



FCC PART 15C TEST REPORT No.I23Z60660-IOT05

for

TCL Communication Ltd.

Tablet PC

9166G

With

FCC ID: 2ACCJB204

Hardware Version: PIO

Software Version: JY1H

Issued Date: 2023-05-28

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.

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Test Laboratory:

CTTL-Telecommunication Technology Labs, CAICT

No. 52, Huayuan North Road, Haidian District, Beijing, P. R. China 100191.

Tel:+86(0)10-62304633-2512, Fax:+86(0)10-62304633-2504

Email: ctl_terminals@caict.ac.cn, website: www.caict.ac.cn



No.I23Z60660-IOT05

REPORT HISTORY

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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 NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM (NVLAP) with lab code 600118-0, and is also an FCC accredited test laboratory (CN5017), and ISED accredited test laboratory (ISED#: 24849). The detail accreditation scope can be found on NVLAP 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

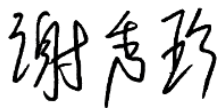
Relative Humidity: 20-75%

1.4. Project date

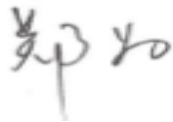
Testing Start Date: 2023-04-13

Testing End Date: 2023-05-28

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: TCL Communication Ltd.
Address: 5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, Shatin, NT, Hong Kong
City: Hong Kong
Postal Code: /
Country: China
Telephone: +86 755 3661 1621
Fax: +86 755 3661 2000-81722

2.2. Manufacturer Information

Company Name: TCL Communication Ltd.
Address: 5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, Shatin, NT, Hong Kong
City: Hong Kong
Postal Code: /
Country: China
Telephone: +86 755 3661 1621
Fax: +86 755 3661 2000-81722

3. EQUIPMENT UNDER TEST (EUT) AND ANCILLARY

EQUIPMENT(AE)

3.1. About EUT

Description	Tablet PC
Model name	9166G
FCC ID	2ACCJB204
WLAN Frequency Band	ISM Band: 5725MHz~5850MHz
Type of modulation	OFDM
Voltage	3.85V

3.2. Internal Identification of EUT used during the test

EUT ID*	IMEI	HW Version	SW Version
UT01a	351556360001321	PIO	JY1H
UT13a	351556360001545	PIO	JY1H

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

UT01a is used for Conduction test, UT13a is used for Radiation test.

3.3. Internal Identification of AE used during the test

AE ID*	Description	Note	Manufacturer
AE1	Battery	TLp078CA	tianmao
AE2	Charger	FG18AQC3.0UU	Huizhou Juwei Electronics Co.,Ltd
AE3	USB cable	JWUB1526-M01R	Juwei Electrontcs 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 Tablet PC 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; 15.209 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
KDB 558074 D01	Federal Communications Commission Office of Engineering and Technology Laboratory Division GUIDANCE FOR COMPLIANCE MEASUREMENTS ON DIGITAL TRANSMISSION SYSTEM, FREQUENCY HOPPING SPREAD SPECTRUM SYSTEM, AND HYBRID SYSTEM DEVICES OPERATING UNDER SECTION 15.247 OF THE FCC RULES	2019

5. LABORATORY ENVIRONMENT

Conducted RF performance testing is performed in shielding room.

EMC performance testing is performed in Semi-anechoic chamber.

6. SUMMARY OF 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 - Conducted	15.407	/	P
Transmitter Spurious Emission - Radiated	15.407, 15.205, 15.209	/	P
AC Powerline Conducted Emission	15.107, 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 requested by the client/matrix manufacturer 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 4.1.

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 EQUIPMENTS 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	2023-06-15
2	LISN	ENV216	101200	Rohde & Schwarz	1 year	2023-06-29
3	Test Receiver	ESCI	100344	Rohde & Schwarz	1 year	2024-02-21
4	Shielding Room	S81	/	ETS-Lindgren	/	/

Radiated emission test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Period	Calibration Due date
1	Test Receiver	ESU26	100376	Rohde & Schwarz	1 year	2023-09-22
2	Test Receiver	ESW44	103015	Rohde & Schwarz	1 year	2024-01-12
3	Loop Antenna	HFH2-Z2	829324/007	Rohde & Schwarz	1 year	2023-12-23
4	BiLog Antenna	VULB9163	01177	Schwarzbeck	1 year	2023-08-03
5	Dual-Ridge Waveguide Horn Antenna	3117	00119024	ETS-Lindgren	1 year	2023-06-07
6	Dual-Ridge Waveguide Horn Antenna	LB-180400-25-C-KF	J211060826	ETS-Lindgren	1 year	2024-03-02

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. Occupied 6dB 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

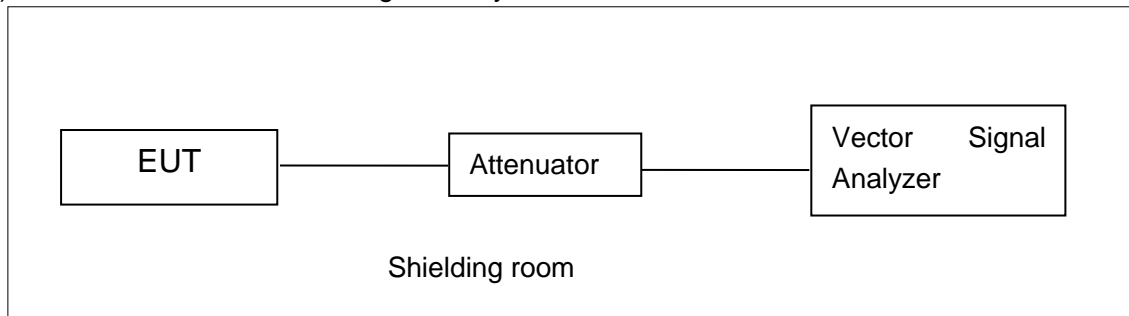
Measurement Uncertainty: 3.08dB, k=2

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

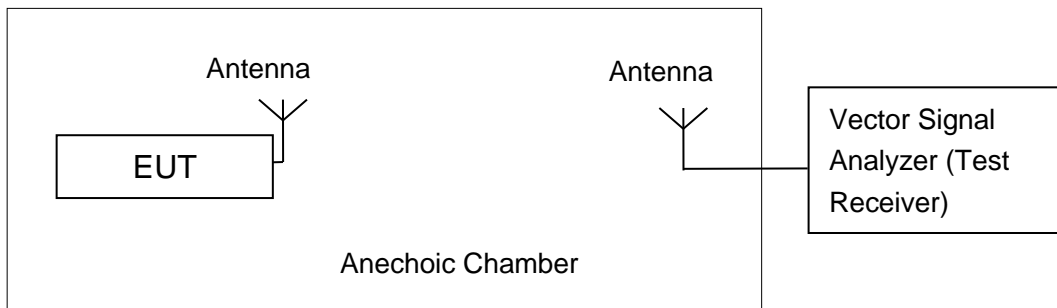


A.1.2. Radiated Emission Measurements

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 = 10Hz;



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

A.2.1 Antenna Gain

Antenna gain is -1.5dBi and the value is supplied by the applicant or manufacturer.

A.2.2. Maximum Average Output Power-Conducted

Measurement Results:

802.11a mode

Mode	Data Rate (Mbps)	Test Result (dBm)		
		5745MHz (Ch149)	5785MHz (Ch157)	5825MHz (Ch165)
802.11a	6	16.53	17.19	16.53
	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	15.87	15.73	15.92
	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	15.79	15.82	15.86
	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	16.87	16.85
	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-HT40 mode

Mode	Data Rate (Index)	Test Result (dBm)	
		5755MHz (Ch151)	5795MHz (Ch159)
802.11ac (40MHz)	MCS0	15.83	15.87
	MCS1	/	/
	MCS2	/	/
	MCS3	/	/
	MCS4	/	/
	MCS5	/	/
	MCS6	/	/
	MCS7	/	/

	MCS8	/	/
	MCS9	/	/

The data rate MCS0 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	15.83
	MCS1	/
	MCS2	/
	MCS3	/
	MCS4	/
	MCS5	/
	MCS6	/
	MCS7	/
	MCS8	/
	MCS9	/

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 100%

Conclusion: PASS

A.3. Peak Power Spectral Density

Measurement Limit:

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

The measurement is made according to ANSI C63.10 and KDB789033 D02

Measurement Uncertainty:

Measurement Uncertainty	0.75dB
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Measurement Results:

Mode	Channel	Power Spectral Density (dBm/500kHz)	Conclusion
802.11a	149	4.46	P
	157	4.49	P
	165	4.20	P
802.11n HT20	149	3.32	P
	157	3.28	P
	165	2.99	P
802.11n HT40	151	1.17	P
	159	1.09	P
802.11ac HT80	155	-3.72	P

Conclusion: PASS

A.4. Occupied 6dB Bandwidth

Measurement Limit:

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

The measurement is made according to KDB789033 D02 .

