

FCC

RF

TEST REPORT

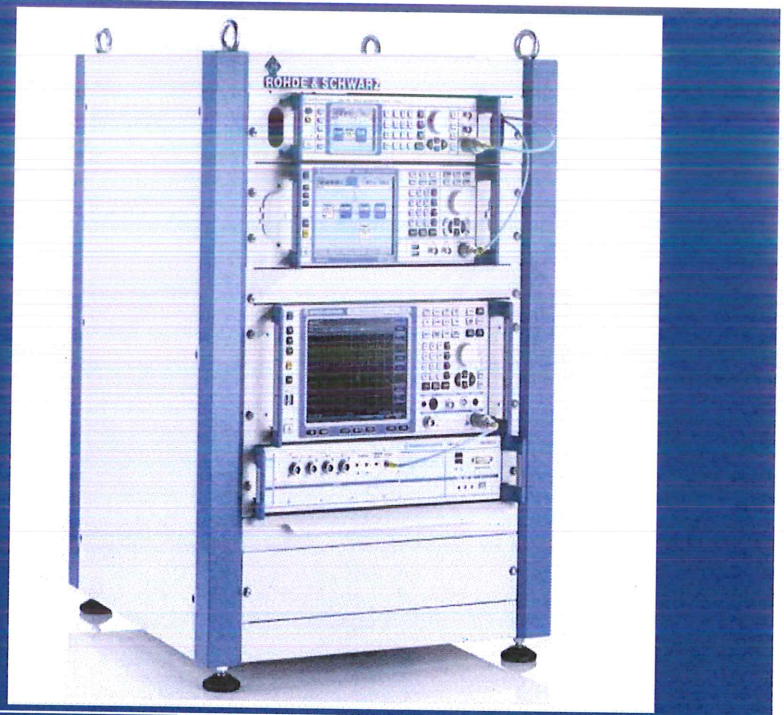
ISSUED BY
Shenzhen BALUN Technology Co., Ltd.




FOR
Dual Band Combo Module

ISSUED TO
Edan Instruments, Inc

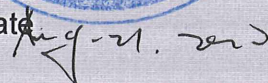
#15 Jinhui Road, Jinsha Community, Kengzi Sub-District, Pingshan District, 518122 Shenzhen P.R.China



Prepared by: 
Ye Hongji

Date: 
Aug. 21, 2020

Approved by: 
Wei Yanquan
(Chief Engineer)

Date: 
Aug. 21, 2020

Report No.: BL-SZ2070396-602

EUT Name: Dual Band Combo Module

Model Name: RS9113

Brand Name: EDAN

Test Standard: 47 CFR Part 15 Subpart E

FCC ID: SMQ9113EDAN

Test Conclusion: Pass

Test Date: Jul. 13, 2020 ~ Jul. 21, 2020

Date of Issue: Aug. 20, 2020

NOTE: This test report of test results only related to testing samples, which can be duplicated completely for the legal use with the approval of the applicant; it shall not be reproduced except in full, without the written approval of Shenzhen BALUN Technology Co., Ltd. Any objections should be raised within thirty days from the date of issue. To validate the report, please contact us.

Revision History

<u>Version</u>	<u>Issue Date</u>	<u>Revisions Content</u>
<u>Rev. 01</u>	<u>Aug. 20, 2020</u>	<u>Initial Issue</u>

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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	<p>The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 11524A-1.</p> <p>The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196.</p> <p>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.</p> <p>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.</p>
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°C to 25°C
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	N/A
Address	N/A

2.4 General Description for Equipment under Test (EUT)

EUT Name	Dual Band Combo Module
Model Name Under Test	RS9113
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	WIFI 802.11a, 802.11b, 802.11g, 802.11n Band 1/2/3/4 SRD
-----------------------------------	--

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	<input type="checkbox"/> Mobile <input type="checkbox"/> Portable <input checked="" type="checkbox"/> Fix Location
Modulation technology	OFDM
Modulation Type	64QAM, 16QAM, BPSK, QPSK
Product Type	Indoor for IC standard Mobile and 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: 11.48 dBm Band II: 11.80 dBm Band III: 11.52 dBm Band IV: 9.55 dBm
Antenna System (eg., MIMO, Smart Antenna)	N/A
Categorization as Correlated or Completely Uncorrelated	N/A
About the Product	The equipment is Dual Band Combo Module, intended for used with information technology equipment.
Note: This value of antenna gain is provided by the applicant.	

Antenna Manufacturer	Model	Antenna Type	Antenna Gain
Edan	SE-18/SE-15	PIFA	2 dBi

2.6 Additional Instructions

EUT Software Settings:

Mode	<input checked="" type="checkbox"/> 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	cmd		
Support Units (Software installation media)	Description	Manufacturer	Model
	Notebook	Dell	N/A

Band I (5150 - 5250 MHz) Power level setup in software			
Mode	Channel	Frequency (MHz)	Soft Set
11a	CH36	5180	9
11a	CH44	5220	10
11a	CH48	5240	7
11n (HT20)	CH36	5180	8
11n (HT20)	CH44	5220	10
11n (HT20)	CH48	5240	8

Band II (5250 - 5350 MHz) Power level setup in software			
Mode	Channel	Frequency (MHz)	Soft Set
11a	CH52	5260	7
11a	CH60	5300	10
11a	CH64	5320	7
11n (HT20)	CH52	5260	8
11n (HT20)	CH60	5300	10
11n (HT20)	CH64	5320	8

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

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

```

Telnet 202.114.4.1
qdar RX bytes:52976 (51.7 KiB) TX bytes:52976 (51.7 KiB)

[EDAN]. /start_sta.sh
./start_sta.sh: line 1: can't create /var/log/messages: nonexistent directory
onebox_insert.sh: line 2: can't create /var/log/messages: nonexistent directory
common_insert.sh: line 2: can't create /var/log/messages: nonexistent directory
GoWLAN protocol selected
ChnDriver initialization is done
Creating VAP in station mode
Software Beacon miss handling enabled
Error While starting Device...
Device might not be detected or Driver might not be installed properly
AB15 [EDAN]. /transmit rpine0 7 6 750 0 11 0 1 0 0 0 255
TX PWR is 7

--Tx TEST CONFIGURATION--
Tx POWER : 7
Tx RATE : 6
PACKET LENGTH : 750
Tx MODE : BURST
CHANNEL NUM : 11
RATE_FLAGS : 1
CHAN_WIDTH : 0
AGCR_ENABLE : 0
NO OF PACKETS : 0
DELAY : 0
CTRY_REGION : 255
Tx Started
[EDAN]
FiretoX 60060 WINTHRAX TFGEN1[1].0 NovaLCT CMS3.0 Instrument Printscreen
  
```

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
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
				Channel
RF Output Power	11a	6	BPSK	48/44/36
	11n(20 MHz)	6.5		48/44/36
Emission Bandwidth & 99% Occupied Bandwidth	11a	6	BPSK	48/44/36
	11n(20 MHz)	6.5		48/44/36
6 dB bandwidth	11a	6	BPSK	N/A
	11n(20 MHz)	6.5		N/A
Power Spectral Density	11a	6	BPSK	48/44/36
	11n(20 MHz)	6.5		48/44/36
Radiated Spurious Emissions	11a	6	BPSK	48/44/36
	11n(20 MHz)	6.5		48/44/36
Band Edge (Restricted-band)	11a	6	BPSK	48/36
	11n(20 MHz)	6.5		48/36

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.

Note ³: Because EUT has four antenna suppliers, so radiation tests were conducted separately, and the data is distinguished by the antenna model.

Note ⁴: The only difference between the EUT (test samples in this report) and testing sample of report BL-SZ19B0657-602, which was issued by Shenzhen BALUN Technology Co., Ltd. on Mar. 25, 2020 are:

1. Replacement Antenna.

And others hardware circuit and software were all the same. Therefore, only the items Conducted Emission, Radiated Spurious Emission and Band Edge(Restricted-band band-edge) were tested in this report, other test data originate from the report BL-SZ19B0657-602, which was issued by Shenzhen BALUN Technology Co., Ltd. on Mar. 25, 2020.

