



FCC RF Test Report

APPLICANT : LENOVO (SHANGHAI) ELECTRONICS
TECHNOLOGY CO LTD.
EQUIPMENT : Lenovo Mobile Phone
BRAND NAME : Lenovo
MODEL NAME : Lenovo PB2-670Y
FCC ID : O57PB2670Y
STANDARD : FCC Part 15 Subpart E §15.407
CLASSIFICATION : (NII) Unlicensed National Information Infrastructure

The product was received on May 13, 2016 and testing was completed on Jun. 22, 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.

Prepared by: James Huang / Manager



Approved by: Jones Tsai / Manager

SPORTON INTERNATIONAL (KUNSHAN) INC.
No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P. R. China



TABLE OF CONTENTS

- 1 GENERAL DESCRIPTION 5**
 - 1.1 Applicant 5
 - 1.2 Manufacturer 5
 - 1.3 Product Feature of Equipment Under Test 5
 - 1.4 Product Specification of Equipment Under Test 6
 - 1.5 Component List 7
 - 1.6 Modification of EUT 7
 - 1.7 Testing Location 7
 - 1.8 Applicable Standards 8

- 2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST 9**
 - 2.1 Carrier Frequency Channel 9
 - 2.2 Pre-Scanned RF Power 11
 - 2.3 Test Mode 13
 - 2.4 Connection Diagram of Test System 16
 - 2.5 Support Unit used in test configuration and system 17
 - 2.6 EUT Operation Test Setup 17
 - 2.7 Measurement Results Explanation Example 17

- 3 TEST RESULT 18**
 - 3.1 26dB & 99% Occupied Bandwidth Measurement 18
 - 3.2 Maximum Conducted Output Power Measurement 20
 - 3.3 Power Spectral Density Measurement 25
 - 3.4 Unwanted Radiated Emission Measurement 28
 - 3.5 AC Conducted Emission Measurement 33
 - 3.6 Frequency Stability Measurement 37
 - 3.7 Automatically Discontinue Transmission 38
 - 3.8 Antenna Requirements 39

- 4 LIST OF MEASURING EQUIPMENTS 40**

- 5 UNCERTAINTY OF EVALUATION 41**

- APPENDIX A. CONDUCTED TEST RESULTS**

- APPENDIX B. RADIATED TEST RESULTS**

- APPENDIX C. DUTY CYCLE PLOTS**

- APPENDIX D. SETUP PHOTOGRAPHS**



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	≤ -17, -27 dBm (depend on band)&15.209(a)	Pass	Under limit 7.00 dB at 5725.000 MHz
3.5	15.207	RSS-Gen 8.8	AC Conducted Emission	15.207(a)	Pass	Under limit 11.66 dB at 17.940 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

LENOVO (SHANGHAI) ELECTRONICS TECHNOLOGY CO LTD.

NO 68 BUILDING 199 FENJU RD, CHINA (SHANGHAI) PILOT FREE TRADE ZONE, SHANGHAI, 200131 CHINA

1.2 Manufacturer

Lenovo PC HK Limited

23/F, Lincoln House, Taikoo Place 979 King's Road, Quarry Bay, Hong Kong

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Lenovo Mobile Phone
Brand Name	Lenovo
Model Name	Lenovo PB2-670Y
FCC ID	O57PB2670Y
EUT supports Radios application	GSM/GPRS/EGPRS/WCDMA/HSPA/DC-HSDPA/HSPA+/LTE/ 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
IMEI Code	Conducted: NA Radiation: Sample 1:860995030005458/860995030006654 Conduction: Sample 1:860995030006266/860995030007462 Sample 2:860995030005292/860995030006498
HW Version	LenovoPad PB2_670Y
SW Version	PB2-670Y_160904
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	<p><5180 MHz ~ 5240 MHz> 802.11a : 15.04 dBm / 0.0319 W 802.11n HT20 : 14.10 dBm / 0.0257 W 802.11n HT40 : 14.46 dBm / 0.0279 W 802.11ac VHT20 : 11.26 dBm / 0.0134 W 802.11ac VHT40 : 11.47 dBm / 0.0140 W 802.11ac VHT80 : 11.14 dBm / 0.0130 W</p> <p><5260 MHz ~ 5320 MHz> 802.11a : 15.30 dBm / 0.0339 W 802.11n HT20 : 14.20 dBm / 0.0263 W 802.11n HT40 : 14.46 dBm / 0.0279 W 802.11ac VHT20 : 11.36 dBm / 0.0137 W 802.11ac VHT40 : 11.35 dBm / 0.0136 W 802.11ac VHT80 : 11.11 dBm / 0.0129 W</p> <p><5500 MHz ~ 5700 MHz> 802.11a : 15.69 dBm / 0.0371 W 802.11n HT20 : 14.54 dBm / 0.0284 W 802.11n HT40 : 15.14 dBm / 0.0327 W 802.11ac VHT20 : 11.61 dBm / 0.0145 W 802.11ac VHT40 : 12.12 dBm / 0.0163 W 802.11ac VHT80 : 11.26 dBm / 0.0134 W</p>
99% Occupied Bandwidth	<p><5180 MHz ~ 5240 MHz> 802.11a : 17.78 MHz 802.11n HT20 : 18.23 MHz 802.11n HT40 : 36.46 MHz 802.11ac VHT20: 18.03 MHz 802.11ac VHT40 : 36.16 MHz 802.11ac VHT80 : 75.04 MHz</p> <p><5260 MHz ~ 5320 MHz> 802.11a : 17.83 MHz 802.11n HT20 : 18.33 MHz 802.11n HT40 : 36.46 MHz 802.11ac VHT20: 18.03 MHz 802.11ac VHT40 : 36.06 MHz 802.11ac VHT80 : 75.04 MHz</p> <p><5500 MHz ~ 5700 MHz> 802.11a : 17.93 MHz 802.11n HT20 : 18.23 MHz 802.11n HT40 : 36.26 MHz 802.11ac VHT20: 18.08 MHz 802.11ac VHT40 : 36.26 MHz 802.11ac VHT80 : 75.16 MHz</p>
Antenna Type	PIFA Antenna
Antenna Gain	<p><5180 MHz ~ 5240 MHz>: -5.00 dBi <5260 MHz ~ 5320 MHz>: -5.00 dBi <5500 MHz ~ 5700 MHz>: -5.00 dBi</p>
Type of Modulation	802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)



1.5 Component List

Note: There are two types of EUT, the details refer the following table. According to the difference, we evaluate is not affect RF performance, so only choose sample 1 to perform RF test.

Component	Sample 1	Sample 2
LCM	Tianma	Oflim
	TL064VVXP02-00IPS(Golden)	MCF-065-2517-02 IPS(Golden)
	TL064VVXP01-00IPS(Black)	MCF-065-2517-01 IPS(Black)
Back_camera	Sunny Y13S03A-200	GuangBao 2-52-13147-00A
Battery	SUCD+ATL L16D1P32	XWD+Coslight L16D1P32

1.6 Modification of EUT

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

1.7 Testing Location

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.	
	TH01-KS	CO01-KS

Test Site	SPORTON INTERNATIONAL (SHENZHEN) INC.	
Test Site Location	No. 3 Building, the third floor of south, Shahe River west, Fengzeyuan warehouse, Nanshan District, Shenzhen, Guangdong, P. R. China TEL: +86-755- 3320-2398	
Test Site No.	Sporton Site No.	FCC/IC Registration No.
	03CH03-SZ	565805/4086F

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
- ♦ IC RSS-247 Issued 1
- ♦ IC RSS-Gen Issue 4

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 (X plane) 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	120	5600
	102	5510	122	5610
	104	5520	124	5620
	106	5530	126	5630
	108	5540	128	5640
	110	5550	132	5660
	112	5560	134	5670
	116	5580	136	5680
	118	5590	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	15.04	CH 36	14.97	14.95	15.02	14.90	15.00	14.96	14.70
CH 44	5220	14.98								
CH 48	5240	14.94								
CH 52	5260	15.02	CH 64	15.23	15.17	15.18	15.20	15.22	15.24	15.16
CH 60	5300	15.18								
CH 64	5320	15.30								
CH 100	5500	15.69	CH 100	15.43	15.41	15.60	15.58	15.49	15.54	15.36
CH 116	5580	14.92								
CH 140	5700	15.50								

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	14.10	CH 36	14.01	14.07	14.05	14.02	13.97	13.96	14.04
CH 44	5220	14.03								
CH 48	5240	13.98								
CH 52	5260	14.06	CH 64	14.11	14.05	14.12	14.05	14.10	14.07	14.04
CH 60	5300	14.03								
CH 64	5320	14.20								
CH 100	5500	14.54	CH 100	14.24	14.52	14.49	14.43	14.33	14.25	14.28
CH 116	5580	14.26								
CH 140	5700	14.38								

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	14.46	CH 38	14.36	14.43	14.25	14.30	14.18	14.27	14.13
CH 46	5230	14.33								
CH 54	5270	14.42	CH 62	14.45	14.36	14.35	14.27	14.18	14.33	14.03
CH 62	5310	14.46								
CH 102	5510	14.52	CH 134	15.07	14.96	14.86	15.00	14.82	15.10	14.88
CH 110	5550	14.34								
CH 134	5670	15.14								



WLAN 5GHz 802.11ac VHT20 Average Power (dBm)											
Power vs. Channel			Power vs. Data Rate								
Channel	Frequency (MHz)	MCS Index	Channel	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8
		MCS0									
CH 36	5180	11.26	CH 36	11.09	11.08	11.18	11.22	11.07	10.99	11.02	11.09
CH 44	5220	11.16									
CH 48	5240	11.12									
CH 52	5260	11.22	CH 64	11.29	11.22	11.32	11.28	11.17	11.18	11.25	11.06
CH 60	5300	11.19									
CH 64	5320	11.36									
CH 100	5500	11.61	CH 100	11.36	11.46	11.45	11.39	11.48	11.35	11.43	11.26
CH 116	5580	11.28									
CH 140	5700	11.47									

WLAN 5GHz 802.11ac VHT40 Average Power (dBm)												
Power vs. Channel			Power vs. Data Rate									
Channel	Frequency (MHz)	MCS Index	Channel	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
		MCS0										
CH 38	5190	11.47	CH 38	11.39	11.28	11.26	11.19	11.02	11.08	11.06	10.83	10.80
CH 46	5230	11.41										
CH 54	5270	11.31	CH 62	11.22	11.17	11.19	11.04	11.04	11.00	11.09	10.90	10.70
CH 62	5310	11.35										
CH 102	5510	11.55	CH 134	12.09	12.11	11.78	11.59	11.58	11.61	11.67	11.47	11.49
CH 110	5550	11.34										
CH 134	5670	12.12										

WLAN 5GHz 802.11ac VHT80 Average Power (dBm)												
Power vs. Channel			Power vs. Data Rate									
Channel	Frequency (MHz)	MCS Index	Channel	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
		MCS0										
CH 42	5210	11.14	CH 42	11.01	11.06	10.92	10.87	11.01	10.90	10.96	11.00	10.93
CH 58	5290	11.11	CH 58	11.04	10.93	10.95	10.92	10.90	10.96	10.93	10.90	10.83
CH 106	5530	11.26	CH 106	11.01	11.00	11.04	10.91	10.96	10.90	10.98	11.19	11.16
CH 122	5610	11.22										



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	<p>Mode 1 : GSM850 Idle + Bluetooth Link + WLAN Link (5GHz) + Earphone + USB Cable (Charging from Adapter 1) + Battery 1 + SIM1 for Sample 1</p> <p>Mode 2 : GSM850 Idle + Bluetooth Link + WLAN Link (5GHz) + Earphone + USB Cable (Charging from Adapter 2) + Battery 2 + SIM1 for Sample 2</p>
<p>Remark:</p> <ol style="list-style-type: none"> For Radiated TCs, the tests were performed with Adapter 1, Earphone, Battery 1, SIM1 and USB Cable for Sample 1. The worst case of conducted emission is mode 2; 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

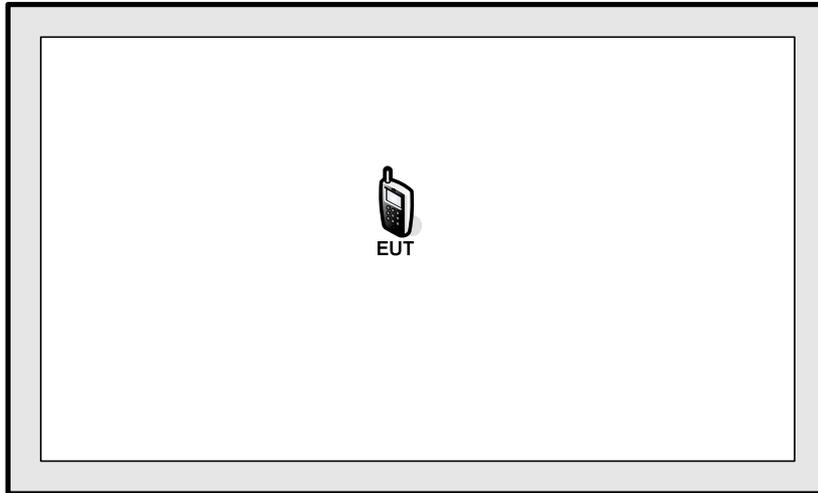


Ch. #		Band I : 5180-5240 MHz	Band II : 5260-5320 MHz	Band III : 5500-5700MHz
		802.11ac VHT40	802.11ac VHT40	802.11ac VHT40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134
Straddle Channel		-	-	142

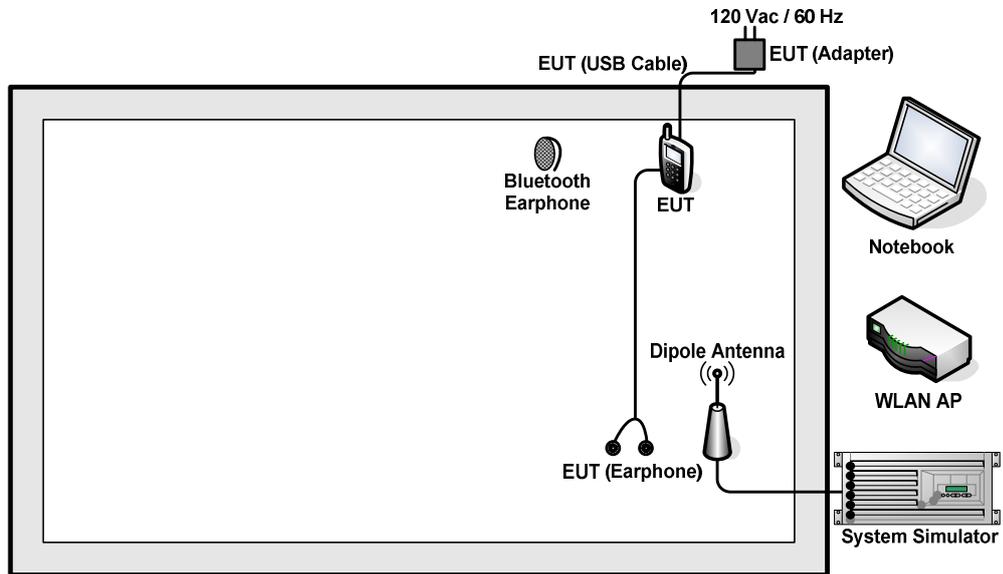
Ch. #		Band I : 5180-5240 MHz	Band II : 5260-5320 MHz	Band III : 5500-5700MHz
		802.11ac VHT80	802.11ac VHT80	802.11ac VHT80
L	Low	-	-	106
M	Middle	42	58	-
H	High	-	-	122
Straddle Channel		-	-	138

2.4 Connection Diagram of Test System

<Radiated Emission Mode>



<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	R&S	CMU 200	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 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.

Offset = RF cable loss.

Following shows an offset computation example with cable loss 7.0 dB.

Offset (dB) = RF cable loss(dB).

= 7.0 (dB)

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.

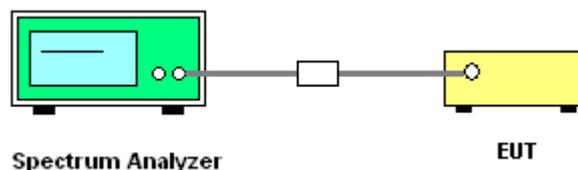
3.1.2 Measuring Instruments

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.

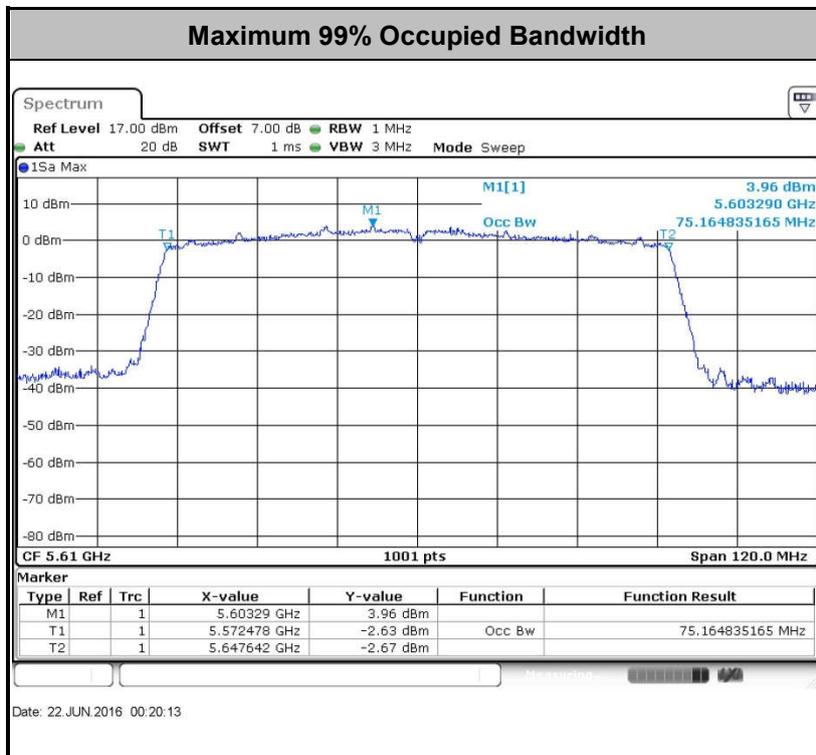
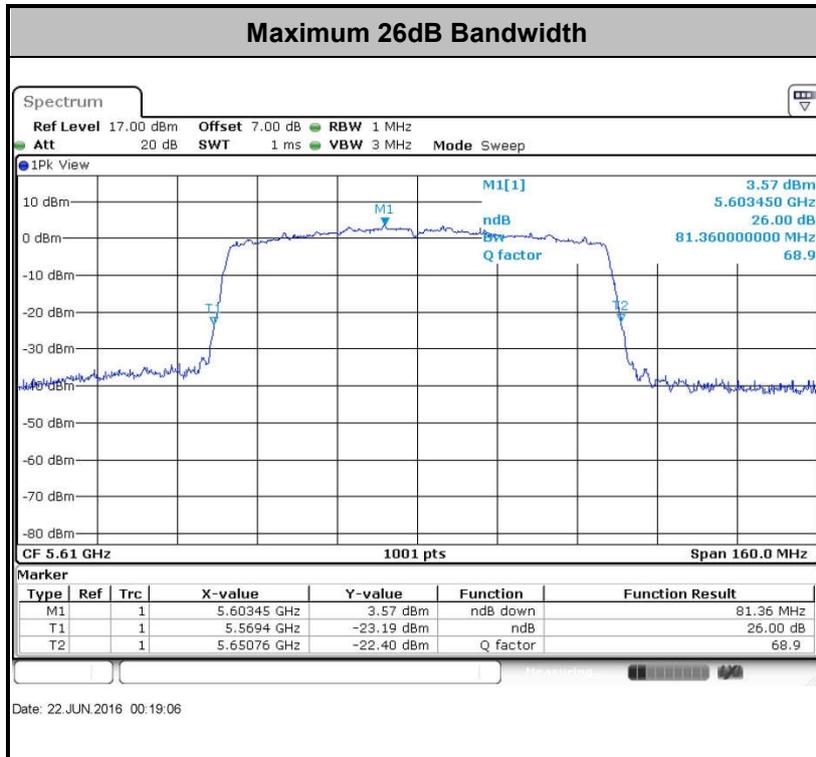
3.1.4 Test Setup





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 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):

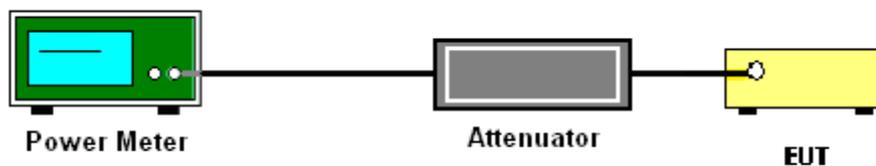
1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit continuously with a consistent duty cycle at its maximum power control level.
3. Measure the average power of the transmitter, and the average power is corrected with duty factor, $10 \log(1/x)$, where x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

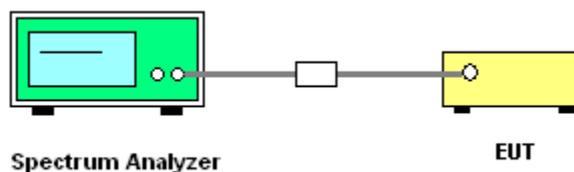
Compute power by integrating the spectrum across the 99% occupied bandwidth of the signal using the instrument's band power measurement function.

