FCC RF TEST REPORT

ISSUED BY
Shenzhen BALUN Technology Co., Ltd.

FOR

Vital Signs Monitor

ISSUED TO
Edan Instruments, Inc

#15 Jinhui Road, Jinsha Community, Kengzi Sub-District, Pingshan District, 518122 Shenzhen P.R. China

Prepared by: Ye Hongji
Date: Aug. 25, 2020

Approved by: Wei Yanquan (Chief Engineer)
Date: Aug. 25, 2020

Report No.:	BL-SZ2070401-604
EUT Name:	Vital Signs Monitor
Model Name:	iM3s
Brand Name:	EDAN
Test Standard:	47 CFR Part 15 Subpart E
FCC ID:	SMQIM3SEDAN
Test Conclusion:	Pass
Test Date:	Jul. 16, 2020 ~ Jul. 24, 2020
Date of Issue:	Aug. 25, 2020

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Revision History

Version	Issue Date	Revisions Content
Rev. 01	Aug. 25, 2020	Initial Issue

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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 v4.4.

(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.

(7) The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.

2 PRODUCT INFORMATION

2.1 Applicant

Applicant	Edan Instruments, Inc
Address	#15 Jinhui Road, Jinsha Community, Kengzi Sub-District, Pingshan District, 518122 Shenzhen P.R. China

2.2 Manufacturer

Manufacturer	Edan Instruments, Inc
Address	#15 Jinhui Road, Jinsha Community, Kengzi Sub-District, Pingshan District, 518122 Shenzhen P.R. China

2.3 Factory

Factory	Edan Instruments, Inc
Address	#15 Jinhui Road, Jinsha Community, Kengzi Sub-District, Pingshan District, 518122 Shenzhen P.R. China

2.4 General Description for Equipment under Test (EUT)

EUT Name	Vital Signs Monitor
Model Name Under Test	iM3s
Series Model Name	N/A
Description of Model name differentiation	N/A
Serial Number	N/A
Hardware Version	N/A
Software Version	N/A
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.5 Technical Information

Network and Wireless connectivity	Bluetooth 5.0 (BR+EDR+BLE) WIFI 802.11a, 802.11b, 802.11g, 802.11n Band 1/2A/2C/3

The requirement for the following technical information of the EUT was tested in this report:

Frequency Range	Band I: 5150 MHz to 5250 MHz, Band II: 5250 MHz to 5350 MHz, Band III: 5470 MHz to 5725 MHz Band IV: 5725 MHz to 5850 MHz
Product Type	☐ Mobile ☒ Portable ☐ Fix Location
Modulation technology	OFDM
Modulation Type	64QAM, 16QAM, BPSK, QPSK
Product Type	Portable for FCC standard
Transfer Rate (Mbps) (Single RF path)	802.11a: 54/ 48/ 36/ 24/ 18/ 12/ 9/ 6 Mbps 802.11n: up to 72.2 Mbps
Channel Bandwidth	802.11a: 20 MHz 802.11n: 20 MHz
Maximum Output Power	Band I: 11.72 dBm Band II: 10.37 dBm Band III: 13.24 dBm Band IV: 12.42 dBm
Antenna System (eg., MIMO, Smart Antenna)	N/A
Categorization as Correlated or Completely Uncorrelated	N/A
Antenna Type	PIFA Antenna
Antenna Gain	2 dBi (In test items related to antenna gain, the final results reflect this figure. This value is provided by the applicant.)
About the Product	The equipment is Vital Signs Monitor, intended for used with information technology equipment.

2.6 Additional Instructions

EUT Software Settings:

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.

Test Software Version	Docklight V1.9		
Support Units (Software installation media)	Description	Manufacturer	Model
	Notebook	Lenovo	X220

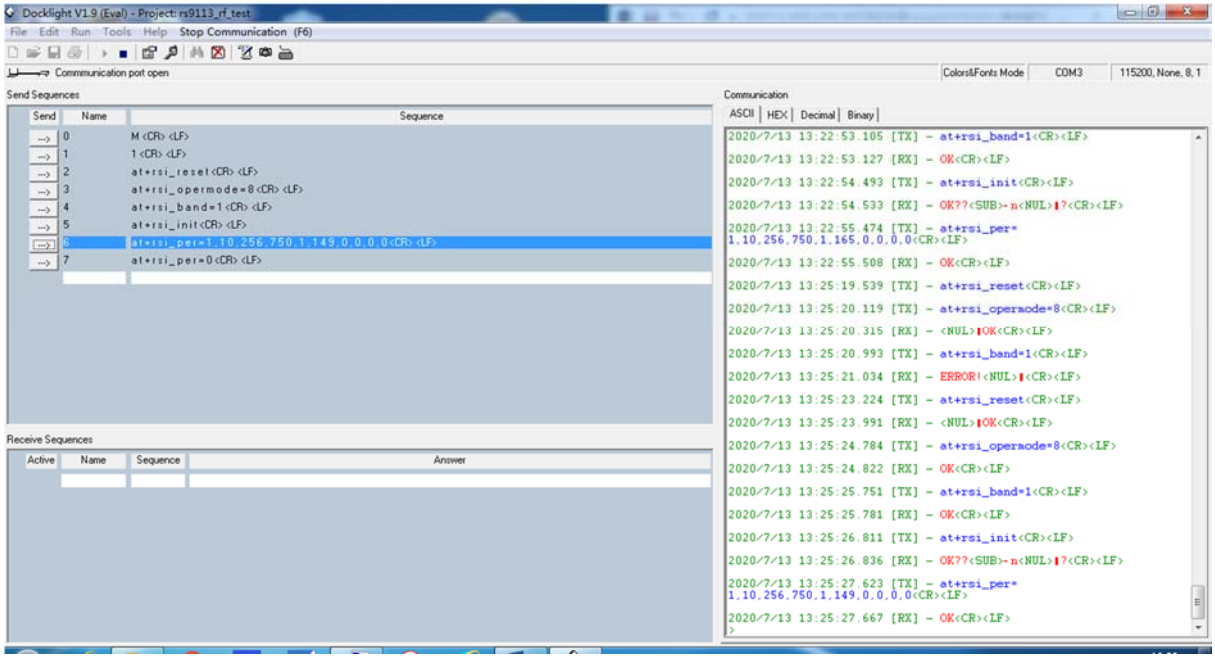
Band I (5150 - 5250 MHz) Power level setup in software			
Mode	Channel	Frequency (MHz)	Soft Set
11a	CH36	5180	10
11a	CH44	5220	10
11a	CH48	5240	10
11n (HT20)	CH36	5180	10
11n (HT20)	CH44	5220	10
11n (HT20)	CH48	5240	10

Band II (5250 - 5350 MHz) Power level setup in software			
Mode	Channel	Frequency (MHz)	Soft Set
11a	CH52	5260	10
11a	CH60	5300	10
11a	CH64	5320	10
11n (HT20)	CH52	5260	10
11n (HT20)	CH60	5300	10
11n (HT20)	CH64	5320	10

Band III (5470 - 5725 MHz) Power level setup in software			
Mode	Channel	Frequency (MHz)	Soft Set
11a	CH100	5500	7
11a	CH116	5580	10
11a	CH140	5700	6
11n (HT20)	CH100	5500	7
11n (HT20)	CH116	5580	10
11n (HT20)	CH140	5700	4

Band IV (5725 - 5850 MHz) Power level setup in software			
Mode	Channel	Frequency (MHz)	Soft Set
11a	CH149	5745	10
11a	CH157	5785	10
11a	CH165	5825	10
11n (HT20)	CH149	5745	10
11n (HT20)	CH157	5785	10
11n (HT20)	CH165	5825	10

Run Software



2.7 Channel List

20 MHz	
Channel Number	Frequency (MHz)
36	**5180**
40	5200
44	**5220**
48	**5240**
52	**5260**
56	5280
60	**5300**
64	**5320**
100	**5500**
104	5520
108	5540
112	5560
116	**5580**
132	5660
136	5680
140	**5700**
144	5720
149	**5745**
153	5765
157	**5785**
161	5805
165	**5825**

Note: 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(HT20)

Band I (5150 - 5250 MHz)			Band II (5250 - 5350 MHz)		
Channel Number	Channel	Frequency (MHz)	Channel Number	Channel	Frequency (MHz)
36	Low	5180	52	Low	5260
44	Mid	5220	60	Mid	5300
48	High	5240	64	High	5320

Band III (5470 - 5725 MHz)			Band IV (5725 - 5850 MHz)		
Channel Number	Channel	Frequency (MHz)	Channel Number	Channel	Frequency (MHz)
100	Low	5500	149	Low	5745
116	Mid	5580	157	Mid	5785
140	High	5700	165	High	5825

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	Band II	Band III	Band IV
				Channel	Channel	Channel	Channel
RF Output Power	11a	6	BPSK	48/44/36	64/60/52	140/116/100	165/157/149
	11n(20 MHz)	6.5		48/44/36	64/60/52	140/116/100	165/157/149
Emission Bandwidth & 99% Occupied Bandwidth	11a	6	BPSK	48/44/36	64/60/52	140/116/100	165/157/149
	11n(20 MHz)	6.5		48/44/36	64/60/52	140/116/100	165/157/149
6 dB bandwidth	11a	6	BPSK	N/A	N/A	N/A	165/157/149
	11n(20 MHz)	6.5		N/A	N/A	N/A	165/157/149
Power Spectral Density	11a	6	BPSK	48/44/36	64/60/52	140/116/100	165/157/149
	11n(20 MHz)	6.5		48/44/36	64/60/52	140/116/100	165/157/149
Radiated Spurious Emissions	11a	6	BPSK	48/44/36	64/60/52	140/116/100	165/157/149
	11n(20 MHz)	6.5		48/44/36	64/60/52	140/116/100	165/157/149
Band Edge (Restricted-band)	11a	6	BPSK	48/44/36	64/60/52	140/116/100	165/157/149
	11n(20 MHz)	6.5		48/44/36	64/60/52	140/116/100	165/157/149

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	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	Radiated Spurious Emissions and Band Edge (Restricted-band)	15.407(b)	ANNEX A.6	Pass
8	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)	+40℃
Working Voltage of the EUT	NV (Normal Voltage)	3.8 V
	LV (Low Voltage)	3.5 V
	HV (High Voltage)	4.2 V

4.2 Test Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer	ROHDE&SCHWARZ	FSV-30	103118	2020.06.08	2021.06.07
Switch Unit with OSP-B157	ROHDE&SCHWARZ	OSP120	101270	2020.06.08	2021.06.07
EMI Receiver	KEYSIGHT	N9038A	MY53220118	2020.06.09	2021.06.08
EMI Receiver	ROHDE&SCHWARZ	ESRP	101036	2020.06.09	2021.06.08
LISN	SCHWARZBECK	NSLK 8127	8127-687	2020.06.09	2021.06.08
Bluetooth Tester	ROHDE&SCHWARZ	CBT	101005	2020.06.08	2021.06.07
DC Power Supply	ROHDE&SCHWARZ	HMP2020	018141664	2020.06.08	2021.06.07
Power Splitter	KMW	DCPD-LDC	1305003215	--	--
Power Sensor	ROHDE&SCHWARZ	NRP-Z21	103971	2020.06.08	2021.06.07
Attenuator (20 dB)	KMW	ZA-S1-201	110617091	--	--
Attenuator (6 dB)	KMW	ZA-S1-61	1305003189	--	--
Temperature Chamber	AHK	SP20	1412	2020.06.10	2021.06.09
Test Antenna-Loop(9 kHz-30 MHz)	SCHWARZBECK	FMZB 1519	1519-037	2019.10.29	2021.10.28
Test Antenna-Bi-Log(30 MHz-3 GHz)	SCHWARZBECK	VULB 9163	9163-624	2019.07.02	2021.07.01
Test Antenna-Horn(1-18 GHz)	SCHWARZBECK	BBHA 9120D	9120D-1917	2019.07.02	2021.07.01
Test Antenna-Horn (18-40 GHz)	A-INFO	LB-180400KF	J211060273	2019.01.06	2021.01.05
Anechoic Chamber	RAINFORD	9m*6m*6m	N/A	2017.02.21	2022.02.20
Anechoic Chamber	EMC Electronic Co., Ltd	20.10*11.60*7.35m	N/A	2018.08.08	2021.08.07
Shielded Enclosure	ChangNing	CN-130701	130703	--	--
Signal Generator	ROHDE&SCHWARZ	SMB100A	177746	2020.06.08	2021.06.07
Power Amplifier	OPHIR RF	5225F	1037	2020.02.19	2021.02.18
Power Amplifier	OPHIR RF	5273F	1016	2020.02.19	2021.02.18
Directional Coupler	Werlantone	C5982-10	109275	N/A	N/A
Directional Coupler	Werlantone	CHP-273E	S00801z-01	N/A	N/A

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Sound Level Meter	B&K	NL-20	00844023	2019.11.12	2020.11.11
Ear Simulator	B&K	4185	2409449	2019.11.12	2020.11.11
Ear Simulator	B&K	4195	2418189	2019.11.12	2020.11.11
Audio analyzer	B&K	UPL 16	100129	2019.11.12	2020.11.11

4.3 Measurement Uncertainty

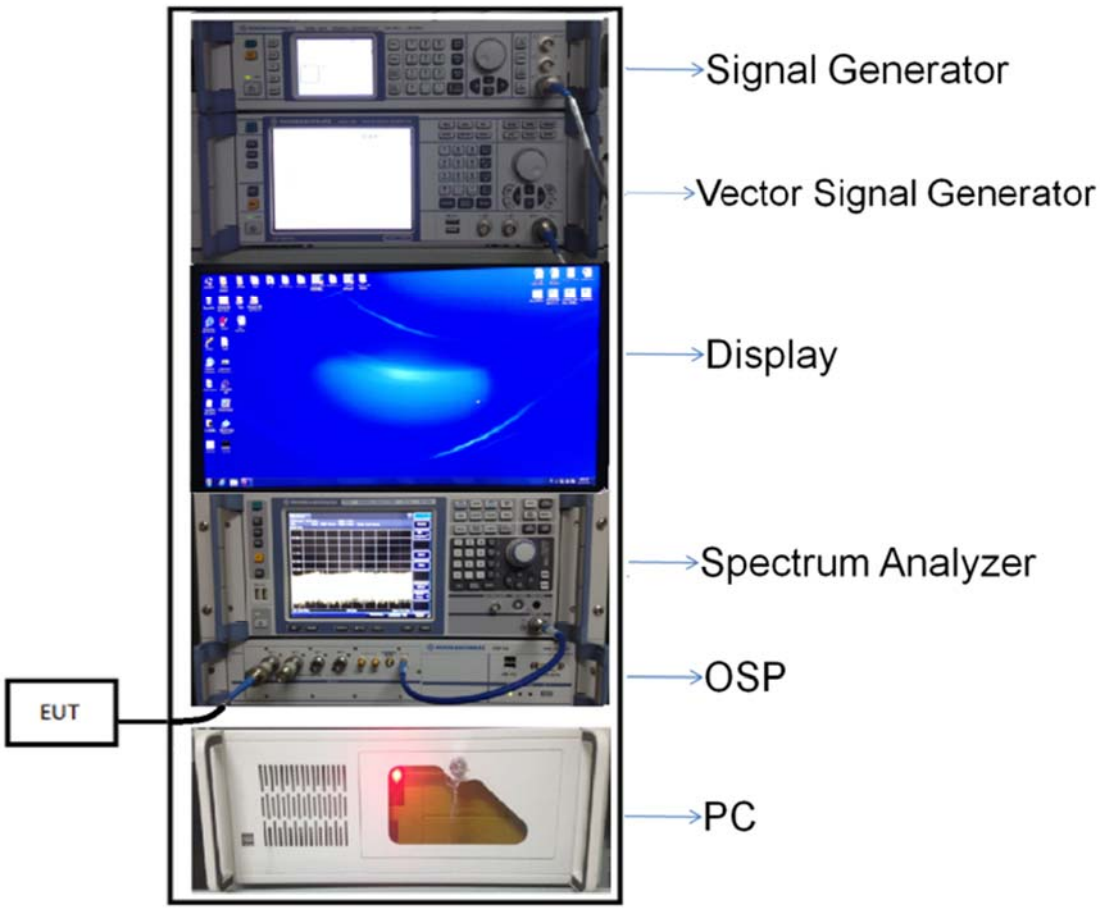
The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2.

