FCC RF TEST REPORT

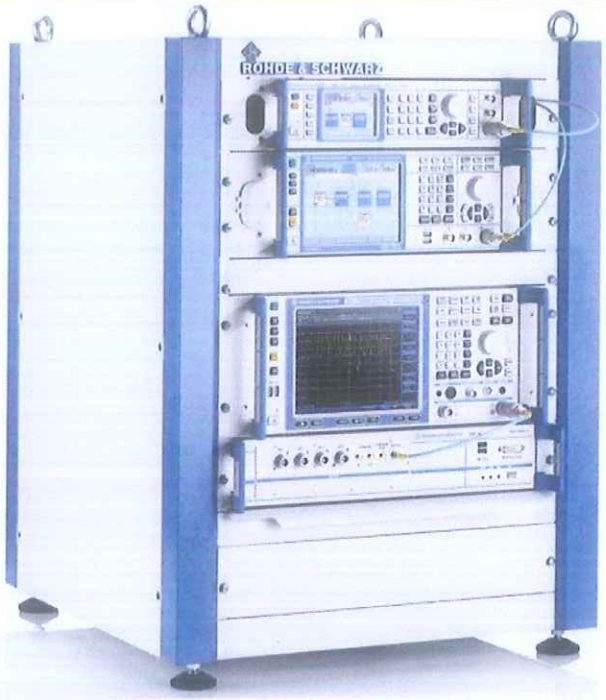
ISSUED BY
Shenzhen BALUN Technology Co., Ltd.

FOR

Gee Chain One

ISSUED TO
Beijing Geek-geek Technology Co., Ltd.

Haidian Street No. 3 Building 1 1201-A1219/1201-A1220, Haidian District, No. 11, 1002,Beijing



Prepared by: Hu Chao
Hu Chao
(Engineer)
Date Apr. 27, 2018

Approved by:
Wei Yanquan
(Chief Engineer)
Date Apr. 27, 2018

Report No.:	BL-SZ1810293-601
EUT Name:	Gee Chain One
Model Name:	HC5962W
Brand Name:	HIWIFI
Test Standard:	47 CFR Part 15 Subpart E
FCC ID:	2AOXH-GJAN182018001
Test Conclusion:	Pass
Test Date:	Mar. 25, 2018 ~ Apr. 08, 2018
Date of Issue:	Apr. 27, 2018

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Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong, P. R. China 518055
TEL: +86-755-66850100, FAX: +86-755-61824271
Email: qc@baluntek.com
www.baluntek.com

Revision History

Version	Issue Date	Revisions Content
Rev. 01	Apr. 23, 2018	Initial Issue
Rev. 02	Apr. 27, 2018	Revise the note on page 8.revise the plot of data part 3.add the MIMO evalution on page 37 of A.6.add the description on page 22 of section 5.5.3.

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1 ADMINISTRATIVE DATA (GENERAL INFORMATION)

1.1 Identification of the Testing Laboratory

Company Name	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Phone Number	+86 755 6685 0100

1.2 Identification of the Responsible Testing Location

Test Location	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Accreditation Certificate	The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 11524A-1. The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196. The laboratory is a testing organization accredited by American Association for Laboratory Accreditation(A2LA) according to ISO/IEC 17025.The accreditation certificate is 4344.01. The laboratory is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L6791.
Description	All measurement facilities used to collect the measurement data are located at Block B, FL 1, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China 518055

1.3 Laboratory Condition

Ambient Temperature	20℃ to 25℃
Ambient Relative Humidity	45% to 55%
Ambient Pressure	100 kPa to 102 kPa

1.4 Announce

(1) The test report reference to the report template version v4.2.

(2) The test report is invalid if not marked with the signatures of the persons responsible for preparing and approving the test report.

(3) The test report is invalid if there is any evidence and/or falsification.

(4) The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein.

(5) This document may not be altered or revised in any way unless done so by BALUN and all revisions are duly noted in the revisions section.

(6) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.

2 PRODUCT INFORMATION

2.1 Applicant

Applicant	Beijing Geek-geek Technology Co., Ltd.
Address	Haidian Street No. 3 Building 1 1201-A1219/1201-A1220, Haidian District, No. 11, 1002,Beijing

2.2 Manufacturer

Manufacturer	Beijing Geek-geek Technology Co., Ltd.
Address	Haidian Street No. 3 Building 1 1201-A1219/1201-A1220, Haidian District, No. 11, 1002,Beijing

2.3 Factory

Factory	Shenzhen Phoenix Telecom Technology Co., Ltd
Address	West of FuYuan 1st Road, Fuyong street, Baoan District, ShenZhen, Guangdong, China.

2.4 General Description for Equipment under Test (EUT)

EUT Type	Gee Chain One
Model Name Under Test	HC5962W
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	HC5962-V4
Software Version	1.4.10
Network and Wireless connectivity	WIFI 802.11a, 802.11b, 802.11g, 802.11n(HT20/40) and 802.11ac

2.5 Ancillary Equipment

Ancillary Equipment 1	Adapter	
	Brand Name	RUIJING
	Model No.	RJT018-AS120150U301
	Serial No.	N/A
	Rated Input	100-240 V~, 50 / 60 Hz, 0.5 A
	Rated Output	12 V⎓ 1500 mA

2.6 Technical Information

Frequency Range		Band I: 5150 MHz to 5250 MHz, Band IV: 5725 MHz to 5850 MHz
Modulation technology		OFDM
Modulation Type		256QAM, 64QAM, 16QAM, BPSK, QPSK
Product Type		☒ Indoor Access Point
Transfer Rate (Mbps) (Single RF path)		802.11a: 54/ 48/ 36 / 24 / 18/12 / 9/ 6 Mbps 802.11n: up to 150 Mbps 802.11ac: up to VHT-MCS9
Channel Bandwidth		802.11a: 20 MHz 802.11n: 20 MHz, 40 MHz 802.11ac: 20 MHz, 40 MHz, 80 MHz
Maximum Output Power		Band I: 23.76 dBm Band IV: 23.85 dBm
Antenna System (eg., MIMO, Smart Antenna)		Cyclic Delay Diversity (CDD)
Categorization as Correlated or Completely Uncorrelated		Correlated
Antenna Type	Antenna 0 (ANT 0)	Dipole Antenna
	Antenna 1 (ANT 1)	
Antenna Gain	Antenna 0 (ANT 0)	Band I: 5150 MHz to 5250 MHz: 5 dBi Band IV: 5725 MHz to 5850 MHz: 5 dBi
	Antenna 1 (ANT 1)	Band I: 5150 MHz to 5250 MHz: 5 dBi Band IV: 5725 MHz to 5850 MHz: 5 dBi
Total directional gain	For power spectral density(PSD) measurements	Band I: 5150 MHz to 5250 MHz: 8 dBi Band IV: 5725 MHz to 5850 MHz: 8 dBi Formulas: Directional gain = GANT + Array Gain, *Array Gain = 10 log(NANT/NSS) dB*. *NSS* =1, ,Array gain =10*log(2/1)=3dB.GANT set equal to the gain of the antenna having the highest gain. GANT=5dBi. So Directional gain = GANT + Array Gain=5+3=8dBi
	For power measurements	Band I: 5150 MHz to 5250 MHz: 5 dBi Band IV: 5725 MHz to 5850 MHz: 5 dBi Formulas: Directional gain = GANT + Array Gain, *Array Gain* = 0.so Directional gain=5+0=5dBi.
About the Product		The equipment is Gee Chain One, intended for used with information technology equipment.

2.7 Additional Instructions

Mode	☒ Special software is used. The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

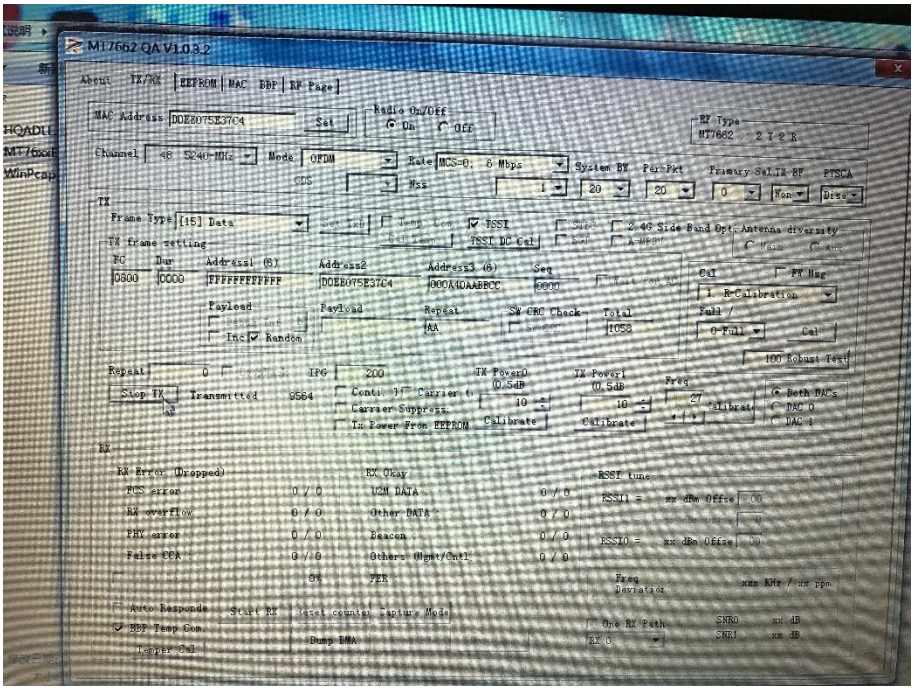
During testing, Channel and Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

EUT Software Settings:

Test Software Version	QATool		
Support Units (Software installation media)	Description	Manufacturer	Model
	Notebook	Lenovo	X220

Band I (5150 - 5250 MHz) Power level setup in software				
Mode	Channel	Frequency (MHz)	Soft Set	
11a	CH36	5180	0F	0F
11a	CH44	5220	0F	0F
11a	CH48	5240	0F	0F
11n (HT20)	CH36	5180	0B	0B
11n (HT20)	CH44	5220	0B	0B
11n (HT20)	CH48	5240	0B	0B
11n (HT40)	CH38	5190	0F	0F
11n (HT40)	CH46	5230	0F	0F
11ac (HT20)	CH36	5180	0B	0B
11ac (HT20)	CH44	5220	0B	0B
11ac (HT20)	CH48	5240	0B	0B
11ac (HT40)	CH38	5190	0F	0F
11ac (HT40)	CH46	5230	0F	0F
11ac (HT80)	CH42	5210	0F	0F
Band IV (5725 - 5850 MHz) Power level setup in software				
Mode	Channel	Frequency (MHz)	Soft Set	
11a	CH149	5745	0E	0E
11a	CH157	5785	0E	0E
11a	CH165	5825	0E	0E
11n (HT20)	CH149	5745	0E	0E
11n (HT20)	CH157	5785	0E	0E
11n (HT20)	CH165	5825	0E	0E
11n (HT40)	CH151	5755	0E	0E
11n (HT40)	CH159	5795	0E	0E
11ac (HT20)	CH149	5745	0E	0E
11ac (HT20)	CH157	5785	0E	0E
11ac (HT20)	CH165	5825	0E	0E
11ac (HT40)	CH151	5755	0E	0E
11ac (HT40)	CH159	5795	0E	0E
11ac (HT80)	CH155	5775	0E	0E

Run Software



2.8 Channel List

20 MHz		40 MHz		80 MHz	
Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)
36	**5180**	**38**	**5190**	**42**	**5210**
40	5200	**46**	**5230**	**155**	**5775**
44	**5220**	**151**	**5755**		
48	**5240**	**159**	**5795**		
149	**5745**				
153	5765				
157	**5785**				
161	5805				
165	**5825**				

Note: according to ISED standard, Until further notice, devices subject to this section shall not be capable of transmitting in the band 5600-5650 MHz. This restriction is for the protection of weather radars operating in this band.

The Lowest frequency, the middle frequency and the highest frequency of channel were selected to perform the test, and the selected channel see below:

For 802.11a/n/ac (HT20)

Band I (5150 - 5250 MHz)			Band IV (5725 - 5850 MHz)		
Channel Number	Channel	Frequency (MHz)	Channel Number	Channel	Frequency (MHz)
36	Low	5180	149	Low	5745
44	Mid	5220	157	Mid	5785
48	High	5240	165	High	5825

For 802.11n/ac (HT40)

Band I (5150 - 5250 MHz)			Band IV (5725 - 5850 MHz)		
Channel Number	Channel	Frequency (MHz)	Channel Number	Channel	Frequency (MHz)
38	Low	5190	151	Low	5755
46	High	5230	159	High	5795

For 802.11ac(HT80)

Band I (5150 - 5250 MHz)			Band IV (5725 - 5850 MHz)		
Channel Number	Channel	Frequency (MHz)	Channel Number	Channel	Frequency (MHz)
42	Low	5210	155	Low	5775

Note: Preliminary tests were performed in different data rate in above table to find the worst radiated emission. The data rate shown in the table below is the worst-case rate with respect to the specific test item. Investigation has been done on all the possible configurations for searching the worst cases. The following table is a list of the test modes shown in this test report.

Test Items	Mode	Data Rate	Modulation Type	Band I Channel	Band IV Channel
RF Output Power	11a	6	BPSK	48/44/36	165/157/149
	11n(20 MHz)	6.5		48/44/36	165/157/149
	11n(40 MHz)	13.5		46/38	159/151
	11ac(20 MHz)	6.5		48/44/36	165/157/149
	11ac(40 MHz)	13.5		46/38	159/151
	11ac(80 MHz)	MCS0		42	155
Emission Bandwidth & 99% Occupied Bandwidth	11a	6	BPSK	48/44/36	165/157/149
	11n(20 MHz)	6.5		48/44/36	165/157/149
	11n(40 MHz)	13.5		46/38	159/151
	11ac(20 MHz)	6.5		48/44/36	165/157/149
	11ac(40 MHz)	13.5		46/38	159/151
	11ac(80 MHz)	VHT-MCS0		42	155
6 dB bandwidth	11a	6	BPSK	N/A	165/157/149
	11n(20 MHz)	6.5		N/A	165/157/149
	11n(40 MHz)	13.5		N/A	159/151
	11ac(20 MHz)	6.5		N/A	165/157/149
	11ac(40 MHz)	13.5		N/A	159/151
	11ac(80 MHz)	MCS0		N/A	155
Power Spectral Density	11a	6	BPSK	48/44/36	165/157/149
	11n(20 MHz)	6.5		48/44/36	165/157/149
	11n(40 MHz)	13.5		46/38	159/151
	11ac(20 MHz)	6.5		48/44/36	165/157/149
	11ac(40 MHz)	13.5		46/38	159/151

	11ac(80 MHz)	MCS0		42	155
Conducted Spurious Emission and Band Edge (Authorized-band)	11a	6	BPSK	48/44/36	165/157/149
	11n(20 MHz)	6.5		48/44/36	165/157/149
	11n(40 MHz)	13.5		46/38	159/151
	11ac(20 MHz)	6.5		48/44/36	165/157/149
	11ac(40 MHz)	13.5		46/38	159/151
	11ac(80 MHz)	MCS0		42	155
Radiated Spurious Emissions	11a	6	BPSK	48/44/36	165/157/149
	11n(20 MHz)	6.5		48/44/36	165/157/149
	11n(40 MHz)	13.5		46/38	159/151
	11ac(20 MHz)	6.5		48/44/36	165/157/149
	11ac(40 MHz)	13.5		46/38	159/151
	11ac(80 MHz)	MCS0		42	155
Band Edge (Restricted-band)	11a	6	BPSK	48/36	165/149
	11n(20 MHz)	6.5		48/36	165/149
	11n(40 MHz)	13.5		46/38	159/151
	11ac(20 MHz)	6.5		48/36	165/149
	11ac(40 MHz)	13.5		46/38	159/151
	11ac(80 MHz)	MCS0		42	155
Frequency Stability	Unmodulated	N/A	N/A	N/A	N/A

3 SUMMARY OF TEST RESULTS

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 15 Subpart E (10-1-16 Edition)	Unlicensed National Information Infrastructure Devices
2	KDB Publication 789033 D02v01r04	Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E
3	KDB Publication 662911 D01v02r01	Emissions Testing of Transmitters with Multiple Outputs in the Same Band (e.g., MIMO, Smart Antenna, etc)
4	ANSI C63.10-2013	American National Standard for Testing Unlicensed Wireless Devices

3.2 Verdict

No.	Description	FCC Part No.	Test Result	Verdict
1	Antenna Requirement	15.203	--	Pass[Note1]
2	RF Output Power	15.407(a)	ANNEX A.1	Pass
3	Emission Bandwidth & 99% Occupied Bandwidth	15.407(a)	ANNEX A.2	Pass
4	6 dB bandwidth	15.407(e)	ANNEX A.3	Pass
5	Power Spectral Density	15.407(a)	ANNEX A.4	Pass
6	Conducted Emission	15.207	ANNEX A.5	Pass
7	Conducted Spurious Emission and Band Edge (Authorized-band)	15.407(b) 15.209	ANNEX A.6	Pass
8	Radiated Spurious Emissions and Band Edge (Restricted-band)	15.407(b)	ANNEX A.7	Pass
9	Frequency Stability	15.407(g)	ANNEX A.8	Pass
10	Receiver Spurious Emissions	--	--	N/A[Note2]

Note [1]: The EUT has a permanently and irreplaceable attached antenna, which complies with the requirement FCC 15.203.

Note [2]: Only radio communication receivers operating in stand-alone mode within the band 30-960 MHz, as well as scanner receivers, are subject to Industry Canada requirements, so this test is not applicable

4 GENERAL TEST CONFIGURATIONS

4.1 Test Environments

During the measurement, the normal environmental conditions were within the listed ranges:

Relative Humidity	45% to 55%	
Atmospheric Pressure	100 kPa to 102 kPa	
Temperature	NT (Normal Temperature)	+22℃ to +25℃
	LT (Low Temperature)	0℃
	HT (High Temperature)	+45℃
Working Voltage of the EUT	NV (Normal Voltage)	120 V
	LV (Low Voltage)	110 V
	HV (High Voltage)	130 V

4.2 Test Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer	ROHDE&SCHWARZ	FSV-30	103118	2017.06.12	2018.06.11
Switch Unit with OSP-B157	ROHDE&SCHWARZ	OSP120	101270	2017.06.12	2018.06.11
EMI Receiver	KEYSIGHT	N9038A	MY53220118	2017.09.07	2018.09.06
EMI Receiver	ROHDE&SCHWARZ	ESRP	101036	2017.06.22	2018.06.21
LISN	SCHWARZBECK	NSLK 8127	8127-687	2017.06.22	2018.06.21
Bluetooth Tester	ROHDE&SCHWARZ	CBT	101005	2017.06.12	2018.06.11
Power Splitter	KMW	DCPD-LDC	1305003215	--	--
Power Sensor	ROHDE&SCHWARZ	NRP-Z21	103971	2017.06.12	2018.06.11
Attenuator (20 dB)	KMW	ZA-S1-201	110617091	--	--
Attenuator (6 dB)	KMW	ZA-S1-61	1305003189	--	--
DC Power Supply	ROHDE&SCHWARZ	HMP2020	018141664	2017.06.22	2018.06.21
Temperature Chamber	ANGELANTIONI SCIENCE	NTH64-40A	1310	2017.06.22	2018.06.21
Test Antenna-Loop(9 kHz-30 MHz)	SCHWARZBECK	FMZB 1519	1519-037	2017.06.22	2018.06.21
Test Antenna-Bi-Log(30 MHz-3 GHz)	SCHWARZBECK	VULB 9163	9163-624	2017.11.07	2019.11.08
Test Antenna-Horn(1-18 GHz)	SCHWARZBECK	BBHA 9120D	9120D-1148	2017.07.22	2019.07.21
Test Antenna-Horn(15-26.5 GHz)	SCHWARZBECK	BBHA 9170	9170-305	2016.07.12	2018.07.11
Test Antenna-Horn (18-40 GHz)	A-INFO	LB-180400KF	J211060273	2017.01.07	2019.01.06
Anechoic Chamber	RAINFORD	9m*6m*6m	N/A	2017.02.21	2019.02.20
Anechoic Chamber	EMC Electronic Co., Ltd	20.10*11.60*7.35m	N/A	2016.08.09	2018.08.08
Shielded Enclosure	ChangNing	CN-130701	130703	--	--
Signal Generator	ROHDE&SCHWARZ	SMB100A	177746	2017.06.12	2018.06.11
Power Amplifier	OPHIR RF	5225F	1037	2018.02.17	2019.02.16

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Power Amplifier	OPHIR RF	5273F	1016	2018.02.17	2019.02.16
Directional Coupler	Werlantone	C5982-10	109275	N/A	N/A
Directional Coupler	Werlantone	CHP-273E	S00801z-01	N/A	N/A
Feld Strength Meter	Narda	EP601	511WX51129	2017.05.22	2018.05.21
Mouth Simulator	B&K	4227	2423931	2017.11.16	2018.11.15
Sound Calibrator	B&K	4231	2430337	2017.11.16	2018.11.15
Sound Level Meter	B&K	NL-20	00844023	2017.11.16	2018.11.15
Ear Simulator	B&K	4185	2409449	2017.11.16	2018.11.15
Ear Simulator	B&K	4195	2418189	2017.11.16	2018.11.15
Audio analyzer	B&K	UPL 16	100129	2017.11.16	2018.11.15

4.3 Measurement Uncertainty

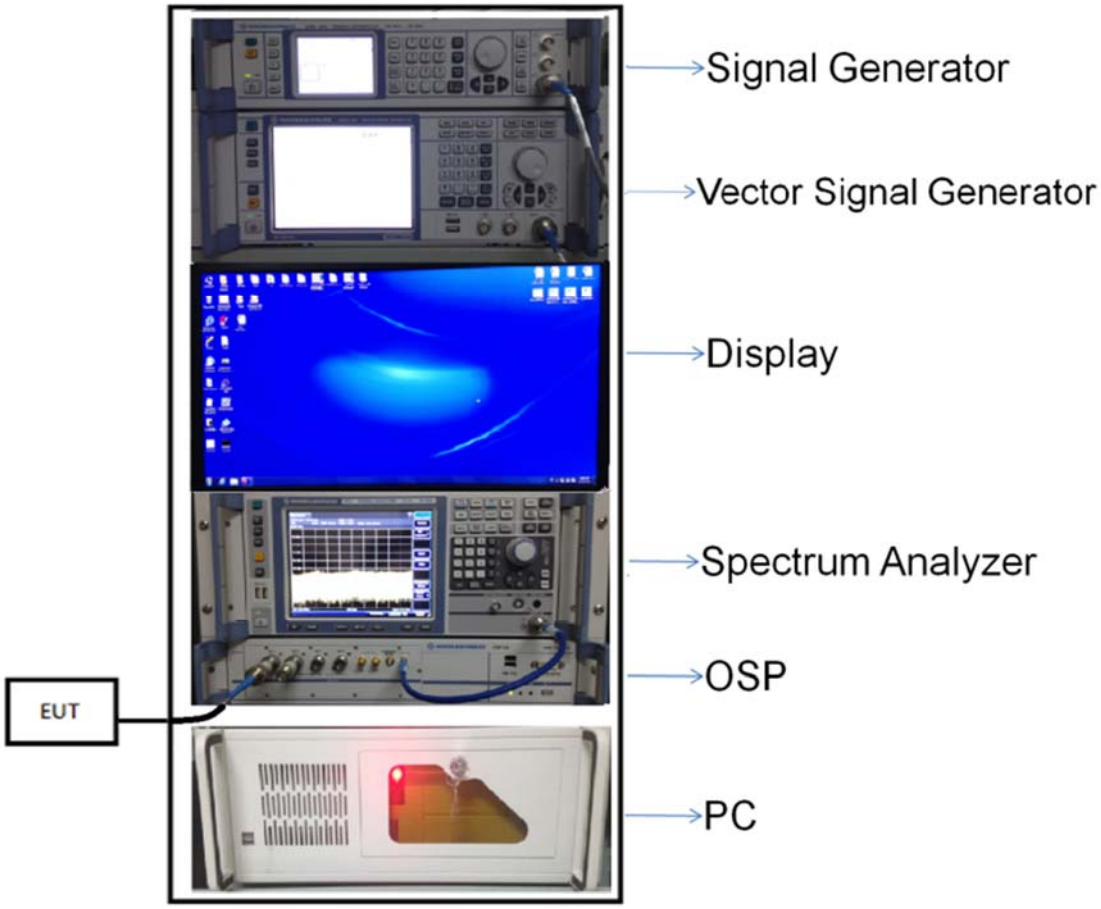
The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2.

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Measurement	Value
Occupied Channel Bandwidth	±4%
RF output power, conducted	±1.4 dB
Power Spectral Density, conducted	±2.5 dB
Unwanted Emissions, conducted	±2.8 dB
All emissions, radiated	±5.4 dB
Temperature	±1°C
Humidity	±4%

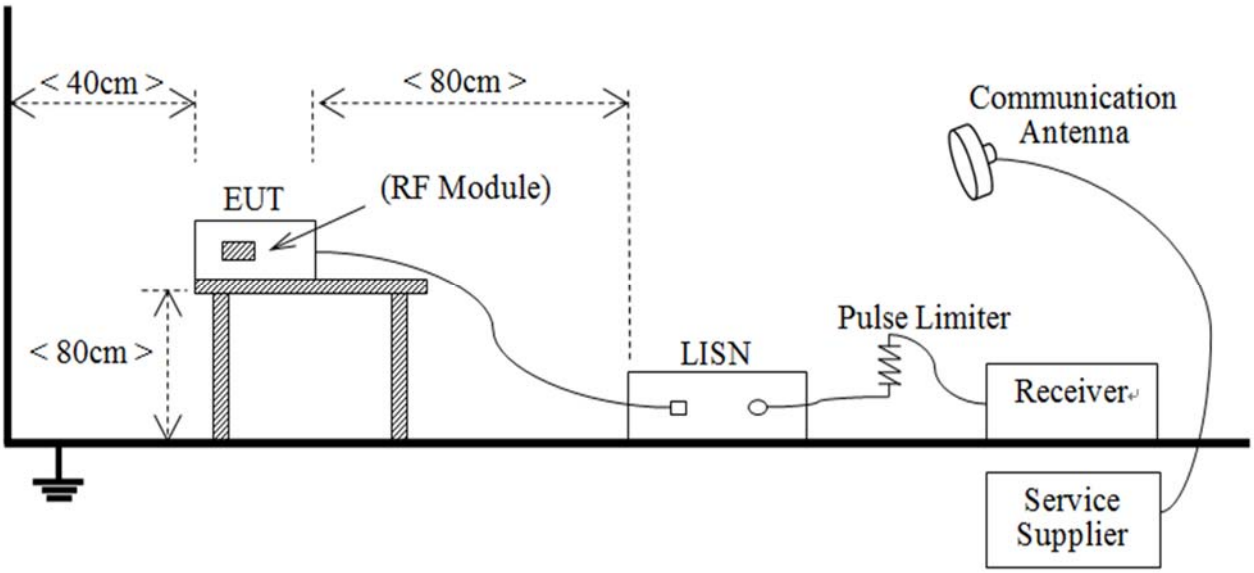
4.4 Description of Test Setup

4.4.1 For Antenna Port Test



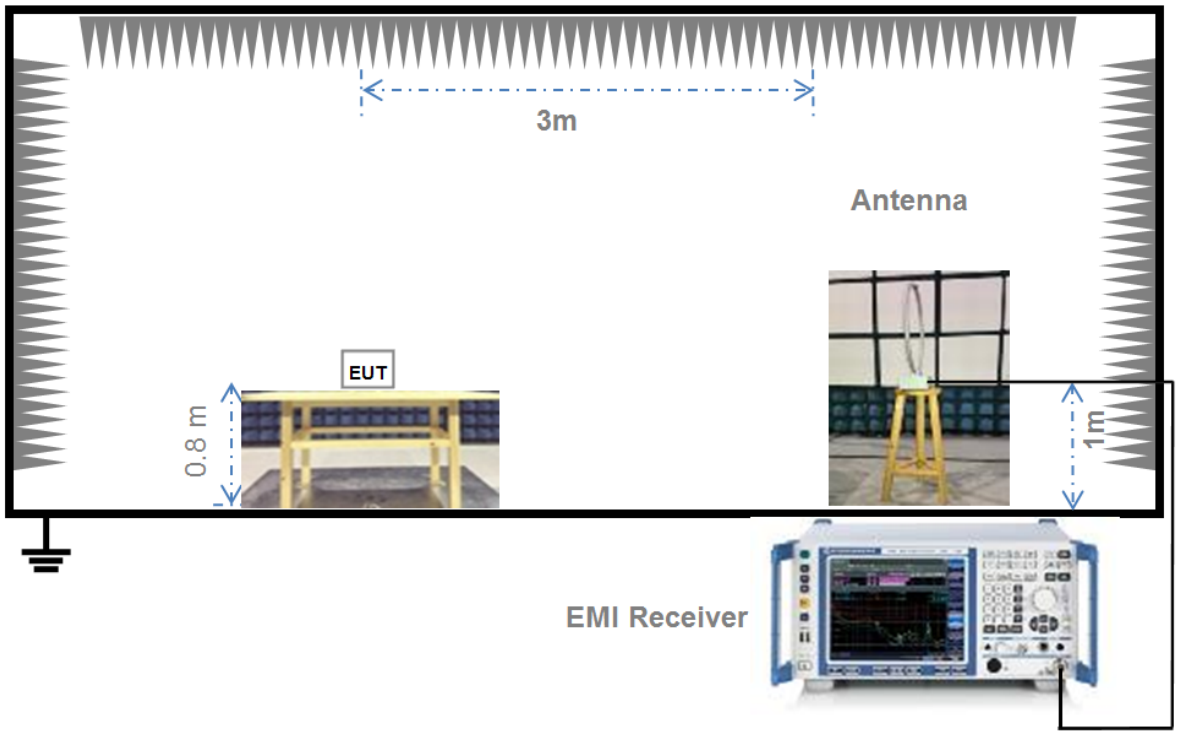
(Diagram 1)

