



FCC RF Test Report

APPLICANT : BlackBerry Ltd.
EQUIPMENT : GSM Quad-band / UMTS FIVE bands / LTE eleven bands mobile phone
BRAND NAME : BlackBerry
MODEL NAME : RJE181LW
MARKETING NAME : DTEK50
FCC ID : L6ARJE180LW
STANDARD : FCC Part 15 Subpart E §15.407
CLASSIFICATION : (NII) Unlicensed National Information Infrastructure

The product was received on May 09, 2016 and testing was completed on Jun. 29, 2016. We, SPORTON INTERNATIONAL (KUNSHAN) INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL (KUNSHAN) INC., the test report shall not be reproduced except in full.

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR611504-06E	Rev. 01	Initial issue of report	Jul. 12, 2016



SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	2.1049 15.403(i)	RSS-247 Section 6	26dB & 99% Bandwidth	-	Pass	-
3.2	15.407(a)	RSS-247 Section 6	Maximum Conducted Output Power	FCC ≤ 24 dBm (depend on band) IC RSS-247 Section 6 Limit	Pass	-
3.3	15.407(a)	RSS-247 Section 6	Power Spectral Density	FCC ≤ 11 dBm (depend on band) IC RSS-247 Section 6 Limit	Pass	-
3.4	15.407(b)	RSS-247 Section 6	Unwanted Emissions	$\leq -17, -27$ dBm (depend on band)&15.209(a)	Pass	Under limit 0.98 dB at 5469.200 MHz
3.5	15.207	RSS-Gen 8.8	AC Conducted Emission	15.207(a)	Pass	Under limit 9.61 dB at 0.530 MHz
3.6	15.407(g)	-	Frequency Stability	Within Operation Band	Pass	-
3.7	15.407(c)	RSS-247 6.4(2)	Automatically Discontinue Transmission	Discontinue Transmission	Pass	-
3.8	15.203 & 15.407(a)	N/A	Antenna Requirement	N/A	Pass	-



1 General Description

1.1 Applicant

BlackBerry Ltd.

2200 University Ave E., Waterloo, ON, CAN. N2K0A7

1.2 Manufacturer

TCL Communication Ltd.

5F, C building, No. 232, Liang Jing Road ZhangJiang High-Tech Park, Pudong Area Shanghai, P.R. China. 201203

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	GSM Quad-band / UMTS FIVE bands / LTE eleven bands mobile phone
Brand Name	BlackBerry
Model Name	RJE181LW
Marketing Name	DTEK50
FCC ID	L6ARJE180LW
EUT supports Radios application	GSM/GPRS/EGPRS/WCDMA/HSPA/DC-HSDPA/HSPA+(16QAM uplink is not supported)/LTE/NFC/WLAN 2.4GHz 802.11b/g/n HT20/HT40/WLAN 5GHz 802.11a/n HT20/HT40/WLAN 5GHz 802.11ac VHT20/VHT40/VHT80/Bluetooth v3.0+EDR/ Bluetooth v4.0 LE/Bluetooth v4.2 LE
IMEI Code	Conducted: 004402243119934 Conduction: 004402243119983 Radiation: 004402243119926
HW Version	PIO
SW Version	AAF295
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Frequency Range	5180 MHz ~ 5240 MHz 5260 MHz ~ 5320 MHz 5500 MHz ~ 5700 MHz
Maximum Output Power to Antenna	<5180 MHz ~ 5240 MHz> 802.11a : 14.17 dBm / 0.0261 W 802.11n HT20 : 13.74 dBm / 0.0237 W 802.11n HT40 : 13.59 dBm / 0.0229 W 802.11ac VHT20 : 14.40 dBm / 0.0275 W 802.11ac VHT40 : 14.36 dBm / 0.0273 W 802.11ac VHT80 : 14.14 dBm / 0.0259 W <5260 MHz ~ 5320 MHz> 802.11a : 14.42 dBm / 0.0277 W 802.11n HT20 : 13.56 dBm / 0.0227 W 802.11n HT40 : 13.43 dBm / 0.0220 W 802.11ac VHT20 : 14.53 dBm / 0.0284 W 802.11ac VHT40 : 13.89 dBm / 0.0245 W 802.11ac VHT80 : 14.15 dBm / 0.0260 W <5500 MHz ~ 5700 MHz> 802.11a : 15.09 dBm / 0.0323 W 802.11n HT20 : 14.19 dBm / 0.0262 W 802.11n HT40 : 14.08 dBm / 0.0256 W 802.11ac VHT20 : 15.18 dBm / 0.0330 W 802.11ac VHT40 : 15.02 dBm / 0.0318 W 802.11ac VHT80 : 15.94 dBm / 0.0393 W
99% Occupied Bandwidth	<5180 MHz ~ 5240 MHz> 802.11a : 18.70 MHz 802.11n HT20 : 19.45 MHz 802.11n HT40 : 36.70 MHz 802.11ac VHT20 : 19.70 MHz 802.11ac VHT40 : 36.80 MHz 802.11ac VHT80 : 75.12 MHz <5260 MHz ~ 5320 MHz> 802.11a : 18.85 MHz 802.11n HT20 : 19.65 MHz 802.11n HT40 : 36.70 MHz 802.11ac VHT20 : 19.70 MHz 802.11ac VHT40 : 37.00 MHz 802.11ac VHT80 : 75.12 MHz <5500 MHz ~ 5700 MHz> 802.11a : 20.05 MHz 802.11n HT20 : 19.70 MHz 802.11n HT40 : 37.00 MHz 802.11ac VHT20 : 20.55 MHz 802.11ac VHT40 : 37.60 MHz 802.11ac VHT80 : 75.24 MHz
Antenna Type/Gain	IFA Antenna with gain -2.40 dBi
Type of Modulation	802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)

1.5 Specification of Accessory

Specification of Accessory				
AC Adapter	Brand Name	N/A	Model Name	UC13US
	Power Rating	I/P: 100 - 240Vac 0.5A, O/P:5V 2.0A		
	Manufacturer	BYD		
	P/N	CBA0059AG4C1		
Battery 1	Brand Name	N/A	Model Name	TLp026EJ
	Power Rating	3.85V 2610mAh		
	Manufacturer	COSLIGHT		
	P/N	CAC2610010CJ		
Battery 2	Brand Name	N/A	Model Name	TLp026E2
	Power Rating	3.84V 2610mAh		
	Manufacturer	SCUD		
	P/N	CAC2610011C2		
USB Cable 1	Brand Name	NA	Model Name	NA
	Signal Line Type	1.0 meter, shielded cable, without ferrite core		
	P/N	CDA0000043C8		
USB Cable 2	Brand Name	NA	Model Name	NA
	Signal Line Type	1.0 meter, shielded cable, without ferrite core		
	P/N	CDA0000043C2		
Earphone	Brand Name	LIANCHUANG	Model Name	NA
	Signal Line Type	1.25 meter, non-shielded cable, without ferrite core		
	P/N	CCB0045A15C3		

1.6 Modification of EUT

No modifications are made to the EUT during all test items.

1.7 Testing Location

Test Site	SPORTON INTERNATIONAL (SHENZHEN) INC.		
Test Site Location	1F & 2F,Building A, Morning Business Center, No. 4003 ShiGu Rd., Xili Town, Nanshan District, Shenzhen, Guangdong, P. R. China TEL: +86-755-8637-9589 FAX: +86-755-8637-9595		
Test Site No.	Sporton Site No.		
	TH01-SZ		

Test Site	SPORTON INTERNATIONAL (KUNSHAN) INC.		
Test Site Location	No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P. R. China TEL: +86-0512-5790-0158 FAX: +86-0512-5790-0958		
Test Site No.	Sporton Site No.		FCC/IC Registration No.
	03CH03-KS	CO01-KS	306251/4086E

Note: The test site complies with ANSI C63.4 2014 requirement.

1.8 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ FCC Part 15 Subpart E
- ♦ FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r02
- ♦ FCC KDB 644545 D03 Guidance for IEEE 802 11ac New Rules v01
- ♦ ANSI C63.10-2013

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.



2 Test Configuration of Equipment Under Test

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conducted emission (150 kHz to 30 MHz) and radiated emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases were recorded in this report.

The final configuration from all the combinations and the worst-case data rates were investigated by measuring the maximum power across all the data rates and modulation modes under section 2.2.

Based on the worst configuration found above, the RF power setting is set individually to meet FCC compliance limit for the final conducted and radiated tests shown in section 2.3.

2.1 Carrier Frequency Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5180- 5240 MHz Band 1 (U-NII-1)	36	5180	44	5220
	38	5190	46	5230
	40	5200	48	5240
	42	5210		

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5260-5320 MHz Band 2 (U-NII-2A)	52	5260	60	5300
	54	5270	62	5310
	56	5280	64	5320
	58	5290		

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5500-5700 MHz Band 3 (U-NII-2C)	100	5500	112	5560
	102	5510	116	5580
	104	5520	132	5660
	106	5530	134	5670
	108	5540	136	5680
	110	5550	140	5700

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
Straddle Channel	144	5720	142	5710
	138	5690		

Note: The above Frequency and Channel in boldface were 802.11n HT40.

2.2 Pre-Scanned RF Power

Preliminary tests were performed in different data rate and data rate associated with the highest power were chosen for full test in the following tables.

WLAN 5GHz 802.11a Average Power (dBm)										
Power vs. Channel			Power vs. Data Rate							
Channel	Frequency (MHz)	Data Rate	Channel	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
		6Mbps								
CH 36	5180	14.17	CH 36	13.54	13.16	12.64	12.20	11.80	11.29	10.35
CH 44	5220	14.08								
CH 48	5240	14.13								
CH 52	5260	14.42	CH 52	14.05	13.65	13.12	12.57	12.30	11.77	10.91
CH 60	5300	14.12								
CH 64	5320	14.18								
CH 100	5500	15.09	CH 100	14.64	14.24	13.70	13.23	12.83	12.29	11.32
CH 116	5580	14.90								
CH 140	5700	14.75								

WLAN 5GHz 802.11n-HT20 Average Power (dBm)										
Power vs. Channel			Power vs. Data Rate							
Channel	Frequency (MHz)	MCS Index	Channel	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
		MCS0								
CH 36	5180	13.74	CH 36	13.36	12.36	11.90	11.34	11.11	11.08	9.87
CH 44	5220	13.39								
CH 48	5240	13.45								
CH 52	5260	13.56	CH 52	13.16	12.29	11.85	11.22	11.00	10.95	9.79
CH 60	5300	13.24								
CH 64	5320	13.34								
CH 100	5500	14.19	CH 100	13.81	12.92	12.48	11.73	11.40	11.39	10.34
CH 116	5580	14.03								
CH 140	5700	13.89								

WLAN 5GHz 802.11n-HT40 Average Power (dBm)										
Power vs. Channel			Power vs. Data Rate							
Channel	Frequency (MHz)	MCS Index	Channel	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
		MCS0								
CH 38	5190	13.59	CH 38	13.05	12.53	12.04	12.05	11.95	11.34	10.03
CH 46	5230	13.27								
CH 54	5270	13.43	CH 54	12.93	12.35	11.85	11.90	11.66	11.11	9.89
CH 62	5310	13.15								
CH 102	5510	14.08	CH 102	13.65	13.19	12.71	12.20	11.79	11.28	10.33
CH 110	5550	14.07								
CH 134	5670	13.85								



WLAN 5GHz 802.11ac VHT20 Average Power (dBm)											
Power vs. Channel			Power vs. Data Rate								
Channel	Frequency (MHz)	MCS Index MCS0	Channel	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8
CH 36	5180	14.14	CH 44	13.94	13.50	13.03	12.50	12.17	11.64	11.09	10.60
CH 44	5220	14.40									
CH 48	5240	14.34									
CH 52	5260	14.53	CH 52	14.08	13.64	13.17	12.66	12.26	11.78	11.28	10.79
CH 60	5300	14.22									
CH 64	5320	14.39									
CH 100	5500	15.18	CH 100	14.78	14.30	13.78	13.22	12.88	12.33	11.79	11.32
CH 116	5580	14.99									
CH 140	5700	14.87									

WLAN 5GHz 802.11ac VHT40 Average Power (dBm)												
Power vs. Channel			Power vs. Data Rate									
Channel	Frequency (MHz)	MCS Index MCS0	Channel	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
CH 38	5190	14.36	CH 38	13.16	12.79	12.26	11.86	11.41	10.99	10.41	10.04	10.13
CH 46	5230	14.29										
CH 54	5270	13.89	CH 54	13.32	12.82	12.21	11.89	11.41	10.98	10.46	10.07	10.17
CH 62	5310	13.83										
CH 102	5510	14.51	CH 110	14.15	13.81	13.21	12.86	12.28	11.87	11.82	10.94	11.05
CH 110	5550	15.02										
CH 134	5670	14.81										

WLAN 5GHz 802.11ac VHT80 Average Power (dBm)												
Power vs. Channel			Power vs. Data Rate									
Channel	Frequency (MHz)	MCS Index MCS0	Channel	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
CH 42	5210	14.14	CH 42	13.85	13.41	13.04	12.51	12.20	11.68	11.30	10.70	10.86
CH 58	5290	14.15	CH 58	13.72	13.33	12.95	12.39	12.02	11.53	11.15	10.52	10.69
CH 106	5530	14.45	CH 122	14.57	14.14	13.74	13.22	12.84	12.39	12.05	11.44	10.71
CH 122	5610	15.94										

2.3 Test Mode

Final test mode of conducted test items and radiated spurious emissions are considering the modulation and worse data rates from the power table described in section 2.2.

Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac VHT20	MCS0
802.11ac VHT40	MCS0
802.11ac VHT80	MCS0

Test Cases	
AC Conducted Emission	Mode 1 : GSM850 Idle + Bluetooth Link + WLAN Link(5G) + Earphone + Battery 1 + USB Cable 1(Charging from Adapter) Mode 2 : GSM850 Idle + Bluetooth Link + WLAN Link(5G) + Earphone + Battery 2 + USB Cable 2(Charging from Adapter)
Remark: - For Radiated TCs, the tests were performed with Adapter, Earphone, Battery 1 and USB Cable 1; And battery 2, USB Cable 2 only verified the worst case of Battery 1, USB Cable 1. - The worst case of conducted emission is mode 1; only the test data of it was reported.	



Ch. #		Band I : 5180-5240 MHz	Band II : 5260-5320 MHz	Band III : 5500-5700MHz
		802.11a	802.11a	802.11a
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140
Straddle Channel		-	-	144

Ch. #		Band I : 5180-5240 MHz	Band II : 5260-5320 MHz	Band III : 5500-5700MHz
		802.11n HT20	802.11n HT20	802.11n HT20
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140
Straddle Channel		-	-	144

Ch. #		Band I : 5180-5240 MHz	Band II : 5260-5320 MHz	Band III : 5500-5700MHz
		802.11n HT40	802.11n HT40	802.11n HT40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134
Straddle Channel		-	-	142



Ch. #		Band I : 5180-5240 MHz	Band II : 5260-5320 MHz	Band III : 5500-5700MHz
		802.11ac VHT20	802.11ac VHT20	802.11ac VHT20
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140
Straddle Channel		-	-	144

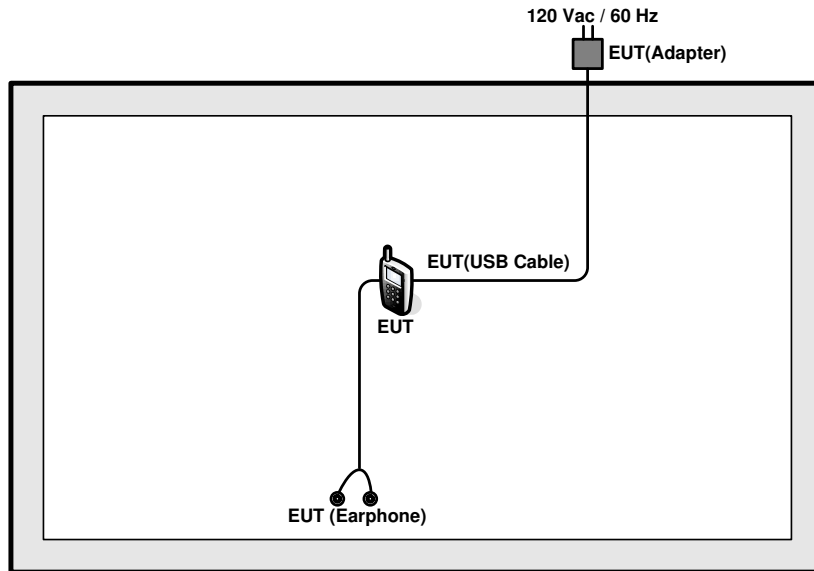
Ch. #		Band I : 5180-5240 MHz	Band II : 5260-5320 MHz	Band III : 5500-5700MHz
		802.11ac VHT40	802.11ac VHT40	802.11ac VHT40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134
Straddle Channel		-	-	142

Ch. #		Band I : 5180-5240 MHz	Band II : 5260-5320 MHz	Band III : 5500-5700MHz
		802.11ac VHT80	802.11ac VHT80	802.11ac VHT80
L	Low	-	-	106
M	Middle	42	58	-
H	High	-	-	122
Straddle Channel		-	-	138