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%

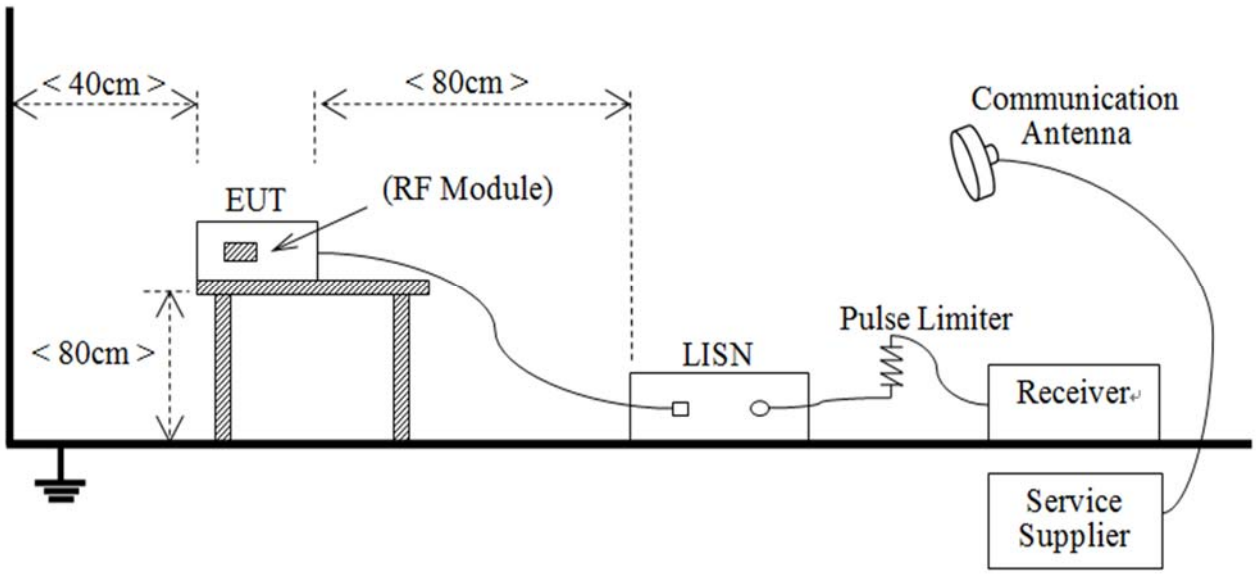
4.4 Description of Test Setup

4.4.1 For Antenna Port Test



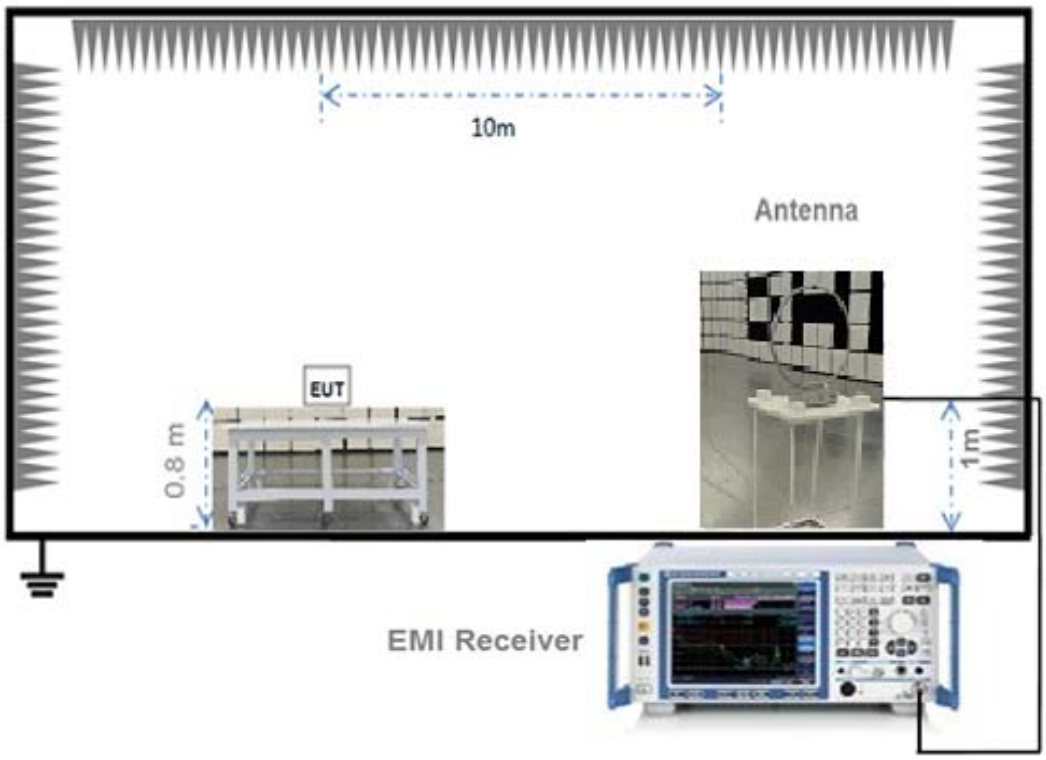
(Diagram 1)

4.4.2 For AC Power Supply Port Test



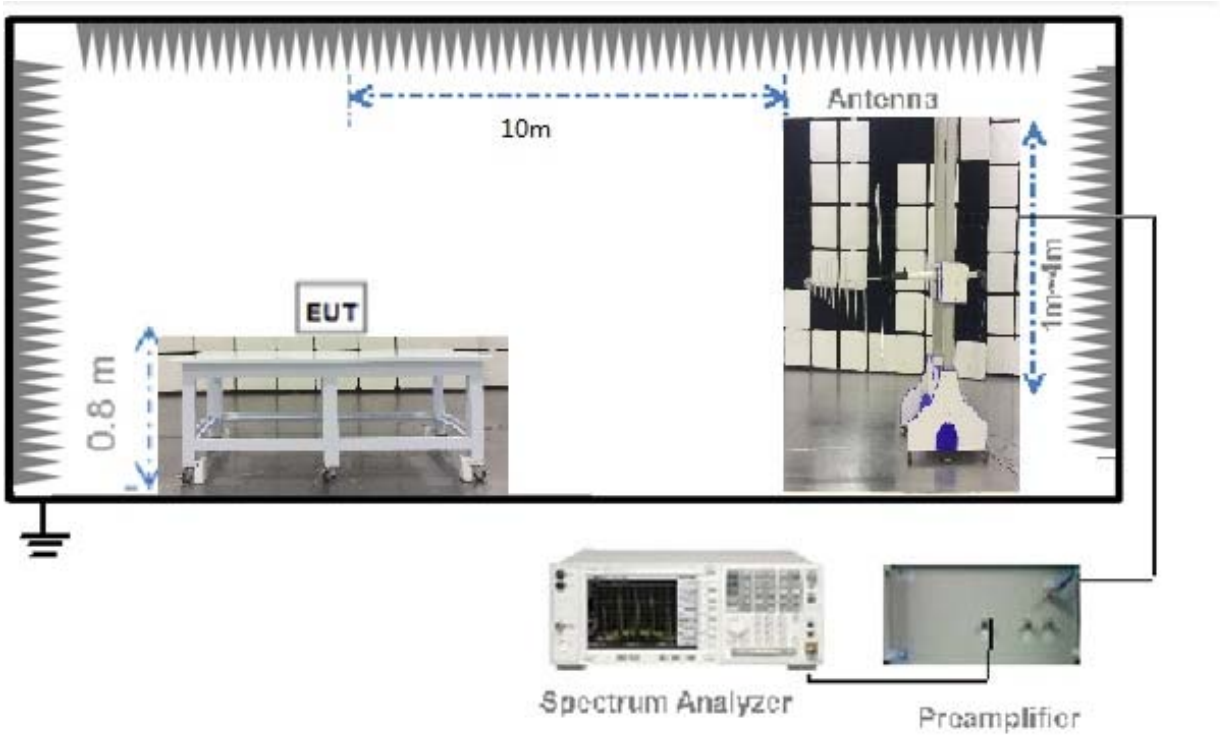
(Diagram 2)

4.4.3 For Radiated Test (Below 30 MHz)



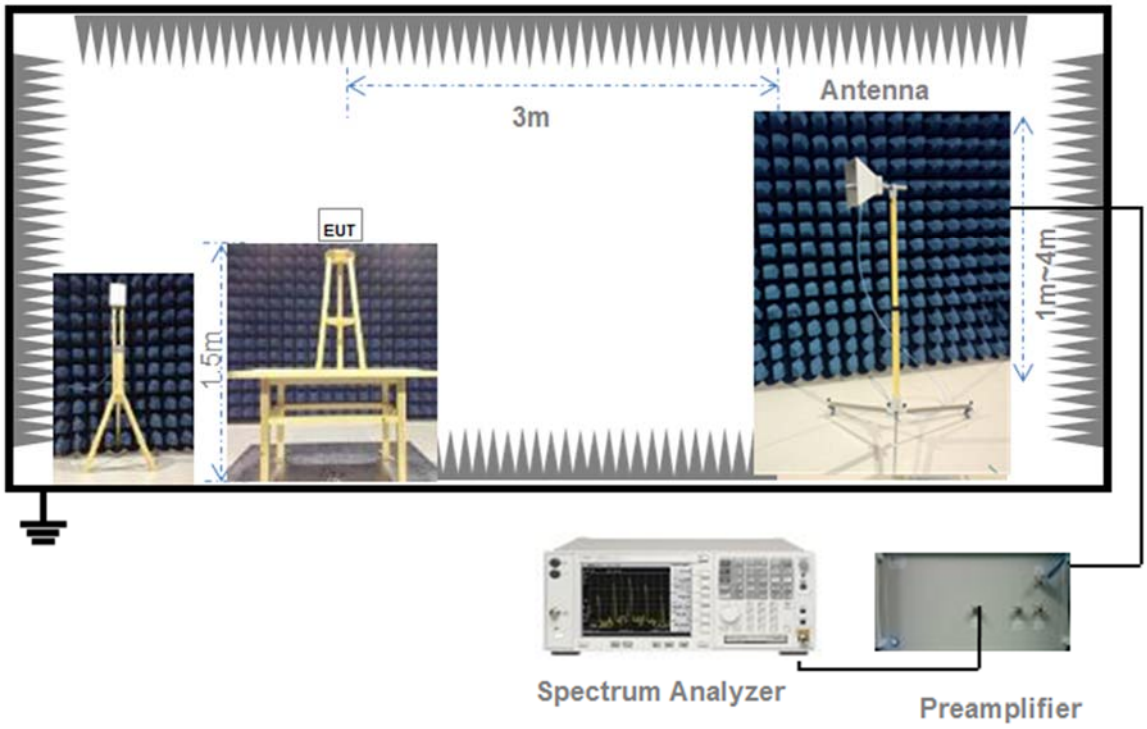
(Diagram 3)

4.4.4 For Radiated Test (30 MHz-1 GHz)



(Diagram 4)

4.4.5 For Radiated Test (Above 1 GHz)



(Diagram 5)

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	11 dBm/MHz
5250-5350	11 dBm/MHz
5470-5725	11 dBm/MHz
5725-5850	30 dBm/500kHz

RSS-247, 6.2

The maximum power spectral density should not exceed:

Frequency Band (MHz)	Limit
5150-5250	N/A
5250-5350	11 dBm/MHz
5470-5725	11 dBm/MHz
5725-5850	30 dBm/500kHz

The e.i.r.p. spectral density should not exceed:

Frequency Band (MHz)	Limit
5150-5250	10 dBm/MHz
5250-5350	N/A
5470-5725	N/A
5725-5850	N/A

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 Radiated Spurious Emissions and Band Edge (Restricted-band)

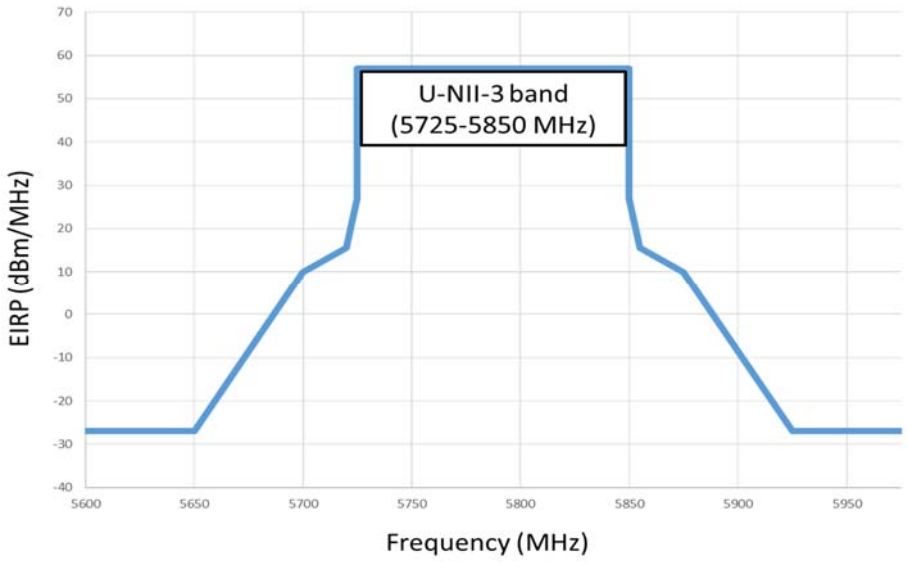
5.5.1 Limit

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.

5.5.2 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.

5.5.3 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

5.5.4 Test Result

Please refer to ANNEX A.6.

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)					
Mode	Channel	Conducted Power (dBm)	Conducted Power (mW)	FCC Limit (mW)	Verdict
11a	CH36	11.57	14.35	250	Pass
11a	CH44	11.31	13.52	250	Pass
11a	CH48	11.16	13.06	250	Pass
11n (HT20)	CH36	11.72	14.86	250	Pass
11n (HT20)	CH44	11.57	14.35	250	Pass
11n (HT20)	CH48	11.07	12.79	250	Pass

Band II (5250 - 5350 MHz)					
Mode	Channel	Conducted Power (dBm)	Conducted Power (mW)	FCC Limit (mW)	Verdict
11a	CH52	9.93	9.84	250	Pass
11a	CH60	10.37	10.89	250	Pass
11a	CH64	10.01	10.02	250	Pass
11n (HT20)	CH52	8.96	7.87	250	Pass
11n (HT20)	CH60	9.29	8.49	250	Pass
11n (HT20)	CH64	8.91	7.78	250	Pass

Band III (5470 - 5725 MHz)					
Mode	Channel	Conducted Power (dBm)	Conducted Power (mW)	FCC Limit (mW)	Verdict
11a	CH100	9.63	9.18	250	Pass
11a	CH116	13.24	21.09	250	Pass
11a	CH140	9.10	8.13	250	Pass
11n (HT20)	CH100	9.92	9.82	250	Pass
11n (HT20)	CH116	10.92	12.36	250	Pass
11n (HT20)	CH140	7.42	5.52	250	Pass

Band IV (5725 - 5850 MHz)					
Mode	Channel	Conducted Power (dBm)	Conducted Power (mW)	FCC Limit (mW)	Verdict
11a	CH149	11.89	15.45	1000	Pass
11a	CH157	12.42	17.46	1000	Pass
11a	CH165	12.28	16.90	1000	Pass
11n (HT20)	CH149	11.42	13.87	1000	Pass
11n (HT20)	CH157	12.03	15.96	1000	Pass
11n (HT20)	CH165	11.76	15.00	1000	Pass

A.2 Emission Bandwidth & 99% Bandwidth

Note: Test plots please refer to the document “Annex No.: BL-SZ2070401-604 Data Part 1.pdf”.

