.500	53.29	-24.11	42.00	35.41	68.30	15.01	V
17622.500	52.69	-23.92	41.88	34.73	68.30	15.61	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)
5923.100	57.19	-22.87	34.89	45.17	69.61	12.41	V
5923.525	58.18	-22.86	34.89	46.14	69.29	11.11	V
11590.000	44.22	-30.23	38.91	35.54	74.00	29.78	V
17385.000	50.23	-24.39	41.96	32.66	68.30	18.07	V
17497.000	52.89	-24.08	42.00	34.97	68.30	15.41	V
17676.000	52.77	-23.88	41.82	34.83	68.30	15.53	V

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)
5650.825	57.15	-22.70	33.90	45.95	68.81	11.66	V
5651.475	56.25	-22.69	33.90	45.04	69.29	13.04	H
11490.000	46.01	-30.15	38.98	37.17	74.00	27.99	H
17235.000	52.18	-24.43	41.57	35.04	68.30	16.12	V
17486.000	52.34	-24.15	42.00	34.49	68.30	15.96	V
17630.000	51.90	-23.90	41.87	33.93	68.30	16.40	H

Channel 157

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)
5756.800	56.59	-22.85	34.15	45.29	68.30	11.71	V
5812.000	55.62	-22.74	34.50	43.86	68.30	12.68	V
11570.000	44.94	-30.11	38.93	36.11	74.00	29.06	H
17355.000	51.26	-24.39	41.87	33.78	68.30	17.04	V
17493.000	52.08	-24.11	42.00	34.19	68.30	16.22	V
17655.000	52.63	-23.85	41.84	34.63	68.30	15.67	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)
5924.075	56.80	-22.84	34.90	44.75	68.88	12.08	V
5924.700	57.16	-22.83	34.90	45.09	68.42	11.27	V
11650.000	45.47	-29.97	38.85	36.59	74.00	28.53	V
17475.000	49.59	-24.22	42.00	31.81	68.30	18.71	V
17552.500	51.74	-24.20	41.95	33.99	68.30	16.56	H
17648.000	52.35	-23.85	41.85	34.34	68.30	15.95	V

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)
5650.750	56.68	-22.70	33.90	45.48	68.76	12.08	V
5651.225	56.43	-22.70	33.90	45.22	69.11	12.68	H
11510.000	45.51	-30.13	38.99	36.65	74.00	28.49	V
17265.000	50.86	-24.40	41.63	33.63	68.30	17.44	H
17478.000	52.81	-24.20	42.00	35.01	68.30	15.48	H
17664.000	52.68	-23.86	41.84	34.70	68.30	15.62	V

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)
5924.400	57.62	-22.84	34.90	45.56	68.64	11.03	H
5924.675	57.75	-22.83	34.90	45.68	68.44	10.69	H
11590.000	44.83	-30.23	38.91	36.16	74.00	29.17	H
17385.000	50.64	-24.39	41.96	33.07	68.30	17.66	H
17489.500	52.94	-24.13	42.00	35.06	68.30	15.36	V
17642.500	53.27	-23.86	41.86	35.28	68.30	15.03	H

802.11ac-HT80

Channel 155 L

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)
5651.825	56.9	-22.7	33.9	45.69	69.6	12.6	H
5652.675	56.2	-22.7	33.9	45.00	70.2	14.0	V
11550.000	44.4	-30.0	38.9	35.47	74.0	29.6	V
17325.000	49.9	-24.3	41.8	32.44	68.3	18.4	V
17546.000	53.0	-24.2	42.0	35.25	68.3	15.3	V
17623.500	53.5	-23.9	41.9	35.53	68.3	14.8	H

Channel 155 R

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)
5924.475	57.6	-22.8	34.9	45.49	68.6	11.0	V
5924.550	56.5	-22.8	34.9	44.42	68.5	12.0	V
11550.000	44.4	-30.0	38.9	35.47	74.0	29.6	V
17325.000	49.9	-24.3	41.8	32.44	68.3	18.4	V
17546.000	53.0	-24.2	42.0	35.25	68.3	15.3	V
17623.500	53.5	-23.9	41.9	35.53	68.3	14.8	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.10	P
	5825 MHz	Fig.11	P
802.11n HT20	5745 MHz	Fig.12	P
	5825 MHz	Fig.13	P
802.11n HT40	5755 MHz	Fig.14	P
	5795 MHz	Fig.15	P
802.11ac HT20	5745 MHz	Fig.16	P
	5825 MHz	Fig.17	P
802.11ac HT40	5755 MHz	Fig.18	P
	5795 MHz	Fig.19	P
802.11ac HT80	5775 MHz	Fig.20	P
	5775 MHz	Fig.21	P

Conclusion: PASS

Test graphs as below:

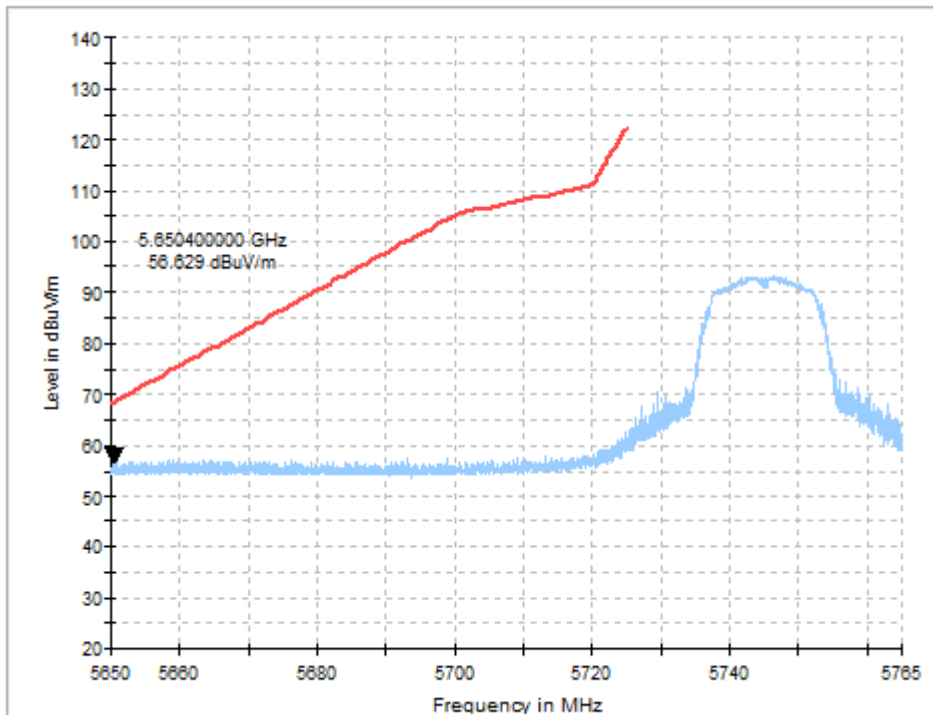


Fig. 10 Band Edges (802.11a Ch149,5745MHz)

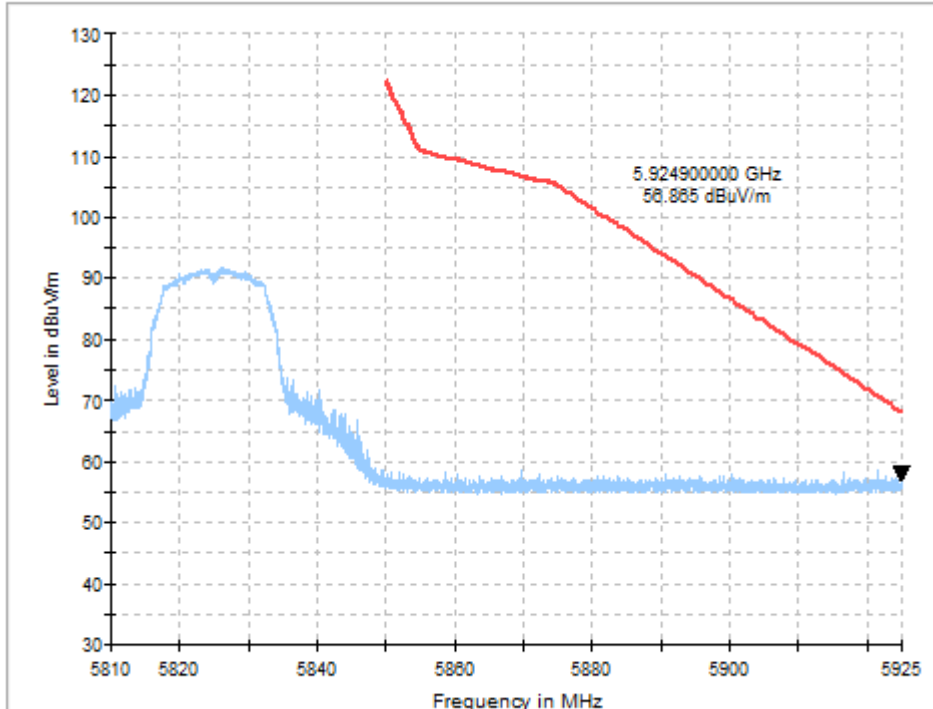


Fig. 11 Band Edges (802.11a Ch165, 5825MHz)

