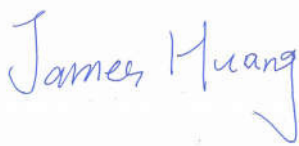


FCC RF Test Report

APPLICANT : TCL Communication Ltd.
EQUIPMENT : GSM Quad-band / UMTS Quad-band / LTE
hepta-band mobile phone
BRAND NAME : alcatel
MODEL NAME : 6055B
FCC ID : 2ACCJA015
STANDARD : FCC Part 15 Subpart E §15.407
CLASSIFICATION : (NII) Unlicensed National Information Infrastructure

The product was received on Jan. 15, 2016 and testing was completed on Apr. 18, 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

REVISION HISTORY	3
SUMMARY OF TEST RESULT	4
1 GENERAL DESCRIPTION	5
1.1. Applicant	5
1.2. Manufacturer	5
1.3. Feature of Equipment Under Test	5
1.4. Product Specification of Equipment Under Test	6
1.5. Specification of Accessory	8
1.6. Modification of EUT	8
1.7. Testing Location	9
1.8. Applicable Standards	9
2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST	10
2.1 Carrier Frequency Channel	10
2.2 Pre-Scanned RF Power	12
2.3 Test Mode	14
2.4 Connection Diagram of Test System	17
2.5 Support Unit used in test configuration and system	19
2.6 EUT Operation Test Setup	19
2.7 Measurement Results Explanation Example	19
3 TEST RESULT	20
3.1 26dB & 99% Occupied Bandwidth Measurement	20
3.2 Maximum Conducted Output Power Measurement	22
3.3 Power Spectral Density Measurement	27
3.4 Unwanted Radiated Emission Measurement	30
3.5 AC Conducted Emission Measurement	35
3.6 Frequency Stability Measurement	40
3.7 Automatically Discontinue Transmission	41
3.8 Antenna Requirements	42
4 LIST OF MEASURING EQUIPMENT	43
5 UNCERTAINTY OF EVALUATION	44
APPENDIX A. CONDUCTED TEST RESULTS	
APPENDIX B. RADIATED TEST RESULTS	
APPENDIX C. SETUP PHOTOGRAPHS	
APPENDIX D. Duty Cycle Plots	



REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR611504E	Rev. 01	Initial issue of report	Apr. 22, 2016

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	2.1049 15.403(i)	26dB & 99% Bandwidth	-	Pass	-
3.2	15.407(a)	Maximum Conducted Output Power	FCC ≤24 dBm (depend on band)	Pass	-
3.3	15.407(a)	Power Spectral Density	FCC ≤11 dBm (depend on band)	Pass	-
3.4	15.407(b)	Unwanted Emissions	≤ -17, -27 dBm (depend on band)&15.209(a)	Pass	Under limit 1.25 dB at 5354.700 MHz
3.5	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 8.98 dB at 17.290 MHz
3.6	15.407(g)	Frequency Stability	Within Operation Band	Pass	-
3.7	15.407(c)	Automatically Discontinue Transmission	Discontinue Transmission	Pass	-
3.8	15.203 & 15.407(a)	Antenna Requirement	N/A	Pass	-



1 General Description

1.1. Applicant

TCL Communication Ltd.

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

1.2. Manufacturer

TCL Communication Ltd.

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

1.3. Feature of Equipment Under Test

Product Feature & Specification	
Equipment	GSM Quad-band / UMTS Quad-band / LTE hepta-band mobile phone
Brand Name	alcatel
Model Name	6055B
FCC ID	2ACCJA015
EUT supports Radios application	GSM/GPRS/EGPRS/WCDMA/HSPA/DC-HSDPA/ HSPA+(16QAM uplink is not supported)/LTE/NFC/ WLAN 2.4GHz 802.11b/g/n HT20/HT40/ WLAN 5GHz 802.11a/n HT20/HT40/ WLAN 5GHz 802.11ac VHT20/VHT40/VHT80/ Bluetooth v3.0+EDR/ Bluetooth v4.0 LE/ Bluetooth v4.2 LE
IMEI Code	Conducted: 356132070002499 Radiation: 356132070001855 Conduction: 35613207001459
HW Version	PIO
SW Version	010 01
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

Product Specification subjective to this standard	
Tx/Rx Frequency Range	5180 MHz ~ 5240 MHz 5260 MHz ~ 5320 MHz 5500 MHz ~ 5700 MHz
Maximum Output Power to Antenna	<5180 MHz ~ 5240 MHz> 802.11a : 12.15 dBm / 0.0164 W 802.11n HT20 : 12.10 dBm / 0.0162 W 802.11n HT40 : 12.08 dBm / 0.0161 W 802.11ac VHT20 : 11.98 dBm / 0.0158 W 802.11ac VHT40 : 11.70 dBm / 0.0148 W 802.11ac VHT80 : 11.39 dBm / 0.0138 W <5260 MHz ~ 5320 MHz> 802.11a : 12.18 dBm / 0.0165 W 802.11n HT20 : 12.16 dBm / 0.0164 W 802.11n HT40 : 12.03 dBm / 0.0160 W 802.11ac VHT20 : 12.09 dBm / 0.0162 W 802.11ac VHT40 : 11.65 dBm / 0.0146 W 802.11ac VHT80 : 10.43 dBm / 0.0110 W <5500 MHz ~ 5700 MHz> 802.11a : 12.22 dBm / 0.0167 W 802.11n HT20 : 12.18 dBm / 0.0165 W 802.11n HT40 : 12.10 dBm / 0.0162 W 802.11ac VHT20 : 11.78 dBm / 0.0151 W 802.11ac VHT40 : 11.68 dBm / 0.0147 W 802.11ac VHT80 : 10.99 dBm / 0.0126 W
99% Occupied Bandwidth	<5180 MHz ~ 5240 MHz> 802.11a : 18.73 MHz 802.11n HT20 : 19.63 MHz 802.11n HT40 : 36.76 MHz 802.11ac VHT20 : 19.38 MHz 802.11ac VHT40 : 37.06 MHz 802.11ac VHT80 : 74.81 MHz <5260 MHz ~ 5320 MHz> 802.11a : 18.78 MHz 802.11n HT20 : 19.53 MHz 802.11n HT40 : 36.96 MHz 802.11ac VHT20 : 19.38 MHz 802.11ac VHT40 : 36.96 MHz 802.11ac VHT80 : 74.81 MHz <5500 MHz ~ 5700 MHz> 802.11a : 18.98 MHz 802.11n HT20 : 19.78 MHz 802.11n HT40 : 37.36 MHz 802.11ac VHT20 : 19.43 MHz 802.11ac VHT40 : 37.16 MHz 802.11ac VHT80 : 74.81 MHz



Antenna Type	IFA Antenna
Antenna Gain	<5180 MHz ~ 5240 MHz>: -2.40 dBi <5260 MHz ~ 5320 MHz>: -2.40 dBi <5500 MHz ~ 5700 MHz>: -2.40 dBi
Type of Modulation	802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)

1.5. Specification of Accessory

Specification of Accessory				
AC Adapter 1	Brand Name	ALCATEL onetouch	Model Name	UC13US
	Power Rating	I/P: 100-240Vac, 400mA, O/P: 5Vdc, 2000mA		
	P/N	CBA0059AG0C2		
AC Adapter 2	Brand Name	ALCATEL onetouch	Model Name	UC13US
	Power Rating	I/P: 100-240Vac, 350mA, O/P: 5Vdc, 2000mA		
	P/N	CBA0059AG0C4		
AC Adapter 3	Brand Name	N/A	Model Name	UC13US
	Power Rating	I/P: 100-240Vac, 500mA, O/P: 5Vdc, 2000mA		
	P/N	CBA0059AG4C1		
AC Adapter 4	Brand Name	alcatel	Model Name	UC13US
	Power Rating	I/P: 100-240Vac, 350mA, O/P: 5Vdc, 2000mA		
	P/N	CBA0059AG0C4		
AC Adapter 5	Brand Name	alcatel	Model Name	UC13US
	Power Rating	I/P: 100-240Vac, 500mA, O/P: 5Vdc, 2000mA		
	P/N	CBA0059AGAC1		
Battery 1	Brand Name	ALCATEL onetouch	Model Name	TLp026EJ
	Power Rating	3.85Vdc, 2610mAh		
Battery 2	Brand Name	ALCATEL onetouch	Model Name	TLp026E2
	Power Rating	3.84Vdc, 2610mAh		
Battery 3	Brand Name	alcatel	Model Name	TLp026EJ
	Power Rating	3.85Vdc, 2610mAh		
Battery 4	Brand Name	alcatel	Model Name	TLp026E2
	Power Rating	3.84Vdc, 2610mAh		
USB Cable 1	Brand Name	N/A	Model Name	CDA0000043C8
	Signal Line Type	1.0m shielded without core		
USB Cable 2	Brand Name	N/A	Model Name	CDA0000043C2
	Signal Line Type	1.0m shielded without core		
Earphone 1	Brand Name	alcatel	Model Name	J22C
	Signal Line Type	1.4m non-shielded without core		
	P/N	CCB0029A10CC		
Earphone 2	Brand Name	alcatel	Model Name	J22H
	Signal Line Type	1.0m non-shielded without core		
	P/N	CCB0047A10CC		

Note: The adapter 4, 5 and battery 3, 4 are just with different logo, all the designs are identical with adapter 2, 3 and battery 1, 2.

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.			FCC Registration No.
	TH01-KS	CO01-KS	03CH03-KS	306251

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

1.8. Applicable Standards

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

- FCC Part 15 Subpart E
- FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r02
- FCC KDB 644545 D03 Guidance for IEEE 802.11ac New Rules v01
- ANSI C63.10-2013

Remark:

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

2 Test Configuration of Equipment Under Test

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conducted emission (150 kHz to 30 MHz) and radiated emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Y/Z 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	11.74	CH 48	11.96	11.99	11.94	12.11	12.01	12.09	12.00
CH 44	5220	11.91								
CH 48	5240	12.15								
CH 52	5260	12.18	CH 52	12.00	12.04	12.06	12.10	12.12	12.14	12.07
CH 60	5300	11.70								
CH 64	5320	11.73								
CH 100	5500	12.22	CH 100	12.06	12.07	12.09	12.13	12.10	12.19	12.14
CH 116	5580	11.46								
CH 140	5700	11.01								

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	11.85	CH 48	11.99	12.02	11.98	12.00	12.08	12.04	12.06
CH 44	5220	12.02								
CH 48	5240	12.10								
CH 52	5260	12.16	CH 52	12.02	12.07	12.09	12.11	12.12	12.15	12.13
CH 60	5300	11.80								
CH 64	5320	11.85								
CH 100	5500	12.18	CH 100	12.06	12.11	12.09	12.10	12.13	12.15	12.16
CH 116	5580	11.57								
CH 140	5700	10.92								

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	12.08	CH 38	11.91	11.95	11.89	11.86	11.98	12.02	12.05
CH 46	5230	11.82								
CH 54	5270	11.64	CH 62	11.89	11.90	11.92	11.95	12.00	11.96	11.98
CH 62	5310	12.03								
CH 102	5510	12.10	CH 102	11.96	11.98	12.01	12.04	12.03	12.06	12.02
CH 110	5550	11.44								
CH 134	5670	11.54								



WLAN 5GHz 802.11ac VHT20 Average Power (dBm)											
Power vs. Channel			Power vs. Data Rate								
Channel	Frequency (MHz)	MCS Index MCS0	Channel	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8
CH 36	5180	11.45	CH 48	11.86	11.93	11.90	11.92	11.94	11.97	11.96	11.89
CH 44	5220	11.64									
CH 48	5240	11.98									
CH 52	5260	12.09	CH 52	12.01	12.06	12.02	12.07	12.04	12.03	12.05	12.08
CH 60	5300	11.29									
CH 64	5320	11.40									
CH 100	5500	11.78	CH 100	11.71	11.65	11.73	11.62	11.74	11.76	11.66	11.67
CH 116	5580	10.87									
CH 140	5700	10.81									

WLAN 5GHz 802.11ac VHT40 Average Power (dBm)												
Power vs. Channel			Power vs. Data Rate									
Channel	Frequency (MHz)	MCS Index MCS0	Channel	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
CH 38	5190	11.70	CH 38	11.61	11.54	11.47	11.65	11.55	11.61	11.67	11.66	11.68
CH 46	5230	11.58										
CH 54	5270	11.44										
CH 62	5310	11.65	CH 62	11.55	11.57	11.49	11.63	11.52	11.53	11.60	11.56	11.61
CH 102	5510	11.68										
CH 110	5550	10.39										
CH 134	5670	10.74	CH 102	11.65	11.62	11.53	11.63	11.55	11.66	11.64	11.67	11.62

WLAN 5GHz 802.11ac VHT80 Average Power (dBm)												
Power vs. Channel			Power vs. Data Rate									
Channel	Frequency (MHz)	MCS Index MCS0	Channel	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
CH 42	5210	11.39	CH 42	11.34	11.24	11.27	11.25	11.37	11.38	11.31	11.35	11.36
CH 58	5290	10.43	CH 58	10.39	10.42	10.35	10.28	10.38	10.42	10.40	10.33	10.36
CH 106	5530	10.99	CH 106	10.95	10.88	10.97	10.93	10.98	10.89	10.91	10.94	10.95
CH 122	5610	9.91										

2.3 Test Mode

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

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

Test Cases	
AC Conducted Emission	Mode 1 : GSM850 Idle + Bluetooth Link + WLAN (5GHz) Link + Earphone 1 + USB Cable 1 (Charging from Adapter 1) + Battery 1 Mode 2 : GSM850 Idle + Bluetooth Link + WLAN (5GHz) Link + Earphone 2 + USB Cable 2 (Charging from Adapter 2) + Battery 2
Remark: - For Radiated TCs, the tests were performed with Adapter 1, Earphone 1, Battery 1 and USB Cable 1, only the worst mode need to verify Adapter 2, Battery 2 and USB Cable 2. - 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



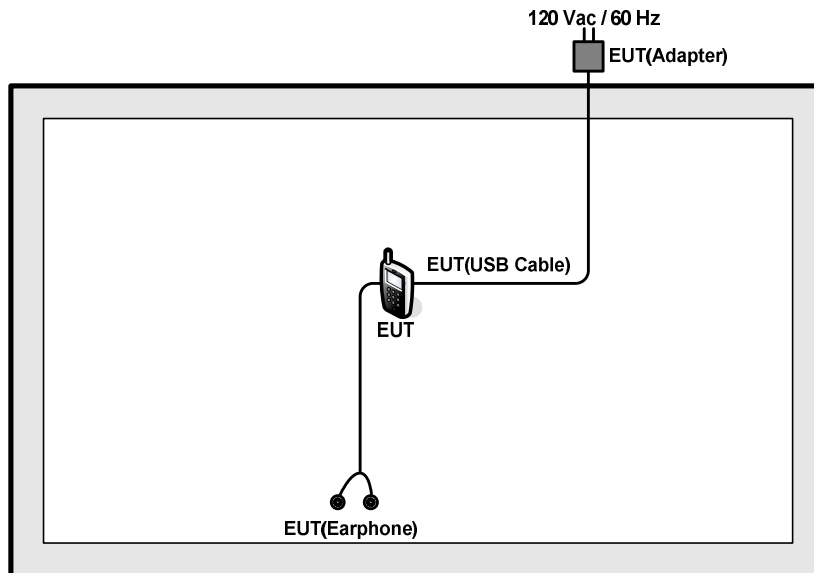
Ch. #		Band I : 5180-5240 MHz	Band II : 5260-5320 MHz	Band III : 5500-5700MHz
		802.11ac VHT40	802.11ac VHT40	802.11ac VHT40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134
Straddle Channel		-	-	142

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

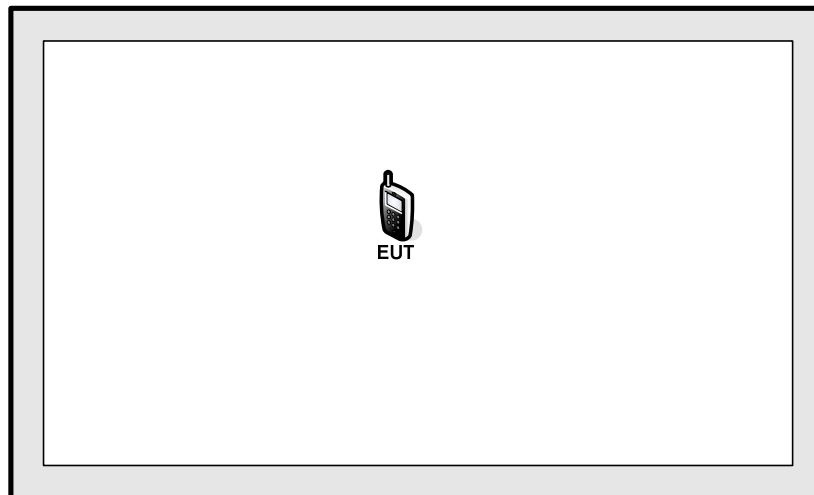
2.4 Connection Diagram of Test System

<WLAN Tx Mode>

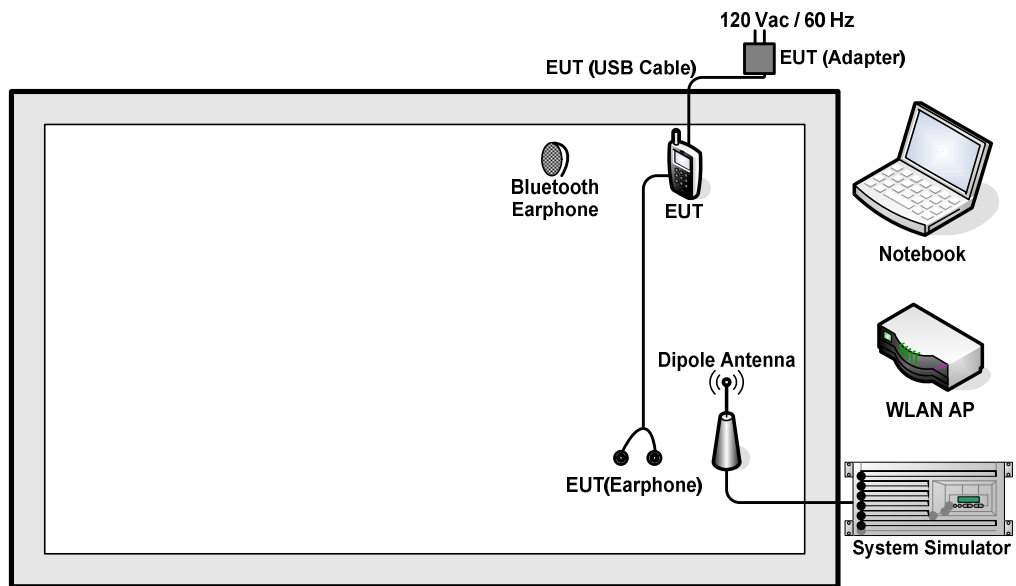
For WLAN 5GHz 802.11a/802.11ac VHT20/VHT40/VHT80



For WLAN 5GHz 802.11n HT20/HT40



<AC Conducted Emission Mode>



2.5 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Notebook	Lenovo	G480	N/A	N/A	AC I/P: Unshielded, 1.8 m DC O/P: Shielded, 1.8 m
2.	WLAN AP	LINKSYS	WRT600N	Q87-WRT600NV11	N/A	Unshielded, 1.8 m
3.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
4.	Bluetooth Earphone	Nokia	BH-102	PYAHS-107W	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.