Test Data

Band I (5150 - 5250 MHz)			
Mode	Channel	26 dB Bandwidth (MHz)	99% Bandwidth (MHz)
11a	CH36	30.68	18.29
11a	CH44	28.60	17.89
11a	CH48	31.56	19.51
11n (HT20)	CH36	34.12	20.20
11n (HT20)	CH44	33.40	19.39
11n (HT20)	CH48	35.16	20.90

Band II (5250 - 5350 MHz)			
Mode	Channel	26 dB Bandwidth (MHz)	99% Bandwidth (MHz)
11a	CH52	25.36	17.77
11a	CH60	23.76	17.42
11a	CH64	25.56	17.83
11n (HT20)	CH52	26.44	18.35
11n (HT20)	CH60	24.68	18.12
11n (HT20)	CH64	26.48	18.29

Band III (5470 - 5725 MHz)			
Mode	Channel	26 dB Bandwidth (MHz)	99% Bandwidth (MHz)
11a	CH100	26.12	17.42
11a	CH116	36.52	22.34
11a	CH140	26.80	17.42
11n (HT20)	CH100	31.12	18.41
11n (HT20)	CH116	34.00	23.56
11n (HT20)	CH140	23.40	18.06

Band IV (5725 - 5850 MHz)			
Mode	Channel	26 dB Bandwidth (MHz)	99% Bandwidth (MHz)
11a	CH149	36.92	23.21
11a	CH157	36.72	23.73
11a	CH165	36.56	23.68
11n (HT20)	CH149	39.84	24.20
11n (HT20)	CH157	40.14	24.72
11n (HT20)	CH165	40.08	24.78

A.3 6 dB Bandwidth

Note: Test plots please refer to the document “Annex No.: BL-SZ2070401-604 Data Part 2.pdf”.

Test Data

Band IV (5725 - 5850 MHz)				
Mode	Channel	6 dB Bandwidth (MHz)	Limit (kHz)	Verdict
11a	CH149	16.67	500.00	Pass
11a	CH157	16.62	500.00	Pass
11a	CH165	16.62	500.00	Pass
11n (HT20)	CH149	17.92	500.00	Pass
11n (HT20)	CH157	17.87	500.00	Pass
11n (HT20)	CH165	17.92	500.00	Pass

A.4 Power Spectral Density

Note: Test plots please refer to the document “Annex No.: BL-SZ2070401-604 Data Part 3.pdf”.

Test Data

Note [1]: The RBW used in Band IV is 1 MHz, and the PSD factor is: 10*log (500 kHz/RBW) =-3 dBm.

Band I (5150 - 5250 MHz)				
Mode	Channel	PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
11a	CH36	0.43	11.00	Pass
11a	CH44	0.08	11.00	Pass
11a	CH48	-0.06	11.00	Pass
11n (HT20)	CH36	0.27	11.00	Pass
11n (HT20)	CH44	0.19	11.00	Pass
11n (HT20)	CH48	-0.61	11.00	Pass

Band II (5250 - 5350 MHz)				
Mode	Channel	PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
11a	CH52	-1.22	11.00	Pass
11a	CH60	-0.79	11.00	Pass
11a	CH64	-1.18	11.00	Pass
11n (HT20)	CH52	-2.51	11.00	Pass
11n (HT20)	CH60	-2.15	11.00	Pass
11n (HT20)	CH64	-2.53	11.00	Pass

Band III (5470 - 5725 MHz)				
Mode	Channel	PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
11a	CH100	-1.52	11.00	Pass
11a	CH116	2.07	11.00	Pass
11a	CH140	-2.03	11.00	Pass
11n (HT20)	CH100	-1.50	11.00	Pass
11n (HT20)	CH116	-0.03	11.00	Pass
11n (HT20)	CH140	-3.99	11.00	Pass

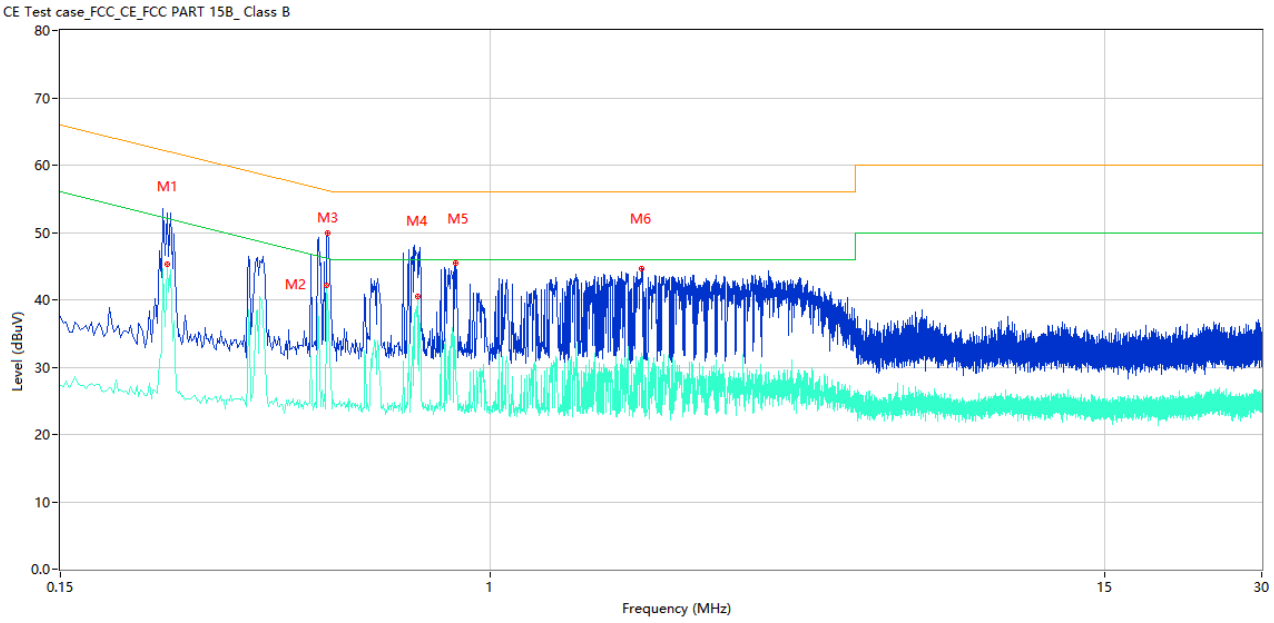
Band IV (5725 - 5850 MHz)				
Mode	Channel	PSD (dBm/500kHz)	Limit (dBm/500kHz)	Verdict
11a	CH149	-2.22	30.00	Pass
11a	CH157	-1.76	30.00	Pass
11a	CH165	-2.03	30.00	Pass
11n (HT20)	CH149	-2.70	30.00	Pass
11n (HT20)	CH157	-2.31	30.00	Pass
11n (HT20)	CH165	-2.61	30.00	Pass

A.5 Conducted Emissions

Note [1]: The EUT is working in the Normal link mode. All modes have been tested and normal link mode is worst.
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.

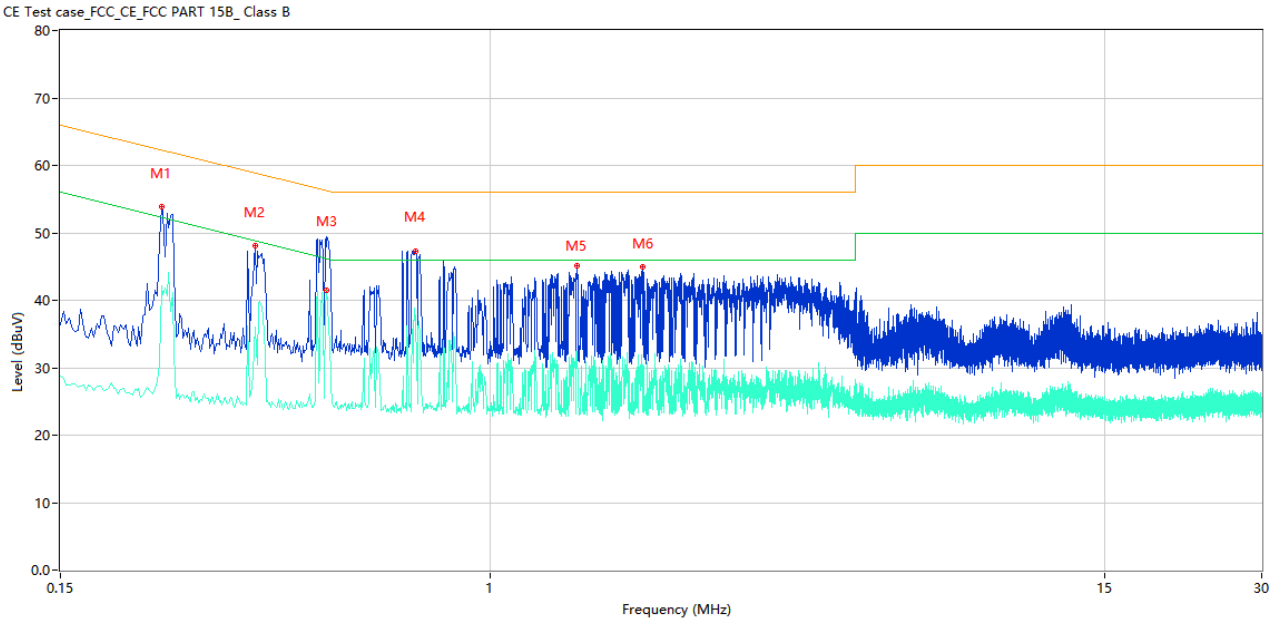
Test Data and Plots

PHASE L



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.240	52.83	10.35	62.10	-9.27	Peak	L	Pass
1**	0.240	45.34	10.35	52.10	-6.76	AV	L	Pass
2	0.486	49.10	10.29	56.24	-7.14	Peak	L	Pass
2**	0.486	42.19	10.29	46.24	-4.05	AV	L	Pass
3	0.488	49.92	10.29	56.20	-6.28	Peak	L	Pass
3**	0.488	39.84	10.29	46.20	-6.36	AV	L	Pass
4	0.724	46.80	10.27	56.00	-9.20	Peak	L	Pass
4**	0.724	40.44	10.27	46.00	-5.56	AV	L	Pass
5	0.856	45.42	10.24	56.00	-10.58	Peak	L	Pass
5**	0.856	32.13	10.24	46.00	-13.87	AV	L	Pass
6	1.948	44.71	10.25	56.00	-11.29	Peak	L	Pass
6**	1.948	27.41	10.25	46.00	-18.59	AV	L	Pass

PHASE N



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.234	53.84	10.35	62.31	-8.47	Peak	N	Pass
1**	0.234	42.12	10.35	52.31	-10.19	AV	N	Pass
2	0.354	48.14	10.31	58.87	-10.73	Peak	N	Pass
2**	0.354	36.11	10.31	48.87	-12.76	AV	N	Pass
3	0.486	49.44	10.29	56.24	-6.80	Peak	N	Pass
3**	0.486	41.52	10.29	46.24	-4.72	AV	N	Pass
4	0.720	47.24	10.27	56.00	-8.76	Peak	N	Pass
4**	0.720	36.20	10.27	46.00	-9.80	AV	N	Pass
5	1.462	45.09	10.25	56.00	-10.91	Peak	N	Pass
5**	1.462	32.37	10.25	46.00	-13.63	AV	N	Pass
6	1.954	44.96	10.25	56.00	-11.04	Peak	N	Pass
6**	1.954	30.40	10.25	46.00	-15.60	AV	N	Pass

A.6 Radiated Spurious Emissions and Band Edge (Restricted-band)

Test Data

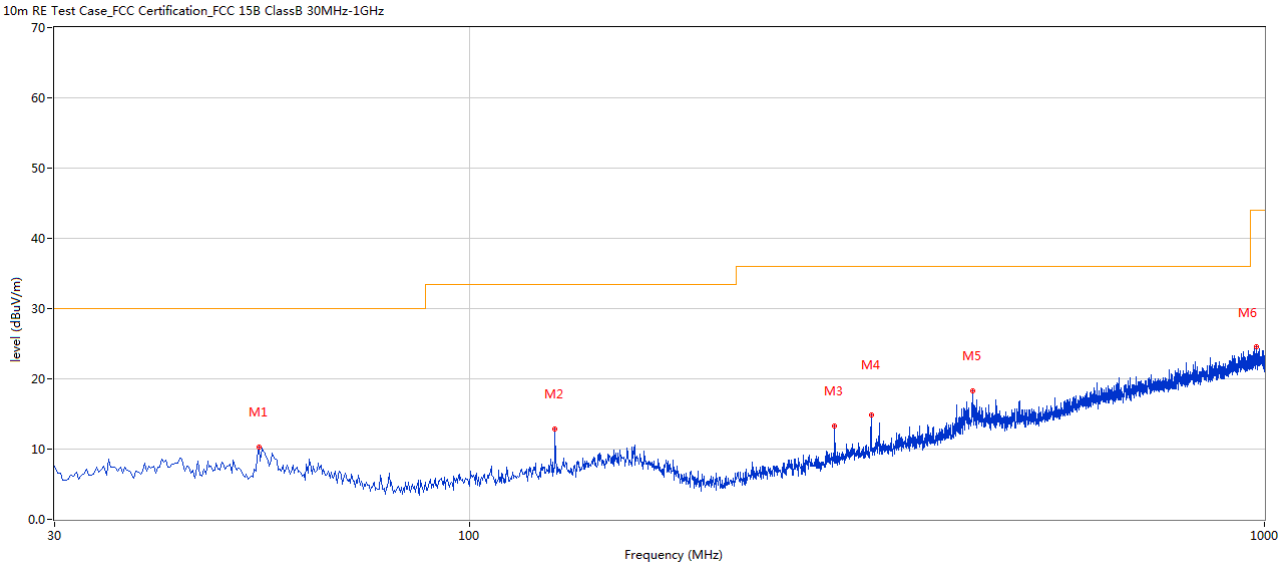
Note [1]: The symbol of "--" in the table which means not application.

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.

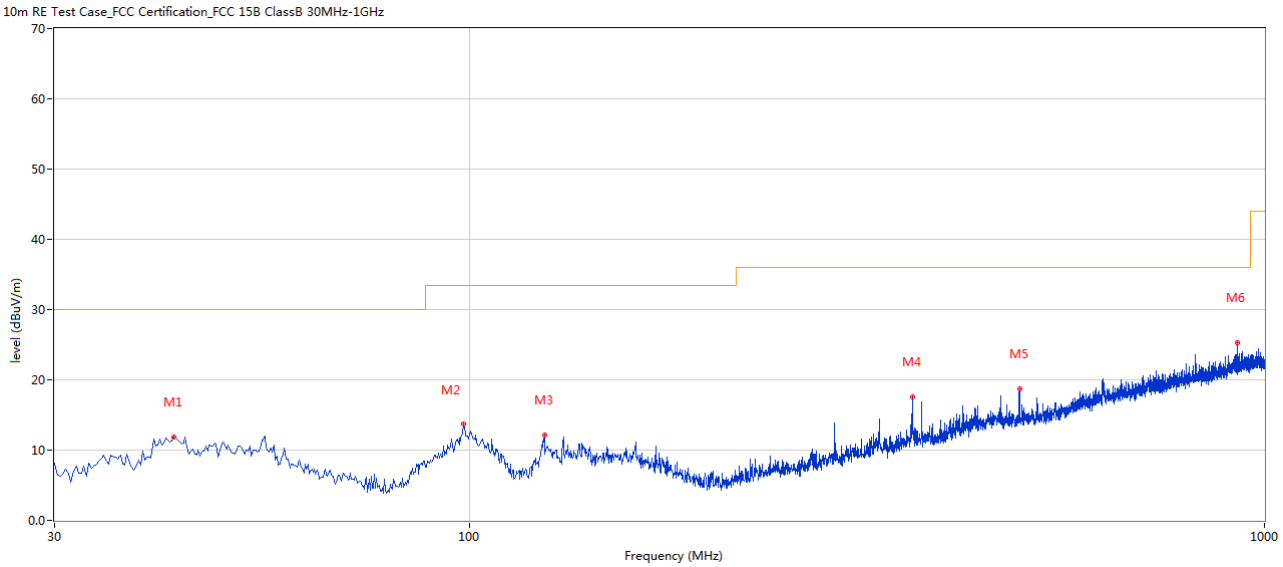
Note [4]: The EUT is working in the Normal link mode below 1 GHz. All modes have been tested and normal link mode is worst.