Measurement Uncertainty:

Measurement Uncertainty	60.80Hz
-------------------------	---------

Measurement Result:

Mode	Channel	Occupied 6dB Bandwidth (MHz)		conclusion
802.11a	149	Fig.1	16.30	P
	157	Fig.2	16.35	P
	165	Fig.3	15.85	P
802.11n HT20	149	Fig.4	17.55	P
	157	Fig.5	17.55	P
	165	Fig.6	17.55	P
802.11n HT40	151	Fig.7	35.84	P
	159	Fig.8	35.84	P
802.11ac HT80	155	Fig.9	76.48	P

Conclusion: PASS

Test graphs as below:

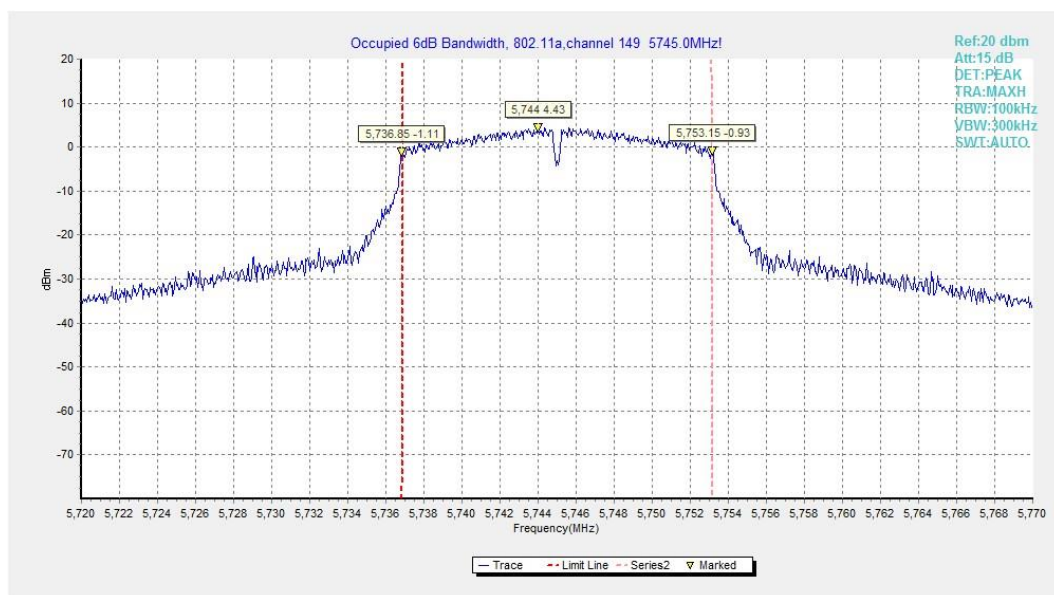


Fig. 1 Occupied 6dB Bandwidth (802.11a, Ch 149)

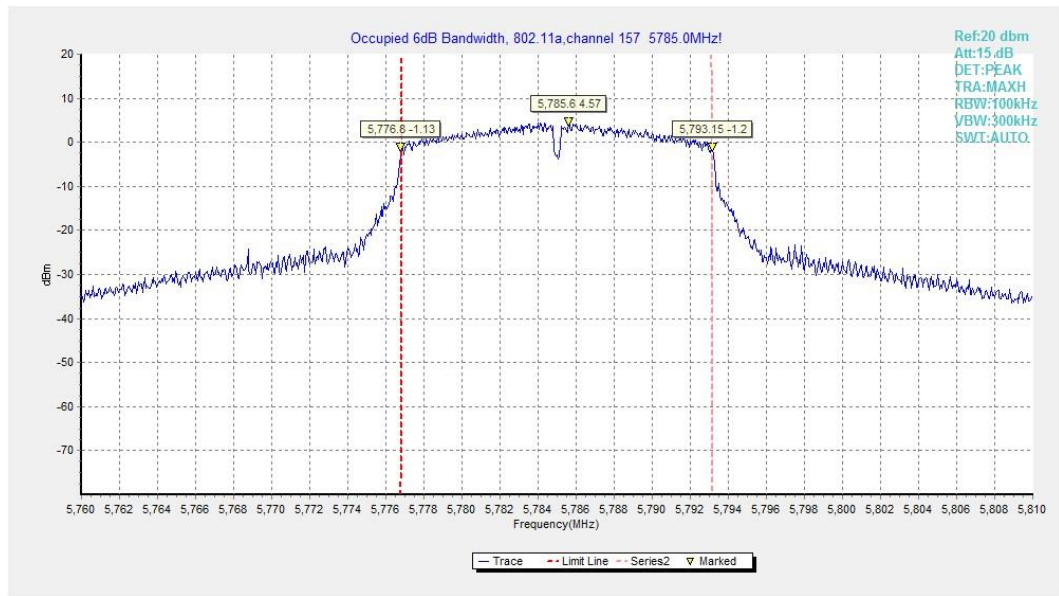


Fig. 2 Occupied 6dB Bandwidth (802.11a, Ch 157)

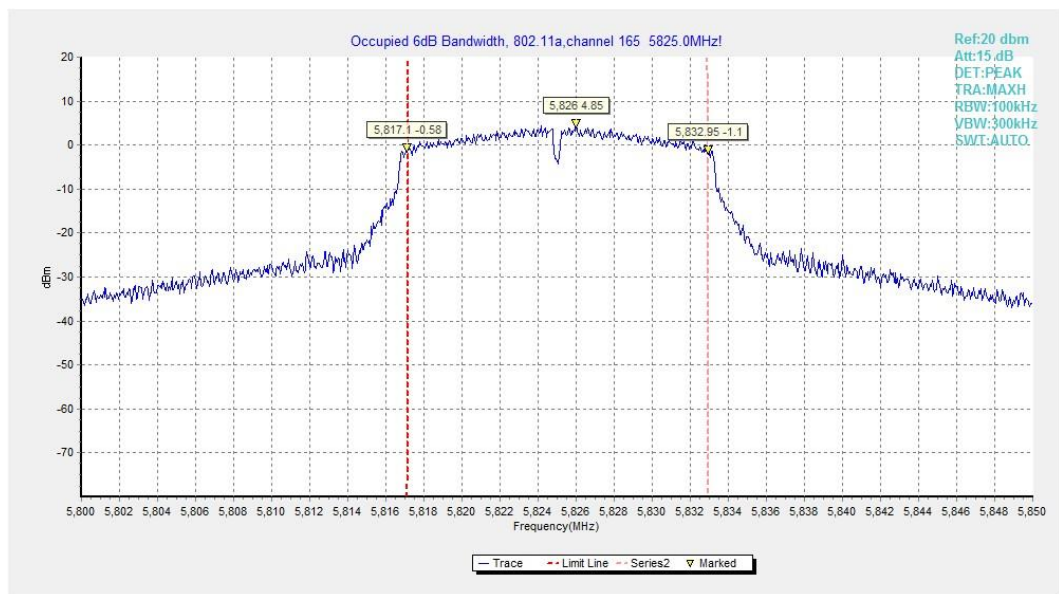


Fig. 3 Occupied 6dB Bandwidth (802.11a, Ch 165)

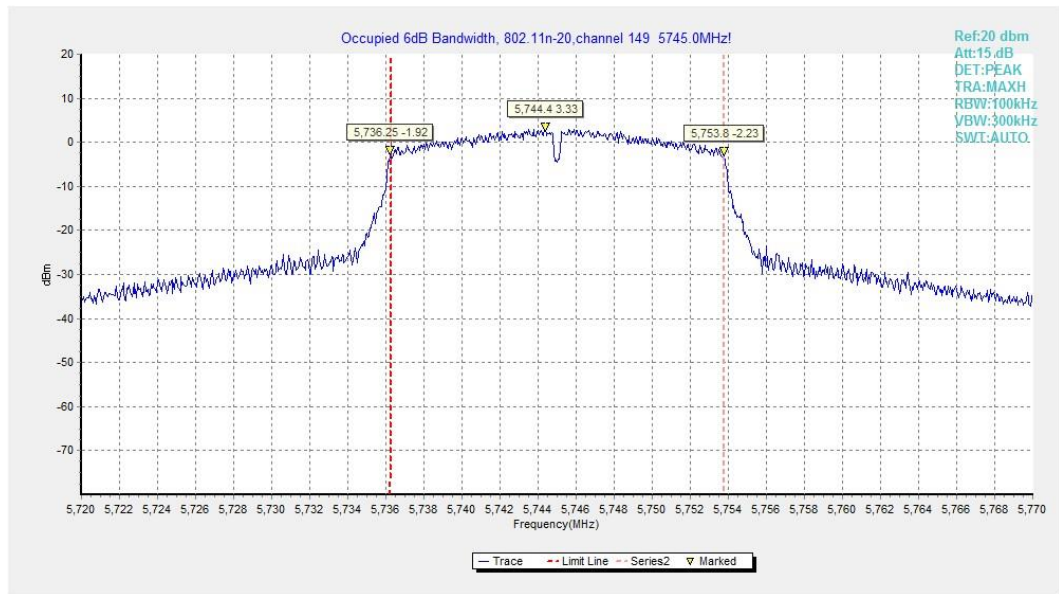


Fig. 4 Occupied 6dB Bandwidth (802.11n-HT20, Ch 149)

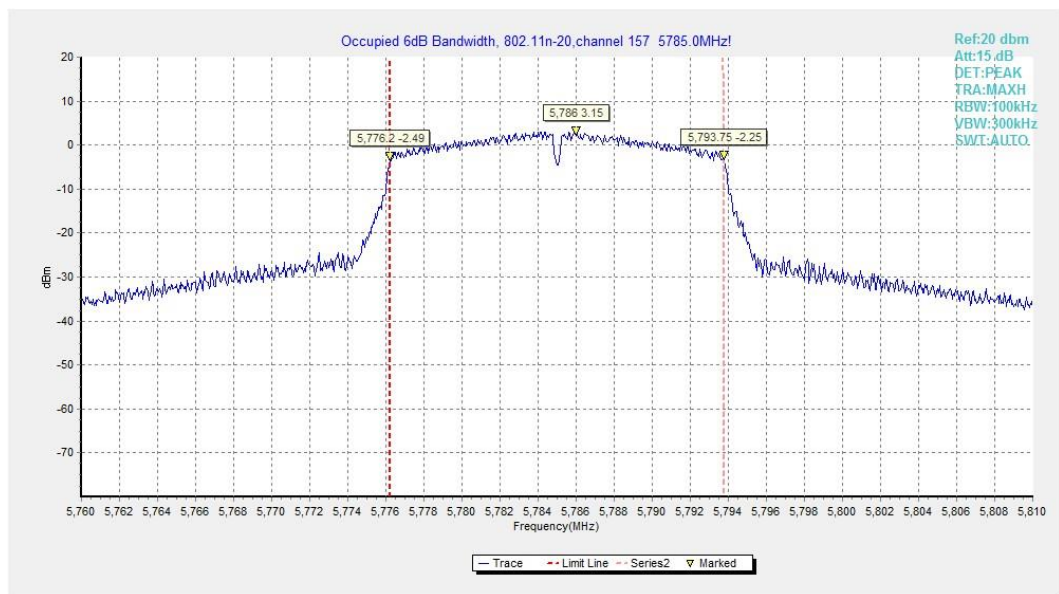


Fig. 5 Occupied 6dB Bandwidth (802.11n-HT20, Ch 157)