4.4.2 For AC Power Supply Port Test



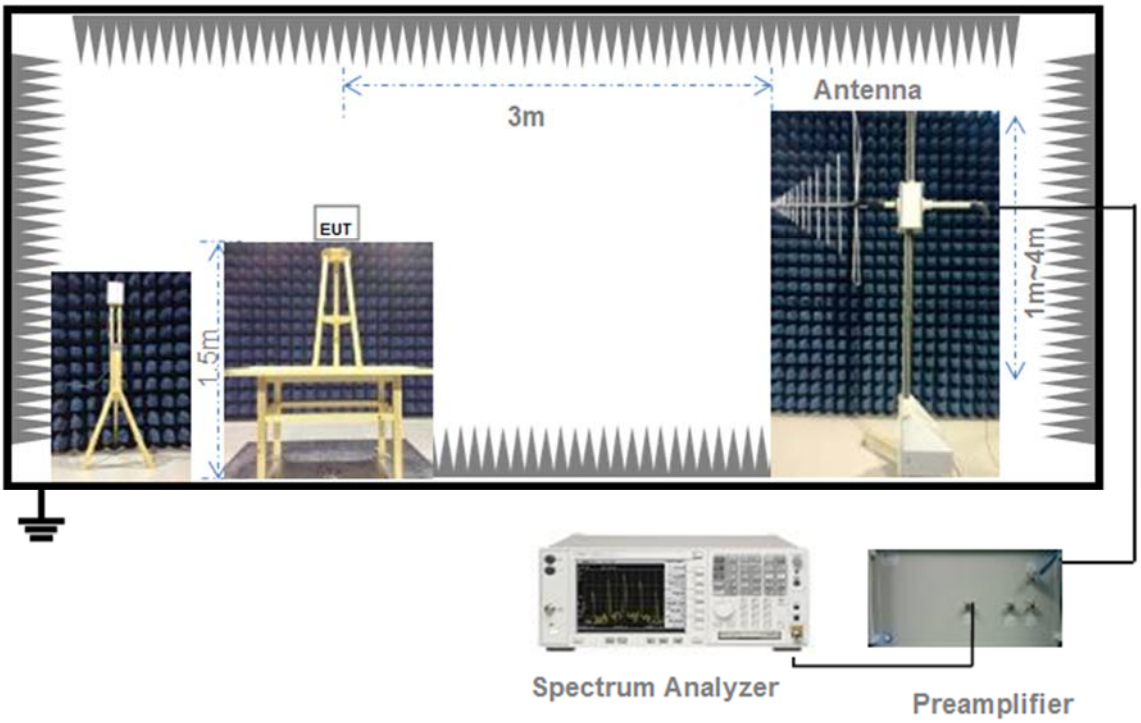
(Diagram 2)

4.4.3 For Radiated Test (Below 30 MHz)



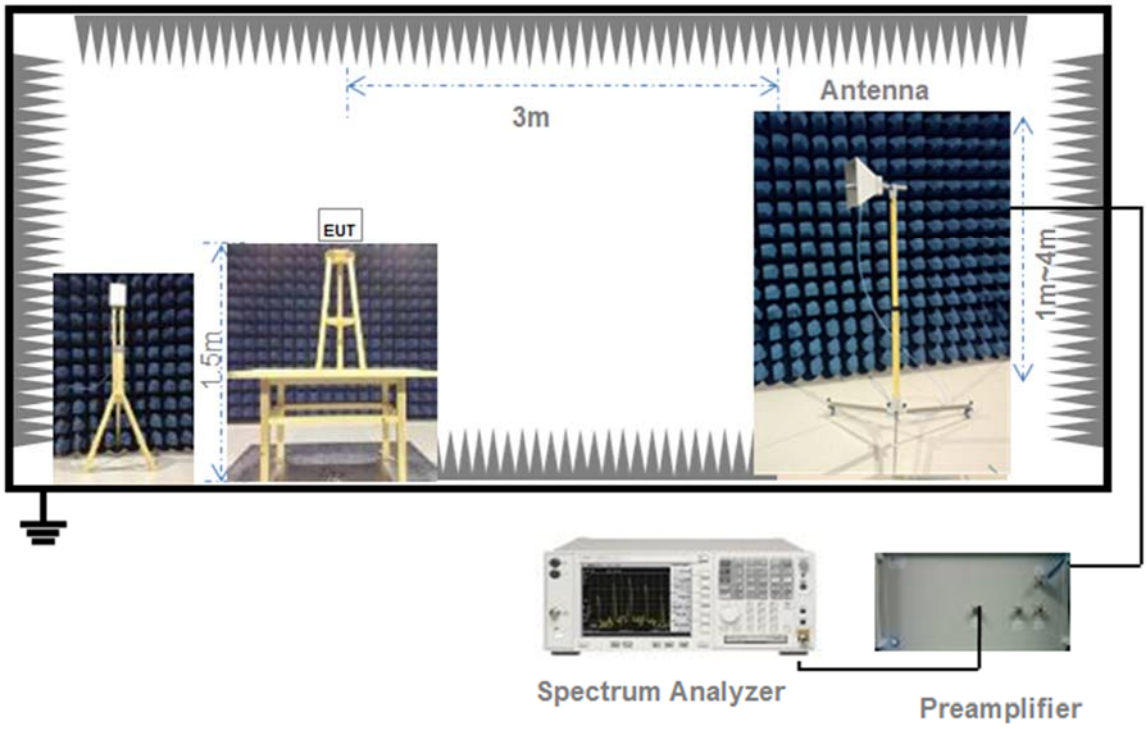
(Diagram 3)

4.4.4 For Radiated Test (30 MHz-1 GHz)



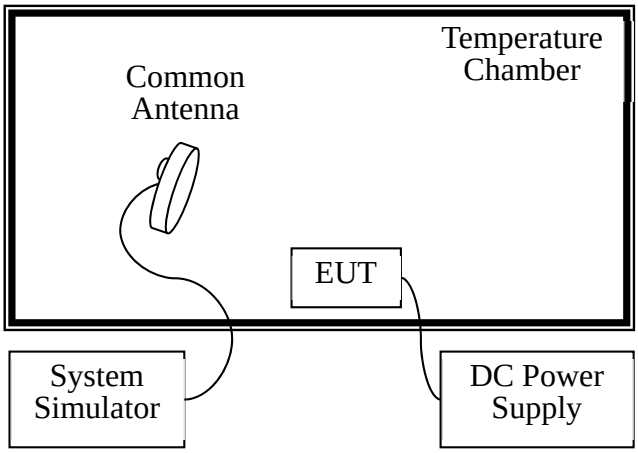
(Diagram 4)

4.4.5 For Radiated Test (Above 1 GHz)



(Diagram 5)

4.4.6 For Frequency Stability Test



(Diagram 6)

5 TEST ITEMS

5.1 RF Output Power

5.1.1 Test Limit

FCC §15.407(a)

The maximum conducted output power should not exceed:

Frequency Band (MHz)	Limit
5150-5250	250 mW
5250-5350	250 mW or 11 dBm + 10log B, whichever is less.
5470-5725	250 mW or 11 dBm + 10log B, whichever is less.
5725-5850	1 W
Note: Where “B” is the 26 dB emissions bandwidth in MHz.	

RSS-247, 6.2

The maximum conducted output power shall not exceed:

Frequency Band (MHz)	Limit
5150-5250	N/A
5250-5350	250 mW or 11 dBm + 10log B, whichever is less.
5470-5725	250 mW or 11 dBm + 10log B, whichever is less.
5725-5850	1 W
Note: Where “B” is the 99% emissions bandwidth in MHz.	

The maximum e.i.r.p. shall not exceed:

Frequency Band (MHz)	Limit
5150-5250	200 mW or 10 dBm + 10log B, whichever is less.
5250-5350	1W or 17 dBm + 10log B, whichever is less.
5470-5725	1W or 17 dBm + 10log B, whichever is less.
5725-5850	N/A
Note: Where “B” is the 99% emissions bandwidth in MHz.	

5.1.2 Test Setup

The section 4.4.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.1.3 Test Procedure

The maximum peak conducted output power may be measured using a broadband Average RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the emission bandwidth and utilize a fast-responding diode detector.

The E.I.R.P used radiated test method. At a test site that has been validated using the procedures of ANSI C63.4 or the latest CISPR 16-1-4 for measurements above 1 GHz, so as to simulate a near free-space environment.

5.1.4 Test Result

Please refer to ANNEX A.1.

5.2 Emission Bandwidth and 6 dB Bandwidth

5.2.1 Limit

FCC §15.407(a), RSS-247, 6.2

Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

5.2.2 Test Setup

The test setup photo please refer to 4.4.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.2.3 Test Procedure

Emission bandwidth

1. Set RBW = approximately 1% of the emission bandwidth.

2. Set VBW ≥ 3*RBW,

3. Detector = Peak.

4. Trace mode = Max hold.

5. Measure the maximum width of the emission that is 26 dB down from the peak of the emission.

Occupied Bandwidth

1. Set Span = 1.5 times to 5.0 times the OBW

2. Set RBW = 1% to 5% of the OBW.

3. Set VBW ≥ 3*RBW, Detector = Peak.

4. Trace mode = Max hold.

5. Use the 99% power bandwidth function of the instrument.

6 dB bandwidth

1. Set RBW = 100 kHz, VBW = 300 kHz.

2. Detector = Peak.Trace mode = Max hold.

3. Allow the trace to stabilize.

4. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

5.2.4 Test Result

Please refer to ANNEX A.2 and ANNEX A.3.

5.3 Power Spectral density (PSD)

5.3.1 Limit

FCC §15.407(a)

The maximum power spectral density should not exceed:

Frequency Band (MHz)	Limit
5150-5250	17 dBm/MHz
5725-5850	30 dBm/500kHz

5.3.2 Test Setup

The section 4.4.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.3.3 Test Procedure

Set the spectrum analyzer or EMI receiver span to view the entire emission bandwidth.

1. Set RBW = 510 kHz/1 MHz, VBW ≥ 3*RBW, Sweep time = Auto, Detector = RMS.
2. Allow the sweeps to continue until the trace stabilizes.
3. Use the peak marker function to determine the maximum amplitude level.
4. The E.I.R.P spectral density used radiated test method. At a test site that has been validated using the procedures of ANSI C63.4 or the latest CISPR 16-1-4 for measurements above 1 GHz, so as to simulate a near free-space environment.

5.3.4 Test Result

Please refer to ANNEX A.4.

5.4 Conducted Emission

5.4.1 Limit

FCC §15.207, RSS-GEN, 8.8

For an intentional radiator 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 within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50μH/50Ω line impedance stabilization network (LISN).

Frequency range (MHz)	Conducted Limit (dBμV)	
	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
0.50 - 30	60	50

5.4.2 Test Setup

The section 4.4.2 (Diagram 2) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.4.3 Test Procedure

The maximum conducted interference is searched using Peak (PK), if the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. Refer to recorded points and plots below.

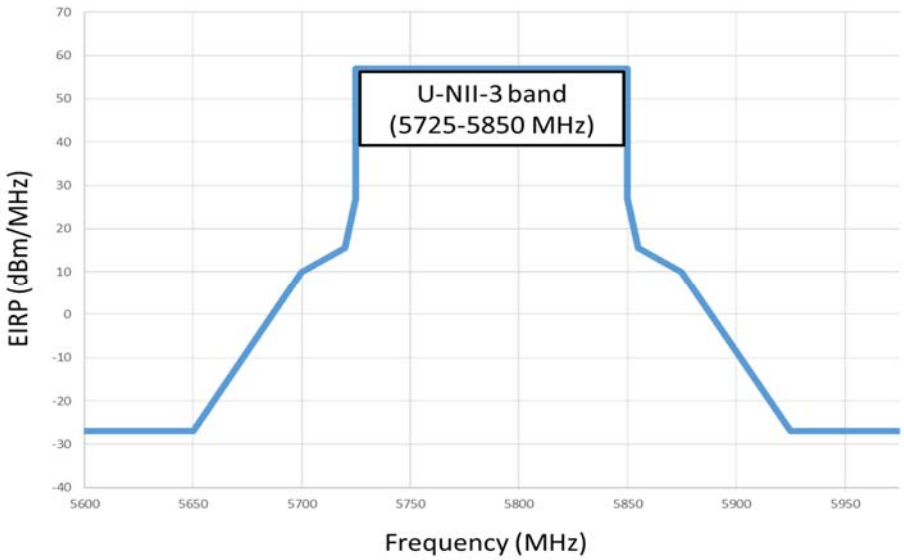
5.4.4 Test Result

Please refer to ANNEX A.5.

5.5 Conducted Spurious Emission and Band Edge (Authorized-band)

5.5.1 Limit

FCC §15.407(b)

Un-restricted band emissions	
Frequency Band (MHz)	Limit
5150 - 5250	Outside of the 5.15-5.35 GHz band: e.i.r.p. -27 dBm
5250 - 5350	Outside of the 5.15-5.35 GHz band: e.i.r.p. -27 dBm
5470 - 5725	Outside of the 5.47-5.725 GHz band: e.i.r.p. -27 dBm
5725 - 5850	All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge. 

RSS-247, 6.2

Un-restricted band emissions	
Frequency Band (MHz)	Limit
5150 - 5250	Outside of the 5.15-5.35 GHz band: e.i.r.p. -27 dBm, However, any unwanted emissions that fall into the band 5250-5350 MHz must be 26 dBc, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth, above 5.25 GHz.
5250 - 5350	Outside of the 5.15-5.35 GHz band: e.i.r.p. -27 dBm. And any emissions within the band 5150-5250 MHz shall meet the power spectral density limits of 10 dBm/MHz, The device shall be labelled “for indoor use only.”
5470 - 5725	Outside of the 5.47-5.725 GHz band: e.i.r.p. -27 dBm
5725 - 5850	5715 -5725 MHz: e.i.r.p. -17 dBm 5850 -5860 MHz: e.i.r.p. -17 dBm Other un-restricted band: e.i.r.p .-27 dBm

5.5.2 Test Setup

See section 4.4.2 (Diagram 2) for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.5.3 Test Procedure

Use the following spectrum analyzer settings:

Span = wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g., harmonics) from the lowest frequency generated in the EUT up through the 10th harmonic. Typically, several plots are required to cover this entire span.
RBW = 1 MHz for f ≥ 1 GHz, 100 kHz for f < 1 GHz
VBW ≥ RBW
Sweep = auto
Detector function = peak
Trace = max hold
Allow the trace to stabilize

Note:For FCC standard, if transmitting antennas of directional gain greater than 6 dBi are used, all band of the Conducted Spurious Emission shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

5.5.4 Test Result

Please refer to ANNEX A.6.

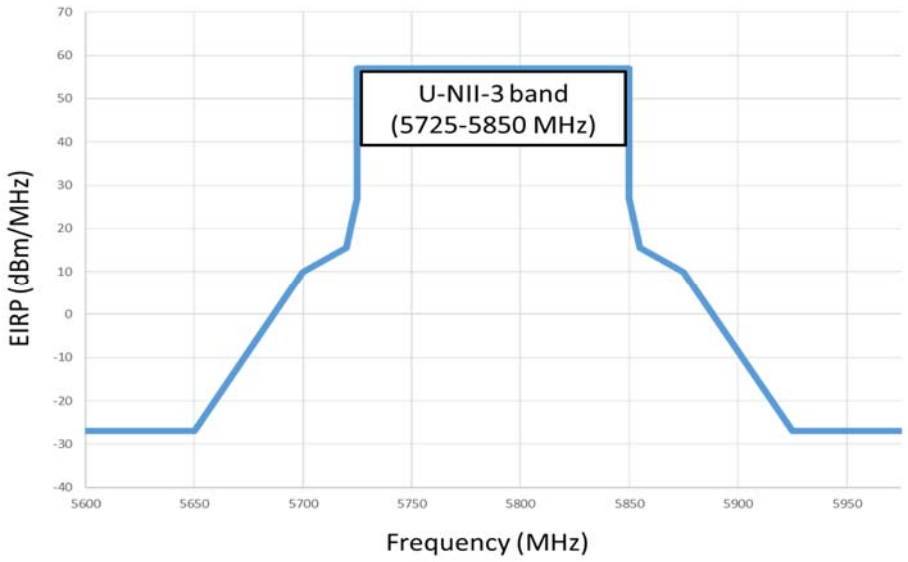
5.6 Radiated Spurious Emissions and Band Edge (Restricted-band)

5.6.1 Limit

FCC §15.209 & 15.407(b), RSS-247, 6.2

Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
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 [1]: The Limit for radiated test was performed according to FCC Part 15C
Note [2]: The tighter limit applies at the band edge.

Un-restricted band emissions	
Out Operating Band (MHz)	Limit
5150 - 5250	e.i.r.p. -27 dBm (68.2 dBuV/m@3m)
5250 - 5350	e.i.r.p. -27 dBm (68.2 dBuV/m@3m)
5470 - 5725	e.i.r.p. -27 dBm (68.2 dBuV/m@3m)
5725 - 5850	All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge. 

Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength.

5.6.2 Test Setup

The section 4.4.3-4.4.5 (Diagram 3 - Diagram 5) test setup description was used for this test. The photo of test

setup please refer to ANNEX B.

5.6.3 Test Procedure

Since the emission limits are specified in terms of radiated field strength levels, measurements performed to demonstrate compliance have traditionally relied on a radiated test configuration. Radiated measurements remain the principal method for demonstrating compliance to the specified limits; however antenna-port conducted measurements are also now acceptable to demonstrate compliance (see below for details). When radiated measurements are utilized, test site requirements and procedures for maximizing and measuring radiated emissions that are described in ANSI C63.10 shall be followed.

Antenna-port conducted measurements may also be used as an alternative to radiated measurements for demonstrating compliance in the restricted frequency bands. If conducted measurements are performed, then proper impedance matching must be ensured and an additional radiated test for cabinet/case spurious emissions is required.

General Procedure for conducted measurements in restricted bands

a) Measure the conducted output power (in dBm) using the detector specified (see guidance regarding measurement procedures for determining quasi-peak, peak, and average conducted output power, respectively).

b) Add the maximum transmit antenna gain (in dBi) to the measured output power level to determine the EIRP level (see guidance on determining the applicable antenna gain)

c) Add the appropriate maximum ground reflection factor to the EIRP level (6 dB for frequencies ≤ 30 MHz, 4.7 dB for frequencies between 30 MHz and 1000 MHz, inclusive and 0 dB for frequencies > 1000 MHz).

d) For devices with multiple antenna-ports, measure the power of each individual chain and sum the EIRP of all chains in linear terms (e.g., Watts, mW).

e) Convert the resultant EIRP level to an equivalent electric field strength using the following relationship:

$E = EIRP – 20\log D + 104.8$

where:

E = electric field strength in dBμV/m,

EIRP = equivalent isotropic radiated power in dBm

D = specified measurement distance in meters.

f) Compare the resultant electric field strength level to the applicable limit.

g) Perform radiated spurious emission test.

Quasi-Peak measurement procedure

The specifications for measurements using the CISPR quasi-peak detector can be found in Publication 16 of the International Special Committee on Radio Frequency Interference (CISPR) of the International Electrotechnical Commission.

As an alternative to CISPR quasi-peak measurement, compliance can be demonstrated to the applicable emission limits using a peak detector.

Peak power measurement procedure

Peak emission levels are measured by setting the instrument as follows:

a) RBW = as specified in Table 1.

b) VBW ≥ 3 x RBW.

c) Detector = Peak.

d) Sweep time = auto.

e) Trace mode = max hold.

f) Allow sweeps to continue until the trace stabilizes. (Note that the required measurement time may be longer for low duty cycle applications).

Table 1—RBW as a function of frequency

Frequency	RBW
9-150 kHz	200-300 Hz
0.15-30 MHz	9-10 kHz
30-1000 MHz	100-120 kHz
> 1000 MHz	1 MHz

If the peak-detected amplitude can be shown to comply with the average limit, then it is not necessary to perform a separate average measurement.

Trace averaging across on and off times of the EUT transmissions followed by duty cycle correction

If continuous transmission of the EUT (i.e., duty cycle ≥ 98 percent) cannot be achieved and the duty cycle is constant (i.e., duty cycle variations are less than ± 2 percent), then the following procedure shall be used:

a) The EUT shall be configured to operate at the maximum achievable duty cycle.

b) Measure the duty cycle, x, of the transmitter output signal as described in section 6.0.

c) RBW = 1 MHz (unless otherwise specified).

d) VBW ≥ 3 x RBW.

e) Detector = RMS, if span/(# of points in sweep) ≤ (RBW/2). Satisfying this condition may require increasing the number of points in the sweep or reducing the span. If this condition cannot be satisfied, then the detector mode shall be set to peak.

f) Averaging type = power (i.e., RMS).

1) As an alternative, the detector and averaging type may be set for linear voltage averaging.

2) Some instruments require linear display mode in order to use linear voltage averaging. Log or dB averaging shall not be used.

g) Sweep time = auto.

h) Perform a trace average of at least 100 traces.

i) A correction factor shall be added to the measurement results prior to comparing to the emission limit in order to compute the emission level that would have been measured had the test been performed at 100 percent duty cycle. The correction factor is computed as follows:

1) If power averaging (RMS) mode was used in step f), then the applicable correction factor is 10 log(1/x), where x is the duty cycle.

2) If linear voltage averaging mode was used in step f), then the applicable correction factor is 20 log(1/x), where x is the duty cycle.

3) If a specific emission is demonstrated to be continuous (≥ 98 percent duty cycle) rather than turning on and off with the transmit cycle, then no duty cycle correction is required for that emission.

NOTE: Reduction of the measured emission amplitude levels to account for operational duty factor is not permitted. Compliance is based on emission levels occurring during transmission - not on an average across on and off times of the transmitter.

Determining the applicable transmit antenna gain

A conducted power measurement will determine the maximum output power associated with a restricted band

emission; however, in order to determine the associated EIRP level, the gain of the transmitting antenna (in dBi) must be added to the measured output power (in dBm).

Since the out-of-band characteristics of the EUT transmit antenna will often be unknown, the use of a conservative antenna gain value is necessary. Thus, when determining the EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2 dBi, whichever is greater. However, for devices that operate in multiple frequency bands while using the same transmit antenna, the highest gain of the antenna within the operating band nearest in frequency to the restricted band emission being measured may be used in lieu of the overall highest gain when the emission is at a frequency that is within 20 percent of the nearest band edge frequency, but in no case shall a value less than 2 dBi be used.

See KDB 662911 for guidance on calculating the additional array gain term when determining the effective antenna gain for a EUT with multiple outputs occupying the same or overlapping frequency ranges in the same band.

Radiated spurious emission test

An additional consideration when performing conducted measurements of restricted band emissions is that unwanted emissions radiating from the EUT cabinet, control circuits, power leads, or intermediate circuit elements will likely go undetected in a conducted measurement configuration. To address this concern, a radiated test shall be performed to ensure that emissions emanating from the EUT cabinet (rather than the antenna port) also comply with the applicable limits.

For these cabinet radiated spurious emission measurements the EUT transmit antenna may be replaced with a termination matching the nominal impedance of the antenna. Procedures for performing radiated measurements are specified in ANSI C63.10. All detected emissions shall comply with the applicable limits.

The measurement frequency range is from 30 MHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. Mid channels on all channel bandwidth verified. Only the worst RB size/offset presented.

The power of the EUT transmitting frequency should be ignored.

All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured
RBW = 1 MHz for f ≥ 1 GHz, 100 kHz for f < 1 GHz
VBW ≥ RBW
Sweep = auto
Detector function = peak
Trace = max hold

5.6.4 Test Result

Please refer to ANNEX A.7 and Please refer to ANNEX A.9

5.7 Frequency Stability

5.7.1 Limit

FCC §15.407(g)

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.

5.7.2 Test Setup

The section 4.4.6 (Diagram 6) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.7.3 Test Procedure

The EUT is installed in an environment test chamber with external power source.
Set the chamber to operate at 50 centigrade and external power source to output at nominal voltage of EUT.
A sufficient stabilization period at each temperatures is used prior to each frequency measurement.
When temperature is stabled, measure the frequency stability.
The test shall be performed under -30 to 50 centigrade and 85 to 115 percent of the nominal voltage.
Change setting of chamber and external power source to complete all conditions.

5.7.4 Test Result

Please refer to ANNEX A.8.

ANNEX A TEST RESULT

A.1 RF Output Power

Note [1]: For FCC standard, if transmitting antennas of directional gain greater than 6 dBi are used, all band maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Test Data

Conducted Power

Band I (5150 - 5250 MHz)								
Note [1]: Transmitting antennas of directional gain in Band I(5150 MHz to 5250 MHz) is 5 dBi								
Mode	Channel	Frequency (MHz)	Conducted Power 0 (dBm)	Conducted Power 1 (dBm)	Conducted Power Total (dBm)	Conducted Power Total (mW)	FCC Limit (mW)	Verdict
11a	CH36	5180	23.09	22.16	/	/	250.00	Pass
11a	CH44	5220	22.57	23.04	/	/	250.00	Pass
11a	CH48	5240	23.35	23.38	/	/	250.00	Pass
11n (HT20)	CH36	5180	20.51	20.89	23.71	234.96	250.00	Pass
11n (HT20)	CH44	5220	20.75	20.48	23.63	230.67	250.00	Pass
11n (HT20)	CH48	5240	20.46	20.46	23.47	222.33	250.00	Pass
11n (HT40)	CH38	5190	20.65	20.85	23.76	237.68	250.00	Pass
11n (HT40)	CH46	5230	20.81	20.67	23.75	237.14	250.00	Pass
11ac (HT20)	CH36	5180	20.5	20.19	23.36	216.77	250.00	Pass
11ac (HT20)	CH44	5220	20.13	20.13	23.14	206.06	250.00	Pass
11ac (HT20)	CH48	5240	20.47	20.5	23.50	223.87	250.00	Pass
11ac (HT40)	CH38	5190	20.53	20.84	23.70	234.42	250.00	Pass
11ac (HT40)	CH46	5230	20.26	20.72	23.51	224.39	250.00	Pass
11ac (HT80)	CH42	5210	20.34	20.25	23.31	214.29	250.00	Pass

Band IV (5725 - 5850 MHz)								
Note [1]: Transmitting antennas of directional gain in Band IV (5725 MHz to 5850 MHz) is 5 dBi Formulas: Directional gain = GANT + Array Gain, *Array Gain* = 0.								
Mode	Channel	Frequency (MHz)	Conducted Power 0 (dBm)	Conducted Power 1 (dBm)	Conducted Power Total (dBm)	Conducted Power Total (mW)	FCC Limit (W)	Verdict
11a	CH149	5745	22.11	22.05	/	/	1.00	Pass
11a	CH157	5785	22.13	22.15	/	/	1.00	Pass
11a	CH165	5825	21.64	21.93	/	/	1.00	Pass
11n (HT20)	CH149	5745	19.98	20.3	23.15	206.54	1.00	Pass
11n (HT20)	CH157	5785	20.39	20.55	23.48	222.84	1.00	Pass
11n (HT20)	CH165	5825	20.11	20.46	23.30	213.80	1.00	Pass
11n (HT40)	CH151	5755	20.23	20.37	23.31	214.29	1.00	Pass
11n (HT40)	CH159	5795	20.38	20.55	23.48	222.84	1.00	Pass
11ac (HT20)	CH149	5745	20.08	20.42	23.26	211.84	1.00	Pass
11ac (HT20)	CH157	5785	20.41	20.6	23.52	224.91	1.00	Pass
11ac (HT20)	CH165	5825	20.13	20.39	23.27	212.32	1.00	Pass
11ac (HT40)	CH151	5755	20.17	20.61	23.41	219.28	1.00	Pass
11ac (HT40)	CH159	5795	20.33	20.5	23.43	220.29	1.00	Pass
11ac (HT80)	CH155	5775	20.76	20.92	23.85	242.66	1.00	Pass

A.2 Emission Bandwidth & 99% Bandwidth

Note: Test plots please refer to the document “Annex No.: BL-SZ1810293-601 Data Part 1.pdf”.

Test Data

Band I (5150 - 5250 MHz)						
Mode	Channel	Frequency	26 dB Bandwidth (MHz)		99% Bandwidth (MHz)	
		(MHz)	ANT0	ANT1	ANT0	ANT1
11a	CH36	5180	19.52	19.56	16.67	16.67
11a	CH44	5220	19.52	19.48	16.67	16.67
11a	CH48	5240	19.52	19.52	16.67	16.67
11n (HT20)	CH36	5180	20.00	20.00	17.60	17.54
11n (HT20)	CH44	5220	20.08	19.96	17.60	17.54
11n (HT20)	CH48	5240	20.04	20.00	17.60	17.54
11n (HT40)	CH38	5190	40.80	40.90	36.12	36.12
11n (HT40)	CH46	5230	40.20	40.20	36.24	36.24
11ac (HT20)	CH36	5180	20.00	20.00	17.60	17.60
11ac (HT20)	CH44	5220	19.96	20.04	17.54	17.60
11ac (HT20)	CH48	5240	20.04	20.00	17.60	17.60
11ac (HT40)	CH38	5190	40.60	40.70	36.12	36.12
11ac (HT40)	CH46	5230	40.30	40.30	36.24	36.24
11ac (HT80)	CH42	5210	81.40	81.40	75.25	75.25

Band IV (5725 - 5850 MHz)				
Mode	Channel	Frequency	99% Bandwidth (MHz)	
		(MHz)	ANT0	ANT1
11a	CH149	5745	16.67	16.67
11a	CH157	5785	16.67	16.67
11a	CH165	5825	16.67	16.67
11n (HT20)	CH149	5745	17.66	17.66
11n (HT20)	CH157	5785	17.60	17.60
11n (HT20)	CH165	5825	17.66	17.66
11n (HT40)	CH151	5755	36.24	36.12
11n (HT40)	CH159	5795	36.12	36.24
11ac (HT20)	CH149	5745	17.66	17.54
11ac (HT20)	CH157	5785	17.60	17.60
11ac (HT20)	CH165	5825	17.66	17.66
11ac (HT40)	CH151	5755	36.24	36.12
11ac (HT40)	CH159	5795	36.12	36.12
11ac (HT80)	CH155	5775	75.25	75.25

A.3 6 dB Bandwidth

Note: Test plots please refer to the document “Annex No.: BL-SZ1810293-601 Data Part 2.pdf”.

Test Data

Band IV (5725 - 5850 MHz)						
Mode	Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Limit (kHz)	Verdict
			ANT0	ANT1		
11a	CH149	5745	16.42	16.57	500	Pass
11a	CH157	5785	16.42	16.57	500	Pass
11a	CH165	5825	14.57	16.47	500	Pass
11n (HT20)	CH149	5745	17.62	17.72	500	Pass
11n (HT20)	CH157	5785	17.72	17.72	500	Pass
11n (HT20)	CH165	5825	17.82	17.72	500	Pass
11n (HT40)	CH151	5755	35.47	35.57	500	Pass
11n (HT40)	CH159	5795	33.82	32.67	500	Pass
11ac (HT20)	CH149	5745	17.67	17.72	500	Pass
11ac (HT20)	CH157	5785	17.72	17.72	500	Pass
11ac (HT20)	CH165	5825	17.62	17.72	500	Pass
11ac (HT40)	CH151	5755	35.22	35.42	500	Pass
11ac (HT40)	CH159	5795	36.17	35.17	500	Pass
11ac (HT80)	CH155	5775	75.12	73.92	500	Pass

A.4 Power Spectral Density

Note: Test plots please refer to the document “Annex No.: BL-SZ1810293-601 Data Part 3.pdf”.

