



# FCC PART 15C TEST REPORT No.I23Z61283-IOT04

for

**Client name: TCL Communication Ltd.**

**Product name: GSM/UMTS/LTE Mobile phone**

**Model name: T612B**

**With**

**FCC ID: 2ACCJH176**

**Hardware Version: 05**

**Software Version: 2BS7**

**Issued Date: 2023-07-28**

**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.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

**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](mailto:ctl_terminals@caict.ac.cn), website: [www.caict.ac.cn](http://www.caict.ac.cn)



No.I23Z61283-IOT04

## **REPORT HISTORY**

<b>Report Number</b>	<b>Revision</b>	<b>Description</b>	<b>Issue Date</b>
I23Z61283-IOT04	Rev.0	1st edition	2023-07-28

## **CONTENTS**

<b>CONTENTS</b> .....	<b>3</b>
<b>1. TEST LATORATORY</b> .....	<b>5</b>
1.1. INTRODUCTION & ACCREDITATION .....	5
1.2. TESTING LOCATION .....	5
1.3. TESTING ENVIRONMENT .....	6
1.4. PROJECT DATE .....	6
1.5. SIGNATURE .....	6
<b>2. CLIENT INFORMATION</b> .....	<b>7</b>
2.1. APPLICANT INFORMATION .....	7
2.2. MANUFACTURER INFORMATION .....	7
<b>3. EQUIPMENT UNDER TEST (EUT) AND ANCILLARY EQUIPMENT(AE)</b> .....	<b>8</b>
3.1. ABOUT EUT .....	8
3.2. INTERNAL IDENTIFICATION OF EUT USED DURING THE TEST .....	8
3.3. INTERNAL IDENTIFICATION OF AE USED DURING THE TEST .....	8
3.4. GENERAL DESCRIPTION .....	9
<b>4. REFERENCE DOCUMENTS</b> .....	<b>10</b>
4.1. DOCUMENTS SUPPLIED BY APPLICANT .....	10
4.2. REFERENCE DOCUMENTS FOR TESTING .....	10
<b>5. LABORATORY ENVIRONMENT</b> .....	<b>10</b>
<b>6. SUMMARY OF TEST RESULTS</b> .....	<b>11</b>
6.1. SUMMARY OF TEST RESULTS .....	11
6.2. STATEMENTS .....	11
6.3. TEST CONDITIONS .....	11
<b>7. TEST EQUIPMENTS UTILIZED</b> .....	<b>12</b>
<b>8. MEASUREMENT UNCERTAINTY</b> .....	<b>13</b>
8.1. TRANSMITTER OUTPUT POWER .....	13
8.2. PEAK POWER SPECTRAL DENSITY .....	13
8.3. OCCUPIED 6DB BANDWIDTH .....	13
8.4. BAND EDGES COMPLIANCE .....	13
8.5. SPURIOUS EMISSIONS .....	13
8.6. AC POWER-LINE CONDUCTED EMISSION .....	13
<b>ANNEX A: MEASUREMENT RESULTS</b> .....	<b>14</b>
A.1. MEASUREMENT METHOD .....	14
A.2. MAXIMUM PEAK OUTPUT POWER .....	15
A.2.1 ANTENNA GAIN .....	15
A.2.2. MAXIMUM AVERAGE OUTPUT POWER-CONDUCTED .....	15

A.3. PEAK POWER SPECTRAL DENSITY .....	17
A.4. OCCUPIED 6DB BANDWIDTH .....	18
A.5. TRANSMITTER SPURIOUS EMISSION .....	23
A.5.1 TRANSMITTER SPURIOUS EMISSION - RADIATED.....	23
A.6. BAND EDGES COMPLIANCE .....	34
A6.1 BAND EDGES - RADIATED.....	34
FIG. 10 BAND EDGES (802.11A CH149,5745MHZ).....	35
FIG. 11 BAND EDGES (802.11A CH165, 5825MHZ).....	35
FIG. 12 BAND EDGES (802.11N-HT20 CH149, 5745MHZ) .....	36
FIG. 13 BAND EDGES (802.11N-HT20 CH165, 5825MHZ).....	36
FIG. 14 BAND EDGES (802.11N-HT40 CH151, 5755MHZ) .....	37
FIG. 15 BAND EDGES (802.11N-HT40 CH159, 5795MHZ).....	37
FIG. 16 BAND EDGES (802.11AC-HT20 CH149, 5745MHZ).....	38
FIG. 17 BAND EDGES (802.11AC-HT20 CH165, 5825MHZ).....	38
FIG. 18 BAND EDGES (802.11AC-HT40 CH151, 5755MHZ).....	39
FIG. 19 BAND EDGES (802.11AC-HT40 CH159, 5795MHZ).....	39
FIG. 20 BAND EDGES (802.11AC-HT80 CH155, 5775MHZ).....	40
FIG. 21 BAND EDGES (802.11AC-HT80, 5775MHZ).....	40
A.7. AC POWERLINE CONDUCTED EMISSION.....	41
FIG. 22 AC POWER LINE CONDUCTED EMISSION-802.11A .....	42
FIG. 23 AC POWER LINE CONDUCTED EMISSION-IDLE.....	43
<b>ANNEX B: EUT PARAMETERS.....</b>	<b>44</b>
<b>ANNEX C: ACCREDITATION CERTIFICATE .....</b>	<b>44</b>



No.I23Z61283-IOT04

## **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(huayuan North Road)

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

### 1.3. Testing Environment

Normal Temperature: 15-35°C

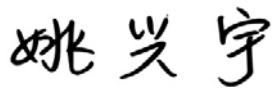
Relative Humidity: 20-75%

### 1.4. Project date

Testing Start Date: 2023-07-04

Testing End Date: 2023-07-27

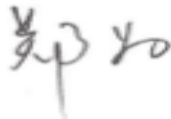
### 1.5. Signature



---

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: 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	GSM/UMTS/LTE Mobile phone
Model name	T612B
FCC ID	2ACCJH176
WLAN Frequency Band	ISM Band: 5725MHz~5850MHz
Type of modulation	OFDM
Voltage	3.87V

##### 3.2. Internal Identification of EUT used during the test

EUT ID*	IMEI	HW Version	SW Version
UT01a	352051810201118/	05	2BS7
	352051810201126		
UT37a	352051810201555/	05	2BS7
	352051810201563		

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

UT01a is used for Conduction test, UT37a is used for Radiation test.

##### 3.3. Internal Identification of AE used during the test

AE ID*	Description	Type	SN
AE1	Battery	/	/
AE2	Battery	/	/
AE3	Charger	/	/
AE4	USB Cable	/	/

###### AE1

Model	CAC4900009CA
Manufacturer	TIANMAO
Capacity	4900 mAh
Nominal Voltage	/

###### AE2

Model	CAC4900007C7
Manufacturer	VEKEN
Capacity	4900 mAh
Nominal Voltage	/

###### AE3

Model	CBA0118BG0C7
Manufacturer	CHENYANG
Length of cable	/

###### AE4





Model	CDA0000205C1
Manufacturer	JUWEI
Length of cable	/

\*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 GSM/UMTS/LTE Mobile 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 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)	/	<b>P</b>
Peak Power Spectral Density	15.407 (a)	/	<b>P</b>
Occupied 6dB Bandwidth	15.407 (e)	/	<b>P</b>
Band Edges Compliance - Conducted& Radiated	15.407 (b)	/	<b>P</b>
Transmitter Spurious Emission - Conducted	15.407	/	<b>P</b>
Transmitter Spurious Emission - Radiated	15.407, 15.205, 15.209	/	<b>P</b>
AC Powerline Conducted Emission	15.107, 15.207	/	<b>P</b>

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	3.87V
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	2024-07-04
2	LISN	ENV216	101200	Rohde & Schwarz	1 year	2024-07-04
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	ESW44	103144	R&S	1 year	2023-10-25
2	EMI Antenna	VULB 9163	01223	SCHWARZBECK	1 year	2023-07-25
3	EMI Antenna	3115	6914	ETS-Lindgren	1 year	2024-04-25
4	EMI Antenna	3116	2663	ETS-Lindgren	1 year	2023-11-22

※The EMI Antenna with series number of 01223 did not exceed the CAL.DUE.DATE when used.