30 MHz to 1 GHz, ANT H



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	54.244	10.30	-27.59	30.0	-19.70	Peak	4.00	100	Horizontal	Pass
2	127.946	12.80	-27.34	33.5	-20.70	Peak	342.00	400	Horizontal	Pass
3	287.956	13.25	-26.09	36.0	-22.75	Peak	99.00	200	Horizontal	Pass
4	319.958	14.82	-25.31	36.0	-21.18	Peak	360.00	200	Horizontal	Pass
5	428.813	18.31	-22.05	36.0	-17.69	Peak	260.00	300	Horizontal	Pass
6	976.241	24.53	-11.41	44.0	-19.47	Peak	100.00	100	Horizontal	Pass

30 MHz to 1 GHz, ANT V



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	42.364	11.89	-26.74	30.0	-18.11	Peak	305.00	200	Vertical	Pass
2	98.125	13.70	-30.45	33.5	-19.80	Peak	154.00	200	Vertical	Pass
3	124.066	12.20	-27.78	33.5	-21.30	Peak	35.00	100	Vertical	Pass
4	360.202	17.58	-24.18	36.0	-18.42	Peak	360.00	300	Vertical	Pass
5	491.605	18.74	-20.91	36.0	-17.26	Peak	196.00	100	Vertical	Pass
6	923.389	25.27	-12.07	36.0	-10.73	Peak	199.00	200	Vertical	Pass