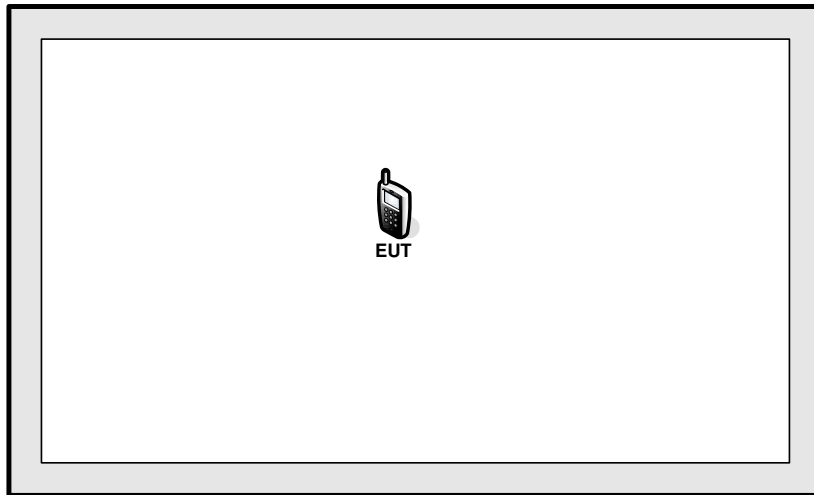
2.4 Connection Diagram of Test System

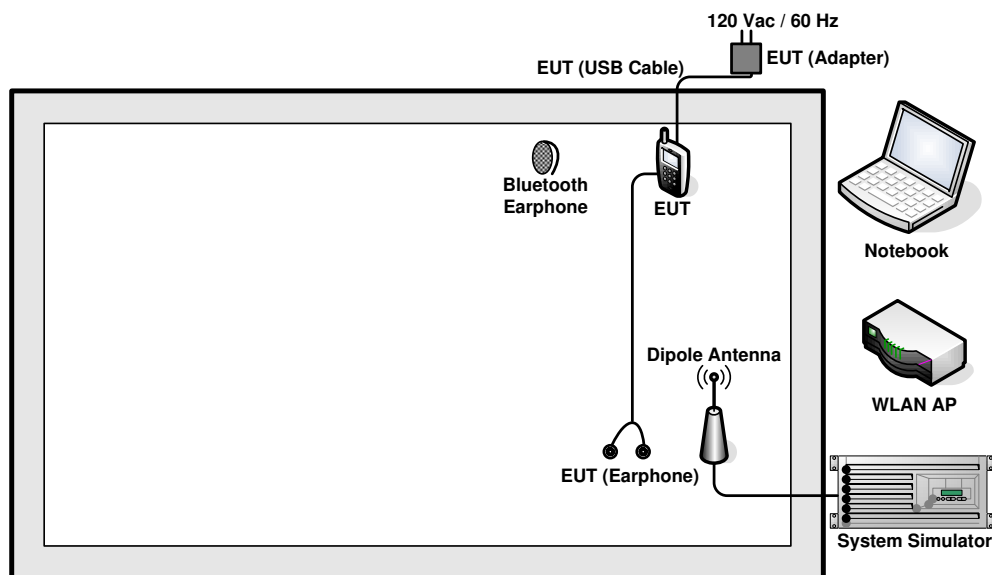
< Radiated Emission Mode>

For 802.11a/n HT20/HT40 and 802.11ac VHT20/VHT80



For 802.11ac VHT40



<AC Conducted Emission Mode>


2.5 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Notebook	Lenovo	G480	N/A	N/A	AC I/P: Unshielded, 1.8 m DC O/P: Shielded, 1.8 m
2.	WLAN AP	LINKSYS	WRT600N	Q87-WRT600NV11	N/A	Unshielded, 1.8 m
3.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
4.	Bluetooth Earphone	Lenovo	LBH 505	N/A	N/A	N/A
5.	DC Power Supply	GW INSTEK	GPD-2303S	N/A	N/A	Unshielded, 1.8 m

2.6 EUT Operation Test Setup

For WLAN RF test items, an engineering test program was provided and enabled to make EUT continuously transmit/receive.

For AC power line conducted emissions, the EUT was set to connect with the Notebook under large package sizes transmission.

2.7 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example :

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 6.5 dB and 10dB attenuator.

$$\begin{aligned}\text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)} \\ &= 6.5 + 10 = 16.5 \text{ (dB)}\end{aligned}$$

3 Test Result

3.1 26dB & 99% Occupied Bandwidth Measurement

3.1.1 Description of 26dB & 99% Occupied Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

For Straddle Channel, U-NII procedures were applied for operations in the frequency band in accordance with FCC KDB 644545 D03.

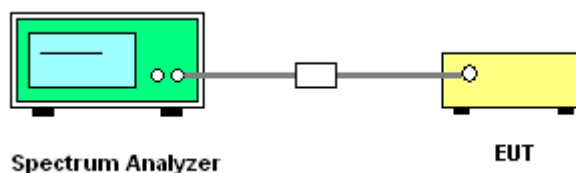
3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.1.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r02. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.
7. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1MHz and set the Video bandwidth (VBW) $\geq 3 * RBW$.
8. Measure and record the results in the test report.

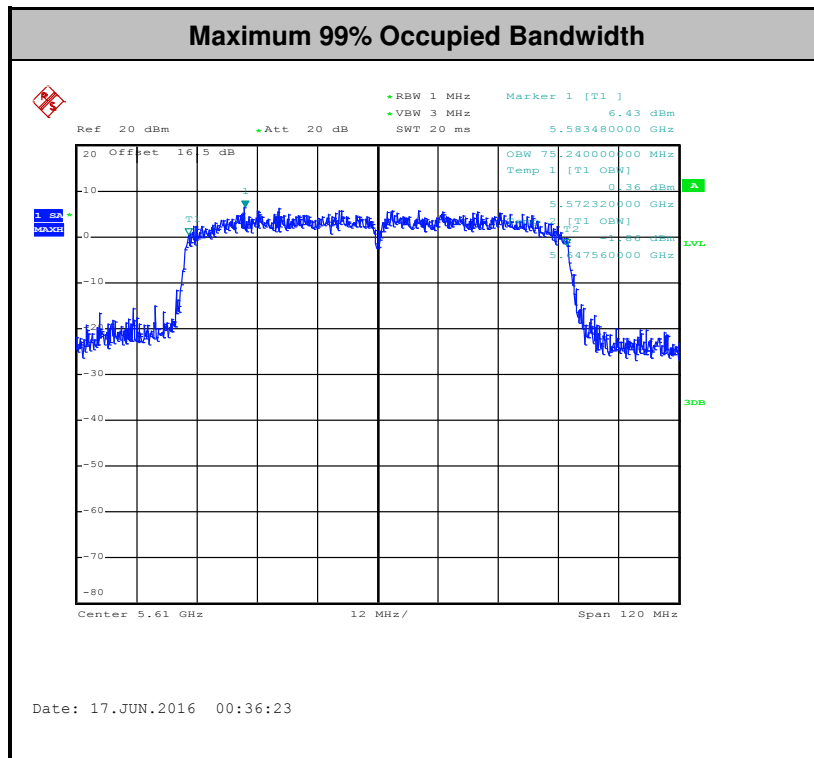
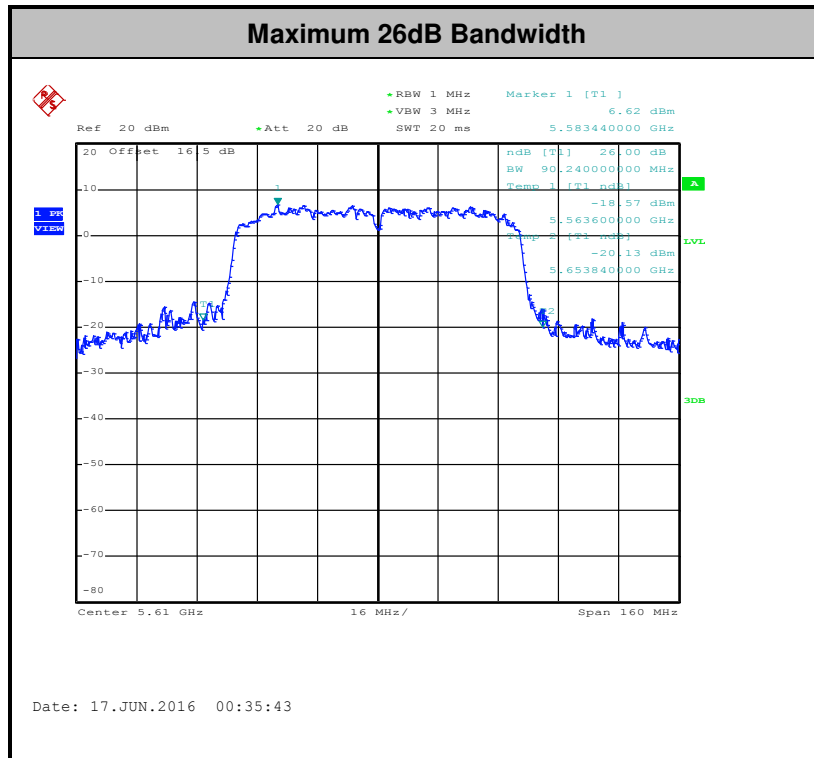
3.1.4 Test Setup





3.1.5 Test Result of 26dB & 99% Occupied Bandwidth Plots

Please refer to Appendix A.



Note : The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

<FCC 14-30 CFR 15.407>

For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW.

For the 5.25–5.35 GHz and 5.47–5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz.

For Straddle Channel, U-NII procedures and limits were applied for operations in the frequency band in accordance with FCC KDB 644545 D03.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Note that U-NII-2 band, devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

3.2.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.2.3 Test Procedures

The testing follows Method PM of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r02.

Method PM (Measurement using an RF average power meter):

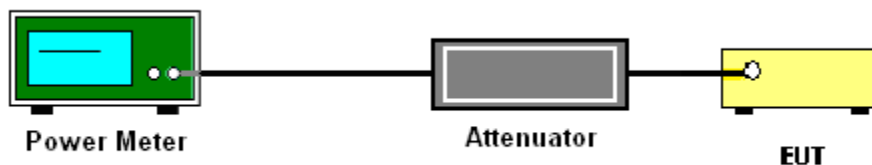
1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit continuously with a consistent duty cycle at its maximum power control level.
3. Measure the average power of the transmitter, and the average power is corrected with duty factor, $10 \log(1/x)$, where x is the duty cycle.

For straddle channel, the testing follows Method SA-3 (RMS detection with max hold) of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r02.

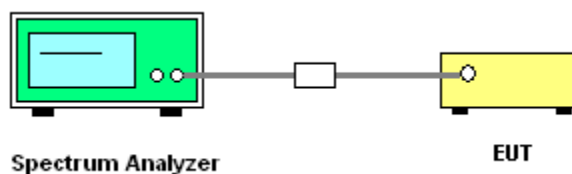
Compute power by integrating the spectrum across the 99% occupied bandwidth of the signal using the instrument's band power measurement function.

3.2.4 Test Setup

For normal channel:



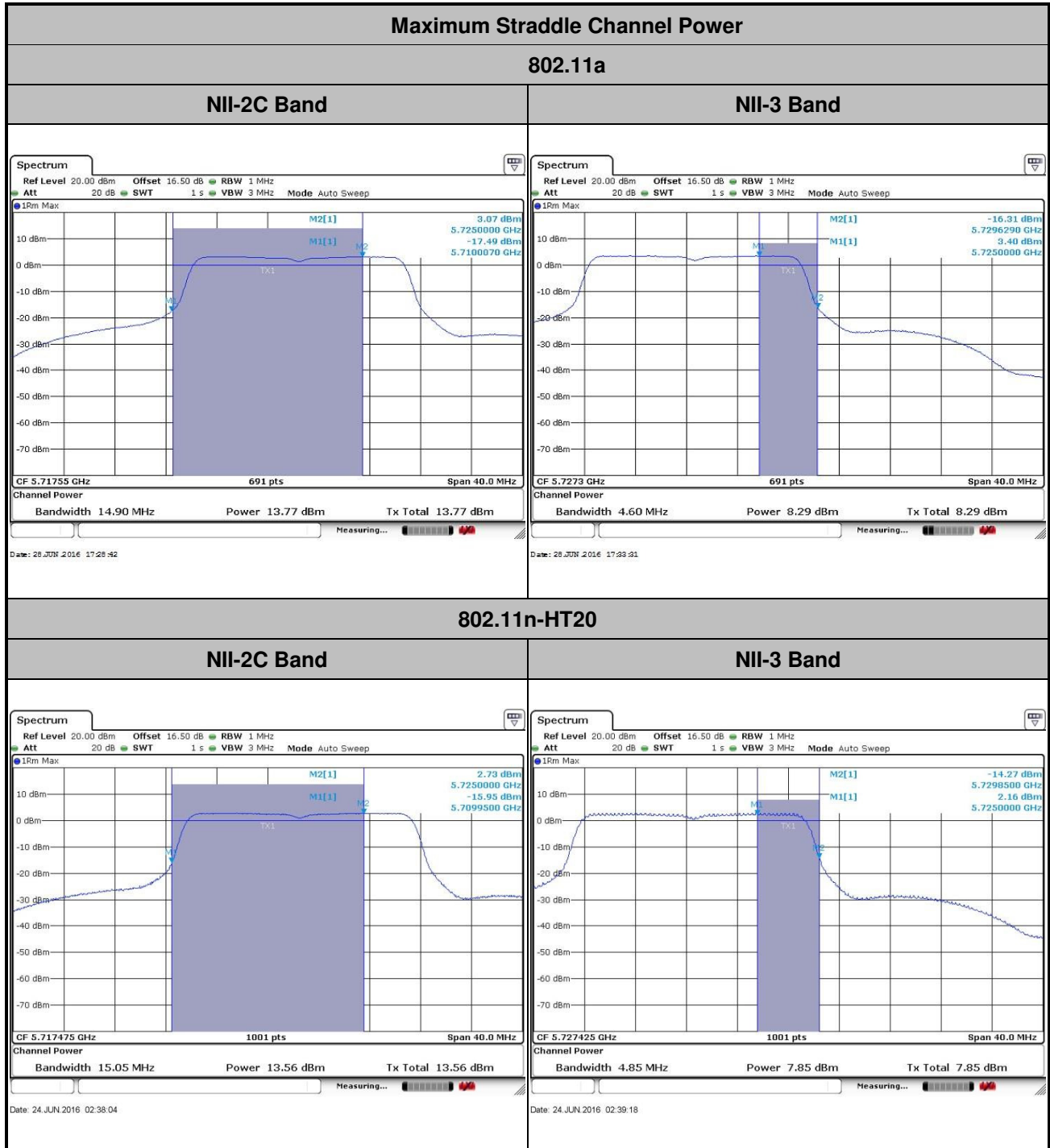
For straddle channel:



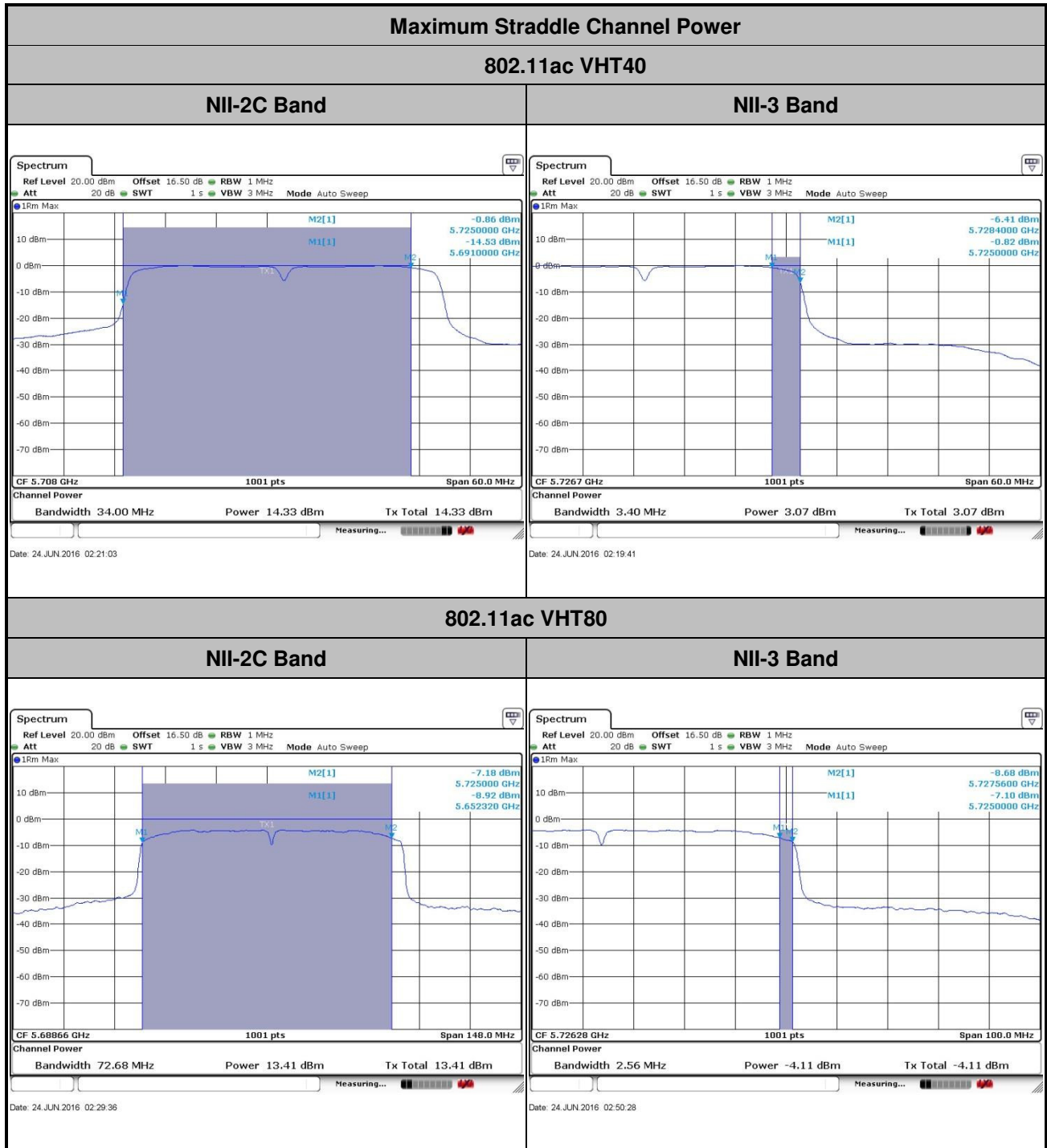


3.2.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.









3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

<FCC 14-30 CFR 15.407>

For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band.

For the 5.25–5.35 GHz and 5.47–5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.

For Straddle Channel, U-NII procedures and limits were applied for operations in the frequency band in accordance with FCC KDB 644545 D03.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.3.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.3.3 Test Procedures

The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r02.

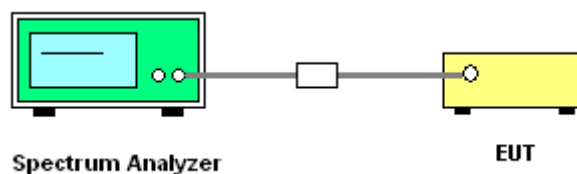
Section F) Maximum power spectral density.