## 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	/
$30\text{MHz} \leq f \leq 1\text{GHz}$	4.72
$1\text{GHz} \leq f \leq 18\text{GHz}$	4.84
$18\text{GHz} \leq f \leq 40\text{GHz}$	5.12

### 8.6. AC Power-line Conducted Emission

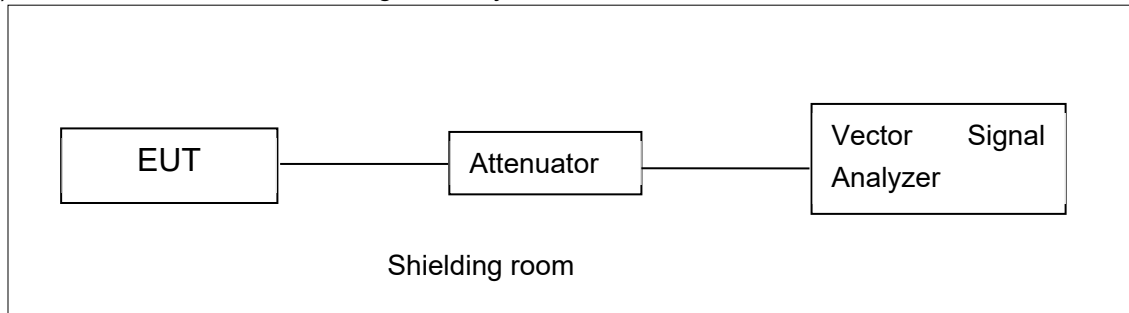
Measurement Uncertainty : 3.08dB,k=2

## 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

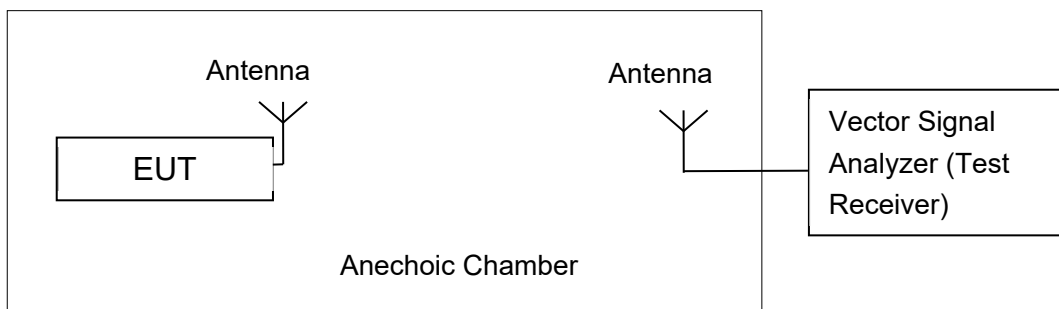


#### A.1.2. Radiated Emission Measurements

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 = 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

### A.2.1 Antenna Gain

Antenna gain is 1.53dBi 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	17.35	17.18	17.11

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	17.05	16.97	17.10

The data rate MSC0 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	16.32	16.17	16.06

The data rate MSC0 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	15.96	15.84

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	14.84	14.73

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	13.60

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

#### Measurement Results:

Mode	Channel	Power Spectral Density ( dBm/500kHz )	Conclusion
802.11a	149	3.93	P
	157	4.49	P
	165	4.77	P
802.11n HT20	149	4.66	P
	157	4.50	P
	165	4.72	P
802.11n HT40	151	0.71	P
	159	0.64	P
802.11ac HT80	155	-5.07	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:

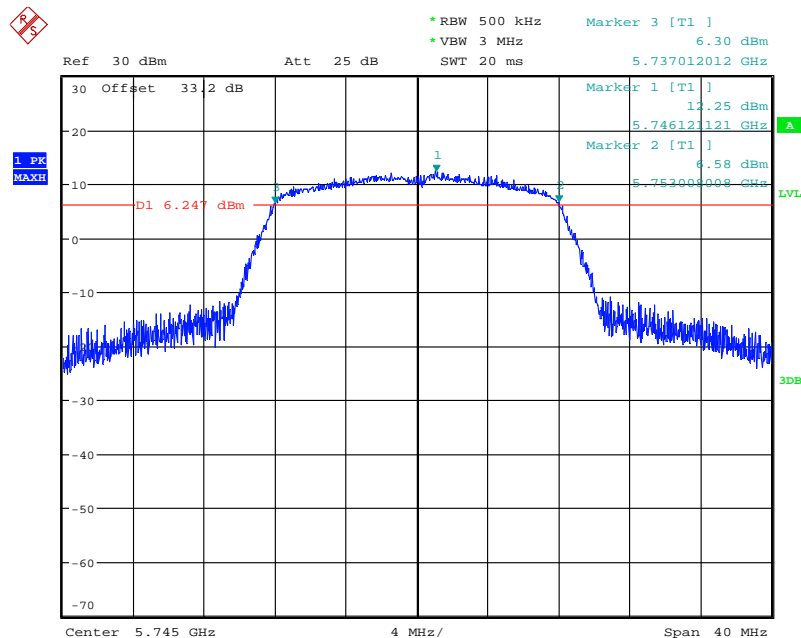
Measurement Uncertainty	60.80Hz
-------------------------	---------

#### Measurement Result:

Mode	Channel	Occupied 6dB Bandwidth ( MHz)		conclusion
		Fig.	Value	
802.11a	149	Fig.1	16.00	P
	157	Fig.2	16.00	P
	165	Fig.3	16.12	P
802.11n HT20	149	Fig.4	17.08	P
	157	Fig.5	17.24	P
	165	Fig.6	17.34	P
802.11n HT40	151	Fig.7	35.12	P
	159	Fig.8	35.40	P
802.11ac HT80	155	Fig.9	75.44	P