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

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1681.500	41.98	-17.54	74.0	-32.02	Peak	88.00	150	Horizontal	Pass
1**	1681.500	27.71	-17.54	54.0	-26.29	AV	88.00	150	Horizontal	Pass
2	2825.300	42.66	-10.29	74.0	-31.34	Peak	332.00	150	Horizontal	Pass
2**	2825.300	32.93	-10.29	54.0	-21.07	AV	332.00	150	Horizontal	Pass
3	4154.800	46.37	-5.01	74.0	-27.63	Peak	266.00	150	Horizontal	Pass
3**	4154.800	37.45	-5.01	54.0	-16.55	AV	266.00	150	Horizontal	Pass
4	5178.800	98.05	-2.68	--	--	Peak	225.00	150	Horizontal	N/A
4**	5178.800	92.80	-2.68	--	--	AV	225.00	150	Horizontal	N/A
5	12373.375	50.06	1.32	74.0	-23.94	Peak	360.00	150	Horizontal	Pass
5**	12373.375	40.58	1.32	54.0	-13.42	AV	360.00	150	Horizontal	Pass
6	15634.875	53.29	1.56	74.0	-20.71	Peak	-2.00	150	Horizontal	Pass
6**	15634.875	44.45	1.56	54.0	-9.55	AV	-2.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1329.200	43.74	-17.44	74.0	-30.26	Peak	82.00	150	Vertical	Pass
1**	1329.200	29.83	-17.44	54.0	-24.17	AV	82.00	150	Vertical	Pass
2	2765.000	42.13	-10.81	74.0	-31.87	Peak	49.00	150	Vertical	Pass
2**	2765.000	32.87	-10.81	54.0	-21.13	AV	49.00	150	Vertical	Pass
3	4278.400	47.34	-4.54	74.0	-26.66	Peak	2.00	150	Vertical	Pass
3**	4278.400	38.78	-4.54	54.0	-15.22	AV	2.00	150	Vertical	Pass
4	5177.800	92.89	-2.73	--	--	Peak	208.00	150	Vertical	N/A
4**	5177.800	86.73	-2.73	--	--	AV	208.00	150	Vertical	N/A
5	12437.775	50.42	1.74	74.0	-23.58	Peak	162.00	150	Vertical	Pass
5**	12437.775	41.73	1.74	54.0	-12.27	AV	162.00	150	Vertical	Pass
6	16114.987	53.03	0.68	74.0	-20.97	Peak	274.00	150	Vertical	Pass
6**	16114.987	44.27	0.68	54.0	-9.73	AV	274.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1317.000	40.38	-17.38	74.0	-33.62	Peak	358.00	150	Horizontal	Pass
1**	1317.000	38.44	-17.38	54.0	-15.56	AV	358.00	150	Horizontal	Pass
2	2821.400	42.32	-10.22	74.0	-31.68	Peak	362.00	150	Horizontal	Pass
2**	2821.400	33.32	-10.22	54.0	-20.68	AV	362.00	150	Horizontal	Pass
3	4304.800	46.97	-4.90	74.0	-27.03	Peak	83.00	150	Horizontal	Pass
3**	4304.800	37.86	-4.90	54.0	-16.14	AV	83.00	150	Horizontal	Pass
4	5213.400	96.75	-2.85	--	--	Peak	218.00	150	Horizontal	N/A
4**	5213.400	89.59	-2.85	--	--	AV	218.00	150	Horizontal	N/A
5	12395.513	50.19	1.60	74.0	-23.81	Peak	21.00	150	Horizontal	Pass
5**	12395.513	41.12	1.60	54.0	-12.88	AV	21.00	150	Horizontal	Pass
6	15630.675	53.16	1.68	74.0	-20.84	Peak	236.00	150	Horizontal	Pass
6**	15630.675	44.76	1.68	54.0	-9.24	AV	236.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1622.000	47.89	-17.68	74.0	-26.11	Peak	29.00	150	Vertical	Pass
1**	1622.000	27.51	-17.68	54.0	-26.49	AV	29.00	150	Vertical	Pass
2	2788.800	43.64	-10.57	74.0	-30.36	Peak	274.00	150	Vertical	Pass
2**	2788.800	32.38	-10.57	54.0	-21.62	AV	274.00	150	Vertical	Pass
3	4332.000	47.17	-4.52	74.0	-26.83	Peak	58.00	150	Vertical	Pass
3**	4332.000	37.96	-4.52	54.0	-16.04	AV	58.00	150	Vertical	Pass
4	5216.600	93.76	-2.88	--	--	Peak	86.00	150	Vertical	N/A
4**	5216.600	88.94	-2.88	--	--	AV	86.00	150	Vertical	N/A
5	12217.263	50.45	1.20	74.0	-23.55	Peak	362.00	150	Vertical	Pass
5**	12217.263	41.13	1.20	54.0	-12.87	AV	362.00	150	Vertical	Pass
6	15922.050	53.45	-0.04	74.0	-20.55	Peak	45.00	150	Vertical	Pass
6**	15922.050	43.21	-0.04	54.0	-10.79	AV	45.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1703.600	42.27	-17.24	74.0	-31.73	Peak	308.00	150	Horizontal	Pass
1**	1703.600	32.67	-17.24	54.0	-21.33	AV	308.00	150	Horizontal	Pass
2	2854.900	42.53	-10.28	74.0	-31.47	Peak	145.00	150	Horizontal	Pass
2**	2854.900	33.59	-10.28	54.0	-20.41	AV	145.00	150	Horizontal	Pass
3	4124.600	46.56	-5.49	74.0	-27.44	Peak	109.00	150	Horizontal	Pass
3**	4124.600	37.16	-5.49	54.0	-16.84	AV	109.00	150	Horizontal	Pass
4	5239.400	97.61	-2.72	--	--	Peak	224.00	150	Horizontal	N/A
4**	5239.400	90.89	-2.72	--	--	AV	224.00	150	Horizontal	N/A
5	11941.262	50.23	1.65	74.0	-23.77	Peak	315.00	150	Horizontal	Pass
5**	11941.262	40.84	1.65	54.0	-13.16	AV	315.00	150	Horizontal	Pass
6	15856.162	53.39	1.13	74.0	-20.61	Peak	88.00	150	Horizontal	Pass
6**	15856.162	45.51	1.13	54.0	-8.49	AV	88.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1707.400	48.44	-17.22	74.0	-25.56	Peak	362.00	150	Vertical	Pass
1**	1707.400	30.23	-17.22	54.0	-23.77	AV	362.00	150	Vertical	Pass
2	2815.700	42.36	-10.13	74.0	-31.64	Peak	159.00	150	Vertical	Pass
2**	2815.700	33.14	-10.13	54.0	-20.86	AV	159.00	150	Vertical	Pass
3	3841.400	46.61	-5.00	74.0	-27.39	Peak	73.00	150	Vertical	Pass
3**	3841.400	36.37	-5.00	54.0	-17.63	AV	73.00	150	Vertical	Pass
4	5243.200	94.12	-2.68	--	--	Peak	219.00	150	Vertical	N/A
4**	5243.200	87.50	-2.68	--	--	AV	219.00	150	Vertical	N/A
5	11905.901	50.65	1.59	74.0	-23.35	Peak	51.00	150	Vertical	Pass
5**	11905.901	40.70	1.59	54.0	-13.30	AV	51.00	150	Vertical	Pass
6	15852.225	53.52	1.27	74.0	-20.48	Peak	361.00	150	Vertical	Pass
6**	15852.225	44.80	1.27	54.0	-9.20	AV	361.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1685.200	45.51	-17.42	74.0	-28.49	Peak	90.00	150	Horizontal	Pass
1**	1685.200	30.22	-17.42	54.0	-23.78	AV	90.00	150	Horizontal	Pass
2	2775.300	42.18	-10.49	74.0	-31.82	Peak	205.00	150	Horizontal	Pass
2**	2775.300	33.99	-10.49	54.0	-20.01	AV	205.00	150	Horizontal	Pass
3	4083.400	46.45	-5.33	74.0	-27.55	Peak	0.00	150	Horizontal	Pass
3**	4083.400	38.01	-5.33	54.0	-15.99	AV	0.00	150	Horizontal	Pass
4	5177.800	98.23	-2.73	--	--	Peak	210.00	150	Horizontal	N/A
4**	5177.800	91.63	-2.73	--	--	AV	210.00	150	Horizontal	N/A
5	11992.724	49.97	1.18	74.0	-24.03	Peak	215.00	150	Horizontal	Pass
5**	11992.724	41.14	1.18	54.0	-12.86	AV	215.00	150	Horizontal	Pass
6	15942.525	52.86	-0.29	74.0	-21.14	Peak	-2.00	150	Horizontal	Pass
6**	15942.525	45.39	-0.29	54.0	-8.61	AV	-2.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1634.600	46.76	-17.52	68.2	-21.44	Peak	31.00	150	Vertical	Pass
1**	1634.600	37.74	-17.52	--	37.74	AV	31.00	150	Vertical	N/A
2	2819.100	43.28	-10.21	74.0	-30.72	Peak	117.00	150	Vertical	Pass
2**	2819.100	32.59	-10.21	54.0	-21.41	AV	117.00	150	Vertical	Pass
3	4278.000	47.57	-4.53	74.0	-26.43	Peak	206.00	150	Vertical	Pass
3**	4278.000	38.02	-4.53	54.0	-15.98	AV	206.00	150	Vertical	Pass
4	5177.000	92.41	-2.78	--	--	Peak	77.00	150	Vertical	N/A
4**	5177.000	85.08	-2.78	--	--	AV	77.00	150	Vertical	N/A
5	11942.988	50.64	1.60	74.0	-23.36	Peak	343.00	150	Vertical	Pass
5**	11942.988	41.58	1.60	54.0	-12.42	AV	343.00	150	Vertical	Pass
6	16012.349	53.21	0.46	74.0	-20.79	Peak	360.00	150	Vertical	Pass
6**	16012.349	44.19	0.46	54.0	-9.81	AV	360.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1692.600	41.48	-17.24	74.0	-32.52	Peak	90.00	150	Horizontal	Pass
1**	1692.600	29.23	-17.24	54.0	-24.77	AV	90.00	150	Horizontal	Pass
2	2765.000	42.88	-10.81	74.0	-31.12	Peak	362.00	150	Horizontal	Pass
2**	2765.000	33.05	-10.81	54.0	-20.95	AV	362.00	150	Horizontal	Pass
3	4366.800	47.84	-4.12	74.0	-26.16	Peak	128.00	150	Horizontal	Pass
3**	4366.800	38.48	-4.12	54.0	-15.52	AV	128.00	150	Horizontal	Pass
4	5225.400	97.96	-3.06	--	--	Peak	214.00	150	Horizontal	N/A
4**	5225.400	91.59	-3.06	--	--	AV	214.00	150	Horizontal	N/A
5	12054.250	50.75	1.03	74.0	-23.25	Peak	218.00	150	Horizontal	Pass
5**	12054.250	40.96	1.03	54.0	-13.04	AV	218.00	150	Horizontal	Pass
6	15852.225	53.68	1.27	74.0	-20.32	Peak	174.00	150	Horizontal	Pass
6**	15852.225	43.86	1.27	54.0	-10.14	AV	174.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1682.500	47.34	-17.43	74.0	-26.66	Peak	8.00	150	Vertical	Pass
1**	1682.500	31.24	-17.43	54.0	-22.76	AV	8.00	150	Vertical	Pass
2	2840.400	42.22	-10.24	74.0	-31.78	Peak	288.00	150	Vertical	Pass
2**	2840.400	33.31	-10.24	54.0	-20.69	AV	288.00	150	Vertical	Pass
3	4273.400	47.04	-4.51	74.0	-26.96	Peak	361.00	150	Vertical	Pass
3**	4273.400	37.88	-4.51	54.0	-16.12	AV	361.00	150	Vertical	Pass
4	5221.600	93.91	-3.04	--	--	Peak	116.00	150	Vertical	N/A
4**	5221.600	87.62	-3.04	--	--	AV	116.00	150	Vertical	N/A
5	12277.638	51.00	1.72	74.0	-23.00	Peak	106.00	150	Vertical	Pass
5**	12277.638	41.37	1.72	54.0	-12.63	AV	106.00	150	Vertical	Pass
6	15858.787	53.10	0.99	74.0	-20.90	Peak	210.00	150	Vertical	Pass
6**	15858.787	44.38	0.99	54.0	-9.62	AV	210.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1684.300	41.86	-17.39	74.0	-32.14	Peak	75.00	150	Horizontal	Pass
1**	1684.300	30.97	-17.39	54.0	-23.03	AV	75.00	150	Horizontal	Pass
2	2727.500	42.77	-11.04	74.0	-31.23	Peak	329.00	150	Horizontal	Pass
2**	2727.500	33.25	-11.04	54.0	-20.75	AV	329.00	150	Horizontal	Pass
3	4256.800	46.76	-4.92	74.0	-27.24	Peak	115.00	150	Horizontal	Pass
3**	4256.800	38.56	-4.92	54.0	-15.44	AV	115.00	150	Horizontal	Pass
4	5237.000	98.52	-2.83	--	--	Peak	214.00	150	Horizontal	N/A
4**	5237.000	90.47	-2.83	--	--	AV	214.00	150	Horizontal	N/A
5	11795.787	50.49	0.90	74.0	-23.51	Peak	221.00	150	Horizontal	Pass
5**	11795.787	41.28	0.90	54.0	-12.72	AV	221.00	150	Horizontal	Pass
6	15518.588	53.38	1.39	74.0	-20.62	Peak	77.00	150	Horizontal	Pass
6**	15518.588	44.29	1.39	54.0	-9.71	AV	77.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1706.800	46.76	-17.23	74.0	-27.24	Peak	0.00	150	Vertical	Pass
1**	1706.800	33.55	-17.23	54.0	-20.45	AV	0.00	150	Vertical	Pass
2	2788.700	42.42	-10.57	74.0	-31.58	Peak	76.00	150	Vertical	Pass
2**	2788.700	32.66	-10.57	54.0	-21.34	AV	76.00	150	Vertical	Pass
3	4050.000	46.63	-4.74	74.0	-27.37	Peak	53.00	150	Vertical	Pass
3**	4050.000	37.83	-4.74	54.0	-16.17	AV	53.00	150	Vertical	Pass
4	5241.800	94.14	-2.70	--	--	Peak	83.00	150	Vertical	N/A
4**	5241.800	87.45	-2.70	--	--	AV	83.00	150	Vertical	N/A
5	11756.687	50.47	1.11	74.0	-23.53	Peak	219.00	150	Vertical	Pass
5**	11756.687	41.32	1.11	54.0	-12.68	AV	219.00	150	Vertical	Pass
6	15799.200	53.32	2.31	74.0	-20.68	Peak	-2.00	150	Vertical	Pass
6**	15799.200	45.87	2.31	54.0	-8.13	AV	-2.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1676.500	42.62	-17.46	74.0	-31.38	Peak	85.00	150	Horizontal	Pass
1**	1676.500	27.64	-17.46	54.0	-26.36	AV	85.00	150	Horizontal	Pass
2	2836.200	42.53	-10.39	74.0	-31.47	Peak	5.00	150	Horizontal	Pass
2**	2836.200	33.08	-10.39	54.0	-20.92	AV	5.00	150	Horizontal	Pass
3	4062.800	46.29	-5.17	74.0	-27.71	Peak	361.00	150	Horizontal	Pass
3**	4062.800	38.00	-5.17	54.0	-16.00	AV	361.00	150	Horizontal	Pass
4	5257.600	95.03	-2.90	--	--	Peak	213.00	150	Horizontal	N/A
4**	5257.600	89.10	-2.90	--	--	AV	213.00	150	Horizontal	N/A
5	11662.387	50.07	0.15	74.0	-23.93	Peak	51.00	150	Horizontal	Pass
5**	11662.387	40.94	0.15	54.0	-13.06	AV	51.00	150	Horizontal	Pass
6	16016.287	52.88	0.49	74.0	-21.12	Peak	-2.00	150	Horizontal	Pass
6**	16016.287	43.71	0.49	54.0	-10.29	AV	-2.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1702.300	46.49	-17.30	74.0	-27.51	Peak	119.00	150	Vertical	Pass
1**	1702.300	35.48	-17.30	54.0	-18.52	AV	119.00	150	Vertical	Pass
2	2878.900	42.94	-10.29	74.0	-31.06	Peak	282.00	150	Vertical	Pass
2**	2878.900	33.89	-10.29	54.0	-20.11	AV	282.00	150	Vertical	Pass
3	4160.600	46.22	-4.92	74.0	-27.78	Peak	361.00	150	Vertical	Pass
3**	4160.600	38.04	-4.92	54.0	-15.96	AV	361.00	150	Vertical	Pass
4	5261.200	92.93	-3.09	--	--	Peak	216.00	150	Vertical	N/A
4**	5261.200	85.99	-3.09	--	--	AV	216.00	150	Vertical	N/A
5	11676.188	50.06	0.24	74.0	-23.94	Peak	234.00	150	Vertical	Pass
5**	11676.188	41.29	0.24	54.0	-12.71	AV	234.00	150	Vertical	Pass
6	15681.075	53.57	1.55	74.0	-20.43	Peak	-2.00	150	Vertical	Pass
6**	15681.075	43.97	1.55	54.0	-10.03	AV	-2.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1697.100	41.64	-17.33	74.0	-32.36	Peak	94.00	150	Horizontal	Pass
1**	1697.100	28.03	-17.33	54.0	-25.97	AV	94.00	150	Horizontal	Pass
2	2806.500	42.68	-10.33	74.0	-31.32	Peak	192.00	150	Horizontal	Pass
2**	2806.500	33.92	-10.33	54.0	-20.08	AV	192.00	150	Horizontal	Pass
3	4278.000	46.74	-4.53	74.0	-27.26	Peak	360.00	150	Horizontal	Pass
3**	4278.000	38.77	-4.53	54.0	-15.23	AV	360.00	150	Horizontal	Pass
4	5301.000	94.98	-3.23	--	--	Peak	219.00	150	Horizontal	N/A
4**	5301.000	88.45	-3.23	--	--	AV	219.00	150	Horizontal	N/A
5	12496.713	49.89	1.66	74.0	-24.11	Peak	104.00	150	Horizontal	Pass
5**	12496.713	40.81	1.66	54.0	-13.19	AV	104.00	150	Horizontal	Pass
6	16055.663	52.88	0.81	74.0	-21.12	Peak	302.00	150	Horizontal	Pass
6**	16055.663	44.14	0.81	54.0	-9.86	AV	302.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1673.100	46.06	-17.50	74.0	-27.94	Peak	99.00	150	Vertical	Pass
1**	1673.100	27.71	-17.50	54.0	-26.29	AV	99.00	150	Vertical	Pass
2	2780.600	42.70	-10.41	74.0	-31.30	Peak	231.00	150	Vertical	Pass
2**	2780.600	34.42	-10.41	54.0	-19.58	AV	231.00	150	Vertical	Pass
3	4335.200	47.58	-4.52	74.0	-26.42	Peak	248.00	150	Vertical	Pass
3**	4335.200	37.41	-4.52	54.0	-16.59	AV	248.00	150	Vertical	Pass
4	5302.800	94.07	-3.12	--	--	Peak	219.00	150	Vertical	N/A
4**	5302.800	86.98	-3.12	--	--	AV	219.00	150	Vertical	N/A
5	12261.826	50.37	1.15	74.0	-23.63	Peak	50.00	150	Vertical	Pass
5**	12261.826	41.92	1.15	54.0	-12.08	AV	50.00	150	Vertical	Pass
6	15959.588	53.01	0.12	74.0	-20.99	Peak	61.00	150	Vertical	Pass
6**	15959.588	43.66	0.12	54.0	-10.34	AV	61.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1699.600	42.63	-17.32	74.0	-31.37	Peak	90.00	150	Horizontal	Pass
1**	1699.600	27.92	-17.32	54.0	-26.08	AV	90.00	150	Horizontal	Pass
2	2884.000	43.39	-10.06	74.0	-30.61	Peak	348.00	150	Horizontal	Pass
2**	2884.000	33.45	-10.06	54.0	-20.55	AV	348.00	150	Horizontal	Pass
3	4175.800	46.64	-5.36	74.0	-27.36	Peak	360.00	150	Horizontal	Pass
3**	4175.800	37.30	-5.36	54.0	-16.70	AV	360.00	150	Horizontal	Pass
4	5321.800	93.42	-2.76	--	--	Peak	246.00	150	Horizontal	N/A
4**	5321.800	86.59	-2.76	--	--	AV	246.00	150	Horizontal	N/A
5	12231.349	50.23	1.26	74.0	-23.77	Peak	183.00	150	Horizontal	Pass
5**	12231.349	40.57	1.26	54.0	-13.43	AV	183.00	150	Horizontal	Pass
6	15863.775	53.42	0.84	74.0	-20.58	Peak	150.00	150	Horizontal	Pass
6**	15863.775	43.83	0.84	54.0	-10.17	AV	150.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1705.700	47.33	-17.22	74.0	-26.67	Peak	-1.00	150	Vertical	Pass
1**	1705.700	30.16	-17.22	54.0	-23.84	AV	-1.00	150	Vertical	Pass
2	2871.600	42.68	-10.39	74.0	-31.32	Peak	62.00	150	Vertical	Pass
2**	2871.600	33.81	-10.39	54.0	-20.19	AV	62.00	150	Vertical	Pass
3	4231.000	47.52	-4.62	74.0	-26.48	Peak	109.00	150	Vertical	Pass
3**	4231.000	37.84	-4.62	54.0	-16.16	AV	109.00	150	Vertical	Pass
4	5322.800	94.55	-2.74	--	--	Peak	214.00	150	Vertical	N/A
4**	5322.800	87.53	-2.74	--	--	AV	214.00	150	Vertical	N/A
5	12522.588	50.69	1.42	74.0	-23.31	Peak	25.00	150	Vertical	Pass
5**	12522.588	41.82	1.42	54.0	-12.18	AV	25.00	150	Vertical	Pass
6	15795.787	53.85	2.19	74.0	-20.15	Peak	360.00	150	Vertical	Pass
6**	15795.787	45.70	2.19	54.0	-8.30	AV	360.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1705.200	44.04	-17.21	74.0	-29.96	Peak	91.00	150	Horizontal	Pass
1**	1705.200	28.16	-17.21	54.0	-25.84	AV	91.00	150	Horizontal	Pass
2	2806.900	42.41	-10.32	74.0	-31.59	Peak	336.00	150	Horizontal	Pass
2**	2806.900	33.54	-10.32	54.0	-20.46	AV	336.00	150	Horizontal	Pass
3	4255.200	46.82	-5.00	74.0	-27.18	Peak	176.00	150	Horizontal	Pass
3**	4255.200	38.02	-5.00	54.0	-15.98	AV	176.00	150	Horizontal	Pass
4	5258.600	93.71	-2.89	--	--	Peak	218.00	150	Horizontal	N/A
4**	5258.600	87.27	-2.89	--	--	AV	218.00	150	Horizontal	N/A
5	12008.825	50.21	1.21	74.0	-23.79	Peak	185.00	150	Horizontal	Pass
5**	12008.825	41.91	1.21	54.0	-12.09	AV	185.00	150	Horizontal	Pass
6	16135.463	53.59	1.06	74.0	-20.41	Peak	360.00	150	Horizontal	Pass
6**	16135.463	44.66	1.06	54.0	-9.34	AV	360.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1701.100	47.88	-17.32	74.0	-26.12	Peak	361.00	150	Vertical	Pass
1**	1701.100	30.09	-17.32	54.0	-23.91	AV	361.00	150	Vertical	Pass
2	2756.700	42.93	-10.76	74.0	-31.07	Peak	362.00	150	Vertical	Pass
2**	2756.700	32.70	-10.76	54.0	-21.30	AV	362.00	150	Vertical	Pass
3	4266.600	47.24	-4.56	74.0	-26.76	Peak	143.00	150	Vertical	Pass
3**	4266.600	38.08	-4.56	54.0	-15.92	AV	143.00	150	Vertical	Pass
4	5263.400	90.98	-3.12	--	--	Peak	213.00	150	Vertical	N/A
4**	5263.400	84.72	-3.12	--	--	AV	213.00	150	Vertical	N/A
5	11925.162	50.42	1.52	74.0	-23.58	Peak	21.00	150	Vertical	Pass
5**	11925.162	41.25	1.52	54.0	-12.75	AV	21.00	150	Vertical	Pass
6	15937.013	52.85	-0.32	74.0	-21.15	Peak	59.00	150	Vertical	Pass
6**	15937.013	44.08	-0.32	54.0	-9.92	AV	59.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1707.600	42.35	-17.22	74.0	-31.65	Peak	96.00	150	Horizontal	Pass
1**	1707.600	28.45	-17.22	54.0	-25.55	AV	96.00	150	Horizontal	Pass
2	2788.400	42.34	-10.57	74.0	-31.66	Peak	37.00	150	Horizontal	Pass
2**	2788.400	33.32	-10.57	54.0	-20.68	AV	37.00	150	Horizontal	Pass
3	4284.000	47.41	-4.77	74.0	-26.59	Peak	128.00	150	Horizontal	Pass
3**	4284.000	39.73	-4.77	54.0	-14.27	AV	128.00	150	Horizontal	Pass
4	5297.800	94.32	-3.24	--	--	Peak	214.00	150	Horizontal	N/A
4**	5297.800	88.58	-3.24	--	--	AV	214.00	150	Horizontal	N/A
5	12441.513	50.29	1.79	74.0	-23.71	Peak	51.00	150	Horizontal	Pass
5**	12441.513	41.11	1.79	54.0	-12.89	AV	51.00	150	Horizontal	Pass
6	15631.200	52.69	1.67	74.0	-21.31	Peak	143.00	150	Horizontal	Pass
6**	15631.200	44.33	1.67	54.0	-9.67	AV	143.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1693.800	46.66	-17.21	74.0	-27.34	Peak	362.00	150	Vertical	Pass
1**	1693.800	28.97	-17.21	54.0	-25.03	AV	362.00	150	Vertical	Pass
2	2843.400	42.38	-10.28	74.0	-31.62	Peak	333.00	150	Vertical	Pass
2**	2843.400	33.80	-10.28	54.0	-20.20	AV	333.00	150	Vertical	Pass
3	4311.000	46.91	-4.83	74.0	-27.09	Peak	341.00	150	Vertical	Pass
3**	4311.000	37.20	-4.83	54.0	-16.80	AV	341.00	150	Vertical	Pass
4	5297.600	92.18	-3.25	--	--	Peak	216.00	150	Vertical	N/A
4**	5297.600	85.46	-3.25	--	--	AV	216.00	150	Vertical	N/A
5	12102.838	49.85	0.59	74.0	-24.15	Peak	84.00	150	Vertical	Pass
5**	12102.838	41.90	0.59	54.0	-12.10	AV	84.00	150	Vertical	Pass
6	15522.525	53.62	1.38	74.0	-20.38	Peak	235.00	150	Vertical	Pass
6**	15522.525	43.51	1.38	54.0	-10.49	AV	235.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1571.700	39.64	-17.54	74.0	-34.36	Peak	326.00	150	Horizontal	Pass
1**	1571.700	32.35	-17.54	54.0	-21.65	AV	326.00	150	Horizontal	Pass
2	2861.500	42.74	-10.24	74.0	-31.26	Peak	-1.00	150	Horizontal	Pass
2**	2861.500	33.32	-10.24	54.0	-20.68	AV	-1.00	150	Horizontal	Pass
3	4279.000	47.37	-4.55	74.0	-26.63	Peak	73.00	150	Horizontal	Pass
3**	4279.000	37.92	-4.55	54.0	-16.08	AV	73.00	150	Horizontal	Pass
4	5320.400	95.74	-2.78	--	--	Peak	203.00	150	Horizontal	N/A
4**	5320.400	87.53	-2.78	--	--	AV	203.00	150	Horizontal	N/A
5	12596.475	50.70	1.82	74.0	-23.30	Peak	0.00	150	Horizontal	Pass
5**	12596.475	41.56	1.82	54.0	-12.44	AV	0.00	150	Horizontal	Pass
6	15793.162	52.83	2.11	74.0	-21.17	Peak	361.00	150	Horizontal	Pass
6**	15793.162	44.51	2.11	54.0	-9.49	AV	361.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1612.000	45.57	-17.69	74.0	-28.43	Peak	22.00	150	Vertical	Pass
1**	1612.000	27.56	-17.69	54.0	-26.44	AV	22.00	150	Vertical	Pass
2	2786.900	42.18	-10.49	74.0	-31.82	Peak	244.00	150	Vertical	Pass
2**	2786.900	32.85	-10.49	54.0	-21.15	AV	244.00	150	Vertical	Pass
3	4045.200	46.73	-4.86	74.0	-27.27	Peak	76.00	150	Vertical	Pass
3**	4045.200	38.52	-4.86	54.0	-15.48	AV	76.00	150	Vertical	Pass