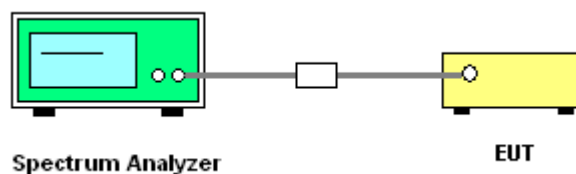
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

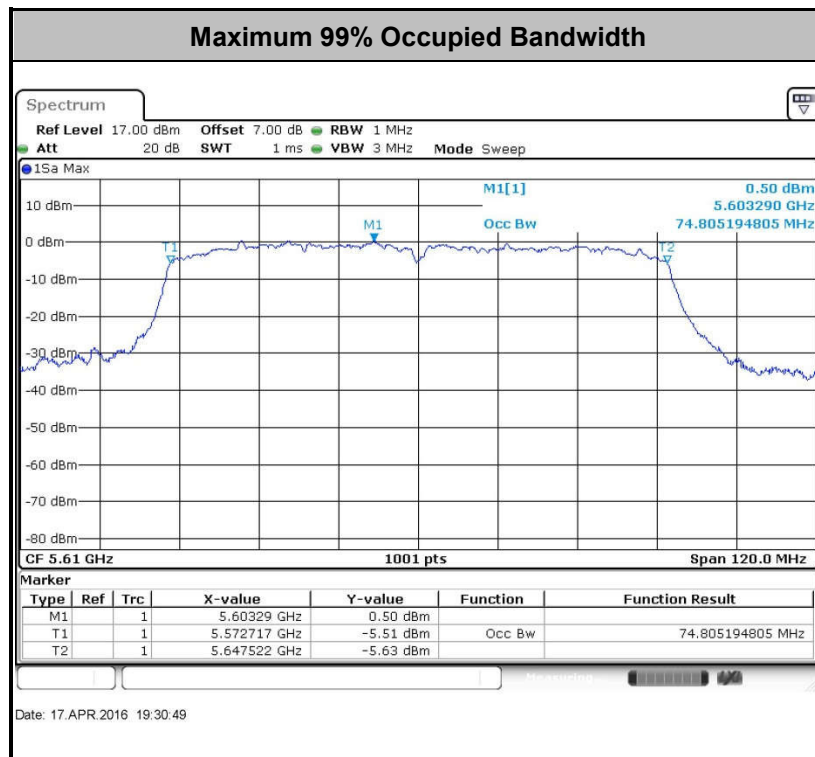
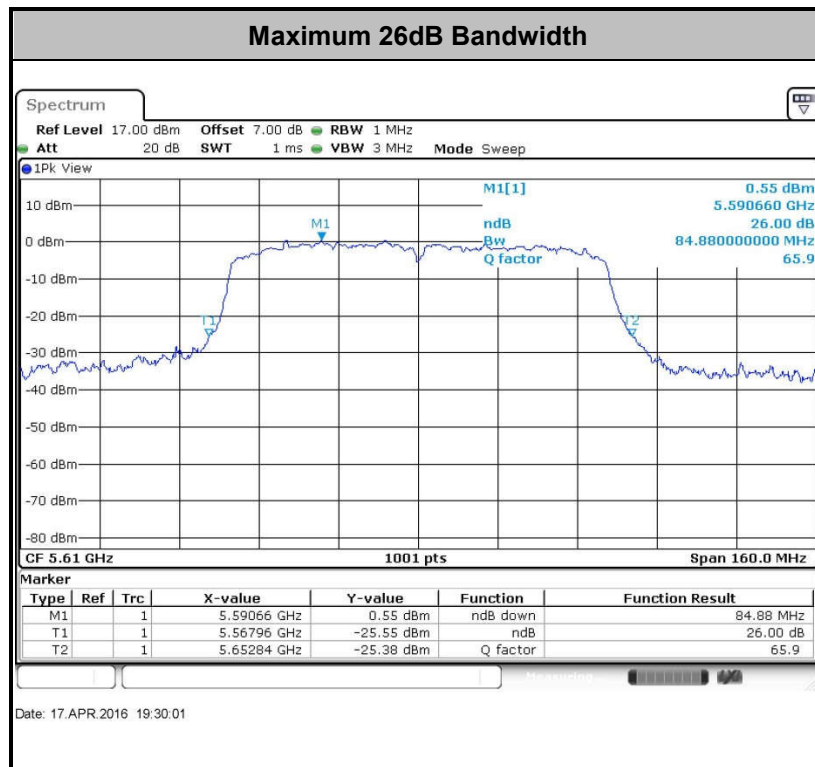
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r02. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB 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) $\geq 3 * \text{RBW}$.
8. Measure and record the results in the test report.

3.1.4 Test Setup



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

Please refer to Appendix A.



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

3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

<FCC 14-30 CFR 15.407>

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

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

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

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

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

3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

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

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

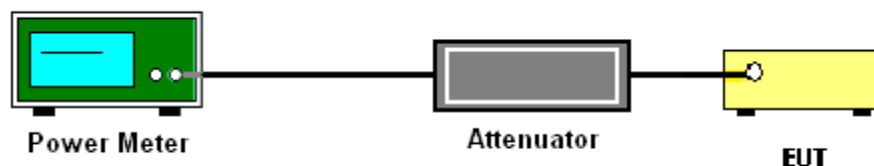
1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit continuously with a consistent duty cycle at its maximum power control level.
3. Measure the average power of the transmitter, and the average power is corrected with duty factor, $10 \log(1/x)$, where x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

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

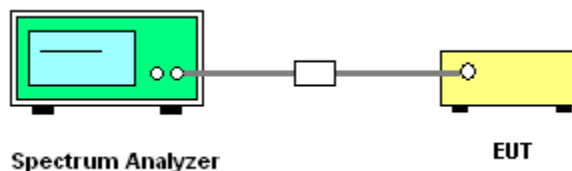
Compute power by integrating the spectrum across the 99% occupied bandwidth of the signal using the instrument's band power measurement function.

3.2.4 Test Setup

For normal channel:



For straddle channel:



3.2.5 Test Result of Maximum Conducted Output Power

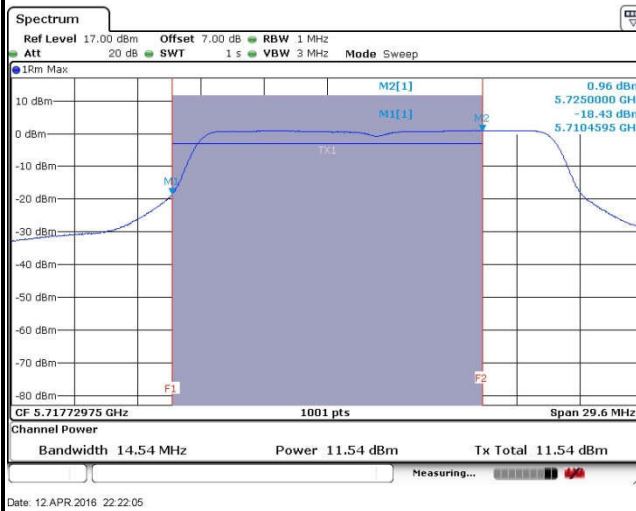
Please refer to Appendix A.



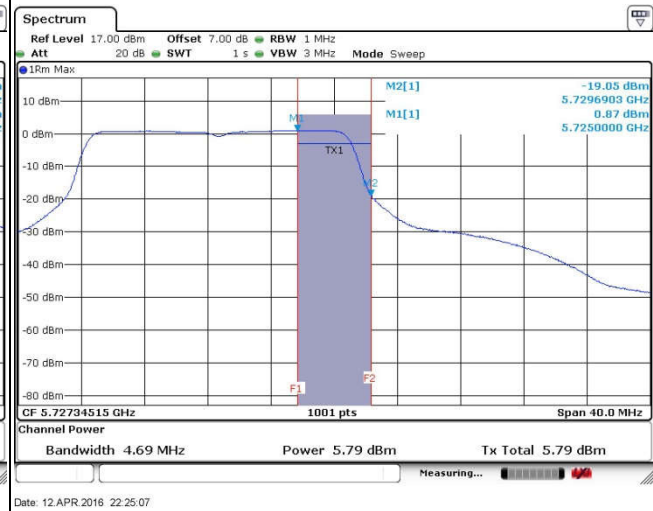
Maximum Straddle Channel Power

802.11a

NII-2C Band

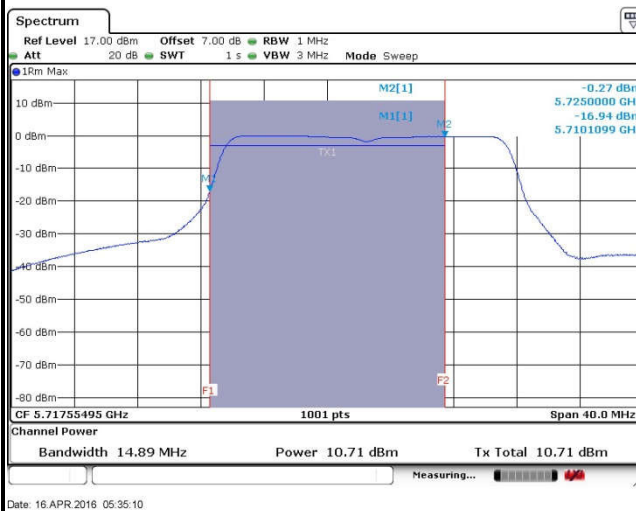


DTS Band

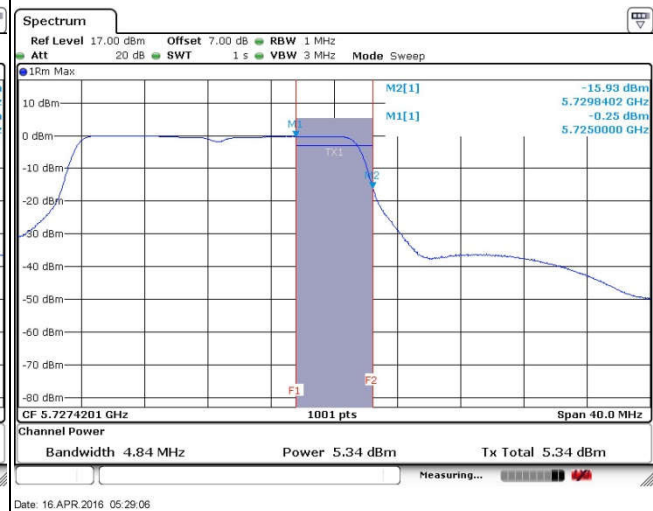


802.11n-HT20

NII-2C Band



DTS Band

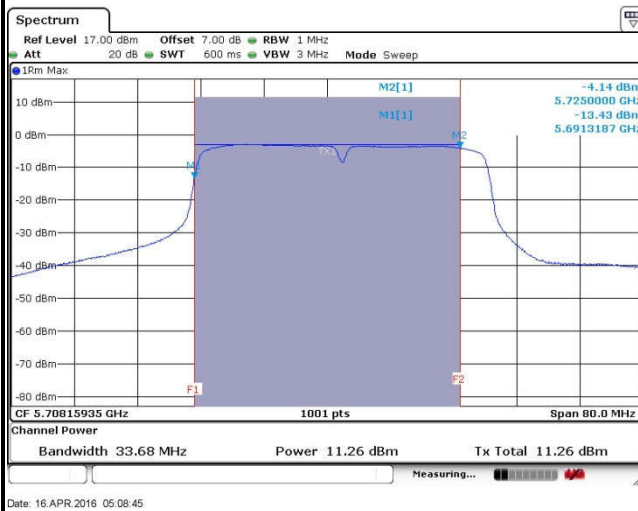




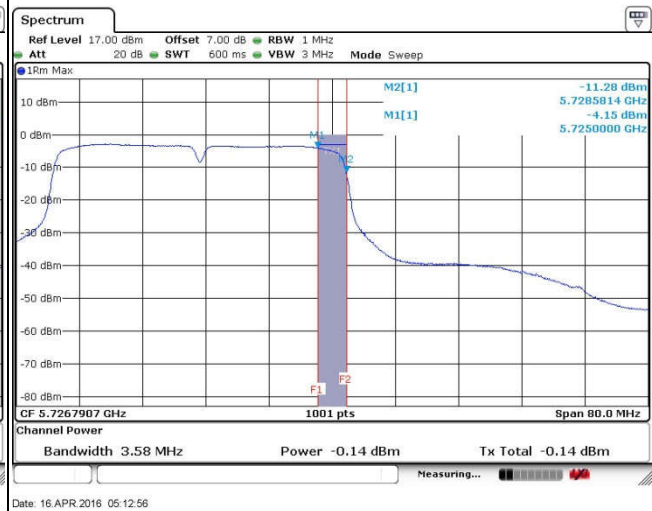
Maximum Straddle Channel Power

802.11n-HT40

NII-2C Band

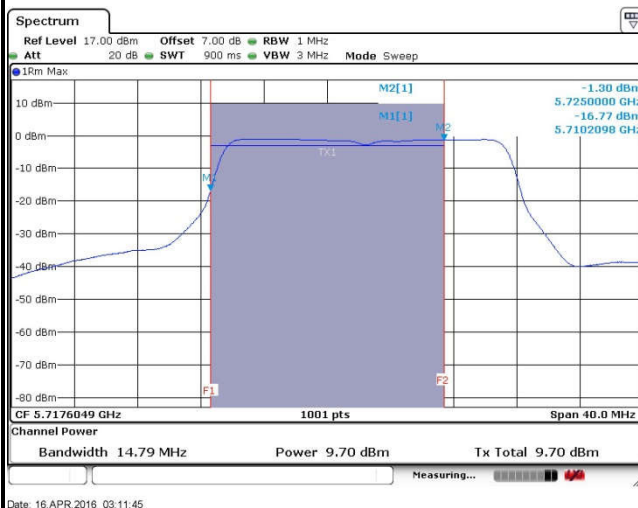


DTS Band

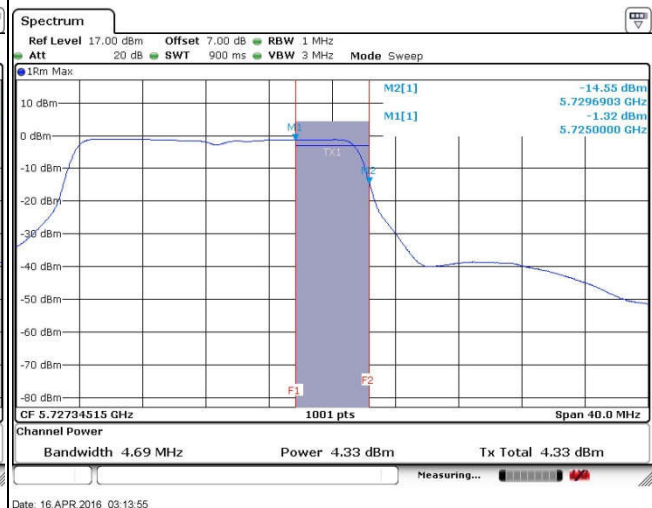


802.11ac VHT20

NII-2C Band



NII-3 Band

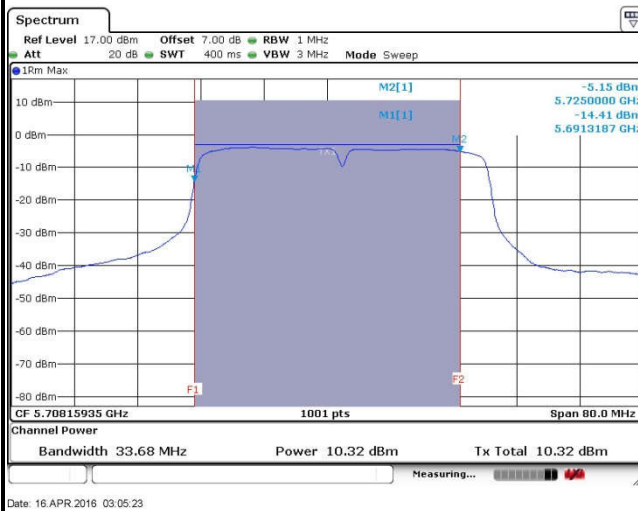




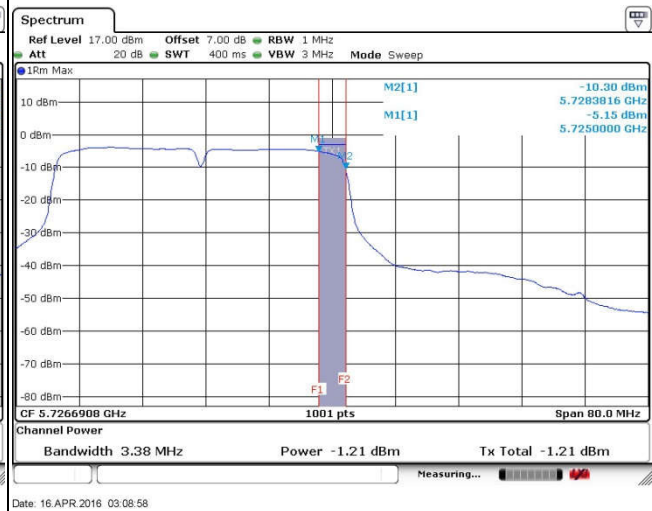
Maximum Straddle Channel Power

802.11ac VHT40

NII-2C Band

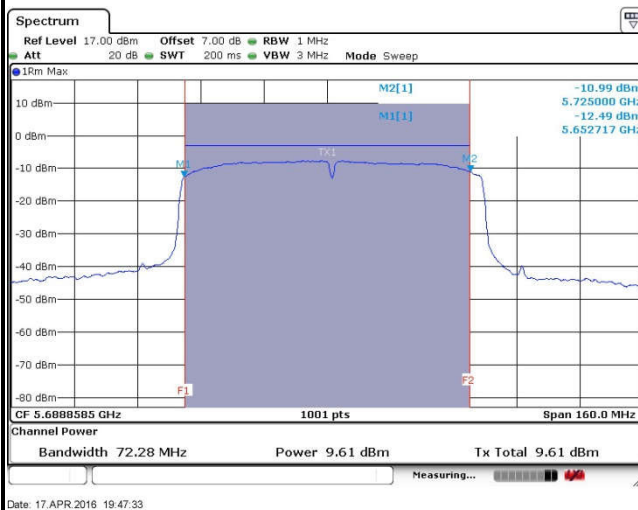


NII-3 Band

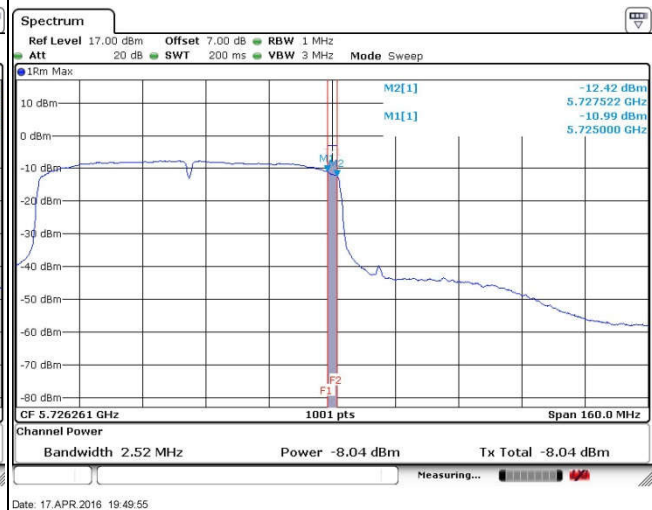


802.11ac VHT80

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.