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°C to +25°C
	LT (Low Temperature)	0°C
	HT (High Temperature)	+40°C
Working Voltage of the EUT	NV (Normal Voltage)	3.3 V
	LV (Low Voltage)	3.0 V
	HV (High Voltage)	3.5 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

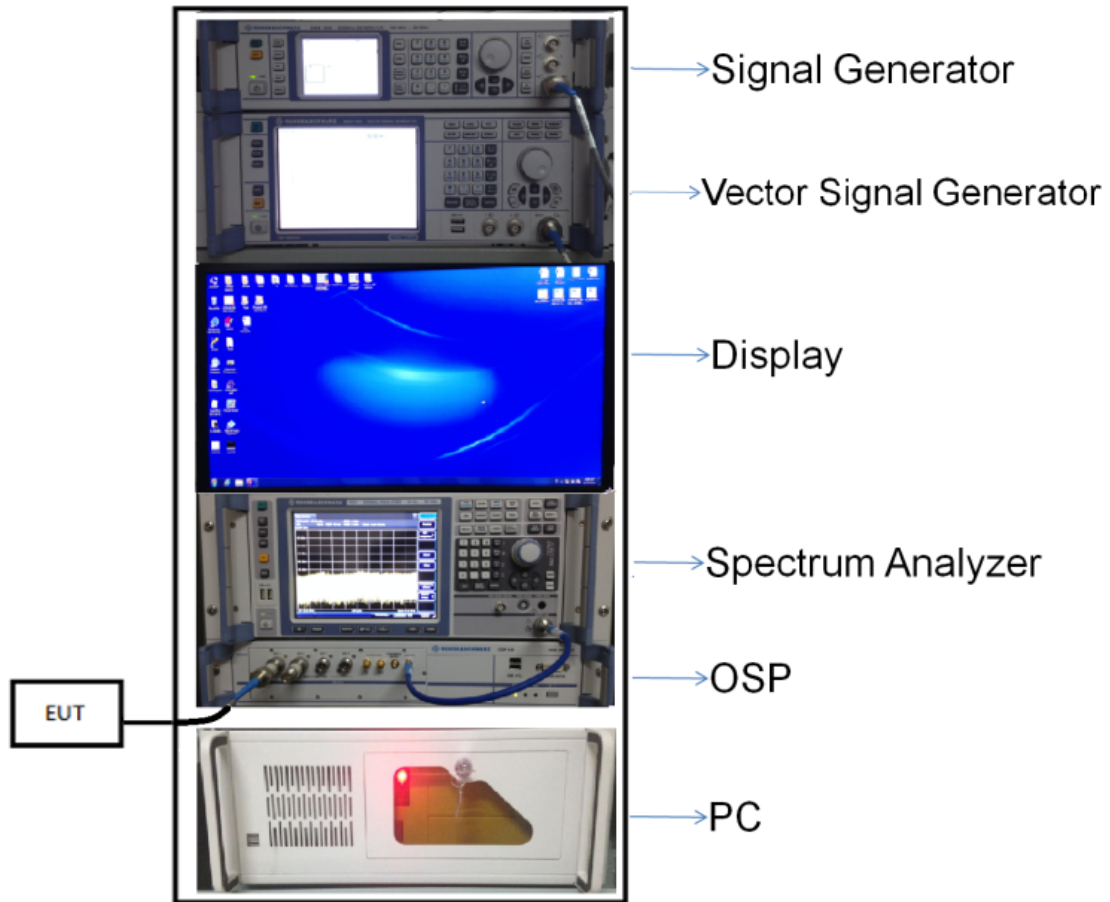
The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2.

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	$\pm 4\%$
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	$\pm 4\%$

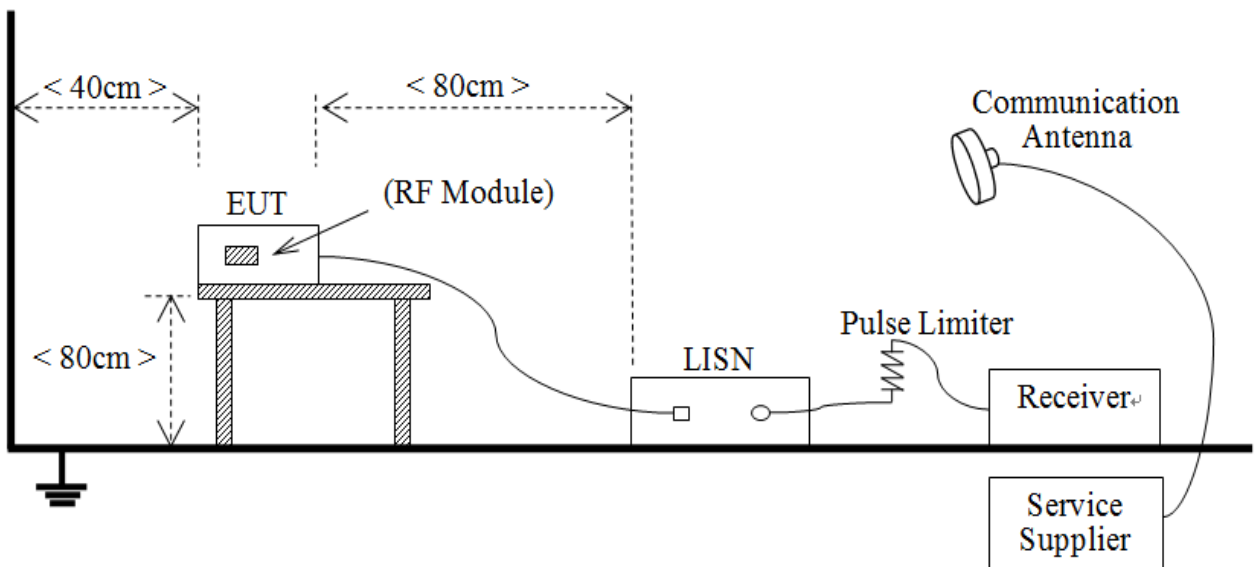
4.4 Description of Test Setup

4.4.1 For Antenna Port Test



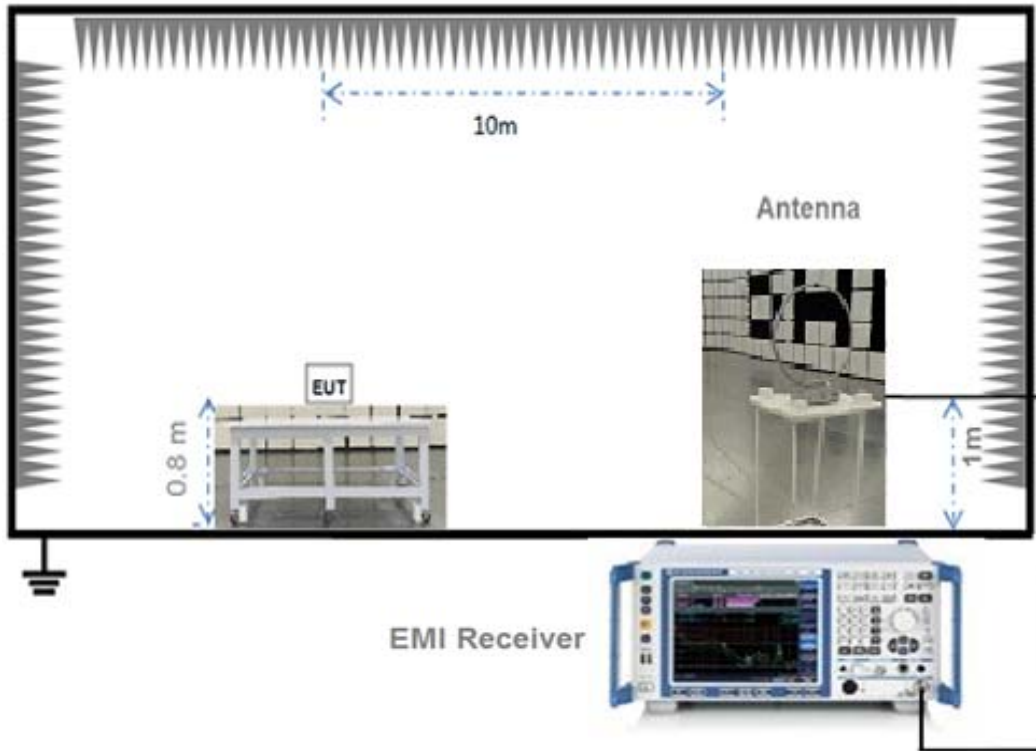
(Diagram 1)