Method SA-2

(trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

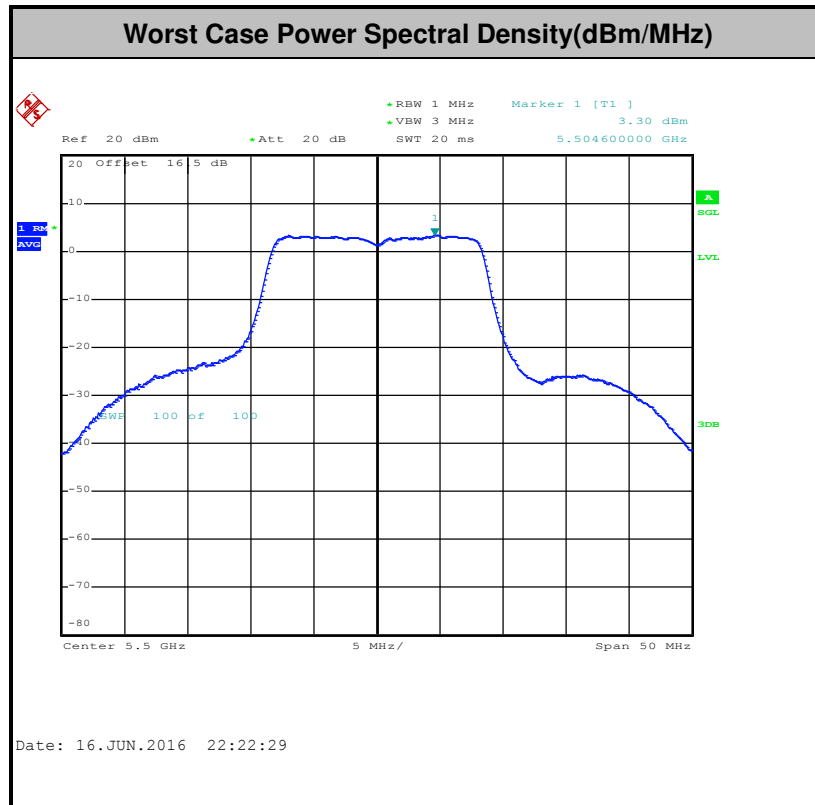
1. The testing follows Method SA-2 of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r02.
 - Measure the duty cycle.
 - Set span to encompass the entire emission bandwidth (EBW) of the signal.
 - Set RBW = 1 MHz.
 - Set VBW $\geq$ 3 MHz.
 - Number of points in sweep $\geq$ 2 Span / RBW.
 - Sweep time = auto.
 - Detector = RMS
 - Trace average at least 100 traces in power averaging mode.
 - Add $10 \log(1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times. For example, add $10 \log(1/0.25) = 6$ dB if the duty cycle is 25 percent.
2. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
3. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.

3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.



Note: Average Power Density (dB) = Measured value+ Duty Factor

3.4 Unwanted Radiated Emission Measurement

This section as specified in FCC Part 15.407(b) is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement. The unwanted emissions shall comply with 15.407(b)(1) to (6), and restricted bands per FCC Part 15.205.

3.4.1 Limit of Unwanted Emissions

- (1) For transmitters operating in the 5150-5250 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27dBm/MHz.

For transmitters operating in the 5250-5350 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5250-5350 MHz band that generate emissions in the 5150-5250 MHz band must meet all applicable technical requirements for operation in the 5150-5250 MHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5150-5250 MHz band.

For transmitters operating in the 5470-5725MHz band: all emissions outside of the 5470-5725MHz band shall not exceed an EIRP of -27 dBm/MHz.

- (2) Unwanted spurious emissions fallen in restricted bands per FCC Part 15.205 shall comply with the general field strength limits set forth in § 15.209 as below table,

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

Note: The following formula is used to convert the EIRP to field strength.

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

EIRP (dBm)	Field Strength at 3m (dB μ V/m)
-17	78.3
- 27	68.3

- (3) KDB789033 D02 v01r02 G)2)c) As specified in 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in 15.407(b)(4)). However, an out-of-band emission that complies with both the average and peak limits of 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz peak emission limit.

3.4.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.4.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r02.

Section G) Unwanted emissions measurement.

(1) Procedure for Unwanted Emissions Measurements Below 1000MHz

- RBW = 120 kHz
- VBW = 300 kHz
- Detector = Peak
- Trace mode = max hold

(2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz

- RBW = 1 MHz
- VBW $\geq$ 3 MHz
- Detector = Peak
- Sweep time = auto
- Trace mode = max hold

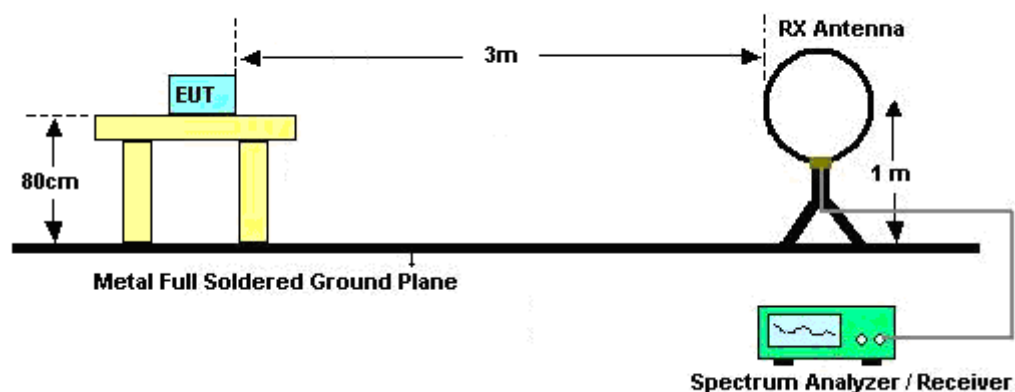
(3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

- RBW = 1 MHz
- VBW = 10 Hz, when duty cycle is no less than 98 percent.
- VBW $\geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

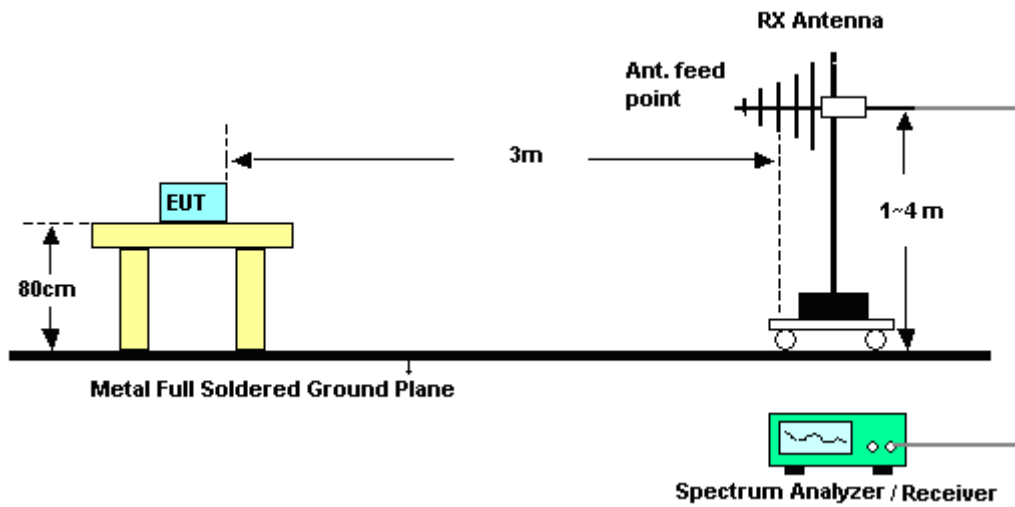
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

3.4.4 Test Setup

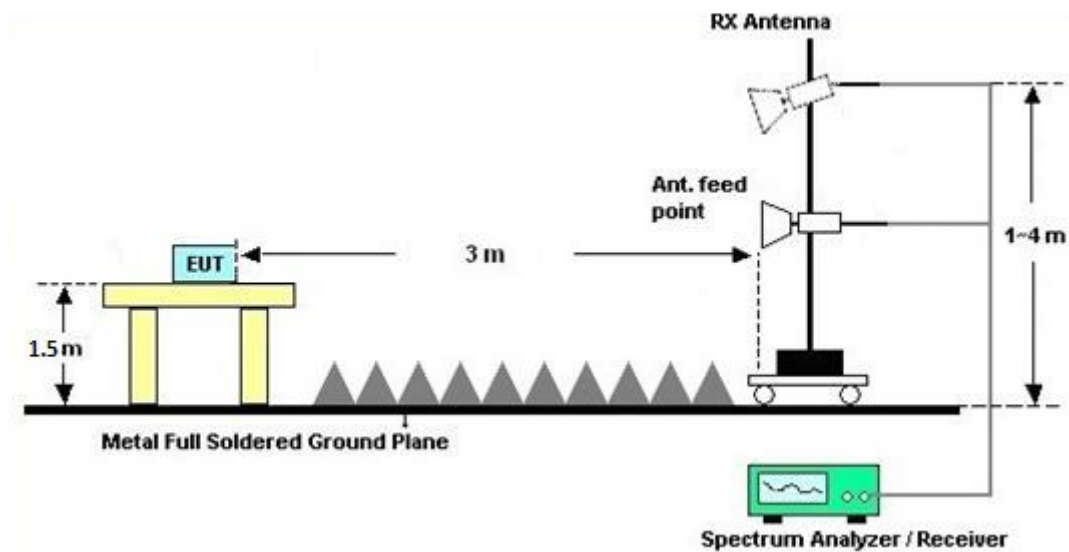
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.4.5 Test Results of Radiated Emissions (9 kHz ~ 30 MHz)

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.



3.4.6 Test Result of Radiated Band Edges

Please refer to Appendix B.

3.4.7 Duty Cycle

Please refer to Appendix C.

3.4.8 Test Result of Unwanted Radiated Emission (30MHz ~ 10th Harmonic)

Please refer to Appendix B.

3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

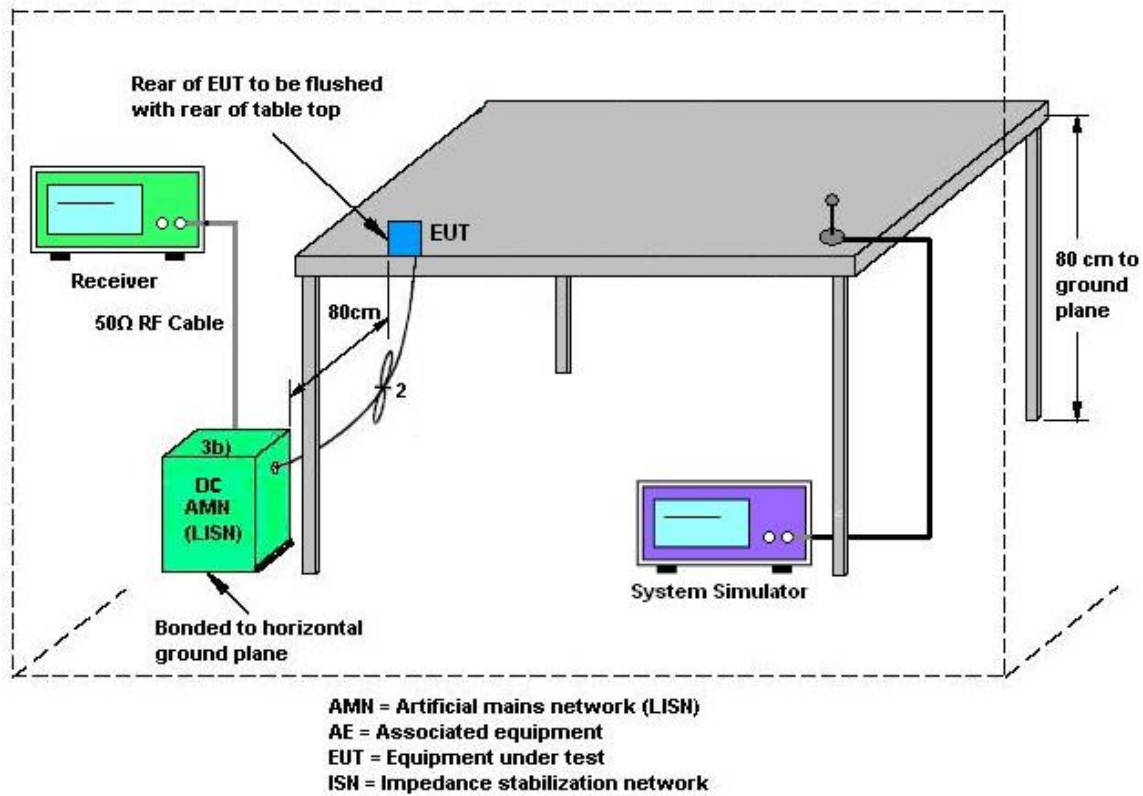
3.5.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.5.3 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

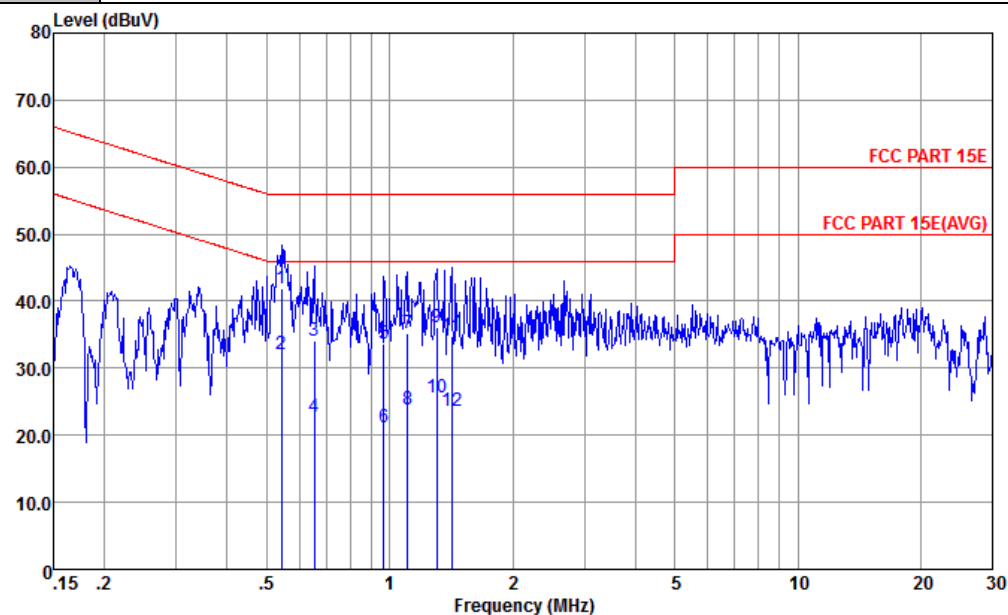
3.5.4 Test Setup





3.5.5 Test Result of AC Conducted Emission

Test Mode :	Mode 1	Temperature :	22~24℃
Test Engineer :	Amos Zhang	Relative Humidity :	43~47%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	GSM850 Idle + Bluetooth Link + WLAN Link(5G) + Earphone + Battery 1 + USB Cable 1(Charging from Adapter)		

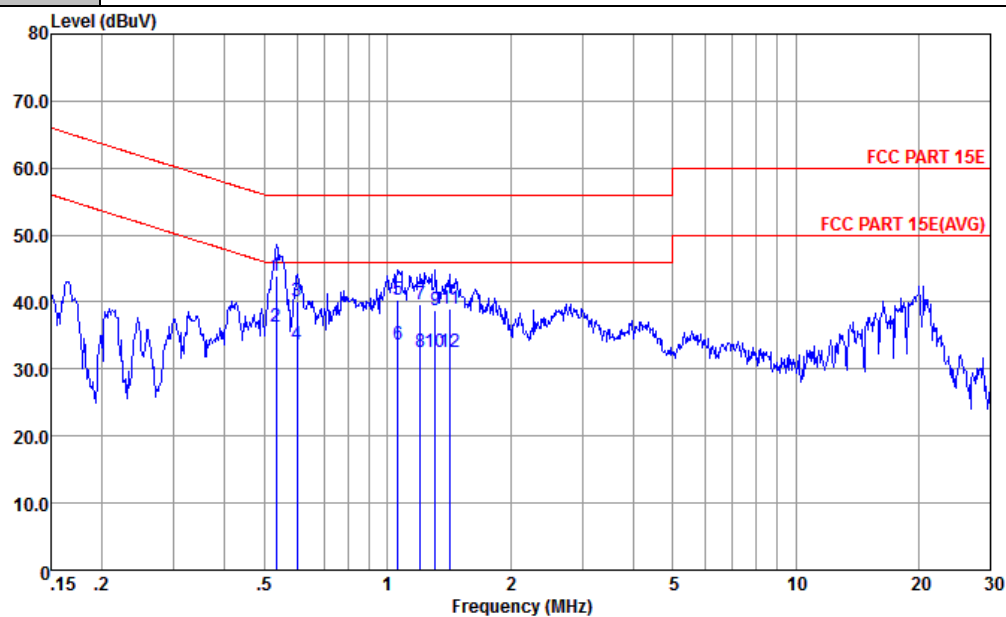


Site : CO01-KS
Condition : FCC PART 15E LISN-L-20151024 LINE
mode : Mode 1

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.54	41.99	-14.01	56.00	31.60	0.23	10.16	QP
2 *	0.54	31.99	-14.01	46.00	21.60	0.23	10.16	Average
3	0.65	34.19	-21.81	56.00	23.80	0.24	10.15	QP
4	0.65	22.69	-23.31	46.00	12.30	0.24	10.15	Average
5	0.97	33.59	-22.41	56.00	23.20	0.25	10.14	QP
6	0.97	21.19	-24.81	46.00	10.80	0.25	10.14	Average
7	1.11	35.18	-20.82	56.00	24.80	0.24	10.14	QP
8	1.11	23.88	-22.12	46.00	13.50	0.24	10.14	Average
9	1.30	36.16	-19.84	56.00	25.80	0.22	10.14	QP
10	1.30	25.56	-20.44	46.00	15.20	0.22	10.14	Average
11	1.42	34.85	-21.15	56.00	24.50	0.21	10.14	QP
12	1.42	23.55	-22.45	46.00	13.20	0.21	10.14	Average



Test Mode :	Mode 1	Temperature :	22~24℃
Test Engineer :	Amos Zhang	Relative Humidity :	43~47%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	GSM850 Idle + Bluetooth Link + WLAN Link(5G) + Earphone + Battery 1 + USB Cable 1(Charging from Adapter)		



Site : CO01-KS
Condition : FCC PART 15E LISN-N-20151024 NEUTRAL
mode : Mode 1

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.53	43.99	-12.01	56.00	33.51	0.32	10.16	QP
2 *	0.53	36.39	-9.61	46.00	25.91	0.32	10.16	Average
3	0.60	40.09	-15.91	56.00	29.60	0.33	10.16	QP
4	0.60	33.69	-12.31	46.00	23.20	0.33	10.16	Average
5	1.06	40.31	-15.69	56.00	29.80	0.37	10.14	QP
6	1.06	33.71	-12.29	46.00	23.20	0.37	10.14	Average
7	1.20	39.71	-16.29	56.00	29.20	0.37	10.14	QP
8	1.20	32.61	-13.39	46.00	22.10	0.37	10.14	Average
9	1.31	38.71	-17.29	56.00	28.20	0.37	10.14	QP
10	1.31	32.61	-13.39	46.00	22.10	0.37	10.14	Average
11	1.43	39.01	-16.99	56.00	28.49	0.38	10.14	QP
12	1.43	32.61	-13.39	46.00	22.09	0.38	10.14	Average

3.6 Frequency Stability Measurement

3.6.1 Limit of Frequency Stability

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

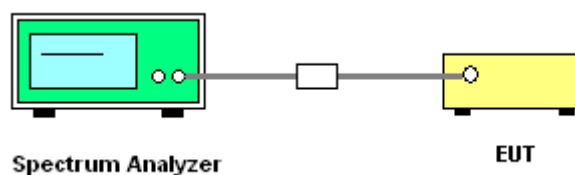
3.6.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.6.3 Test Procedures

1. To ensure emission at the band edge is maintained within the authorized band, those values shall be measured by radiation emissions at upper and lower frequency points, and finally compensated by frequency deviation as procedures below.
2. The EUT was operated at the maximum output power, and connected to the spectrum analyzer, which is set to maximum hold function and peak detector. The peak value of the power envelope was measured and noted. The upper and lower frequency points were respectively measured relatively 10dB lower than the measured peak value.
3. The frequency deviation was calculated by adding the upper frequency point and the lower frequency point divided by two. Those detailed values of frequency deviation are provided in table below.