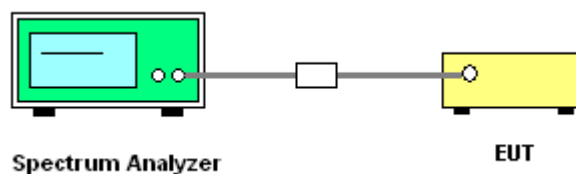
Section F) Maximum power spectral density.

Method SA-2

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

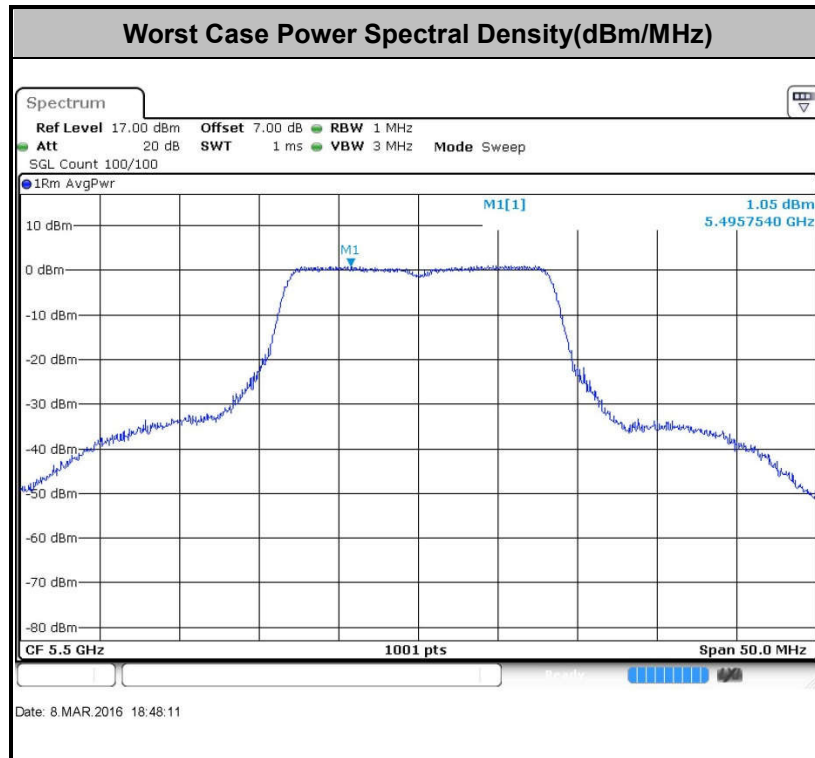
1. The testing follows Method SA-2 of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r02.
 - Measure the duty cycle.
 - Set span to encompass the entire emission bandwidth (EBW) of the signal.
 - Set RBW = 1 MHz.
 - Set VBW $\geq$ 3 MHz.
 - Number of points in sweep $\geq$ 2 Span / RBW.
 - 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 Part 15.205.

3.4.1 Limit of Unwanted Emissions

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

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

For transmitters operating in the 5470-5600 MHz and 5650-5725MHz band: all emissions outside of the 5470-5600 MHz and 5650-5725MHz band shall not exceed an EIRP of -27 dBm/MHz.

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

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

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

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

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

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

3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

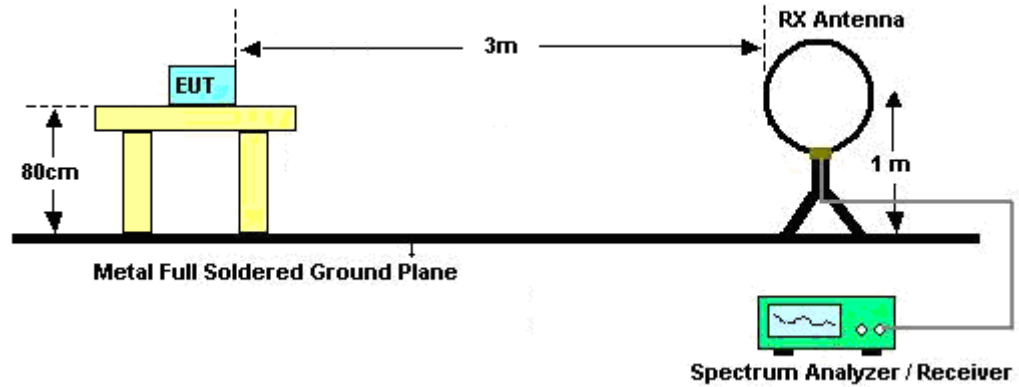
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r02. Section G) Unwanted emissions measurement.
 - (1) Procedure for Unwanted Emissions Measurements Below 1000MHz
 - RBW = 120 kHz
 - VBW = 300 kHz
 - Detector = Peak
 - Trace mode = max hold
 - (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
 - RBW = 1 MHz
 - VBW $\geq$ 3 MHz
 - Detector = Peak
 - Sweep time = auto
 - Trace mode = max hold
 - (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz
 - RBW = 1 MHz
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - VBW $\geq$ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.



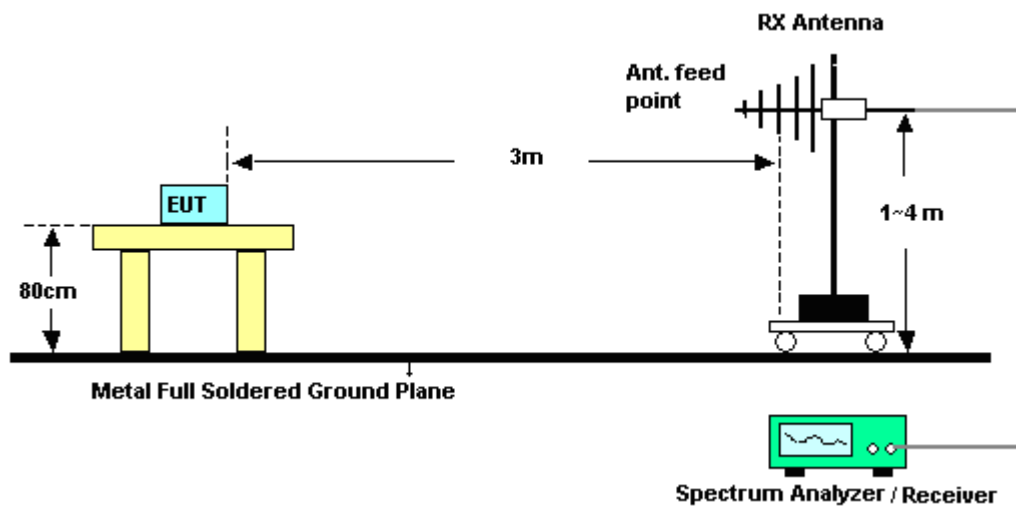
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband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

3.4.4 Test Setup

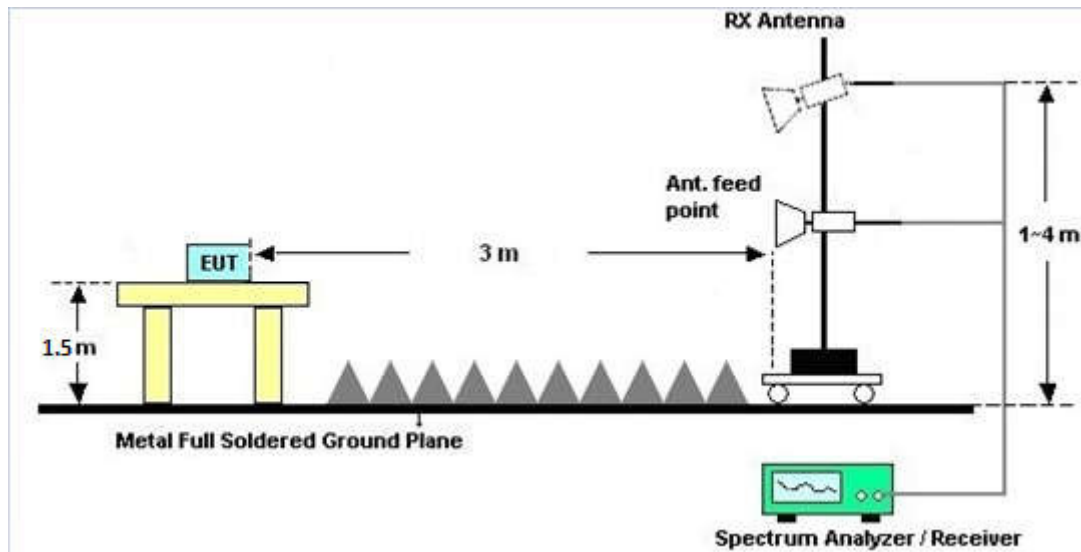
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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

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

3.4.6 Test Result of Radiated Band Edges

Please refer to Appendix B.

3.4.7 Duty Cycle

Please refer to Appendix D.

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

Please refer to Appendix B.

3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

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

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

*Decreases with the logarithm of the frequency.

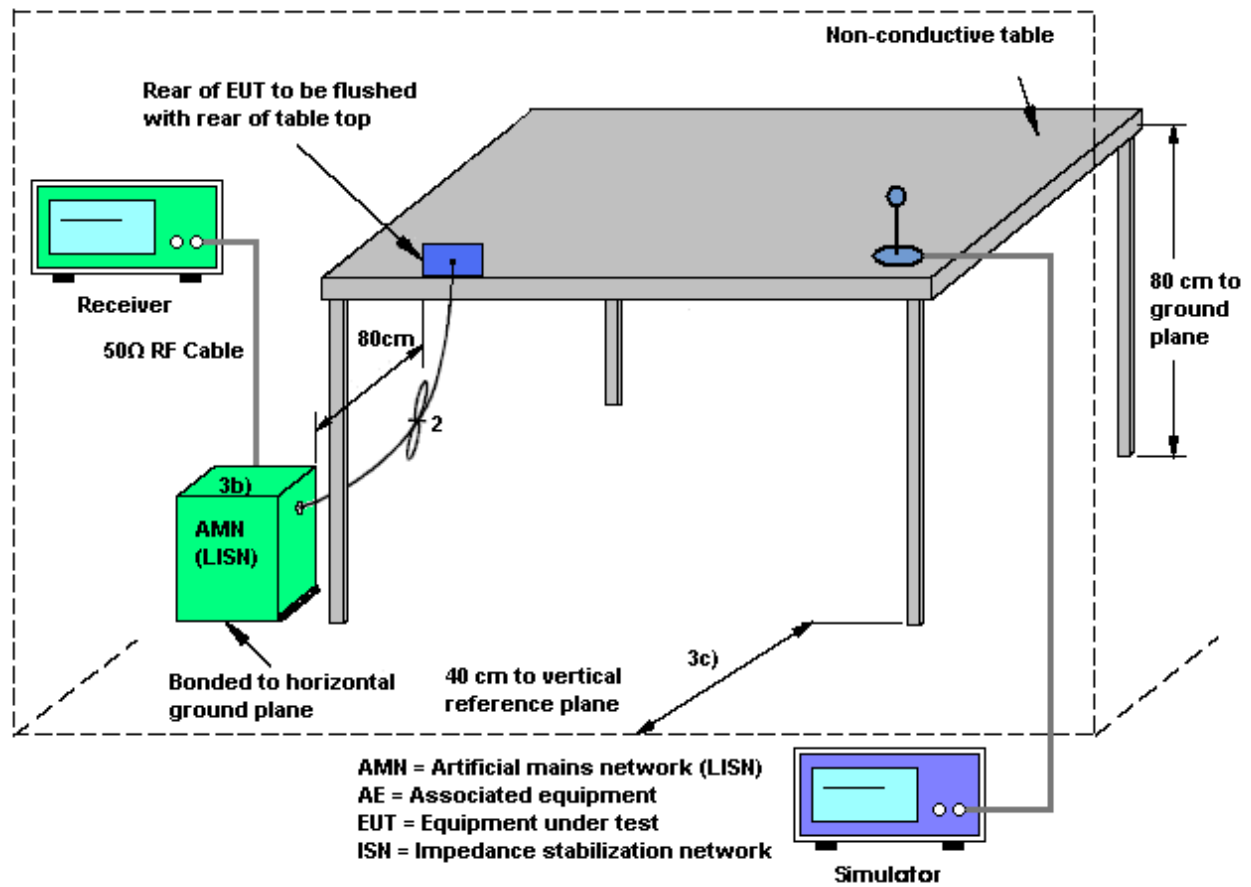
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

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

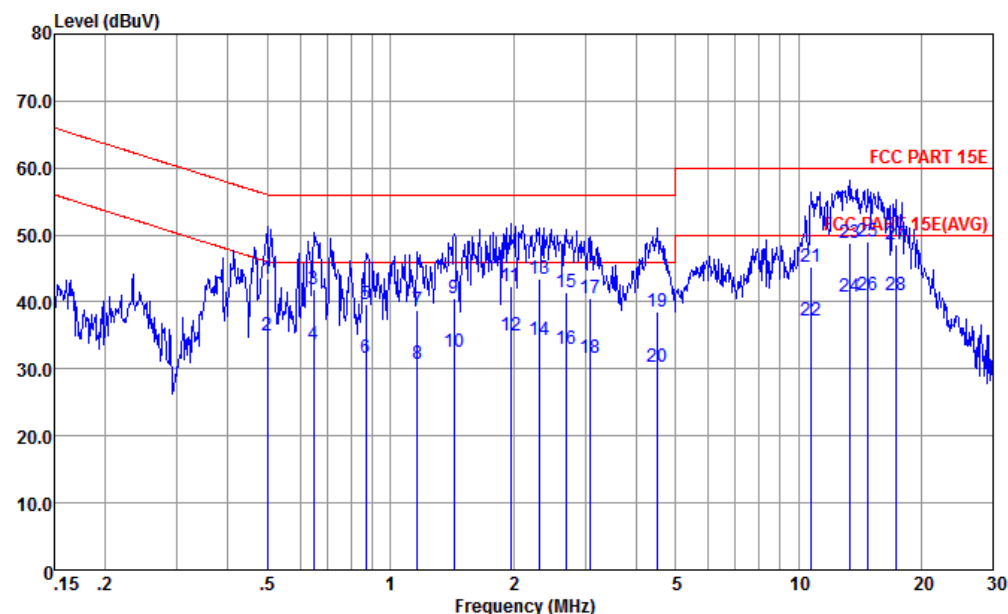
3.5.4 Test Setup





3.5.5 Test Result of AC Conducted Emission

Test Mode :	Mode 2	Temperature :	22~24℃
Test Engineer :	Amos Zhang	Relative Humidity :	44~46%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	GSM850 Idle + Bluetooth Link + WLAN (5GHz) Link + Earphone 2 + USB Cable 2 (Charging from Adapter 2) + Battery 2		

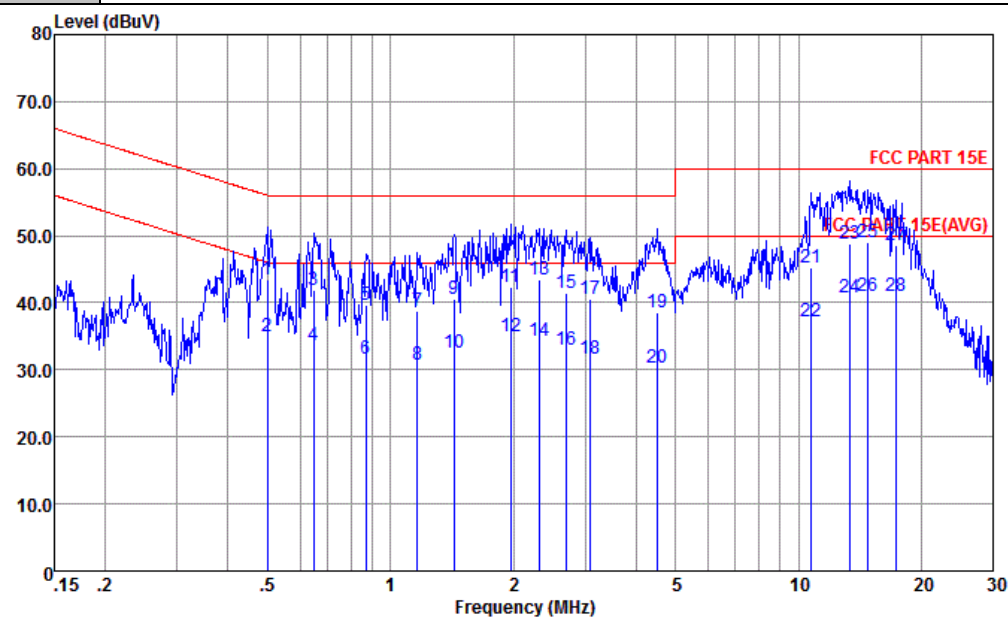


Site : CO01-KS
Condition : FCC PART 15E LISN-L-20151024 LINE

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.50	43.49	-12.52	56.01	33.10	0.23	10.16	QP
2	0.50	34.99	-11.02	46.01	24.60	0.23	10.16	Average
3	0.65	41.99	-14.01	56.00	31.60	0.24	10.15	QP
4	0.65	33.59	-12.41	46.00	23.20	0.24	10.15	Average
5	0.87	39.59	-16.41	56.00	29.20	0.25	10.14	QP
6	0.87	31.69	-14.31	46.00	21.30	0.25	10.14	Average
7	1.17	38.67	-17.33	56.00	28.30	0.23	10.14	QP
8	1.17	30.67	-15.33	46.00	20.30	0.23	10.14	Average
9	1.43	40.65	-15.35	56.00	30.30	0.21	10.14	QP
10	1.43	32.55	-13.45	46.00	22.20	0.21	10.14	Average
11	1.97	42.42	-13.58	56.00	32.10	0.18	10.14	QP
12	1.97	34.92	-11.08	46.00	24.60	0.18	10.14	Average
13	2.31	43.53	-12.47	56.00	33.20	0.18	10.15	QP
14	2.31	34.23	-11.77	46.00	23.90	0.18	10.15	Average
15	2.69	41.53	-14.47	56.00	31.20	0.18	10.15	QP
16	2.69	32.93	-13.07	46.00	22.60	0.18	10.15	Average
17	3.07	40.64	-15.36	56.00	30.31	0.18	10.15	QP