4.4.2 For AC Power Supply Port Test



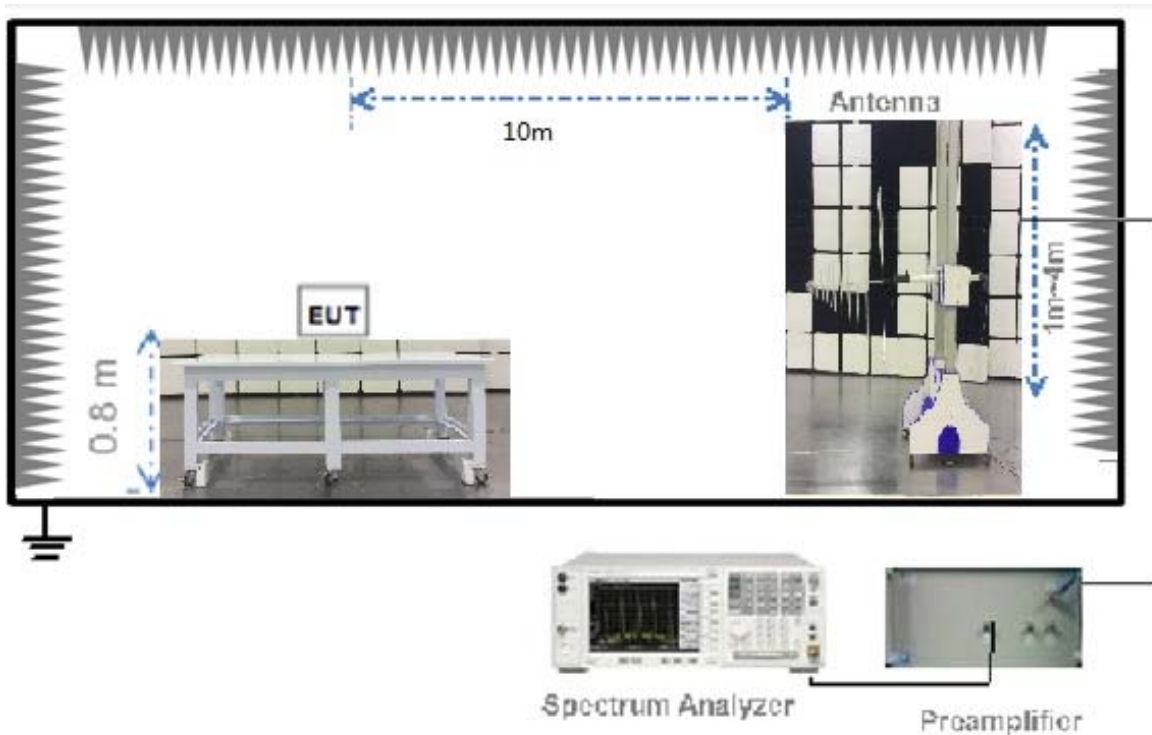
(Diagram 2)

4.4.3 For Radiated Test (Below 30 MHz)



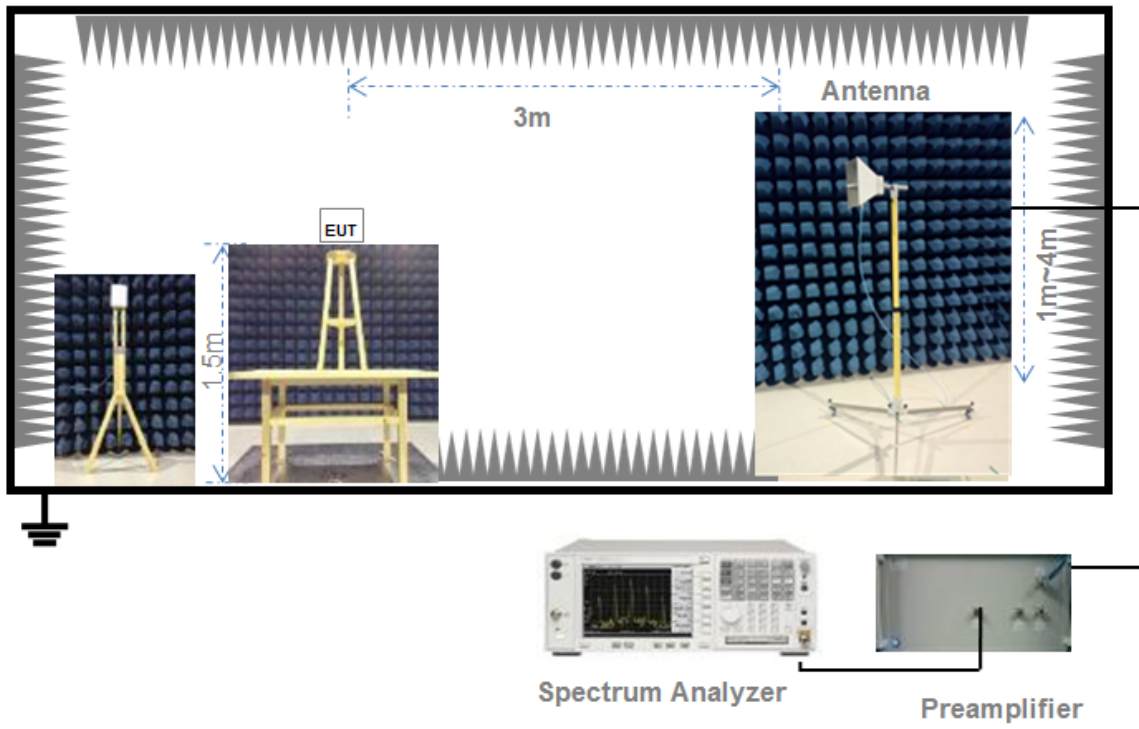
(Diagram 3)

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 $\geq 3 \times$ 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 $\geq 3 \times$ 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 $\geq 3 \times$ 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 50 μ H/50 Ω line impedance stabilization network (LISN).