3.6.4 Test Setup



3.6.5 Test Result of Frequency Stability

Please refer to Appendix A.

3.7 Automatically Discontinue Transmission

3.7.1 Limit of Automatically Discontinue Transmission

The device shall automatically discontinue transmission in case of either absence of information to transmit or 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 to describe how this requirement is met.

3.7.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.7.3 Test Result of Automatically Discontinue Transmission

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.



3.8 Antenna Requirements

3.8.1 Standard Applicable

According to FCC 47 CFR Section 15.407(a)(1)(2), if transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.8.2 Antenna Anti-Replacement Construction

Non-standard antenna connector is used.

3.8.3 Antenna Gain

The antenna gain is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.



4 List of Measuring Equipments

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	9kHz~40GHz	May 07, 2016	Jun. 13, 2016~ Jun. 28, 2016	May 06, 2017	Conducted (TH01-SZ)
Spectrum Analyzer	R&S	FSP30	101400	9kHz~30GHz	Jan. 12, 2016	Jun. 13, 2016~ Jun. 28, 2016	Jan. 11, 2017	Conducted (TH01-SZ)
Pulse Power Sensor	Anritsu	MA2411B	1207253	30MHz~40GHz	Jan. 12, 2016	Jun. 13, 2016~ Jun. 28, 2016	Jan. 11, 2017	Conducted (TH01-SZ)
Power Meter	Anritsu	ML2495A	1218010	50MHz Bandwidth	Jan. 12, 2016	Jun. 13, 2016~ Jun. 28, 2016	Jan. 11, 2017	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Aug. 07, 2015	Jun. 13, 2016~ Jun. 28, 2016	Aug. 06, 2016	Conducted (TH01-SZ)
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz; Max 30dBm	Sep. 10, 2015	Jun. 13, 2016~ Jun. 29, 2016	Sep. 09, 2016	Radiation (03CH03-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150244	10Hz~44GHz	Apr. 22, 2016	Jun. 13, 2016~ Jun. 29, 2016	Apr. 21, 2017	Radiation (03CH03-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Nov. 07, 2015	Jun. 13, 2016~ Jun. 29, 2016	Nov. 06, 2016	Radiation (03CH03-KS)
Bilog Antenna	TeseQ	CBL6112D	35406	25MHz~2GHz	Apr. 16, 2016	Jun. 13, 2016~ Jun. 29, 2016	Apr. 15, 2017	Radiation (03CH03-KS)
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-1356	1GHz~18GHz	Apr. 16, 2016	Jun. 13, 2016~ Jun. 29, 2016	Apr. 15, 2017	Radiation (03CH03-KS)
SHF-EHF Horn	Schwarzbeck	BBHA 9170	BBHA170249	15GHz ~40GHz	Mar. 03, 2016	Jun. 13, 2016~ Jun. 29, 2016	Mar. 02, 2017	Radiation (03CH03-KS)
Amplifier	Burgeon	BPA-530	102212	0.01MHz~3000MHz	Aug. 10, 2015	Jun. 13, 2016~ Jun. 29, 2016	Aug. 09, 2016	Radiation (03CH03-KS)
Amplifier	MITEQ	TTA1840-35-HG	1887435	18~40GHz	Aug. 27, 2015	Jun. 13, 2016~ Jun. 29, 2016	Aug. 26, 2016	Radiation (03CH03-KS)
Amplifier	Agilent	8449B	3008A02370	1GHz~26.5GHz	Oct. 24, 2015	Jun. 13, 2016~ Jun. 29, 2016	Oct. 23, 2016	Radiation (03CH03-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Jun. 13, 2016~ Jun. 29, 2016	NCR	Radiation (03CH03-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Jun. 13, 2016~ Jun. 29, 2016	NCR	Radiation (03CH03-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Jun. 13, 2016~ Jun. 29, 2016	NCR	Radiation (03CH03-KS)
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz; Max 30dBm	Sep. 10, 2015	Jun. 21, 2016	Sep. 09, 2016	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060103	9kHz~30MHz	Oct. 24, 2015	Jun. 21, 2016	Oct. 23, 2016	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060105	9kHz~30MHz	Oct. 24, 2015	Jun. 21, 2016	Oct. 23, 2016	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	AC 0V~300V, 45Hz~1000Hz	Oct. 24, 2015	Jun. 21, 2016	Oct. 23, 2016	Conduction (CO01-KS)

NCR: No Calibration Required

5 Uncertainty of Evaluation

Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.3dB
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.5dB
---	-------

Uncertainty of Radiated Emission Measurement (1GHz ~ 18GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.5dB
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Uncertainty of Radiated Emission Measurement (18GHz ~ 40GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.6dB
---	-------



Appendix A. Conducted Test Results

Test Engineer:	Mygai Mo	Temperature:	24~26	°C
Test Date:	2016/6/13 ~ 2016/6/28	Relative Humidity:	50~53	%

TEST RESULTS DATA
26dB and 99% OBW

Band I										
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	99% Bandwidth (MHz)	26 dB Bandwidth (MHz)	IC 99% Bandwidth Power Limit (dBm)	IC 99% Bandwidth EIRP Limit (dBm)	-	-
11a	6Mbps	1	36	5180	18.45	24.15	-	22.66	-	-
11a	6Mbps	1	44	5220	18.70	25.20	-	22.72	-	-
11a	6Mbps	1	48	5240	18.70	24.60	-	22.72	-	-
HT20	MCS0	1	36	5180	19.45	24.50	-	22.89	-	-
HT20	MCS0	1	44	5220	19.10	24.75	-	22.81	-	-
HT20	MCS0	1	48	5240	19.25	24.20	-	22.84	-	-
HT40	MCS0	1	38	5190	36.70	45.18	-	23.01	-	-
HT40	MCS0	1	46	5230	36.70	45.54	-	23.01	-	-
VHT20	MCS0	1	36	5180	19.35	27.05	-	22.87	-	-
VHT20	MCS0	1	44	5220	19.55	25.45	-	22.91	-	-
VHT20	MCS0	1	48	5240	19.70	26.05	-	22.94	-	-
VHT40	MCS0	1	38	5190	36.70	45.90	-	23.01	-	-
VHT40	MCS0	1	46	5230	36.80	48.15	-	23.01	-	-
VHT80	MCS0	1	42	5210	75.12	84.64	-	23.01	-	-

TEST RESULTS DATA
Average Power Table

FCC Band I										
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)	FCC Conducted Power Limit (dBm)	DG (dBi)	-	Pass/Fail
11a	6Mbps	1	36	5180	0.58	14.17	24.00	-2.40	-	Pass
11a	6Mbps	1	44	5220	0.58	14.08	24.00	-2.40		Pass
11a	6Mbps	1	48	5240	0.58	14.13	24.00	-2.40		Pass
HT20	MCS0	1	36	5180	0.60	13.74	24.00	-2.40		Pass
HT20	MCS0	1	44	5220	0.60	13.39	24.00	-2.40		Pass
HT20	MCS0	1	48	5240	0.60	13.45	24.00	-2.40		Pass
HT40	MCS0	1	38	5190	1.17	13.59	24.00	-2.40		Pass
HT40	MCS0	1	46	5230	1.17	13.27	24.00	-2.40		Pass
VHT20	MCS0	1	36	5180	0.80	14.14	24.00	-2.40		Pass
VHT20	MCS0	1	44	5220	0.80	14.40	24.00	-2.40		Pass
VHT20	MCS0	1	48	5240	0.80	14.34	24.00	-2.40		Pass
VHT40	MCS0	1	38	5190	1.48	14.36	24.00	-2.40		Pass
VHT40	MCS0	1	46	5230	1.48	14.29	24.00	-2.40		Pass
VHT80	MCS0	1	42	5210	2.61	14.14	24.00	-2.40		Pass

TEST RESULTS DATA
Power Spectral Density

FCC Band I										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Power Density (dBm/MHz)	Average PSD Limit (dBm/MHz)	DG (dBi)	-	Pass/Fail
11a	6Mbps	1	36	5180	0.58	2.93	11.00	-2.40	-	Pass
11a	6Mbps	1	44	5220	0.58	2.75	11.00	-2.40		Pass
11a	6Mbps	1	48	5240	0.58	2.82	11.00	-2.40		Pass
HT20	MCS0	1	36	5180	0.60	1.65	11.00	-2.40		Pass
HT20	MCS0	1	44	5220	0.60	1.63	11.00	-2.40		Pass
HT20	MCS0	1	48	5240	0.60	1.60	11.00	-2.40		Pass
HT40	MCS0	1	38	5190	1.17	-1.28	11.00	-2.40		Pass
HT40	MCS0	1	46	5230	1.17	-1.29	11.00	-2.40		Pass
VHT20	MCS0	1	36	5180	0.80	2.64	11.00	-2.40		Pass
VHT20	MCS0	1	44	5220	0.80	2.81	11.00	-2.40		Pass
VHT20	MCS0	1	48	5240	0.80	2.47	11.00	-2.40		Pass
VHT40	MCS0	1	38	5190	1.48	0.13	11.00	-2.40		Pass
VHT40	MCS0	1	46	5230	1.48	0.20	11.00	-2.40		Pass
VHT80	MCS0	1	42	5210	2.61	-2.95	11.00	-2.40		Pass

TEST RESULTS DATA
26dB and 99% OBW

Band II										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)	26 dB Bandwidth (MHz)	IC 99% Bandwidth Power Limit (dBm)	IC 99% Bandwidth EIRP Limit (dBm)	FCC 26dB Bandwidth Power Limit (dBm)	Note
11a	6M bps	1	52	5260	18.85	24.05	23.75	29.75	23.98	-
11a	6M bps	1	60	5300	18.85	25.10	23.75	29.75	23.98	-
11a	6M bps	1	64	5320	18.75	23.90	23.73	29.73	23.98	-
HT20	MCS 0	1	52	5260	19.30	24.80	23.86	29.86	23.98	-
HT20	MCS 0	1	60	5300	19.55	24.15	23.91	29.91	23.98	-
HT20	MCS 0	1	64	5320	19.65	24.05	23.93	29.93	23.98	-
HT40	MCS 0	1	54	5270	36.50	45.00	23.98	30.00	23.98	-
HT40	MCS 0	1	62	5310	36.70	44.73	23.98	30.00	23.98	-
VHT20	MCS 0	1	52	5260	19.50	25.00	23.90	29.90	23.98	-
VHT20	MCS 0	1	60	5300	19.55	25.65	23.91	29.91	23.98	-
VHT20	MCS 0	1	64	5320	19.70	24.55	23.94	29.94	23.98	-
VHT40	MCS 0	1	54	5270	37.00	46.35	23.98	30.00	23.98	-
VHT40	MCS 0	1	62	5310	36.90	46.89	23.98	30.00	23.98	-
VHT80	MCS 0	1	58	5290	75.12	85.44	23.98	30.00	23.98	-

TEST RESULTS DATA
Average Power Table

FCC Band II										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)	FCC Conducted Power Limit (dBm)	DG (dBi)	EIRP Power Limit (dBm)	Pass/Fail
11a	6M bps	1	52	5260	0.58	14.42	23.98	-2.40	26.99	Pass
11a	6M bps	1	60	5300	0.58	14.12	23.98	-2.40	26.99	Pass
11a	6M bps	1	64	5320	0.58	14.18	23.98	-2.40	26.99	Pass
HT20	MCS 0	1	52	5260	0.60	13.56	23.98	-2.40	26.99	Pass
HT20	MCS 0	1	60	5300	0.60	13.24	23.98	-2.40	26.99	Pass
HT20	MCS 0	1	64	5320	0.60	13.34	23.98	-2.40	26.99	Pass
HT40	MCS 0	1	54	5270	1.17	13.43	23.98	-2.40	26.99	Pass
HT40	MCS 0	1	62	5310	1.17	13.15	23.98	-2.40	26.99	Pass
VHT20	MCS 0	1	52	5260	0.80	14.53	23.98	-2.40	26.99	Pass
VHT20	MCS 0	1	60	5300	0.80	14.22	23.98	-2.40	26.99	Pass
VHT20	MCS 0	1	64	5320	0.80	14.39	23.98	-2.40	26.99	Pass
VHT40	MCS 0	1	54	5270	1.48	13.89	23.98	-2.40	26.99	Pass
VHT40	MCS 0	1	62	5310	1.48	13.83	23.98	-2.40	26.99	Pass
VHT80	MCS 0	1	58	5290	2.61	14.15	23.98	-2.40	26.99	Pass

TEST RESULTS DATA
Power Spectral Density

Band II										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Power Density (dBm/MHz)	Average PSD Limit (dBm/MHz)	DG (dBi)	-	Pass/Fail
11a	6M bps	1	52	5260	0.58	2.89	11.00	-2.40	-	Pass
11a	6M bps	1	60	5300	0.58	2.34	11.00	-2.40		Pass
11a	6M bps	1	64	5320	0.58	2.79	11.00	-2.40		Pass
HT20	MCS 0	1	52	5260	0.60	1.40	11.00	-2.40		Pass
HT20	MCS 0	1	60	5300	0.60	1.08	11.00	-2.40		Pass
HT20	MCS 0	1	64	5320	0.60	1.27	11.00	-2.40		Pass
HT40	MCS 0	1	54	5270	1.17	-1.96	11.00	-2.40		Pass
HT40	MCS 0	1	62	5310	1.17	-1.64	11.00	-2.40		Pass
VHT20	MCS 0	1	52	5260	0.80	2.61	11.00	-2.40		Pass
VHT20	MCS 0	1	60	5300	0.80	2.28	11.00	-2.40		Pass
VHT20	MCS 0	1	64	5320	0.80	2.50	11.00	-2.40		Pass
VHT40	MCS 0	1	54	5270	1.48	-0.54	11.00	-2.40		Pass
VHT40	MCS 0	1	62	5310	1.48	-0.29	11.00	-2.40		Pass
VHT80	MCS 0	1	58	5290	2.61	-3.56	11.00	-2.40		Pass

TEST RESULTS DATA
26dB and 99% OBW

Band III										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)	26 dB Bandwidth (MHz)	IC 99% Bandwidth Power Limit (dBm)	IC 99% Bandwidth EIRP Limit (dBm)	FCC 26dB Bandwidth Power Limit (dBm)	Note
11a	6M bps	1	100	5500	19.95	37.35	23.98	30.00	23.98	-
11a	6M bps	1	116	5580	19.2	28.85	23.83	29.83	23.98	-
11a	6M bps	1	140	5700	20.05	30.25	23.98	30.00	23.98	-
HT20	MCS 0	1	100	5500	19.55	30.25	23.91	29.91	23.98	-
HT20	MCS 0	1	116	5580	19.7	27.8	23.94	29.94	23.98	-
HT20	MCS 0	1	140	5700	19.55	27.6	23.91	29.91	23.98	-
HT40	MCS 0	1	102	5510	36.9	49.68	23.98	30.00	23.98	-
HT40	MCS 0	1	110	5550	37	51.21	23.98	30.00	23.98	-
HT40	MCS 0	1	134	5670	37	53.46	23.98	30.00	23.98	-
VHT20	MCS 0	1	100	5500	20.35	39.05	23.98	30.00	23.98	-
VHT20	MCS 0	1	116	5580	20.4	34.75	23.98	30.00	23.98	-
VHT20	MCS 0	1	140	5700	20.55	33.75	23.98	30.00	23.98	-
VHT40	MCS 0	1	102	5510	37.6	60.21	23.98	30.00	23.98	-
VHT40	MCS 0	1	110	5550	37.5	59.4	23.98	30.00	23.98	-
VHT40	MCS 0	1	134	5670	37.5	55.26	23.98	30.00	23.98	-
VHT80	MCS 0	1	106	5530	75.12	86.24	23.98	30.00	23.98	-
VHT80	MCS 0	1	122	5610	75.24	90.24	23.98	30.00	23.98	-