4	5325.800	93.30	-3.00	--	--	Peak	219.00	150	Vertical	N/A
4**	5325.800	85.54	-3.00	--	--	AV	219.00	150	Vertical	N/A
5	11929.475	50.79	1.56	74.0	-23.21	Peak	161.00	150	Vertical	Pass
5**	11929.475	40.85	1.56	54.0	-13.15	AV	161.00	150	Vertical	Pass
6	15834.900	52.81	1.45	74.0	-21.19	Peak	58.00	150	Vertical	Pass
6**	15834.900	43.79	1.45	54.0	-10.21	AV	58.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1703.200	41.79	-17.26	74.0	-32.21	Peak	350.00	100	Horizontal	Pass
1**	1703.200	29.11	-17.26	54.0	-24.89	AV	350.00	100	Horizontal	Pass
2	2844.500	42.67	-10.33	74.0	-31.33	Peak	230.00	100	Horizontal	Pass
2**	2844.500	34.60	-10.33	54.0	-19.40	AV	230.00	100	Horizontal	Pass
3	3935.600	46.41	-5.76	74.0	-27.59	Peak	102.00	100	Horizontal	Pass
3**	3935.600	36.33	-5.76	54.0	-17.67	AV	102.00	100	Horizontal	Pass
4	5502.000	98.35	-2.20	--	--	Peak	186.00	100	Horizontal	N/A
4**	5502.000	93.28	-2.20	--	--	AV	186.00	100	Horizontal	N/A
5	12392.925	51.20	1.59	74.0	-22.80	Peak	359.00	100	Horizontal	Pass
5**	12392.925	42.00	1.59	54.0	-12.00	AV	359.00	100	Horizontal	Pass
6	15902.099	53.64	0.30	74.0	-20.36	Peak	317.00	100	Horizontal	Pass
6**	15902.099	43.72	0.30	54.0	-10.28	AV	317.00	100	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1679.500	45.30	-17.50	74.0	-28.70	Peak	360.00	100	Vertical	Pass
1**	1679.500	32.74	-17.50	54.0	-21.26	AV	360.00	100	Vertical	Pass
2	2830.000	42.72	-10.37	74.0	-31.28	Peak	360.00	100	Vertical	Pass
2**	2830.000	32.41	-10.37	54.0	-21.59	AV	360.00	100	Vertical	Pass
3	4256.800	46.79	-4.92	74.0	-27.21	Peak	209.00	100	Vertical	Pass
3**	4256.800	37.48	-4.92	54.0	-16.52	AV	209.00	100	Vertical	Pass
4	5498.800	96.80	-2.07	--	--	Peak	181.00	100	Vertical	N/A
4**	5498.800	90.84	-2.07	--	--	AV	181.00	100	Vertical	N/A
5	11054.612	50.73	-0.73	74.0	-23.27	Peak	138.00	100	Vertical	Pass
5**	11054.612	40.23	-0.73	54.0	-13.77	AV	138.00	100	Vertical	Pass
6	15638.813	53.54	1.40	74.0	-20.46	Peak	226.00	100	Vertical	Pass
6**	15638.813	43.75	1.40	54.0	-10.25	AV	226.00	100	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1330.400	37.65	-17.40	74.0	-36.35	Peak	70.00	150	Horizontal	Pass
1**	1330.400	30.68	-17.40	54.0	-23.32	AV	70.00	150	Horizontal	Pass
2	2879.400	43.36	-10.26	74.0	-30.64	Peak	112.00	150	Horizontal	Pass
2**	2879.400	33.40	-10.26	54.0	-20.60	AV	112.00	150	Horizontal	Pass
3	4357.000	48.74	-3.70	74.0	-25.26	Peak	229.00	150	Horizontal	Pass
3**	4357.000	37.86	-3.70	54.0	-16.14	AV	229.00	150	Horizontal	Pass
4	5577.600	99.95	-2.16	--	--	Peak	198.00	150	Horizontal	N/A
4**	5577.600	93.05	-2.16	--	--	AV	198.00	150	Horizontal	N/A
5	12430.300	50.46	1.56	74.0	-23.54	Peak	38.00	150	Horizontal	Pass
5**	12430.300	40.98	1.56	54.0	-13.02	AV	38.00	150	Horizontal	Pass
6	15790.800	53.29	2.04	74.0	-20.71	Peak	0.00	150	Horizontal	Pass
6**	15790.800	44.88	2.04	54.0	-9.12	AV	0.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1707.900	46.93	-17.21	74.0	-27.07	Peak	362.00	150	Vertical	Pass
1**	1707.900	28.51	-17.21	54.0	-25.49	AV	362.00	150	Vertical	Pass
2	2833.100	42.84	-10.34	74.0	-31.16	Peak	124.00	150	Vertical	Pass
2**	2833.100	32.71	-10.34	54.0	-21.29	AV	124.00	150	Vertical	Pass
3	4100.800	46.94	-5.76	74.0	-27.06	Peak	210.00	150	Vertical	Pass
3**	4100.800	37.03	-5.76	54.0	-16.97	AV	210.00	150	Vertical	Pass
4	5580.000	98.14	-2.22	--	--	Peak	179.00	150	Vertical	N/A
4**	5580.000	89.35	-2.22	--	--	AV	179.00	150	Vertical	N/A
5	12595.613	51.48	1.80	74.0	-22.52	Peak	206.00	150	Vertical	Pass
5**	12595.613	41.17	1.80	54.0	-12.83	AV	206.00	150	Vertical	Pass
6	16136.513	53.28	1.05	74.0	-20.72	Peak	50.00	150	Vertical	Pass
6**	16136.513	44.58	1.05	54.0	-9.42	AV	50.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1618.300	38.43	-17.62	74.0	-35.57	Peak	362.00	150	Horizontal	Pass
1**	1618.300	27.48	-17.62	54.0	-26.52	AV	362.00	150	Horizontal	Pass
2	2856.600	42.79	-10.32	74.0	-31.21	Peak	143.00	150	Horizontal	Pass
2**	2856.600	33.85	-10.32	54.0	-20.15	AV	143.00	150	Horizontal	Pass
3	4091.000	46.67	-5.61	74.0	-27.33	Peak	275.00	150	Horizontal	Pass
3**	4091.000	38.55	-5.61	54.0	-15.45	AV	275.00	150	Horizontal	Pass
4	5697.600	102.68	-2.09	--	--	Peak	197.00	150	Horizontal	N/A
4**	5697.600	96.08	-2.09	--	--	AV	197.00	150	Horizontal	N/A
5	12482.338	50.42	1.63	74.0	-23.58	Peak	56.00	150	Horizontal	Pass
5**	12482.338	40.40	1.63	54.0	-13.60	AV	56.00	150	Horizontal	Pass
6	15804.975	53.04	2.27	74.0	-20.96	Peak	283.00	150	Horizontal	Pass
6**	15804.975	43.77	2.27	54.0	-10.23	AV	283.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1705.800	49.92	-17.22	74.0	-24.08	Peak	362.00	150	Vertical	Pass
1**	1705.800	40.00	-17.22	54.0	-14.00	AV	362.00	150	Vertical	Pass
2	2809.000	42.19	-10.28	74.0	-31.81	Peak	14.00	150	Vertical	Pass
2**	2809.000	33.23	-10.28	54.0	-20.77	AV	14.00	150	Vertical	Pass
3	4267.200	47.23	-4.53	74.0	-26.77	Peak	360.00	150	Vertical	Pass
3**	4267.200	37.55	-4.53	54.0	-16.45	AV	360.00	150	Vertical	Pass
4	5704.400	98.07	-2.24	--	--	Peak	173.00	150	Vertical	N/A
4**	5704.400	90.58	-2.24	--	--	AV	173.00	150	Vertical	N/A
5	12488.375	50.51	1.66	74.0	-23.49	Peak	59.00	150	Vertical	Pass
5**	12488.375	41.52	1.66	54.0	-12.48	AV	59.00	150	Vertical	Pass
6	15822.300	53.07	1.77	74.0	-20.93	Peak	-2.00	150	Vertical	Pass
6**	15822.300	43.17	1.77	54.0	-10.83	AV	-2.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1330.500	37.05	-17.40	74.0	-36.95	Peak	362.00	150	Horizontal	Pass
1**	1330.500	31.46	-17.40	54.0	-22.54	AV	362.00	150	Horizontal	Pass
2	2853.200	42.77	-10.28	74.0	-31.23	Peak	362.00	150	Horizontal	Pass
2**	2853.200	33.74	-10.28	54.0	-20.26	AV	362.00	150	Horizontal	Pass
3	4040.200	46.86	-4.82	74.0	-27.14	Peak	67.00	150	Horizontal	Pass
3**	4040.200	37.47	-4.82	54.0	-16.53	AV	67.00	150	Horizontal	Pass
4	5496.400	97.48	-2.16	--	--	Peak	183.00	150	Horizontal	N/A
4**	5496.400	89.76	-2.16	--	--	AV	183.00	150	Horizontal	N/A
5	12422.825	51.33	1.41	74.0	-22.67	Peak	181.00	150	Horizontal	Pass
5**	12422.825	40.85	1.41	54.0	-13.15	AV	181.00	150	Horizontal	Pass
6	15798.674	53.40	2.29	74.0	-20.60	Peak	324.00	150	Horizontal	Pass
6**	15798.674	44.24	2.29	54.0	-9.76	AV	324.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1366.900	39.84	-17.42	74.0	-34.16	Peak	44.00	150	Vertical	Pass
1**	1366.900	29.13	-17.42	54.0	-24.87	AV	44.00	150	Vertical	Pass
2	2805.000	42.93	-10.36	74.0	-31.07	Peak	324.00	150	Vertical	Pass
2**	2805.000	32.13	-10.36	54.0	-21.87	AV	324.00	150	Vertical	Pass
3	4187.600	46.71	-4.96	74.0	-27.29	Peak	186.00	150	Vertical	Pass
3**	4187.600	37.14	-4.96	54.0	-16.86	AV	186.00	150	Vertical	Pass
4	5498.800	95.68	-2.07	--	--	Peak	170.00	150	Vertical	N/A
4**	5498.800	89.12	-2.07	--	--	AV	170.00	150	Vertical	N/A
5	12508.787	50.78	1.63	74.0	-23.22	Peak	89.00	150	Vertical	Pass
5**	12508.787	41.49	1.63	54.0	-12.51	AV	89.00	150	Vertical	Pass
6	15906.825	53.06	0.31	74.0	-20.94	Peak	360.00	150	Vertical	Pass
6**	15906.825	44.32	0.31	54.0	-9.68	AV	360.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1704.800	41.71	-17.20	74.0	-32.29	Peak	111.00	150	Horizontal	Pass
1**	1704.800	27.66	-17.20	54.0	-26.34	AV	111.00	150	Horizontal	Pass
2	2782.300	42.93	-10.43	74.0	-31.07	Peak	335.00	150	Horizontal	Pass
2**	2782.300	34.98	-10.43	54.0	-19.02	AV	335.00	150	Horizontal	Pass
3	4324.800	47.42	-4.28	74.0	-26.58	Peak	121.00	150	Horizontal	Pass
3**	4324.800	37.61	-4.28	54.0	-16.39	AV	121.00	150	Horizontal	Pass
4	5578.400	98.93	-2.13	--	--	Peak	176.00	150	Horizontal	N/A
4**	5578.400	92.57	-2.13	--	--	AV	176.00	150	Horizontal	N/A
5	12423.400	50.66	1.42	74.0	-23.34	Peak	0.00	150	Horizontal	Pass
5**	12423.400	41.86	1.42	54.0	-12.14	AV	0.00	150	Horizontal	Pass
6	15846.713	53.19	1.36	74.0	-20.81	Peak	-2.00	150	Horizontal	Pass
6**	15846.713	45.36	1.36	54.0	-8.64	AV	-2.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1697.700	47.76	-17.31	74.0	-26.24	Peak	12.00	150	Vertical	Pass
1**	1697.700	33.01	-17.31	54.0	-20.99	AV	12.00	150	Vertical	Pass
2	2735.400	42.40	-10.96	74.0	-31.60	Peak	306.00	150	Vertical	Pass
2**	2735.400	33.48	-10.96	54.0	-20.52	AV	306.00	150	Vertical	Pass
3	4052.800	46.63	-4.88	74.0	-27.37	Peak	308.00	150	Vertical	Pass
3**	4052.800	37.26	-4.88	54.0	-16.74	AV	308.00	150	Vertical	Pass
4	5576.000	96.29	-2.24	--	--	Peak	180.00	150	Vertical	N/A
4**	5576.000	89.99	-2.24	--	--	AV	180.00	150	Vertical	N/A
5	11976.912	50.54	0.83	74.0	-23.46	Peak	51.00	150	Vertical	Pass
5**	11976.912	40.16	0.83	54.0	-13.84	AV	51.00	150	Vertical	Pass
6	16043.062	53.48	0.77	74.0	-20.52	Peak	234.00	150	Vertical	Pass
6**	16043.062	44.67	0.77	54.0	-9.33	AV	234.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1704.700	42.38	-17.19	74.0	-31.62	Peak	120.00	150	Horizontal	Pass
1**	1704.700	29.27	-17.19	54.0	-24.73	AV	120.00	150	Horizontal	Pass
2	2787.900	42.78	-10.55	74.0	-31.22	Peak	102.00	150	Horizontal	Pass
2**	2787.900	33.03	-10.55	54.0	-20.97	AV	102.00	150	Horizontal	Pass
3	3874.000	46.65	-5.88	74.0	-27.35	Peak	161.00	150	Horizontal	Pass
3**	3874.000	36.85	-5.88	54.0	-17.15	AV	161.00	150	Horizontal	Pass
4	5700.000	100.69	-2.05	--	--	Peak	189.00	150	Horizontal	N/A
4**	5700.000	92.40	-2.05	--	--	AV	189.00	150	Horizontal	N/A
5	11900.724	49.85	1.71	74.0	-24.15	Peak	106.00	150	Horizontal	Pass
5**	11900.724	40.93	1.71	54.0	-13.07	AV	106.00	150	Horizontal	Pass
6	15518.325	53.78	1.39	74.0	-20.22	Peak	299.00	150	Horizontal	Pass
6**	15518.325	44.80	1.39	54.0	-9.20	AV	299.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1702.100	47.38	-17.30	74.0	-26.62	Peak	362.00	150	Vertical	Pass
1**	1702.100	35.62	-17.30	54.0	-18.38	AV	362.00	150	Vertical	Pass
2	2785.500	42.33	-10.49	74.0	-31.67	Peak	313.00	150	Vertical	Pass
2**	2785.500	34.55	-10.49	54.0	-19.45	AV	313.00	150	Vertical	Pass
3	4044.800	46.56	-4.88	74.0	-27.44	Peak	325.00	150	Vertical	Pass
3**	4044.800	37.70	-4.88	54.0	-16.30	AV	325.00	150	Vertical	Pass
4	5701.000	97.01	-2.09	--	--	Peak	179.00	150	Vertical	N/A
4**	5701.000	89.93	-2.09	--	--	AV	179.00	150	Vertical	N/A
5	12269.013	50.37	1.42	74.0	-23.63	Peak	362.00	150	Vertical	Pass
5**	12269.013	41.78	1.42	54.0	-12.22	AV	362.00	150	Vertical	Pass
6	15807.337	53.35	2.22	74.0	-20.65	Peak	361.00	150	Vertical	Pass
6**	15807.337	44.18	2.22	54.0	-9.82	AV	361.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1329.500	37.70	-17.43	74.0	-36.30	Peak	362.00	150	Horizontal	Pass
1**	1329.500	29.54	-17.43	54.0	-24.46	AV	362.00	150	Horizontal	Pass
2	2812.600	42.49	-10.09	74.0	-31.51	Peak	254.00	150	Horizontal	Pass
2**	2812.600	33.70	-10.09	54.0	-20.30	AV	254.00	150	Horizontal	Pass
3	4183.800	46.91	-4.99	74.0	-27.09	Peak	200.00	150	Horizontal	Pass
3**	4183.800	37.40	-4.99	54.0	-16.60	AV	200.00	150	Horizontal	Pass
4	5740.400	101.48	-2.32	--	--	Peak	200.00	150	Horizontal	N/A
4**	5740.400	93.33	-2.32	--	--	AV	200.00	150	Horizontal	N/A
5	12169.538	50.51	0.64	74.0	-23.49	Peak	166.00	150	Horizontal	Pass
5**	12169.538	40.44	0.64	54.0	-13.56	AV	166.00	150	Horizontal	Pass
6	15806.026	53.67	2.25	74.0	-20.33	Peak	-2.00	150	Horizontal	Pass
6**	15806.026	45.38	2.25	54.0	-8.62	AV	-2.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1707.000	47.54	-17.23	74.0	-26.46	Peak	362.00	150	Vertical	Pass
1**	1707.000	34.98	-17.23	54.0	-19.02	AV	362.00	150	Vertical	Pass
2	2789.600	42.52	-10.58	74.0	-31.48	Peak	172.00	150	Vertical	Pass
2**	2789.600	32.64	-10.58	54.0	-21.36	AV	172.00	150	Vertical	Pass
3	4177.000	47.12	-5.31	74.0	-26.88	Peak	285.00	150	Vertical	Pass
3**	4177.000	37.66	-5.31	54.0	-16.34	AV	285.00	150	Vertical	Pass
4	5744.200	95.71	-2.31	--	--	Peak	81.00	150	Vertical	N/A
4**	5744.200	89.74	-2.31	--	--	AV	81.00	150	Vertical	N/A
5	12000.775	50.47	1.28	74.0	-23.53	Peak	154.00	150	Vertical	Pass
5**	12000.775	41.10	1.28	54.0	-12.90	AV	154.00	150	Vertical	Pass
6	15631.200	53.00	1.67	74.0	-21.00	Peak	360.00	150	Vertical	Pass
6**	15631.200	44.94	1.67	54.0	-9.06	AV	360.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1494.500	46.27	-17.58	74.0	-27.73	Peak	330.00	150	Horizontal	Pass
1**	1494.500	39.33	-17.58	54.0	-14.67	AV	330.00	150	Horizontal	Pass
2	2757.300	42.29	-10.82	74.0	-31.71	Peak	251.00	150	Horizontal	Pass
2**	2757.300	32.83	-10.82	54.0	-21.17	AV	251.00	150	Horizontal	Pass
3	4268.200	47.44	-4.52	74.0	-26.56	Peak	183.00	150	Horizontal	Pass
3**	4268.200	37.30	-4.52	54.0	-16.70	AV	183.00	150	Horizontal	Pass
4	5783.600	100.27	-2.26	--	--	Peak	198.00	150	Horizontal	N/A
4**	5783.600	93.37	-2.26	--	--	AV	198.00	150	Horizontal	N/A
5	12245.437	51.00	1.01	74.0	-23.00	Peak	309.00	150	Horizontal	Pass
5**	12245.437	40.66	1.01	54.0	-13.34	AV	309.00	150	Horizontal	Pass
6	16070.625	53.37	1.37	74.0	-20.63	Peak	361.00	150	Horizontal	Pass
6**	16070.625	44.56	1.37	54.0	-9.44	AV	361.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1609.700	44.42	-17.74	74.0	-29.58	Peak	36.00	150	Vertical	Pass
1**	1609.700	32.52	-17.74	54.0	-21.48	AV	36.00	150	Vertical	Pass
2	2858.400	42.44	-10.25	74.0	-31.56	Peak	227.00	150	Vertical	Pass
2**	2858.400	33.49	-10.25	54.0	-20.51	AV	227.00	150	Vertical	Pass
3	4273.600	46.87	-4.51	74.0	-27.13	Peak	7.00	150	Vertical	Pass
3**	4273.600	38.12	-4.51	54.0	-15.88	AV	7.00	150	Vertical	Pass
4	5783.400	94.42	-2.25	--	--	Peak	70.00	150	Vertical	N/A
4**	5783.400	88.08	-2.25	--	--	AV	70.00	150	Vertical	N/A
5	11905.901	50.00	1.59	74.0	-24.00	Peak	197.00	150	Vertical	Pass
5**	11905.901	40.19	1.59	54.0	-13.81	AV	197.00	150	Vertical	Pass
6	15778.987	53.99	1.49	74.0	-20.01	Peak	261.00	150	Vertical	Pass
6**	15778.987	44.52	1.49	54.0	-9.48	AV	261.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1366.300	36.78	-17.42	74.0	-37.22	Peak	35.00	150	Horizontal	Pass
1**	1366.300	27.86	-17.42	54.0	-26.14	AV	35.00	150	Horizontal	Pass
2	2795.600	42.12	-10.58	74.0	-31.88	Peak	362.00	150	Horizontal	Pass
2**	2795.600	33.50	-10.58	54.0	-20.50	AV	362.00	150	Horizontal	Pass
3	3969.200	47.00	-5.05	74.0	-27.00	Peak	98.00	150	Horizontal	Pass
3**	3969.200	37.51	-5.05	54.0	-16.49	AV	98.00	150	Horizontal	Pass
4	5828.200	99.75	-2.27	--	--	Peak	192.00	150	Horizontal	N/A
4**	5828.200	92.98	-2.27	--	--	AV	192.00	150	Horizontal	N/A
5	12112.900	50.61	0.56	74.0	-23.39	Peak	279.00	150	Horizontal	Pass
5**	12112.900	40.62	0.56	54.0	-13.38	AV	279.00	150	Horizontal	Pass
6	15860.100	53.06	0.92	74.0	-20.94	Peak	207.00	150	Horizontal	Pass
6**	15860.100	44.83	0.92	54.0	-9.17	AV	207.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1590.800	42.66	-17.49	74.0	-31.34	Peak	35.00	150	Vertical	Pass
1**	1590.800	33.85	-17.49	54.0	-20.15	AV	35.00	150	Vertical	Pass
2	2788.100	43.25	-10.56	74.0	-30.75	Peak	0.00	150	Vertical	Pass
2**	2788.100	33.44	-10.56	54.0	-20.56	AV	0.00	150	Vertical	Pass
3	4359.400	47.77	-3.77	74.0	-26.23	Peak	303.00	150	Vertical	Pass
3**	4359.400	39.21	-3.77	54.0	-14.79	AV	303.00	150	Vertical	Pass
4	5823.400	95.24	-2.41	--	--	Peak	69.00	150	Vertical	N/A
4**	5823.400	87.63	-2.41	--	--	AV	69.00	150	Vertical	N/A
5	11858.463	50.30	1.04	74.0	-23.70	Peak	254.00	150	Vertical	Pass
5**	11858.463	41.48	1.04	54.0	-12.52	AV	254.00	150	Vertical	Pass
6	16030.200	53.30	0.71	74.0	-20.70	Peak	288.00	150	Vertical	Pass
6**	16030.200	45.29	0.71	54.0	-8.71	AV	288.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1330.600	38.33	-17.40	74.0	-35.67	Peak	182.00	150	Horizontal	Pass
1**	1330.600	31.51	-17.40	54.0	-22.49	AV	182.00	150	Horizontal	Pass
2	2860.200	42.84	-10.19	74.0	-31.16	Peak	119.00	150	Horizontal	Pass
2**	2860.200	33.31	-10.19	54.0	-20.69	AV	119.00	150	Horizontal	Pass
3	4079.200	46.91	-5.37	74.0	-27.09	Peak	12.00	150	Horizontal	Pass
3**	4079.200	38.10	-5.37	54.0	-15.90	AV	12.00	150	Horizontal	Pass
4	5743.400	99.69	-2.28	--	--	Peak	188.00	150	Horizontal	N/A
4**	5743.400	93.33	-2.28	--	--	AV	188.00	150	Horizontal	N/A
5	11642.838	50.22	-0.22	74.0	-23.78	Peak	354.00	150	Horizontal	Pass
5**	11642.838	41.11	-0.22	54.0	-12.89	AV	354.00	150	Horizontal	Pass
6	16104.225	53.66	1.01	74.0	-20.34	Peak	361.00	150	Horizontal	Pass
6**	16104.225	44.06	1.01	54.0	-9.94	AV	361.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1364.400	41.32	-17.48	74.0	-32.68	Peak	123.00	150	Vertical	Pass
1**	1364.400	28.46	-17.48	54.0	-25.54	AV	123.00	150	Vertical	Pass
2	2821.400	42.32	-10.22	74.0	-31.68	Peak	198.00	150	Vertical	Pass
2**	2821.400	34.13	-10.22	54.0	-19.87	AV	198.00	150	Vertical	Pass
3	4057.000	46.85	-4.88	74.0	-27.15	Peak	285.00	150	Vertical	Pass
3**	4057.000	37.32	-4.88	54.0	-16.68	AV	285.00	150	Vertical	Pass
4	5746.600	92.77	-2.40	--	--	Peak	73.00	150	Vertical	N/A
4**	5746.600	86.10	-2.40	--	--	AV	73.00	150	Vertical	N/A
5	12059.425	50.55	0.94	74.0	-23.45	Peak	255.00	150	Vertical	Pass
5**	12059.425	40.73	0.94	54.0	-13.27	AV	255.00	150	Vertical	Pass
6	15512.025	52.90	1.42	74.0	-21.10	Peak	202.00	150	Vertical	Pass
6**	15512.025	44.30	1.42	54.0	-9.70	AV	202.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1613.900	39.40	-17.64	74.0	-34.60	Peak	-1.00	150	Horizontal	Pass
1**	1613.900	28.60	-17.64	54.0	-25.40	AV	-1.00	150	Horizontal	Pass
2	2827.600	42.51	-10.31	74.0	-31.49	Peak	328.00	150	Horizontal	Pass
2**	2827.600	33.63	-10.31	54.0	-20.37	AV	328.00	150	Horizontal	Pass
3	4289.000	46.85	-4.97	74.0	-27.15	Peak	128.00	150	Horizontal	Pass
3**	4289.000	37.53	-4.97	54.0	-16.47	AV	128.00	150	Horizontal	Pass
4	5786.400	100.64	-2.46	--	--	Peak	188.00	150	Horizontal	N/A
4**	5786.400	94.28	-2.46	--	--	AV	188.00	150	Horizontal	N/A
5	12298.625	50.31	1.50	74.0	-23.69	Peak	224.00	150	Horizontal	Pass
5**	12298.625	40.72	1.50	54.0	-13.28	AV	224.00	150	Horizontal	Pass
6	15783.975	53.36	1.75	74.0	-20.64	Peak	-2.00	150	Horizontal	Pass
6**	15783.975	44.70	1.75	54.0	-9.30	AV	-2.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1329.400	45.59	-17.44	74.0	-28.41	Peak	20.00	150	Vertical	Pass
1**	1329.400	30.54	-17.44	54.0	-23.46	AV	20.00	150	Vertical	Pass
2	2830.800	42.57	-10.37	74.0	-31.43	Peak	362.00	150	Vertical	Pass
2**	2830.800	34.98	-10.37	54.0	-19.02	AV	362.00	150	Vertical	Pass
3	4335.600	47.31	-4.54	74.0	-26.69	Peak	134.00	150	Vertical	Pass
3**	4335.600	38.20	-4.54	54.0	-15.80	AV	134.00	150	Vertical	Pass
4	5786.600	94.79	-2.47	--	--	Peak	214.00	150	Vertical	N/A
4**	5786.600	88.38	-2.47	--	--	AV	214.00	150	Vertical	N/A
5	12063.450	50.59	0.90	74.0	-23.41	Peak	361.00	150	Vertical	Pass
5**	12063.450	40.90	0.90	54.0	-13.10	AV	361.00	150	Vertical	Pass
6	15625.950	53.20	1.72	74.0	-20.80	Peak	313.00	150	Vertical	Pass
6**	15625.950	45.06	1.72	54.0	-8.94	AV	313.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1328.800	38.46	-17.46	74.0	-35.54	Peak	69.00	150	Horizontal	Pass
1**	1328.800	29.91	-17.46	54.0	-24.09	AV	69.00	150	Horizontal	Pass
2	2846.400	42.79	-10.34	74.0	-31.21	Peak	69.00	150	Horizontal	Pass
2**	2846.400	34.64	-10.34	54.0	-19.36	AV	69.00	150	Horizontal	Pass
3	4247.800	47.06	-4.90	74.0	-26.94	Peak	195.00	150	Horizontal	Pass
3**	4247.800	38.70	-4.90	54.0	-15.30	AV	195.00	150	Horizontal	Pass
4	5829.200	100.02	-2.21	--	--	Peak	177.00	150	Horizontal	N/A
4**	5829.200	91.98	-2.21	--	--	AV	177.00	150	Horizontal	N/A
5	11636.225	50.16	-0.22	74.0	-23.84	Peak	362.00	150	Horizontal	Pass
5**	11636.225	40.17	-0.22	54.0	-13.83	AV	362.00	150	Horizontal	Pass
6	15787.388	54.23	1.90	74.0	-19.77	Peak	360.00	150	Horizontal	Pass
6**	15787.388	45.16	1.90	54.0	-8.84	AV	360.00	150	Horizontal	Pass