3.2.4 Test Setup

For normal channel:



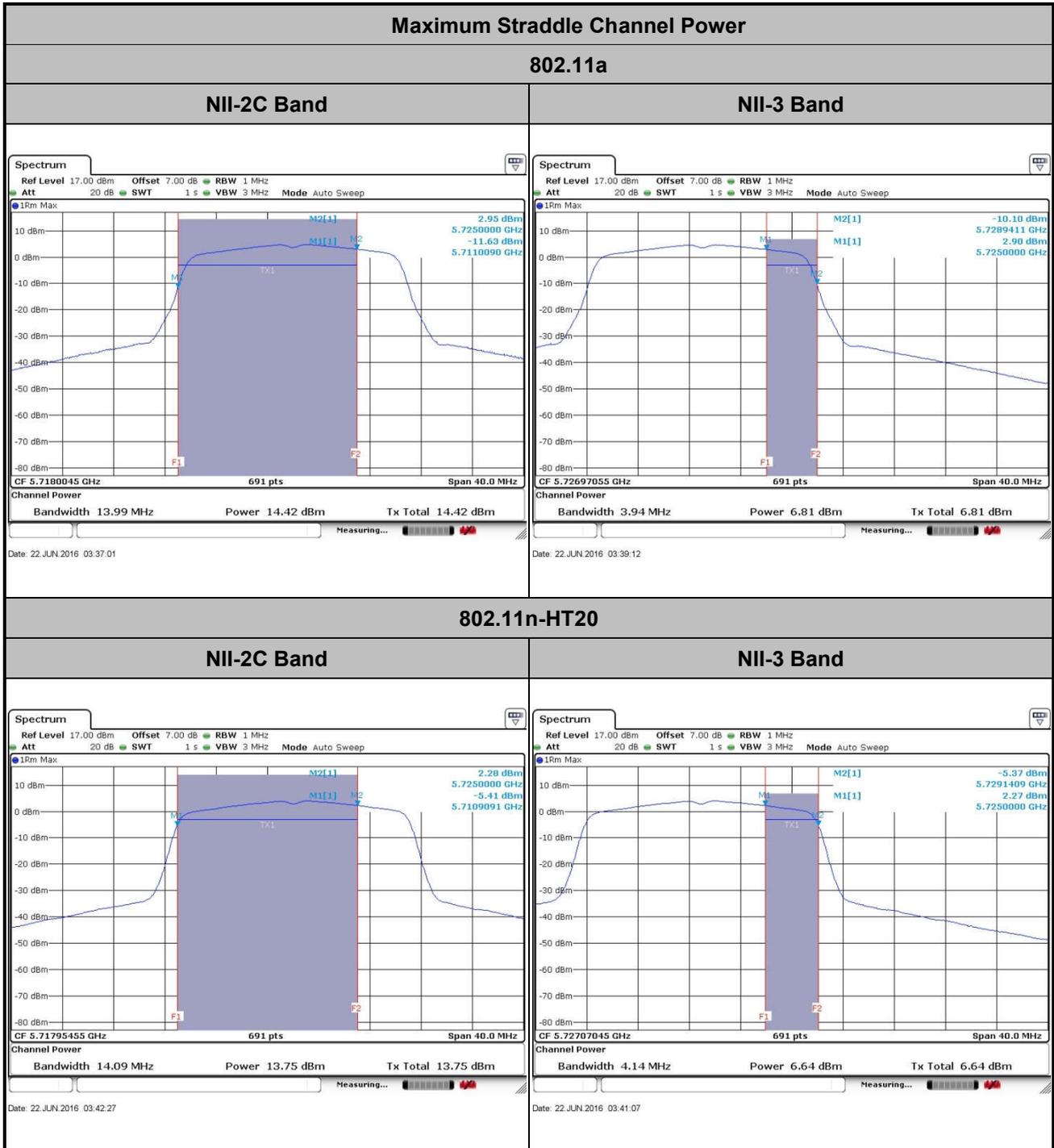
For straddle channel:





3.2.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.



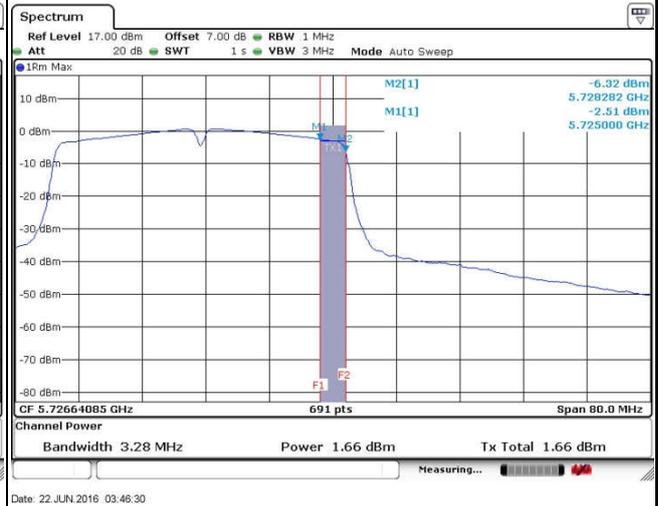
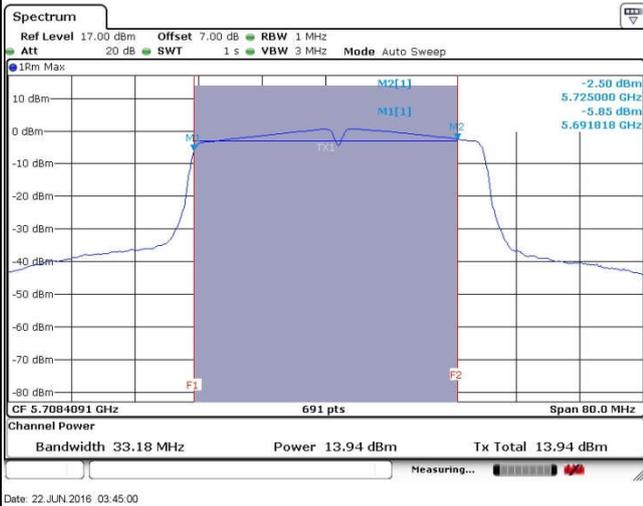


Maximum Straddle Channel Power

802.11n-HT40

NII-2C Band

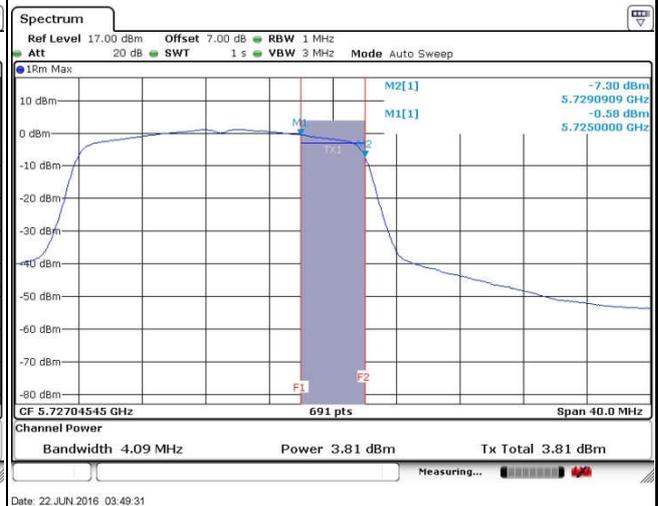
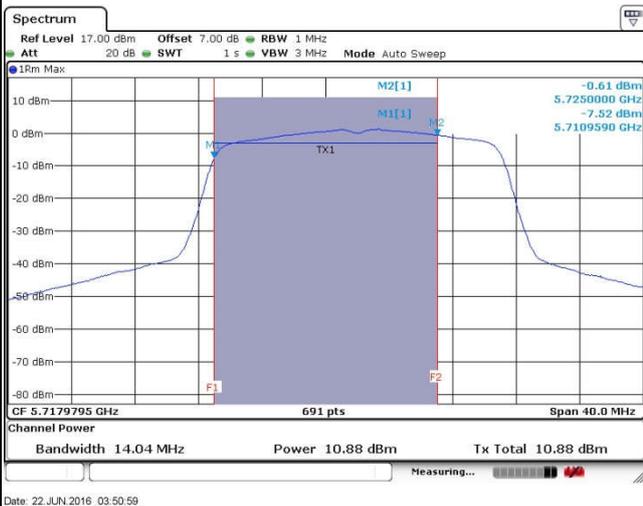
NII-3 Band



802.11ac VHT20

NII-2C Band

NII-3 Band



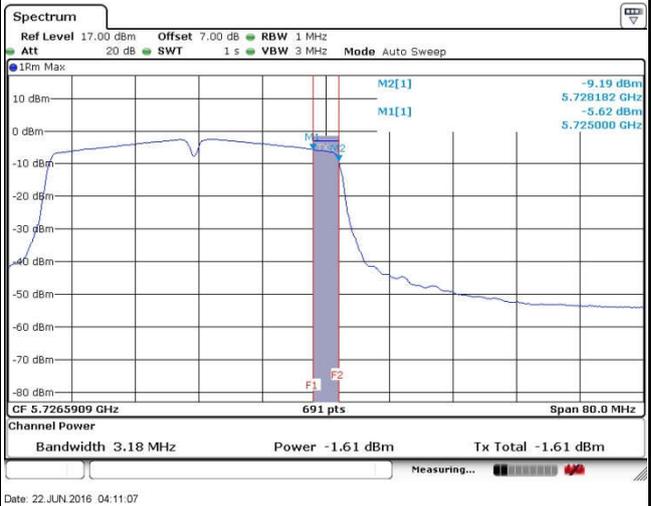
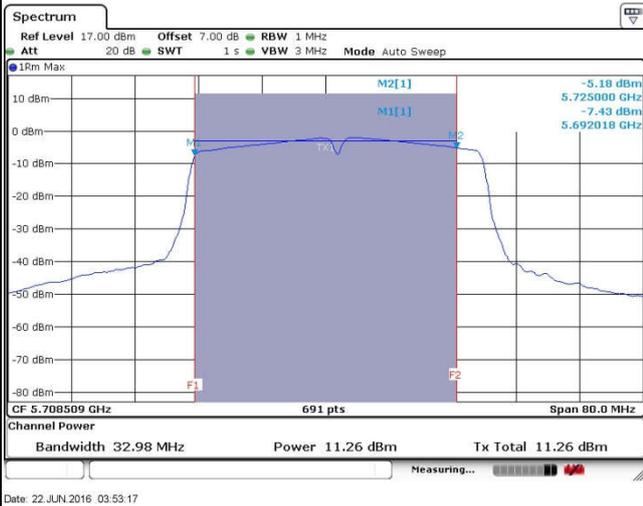


Maximum Straddle Channel Power

802.11ac VHT40

NII-2C Band

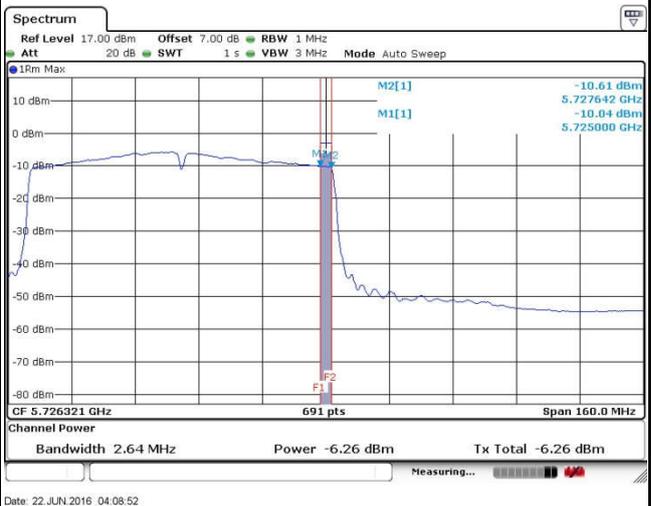
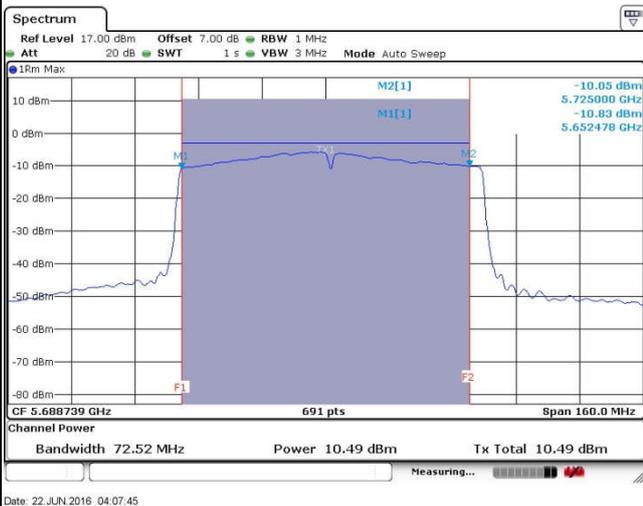
NII-3 Band



802.11ac VHT80

NII-2C Band

NII-3 Band





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

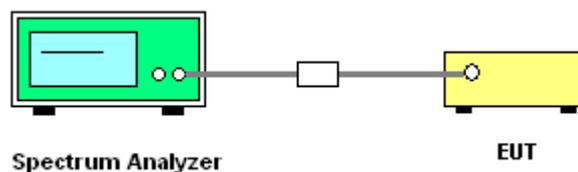
The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r02.
Section F) Maximum power spectral density.

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.

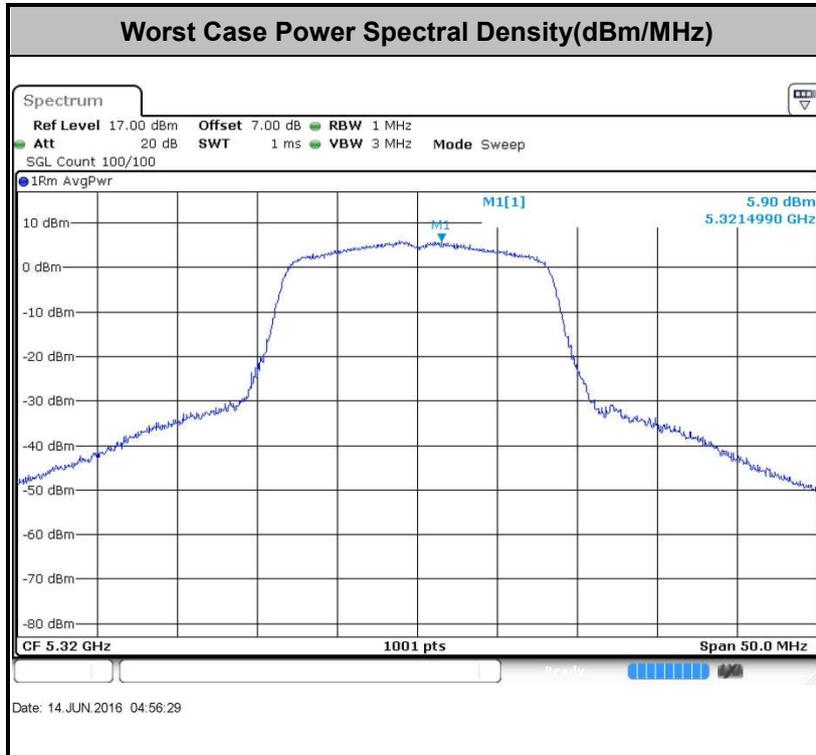
3.3.4 Test Setup





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 Part15.205.

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 Part15.205 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.

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



EIRP (dBm)	Field Strength at 3m (dBµV/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 ≥ 3 MHz
- Detector = Peak
- Sweep time = auto
- Trace mode = max hold

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

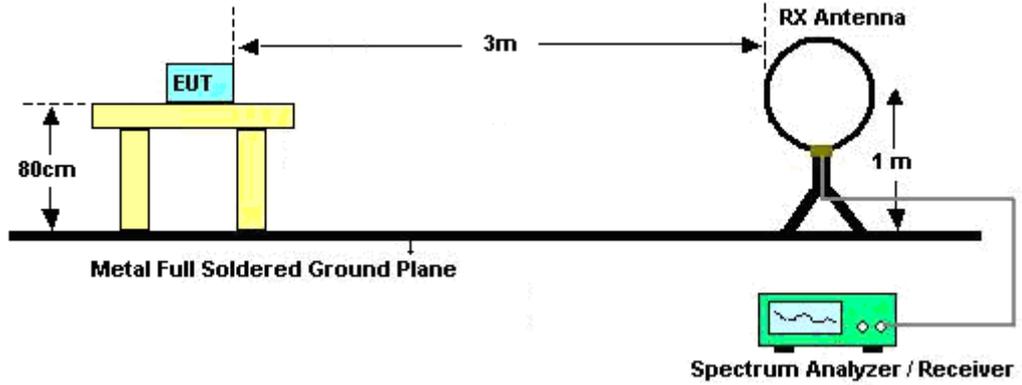
- RBW = 1 MHz
- VBW = 10 Hz, when duty cycle is no less than 98 percent.
- VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.