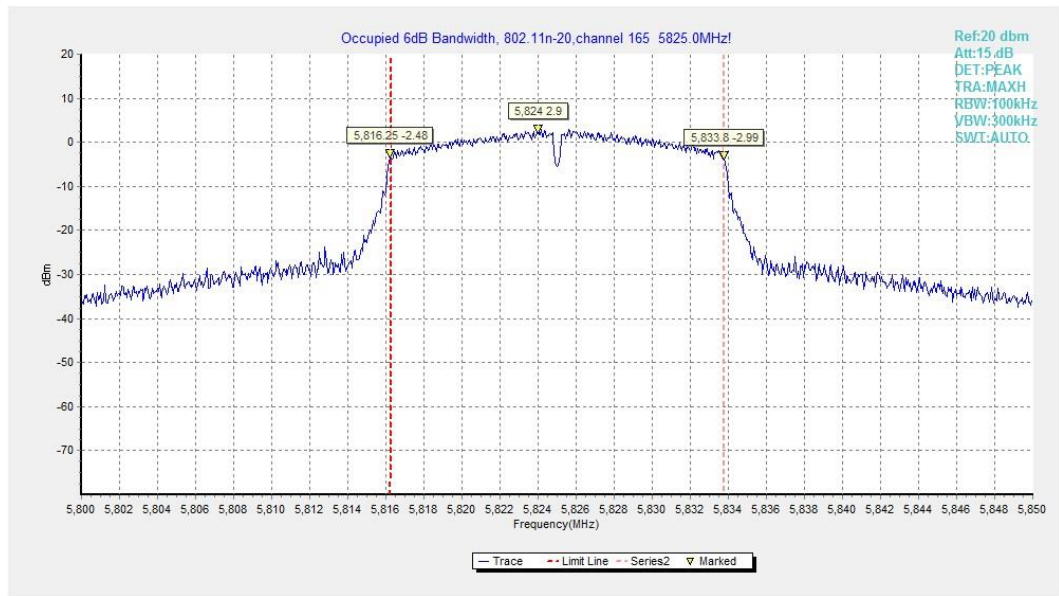


Fig. 6 Occupied 6dB Bandwidth (802.11n-HT20, Ch 165)

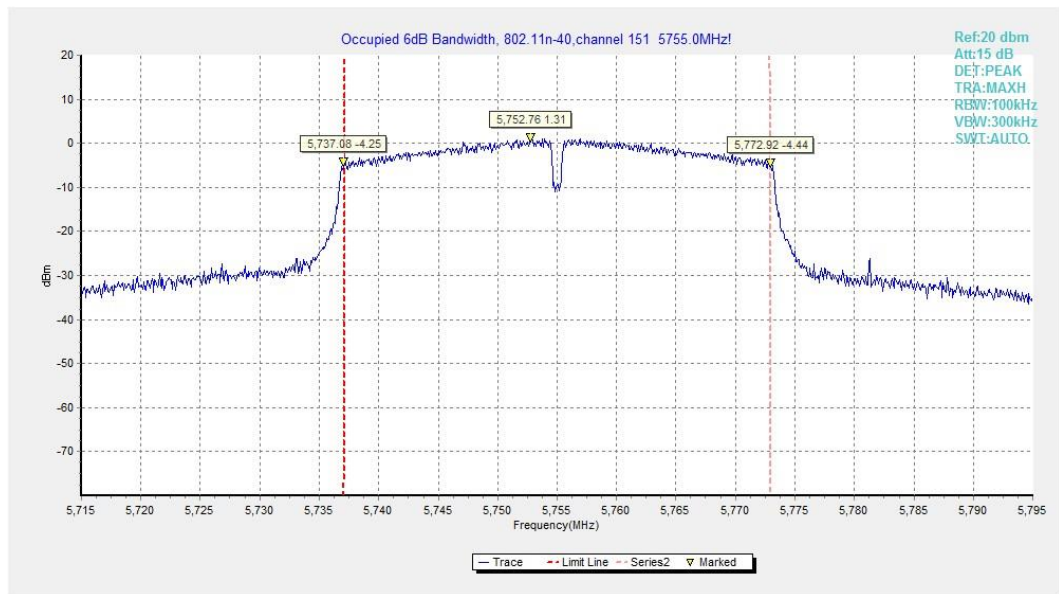


Fig. 7 Occupied 6dB Bandwidth (802.11n-HT40, Ch 151)

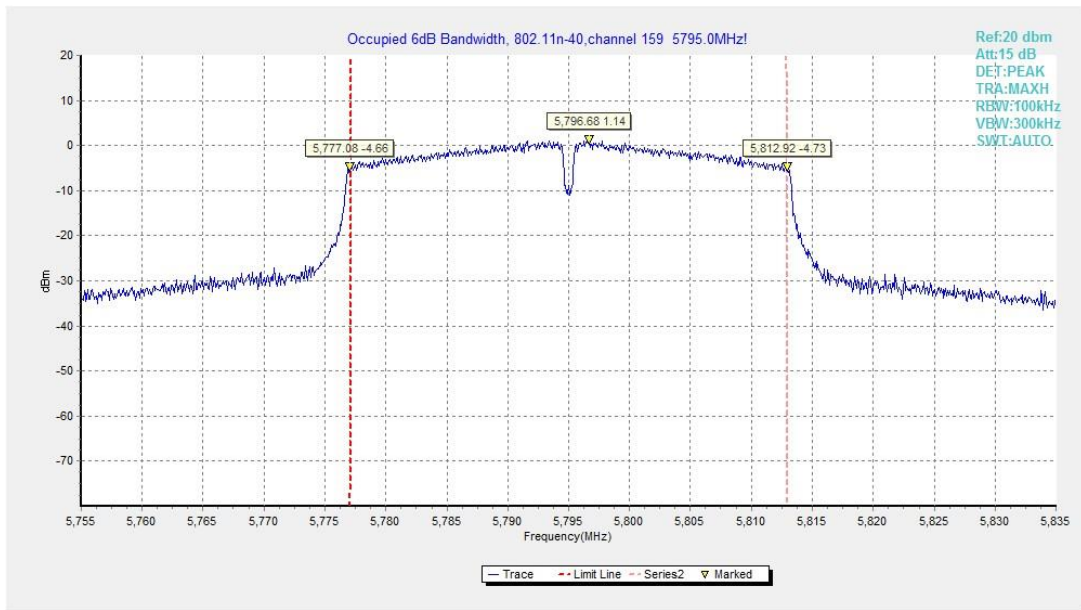


Fig. 8 Occupied 6dB Bandwidth (802.11n-HT40, Ch 159)

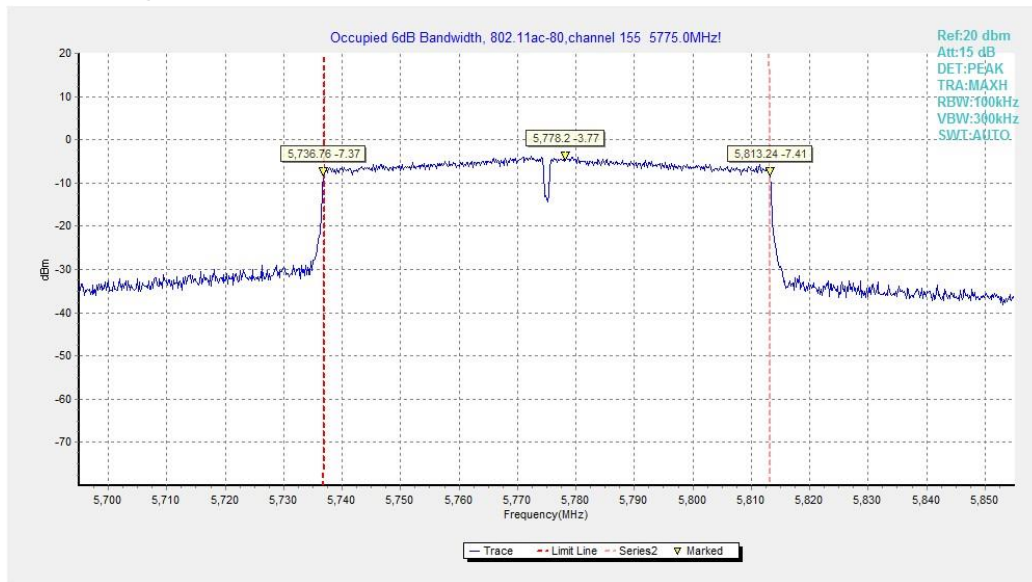


Fig. 9 Occupied 6dB Bandwidth (802.11ac-HT80, Ch 155)

A.5. Transmitter Spurious Emission

A.5.1 Transmitter Spurious Emission – 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

Measurement Results:

EUT ID: UT13a

802.11a mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11a	149	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	157	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz~ 40 GHz	---	P
	165	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P

802.11n-HT20 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n (HT20)	149	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	157	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz~ 40 GHz	---	P
	165	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P

		7 GHz ~ 18 GHz	---	P
--	--	----------------	-----	---

802.11n-HT40 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n (HT40)	151	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz~ 40 GHz	---	P
	159	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P

802.11ac-HT20 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11ac (HT20)	149	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	157	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz~ 40 GHz	---	P
	165	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P

802.11ac-HT40 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11ac (HT40)	151	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz~ 40 GHz	---	P
	159	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P

802.11ac-HT80 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
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802.11ac (HT80)	155	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz~ 40 GHz	---	P

Conclusion: PASS

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.