Note2: For FCC standard, if transmitting antennas of directional gain greater than 6 dBi are used, all band of the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. For IC standard, if transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density of band IV (5725 - 5850 MHz) shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For PSD limit in band 5150-5250 is 17-(8-6)=15 dBm/MHz. For PSD limit in band 5725-5850MHz is 30-(8-6)=28 dBm/500KHz

Test Data:

Band I (5150 - 5250 MHz)							
Note [1]: Transmitting antennas of directional gain in Band I(5150 MHz to 5250 MHz) is 8 dBi Formulas: Directional gain = GANT + Array Gain, *Array Gain* = 10 log(NANT/NSS) dB. NSS =1,. Directional gain=8dBi. Note [2]: The total PSD method used the sum spectra maxima across the outputs.							
Mode	Channel	Frequency (MHz)	PSD at ant 0 (dBm/MHz)	PSD at ant 1 (dBm/MHz)	Total PSD (dBm/MHz)	FCC Limit(dBm/MHz)	Verdict
11a	CH36	5180	10.43	10.72	/	15.00	Pass
11a	CH44	5220	10.29	10.99	/	15.00	Pass
11a	CH48	5240	10.6	10.79	/	15.00	Pass
11n (HT20)	CH36	5180	7.72	7.91	10.83	15.00	Pass
11n (HT20)	CH44	5220	7.54	7.85	10.71	15.00	Pass
11n (HT20)	CH48	5240	7.71	7.91	10.82	15.00	Pass
11n (HT40)	CH38	5190	6.26	6.21	9.25	15.00	Pass
11n (HT40)	CH46	5230	6.84	6.89	9.88	15.00	Pass
11ac (HT20)	CH36	5180	7.99	7.73	10.87	15.00	Pass
11ac (HT20)	CH44	5220	7.61	7.78	10.71	15.00	Pass
11ac (HT20)	CH48	5240	7.53	7.72	10.64	15.00	Pass
11ac (HT40)	CH38	5190	6.01	5.94	8.99	15.00	Pass
11ac (HT40)	CH46	5230	6.35	7.37	9.90	15.00	Pass
11ac (HT80)	CH42	5210	3.80	3.54	6.68	15.00	Pass

Band IV (5725 - 5850 MHz)							
Note [3]: Transmitting antennas of directional gain in Band III (5470 MHz to 5725 MHz) is 8 dBi Formulas: Directional gain = GANT + Array Gain, *Array Gain* = 10 log(NANT/NSS) dB. NSS =1,. Directional gain=8dBi. Note [4]: The total PSD method used the sum spectra maxima across the outputs.							
Mode	Channel	Frequency (MHz)	PSD at ant 0 (dBm/MHz)	PSD at ant 1 (dBm/MHz)	Total PSD (dBm/MHz)	FCC/IC Limit(dBm/ 500 kHz)	Verdict
11a	CH149	5745	6.45	6.38	/	28.00	Pass
11a	CH157	5785	6.42	6.47	/	28.00	Pass
11a	CH165	5825	6.05	6.01	/	28.00	Pass
11n (HT20)	CH149	5745	4.51	4.83	7.68	28.00	Pass
11n (HT20)	CH157	5785	4.80	5.20	8.01	28.00	Pass
11n (HT20)	CH165	5825	4.39	4.90	7.66	28.00	Pass
11n (HT40)	CH151	5755	-9.38	-5.31	-3.87	28.00	Pass
11n (HT40)	CH159	5795	-7.95	-6.55	-4.20	28.00	Pass
11ac (HT20)	CH149	5745	4.56	4.93	7.76	28.00	Pass
11ac (HT20)	CH157	5785	4.88	5.09	8.00	28.00	Pass
11ac (HT20)	CH165	5825	4.54	5.01	7.79	28.00	Pass
11ac (HT40)	CH151	5755	-7.56	-5.70	-3.47	28.00	Pass
11ac (HT40)	CH159	5795	-7.08	-7.33	-4.20	28.00	Pass
11ac (HT80)	CH155	5775	-4.20	-3.61	-0.86	28.00	Pass

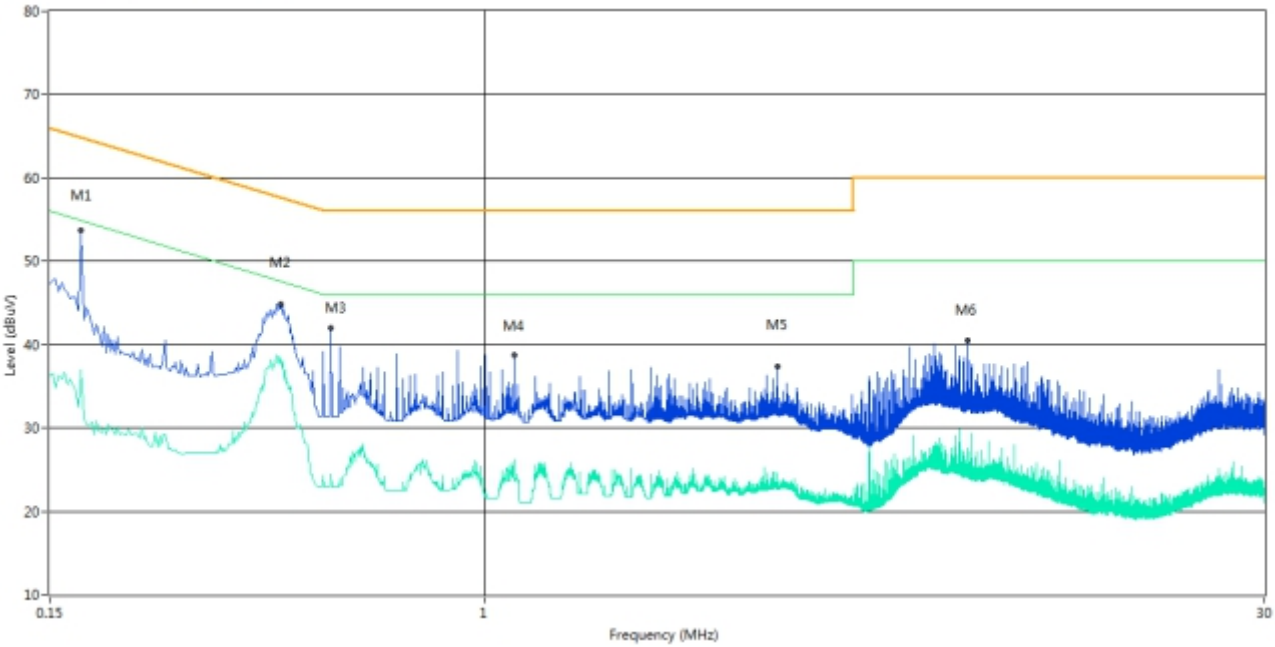
A.5 Conducted Emissions

Note [1]: The EUT is working in the Normal link mode.

Note [2]: Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 60 Hz and 240 VAC, 50 Hz) for which the device is capable of operation. So, The configuration 120 VAC, 60 Hz and 240 VAC, 50 Hz were tested respectively, but only the worst configuration (120 VAC, 60 Hz) shown here.

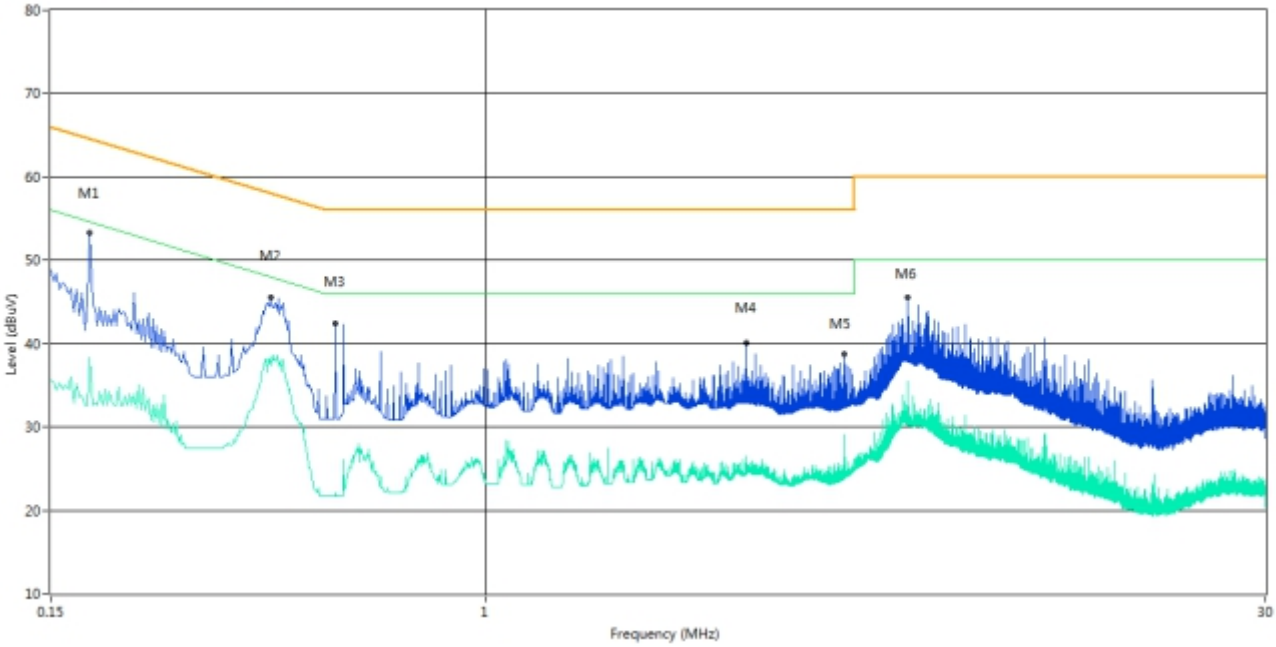
Test Data and Plots

PHASE L



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.172	53.8	10.04	64.9	11.10	Peak	L Line	Pass
1**	0.172	37.0	10.04	54.9	17.90	AV	L Line	Pass
2	0.412	44.9	10.04	57.6	12.70	Peak	L Line	Pass
2**	0.412	38.4	10.04	47.6	9.20	AV	L Line	Pass
3	0.512	42.0	10.05	56.0	14.00	Peak	L Line	Pass
3**	0.512	24.4	10.05	46.0	21.60	AV	L Line	Pass
4	1.136	38.7	10.06	56.0	17.30	Peak	L Line	Pass
4**	1.136	26.2	10.06	46.0	19.80	AV	L Line	Pass
5	3.594	37.4	10.13	56.0	18.60	Peak	L Line	Pass
5**	3.594	24.5	10.13	46.0	21.50	AV	L Line	Pass
6	8.212	40.5	10.26	60.0	19.50	Peak	L Line	Pass
6**	8.212	27.5	10.26	50.0	22.50	AV	L Line	Pass

PHASE N



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.178	53.3	10.04	64.6	11.30	Peak	N Line	Pass
1**	0.178	38.4	10.04	54.6	16.20	AV	N Line	Pass
2	0.392	45.5	10.04	58.0	12.50	Peak	N Line	Pass
2**	0.392	38.5	10.04	48.0	9.50	AV	N Line	Pass
3	0.520	42.4	10.05	56.0	13.60	Peak	N Line	Pass
3**	0.520	22.2	10.05	46.0	23.80	AV	N Line	Pass
4	3.112	40.1	10.12	56.0	15.90	Peak	N Line	Pass
4**	3.112	26.5	10.12	46.0	19.50	AV	N Line	Pass
5	4.780	38.7	10.17	56.0	17.30	Peak	N Line	Pass
5**	4.780	26.2	10.17	46.0	19.80	AV	N Line	Pass
6	6.312	45.5	10.21	60.0	14.50	Peak	N Line	Pass
6**	6.312	34.2	10.21	50.0	15.80	AV	N Line	Pass

A.6 Conducted Spurious Emission and Band Edge (Authorized-band)

Note [1]: Test plots please refer to the document “Annex No.: BL-SZ1810293-601 Data Part 4.pdf”.
Note [2]: because of Directional gain = GANT + Array Gain, Array Gain = 10 log(NANT/NSS) dB. NSS =1, ,Array gain =10*log(2/1)=3dB.GANT set equal to the gain of the antenna having the highest gain. GANT=5dBi.
So Directional gain = GANT + Array Gain=5+3=8dBi.the limit should be reduced 8-6=2dBi.the MIMO mode should be evaluated by additional directive gain.
Note [2]: The margin of all individual chains in the report is greater than 5 db, so the total value meets the limit requirement.

ANT 0

Test Band	Mode	Channel	Verdict
Band I	802.11a	Low	Pass
		Middle	Pass
		High	Pass
	802.11n(HT20)	Low	Pass
		Middle	Pass
		High	Pass
	802.11n(HT40)	Low	Pass
		High	Pass
	802.11ac(HT20)	Low	Pass
		Middle	Pass
		High	Pass
	802.11ac(HT40)	Low	Pass
		High	Pass
	802.11ac(HT80)	Low	Pass
Band IV	802.11a	Low	Pass
		Middle	Pass
		High	Pass
	802.11n(HT20)	Low	Pass
		Middle	Pass
		High	Pass
	802.11n(HT40)	Low	Pass
		High	Pass
	802.11ac(HT20)	Low	Pass
		Middle	Pass
		High	Pass
	802.11ac(HT40)	Low	Pass
		High	Pass
	802.11ac(HT80)	Low	Pass

ANT 1

Test Band	Mode	Channel	Verdict
Band I	802.11a	Low	Pass
		Middle	Pass
		High	Pass
	802.11n(HT20)	Low	Pass
		Middle	Pass
		High	Pass
	802.11n(HT40)	Low	Pass
		High	Pass
	802.11ac(HT20)	Low	Pass
		Middle	Pass
		High	Pass
	802.11ac(HT40)	Low	Pass
		High	Pass
	802.11ac(HT80)	Low	Pass
Band IV	802.11a	Low	Pass
		Middle	Pass
		High	Pass
	802.11n(HT20)	Low	Pass
		Middle	Pass
		High	Pass
	802.11n(HT40)	Low	Pass
		High	Pass
	802.11ac(HT20)	Low	Pass
		Middle	Pass
		High	Pass
	802.11ac(HT40)	Low	Pass
		High	Pass
	802.11ac(HT80)	Low	Pass

ANT 0+ANT 1:

Test Band	Mode	Channel	Verdict
Band I	802.11n(HT20)	Low	Pass
		Middle	Pass
		High	Pass
	802.11n(HT40)	Low	Pass
		High	Pass
	802.11ac(HT20)	Low	Pass
		Middle	Pass
		High	Pass
	802.11ac(HT40)	Low	Pass
		High	Pass
	802.11ac(HT80)	Low	Pass
Band IV	802.11n(HT20)	Low	Pass
		Middle	Pass
		High	Pass
	802.11n(HT40)	Low	Pass
		High	Pass
	802.11ac(HT20)	Low	Pass
		Middle	Pass
		High	Pass
	802.11ac(HT40)	Low	Pass
		High	Pass
	802.11ac(HT80)	Low	Pass

A.7 Radiated Spurious Emissions and Band Edge (Restricted-band)

Test Data

Cabinet Radiated spurious emission test

Note [1]: The symbol of "--" in the table which means not application.

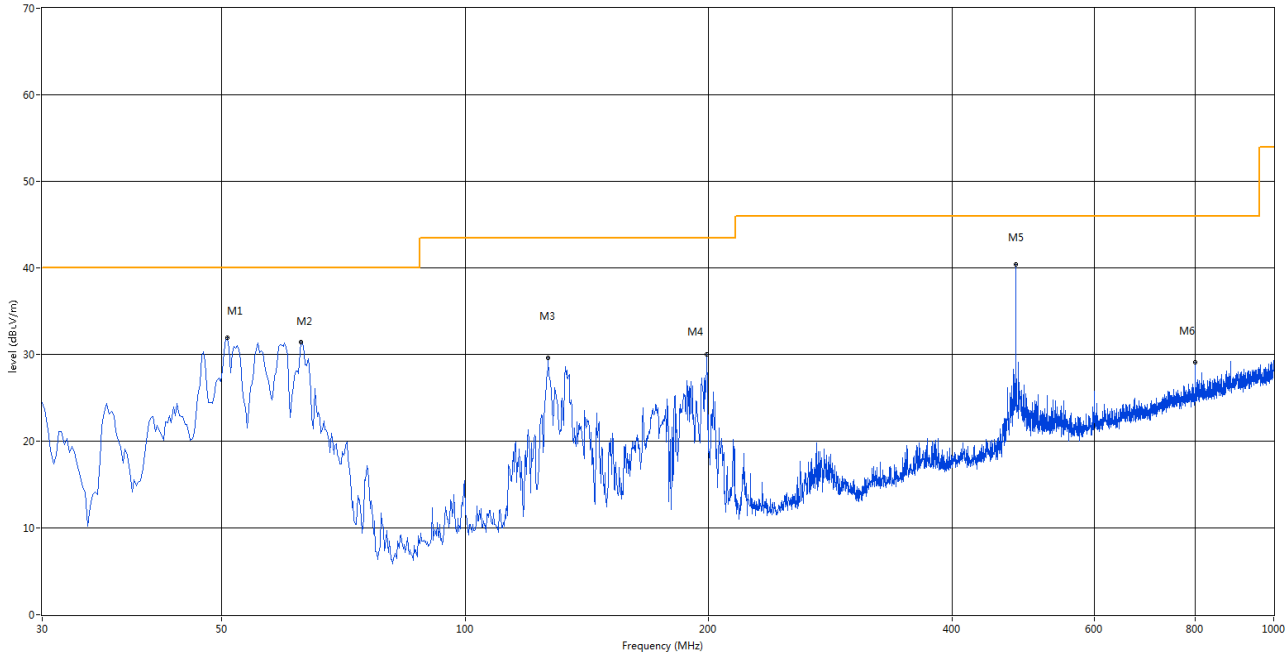
Note [2]: For the test data above 1 GHz，According the ANSI C63.4, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

Note [3]: The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

Note [4]: The EUT is working in the Normal link mode below 1 GHz.

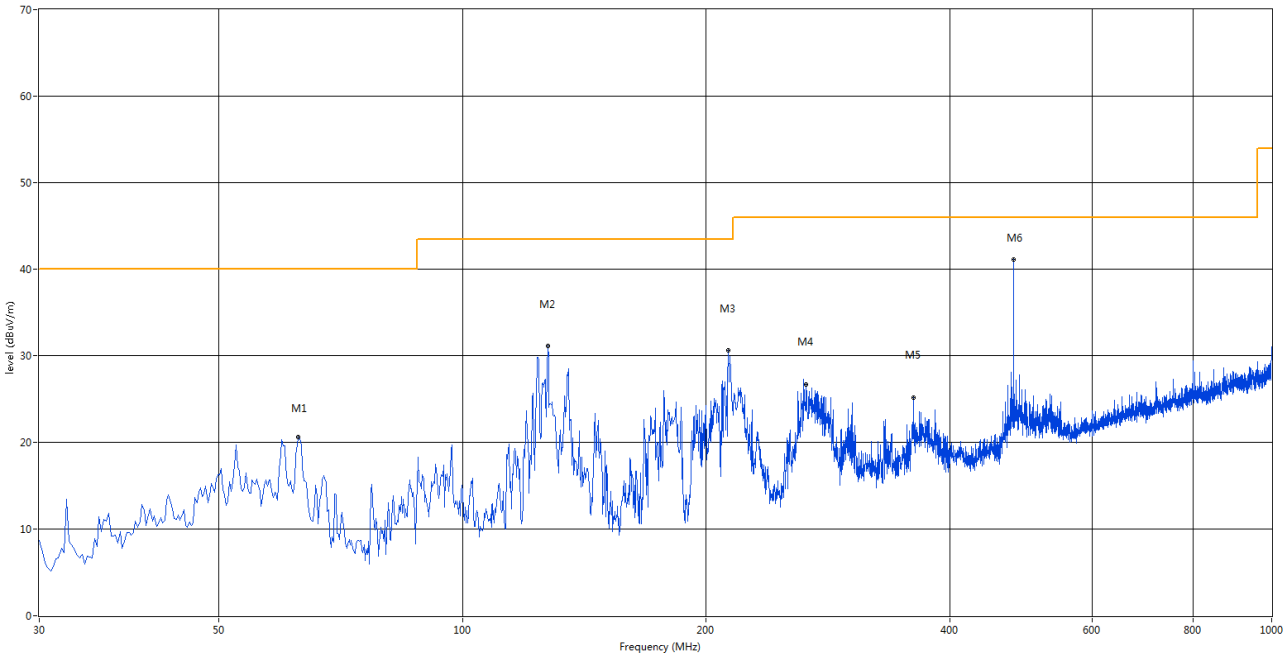
Note [5]: For Multiple transmitter output, the quantity *10 log (NANT)* dB is added to each spectrum value before comparing to the emission limit. When testing out-of-band and spurious emissions against relative emission limits, tests may be performed on each output individually without summing or adding *10 log(NANT)* if the measurements are made relative to the in-band emissions on the individual outputs.

30 MHz to 1 GHz, ANT V



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	50.855	31.89	-23.34	40.0	8.11	Peak	218.00	100	Vertical	Pass
2	62.737	31.37	-24.97	40.0	8.63	Peak	360.00	200	Vertical	Pass
3	126.757	29.54	-27.03	43.5	13.96	Peak	67.00	100	Vertical	Pass
4	199.023	30.00	-24.01	43.5	13.50	Peak	249.00	100	Vertical	Pass
5	480.080	40.48	-15.91	46.0	5.52	Peak	360.00	200	Vertical	Pass
6	799.210	29.03	-9.40	46.0	16.97	Peak	350.00	100	Vertical	Pass

30 MHz to 1 GHz, ANT H



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	62.737	20.60	-24.97	40.0	19.40	Peak	331.00	200	Horizontal	Pass
2	127.485	31.03	-27.03	43.5	12.47	Peak	92.00	200	Horizontal	Pass
3	212.845	30.52	-23.87	43.5	12.98	Peak	319.00	100	Horizontal	Pass
4	265.953	26.61	-21.86	46.0	19.39	Peak	205.00	100	Horizontal	Pass
5	361.013	25.09	-18.86	46.0	20.91	Peak	29.00	100	Horizontal	Pass
6	480.080	40.49	-15.91	46.0	5.51	Peak	193.00	100	Horizontal	Pass

Note [1]: The device was evaluated/tested in XYZ orientation for radiated spurious emissions. And only the worst orientation of EUT was reported, which is the horizontal orientation.

Note [1]: The spurious above 18G is noise only, do not show on the report.

1 GHz to 18 GHz, ANT H Band I 11a Low channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1450.500	43.0	-16.58	54.0	11.00	AV	1.70	150	Horizontal	Pass
1	1450.500	49.91	-16.58	74.0	24.09	Peak	1.70	150	Horizontal	Pass
2**	1753.000	51.2	-17.17	--	-51.20	AV	212.80	150	Horizontal	N/A
2	1753.000	57.06	-17.17	68.2	11.14	Peak	212.80	150	Horizontal	Pass
3**	2991.000	39.4	-9.11	--	-39.40	AV	79.40	150	Horizontal	N/A
3	2991.000	48.82	-9.11	68.2	19.38	Peak	79.40	150	Horizontal	Pass
4**	5187.000	100.3	-3.49	--	-100.30	AV	72.70	150	Horizontal	N/A
4	5187.000	105.06	-3.49	--	-32.36	Peak	72.70	150	Horizontal	N/A
5**	9708.250	53.3	13.80	--	-53.30	AV	358.70	150	Horizontal	N/A
5	9708.250	58.60	13.80	68.2	9.60	Peak	358.70	150	Horizontal	Pass
6**	12576.062	47.5	18.03	54.0	6.50	AV	130.30	150	Horizontal	Pass
6	12576.062	53.66	18.03	74.0	20.34	Peak	130.30	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V Band I 11a Low channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1847.000	35.3	-16.37	--	-35.30	AV	160.40	150	Vertical	N/A
1	1847.000	51.61	-16.37	68.2	16.59	Peak	160.40	150	Vertical	Pass
2**	2999.500	34.5	-8.68	--	-34.50	AV	141.30	150	Vertical	N/A
2	2999.500	45.16	-8.68	68.2	23.04	Peak	141.30	150	Vertical	Pass
3**	4330.000	39.6	-6.45	54.0	14.40	AV	81.50	150	Vertical	Pass
3	4330.000	42.97	-6.45	74.0	31.03	Peak	81.50	150	Vertical	Pass
4**	5179.000	98.6	-3.39	--	-98.60	AV	251.00	150	Vertical	N/A
4	5179.000	101.29	-3.39	--	149.71	Peak	251.00	150	Vertical	Pass
5**	10362.313	49.6	14.12	--	-49.60	AV	341.40	150	Vertical	N/A
5	10362.313	54.30	14.12	68.2	13.90	Peak	341.40	150	Vertical	Pass
6**	17557.688	46.3	19.76	--	-46.30	AV	239.80	150	Vertical	N/A
6	17557.688	51.37	19.76	68.2	16.83	Peak	239.80	150	Vertical	Pass

1 GHz to 18 GHz, ANT H Band I 11a Middle channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1734.500	45.7	-17.06	--	-45.70	AV	359.30	150	Horizontal	N/A
1	1734.500	52.02	-17.06	68.2	16.18	Peak	359.30	150	Horizontal	Pass
2**	3892.000	36.8	-6.85	54.0	17.20	AV	148.50	150	Horizontal	Pass
2	3892.000	41.07	-6.85	74.0	32.93	Peak	148.50	150	Horizontal	Pass
3**	5193.000	100.5	-3.38	--	-100.50	AV	3.60	150	Horizontal	N/A
3	5193.000	105.38	-3.38	--	-101.78	Peak	3.60	150	Horizontal	N/A
4**	5687.000	47.7	-2.41	--	-47.70	AV	73.10	150	Horizontal	N/A
4	5687.000	52.67	-2.41	68.2	15.53	Peak	73.10	150	Horizontal	Pass
5**	7280.312	51.3	13.67	54.0	2.70	AV	166.10	150	Horizontal	Pass
5	7280.312	54.78	13.67	74.0	19.22	Peak	166.10	150	Horizontal	Pass
6**	9708.250	57.9	13.80	--	-57.90	AV	124.80	150	Horizontal	N/A
6	9708.250	62.25	13.80	68.2	5.95	Peak	124.80	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V Band I 11a Middle channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1850.000	39.4	-16.23	--	-39.40	AV	162.30	150	Vertical	N/A
1	1850.000	54.09	-16.23	68.2	14.11	Peak	162.30	150	Vertical	Pass
2**	3000.000	44.1	-8.65	--	-44.10	AV	150.60	150	Vertical	N/A
2	3000.000	47.70	-8.65	68.2	20.50	Peak	150.60	150	Vertical	Pass
3**	5201.000	97.1	-3.36	--	-97.10	AV	119.20	150	Vertical	N/A
3	5201.000	101.03	-3.36	--	18.17	Peak	119.20	150	Vertical	Pass
4**	7281.750	45.4	13.62	54.0	8.60	AV	358.30	150	Vertical	Pass
4	7281.750	50.20	13.62	74.0	23.80	Peak	358.30	150	Vertical	Pass
5**	10396.812	50.4	14.29	--	-50.40	AV	360.00	150	Vertical	N/A
5	10396.812	55.34	14.29	68.2	12.86	Peak	360.00	150	Vertical	Pass
6**	15591.562	43.7	16.63	54.0	10.30	AV	154.30	150	Vertical	Pass
6	15591.562	51.95	16.63	74.0	22.05	Peak	154.30	150	Vertical	Pass

1 GHz to 18 GHz, ANT H Band I 11a High channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1648.000	45.5	-17.39	--	-45.50	AV	70.30	150	Horizontal	N/A
1	1648.000	54.12	-17.39	68.2	14.08	Peak	70.30	150	Horizontal	Pass
2**	3999.000	38.1	-6.56	54.0	15.90	AV	193.80	150	Horizontal	Pass
2	3999.000	42.13	-6.56	74.0	31.87	Peak	193.80	150	Horizontal	Pass
3**	5246.000	101.9	-2.29	--	-101.90	AV	0.00	150	Horizontal	N/A
3	5246.000	105.69	-2.29	--	-105.69	Peak	0.00	150	Horizontal	N/A
4**	8106.875	40.6	13.68	54.0	13.40	AV	229.40	150	Horizontal	Pass
4	8106.875	47.99	13.68	74.0	26.01	Peak	229.40	150	Horizontal	Pass
5**	9708.250	58.2	13.80	--	-58.20	AV	130.30	150	Horizontal	N/A
5	9708.250	62.82	13.80	68.2	5.38	Peak	130.30	150	Horizontal	Pass
6**	16169.062	43.0	17.52	54.0	11.00	AV	175.10	150	Horizontal	Pass
6	16169.062	51.08	17.52	74.0	22.92	Peak	175.10	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V Band I 11a High channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1858.000	43.1	-16.17	--	-43.10	AV	158.40	150	Vertical	N/A
1	1858.000	55.42	-16.17	68.2	12.78	Peak	158.40	150	Vertical	Pass
2**	3000.000	43.6	-8.65	--	-43.60	AV	150.50	150	Vertical	N/A
2	3000.000	46.64	-8.65	68.2	21.56	Peak	150.50	150	Vertical	Pass
3**	5239.000	97.8	-2.40	--	-97.80	AV	272.90	150	Vertical	N/A
3	5239.000	101.38	-2.40	--	171.52	Peak	272.90	150	Vertical	Pass
4**	7086.250	41.0	12.91	--	-41.00	AV	353.90	150	Vertical	N/A
4	7086.250	47.85	12.91	68.2	20.35	Peak	353.90	150	Vertical	Pass
5**	9708.250	49.9	13.80	--	-49.90	AV	322.80	150	Vertical	N/A
5	9708.250	54.61	13.80	68.2	13.59	Peak	322.80	150	Vertical	Pass
6**	12578.938	47.2	18.11	54.0	6.80	AV	193.10	150	Vertical	Pass
6	12578.938	53.61	18.11	74.0	20.39	Peak	193.10	150	Vertical	Pass

1 GHz to 18 GHz, ANT H Band I 11n20 Low channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1775.500	49.9	-16.93	--	-49.90	AV	250.80	150	Horizontal	N/A
1	1775.500	57.11	-16.93	68.2	11.09	Peak	250.80	150	Horizontal	Pass
2**	3995.000	35.4	-6.56	54.0	18.60	AV	127.90	150	Horizontal	Pass
2	3995.000	41.73	-6.56	74.0	32.27	Peak	127.90	150	Horizontal	Pass
3**	5183.000	100.2	-3.51	--	-100.20	AV	242.30	150	Horizontal	N/A
3	5183.000	104.21	-3.51	--	138.09	Peak	242.30	150	Horizontal	Pass
4**	8523.750	41.6	14.78	--	-41.60	AV	88.00	150	Horizontal	N/A
4	8523.750	48.94	14.78	68.2	19.26	Peak	88.00	150	Horizontal	Pass
5**	10362.313	47.4	14.12	--	-47.40	AV	118.60	150	Horizontal	N/A
5	10362.313	52.61	14.12	68.2	15.59	Peak	118.60	150	Horizontal	Pass
6**	15409.125	42.7	16.80	54.0	11.30	AV	0.00	150	Horizontal	Pass
6	15409.125	49.38	16.80	74.0	24.62	Peak	0.00	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V Band I 11n20 Low channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1862.000	46.1	-16.02	--	-46.10	AV	156.70	150	Vertical	N/A
1	1862.000	54.96	-16.02	68.2	13.24	Peak	156.70	150	Vertical	Pass
2**	4160.000	37.1	-6.25	54.0	16.90	AV	60.00	150	Vertical	Pass
2	4160.000	42.38	-6.25	74.0	31.62	Peak	60.00	150	Vertical	Pass
3**	5180.000	96.4	-3.41	--	-96.40	AV	126.70	150	Vertical	N/A
3	5180.000	101.05	-3.41	--	25.65	Peak	126.70	150	Vertical	Pass
4**	7278.875	46.9	13.77	54.0	7.10	AV	295.50	150	Vertical	Pass
4	7278.875	50.39	13.77	74.0	23.61	Peak	295.50	150	Vertical	Pass
5**	10353.688	45.4	14.04	--	-45.40	AV	341.80	150	Vertical	N/A
5	10353.688	53.23	14.04	68.2	14.97	Peak	341.80	150	Vertical	Pass
6**	17623.312	44.0	18.81	--	-44.00	AV	43.00	150	Vertical	N/A
6	17623.312	51.35	18.81	68.2	16.85	Peak	43.00	150	Vertical	Pass