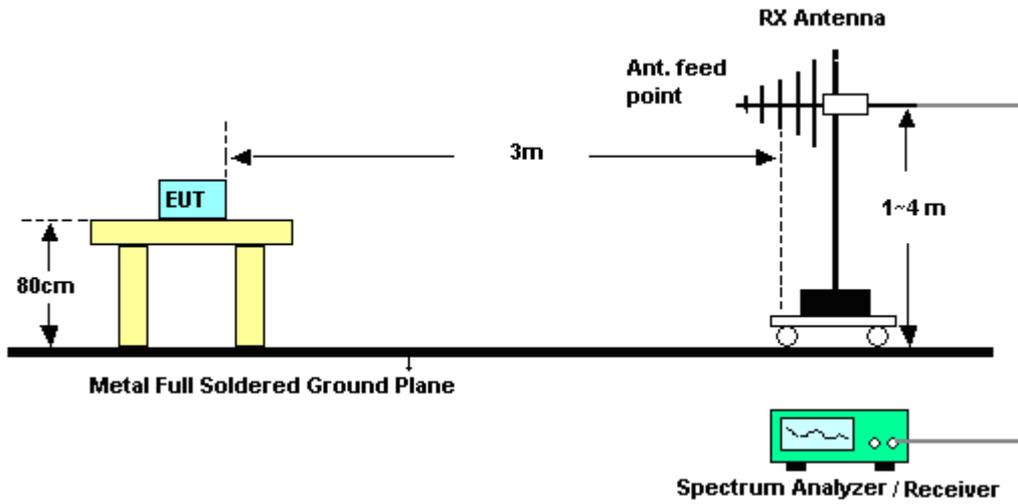
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband 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

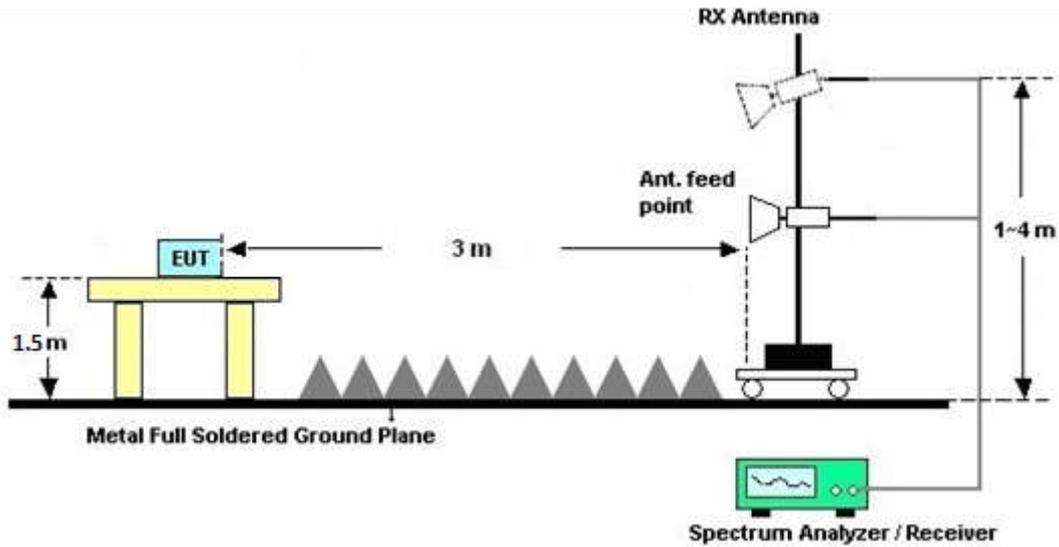
For radiated emissions below 30MHz



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 (dBµV)	
	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.

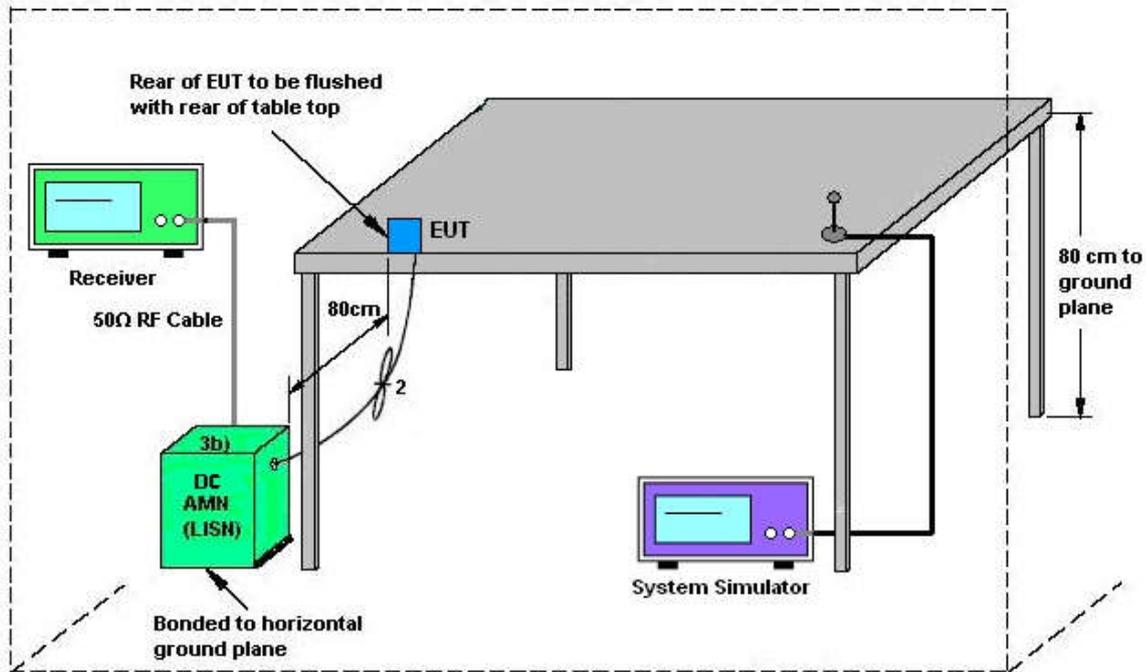
3.5.2 Measuring Instruments

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

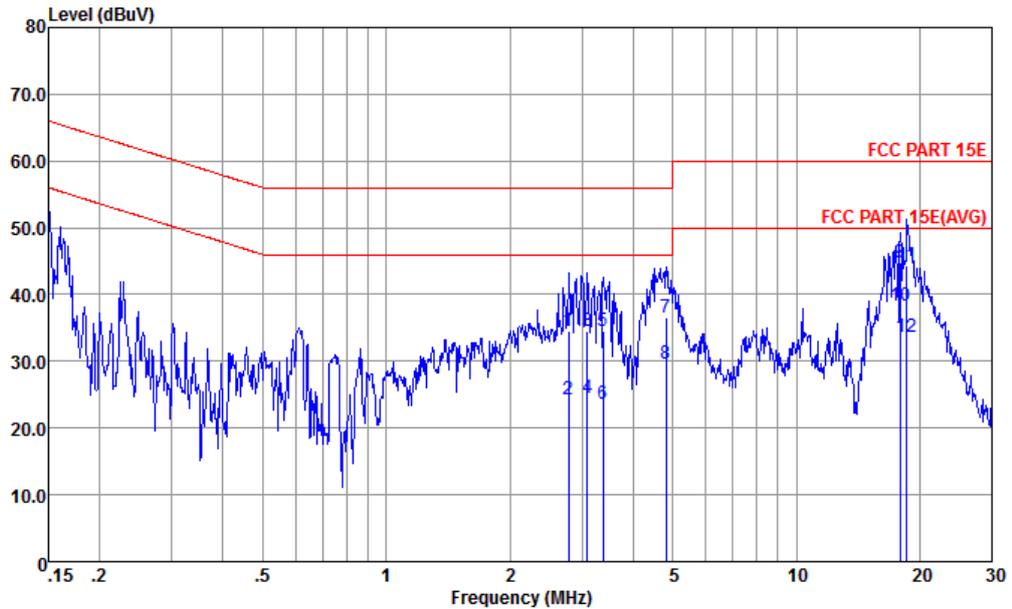


AMN = Artificial mains network (LISN)
 AE = Associated equipment
 EUT = Equipment under test
 ISN = Impedance stabilization network



3.5.5 Test Result of AC Conducted Emission

Test Mode :	Mode 2	Temperature :	22~24°C
Test Engineer :	Amos Zhang	Relative Humidity :	43~47%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	GSM850 Idle + Bluetooth Link + WLAN Link (5GHz) + Earphone + USB Cable (Charging from Adapter 2) + Battery 2 + SIM1 for Sample 2		



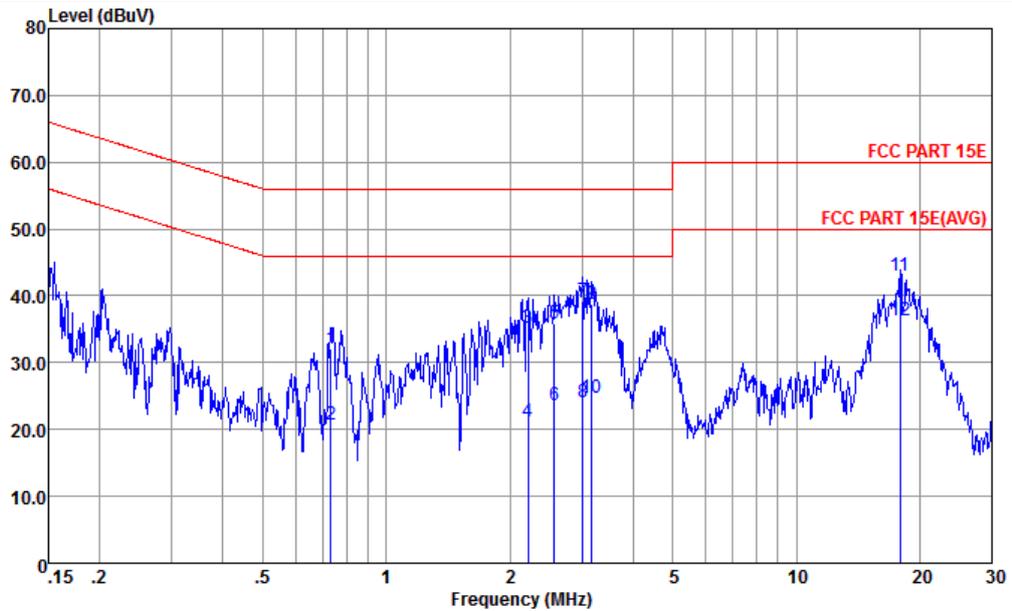
Site : CO01-KS
Condition : FCC PART 15E LISN-L-20151024 LINE

mode : Mode 2
: 860995030005292/860995030006498 #9

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	2.78	34.63	-21.37	56.00	24.30	0.18	10.15	QP
2	2.78	24.23	-21.77	46.00	13.90	0.18	10.15	Average
3	3.09	34.54	-21.46	56.00	24.21	0.18	10.15	QP
4	3.09	24.44	-21.56	46.00	14.11	0.18	10.15	Average
5	3.38	34.64	-21.36	56.00	24.29	0.19	10.16	QP
6	3.38	23.64	-22.36	46.00	13.29	0.19	10.16	Average
7	4.82	36.57	-19.43	56.00	26.20	0.19	10.18	QP
8	4.82	29.67	-16.33	46.00	19.30	0.19	10.18	Average
9	17.94	44.84	-15.16	60.00	34.10	0.27	10.47	QP
10 *	17.94	38.34	-11.66	50.00	27.60	0.27	10.47	Average
11	18.62	44.36	-15.64	60.00	33.59	0.27	10.50	QP
12	18.62	33.66	-16.34	50.00	22.89	0.27	10.50	Average



Test Mode :	Mode 2	Temperature :	22~24°C
Test Engineer :	Amos Zhang	Relative Humidity :	43~47%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	GSM850 Idle + Bluetooth Link + WLAN Link (5GHz) + Earphone + USB Cable (Charging from Adapter 2) + Battery 2 + SIM1 for Sample 2		



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

mode : Mode 2
: 860995030005292/860995030006498 #9

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.73	32.09	-23.91	56.00	21.60	0.34	10.15	QP
2	0.73	20.79	-25.21	46.00	10.30	0.34	10.15	Average
3	2.21	35.12	-20.88	56.00	24.60	0.38	10.14	QP
4	2.21	21.12	-24.88	46.00	10.60	0.38	10.14	Average
5	2.57	35.82	-20.18	56.00	25.30	0.37	10.15	QP
6	2.57	23.72	-22.28	46.00	13.20	0.37	10.15	Average
7	3.01	39.13	-16.87	56.00	28.61	0.37	10.15	QP
8	3.01	24.13	-21.87	46.00	13.61	0.37	10.15	Average
9	3.17	38.73	-17.27	56.00	28.20	0.37	10.16	QP
10	3.17	24.83	-21.17	46.00	14.30	0.37	10.16	Average
11	17.94	42.93	-17.07	60.00	32.20	0.26	10.47	QP
12 *	17.94	36.33	-13.67	50.00	25.60	0.26	10.47	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.

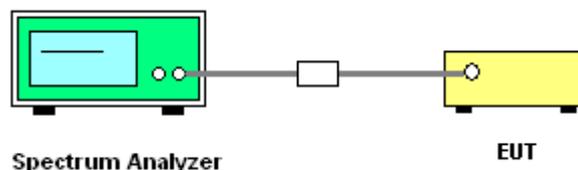
3.6.2 Measuring Instruments

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

An embedded-in antenna design 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	101040	10Hz~40GHz	Sep. 10, 2015	Jun. 14, 2016~ Jun. 22, 2016	Sep. 09, 2016	Conducted (TH01-KS)
Spectrum Analyzer	R&S	FSP40	100319	9kHz~40GHz	Oct. 24, 2015	Jun. 14, 2016~ Jun. 22, 2016	Oct. 23, 2016	Conducted (TH01-KS)
Pulse Power Sensor	Anritsu	MA2411B	0917070	30MHz~40GHz	Jan. 20, 2016	Jun. 14, 2016~ Jun. 22, 2016	Jan. 19, 2017	Conducted (TH01-KS)
Power Meter	Anritsu	ML2495A	1005002	50MHz Bandwidth	Jan. 20, 2016	Jun. 14, 2016~ Jun. 22, 2016	Jan. 19, 2017	Conducted (TH01-KS)
Thermal Chamber	Ten Billion	TTC-B3S	TBN-960502	-40~+150°C	Oct. 24, 2015	Jun. 14, 2016~ Jun. 22, 2016	Oct. 23, 2016	Conducted (TH01-KS)
EMI Test Receiver&SA	KEYSIGHT	N9038A	MY54450083	20Hz~8.4GHz	May 07, 2016	Jun. 19, 2016~ Jun. 20, 2016	May 06, 2017	Radiation (03CH03-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150246	10Hz~44GHz;	May 07, 2016	Jun. 19, 2016~ Jun. 20, 2016	May 06, 2017	Radiation (03CH03-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	May 07, 2016	Jun. 19, 2016~ Jun. 20, 2016	May 06, 2017	Radiation (03CH03-SZ)
Bilog Antenna	TeseQ	CBL6112D	35408	30MHz~2GHz	May 21, 2016	Jun. 19, 2016~ Jun. 20, 2016	May 20, 2017	Radiation (03CH03-SZ)
Double Ridge Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1355	1GHz~18GHz	May 07, 2016	Jun. 19, 2016~ Jun. 20, 2016	May 06, 2017	Radiation (03CH03-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18GHz~40GHz	Aug. 19, 2015	Jun. 19, 2016~ Jun. 20, 2016	Aug. 18, 2016	Radiation (03CH03-SZ)
Amplifier	PREAMPLIFIER	BPA-530	102210	0.01Hz~3000MHz	Oct. 20, 2015	Jun. 19, 2016~ Jun. 20, 2016	Oct. 19, 2016	Radiation (03CH03-SZ)
Amplifier	Agilent Technologies	83017A	MY39501302	500MHz~26.5GHz	Jan. 12, 2016	Jun. 19, 2016~ Jun. 20, 2016	Jan. 11, 2017	Radiation (03CH03-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Jul. 18, 2015	Jun. 19, 2016~ Jun. 20, 2016	Jul. 17, 2016	Radiation (03CH03-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	NCR	Jun. 19, 2016~ Jun. 20, 2016	NCR	Radiation (03CH03-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Jun. 19, 2016~ Jun. 20, 2016	NCR	Radiation (03CH03-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Jun. 19, 2016~ Jun. 20, 2016	NCR	Radiation (03CH03-SZ)
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz; Max 30dBm	Sep. 10, 2015	Jun. 03, 2016	Sep. 09, 2016	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060103	9kHz~30MHz	Oct. 24, 2015	Jun. 03, 2016	Oct. 23, 2016	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060105	9kHz~30MHz	Oct. 24, 2015	Jun. 03, 2016	Oct. 23, 2016	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	AC 0V~300V, 45Hz~1000Hz	Oct. 24, 2015	Jun. 03, 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
---	-------

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.0dB
---	-------

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.8dB
---	-------

Uncertainty of Radiated Emission Measurement (18GHz ~ 40GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.0dB
---	-------



Appendix A. Conducted Test Results

Test Engineer:	Ivan Zhang	Temperature:	24~25	°C
Test Date:	2016/6/14~2016/6/22	Relative Humidity:	54~55	%

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	17.63	21.13	-	22.46		
11a	6Mbps	1	44	5220	17.78	21.33	-	22.50		
11a	6Mbps	1	48	5240	17.78	21.38	-	22.50		
HT20	MCS0	1	36	5180	17.93	21.18	-	22.54		
HT20	MCS0	1	44	5220	18.23	21.23	-	22.61		
HT20	MCS0	1	48	5240	17.98	21.53	-	22.55		
HT40	MCS0	1	38	5190	36.46	41.36	-	23.01		
HT40	MCS0	1	46	5230	36.46	41.63	-	23.01		
VHT20	MCS0	1	36	5180	17.98	21.18	-	22.55		
VHT20	MCS0	1	44	5220	18.03	21.23	-	22.56		
VHT20	MCS0	1	48	5240	18.03	21.28	-	22.56		
VHT40	MCS0	1	38	5190	36.16	41.36	-	23.01		
VHT40	MCS0	1	46	5230	36.16	41.36	-	23.01		
VHT80	MCS0	1	42	5210	75.04	80.88	-	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	0.33	15.04	24.00	-5.00		Pass
11a	6Mbps	1	44	5220	0.33	14.98	24.00	-5.00		Pass
11a	6Mbps	1	48	5240	0.33	14.94	24.00	-5.00		Pass
HT20	MCS0	1	36	5180	0.35	14.10	24.00	-5.00		Pass
HT20	MCS0	1	44	5220	0.35	14.03	24.00	-5.00		Pass
HT20	MCS0	1	48	5240	0.35	13.98	24.00	-5.00		Pass
HT40	MCS0	1	38	5190	0.68	14.46	24.00	-5.00		Pass
HT40	MCS0	1	46	5230	0.68	14.33	24.00	-5.00		Pass
VHT20	MCS0	1	36	5180	0.34	11.26	24.00	-5.00		Pass
VHT20	MCS0	1	44	5220	0.34	11.16	24.00	-5.00		Pass
VHT20	MCS0	1	48	5240	0.34	11.12	24.00	-5.00		Pass
VHT40	MCS0	1	38	5190	0.66	11.47	24.00	-5.00		Pass
VHT40	MCS0	1	46	5230	0.66	11.41	24.00	-5.00		Pass
VHT80	MCS0	1	42	5210	1.25	11.14	24.00	-5.00		Pass