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)
5459.930	42.53	-25.33	34.42	33.44	54.00	11.47	V
5459.850	42.55	-25.33	34.42	33.46	54.00	11.45	V
11493.000	33.55	-32.55	38.00	28.09	54.00	20.45	H
16035.000	36.43	-27.89	40.41	23.91	54.00	17.57	V
17770.000	36.06	-26.49	40.33	22.23	54.00	17.94	V
17865.500	35.98	-26.31	40.23	22.05	54.00	18.02	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)
5459.000	42.58	-25.33	34.42	33.49	54.00	11.42	V
5459.850	42.63	-25.33	34.42	33.54	54.00	11.37	V
11571.500	34.08	-32.29	38.07	28.30	54.00	19.92	H
15832.500	36.09	-28.21	40.30	24.00	54.00	17.91	H
17748.000	36.05	-26.52	40.35	22.22	54.00	17.95	H
17871.500	35.87	-26.30	40.23	21.94	54.00	18.13	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)
5459.200	42.74	-25.33	34.42	33.66	54.00	11.26	V
5459.700	42.70	-25.33	34.42	33.61	54.00	11.30	V
11650.000	33.63	-32.11	38.20	27.54	54.00	20.37	H
15941.000	36.15	-27.73	40.30	23.58	54.00	17.85	V
17749.500	35.97	-26.52	40.35	22.14	54.00	18.03	V
17872.500	35.83	-26.29	40.23	21.89	54.00	18.17	H

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)
5459.000	42.72	-25.33	34.42	33.63	54.00	11.28	V
5459.800	42.78	-25.33	34.42	33.70	54.00	11.22	V
11490.000	33.06	-32.54	38.00	27.60	54.00	20.94	V
16032.500	36.39	-27.88	40.40	23.87	54.00	17.61	H
17766.500	36.09	-26.50	40.33	22.25	54.00	17.91	H
17864.000	35.89	-26.31	40.24	21.97	54.00	18.11	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)
5459.050	42.77	-25.33	34.42	33.68	54.00	11.23	V
5459.450	42.76	-25.33	34.42	33.67	54.00	11.24	V
11570.000	33.24	-32.30	38.07	27.46	54.00	20.76	V
16031.000	36.40	-27.87	40.39	23.88	54.00	17.60	H
17747.000	36.01	-26.52	40.35	22.18	54.00	17.99	V
17860.000	35.97	-26.32	40.24	22.05	54.00	18.03	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)
5459.350	42.74	-25.33	34.42	33.65	54.00	11.26	V
5459.850	42.72	-25.33	34.42	33.63	54.00	11.28	V
11650.000	33.22	-32.11	38.20	27.13	54.00	20.78	H
16033.000	36.33	-27.88	40.40	23.81	54.00	17.67	V
17750.000	35.92	-26.52	40.35	22.09	54.00	18.08	V
17876.000	35.77	-26.29	40.22	21.84	54.00	18.23	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)
5459.650	42.74	-25.33	34.42	33.66	54.00	11.26	V
5459.800	42.72	-25.33	34.42	33.63	54.00	11.28	V
11510.000	33.15	-32.50	38.01	27.64	54.00	20.85	H
16027.500	36.42	-27.86	40.38	23.89	54.00	17.58	V
17747.500	36.01	-26.52	40.35	22.17	54.00	17.99	V
17869.000	35.87	-26.30	40.23	21.94	54.00	18.13	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)
5459.500	42.76	-25.33	34.42	33.67	54.00	11.24	V
5459.850	42.78	-25.33	34.42	33.69	54.00	11.22	V
11590.000	33.19	-32.23	38.09	27.32	54.00	20.81	V
16026.000	36.36	-27.85	40.38	23.84	54.00	17.64	V
17745.000	35.95	-26.52	40.35	22.12	54.00	18.05	V
17843.000	35.83	-26.36	40.26	21.93	54.00	18.17	H

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)
5459.650	42.77	-25.33	34.42	33.68	54.00	11.23	V
5459.800	42.75	-25.33	34.42	33.66	54.00	11.25	V
11491.500	34.21	-32.54	38.00	28.76	54.00	19.79	H
16033.000	36.36	-27.88	40.40	23.84	54.00	17.64	V
17763.500	36.11	-26.50	40.34	22.27	54.00	17.89	H
17850.500	35.76	-26.35	40.25	21.86	54.00	18.24	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)
5457.050	42.81	-25.35	34.41	33.75	54.00	11.19	V
5459.500	42.81	-25.33	34.42	33.72	54.00	11.19	V
11568.500	33.92	-32.30	38.07	28.15	54.00	20.08	H
15831.500	36.11	-28.22	40.30	24.03	54.00	17.89	V
17746.000	35.86	-26.52	40.35	22.03	54.00	18.14	H
17869.000	35.95	-26.30	40.23	22.02	54.00	18.05	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)
5458.450	42.74	-25.34	34.42	33.66	54.00	11.26	V
5459.450	42.68	-25.33	34.42	33.59	54.00	11.32	V
11650.000	33.72	-32.11	38.20	27.62	54.00	20.28	V
16036.000	36.23	-27.89	40.41	23.71	54.00	17.77	H
17753.000	35.91	-26.51	40.35	22.08	54.00	18.09	V
17867.500	35.86	-26.31	40.23	21.94	54.00	18.14	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)
5459.500	42.80	-25.33	34.42	33.72	54.00	11.20	V
5459.850	42.82	-25.33	34.42	33.73	54.00	11.18	V
11510.000	33.15	-32.50	38.01	27.64	54.00	20.85	V
16028.000	36.44	-27.86	40.38	23.92	54.00	17.56	H
17763.500	36.02	-26.50	40.34	22.18	54.00	17.98	V
17869.000	35.88	-26.30	40.23	21.95	54.00	18.12	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)
5459.200	42.85	-25.33	34.42	33.77	54.00	11.15	V
5459.750	42.81	-25.33	34.42	33.73	54.00	11.19	V
11590.000	33.18	-32.23	38.09	27.32	54.00	20.82	V
16032.000	36.38	-27.88	40.40	23.86	54.00	17.62	V
17749.500	35.88	-26.52	40.35	22.05	54.00	18.12	H
17862.000	35.78	-26.32	40.24	21.86	54.00	18.22	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)
5459.450	42.8	-25.3	34.4	33.74	48.3	5.5	V
5459.800	42.8	-25.3	34.4	33.69	48.3	5.5	V
11550.100	32.7	-32.4	38.1	27.00	48.3	15.6	H
16026.500	36.4	-27.9	40.4	23.92	48.3	11.9	V
17761.000	35.9	-26.5	40.3	22.04	48.3	12.4	V
17843.000	35.8	-26.4	40.3	21.87	48.3	12.5	H

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)
5459.450	42.8	-25.3	34.4	33.74	48.3	5.5	V
5459.800	42.8	-25.3	34.4	33.69	48.3	5.5	V
11550.100	32.7	-32.4	38.1	27.00	48.3	15.6	H
16026.500	36.4	-27.9	40.4	23.92	48.3	11.9	V
17761.000	35.9	-26.5	40.3	22.04	48.3	12.4	V
17843.000	35.8	-26.4	40.3	21.87	48.3	12.5	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)
5650.046	55.05	-24.77	34.50	45.32	68.23	13.19	H
5650.155	55.21	-24.77	34.50	45.48	68.31	13.10	V
11490.200	45.25	-32.54	38.00	39.79	74.00	28.75	H
17234.950	48.76	-26.91	40.93	34.74	68.30	19.54	V
17469.250	49.56	-26.75	40.80	35.51	68.30	18.74	H
17649.650	50.00	-26.65	40.50	36.15	68.30	18.30	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)
5740.800	55.62	-24.79	34.68	45.72	68.30	12.68	V
5824.800	55.08	-24.94	34.65	45.37	68.30	13.22	H
11563.350	47.95	-32.32	38.06	42.21	74.00	26.05	V
17354.850	47.22	-26.84	40.80	33.25	68.30	21.08	V
17494.550	49.83	-26.74	40.80	35.77	68.30	18.47	H
17612.250	50.01	-26.68	40.58	36.11	68.30	18.29	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)
5924.661	54.90	-25.21	34.95	45.16	68.45	13.56	V
5924.971	54.69	-25.21	34.95	44.95	68.22	13.53	H
11650.250	45.94	-32.11	38.20	39.84	74.00	28.06	V
17474.750	47.94	-26.75	40.80	33.89	68.30	20.36	H
17635.900	49.16	-26.67	40.53	35.29	68.30	19.14	V
17688.150	49.07	-26.60	40.42	35.25	68.30	19.23	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)
5650.138	54.52	-24.77	34.50	44.79	68.30	13.78	V
5650.207	54.85	-24.77	34.50	45.13	68.35	13.50	H
11490.200	43.32	-32.54	38.00	37.86	74.00	30.68	H
17234.950	47.00	-26.91	40.93	32.98	68.30	21.30	V
17469.800	49.12	-26.75	40.80	35.07	68.30	19.18	V
17613.350	50.25	-26.68	40.57	36.36	68.30	18.05	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)
5721.200	56.20	-24.80	34.64	46.36	68.30	12.10	V
5846.000	55.44	-25.05	34.69	45.79	68.30	12.86	V
11569.950	43.85	-32.30	38.07	38.08	74.00	30.15	V
17354.850	47.70	-26.84	40.80	33.73	68.30	20.60	V
17477.500	50.87	-26.74	40.80	36.81	68.30	17.43	H
17626.000	49.46	-26.67	40.55	35.58	68.30	18.84	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)
5924.465	54.78	-25.21	34.95	45.04	68.60	13.82	H
5924.891	55.05	-25.21	34.95	45.31	68.28	13.23	V
11650.250	45.20	-32.11	38.20	39.11	74.00	28.80	H
17474.750	47.44	-26.75	40.80	33.38	68.30	20.86	H
17549.000	49.11	-26.71	40.70	35.12	68.30	19.19	V
17672.750	49.30	-26.62	40.45	35.46	68.30	19.00	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)
5650.172	54.42	-24.77	34.50	44.70	68.33	13.90	H
5650.305	54.75	-24.77	34.50	45.02	68.43	13.68	H
11510.000	44.50	-32.50	38.01	38.99	74.00	29.50	H
17265.200	46.90	-26.90	40.87	32.93	68.30	21.40	H
17455.500	51.52	-26.76	40.80	37.48	68.30	16.77	H
17598.500	50.51	-26.69	40.60	36.60	68.30	17.79	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)
5924.620	54.65	-25.21	34.95	44.92	68.48	13.83	H
5924.937	54.73	-25.21	34.95	44.99	68.25	13.52	V
11589.750	45.08	-32.23	38.09	39.22	74.00	28.92	H
17385.100	46.97	-26.81	40.80	32.98	68.30	21.33	V
17524.250	49.92	-26.72	40.75	35.89	68.30	18.38	H
17661.200	49.21	-26.63	40.48	35.37	68.30	19.09	H