Test Mode :	Mode 2	Temperature :	22~24°C
Test Engineer :	Amos Zhang	Relative Humidity :	44~46%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	GSM850 Idle + Bluetooth Link + WLAN (5GHz) Link + Earphone 2 + USB Cable 2 (Charging from Adapter 2) + Battery 2		

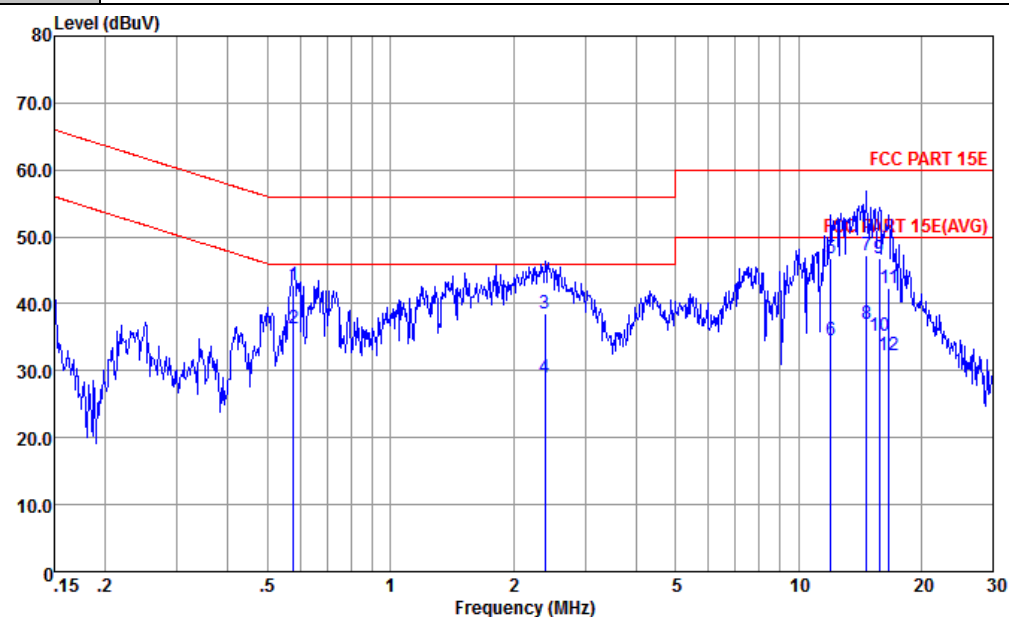


Site : CO01-KS
Condition : FCC PART 15E LISN-L-20151024 LINE

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
18	3.07	31.54	-14.46	46.00	21.21	0.18	10.15	Average
19	4.53	38.56	-17.44	56.00	28.19	0.19	10.18	QP
20	4.53	30.26	-15.74	46.00	19.89	0.19	10.18	Average
21	10.73	45.14	-14.86	60.00	34.60	0.25	10.29	QP
22	10.73	37.14	-12.86	50.00	26.60	0.25	10.29	Average
23	13.41	48.91	-11.09	60.00	38.30	0.26	10.35	QP
24	13.41	40.71	-9.29	50.00	30.10	0.26	10.35	Average
25	14.83	48.94	-11.06	60.00	38.30	0.26	10.38	QP
26	14.83	40.94	-9.06	50.00	30.30	0.26	10.38	Average
27	17.29	48.62	-11.38	60.00	37.91	0.26	10.45	QP
28 *	17.29	41.02	-8.98	50.00	30.31	0.26	10.45	Average



Test Mode :	Mode 2	Temperature :	22~24℃
Test Engineer :	Amos Zhang	Relative Humidity :	44~46%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	GSM850 Idle + Bluetooth Link + WLAN (5GHz) Link + Earphone 2 + USB Cable 2 (Charging from Adapter 2) + Battery 2		



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

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.58	42.69	-13.31	56.00	32.20	0.33	10.16	QP
2 *	0.58	36.39	-9.61	46.00	25.90	0.33	10.16	Average
3	2.40	38.62	-17.38	56.00	28.09	0.38	10.15	QP
4	2.40	29.02	-16.98	46.00	18.49	0.38	10.15	Average
5	12.00	46.89	-13.11	60.00	36.29	0.28	10.32	QP
6	12.00	34.49	-15.51	50.00	23.89	0.28	10.32	Average
7	14.67	47.25	-12.75	60.00	36.60	0.27	10.38	QP
8	14.67	36.95	-13.05	50.00	26.30	0.27	10.38	Average
9	15.80	46.78	-13.22	60.00	36.10	0.27	10.41	QP
10	15.80	35.28	-14.72	50.00	24.60	0.27	10.41	Average
11	16.66	42.30	-17.70	60.00	31.60	0.26	10.44	QP
12	16.66	32.30	-17.70	50.00	21.60	0.26	10.44	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.

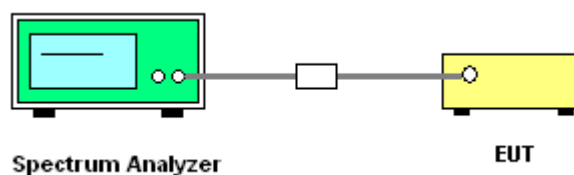
3.6.2 Measuring Instruments

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 Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV30	101338	9kHz~30GHz	May 04, 2015	Feb. 19, 2016~ Apr. 17, 2016	May 03, 2016	Conducted (TH01-KS)
Pulse Power Sensor	Anritsu	MA2411B	0917070	30MHz~40GHz	Jan. 20, 2016	Feb. 19, 2016~ Apr. 17, 2016	Jan. 19, 2017	Conducted (TH01-KS)
Power Meter	Anritsu	ML2495A	1005002	50MHz Bandwidth	Jan. 20, 2016	Feb. 19, 2016~ Apr. 17, 2016	Jan. 19, 2017	Conducted (TH01-KS)
Thermal Chamber	Ten Billion	TTC-B3S	TBN-960502	-40~+150°C	Oct. 24, 2015	Feb. 19, 2016~ Apr. 17, 2016	Oct. 23, 2016	Conducted (TH01-KS)
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz; Max 30dBm	Sep. 10, 2015	Feb. 19, 2016~ Apr. 18, 2016	Sep. 09, 2016	Radiation (03CH03-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150244	10Hz~44GHz	Jun. 05, 2015	Feb. 19, 2016~ Apr. 18, 2016	Jun. 04, 2016	Radiation (03CH03-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Nov. 07, 2015	Feb. 19, 2016~ Apr. 18, 2016	Nov. 06, 2016	Radiation (03CH03-KS)
Bilog Antenna	TeseQ	CBL6112D	35406	25MHz~2GHz	Jun. 25, 2015	Feb. 19, 2016~ Apr. 18, 2016	Jun. 24, 2016	Radiation (03CH03-KS)
Horn Antenna	Schwarzbeck	BBHA9120 D	9120D-1356	1GHz~18GHz	Jun. 25, 2015	Feb. 19, 2016~ Apr. 18, 2016	Jun. 24, 2016	Radiation (03CH03-KS)
SHF-EHF Horn	com-power	AH-840	101070	18Ghz~40Ghz	Oct. 10, 2015	Feb. 19, 2016~ Apr. 18, 2016	Oct. 09, 2016	Radiation (03CH03-KS)
Amplifier	Burgeon	BPA-530	102212	0.01MHz~3000M Hz	Aug. 10, 2015	Feb. 19, 2016~ Apr. 18, 2016	Aug. 09, 2016	Radiation (03CH03-KS)
Amplifier	Agilent	8449B	3008A02370	1GHz~26.5GHz	Oct. 24, 2015	Feb. 19, 2016~ Apr. 18, 2016	Oct. 23, 2016	Radiation (03CH03-KS)
Amplifier	MITEQ	TTA1840-35-HG	1887435	18GHz~40GHz	Aug. 27, 2015	Feb. 19, 2016~ Apr. 18, 2016	Aug. 26, 2016	Radiation (03CH03-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Feb. 19, 2016~ Apr. 18, 2016	NCR	Radiation (03CH03-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Feb. 19, 2016~ Apr. 18, 2016	NCR	Radiation (03CH03-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Feb. 19, 2016~ Apr. 18, 2016	NCR	Radiation (03CH03-KS)
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz	May 04, 2015	Mar. 03, 2016	May 03, 2016	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060103	9kHz~30MHz	Oct. 24, 2015	Mar. 03, 2016	Oct. 23, 2016	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060105	9kHz~30MHz	Oct. 24, 2015	Mar. 03, 2016	Oct. 23, 2016	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	AC 0V~300V, 45Hz~1000Hz	Oct. 24, 2015	Mar. 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% ($U = 2Uc(y)$)	2.3 dB
---	--------

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

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



Appendix A. Conducted Test Results

Test Engineer:	Issac Song	Temperature:	24~25	°C
Test Date:	2016/2/19~2016/4/17	Relative Humidity:	49~51	%

TEST RESULTS DATA
26dB and 99% OBW

Band I										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)	26 dB Bandwidth (MHz)	IC 99% Bandwidth Power Limit (dBm)	IC 99% Bandwidth EIRP Limit (dBm)		
11a	6Mbps	1	36	5180	18.68	23.33	-	22.71		
11a	6Mbps	1	44	5220	18.73	23.68	-	22.73		
11a	6Mbps	1	48	5240	18.73	23.68	-	22.73		
HT20	MCS0	1	36	5180	19.38	23.68	-	22.87		
HT20	MCS0	1	44	5220	19.63	24.18	-	22.93		
HT20	MCS0	1	48	5240	19.33	24.13	-	22.86		
HT40	MCS0	1	38	5190	36.76	45.41	-	23.01		
HT40	MCS0	1	46	5230	36.66	44.96	-	23.01		
VHT20	MCS0	1	36	5180	19.28	24.03	-	22.85		
VHT20	MCS0	1	44	5220	19.38	24.43	-	22.87		
VHT20	MCS0	1	48	5240	19.38	24.63	-	22.87		
VHT40	MCS0	1	38	5190	37.06	44.78	-	23.01		
VHT40	MCS0	1	46	5230	37.06	45.23	-	23.01		
VHT80	MCS0	1	42	5210	74.81	84.24	-	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	0.59	11.74	24.00	-2.40		Pass
11a	6Mbps	1	44	5220	0.59	11.91	24.00	-2.40		Pass
11a	6Mbps	1	48	5240	0.59	12.15	24.00	-2.40		Pass
HT20	MCS0	1	36	5180	0.63	11.85	24.00	-2.40		Pass
HT20	MCS0	1	44	5220	0.63	12.02	24.00	-2.40		Pass
HT20	MCS0	1	48	5240	0.63	12.10	24.00	-2.40		Pass
HT40	MCS0	1	38	5190	1.19	12.08	24.00	-2.40		Pass
HT40	MCS0	1	46	5230	1.19	11.82	24.00	-2.40		Pass
VHT20	MCS0	1	36	5180	0.79	11.45	24.00	-2.40		Pass
VHT20	MCS0	1	44	5220	0.79	11.64	24.00	-2.40		Pass
VHT20	MCS0	1	48	5240	0.79	11.98	24.00	-2.40		Pass
VHT40	MCS0	1	38	5190	1.47	11.70	24.00	-2.40		Pass
VHT40	MCS0	1	46	5230	1.47	11.58	24.00	-2.40		Pass
VHT80	MCS0	1	42	5210	2.58	11.39	24.00	-2.40		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	0.59	0.45	11.00	-2.40		Pass
11a	6Mbps	1	44	5220	0.59	0.51	11.00	-2.40		Pass
11a	6Mbps	1	48	5240	0.59	0.73	11.00	-2.40		Pass
HT20	MCS0	1	36	5180	0.63	0.88	11.00	-2.40		Pass
HT20	MCS0	1	44	5220	0.63	0.17	11.00	-2.40		Pass
HT20	MCS0	1	48	5240	0.63	0.39	11.00	-2.40		Pass
HT40	MCS0	1	38	5190	1.19	-2.66	11.00	-2.40		Pass
HT40	MCS0	1	46	5230	1.19	-2.71	11.00	-2.40		Pass
VHT20	MCS0	1	36	5180	0.79	0.43	11.00	-2.40		Pass
VHT20	MCS0	1	44	5220	0.79	0.95	11.00	-2.40		Pass
VHT20	MCS0	1	48	5240	0.79	1.09	11.00	-2.40		Pass
VHT40	MCS0	1	38	5190	1.47	-2.36	11.00	-2.40		Pass
VHT40	MCS0	1	46	5230	1.47	-2.12	11.00	-2.40		Pass
VHT80	MCS0	1	42	5210	2.58	-5.20	11.00	-2.40		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	18.63	23.63	23.70	29.70	23.98	
11a	6M bps	1	60	5300	18.63	23.58	23.70	29.70	23.98	
11a	6M bps	1	64	5320	18.78	23.73	23.74	29.74	23.98	
HT20	MCS 0	1	52	5260	19.53	24.08	23.91	29.91	23.98	
HT20	MCS 0	1	60	5300	19.43	23.93	23.88	29.88	23.98	
HT20	MCS 0	1	64	5320	19.43	23.93	23.88	29.88	23.98	
HT40	MCS 0	1	54	5270	36.66	44.33	23.98	30.00	23.98	
HT40	MCS 0	1	62	5310	36.96	45.23	23.98	30.00	23.98	
VHT20	MCS 0	1	52	5260	19.33	24.53	23.86	29.86	23.98	
VHT20	MCS 0	1	60	5300	19.38	24.28	23.87	29.87	23.98	
VHT20	MCS 0	1	64	5320	19.33	24.23	23.86	29.86	23.98	
VHT40	MCS 0	1	54	5270	36.96	44.51	23.98	30.00	23.98	
VHT40	MCS 0	1	62	5310	36.96	44.96	23.98	30.00	23.98	
VHT80	MCS 0	1	58	5290	74.81	83.60	23.98	30.00	23.98	

TEST RESULTS DATA
Average Power Table

FCC Band II										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)	FCC Conducted Power Limit (dBm)	DG (dBi)		Pass/Fail
11a	6M bps	1	52	5260	0.59	12.18	23.98	-2.40		Pass
11a	6M bps	1	60	5300	0.59	11.70	23.98	-2.40		Pass
11a	6M bps	1	64	5320	0.59	11.73	23.98	-2.40		Pass
HT20	MCS 0	1	52	5260	0.63	12.16	23.98	-2.40		Pass
HT20	MCS 0	1	60	5300	0.63	11.80	23.98	-2.40		Pass
HT20	MCS 0	1	64	5320	0.63	11.85	23.98	-2.40		Pass
HT40	MCS 0	1	54	5270	1.19	11.64	23.98	-2.40		Pass
HT40	MCS 0	1	62	5310	1.19	12.03	23.98	-2.40		Pass
VHT20	MCS 0	1	52	5260	0.79	12.09	23.98	-2.40		Pass
VHT20	MCS 0	1	60	5300	0.79	11.29	23.98	-2.40		Pass
VHT20	MCS 0	1	64	5320	0.79	11.40	23.98	-2.40		Pass
VHT40	MCS 0	1	54	5270	1.47	11.44	23.98	-2.40		Pass
VHT40	MCS 0	1	62	5310	1.47	11.65	23.98	-2.40		Pass
VHT80	MCS 0	1	58	5290	2.58	10.43	23.98	-2.40		Pass

TEST RESULTS DATA
Power Spectral Density

Band II										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Power Density (dBm/MHz)	Average PSD Limit (dBm/MHz)	DG (dBi)		Pass/Fail
11a	6M bps	1	52	5260	0.59	0.94	11.00	-2.40		Pass
11a	6M bps	1	60	5300	0.59	0.28	11.00	-2.40		Pass
11a	6M bps	1	64	5320	0.59	0.52	11.00	-2.40		Pass
HT20	MCS 0	1	52	5260	0.63	0.66	11.00	-2.40		Pass
HT20	MCS 0	1	60	5300	0.63	0.12	11.00	-2.40		Pass
HT20	MCS 0	1	64	5320	0.63	-0.21	11.00	-2.40		Pass
HT40	MCS 0	1	54	5270	1.19	-1.80	11.00	-2.40		Pass
HT40	MCS 0	1	62	5310	1.19	-2.85	11.00	-2.40		Pass
VHT20	MCS 0	1	52	5260	0.79	1.45	11.00	-2.40		Pass
VHT20	MCS 0	1	60	5300	0.79	0.04	11.00	-2.40		Pass
VHT20	MCS 0	1	64	5320	0.79	0.11	11.00	-2.40		Pass
VHT40	MCS 0	1	54	5270	1.47	-2.11	11.00	-2.40		Pass
VHT40	MCS 0	1	62	5310	1.47	-2.12	11.00	-2.40		Pass
VHT80	MCS 0	1	58	5290	2.58	-6.71	11.00	-2.40		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	18.78	23.93	23.74	29.74	23.98	
11a	6M bps	1	116	5580	18.88	23.98	23.76	29.76	23.98	
11a	6M bps	1	140	5700	18.98	24.18	23.78	29.78	23.98	
HT20	MCS 0	1	100	5500	19.78	24.28	23.96	29.96	23.98	
HT20	MCS 0	1	116	5580	19.73	24.53	23.95	29.95	23.98	
HT20	MCS 0	1	140	5700	19.53	25.18	23.91	29.91	23.98	
HT40	MCS 0	1	102	5510	37.36	44.42	23.98	30.00	23.98	
HT40	MCS 0	1	110	5550	36.96	46.30	23.98	30.00	23.98	
HT40	MCS 0	1	134	5670	36.76	45.05	23.98	30.00	23.98	
VHT20	MCS 0	1	100	5500	19.43	24.03	23.88	29.88	23.98	
VHT20	MCS 0	1	116	5580	19.38	24.13	23.87	29.87	23.98	
VHT20	MCS 0	1	140	5700	19.38	24.18	23.87	29.87	23.98	
VHT40	MCS 0	1	102	5510	37.06	44.78	23.98	30.00	23.98	
VHT40	MCS 0	1	110	5550	37.16	45.05	23.98	30.00	23.98	
VHT40	MCS 0	1	134	5670	36.86	44.96	23.98	30.00	23.98	
VHT80	MCS 0	1	106	5530	74.81	84.40	23.98	30.00	23.98	
VHT80	MCS 0	1	122	5610	74.81	84.88	23.98	30.00	23.98	