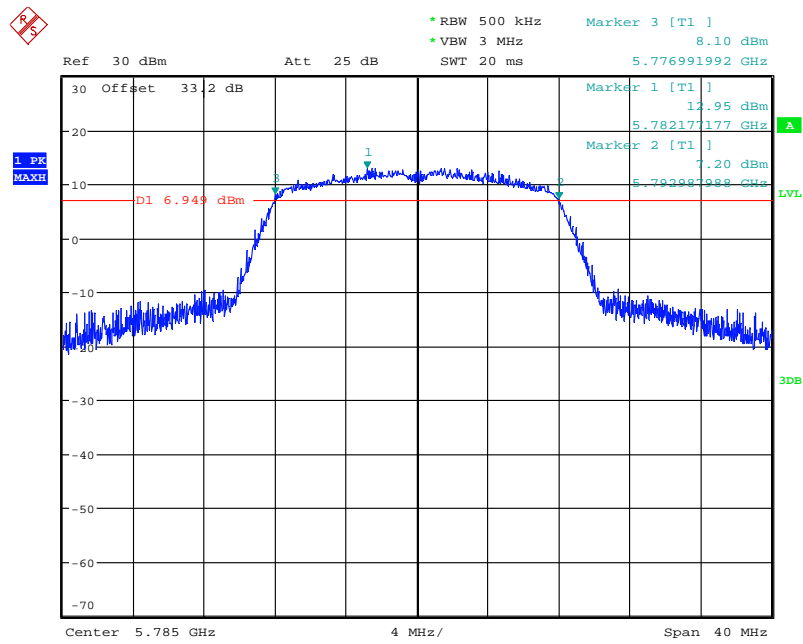
### Conclusion: PASS

#### Test graphs as below:



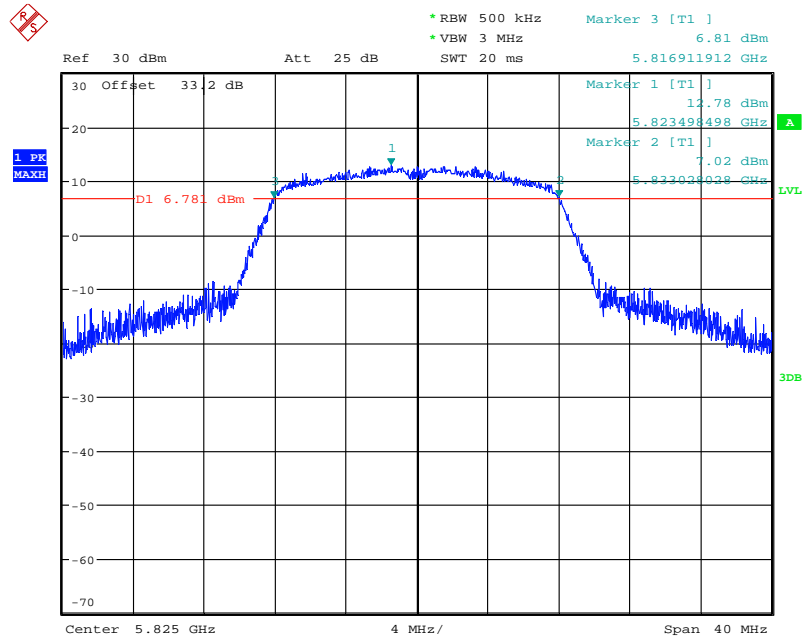
Date: 26.JUL.2023 14:18:24

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



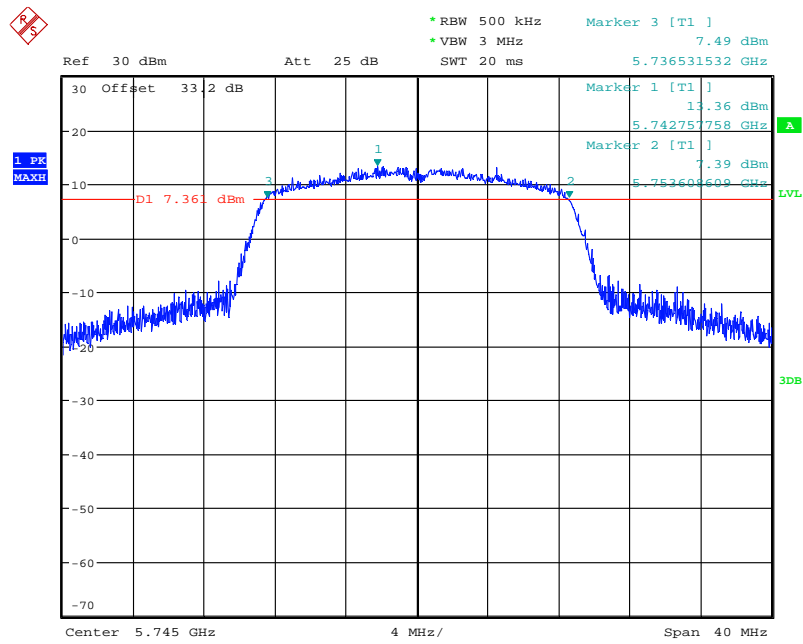
Date: 26.JUL.2023 14:21:14

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



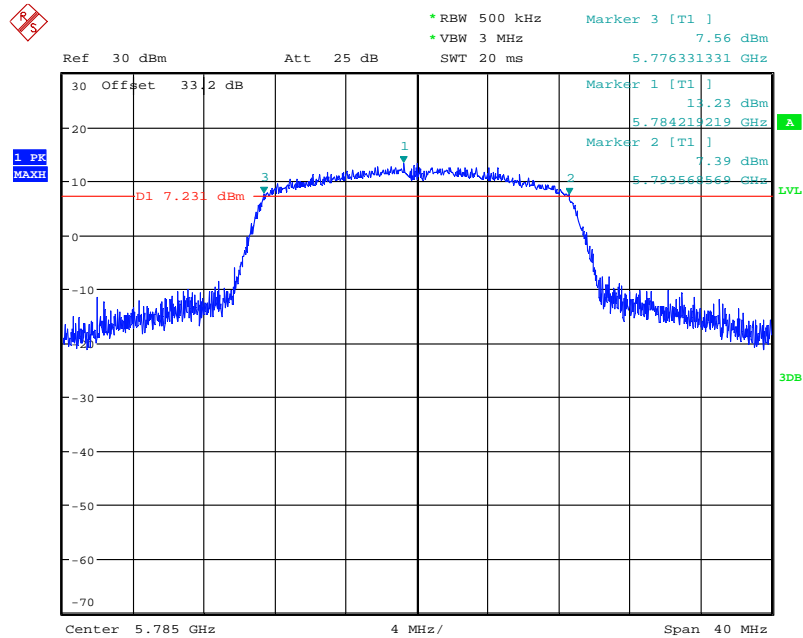
Date: 26.JUL.2023 14:23:19

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



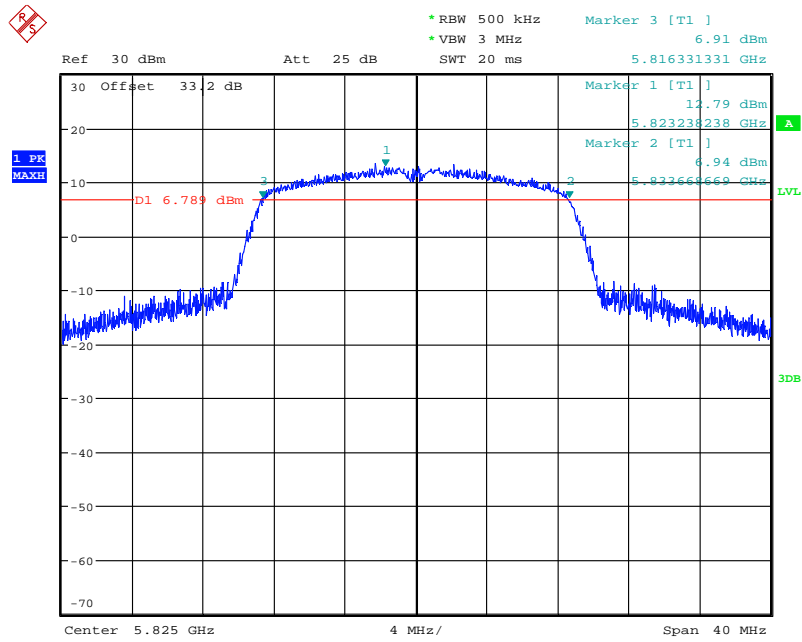
Date: 26.JUL.2023 14:45:27

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



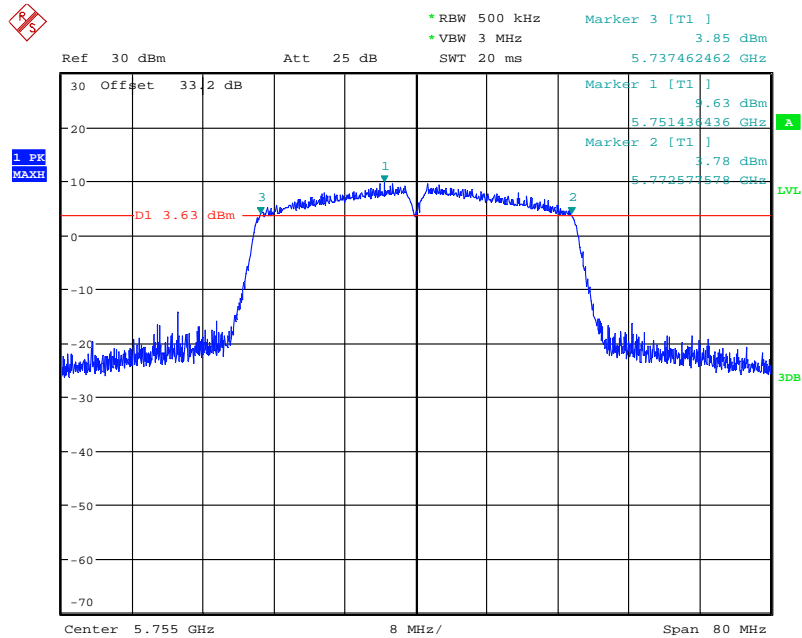
Date: 26.JUL.2023 14:48:12

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



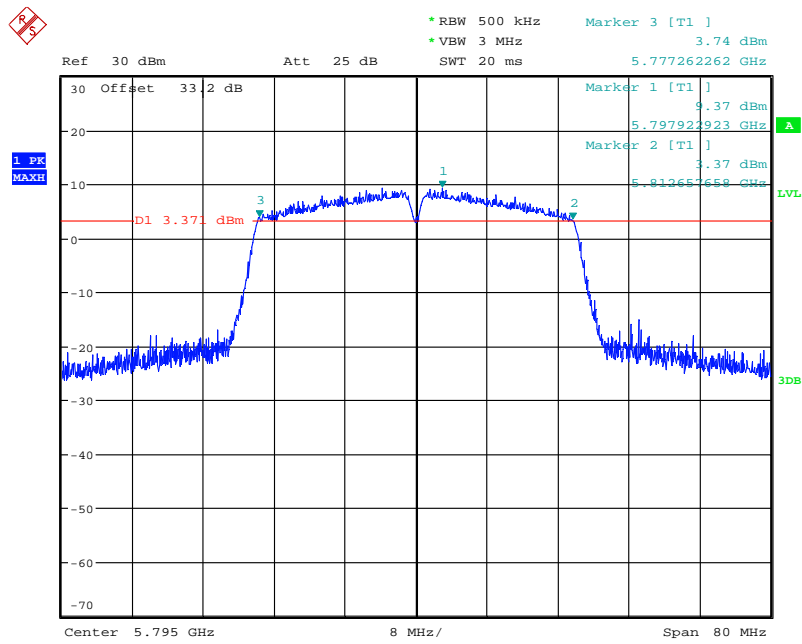
Date: 26.JUL.2023 14:50:23

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



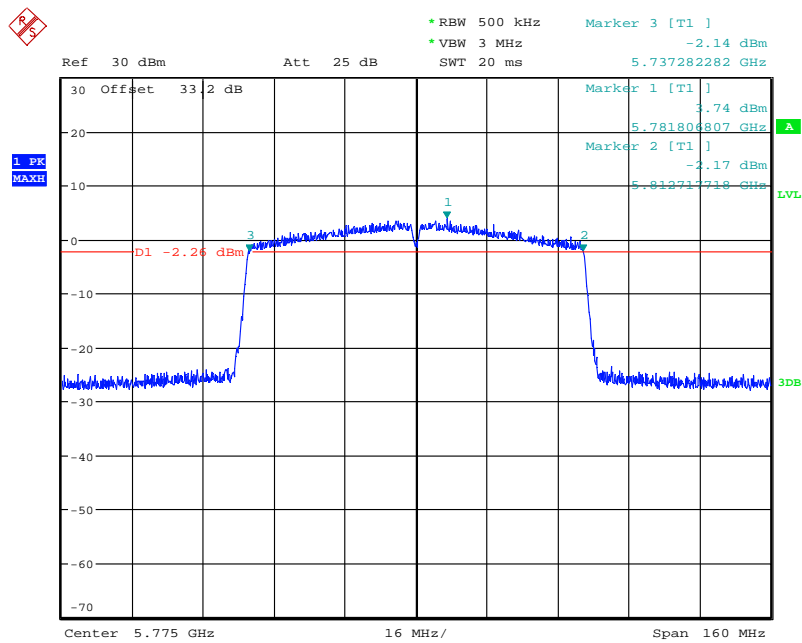
Date: 26.JUL.2023 14:52:38

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



Date: 26.JUL.2023 14:54:41

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



Date: 26.JUL.2023 14:43:06

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

## A.5. Transmitter Spurious Emission

### 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)).

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

### Measurement Uncertainty:

Frequency Range	Uncertainty(dB)
30MHz ≤ f ≤ 2GHz	0.63
2GHz ≤ f ≤ 3.6GHz	0.82
3.6GHz ≤ f ≤ 8GHz	1.55
8GHz ≤ f ≤ 20GHz	1.86
20GHz ≤ f ≤ 22GHz	1.90
22GHz ≤ f ≤ 26GHz	2.20