TEST RESULTS DATA
Power Spectral Density

FCC Band I										
Mod.	Data Rate	N _{TX}	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	0.33	5.72	11.00	-5.00		Pass
11a	6Mbps	1	44	5220	0.33	5.68	11.00	-5.00		Pass
11a	6Mbps	1	48	5240	0.33	5.64	11.00	-5.00		Pass
HT20	MCS0	1	36	5180	0.35	4.72	11.00	-5.00		Pass
HT20	MCS0	1	44	5220	0.35	4.41	11.00	-5.00		Pass
HT20	MCS0	1	48	5240	0.35	4.49	11.00	-5.00		Pass
HT40	MCS0	1	38	5190	0.68	2.12	11.00	-5.00		Pass
HT40	MCS0	1	46	5230	0.68	2.23	11.00	-5.00		Pass
VHT20	MCS0	1	36	5180	0.34	1.83	11.00	-5.00		Pass
VHT20	MCS0	1	44	5220	0.34	1.57	11.00	-5.00		Pass
VHT20	MCS0	1	48	5240	0.34	1.65	11.00	-5.00		Pass
VHT40	MCS0	1	38	5190	0.66	-0.84	11.00	-5.00		Pass
VHT40	MCS0	1	46	5230	0.66	-0.87	11.00	-5.00		Pass
VHT80	MCS0	1	42	5210	1.25	-3.49	11.00	-5.00		Pass

TEST RESULTS DATA
26dB and 99% OBW

Band II										
Mod.	Data Rate	N _{TX}	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	17.73	21.48	23.49	29.49	23.98	
11a	6M bps	1	60	5300	17.83	21.28	23.51	29.51	23.98	
11a	6M bps	1	64	5320	17.63	21.23	23.46	29.46	23.98	
HT20	MCS 0	1	52	5260	18.33	22.48	23.63	29.63	23.98	
HT20	MCS 0	1	60	5300	18.28	21.53	23.62	29.62	23.98	
HT20	MCS 0	1	64	5320	18.28	21.28	23.62	29.62	23.98	
HT40	MCS 0	1	54	5270	36.46	41.54	23.98	30.00	23.98	
HT40	MCS 0	1	62	5310	36.46	41.27	23.98	30.00	23.98	
VHT20	MCS 0	1	52	5260	18.03	21.33	23.56	29.56	23.98	
VHT20	MCS 0	1	60	5300	18.03	21.33	23.56	29.56	23.98	
VHT20	MCS 0	1	64	5320	17.98	21.28	23.55	29.55	23.98	
VHT40	MCS 0	1	54	5270	36.06	41.45	23.98	30.00	23.98	
VHT40	MCS 0	1	62	5310	36.06	41.36	23.98	30.00	23.98	
VHT80	MCS 0	1	58	5290	75.04	81.20	23.98	30.00	23.98	

TEST RESULTS DATA
Average Power Table

FCC Band II										
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)	FCC Conducted Power Limit (dBm)	DG (dBi)		Pass/Fail
11a	6M bps	1	52	5260	0.33	15.02	23.98	-5.00		Pass
11a	6M bps	1	60	5300	0.33	15.18	23.98	-5.00		Pass
11a	6M bps	1	64	5320	0.33	15.30	23.98	-5.00		Pass
HT20	MCS 0	1	52	5260	0.35	14.06	23.98	-5.00		Pass
HT20	MCS 0	1	60	5300	0.35	14.03	23.98	-5.00		Pass
HT20	MCS 0	1	64	5320	0.35	14.20	23.98	-5.00		Pass
HT40	MCS 0	1	54	5270	0.68	14.42	23.98	-5.00		Pass
HT40	MCS 0	1	62	5310	0.68	14.46	23.98	-5.00		Pass
VHT20	MCS 0	1	52	5260	0.34	11.22	23.98	-5.00		Pass
VHT20	MCS 0	1	60	5300	0.34	11.19	23.98	-5.00		Pass
VHT20	MCS 0	1	64	5320	0.34	11.36	23.98	-5.00		Pass
VHT40	MCS 0	1	54	5270	0.66	11.31	23.98	-5.00		Pass
VHT40	MCS 0	1	62	5310	0.66	11.35	23.98	-5.00		Pass
VHT80	MCS 0	1	58	5290	1.25	11.11	23.98	-5.00		Pass

TEST RESULTS DATA
Power Spectral Density

Band II										
Mod.	Data Rate	N _{TX}	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	0.33	6.12	11.00	-5.00		Pass
11a	6M bps	1	60	5300	0.33	6.06	11.00	-5.00		Pass
11a	6M bps	1	64	5320	0.33	6.23	11.00	-5.00		Pass
HT20	MCS 0	1	52	5260	0.35	4.66	11.00	-5.00		Pass
HT20	MCS 0	1	60	5300	0.35	4.78	11.00	-5.00		Pass
HT20	MCS 0	1	64	5320	0.35	4.87	11.00	-5.00		Pass
HT40	MCS 0	1	54	5270	0.68	2.49	11.00	-5.00		Pass
HT40	MCS 0	1	62	5310	0.68	2.10	11.00	-5.00		Pass
VHT20	MCS 0	1	52	5260	0.34	1.66	11.00	-5.00		Pass
VHT20	MCS 0	1	60	5300	0.34	1.83	11.00	-5.00		Pass
VHT20	MCS 0	1	64	5320	0.34	2.06	11.00	-5.00		Pass
VHT40	MCS 0	1	54	5270	0.66	-0.51	11.00	-5.00		Pass
VHT40	MCS 0	1	62	5310	0.66	-0.63	11.00	-5.00		Pass
VHT80	MCS 0	1	58	5290	1.25	-3.13	11.00	-5.00		Pass

TEST RESULTS DATA
26dB and 99% OBW

Band III										
Mod.	Data Rate	N _{TX}	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	17.73	21.38	23.49	29.49	23.98	
11a	6M bps	1	116	5580	17.93	21.28	23.54	29.54	23.98	
11a	6M bps	1	140	5700	17.88	21.58	23.52	29.52	23.98	
HT20	MCS 0	1	100	5500	18.08	21.38	23.57	29.57	23.98	
HT20	MCS 0	1	116	5580	18.23	21.68	23.61	29.61	23.98	
HT20	MCS 0	1	140	5700	18.18	21.53	23.60	29.60	23.98	
HT40	MCS 0	1	102	5510	36.16	41.36	23.98	30.00	23.98	
HT40	MCS 0	1	110	5550	36.26	41.45	23.98	30.00	23.98	
HT40	MCS 0	1	134	5670	36.16	41.45	23.98	30.00	23.98	
VHT20	MCS 0	1	100	5500	18.03	21.28	23.56	29.56	23.98	
VHT20	MCS 0	1	116	5580	18.03	21.33	23.56	29.56	23.98	
VHT20	MCS 0	1	140	5700	18.08	21.33	23.57	29.57	23.98	
VHT40	MCS 0	1	102	5510	36.06	41.45	23.98	30.00	23.98	
VHT40	MCS 0	1	110	5550	36.26	41.54	23.98	30.00	23.98	
VHT40	MCS 0	1	134	5670	36.06	41.54	23.98	30.00	23.98	
VHT80	MCS 0	1	106	5530	75.16	81.20	23.98	30.00	23.98	
VHT80	MCS 0	1	122	5610	75.16	81.36	23.98	30.00	23.98	

TEST RESULTS DATA
Average Power Table

FCC Band III										
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)	FCC Conducted Power Limit (dBm)	DG (dBi)		Pass/Fail
11a	6M bps	1	100	5500	0.33	15.69	23.98	-5.00		Pass
11a	6M bps	1	116	5580	0.33	14.92	23.98	-5.00		Pass
11a	6M bps	1	140	5700	0.33	15.50	23.98	-5.00		Pass
HT20	MCS 0	1	100	5500	0.35	14.54	23.98	-5.00		Pass
HT20	MCS 0	1	116	5580	0.35	14.26	23.98	-5.00		Pass
HT20	MCS 0	1	140	5700	0.35	14.38	23.98	-5.00		Pass
HT40	MCS 0	1	102	5510	0.68	14.52	23.98	-5.00		Pass
HT40	MCS 0	1	110	5550	0.68	14.34	23.98	-5.00		Pass
HT40	MCS 0	1	134	5670	0.68	15.14	23.98	-5.00		Pass
VHT20	MCS 0	1	100	5500	0.34	11.61	23.98	-5.00		Pass
VHT20	MCS 0	1	116	5580	0.34	11.28	23.98	-5.00		Pass
VHT20	MCS 0	1	140	5700	0.34	11.47	23.98	-5.00		Pass
VHT40	MCS 0	1	102	5510	0.66	11.55	23.98	-5.00		Pass
VHT40	MCS 0	1	110	5550	0.66	11.34	23.98	-5.00		Pass
VHT40	MCS 0	1	134	5670	0.66	12.12	23.98	-5.00		Pass
VHT80	MCS 0	1	106	5530	1.25	11.26	23.98	-5.00		Pass
VHT80	MCS 0	1	122	5610	1.25	11.22	23.98	-5.00		Pass

TEST RESULTS DATA
Power Spectral Density

Band III										
Mod.	Data Rate	N _{TX}	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	0.33	5.38	11.00	-5.00		Pass
11a	6M bps	1	116	5580	0.33	5.50	11.00	-5.00		Pass
11a	6M bps	1	140	5700	0.33	5.15	11.00	-5.00		Pass
HT20	MCS 0	1	100	5500	0.35	3.67	11.00	-5.00		Pass
HT20	MCS 0	1	116	5580	0.35	3.41	11.00	-5.00		Pass
HT20	MCS 0	1	140	5700	0.35	3.89	11.00	-5.00		Pass
HT40	MCS 0	1	102	5510	0.68	1.28	11.00	-5.00		Pass
HT40	MCS 0	1	110	5550	0.68	0.85	11.00	-5.00		Pass
HT40	MCS 0	1	134	5670	0.68	1.89	11.00	-5.00		Pass
VHT20	MCS 0	1	100	5500	0.34	1.18	11.00	-5.00		Pass
VHT20	MCS 0	1	116	5580	0.34	0.80	11.00	-5.00		Pass
VHT20	MCS 0	1	140	5700	0.34	0.96	11.00	-5.00		Pass
VHT40	MCS 0	1	102	5510	0.66	-1.23	11.00	-5.00		Pass
VHT40	MCS 0	1	110	5550	0.66	-1.73	11.00	-5.00		Pass
VHT40	MCS 0	1	134	5670	0.66	-0.46	11.00	-5.00		Pass
VHT80	MCS 0	1	106	5530	1.25	-4.96	11.00	-5.00		Pass
VHT80	MCS 0	1	122	5610	1.25	-4.42	11.00	-5.00		Pass

TEST RESULTS DATA
26dB and 99% OBW

Straddle Channel										
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	99% Bandwidth (MHz)	6DB Bandwidth (MHz)	Emission Bandwidth (MHz)	IC 99% Bandwidth Power Limit (dBm)	IC 99% Bandwidth EIRP Limit (dBm)	FCC 26dB Bandwidth Power Limit (dBm)
11a	6Mbps	1	144	5720	17.93	15.13	21.23	-	-	-
				NII-2C	13.991	12.552	15.689	21.99	27.99	22.96
				NII-3	3.9411	2.573	5.539	21.10	27.10	-
HT20	MCS0	1	144	5720	18.23	15.11	21.93	-	-	-
				NII-2C	14.0909	12.532	15.939	21.98	27.98	23.02
				NII-3	4.1409	2.573	5.989	21.10	27.10	-
HT40	MCS0	1	142	5710	36.46	35.09	41.81	-	-	-
				NII-2C	33.1818	32.502	35.859	23.98	30.00	23.98
				NII-3	3.2817	2.583	5.949	21.12	27.12	-
VHT20	MCS0	1	144	5720	18.13	15.11	21.38	-	-	-
				NII-2C	14.041	12.532	15.639	21.98	27.98	22.94
				NII-3	4.0909	2.573	5.739	21.10	27.10	-
VHT40	MCS0	1	142	5710	36.16	35.09	41.81	-	-	-
				NII-2C	32.982	32.502	35.859	23.98	30.00	23.98
				NII-3	3.1818	2.583	5.949	21.12	27.12	-
VHT80	MCS0	1	138	5690	75.16	75.13	81.20	-	-	-
				NII-2C	72.522	72.562	75.44	23.98	30.00	23.98
				NII-3	2.642	2.563	5.76	21.09	27.09	-

TEST RESULTS DATA
Average Power Table

FCC Straddle Channel										
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)	FCC Conducted Power Limit (dBm)	DG (dBi)		Pass/Fail
11a	6Mbps	1	144	5720	0.33	15.11	-	-5.00		Pass
				NII-2C	0.33	14.42	22.96	-5.00	Pass	
				NII-3	0.33	6.81	30.00	-5.00	Pass	
HT20	MCS0	1	144	5720	0.35	14.52	-	-5.00		Pass
				NII-2C	0.35	13.75	23.02	-5.00	Pass	
				NII-3	0.35	6.64	30.00	-5.00	Pass	
HT40	MCS0	1	142	5710	0.68	14.19	-	-5.00		Pass
				NII-2C	0.68	13.94	23.98	-5.00	Pass	
				NII-3	0.68	1.66	30.00	-5.00	Pass	
VHT20	MCS0	1	144	5720	0.34	11.66	-	-5.00		Pass
				NII-2C	0.34	10.88	22.94	-5.00	Pass	
				NII-3	0.34	3.81	30.00	-5.00	Pass	
VHT40	MCS0	1	142	5710	0.66	11.48	-	-5.00		Pass
				NII-2C	0.66	11.26	23.98	-5.00	Pass	
				NII-3	0.66	-1.61	30.00	-5.00	Pass	
VHT80	MCS0	1	138	5690	1.25	10.58	-	-5.00		Pass
				NII-2C	1.25	10.49	23.98	-5.00	Pass	
				NII-3	1.25	-6.26	30.00	-5.00	Pass	

TEST RESULTS DATA
Power Spectral Density

Straddle Channel										
Mod.	Data Rate	N _{TX}	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	0.33	5.52	11.00	-5.00		Pass
				NII-3	0.33	5.52	30.00	-5.00		Pass
HT20	MCS0	1	144	NII-2C	0.35	4.56	11.00	-5.00		Pass
				NII-3	0.35	4.56	30.00	-5.00		Pass
HT40	MCS0	1	142	NII-2C	0.68	1.27	11.00	-5.00		Pass
				NII-3	0.68	1.27	30.00	-5.00		Pass
VHT20	MCS0	1	144	NII-2C	0.34	1.12	11.00	-5.00		Pass
				NII-3	0.34	1.12	30.00	-5.00		Pass
VHT40	MCS0	1	142	NII-2C	0.66	-0.91	11.00	-5.00		Pass
				NII-3	0.66	-0.91	30.00	-5.00		Pass
VHT80	MCS0	1	138	NII-2C	1.25	-3.57	11.00	-5.00		Pass
				NII-3	1.25	-3.57	30.00	-5.00		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	5180.025	0.025	4.83	20	3.7	
11a	6Mbps	1	36	5180	5180.025	0.025	4.83	20	4.2	
11a	6Mbps	1	36	5180	5180.025	0.025	4.83	20	3.8	
11a	6Mbps	1	36	5180	5180.025	0.025	4.83	-30	3.8	
11a	6Mbps	1	36	5180	5180.025	0.025	4.83	50	3.8	

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	5320.025	0.025	4.70	20	3.7	
11a	6Mbps	1	64	5320	5320.025	0.025	4.70	20	4.2	
11a	6Mbps	1	64	5320	5320.025	0.025	4.70	20	3.8	
11a	6Mbps	1	64	5320	5320.025	0.025	4.70	-30	3.8	
11a	6Mbps	1	64	5320	5320.025	0.025	4.70	50	3.8	

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	5500.025	0.025	4.55	20	3.7	
11a	6Mbps	1	100	5500	5500.025	0.025	4.55	20	4.2	
11a	6Mbps	1	100	5500	5500.025	0.025	4.55	20	3.8	
11a	6Mbps	1	100	5500	5500.025	0.025	4.55	-30	3.8	
11a	6Mbps	1	100	5500	5500.025	0.025	4.55	50	3.8	



Appendix B. Radiated Spurious Emission

Band 1 - 5150~5250MHz 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 36 5180MHz		5095.25	51.24	-22.76	74	46.45	31.43	7.06	33.7	150	239	P	H
		5082.95	42.67	-11.33	54	37.92	31.41	7.06	33.72	150	239	A	H
	*	5180	103.37	-	-	98.39	31.55	7.08	33.65	150	239	P	H
	*	5180	96.68	-	-	91.7	31.55	7.08	33.65	150	239	A	H
		5081.15	46.63	-27.37	74	41.88	31.41	7.06	33.72	250	140	P	V
		5053.1	37.7	-16.3	54	33.02	31.36	7.06	33.74	250	140	A	V
	*	5180	93.59	-	-	88.61	31.55	7.08	33.65	250	140	P	V
	*	5180	86.78	-	-	81.8	31.55	7.08	33.65	250	140	A	V
802.11a CH 44 5220MHz		5012.3	52.15	-21.85	74	47.56	31.31	7.05	33.77	150	238	P	H
		5123.9	43.27	-10.73	54	38.42	31.48	7.06	33.69	150	238	A	H
	*	5220	104.56	-	-	99.51	31.6	7.09	33.64	150	238	P	H
	*	5220	97.45	-	-	92.4	31.6	7.09	33.64	150	238	A	H
		5450.43	48.05	-25.95	74	42.42	31.93	7.17	33.47	150	238	P	H
		5459.12	38.69	-15.31	54	33.06	31.93	7.17	33.47	150	238	A	H
		5147.3	47.47	-26.53	74	42.57	31.5	7.07	33.67	190	141	P	V
		5108.75	38.05	-15.95	54	33.24	31.45	7.06	33.7	190	141	A	V
	*	5220	95.44	-	-	90.39	31.6	7.09	33.64	190	141	P	V
	*	5220	88.45	-	-	83.4	31.6	7.09	33.64	190	141	A	V
		5408.74	45.92	-28.08	74	40.41	31.86	7.15	33.5	190	141	P	V
	5421.39	36.64	-17.36	54	31.11	31.88	7.15	33.5	190	141	A	V	