Frequency range (MHz)	Conducted Limit (dB μ V)	
	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 ($\mu\text{V}/\text{m}$)	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

Note¹: The Limit for radiated test was performed according to FCC Part 15C

Note²: 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	<p>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.</p>

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:

$$E = \text{EIRP} - 20\log D + 104.8$$

where:

E = electric field strength in dB μ V/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 $\geq 3 \times$ 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 $\geq 3 \times$ RBW.
- e) Detector = RMS, if span/(# of points in sweep) \leq (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 $f \geq 1$ GHz, 100 kHz for $f < 1$ GHz

VBW \geq 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: The RF Output Power please refer to the Report No. BL-SZ19B0657-602, which issued by Shenzhen BALUN Technology Co., Ltd. on Mar. 25, 2020, **Section A.1 RF Output Power.**

A.2 Emission Bandwidth & 99% Bandwidth

Note: The Emission Bandwidth & 99% Bandwidth please refer to the Report No. BL-SZ19B0657-602, which issued by Shenzhen BALUN Technology Co., Ltd. on Mar. 25, 2020, **Section A.2 Emission Bandwidth & 99% Bandwidth.**

A.3 6 dB Bandwidth

Note: The 6 dB Bandwidth please refer to the Report No. BL-SZ19B0657-602, which issued by Shenzhen BALUN Technology Co., Ltd. on Mar. 25, 2020, **Section A.3 6 dB Bandwidth.**

A.4 Power Spectral Density

Note: The Power Spectral Density please refer to the Report No. BL-SZ19B0657-602, which issued by Shenzhen BALUN Technology Co., Ltd. on Mar. 25, 2020, **Section A.4 Power Spectral Density.**

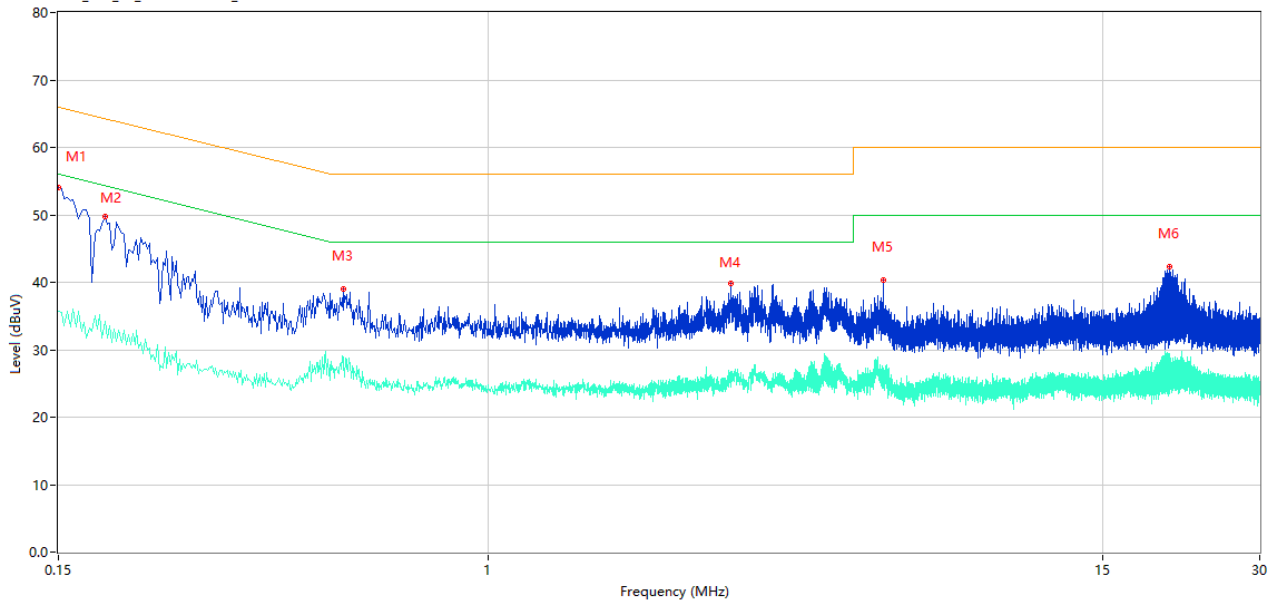
A.5 Conducted Emissions

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

Test Data and Plots

PHASE L

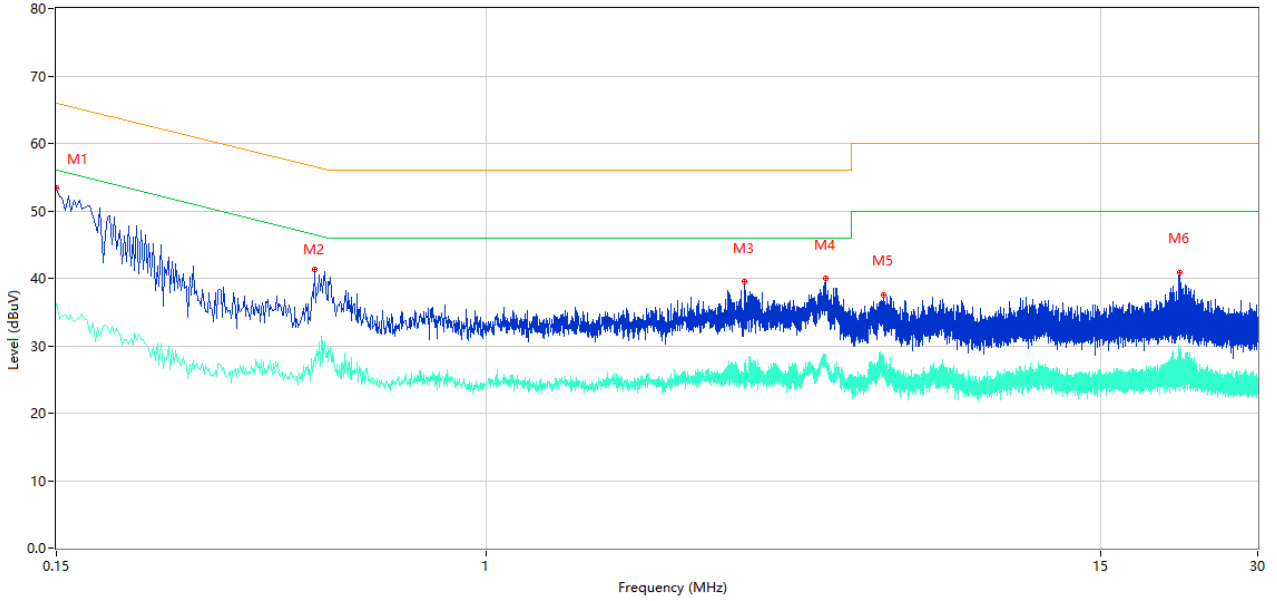
CE Test case_FCC_CE_FCC PART 15B_Class B



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.150	54.03	10.41	66.00	-11.97	Peak	L	Pass
1**	0.150	35.63	10.41	56.00	-20.37	AV	L	Pass
2	0.184	49.82	10.39	64.30	-14.48	Peak	L	Pass
2**	0.184	34.15	10.39	54.30	-20.15	AV	L	Pass
3	0.526	38.98	10.30	56.00	-17.02	Peak	L	Pass
3**	0.526	26.94	10.30	46.00	-19.06	AV	L	Pass
4	2.906	39.81	10.28	56.00	-16.19	Peak	L	Pass
4**	2.906	26.07	10.28	46.00	-19.93	AV	L	Pass
5	5.702	40.25	10.32	60.00	-19.75	Peak	L	Pass
5**	5.702	25.95	10.32	50.00	-24.05	AV	L	Pass
6	20.190	42.36	10.55	60.00	-17.64	Peak	L	Pass
6**	20.190	29.00	10.55	50.00	-21.00	AV	L	Pass

PHASE N

CE Test case_FCC_CE_FCC PART 15B_Class B



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.150	53.46	10.41	66.00	-12.54	Peak	N	Pass
1**	0.150	36.14	10.41	56.00	-19.86	AV	N	Pass
2	0.468	41.33	10.30	56.55	-15.22	Peak	N	Pass
2**	0.468	28.29	10.30	46.55	-18.26	AV	N	Pass
3	3.116	39.43	10.28	56.00	-16.57	Peak	N	Pass
3**	3.116	27.48	10.28	46.00	-18.52	AV	N	Pass
4	4.460	40.03	10.30	56.00	-15.97	Peak	N	Pass
4**	4.460	27.64	10.30	46.00	-18.36	AV	N	Pass
5	5.770	37.53	10.32	60.00	-22.47	Peak	N	Pass
5**	5.770	27.22	10.32	50.00	-22.78	AV	N	Pass
6	21.240	40.76	10.57	60.00	-19.24	Peak	N	Pass
6**	21.240	29.40	10.57	50.00	-20.60	AV	N	Pass