### 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

### 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.

**Measurement Results:**

**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)
17961.867	40.71	-29.59	45.95	24.35	54.00	13.29	H
17971.400	40.71	-29.59	45.95	24.35	54.00	13.29	V
12331.700	36.97	-32.39	38.95	30.41	54.00	17.03	H
12333.167	36.96	-32.39	38.95	30.40	54.00	17.04	H
8472.900	34.28	-34.28	37.30	31.26	54.00	19.72	V
8498.200	34.18	-34.28	37.30	31.16	54.00	19.82	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)
17978.367	40.61	-29.59	45.95	24.25	54.00	13.39	H
17872.400	40.44	-29.59	45.95	24.08	54.00	13.56	H
12329.500	36.78	-32.39	38.95	30.22	54.00	17.22	V
12332.067	36.66	-32.39	38.95	30.10	54.00	17.34	V
8359.600	33.69	-34.93	37.20	31.42	54.00	20.31	H
8494.167	33.46	-34.28	37.30	30.44	54.00	20.54	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)
17957.100	40.49	-29.59	45.95	24.13	54.00	13.51	H
17977.633	40.41	-29.59	45.95	24.05	54.00	13.59	H
12330.233	36.74	-32.39	38.95	30.18	54.00	17.26	H
12011.233	36.49	-32.66	39.00	30.15	54.00	17.51	V
8344.200	33.79	-34.93	37.20	31.52	54.00	20.21	V
8320.367	33.69	-34.93	37.20	31.42	54.00	20.31	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)
17937.300	40.76	-29.59	45.95	24.40	54.00	13.24	V
17946.467	40.42	-29.59	45.95	24.06	54.00	13.58	V
12264.233	36.86	-32.37	38.95	30.28	54.00	17.14	V
12308.600	36.72	-32.12	39.00	29.84	54.00	17.28	V
8478.033	33.79	-34.28	37.30	30.77	54.00	20.21	V
8437.333	33.61	-34.69	37.40	30.90	54.00	20.39	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)
17914.567	40.47	-29.59	45.95	24.11	54.00	13.53	V
17948.667	40.39	-29.59	45.95	24.03	54.00	13.61	V
12330.233	36.91	-32.39	38.95	30.35	54.00	17.09	H
12332.800	36.75	-32.39	38.95	30.19	54.00	17.25	V
8494.167	33.67	-34.28	37.30	30.65	54.00	20.33	H
8498.200	33.38	-34.28	37.30	30.36	54.00	20.62	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)
17840.500	40.56	-29.59	45.95	24.20	54.00	13.44	V
17947.200	40.49	-29.59	45.95	24.13	54.00	13.51	V
12333.167	36.91	-32.39	38.95	30.35	54.00	17.09	V
12330.233	36.83	-32.39	38.95	30.27	54.00	17.17	H
8280.400	33.96	-34.84	37.10	31.69	54.00	20.04	H
8456.400	33.90	-34.69	37.40	31.19	54.00	20.10	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)
17950.500	41.06	-29.59	45.95	24.70	54.00	12.94	H
17977.267	40.53	-29.59	45.95	24.17	54.00	13.47	H
12330.967	38.12	-32.39	38.95	31.56	54.00	15.88	H
12330.233	36.85	-32.39	38.95	30.29	54.00	17.15	H
8292.867	33.95	-34.84	37.10	31.68	54.00	20.05	V
8235.667	33.82	-34.48	37.00	31.30	54.00	20.18	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)
17947.933	40.49	-29.59	45.95	24.13	54.00	13.51	V
17972.133	40.44	-29.59	45.95	24.08	54.00	13.56	H
12331.700	37.27	-32.39	38.95	30.71	54.00	16.73	H
12267.167	37.11	-32.37	38.95	30.53	54.00	16.89	V
8456.400	33.88	-34.69	37.40	31.17	54.00	20.12	H
8284.067	33.76	-34.84	37.10	31.49	54.00	20.24	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)
17938.033	40.75	-29.59	45.95	24.39	54.00	13.25	V
17953.800	40.57	-29.59	45.95	24.21	54.00	13.43	H
12332.800	36.69	-32.39	38.95	30.13	54.00	17.31	V
12331.700	36.58	-32.39	38.95	30.02	54.00	17.42	H
8359.600	33.99	-34.93	37.20	31.72	54.00	20.01	H
8491.967	33.82	-34.28	37.30	30.80	54.00	20.18	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)
17982.400	40.67	-29.59	45.95	24.31	54.00	13.33	V
17909.433	40.41	-29.59	45.95	24.05	54.00	13.59	H
12327.667	36.84	-32.39	38.95	30.28	54.00	17.16	H
12331.700	36.83	-32.39	38.95	30.27	54.00	17.17	H
8465.933	33.90	-34.28	37.30	30.88	54.00	20.10	H
8498.200	33.50	-34.28	37.30	30.48	54.00	20.50	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)
17947.933	40.56	-29.59	45.95	24.20	54.00	13.44	V
17942.067	40.38	-29.59	45.95	24.02	54.00	13.62	V
12331.700	36.70	-32.39	38.95	30.14	54.00	17.30	V
12293.933	36.67	-32.12	39.00	29.79	54.00	17.33	V
8335.033	33.74	-34.93	37.20	31.47	54.00	20.26	V
8497.100	33.59	-34.28	37.30	30.57	54.00	20.41	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)
17934.733	40.54	-29.59	45.95	24.18	54.00	13.46	V
17975.800	40.51	-29.59	45.95	24.15	54.00	13.49	V
12330.967	37.44	-32.39	38.95	30.88	54.00	16.56	V
12332.800	37.11	-32.39	38.95	30.55	54.00	16.89	H
8355.933	34.13	-34.93	37.20	31.86	54.00	19.87	V
8277.833	33.87	-34.84	37.10	31.60	54.00	20.13	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)
17976.533	40.10	-29.59	45.95	23.74	54.00	13.90	V
17975.800	40.07	-29.59	45.95	23.71	54.00	13.93	V
12329.500	37.11	-32.39	38.95	30.55	54.00	16.89	H
12329.867	36.78	-32.39	38.95	30.22	54.00	17.22	H
8264.633	33.77	-34.48	37.00	31.25	54.00	20.23	V
8494.533	33.47	-34.28	37.30	30.45	54.00	20.53	H