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

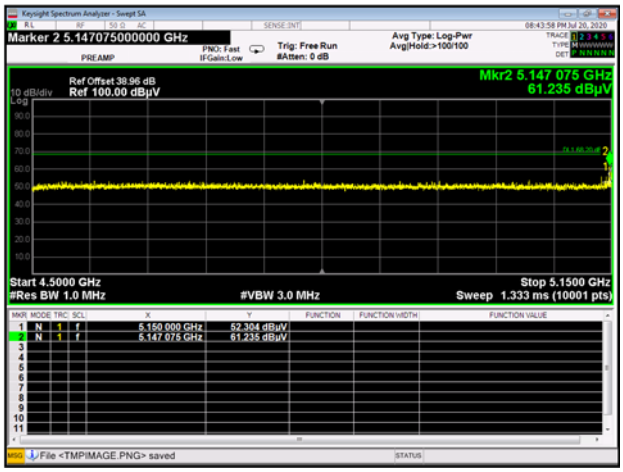
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1328.600	40.55	-17.46	74.0	-33.45	Peak	91.00	150	Vertical	Pass
1**	1328.600	31.26	-17.46	54.0	-22.74	AV	91.00	150	Vertical	Pass
2	2771.800	42.40	-10.49	74.0	-31.60	Peak	-1.00	150	Vertical	Pass
2**	2771.800	33.61	-10.49	54.0	-20.39	AV	-1.00	150	Vertical	Pass
3	4172.400	47.08	-5.19	74.0	-26.92	Peak	348.00	150	Vertical	Pass
3**	4172.400	37.23	-5.19	54.0	-16.77	AV	348.00	150	Vertical	Pass
4	5825.000	92.26	-2.39	--	--	Peak	75.00	150	Vertical	N/A
4**	5825.000	84.16	-2.39	--	--	AV	75.00	150	Vertical	N/A
5	11847.825	49.87	1.14	74.0	-24.13	Peak	256.00	150	Vertical	Pass
5**	11847.825	40.93	1.14	54.0	-13.07	AV	256.00	150	Vertical	Pass
6	15523.838	53.14	1.39	74.0	-20.86	Peak	168.00	150	Vertical	Pass
6**	15523.838	44.39	1.39	54.0	-9.61	AV	168.00	150	Vertical	Pass

A.6.2 Band Edge (Restricted-band)

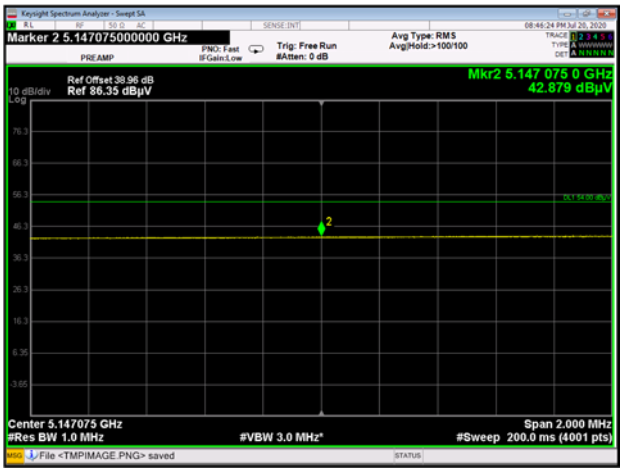
Test Band	Mode	Channel	Verdict
Band I	802.11a	Low	Pass
		High	Pass
	802.11n(HT20)	Low	Pass
		High	Pass
Band II	802.11a	Low	Pass
		High	Pass
	802.11n(HT20)	Low	Pass
		High	Pass
Band III	802.11a	Low	Pass
		High	Pass
	802.11n(HT20)	Low	Pass
		High	Pass
Band IV	802.11a	Low	Pass
		High	Pass
	802.11n(HT20)	Low	Pass
		High	Pass