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)
5650.029	54.60	-24.77	34.50	44.88	68.22	13.62	H
5650.282	55.12	-24.77	34.50	45.40	68.41	13.28	V
11486.900	47.71	-32.53	38.00	42.24	74.00	26.29	H
17234.950	47.72	-26.91	40.93	33.70	68.30	20.58	H
17442.300	50.01	-26.77	40.80	35.98	68.30	18.29	H
17552.850	50.90	-26.71	40.69	36.92	68.30	17.40	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)
5730.600	55.43	-24.80	34.66	45.57	68.30	12.87	V
5840.200	55.42	-25.02	34.68	45.76	68.30	12.88	H
11567.750	47.08	-32.30	38.07	41.32	74.00	26.92	H
17354.850	48.00	-26.84	40.80	34.03	68.30	20.30	V
17434.050	49.69	-26.77	40.80	35.67	68.30	18.61	H
17536.900	49.51	-26.72	40.73	35.49	68.30	18.79	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)
5924.862	54.67	-25.21	34.95	44.93	68.30	13.64	V
5924.966	54.34	-25.21	34.95	44.60	68.23	13.88	V
11650.250	44.81	-32.11	38.20	38.72	74.00	29.19	V
17474.750	47.47	-26.75	40.80	33.41	68.30	20.83	V
17550.650	49.75	-26.71	40.70	35.76	68.30	18.55	V
17688.150	49.79	-26.60	40.42	35.96	68.30	18.51	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)
5650.328	54.74	-24.77	34.50	45.02	68.44	13.70	V
5650.575	55.03	-24.77	34.50	45.30	68.63	13.60	H
11510.000	44.01	-32.50	38.01	38.50	74.00	29.99	V
17265.200	46.97	-26.90	40.87	33.00	68.30	21.33	H
17465.400	49.39	-26.75	40.80	35.34	68.30	18.91	V
17626.000	48.98	-26.67	40.55	35.11	68.30	19.32	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)
5924.805	53.97	-25.21	34.95	44.23	68.34	14.38	V
5924.937	54.44	-25.21	34.95	44.70	68.25	13.81	H
11510.000	43.37	-32.50	38.01	37.86	74.00	30.63	V
17265.200	47.60	-26.90	40.87	33.62	68.30	20.70	V
17495.650	49.89	-26.74	40.80	35.83	68.30	18.41	V
17618.300	49.70	-26.68	40.56	35.81	68.30	18.60	V

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)
5650.144	58.6	-24.8	34.5	48.84	68.3	9.7	V
5650.759	59.7	-24.8	34.5	49.96	68.3	8.6	H
11550.150	43.2	-32.4	38.1	37.55	74.0	30.8	H
17325.150	46.2	-26.9	40.8	32.23	68.3	22.1	V
17472.550	49.5	-26.7	40.8	35.42	68.3	18.8	V
17689.250	49.3	-26.6	40.4	35.52	68.3	19.0	V

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)
5924.908	53.6	-25.2	34.9	43.90	68.3	14.7	V
5924.937	54.0	-25.2	34.9	44.26	68.3	14.3	H
11550.150	43.2	-32.4	38.1	37.55	74.0	30.8	H
17325.150	46.2	-26.9	40.8	32.23	68.3	22.1	H
17472.550	49.5	-26.7	40.8	35.42	68.3	18.8	H
17689.250	49.3	-26.6	40.4	35.52	68.3	19.0	H

Conclusion: PASS

Sample calculation: 5924.908MHz

$$\text{Peak ERP(dBm)} = P_{\text{Mea}}(53.6\text{dBuV/m}) + \text{Cable Loss}(-25.2) + \text{Antenna Factor}(34.9) = 43.90 \text{ dBuV/m}$$

A.6. Band Edges Compliance

A6.2 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.	

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 Fig.21	P

Conclusion: PASS

Test graphs as below:

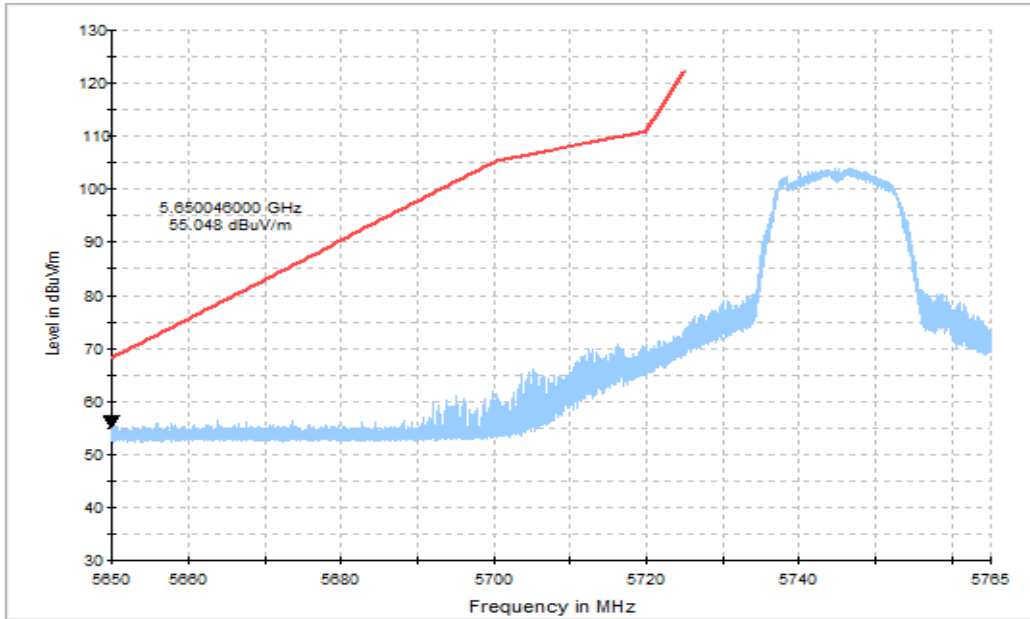


Fig. 10 Band Edges (802.11a Ch149,5745MHz)

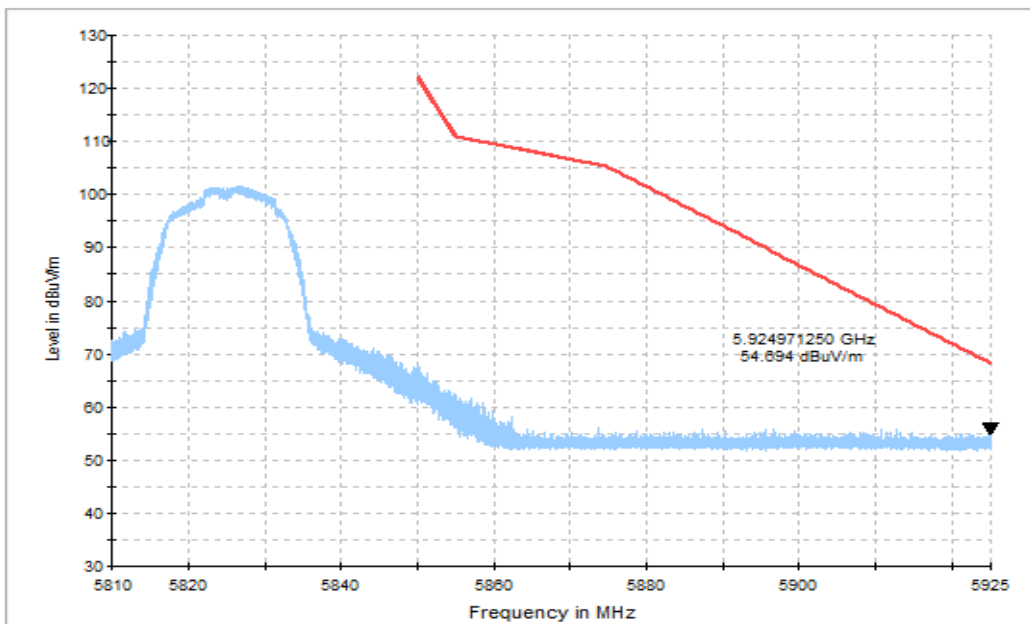


Fig. 11 Band Edges (802.11a Ch165, 5825MHz)