802.11a CH 48 5240MHz		5128.85	52.55	-21.45	74	47.69	31.48	7.07	33.69	171	238	P	H
		5126.6	43.44	-10.56	54	38.58	31.48	7.07	33.69	171	238	A	H
	*	5240	103.87	-	-	98.78	31.62	7.09	33.62	171	238	P	H
	*	5240	97.39	-	-	92.3	31.62	7.09	33.62	171	238	A	H
		5453.51	47.92	-26.08	74	42.29	31.93	7.17	33.47	171	238	P	H
		5445.81	38.62	-15.38	54	33.02	31.93	7.15	33.48	171	238	A	H
		5128.85	46.6	-27.4	74	41.74	31.48	7.07	33.69	166	141	P	V
		5132.45	37.99	-16.01	54	33.13	31.48	7.07	33.69	166	141	A	V
	*	5240	94.74	-	-	89.65	31.62	7.09	33.62	166	141	P	V
	*	5240	88.49	-	-	83.4	31.62	7.09	33.62	166	141	A	V
		5460	46.52	-27.48	74	40.89	31.93	7.17	33.47	166	141	P	V
		5459.45	36.69	-17.31	54	31.06	31.93	7.17	33.47	166	141	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	49.17	-24.83	74	59.48	38.62	10.07	59	250	0	P	H
		15540	49.12	-24.88	74	57.5	38.54	12.77	59.69	150	0	P	H
		10360	49.84	-24.16	74	60.15	38.62	10.07	59	250	0	P	V
		15540	50.23	-23.77	74	58.61	38.54	12.77	59.69	150	0	P	V
802.11a CH 44 5220MHz		10440	48.9	-25.1	74	59.07	38.72	10.13	59.02	250	0	P	H
		15660	49.74	-24.26	74	58.39	38.17	12.93	59.75	150	0	P	H
		10440	49.36	-24.64	74	59.53	38.72	10.13	59.02	250	0	P	V
		15660	49.5	-24.5	74	58.15	38.17	12.93	59.75	150	0	P	V
802.11a CH 48 5240MHz		10480	48.28	-25.72	74	58.37	38.79	10.15	59.03	250	0	P	H
		15720	49.6	-24.4	74	58.4	37.96	13.03	59.79	150	0	P	H
		10480	48.75	-25.25	74	58.84	38.79	10.15	59.03	250	0	P	V
		15720	49.51	-24.49	74	58.31	37.96	13.03	59.79	150	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		5147.3	52.85	-21.15	74	47.95	31.5	7.07	33.67	150	245	P	H
		5071.85	43.22	-10.78	54	38.47	31.41	7.06	33.72	150	245	A	H
	*	5180	103.53	-	-	98.55	31.55	7.08	33.65	150	245	P	H
	*	5180	97.28	-	-	92.3	31.55	7.08	33.65	150	245	A	H
		5040.65	46.8	-27.2	74	42.14	31.36	7.05	33.75	239	175	P	V
		5043.2	37.88	-16.12	54	33.21	31.36	7.05	33.74	239	175	A	V
	*	5180	91.94	-	-	86.96	31.55	7.08	33.65	239	175	P	V
		5180	85.24	-	-	80.26	31.55	7.08	33.65	239	175	A	V
802.11n HT20 CH 44 5220MHz		5052.8	51.7	-22.3	74	47.02	31.36	7.06	33.74	169	246	P	H
		5115.65	43.37	-10.63	54	38.56	31.45	7.06	33.7	169	246	A	H
	*	5220	103.29	-	-	98.24	31.6	7.09	33.64	169	246	P	H
	*	5220	96.55	-	-	91.5	31.6	7.09	33.64	169	246	A	H
		5435.58	48.47	-25.53	74	42.89	31.91	7.15	33.48	169	246	P	H
		5442.95	38.51	-15.49	54	32.93	31.91	7.15	33.48	169	246	A	H
		5009.3	46.93	-27.07	74	42.34	31.31	7.05	33.77	238	141	P	V
		5040.65	38.12	-15.88	54	33.46	31.36	7.05	33.75	238	141	A	V
	*	5220	94.13	-	-	89.08	31.6	7.09	33.64	238	141	P	V
	*	5220	87.19	-	-	82.14	31.6	7.09	33.64	238	141	A	V
		5445.59	46.05	-27.95	74	40.45	31.93	7.15	33.48	238	141	P	V
	5459.89	36.67	-17.33	54	31.04	31.93	7.17	33.47	238	141	A	V	



802.11n HT20 CH 48 5240MHz		5028.65	53.54	-20.46	74	48.9	31.34	7.05	33.75	150	246	P	H
		5115.05	43.04	-10.96	54	38.23	31.45	7.06	33.7	150	246	A	H
	*	5240	103.14	-	-	98.05	31.62	7.09	33.62	150	246	P	H
	*	5240	96.59	-	-	91.5	31.62	7.09	33.62	150	246	A	H
		5361	48.3	-25.7	74	42.9	31.81	7.12	33.53	150	246	P	H
		5358.58	38.45	-15.55	54	33.07	31.79	7.12	33.53	150	246	A	H
		5115.95	46.53	-27.47	74	41.72	31.45	7.06	33.7	150	297	P	V
		5127.35	37.09	-16.91	54	32.23	31.48	7.07	33.69	150	297	A	V
	*	5240	90.69	-	-	85.6	31.62	7.09	33.62	150	297	P	V
	*	5240	83.59	-	-	78.5	31.62	7.09	33.62	150	297	A	V
		5452.74	46.42	-27.58	74	40.79	31.93	7.17	33.47	150	297	P	V
		5459.45	36.65	-17.35	54	31.02	31.93	7.17	33.47	150	297	A	V
Remark	<ol style="list-style-type: none"> No other spurious found. 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	49.66	-24.34	74	59.97	38.62	10.07	59	250	0	P	H
		15540	49.92	-24.08	74	58.3	38.54	12.77	59.69	150	0	P	H
		10360	48.85	-25.15	74	59.16	38.62	10.07	59	250	0	P	V
		15540	49.09	-24.91	74	57.47	38.54	12.77	59.69	150	0	P	V
802.11n HT20 CH 44 5220MHz		10440	48.68	-25.32	74	58.85	38.72	10.13	59.02	250	0	P	H
		15660	50.57	-23.43	74	59.22	38.17	12.93	59.75	150	0	P	H
		10440	48.7	-25.3	74	58.87	38.72	10.13	59.02	250	0	P	V
		15660	49.99	-24.01	74	58.64	38.17	12.93	59.75	150	0	P	V
802.11n HT20 CH 48 5240MHz		10480	48.97	-25.03	74	59.06	38.79	10.15	59.03	250	0	P	H
		15720	50.61	-23.39	74	59.41	37.96	13.03	59.79	150	0	P	H
		10480	50.29	-23.71	74	60.38	38.79	10.15	59.03	250	0	P	V
		15720	50.93	-23.07	74	59.73	37.96	13.03	59.79	150	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 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		5146.25	53.16	-20.84	74	48.26	31.5	7.07	33.67	150	245	P	H
		5148.2	42.95	-11.05	54	38.05	31.5	7.07	33.67	150	245	A	H
	*	5190	99.8	-	-	94.82	31.55	7.08	33.65	150	245	P	H
	*	5190	88.9	-	-	83.92	31.55	7.08	33.65	150	245	A	H
		5361.88	47.5	-26.5	74	42.1	31.81	7.12	33.53	150	245	P	H
		5354.07	38.19	-15.81	54	32.81	31.79	7.12	33.53	150	245	A	H
		5067.65	47.51	-26.49	74	42.79	31.38	7.06	33.72	200	149	P	V
		5150	38.24	-15.76	54	33.34	31.5	7.07	33.67	200	149	A	V
	*	5190	89.54	-	-	84.56	31.55	7.08	33.65	200	149	P	V
	*	5190	79.95	-	-	74.97	31.55	7.08	33.65	200	149	A	V
		5456.15	45.45	-28.55	74	39.82	31.93	7.17	33.47	200	149	P	V
		5436.13	37.11	-16.89	54	31.53	31.91	7.15	33.48	200	149	A	V
802.11n HT40 CH 46 5230MHz		5135	52.6	-21.4	74	47.74	31.48	7.07	33.69	150	255	P	H
		5113.85	43.62	-10.38	54	38.81	31.45	7.06	33.7	150	255	A	H
	*	5230	101.07	-	-	95.98	31.62	7.09	33.62	150	255	P	H
	*	5230	92.6	-	-	87.51	31.62	7.09	33.62	150	255	A	H
		5446.91	48.52	-25.48	74	42.9	31.93	7.17	33.48	150	255	P	H
		5455.82	39.49	-14.51	54	33.86	31.93	7.17	33.47	150	255	A	H
		5019.65	47.17	-26.83	74	42.56	31.31	7.05	33.75	150	156	P	V
		5091.05	38.47	-15.53	54	33.7	31.43	7.06	33.72	150	156	A	V
	*	5230	91	-	-	85.91	31.62	7.09	33.62	150	156	P	V
	*	5230	81.78	-	-	76.69	31.62	7.09	33.62	150	156	A	V
	5460	46.05	-27.95	74	40.42	31.93	7.17	33.47	150	156	P	V	
	5420.95	37.36	-16.64	54	31.83	31.88	7.15	33.5	150	156	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	49.58	-24.42	74	59.84	38.65	10.1	59.01	150	360	P	H
		15570	50.1	-23.9	74	58.55	38.44	12.82	59.71	100	360	P	H
		10380	50.08	-23.92	74	60.34	38.65	10.1	59.01	150	360	P	V
		15570	50.07	-23.93	74	58.52	38.44	12.82	59.71	100	360	P	V
802.11n HT40 CH 46 5230MHz		10460	49.53	-24.47	74	59.67	38.74	10.15	59.03	100	360	P	H
		15690	50.21	-23.79	74	58.94	38.06	12.98	59.77	100	225	P	H
		10460	49.25	-24.75	74	59.39	38.74	10.15	59.03	100	360	P	V
		15690	50.62	-23.38	74	59.35	38.06	12.98	59.77	100	225	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		5080.7	51.92	-22.08	74	47.17	31.41	7.06	33.72	150	242	P	H
		5113.4	42.72	-11.28	54	37.91	31.45	7.06	33.7	150	242	A	H
	*	5180	101.34	-	-	96.36	31.55	7.08	33.65	150	242	P	H
	*	5180	92.03	-	-	87.05	31.55	7.08	33.65	150	242	A	H
		5038.4	47.02	-26.98	74	42.36	31.36	7.05	33.75	150	96	P	V
		5073.2	37.59	-16.41	54	32.84	31.41	7.06	33.72	150	96	A	V
	*	5180	90.34	-	-	85.36	31.55	7.08	33.65	150	96	P	V
	5180	81.48	-	-	76.5	31.55	7.08	33.65	150	96	A	V	
802.11ac VHT20 CH 44 5220MHz		5091.8	50.66	-23.34	74	45.89	31.43	7.06	33.72	150	250	P	H
		5115.5	41.97	-12.03	54	37.16	31.45	7.06	33.7	150	250	A	H
	*	5220	101.56	-	-	96.51	31.6	7.09	33.64	150	250	P	H
	*	5220	92.27	-	-	87.22	31.6	7.09	33.64	150	250	A	H
		5426.89	47.09	-26.91	74	41.54	31.88	7.15	33.48	150	250	P	H
		5442.29	37.7	-16.3	54	32.12	31.91	7.15	33.48	150	250	A	H
		5011.1	46.96	-27.04	74	42.37	31.31	7.05	33.77	150	95	P	V
		5125.1	37.48	-16.52	54	32.63	31.48	7.06	33.69	150	95	A	V
	*	5220	90.98	-	-	85.93	31.6	7.09	33.64	150	95	P	V
	*	5220	80.64	-	-	75.59	31.6	7.09	33.64	150	95	A	V
		5372.44	46.02	-27.98	74	40.61	31.81	7.13	33.53	150	95	P	V
	5459.67	36.61	-17.39	54	30.98	31.93	7.17	33.47	150	95	A	V	



802.11ac VHT20 CH 48 5240MHz		5117.75	51.3	-22.7	74	46.49	31.45	7.06	33.7	150	251	P	H
		5120.6	41.97	-12.03	54	37.15	31.45	7.06	33.69	150	251	A	H
	*	5240	101.06	-	-	95.97	31.62	7.09	33.62	150	251	P	H
	*	5240	92.65	-	-	87.56	31.62	7.09	33.62	150	251	A	H
		5362.98	48.14	-25.86	74	42.74	31.81	7.12	33.53	150	251	P	H
		5458.9	37.8	-16.2	54	32.17	31.93	7.17	33.47	150	251	A	H
		5025.65	47.06	-26.94	74	42.42	31.34	7.05	33.75	236	142	P	V
		5097.5	37.83	-16.17	54	33.04	31.43	7.06	33.7	236	142	A	V
	*	5240	92.96	-	-	87.87	31.62	7.09	33.62	236	142	P	V
	*	5240	83.54	-	-	78.45	31.62	7.09	33.62	236	142	A	V
		5362.54	45.93	-28.07	74	40.53	31.81	7.12	33.53	236	142	P	V
		5444.93	36.59	-17.41	54	31.01	31.91	7.15	33.48	236	142	A	V
Remark	<ol style="list-style-type: none"> No other spurious found. 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		10360	50.88	-23.12	74	61.19	38.62	10.07	59	152	260	P	H
VHT20		15540	50.31	-23.69	74	58.69	38.54	12.77	59.69	189	238	P	H
CH 36		10360	49.54	-24.46	74	59.85	38.62	10.07	59	152	260	P	V
5180MHz		15540	49.39	-24.61	74	57.77	38.54	12.77	59.69	189	238	P	V
802.11ac		10440	49.83	-24.17	74	60	38.72	10.13	59.02	125	230	P	H
VHT20		15660	50.49	-23.51	74	59.14	38.17	12.93	59.75	110	225	P	H
CH 44		10440	49.35	-24.65	74	59.52	38.72	10.13	59.02	125	230	P	V
5220MHz		15660	50.91	-23.09	74	59.56	38.17	12.93	59.75	110	225	P	V
802.11ac		10480	49.33	-24.67	74	59.42	38.79	10.15	59.03	149	289	P	H
VHT20		15720	49.74	-24.26	74	58.54	37.96	13.03	59.79	139	291	P	H
CH 48		10480	49.25	-24.75	74	59.34	38.79	10.15	59.03	149	289	P	V
5240MHz		15720	50.56	-23.44	74	59.36	37.96	13.03	59.79	139	291	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		5148.5	52.74	-21.26	74	47.84	31.5	7.07	33.67	152	239	P	H
		5149.55	44.67	-9.33	54	39.77	31.5	7.07	33.67	152	239	A	H
	*	5190	97.25	-	-	92.27	31.55	7.08	33.65	152	239	P	H
	*	5190	91.38	-	-	86.4	31.55	7.08	33.65	152	239	A	H
		5369.47	47.63	-26.37	74	42.22	31.81	7.13	33.53	152	239	P	H
		5428.43	38.8	-15.2	54	33.25	31.88	7.15	33.48	152	239	A	H
		5007.5	46.81	-27.19	74	42.22	31.31	7.05	33.77	243	97	P	V
		5033.6	38.46	-15.54	54	33.82	31.34	7.05	33.75	243	97	A	V
	*	5190	86.66	-	-	81.68	31.55	7.08	33.65	243	97	P	V
	*	5190	80.58	-	-	75.6	31.55	7.08	33.65	243	97	A	V
		5353.85	46.24	-27.76	74	40.86	31.79	7.12	33.53	243	97	P	V
		5454.17	37.27	-16.73	54	31.64	31.93	7.17	33.47	243	97	A	V
	802.11ac VHT40 CH 46 5230MHz		5098.25	52.44	-21.56	74	47.65	31.43	7.06	33.7	150	254	P
		5126.9	43.51	-10.49	54	38.65	31.48	7.07	33.69	150	254	A	H
*		5230	98.57	-	-	93.48	31.62	7.09	33.62	150	254	P	H
*		5230	92.19	-	-	87.1	31.62	7.09	33.62	150	254	A	H
		5436.13	48.05	-25.95	74	42.47	31.91	7.15	33.48	150	254	P	H
		5441.19	39.12	-14.88	54	33.54	31.91	7.15	33.48	150	254	A	H
		5093.9	48.42	-25.58	74	43.63	31.43	7.06	33.7	150	96	P	V
		5131.1	38.06	-15.94	54	33.2	31.48	7.07	33.69	150	96	A	V
*		5230	87.47	-	-	82.38	31.62	7.09	33.62	150	96	P	V
*		5230	80.49	-	-	75.4	31.62	7.09	33.62	150	96	A	V
	5433.93	45.96	-28.04	74	40.38	31.91	7.15	33.48	150	96	P	V	
	5457.69	37.24	-16.76	54	31.61	31.93	7.17	33.47	150	96	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		10380	50.34	-23.66	74	60.6	38.65	10.1	59.01	250	0	P	H
VHT40		15570	49.51	-24.49	74	57.96	38.44	12.82	59.71	150	0	P	H
CH 38		10380	50.31	-23.69	74	60.57	38.65	10.1	59.01	250	0	P	V
5190MHz		15570	49	-25	74	57.45	38.44	12.82	59.71	150	0	P	V
802.11ac		10460	49.47	-24.53	74	59.61	38.74	10.15	59.03	250	0	P	H
VHT40		15690	49.86	-24.14	74	58.59	38.06	12.98	59.77	150	0	P	H
CH 46		10460	48.64	-25.36	74	58.78	38.74	10.15	59.03	250	0	P	V
5230MHz		15690	50.83	-23.17	74	59.56	38.06	12.98	59.77	150	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 VHT80 (Band Edge @ 3m)

Table with 14 columns: 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). Rows include test data for 802.11ac VHT80 CH 42 5210MHz and a Remark section.