**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)
17960.400	40.78	-29.59	45.95	24.42	54.00	13.22	H
17934.733	40.52	-29.59	45.95	24.16	54.00	13.48	V
12331.700	37.39	-32.39	38.95	30.83	54.00	16.61	H
12332.800	37.12	-32.39	38.95	30.56	54.00	16.88	H
8277.833	33.71	-34.84	37.10	31.44	54.00	20.29	V
8355.567	33.57	-34.93	37.20	31.30	54.00	20.43	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)
17386.200	52.91	-29.44	43.80	38.55	68.20	15.29	H
17376.300	51.16	-29.44	43.80	36.80	68.20	17.04	H
12269.367	45.76	-32.37	38.95	39.18	74.00	28.24	V
11991.800	45.19	-32.66	39.00	38.85	74.00	28.81	V
10007.400	43.54	-34.07	38.00	39.61	68.20	24.66	H
10147.833	42.88	-34.28	38.10	39.06	68.20	25.32	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)
17380.700	51.57	-29.44	43.80	37.21	68.20	16.63	V
17386.200	51.39	-29.44	43.80	37.03	68.20	16.81	V
12328.400	45.60	-32.39	38.95	39.04	74.00	28.40	H
12193.100	45.02	-32.12	38.90	38.24	74.00	28.98	V
7989.633	42.72	-35.07	36.90	40.89	68.20	25.48	V
10093.567	42.66	-33.75	38.05	38.36	68.20	25.54	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)
17375.933	51.75	-28.74	43.40	37.09	68.20	16.45	V
17385.467	51.68	-29.44	43.80	37.32	68.20	16.52	H
12218.033	45.26	-32.12	38.90	38.48	74.00	28.74	V
11733.667	44.86	-32.71	39.20	38.37	74.00	29.14	H
9695.733	43.35	-33.86	37.70	39.51	68.20	24.85	V
10088.433	42.89	-33.75	38.05	38.59	68.20	25.31	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)
17388.033	52.24	-29.44	43.80	37.88	68.20	15.96	V
17378.133	52.06	-29.44	43.80	37.70	68.20	16.14	H
11803.700	45.53	-32.09	39.20	38.42	74.00	28.47	H
12222.433	45.09	-32.12	38.90	38.31	74.00	28.91	H
10249.767	43.53	-33.82	38.00	39.35	68.20	24.67	H
8013.100	42.84	-35.07	36.90	41.01	68.20	25.36	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)
17367.867	51.40	-28.74	43.40	36.74	68.20	16.80	V
17388.400	51.33	-29.44	43.80	36.97	68.20	16.87	H
12330.233	45.93	-32.39	38.95	39.37	74.00	28.07	H
12331.333	44.95	-32.39	38.95	38.39	74.00	29.05	V
10085.500	42.83	-33.75	38.05	38.53	68.20	25.37	V
9946.533	42.61	-33.69	37.90	38.40	68.20	25.59	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)
17385.833	51.50	-29.44	43.80	37.14	68.20	16.70	V
17379.233	51.30	-29.44	43.80	36.94	68.20	16.90	H
12332.800	45.91	-32.39	38.95	39.35	74.00	28.09	H
12332.433	44.92	-32.39	38.95	38.36	74.00	29.08	V
8486.467	43.43	-34.28	37.30	40.41	74.00	30.57	V
8517.267	43.00	-33.81	37.40	39.41	68.20	25.20	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)
17389.133	51.50	-29.44	43.80	37.14	68.20	16.70	V
17391.700	51.47	-29.44	43.80	37.11	68.20	16.73	V
12329.500	45.99	-32.39	38.95	39.43	74.00	28.01	V
12291.367	45.42	-32.12	39.00	38.54	74.00	28.58	H
10254.533	43.10	-33.82	38.00	38.92	68.20	25.10	V
10260.767	42.49	-33.82	38.00	38.31	68.20	25.71	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)
17376.300	51.42	-29.44	43.80	37.06	68.20	16.78	H
17382.900	51.30	-29.44	43.80	36.94	68.20	16.90	V
11837.433	46.18	-32.73	39.15	39.76	74.00	27.82	V
12311.533	45.29	-32.12	39.00	38.41	74.00	28.71	V
10144.167	43.32	-34.28	38.10	39.50	68.20	24.88	V
10265.900	43.03	-33.82	38.00	38.85	68.20	25.17	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)
17385.100	52.16	-29.44	43.80	37.80	68.20	16.04	V
17390.233	51.49	-29.44	43.80	37.13	68.20	16.71	H
12307.867	45.47	-32.12	39.00	38.59	74.00	28.53	H
12265.333	45.42	-32.37	38.95	38.84	74.00	28.58	V
10098.333	43.33	-33.75	38.05	39.03	68.20	24.87	H
8311.933	42.94	-34.84	37.10	40.67	74.00	31.06	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)
17385.100	51.85	-29.44	43.80	37.49	68.20	16.35	V
17384.000	51.54	-29.44	43.80	37.18	68.20	16.66	H
11038.467	46.03	-33.10	38.60	40.53	74.00	27.97	H
11742.100	46.02	-32.71	39.20	39.53	74.00	27.98	H
10269.567	42.99	-33.82	38.00	38.81	68.20	25.21	H
8503.333	42.94	-34.28	37.30	39.92	68.20	25.26	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)
17380.700	51.25	-29.44	43.80	36.89	68.20	16.95	H
17381.067	51.18	-29.44	43.80	36.82	68.20	17.02	H
12289.900	45.96	-32.12	39.00	39.08	74.00	28.04	H
11815.800	45.15	-32.09	39.20	38.04	74.00	28.85	V
10246.833	42.92	-34.09	38.00	39.01	68.20	25.28	H
10253.067	42.73	-33.82	38.00	38.55	68.20	25.47	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)
17359.067	51.51	-28.74	43.40	36.85	68.20	16.69	H
17341.100	50.74	-28.74	43.40	36.08	68.20	17.46	H
12311.167	44.94	-32.12	39.00	38.06	74.00	29.06	V
12222.433	44.86	-32.12	38.90	38.08	74.00	29.14	V
10250.867	43.49	-33.82	38.00	39.31	68.20	24.71	V
10246.100	42.87	-34.09	38.00	38.96	68.20	25.33	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)
17383.633	51.66	-29.44	43.80	37.30	68.20	16.54	V
17384.000	51.03	-29.44	43.80	36.67	68.20	17.17	V
12061.833	44.92	-32.19	38.95	38.16	74.00	29.08	H
12332.800	44.75	-32.39	38.95	38.19	74.00	29.25	H
10113.367	43.26	-34.28	38.10	39.44	68.20	24.94	H
10221.167	43.07	-34.09	38.00	39.16	68.20	25.13	H

**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)
17344.767	51.41	-28.74	43.40	36.75	68.20	16.79	H
17326.800	51.01	-28.74	43.40	36.35	68.20	17.19	V
12216.567	45.63	-32.12	38.90	38.85	74.00	28.37	H
12308.233	45.54	-32.12	39.00	38.66	74.00	28.46	H
10271.767	42.99	-33.82	38.00	38.81	68.20	25.21	V
9759.533	42.58	-33.67	38.00	38.25	68.20	25.62	H

## A.6. Band Edges Compliance

### A6.1 Band Edges - Radiated

#### Measurement Limit:

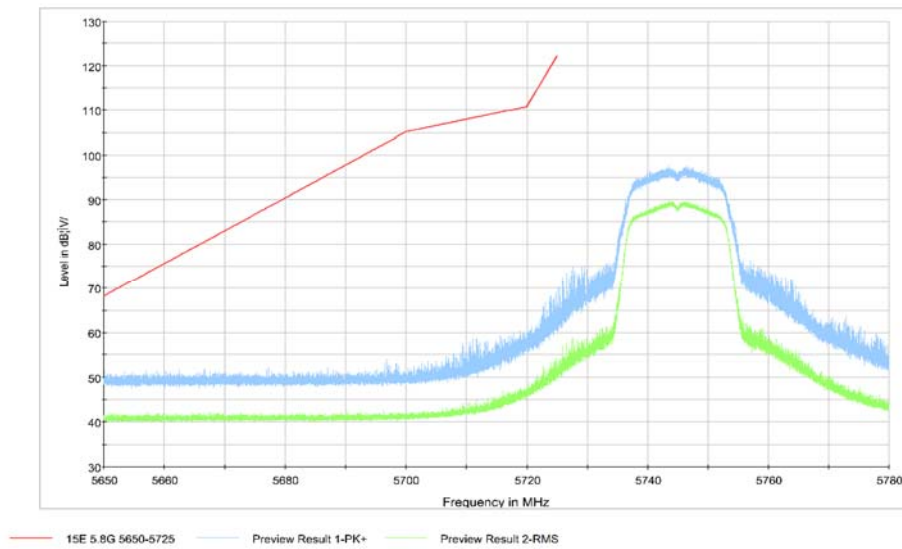
Standard	Limit (dBm/MHz)	
FCC 47 CFR Part 15.407	at the band edge	27
	at 5 MHz above or below the band edge	15.6
	at 25 MHz above or below the band edge	10
	at 75 MHz or more above or below the band edge	-27
	Note: increasing linearly from point to point.	

#### Measurement Result:

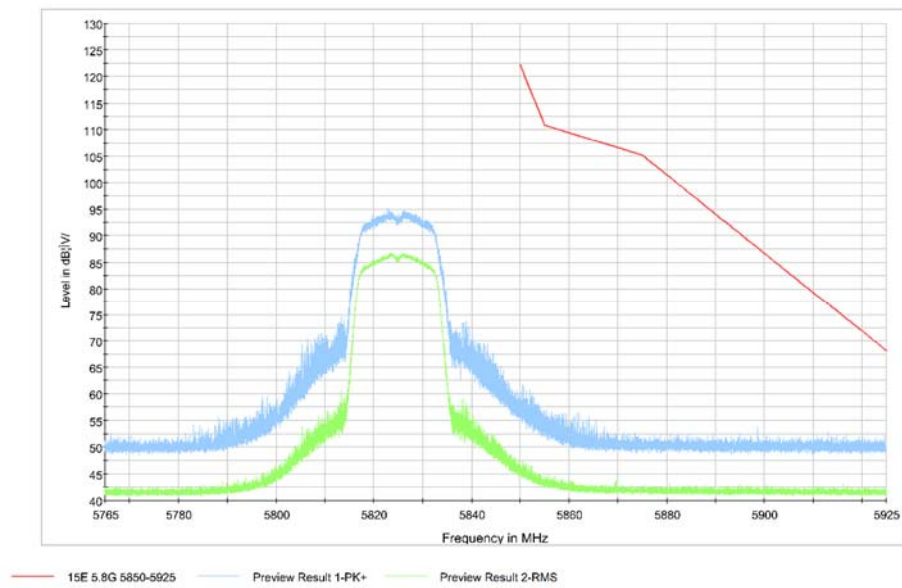
Mode	Channel	Test Results	Conclusion
802.11a	5745 MHz	Fig.10	P
	5825 MHz	Fig.11	P
802.11n HT20	5745 MHz	Fig.12	P
	5825 MHz	Fig.13	P
802.11n HT40	5755 MHz	Fig.14	P
	5795 MHz	Fig.15	P
802.11ac HT20	5745 MHz	Fig.16	P
	5825 MHz	Fig.17	P
802.11ac HT40	5755 MHz	Fig.18	P
	5795 MHz	Fig.19	P
802.11ac HT80	5775 MHz	Fig.20 Fig.21	P