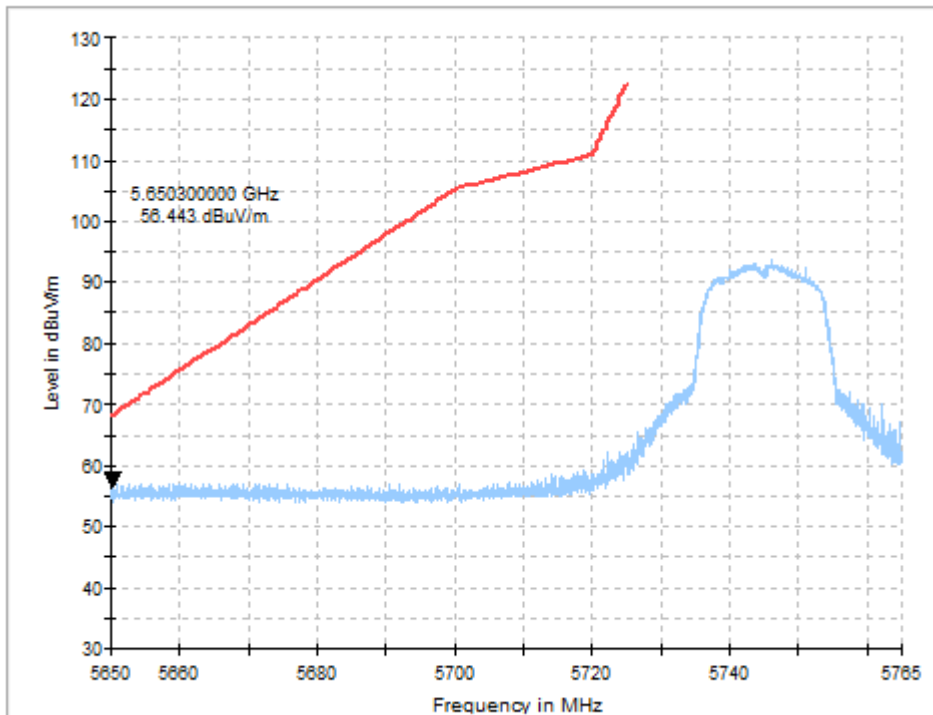


Fig. 12 Band Edges (802.11n-HT20 Ch149, 5745MHz)

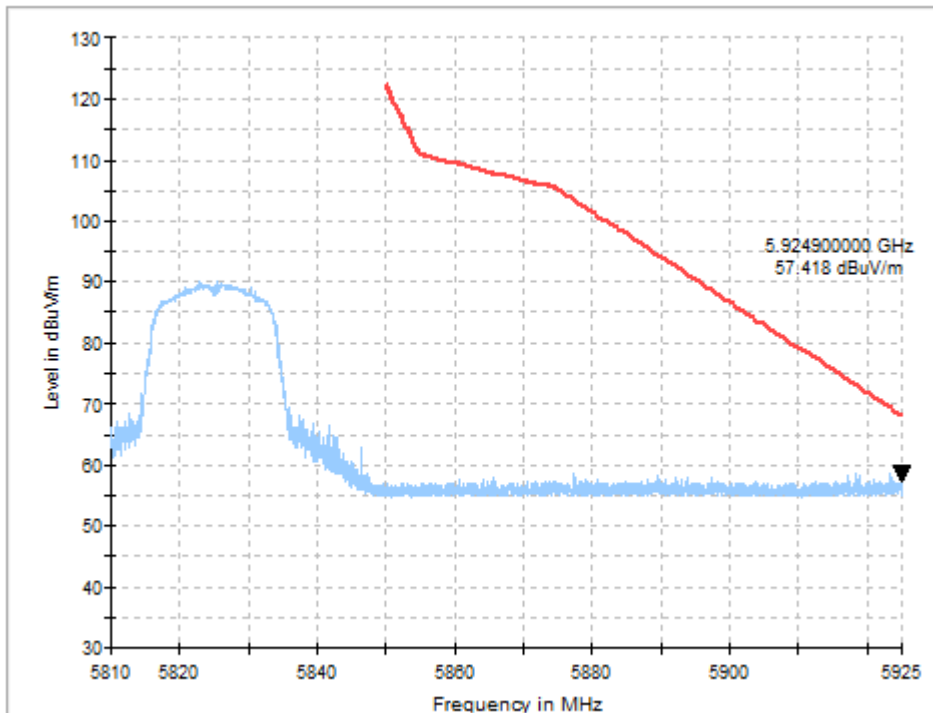


Fig. 13 Band Edges (802.11n-HT20 Ch165, 5825MHz)