1 GHz to 18 GHz, ANT H Band I 11n20 Middle channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1734.000	45.8	-17.06	--	-45.80	AV	67.60	150	Horizontal	N/A
1	1734.000	53.83	-17.06	68.2	14.37	Peak	67.60	150	Horizontal	Pass
2**	3867.000	37.4	-7.63	54.0	16.60	AV	153.40	150	Horizontal	Pass
2	3867.000	41.91	-7.63	74.0	32.09	Peak	153.40	150	Horizontal	Pass
3**	5194.000	99.9	-3.33	--	-99.90	AV	113.80	150	Horizontal	N/A
3	5194.000	104.23	-3.33	--	9.57	Peak	113.80	150	Horizontal	Pass
4**	7281.750	50.8	13.62	54.0	3.20	AV	207.50	150	Horizontal	Pass
4	7281.750	55.63	13.62	74.0	18.37	Peak	207.50	150	Horizontal	Pass
5**	9708.250	57.7	13.80	--	-57.70	AV	130.20	150	Horizontal	N/A
5	9708.250	61.98	13.80	68.2	6.22	Peak	130.20	150	Horizontal	Pass
6**	12571.750	47.0	17.90	54.0	7.00	AV	359.50	150	Horizontal	Pass
6	12571.750		17.90	74.0	20.50	Peak	359.50	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V Band I 11n20 Middle channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1845.500	42.0	-16.47	--	-42.00	AV	166.70	150	Vertical	N/A
1	1845.500	53.47	-16.47	68.2	14.73	Peak	166.70	150	Vertical	Pass
2**	3000.000	43.0	-8.65	--	-43.00	AV	154.90	150	Vertical	N/A
2	3000.000	47.06	-8.65	68.2	21.14	Peak	154.90	150	Vertical	Pass
3**	4854.000	46.5	-4.39	54.0	7.50	AV	312.50	150	Vertical	Pass
3	4854.000	51.40	-4.39	74.0	22.60	Peak	312.50	150	Vertical	Pass
4**	5202.000	95.3	-3.36	--	-95.30	AV	276.80	150	Vertical	N/A
4	5202.000	99.45	-3.36	--	177.35	Peak	276.80	150	Vertical	Pass
5**	5808.000	53.4	-2.84	--	-53.40	AV	201.60	150	Vertical	N/A
5	5808.000	58.95	-2.84	68.2	9.25	Peak	201.60	150	Vertical	Pass
6**	10399.688	48.0	14.31	--	-48.00	AV	360.00	150	Vertical	N/A
6	10399.688	52.84	14.31	68.2	15.36	Peak	360.00	150	Vertical	Pass

1 GHz to 18 GHz, ANT H Band I 11n20 High channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1654.000	41.4	-17.41	--	-41.40	AV	1.70	150	Horizontal	N/A
1	1654.000	49.02	-17.41	68.2	19.18	Peak	1.70	150	Horizontal	Pass
2**	3944.000	39.4	-6.88	54.0	14.60	AV	331.10	150	Horizontal	Pass
2	3944.000	42.18	-6.88	74.0	31.82	Peak	331.10	150	Horizontal	Pass
3**	5247.000	99.3	-2.27	--	-99.30	AV	0.40	150	Horizontal	N/A
3	5247.000	104.50	-2.27	--	-104.10	Peak	0.40	150	Horizontal	N/A
4**	5798.000	54.9	-2.76	--	-54.90	AV	241.90	150	Horizontal	N/A
4	5798.000	58.82	-2.76	68.2	9.38	Peak	241.90	150	Horizontal	Pass
5**	9708.250	55.6	13.80	--	-55.60	AV	228.30	150	Horizontal	N/A
5	9708.250	60.39	13.80	68.2	7.81	Peak	228.30	150	Horizontal	Pass
6**	14197.687	43.6	18.60	--	-43.60	AV	289.10	150	Horizontal	N/A
6	14197.687	49.21	18.60	68.2	18.99	Peak	289.10	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V Band I 11n20 High channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1887.500	44.8	-16.15	--	-44.80	AV	164.90	150	Vertical	N/A
1	1887.500	55.41	-16.15	68.2	12.79	Peak	164.90	150	Vertical	Pass
2**	4854.000	55.2	-4.39	54.0	-1.20	AV	264.50	150	Vertical	Fail
2	4854.000	58.36	-4.39	74.0	15.64	Peak	264.50	150	Vertical	Pass
3**	5240.000	93.8	-2.36	--	-93.80	AV	228.80	150	Vertical	N/A
3	5240.000	98.28	-2.36	--	130.52	Peak	228.80	150	Vertical	Pass
4**	7500.250	43.2	13.25	54.0	10.80	AV	20.70	150	Vertical	Pass
4	7500.250	48.56	13.25	74.0	25.44	Peak	20.70	150	Vertical	Pass
5**	9708.250	51.0	13.80	--	-51.00	AV	310.90	150	Vertical	N/A
5	9708.250	56.32	13.80	68.2	11.88	Peak	310.90	150	Vertical	Pass
6**	15477.375	43.9	17.38	54.0	10.10	AV	348.50	150	Vertical	Pass
6	15477.375	50.53	17.38	74.0	23.47	Peak	348.50	150	Vertical	Pass

1 GHz to 18 GHz, ANT H Band I 11n40 Low channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1759.500	42.3	-17.06	--	-42.30	AV	252.20	150	Horizontal	N/A
1	1759.500	50.83	-17.06	68.2	17.37	Peak	252.20	150	Horizontal	Pass
2**	3939.000	36.7	-7.06	54.0	17.30	AV	304.00	150	Horizontal	Pass
2	3939.000	42.39	-7.06	74.0	31.61	Peak	304.00	150	Horizontal	Pass
3**	5189.000	99.5	-3.45	--	-99.50	AV	69.20	150	Horizontal	N/A
3	5189.000	103.34	-3.45	--	-34.14	Peak	69.20	150	Horizontal	N/A
4**	5653.000	51.4	-3.07	--	-51.40	AV	237.50	150	Horizontal	N/A
4	5653.000	55.68	-3.07	68.2	12.52	Peak	237.50	150	Horizontal	Pass
5**	9708.250	55.0	13.80	--	-55.00	AV	131.60	150	Horizontal	N/A
5	9708.250	59.43	13.80	68.2	8.77	Peak	131.60	150	Horizontal	Pass
6**	12578.938	47.2	18.11	54.0	6.80	AV	354.60	150	Horizontal	Pass
6	12578.938	53.45	18.11	74.0	20.55	Peak	354.60	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V Band I 11n40 Low channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1824.000	43.2	-16.65	--	-43.20	AV	150.10	150	Vertical	N/A
1	1824.000	52.75	-16.65	68.2	15.45	Peak	150.10	150	Vertical	Pass
2**	4306.000	37.5	-6.43	54.0	16.50	AV	263.70	150	Vertical	Pass
2	4306.000	42.66	-6.43	74.0	31.34	Peak	263.70	150	Vertical	Pass
3**	5185.000	93.2	-3.45	--	-93.20	AV	125.50	150	Vertical	N/A
3	5185.000	98.16	-3.45	--	27.34	Peak	125.50	150	Vertical	Pass
4**	5807.000	53.1	-2.84	--	-53.10	AV	254.30	150	Vertical	N/A
4	5807.000	59.52	-2.84	68.2	8.68	Peak	254.30	150	Vertical	Pass
5**	10375.250	46.4	14.11	--	-46.40	AV	346.40	150	Vertical	N/A
5	10375.250	52.02	14.11	68.2	16.18	Peak	346.40	150	Vertical	Pass
6**	14264.625	43.4	18.95	--	-43.40	AV	115.50	150	Vertical	N/A
6	14264.625	50.14	18.95	68.2	18.06	Peak	115.50	150	Vertical	Pass

1 GHz to 18 GHz, ANT H Band I 11n40 High channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1679.000	46.9	-17.32	54.0	7.10	AV	251.50	150	Horizontal	Pass
1	1679.000	56.64	-17.32	74.0	17.36	Peak	251.50	150	Horizontal	Pass
2**	4767.000	51.6	-4.47	54.0	2.40	AV	77.20	150	Horizontal	Pass
2	4767.000	55.65	-4.47	74.0	18.35	Peak	77.20	150	Horizontal	Pass
3**	5246.000	100.3	-2.29	--	-100.30	AV	64.20	150	Horizontal	N/A
3	5246.000	105.23	-2.29	--	-41.03	Peak	64.20	150	Horizontal	N/A
4**	9708.250	55.6	13.80	--	-55.60	AV	10.40	150	Horizontal	N/A
4	9708.250	60.58	13.80	68.2	7.62	Peak	10.40	150	Horizontal	Pass
5**	11957.937	45.5	16.78	54.0	8.50	AV	114.00	150	Horizontal	Pass
5	11957.937	52.25	16.78	74.0	21.75	Peak	114.00	150	Horizontal	Pass
6**	16904.063	45.3	17.17	--	-45.30	AV	121.70	150	Horizontal	N/A
6	16904.063	51.79	17.17	68.2	16.41	Peak	121.70	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V Band I 11n40 High channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	2066.500	52.8	-14.51	--	-52.80	AV	233.40	150	Vertical	N/A
1	2066.500	61.68	-14.51	68.2	6.52	Peak	233.40	150	Vertical	Pass
2**	3000.000	43.9	-8.65	--	-43.90	AV	155.00	150	Vertical	N/A
2	3000.000	47.03	-8.65	68.2	21.17	Peak	155.00	150	Vertical	Pass
3**	5236.000	91.6	-2.43	--	-91.60	AV	123.60	150	Vertical	N/A
3	5236.000	97.12	-2.43	--	26.48	Peak	123.60	150	Vertical	Pass
4**	5808.000	51.2	-2.84	--	-51.20	AV	360.00	150	Vertical	N/A
4	5808.000	57.89	-2.84	68.2	10.31	Peak	360.00	150	Vertical	Pass
5**	9708.250	47.9	13.80	--	-47.90	AV	16.00	150	Vertical	N/A
5	9708.250	52.49	13.80	68.2	15.71	Peak	16.00	150	Vertical	Pass
6**	14158.312	43.1	18.15	--	-43.10	AV	272.70	150	Vertical	N/A
6	14158.312	48.89	18.15	68.2	19.31	Peak	272.70	150	Vertical	Pass

1 GHz to 18 GHz, ANT H Band I 11ac20 Low channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1769.500	38.4	-16.94	--	-38.40	AV	97.00	150	Horizontal	N/A
1	1769.500	50.30	-16.94	68.2	17.90	Peak	97.00	150	Horizontal	Pass
2**	4706.000	42.4	-5.35	54.0	11.60	AV	114.40	150	Horizontal	Pass
2	4706.000	47.80	-5.35	74.0	26.20	Peak	114.40	150	Horizontal	Pass
3**	5188.000	100.8	-3.48	--	-100.80	AV	65.70	150	Horizontal	N/A
3	5188.000	104.84	-3.48	--	-39.14	Peak	65.70	150	Horizontal	N/A
4**	7419.750	41.9	13.54	54.0	12.10	AV	217.40	150	Horizontal	Pass
4	7419.750	49.00	13.54	74.0	25.00	Peak	217.40	150	Horizontal	Pass
5**	9708.250	59.3	13.80	--	-59.30	AV	191.20	150	Horizontal	N/A
5	9708.250	63.50	13.80	68.2	4.70	Peak	191.20	150	Horizontal	Pass
6**	12581.812	46.9	18.09	54.0	7.10	AV	181.00	150	Horizontal	Pass
6	12581.812	53.58	18.09	74.0	20.42	Peak	181.00	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V Band I 11ac20 Low channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1992.500	41.0	-15.39	--	-41.00	AV	169.50	150	Vertical	N/A
1	1992.500	54.85	-15.39	68.2	13.35	Peak	169.50	150	Vertical	Pass
2**	3000.000	44.2	-8.65	--	-44.20	AV	149.90	150	Vertical	N/A
2	3000.000	48.03	-8.65	68.2	20.17	Peak	149.90	150	Vertical	Pass
3**	5181.000	98.1	-3.43	--	-98.10	AV	74.10	150	Vertical	N/A
3	5181.000	100.82	-3.43	--	-26.72	Peak	74.10	150	Vertical	N/A
4**	6735.000	40.6	-1.01	--	-40.60	AV	150.00	150	Vertical	N/A
4	6735.000	47.82	-1.01	68.2	20.38	Peak	150.00	150	Vertical	Pass
5**	9708.250	48.9	13.80	--	-48.90	AV	161.00	150	Vertical	N/A
5	9708.250	53.85	13.80	68.2	14.35	Peak	161.00	150	Vertical	Pass
6**	16680.937	45.0	17.10	--	-45.00	AV	147.60	150	Vertical	N/A
6	16680.937	51.53	17.10	68.2	16.67	Peak	147.60	150	Vertical	Pass

1 GHz to 18 GHz, ANT H Band I 11ac20 Middle channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1732.500	43.7	-17.09	--	-43.70	AV	120.70	150	Horizontal	N/A
1	1732.500	49.51	-17.09	68.2	18.69	Peak	120.70	150	Horizontal	Pass
2**	3885.000	35.8	-7.12	54.0	18.20	AV	340.70	150	Horizontal	Pass
2	3885.000	42.47	-7.12	74.0	31.53	Peak	340.70	150	Horizontal	Pass
3**	5196.000	98.4	-3.29	--	-98.40	AV	73.80	150	Horizontal	N/A
3	5196.000	103.66	-3.29	--	-29.86	Peak	73.80	150	Horizontal	N/A
4**	7281.750	49.5	13.62	54.0	4.50	AV	33.00	150	Horizontal	Pass
4	7281.750	52.06	13.62	74.0	21.94	Peak	33.00	150	Horizontal	Pass
5**	9708.250	58.8	13.80	--	-58.80	AV	121.50	150	Horizontal	N/A
5	9708.250	63.66	13.80	68.2	4.54	Peak	121.50	150	Horizontal	Pass
6**	10398.250	47.7	14.30	--	-47.70	AV	48.60	150	Horizontal	N/A
6	10398.250	53.22	14.30	68.2	14.98	Peak	48.60	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V Band I 11ac20 Middle channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1996.000	47.0	-15.25	--	-47.00	AV	132.50	150	Vertical	N/A
1	1996.000	55.28	-15.25	68.2	12.92	Peak	132.50	150	Vertical	Pass
2**	3000.000	41.9	-8.65	--	-41.90	AV	160.50	150	Vertical	N/A
2	3000.000	45.41	-8.65	68.2	22.79	Peak	160.50	150	Vertical	Pass
3**	4291.000	36.9	-6.87	54.0	17.10	AV	189.10	150	Vertical	Pass
3	4291.000	42.77	-6.87	74.0	31.23	Peak	189.10	150	Vertical	Pass
4**	5195.000	95.2	-3.31	--	-95.20	AV	50.60	150	Vertical	N/A
4	5195.000	99.96	-3.31	--	-49.36	Peak	50.60	150	Vertical	N/A
5**	7281.750	44.0	13.62	54.0	10.00	AV	301.20	150	Vertical	Pass
5	7281.750	49.24	13.62	74.0	24.76	Peak	301.20	150	Vertical	Pass
6**	9706.812	41.3	13.82	--	-41.30	AV	161.20	150	Vertical	N/A
6	9706.812	53.71	13.82	68.2	14.49	Peak	161.20	150	Vertical	Pass

1 GHz to 18 GHz, ANT H Band I 11ac20 High channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1658.000	40.2	-17.30	--	-40.20	AV	360.00	150	Horizontal	N/A
1	1658.000	48.16	-17.30	68.2	20.04	Peak	360.00	150	Horizontal	Pass
2**	3476.000	36.1	-8.81	--	-36.10	AV	135.70	150	Horizontal	N/A
2	3476.000	41.93	-8.81	68.2	26.27	Peak	135.70	150	Horizontal	Pass
3**	5241.000	101.3	-2.36	--	-101.30	AV	69.10	150	Horizontal	N/A
3	5241.000	104.57	-2.36	--	-35.47	Peak	69.10	150	Horizontal	N/A
4**	5728.000	48.0	-2.57	--	-48.00	AV	73.50	150	Horizontal	N/A
4	5728.000	53.33	-2.57	68.2	14.87	Peak	73.50	150	Horizontal	Pass
5**	9708.250	53.5	13.80	--	-53.50	AV	74.90	150	Horizontal	N/A
5	9708.250	57.81	13.80	68.2	10.39	Peak	74.90	150	Horizontal	Pass
6**	11983.813	45.4	16.69	54.0	8.60	AV	90.70	150	Horizontal	Pass
6	11983.813	53.44	16.69	74.0	20.56	Peak	90.70	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V Band I 11ac20 High channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1845.500	45.2	-16.47	--	-45.20	AV	155.20	150	Vertical	N/A
1	1845.500	53.62	-16.47	68.2	14.58	Peak	155.20	150	Vertical	Pass
2**	3000.000	42.9	-8.65	--	-42.90	AV	143.60	150	Vertical	N/A
2	3000.000	46.26	-8.65	68.2	21.94	Peak	143.60	150	Vertical	Pass
3**	4356.000	37.1	-6.22	54.0	16.90	AV	122.50	150	Vertical	Pass
3	4356.000	42.81	-6.22	74.0	31.19	Peak	122.50	150	Vertical	Pass
4**	5239.000	96.3	-2.40	--	-96.30	AV	55.80	150	Vertical	N/A
4	5239.000	99.72	-2.40	--	-43.92	Peak	55.80	150	Vertical	N/A
5**	9708.250	51.0	13.80	--	-51.00	AV	354.20	150	Vertical	N/A
5	9708.250	55.48	13.80	68.2	12.72	Peak	354.20	150	Vertical	Pass
6**	16229.437	44.6	18.34	--	-44.60	AV	276.10	150	Vertical	N/A
6	16229.437	51.53	18.34	68.2	16.67	Peak	276.10	150	Vertical	Pass

1 GHz to 18 GHz, ANT H Band I 11ac40 Low channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1825.000	31.5	-16.68	--	-31.50	AV	176.30	150	Horizontal	N/A
1	1825.000	46.44	-16.68	68.2	21.76	Peak	176.30	150	Horizontal	Pass
2**	3552.000	36.7	-8.71	--	-36.70	AV	348.40	150	Horizontal	N/A
2	3552.000	42.09	-8.71	68.2	26.11	Peak	348.40	150	Horizontal	Pass
3**	4727.000	49.3	-5.26	54.0	4.70	AV	64.50	150	Horizontal	Pass
3	4727.000	52.73	-5.26	74.0	21.27	Peak	64.50	150	Horizontal	Pass
4**	5189.000	97.9	-3.45	--	-97.90	AV	254.90	150	Horizontal	N/A
4	5189.000	102.15	-3.45	--	152.75	Peak	254.90	150	Horizontal	Pass
5**	9708.250	53.4	13.80	--	-53.40	AV	357.20	150	Horizontal	N/A
5	9708.250	57.77	13.80	68.2	10.43	Peak	357.20	150	Horizontal	Pass
6**	16656.000	45.9	17.50	--	-45.90	AV	60.60	150	Horizontal	N/A
6	16656.000	51.27	17.50	68.2	16.93	Peak	60.60	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V Band I 11ac40 Low channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1866.500	42.8	-16.06	--	-42.80	AV	156.40	150	Vertical	N/A
1	1866.500	53.85	-16.06	68.2	14.35	Peak	156.40	150	Vertical	Pass
2**	3000.000	43.3	-8.65	--	-43.30	AV	156.40	150	Vertical	N/A
2	3000.000	47.36	-8.65	68.2	20.84	Peak	156.40	150	Vertical	Pass
3**	4408.000	38.9	-6.31	--	-38.90	AV	148.80	150	Vertical	N/A
3	4408.000	43.42	-6.31	68.2	24.78	Peak	148.80	150	Vertical	Pass
4**	5188.000	89.9	-3.48	--	-89.90	AV	126.80	150	Vertical	N/A
4	5188.000	95.14	-3.48	--	31.66	Peak	126.80	150	Vertical	Pass
5**	9708.250	48.5	13.80	--	-48.50	AV	178.60	150	Vertical	N/A
5	9708.250	53.86	13.80	68.2	14.34	Peak	178.60	150	Vertical	Pass
6**	15695.250	42.5	15.74	54.0	11.50	AV	33.00	150	Vertical	Pass
6	15695.250	49.74	15.74	74.0	24.26	Peak	33.00	150	Vertical	Pass

1 GHz to 18 GHz, ANT H Band I 11ac40 High channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1678.500	41.2	-17.36	54.0	12.80	AV	360.00	150	Horizontal	Pass
1	1678.500	49.99	-17.36	74.0	24.01	Peak	360.00	150	Horizontal	Pass
2**	3957.000	38.3	-7.20	54.0	15.70	AV	223.60	150	Horizontal	Pass
2	3957.000	42.20	-7.20	74.0	31.80	Peak	223.60	150	Horizontal	Pass
3**	4767.000	49.0	-4.47	54.0	5.00	AV	95.40	150	Horizontal	Pass
3	4767.000	52.98	-4.47	74.0	21.02	Peak	95.40	150	Horizontal	Pass
4**	5247.000	100.5	-2.27	--	-100.50	AV	68.80	150	Horizontal	N/A
4	5247.000	104.68	-2.27	--	-35.88	Peak	68.80	150	Horizontal	N/A
5**	9708.250	58.8	13.80	--	-58.80	AV	121.50	150	Horizontal	N/A
5	9708.250	63.09	13.80	68.2	5.11	Peak	121.50	150	Horizontal	Pass
6**	12476.875	48.4	16.86	54.0	5.60	AV	152.30	150	Horizontal	Pass
6	12476.875	53.05	16.86	74.0	20.95	Peak	152.30	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V Band I 11ac40 High channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1842.500	39.3	-16.56	--	-39.30	AV	170.40	150	Vertical	N/A
1	1842.500	53.59	-16.56	68.2	14.61	Peak	170.40	150	Vertical	Pass
2**	4241.000	38.8	-6.99	54.0	15.20	AV	67.70	150	Vertical	Pass
2	4241.000	42.27	-6.99	74.0	31.73	Peak	67.70	150	Vertical	Pass
3**	5224.000	93.2	-2.89	--	-93.20	AV	281.30	150	Vertical	N/A
3	5224.000	97.73	-2.89	--	183.57	Peak	281.30	150	Vertical	Pass
4**	7280.312	48.3	13.67	54.0	5.70	AV	55.00	150	Vertical	Pass
4	7280.312	50.89	13.67	74.0	23.11	Peak	55.00	150	Vertical	Pass
5**	9708.250	47.3	13.80	--	-47.30	AV	189.00	150	Vertical	N/A
5	9708.250	51.90	13.80	68.2	16.30	Peak	189.00	150	Vertical	Pass
6**	12032.687	46.3	16.63	54.0	7.70	AV	220.20	150	Vertical	Pass
6	12032.687	52.25	16.63	74.0	21.75	Peak	220.20	150	Vertical	Pass

1 GHz to 18 GHz, ANT H Band I 11ac80 Low channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1747.000	37.8	-17.18	--	-37.80	AV	360.00	150	Horizontal	N/A
1	1747.000	45.07	-17.18	68.2	23.13	Peak	360.00	150	Horizontal	Pass
2**	3804.000	35.5	-6.95	54.0	18.50	AV	6.60	150	Horizontal	Pass
2	3804.000	41.60	-6.95	74.0	32.40	Peak	6.60	150	Horizontal	Pass
3**	4766.000	52.0	-4.48	54.0	2.00	AV	90.80	150	Horizontal	Pass
3	4766.000	57.37	-4.48	74.0	16.63	Peak	90.80	150	Horizontal	Pass
4**	5203.000	97.3	-3.35	--	-97.30	AV	72.90	150	Horizontal	N/A
4	5203.000	103.36	-3.35	--	-30.46	Peak	72.90	150	Horizontal	N/A
5**	9708.250	52.1	13.80	--	-52.10	AV	21.70	150	Horizontal	N/A
5	9708.250	56.76	13.80	68.2	11.44	Peak	21.70	150	Horizontal	Pass
6**	14225.250	43.0	18.36	--	-43.00	AV	93.00	150	Horizontal	N/A
6	14225.250	49.69	18.36	68.2	18.51	Peak	93.00	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V Band I 11ac80 Low channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1794.500	42.5	-16.79	--	-42.50	AV	151.40	150	Vertical	N/A
1	1794.500	53.88	-16.79	68.2	14.32	Peak	151.40	150	Vertical	Pass
2**	3000.000	43.5	-8.65	--	-43.50	AV	143.60	150	Vertical	N/A
2	3000.000	46.59	-8.65	68.2	21.61	Peak	143.60	150	Vertical	Pass
3**	4763.000	41.9	-4.60	54.0	12.10	AV	216.30	150	Vertical	Pass
3	4763.000	47.49	-4.60	74.0	26.51	Peak	216.30	150	Vertical	Pass
4**	5214.000	90.3	-3.06	--	-90.30	AV	282.90	150	Vertical	N/A
4	5214.000	96.03	-3.06	--	186.87	Peak	282.90	150	Vertical	Pass
5**	7281.750	46.2	13.62	54.0	7.80	AV	54.20	150	Vertical	Pass
5	7281.750	50.92	13.62	74.0	23.08	Peak	54.20	150	Vertical	Pass
6**	9708.250	48.7	13.80	--	-48.70	AV	147.70	150	Vertical	N/A
6	9708.250	53.46	13.80	68.2	14.74	Peak	147.70	150	Vertical	Pass

1 GHz to 18 GHz, ANT H Band IV a Low channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1783.500	49.0	-16.92	--	-49.00	AV	243.40	150	Horizontal	N/A
1	1783.500	56.90	-16.92	68.2	11.30	Peak	243.40	150	Horizontal	Pass
2**	2997.000	48.2	-8.76	--	-48.20	AV	239.50	150	Horizontal	N/A
2	2997.000	52.86	-8.76	68.2	15.34	Peak	239.50	150	Horizontal	Pass
3**	5335.000	43.6	0.50	--	-43.60	AV	179.00	150	Horizontal	N/A
3	5335.000	48.53	0.50	68.2	19.67	Peak	179.00	150	Horizontal	Pass
4**	5741.000	102.1	-2.40	--	-102.10	AV	104.30	150	Horizontal	N/A
4	5741.000	105.34	-2.40	--	-1.04	Peak	104.30	150	Horizontal	N/A
5**	9708.250	55.3	13.80	--	-55.30	AV	64.20	150	Horizontal	N/A
5	9708.250	60.46	13.80	68.2	7.74	Peak	64.20	150	Horizontal	Pass
6**	17229.562	49.5	17.47	--	-49.50	AV	140.80	150	Horizontal	N/A
6	17229.562	54.62	17.47	68.2	13.58	Peak	140.80	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V Band IV 11a Low channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1993.000	42.7	-15.42	--	-42.70	AV	126.30	150	Vertical	N/A
1	1993.000	54.31	-15.42	68.2	13.89	Peak	126.30	150	Vertical	Pass
2**	3000.000	43.3	-8.65	--	-43.30	AV	145.80	150	Vertical	N/A
2	3000.000	47.65	-8.65	68.2	20.55	Peak	145.80	150	Vertical	Pass
3**	5362.000	43.5	0.33	54.0	10.50	AV	209.70	150	Vertical	Pass
3	5362.000	48.43	0.33	74.0	25.57	Peak	209.70	150	Vertical	Pass
4**	5744.000	93.5	-2.31	--	-93.50	AV	135.10	150	Vertical	N/A
4	5744.000	98.98	-2.31	--	36.12	Peak	135.10	150	Vertical	Pass
5**	9708.250	49.6	13.80	--	-49.60	AV	333.50	150	Vertical	N/A
5	9708.250	53.80	13.80	68.2	14.40	Peak	333.50	150	Vertical	Pass
6**	17562.937	44.9	19.71	--	-44.90	AV	98.50	150	Vertical	N/A
6	17562.937	52.02	19.71	68.2	16.18	Peak	98.50	150	Vertical	Pass

1 GHz to 18 GHz, ANT H Band IV 11a Middle channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1863.000	45.7	-16.04	--	-45.70	AV	59.00	150	Horizontal	N/A
1	1863.000	54.19	-16.04	68.2	14.01	Peak	59.00	150	Horizontal	Pass
2**	3980.000	36.6	-7.36	54.0	17.40	AV	342.30	150	Horizontal	Pass
2	3980.000	41.84	-7.36	74.0	32.16	Peak	342.30	150	Horizontal	Pass
3**	5366.000	43.5	0.18	54.0	10.50	AV	236.20	150	Horizontal	Pass
3	5366.000	48.72	0.18	74.0	25.28	Peak	236.20	150	Horizontal	Pass
4**	5781.000	103.2	-2.60	--	-103.20	AV	68.10	150	Horizontal	N/A
4	5781.000	106.61	-2.60	--	-38.51	Peak	68.10	150	Horizontal	N/A
5**	9708.250	54.5	13.80	--	-54.50	AV	76.40	150	Horizontal	N/A
5	9708.250	59.38	13.80	68.2	8.82	Peak	76.40	150	Horizontal	Pass
6**	11571.250	49.6	15.90	54.0	4.40	AV	107.20	150	Horizontal	Pass
6	11571.250	55.86	15.90	74.0	18.14	Peak	107.20	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V Band IV 11a Middle channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1828.000	44.4	-16.66	--	-44.40	AV	156.40	150	Vertical	N/A
1	1828.000	55.50	-16.66	68.2	12.70	Peak	156.40	150	Vertical	Pass
2**	2990.500	58.0	-9.14	--	-58.00	AV	54.70	150	Vertical	N/A
2	2990.500	63.26	-9.14	68.2	4.94	Peak	54.70	150	Vertical	Pass
3**	5333.000	44.5	0.58	--	-44.50	AV	103.50	150	Vertical	N/A
3	5333.000	48.34	0.58	68.2	19.86	Peak	103.50	150	Vertical	Pass
4**	5787.000	95.9	-2.48	--	-95.90	AV	63.90	150	Vertical	N/A
4	5787.000	99.66	-2.48	--	-35.76	Peak	63.90	150	Vertical	N/A
5**	11572.688	48.6	15.90	54.0	5.40	AV	357.10	150	Vertical	Pass
5	11572.688	53.46	15.90	74.0	20.54	Peak	357.10	150	Vertical	Pass
6**	14877.563	46.7	17.94	--	-46.70	AV	65.30	150	Vertical	N/A
6	14877.563	50.53	17.94	68.2	17.67	Peak	65.30	150	Vertical	Pass