**Conclusion: PASS**

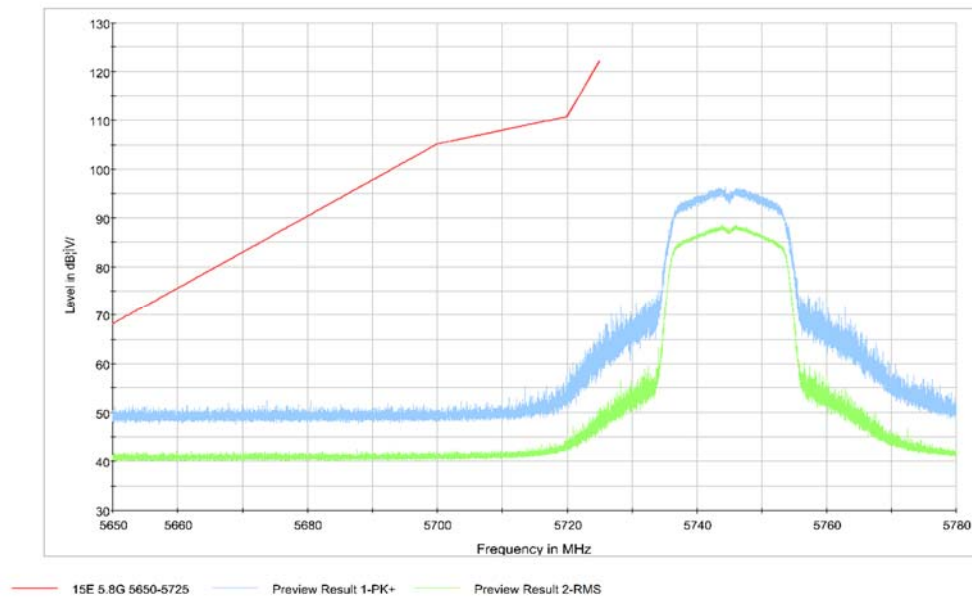
Test graphs as below:



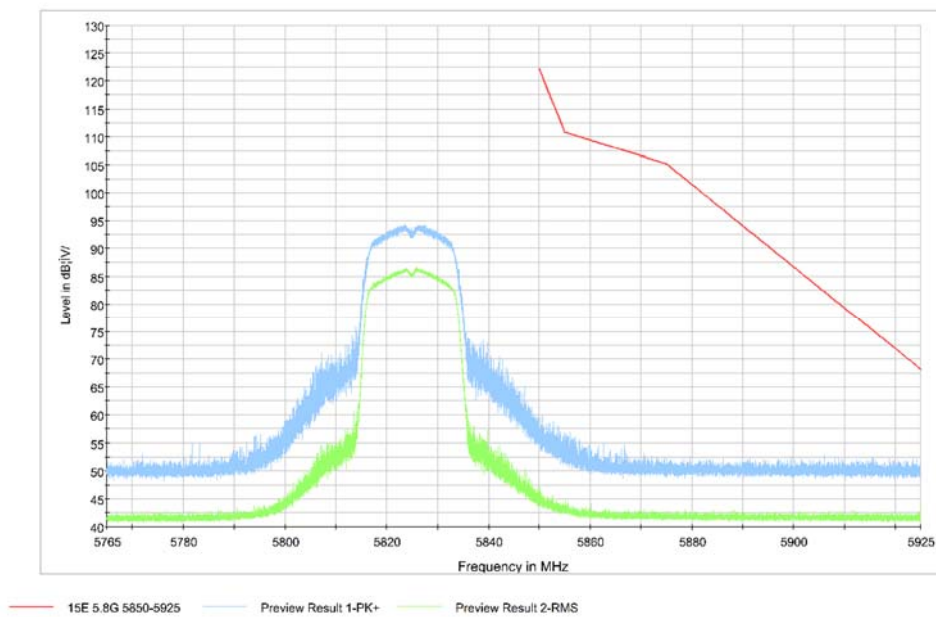
**Fig. 10 Band Edges (802.11a Ch149,5745MHz)**



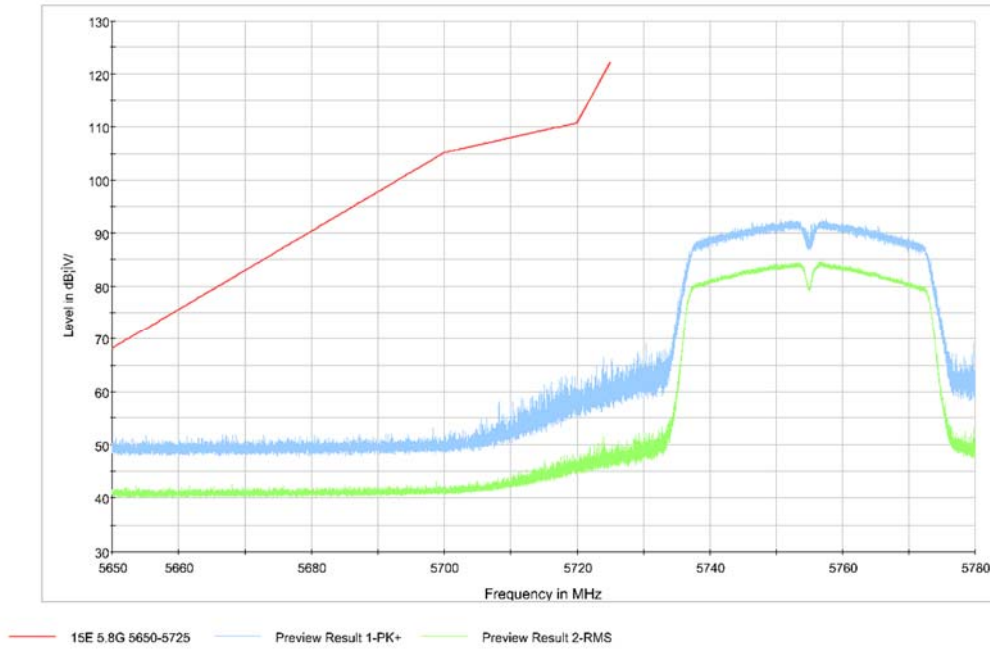
**Fig. 11 Band Edges (802.11a Ch165, 5825MHz)**



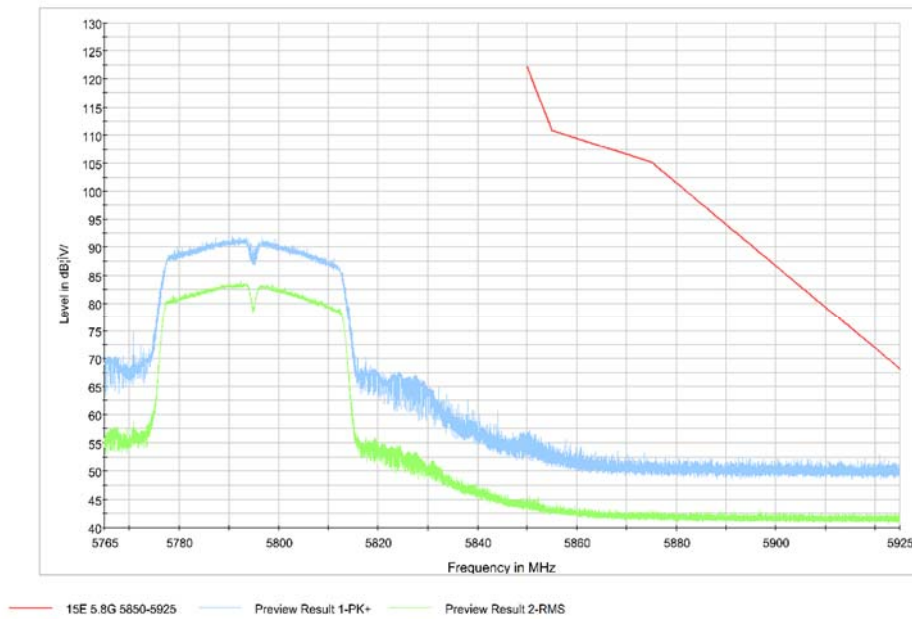
**Fig. 12 Band Edges (802.11n-HT20 Ch149, 5745MHz)**