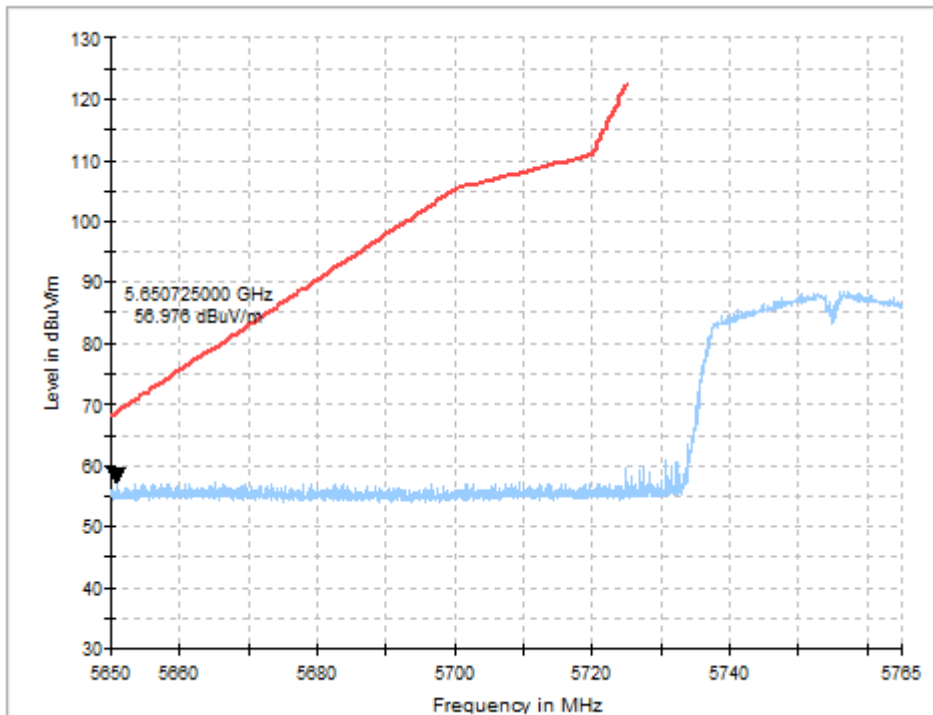


Fig. 14 Band Edges (802.11n-HT40 Ch151, 5755MHz)

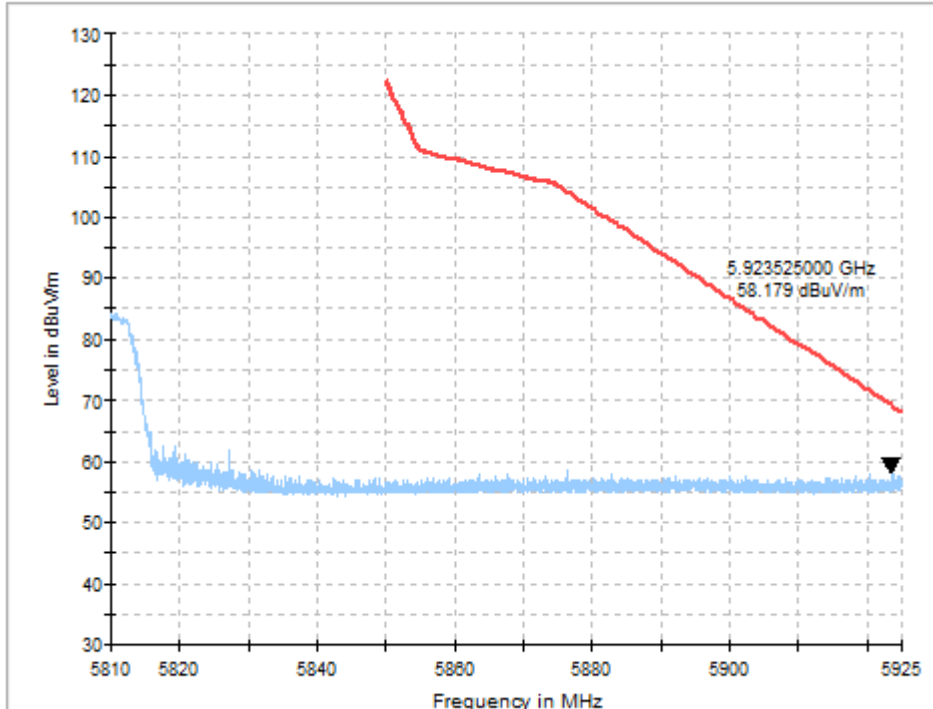


Fig. 15 Band Edges (802.11n-HT40 Ch159, 5795MHz)