1 GHz to 18 GHz, ANT H Band IV 11a High channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1937.500	41.6	-15.45	--	-41.60	AV	214.90	150	Horizontal	N/A
1	1937.500	50.95	-15.45	68.2	17.25	Peak	214.90	150	Horizontal	Pass
2**	3939.000	36.0	-7.06	54.0	18.00	AV	268.40	150	Horizontal	Pass
2	3939.000	41.44	-7.06	74.0	32.56	Peak	268.40	150	Horizontal	Pass
3**	5338.000	48.3	0.33	--	-48.30	AV	73.30	150	Horizontal	N/A
3	5338.000	52.00	0.33	68.2	16.20	Peak	73.30	150	Horizontal	Pass
4**	5826.000	102.0	-2.76	--	-102.00	AV	228.50	150	Horizontal	N/A
4	5826.000	106.07	-2.76	--	122.43	Peak	228.50	150	Horizontal	Pass
5**	9708.250	54.2	13.80	--	-54.20	AV	225.10	150	Horizontal	N/A
5	9708.250	59.35	13.80	68.2	8.85	Peak	225.10	150	Horizontal	Pass
6**	11648.874	51.2	15.58	54.0	2.80	AV	173.00	150	Horizontal	Pass
6	11648.874	55.82	15.58	74.0	18.18	Peak	173.00	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V Band IV 11a High channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1878.500	39.7	-16.22	--	-39.70	AV	157.70	150	Vertical	N/A
1	1878.500	53.80	-16.22	68.2	14.40	Peak	157.70	150	Vertical	Pass
2**	3503.000	37.3	-8.12	--	-37.30	AV	205.30	150	Vertical	N/A
2	3503.000	41.68	-8.12	68.2	26.52	Peak	205.30	150	Vertical	Pass
3**	4854.000	47.3	-4.39	54.0	6.70	AV	152.20	150	Vertical	Pass
3	4854.000	50.77	-4.39	74.0	23.23	Peak	152.20	150	Vertical	Pass
4**	5823.000	94.7	-2.84	--	-94.70	AV	236.30	150	Vertical	N/A
4	5823.000	99.00	-2.84	--	137.30	Peak	236.30	150	Vertical	Pass
5**	11650.312	48.3	15.60	54.0	5.70	AV	225.10	150	Vertical	Pass
5	11650.312	53.33	15.60	74.0	20.67	Peak	225.10	150	Vertical	Pass
6**	16695.375	44.5	17.55	--	-44.50	AV	218.00	150	Vertical	N/A
6	16695.375	51.40	17.55	68.2	16.80	Peak	218.00	150	Vertical	Pass

1 GHz to 18 GHz, ANT H Band IV 11n20 Low channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1769.500	51.5	-16.94	--	-51.50	AV	209.60	150	Horizontal	N/A
1	1769.500	58.91	-16.94	68.2	9.29	Peak	209.60	150	Horizontal	Pass
2**	2986.500	46.3	-9.39	--	-46.30	AV	92.10	150	Horizontal	N/A
2	2986.500	52.55	-9.39	68.2	15.65	Peak	92.10	150	Horizontal	Pass
3**	5738.000	102.4	-2.25	--	-102.40	AV	82.10	150	Horizontal	N/A
3	5738.000	105.65	-2.25	--	-23.55	Peak	82.10	150	Horizontal	N/A
4**	7280.312	52.5	13.67	54.0	1.50	AV	101.00	150	Horizontal	Pass
4	7280.312	55.23	13.67	74.0	18.77	Peak	101.00	150	Horizontal	Pass
5**	9708.250	51.3	13.80	--	-51.30	AV	18.40	150	Horizontal	N/A
5	9708.250	56.04	13.80	68.2	12.16	Peak	18.40	150	Horizontal	Pass
6**	17233.500	48.7	17.41	--	-48.70	AV	156.50	150	Horizontal	N/A
6	17233.500	54.27	17.41	68.2	13.93	Peak	156.50	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V Band IV 11n20 Low channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1955.500	41.9	-15.55	--	-41.90	AV	130.70	150	Vertical	N/A
1	1955.500	51.92	-15.55	68.2	16.28	Peak	130.70	150	Vertical	Pass
2**	3880.000	35.8	-7.28	54.0	18.20	AV	216.80	150	Vertical	Pass
2	3880.000	42.39	-7.28	74.0	31.61	Peak	216.80	150	Vertical	Pass
3**	4854.000	51.1	-4.39	54.0	2.90	AV	141.20	150	Vertical	Pass
3	4854.000	54.53	-4.39	74.0	19.47	Peak	141.20	150	Vertical	Pass
4**	5742.000	94.1	-2.40	--	-94.10	AV	61.10	150	Vertical	N/A
4	5742.000	99.61	-2.40	--	-38.51	Peak	61.10	150	Vertical	N/A
5**	9708.250	48.1	13.80	--	-48.10	AV	188.90	150	Vertical	N/A
5	9708.250	52.27	13.80	68.2	15.93	Peak	188.90	150	Vertical	Pass
6**	12574.625	47.7	17.99	54.0	6.30	AV	349.70	150	Vertical	Pass
6	12574.625	54.21	17.99	74.0	19.79	Peak	349.70	150	Vertical	Pass

1 GHz to 18 GHz, ANT H Band IV 11n20 Middle channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1863.500	49.4	-16.05	--	-49.40	AV	233.30	150	Horizontal	N/A
1	1863.500	60.19	-16.05	68.2	8.01	Peak	233.30	150	Horizontal	Pass
2**	2056.500	48.8	-14.54	--	-48.80	AV	98.20	150	Horizontal	N/A
2	2056.500	55.21	-14.54	68.2	12.99	Peak	98.20	150	Horizontal	Pass
3**	3996.000	35.8	-6.58	54.0	18.20	AV	278.40	150	Horizontal	Pass
3	3996.000	42.10	-6.58	74.0	31.90	Peak	278.40	150	Horizontal	Pass
4**	5783.000	100.6	-2.60	--	-100.60	AV	242.20	150	Horizontal	N/A
4	5783.000	105.28	-2.60	--	136.92	Peak	242.20	150	Horizontal	Pass
5**	9708.250	53.8	13.80	--	-53.80	AV	84.70	150	Horizontal	N/A
5	9708.250	57.89	13.80	68.2	10.31	Peak	84.70	150	Horizontal	Pass
6**	11572.688	46.0	15.90	54.0	8.00	AV	105.30	150	Horizontal	Pass
6	11572.688	53.59	15.90	74.0	20.41	Peak	105.30	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V Band IV 11n20 Middle channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1878.500	45.0	-16.22	--	-45.00	AV	165.60	150	Vertical	N/A
1	1878.500	54.37	-16.22	68.2	13.83	Peak	165.60	150	Vertical	Pass
2**	2984.000	47.9	-9.29	--	-47.90	AV	192.80	150	Vertical	N/A
2	2984.000	56.12	-9.29	68.2	12.08	Peak	192.80	150	Vertical	Pass
3**	4854.000	50.4	-4.39	54.0	3.60	AV	123.00	150	Vertical	Pass
3	4854.000	53.83	-4.39	74.0	20.17	Peak	123.00	150	Vertical	Pass
4**	5786.000	93.1	-2.47	--	-93.10	AV	131.80	150	Vertical	N/A
4	5786.000	97.81	-2.47	--	33.99	Peak	131.80	150	Vertical	Pass
5**	9708.250	48.1	13.80	--	-48.10	AV	122.00	150	Vertical	N/A
5	9708.250	53.20	13.80	68.2	15.00	Peak	122.00	150	Vertical	Pass
6**	11574.125	46.1	15.90	54.0	7.90	AV	86.10	150	Vertical	Pass
6	11574.125	52.12	15.90	74.0	21.88	Peak	86.10	150	Vertical	Pass

1 GHz to 18 GHz, ANT H Band IV 11n20 High channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1933.500	47.6	-15.49	--	-47.60	AV	136.00	150	Horizontal	N/A
1	1933.500	57.26	-15.49	68.2	10.94	Peak	136.00	150	Horizontal	Pass
2**	3149.000	35.0	-8.73	--	-35.00	AV	180.80	150	Horizontal	N/A
2	3149.000	41.63	-8.73	68.2	26.57	Peak	180.80	150	Horizontal	Pass
3**	5337.000	48.1	0.41	--	-48.10	AV	252.00	150	Horizontal	N/A
3	5337.000	52.99	0.41	68.2	15.21	Peak	252.00	150	Horizontal	Pass
4**	5826.000	99.9	-2.76	--	-99.90	AV	243.20	150	Horizontal	N/A
4	5826.000	104.40	-2.76	--	138.80	Peak	243.20	150	Horizontal	Pass
5**	9668.000	50.8	14.27	--	-50.80	AV	179.00	150	Horizontal	N/A
5	9668.000	58.48	14.27	68.2	9.72	Peak	179.00	150	Horizontal	Pass
6**	11653.188	47.9	15.64	54.0	6.10	AV	74.90	150	Horizontal	Pass
6	11653.188	53.08	15.64	74.0	20.92	Peak	74.90	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V Band IV 11n20 High channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1995.000	42.1	-15.31	--	-42.10	AV	129.30	150	Vertical	N/A
1	1995.000	53.69	-15.31	68.2	14.51	Peak	129.30	150	Vertical	Pass
2**	2916.500	43.8	-9.77	--	-43.80	AV	109.10	150	Vertical	N/A
2	2916.500	53.34	-9.77	68.2	14.86	Peak	109.10	150	Vertical	Pass
3**	5402.000	43.4	-0.51	54.0	10.60	AV	20.50	150	Vertical	Pass
3	5402.000	48.14	-0.51	74.0	25.86	Peak	20.50	150	Vertical	Pass
4**	5826.000	94.3	-2.76	--	-94.30	AV	131.00	150	Vertical	N/A
4	5826.000	98.26	-2.76	--	32.74	Peak	131.00	150	Vertical	Pass
5**	9255.437	42.9	15.20	--	-42.90	AV	121.00	150	Vertical	N/A
5	9255.437	49.96	15.20	68.2	18.24	Peak	121.00	150	Vertical	Pass
6**	12594.750	46.8	17.73	54.0	7.20	AV	229.70	150	Vertical	Pass
6	12594.750	53.44	17.73	74.0	20.56	Peak	229.70	150	Vertical	Pass

1 GHz to 18 GHz, ANT H Band IV 11n40 Low channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	2693.500	40.4	-10.35	54.0	13.60	AV	76.10	150	Horizontal	Pass
1	2693.500	47.03	-10.35	74.0	26.97	Peak	76.10	150	Horizontal	Pass
2**	4126.000	38.8	-7.28	54.0	15.20	AV	99.80	150	Horizontal	Pass
2	4126.000	42.51	-7.28	74.0	31.49	Peak	99.80	150	Horizontal	Pass
3**	5291.000	48.6	-1.36	--	-48.60	AV	68.70	150	Horizontal	N/A
3	5291.000	51.95	-1.36	68.2	16.25	Peak	68.70	150	Horizontal	Pass
4**	5772.000	101.0	-2.58	--	-101.00	AV	73.10	150	Horizontal	N/A
4	5772.000	104.99	-2.58	--	-31.89	Peak	73.10	150	Horizontal	N/A
5**	9708.250	55.6	13.80	--	-55.60	AV	130.70	150	Horizontal	N/A
5	9708.250	60.24	13.80	68.2	7.96	Peak	130.70	150	Horizontal	Pass
6**	12620.625	46.5	17.88	54.0	7.50	AV	130.70	150	Horizontal	Pass
6	12620.625	53.27	17.88	74.0	20.73	Peak	130.70	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V Band IV 11n40 Low channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1858.500	35.2	-16.17	--	-35.20	AV	155.10	150	Vertical	N/A
1	1858.500	52.31	-16.17	68.2	15.89	Peak	155.10	150	Vertical	Pass
2**	3000.000	43.3	-8.65	--	-43.30	AV	147.20	150	Vertical	N/A
2	3000.000	46.74	-8.65	68.2	21.46	Peak	147.20	150	Vertical	Pass
3**	4440.000	37.9	-5.87	--	-37.90	AV	209.30	150	Vertical	N/A
3	4440.000	43.93	-5.87	68.2	24.27	Peak	209.30	150	Vertical	Pass
4**	5753.000	92.2	-2.47	--	-92.20	AV	59.60	150	Vertical	N/A
4	5753.000	97.93	-2.47	--	-38.33	Peak	59.60	150	Vertical	N/A
5**	9708.250	49.0	13.80	--	-49.00	AV	136.20	150	Vertical	N/A
5	9708.250	53.26	13.80	68.2	14.94	Peak	136.20	150	Vertical	Pass
6**	12314.438	46.1	17.22	54.0	7.90	AV	255.70	150	Vertical	Pass
6	12314.438	53.48	17.22	74.0	20.52	Peak	255.70	150	Vertical	Pass

1 GHz to 18 GHz, ANT H Band IV 11n40 High channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	3576.000	36.1	-8.04	--	-36.10	AV	11.80	150	Horizontal	N/A
1	3576.000	41.39	-8.04	68.2	26.81	Peak	11.80	150	Horizontal	Pass
2**	5686.000	44.7	-2.35	--	-44.70	AV	78.20	150	Horizontal	N/A
2	5686.000	52.03	-2.35	94.9	42.87	Peak	78.20	150	Horizontal	Pass
3**	5796.000	99.2	-2.67	--	-99.20	AV	73.80	150	Horizontal	N/A
3	5796.000	105.66	-2.67	--	-31.86	Peak	73.80	150	Horizontal	N/A
4**	9157.687	43.6	15.51	54.0	10.40	AV	344.10	150	Horizontal	Pass
4	9157.687	50.55	15.51	74.0	23.45	Peak	344.10	150	Horizontal	Pass
5**	11601.438	45.7	16.01	54.0	8.30	AV	94.50	150	Horizontal	Pass
5	11601.438	52.05	16.01	74.0	21.95	Peak	94.50	150	Horizontal	Pass
6**	16204.500	45.7	18.45	--	-45.70	AV	123.20	150	Horizontal	N/A
6	16204.500	50.70	18.45	68.2	17.50	Peak	123.20	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V Band IV 11n40 High channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1825.500	42.4	-16.70	--	-42.40	AV	154.30	150	Vertical	N/A
1	1825.500	56.35	-16.70	68.2	11.85	Peak	154.30	150	Vertical	Pass
2**	3237.000	36.7	-8.19	--	-36.70	AV	254.40	150	Vertical	N/A
2	3237.000	42.41	-8.19	68.2	25.79	Peak	254.40	150	Vertical	Pass
3**	5368.000	44.9	0.11	54.0	9.10	AV	254.40	150	Vertical	Pass
3	5368.000	48.35	0.11	74.0	25.65	Peak	254.40	150	Vertical	Pass
4**	5793.000	92.9	-2.57	--	-92.90	AV	64.10	150	Vertical	N/A
4	5793.000	96.73	-2.57	--	-32.63	Peak	64.10	150	Vertical	N/A
5**	9072.874	43.6	15.52	54.0	10.40	AV	276.80	150	Vertical	Pass
5	9072.874	49.37	15.52	74.0	24.63	Peak	276.80	150	Vertical	Pass
6**	12590.437	46.9	17.85	54.0	7.10	AV	136.70	150	Vertical	Pass
6	12590.437	53.17	17.85	74.0	20.83	Peak	136.70	150	Vertical	Pass

1 GHz to 18 GHz, ANT H Band IV11ac20 Low channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1995.500	31.0	-15.27	--	-31.00	AV	89.20	150	Horizontal	N/A
1	1995.500	39.24	-15.27	68.2	28.96	Peak	89.20	150	Horizontal	Pass
2**	3860.000	37.2	-7.63	54.0	16.80	AV	349.80	150	Horizontal	Pass
2	3860.000	42.48	-7.63	74.0	31.52	Peak	349.80	150	Horizontal	Pass
3**	5314.000	42.5	0.62	--	-42.50	AV	95.50	150	Horizontal	N/A
3	5314.000	48.92	0.62	68.2	19.28	Peak	95.50	150	Horizontal	Pass
4**	5751.000	101.4	-2.48	--	-101.40	AV	122.00	150	Horizontal	N/A
4	5751.000	105.33	-2.48	--	16.67	Peak	122.00	150	Horizontal	Pass
5**	7280.312	49.9	13.67	54.0	4.10	AV	126.30	150	Horizontal	Pass
5	7280.312	53.98	13.67	74.0	20.02	Peak	126.30	150	Horizontal	Pass
6**	11497.938	44.2	15.54	54.0	9.80	AV	90.10	150	Horizontal	Pass
6	11497.938	52.17	15.54	74.0	21.83	Peak	90.10	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V Band IV11ac20 Low channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1804.500	42.7	-16.92	--	-42.70	AV	156.00	150	Vertical	N/A
1	1804.500	55.82	-16.92	68.2	12.38	Peak	156.00	150	Vertical	Pass
2**	3000.000	44.6	-8.65	--	-44.60	AV	152.10	150	Vertical	N/A
2	3000.000	47.10	-8.65	68.2	21.10	Peak	152.10	150	Vertical	Pass
3**	4286.000	37.5	-6.80	54.0	16.50	AV	91.30	150	Vertical	Pass
3	4286.000	45.44	-6.80	74.0	28.56	Peak	91.30	150	Vertical	Pass
4**	5744.000	93.8	-2.31	--	-93.80	AV	60.20	150	Vertical	N/A
4	5744.000	99.75	-2.31	--	-39.55	Peak	60.20	150	Vertical	N/A
5**	9708.250	49.5	13.80	--	-49.50	AV	1.40	150	Vertical	N/A
5	9708.250	54.70	13.80	68.2	13.50	Peak	1.40	150	Vertical	Pass
6**	12580.375	47.3	18.13	54.0	6.70	AV	105.30	150	Vertical	Pass
6	12580.375	54.04	18.13	74.0	19.96	Peak	105.30	150	Vertical	Pass

1 GHz to 18 GHz, ANT H Band IV11ac20 Middle channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1812.000	40.9	-16.87	--	-40.90	AV	161.00	150	Vertical	N/A
1	1812.000	54.46	-16.87	68.2	13.74	Peak	161.00	150	Vertical	Pass
2**	2990.500	47.1	-9.14	--	-47.10	AV	188.10	150	Vertical	N/A
2	2990.500	58.15	-9.14	68.2	10.05	Peak	188.10	150	Vertical	Pass
3**	4854.000	50.6	-4.39	54.0	3.40	AV	99.70	150	Vertical	Pass
3	4854.000	54.19	-4.39	74.0	19.81	Peak	99.70	150	Vertical	Pass
4**	5785.000	92.4	-2.50	--	-92.40	AV	130.80	150	Vertical	N/A
4	5785.000	98.59	-2.50	--	32.21	Peak	130.80	150	Vertical	Pass
5**	9708.250	48.4	13.80	--	-48.40	AV	3.90	150	Vertical	N/A
5	9708.250	53.36	13.80	68.2	14.84	Peak	3.90	150	Vertical	Pass
6**	12455.312	46.6	17.12	54.0	7.40	AV	127.20	150	Vertical	Pass
6	12455.312	52.79	17.12	74.0	21.21	Peak	127.20	150	Vertical	Pass

1 GHz to 18 GHz, ANT V Band IV11ac20 Middle channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	2201.500	40.2	-12.66	54.0	13.80	AV	243.60	150	Horizontal	Pass
1	2201.500	48.61	-12.66	74.0	25.39	Peak	243.60	150	Horizontal	Pass
2**	4021.000	36.3	-7.15	54.0	17.70	AV	0.00	150	Horizontal	Pass
2	4021.000	41.96	-7.15	74.0	32.04	Peak	0.00	150	Horizontal	Pass
3**	5313.000	50.9	0.57	--	-50.90	AV	73.80	150	Horizontal	N/A
3	5313.000	53.45	0.57	68.2	14.75	Peak	73.80	150	Horizontal	Pass
4**	5782.000	101.1	-2.63	--	-101.10	AV	238.00	150	Horizontal	N/A
4	5782.000	105.14	-2.63	--	132.86	Peak	238.00	150	Horizontal	Pass
5**	9708.250	51.1	13.80	--	-51.10	AV	84.40	150	Horizontal	N/A
5	9708.250	55.59	13.80	68.2	12.61	Peak	84.40	150	Horizontal	Pass
6**	12649.375	46.4	17.70	54.0	7.60	AV	276.90	150	Horizontal	Pass
6	12649.375	53.97	17.70	74.0	20.03	Peak	276.90	150	Horizontal	Pass

1 GHz to 18 GHz, ANT H Band IV11ac20 High channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1755.500	36.4	-17.15	--	-36.40	AV	176.10	150	Horizontal	N/A
1	1755.500	43.95	-17.15	68.2	24.25	Peak	176.10	150	Horizontal	Pass
2**	4042.000	37.9	-7.09	54.0	16.10	AV	0.00	150	Horizontal	Pass
2	4042.000	42.13	-7.09	74.0	31.87	Peak	0.00	150	Horizontal	Pass
3**	5352.000	47.3	0.29	54.0	6.70	AV	65.90	150	Horizontal	Pass
3	5352.000	51.41	0.29	74.0	22.59	Peak	65.90	150	Horizontal	Pass
4**	5832.000	100.5	-2.59	--	-100.50	AV	78.90	150	Horizontal	N/A
4	5832.000	105.67	-2.59	--	-26.77	Peak	78.90	150	Horizontal	N/A
5**	9708.250	54.8	13.80	--	-54.80	AV	119.50	150	Horizontal	N/A
5	9708.250	59.57	13.80	68.2	8.63	Peak	119.50	150	Horizontal	Pass
6**	11650.312	48.6	15.60	54.0	5.40	AV	93.80	150	Horizontal	Pass
6	11650.312	56.01	15.60	74.0	17.99	Peak	93.80	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V Band IV11ac20 High channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1991.000	38.1	-15.34	--	-38.10	AV	134.80	150	Vertical	N/A
1	1991.000	54.17	-15.34	68.2	14.03	Peak	134.80	150	Vertical	Pass
2**	4029.000	37.2	-7.02	54.0	16.80	AV	220.30	150	Vertical	Pass
2	4029.000	41.70	-7.02	74.0	32.30	Peak	220.30	150	Vertical	Pass
3**	5325.000	43.1	0.96	--	-43.10	AV	0.80	150	Vertical	N/A
3	5325.000	49.05	0.96	68.2	19.15	Peak	0.80	150	Vertical	Pass
4**	5823.000	92.7	-2.84	--	-92.70	AV	47.90	150	Vertical	N/A
4	5823.000	97.02	-2.84	--	-49.12	Peak	47.90	150	Vertical	N/A
5**	9708.250	47.4	13.80	--	-47.40	AV	125.30	150	Vertical	N/A
5	9708.250	51.63	13.80	68.2	16.57	Peak	125.30	150	Vertical	Pass
6**	14218.687	43.3	18.47	--	-43.30	AV	28.00	150	Vertical	N/A
6	14218.687	49.69	18.47	68.2	18.51	Peak	28.00	150	Vertical	Pass

1 GHz to 18 GHz, ANT H Band IV11ac40 Low channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1801.500	46.4	-16.88	--	-46.40	AV	94.10	150	Horizontal	N/A
1	1801.500	53.47	-16.88	68.2	14.73	Peak	94.10	150	Horizontal	Pass
2**	4069.000	35.3	-7.32	54.0	18.70	AV	360.00	150	Horizontal	Pass
2	4069.000	42.16	-7.32	74.0	31.84	Peak	360.00	150	Horizontal	Pass
3**	5291.000	51.0	-1.36	--	-51.00	AV	61.70	150	Horizontal	N/A
3	5291.000	56.73	-1.36	68.2	11.47	Peak	61.70	150	Horizontal	Pass
4**	5738.000	99.6	-2.25	--	-99.60	AV	238.00	150	Horizontal	N/A
4	5738.000	104.32	-2.25	--	133.68	Peak	238.00	150	Horizontal	Pass
5**	9093.000	43.4	15.65	54.0	10.60	AV	5.60	150	Horizontal	Pass
5	9093.000	49.78	15.65	74.0	24.22	Peak	5.60	150	Horizontal	Pass
6**	9708.250	57.8	13.80	--	-57.80	AV	130.20	150	Horizontal	N/A
6	9708.250	62.57	13.80	68.2	5.63	Peak	130.20	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V Band IV11ac40 Low channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1824.500	43.9	-16.67	--	-43.90	AV	167.80	150	Vertical	N/A
1	1824.500	55.93	-16.67	68.2	12.27	Peak	167.80	150	Vertical	Pass
2**	3000.000	43.4	-8.65	--	-43.40	AV	148.70	150	Vertical	N/A
2	3000.000	46.89	-8.65	68.2	21.31	Peak	148.70	150	Vertical	Pass
3**	4854.000	45.2	-4.39	54.0	8.80	AV	157.20	150	Vertical	Pass
3	4854.000	49.45	-4.39	74.0	24.55	Peak	157.20	150	Vertical	Pass
4**	5751.000	89.0	-2.48	--	-89.00	AV	196.60	150	Vertical	N/A
4	5751.000	95.01	-2.48	--	101.59	Peak	196.60	150	Vertical	Pass
5**	9708.250	48.4	13.80	--	-48.40	AV	341.30	150	Vertical	N/A
5	9708.250	52.72	13.80	68.2	15.48	Peak	341.30	150	Vertical	Pass
6**	12031.250	45.9	16.61	54.0	8.10	AV	82.80	150	Vertical	Pass
6	12031.250	52.64	16.61	74.0	21.36	Peak	82.80	150	Vertical	Pass

1 GHz to 18 GHz, ANT H Band IV11ac40 High channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	2203.000	46.0	-12.71	54.0	8.00	AV	254.10	150	Horizontal	Pass
1	2203.000	49.22	-12.71	74.0	24.78	Peak	254.10	150	Horizontal	Pass
2**	3817.000	37.3	-7.34	54.0	16.70	AV	265.10	150	Horizontal	Pass
2	3817.000	42.29	-7.34	74.0	31.71	Peak	265.10	150	Horizontal	Pass
3**	5790.000	98.9	-2.52	--	-98.90	AV	238.70	150	Horizontal	N/A
3	5790.000	103.61	-2.52	--	135.09	Peak	238.70	150	Horizontal	Pass
4**	7280.312	51.0	13.67	54.0	3.00	AV	165.10	150	Horizontal	Pass
4	7280.312	53.16	13.67	74.0	20.84	Peak	165.10	150	Horizontal	Pass
5**	9708.250	58.3	13.80	--	-58.30	AV	190.90	150	Horizontal	N/A
5	9708.250	62.99	13.80	68.2	5.21	Peak	190.90	150	Horizontal	Pass
6**	11589.937	47.7	15.96	54.0	6.30	AV	232.30	150	Horizontal	Pass
6	11589.937	52.87	15.96	74.0	21.13	Peak	232.30	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V Band IV11ac40 High channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1805.500	45.5	-16.95	--	-45.50	AV	166.50	150	Vertical	N/A
1	1805.500	53.91	-16.95	68.2	14.29	Peak	166.50	150	Vertical	Pass
2**	4046.000	37.5	-7.13	54.0	16.50	AV	117.90	150	Vertical	Pass
2	4046.000	42.20	-7.13	74.0	31.80	Peak	117.90	150	Vertical	Pass
3**	4854.000	49.4	-4.39	54.0	4.60	AV	82.40	150	Vertical	Pass
3	4854.000	52.28	-4.39	74.0	21.72	Peak	82.40	150	Vertical	Pass
4**	5792.000	90.2	-2.54	--	-90.20	AV	131.20	150	Vertical	N/A
4	5792.000	94.76	-2.54	--	36.44	Peak	131.20	150	Vertical	Pass
5**	9708.250	45.8	13.80	--	-45.80	AV	322.90	150	Vertical	N/A
5	9708.250	50.37	13.80	68.2	17.83	Peak	322.90	150	Vertical	Pass
6**	12593.313	47.6	17.77	54.0	6.40	AV	307.20	150	Vertical	Pass
6	12593.313	53.65	17.77	74.0	20.35	Peak	307.20	150	Vertical	Pass

1 GHz to 18 GHz, ANT H Band IV11ac80 Low channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	2170.000	43.7	-12.50	--	-43.70	AV	252.00	150	Horizontal	N/A
1	2170.000	45.32	-12.50	68.2	22.88	Peak	252.00	150	Horizontal	Pass
2**	3893.000	36.2	-6.77	54.0	17.80	AV	0.00	150	Horizontal	Pass
2	3893.000	41.78	-6.77	74.0	32.22	Peak	0.00	150	Horizontal	Pass
3**	5757.000	100.4	-2.60	--	-100.40	AV	65.60	150	Horizontal	N/A
3	5757.000	104.00	-2.60	--	-38.40	Peak	65.60	150	Horizontal	N/A
4**	7281.750	45.6	13.62	54.0	8.40	AV	93.90	150	Horizontal	Pass
4	7281.750	53.29	13.62	74.0	20.71	Peak	93.90	150	Horizontal	Pass
5**	9708.250	54.0	13.80	--	-54.00	AV	89.10	150	Horizontal	N/A
5	9708.250	58.63	13.80	68.2	9.57	Peak	89.10	150	Horizontal	Pass
6**	11934.937	46.9	16.53	54.0	7.10	AV	306.80	150	Horizontal	Pass
6	11934.937	52.71	16.53	74.0	21.29	Peak	306.80	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V Band IV11ac80 Low channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1824.500	45.4	-16.67	--	-45.40	AV	166.10	150	Vertical	N/A
1	1824.500	57.13	-16.67	68.2	11.07	Peak	166.10	150	Vertical	Pass
2**	2991.500	39.4	-9.08	--	-39.40	AV	174.00	150	Vertical	N/A
2	2991.500	48.09	-9.08	68.2	20.11	Peak	174.00	150	Vertical	Pass
3**	5324.000	44.5	0.94	--	-44.50	AV	264.10	150	Vertical	N/A
3	5324.000	50.29	0.94	68.2	17.91	Peak	264.10	150	Vertical	Pass
4**	5776.000	86.4	-2.50	--	-86.40	AV	57.30	150	Vertical	N/A
4	5776.000	92.45	-2.50	--	-35.15	Peak	57.30	150	Vertical	N/A
5**	9708.250	46.3	13.80	--	-46.30	AV	229.60	150	Vertical	N/A
5	9708.250	51.34	13.80	68.2	16.86	Peak	229.60	150	Vertical	Pass
6**	12061.438	47.8	16.82	54.0	6.20	AV	359.00	150	Vertical	Pass
6	12061.438	52.82	16.82	74.0	21.18	Peak	359.00	150	Vertical	Pass

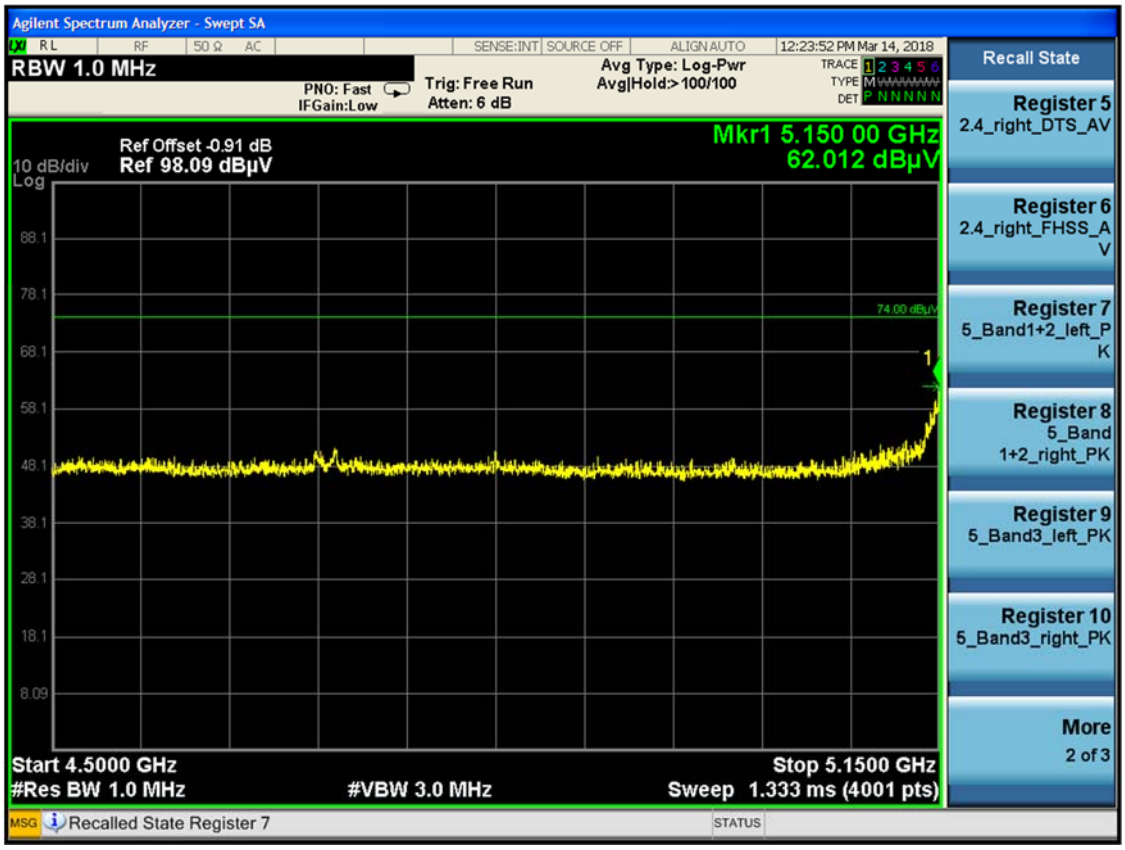
A.7.2 Band Edge (Restricted-band)

Note: The data was tested at the simultaneous launch of two antennas.