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

Test Data and Plots

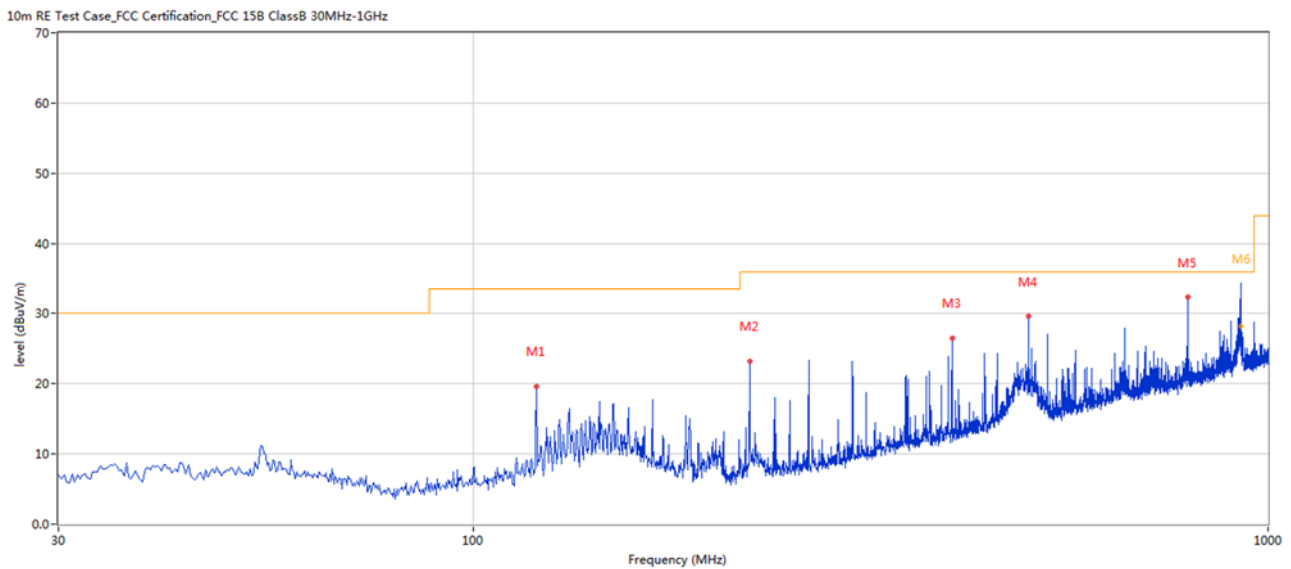
Note 1: The symbol of "--" in the table which means not application.

Note 2: For the test data above 1 GHz, According the ANSI C63.10-2013, 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.

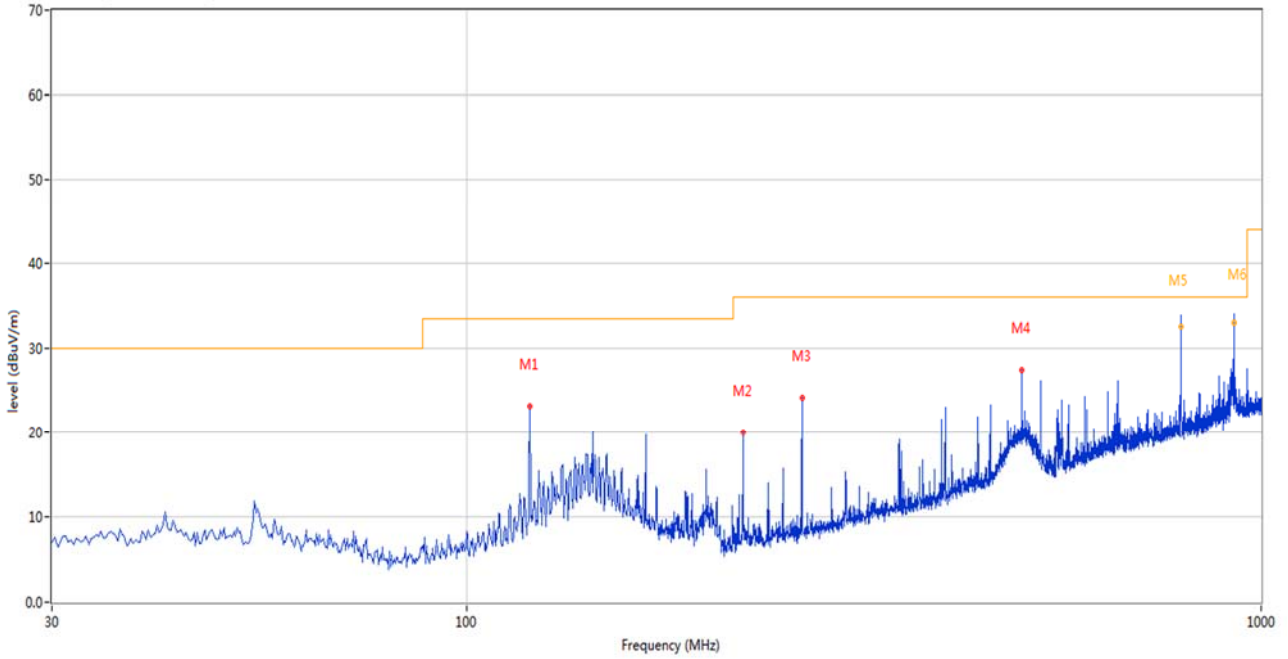
30 MHz to 1 GHz, ANT H



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	119.945	19.55	-28.03	33.5	-13.95	Peak	23.00	400	Horizontal	Pass
2	222.739	23.16	-28.54	36.0	-12.84	Peak	33.00	400	Horizontal	Pass
3	399.963	26.41	-23.17	36.0	-9.59	Peak	225.00	200	Horizontal	Pass
4	499.848	29.52	-20.62	36.0	-6.48	Peak	0.00	300	Horizontal	Pass
5	791.987	32.33	-14.23	36.0	-3.67	Peak	360.00	400	Horizontal	Pass
6	923.986	35.69	-12.05	36.0	-0.31	Peak	360.00	104	Horizontal	N/A
6*	923.986	28.16	-12.05	36.0	-7.84	QP	360.00	104	Horizontal	Pass