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	49.87	-24.13	74	60.06	38.69	10.13	59.01	250	0	P	H
VHT80		15630	49.36	-24.64	74	58	38.22	12.88	59.74	150	0	P	H
CH 42		10420	49.18	-24.82	74	59.37	38.69	10.13	59.01	250	0	P	V
5210MHz		15630	49.78	-24.22	74	58.42	38.22	12.88	59.74	150	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 802.11a (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		5039	54.04	-19.96	74	49.38	31.36	7.05	33.75	150	236	P	H
		5054.45	44.89	-9.11	54	40.21	31.36	7.06	33.74	150	236	A	H
	*	5260	104.46	-	-	99.29	31.67	7.1	33.6	150	236	P	H
	*	5260	98.27	-	-	93.1	31.67	7.1	33.6	150	236	A	H
		5372.55	48.03	-25.97	74	42.62	31.81	7.13	33.53	150	236	P	H
		5376.51	39.45	-14.55	54	34.03	31.81	7.13	33.52	150	236	A	H
		5090.45	47.29	-26.71	74	42.52	31.43	7.06	33.72	150	141	P	V
		5121.05	38.06	-15.94	54	33.24	31.45	7.06	33.69	150	141	A	V
	*	5260	94.6	-	-	89.43	31.67	7.1	33.6	150	141	P	V
	*	5260	88.82	-	-	83.65	31.67	7.1	33.6	150	141	A	V
		5376.84	46.6	-27.4	74	41.18	31.81	7.13	33.52	150	141	P	V
		5432.39	36.88	-17.12	54	31.3	31.91	7.15	33.48	150	141	A	V
802.11a CH 60 5300MHz		5093.6	53.6	-20.4	74	48.81	31.43	7.06	33.7	150	241	P	H
		5113.4	44.25	-9.75	54	39.44	31.45	7.06	33.7	150	241	A	H
	*	5300	103.51	-	-	98.25	31.72	7.11	33.57	150	241	P	H
	*	5300	97.33	-	-	92.07	31.72	7.11	33.57	150	241	A	H
		5397.52	48.26	-25.74	74	42.79	31.86	7.13	33.52	150	241	P	H
		5355.5	39.68	-14.32	54	34.3	31.79	7.12	33.53	150	241	A	H
		5130.65	46.33	-27.67	74	41.47	31.48	7.07	33.69	150	140	P	V
		5148.05	37.96	-16.04	54	33.06	31.5	7.07	33.67	150	140	A	V
	*	5300	95.36	-	-	90.1	31.72	7.11	33.57	150	140	P	V
	*	5300	88.76	-	-	83.5	31.72	7.11	33.57	150	140	A	V
		5444.6	45.78	-28.22	74	40.2	31.91	7.15	33.48	150	140	P	V
		5454.17	36.82	-17.18	54	31.19	31.93	7.17	33.47	150	140	A	V



802.11a CH 64 5320MHz	*	5320	103.77	-	-	98.49	31.74	7.11	33.57	159	238	P	H
	*	5320	96.18	-	-	90.9	31.74	7.11	33.57	159	238	A	H
		5400.16	48.14	-25.86	74	42.65	31.86	7.13	33.5	159	238	P	H
		5350.22	39.74	-14.26	54	34.36	31.79	7.12	33.53	159	238	A	H
	*	5320	93.67	-	-	88.39	31.74	7.11	33.57	176	143	P	V
	*	5320	87.45	-	-	82.17	31.74	7.11	33.57	176	143	A	V
		5409.95	45.78	-28.22	74	40.27	31.86	7.15	33.5	176	143	P	V
		5438.88	36.6	-17.4	54	31.02	31.91	7.15	33.48	176	143	A	V
Remark	<ol style="list-style-type: none"> No other spurious found. 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 CH 52 5260MHz		10520	49.2	-24.8	74	59.24	38.84	10.18	59.06	250	0	P	H
		15780	50.62	-23.38	74	59.56	37.79	13.09	59.82	150	0	P	H
		10520	48.97	-25.03	74	59.01	38.84	10.18	59.06	250	0	P	V
		15780	49.87	-24.13	74	58.81	37.79	13.09	59.82	150	0	P	V
802.11a CH 60 5300MHz		10600	49.18	-24.82	74	59.09	38.95	10.29	59.15	250	0	P	H
		15900	49.52	-24.48	74	58.74	37.42	13.24	59.88	150	0	P	H
		10600	49.23	-24.77	74	59.14	38.95	10.29	59.15	250	0	P	V
		15900	50.7	-23.3	74	59.92	37.42	13.24	59.88	150	0	P	V
802.11a CH 64 5320MHz		10640	49.2	-24.8	74	59.04	39	10.34	59.18	250	0	P	H
		15960	49.36	-24.64	74	58.72	37.21	13.35	59.92	150	0	P	H
		10640	49.03	-24.97	74	58.87	39	10.34	59.18	250	0	P	V
		15960	50.28	-23.72	74	59.64	37.21	13.35	59.92	150	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 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		5048.15	52.75	-21.25	74	48.07	31.36	7.06	33.74	158	244	P	H
		5043.8	43.21	-10.79	54	38.54	31.36	7.05	33.74	158	244	A	H
	*	5260	102.75	-	-	97.58	31.67	7.1	33.6	158	244	P	H
	*	5260	96.07	-	-	90.9	31.67	7.1	33.6	158	244	A	H
		5391.91	48.57	-25.43	74	43.13	31.83	7.13	33.52	158	244	P	H
		5352.42	38.92	-15.08	54	33.54	31.79	7.12	33.53	158	244	A	H
		5068.25	47.56	-26.44	74	42.84	31.38	7.06	33.72	250	139	P	V
		5054.15	38.17	-15.83	54	33.49	31.36	7.06	33.74	250	139	A	V
	*	5260	93.64	-	-	88.47	31.67	7.1	33.6	250	139	P	V
	*	5260	86.87	-	-	81.7	31.67	7.1	33.6	250	139	A	V
		5385.42	46.8	-27.2	74	41.36	31.83	7.13	33.52	250	139	P	V
		5459.45	36.76	-17.24	54	31.13	31.93	7.17	33.47	250	139	A	V
802.11n HT20 CH 60 5300MHz		5077.25	53.27	-20.73	74	48.52	31.41	7.06	33.72	150	246	P	H
		5073.65	44.29	-9.71	54	39.54	31.41	7.06	33.72	150	246	A	H
	*	5300	103.08	-	-	97.82	31.72	7.11	33.57	150	246	P	H
	*	5300	96.56	-	-	91.3	31.72	7.11	33.57	150	246	A	H
		5408.63	48.28	-25.72	74	42.77	31.86	7.15	33.5	150	246	P	H
		5361.33	39	-15	54	33.6	31.81	7.12	33.53	150	246	A	H
		5030.6	47.08	-26.92	74	42.44	31.34	7.05	33.75	233	140	P	V
		5090.6	38.17	-15.83	54	33.4	31.43	7.06	33.72	233	140	A	V
	*	5300	94.56	-	-	89.3	31.72	7.11	33.57	233	140	P	V
	*	5300	87.42	-	-	82.16	31.72	7.11	33.57	233	140	A	V
	5434.7	46.23	-27.77	74	40.65	31.91	7.15	33.48	233	140	P	V	
	5437.34	36.81	-17.19	54	31.23	31.91	7.15	33.48	233	140	A	V	



802.11n HT20 CH 64 5320MHz	*	5320	102.95	-	-	97.67	31.74	7.11	33.57	185	248	P	H
	*	5320	95.58	-	-	90.3	31.74	7.11	33.57	185	248	A	H
		5353.08	49.63	-24.37	74	44.25	31.79	7.12	33.53	185	248	P	H
		5350.44	39.37	-14.63	54	33.99	31.79	7.12	33.53	185	248	A	H
	*	5320	93.34	-	-	88.06	31.74	7.11	33.57	173	140	P	V
	*	5320	86.58	-	-	81.3	31.74	7.11	33.57	173	140	A	V
		5435.69	45.65	-28.35	74	40.07	31.91	7.15	33.48	173	140	P	V
		5459.89	36.73	-17.27	54	31.1	31.93	7.17	33.47	173	140	A	V
Remark	<ol style="list-style-type: none"> No other spurious found. 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		10520	49.36	-24.64	74	59.4	38.84	10.18	59.06	250	0	P	H
		15780	50	-24	74	58.94	37.79	13.09	59.82	150	0	P	H
5260MHz		10520	49.42	-24.58	74	59.46	38.84	10.18	59.06	250	0	P	V
		15780	50.46	-23.54	74	59.4	37.79	13.09	59.82	150	0	P	V
802.11n HT20 CH 60		10600	49.25	-24.75	74	59.16	38.95	10.29	59.15	250	0	P	H
		15900	50.22	-23.78	74	59.44	37.42	13.24	59.88	150	0	P	H
		10600	48.94	-25.06	74	58.85	38.95	10.29	59.15	250	0	P	V
		15900	50.14	-23.86	74	59.36	37.42	13.24	59.88	150	0	P	V
802.11n HT20 CH 64		10640	49.14	-24.86	74	58.98	39	10.34	59.18	250	0	P	H
		15960	50.5	-23.5	74	59.86	37.21	13.35	59.92	150	0	P	H
		10640	50.57	-23.43	74	60.41	39	10.34	59.18	250	0	P	V
		15960	49.68	-24.32	74	59.04	37.21	13.35	59.92	150	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		5030.6	54.31	-19.69	74	49.67	31.34	7.05	33.75	150	247	P	H
		5077.1	45.77	-8.23	54	41.02	31.41	7.06	33.72	150	247	A	H
		5063	53.62	-20.38	74	48.92	31.38	7.06	33.74	150	235	P	H
		5063	43.02	-10.98	54	38.32	31.38	7.06	33.74	150	235	A	H
	*	5270	101.85	-	-	96.68	31.67	7.1	33.6	150	247	P	H
	*	5270	92.68	-	-	87.51	31.67	7.1	33.6	150	247	A	H
		5357.92	49.26	-24.74	74	43.88	31.79	7.12	33.53	150	247	P	H
		5450.98	40.05	-13.95	54	34.42	31.93	7.17	33.47	150	247	A	H
		5142.35	48.56	-25.44	74	43.68	31.5	7.07	33.69	150	99	P	V
		5065.7	38.54	-15.46	54	33.84	31.38	7.06	33.74	150	99	A	V
	*	5270	90.67	-	-	85.5	31.67	7.1	33.6	150	99	P	V
	*	5270	82.46	-	-	77.29	31.67	7.1	33.6	150	99	A	V
		5407.42	45.62	-28.38	74	40.11	31.86	7.15	33.5	150	99	P	V
		5459.56	37.29	-16.71	54	31.66	31.93	7.17	33.47	150	99	A	V
802.11n HT40 CH 62 5310MHz		5121.5	50.53	-23.47	74	45.71	31.45	7.06	33.69	150	246	P	H
		5115.5	43.18	-10.82	54	38.37	31.45	7.06	33.7	150	246	A	H
	*	5310	100.27	-	-	94.99	31.74	7.11	33.57	150	246	P	H
	*	5310	89.15	-	-	83.87	31.74	7.11	33.57	150	246	A	H
		5350.11	53.54	-20.46	74	48.16	31.79	7.12	33.53	150	246	P	H
		5350.77	40.1	-13.9	54	34.72	31.79	7.12	33.53	150	246	A	H
		5026.55	46.63	-27.37	74	41.99	31.34	7.05	33.75	190	147	P	V
		5126.6	38.28	-15.72	54	33.42	31.48	7.07	33.69	190	147	A	V
	*	5310	89.69	-	-	84.41	31.74	7.11	33.57	190	147	P	V
	*	5310	80.19	-	-	74.91	31.74	7.11	33.57	190	147	A	V
		5408.3	45.51	-28.49	74	40	31.86	7.15	33.5	190	147	P	V
	5350.99	37.52	-16.48	54	32.14	31.79	7.12	33.53	190	147	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	49.95	-24.05	74	59.94	38.86	10.23	59.08	110	220	P	H
		15810	50.87	-23.13	74	59.88	37.69	13.14	59.84	109	345	P	H
		10540	49.5	-24.5	74	59.49	38.86	10.23	59.08	110	220	P	V
		15810	50.81	-23.19	74	59.82	37.69	13.14	59.84	109	345	P	V
802.11n HT40 CH 62 5310MHz		10620	49.71	-24.29	74	59.56	38.98	10.34	59.17	100	220	P	H
		15930	50.76	-23.24	74	60.05	37.31	13.3	59.9	100	100	P	H
		10620	50.09	-23.91	74	59.94	38.98	10.34	59.17	100	220	P	V
		15930	50.2	-23.8	74	59.49	37.31	13.3	59.9	100	100	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		5050.7	51.19	-22.81	74	46.51	31.36	7.06	33.74	150	250	P	H
		5114.75	41.78	-12.22	54	36.97	31.45	7.06	33.7	150	250	A	H
	*	5260	101.56	-	-	96.39	31.67	7.1	33.6	150	250	P	H
	*	5260	92.34	-	-	87.17	31.67	7.1	33.6	150	250	A	H
		5374.2	47.45	-26.55	74	42.03	31.81	7.13	33.52	150	250	P	H
		5364.74	38.25	-15.75	54	32.85	31.81	7.12	33.53	150	250	A	H
		5088.35	46.76	-27.24	74	42.01	31.41	7.06	33.72	150	96	P	V
		5065.1	37.37	-16.63	54	32.67	31.38	7.06	33.74	150	96	A	V
	*	5260	90.92	-	-	85.75	31.67	7.1	33.6	150	96	P	V
	*	5260	81.7	-	-	76.53	31.67	7.1	33.6	150	96	A	V
		5442.84	46.75	-27.25	74	41.17	31.91	7.15	33.48	150	96	P	V
		5458.02	36.78	-17.22	54	31.15	31.93	7.17	33.47	150	96	A	V
	802.11ac VHT20 CH 60 5300MHz		5103.8	51.46	-22.54	74	46.67	31.43	7.06	33.7	150	251	P
		5117.15	42.26	-11.74	54	37.45	31.45	7.06	33.7	150	251	A	H
*		5300	100.95	-	-	95.69	31.72	7.11	33.57	150	251	P	H
*		5300	91.8	-	-	86.54	31.72	7.11	33.57	150	251	A	H
		5367.71	48.18	-25.82	74	42.77	31.81	7.13	33.53	150	251	P	H
		5365.51	38.13	-15.87	54	32.73	31.81	7.12	33.53	150	251	A	H
		5094.05	46.51	-27.49	74	41.72	31.43	7.06	33.7	150	97	P	V
		5063.6	37.32	-16.68	54	32.62	31.38	7.06	33.74	150	97	A	V
*		5300	90.02	-	-	84.76	31.72	7.11	33.57	150	97	P	V
*		5300	80.56	-	-	75.3	31.72	7.11	33.57	150	97	A	V
	5448.23	46.22	-27.78	74	40.6	31.93	7.17	33.48	150	97	P	V	
	5459.56	36.56	-17.44	54	30.93	31.93	7.17	33.47	150	97	A	V	



802.11ac VHT20 CH 64 5320MHz	*	5320	101.69	-	-	96.41	31.74	7.11	33.57	150	246	P	H
	*	5320	91.09	-	-	85.81	31.74	7.11	33.57	150	246	A	H
		5381.13	48.18	-25.82	74	42.74	31.83	7.13	33.52	150	246	P	H
		5352.2	38.55	-15.45	54	33.17	31.79	7.12	33.53	150	246	A	H
	*	5320	89.46	-	-	84.18	31.74	7.11	33.57	150	97	P	V
	*	5320	80.35	-	-	75.07	31.74	7.11	33.57	150	97	A	V
		5456.37	45.91	-28.09	74	40.28	31.93	7.17	33.47	150	97	P	V
		5448.78	36.53	-17.47	54	30.91	31.93	7.17	33.48	150	97	A	V
Remark	<ol style="list-style-type: none"> No other spurious found. 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		10520	49.36	-24.64	74	59.4	38.84	10.18	59.06	110	220	P	H
VHT20		15780	50.02	-23.98	74	58.96	37.79	13.09	59.82	109	345	P	H
CH 52		10520	48.94	-25.06	74	58.98	38.84	10.18	59.06	110	220	P	V
5260MHz		15780	50.11	-23.89	74	59.05	37.79	13.09	59.82	109	345	P	V
802.11ac		10600	50	-24	74	59.91	38.95	10.29	59.15	185	215	P	H
VHT20		15900	50.26	-23.74	74	59.48	37.42	13.24	59.88	196	190	P	H
CH 60		10600	48.67	-25.33	74	58.58	38.95	10.29	59.15	185	215	P	V
5300MHz		15900	49.77	-24.23	74	58.99	37.42	13.24	59.88	196	190	P	V
802.11ac		10640	49.86	-24.14	74	59.7	39	10.34	59.18	152	135	P	H
VHT20		15960	50.45	-23.55	74	59.81	37.21	13.35	59.92	173	245	P	H
CH 64		10640	50.03	-23.97	74	59.87	39	10.34	59.18	152	135	P	V
5320MHz		15960	50.13	-23.87	74	59.49	37.21	13.35	59.92	173	245	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		5026.55	52.79	-21.21	74	48.15	31.34	7.05	33.75	153	253	P	H
		5062.25	43.5	-10.5	54	38.8	31.38	7.06	33.74	153	253	A	H
	*	5270	97.22	-	-	92.05	31.67	7.1	33.6	153	253	P	H
	*	5270	91.27	-	-	86.1	31.67	7.1	33.6	153	253	A	H
		5359.13	47.99	-26.01	74	42.61	31.79	7.12	33.53	153	253	P	H
		5357.48	39.06	-14.94	54	33.68	31.79	7.12	33.53	153	253	A	H
		5102.75	46.92	-27.08	74	42.13	31.43	7.06	33.7	250	95	P	V
		5097.05	38.52	-15.48	54	33.73	31.43	7.06	33.7	250	95	A	V
	*	5270	88.02	-	-	82.85	31.67	7.1	33.6	250	95	P	V
	*	5270	81.27	-	-	76.1	31.67	7.1	33.6	250	95	A	V
		5439.87	46.61	-27.39	74	41.03	31.91	7.15	33.48	250	95	P	V
		5423.26	37.28	-16.72	54	31.75	31.88	7.15	33.5	250	95	A	V
802.11ac VHT40 CH 62 5310MHz		5081.9	52.74	-21.26	74	47.99	31.41	7.06	33.72	150	237	P	H
		5082.8	43.69	-10.31	54	38.94	31.41	7.06	33.72	150	237	A	H
	*	5310	96.18	-	-	90.9	31.74	7.11	33.57	150	237	P	H
	*	5310	90.28	-	-	85	31.74	7.11	33.57	150	237	A	H
		5351.32	48.53	-25.47	74	43.15	31.79	7.12	33.53	150	237	P	H
		5350.66	39.77	-14.23	54	34.39	31.79	7.12	33.53	150	237	A	H
		5148.2	47.31	-26.69	74	42.41	31.5	7.07	33.67	150	94	P	V
		5119.25	38	-16	54	33.18	31.45	7.06	33.69	150	94	A	V
	*	5310	86.29	-	-	81.01	31.74	7.11	33.57	150	94	P	V
	*	5310	80.48	-	-	75.2	31.74	7.11	33.57	150	94	A	V
	5391.36	45.94	-28.06	74	40.5	31.83	7.13	33.52	150	94	P	V	
	5446.58	37.36	-16.64	54	31.74	31.93	7.17	33.48	150	94	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		10540	49.58	-24.42	74	59.57	38.86	10.23	59.08	250	0	P	H
VHT40		15810	49.74	-24.26	74	58.75	37.69	13.14	59.84	150	0	P	H
CH 54		10540	49.57	-24.43	74	59.56	38.86	10.23	59.08	250	0	P	V
5270MHz		15810	50.28	-23.72	74	59.29	37.69	13.14	59.84	150	0	P	V
802.11ac		10620	49.19	-24.81	74	59.04	38.98	10.34	59.17	250	0	P	H
VHT40		15930	49.61	-24.39	74	58.9	37.31	13.3	59.9	150	0	P	H
CH 62		10620	48.93	-25.07	74	58.78	38.98	10.34	59.17	250	0	P	V
5310MHz		15930	50.14	-23.86	74	59.43	37.31	13.3	59.9	150	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 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		5076.35	47.33	-26.67	74	42.58	31.41	7.06	33.72	150	248	P	H
		5101.4	39.31	-14.69	54	34.52	31.43	7.06	33.7	150	248	A	H
	*	5290	82.04	-	-	76.82	31.69	7.11	33.58	150	248	P	H
	*	5290	75.82	-	-	70.6	31.69	7.11	33.58	150	248	A	H
		5431.4	45.7	-28.3	74	40.12	31.91	7.15	33.48	150	248	P	H
		5459.56	38.67	-15.33	54	33.04	31.93	7.17	33.47	150	248	A	H
		5045.75	46.63	-27.37	74	41.96	31.36	7.05	33.74	150	169	P	V
		5051.9	39	-15	54	34.32	31.36	7.06	33.74	150	169	A	V
	*	5290	70.88	-	-	65.66	31.69	7.11	33.58	150	169	P	V
	*	5290	64.52	-	-	59.3	31.69	7.11	33.58	150	169	A	V
		5442.84	45.95	-28.05	74	40.37	31.91	7.15	33.48	150	169	P	V
	5407.09	38.02	-15.98	54	32.51	31.86	7.15	33.5	150	169	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)

Table with 14 columns: 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). Rows include 802.11ac, VHT80, CH 58, 5290MHz and a Remark section.