TEST RESULTS DATA
Average Power Table

FCC Band III										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)	FCC Conducted Power Limit (dBm)	DG (dBi)	EIRP Power Limit (dBm)	Pass/Fail
11a	6M bps	1	100	5500	0.58	15.09	23.98	-2.40	26.99	Pass
11a	6M bps	1	116	5580	0.58	14.90	23.98	-2.40	26.99	Pass
11a	6M bps	1	140	5700	0.58	14.75	23.98	-2.40	26.99	Pass
HT20	MCS 0	1	100	5500	17.00	14.19	23.98	-2.40	26.99	Pass
HT20	MCS 0	1	116	5580	17.00	14.03	23.98	-2.40	26.99	Pass
HT20	MCS 0	1	140	5700	17.00	13.89	23.98	-2.40	26.99	Pass
HT40	MCS 0	1	102	5510	1.17	14.08	23.98	-2.40	26.99	Pass
HT40	MCS 0	1	110	5550	1.17	14.07	23.98	-2.40	26.99	Pass
HT40	MCS 0	1	134	5670	1.17	13.85	23.98	-2.40	26.99	Pass
VHT20	MCS 0	1	100	5500	0.80	15.18	23.98	-2.40	26.99	Pass
VHT20	MCS 0	1	116	5580	0.80	14.99	23.98	-2.40	26.99	Pass
VHT20	MCS 0	1	140	5700	0.80	14.87	23.98	-2.40	26.99	Pass
VHT40	MCS 0	1	102	5510	1.48	14.51	23.98	-2.40	26.99	Pass
VHT40	MCS 0	1	110	5550	1.48	15.02	23.98	-2.40	26.99	Pass
VHT40	MCS 0	1	134	5670	1.48	14.81	23.98	-2.40	26.99	Pass
VHT80	MCS 0	1	106	5530	2.61	14.45	23.98	-2.40	26.99	Pass
VHT80	MCS 0	1	122	5610	2.61	15.94	23.98	-2.40	26.99	Pass

TEST RESULTS DATA
Power Spectral Density

Band III										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Power Density (dBm/MHz)	Average PSD Limit (dBm/MHz)	DG (dBi)	-	Pass/Fail
11a	6M bps	1	100	5500	0.58	3.88	11.00	-2.40	-	Pass
11a	6M bps	1	116	5580	0.58	3.86	11.00	-2.40		Pass
11a	6M bps	1	140	5700	0.58	3.59	11.00	-2.40		Pass
HT20	MCS 0	1	100	5500	0.60	2.84	11.00	-2.40		Pass
HT20	MCS 0	1	116	5580	0.60	2.54	11.00	-2.40		Pass
HT20	MCS 0	1	140	5700	0.60	2.30	11.00	-2.40		Pass
HT40	MCS 0	1	102	5510	1.17	-0.05	11.00	-2.40		Pass
HT40	MCS 0	1	110	5550	1.17	0.08	11.00	-2.40		Pass
HT40	MCS 0	1	134	5670	1.17	-0.38	11.00	-2.40		Pass
VHT20	MCS 0	1	100	5500	0.80	3.82	11.00	-2.40		Pass
VHT20	MCS 0	1	116	5580	0.80	3.67	11.00	-2.40		Pass
VHT20	MCS 0	1	140	5700	0.80	3.51	11.00	-2.40		Pass
VHT40	MCS 0	1	102	5510	1.48	1.12	11.00	-2.40		Pass
VHT40	MCS 0	1	110	5550	1.48	1.22	11.00	-2.40		Pass
VHT40	MCS 0	1	134	5670	1.48	0.95	11.00	-2.40		Pass
VHT80	MCS 0	1	106	5530	2.61	-3.63	11.00	-2.40		Pass
VHT80	MCS 0	1	122	5610	2.61	-1.83	11.00	-2.40		Pass

TEST RESULTS DATA
26dB and 99% OBW

Straddle Channel										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)	Emission Bandwidth (MHz)	IC 99% Bandwidth Power Limit (dBm)	IC 99% Bandwidth EIRP Limit (dBm)	FCC 26dB Bandwidth Power Limit (dBm)	Note
11a	6Mbps	1	144	5720	19.50	26.33	-	-	-	-
				NII-2C	14.90	23.15	22.73	28.73	23.98	-
				NII-3	4.60	3.18	23.63	29.63	-	-
HT20	MCS0	1	144	5720	19.90	24.28	-	-	-	-
				NII-2C	15.05	20.50	22.78	28.78	23.98	-
				NII-3	4.85	3.78	23.86	29.86	-	-
HT40	MCS0	1	142	5710	37.10	46.02	-	-	-	-
				NII-2C	33.70	43.26	23.98	30.00	23.98	-
				NII-3	3.40	2.76	22.31	28.31	-	-
VHT20	MCS0	1	144	5720	20.05	27.31	-	-	-	-
				NII-2C	15.15	23.55	22.80	28.80	23.98	-
				NII-3	4.90	3.76	23.90	29.90	-	-
VHT40	MCS0	1	142	5710	37.40	49.73	-	-	-	-
				NII-2C	34.00	47.13	23.98	30.00	23.98	-
				NII-3	3.40	2.60	22.31	28.31	-	-
VHT80	MCS0	1	138	5690	75.24	80.88	-	-	-	-
				NII-2C	72.68	78.36	23.98	30.00	23.98	-
				NII-3	2.56	2.52	21.08	27.08	-	-

TEST RESULTS DATA
Average Power Table

FCC Straddle Channel										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)	FCC Conducted Power Limit (dBm)	DG (dBi)	-	Pass/Fail
11a	6Mbps	1	144	5720	0.58	14.85	-	-2.40		Pass
				NII-2C	0.58	13.77	23.98	-2.40		Pass
				NII-3	0.58	8.29	30.00	-2.40		Pass
HT20	MCS0	1	144	5720	0.60	14.59	-	-2.40		Pass
				NII-2C	0.60	13.56	23.98	-2.40		Pass
				NII-3	0.60	7.85	30.00	-2.40		Pass
HT40	MCS0	1	142	5710	1.17	13.76	-	-2.40		Pass
				NII-2C	1.17	13.45	23.98	-2.40		Pass
				NII-3	1.17	2.17	30.00	-2.40		Pass
VHT20	MCS0	1	144	5720	0.80	15.50	-	-2.40		Pass
				NII-2C	0.80	14.48	23.98	-2.40		Pass
				NII-3	0.80	8.69	30.00	-2.40		Pass
VHT40	MCS0	1	142	5710	1.48	14.64	-	-2.40		Pass
				NII-2C	1.48	14.33	23.98	-2.40		Pass
				NII-3	1.48	3.07	30.00	-2.40		Pass
VHT80	MCS0	1	138	5690	2.61	13.49	-	-2.40		Pass
				NII-2C	2.61	13.41	23.98	-2.40		Pass
				NII-3	2.61	-4.11	30.00	-2.40		Pass

TEST RESULTS DATA
Power Spectral Density

Straddle Channel										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Power Density (dBm/MHz)	Average PSD Limit (dBm/MHz)	DG (dBi)	-	Pass/Fail
11a	6Mbps	1	144	NII-2C	0.58	4.01	11.00	-2.40	-	Pass
				NII-3	0.58	4.01	30.00	-2.40		Pass
HT20	MCS0	1	144	NII-2C	0.60	2.55	11.00	-2.40		Pass
				NII-3	0.60	2.55	30.00	-2.40		Pass
HT40	MCS0	1	142	NII-2C	1.17	-0.39	11.00	-2.40		Pass
				NII-3	1.17	-0.39	30.00	-2.40		Pass
VHT20	MCS0	1	144	NII-2C	0.80	3.78	11.00	-2.40		Pass
				NII-3	0.80	3.78	30.00	-2.40		Pass
VHT40	MCS0	1	142	NII-2C	1.48	0.66	11.00	-2.40		Pass
				NII-3	1.48	0.66	30.00	-2.40		Pass
VHT80	MCS0	1	138	NII-2C	2.61	-1.47	11.00	-2.40		Pass
				NII-3	2.61	-1.47	30.00	-2.40		Pass

TEST RESULTS DATA
Frequency Stability

Band I										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	20	3.55	-
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	20	4.4	-
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	20	3.9	-
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	-30	3.9	-
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	50	3.9	-

Band II										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	20	3.55	-
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	20	4.4	-
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	20	3.9	-
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	-30	3.9	-
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	50	3.9	-

Band III										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	20	3.55	-
11a	6Mbps	1	100	5500	5499.975	-0.025	-4.55	20	4.4	-
11a	6Mbps	1	100	5500	5499.975	-0.025	-4.55	20	3.9	-
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	-30	3.9	-
11a	6Mbps	1	100	5500	5499.975	-0.025	-4.55	50	3.9	-



Appendix B. Radiated Spurious Emission

For USB Cable 1(Charging from Adapter) + Battery 1 + Earphone

Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 36 5180MHz		5142.9	46.96	-27.04	74	43.52	31.84	8.13	36.53	114	325	P	H
		5149.7	37.68	-16.32	54	34.24	31.84	8.13	36.53	114	325	A	H
	*	5186	92.55	-	-	89.04	31.85	8.17	36.51	114	325	P	H
	*	5184	85.37	-	-	81.86	31.85	8.17	36.51	114	325	A	H
		5125.65	47.44	-26.56	74	44.03	31.84	8.11	36.54	113	330	P	V
		5149.1	37.09	-16.91	54	33.65	31.84	8.13	36.53	113	330	A	V
	*	5184	89.97	-	-	86.46	31.85	8.17	36.51	113	330	P	V
	*	5186	82.81	-	-	79.3	31.85	8.17	36.51	113	330	A	V
802.11a CH 44 5220MHz	*	5222	93.91	-	-	90.35	31.86	8.2	36.5	318	327	P	H
	*	5224	86.67	-	-	83.11	31.86	8.2	36.5	318	327	A	H
	*	5220	91.85	-	-	88.29	31.86	8.2	36.5	120	329	P	V
	*	5226	84.42	-	-	80.84	31.87	8.21	36.5	120	329	A	V
802.11a CH 48 5240MHz	*	5246	93.59	-	-	89.99	31.88	8.22	36.5	336	325	P	H
	*	5246	86.14	-	-	82.54	31.88	8.22	36.5	336	325	A	H
		5386.45	45.53	-28.47	74	41.79	31.92	8.32	36.5	336	325	P	H
		5386.2	36.23	-17.77	54	32.49	31.92	8.32	36.5	336	325	A	H
	*	5248	92.41	-	-	88.81	31.88	8.22	36.5	100	328	P	V
	*	5246	84.85	-	-	81.25	31.88	8.22	36.5	100	328	A	V
		5383.2	45.39	-28.61	74	41.65	31.92	8.32	36.5	100	328	P	V
		5387.85	36.23	-17.77	54	32.49	31.92	8.32	36.5	100	328	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		10360	45.6	-28.4	74	55.14	38.02	13.54	61.1	100	0	P	H
		10360	48.48	-25.52	74	58.02	38.02	13.54	61.1	100	360	P	V
802.11a CH 44 5220MHz		10440	45.2	-28.8	74	54.63	38.06	13.58	61.07	100	0	P	H
		10440	48.3	-25.7	74	57.73	38.06	13.58	61.07	100	360	P	V
802.11a CH 48 5240MHz		10480	45.77	-28.23	74	55.11	38.09	13.61	61.04	100	360	P	H
		10480	49.76	-24.24	74	59.1	38.09	13.61	61.04	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 36 5180MHz		5149.1	47.22	-26.78	74	43.78	31.84	8.13	36.53	100	340	P	H
		5149.85	37.59	-16.41	54	34.15	31.84	8.13	36.53	100	340	A	H
	*	5182	90.51	-	-	87	31.85	8.17	36.51	100	340	P	H
	*	5184	83.43	-	-	79.92	31.85	8.17	36.51	100	340	A	H
		5114	46.88	-27.12	74	43.5	31.83	8.1	36.55	100	326	P	V
		5148.2	37.16	-16.84	54	33.72	31.84	8.13	36.53	100	326	A	V
	*	5186	87.62	-	-	84.11	31.85	8.17	36.51	100	326	P	V
	*	5188	80.39	-	-	76.88	31.85	8.17	36.51	100	326	A	V
802.11n HT20 CH 44 5220MHz	*	5226	92.69	-	-	89.11	31.87	8.21	36.5	400	319	P	H
	*	5224	85.35	-	-	81.79	31.86	8.2	36.5	400	319	A	H
	*	5226	89.37	-	-	85.79	31.87	8.21	36.5	100	320	P	V
	*	5226	82.21	-	-	78.63	31.87	8.21	36.5	100	320	A	V
802.11n HT20 CH 48 5240MHz	*	5242	91.53	-	-	87.93	31.88	8.22	36.5	300	331	P	H
	*	5234	83.98	-	-	80.4	31.87	8.21	36.5	300	331	A	H
		5370	45.57	-28.43	74	41.85	31.91	8.31	36.5	300	331	P	H
		5383.4	36.19	-17.81	54	32.45	31.92	8.32	36.5	300	331	A	H
	*	5244	89.27	-	-	85.67	31.88	8.22	36.5	100	338	P	V
	*	5244	82.11	-	-	78.51	31.88	8.22	36.5	100	338	A	V
		5359	46.08	-27.92	74	42.38	31.91	8.29	36.5	100	338	P	V
		5372	36.27	-17.73	54	32.55	31.91	8.31	36.5	100	338	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 36 5180MHz		10360	47.18	-26.82	74	56.72	38.02	13.54	61.1	100	0	P	H
		10360	48.79	-25.21	74	58.33	38.02	13.54	61.1	100	360	P	V
802.11n HT20 CH 44 5220MHz		10440	46.68	-27.32	74	56.11	38.06	13.58	61.07	100	0	P	H
		10440	48.35	-25.65	74	57.78	38.06	13.58	61.07	100	360	P	V
802.11n HT20 CH 48 5240MHz		10480	47.08	-26.92	74	56.42	38.09	13.61	61.04	100	0	P	H
		10480	49.89	-24.11	74	59.23	38.09	13.61	61.04	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 38 5190MHz		5149.7	50.49	-23.51	74	47.05	31.84	8.13	36.53	245	0	P	H
		5149.95	40.62	-13.38	54	37.18	31.84	8.13	36.53	245	0	A	H
	*	5200	86.36	-	-	82.81	31.86	8.19	36.5	245	0	P	H
	*	5188	79.1	-	-	75.59	31.85	8.17	36.51	245	0	A	H
		5149.4	51.32	-22.68	74	47.88	31.84	8.13	36.53	303	0	P	V
		5150	42.38	-11.62	54	38.94	31.84	8.13	36.53	303	0	A	V
	*	5194	88.8	-	-	85.25	31.86	8.19	36.5	303	0	P	V
	*	5204	81.37	-	-	77.82	31.86	8.19	36.5	303	0	A	V
802.11n HT40 CH 46 5230MHz	*	5242	86.87	-	-	83.27	31.88	8.22	36.5	265	360	P	H
	*	5242	79.72	-	-	76.12	31.88	8.22	36.5	265	360	A	H
		5370.1	45.09	-28.91	74	41.37	31.91	8.31	36.5	265	360	P	H
		5381.25	36.96	-17.04	54	33.22	31.92	8.32	36.5	265	360	A	H
	*	5244	91.79	-	-	88.19	31.88	8.22	36.5	326	360	P	V
	*	5244	83.93	-	-	80.33	31.88	8.22	36.5	326	360	A	V
		5391.35	45.52	-28.48	74	41.78	31.92	8.32	36.5	326	360	P	V
		5369.15	36.85	-17.15	54	33.13	31.91	8.31	36.5	326	360	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 38 5190MHz		10380	49.03	-24.97	74	58.55	38.03	13.55	61.1	100	0	P	H
		10380	47.34	-26.66	74	56.86	38.03	13.55	61.1	100	360	P	V
802.11n HT40 CH 46 5230MHz		10460	48.52	-25.48	74	57.92	38.07	13.59	61.06	100	0	P	H
		10460	44.99	-29.01	74	54.39	38.07	13.59	61.06	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz
WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 36 5180MHz		5110.05	47.24	-26.76	74	43.86	31.83	8.1	36.55	311	356	P	H
		5149.95	37.72	-16.28	54	34.28	31.84	8.13	36.53	311	356	A	H
	*	5186	88.35	-	-	84.84	31.85	8.17	36.51	311	356	P	H
	*	5188	81.3	-	-	77.79	31.85	8.17	36.51	311	356	A	H
		5144.15	50.48	-23.52	74	47.04	31.84	8.13	36.53	336	7	P	V
		5149.95	39.81	-14.19	54	36.37	31.84	8.13	36.53	336	7	A	V
	*	5188	94.11	-	-	90.6	31.85	8.17	36.51	336	7	P	V
	*	5184	87.58	-	-	84.07	31.85	8.17	36.51	336	7	A	V
802.11ac VHT20 CH 44 5220MHz	*	5228	89.51	-	-	85.93	31.87	8.21	36.5	341	347	P	H
	*	5228	82.35	-	-	78.77	31.87	8.21	36.5	341	347	A	H
	*	5228	92.93	-	-	89.35	31.87	8.21	36.5	379	0	P	V
	*	5228	86.42	-	-	82.84	31.87	8.21	36.5	379	0	A	V
802.11ac VHT20 CH 48 5240MHz	*	5246	89.42	-	-	85.82	31.88	8.22	36.5	289	343	P	H
	*	5248	82.24	-	-	78.64	31.88	8.22	36.5	289	343	A	H
		5352.15	46.45	-27.55	74	42.75	31.91	8.29	36.5	289	343	P	H
		5387.8	36.81	-17.19	54	33.07	31.92	8.32	36.5	289	343	A	H
	*	5238	96.01	-	-	92.43	31.87	8.21	36.5	344	356	P	V
	*	5244	89.12	-	-	85.52	31.88	8.22	36.5	344	356	A	V
		5376.4	45.62	-28.38	74	41.9	31.91	8.31	36.5	344	356	P	V
		5358.35	36.97	-17.03	54	33.27	31.91	8.29	36.5	344	356	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20		10360	49.89	-24.11	74	59.43	38.02	13.54	61.1	100	360	P	H
CH 36 5180MHz		10360	47.7	-26.3	74	57.24	38.02	13.54	61.1	100	0	P	V
802.11ac VHT20		10440	48.5	-25.5	74	57.93	38.06	13.58	61.07	100	0	P	H
CH 44 5220MHz		10440	46.76	-27.24	74	56.19	38.06	13.58	61.07	100	360	P	V
802.11ac VHT20		10480	53.68	-20.32	74	63.02	38.09	13.61	61.04	100	337	P	H
CH 48 5240MHz	!	10480	49.32	-4.68	54	58.66	38.09	13.61	61.04	100	337	A	H
		10480	45.72	-28.28	74	55.06	38.09	13.61	61.04	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz
WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 38 5190MHz		5148.35	50.32	-23.68	74	46.88	31.84	8.13	36.53	236	0	P	H
		5149.5	41.53	-12.47	54	38.09	31.84	8.13	36.53	236	0	A	H
	*	5202	87.63	-	-	84.08	31.86	8.19	36.5	236	0	P	H
	*	5202	80.75	-	-	77.2	31.86	8.19	36.5	236	0	A	H
		5147.2	52.51	-21.49	74	49.07	31.84	8.13	36.53	364	360	P	V
		5150	43.1	-10.9	54	39.66	31.84	8.13	36.53	364	360	A	V
	*	5200	91.67	-	-	88.12	31.86	8.19	36.5	364	359	P	V
	*	5202	84.39	-	-	80.84	31.86	8.19	36.5	364	359	A	V
802.11ac VHT40 CH 46 5230MHz	*	5240	88.17	-	-	84.59	31.87	8.21	36.5	254	350	P	H
	*	5238	80.97	-	-	77.39	31.87	8.21	36.5	254	350	A	H
		5357.6	45.51	-28.49	74	41.81	31.91	8.29	36.5	254	350	P	H
		5356.75	36.96	-17.04	54	33.26	31.91	8.29	36.5	254	350	A	H
	*	5228	91.02	-	-	87.44	31.87	8.21	36.5	364	360	P	V
	*	5228	82.71	-	-	79.13	31.87	8.21	36.5	364	360	A	V
		5352.45	46.35	-27.65	74	42.65	31.91	8.29	36.5	364	360	P	V
		5376	36.85	-17.15	54	33.13	31.91	8.31	36.5	364	360	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