TEST RESULTS DATA
Average Power Table

FCC Band III										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)	FCC Conducted Power Limit (dBm)	DG (dBi)		Pass/Fail
11a	6M bps	1	100	5500	0.59	12.22	23.98	-2.40		Pass
11a	6M bps	1	116	5580	0.59	11.46	23.98	-2.40		Pass
11a	6M bps	1	140	5700	0.59	11.01	23.98	-2.40		Pass
HT20	MCS 0	1	100	5500	0.63	12.18	23.98	-2.40		Pass
HT20	MCS 0	1	116	5580	0.63	11.57	23.98	-2.40		Pass
HT20	MCS 0	1	140	5700	0.63	10.92	23.98	-2.40		Pass
HT40	MCS 0	1	102	5510	1.19	12.10	23.98	-2.40		Pass
HT40	MCS 0	1	110	5550	1.19	11.44	23.98	-2.40		Pass
HT40	MCS 0	1	134	5670	1.19	11.54	23.98	-2.40		Pass
VHT20	MCS 0	1	100	5500	0.79	11.78	23.98	-2.40		Pass
VHT20	MCS 0	1	116	5580	0.79	10.87	23.98	-2.40		Pass
VHT20	MCS 0	1	140	5700	0.79	10.81	23.98	-2.40		Pass
VHT40	MCS 0	1	102	5510	1.47	11.68	23.98	-2.40		Pass
VHT40	MCS 0	1	110	5550	1.47	10.39	23.98	-2.40		Pass
VHT40	MCS 0	1	134	5670	1.47	10.74	23.98	-2.40		Pass
VHT80	MCS 0	1	106	5530	2.58	10.99	23.98	-2.40		Pass
VHT80	MCS 0	1	122	5610	2.58	9.91	23.98	-2.40		Pass

TEST RESULTS DATA
Power Spectral Density

Band III										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Power Density (dBm/MHz)	Average PSD Limit (dBm/MHz)	DG (dBi)		Pass/Fail
11a	6M bps	1	100	5500	0.59	1.64	11.00	-2.40		Pass
11a	6M bps	1	116	5580	0.59	0.76	11.00	-2.40		Pass
11a	6M bps	1	140	5700	0.59	0.75	11.00	-2.40		Pass
HT20	MCS 0	1	100	5500	0.63	1.50	11.00	-2.40		Pass
HT20	MCS 0	1	116	5580	0.63	0.80	11.00	-2.40		Pass
HT20	MCS 0	1	140	5700	0.63	0.68	11.00	-2.40		Pass
HT40	MCS 0	1	102	5510	1.19	-1.27	11.00	-2.40		Pass
HT40	MCS 0	1	110	5550	1.19	-2.65	11.00	-2.40		Pass
HT40	MCS 0	1	134	5670	1.19	-2.00	11.00	-2.40		Pass
VHT20	MCS 0	1	100	5500	0.79	0.38	11.00	-2.40		Pass
VHT20	MCS 0	1	116	5580	0.79	0.09	11.00	-2.40		Pass
VHT20	MCS 0	1	140	5700	0.79	0.15	11.00	-2.40		Pass
VHT40	MCS 0	1	102	5510	1.47	-2.26	11.00	-2.40		Pass
VHT40	MCS 0	1	110	5550	1.47	-3.23	11.00	-2.40		Pass
VHT40	MCS 0	1	134	5670	1.47	-2.97	11.00	-2.40		Pass
VHT80	MCS 0	1	106	5530	2.58	-6.48	11.00	-2.40		Pass
VHT80	MCS 0	1	122	5610	2.58	-7.50	11.00	-2.40		Pass

TEST RESULTS DATA
26dB and 99% OBW

Straddle Channel											
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	99% Bandwidth (MHz)	26 dB Bandwidth (MHz)	6dB Bandwidth (MHz)	IC 99% Bandwidth Power Limit (dBm)	IC 99% Bandwidth EIRP Limit (dBm)	FCC 26dB Bandwidth Power Limit (dBm)	Note
11a	6Mbps	1	144	5720	18.88	23.83	16.38	-	-	-	
				NII-2C	14.4905	16.888	13.152	22.61	28.61	23.28	
				NII-3	4.3906	6.938	3.232	23.43	29.43	-	
HT20	MCS0	1	144	5720	19.73	24.38	17.60	-	-	-	
				NII-2C	14.8902	17.388	13.771	22.73	28.73	23.40	
				NII-3	4.8402	6.988	3.831	23.85	29.85	-	
HT40	MCS0	1	142	5710	37.26	46.57	35.33	-	-	-	
				NII-2C	33.6813	39.006	32.702	23.98	30.00	23.98	
				NII-3	3.5814	7.567	2.623	22.54	28.54	-	
VHT20	MCS0	1	144	5720	19.48	24.28	17.58	-	-	-	
				NII-2C	14.7902	17.238	13.751	22.70	28.70	23.36	
				NII-3	4.6903	7.038	3.831	23.71	29.71	-	
VHT40	MCS0	1	142	5710	37.06	44.96	35.13	-	-	-	
				NII-2C	33.6813	37.567	32.502	23.98	30.00	23.98	
				NII-3	3.3816	7.388	2.623	22.29	28.29	-	
VHT80	MCS0	1	138	5690	74.81	85.36	75.05	-	-	-	
				NII-2C	72.283	76.88	72.483	23.98	30.00	23.98	
				NII-3	2.522	8.48	2.562	21.02	27.02	-	

TEST RESULTS DATA
Average Power Table

FCC Straddle Channel										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)	FCC Conducted Power Limit (dBm)	DG (dBi)		Pass/Fail
11a	6Mbps	1	144	5720	0.59	12.56	-	-2.40		Pass
				NII-2C	0.59	11.54	23.28	-2.40		Pass
				NII-3	0.59	5.79	30.00	-2.40		Pass
HT20	MCS0	1	144	5720	0.63	11.82	-	-2.40		Pass
				NII-2C	0.63	10.71	23.40	-2.40		Pass
				NII-3	0.63	5.34	30.00	-2.40		Pass
HT40	MCS0	1	142	5710	1.19	11.56	-	-2.40		Pass
				NII-2C	1.19	11.26	23.98	-2.40		Pass
				NII-3	1.19	-0.14	30.00	-2.40		Pass
VHT20	MCS0	1	144	5720	0.79	10.81	-	-2.40		Pass
				NII-2C	0.79	9.70	23.36	-2.40		Pass
				NII-3	0.79	4.33	30.00	-2.40		Pass
VHT40	MCS0	1	142	5710	1.47	10.62	-	-2.40		Pass
				NII-2C	1.47	10.32	23.98	-2.40		Pass
				NII-3	1.47	-1.21	30.00	-2.40		Pass
VHT80	MCS0	1	138	5690	2.58	9.68	-	-2.40		Pass
				NII-2C	2.58	9.61	23.98	-2.40		Pass
				NII-3	2.58	-8.04	30.00	-2.40		Pass

TEST RESULTS DATA
Power Spectral Density

Straddle Channel										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Power Density (dBm/MHz)	Average PSD Limit (dBm/MHz)	DG (dBi)		Pass/Fail
11a	6Mbps	1	144	NII-2C	0.59	0.69	11.00	-2.40		Pass
				NII-3	0.59	0.69	30.00	-2.40		Pass
HT20	MCS0	1	144	NII-2C	0.63	0.39	11.00	-2.40		Pass
				NII-3	0.63	0.39	30.00	-2.40		Pass
HT40	MCS0	1	142	NII-2C	1.19	-2.51	11.00	-2.40		Pass
				NII-3	1.19	-2.51	30.00	-2.40		Pass
VHT20	MCS0	1	144	NII-2C	0.79	0.31	11.00	-2.40		Pass
				NII-3	0.79	0.31	30.00	-2.40		Pass
VHT40	MCS0	1	142	NII-2C	1.47	-3.46	11.00	-2.40		Pass
				NII-3	1.47	-3.46	30.00	-2.40		Pass
VHT80	MCS0	1	138	NII-2C	2.58	-7.03	11.00	-2.40		Pass
				NII-3	2.58	-7.03	30.00	-2.40		Pass

TEST RESULTS DATA
Frequency Stability

Band I										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1	36	5180	5180.050	0.050	9.65	20	3.5	
11a	6Mbps	1	36	5180	5180.050	0.050	9.65	20	4.35	
11a	6Mbps	1	36	5180	5180.050	0.050	9.65	20	3.9	
11a	6Mbps	1	36	5180	5180.050	0.050	9.65	-30	3.9	
11a	6Mbps	1	36	5180	5180.050	0.050	9.65	50	3.9	

Band II										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1	64	5320	5320.050	0.050	9.40	20	3.5	
11a	6Mbps	1	64	5320	5320.050	0.050	9.40	20	4.35	
11a	6Mbps	1	64	5320	5320.050	0.050	9.40	20	3.9	
11a	6Mbps	1	64	5320	5320.050	0.050	9.40	-30	3.9	
11a	6Mbps	1	64	5320	5320.050	0.050	9.40	50	3.9	

Band III										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1	100	5500	5500.050	0.050	9.09	20	3.5	
11a	6Mbps	1	100	5500	5500.050	0.050	9.09	20	4.35	
11a	6Mbps	1	100	5500	5500.050	0.050	9.09	20	3.9	
11a	6Mbps	1	100	5500	5500.050	0.050	9.09	-30	3.9	
11a	6Mbps	1	100	5500	5500.050	0.050	9.09	50	3.9	



Appendix B. Radiated Test Results

15E 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		5149	47.27	-26.73	74	43.83	31.84	8.13	36.53	352	25	P	H
		5149.9	38.01	-15.99	54	34.57	31.84	8.13	36.53	352	25	A	H
	*	5176	95.27	-	-	91.76	31.85	8.17	36.51	352	25	P	H
	*	5176	88.12	-	-	84.61	31.85	8.17	36.51	352	25	A	H
		5149.85	52.6	-21.4	74	49.16	31.84	8.13	36.53	348	22	P	V
		5149.9	40	-14	54	36.56	31.84	8.13	36.53	348	22	A	V
	*	5176	99.1	-	-	95.59	31.85	8.17	36.51	348	22	P	V
	*	5186	91.94	-	-	88.43	31.85	8.17	36.51	348	22	A	V
802.11a CH 44 5220MHz	*	5224	96.79	-	-	93.23	31.86	8.2	36.5	327	25	P	H
	*	5228	89.72	-	-	86.14	31.87	8.21	36.5	327	25	A	H
	*	5228	100.12	-	-	96.54	31.87	8.21	36.5	381	24	P	V
	*	5226	92.59	-	-	89.01	31.87	8.21	36.5	381	24	A	V
802.11a CH 48 5240MHz	*	5246	97.36	-	-	93.76	31.88	8.22	36.5	352	33	P	H
	*	5246	89.93	-	-	86.33	31.88	8.22	36.5	352	33	A	H
		5387.2	45.82	-28.18	74	42.08	31.92	8.32	36.5	352	33	P	H
		5389.15	36.22	-17.78	54	32.48	31.92	8.32	36.5	352	33	A	H
	*	5244	99.42	-	-	95.82	31.88	8.22	36.5	381	36	P	V
	*	5234	92.05	-	-	88.47	31.87	8.21	36.5	381	36	A	V
		5388	45.28	-28.72	74	41.54	31.92	8.32	36.5	381	36	P	V
		5355.6	36.1	-17.9	54	32.4	31.91	8.29	36.5	381	36	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 1 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 36 5180MHz		10359	47.72	-26.28	74	57.26	38.02	13.54	61.1	100	0	P	H
		10359	47.76	-26.24	74	57.3	38.02	13.54	61.1	100	360	P	V
802.11a CH 44 5220MHz		10440	46.64	-27.36	74	56.07	38.06	13.58	61.07	100	0	P	H
		10440	45.14	-28.86	74	54.57	38.06	13.58	61.07	100	360	P	V
802.11a CH 48 5240MHz		10479	48.92	-25.08	74	58.26	38.09	13.61	61.04	100	0	P	H
		10479	46.11	-27.89	74	55.45	38.09	13.61	61.04	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 1 5150~5250MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 36 5180MHz		5148.9	52.84	-21.16	74	49.4	31.84	8.13	36.53	304	335	P	H
		5149.75	41.47	-12.53	54	38.03	31.84	8.13	36.53	304	335	A	H
	*	5188	100.33	-	-	96.82	31.85	8.17	36.51	304	335	P	H
	*	5186	93.24	-	-	89.73	31.85	8.17	36.51	304	335	A	H
		5149.45	52.12	-21.88	74	48.68	31.84	8.13	36.53	300	13	P	V
		5149.7	39.64	-14.36	54	36.2	31.84	8.13	36.53	300	13	A	V
	*	5176	96.31	-	-	92.8	31.85	8.17	36.51	300	13	P	V
	*	5184	89.07	-	-	85.56	31.85	8.17	36.51	300	13	A	V
802.11n HT20 CH 44 5220MHz	*	5228	100.63	-	-	97.05	31.87	8.21	36.5	315	336	P	H
	*	5226	94.02	-	-	90.44	31.87	8.21	36.5	315	336	A	H
	*	5226	96.59	-	-	93.01	31.87	8.21	36.5	327	14	P	V
	*	5226	89.26	-	-	85.68	31.87	8.21	36.5	327	14	A	V
802.11n HT20 CH 48 5240MHz	*	5246	101.68	-	-	98.08	31.88	8.22	36.5	318	334	P	H
	*	5246	94.38	-	-	90.78	31.88	8.22	36.5	318	334	A	H
		5356.1	46.59	-27.41	74	42.89	31.91	8.29	36.5	318	334	P	H
		5372	36.86	-17.14	54	33.14	31.91	8.31	36.5	318	334	A	H
	*	5236	97.7	-	-	94.12	31.87	8.21	36.5	307	5	P	V
	*	5232	90.39	-	-	86.81	31.87	8.21	36.5	307	5	A	V
		5364.45	46.31	-27.69	74	42.59	31.91	8.31	36.5	307	5	P	V
		5389.75	36.57	-17.43	54	32.83	31.92	8.32	36.5	307	5	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 1 5150~5250MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 36 5180MHz		10359	49.02	-24.98	74	58.56	38.02	13.54	61.1	100	0	P	H
		10359	55.63	-18.37	74	65.17	38.02	13.54	61.1	100	349	P	V
	!	10359	49.26	-4.74	54	58.8	38.02	13.54	61.1	100	349	A	V
802.11n HT20 CH 44 5220MHz		10440	48.41	-25.59	74	57.84	38.06	13.58	61.07	100	0	P	H
		10440	54.23	-19.77	74	63.66	38.06	13.58	61.07	100	354	P	V
	!	10440	48.95	-5.05	54	58.38	38.06	13.58	61.07	100	354	A	V
802.11n HT20 CH 48 5240MHz		10479	48.56	-25.44	74	57.9	38.09	13.61	61.04	100	0	P	H
		10479	50.69	-23.31	74	60.03	38.09	13.61	61.04	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 1 5150~5250MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 38 5190MHz		5149.5	59.04	-14.96	74	55.6	31.84	8.13	36.53	300	333	P	H
	!	5149.1	48.46	-5.54	54	45.02	31.84	8.13	36.53	300	333	A	H
	*	5204	97.04	-	-	93.49	31.86	8.19	36.5	300	333	P	H
	*	5202	90.1	-	-	86.55	31.86	8.19	36.5	300	333	A	H
		5149.5	54.76	-19.24	74	51.32	31.84	8.13	36.53	100	0	P	V
		5149	45.14	-8.86	54	41.7	31.84	8.13	36.53	100	0	A	V
	*	5200	93.67	-	-	90.12	31.86	8.19	36.5	100	0	P	V
	*	5202	86.62	-	-	83.07	31.86	8.19	36.5	100	0	A	V
802.11n HT40 CH 46 5230MHz	*	5226	98.19	-	-	94.61	31.87	8.21	36.5	300	338	P	H
	*	5240	91.12	-	-	87.54	31.87	8.21	36.5	300	338	A	H
		5391.8	46.46	-27.54	74	42.72	31.92	8.32	36.5	300	338	P	H
		5385.85	37.46	-16.54	54	33.72	31.92	8.32	36.5	300	338	A	H
	*	5242	93.69	-	-	90.09	31.88	8.22	36.5	100	0	P	V
	*	5242	86.29	-	-	82.69	31.88	8.22	36.5	100	0	A	V
		5376.5	45.72	-28.28	74	42	31.91	8.31	36.5	100	0	P	V
		5372.2	37.06	-16.94	54	33.34	31.91	8.31	36.5	100	0	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 1 5150~5250MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 38 5190MHz		10380	47.26	-26.74	74	56.78	38.03	13.55	61.1	100	0	P	H
		10380	49.81	-24.19	74	59.33	38.03	13.55	61.1	100	360	P	V
802.11n HT40 CH 46 5230MHz		10461	46.54	-27.46	74	55.91	38.08	13.6	61.05	100	0	P	H
		10461	52.84	-21.16	74	62.21	38.08	13.6	61.05	100	360	P	V
	!	10461	48.19	-5.81	54	57.56	38.08	13.6	61.05	100	360	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 1 5150~5250MHz
WIFI 802.11ac VHT20 (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)
802.11ac VHT20 CH 36 5180MHz		5144.25	55.56	-18.44	74	48.62	35.34	8.13	36.53	324	331	P	H
		5149.95	43.78	-10.22	54	36.84	35.34	8.13	36.53	324	331	A	H
	*	5188	100.64	-	-	93.63	35.35	8.17	36.51	324	331	P	H
	*	5184	93.58	-	-	86.57	35.35	8.17	36.51	324	331	A	H
		5128.25	41.82	-12.18	54	34.91	35.34	8.11	36.54	103	352	A	V
		5149	50.62	-23.38	74	43.68	35.34	8.13	36.53	103	352	P	V
	*	5186	94.97	-	-	87.96	35.35	8.17	36.51	103	352	P	V
	*	5188	88.17	-	-	81.16	35.35	8.17	36.51	103	352	A	V
802.11ac VHT20 CH 44 5220MHz	*	5224	100.64	-	-	93.58	35.36	8.2	36.5	322	335	P	H
	*	5224	93.86	-	-	86.8	35.36	8.2	36.5	322	335	A	H
	*	5224	95.37	-	-	88.31	35.36	8.2	36.5	147	354	P	V
	*	5224	88.67	-	-	81.61	35.36	8.2	36.5	147	354	A	V
802.11ac VHT20 CH 48 5240MHz	*	5236	100.49	-	-	93.41	35.37	8.21	36.5	304	330	P	H
	*	5232	93.66	-	-	86.58	35.37	8.21	36.5	304	330	A	H
		5391.5	49.67	-24.33	74	42.43	35.42	8.32	36.5	304	330	P	H
		5399.65	40.31	-13.69	54	33.06	35.42	8.33	36.5	304	330	A	H
	*	5246	95.67	-	-	88.57	35.38	8.22	36.5	148	339	P	V
	*	5248	88.74	-	-	81.64	35.38	8.22	36.5	148	339	A	V
		5357.35	49.17	-24.83	74	41.97	35.41	8.29	36.5	148	339	P	V
		5388.75	40.11	-13.89	54	32.87	35.42	8.32	36.5	148	339	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 1 5150~5250MHz

WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT20 CH 36 5180MHz		10359	49.22	-24.78	74	58.38	38.4	13.54	61.1	100	0	P	H
		10359	50.87	-23.13	74	60.03	38.4	13.54	61.1	100	360	P	V
802.11ac VHT20 CH 44 5220MHz		10440	47.4	-26.6	74	56.46	38.43	13.58	61.07	100	0	P	H
		10440	55.63	-18.37	74	64.69	38.43	13.58	61.07	100	351	P	V
	!	10440	50.7	-3.3	54	59.76	38.43	13.58	61.07	100	351	A	V
802.11ac VHT20 CH 48 5240MHz		10479	46.61	-27.39	74	55.58	38.46	13.61	61.04	100	0	P	H
		10479	54.46	-19.54	74	63.43	38.46	13.61	61.04	100	350	P	V
	!	10479	49.8	-4.2	54	58.77	38.46	13.61	61.04	100	350	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 1 5150~5250MHz
WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT40 CH 38 5190MHz		5148.15	58.89	-15.11	74	51.95	35.34	8.13	36.53	322	335	P	H
	!	5150	49.29	-4.71	54	42.35	35.34	8.13	36.53	322	335	A	H
	*	5194	97.59	-	-	90.54	35.36	8.19	36.5	322	335	P	H
	*	5198	90.36	-	-	83.31	35.36	8.19	36.5	322	335	A	H
		5148.9	54.89	-19.11	74	47.95	35.34	8.13	36.53	144	349	P	V
		5148.85	44.94	-9.06	54	38	35.34	8.13	36.53	144	349	A	V
	*	5186	91.85	-	-	84.84	35.35	8.17	36.51	144	349	P	V
	*	5188	85.11	-	-	78.1	35.35	8.17	36.51	144	349	A	V
802.11ac VHT40 CH 46 5230MHz	*	5240	98.38	-	-	91.3	35.37	8.21	36.5	300	336	P	H
	*	5238	91.29	-	-	84.21	35.37	8.21	36.5	300	336	A	H
		5374	49.63	-24.37	74	42.41	35.41	8.31	36.5	300	336	P	H
		5390.35	40.51	-13.49	54	33.27	35.42	8.32	36.5	300	336	A	H
	*	5228	94.39	-	-	87.31	35.37	8.21	36.5	102	334	P	V
	*	5228	85.87	-	-	78.79	35.37	8.21	36.5	102	334	A	V
		5374.8	48.92	-25.08	74	41.7	35.41	8.31	36.5	102	334	P	V
		5376.1	40.5	-13.5	54	33.28	35.41	8.31	36.5	102	334	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 1 5150~5250MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT40 CH 38 5190MHz		10380	48.2	-25.8	74	57.34	38.41	13.55	61.1	100	0	P	H
		10380	50.3	-23.7	74	59.44	38.41	13.55	61.1	100	360	P	V
802.11ac VHT40 CH 46 5230MHz		10461	47.86	-26.14	74	56.86	38.45	13.6	61.05	100	0	P	H
		10461	54.59	-19.41	74	63.59	38.45	13.6	61.05	100	351	P	V
	!	10461	48.79	-5.21	54	57.79	38.45	13.6	61.05	100	351	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 1 5150~5250MHz
WIFI 802.11ac VHT80 (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)
802.11ac VHT80 CH 42 5210MHz		5135.5	60.88	-13.12	74	53.97	35.34	8.11	36.54	300	336	P	H
	!	5140.15	52.65	-1.35	54	45.71	35.34	8.13	36.53	300	336	A	H
	*	5224	94.48	-	-	87.42	35.36	8.2	36.5	300	336	P	H
	*	5224	87.48	-	-	80.42	35.36	8.2	36.5	300	336	A	H
		5391.75	49.33	-24.67	74	42.09	35.42	8.32	36.5	300	336	P	H
		5354.75	41.69	-12.31	54	34.49	35.41	8.29	36.5	300	336	A	H
		5140.2	55.6	-18.4	74	48.66	35.34	8.13	36.53	100	332	P	V
		5142.6	47.89	-6.11	54	40.95	35.34	8.13	36.53	100	332	A	V
	*	5190	88.6	-	-	81.59	35.35	8.17	36.51	100	332	P	V
	*	5224	82.07	-	-	75.01	35.36	8.2	36.5	100	332	A	V
		5356.4	49.52	-24.48	74	42.32	35.41	8.29	36.5	100	332	P	V
		5360.7	41.26	-12.74	54	34.04	35.41	8.31	36.5	100	332	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 1 5150~5250MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac		10419	49.13	-24.87	74	58.22	38.42	13.57	61.08	100	0	P	H
VHT80													
CH 42		10419	50.76	-23.24	74	59.85	38.42	13.57	61.08	100	360	P	V
5210MHz													
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E 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		5117.1	47.61	-26.39	74	44.23	31.83	8.1	36.55	297	20	P	H
		5146.7	37.1	-16.9	54	33.66	31.84	8.13	36.53	297	20	A	H
	*	5266	96.82	-	-	93.21	31.88	8.23	36.5	297	20	P	H
	*	5264	89.58	-	-	85.97	31.88	8.23	36.5	297	20	A	H
		5132.7	46.82	-27.18	74	43.41	31.84	8.11	36.54	300	18	P	V
		5110.05	37.23	-16.77	54	33.85	31.83	8.1	36.55	300	18	A	V
	*	5262	100.68	-	-	97.07	31.88	8.23	36.5	300	18	P	V
	*	5266	92.89	-	-	89.28	31.88	8.23	36.5	300	18	A	V
802.11a CH 60 5300MHz	*	5306	96.1	-	-	92.45	31.89	8.26	36.5	300	4	P	H
	*	5296	89.11	-	-	85.46	31.89	8.26	36.5	300	4	A	H
	*	5294	99.92	-	-	96.27	31.89	8.26	36.5	367	24	P	V
	*	5296	92.5	-	-	88.85	31.89	8.26	36.5	367	24	A	V
802.11a CH 64 5320MHz	*	5326	96.63	-	-	92.96	31.9	8.27	36.5	300	15	P	H
	*	5326	89.04	-	-	85.37	31.9	8.27	36.5	300	15	A	H
		5353.7	48.03	-25.97	74	44.33	31.91	8.29	36.5	300	15	P	H
		5372.65	39.04	-14.96	54	35.32	31.91	8.31	36.5	300	15	A	H
	*	5316	99.61	-	-	95.94	31.9	8.27	36.5	189	15	P	V
	*	5316	92.14	-	-	88.47	31.9	8.27	36.5	189	15	A	V
		5352.85	49.78	-24.22	74	46.08	31.91	8.29	36.5	189	15	P	V
		5372.45	40.74	-13.26	54	37.02	31.91	8.31	36.5	189	15	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 2 5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a		10521	50.78	-23.22	74	60.07	38.11	13.63	61.03	100	0	P	H
CH 52		10521	47.71	-26.29	74	57	38.11	13.63	61.03	100	360	P	V
5260MHz													
802.11a		10602	49.47	-24.53	74	58.61	38.16	13.68	60.98	100	0	P	H
CH 60		10599	46.71	-27.29	74	55.85	38.16	13.68	60.98	100	360	P	V
5300MHz													
802.11a		10640	48.7	-25.3	74	57.79	38.18	13.7	60.97	100	0	P	H
CH 64		10641	49.03	-24.97	74	58.12	38.18	13.7	60.97	100	360	P	V
5320MHz													
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 2 5250~5350MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 52 5260MHz		5112.9	46.99	-27.01	74	43.61	31.83	8.1	36.55	341	334	P	H
		5101.1	37.29	-16.71	54	33.94	31.83	8.08	36.56	341	334	A	H
	*	5266	101.93	-	-	98.32	31.88	8.23	36.5	341	334	P	H
	*	5268	94.43	-	-	90.82	31.88	8.23	36.5	341	334	A	H
		5102.85	47	-27	74	43.65	31.83	8.08	36.56	323	5	P	V
		5126.8	37.12	-16.88	54	33.71	31.84	8.11	36.54	323	5	A	V
	*	5268	97.48	-	-	93.87	31.88	8.23	36.5	323	5	P	V
	*	5256	90.27	-	-	86.67	31.88	8.22	36.5	323	5	A	V
802.11n HT20 CH 60 5300MHz	*	5306	102.19	-	-	98.54	31.89	8.26	36.5	326	336	P	H
	*	5306	94.14	-	-	90.49	31.89	8.26	36.5	326	336	A	H
	*	5296	96.6	-	-	92.95	31.89	8.26	36.5	318	8	P	V
	*	5296	89.64	-	-	85.99	31.89	8.26	36.5	318	8	A	V
802.11n HT20 CH 64 5320MHz	*	5314	101.72	-	-	98.05	31.9	8.27	36.5	323	336	P	H
	*	5312	94.26	-	-	90.59	31.9	8.27	36.5	323	336	A	H
		5350.7	53.92	-20.08	74	50.22	31.91	8.29	36.5	323	336	P	H
		5350	43.2	-10.8	54	39.5	31.91	8.29	36.5	323	336	A	H
	*	5324	96.07	-	-	92.4	31.9	8.27	36.5	313	11	P	V
	*	5324	88.76	-	-	85.09	31.9	8.27	36.5	313	11	A	V
		5351.8	50.05	-23.95	74	46.35	31.91	8.29	36.5	313	11	P	V
		5350.15	39.41	-14.59	54	35.71	31.91	8.29	36.5	313	11	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 2 5250~5350MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 52 5260MHz		10521	48.35	-25.65	74	57.64	38.11	13.63	61.03	100	0	P	H
		10521	54.26	-19.74	74	63.55	38.11	13.63	61.03	100	355	P	V
	!	10521	49.26	-4.74	54	58.55	38.11	13.63	61.03	100	355	A	V
802.11n HT20 CH 60 5300MHz		10599	49.38	-24.62	74	58.52	38.16	13.68	60.98	100	0	P	H
		10599	54.04	-19.96	74	63.18	38.16	13.68	60.98	100	353	P	V
	!	10599	48.94	-5.06	54	58.08	38.16	13.68	60.98	100	353	A	V
802.11n HT20 CH 64 5320MHz		10641	49.13	-24.87	74	58.22	38.18	13.7	60.97	100	0	P	H
		10641	54.02	-19.98	74	63.11	38.18	13.7	60.97	100	350	P	V
	!	10641	49.27	-4.73	54	58.36	38.18	13.7	60.97	100	350	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 2 5250~5350MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 54 5270MHz		5135.35	47.22	-26.78	74	43.81	31.84	8.11	36.54	300	0	P	H
		5146.8	37.57	-16.43	54	34.13	31.84	8.13	36.53	300	0	A	H
	*	5280	97.67	-	-	94.03	31.89	8.25	36.5	300	0	P	H
	*	5280	90.52	-	-	86.88	31.89	8.25	36.5	300	0	A	H
		5136.55	47.02	-26.98	74	43.61	31.84	8.11	36.54	100	360	P	V
		5114.55	37.74	-16.26	54	34.36	31.83	8.1	36.55	100	360	A	V
	*	5260	94.08	-	-	90.47	31.88	8.23	36.5	100	360	P	V
	*	5258	86.97	-	-	83.37	31.88	8.22	36.5	100	360	A	V
802.11n HT40 CH 62 5310MHz	*	5300	97.69	-	-	94.04	31.89	8.26	36.5	317	360	P	H
	*	5298	90.43	-	-	86.78	31.89	8.26	36.5	317	360	A	H
		5351.5	63.4	-10.6	74	59.7	31.91	8.29	36.5	317	360	P	H
	!	5350.3	50.64	-3.36	54	46.94	31.91	8.29	36.5	317	360	A	H
	*	5322	93.59	-	-	89.92	31.9	8.27	36.5	100	360	P	V
	*	5322	86.25	-	-	82.58	31.9	8.27	36.5	100	360	A	V
		5351.4	58.38	-15.62	74	54.68	31.91	8.29	36.5	100	360	P	V
		5350.1	47.3	-6.7	54	43.6	31.91	8.29	36.5	100	360	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 2 5250~5350MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 54 5270MHz		10539	48	-26	74	57.26	38.12	13.64	61.02	100	0	P	H
		10539	50.27	-23.73	74	59.53	38.12	13.64	61.02	100	360	P	V
802.11n HT40 CH 62 5310MHz		10620	46.76	-27.24	74	55.88	38.17	13.69	60.98	100	0	P	H
		10620	49.57	-24.43	74	58.69	38.17	13.69	60.98	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 2 5250~5350MHz
WIFI 802.11ac VHT20 (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)
802.11ac VHT20 CH 52 5260MHz		5130.3	50.02	-23.98	74	43.11	35.34	8.11	36.54	300	335	P	H
		5130.2	40.94	-13.06	54	34.03	35.34	8.11	36.54	300	335	A	H
	*	5254	100.44	-	-	93.34	35.38	8.22	36.5	300	335	P	H
	*	5254	93.18	-	-	86.08	35.38	8.22	36.5	300	335	A	H
		5103.05	49.85	-24.15	74	43	35.33	8.08	36.56	111	353	P	V
		5130.4	41.05	-12.95	54	34.14	35.34	8.11	36.54	111	353	A	V
	*	5254	96	-	-	88.9	35.38	8.22	36.5	111	353	P	V
	*	5256	89.06	-	-	81.96	35.38	8.22	36.5	111	353	A	V
802.11ac VHT20 CH 60 5300MHz	*	5304	99.55	-	-	92.4	35.39	8.26	36.5	331	332	P	H
	*	5304	92.65	-	-	85.5	35.39	8.26	36.5	331	332	A	H
	*	5308	96.12	-	-	88.97	35.39	8.26	36.5	100	337	P	V
	*	5304	88.46	-	-	81.31	35.39	8.26	36.5	100	337	A	V
802.11ac VHT20 CH 64 5320MHz	*	5318	100.43	-	-	93.26	35.4	8.27	36.5	301	339	P	H
	*	5324	93.3	-	-	86.13	35.4	8.27	36.5	301	339	A	H
		5350.95	52.84	-21.16	74	45.64	35.41	8.29	36.5	301	339	P	H
		5372	43.24	-10.76	54	36.02	35.41	8.31	36.5	301	339	A	H
	*	5328	95.02	-	-	87.84	35.4	8.28	36.5	100	331	P	V
	*	5328	88.11	-	-	80.93	35.4	8.28	36.5	100	331	A	V
		5350.9	51.78	-22.22	74	44.58	35.41	8.29	36.5	100	331	P	V
		5372.05	41.78	-12.22	54	34.56	35.41	8.31	36.5	100	331	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 2 5250~5350MHz

WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac		10521	48.14	-25.86	74	57.06	38.48	13.63	61.03	100	0	P	H
VHT20		10521	54.49	-19.51	74	63.41	38.48	13.63	61.03	102	350	P	V
CH 52	!	10521	49.06	-4.94	54	57.98	38.48	13.63	61.03	102	350	A	V
5260MHz													
802.11ac		10599	46.84	-27.16	74	55.62	38.52	13.68	60.98	100	0	P	H
VHT20		10599	54.53	-19.47	74	63.31	38.52	13.68	60.98	100	350	P	V
CH 60	!	10599	48.64	-5.36	54	57.42	38.52	13.68	60.98	100	350	A	V
5300MHz													
802.11ac		10641	46.45	-27.55	74	55.18	38.54	13.7	60.97	100	0	P	H
VHT20													
CH 64		10641	50.46	-23.54	74	59.19	38.54	13.7	60.97	100	360	P	V
5320MHz													
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 2 5250~5350MHz
WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT40 CH 54 5270MHz		5113.25	50.8	-23.2	74	43.92	35.33	8.1	36.55	322	339	P	H
		5112.9	41.37	-12.63	54	34.49	35.33	8.1	36.55	322	339	A	H
	*	5266	98.54	-	-	91.43	35.38	8.23	36.5	322	339	P	H
	*	5268	91.31	-	-	84.2	35.38	8.23	36.5	322	339	A	H
		5113.1	50.69	-23.31	74	43.81	35.33	8.1	36.55	100	341	P	V
		5104.3	41.32	-12.68	54	34.47	35.33	8.08	36.56	100	341	A	V
	*	5268	94.16	-	-	87.05	35.38	8.23	36.5	100	341	P	V
	*	5258	86.01	-	-	78.91	35.38	8.22	36.5	100	341	A	V
802.11ac VHT40 CH 62 5310MHz	*	5320	97.83	-	-	90.66	35.4	8.27	36.5	300	332	P	H
	*	5318	90.36	-	-	83.19	35.4	8.27	36.5	300	332	A	H
		5351.75	62.95	-11.05	74	55.75	35.41	8.29	36.5	300	332	P	H
	!	5350	51.18	-2.82	54	43.98	35.41	8.29	36.5	300	332	A	H
	*	5302	94.51	-	-	87.36	35.39	8.26	36.5	100	335	P	V
	*	5298	87.51	-	-	80.36	35.39	8.26	36.5	100	335	A	V
		5352	62.11	-11.89	74	54.91	35.41	8.29	36.5	100	335	P	V
	!	5350	50.22	-3.78	54	43.02	35.41	8.29	36.5	100	335	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 2 5250~5350MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT40 CH 54 5270MHz		10539	47.15	-26.85	74	56.04	38.49	13.64	61.02	100	0	P	H
		10539	54.7	-19.3	74	63.59	38.49	13.64	61.02	100	354	P	V
	!	10539	49.94	-4.06	54	58.83	38.49	13.64	61.02	100	354	A	V
802.11ac VHT40 CH 62 5310MHz		10620	46.43	-27.57	74	55.19	38.53	13.69	60.98	100	0	P	H
		10620	52.7	-21.3	74	61.46	38.53	13.69	60.98	100	346	P	V
	!	10620	48.62	-5.38	54	57.38	38.53	13.69	60.98	100	343	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 2 5250~5350MHz
WIFI 802.11ac VHT80 (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)
802.11ac VHT80 CH 58 5290MHz		5148.75	50.89	-23.11	74	43.95	35.34	8.13	36.53	300	0	P	H
		5110.15	42.46	-11.54	54	35.58	35.33	8.1	36.55	300	0	A	H
	*	5318	93.31	-	-	86.14	35.4	8.27	36.5	300	0	P	H
	*	5316	86.49	-	-	79.32	35.4	8.27	36.5	300	0	A	H
		5354.85	61.14	-12.86	74	53.94	35.41	8.29	36.5	300	0	P	H
	!	5354.7	52.75	-1.25	54	45.55	35.41	8.29	36.5	300	0	A	H
		5129.7	50.09	-23.91	74	43.18	35.34	8.11	36.54	100	352	P	V
		5128.35	42.24	-11.76	54	35.33	35.34	8.11	36.54	100	352	A	V
	*	5270	88.71	-	-	81.6	35.38	8.23	36.5	100	352	P	V
	*	5310	81.77	-	-	74.6	35.4	8.27	36.5	100	352	A	V
		5354.7	56.6	-17.4	74	49.4	35.41	8.29	36.5	100	352	P	V
		5354.45	48.49	-5.51	54	41.29	35.41	8.29	36.5	100	352	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 2 5250~5350MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preampl	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)
802.11ac VHT80 CH 58 5290MHz		10581	46.56	-27.44	74	55.37	38.51	13.67	60.99	100	0	P	H
		10581	54.44	-19.56	74	63.25	38.51	13.67	60.99	100	360	P	V
	!	10581	50.77	-3.23	54	59.58	38.51	13.67	60.99	100	360	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E 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		5470	50.33	-23.67	74	46.4	31.95	8.38	36.4	339	43	P	H
		5470	39.5	-14.5	54	35.57	31.95	8.38	36.4	339	43	A	H
	*	5494	94.9	-	-	90.94	31.95	8.39	36.38	339	43	P	H
	*	5496	87.61	-	-	83.65	31.95	8.39	36.38	339	43	A	H
		5469.68	49.3	-24.7	74	45.37	31.95	8.38	36.4	282	28	P	V
		5469.68	40.22	-13.78	54	36.29	31.95	8.38	36.4	282	28	A	V
	*	5504	97.02	-	-	93.01	31.96	8.4	36.35	282	28	P	V
	*	5504	89.71	-	-	85.7	31.96	8.4	36.35	282	28	A	V
802.11a CH 116 5580MHz	*	5586	95.08			90.86	31.98	8.47	36.23	325	344	P	H
	*	5584	88.18			83.96	31.98	8.47	36.23	325	344	A	H
	*	5584	96.3			92.08	31.98	8.47	36.23	302	18	P	V
	*	5588	89.04			84.82	31.98	8.47	36.23	302	18	A	V
802.11a CH 140 5700MHz	*	5706	93.89	-	-	89.58	32.03	8.55	36.27	268	346	P	H
	*	5704	86.52	-	-	82.21	32.03	8.55	36.27	268	346	A	H
		5727.48	48.53	-25.47	74	44.2	32.04	8.57	36.28	268	346	P	H
		5725.16	40.44	-13.56	54	36.11	32.04	8.57	36.28	268	346	A	H
	*	5696	94.26	-	-	89.95	32.02	8.54	36.25	303	17	P	V
	*	5696	87.07	-	-	82.76	32.02	8.54	36.25	303	17	A	V
		5726.12	50.08	-23.92	74	45.75	32.04	8.57	36.28	303	17	P	V
		5725	40.15	-13.85	54	35.82	32.04	8.57	36.28	303	17	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 3 - 5470~5725MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 100 5500MHz		10995	65.35	-8.65	74	73.83	38.4	13.91	60.79	232	0	P	H
	!	10995	50.38	-3.62	54	58.86	38.4	13.91	60.79	232	0	A	H
		16500	48.67	-25.33	74	50.72	38.82	17.57	58.44	100	360	P	H
		11004	62.84	-11.16	74	71.32	38.4	13.91	60.79	166	20	P	V
	!	11004	48.67	-5.33	54	57.15	38.4	13.91	60.79	166	20	A	V
		16491	59.41	-14.59	74	61.51	38.78	17.56	58.44	250	27	P	V
		16491	47.07	-6.93	54	49.17	38.78	17.56	58.44	250	27	A	V
802.11a CH 116 5580MHz		11160	50.68	-23.32	74	58.91	38.47	14.01	60.71	100	0	P	H
		16740	47.8	-26.2	74	49.31	39.39	17.64	58.54	100	360	P	H
		11160	47	-27	74	55.23	38.47	14.01	60.71	100	360	P	V
		16740	50.47	-23.53	74	51.98	39.39	17.64	58.54	100	0	P	V
802.11a CH 140 5700MHz		11400	50.94	-23.06	74	58.82	38.56	14.15	60.59	100	0	P	H
		11400	47.26	-26.74	74	55.14	38.56	14.15	60.59	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 3 - 5470~5725MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 100 5500MHz		5470	52.41	-21.59	74	48.48	31.95	8.38	36.4	347	309	P	H
		5469.68	42.16	-11.84	54	38.23	31.95	8.38	36.4	347	309	A	H
	*	5494	98.06	-	-	94.1	31.95	8.39	36.38	347	309	P	H
	*	5492	90.63	-	-	86.67	31.95	8.39	36.38	347	309	A	H
		5469.2	50.35	-23.65	74	46.42	31.95	8.38	36.4	100	337	P	V
		5470	40.87	-13.13	54	36.94	31.95	8.38	36.4	100	337	A	V
	*	5498	96.06	-	-	92.05	31.96	8.4	36.35	100	337	P	V
	*	5496	88.9	-	-	84.94	31.95	8.39	36.38	100	337	A	V
802.11n HT20 CH 116 5580MHz	*	5586	97.84	-	-	93.62	31.98	8.47	36.23	400	333	P	H
	*	5586	90.14	-	-	85.92	31.98	8.47	36.23	400	333	A	H
	*	5584	95.34	-	-	91.12	31.98	8.47	36.23	100	337	P	V
	*	5588	88.45	-	-	84.23	31.98	8.47	36.23	100	337	A	V
802.11n HT20 CH 140 5700MHz	*	5704	96.48	-	-	92.17	32.03	8.55	36.27	400	341	P	H
	*	5704	89.13	-	-	84.82	32.03	8.55	36.27	400	341	A	H
		5725.32	52.68	-21.32	74	48.35	32.04	8.57	36.28	400	341	P	H
		5725	43.16	-10.84	54	38.83	32.04	8.57	36.28	400	341	A	H
	*	5698	94.33	-	-	90.02	32.02	8.54	36.25	100	338	P	V
	*	5696	86.55	-	-	82.24	32.02	8.54	36.25	100	338	A	V
		5726.36	53.67	-20.33	74	49.34	32.04	8.57	36.28	100	338	P	V
		5725	41.91	-12.09	54	37.58	32.04	8.57	36.28	100	338	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 3 - 5470~5725MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n		11001	49.97	-24.03	74	58.45	38.4	13.91	60.79	100	0	P	H
HT20		11001	54.11	-19.89	74	62.59	38.4	13.91	60.79	100	351	P	V
CH 100	!	11001	48.73	-5.27	54	57.21	38.4	13.91	60.79	100	351	A	V
5500MHz													
802.11n		11160	48.27	-25.73	74	34.79	38.47	12.13	37.12	100	0	P	H
HT20													
CH 116		11160	48.76	-25.24	74	35.28	38.47	12.13	37.12	100	360	P	V
5580MHz													
802.11n		11400	47.7	-26.3	74	55.58	38.56	14.15	60.59	100	0	P	H
HT20													
CH 140		11400	47.42	-26.58	74	55.3	38.56	14.15	60.59	100	360	P	V
5700MHz													
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 3 - 5470~5725MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 102 5510MHz		5468.08	62.74	-11.26	74	58.81	31.95	8.38	36.4	357	331	P	H
	!	5469.84	51.01	-2.99	54	47.08	31.95	8.38	36.4	357	331	A	H
	*	5498	95.45	-	-	91.44	31.96	8.4	36.35	357	331	P	H
	*	5498	88.52	-	-	84.51	31.96	8.4	36.35	357	331	A	H
		5466.96	58.16	-15.84	74	54.23	31.95	8.38	36.4	100	345	P	V
	!	5469.36	48.49	-5.51	54	44.56	31.95	8.38	36.4	100	345	A	V
	*	5498	92.66	-	-	88.65	31.96	8.4	36.35	100	345	P	V
	*	5514	85.48	-	-	81.43	31.96	8.42	36.33	100	345	A	V
802.11n HT40 CH 110 5550MHz	*	5560	95.28	-	-	91.15	31.97	8.44	36.28	383	339	P	H
	*	5562	87.9	-	-	83.77	31.97	8.44	36.28	383	339	A	H
	*	5558	93.1	-	-	88.97	31.97	8.44	36.28	100	336	P	V
	*	5538	85.88	-	-	81.78	31.97	8.43	36.3	100	336	A	V
802.11n HT40 CH 134 5670MHz	*	5666	93.48	-	-	89.18	32.01	8.52	36.23	396	342	P	H
	*	5656	86.74	-	-	82.44	32.01	8.52	36.23	396	342	A	H
		5731	51.25	-22.75	74	46.92	32.04	8.57	36.28	396	342	P	H
		5725.56	40	-14	54	35.67	32.04	8.57	36.28	396	342	A	H
	*	5680	90.56	-	-	86.25	32.02	8.53	36.24	100	340	P	V
	*	5658	83.84	-	-	79.54	32.01	8.52	36.23	100	340	A	V
		5726.36	48.17	-25.83	74	43.84	32.04	8.57	36.28	100	340	P	V
		5726.6	39.02	-14.98	54	34.69	32.04	8.57	36.28	100	340	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 3 - 5470~5725MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 102 5510MHz		11019	48.17	-25.83	74	56.62	38.41	13.92	60.78	100	0	P	H
		11019	53.62	-20.38	74	62.07	38.41	13.92	60.78	100	333	P	V
		11019	47.45	-6.55	54	55.9	38.41	13.92	60.78	100	333	A	V
802.11n HT40 CH 110 5550MHz		11100	48.91	-25.09	74	57.24	38.44	13.97	60.74	100	0	P	H
		11100	50.04	-23.96	74	58.37	38.44	13.97	60.74	100	360	P	V
802.11n HT40 CH 134 5670MHz		11340	46.02	-27.98	74	54	38.53	14.11	60.62	100	0	P	H
		11340	46.61	-27.39	74	54.59	38.53	14.11	60.62	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 3 - 5470~5725MHz

WIFI 802.11ac VHT20 (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)
802.11ac VHT20 CH 100 5500MHz		5467.76	51.5	-22.5	74	44.07	35.45	8.38	36.4	343	336	P	H
		5469.68	42.62	-11.38	54	35.19	35.45	8.38	36.4	343	336	A	H
	*	5496	97.15	-	-	89.69	35.45	8.39	36.38	343	336	P	H
	*	5496	90.25	-	-	82.79	35.45	8.39	36.38	343	336	A	H
		5469.68	49.95	-24.05	74	42.52	35.45	8.38	36.4	100	336	P	V
		5447.92	41.6	-12.4	54	34.21	35.44	8.37	36.42	100	336	A	V
	*	5494	93.38	-	-	85.92	35.45	8.39	36.38	100	336	P	V
	*	5494	86.5	-	-	79.04	35.45	8.39	36.38	100	336	A	V
802.11ac VHT20 CH 116 5580MHz	*	5588	96.06	-	-	88.34	35.48	8.47	36.23	368	337	P	H
	*	5588	89.38	-	-	81.66	35.48	8.47	36.23	368	337	A	H
	*	5588	93.71	-	-	85.99	35.48	8.47	36.23	102	333	P	V
	*	5576	86.44	-	-	78.76	35.48	8.45	36.25	102	333	A	V
802.11ac VHT20 CH 140 5700MHz	*	5708	94.97	-	-	87.1	35.59	8.55	36.27	387	339	P	H
	*	5708	88.15	-	-	80.28	35.59	8.55	36.27	387	339	A	H
		5725.72	52.7	-21.3	74	44.79	35.62	8.57	36.28	387	339	P	H
		5725	43.59	-10.41	54	35.68	35.62	8.57	36.28	387	339	A	H
	*	5698	92.29	-	-	84.43	35.57	8.54	36.25	100	350	P	V
	*	5694	85.43	-	-	77.57	35.57	8.54	36.25	100	350	A	V
		5752.04	50.89	-23.11	74	42.94	35.66	8.59	36.3	100	350	P	V
		5725.24	42.11	-11.89	54	34.2	35.62	8.57	36.28	100	350	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 3 - 5470~5725MHz

WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac		11001	47.04	-26.96	74	55.19	38.73	13.91	60.79	100	0	P	H
VHT20													
CH 100		11001	50.93	-23.07	74	59.08	38.73	13.91	60.79	100	360	P	V
5500MHz													
802.11ac		11160	46.56	-27.44	74	54.44	38.82	14.01	60.71	100	0	P	H
VHT20													
CH 116		11160	48.09	-25.91	74	55.97	38.82	14.01	60.71	100	360	P	V
5580MHz													
802.11ac		11400	45.82	-28.18	74	53.31	38.95	14.15	60.59	100	0	P	H
VHT20													
CH 140		11400	45.24	-28.76	74	52.73	38.95	14.15	60.59	100	360	P	V
5700MHz													
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 3 - 5470~5725MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT40 CH 102 5510MHz		5468.24	60.05	-13.95	74	52.62	35.45	8.38	36.4	344	337	P	H
	!	5469.04	50.14	-3.86	54	42.71	35.45	8.38	36.4	344	337	A	H
	*	5500	94.81	-	-	87.3	35.46	8.4	36.35	344	337	P	H
	*	5500	87.98	-	-	80.47	35.46	8.4	36.35	344	337	A	H
		5467.92	55.4	-18.6	74	47.97	35.45	8.38	36.4	100	342	P	V
		5469.2	47.06	-6.94	54	39.63	35.45	8.38	36.4	100	342	A	V
	*	5524	90.98	-	-	83.43	35.46	8.42	36.33	100	342	P	V
	*	5500	84.43	-	-	76.92	35.46	8.4	36.35	100	342	A	V
802.11ac VHT40 CH 110 5550MHz	*	5546	93.84	-	-	86.24	35.47	8.43	36.3	339	337	P	H
	*	5540	87.03	-	-	79.43	35.47	8.43	36.3	339	337	A	H
	*	5538	90.31	-	-	82.71	35.47	8.43	36.3	141	351	P	V
	*	5548	83.29	-	-	75.66	35.47	8.44	36.28	141	351	A	V
802.11ac VHT40 CH 134 5670MHz	*	5672	92.32	-	-	84.48	35.55	8.53	36.24	400	339	P	H
	*	5658	85.32	-	-	77.51	35.52	8.52	36.23	400	339	A	H
		5732.84	51.08	-22.92	74	43.17	35.62	8.57	36.28	400	339	P	H
		5729.8	41.63	-12.37	54	33.72	35.62	8.57	36.28	400	339	A	H
	*	5672	89.66	-	-	81.82	35.55	8.53	36.24	108	343	P	V
	*	5678	82.42	-	-	74.58	35.55	8.53	36.24	108	343	A	V
		5725	50.4	-23.6	74	42.49	35.62	8.57	36.28	108	343	P	V
		5725.32	41.68	-12.32	54	33.77	35.62	8.57	36.28	108	343	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 3 - 5470~5725MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac		11022	47.55	-26.45	74	55.64	38.75	13.93	60.77	100	0	P	H
VHT40		11022	53.96	-20.04	74	62.05	38.75	13.93	60.77	100	348	P	V
CH 102	!	11022	49.37	-4.63	54	57.46	38.75	13.93	60.77	100	348	A	V
5510MHz													
802.11ac		11100	46.04	-27.96	74	54.03	38.78	13.97	60.74	100	0	P	H
VHT40		11100	49.29	-24.71	74	57.28	38.78	13.97	60.74	100	360	P	V
CH 110													
5550MHz													
802.11ac		11340	48.24	-25.76	74	55.84	38.91	14.11	60.62	100	0	P	H
VHT40		11340	45.03	-28.97	74	52.63	38.91	14.11	60.62	100	360	P	V
CH 134													
5670MHz													
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 3 5470~5725MHz
WIFI 802.11ac VHT80 (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)
802.11ac VHT80 CH 106 5530MHz		5454.8	60.31	-13.69	74	52.92	35.44	8.37	36.42	300	339	P	H
	!	5462.64	52.56	-1.44	54	45.13	35.45	8.38	36.4	300	339	A	H
	*	5524	90.98	-	-	83.43	35.46	8.42	36.33	300	339	P	H
	*	5534	83.64	-	-	76.04	35.47	8.43	36.3	300	339	A	H
		5748.36	50.4	-23.6	74	42.47	35.64	8.58	36.29	300	339	P	H
		5751.08	42.31	-11.69	54	34.38	35.64	8.58	36.29	300	339	A	H
		5458.48	58.33	-15.67	74	50.94	35.44	8.37	36.42	100	338	P	V
	!	5453.84	50.41	-3.59	54	43.02	35.44	8.37	36.42	100	338	A	V
	*	5504	87.17	-	-	79.66	35.46	8.4	36.35	100	338	P	V
	*	5504	80.45	-	-	72.94	35.46	8.4	36.35	100	338	A	V
		5739.64	49.5	-24.5	74	41.57	35.64	8.58	36.29	100	338	P	V
		5761.56	42.46	-11.54	54	34.51	35.66	8.59	36.3	100	338	A	V
802.11ac VHT80 CH 122 5610MHz		5460.56	49.64	-24.36	74	42.25	35.44	8.37	36.42	344	342	P	H
		5446.64	41.93	-12.07	54	34.54	35.44	8.37	36.42	344	342	A	H
	*	5590	90.19	-	-	82.47	35.48	8.47	36.23	344	342	P	H
	*	5590	82.92	-	-	75.2	35.48	8.47	36.23	344	342	A	H
		5746.04	51.22	-22.78	74	43.29	35.64	8.58	36.29	344	342	P	H
		5732.2	42.59	-11.41	54	34.68	35.62	8.57	36.28	344	342	A	H
		5353.84	48.6	-25.4	74	41.4	35.41	8.29	36.5	100	340	P	V
		5462.16	41.93	-12.07	54	34.54	35.44	8.37	36.42	100	340	A	V
	*	5592	86.82	-	-	79.1	35.48	8.47	36.23	100	340	P	V
	*	5614	80	-	-	72.23	35.49	8.48	36.2	100	340	A	V
		5759.24	50.94	-23.06	74	42.99	35.66	8.59	36.3	100	340	P	V
		5727.16	42.3	-11.7	54	34.39	35.62	8.57	36.28	100	340	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 3 5470~5725MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 CH 106 5530MHz		11061	47.82	-26.18	74	55.86	38.77	13.95	60.76	100	0	P	H
		11061	48.64	-25.36	74	56.68	38.77	13.95	60.76	100	360	P	V
802.11ac VHT80 CH 122 5610MHz		11220	44.88	-29.12	74	52.67	38.85	14.04	60.68	100	0	P	H
		11220	47.87	-26.13	74	55.66	38.85	14.04	60.68	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