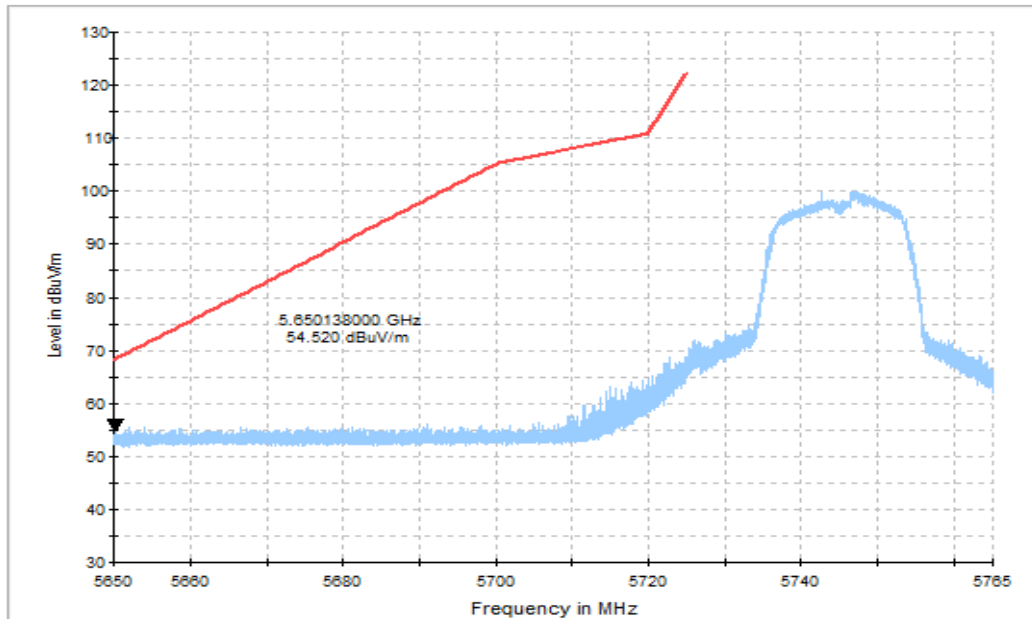


Fig. 12 Band Edges (802.11n-HT20 Ch149, 5745MHz)

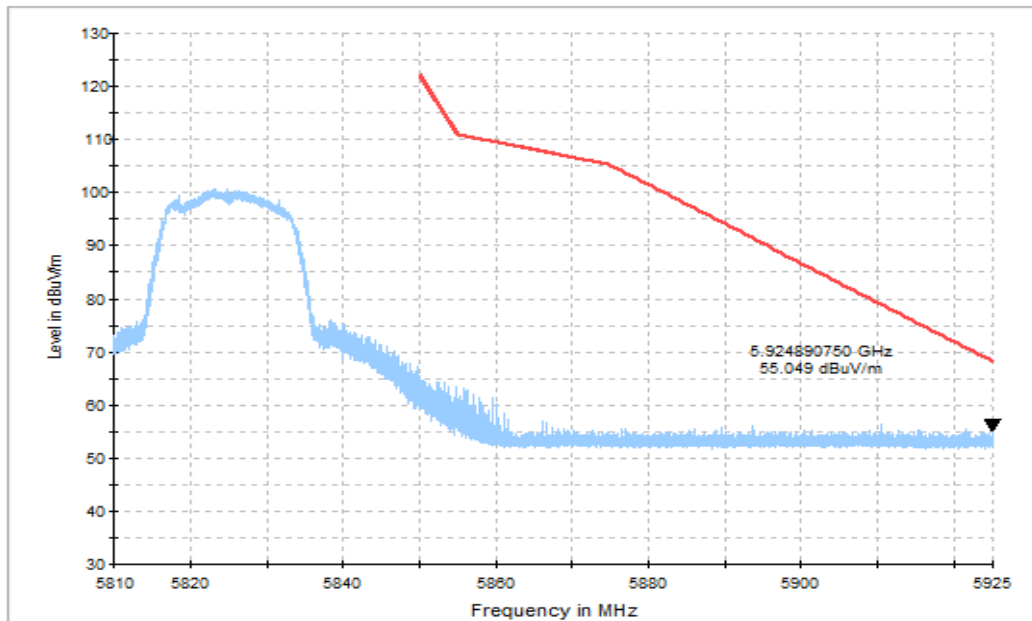


Fig. 13 Band Edges (802.11n-HT20 Ch165, 5825MHz)

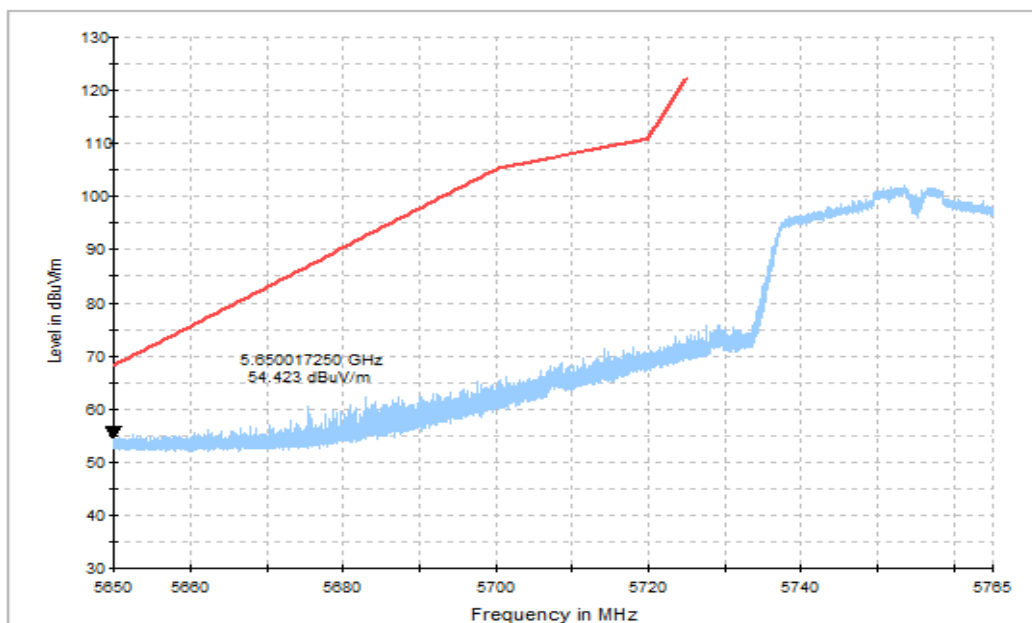


Fig. 14 Band Edges (802.11n-HT40 Ch151, 5755MHz)

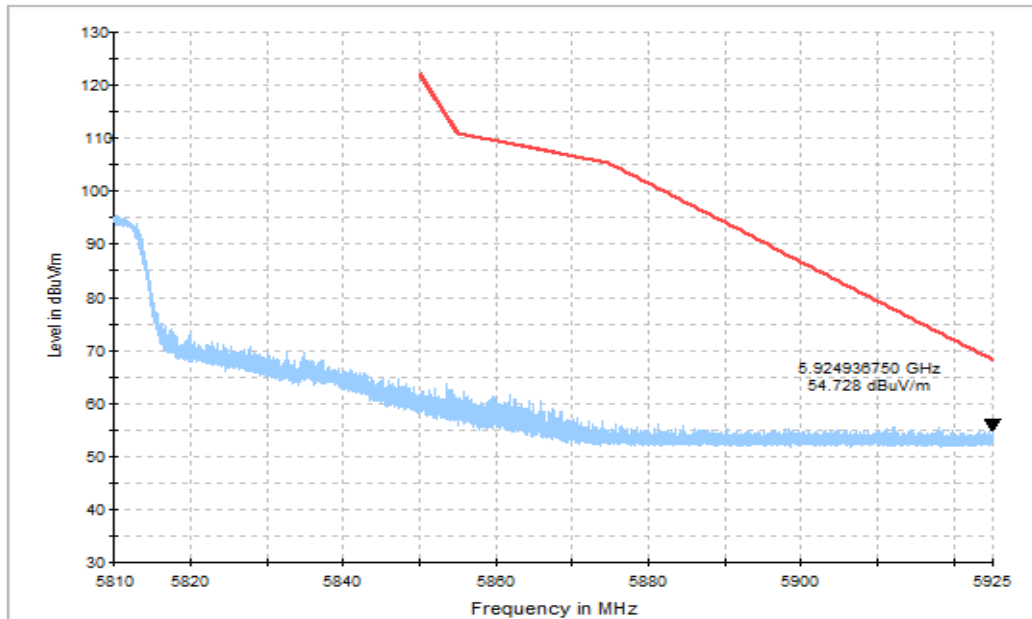


Fig. 15 Band Edges (802.11n-HT40 Ch159, 5795MHz)