30 MHz to 1 GHz, ANT V

10m RE Test Case_FCC Certification_FCC 15B ClassB 30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	119.945	23.18	-28.03	33.5	-10.32	Peak	75.00	100	Vertical	Pass
2	222.739	19.97	-28.54	36.0	-16.03	Peak	201.00	100	Vertical	Pass
3	263.954	24.20	-27.10	36.0	-11.80	Peak	186.00	100	Vertical	Pass
4	499.848	27.46	-20.62	36.0	-8.54	Peak	149.00	400	Vertical	Pass
5	791.989	38.46	-14.23	36.0	2.46	Peak	325.00	219	Vertical	N/A
5*	791.989	32.28	-14.23	36.0	-3.72	QP	325.00	219	Vertical	Pass
6	923.987	38.79	-12.04	36.0	2.79	Peak	179.00	188	Vertical	N/A
6*	923.987	32.57	-12.04	36.0	-3.43	QP	179.00	188	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	1037.000	46.54	-14.85	74.0	-27.46	Peak	103.00	150	Horizontal	Pass
1**	1037.000	42.43	-14.85	54.0	-11.57	AV	103.00	150	Horizontal	Pass
2	2790.400	41.65	-8.88	74.0	-32.35	Peak	70.00	150	Horizontal	Pass
2**	2790.400	31.92	-8.88	54.0	-22.08	AV	70.00	150	Horizontal	Pass
3	4020.800	47.14	-4.03	74.0	-26.86	Peak	338.00	150	Horizontal	Pass
3**	4020.800	37.13	-4.03	54.0	-16.87	AV	338.00	150	Horizontal	Pass
4	5181.600	93.77	-0.58	--	--	Peak	208.00	150	Horizontal	N/A
4**	5181.600	87.49	-0.58	--	--	AV	208.00	150	Horizontal	N/A
5	11679.350	50.76	20.07	74.0	-23.24	Peak	78.00	150	Horizontal	Pass
5**	11679.350	38.34	20.07	54.0	-15.66	AV	78.00	150	Horizontal	Pass
6	16008.150	54.91	24.00	74.0	-19.09	Peak	0.00	150	Horizontal	Pass
6**	16008.150	43.24	24.00	54.0	-10.76	AV	0.00	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	1188.000	45.84	-15.07	74.0	-28.16	Peak	306.00	150	Vertical	Pass
1**	1188.000	42.77	-15.07	54.0	-11.23	AV	306.00	150	Vertical	Pass
2	2860.700	42.21	-7.97	74.0	-31.79	Peak	360.00	150	Vertical	Pass
2**	2860.700	33.82	-7.97	54.0	-20.18	AV	360.00	150	Vertical	Pass
3	4247.800	46.92	-3.18	74.0	-27.08	Peak	110.00	150	Vertical	Pass
3**	4247.800	36.27	-3.18	54.0	-17.73	AV	110.00	150	Vertical	Pass
4	5181.600	80.53	-0.58	--	--	Peak	318.00	150	Vertical	N/A
4**	5181.600	74.70	-0.58	--	--	AV	318.00	150	Vertical	N/A
5	11603.162	49.86	20.15	74.0	-24.14	Peak	360.00	150	Vertical	Pass
5**	11603.162	38.80	20.15	54.0	-15.20	AV	360.00	150	Vertical	Pass
6	15534.075	56.03	23.72	74.0	-17.97	Peak	16.00	150	Vertical	Pass
6**	15534.075	45.54	23.72	54.0	-8.46	AV	16.00	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	1187.500	46.00	-15.08	74.0	-28.00	Peak	186.00	150	Horizontal	Pass
1**	1187.500	39.51	-15.08	54.0	-14.49	AV	186.00	150	Horizontal	Pass
2	2759.400	42.16	-8.89	74.0	-31.84	Peak	0.00	150	Horizontal	Pass
2**	2759.400	31.89	-8.89	54.0	-22.11	AV	0.00	150	Horizontal	Pass
3	4053.200	46.87	-3.72	74.0	-27.13	Peak	217.00	150	Horizontal	Pass
3**	4053.200	35.12	-3.72	54.0	-18.88	AV	217.00	150	Horizontal	Pass
4	5222.600	96.74	-0.39	--	--	Peak	207.00	150	Horizontal	N/A
4**	5222.600	90.39	-0.39	--	--	AV	207.00	150	Horizontal	N/A
5	12207.487	50.91	20.44	74.0	-23.09	Peak	154.00	150	Horizontal	Pass
5**	12207.487	40.26	20.44	54.0	-13.74	AV	154.00	150	Horizontal	Pass
6	15888.713	54.77	23.31	74.0	-19.23	Peak	131.00	150	Horizontal	Pass
6**	15888.713	43.97	23.31	54.0	-10.03	AV	131.00	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	1188.200	46.22	-15.07	74.0	-27.78	Peak	313.00	150	Vertical	Pass
1**	1188.200	43.87	-15.07	54.0	-10.13	AV	313.00	150	Vertical	Pass
2	2826.700	42.08	-8.38	74.0	-31.92	Peak	307.00	150	Vertical	Pass
2**	2826.700	32.26	-8.38	54.0	-21.74	AV	307.00	150	Vertical	Pass
3	4330.600	48.22	-2.79	74.0	-25.78	Peak	149.00	150	Vertical	Pass
3**	4330.600	34.74	-2.79	54.0	-19.26	AV	149.00	150	Vertical	Pass
4	5218.600	83.75	-0.22	--	--	Peak	333.00	150	Vertical	N/A
4**	5218.600	78.09	-0.22	--	--	AV	333.00	150	Vertical	N/A
5	11744.037	49.79	19.03	74.0	-24.21	Peak	0.00	150	Vertical	Pass
5**	11744.037	38.93	19.03	54.0	-15.07	AV	0.00	150	Vertical	Pass
6	15460.575	55.74	23.54	74.0	-18.26	Peak	0.00	150	Vertical	Pass
6**	15460.575	43.34	23.54	54.0	-10.66	AV	0.00	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	1188.300	44.51	-15.06	74.0	-29.49	Peak	184.00	150	Horizontal	Pass
1**	1188.300	41.32	-15.06	54.0	-12.68	AV	184.00	150	Horizontal	Pass
2	2781.600	41.90	-8.70	74.0	-32.10	Peak	152.00	150	Horizontal	Pass
2**	2781.600	31.92	-8.70	54.0	-22.08	AV	152.00	150	Horizontal	Pass
3	4109.800	46.97	-4.22	74.0	-27.03	Peak	186.00	150	Horizontal	Pass
3**	4109.800	35.62	-4.22	54.0	-18.38	AV	186.00	150	Horizontal	Pass
4	5241.800	92.78	-0.93	--	--	Peak	218.00	150	Horizontal	N/A
4**	5241.800	86.57	-0.93	--	--	AV	218.00	150	Horizontal	N/A
5	12282.526	50.03	20.20	74.0	-23.97	Peak	132.00	150	Horizontal	Pass
5**	12282.526	38.83	20.20	54.0	-15.17	AV	132.00	150	Horizontal	Pass
6	16051.200	55.00	24.10	74.0	-19.00	Peak	67.00	150	Horizontal	Pass
6**	16051.200	42.85	24.10	54.0	-11.15	AV	67.00	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	1188.000	46.52	-15.07	74.0	-27.48	Peak	301.00	150	Vertical	Pass
1**	1188.000	43.11	-15.07	54.0	-10.89	AV	301.00	150	Vertical	Pass
2	2785.700	41.89	-8.74	74.0	-32.11	Peak	69.00	150	Vertical	Pass
2**	2785.700	31.17	-8.74	54.0	-22.83	AV	69.00	150	Vertical	Pass
3	3956.200	46.40	-4.47	74.0	-27.60	Peak	112.00	150	Vertical	Pass
3**	3956.200	34.43	-4.47	54.0	-19.57	AV	112.00	150	Vertical	Pass
4	5244.000	80.58	-0.82	--	--	Peak	336.00	150	Vertical	N/A
4**	5244.000	73.50	-0.82	--	--	AV	336.00	150	Vertical	N/A
5	12110.888	50.09	19.53	74.0	-23.91	Peak	43.00	150	Vertical	Pass
5**	12110.888	38.06	19.53	54.0	-15.94	AV	43.00	150	Vertical	Pass
6	15929.138	55.00	23.76	74.0	-19.00	Peak	185.00	150	Vertical	Pass