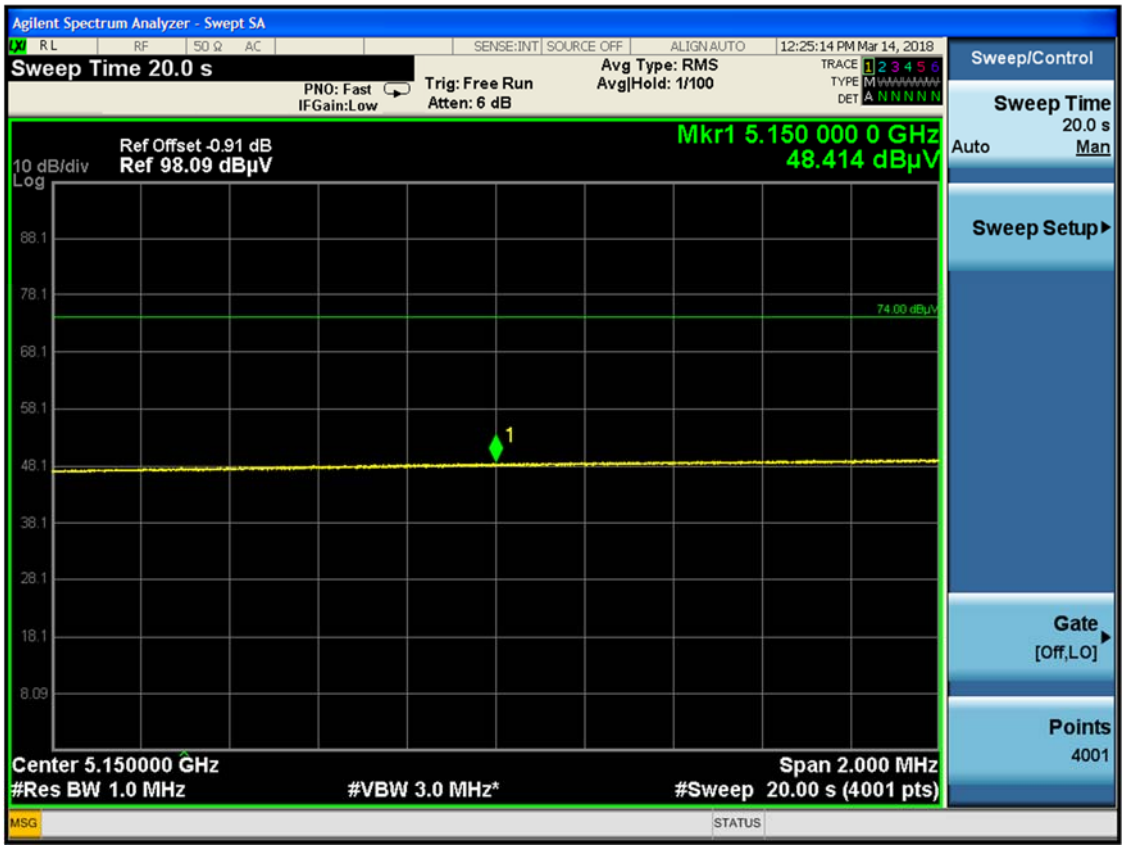
Test Band	Mode	Channel	Verdict
Band I	802.11a	Low	Pass
		High	Pass
	802.11n(HT20)	Low	Pass
		High	Pass
	802.11n(HT40)	Low	Pass
		High	Pass
	802.11ac(HT20)	Low	Pass
		High	Pass
	802.11ac(HT40)	Low	Pass
		High	Pass
	802.11ac(HT80)	Low	Pass
Band IV	802.11a	Low	Pass
		High	Pass
	802.11n(HT20)	Low	Pass
		High	Pass
	802.11n(HT40)	Low	Pass
		High	Pass
	802.11ac(HT20)	Low	Pass
		High	Pass
	802.11ac(HT40)	Low	Pass
		High	Pass
	802.11ac(HT80)	Low	Pass