**Band 1 5150~5250MHz****WIFI 802.11ac VHT40 (Harmonic @ 3m)**

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 38 5190MHz		10380	48.93	-25.07	74	58.45	38.03	13.55	61.1	100	360	P	H
		10380	46.93	-27.07	74	56.45	38.03	13.55	61.1	100	0	P	V
802.11ac VHT40 CH 46 5230MHz		10460	49.45	-24.55	74	58.85	38.07	13.59	61.06	100	0	P	H
		10460	45.15	-28.85	74	54.55	38.07	13.59	61.06	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 42 5210MHz		5146.6	53.84	-20.16	74	50.4	31.84	8.13	36.53	326	330	P	H
		5147.65	45.83	-8.17	54	42.39	31.84	8.13	36.53	326	330	A	H
	*	5206	87.36	-	-	83.81	31.86	8.19	36.5	326	330	P	H
	*	5214	81.02	-	-	77.46	31.86	8.2	36.5	326	330	A	H
		5356.8	45.79	-28.21	74	42.09	31.91	8.29	36.5	326	330	P	H
		5379.6	38.19	-15.81	54	34.45	31.92	8.32	36.5	326	330	A	H
		5149.95	51.21	-22.79	74	47.77	31.84	8.13	36.53	100	326	P	V
		5147.8	43.71	-10.29	54	40.27	31.84	8.13	36.53	100	326	A	V
	*	5232	86.73	-	-	83.15	31.87	8.21	36.5	100	326	P	V
	*	5230	80.17	-	-	76.59	31.87	8.21	36.5	100	326	A	V
		5393.1	46.26	-27.74	74	42.52	31.92	8.32	36.5	100	326	P	V
		5375.15	38.38	-15.62	54	34.66	31.91	8.31	36.5	100	326	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

**Band 1 5150~5250MHz****WIFI 802.11ac VHT80 (Harmonic @ 3m)**

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac		10420	45.03	-28.97	74	54.49	38.05	13.57	61.08	100	0	P	H
VHT80													
CH 42		10420	47.48	-26.52	74	56.94	38.05	13.57	61.08	100	360	P	V
5210MHz													
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 - 5250~5350MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 52 5260MHz		5143.9	46.88	-27.12	74	43.44	31.84	8.13	36.53	300	328	P	H
		5102.8	36.89	-17.11	54	33.54	31.83	8.08	36.56	300	328	A	H
	*	5266	94.21	-	-	90.6	31.88	8.23	36.5	300	328	P	H
	*	5266	86.82	-	-	83.21	31.88	8.23	36.5	300	328	A	H
		5114.35	47.51	-26.49	74	44.13	31.83	8.1	36.55	100	330	P	V
		5105.85	36.85	-17.15	54	33.47	31.83	8.1	36.55	100	330	A	V
	*	5264	93.15	-	-	89.54	31.88	8.23	36.5	100	330	P	V
	*	5266	85.86	-	-	82.25	31.88	8.23	36.5	100	330	A	V
802.11a CH 60 5300MHz	*	5294	94.2	-	-	90.55	31.89	8.26	36.5	331	324	P	H
	*	5306	86.86	-	-	83.21	31.89	8.26	36.5	331	324	A	H
	*	5302	94.18	-	-	90.53	31.89	8.26	36.5	105	327	P	V
	*	5304	87.13	-	-	83.48	31.89	8.26	36.5	105	327	A	V
802.11a CH 64 5320MHz	*	5324	95.97	-	-	92.3	31.9	8.27	36.5	345	323	P	H
	*	5326	87.06	-	-	83.39	31.9	8.27	36.5	345	323	A	H
		5353.2	51.39	-22.61	74	47.69	31.91	8.29	36.5	345	323	P	H
		5350	38.53	-15.47	54	34.83	31.91	8.29	36.5	345	323	A	H
	*	5316	94.83	-	-	91.16	31.9	8.27	36.5	100	326	P	V
	*	5314	87.26	-	-	83.59	31.9	8.27	36.5	100	326	A	V
		5350.55	52	-22	74	48.3	31.91	8.29	36.5	100	326	P	V
		5350.5	39.44	-14.56	54	35.74	31.91	8.29	36.5	100	326	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a		10520	47	-27	74	56.29	38.11	13.63	61.03	100	360	P	H
CH 52 5260MHz		10520	50.05	-23.95	74	59.34	38.11	13.63	61.03	100	0	P	V
802.11a		10600	45.07	-28.93	74	54.21	38.16	13.68	60.98	100	0	P	H
CH 60 5300MHz		10600	48.94	-25.06	74	58.08	38.16	13.68	60.98	100	360	P	V
802.11a		10640	44.51	-29.49	74	53.6	38.18	13.7	60.97	100	0	P	H
CH 64 5320MHz		10640	50.03	-23.97	74	59.12	38.18	13.7	60.97	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 52 5260MHz		5104.65	46.81	-27.19	74	43.46	31.83	8.08	36.56	100	340	P	H
		5115.65	36.83	-17.17	54	33.45	31.83	8.1	36.55	100	340	A	H
	*	5268	92.18	-	-	88.57	31.88	8.23	36.5	100	340	P	H
	*	5264	84.98	-	-	81.37	31.88	8.23	36.5	100	340	A	H
		5143.9	46.49	-27.51	74	43.05	31.84	8.13	36.53	100	333	P	V
		5106.6	36.85	-17.15	54	33.47	31.83	8.1	36.55	100	333	A	V
	*	5264	90.61	-	-	87	31.88	8.23	36.5	100	333	P	V
	*	5264	83.36	-	-	79.75	31.88	8.23	36.5	100	333	A	V
802.11n HT20 CH 60 5300MHz	*	5306	92.3	-	-	88.65	31.89	8.26	36.5	100	353	P	H
	*	5306	84.84	-	-	81.19	31.89	8.26	36.5	100	353	A	H
	*	5306	90.98	-	-	87.33	31.89	8.26	36.5	100	328	P	V
	*	5304	84.54	-	-	80.89	31.89	8.26	36.5	100	328	A	V
802.11n HT20 CH 64 5320MHz	*	5328	92.83	-	-	89.15	31.9	8.28	36.5	100	338	P	H
	*	5324	85.42	-	-	81.75	31.9	8.27	36.5	100	338	A	H
		5354.9	47.51	-26.49	74	43.81	31.91	8.29	36.5	100	338	P	H
		5371.75	37.98	-16.02	54	34.26	31.91	8.31	36.5	100	338	A	H
	*	5314	92.34	-	-	88.67	31.9	8.27	36.5	100	333	P	V
	*	5326	84.89	-	-	81.22	31.9	8.27	36.5	100	333	A	V
		5353.1	52.64	-21.36	74	48.94	31.91	8.29	36.5	100	333	P	V
		5371.45	38.05	-15.95	54	34.33	31.91	8.31	36.5	100	333	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 52 5260MHz		10520	47	-27	74	56.29	38.11	13.63	61.03	100	0	P	H
		10520	52.61	-21.39	74	61.9	38.11	13.63	61.03	100	20	P	V
	!	10520	48.52	-5.48	54	57.81	38.11	13.63	61.03	100	20	A	V
802.11n HT20 CH 60 5300MHz		10600	44.11	-29.89	74	53.25	38.16	13.68	60.98	100	360	P	H
		10600	49.03	-24.97	74	58.17	38.16	13.68	60.98	100	0	P	V
802.11n HT20 CH 64 5320MHz		10640	45.61	-28.39	74	54.7	38.18	13.7	60.97	100	360	P	H
		10640	50.63	-23.37	74	59.72	38.18	13.7	60.97	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 54 5270MHz		5109.1	46.48	-27.52	74	43.1	31.83	8.1	36.55	310	0	P	H
		5113.3	37.43	-16.57	54	34.05	31.83	8.1	36.55	310	0	A	H
	*	5282	87.31	-	-	83.67	31.89	8.25	36.5	310	0	P	H
	*	5284	80.17	-	-	76.53	31.89	8.25	36.5	310	0	A	H
		5131.2	46.49	-27.51	74	43.08	31.84	8.11	36.54	274	360	P	V
		5113.9	37.46	-16.54	54	34.08	31.83	8.1	36.55	274	360	A	V
	*	5280	90.33	-	-	86.69	31.89	8.25	36.5	274	360	P	V
	*	5282	83.48	-	-	79.84	31.89	8.25	36.5	274	360	A	V
802.11n HT40 CH 62 5310MHz	*	5320	89.71	-	-	86.04	31.9	8.27	36.5	338	347	P	H
	*	5322	82.42	-	-	78.75	31.9	8.27	36.5	338	347	A	H
		5353.8	52.94	-21.06	74	49.24	31.91	8.29	36.5	338	347	P	H
		5350.55	41.38	-12.62	54	37.68	31.91	8.29	36.5	338	347	A	H
	*	5316	91.69	-	-	88.02	31.9	8.27	36.5	375	356	P	V
	*	5322	84.44	-	-	80.77	31.9	8.27	36.5	375	356	A	V
		5352.1	54.42	-19.58	74	50.72	31.91	8.29	36.5	375	356	P	V
		5352.55	41.55	-12.45	54	37.85	31.91	8.29	36.5	375	356	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 54 5270MHz		10540	49.98	-24.02	74	59.24	38.12	13.64	61.02	100	360	P	H
		10540	46.01	-27.99	74	55.27	38.12	13.64	61.02	100	0	P	V
802.11n HT40 CH 62 5310MHz		10620	50.86	-23.14	74	59.98	38.17	13.69	60.98	100	360	P	H
		10620	45.59	-28.41	74	54.71	38.17	13.69	60.98	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz
WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 52 5260MHz		5109.5	46.98	-27.02	74	43.6	31.83	8.1	36.55	325	360	P	H
		5101.25	37.55	-16.45	54	34.2	31.83	8.08	36.56	325	360	A	H
	*	5264	90.26	-	-	86.65	31.88	8.23	36.5	325	360	P	H
	*	5264	83.17	-	-	79.56	31.88	8.23	36.5	325	360	A	H
		5115.25	46.38	-27.62	74	43	31.83	8.1	36.55	340	3	P	V
		5146.15	37.48	-16.52	54	34.04	31.84	8.13	36.53	340	3	A	V
	*	5264	95.07	-	-	91.46	31.88	8.23	36.5	340	3	P	V
	*	5264	88.27	-	-	84.66	31.88	8.23	36.5	340	3	A	V
802.11ac VHT20 CH 60 5300MHz	*	5296	91.64	-	-	87.99	31.89	8.26	36.5	300	341	P	H
	*	5304	84.42	-	-	80.77	31.89	8.26	36.5	300	341	A	H
	*	5296	95.86	-	-	92.21	31.89	8.26	36.5	356	345	P	V
	*	5304	88.71	-	-	85.06	31.89	8.26	36.5	356	345	A	V
802.11ac VHT20 CH 64 5320MHz	*	5322	93.26	-	-	89.59	31.9	8.27	36.5	319	350	P	H
	*	5328	86.58	-	-	82.9	31.9	8.28	36.5	319	350	A	H
		5350.3	53.3	-20.7	74	49.6	31.91	8.29	36.5	319	350	P	H
		5350.4	40.67	-13.33	54	36.97	31.91	8.29	36.5	319	350	A	H
	*	5326	96.15	-	-	92.48	31.9	8.27	36.5	298	360	P	V
	*	5328	88.7	-	-	85.02	31.9	8.28	36.5	298	360	A	V
		5350.45	53.67	-20.33	74	49.97	31.91	8.29	36.5	298	360	P	V
		5350.4	41.24	-12.76	54	37.54	31.91	8.29	36.5	298	360	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 52 5260MHz		10520	53.09	-20.91	74	62.38	38.11	13.63	61.03	100	2	P	H
	!	10520	49.34	-4.66	54	58.63	38.11	13.63	61.03	100	2	A	H
		10520	47.57	-26.43	74	56.86	38.11	13.63	61.03	100	360	P	V
802.11ac VHT20 CH 60 5300MHz		10600	50.25	-23.75	74	59.39	38.16	13.68	60.98	100	360	P	H
		10600	44.66	-29.34	74	53.8	38.16	13.68	60.98	100	0	P	V
802.11ac VHT20 CH 64 5320MHz		10640	50.25	-23.75	74	59.34	38.18	13.7	60.97	100	0	P	H
		10640	45.84	-28.16	74	54.93	38.18	13.7	60.97	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 54 5270MHz		5112	46.48	-27.52	74	43.1	31.83	8.1	36.55	345	347	P	H
		5128.8	37.39	-16.61	54	33.98	31.84	8.11	36.54	345	347	A	H
	*	5282	89.73	-	-	86.09	31.89	8.25	36.5	345	347	P	H
	*	5282	82.25	-	-	78.61	31.89	8.25	36.5	345	347	A	H
		5130.1	46.41	-27.59	74	43	31.84	8.11	36.54	300	5	P	V
		5111.25	37.4	-16.6	54	34.02	31.83	8.1	36.55	300	5	A	V
	*	5260	90.86	-	-	87.25	31.88	8.23	36.5	300	5	P	V
	*	5260	83.7	-	-	80.09	31.88	8.23	36.5	300	5	A	V
802.11ac VHT40 CH 62 5310MHz	*	5320	91.71	-	-	88.04	31.9	8.27	36.5	348	348	P	H
	*	5322	84.28	-	-	80.61	31.9	8.27	36.5	348	348	A	H
		5350	55.91	-18.09	74	52.21	31.91	8.29	36.5	348	348	P	H
		5351.3	43.33	-10.67	54	39.63	31.91	8.29	36.5	348	348	A	H
	*	5322	92.1	-	-	88.43	31.9	8.27	36.5	310	5	P	V
	*	5322	85.05	-	-	81.38	31.9	8.27	36.5	310	5	A	V
		5352.25	56.71	-17.29	74	53.01	31.91	8.29	36.5	310	5	P	V
		5351.55	43.76	-10.24	54	40.06	31.91	8.29	36.5	310	5	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40		10540	50	-24	74	59.26	38.12	13.64	61.02	100	360	P	H
CH 54 5270MHz		10540	46.02	-27.98	74	55.28	38.12	13.64	61.02	100	360	P	V
802.11ac VHT40		10620	49.2	-24.8	74	58.32	38.17	13.69	60.98	100	360	P	H
CH 62 5310MHz		10620	43.83	-30.17	74	52.95	38.17	13.69	60.98	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		5126.3	46.35	-27.65	74	42.94	31.84	8.11	36.54	123	342	P	H
		5114.1	38.54	-15.46	54	35.16	31.83	8.1	36.55	123	342	A	H
	*	5314	89.55	-	-	85.88	31.9	8.27	36.5	123	342	P	H
	*	5312	82.93	-	-	79.26	31.9	8.27	36.5	123	342	A	H
		5373.25	54.86	-19.14	74	51.14	31.91	8.31	36.5	123	342	P	H
		5357.05	44.68	-9.32	54	40.98	31.91	8.29	36.5	123	342	A	H
		5131.05	46.71	-27.29	74	43.3	31.84	8.11	36.54	100	309	P	V
		5101.55	38.4	-15.6	54	35.05	31.83	8.08	36.56	100	309	A	V
	*	5314	89.36	-	-	85.69	31.9	8.27	36.5	100	309	P	V
	*	5310	82.4	-	-	78.73	31.9	8.27	36.5	100	309	A	V
		5373.3	54.22	-19.78	74	50.5	31.91	8.31	36.5	100	309	P	V
		5356.65	44.68	-9.32	54	40.98	31.91	8.29	36.5	100	309	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