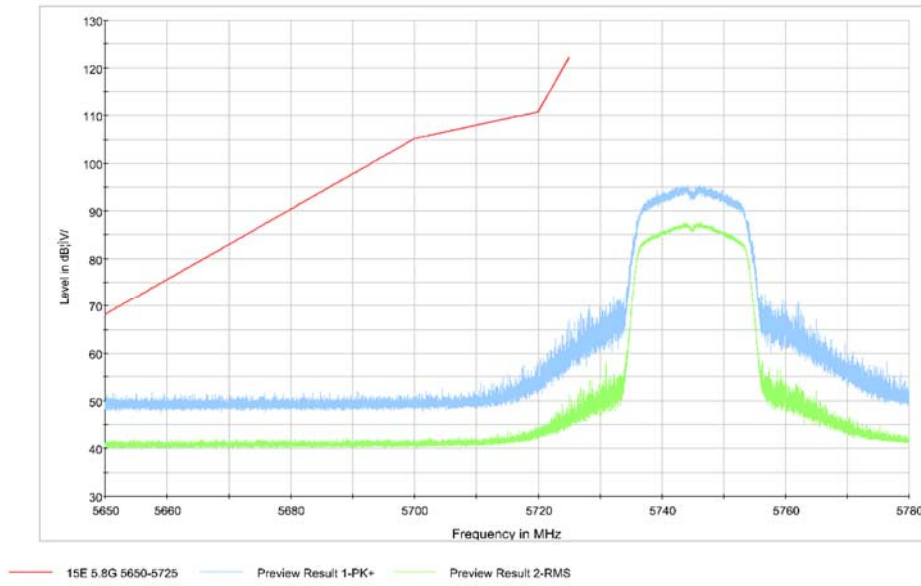
**Fig. 13 Band Edges (802.11n-HT20 Ch165, 5825MHz)**



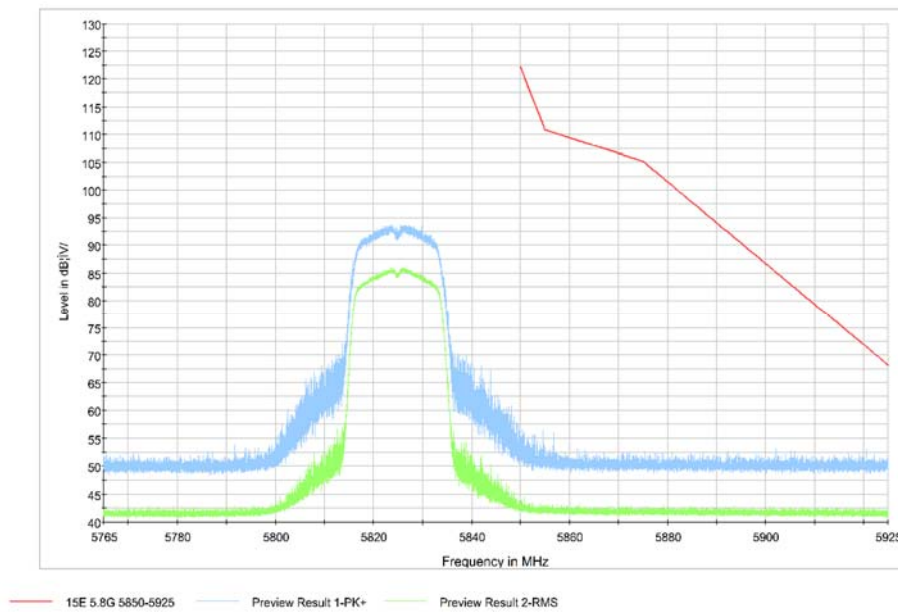
**Fig. 14 Band Edges (802.11n-HT40 Ch151, 5755MHz)**



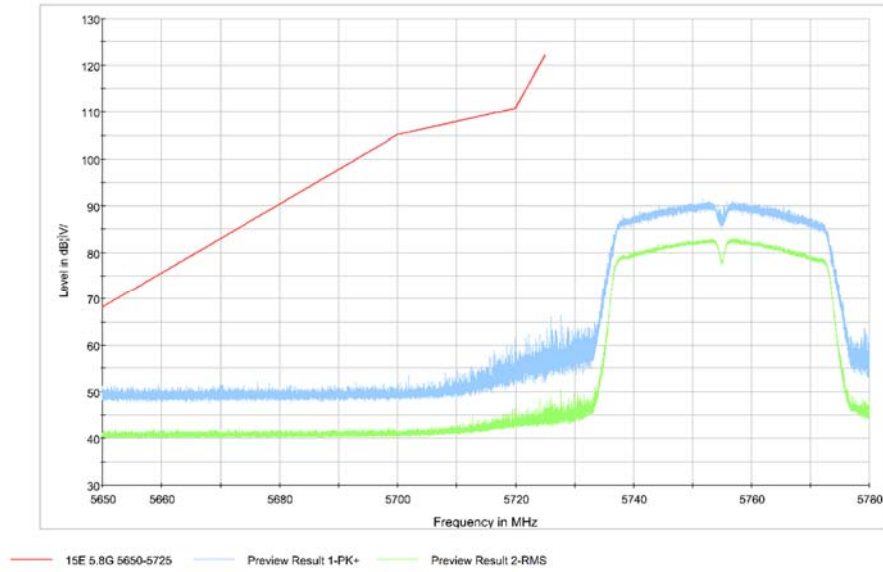
**Fig. 15 Band Edges (802.11n-HT40 Ch159, 5795MHz)**



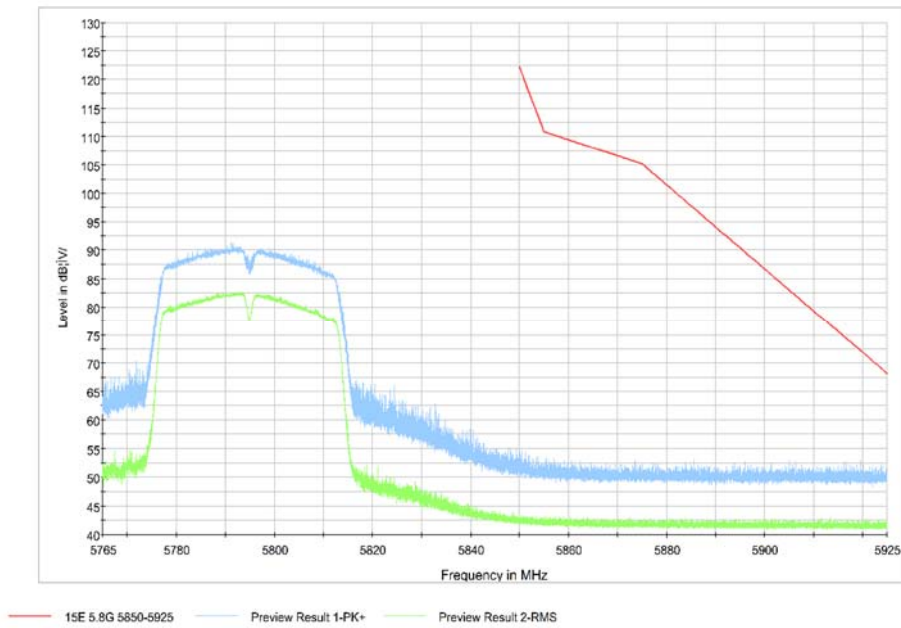
**Fig. 16 Band Edges (802.11ac-HT20 Ch149, 5745MHz)**



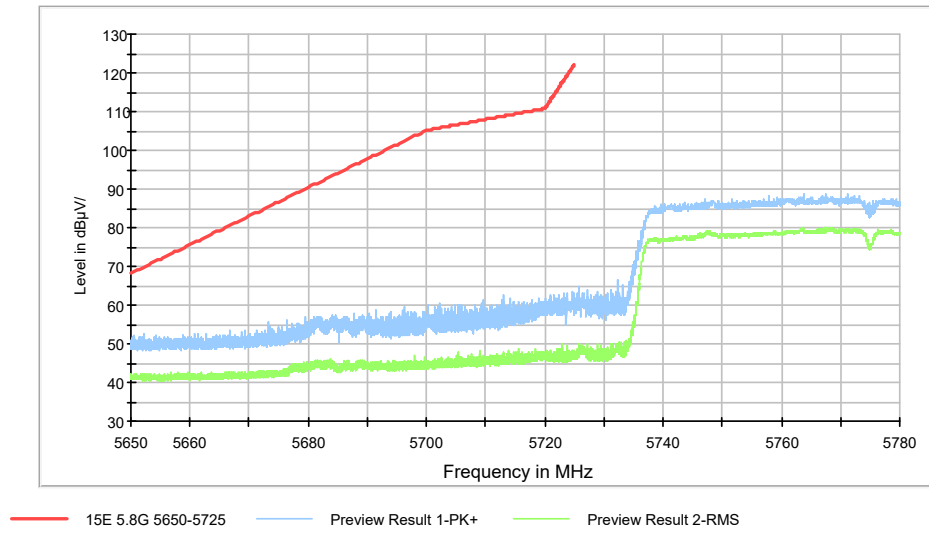
**Fig. 17 Band Edges (802.11ac-HT20 Ch165, 5825MHz)**