6**	15929.138	42.93	23.76	54.0	-11.07	AV	185.00	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	1188.100	44.07	-15.07	74.0	-29.93	Peak	174.00	150	Horizontal	Pass
1**	1188.100	41.31	-15.07	54.0	-12.69	AV	174.00	150	Horizontal	Pass
2	2776.700	41.87	-8.55	74.0	-32.13	Peak	313.00	150	Horizontal	Pass
2**	2776.700	32.49	-8.55	54.0	-21.51	AV	313.00	150	Horizontal	Pass
3	3894.600	46.72	-5.08	74.0	-27.28	Peak	77.00	150	Horizontal	Pass
3**	3894.600	33.83	-5.08	54.0	-20.17	AV	77.00	150	Horizontal	Pass
4	5179.800	93.22	-0.62	--	--	Peak	219.00	150	Horizontal	N/A
4**	5179.800	83.80	-0.62	--	--	AV	219.00	150	Horizontal	N/A
5	11669.000	49.98	20.18	74.0	-24.02	Peak	153.00	150	Horizontal	Pass
5**	11669.000	38.49	20.18	54.0	-15.51	AV	153.00	150	Horizontal	Pass
6	15922.575	55.18	23.68	74.0	-18.82	Peak	45.00	150	Horizontal	Pass
6**	15922.575	43.06	23.68	54.0	-10.94	AV	45.00	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	1187.700	44.86	-15.08	74.0	-29.14	Peak	288.00	150	Vertical	Pass
1**	1187.700	40.86	-15.08	54.0	-13.14	AV	288.00	150	Vertical	Pass
2	2770.800	42.42	-8.49	74.0	-31.58	Peak	78.00	150	Vertical	Pass
2**	2770.800	32.61	-8.49	54.0	-21.39	AV	78.00	150	Vertical	Pass
3	4017.400	46.58	-4.08	74.0	-27.42	Peak	16.00	150	Vertical	Pass
3**	4017.400	35.78	-4.08	54.0	-18.22	AV	16.00	150	Vertical	Pass
4	5183.000	82.47	-0.57	--	--	Peak	309.00	150	Vertical	N/A
4**	5183.000	75.39	-0.57	--	--	AV	309.00	150	Vertical	N/A
5	12114.625	50.99	19.57	74.0	-23.01	Peak	214.00	150	Vertical	Pass
5**	12114.625	37.46	19.57	54.0	-16.54	AV	214.00	150	Vertical	Pass
6	15914.174	55.30	23.54	74.0	-18.70	Peak	192.00	150	Vertical	Pass
6**	15914.174	43.49	23.54	54.0	-10.51	AV	192.00	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	1187.900	45.25	-15.07	74.0	-28.75	Peak	187.00	150	Horizontal	Pass
1**	1187.900	41.56	-15.07	54.0	-12.44	AV	187.00	150	Horizontal	Pass
2	2708.100	42.38	-8.86	74.0	-31.62	Peak	11.00	150	Horizontal	Pass
2**	2708.100	32.38	-8.86	54.0	-21.62	AV	11.00	150	Horizontal	Pass
3	3975.800	46.71	-4.12	74.0	-27.29	Peak	68.00	150	Horizontal	Pass
3**	3975.800	34.96	-4.12	54.0	-19.04	AV	68.00	150	Horizontal	Pass
4	5218.200	96.42	-0.24	--	--	Peak	209.00	150	Horizontal	N/A
4**	5218.200	88.39	-0.24	--	--	AV	209.00	150	Horizontal	N/A
5	11659.513	50.75	20.28	74.0	-23.25	Peak	154.00	150	Horizontal	Pass
5**	11659.513	39.24	20.28	54.0	-14.76	AV	154.00	150	Horizontal	Pass
6	15676.088	54.52	23.56	74.0	-19.48	Peak	309.00	150	Horizontal	Pass
6**	15676.088	44.22	23.56	54.0	-9.78	AV	309.00	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	1187.900	46.78	-15.07	74.0	-27.22	Peak	291.00	150	Vertical	Pass
1**	1187.900	44.00	-15.07	54.0	-10.00	AV	291.00	150	Vertical	Pass
2	2714.500	42.46	-8.73	74.0	-31.54	Peak	357.00	150	Vertical	Pass
2**	2714.500	32.58	-8.73	54.0	-21.42	AV	357.00	150	Vertical	Pass
3	4073.800	46.89	-4.11	74.0	-27.11	Peak	325.00	150	Vertical	Pass
3**	4073.800	35.84	-4.11	54.0	-18.16	AV	325.00	150	Vertical	Pass
4	5219.000	87.21	-0.20	--	--	Peak	315.00	150	Vertical	N/A
4**	5219.000	79.13	-0.20	--	--	AV	315.00	150	Vertical	N/A
5	12338.875	50.51	19.79	74.0	-23.49	Peak	237.00	150	Vertical	Pass
5**	12338.875	39.05	19.79	54.0	-14.95	AV	237.00	150	Vertical	Pass
6	15939.900	55.04	23.90	74.0	-18.96	Peak	337.00	150	Vertical	Pass
6**	15939.900	43.33	23.90	54.0	-10.67	AV	337.00	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	1188.300	45.34	-15.06	74.0	-28.66	Peak	176.00	150	Horizontal	Pass
1**	1188.300	41.86	-15.06	54.0	-12.14	AV	176.00	150	Horizontal	Pass
2	2773.400	41.65	-8.46	74.0	-32.35	Peak	129.00	150	Horizontal	Pass
2**	2773.400	32.78	-8.46	54.0	-21.22	AV	129.00	150	Horizontal	Pass
3	4247.400	47.67	-3.20	74.0	-26.33	Peak	307.00	150	Horizontal	Pass
3**	4247.400	35.88	-3.20	54.0	-18.12	AV	307.00	150	Horizontal	Pass
4	5242.400	93.98	-0.91	--	--	Peak	218.00	150	Horizontal	N/A
4**	5242.400	87.01	-0.91	--	--	AV	218.00	150	Horizontal	N/A
5	11634.213	50.27	20.33	74.0	-23.73	Peak	137.00	150	Horizontal	Pass
5**	11634.213	39.59	20.33	54.0	-14.41	AV	137.00	150	Horizontal	Pass
6	15624.637	55.35	23.47	74.0	-18.65	Peak	242.00	150	Horizontal	Pass
6**	15624.637	43.70	23.47	54.0	-10.30	AV	242.00	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	1188.000	45.51	-15.07	74.0	-28.49	Peak	302.00	150	Vertical	Pass
1**	1188.000	42.94	-15.07	54.0	-11.06	AV	302.00	150	Vertical	Pass
2	2784.100	41.56	-8.67	74.0	-32.44	Peak	0.00	150	Vertical	Pass
2**	2784.100	32.79	-8.67	54.0	-21.21	AV	0.00	150	Vertical	Pass
3	4306.200	47.08	-3.41	74.0	-26.92	Peak	34.00	150	Vertical	Pass
3**	4306.200	35.02	-3.41	54.0	-18.98	AV	34.00	150	Vertical	Pass
4	5242.800	81.61	-0.89	--	--	Peak	317.00	150	Vertical	N/A
4**	5242.800	74.09	-0.89	--	--	AV	317.00	150	Vertical	N/A
5	12331.975	50.29	19.84	74.0	-23.71	Peak	249.00	150	Vertical	Pass
5**	12331.975	39.36	19.84	54.0	-14.64	AV	249.00	150	Vertical	Pass
6	15464.776	55.16	23.56	74.0	-18.84	Peak	147.00	150	Vertical	Pass
6**	15464.776	43.14	23.56	54.0	-10.86	AV	147.00	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	1187.900	45.09	-15.07	74.0	-28.91	Peak	177.00	150	Horizontal	Pass
1**	1187.900	42.44	-15.07	54.0	-11.56	AV	177.00	150	Horizontal	Pass
2	2781.900	41.84	-8.72	74.0	-32.16	Peak	266.00	150	Horizontal	Pass
2**	2781.900	31.90	-8.72	54.0	-22.10	AV	266.00	150	Horizontal	Pass
3	4163.200	47.24	-3.51	74.0	-26.76	Peak	54.00	150	Horizontal	Pass
3**	4163.200	35.83	-3.51	54.0	-18.17	AV	54.00	150	Horizontal	Pass
4	5258.600	94.70	-1.05	--	--	Peak	217.00	150	Horizontal	N/A
4**	5258.600	87.76	-1.05	--	--	AV	217.00	150	Horizontal	N/A