**Band 2 5250~5350MHz****WIFI 802.11ac VHT80 (Harmonic @ 3m)**

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac		10580	44.37	-29.63	74	53.54	38.15	13.67	60.99	100	0	P	H
VHT80 CH 58 5290MHz		10580	49.25	-24.75	74	58.42	38.15	13.67	60.99	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 100 5500MHz		5468.88	57.62	-16.38	74	53.69	31.95	8.38	36.4	308	325	P	H
		5470	43.55	-10.45	54	39.62	31.95	8.38	36.4	308	325	A	H
	*	5494	96.99	-	-	93.03	31.95	8.39	36.38	308	325	P	H
	*	5496	90.1	-	-	86.14	31.95	8.39	36.38	308	325	A	H
		5469.36	59.02	-14.98	74	55.09	31.95	8.38	36.4	132	324	P	V
		5470	44.93	-9.07	54	41	31.95	8.38	36.4	132	324	A	V
	*	5502	98.27	-	-	94.26	31.96	8.4	36.35	132	324	P	V
	*	5496	91.14	-	-	87.18	31.95	8.39	36.38	132	324	A	V
802.11a CH 116 5580MHz	*	5586	97.87	-	-	93.65	31.98	8.47	36.23	302	337	P	H
	*	5584	90.54	-	-	86.32	31.98	8.47	36.23	302	337	A	H
	*	5576	98.37	-	-	94.19	31.98	8.45	36.25	174	330	P	V
	*	5576	91.1	-	-	86.92	31.98	8.45	36.25	174	330	A	V
802.11a CH 140 5700MHz	*	5696	97.98	-	-	93.67	32.02	8.54	36.25	326	338	P	H
	*	5696	89.92	-	-	85.61	32.02	8.54	36.25	326	338	A	H
		5725.72	58.18	-15.82	74	53.85	32.04	8.57	36.28	326	338	P	H
		5725	45.65	-8.35	54	41.32	32.04	8.57	36.28	326	338	A	H
	*	5702	95.69	-	-	91.38	32.03	8.55	36.27	174	326	P	V
	*	5696	88.82	-	-	84.51	32.02	8.54	36.25	174	326	A	V
		5726.92	55	-19	74	50.67	32.04	8.57	36.28	174	326	P	V
		5725.08	44.3	-9.7	54	39.97	32.04	8.57	36.28	174	326	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a		11000	50.24	-23.76	74	58.72	38.4	13.91	60.79	100	0	P	H
CH 100		11000	54.14	-19.86	74	62.62	38.4	13.91	60.79	100	10	P	V
5500MHz	!	11000	50.56	-3.44	54	59.04	38.4	13.91	60.79	100	10	A	V
802.11a		11150	48.34	-25.66	74	56.59	38.46	14	60.71	100	0	P	H
CH 116		11160	54.52	-19.48	74	62.75	38.47	14.01	60.71	100	24	P	V
5580MHz	!	11160	50.75	-3.25	54	58.98	38.47	14.01	60.71	100	14	A	V
802.11a		11395	48.07	-25.93	74	55.98	38.55	14.14	60.6	100	360	P	H
CH 140		11400	54.42	-19.58	74	62.3	38.56	14.15	60.59	100	18	P	V
5700MHz	!	11400	51.06	-2.94	54	58.94	38.56	14.15	60.59	100	18	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 100 5500MHz		5468.24	59.81	-14.19	74	55.88	31.95	8.38	36.4	100	324	P	H
		5469.36	42.71	-11.29	54	38.78	31.95	8.38	36.4	100	324	A	H
	*	5498	96.96	-	-	92.95	31.96	8.4	36.35	100	324	P	H
	*	5496	89.94	-	-	85.98	31.95	8.39	36.38	100	324	A	H
		5470	54.84	-19.16	74	50.91	31.95	8.38	36.4	100	302	P	V
		5469.36	42.95	-11.05	54	39.02	31.95	8.38	36.4	100	302	A	V
	*	5496	97.25	-	-	93.29	31.95	8.39	36.38	100	302	P	V
	*	5494	90.14	-	-	86.18	31.95	8.39	36.38	100	302	A	V
802.11n HT20 CH 116 5580MHz	*	5584	96.11	-	-	91.89	31.98	8.47	36.23	100	311	P	H
	*	5586	89.09	-	-	84.87	31.98	8.47	36.23	100	311	A	H
	*	5584	97.31	-	-	93.09	31.98	8.47	36.23	100	326	P	V
	*	5576	89.69	-	-	85.51	31.98	8.45	36.25	100	326	A	V
802.11n HT20 CH 140 5700MHz	*	5694	95.72	-	-	91.41	32.02	8.54	36.25	301	332	P	H
	*	5696	88.44	-	-	84.13	32.02	8.54	36.25	301	332	A	H
		5725.24	56.98	-17.02	74	52.65	32.04	8.57	36.28	301	332	P	H
		5725	45.61	-8.39	54	41.28	32.04	8.57	36.28	301	332	A	H
	*	5692	94.64	-	-	90.33	32.02	8.54	36.25	116	311	P	V
	*	5696	87.32	-	-	83.01	32.02	8.54	36.25	116	311	A	V
		5725.08	53.88	-20.12	74	49.55	32.04	8.57	36.28	116	311	P	V
		5725	43.91	-10.09	54	39.58	32.04	8.57	36.28	116	311	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 100 5500MHz		11000	46.78	-27.22	74	55.26	38.4	13.91	60.79	100	360	P	H
		11000	54.06	-19.94	74	62.54	38.4	13.91	60.79	100	30	P	V
	!	11000	50.55	-3.45	54	59.03	38.4	13.91	60.79	100	30	A	V
802.11n HT20 CH 116 5580MHz		11160	45.74	-28.26	74	53.97	38.47	14.01	60.71	100	0	P	H
		11160	51.33	-22.67	74	37.85	38.47	12.13	37.12	100	30	P	V
	!	11160	49.9	-4.1	54	58.13	38.47	14.01	60.71	100	30	A	V
802.11n HT20 CH 140 5700MHz		11400	45.35	-28.65	74	53.23	38.56	14.15	60.59	100	360	P	H
		11400	53.79	-20.21	74	61.67	38.56	14.15	60.59	100	18	P	V
	!	11400	50.44	-3.56	54	58.32	38.56	14.15	60.59	100	18	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 102 5510MHz		5458.48	57.95	-16.05	74	54.06	31.94	8.37	36.42	385	2	P	H
		5459.92	46.1	-7.9	54	42.21	31.94	8.37	36.42	385	2	A	H
	!	5466.64	65.7	-2.6	68.3	61.77	31.95	8.38	36.4	385	2	P	H
	*	5522	95.31	-	-	91.26	31.96	8.42	36.33	385	2	P	H
	*	5524	88.41	-	-	84.36	31.96	8.42	36.33	385	2	A	H
		5459.44	55.78	-18.22	74	51.89	31.94	8.37	36.42	332	7	P	V
		5459.44	46.98	-7.02	54	43.09	31.94	8.37	36.42	332	7	A	V
	!	5466.32	67.16	-1.14	68.3	63.23	31.95	8.38	36.4	332	7	P	V
	*	5498	95.35	-	-	91.34	31.96	8.4	36.35	332	7	P	V
	*	5498	88.48	-	-	84.47	31.96	8.4	36.35	332	7	A	V
802.11n HT40 CH 110 5550MHz	*	5564	95.94	-	-	91.81	31.97	8.44	36.28	400	2	P	H
	*	5544	88.15	-	-	84.05	31.97	8.43	36.3	400	2	A	H
	*	5552	95.53	-	-	91.4	31.97	8.44	36.28	293	9	P	V
	*	5554	88.48	-	-	84.35	31.97	8.44	36.28	293	9	A	V
802.11n HT40 CH 134 5670MHz	*	5664	93.57	-	-	89.27	32.01	8.52	36.23	400	4	P	H
	*	5662	86.65	-	-	82.35	32.01	8.52	36.23	400	4	A	H
		5727.64	49.1	-24.9	74	44.77	32.04	8.57	36.28	400	4	P	H
		5725.64	39.81	-14.19	54	35.48	32.04	8.57	36.28	400	4	A	H
	*	5658	95.18	-	-	90.88	32.01	8.52	36.23	299	16	P	V
	*	5660	88.04	-	-	83.74	32.01	8.52	36.23	299	16	A	V
		5727.16	51	-23	74	46.67	32.04	8.57	36.28	299	16	P	V
		5725.32	40.77	-13.23	54	36.44	32.04	8.57	36.28	299	16	A	V
Remark	1. No other spurious found.												
	2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 102 5510MHz		11020	53.93	-20.07	74	62.38	38.41	13.92	60.78	100	343	P	H
	!	11020	50.23	-3.77	54	58.68	38.41	13.92	60.78	100	343	A	H
		11020	46.83	-27.17	74	55.28	38.41	13.92	60.78	100	360	P	V
802.11n HT40 CH 110 5550MHz		11100	54.05	-19.95	74	62.38	38.44	13.97	60.74	100	344	P	H
	!	11100	51.69	-2.31	54	60.02	38.44	13.97	60.74	100	344	A	H
		11100	47.99	-26.01	74	56.32	38.44	13.97	60.74	100	360	P	V
802.11n HT40 CH 134 5670MHz		11340	52.8	-21.2	74	60.78	38.53	14.11	60.62	100	13	P	H
	!	11340	50.34	-3.66	54	58.32	38.53	14.11	60.62	100	13	A	H
		11340	47.38	-26.62	74	55.36	38.53	14.11	60.62	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 100 5500MHz		5464.08	56.99	-17.01	74	53.06	31.95	8.38	36.4	400	0	P	H
		5469.84	46.38	-7.62	54	42.45	31.95	8.38	36.4	400	0	A	H
	*	5502	97.65	-	-	93.64	31.96	8.4	36.35	400	0	P	H
	*	5504	90.85	-	-	86.84	31.96	8.4	36.35	400	0	A	H
		5468.88	58.36	-15.64	74	54.43	31.95	8.38	36.4	350	0	P	V
	!	5470	48.37	-5.63	54	44.44	31.95	8.38	36.4	350	0	A	V
	*	5494	97.88	-	-	93.92	31.95	8.39	36.38	350	0	P	V
	*	5496	91.08	-	-	87.12	31.95	8.39	36.38	350	0	A	V
802.11ac VHT20 CH 116 5580MHz	*	5574	98.62	-	-	94.44	31.98	8.45	36.25	294	360	P	H
	*	5576	91.6	-	-	87.42	31.98	8.45	36.25	294	360	A	H
	*	5588	99.98	-	-	95.76	31.98	8.47	36.23	351	360	P	V
	*	5584	92.58	-	-	88.36	31.98	8.47	36.23	351	360	A	V
802.11ac VHT20 CH 140 5700MHz	*	5696	97.9	-	-	93.59	32.02	8.54	36.25	393	360	P	H
	*	5694	90.73	-	-	86.42	32.02	8.54	36.25	393	360	A	H
		5725	59.63	-14.37	74	55.3	32.04	8.57	36.28	393	360	P	H
	!	5725	48.54	-5.46	54	44.21	32.04	8.57	36.28	393	360	A	H
	*	5708	97.15	-	-	92.84	32.03	8.55	36.27	390	7	P	V
	*	5704	90.32	-	-	86.01	32.03	8.55	36.27	390	7	A	V
		5725	59.6	-14.4	74	55.27	32.04	8.57	36.28	390	7	P	V
	!	5725	48.95	-5.05	54	44.62	32.04	8.57	36.28	390	7	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz

WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac		11000	55.11	-18.89	74	63.59	38.4	13.91	60.79	100	349	P	H
VHT20	!	11000	51.26	-2.74	54	59.74	38.4	13.91	60.79	100	349	A	H
CH 100		11000	46.18	-27.82	74	54.66	38.4	13.91	60.79	100	0	P	V
5500MHz													
802.11ac		11160	55.49	-18.51	74	63.72	38.47	14.01	60.71	100	341	P	H
VHT20	!	11160	51.12	-2.88	54	59.35	38.47	14.01	60.71	100	341	A	H
CH 116		11160	46.18	-27.82	74	54.41	38.47	14.01	60.71	100	0	P	V
5580MHz													
802.11ac		11400	54.48	-19.52	74	62.36	38.56	14.15	60.59	100	349	P	H
VHT20	!	11400	50.7	-3.3	54	58.58	38.56	14.15	60.59	100	349	A	H
CH 140		11400	47.12	-26.88	74	55	38.56	14.15	60.59	100	0	P	V
5700MHz													
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 102 5510MHz		5458.48	55.6	-18.4	74	51.71	31.94	8.37	36.42	338	1	P	H
		5459.76	45.57	-8.43	54	41.68	31.94	8.37	36.42	338	1	A	H
		5468.72	65.18	-3.12	68.3	61.25	31.95	8.38	36.4	338	1	P	H
	*	5524	95.48			91.43	31.96	8.42	36.33	338	1	P	H
	*	5500	88.34			84.33	31.96	8.4	36.35	338	1	A	H
		5459.92	53.7	-20.3	74	49.81	31.94	8.37	36.42	358	0	P	V
		5460.00	44.66	-9.34	54	40.77	31.94	8.37	36.42	358	0	A	V
		5468.4	64.41	-3.89	68.3	60.48	31.95	8.38	36.4	358	0	P	V
	*	5500	95.09			91.08	31.96	8.4	36.35	358	0	P	V
	*	5500	87.92			83.91	31.96	8.4	36.35	358	0	A	V
802.11ac VHT40 CH 110 5550MHz	*	5552	95.72	-	-	91.59	31.97	8.44	36.28	338	360	P	H
	*	5558	88.58	-	-	84.45	31.97	8.44	36.28	338	360	A	H
	*	5564	95.66	-	-	91.53	31.97	8.44	36.28	350	0	P	V
	*	5562	88.34	-	-	84.21	31.97	8.44	36.28	350	0	A	V
802.11ac VHT40 CH 134 5670MHz	*	5662	95.08	-	-	90.78	32.01	8.52	36.23	353	359	P	H
	*	5658	87.89	-	-	83.59	32.01	8.52	36.23	353	359	A	H
		5725.16	51.12	-22.88	74	46.79	32.04	8.57	36.28	353	359	P	H
		5725.16	41.51	-12.49	54	37.18	32.04	8.57	36.28	353	359	A	H
	*	5680	94.19	-	-	89.88	32.02	8.53	36.24	318	9	P	V
	*	5682	87.36	-	-	83.05	32.02	8.53	36.24	318	9	A	V
		5725.24	51.11	-22.89	74	46.78	32.04	8.57	36.28	318	9	P	V
		5725.08	41.77	-12.23	54	37.44	32.04	8.57	36.28	318	9	A	V
Remark	1. No other spurious found.												
	2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac		11020	53.76	-20.24	74	62.21	38.41	13.92	60.78	100	351	P	H
VHT40	!	11020	50.58	-3.42	54	59.03	38.41	13.92	60.78	100	351	A	H
CH 102 5510MHz		11020	45.57	-28.43	74	54.02	38.41	13.92	60.78	100	360	P	V
802.11ac		11100	55.26	-18.74	74	63.59	38.44	13.97	60.74	100	352	P	H
VHT40	!	11100	51.85	-2.15	54	60.18	38.44	13.97	60.74	100	352	A	H
CH 110 5550MHz		11100	46.91	-27.09	74	55.24	38.44	13.97	60.74	100	360	P	V
802.11ac		11340	52.97	-21.03	74	60.95	38.53	14.11	60.62	100	354	P	H
VHT40	!	11340	49.93	-4.07	54	57.91	38.53	14.11	60.62	100	354	A	H
CH 134 5670MHz		11340	46.76	-27.24	74	54.74	38.53	14.11	60.62	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 5470~5725MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 106 5530MHz		5469.36	60.65	-13.35	74	56.72	31.95	8.38	36.4	100	335	P	H
	!	5467.76	52.34	-1.66	54	48.41	31.95	8.38	36.4	100	335	A	H
	*	5524	91.2	-	-	87.15	31.96	8.42	36.33	100	335	P	H
	*	5534	84.34	-	-	80.24	31.97	8.43	36.3	100	335	A	H
		5738.04	47.95	-26.05	74	43.61	32.05	8.58	36.29	100	335	P	H
		5752.6	38.88	-15.12	54	34.54	32.05	8.59	36.3	100	335	A	H
		5469.84	61.5	-12.5	74	57.57	31.95	8.38	36.4	100	324	P	V
	!	5467.76	52.83	-1.17	54	48.9	31.95	8.38	36.4	100	324	A	V
	*	5510	91.78	-	-	87.77	31.96	8.4	36.35	100	324	P	V
	*	5524	84.66	-	-	80.61	31.96	8.42	36.33	100	324	A	V
		5758.28	47.48	-26.52	74	43.14	32.05	8.59	36.3	100	324	P	V
		5741.56	39.02	-14.98	54	34.68	32.05	8.58	36.29	100	324	A	V
802.11ac VHT80 CH 122 5610MHz		5455.76	46.42	-27.58	74	42.53	31.94	8.37	36.42	253	330	P	H
		5466.48	39.17	-14.83	54	35.24	31.95	8.38	36.4	253	330	A	H
	*	5624	92.9	-	-	88.63	31.99	8.49	36.21	253	330	P	H
	*	5604	86.4	-	-	82.13	31.99	8.48	36.2	253	330	A	H
		5727	47.1	-26.9	74	42.77	32.04	8.57	36.28	253	330	P	H
		5731.88	40.13	-13.87	54	35.8	32.04	8.57	36.28	253	330	A	H
		5469.52	47.58	-26.42	74	43.65	31.95	8.38	36.4	126	322	P	V
		5467.92	39.52	-14.48	54	35.59	31.95	8.38	36.4	126	322	A	V
	*	5604	92.82	-	-	88.55	31.99	8.48	36.2	126	322	P	V
	*	5584	86.28	-	-	82.06	31.98	8.47	36.23	126	322	A	V
		5725.24	47.28	-26.72	74	42.95	32.04	8.57	36.28	126	322	P	V
		5726.84	40.34	-13.66	54	36.01	32.04	8.57	36.28	126	322	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