Test Plots

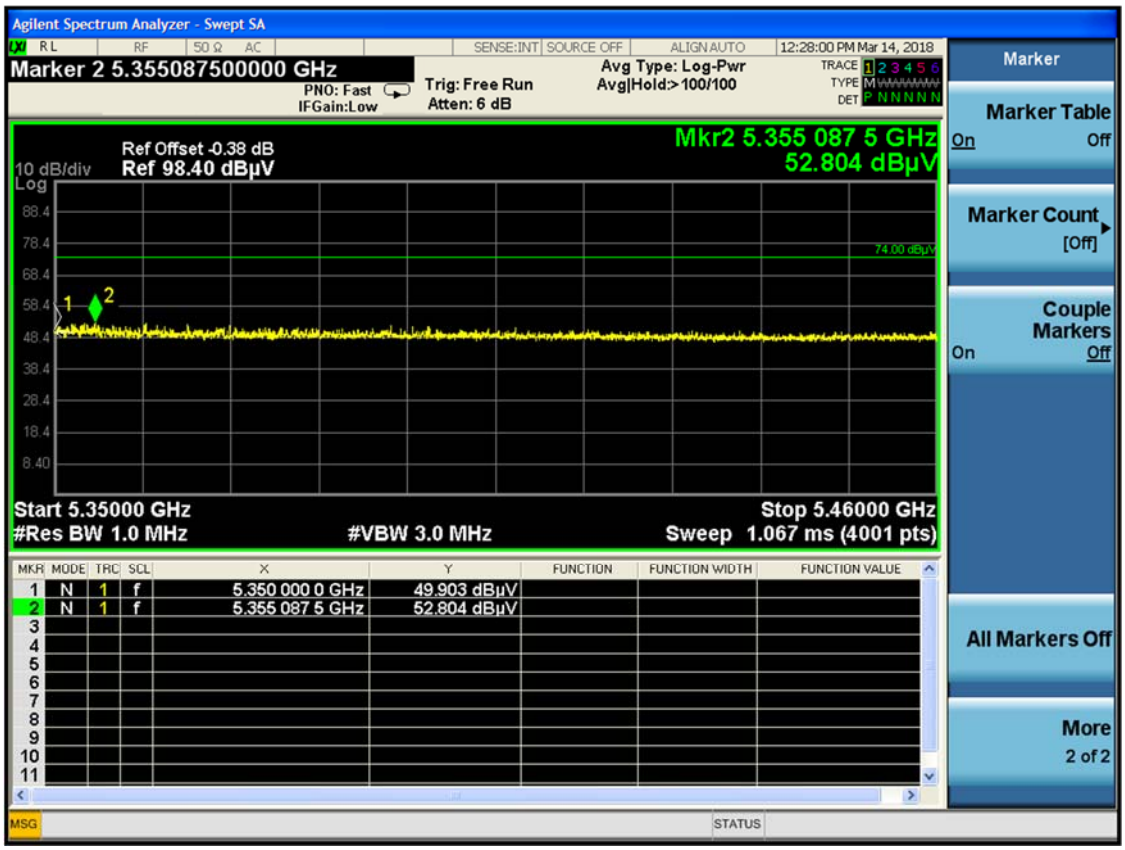
Band I 11a CH36 PK



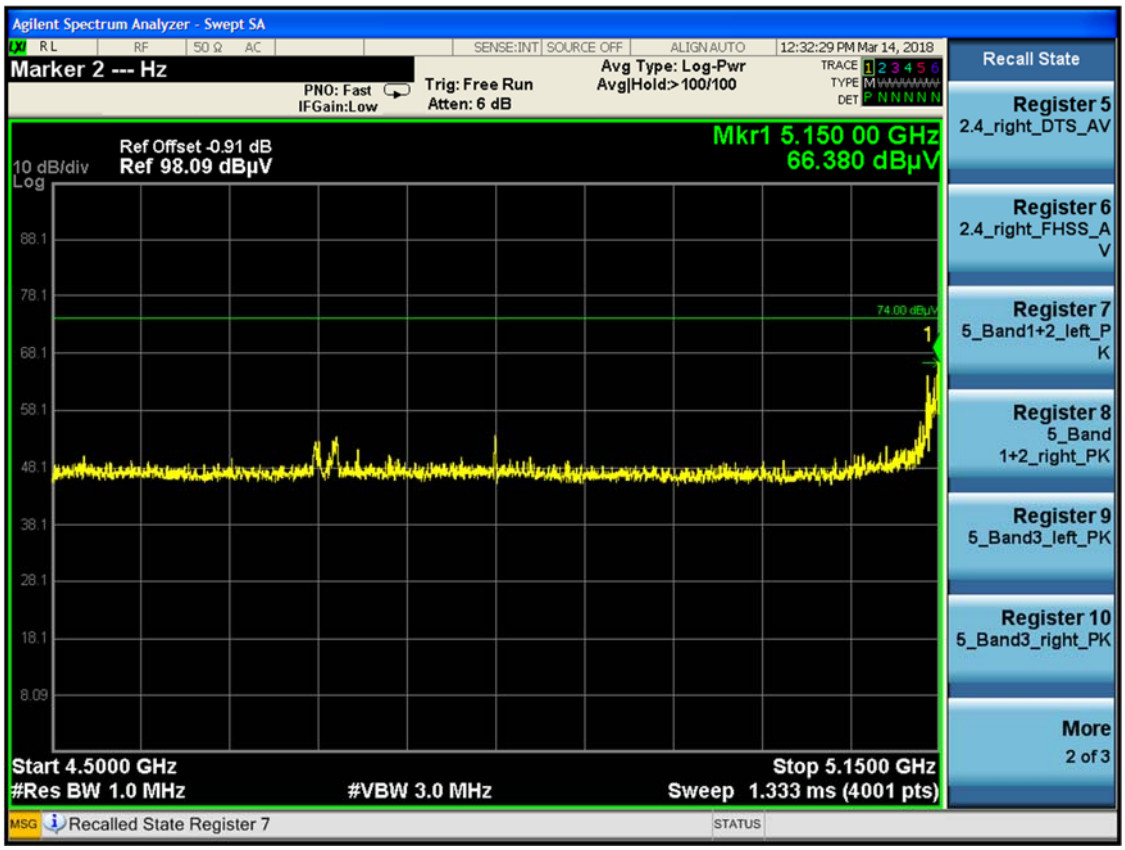
Band I 11a CH36 AV



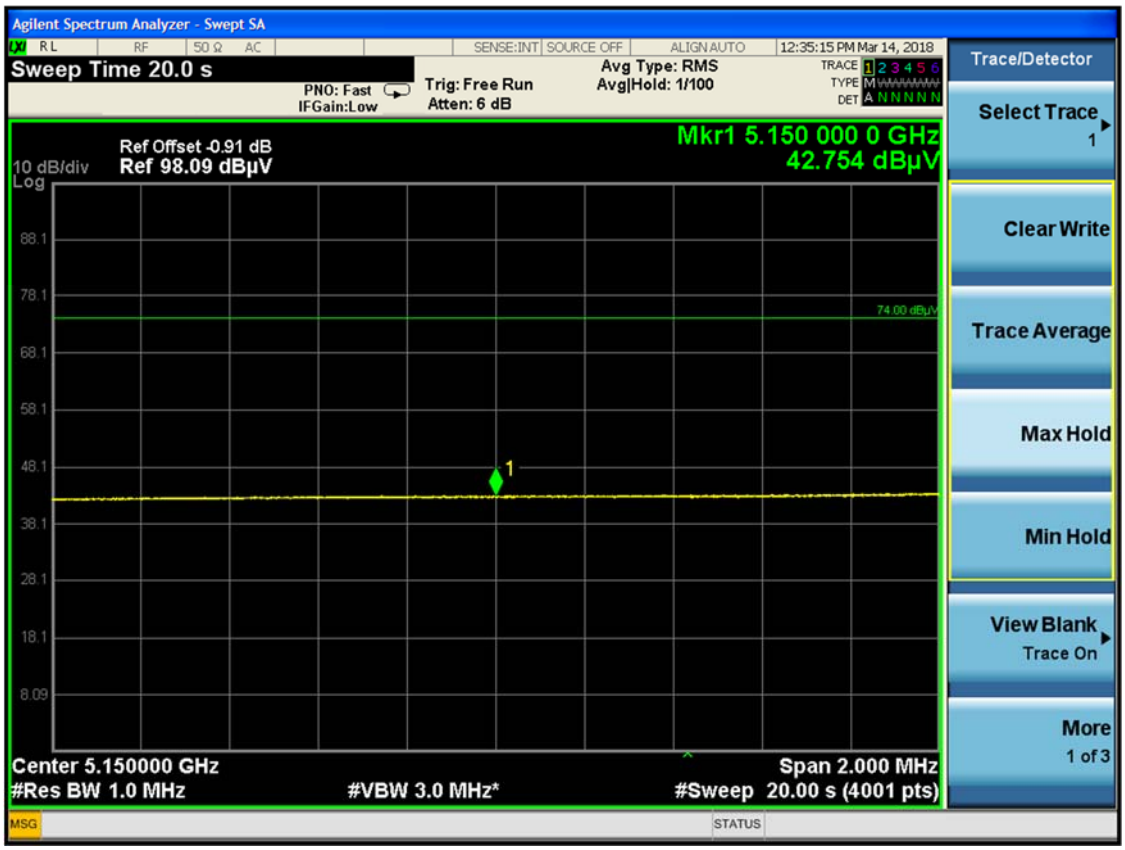
Band I 11a CH48 PK



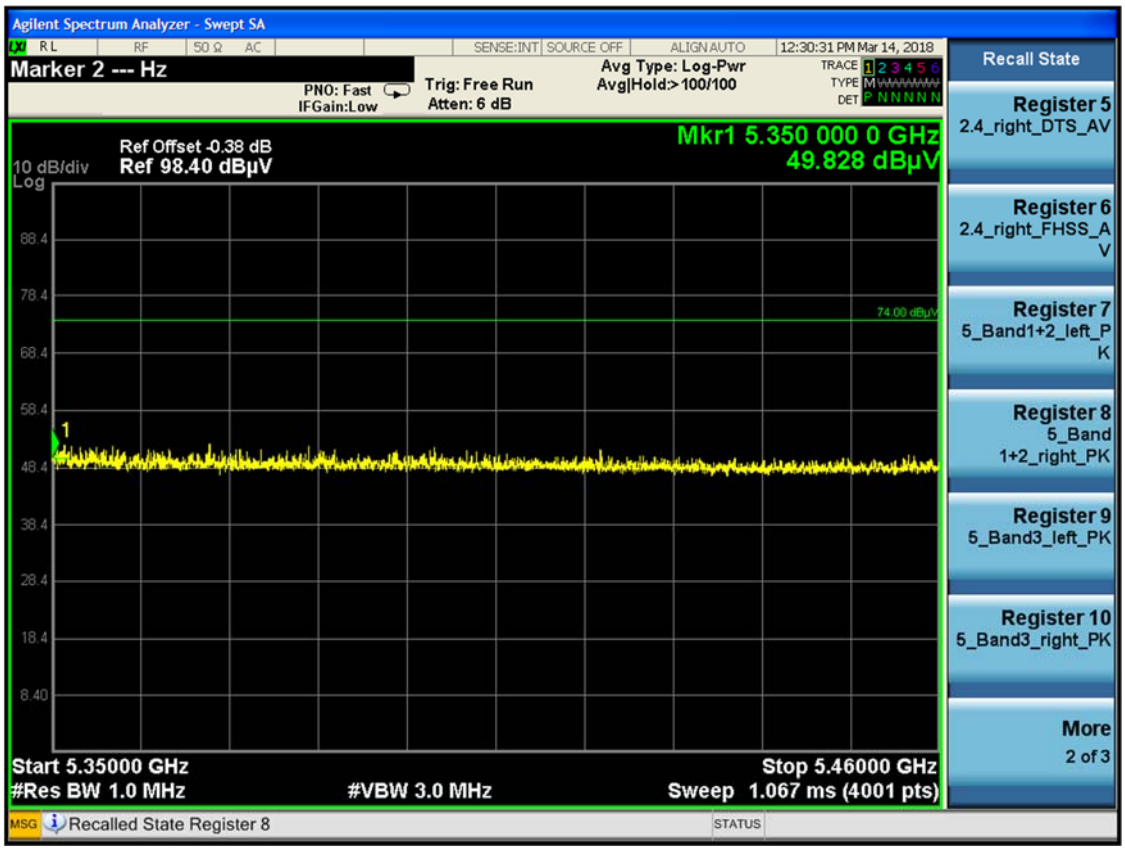
Band I 11n(HT20) CH36 PK



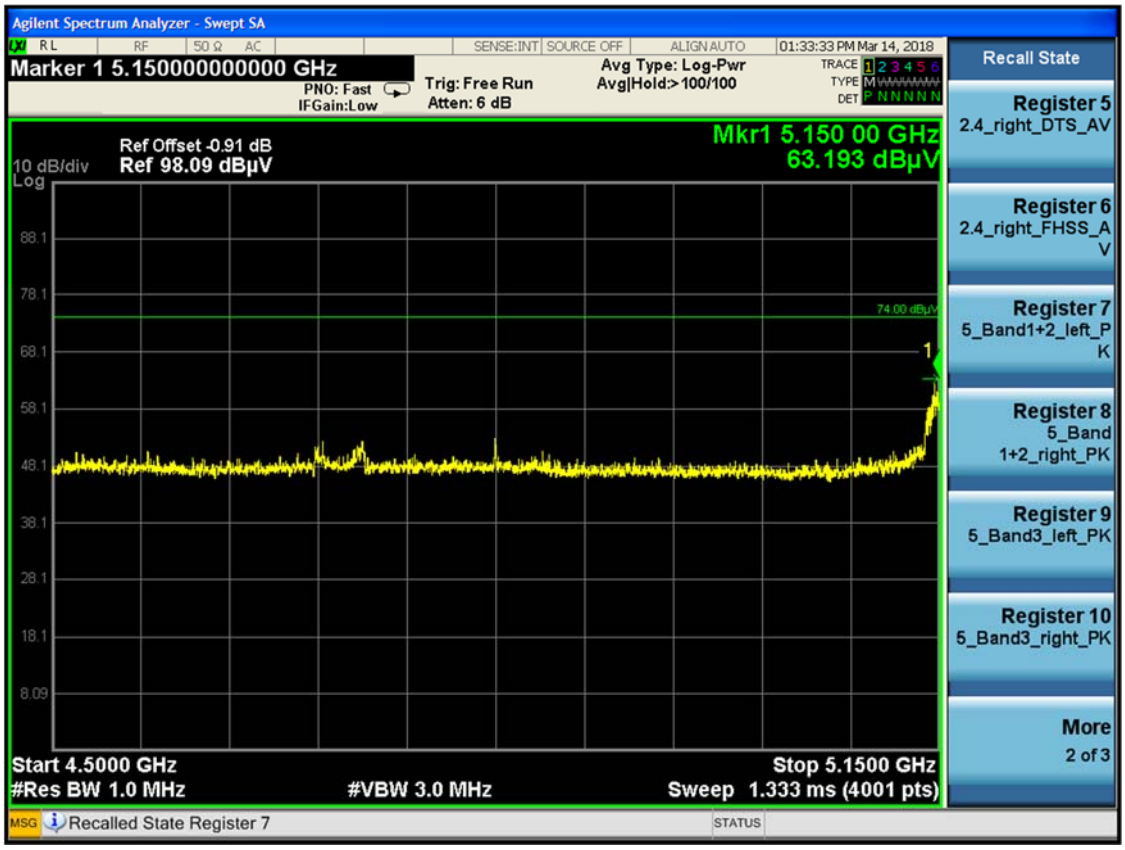
Band I 11n(HT20) CH36 AV



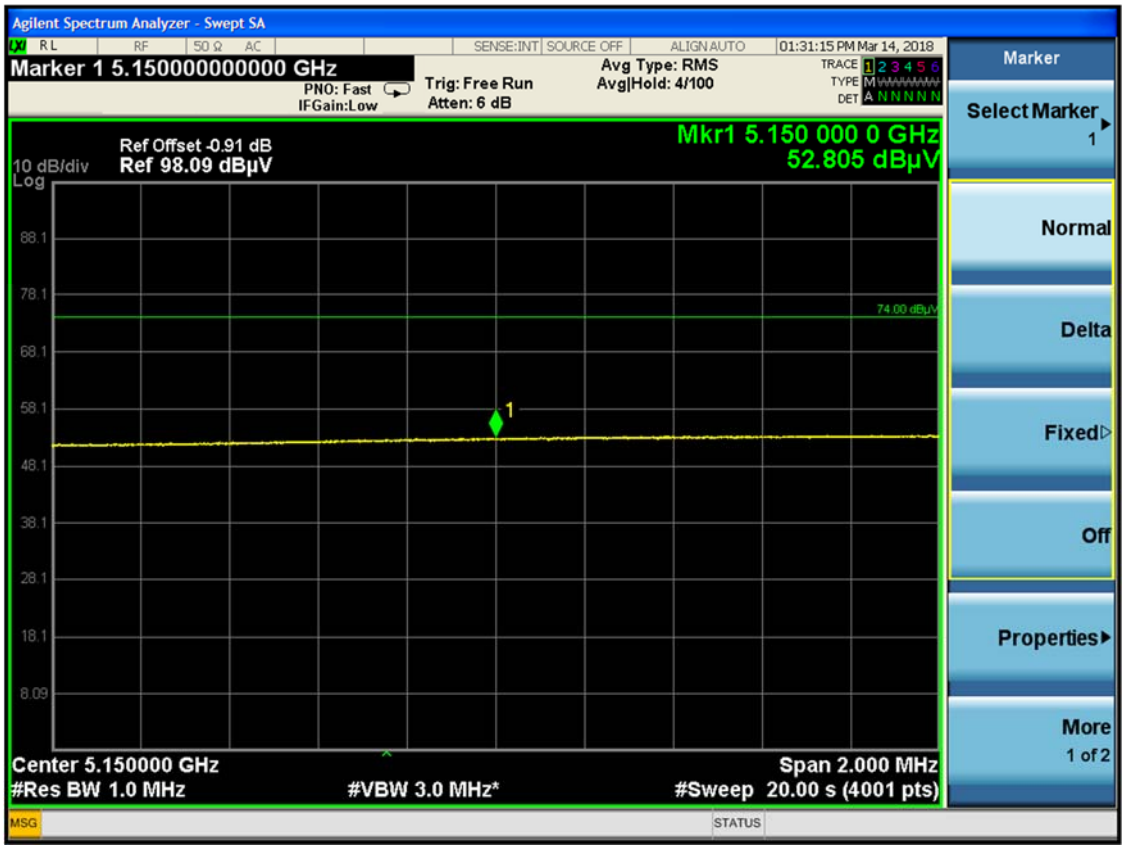
Band I 11n(HT20) CH48 PK



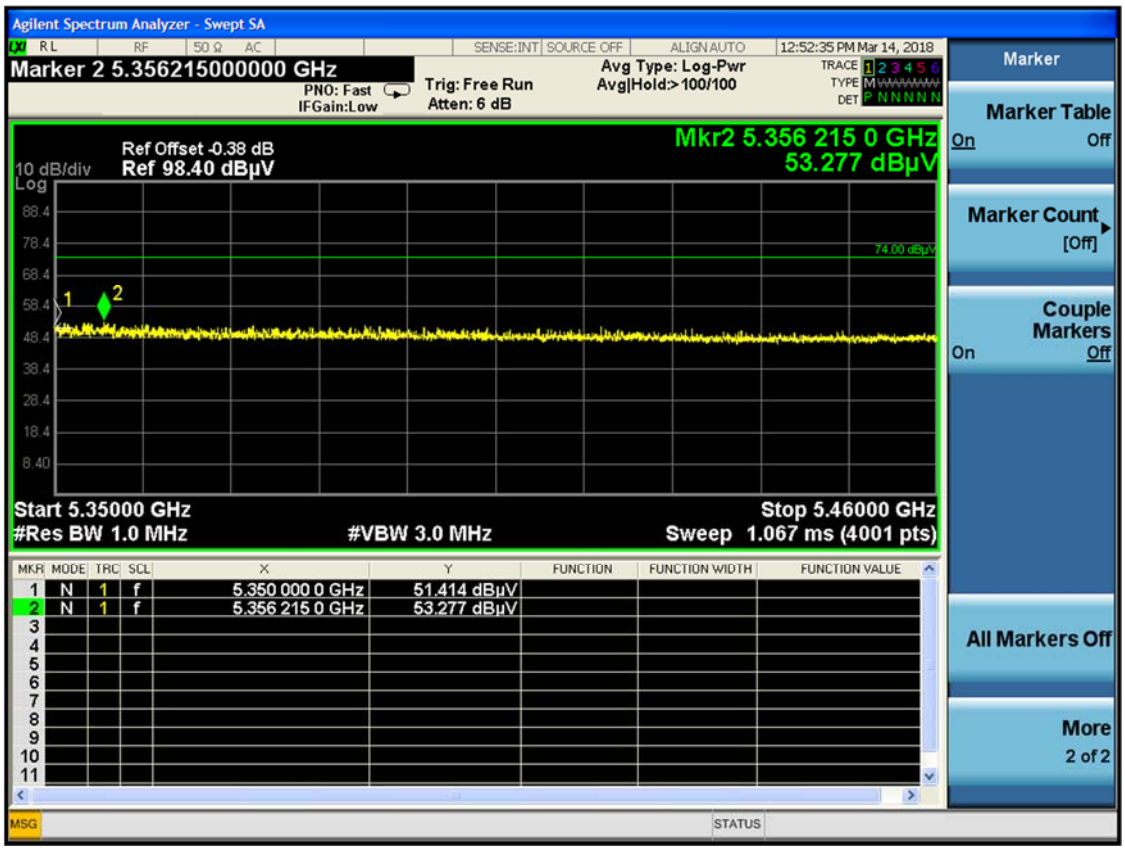
Band I 11n(HT40) CH38 PK



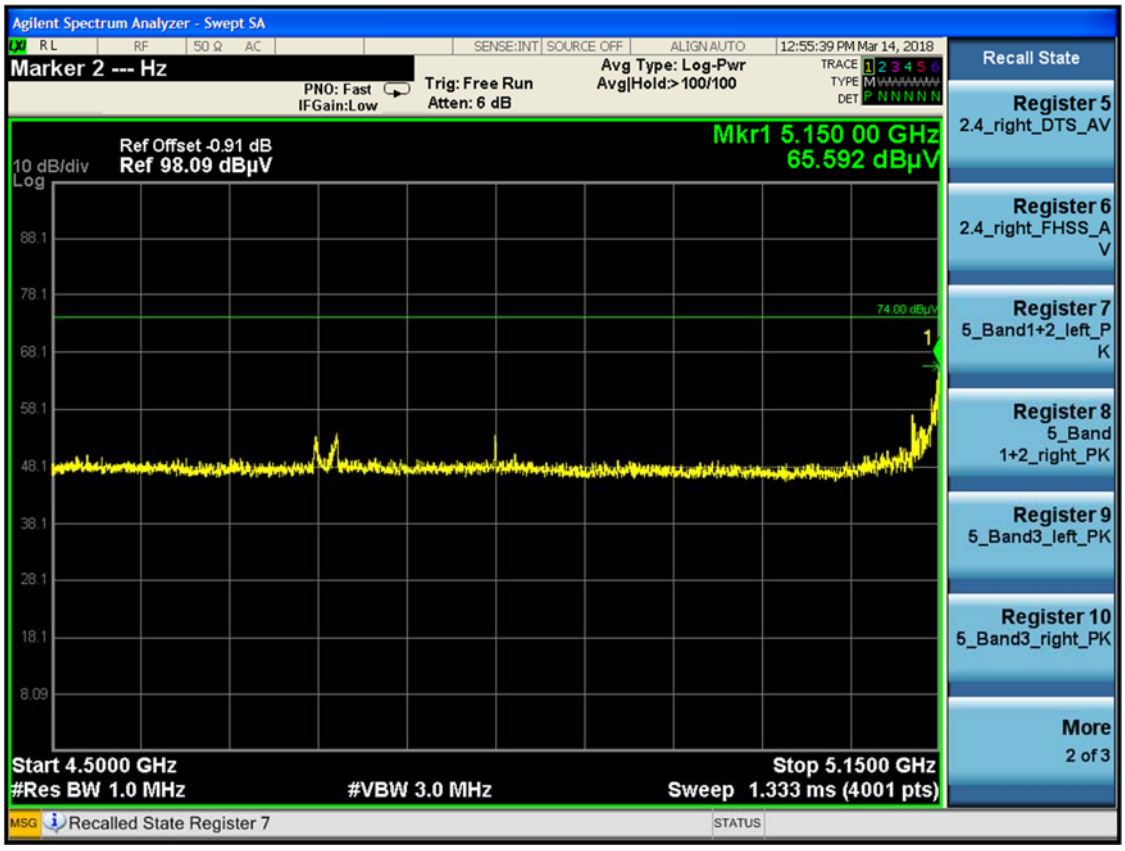
Band I 11n(HT40) CH38 AV



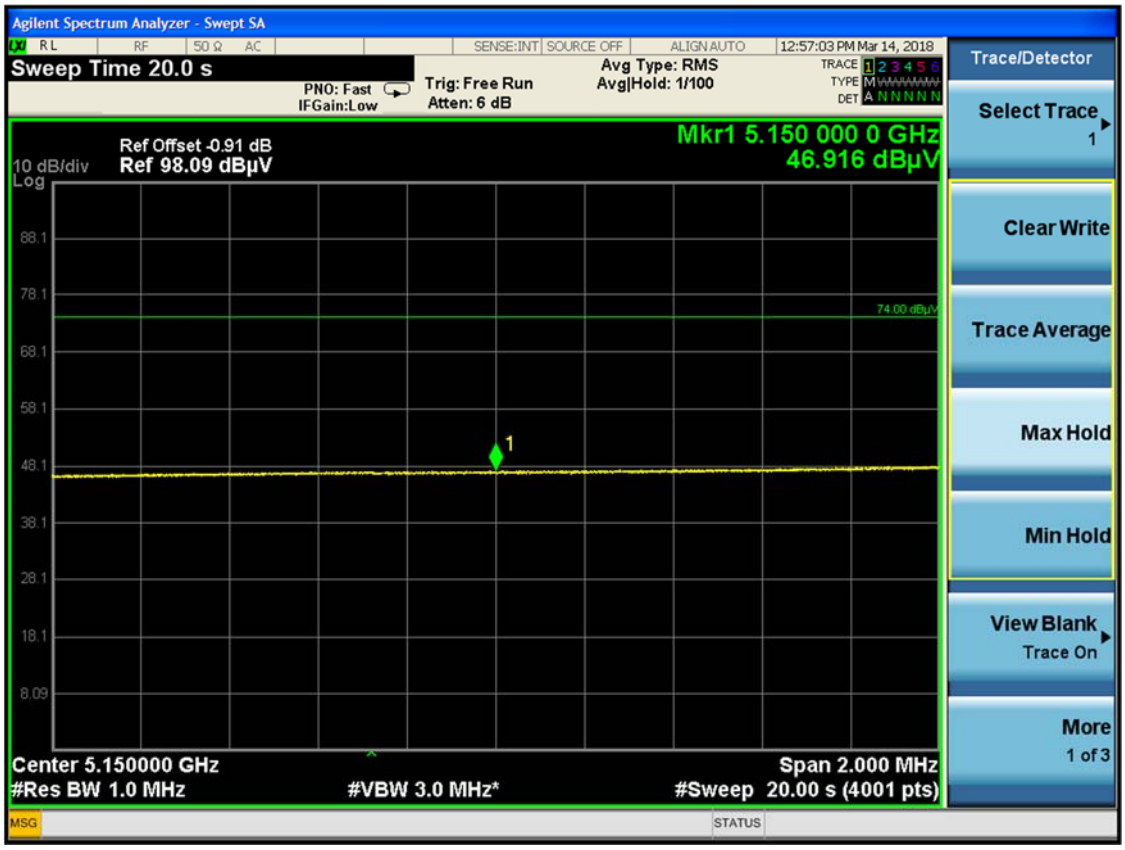
Band I 11ac(HT40) CH46 PK



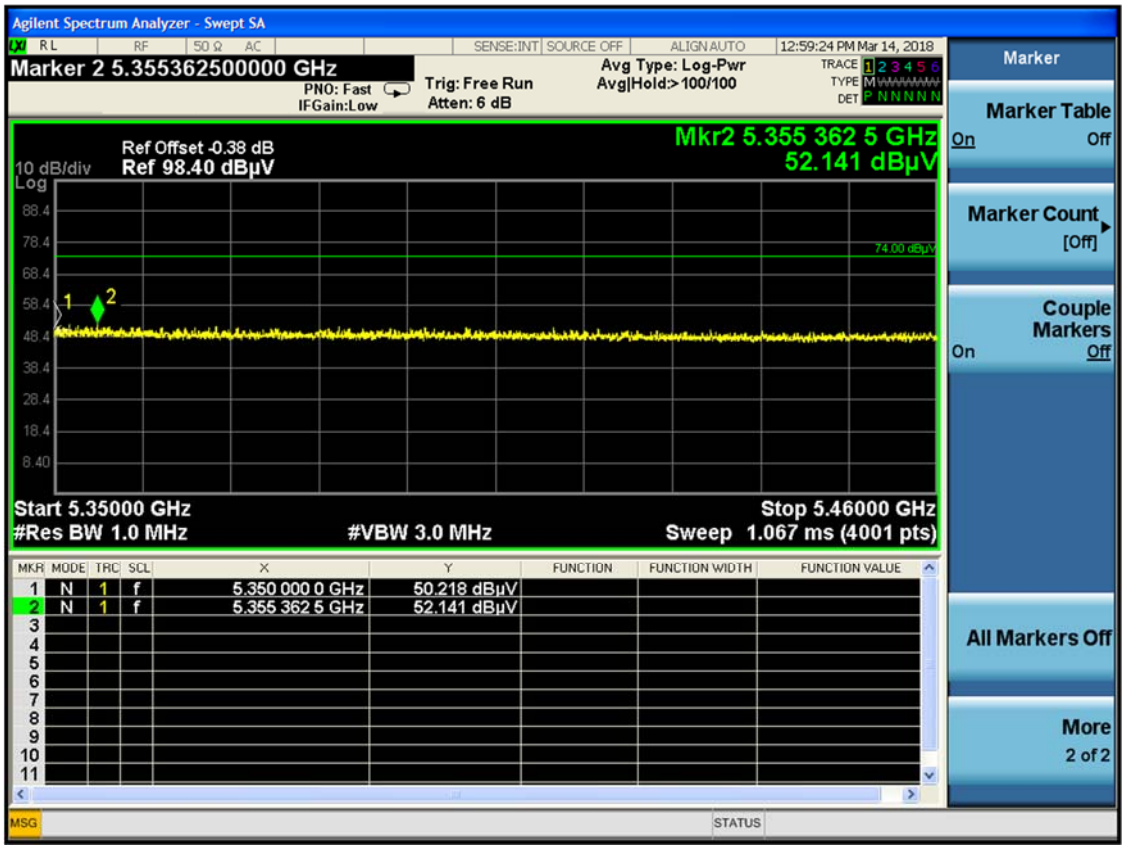
Band I 11ac(HT20) CH36 PK



Band I 11ac(HT20) CH36 AV

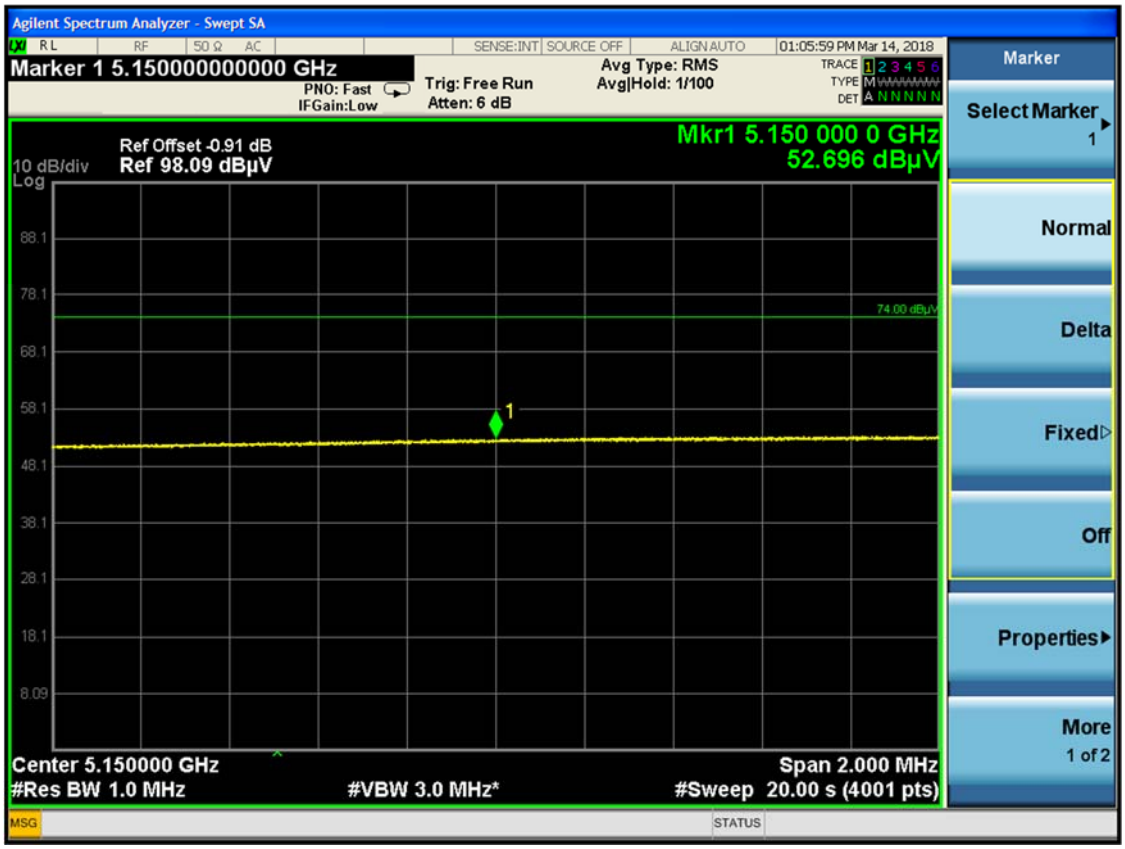


Band I 11ac(HT20) CH48 PK

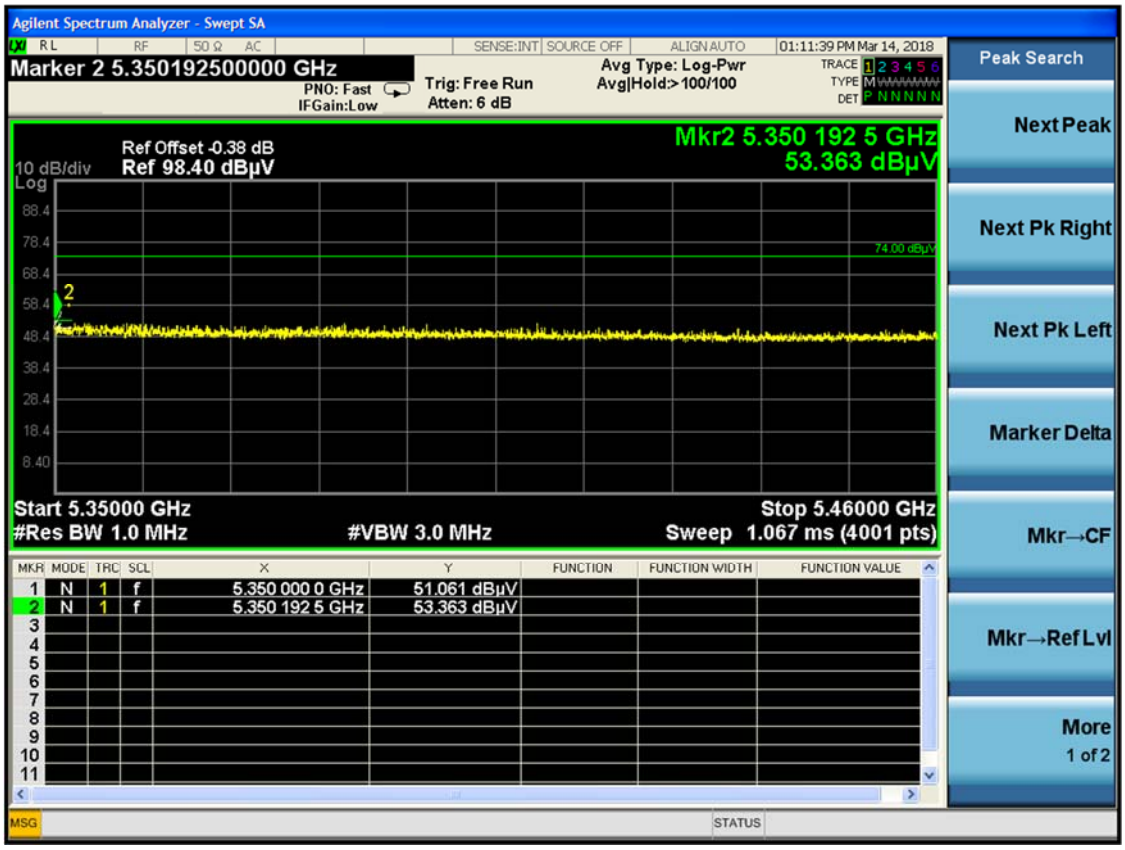


Band I 11ac(HT40) CH38 PK

Band I 11ac(HT40) CH38 AV

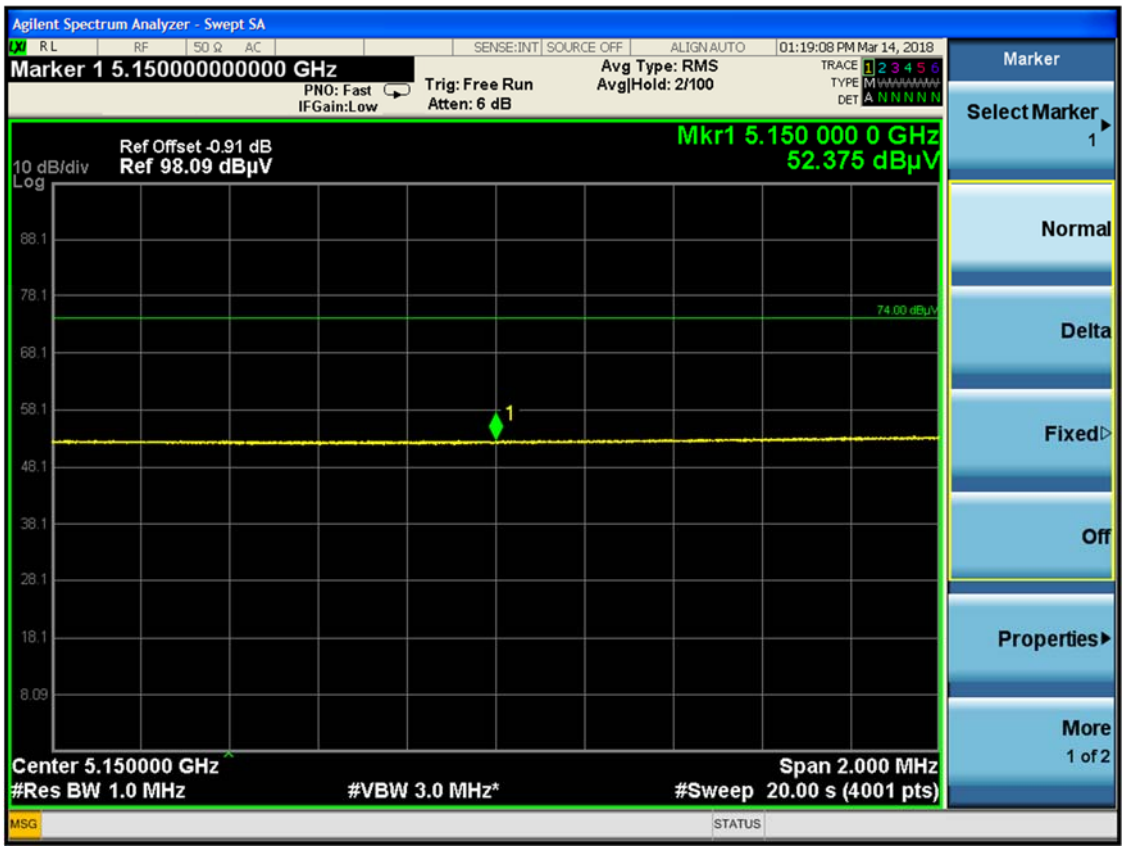


Band I 11ac(HT40) CH46 PK

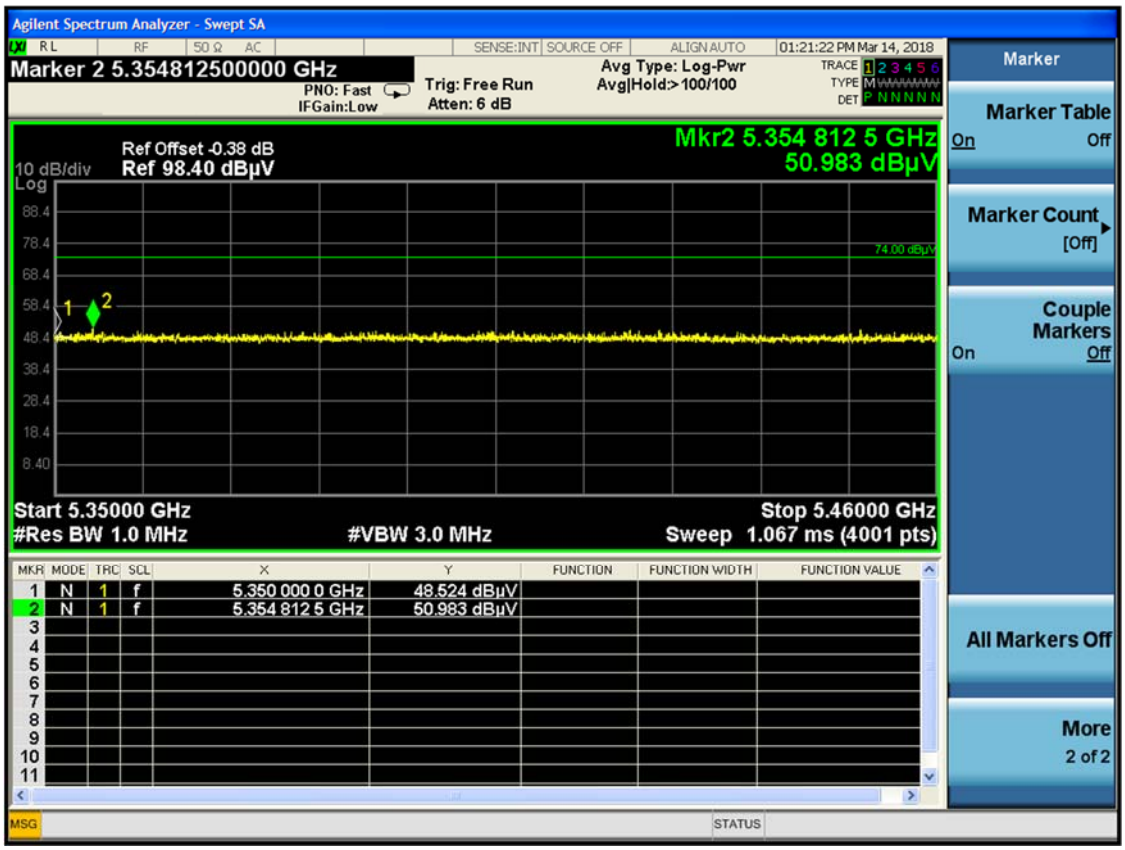


Left Band I 11ac(HT80) CH42 PK

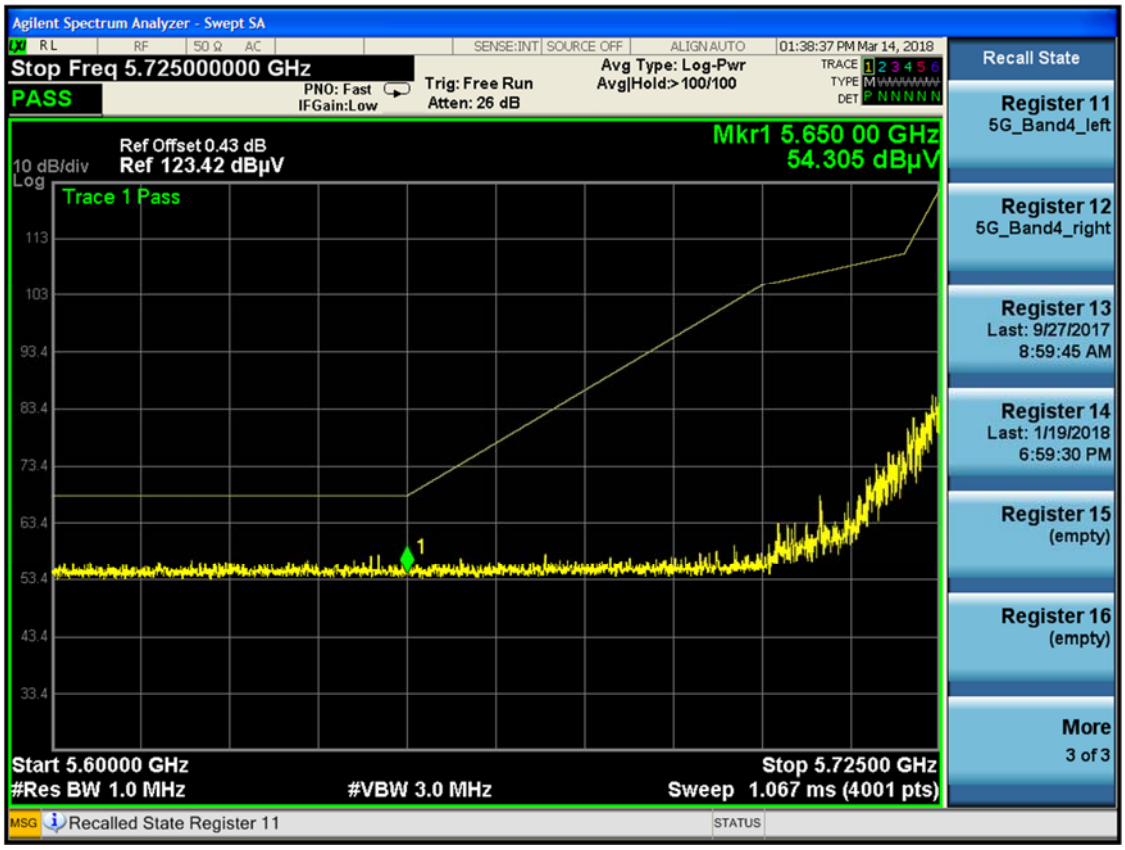
Left Band I 11ac(HT80) CH42 AV



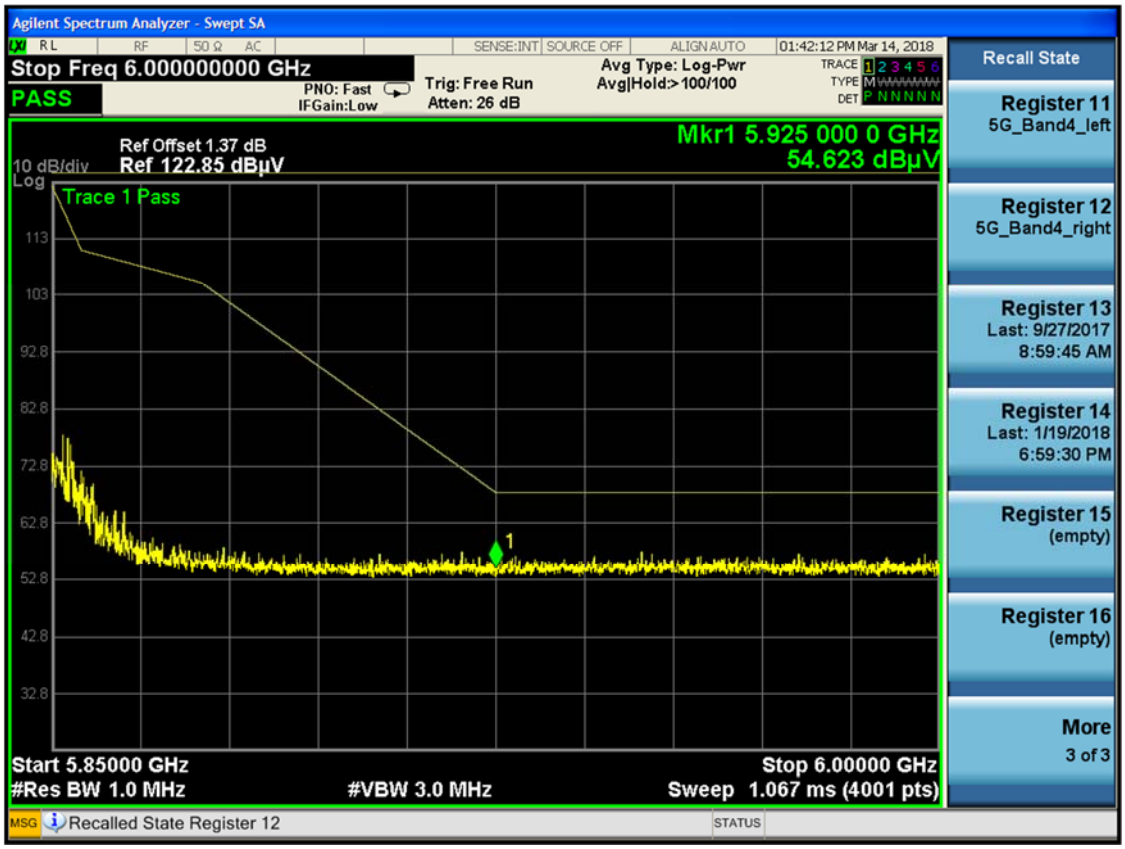
Right Band I 11ac(HT80) CH42 PK



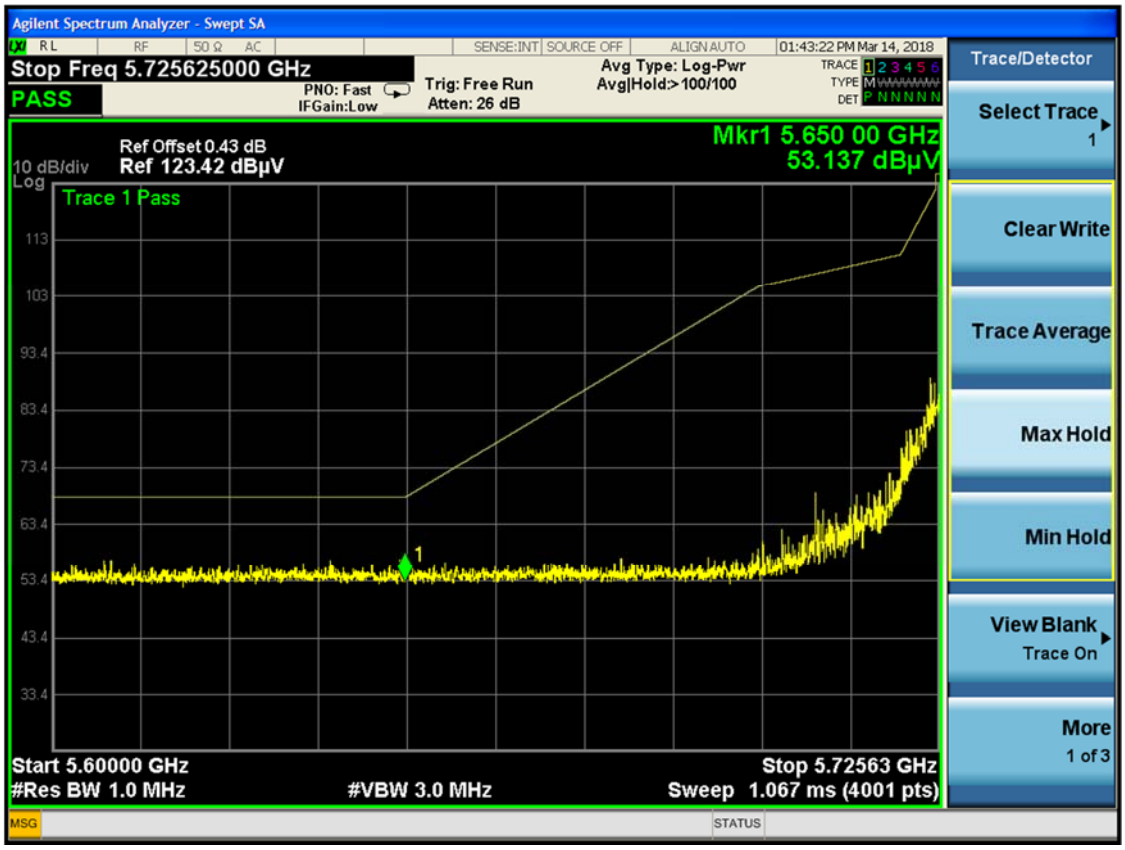
Band IV 11a CH149 PK



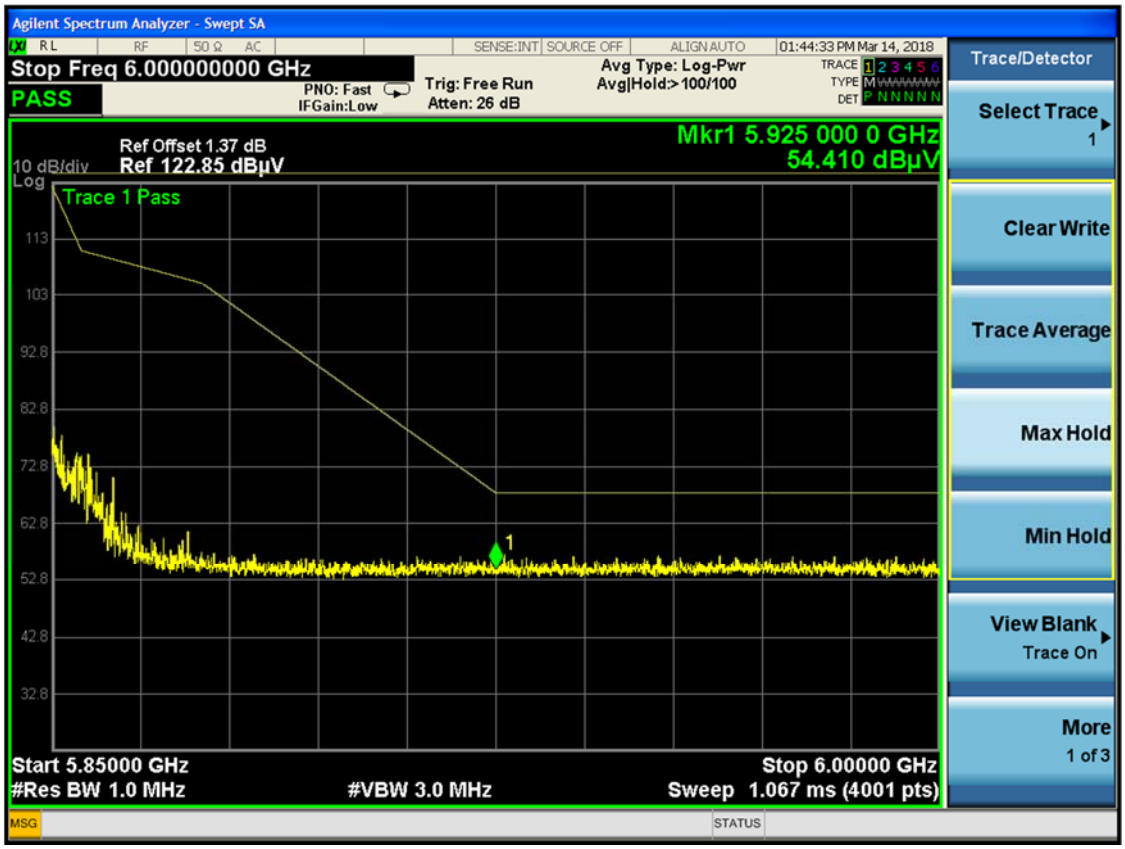
Band IV 11a CH165 PK



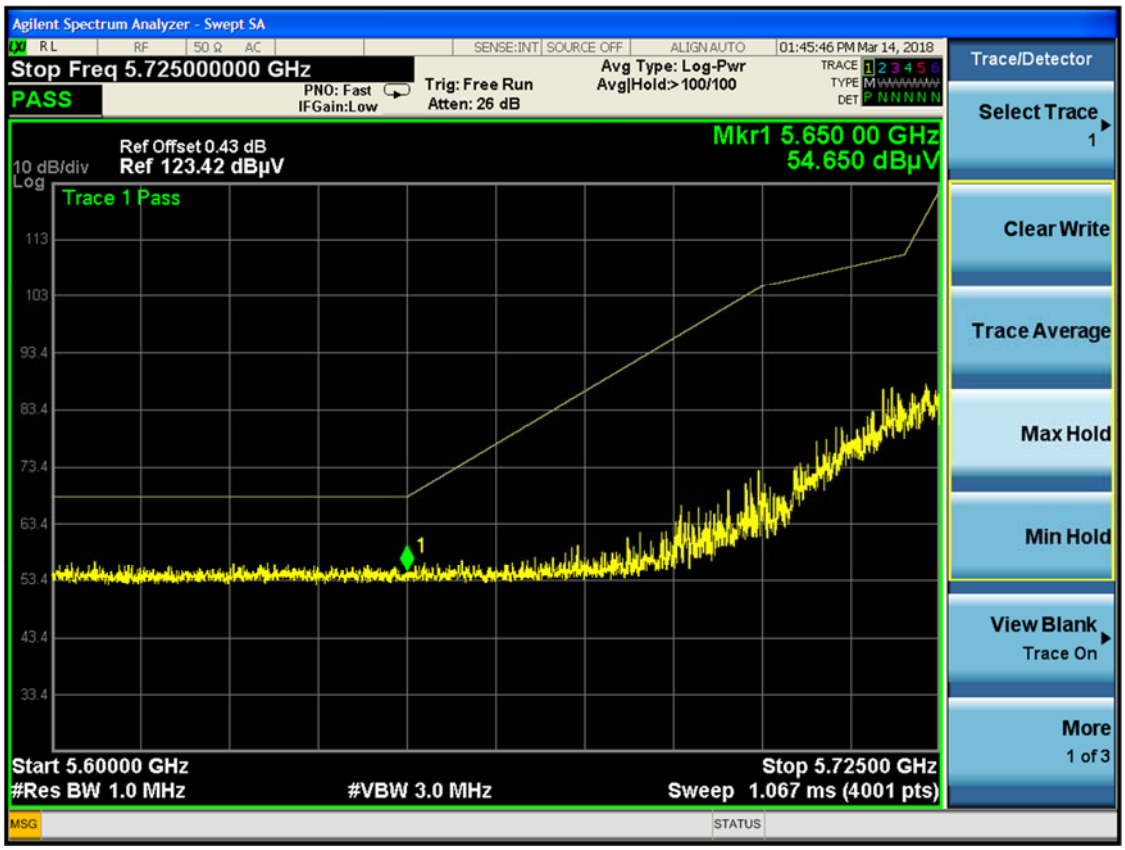
Band IV 11n(HT20) CH149 PK



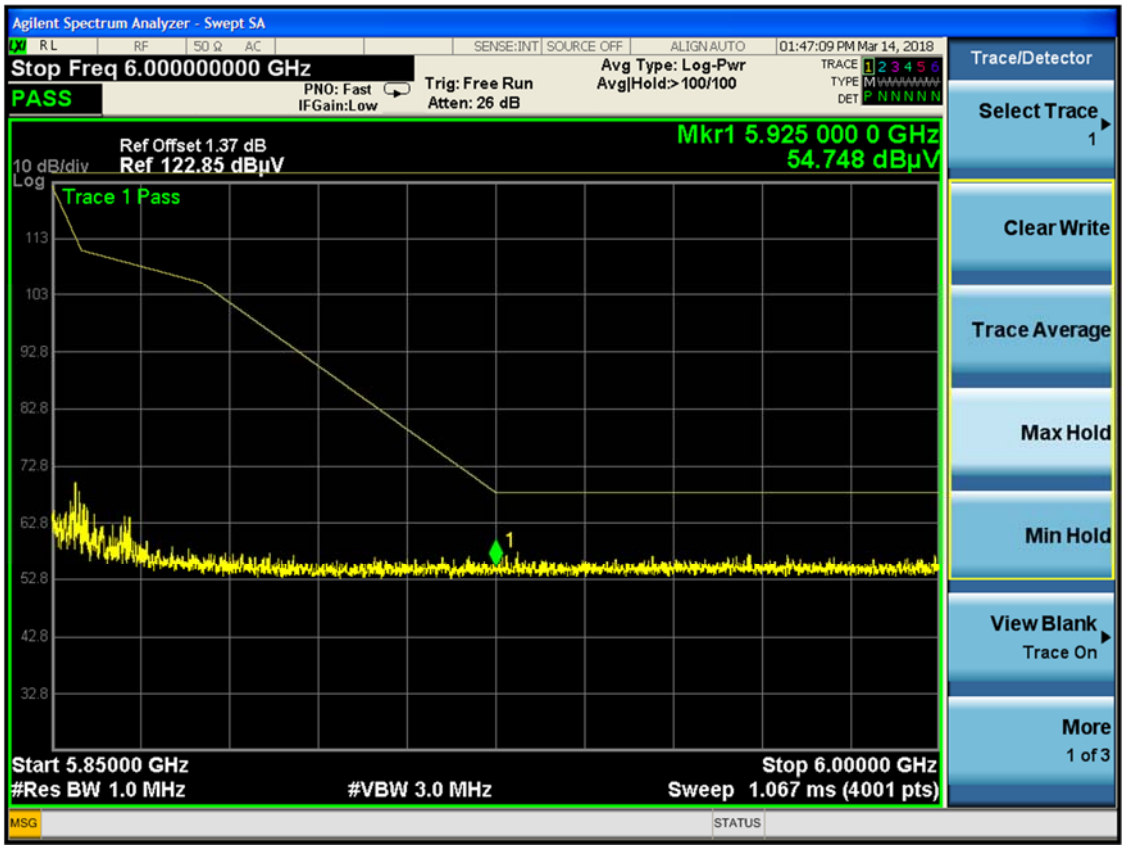
Band IV 11n(HT20) CH165 PK



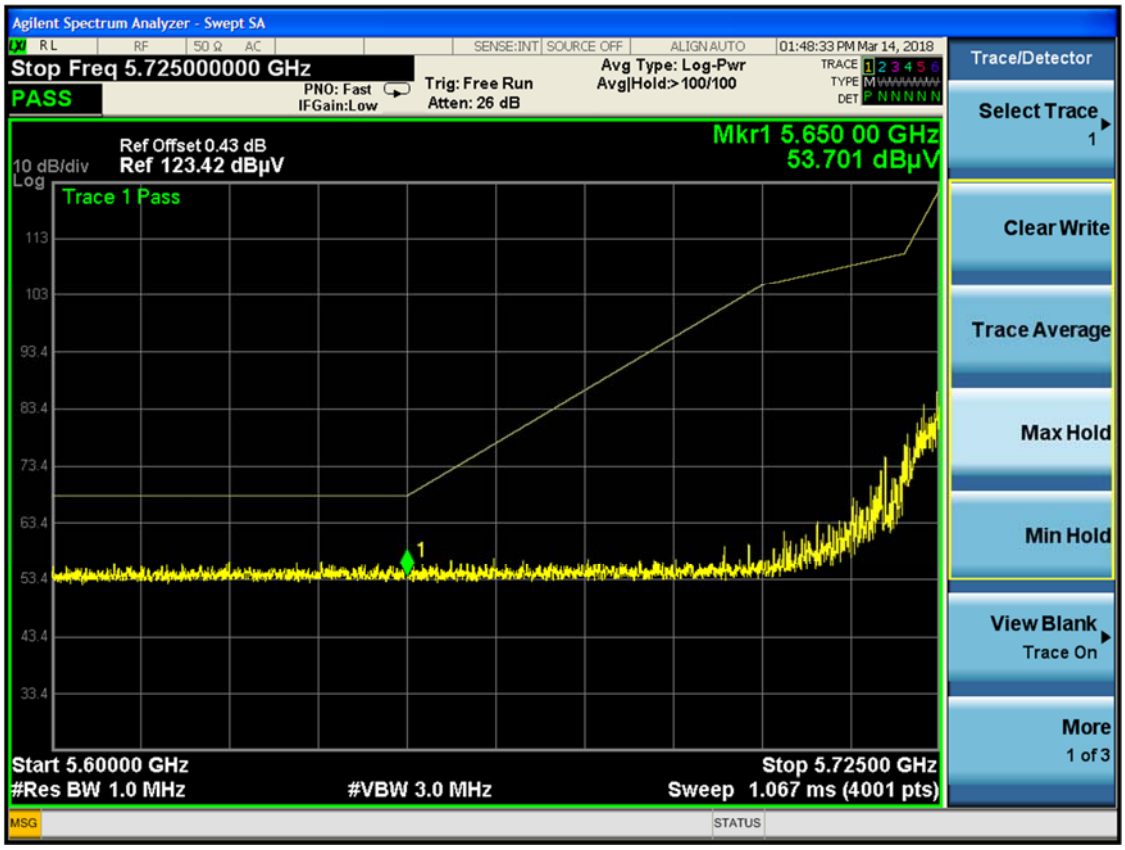
Band IV 11n(HT40) CH151 PK



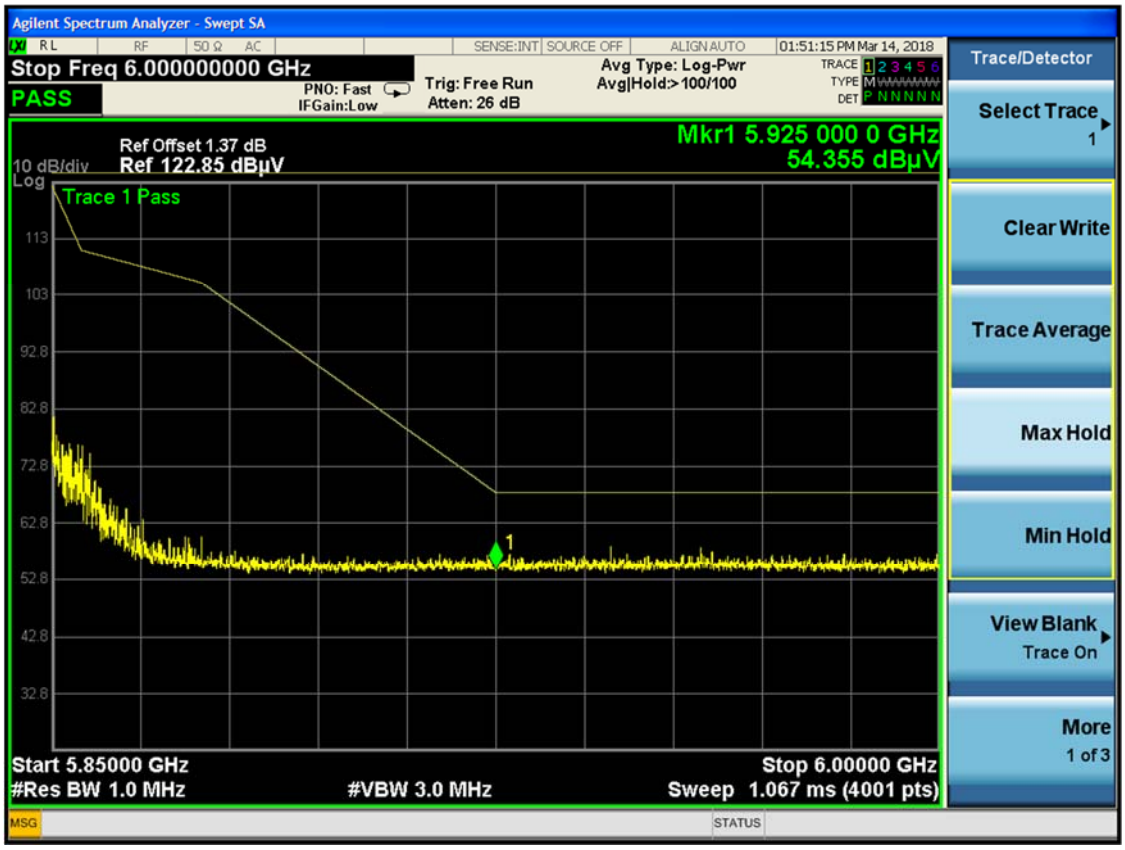
Band IV 11n(HT40) CH159 PK



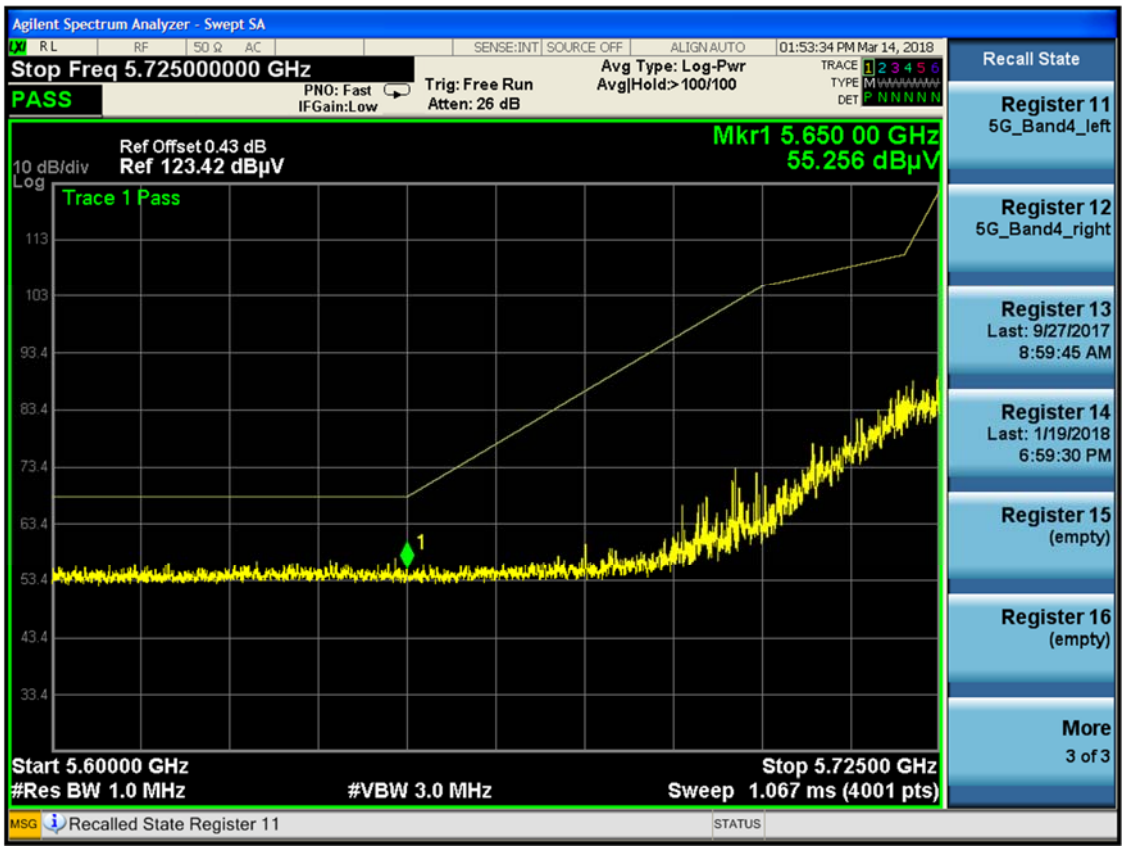
Band IV 11ac(HT20) CH149 PK



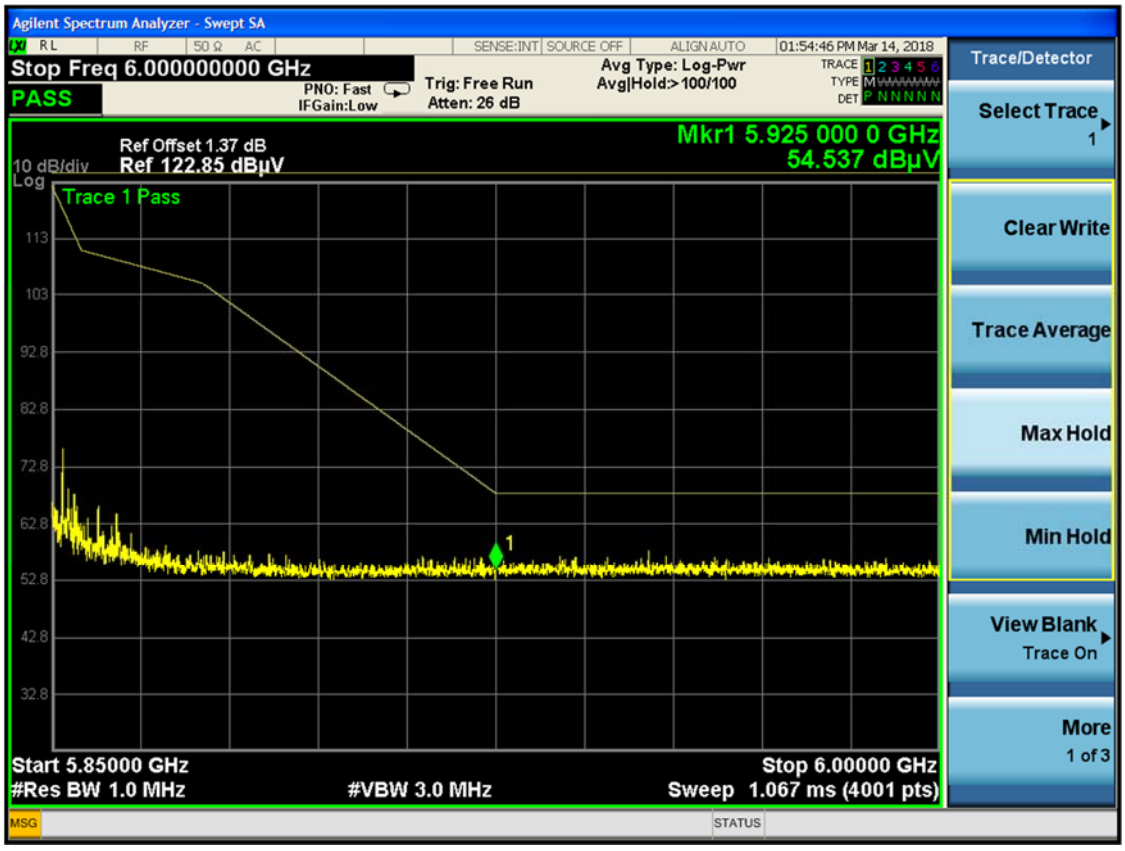
Band IV 11ac(HT20) CH165 PK



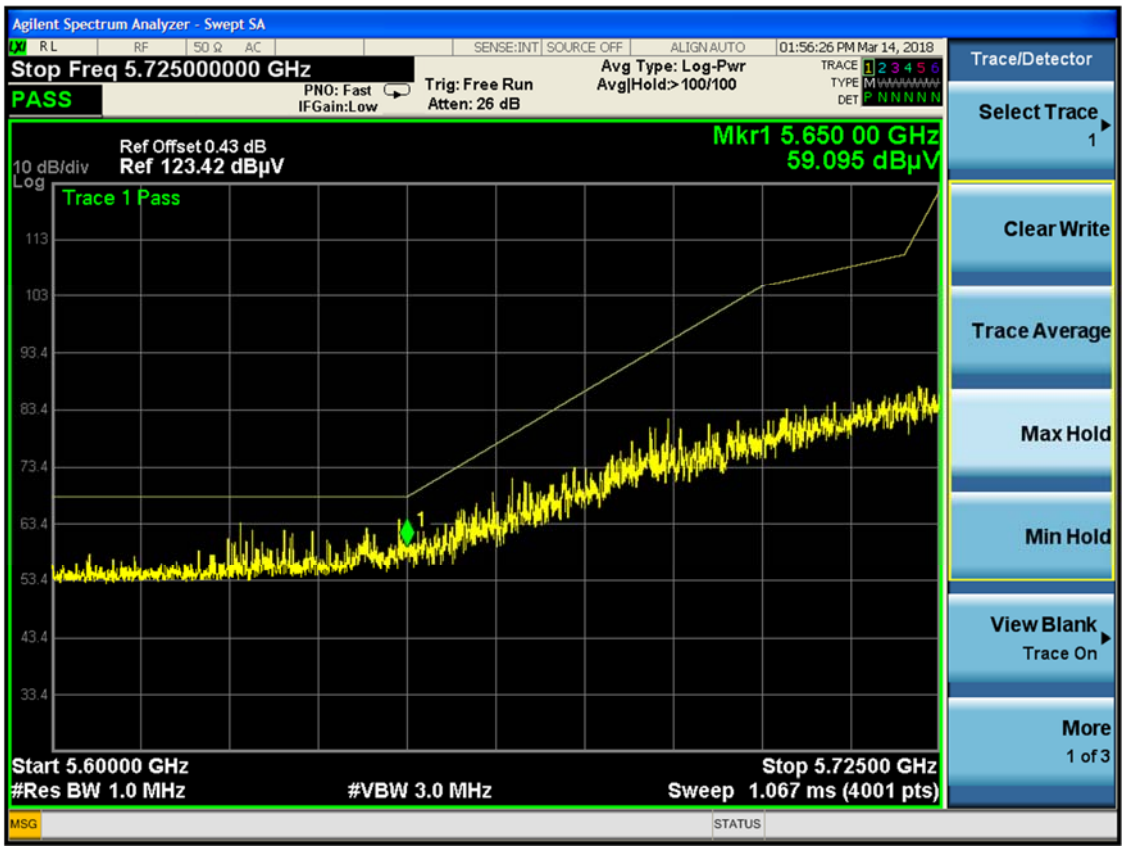
Band IV 11ac(HT40) CH151 PK



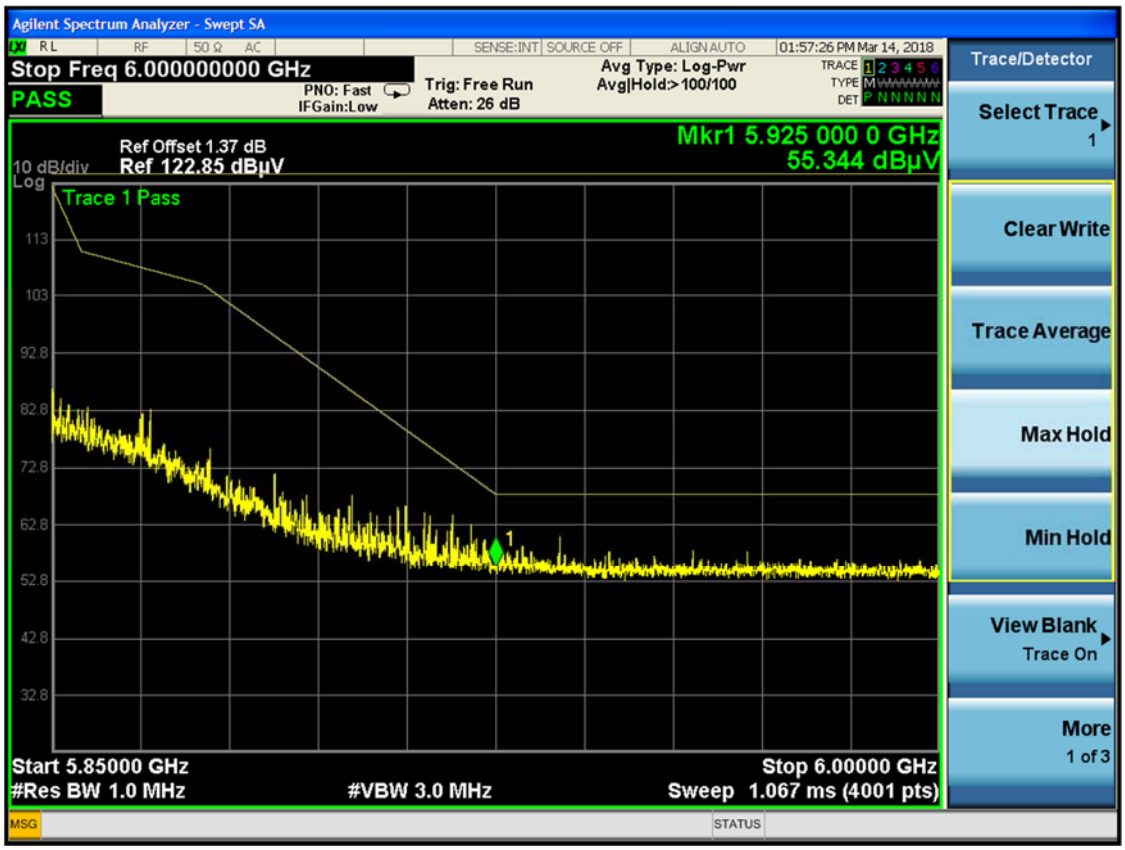
Band IV 11ac(HT40) CH159 PK



Left Band IV 11ac(HT80) CH155 PK



Right Band IV 11ac(HT80) CH155 PK



A.8 Frequency Stability

Note：Only the worst data were shown in this report.

ANT 0

Voltage vs. Frequency Stability (5180 MHz)

Test Conditions		Test Frequency (MHz)	0 Minute		2 Minute		5 Minute		10Minute	
TEMP. (°C)	Voltage (VDC)		Measurement Frequency (MHz)	Max. Deviation (ppm)	Measurement Frequency (MHz)	Max. Deviation (ppm)	Measurement Frequency (MHz)	Max. Deviation (ppm)	Measurement Frequency (MHz)	Max. Deviation (ppm)
20	110	5180	5179.983647	-3.16	5180.012849	2.48	5180.010564	2.04	5180.014883	2.87
	120	5180	5180.041819	8.07	5180.039562	7.64	5180.017511	3.38	5180.03692	7.13
	130	5180	5180.033784	6.52	5180.028423	5.49	5180.004445	0.86	5179.985498	-2.80

Temperature vs. Frequency Stability (5180 MHz)

Test Conditions		Test Frequency (MHz)	0 Minute		2 Minute		5 Minute		10Minute	