Test Plots

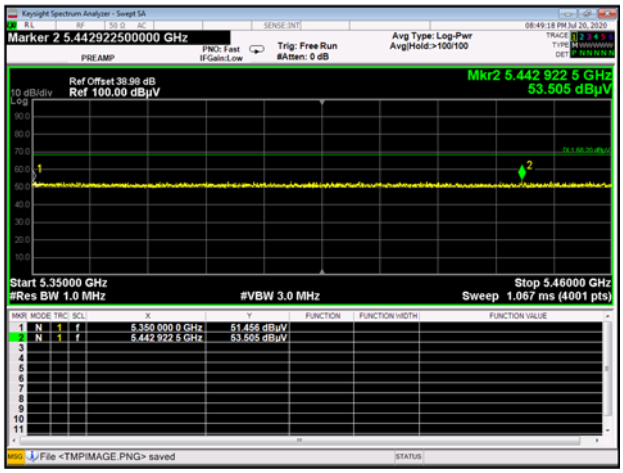
Band I 11a CH36 Peak



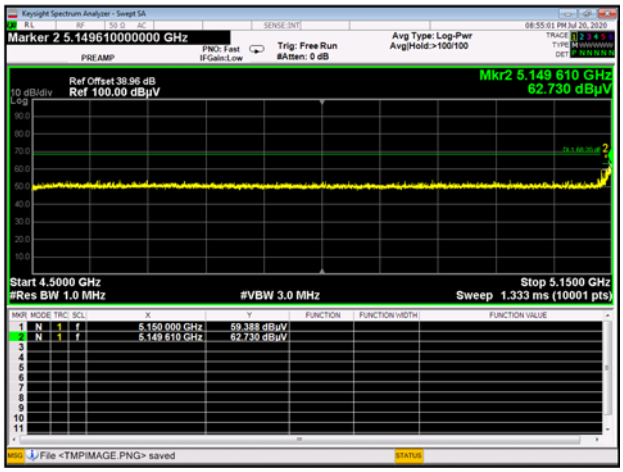
Band I 11a CH36 AV



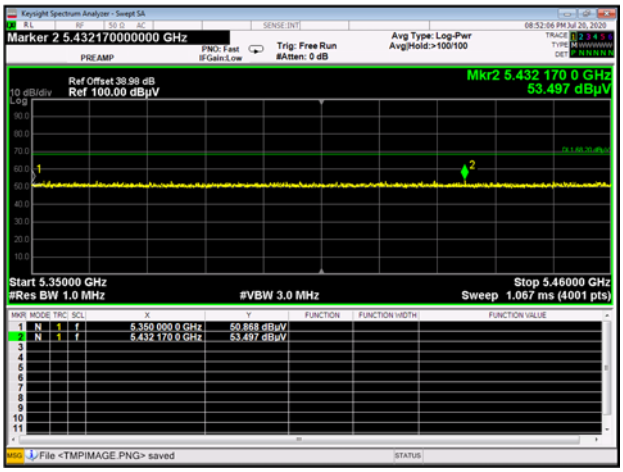
Band I 11a CH48 Peak



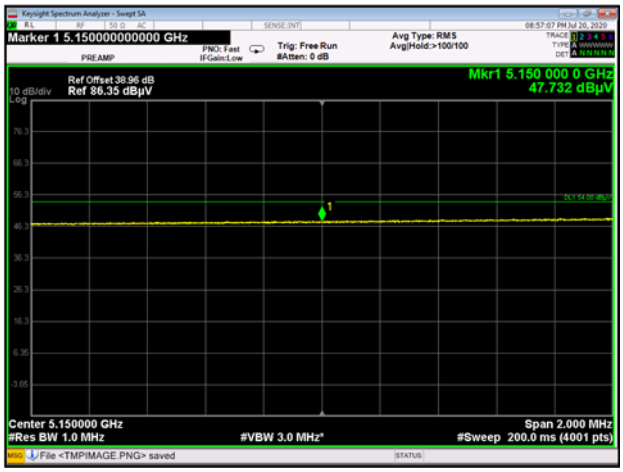
Band I 11n20 CH36 Peak



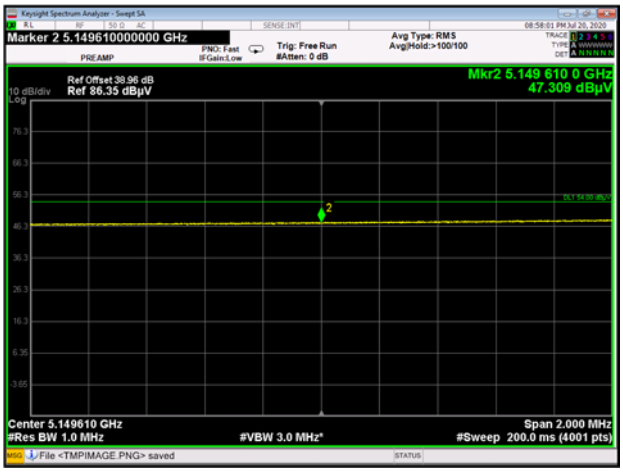
Band I 11n20 CH48 Peak



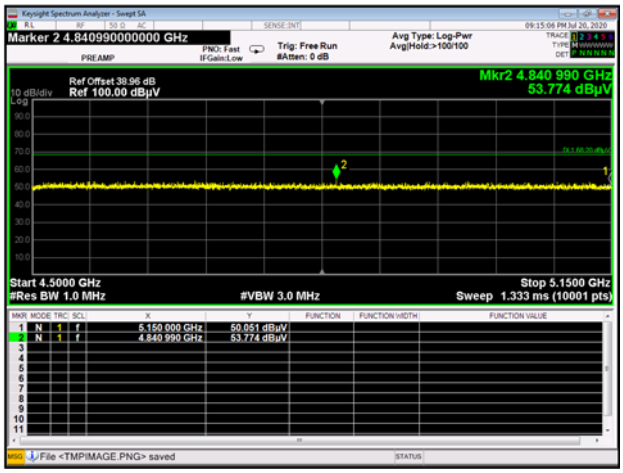
Band I 11n20 CH36 AV



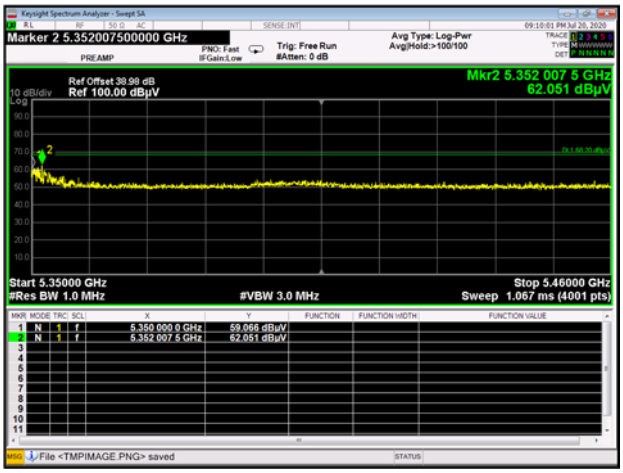
Band I 11n20 CH36 AV



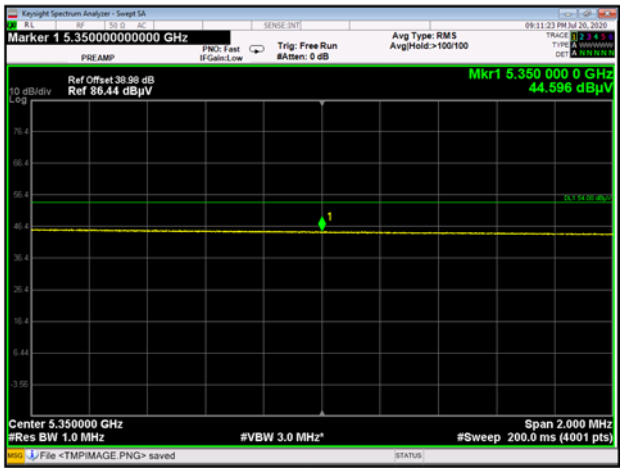
Band II 11a CH52 Peak



Band II 11a CH64 Peak

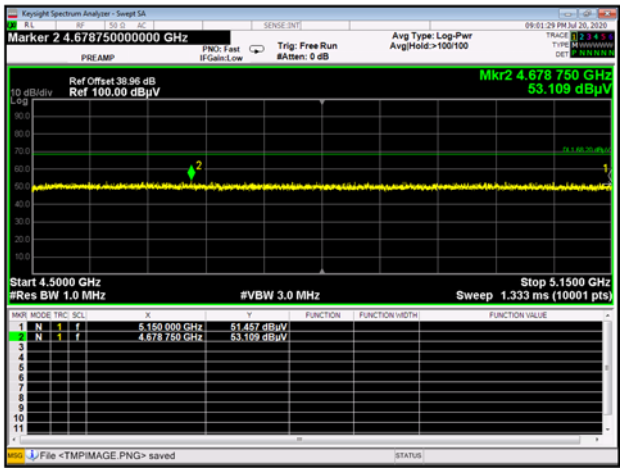


Band II 11a CH64 AV

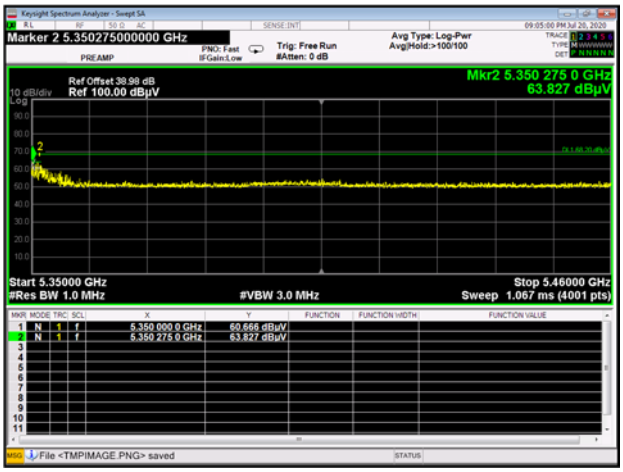


Band II 11a CH64 AV

Band II 11n20 CH52 Peak

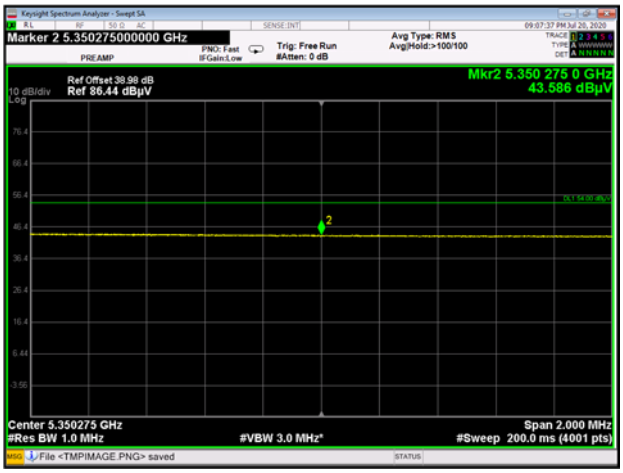


Band II 11n20 CH64 Peak

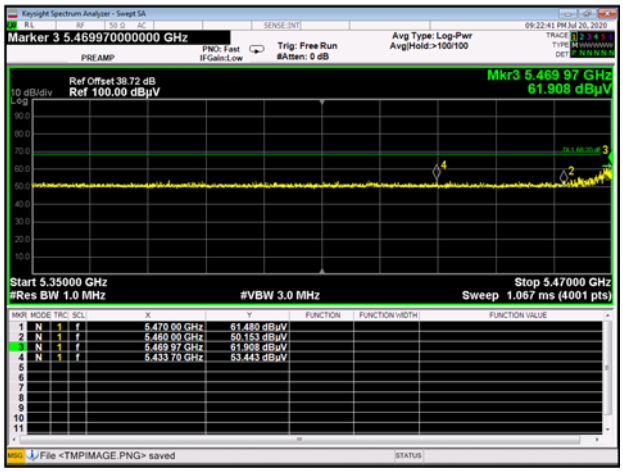


Band II 11n20 CH64 AV

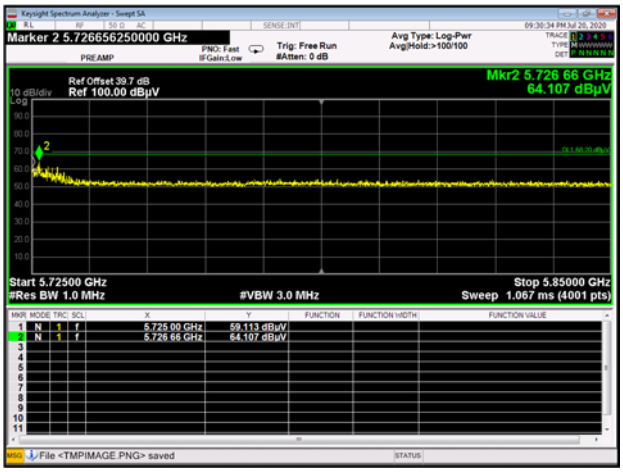
Band II 11n20 CH64 AV



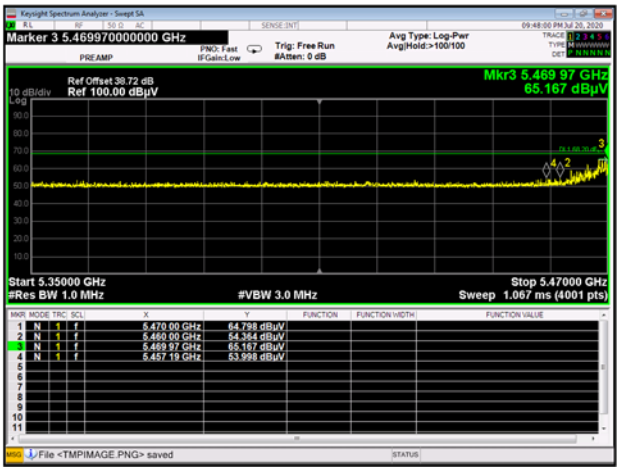
Band III 11a CH100 Peak



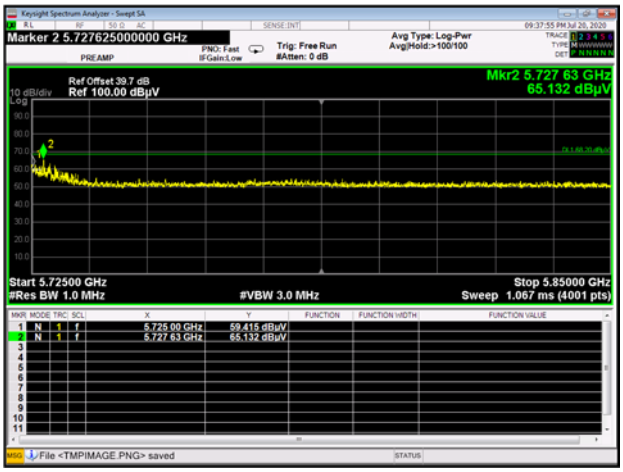
Band III 11a CH140 Peak



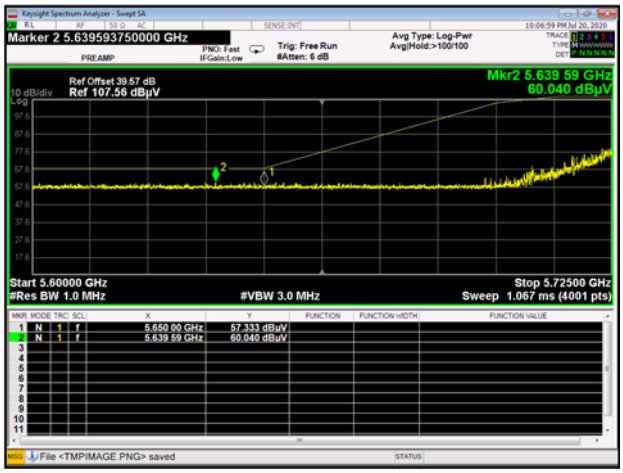
Band III 11n20 CH100 Peak



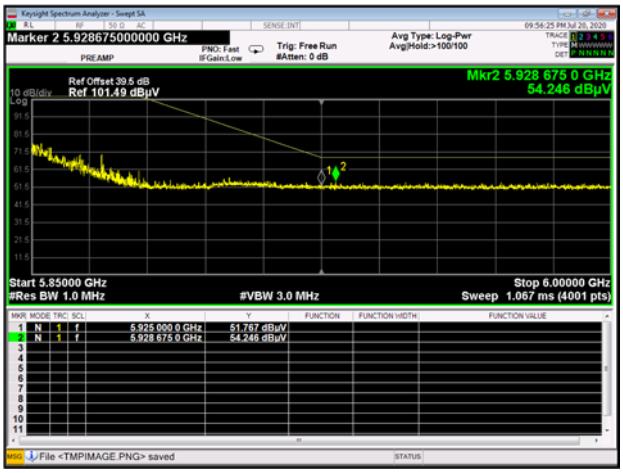
Band III 11n20 CH140 Peak



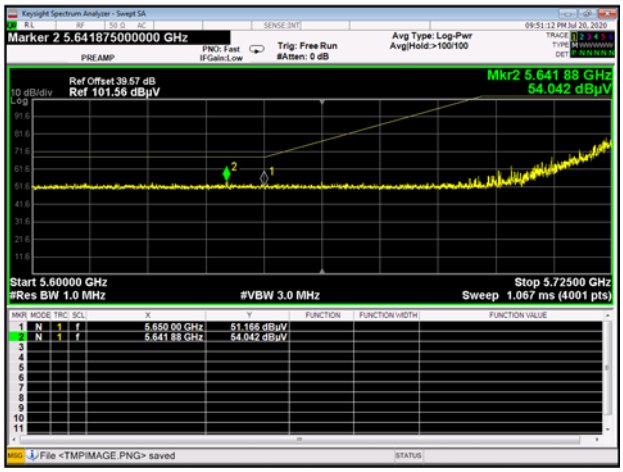
Band IV 11a CH149 Peak



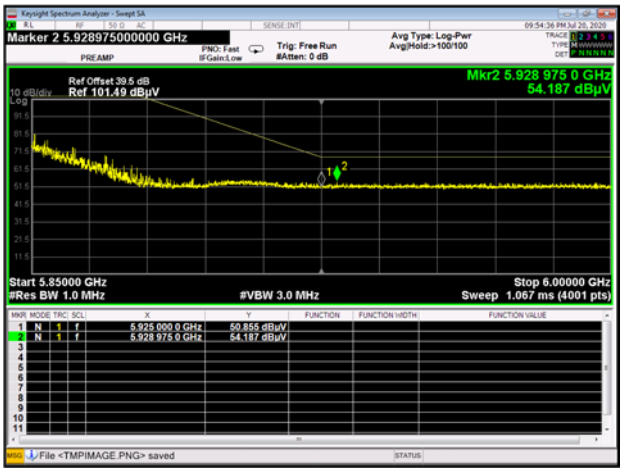
Band IV 11a CH165 Peak



Band IV 11n20 CH149 Peak



Band IV 11n20 CH165 Peak



ANNEX B TEST SETUP PHOTOS

Please refer the document “BL-SZ2070401-AR.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ2070401-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “BL-SZ2070401-AI.PDF”.

--END OF REPORT--