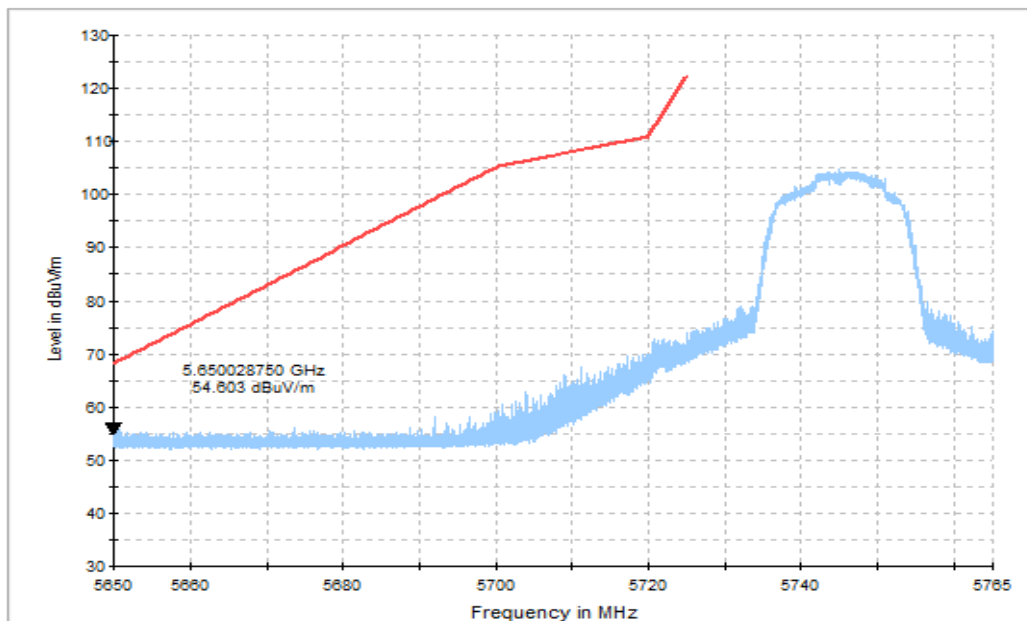


Fig. 16 Band Edges (802.11ac-HT20 Ch149, 5745MHz)

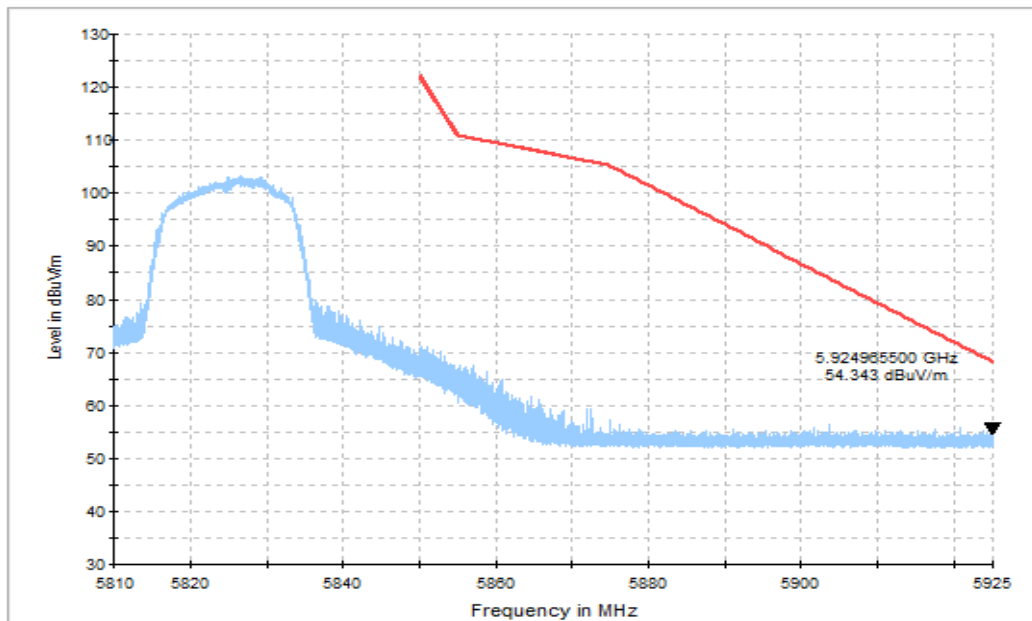


Fig. 17 Band Edges (802.11ac-HT20 Ch165, 5825MHz)

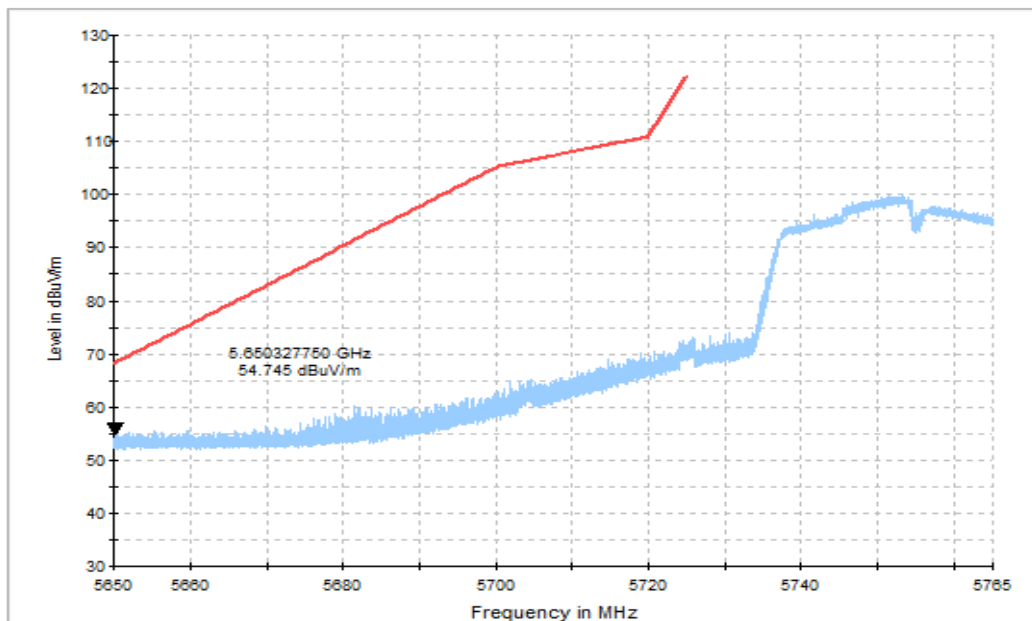


Fig. 18 Band Edges (802.11ac-HT40 Ch151, 5755MHz)

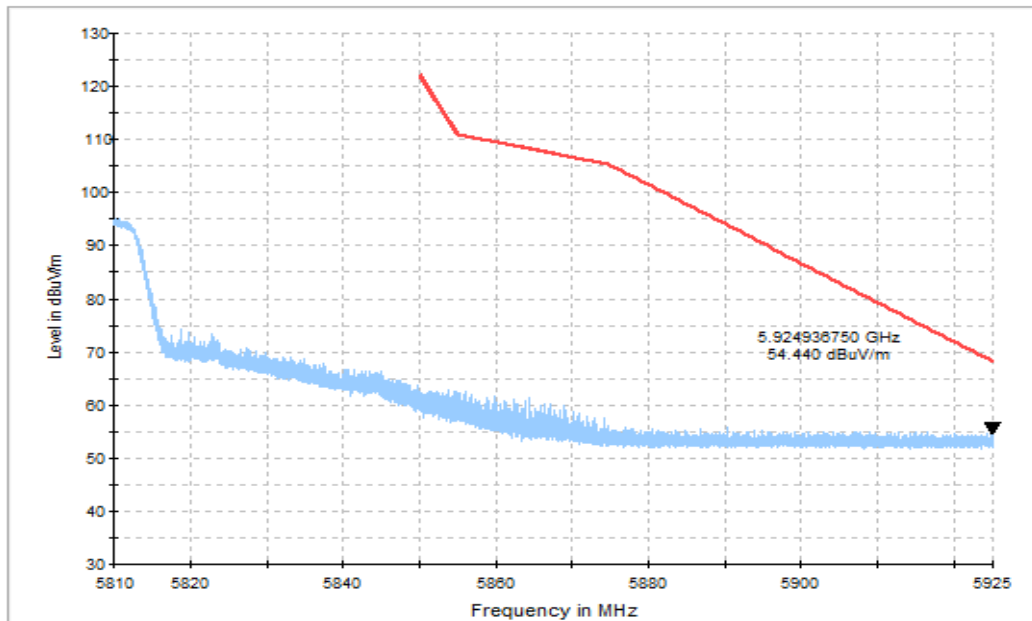


Fig. 19 Band Edges (802.11ac-HT40 Ch159, 5795MHz)

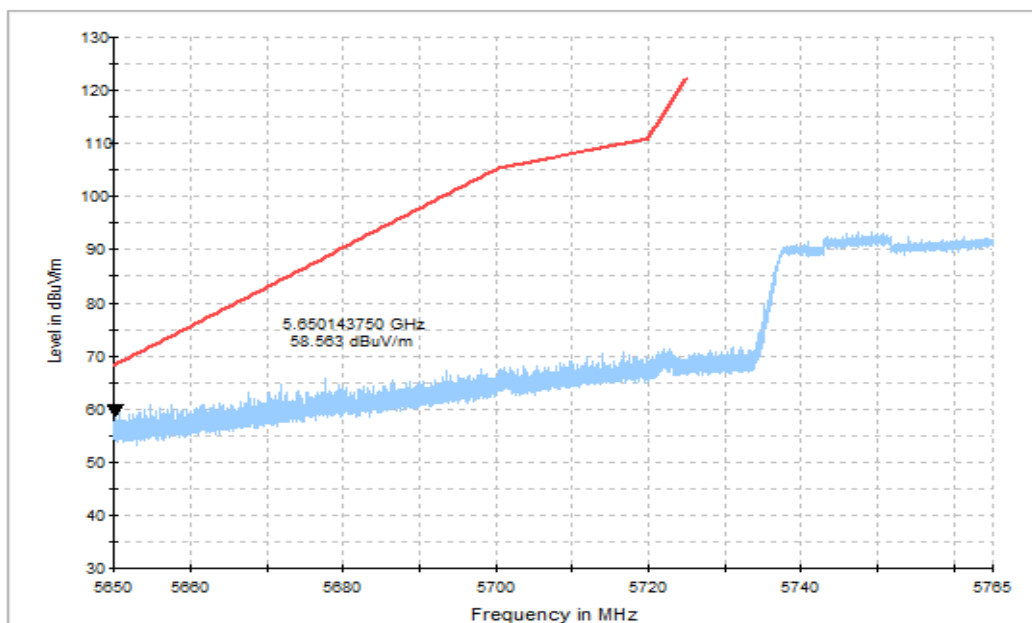


Fig. 20 Band Edges (802.11ac-HT80 Ch155, 5775MHz)