Voltage (VDC)	TEMP. (°C)		Measurement Frequency (MHz)	Max. Deviation (ppm)	Measurement Frequency (MHz)	Max. Deviation (ppm)	Measurement Frequency (MHz)	Max. Deviation (ppm)	Measurement Frequency (MHz)	Max. Deviation (ppm)
120	0	5180	5180.036596	7.06	5179.953088	-9.06	5179.991903	-1.56	5180.020406	3.94
	5	5180	5180.03102	5.99	5180.003445	0.67	5180.017992	3.47	5180.010491	2.03
	10	5180	5180.034677	6.69	5180.004207	0.81	5180.03821	7.38	5180.0162	3.13
	15	5180	5179.963956	-6.96	5180.048169	9.30	5180.011371	2.20	5179.983865	-3.11
	20	5180	5180.024972	4.82	5179.987592	-2.40	5179.980418	-3.78	5180.012175	2.35
	25	5180	5180.031202	6.02	5180.047468	9.16	5180.025473	4.92	5180.006212	1.20
	30	5180	5180.025687	4.96	5179.979254	-4.01	5179.955119	-8.66	5179.981859	-3.50
	40	5180	5180.019443	3.75	5180.019325	3.73	5180.037081	7.16	5180.048505	9.36
	45	5180	5180.019877	3.84	5180.049811	9.62	5180.022193	4.28	5180.029621	5.72

ANT 1

Voltage vs. Frequency Stability (5180 MHz)

Test Conditions		Test Frequency (MHz)	0 Minute		2 Minute		5 Minute		10Minute	
TEMP. (°C)	Voltage (VDC)		Measurement Frequency (MHz)	Max. Deviation (ppm)	Measurement Frequency (MHz)	Max. Deviation (ppm)	Measurement Frequency (MHz)	Max. Deviation (ppm)	Measurement Frequency (MHz)	Max. Deviation (ppm)
20	110	5180	5179.954902	-8.71	5180.001683	0.32	5180.014693	2.84	5179.967588	-6.26
	120	5180	5180.030238	5.84	5179.981064	-3.66	5180.045191	8.72	5180.008562	1.65
	130	5180	5180.02321	4.48	5180.000855	0.17	5180.049934	9.64	5180.032028	6.18

Temperature vs. Frequency Stability (5180 MHz)

Test Conditions		Test Frequency (MHz)	0 Minute		2 Minute		5 Minute		10Minute	
Voltage (VDC)	TEMP. (°C)		Measurement Frequency (MHz)	Max. Deviation (ppm)	Measurement Frequency (MHz)	Max. Deviation (ppm)	Measurement Frequency (MHz)	Max. Deviation (ppm)	Measurement Frequency (MHz)	Max. Deviation (ppm)
120	0	5180	5179.956615	-8.38	5180.041574	8.03	5180.043869	8.47	5179.97255	-5.30
	5	5180	5180.04246	8.20	5180.044874	8.66	5180.006963	1.34	5180.021768	4.20
	10	5180	5180.000127	0.02	5180.045674	8.82	5180.023746	4.58	5180.049525	9.56
	15	5180	5180.013844	2.67	5179.985152	-2.87	5179.957029	-8.30	5180.033418	6.45
	20	5180	5179.974876	-4.85	5180.026137	5.05	5180.04386	8.47	5179.991433	-1.65
	25	5180	5180.028062	5.42	5180.029536	5.70	5180.026648	5.14	5180.014755	2.85
	30	5180	5179.965989	-6.57	5180.012317	2.38	5180.013505	2.61	5179.959557	-7.81
	40	5180	5180.021528	4.16	5179.970055	-5.78	5180.021687	4.19	5180.007152	1.38
	45	5180	5180.004188	0.81	5180.01673	3.23	5180.021536	4.16	5180.040263	7.77

ANNEX B TEST SETUP PHOTOS

Please refer the document “BL-SZ1810293-AR.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “BL- SZ1810293-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “BL- SZ1810293-AI.PDF”.

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