**15E Band 3 - Straddle Channel****WIFI 802.11a (Band Edge @ 3m)**

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 144 5720MHz	*	5720	91.93	-	-	87.6	32.04	8.57	36.28	353	4	P	H
	*	5720	84.79	-	-	80.48	32.03	8.55	36.27	353	4	A	H
	*	5720	94.69	-	-	90.36	32.04	8.57	36.28	306	35	P	V
	*	5720	87.09	-	-	82.76	32.04	8.57	36.28	306	35	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												


15E band 3 - Straddle Channel
WIFI 802.11a (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a		11439	49.3	-24.7	74	57.13	38.57	14.17	60.57	100	0	P	H
CH 144		11439	44.3	-29.7	74	52.13	38.57	14.17	60.57	100	360	P	V
5720MHz													
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 3 - Straddle Channel
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n	*	5720	95.71	-	-	91.38	32.04	8.57	36.28	397	341	P	H
HT20	*	5712	88.58	-	-	84.27	32.03	8.55	36.27	397	341	A	H
CH 144	*	5720	94.04	-	-	89.71	32.04	8.57	36.28	100	341	P	V
5720MHz	*	5720	86.76	-	-	82.43	32.04	8.57	36.28	100	341	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 3 - Straddle Channel
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 144 5720MHz		11439	46.77	-27.23	74	54.6	38.57	14.17	60.57	100	0	P	H
		11439	47.64	-26.36	74	55.47	38.57	14.17	60.57	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 3 - Straddle Channel
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n	*	5704	92.85	-	-	88.54	32.03	8.55	36.27	398	339	P	H
HT40	*	5708	85.7	-	-	81.39	32.03	8.55	36.27	398	339	A	H
CH 142	*	5710	91.69	-	-	87.38	32.02	8.54	36.25	100	357	P	V
5710MHz	*	5712	83.64	-	-	79.31	32.04	8.57	36.28	100	357	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 3 - Straddle Channel
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 142 5710MHz		11421	46.96	-27.04	74	54.81	38.57	14.16	60.58	100	0	P	H
		11421	47.2	-26.8	74	55.05	38.57	14.16	60.58	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 3 - Straddle Channel
WIFI 802.11ac VHT20 (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)
802.11ac	*	5714	96.75	-	-	88.88	35.59	8.55	36.27	379	0	P	H
VHT20	*	5714	89.69	-	-	81.82	35.59	8.55	36.27	379	0	A	H
CH 144	*	5728	93.13	-	-	85.22	35.62	8.57	36.28	100	351	P	V
5720MHz	*	5724	86.12	-	-	78.21	35.62	8.57	36.28	100	351	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 3 - Straddle Channel
WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT20 CH 144 5720MHz		11439	44.11	-29.89	74	51.94	38.57	14.17	60.57	100	0	P	H
		11439	43.99	-30.01	74	51.82	38.57	14.17	60.57	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 3 - Straddle Channel
WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac	*	5724	92.65	-	-	84.74	35.62	8.57	36.28	396	343	P	H
VHT40	*	5718	85.45	-	-	77.54	35.62	8.57	36.28	396	343	A	H
CH 142	*	5698	90.09	-	-	82.23	35.57	8.54	36.25	106	348	P	V
5710MHz	*	5700	83.13	-	-	75.27	35.57	8.54	36.25	106	348	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 3 - Straddle Channel
WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT40 CH 142 5710MHz		11421	45.42	-28.58	74	53.27	38.57	14.16	60.58	100	0	P	H
		11421	45.8	-28.2	74	53.65	38.57	14.16	60.58	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 3 - Straddle Channel
WIFI 802.11ac VHT80 (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)
802.11ac	*	5684	89.32	-	-	81.46	35.57	8.54	36.25	314	4	P	H
VHT80	*	5684	82.85	-	-	74.99	35.57	8.54	36.25	314	4	A	H
CH 138	*	5684	87.6	-	-	79.74	35.57	8.54	36.25	100	343	P	V
5690MHz	*	5694	80.72	-	-	72.86	35.57	8.54	36.25	100	343	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E band 3 - Straddle Channel

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac		11382	45.01	-28.99	74	52.53	38.94	14.14	60.6	100	0	P	H
VHT80													
CH 138		11379	47.28	-26.72	74	54.8	38.94	14.14	60.6	100	360	P	V
5690MHz													
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



15E Emission below 1GHz

WIFI 802.11ac VHT80 (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)
802.11ac VHT80 LF		30	17.02	-22.98	40	28.87	18.6	0.65	31.1	-	-	P	H
		126.03	13.48	-30.02	43.5	29.07	13.46	1.35	30.4	-	-	P	H
		488.81	23.03	-22.97	46	32.59	18.09	2.77	30.42	-	-	P	H
		648.86	22.35	-23.65	46	29.99	19.45	3.21	30.3	-	-	P	H
		869.05	24.68	-21.32	46	28.9	22.49	3.77	30.48	-	-	P	H
		882.63	26.44	-19.56	46	30.54	22.63	3.8	30.53	169	258	P	H
		30	17.57	-22.43	40	29.42	18.6	0.65	31.1	-	-	P	V
		488.81	25.26	-20.74	46	34.82	18.09	2.77	30.42	-	-	P	V
		612	25.12	-20.88	46	34.5	17.74	3.1	30.22	-	-	P	V
		734.22	23.95	-22.05	46	30.32	20.67	3.43	30.47	-	-	P	V
		880.69	32.49	-13.51	46	36.6	22.61	3.8	30.52	103	267	P	V
		928.22	24.88	-21.12	46	28.25	23.25	3.92	30.54	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



Adapter 2, Battery 2, USB Cable 2:

15E band 2 5250~5350MHz

WIFI 802.11ac VHT80 (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)
802.11ac VHT80 CH 58 5290MHz		5130.35	50.22	-23.78	74	43.31	35.34	8.11	36.54	300	355	P	H
		5122.5	42.33	-11.67	54	35.45	35.33	8.1	36.55	300	355	A	H
	*	5304	94.38	-	-	87.23	35.39	8.26	36.5	300	355	P	H
	*	5284	87.48	-	-	80.34	35.39	8.25	36.5	300	355	A	H
		5354.5	59.89	-14.11	74	52.69	35.41	8.29	36.5	300	355	P	H
	!	5354.5	51.48	-2.52	54	44.28	35.41	8.29	36.5	300	355	A	H
		5106.45	50.21	-23.79	74	43.33	35.33	8.1	36.55	100	343	P	V
		5146.75	42.13	-11.87	54	35.19	35.34	8.13	36.53	100	343	A	V
	*	5272	88.44	-	-	81.33	35.38	8.23	36.5	100	343	P	V
	*	5310	81.25	-	-	74.08	35.4	8.27	36.5	100	343	A	V
		5354.95	54.88	-19.12	74	47.68	35.41	8.29	36.5	100	343	P	V
		5355.1	47.3	-6.7	54	40.1	35.41	8.29	36.5	100	343	A	V
Remark	3. No other spurious found. 4. All results are PASS against Peak and Average limit line.												



15E band 2 5250~5350MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 CH 58 5290MHz		10581	48.75	-25.25	74	57.56	38.51	13.67	60.99	100	0	P	H
		10581	53.78	-20.22	74	62.59	38.51	13.67	60.99	100	265	P	V
	!	10581	50.55	-3.45	54	59.36	38.51	13.67	60.99	100	265	A	V
Remark	3. No other spurious found. 4. All results are PASS against Peak and Average 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 per 15.209(c).
!	Test result is over limit line.
P/A	P eak or A verage
H/V	H orizontal or V ertical



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

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

1. Level(dBμV/m) =

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

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

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

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

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

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

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

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

= 43.54 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

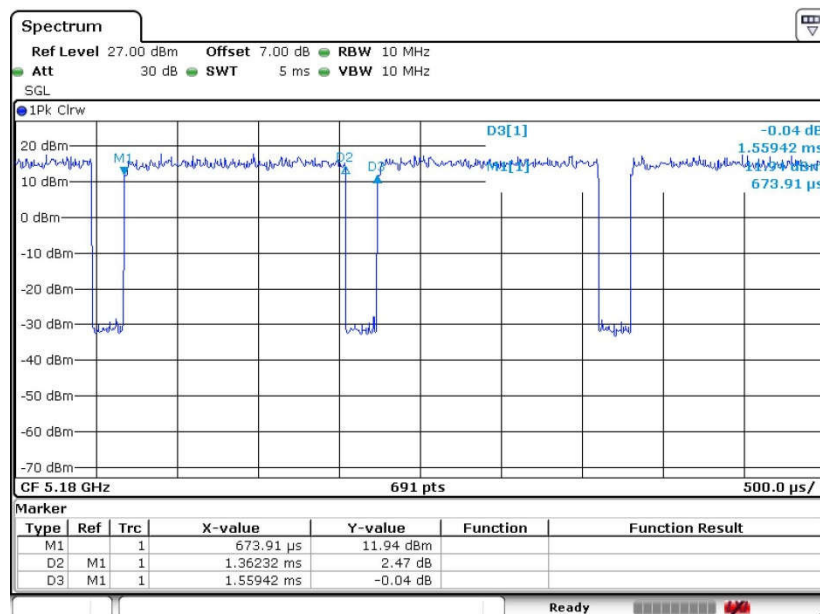
= -10.46(dB)

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

Appendix D. Duty Cycle Plots

Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
802.11a	87.361	1.362	0.734	1kHz
802.11n HT20	86.444	1.275	0.784	1kHz
802.11n HT40	76.125	0.638	1.567	3kHz
802.11ac VHT20	83.333	0.978	1.022	3kHz
802.11ac VHT40	71.339	0.494	2.024	3kHz
802.11ac VHT80	55.195	0.246	4.059	10kHz

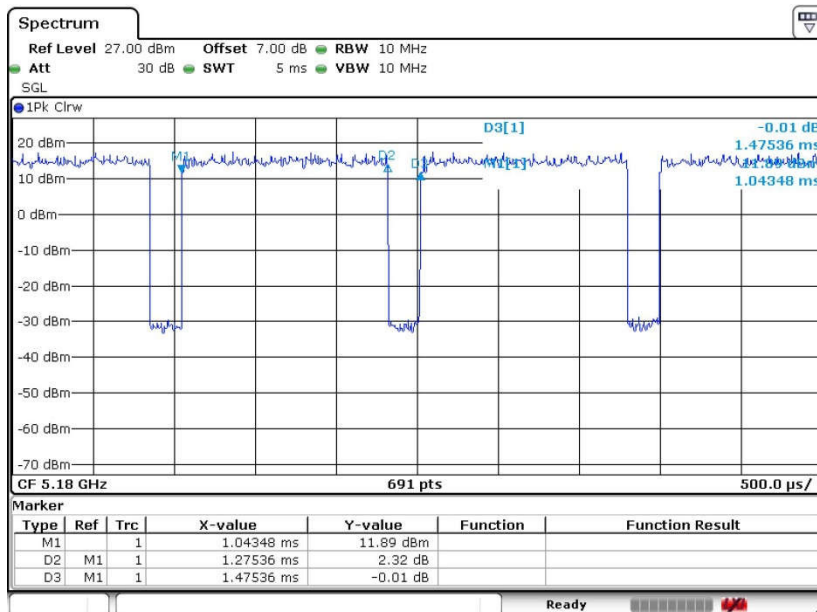
802.11a



Date: 19.FEB.2016 20:24:01

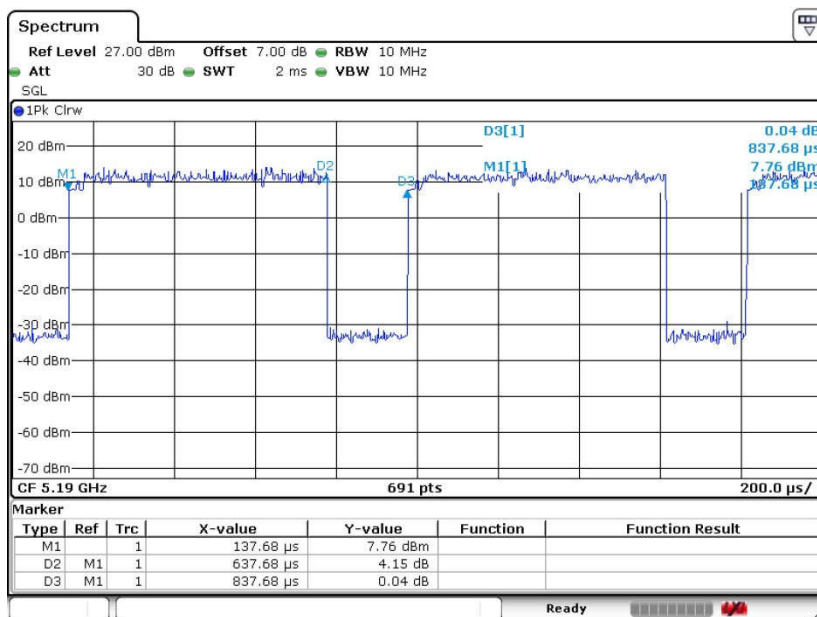


802.11n HT20



Date: 19.FEB.2016 20:58:21

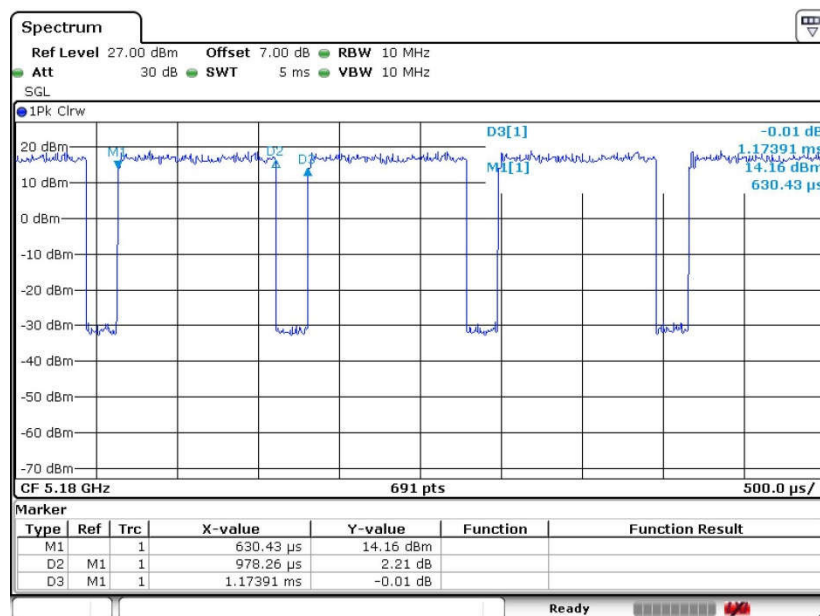
802.11n HT40



Date: 19.FEB.2016 20:55:17

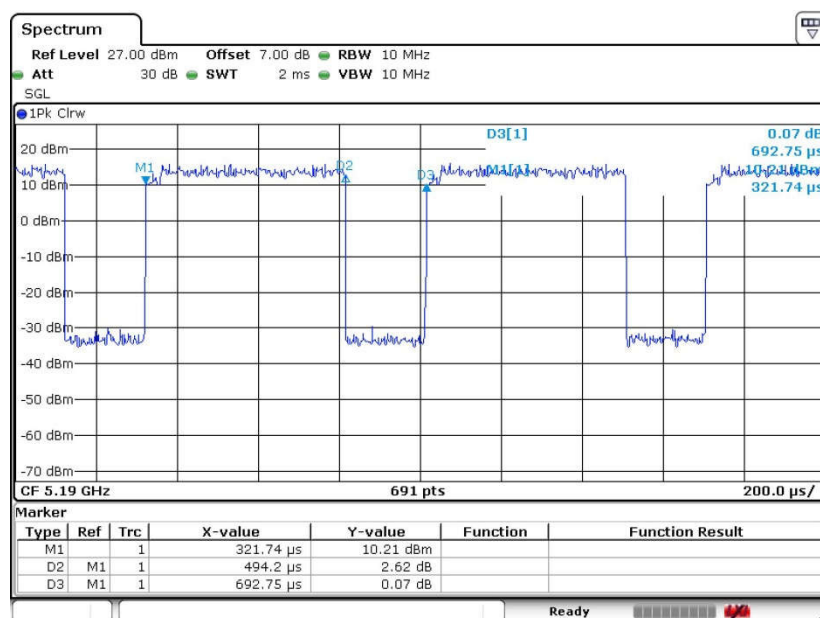


802.11ac VHT20



Date: 15.APR.2016 19:16:23

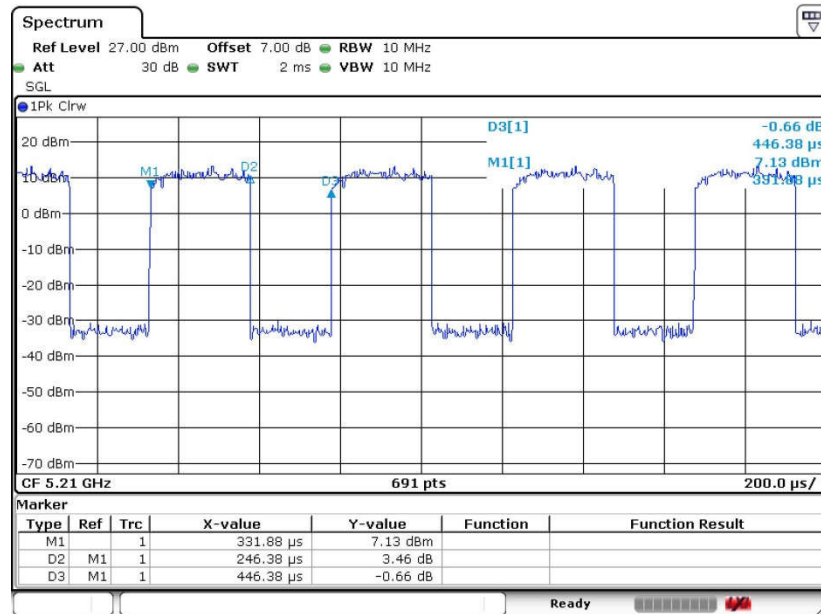
802.11ac VHT40



Date: 15.APR.2016 19:24:00



802.11ac VHT80



Date: 15.APR.2016 19:33:32