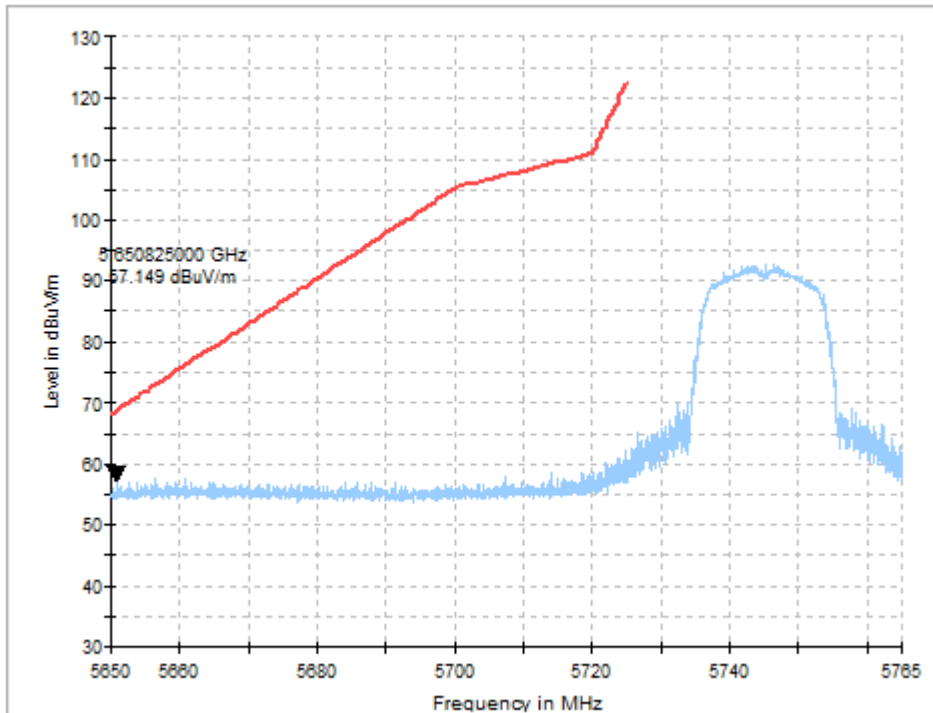


Fig. 16 Band Edges (802.11ac-HT20 Ch149, 5745MHz)

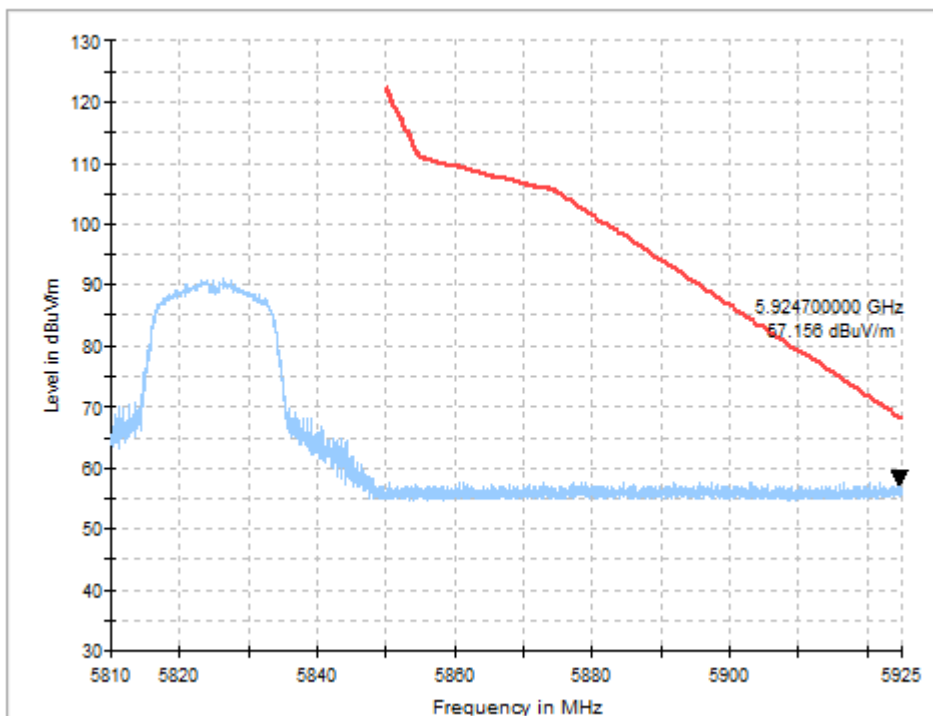


Fig. 17 Band Edges (802.11ac-HT20 Ch165, 5825MHz)