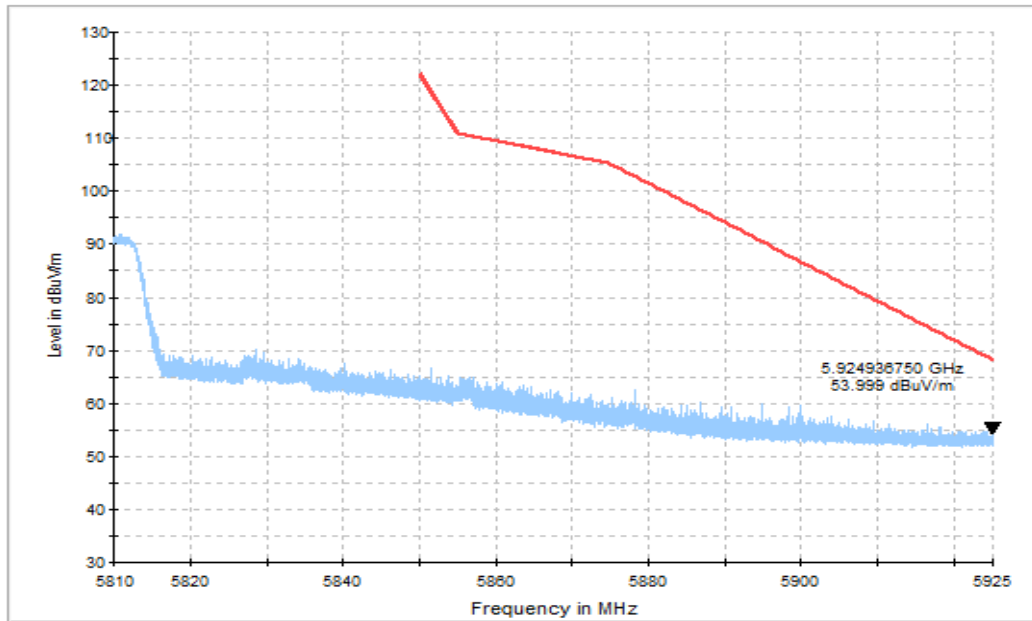


Fig. 21 Band Edges (802.11ac-HT80 Ch155, 5775MHz)

A.7. AC Powerline Conducted Emission

Test Condition:

Voltage (V)	Frequency (Hz)
120	60

Measurement Result and limit:

EUT ID: UT13a

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:

Traffic:

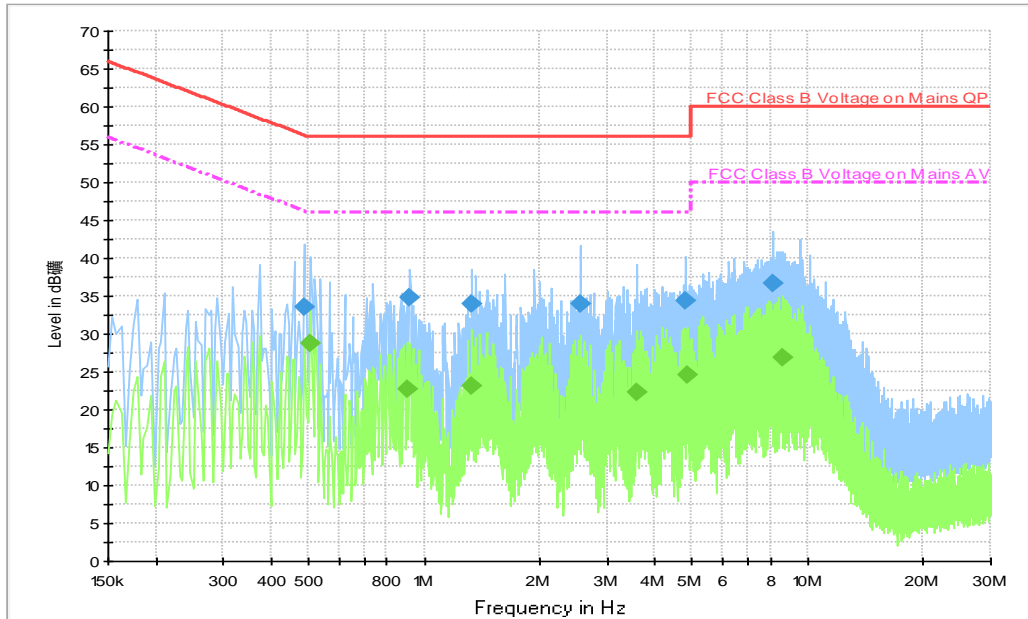


Fig. 22 AC Power line Conducted Emission-802.11a

Note1: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.486000	33.6	2000.0	9.000	On	L1	19.7	22.7	56.2
0.918000	34.8	2000.0	9.000	On	L1	19.7	21.2	56.0
1.330000	34.0	2000.0	9.000	On	L1	19.6	22.0	56.0
2.558000	33.9	2000.0	9.000	On	L1	19.6	22.1	56.0
4.810000	34.4	2000.0	9.000	On	L1	19.6	21.6	56.0
8.078000	36.7	2000.0	9.000	On	L1	19.6	23.3	60.0

Final Result 2

Frequency (MHz)	QuasiPeak (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.502000	28.7	2000.0	9.000	On	L1	19.7	17.3	46.0
0.902000	22.6	2000.0	9.000	On	L1	19.7	23.4	46.0
1.330000	23.1	2000.0	9.000	On	L1	19.6	22.9	46.0
3.578000	22.3	2000.0	9.000	On	L1	19.6	23.7	46.0
4.858000	24.5	2000.0	9.000	On	L1	19.6	21.5	46.0
8.598000	26.9	2000.0	9.000	On	L1	19.7	23.1	50.0

Note2: The measurement results showed here are worst cases of the combinations of different cables and chargers

Idle:

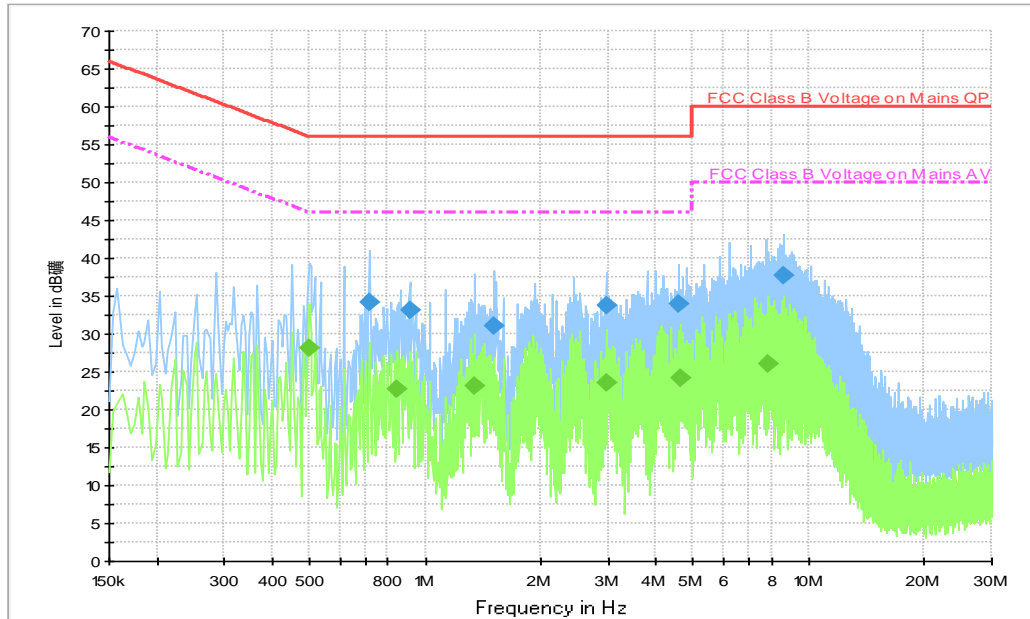


Fig. 23 AC Power line Conducted Emission-Idle

Note1: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.714000	34.3	2000.0	9.000	On	L1	19.7	21.7	56.0
0.914000	33.1	2000.0	9.000	On	L1	19.7	22.9	56.0
1.514000	31.1	2000.0	9.000	On	L1	19.6	24.9	56.0
2.962000	33.7	2000.0	9.000	On	L1	19.6	22.3	56.0
4.598000	34.0	2000.0	9.000	On	L1	19.6	22.0	56.0
8.590000	37.6	2000.0	9.000	On	L1	19.7	22.4	60.0

Final Result 2

Frequency (MHz)	QuasiPeak (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.498000	28.1	2000.0	9.000	On	L1	19.7	17.9	46.0
0.846000	22.7	2000.0	9.000	On	L1	19.7	23.3	46.0
1.342000	23.2	2000.0	9.000	On	L1	19.6	22.8	46.0
2.962000	23.5	2000.0	9.000	On	L1	19.6	22.5	46.0
4.658000	24.3	2000.0	9.000	On	L1	19.6	21.7	46.0
7.874000	26.1	2000.0	9.000	On	L1	19.7	23.9	50.0

Note2: The measurement results showed here are worst cases of the combinations of different cables and chargers

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

<p>United States Department of Commerce National Institute of Standards and Technology</p>  	
<hr/> Certificate of Accreditation to ISO/IEC 17025:2017 <hr/>	
NVLAP LAB CODE: 600118-0	
Telecommunication Technology Labs, CAICT Beijing China	
<i>is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:</i>	
Electromagnetic Compatibility & Telecommunications	
<i>This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).</i>	
2022-10-01 through 2023-09-30 <i>Effective Dates</i>	  <i>For the National Voluntary Laboratory Accreditation Program</i>

*** END OF REPORT BODY ***