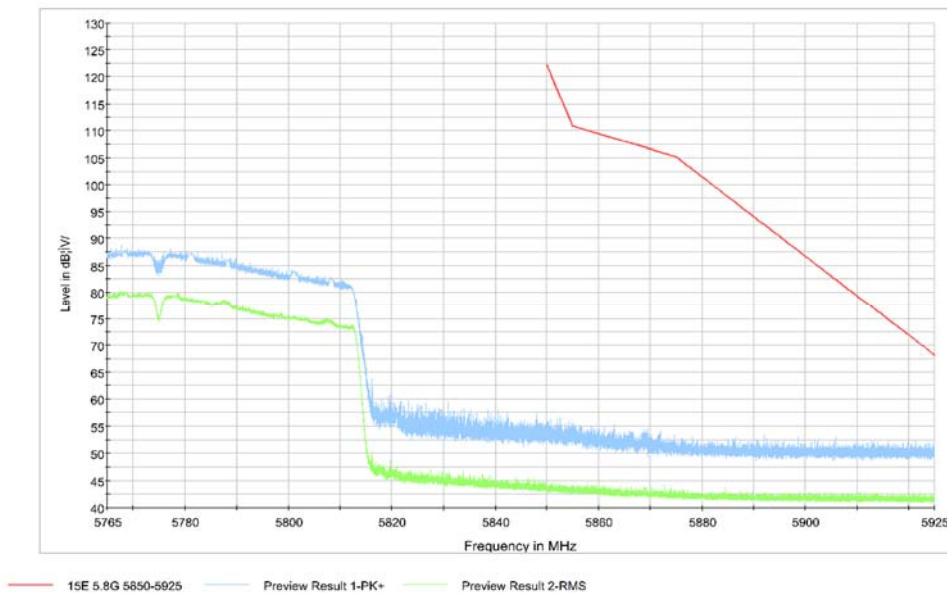
**Fig. 18 Band Edges (802.11ac-HT40 Ch151, 5755MHz)**



**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, 5775MHz)**



## A.7. AC Powerline Conducted Emission

### Test Condition:

Voltage (V)	Frequency (Hz)
120	60

### Measurement uncertainty:

Expanded measurement uncertainty for this test item is  $U = 3.08\text{dB}$ ,  $k=2$ .

### Measurement Result and limit:

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dB $\mu$ V)	Result (dB $\mu$ 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 $\mu$ V)	Result (dB $\mu$ 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:

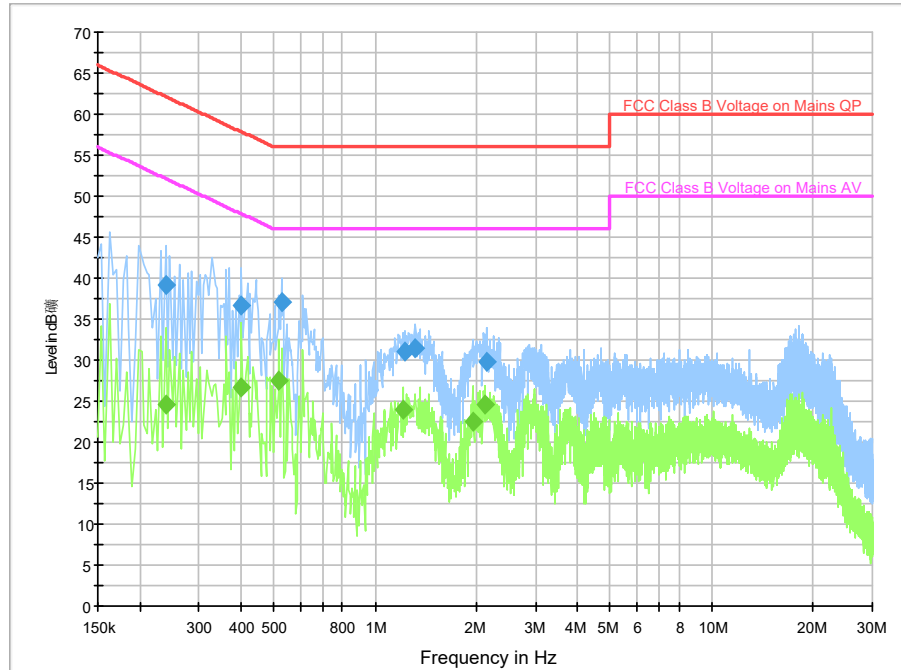


Fig. 22 AC Power line Conducted Emission-802.11a

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

### Final Result 1

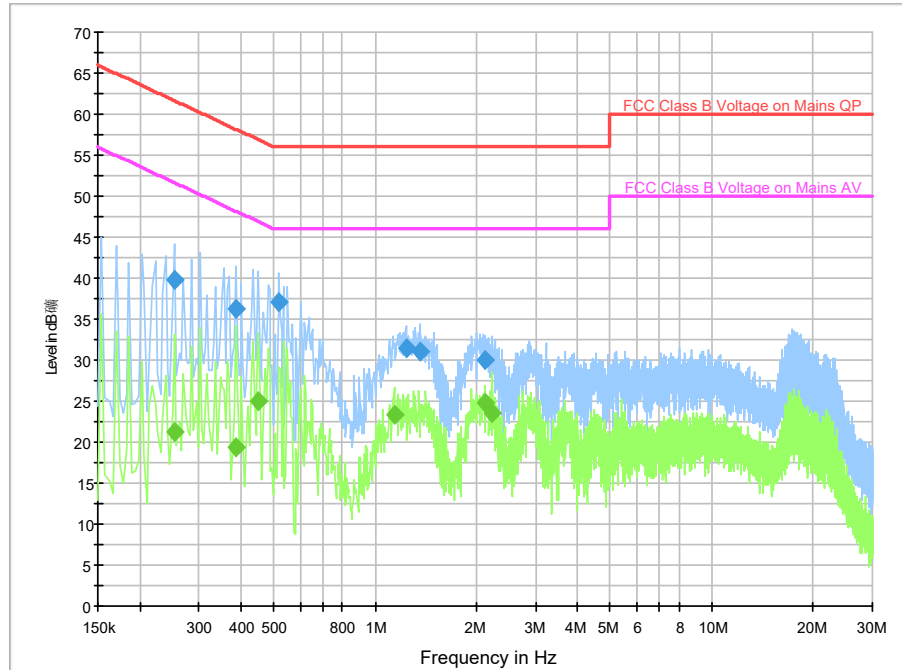
Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.238000	39.3	2000.	9.000	On	N	19.7	22.9	62.2	
0.402000	36.7	2000.	9.000	On	N	19.6	21.1	57.8	
0.526000	37.0	2000.	9.000	On	L1	19.7	19.0	56.0	
1.226000	31.1	2000.	9.000	On	N	19.6	24.9	56.0	
1.322000	31.5	2000.	9.000	On	N	19.6	24.5	56.0	
2.150000	29.9	2000.	9.000	On	N	19.6	26.1	56.0	

### Final Result 2

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.238000	24.6	2000.	9.000	On	N	19.7	27.6	52.2	
0.402000	26.6	2000.	9.000	On	N	19.6	21.2	47.8	
0.518000	27.4	2000.	9.000	On	N	19.7	18.6	46.0	
1.210000	24.0	2000.	9.000	On	N	19.6	22.0	46.0	
1.946000	22.4	2000.	9.000	On	N	19.6	23.6	46.0	
2.122000	24.6	2000.	9.000	On	N	19.6	21.4	46.0	

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 (dBµV)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.254000	39.8	2000.	9.000	On	L1	19.7	21.8	61.6	
0.386000	36.3	2000.	9.000	On	L1	19.7	21.9	58.1	
0.518000	37.1	2000.	9.000	On	L1	19.7	18.9	56.0	
1.234000	31.5	2000.	9.000	On	N	19.6	24.5	56.0	
1.358000	31.1	2000.	9.000	On	N	19.6	24.9	56.0	
2.130000	30.0	2000.	9.000	On	N	19.6	26.0	56.0	

**Final Result 2**

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.254000	21.3	2000.0	9.000	On	L1	19.7	30.3	51.6	
0.386000	19.4	2000.0	9.000	On	L1	19.7	28.7	48.1	
0.450000	24.9	2000.0	9.000	On	N	19.7	21.9	46.9	
1.138000	23.4	2000.0	9.000	On	N	19.6	22.6	46.0	
2.118000	24.8	2000.0	9.000	On	N	19.6	21.2	46.0	
2.234000	23.6	2000.0	9.000	On	N	19.6	22.4	46.0	

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/> <b>Certificate of Accreditation to ISO/IEC 17025:2017</b> <hr/>	
NVLAP LAB CODE: 600118-0	
<b>Telecommunication Technology Labs, CAICT</b> Beijing China	
<i>is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:</i>	
<b>Electromagnetic Compatibility &amp; Telecommunications</b>	
<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 \*\*\*