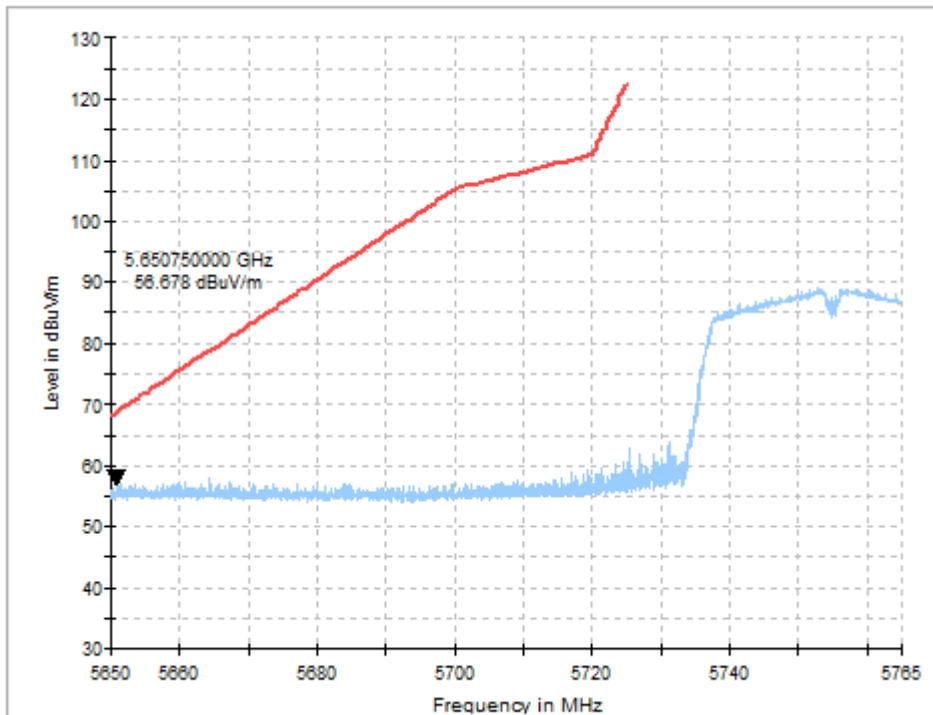


Fig. 18 Band Edges (802.11ac-HT40 Ch151, 5755MHz)

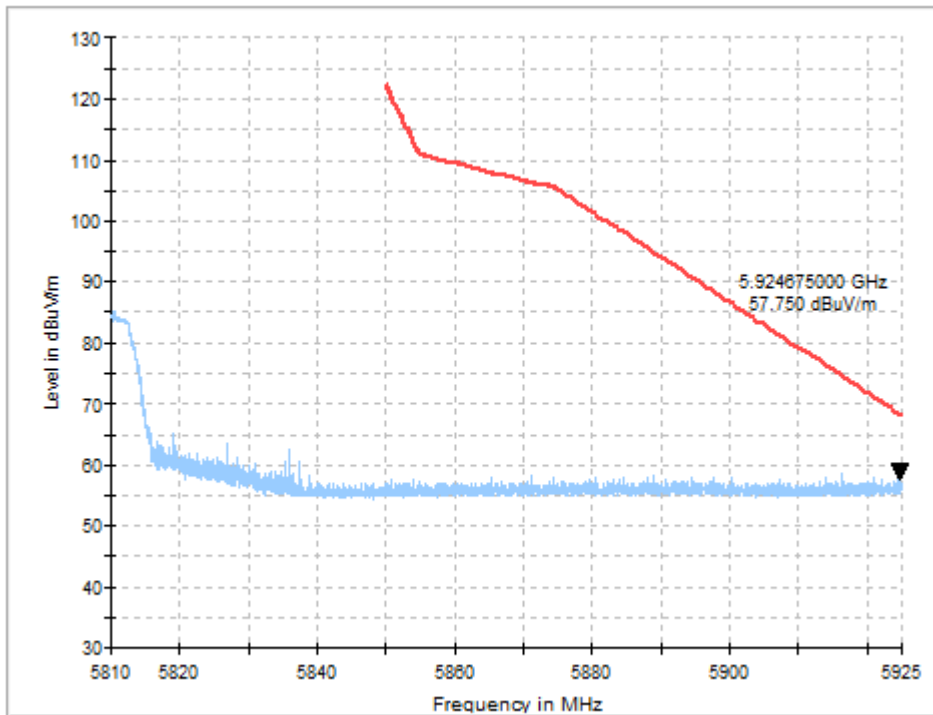


Fig. 19 Band Edges (802.11ac-HT40 Ch159, 5795MHz)

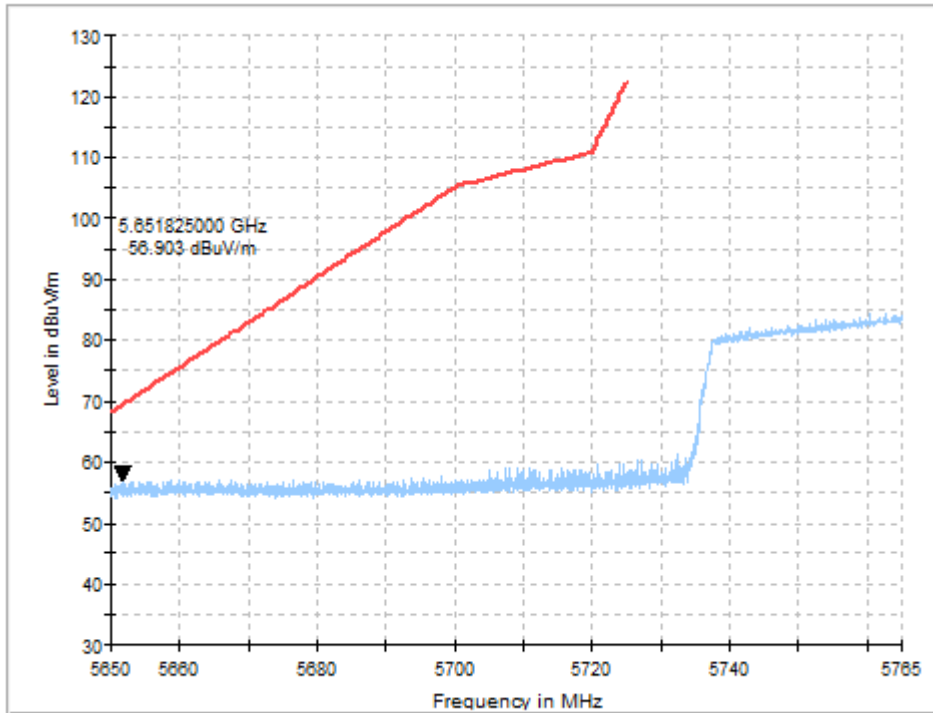


Fig. 20 Band Edges (802.11ac-HT80 Ch155, 5775MHz)