**Band 3 5470~5725MHz****WIFI 802.11ac VHT80 (Harmonic @ 3m)**

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80		11060	45.84	-28.16	74	54.22	38.43	13.95	60.76	100	360	P	H
CH 106 5530MHz		11060	50.81	-23.19	74	59.19	38.43	13.95	60.76	100	0	P	V
802.11ac VHT80		11220	44.21	-29.79	74	52.36	38.49	14.04	60.68	100	360	P	H
CH 122 5610MHz		11220	50.47	-23.53	74	58.62	38.49	14.04	60.68	100	0	P	V
Remark	3. No other spurious found. 4. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 144 5720MHz	*	5716	96.97	-	-	92.66	32.03	8.55	36.27	301	360	P	H
	*	5714	89.95	-	-	85.64	32.03	8.55	36.27	301	360	A	H
	*	5716	97.33	-	-	93.02	32.03	8.55	36.27	100	311	P	V
	*	5716	89.47	-	-	85.16	32.03	8.55	36.27	100	311	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a		11440	45.72	-28.28	74	53.55	38.57	14.17	60.57	100	360	P	H
CH 144		11440	54.33	-19.67	74	62.16	38.57	14.17	60.57	102	15	P	V
5720MHz		11440	51.25	-2.75	54	59.08	38.57	14.17	60.57	102	15	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n	*	5714	95.37	-	-	91.06	32.03	8.55	36.27	302	334	P	H
HT20	*	5712	88.04	-	-	83.73	32.03	8.55	36.27	302	334	A	H
CH 144	*	5718	95.04	-	-	90.71	32.04	8.57	36.28	163	337	P	V
5720MHz	*	5714	87.46	-	-	83.15	32.03	8.55	36.27	163	337	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n		11440	46.68	-27.32	74	54.51	38.57	14.17	60.57	100	360	P	H
HT20		11440	54.87	-19.13	74	62.7	38.57	14.17	60.57	100	19	P	V
CH 144 5720MHz		11440	51.42	-2.58	54	59.25	38.57	14.17	60.57	100	19	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n	*	5696	94.54	-	-	90.23	32.02	8.54	36.25	338	4	P	H
HT40	*	5698	86.24	-	-	81.93	32.02	8.54	36.25	338	4	A	H
CH 142	*	5700	93.54	-	-	89.23	32.02	8.54	36.25	327	14	P	V
5710MHz	*	5698	86.71	-	-	82.4	32.02	8.54	36.25	327	14	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n		11420	54.62	-19.38	74	62.47	38.57	14.16	60.58	110	355	P	H
HT40		11420	51.32	-2.68	54	59.17	38.57	14.16	60.58	110	355	A	H
CH 142 5710MHz		11420	48.38	-25.62	74	56.23	38.57	14.16	60.58	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac	*	5716	96.95	-	-	92.64	32.03	8.55	36.27	396	12	P	H
VHT20	*	5716	90.07	-	-	85.76	32.03	8.55	36.27	396	12	A	H
CH 144	*	5716	97.34	-	-	93.03	32.03	8.55	36.27	323	14	P	V
5720MHz	*	5714	90.41	-	-	86.1	32.03	8.55	36.27	323	14	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac		11440	54.37	-19.63	74	62.64	38.57	10.04	56.88	100	355	P	H
VHT20		11440	51.09	-2.91	54	59.36	38.57	10.04	56.88	100	355	A	H
CH 144 5720MHz		11440	48.14	-25.86	74	55.97	38.57	14.17	60.57	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac	*	5698	96.82	-	-	92.8	32.02	8.25	36.25	309	0	P	H
VHT40	*	5698	88.18	-	-	84.16	32.02	8.25	36.25	309	0	A	H
CH 142	*	5696	98.37	-	-	94.35	32.02	8.25	36.25	319	10	P	V
5710MHz	*	5698	88.32	-	-	84.3	32.02	8.25	36.25	319	10	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac		11420	55.53	-18.47	74	63.8	38.57	10.01	56.85	100	347	P	H
VHT40													
CH 142		11420	51.36	-2.64	54	59.63	38.57	10.01	56.85	100	347	A	H
5710MHz													
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac	*	5664	92.68	-	-	88.71	32.01	8.19	36.23	297	336	P	H
VHT80	*	5694	85.4	-	-	81.38	32.02	8.25	36.25	297	336	A	H
CH 138	*	5694	91.07	-	-	87.05	32.02	8.25	36.25	100	337	P	V
5690MHz	*	5694	84.39	-	-	80.37	32.02	8.25	36.25	100	337	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac		11380	47.71	-26.29	74	55.99	38.55	9.95	56.78	100	360	P	H
VHT80		11380	54.07	-19.93	74	62.35	38.55	9.95	56.78	100	14	P	V
CH 138 5690MHz		11380	51.04	-2.96	54	59.32	38.55	9.95	56.78	100	14	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



For USB Cable 2(Charging from Adapter) + Battery 2 + Earphone

15E band 3 - 5470~5725MHz

WIFI 802.11n VHT40 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n VHT20 CH 102 5510MHz	*	5516	94.38	-	-	90.49	31.96	8.26	36.33	236	354	P	H
	*	5514	87.4	-	-	83.51	31.96	8.26	36.33	236	354	A	H
		5458.96	55.11	-18.89	74	51.21	31.94	8.38	36.42	236	354	P	H
		5460	46.41	-7.59	54	42.51	31.94	8.38	36.42	236	354	A	H
		5468.72	63.71	-4.59	68.3	59.81	31.95	8.35	36.4	236	354	P	H
	*	5520	96.36	-	-	92.47	31.96	8.26	36.33	238	19	P	V
	*	5498	89.41	-	-	85.51	31.96	8.29	36.35	238	19	A	V
		5458.48	58.12	-15.88	74	54.22	31.94	8.38	36.42	238	19	P	V
		5460	48.61	-5.39	54	44.71	31.94	8.38	36.42	238	19	A	V
		5469.2	67.32	-0.98	68.3	63.42	31.95	8.35	36.4	238	19	P	V



15E band 3 - 5470~5725MHz

WIFI 802. 11ac VHT40 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n		11020	53	-21	74	61.35	38.41	9.27	56.03	100	214	P	H
VHT20		11020	51.88	-2.12	54	60.23	38.41	9.27	56.03	100	214	A	H
CH 102 5510MHz		11020	49.9	-24.1	74	58.25	38.41	9.27	56.03	100	85	P	V
Remark	3. No other spurious found. 4. All results are PASS against Peak and Average limit line.												



Emission below 1GHz

WIFI 802.11n VHT40

(LF @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n VHT40 LF		55.22	35.78	-4.22	40	59.89	7.6	0.89	32.6	100	125	P	H
		74.62	27.04	-12.96	40	49.38	9.1	1.05	32.49	-	-	P	H
		166.77	30.61	-12.89	43.5	48.72	12.77	1.56	32.44	-	-	P	H
		286.08	33.12	-12.88	46	48.84	14.43	2.02	32.17	-	-	P	H
		413.15	28.42	-17.58	46	40.92	17.11	2.51	32.12	-	-	P	H
		470.38	26.9	-19.1	46	38.62	17.76	2.71	32.19	-	-	P	H
		74.62	33.92	-6.08	40	56.26	9.1	1.05	32.49	100	65	P	V
		105.66	32.91	-10.59	43.5	50.79	13.18	1.24	32.3	-	-	P	V
		227.88	27.29	-18.71	46	45.8	12.09	1.73	32.33	-	-	P	V
		288.02	26.18	-19.82	46	41.84	14.5	2.04	32.2	-	-	P	V
		412.18	22.77	-23.23	46	35.28	17.1	2.51	32.12	-	-	P	V
		451.95	23.89	-22.11	46	35.99	17.43	2.65	32.18	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Note symbol

*	Fundamental Frequency which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is over limit line.
P/A	P eak or A verage
H/V	H orizontal or V ertical



A calculation example for radiated spurious emission is shown as below:

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 01													
2412MHz		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Level(dBμV/m) =

Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

2. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

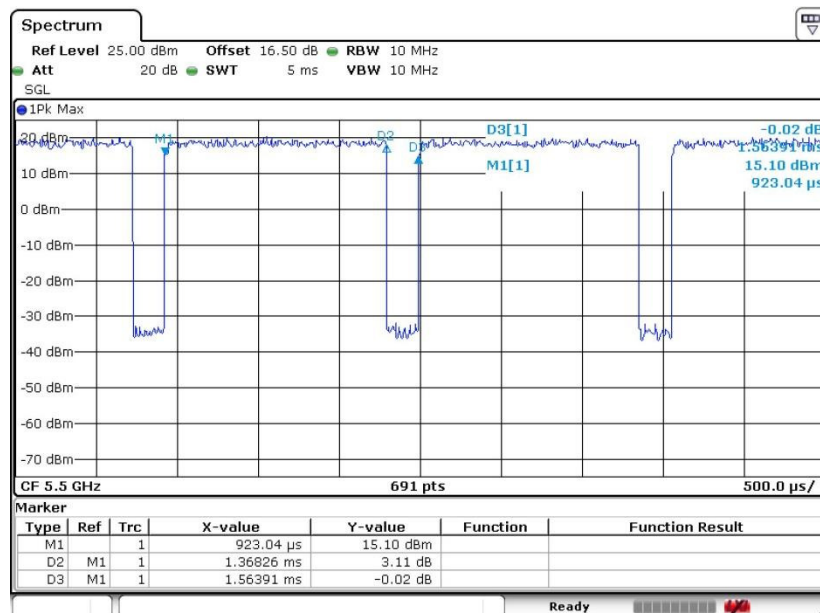
= -10.46(dB)

Both peak and average measured complies with the limit line, so test result is “PASS”.

Appendix C. Duty Cycle Plots

Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
802.11a	87.49	1.37	0.73	1kHz
802.11n HT20	87.00	1.28	0.78	1kHz
802.11n HT40	76.52	0.64	1.57	3kHz
802.11ac VHT20	83.11	0.97	1.03	3kHz
802.11ac VHT40	71.07	0.49	2.04	3kHz
802.11ac VHT80	54.96	0.25	4.07	10kHz

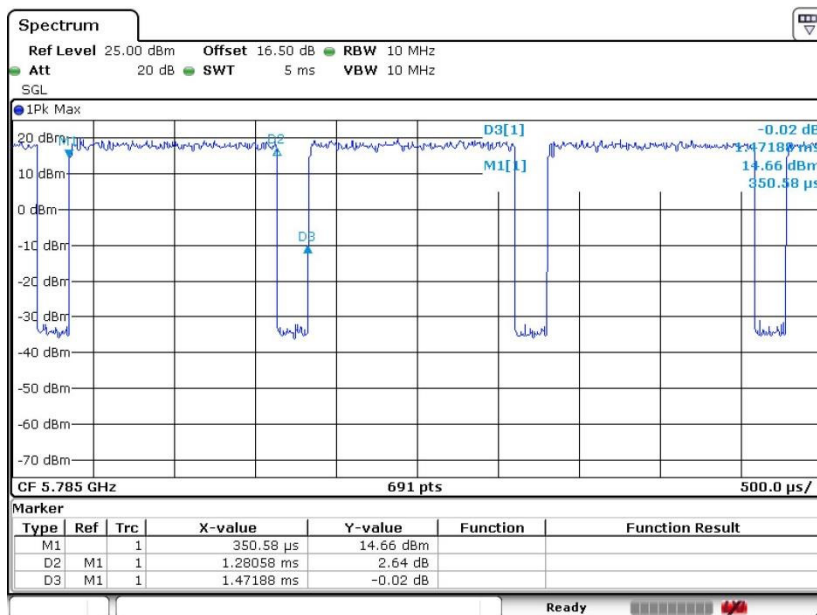
802.11a



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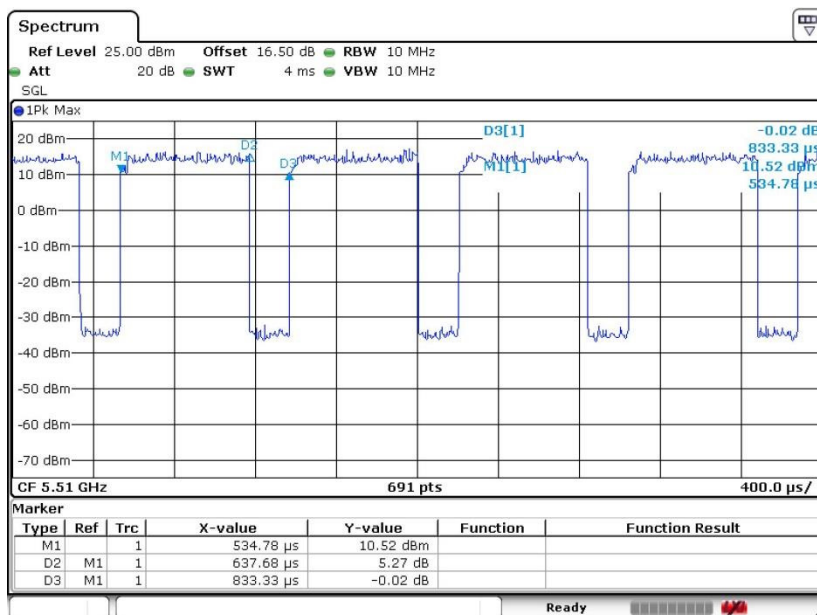


802.11n HT20



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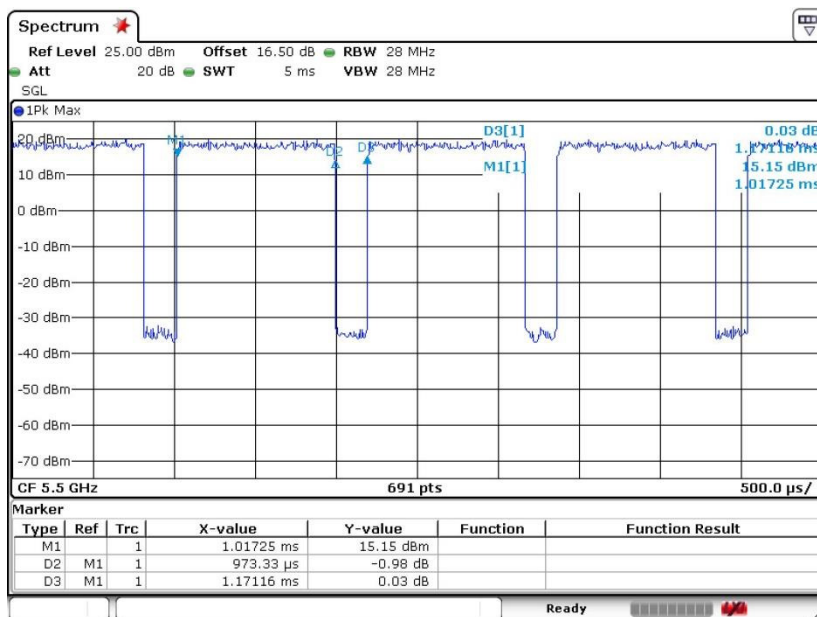
802.11n HT40



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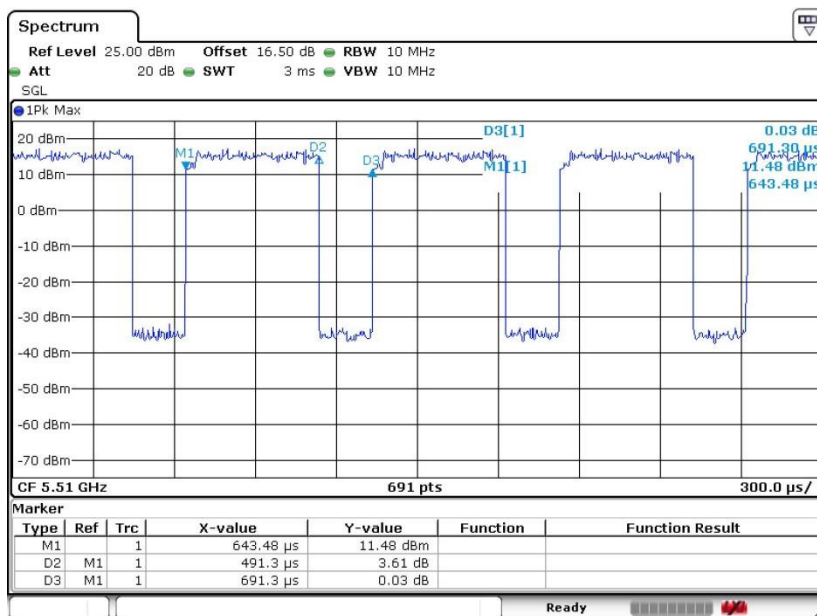


802.11ac VHT20



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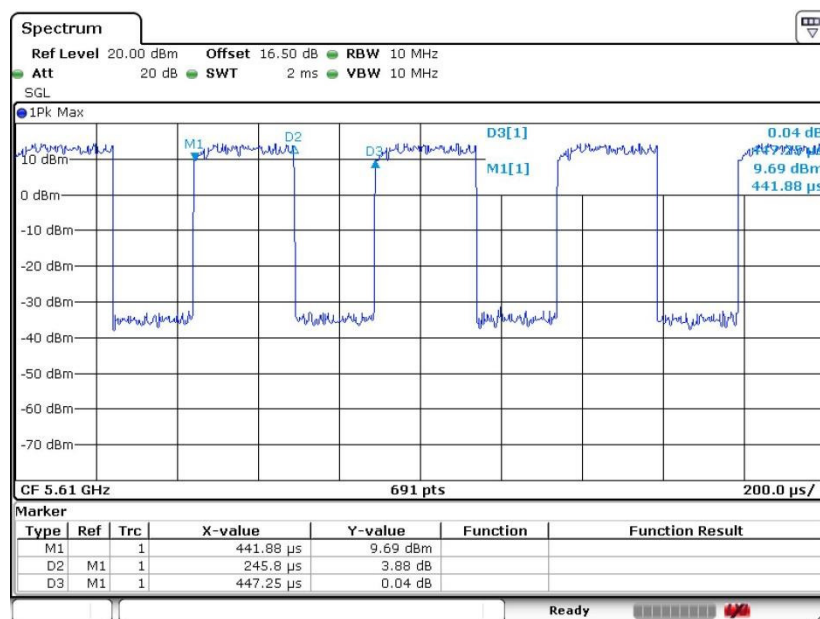
802.11ac VHT40



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802.11ac VHT80



Date: 14 JUN 2016 01:01:38