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		5376.24	48.11	-25.89	74	42.69	31.81	7.13	33.52	169	263	P	H
		5407.28	39.49	-14.51	54	33.98	31.86	7.15	33.5	169	263	A	H
	*	5500	101.14	-	-	95.4	32	7.19	33.45	169	263	P	H
	*	5500	94.64	-	-	88.9	32	7.19	33.45	169	263	A	H
		5434.48	45.89	-28.11	74	40.31	31.91	7.15	33.48	161	242	P	V
		5462.48	36.93	-17.07	54	31.3	31.93	7.17	33.47	161	242	A	V
	*	5500	90.18	-	-	84.44	32	7.19	33.45	161	242	P	V
	*	5500	85.34	-	-	79.6	32	7.19	33.45	161	242	A	V
802.11a CH 116 5580MHz		5461.68	49.21	-24.79	74	43.58	31.93	7.17	33.47	150	263	P	H
		5387.12	40.13	-13.87	54	34.69	31.83	7.13	33.52	150	263	A	H
	*	5580	101.56	-	-	95.7	32.11	7.23	33.48	150	263	P	H
	*	5580	94.46	-	-	88.6	32.11	7.23	33.48	150	263	A	H
		5732.04	47.94	-26.06	74	41.7	32.36	7.41	33.53	150	263	P	H
		5760.28	39.46	-14.54	54	33.17	32.41	7.41	33.53	150	263	A	H
		5407.44	45.45	-28.55	74	39.94	31.86	7.15	33.5	159	241	P	V
		5469.52	37.05	-16.95	54	31.4	31.95	7.17	33.47	159	241	A	V
	*	5580	90.12	-	-	84.26	32.11	7.23	33.48	159	241	P	V
	*	5580	83.46	-	-	77.6	32.11	7.23	33.48	159	241	A	V
		5765	47.51	-26.49	74	41.22	32.41	7.41	33.53	159	241	P	V
		5743.8	37.22	-16.78	54	30.95	32.39	7.41	33.53	159	241	A	V



802.11a CH 140 5700MHz	*	5700	101.2	-	-	95.05	32.3	7.36	33.51	240	258	P	H
	*	5700	88.8	-	-	82.65	32.3	7.36	33.51	240	258	A	H
		5725	58.3	-15.7	74	52.1	32.36	7.36	33.52	240	258	P	H
		5725	47	-7	54	40.8	32.36	7.36	33.52	240	258	A	H
	*	5700	89.99	-	-	83.84	32.3	7.36	33.51	250	44	P	V
	*	5700	83.32	-	-	77.17	32.3	7.36	33.51	250	44	A	V
		5725.24	47.93	-26.07	74	41.73	32.36	7.36	33.52	250	44	P	V
		5725.16	39.53	-14.47	54	33.33	32.36	7.36	33.52	250	44	A	V
Remark	<ol style="list-style-type: none"> No other spurious found. 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 CH 100 5500MHz		11000	49.27	-24.73	74	58.5	39.5	10.83	59.56	250	0	P	H
		16500	49.17	-24.83	74	57.01	38.47	13.36	59.67	150	0	P	H
		11000	49.39	-24.61	74	58.62	39.5	10.83	59.56	250	0	P	V
		16500	49.41	-24.59	74	57.25	38.47	13.36	59.67	150	0	P	V
802.11a CH 116 5580MHz		11160	49.08	-24.92	74	58.46	39.35	10.9	59.63	250	0	P	H
		16740	50.2	-23.8	74	56.65	39.11	13.86	59.42	150	0	P	H
		11160	48.69	-25.31	74	58.07	39.35	10.9	59.63	250	0	P	V
		16740	49.87	-24.13	74	56.32	39.11	13.86	59.42	150	0	P	V
802.11a CH 140 5700MHz		11400	49.16	-24.84	74	58.75	39.13	11	59.72	250	0	P	H
		17100	50.57	-23.43	74	54.33	40.48	14.53	58.77	150	0	P	H
		11400	48.6	-25.4	74	58.19	39.13	11	59.72	250	0	P	V
		17100	50.26	-23.74	74	54.02	40.48	14.53	58.77	150	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11n 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		5470	52.97	-21.03	74	47.32	31.95	7.17	33.47	150	242	P	H
		5470	42.89	-11.11	54	37.24	31.95	7.17	33.47	150	242	A	H
	*	5500	103.05	-	-	97.31	32	7.19	33.45	150	242	P	H
	*	5500	92.63	-	-	86.89	32	7.19	33.45	150	242	A	H
		5404.24	46.27	-27.73	74	40.78	31.86	7.13	33.5	242	212	P	V
		5380.24	37.4	-16.6	54	31.96	31.83	7.13	33.52	242	212	A	V
	*	5500	92.31	-	-	86.57	32	7.19	33.45	242	212	P	V
		5500	82.65	-	-	76.91	32	7.19	33.45	242	212	A	V
802.11n HT20 CH 116 5580MHz		5469.36	49.64	-24.36	74	43.99	31.95	7.17	33.47	150	267	P	H
		5469.04	40.07	-13.93	54	34.42	31.95	7.17	33.47	150	267	A	H
	*	5580	101.53	-	-	95.67	32.11	7.23	33.48	150	267	P	H
	*	5580	91.19	-	-	85.33	32.11	7.23	33.48	150	267	A	H
		5744.6	48.57	-25.43	74	42.3	32.39	7.41	33.53	150	267	P	H
		5750.76	39.31	-14.69	54	33.04	32.39	7.41	33.53	150	267	A	H
		5458.64	45.95	-28.05	74	40.32	31.93	7.17	33.47	243	223	P	V
		5469.04	37.12	-16.88	54	31.47	31.95	7.17	33.47	243	223	A	V
	*	5580	91.57	-	-	85.71	32.11	7.23	33.48	243	223	P	V
	*	5580	81.84	-	-	75.98	32.11	7.23	33.48	243	223	A	V
		5738.92	46.34	-27.66	74	40.07	32.39	7.41	33.53	243	223	P	V
	5743.08	37.34	-16.66	54	31.07	32.39	7.41	33.53	243	223	A	V	



802.11n HT20 CH 140 5700MHz	*	5700	101.4	-	-	95.25	32.3	7.36	33.51	150	259	P	H
	*	5700	90.83	-	-	84.68	32.3	7.36	33.51	150	259	A	H
		5725	58.85	-15.15	74	52.65	32.36	7.36	33.52	150	259	P	H
		5725.16	45.05	-8.95	54	38.85	32.36	7.36	33.52	150	259	A	H
	*	5700	89.15	-	-	83	32.3	7.36	33.51	150	92	P	V
	*	5700	79.48	-	-	73.33	32.3	7.36	33.51	150	92	A	V
		5726.52	48	-26	74	41.75	32.36	7.41	33.52	150	92	P	V
		5725	38.27	-15.73	54	32.07	32.36	7.36	33.52	150	92	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		11000	48.2	-25.8	74	57.43	39.5	10.83	59.56	250	0	P	H
		16500	48.79	-25.21	74	56.63	38.47	13.36	59.67	150	0	P	H
CH 100 5500MHz		11000	49.09	-24.91	74	58.32	39.5	10.83	59.56	250	0	P	V
		16500	49.22	-24.78	74	57.06	38.47	13.36	59.67	150	0	P	V
802.11n HT20 CH 116 5580MHz		11160	49.26	-24.74	74	58.64	39.35	10.9	59.63	170	200	P	H
		16740	50.65	-23.35	74	57.1	39.11	13.86	59.42	156	350	P	H
		11160	49.77	-24.23	74	59.15	39.35	10.9	59.63	170	200	P	V
		16740	50.76	-23.24	74	57.21	39.11	13.86	59.42	156	350	P	V
802.11n HT20 CH 140 5700MHz		11400	48.72	-25.28	74	58.31	39.13	11	59.72	147	285	P	H
		17100	50.79	-23.21	74	54.55	40.48	14.53	58.77	165	246	P	H
		11400	49.08	-24.92	74	58.67	39.13	11	59.72	147	285	P	V
		17100	50.75	-23.25	74	54.51	40.48	14.53	58.77	165	246	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11n 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		5468.56	50.36	-23.64	74	44.71	31.95	7.17	33.47	150	250	P	H
		5469.68	42.32	-11.68	54	36.67	31.95	7.17	33.47	150	250	A	H
	*	5510	97.28	-	-	91.55	32	7.19	33.46	150	250	P	H
	*	5510	86.54	-	-	80.81	32	7.19	33.46	150	250	A	H
		5727.08	48.16	-25.84	74	41.91	32.36	7.41	33.52	150	250	P	H
		5752.6	39.64	-14.36	54	33.35	32.41	7.41	33.53	150	250	A	H
		5419.92	45.34	-28.66	74	39.81	31.88	7.15	33.5	247	90	P	V
		5467.28	37.46	-16.54	54	31.81	31.95	7.17	33.47	247	90	A	V
	*	5510	86.28	-	-	80.55	32	7.19	33.46	247	90	P	V
	*	5510	76.48	-	-	70.75	32	7.19	33.46	247	90	A	V
		5735.08	47.36	-26.64	74	41.09	32.39	7.41	33.53	247	90	P	V
		5727.32	38.01	-15.99	54	31.76	32.36	7.41	33.52	247	90	A	V
802.11n HT40 CH 110 5550MHz		5373.2	50.94	-23.06	74	45.53	31.81	7.13	33.53	150	245	P	H
		5357.84	43.06	-10.94	54	37.68	31.79	7.12	33.53	150	245	A	H
	*	5550	98.1	-	-	92.28	32.08	7.21	33.47	150	245	P	H
	*	5550	89.35	-	-	83.53	32.08	7.21	33.47	150	245	A	H
		5759.64	49.85	-24.15	74	43.56	32.41	7.41	33.53	150	245	P	H
		5747.96	40.51	-13.49	54	34.24	32.39	7.41	33.53	150	245	A	H
		5378.8	45.73	-28.27	74	40.29	31.83	7.13	33.52	250	212	P	V
		5406.16	37.55	-16.45	54	32.04	31.86	7.15	33.5	250	212	A	V
	*	5550	90.99	-	-	85.17	32.08	7.21	33.47	250	212	P	V
	*	5550	80.13	-	-	74.31	32.08	7.21	33.47	250	212	A	V
		5731.96	46.96	-27.04	74	40.72	32.36	7.41	33.53	250	212	P	V
		5734.36	37.94	-16.06	54	31.7	32.36	7.41	33.53	250	212	A	V



802.11n HT40 CH 134 5670MHz	*	5670	99.07	-	-	92.97	32.28	7.32	33.5	150	265	P	H
	*	5670	89.3	-	-	83.2	32.28	7.32	33.5	150	265	A	H
		5741.32	52.58	-21.42	74	46.31	32.39	7.41	33.53	150	265	P	H
		5725.64	41.67	-12.33	54	35.47	32.36	7.36	33.52	150	265	A	H
	*	5670	88.66	-	-	82.56	32.28	7.32	33.5	250	87	P	V
	*	5670	78.79	-	-	72.69	32.28	7.32	33.5	250	87	A	V
		5726.76	47.51	-26.49	74	41.26	32.36	7.41	33.52	250	87	P	V
		5726.28	38.19	-15.81	54	31.94	32.36	7.41	33.52	250	87	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		11020	49.47	-24.53	74	58.71	39.48	10.85	59.57	100	230	P	H
		16530	50.43	-23.57	74	58.06	38.56	13.44	59.63	100	300	P	H
5510MHz		11020	50.03	-23.97	74	59.27	39.48	10.85	59.57	100	230	P	V
		16530	49.62	-24.38	74	57.25	38.56	13.44	59.63	100	300	P	V
802.11n HT40 CH 110		11100	48.8	-25.2	74	58.11	39.41	10.88	59.6	100	200	P	H
		16650	50.95	-23.05	74	57.88	38.88	13.7	59.51	100	350	P	H
5550MHz		11100	49.64	-24.36	74	58.95	39.41	10.88	59.6	100	200	P	V
		16650	50.51	-23.49	74	57.44	38.88	13.7	59.51	100	350	P	V
802.11n HT40 CH 134		11340	48.74	-25.26	74	58.26	39.19	10.98	59.69	200	360	P	H
		17010	50.49	-23.51	74	55.23	39.91	14.45	59.1	200	360	P	H
5670MHz		11340	49.2	-24.8	74	58.72	39.19	10.98	59.69	200	360	P	V
		17010	50.73	-23.27	74	55.47	39.91	14.45	59.1	200	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		5412.56	48.06	-25.94	74	42.53	31.88	7.15	33.5	150	250	P	H
		5357.84	39.22	-14.78	54	33.84	31.79	7.12	33.53	150	250	A	H
	*	5500	99.27	-	-	93.53	32	7.19	33.45	150	250	P	H
	*	5500	89.24	-	-	83.5	32	7.19	33.45	150	250	A	H
		5440.4	46.18	-27.82	74	40.6	31.91	7.15	33.48	250	89	P	V
		5468.24	36.91	-17.09	54	31.26	31.95	7.17	33.47	250	89	A	V
	*	5500	89	-	-	83.26	32	7.19	33.45	250	89	P	V
	5500	79.29	-	-	73.55	32	7.19	33.45	250	89	A	V	
802.11ac VHT20 CH 116 5580MHz		5449.2	50.44	-23.56	74	44.82	31.93	7.17	33.48	150	242	P	H
		5370.8	40.65	-13.35	54	35.24	31.81	7.13	33.53	150	242	A	H
	*	5580	100.7	-	-	94.84	32.11	7.23	33.48	150	242	P	H
	*	5580	90.32	-	-	84.46	32.11	7.23	33.48	150	242	A	H
		5756.52	48.21	-25.79	74	41.92	32.41	7.41	33.53	150	242	P	H
		5746.04	39.02	-14.98	54	32.75	32.39	7.41	33.53	150	242	A	H
		5406.8	46.54	-27.46	74	41.03	31.86	7.15	33.5	150	94	P	V
		5465.68	37.32	-16.68	54	31.67	31.95	7.17	33.47	150	94	A	V
	*	5580	87.96	-	-	82.1	32.11	7.23	33.48	150	94	P	V
	*	5580	78.49	-	-	72.63	32.11	7.23	33.48	150	94	A	V
		5758.04	46.83	-27.17	74	40.54	32.41	7.41	33.53	150	94	P	V
	5725.88	37.7	-16.3	54	31.45	32.36	7.41	33.52	150	94	A	V	



802.11ac VHT20 CH 140 5700MHz	*	5700	99.81	-	-	93.66	32.3	7.36	33.51	150	271	P	H
	*	5700	89.28	-	-	83.13	32.3	7.36	33.51	150	271	A	H
		5725.32	51.67	-22.33	74	45.47	32.36	7.36	33.52	150	271	P	H
		5725.08	39.88	-14.12	54	33.68	32.36	7.36	33.52	150	271	A	H
	*	5700	87.91	-	-	81.76	32.3	7.36	33.51	150	93	P	V
	*	5700	78.34	-	-	72.19	32.3	7.36	33.51	150	93	A	V
		5752.12	46.49	-27.51	74	40.2	32.41	7.41	33.53	150	93	P	V
		5754.92	37.63	-16.37	54	31.34	32.41	7.41	33.53	150	93	A	V
Remark	<ol style="list-style-type: none"> No other spurious found. 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	49.33	-24.67	74	58.56	39.5	10.83	59.56	163	230	P	H
VHT20		16500	50.43	-23.57	74	58.27	38.47	13.36	59.67	178	296	P	H
CH 100		11000	49.18	-24.82	74	58.41	39.5	10.83	59.56	163	230	P	V
5500MHz		16500	50.45	-23.55	74	58.29	38.47	13.36	59.67	178	296	P	V
802.11ac		11160	50.11	-23.89	74	59.49	39.35	10.9	59.63	170	200	P	H
VHT20		16740	50.69	-23.31	74	57.14	39.11	13.86	59.42	156	350	P	H
CH 116		11160	49.02	-24.98	74	58.4	39.35	10.9	59.63	170	200	P	V
5580MHz		16740	50.6	-23.4	74	57.05	39.11	13.86	59.42	156	350	P	V
802.11ac		11400	49.9	-24.1	74	59.49	39.13	11	59.72	147	285	P	H
VHT20		17100	50.62	-23.38	74	54.38	40.48	14.53	58.77	165	246	P	H
CH 140		11400	49.21	-24.79	74	58.8	39.13	11	59.72	147	285	P	V
5700MHz		17100	50.15	-23.85	74	53.91	40.48	14.53	58.77	165	246	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 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		5469.84	51.83	-22.17	74	46.18	31.95	7.17	33.47	150	246	P	H
		5469.36	43.39	-10.61	54	37.74	31.95	7.17	33.47	150	246	A	H
	*	5510	95.33	-	-	89.6	32	7.19	33.46	150	246	P	H
	*	5510	88.75	-	-	83.02	32	7.19	33.46	150	246	A	H
		5746.92	48.41	-25.59	74	42.14	32.39	7.41	33.53	150	246	P	H
		5744.84	39.12	-14.88	54	32.85	32.39	7.41	33.53	150	246	A	H
		5425.84	46.04	-27.96	74	40.49	31.88	7.15	33.48	245	96	P	V
		5469.52	37.79	-16.21	54	32.14	31.95	7.17	33.47	245	96	A	V
	*	5510	84.31	-	-	78.58	32	7.19	33.46	245	96	P	V
	*	5510	78.03	-	-	72.3	32	7.19	33.46	245	96	A	V
		5760.52	46.36	-27.64	74	40.07	32.41	7.41	33.53	245	96	P	V
		5752.2	37.99	-16.01	54	31.7	32.41	7.41	33.53	245	96	A	V
802.11ac VHT40 CH 110 5550MHz		5390.16	48.91	-25.09	74	43.47	31.83	7.13	33.52	150	245	P	H
		5457.52	40.57	-13.43	54	34.94	31.93	7.17	33.47	150	245	A	H
	*	5550	96.33	-	-	90.51	32.08	7.21	33.47	150	245	P	H
	*	5550	89.13	-	-	83.31	32.08	7.21	33.47	150	245	A	H
		5750.2	48.45	-25.55	74	42.18	32.39	7.41	33.53	150	245	P	H
		5751.16	39.7	-14.3	54	33.43	32.39	7.41	33.53	150	245	A	H
		5431.44	46.53	-27.47	74	40.95	31.91	7.15	33.48	240	94	P	V
		5468.24	37.4	-16.6	54	31.75	31.95	7.17	33.47	240	94	A	V
	*	5550	84.5	-	-	78.68	32.08	7.21	33.47	240	94	P	V
	*	5550	79.33	-	-	73.51	32.08	7.21	33.47	240	94	A	V
	5728.36	45.99	-28.01	74	39.74	32.36	7.41	33.52	240	94	P	V	
	5741.8	37.96	-16.04	54	31.69	32.39	7.41	33.53	240	94	A	V	