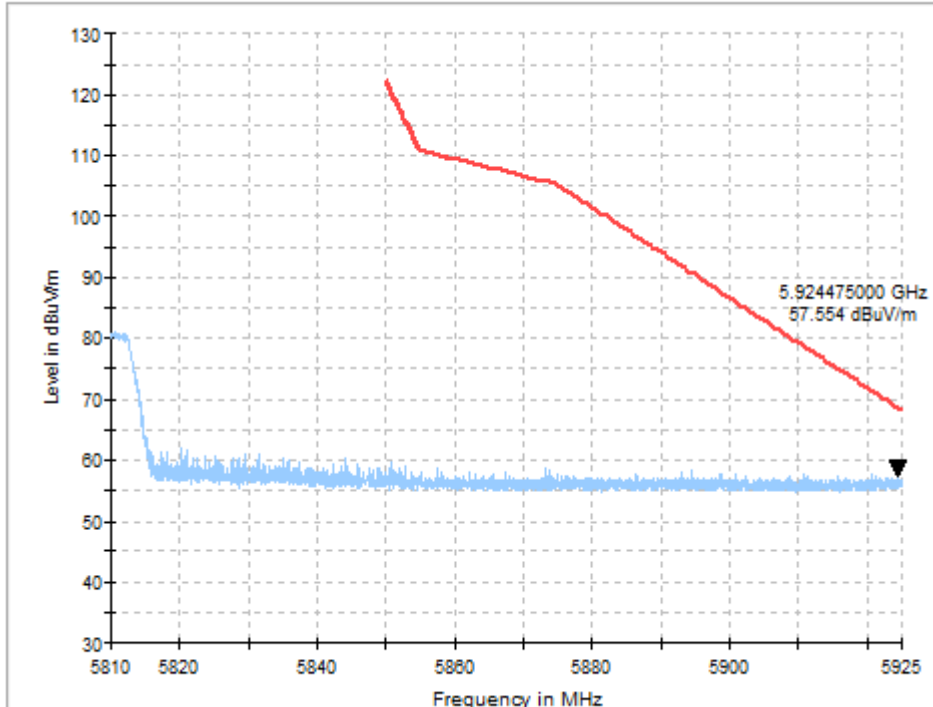


Fig. 21 Band Edges (802.11ac-HT80 Ch155, 5775MHz)

A.7. AC Powerline Conducted Emission

Test Condition:

Voltage (V)	Frequency (Hz)
110	60

Measurement Result and limit:

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dB μ V)	Result (dB μ V)		Conclusion
		With charger		
		802.11a	Idle	
0.15 to 0.5	66 to 56	Fig.22	Fig.23	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 (dB μ V)	Result (dB μ V)		Conclusion
		With charger		
		802.11a	Idle	
0.15 to 0.5	56 to 46	Fig.22	Fig.23	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.

The measurement is made according to ANSI C63.10 .

Conclusion: PASS

Test graphs as below:

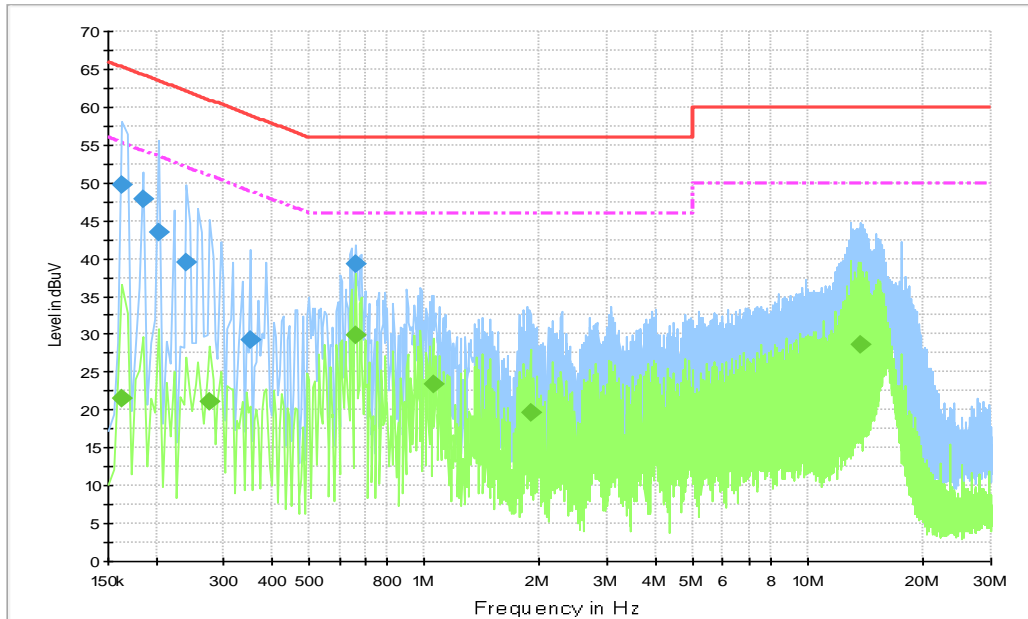


Fig. 22 AC Powerline Conducted Emission-802.11a

Measurement Result:

Frequency (MHz)	QuasiPeak (dB μ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.163500	49.7	N	19.5	15.6	65.3
0.186000	47.9	N	19.5	16.3	64.2
0.204000	43.4	L1	19.4	20.0	63.4
0.240000	39.4	L1	19.5	22.7	62.1
0.352500	29.3	L1	19.4	29.6	58.9
0.663000	39.3	L1	19.5	16.7	56.0

Measurement Result:

Frequency (MHz)	CAverage (dBuV)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.163500	21.5	N	19.5	33.8	55.3
0.276000	21.2	L1	19.4	29.8	50.9
0.663000	29.9	L1	19.5	16.1	46.0
1.054500	23.4	L1	19.5	22.6	46.0
1.891500	19.7	L1	19.5	26.3	46.0
13.780500	28.6	L1	19.8	21.4	50.0

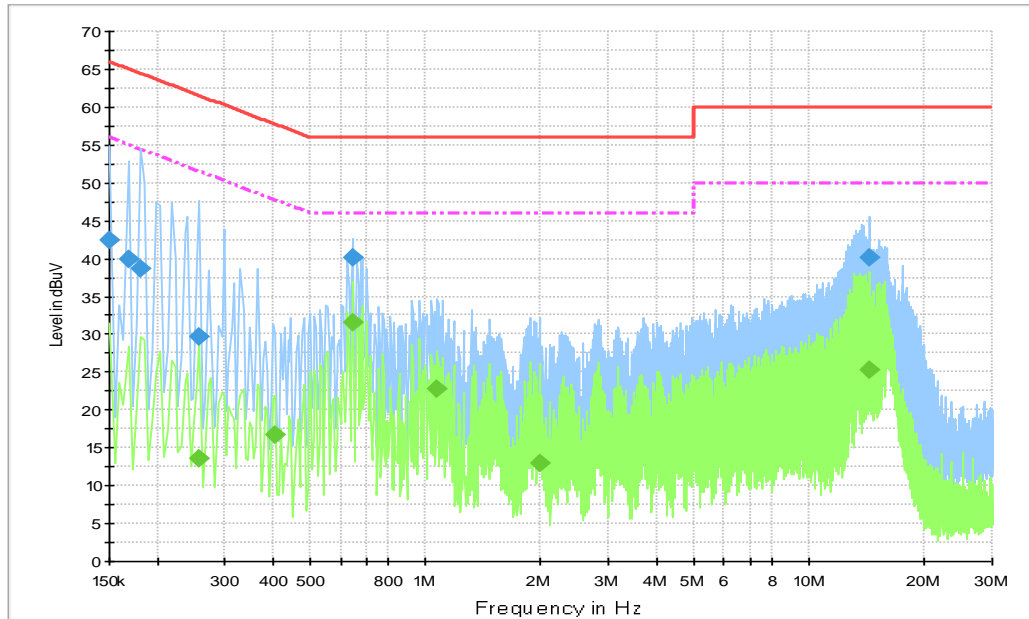


Fig. 23 AC Powerline Conducted Emission-Idle

Measurement Result:

Frequency (MHz)	QuasiPeak (dB μ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.150000	42.5	N	19.4	23.5	66.0
0.168000	39.9	L1	19.5	25.1	65.1
0.181500	38.7	N	19.5	25.7	64.4
0.258000	29.6	L1	19.4	31.9	61.5
0.645000	40.1	L1	19.5	15.9	56.0
14.428500	40.1	L1	19.8	19.9	60.0

Measurement Result:

Frequency (MHz)	CAverage (dBuV)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)
0.258000	13.5	N	19.4	38.0	51.5
0.406500	16.8	L1	19.5	30.9	47.7
0.645000	31.6	L1	19.5	14.4	46.0
1.072500	22.9	L1	19.5	23.1	46.0
1.986000	12.9	N	19.5	33.1	46.0
14.428500	25.4	N	19.8	24.6	50.0

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



Accredited Laboratory

A2LA has accredited

TELECOMMUNICATION TECHNOLOGY LABS, CAICT
Beijing, People's Republic of China

for technical competence in the field of
Electrical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 26th day of June 2023.



Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 7049.01
Valid to July 31, 2024

For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.

***** END OF REPORT BODY *****