802.11ac VHT40 CH 134 5670MHz		5455.44	48.18	-25.82	74	42.55	31.93	7.17	33.47	150	244	P	H
		5462.64	40.1	-13.9	54	34.45	31.95	7.17	33.47	150	244	A	H
	*	5670	96.39	-	-	90.29	32.28	7.32	33.5	150	244	P	H
	*	5670	88.99	-	-	82.89	32.28	7.32	33.5	150	244	A	H
		5732.04	48.92	-25.08	74	42.68	32.36	7.41	33.53	150	244	P	H
		5725	39.23	-14.77	54	33.03	32.36	7.36	33.52	150	244	A	H
		5452.4	45.06	-28.94	74	39.43	31.93	7.17	33.47	250	93	P	V
		5461.84	37.51	-16.49	54	31.88	31.93	7.17	33.47	250	93	A	V
	*	5670	84.43	-	-	78.33	32.28	7.32	33.5	250	93	P	V
	*	5670	78.69	-	-	72.59	32.28	7.32	33.5	250	93	A	V
		5749.56	47.21	-26.79	74	40.94	32.39	7.41	33.53	250	93	P	V
		5760.52	37.91	-16.09	54	31.62	32.41	7.41	33.53	250	93	A	V
Remark	<ol style="list-style-type: none"> 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	48.18	-25.82	74	57.42	39.48	10.85	59.57	250	0	P	H
VHT40		16530	49.27	-24.73	74	56.9	38.56	13.44	59.63	150	0	P	H
CH 102		11020	48.08	-25.92	74	57.32	39.48	10.85	59.57	250	0	P	V
5510MHz		16530	50.71	-23.29	74	58.34	38.56	13.44	59.63	150	0	P	V
802.11ac		11100	48.41	-25.59	74	57.72	39.41	10.88	59.6	250	0	P	H
VHT40		16650	50.39	-23.61	74	57.32	38.88	13.7	59.51	150	0	P	H
CH 110		11100	47.67	-26.33	74	56.98	39.41	10.88	59.6	250	0	P	V
5550MHz		16650	49.61	-24.39	74	56.54	38.88	13.7	59.51	150	0	P	V
802.11ac		11340	48.79	-25.21	74	58.31	39.19	10.98	59.69	250	0	P	H
VHT40		17010	49.72	-24.28	74	54.46	39.91	14.45	59.1	150	0	P	H
CH 134		11340	47.88	-26.12	74	57.4	39.19	10.98	59.69	250	0	P	V
5670MHz		17010	50	-23	74	55.74	39.91	14.45	59.1	150	0	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		5424.4	45.81	-28.19	74	40.26	31.88	7.15	33.48	150	241	P	H
		5469.84	38.23	-15.77	54	32.58	31.95	7.17	33.47	150	241	A	H
	*	5530	78.57	-	-	72.8	32.03	7.21	33.47	150	241	P	H
	*	5530	70.97	-	-	65.2	32.03	7.21	33.47	150	241	A	H
		5756.68	47.73	-26.27	74	41.44	32.41	7.41	33.53	150	241	P	H
		5749	38.8	-15.2	54	32.53	32.39	7.41	33.53	150	241	A	H
		5468.08	45.8	-28.2	74	40.15	31.95	7.17	33.47	211	220	P	V
		5352.24	37.88	-16.12	54	32.5	31.79	7.12	33.53	211	220	A	V
	*	5530	68.2	-	-	62.43	32.03	7.21	33.47	211	220	P	V
	*	5530	60.87	-	-	55.1	32.03	7.21	33.47	211	220	A	V
		5742.6	46.35	-27.65	74	40.08	32.39	7.41	33.53	211	220	P	V
		5739.88	38.86	-15.14	54	32.59	32.39	7.41	33.53	211	220	A	V
802.11ac VHT80 CH 122 5610MHz		5373.68	51.26	-22.74	74	45.84	31.81	7.13	33.52	150	70	P	H
		5354.64	43.52	-10.48	54	38.14	31.79	7.12	33.53	150	70	A	H
		5610	94.18	-	-	88.23	32.17	7.27	33.49	150	70	P	H
		5610	86.57	-	-	80.62	32.17	7.27	33.49	150	70	A	H
		5763.96	49.08	-24.92	74	42.79	32.41	7.41	33.53	150	70	P	H
		5748.36	41.12	-12.88	54	34.85	32.39	7.41	33.53	150	70	A	H
		5402.96	46.9	-27.1	74	41.41	31.86	7.13	33.5	231	244	P	V
		5463.28	39.19	-14.81	54	33.54	31.95	7.17	33.47	231	244	A	V
		5610	85.91	-	-	79.96	32.17	7.27	33.49	231	244	P	V
		5610	78	-	-	72.05	32.17	7.27	33.49	231	244	A	V
	5754.6	46.57	-27.43	74	40.28	32.41	7.41	33.53	231	244	P	V	
	5739.32	39.37	-14.63	54	33.1	32.39	7.41	33.53	231	244	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		11060	48.38	-25.62	74	57.67	39.44	10.86	59.59	250	0	P	H
VHT80		16590	49.76	-24.24	74	57.11	38.7	13.53	59.58	150	274	P	H
CH 106		11060	48.54	-25.46	74	57.83	39.44	10.86	59.59	150	3	P	V
5530MHz		16590	49.8	-24.2	74	57.15	38.7	13.53	59.58	150	0	P	V
802.11ac		11220	48.19	-25.81	74	57.61	39.3	10.93	59.65	150	0	P	H
VHT80		16830	49.82	-24.18	74	55.79	39.34	14.03	59.34	150	360	P	H
CH 122		11220	47.89	-26.11	74	57.31	39.3	10.93	59.65	150	66	P	V
5610MHz		16830	49.29	-24.71	74	55.26	39.34	14.03	59.34	150	185	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

Table with 14 columns: WIFI, Note, Frequency, Level, Over, Limit, Read, Antenna, Cable, Preamp, Ant, Table, Peak, Pol. It contains test data for 802.11a CH 144 at 5720MHz and a Remark section stating 'No other spurious found' and 'All results are PASS against Peak and Average limit line.'



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

Table with 14 columns: 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). Rows include data for 802.11a CH 144 at 5720MHz and a Remark section.



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

Table with 14 columns: 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). Rows include 802.11n, HT20, CH 144, 5720MHz and a Remark section.



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		10440	49.12	-24.88	74	59.29	38.72	10.13	59.02	250	0	P	H
HT20		17160	49.36	-24.64	74	52.32	40.94	14.61	58.51	150	0	P	H
CH 144		10440	49.41	-24.59	74	59.58	38.72	10.13	59.02	250	0	P	V
5720MHz		17160	50.56	-23.44	74	53.52	40.94	14.61	58.51	150	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 802.11n HT40 (Band Edge @ 3m)

Table with 14 columns: 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). Rows include 802.11n, HT40, CH 142, 5710MHz and a Remark section.



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

Table with 14 columns: 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). Rows include data for 802.11n HT40 CH 142 at 5710MHz and a Remark section.



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

Table with 14 columns: 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). Rows include 802.11ac, VHT20, CH 144, 5720MHz and a Remark section.



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

Table with 14 columns: 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). Rows include 802.11ac VHT20 CH 144 5720MHz and a Remark section.



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

Table with 14 columns: 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). Rows include 802.11ac, VHT40, CH 142, 5710MHz and a Remark section.



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

Table with 14 columns: 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). Rows include 802.11ac VHT40 CH 142 5710MHz and a Remark section.



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

Table with 14 columns: 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). Rows include 802.11ac, VHT80, CH 138, 5690MHz and a Remark section.



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

Table with 14 columns: 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). Rows include 802.11ac VHT80 and CH 138 5690MHz, and a Remark section.



Emission below 1GHz

WIFI 802.11a (LF @ 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 LF		30	23.41	-16.59	40	31.57	24.2	1	33.36	-	-	P	H
		100.81	17.68	-25.82	43.5	31.38	18.28	1.38	33.36	-	-	P	H
		234.67	18.41	-27.59	46	32.34	17.39	1.8	33.12	-	-	P	H
		478.14	24.33	-21.67	46	30.98	23.59	2.31	32.55	-	-	P	H
		726.46	28.74	-17.26	46	32.13	25.68	2.75	31.82	-	-	P	H
		876.81	30.51	-15.49	46	31.92	26.89	3.03	31.33	100	200	P	H
		46.49	23.71	-16.29	40	39.74	16.35	1	33.38	100	300	P	V
		76.56	18.78	-21.22	40	36.28	14.74	1.14	33.38	-	-	P	V
		112.45	18.27	-25.23	43.5	32.2	18.02	1.38	33.33	-	-	P	V
		353.01	22.26	-23.74	46	31.88	21.24	2.04	32.9	-	-	P	V
		570.29	27.04	-18.96	46	32.18	24.53	2.57	32.24	-	-	P	V
		734.22	28.35	-17.65	46	31.55	25.74	2.85	31.79	-	-	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	Peak or Average
H/V	Horizontal or Vertical



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

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

For Peak Limit @ 2390MHz:

- 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)
- Over Limit(dB)
= Level(dBμV/m) – Limit Line(dBμV/m)
= 55.45(dBμV/m) – 74(dBμV/m)
= -18.55(dB)

For Average Limit @ 2390MHz:

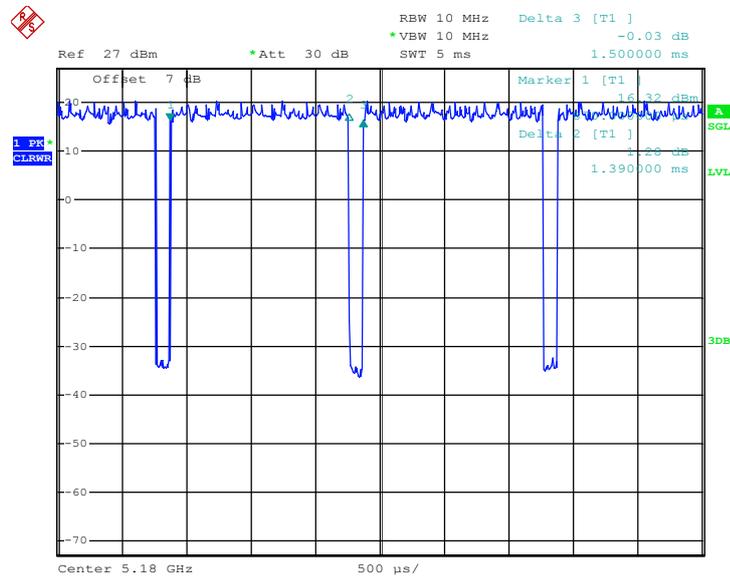
- Level(dBμV/m)
= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)
= 43.54 (dBμV/m)
- Over Limit(dB)
= Level(dBμV/m) – Limit Line(dBμV/m)
= 43.54(dBμV/m) – 54(dBμV/m)
= -10.46(dB)

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	92.67	1.390	0.719	1kHz
802.11n HT20	92.31	1.296	0.771	1kHz
802.11n HT40	85.56	0.640	1.562	3kHz
802.11ac VHT20	92.56	1.320	0.758	1kHz
802.11ac VHT40	85.86	0.656	1.524	3kHz
802.11ac VHT80	75.00	0.324	3.086	10kHz

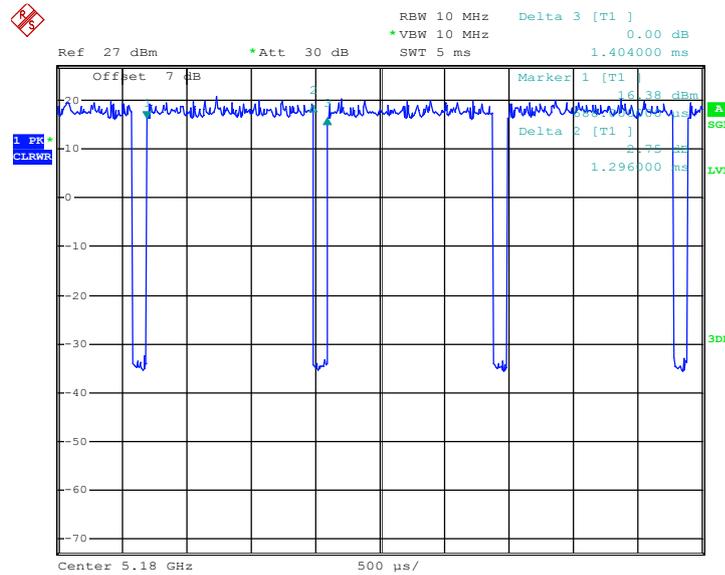
802.11a



Date: 20.JUN.2016 00:42:07

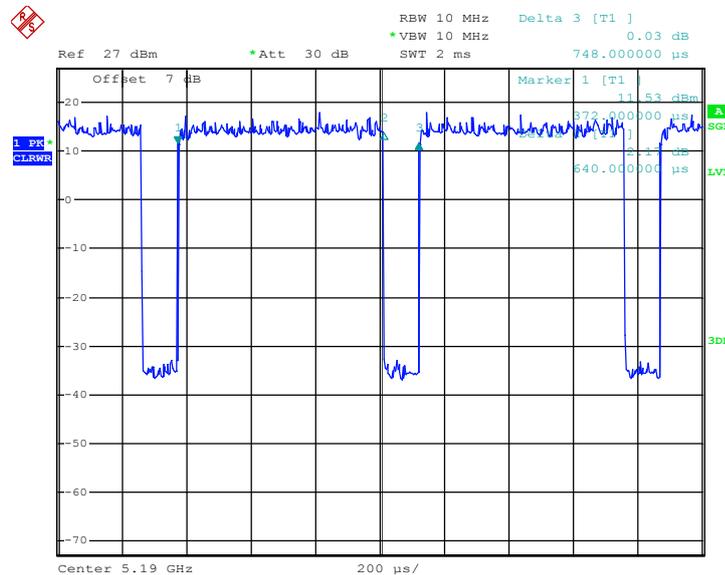


802.11n HT20



Date: 20.JUN.2016 00:50:36

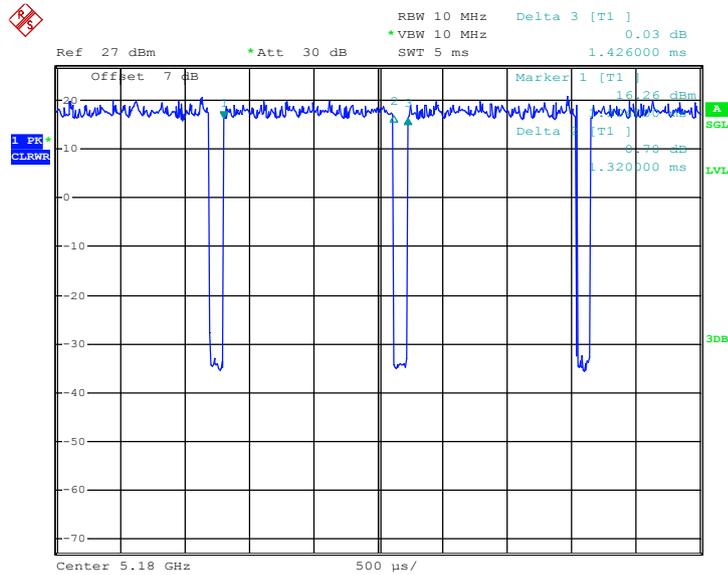
802.11n HT40



Date: 20.JUN.2016 00:58:53

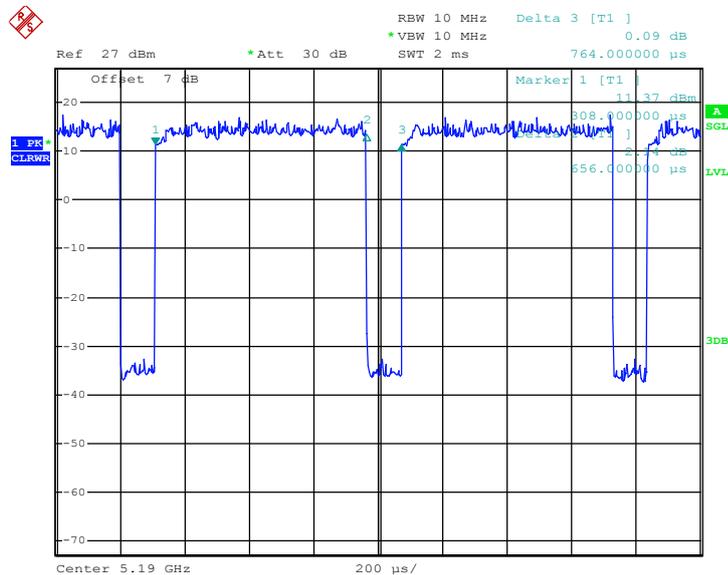


802.11ac VHT20



Date: 20.JUN.2016 01:07:10

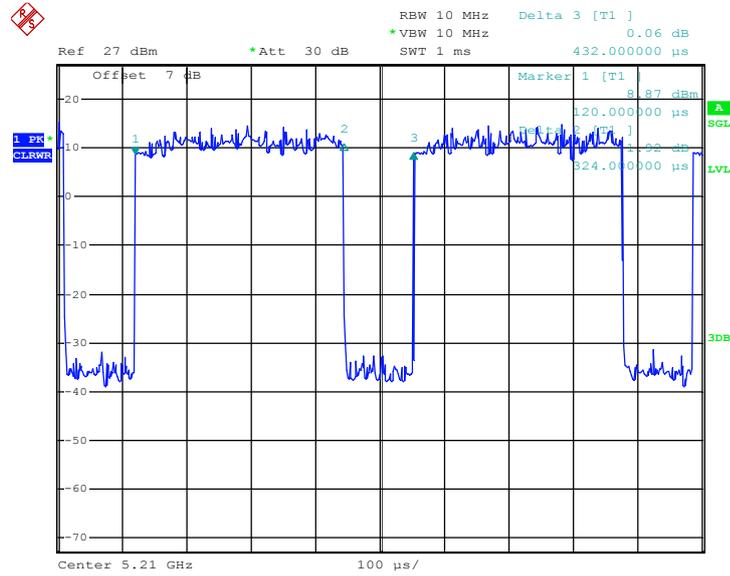
802.11ac VHT40



Date: 20.JUN.2016 01:14:30



802.11ac VHT80



Date: 20.JUN.2016 01:22:20