5	11560.037	50.39	19.78	74.0	-23.61	Peak	244.00	150	Horizontal	Pass
5**	11560.037	37.82	19.78	54.0	-16.18	AV	244.00	150	Horizontal	Pass
6	15594.450	54.91	23.56	74.0	-19.09	Peak	85.00	150	Horizontal	Pass
6**	15594.450	44.33	23.56	54.0	-9.67	AV	85.00	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	1187.700	44.90	-15.08	74.0	-29.10	Peak	303.00	150	Vertical	Pass
1**	1187.700	41.14	-15.08	54.0	-12.86	AV	303.00	150	Vertical	Pass
2	2864.900	42.30	-8.05	74.0	-31.70	Peak	78.00	150	Vertical	Pass
2**	2864.900	33.75	-8.05	54.0	-20.25	AV	78.00	150	Vertical	Pass
3	3988.800	47.31	-4.32	74.0	-26.69	Peak	20.00	150	Vertical	Pass
3**	3988.800	35.73	-4.32	54.0	-18.27	AV	20.00	150	Vertical	Pass
4	5258.800	80.23	-1.05	--	--	Peak	54.00	150	Vertical	N/A
4**	5258.800	74.30	-1.05	--	--	AV	54.00	150	Vertical	N/A
5	12223.875	50.67	20.44	74.0	-23.33	Peak	244.00	150	Vertical	Pass
5**	12223.875	38.51	20.44	54.0	-15.49	AV	244.00	150	Vertical	Pass
6	15605.213	54.98	23.52	74.0	-19.02	Peak	64.00	150	Vertical	Pass
6**	15605.213	44.37	23.52	54.0	-9.63	AV	64.00	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	1188.000	45.40	-15.07	74.0	-28.60	Peak	212.00	150	Horizontal	Pass
1**	1188.000	42.65	-15.07	54.0	-11.35	AV	212.00	150	Horizontal	Pass
2	2776.100	41.96	-8.57	74.0	-32.04	Peak	262.00	150	Horizontal	Pass
2**	2776.100	32.27	-8.57	54.0	-21.73	AV	262.00	150	Horizontal	Pass
3	4271.400	47.46	-3.62	74.0	-26.54	Peak	58.00	150	Horizontal	Pass
3**	4271.400	36.68	-3.62	54.0	-17.32	AV	58.00	150	Horizontal	Pass
4	5298.800	96.89	0.26	--	--	Peak	219.00	150	Horizontal	N/A
4**	5298.800	90.83	0.26	--	--	AV	219.00	150	Horizontal	N/A
5	12340.025	50.78	19.78	74.0	-23.22	Peak	343.00	150	Horizontal	Pass
5**	12340.025	38.86	19.78	54.0	-15.14	AV	343.00	150	Horizontal	Pass
6	15676.088	54.84	23.56	74.0	-19.16	Peak	159.00	150	Horizontal	Pass
6**	15676.088	43.36	23.56	54.0	-10.64	AV	159.00	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	1188.400	46.07	-15.06	74.0	-27.93	Peak	288.00	150	Vertical	Pass
1**	1188.400	41.73	-15.06	54.0	-12.27	AV	288.00	150	Vertical	Pass
2	2828.500	42.54	-8.23	74.0	-31.46	Peak	14.00	150	Vertical	Pass
2**	2828.500	33.42	-8.23	54.0	-20.58	AV	14.00	150	Vertical	Pass
3	4295.000	47.44	-3.84	74.0	-26.56	Peak	167.00	150	Vertical	Pass
3**	4295.000	35.47	-3.84	54.0	-18.53	AV	167.00	150	Vertical	Pass
4	5301.000	86.24	0.28	--	--	Peak	310.00	150	Vertical	N/A
4**	5301.000	79.70	0.28	--	--	AV	310.00	150	Vertical	N/A
5	11922.862	50.74	18.14	74.0	-23.26	Peak	56.00	150	Vertical	Pass
5**	11922.862	38.95	18.14	54.0	-15.05	AV	56.00	150	Vertical	Pass
6	15807.075	55.12	23.19	74.0	-18.88	Peak	324.00	150	Vertical	Pass
6**	15807.075	43.42	23.19	54.0	-10.58	AV	324.00	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	1188.000	45.26	-15.07	74.0	-28.74	Peak	182.00	150	Horizontal	Pass
1**	1188.000	42.40	-15.07	54.0	-11.60	AV	182.00	150	Horizontal	Pass
2	2824.000	41.96	-8.31	74.0	-32.04	Peak	70.00	150	Horizontal	Pass
2**	2824.000	33.33	-8.31	54.0	-20.67	AV	70.00	150	Horizontal	Pass
3	4054.200	46.59	-3.80	74.0	-27.41	Peak	155.00	150	Horizontal	Pass
3**	4054.200	35.10	-3.80	54.0	-18.90	AV	155.00	150	Horizontal	Pass
4	5318.400	93.43	0.09	--	--	Peak	202.00	150	Horizontal	N/A
4**	5318.400	88.57	0.09	--	--	AV	202.00	150	Horizontal	N/A
5	11655.487	50.56	20.33	74.0	-23.44	Peak	0.00	150	Horizontal	Pass
5**	11655.487	38.58	20.33	54.0	-15.42	AV	0.00	150	Horizontal	Pass
6	15559.276	55.49	23.58	74.0	-18.51	Peak	18.00	150	Horizontal	Pass
6**	15559.276	44.43	23.58	54.0	-9.57	AV	18.00	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	1188.200	45.03	-15.07	74.0	-28.97	Peak	291.00	150	Vertical	Pass
1**	1188.200	41.44	-15.07	54.0	-12.56	AV	291.00	150	Vertical	Pass
2	2888.500	43.23	-8.15	74.0	-30.77	Peak	80.00	150	Vertical	Pass
2**	2888.500	33.32	-8.15	54.0	-20.68	AV	80.00	150	Vertical	Pass
3	4178.400	47.66	-3.96	74.0	-26.34	Peak	345.00	150	Vertical	Pass
3**	4178.400	35.06	-3.96	54.0	-18.94	AV	345.00	150	Vertical	Pass
4	5319.000	82.73	0.15	--	--	Peak	307.00	150	Vertical	N/A
4**	5319.000	75.80	0.15	--	--	AV	307.00	150	Vertical	N/A
5	11260.463	50.21	18.03	74.0	-23.79	Peak	211.00	150	Vertical	Pass
5**	11260.463	37.31	18.03	54.0	-16.69	AV	211.00	150	Vertical	Pass
6	15591.300	55.70	23.56	74.0	-18.30	Peak	244.00	150	Vertical	Pass
6**	15591.300	43.57	23.56	54.0	-10.43	AV	244.00	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	1187.600	46.49	-15.08	74.0	-27.51	Peak	185.00	150	Horizontal	Pass
1**	1187.600	41.74	-15.08	54.0	-12.26	AV	185.00	150	Horizontal	Pass
2	2836.600	42.34	-8.47	74.0	-31.66	Peak	354.00	150	Horizontal	Pass
2**	2836.600	33.23	-8.47	54.0	-20.77	AV	354.00	150	Horizontal	Pass
3	3967.400	47.32	-4.13	74.0	-26.68	Peak	193.00	150	Horizontal	Pass
3**	3967.400	35.06	-4.13	54.0	-18.94	AV	193.00	150	Horizontal	Pass
4	5256.800	94.77	-1.07	--	--	Peak	202.00	150	Horizontal	N/A
4**	5256.800	86.98	-1.07	--	--	AV	202.00	150	Horizontal	N/A
5	11666.125	49.99	20.21	74.0	-24.01	Peak	360.00	150	Horizontal	Pass
5**	11666.125	39.00	20.21	54.0	-15.00	AV	360.00	150	Horizontal	Pass
6	15623.063	56.48	23.47	74.0	-17.52	Peak	283.00	150	Horizontal	Pass
6**	15623.063	44.86	23.47	54.0	-9.14	AV	283.00	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	1188.300	47.77	-15.06	74.0	-26.23	Peak	292.00	150	Vertical	Pass
1**	1188.300	43.87	-15.06	54.0	-10.13	AV	292.00	150	Vertical	Pass
2	2868.100	42.34	-8.14	74.0	-31.66	Peak	244.00	150	Vertical	Pass
2**	2868.100	32.48	-8.14	54.0	-21.52	AV	244.00	150	Vertical	Pass
3	4029.600	46.57	-3.99	74.0	-27.43	Peak	164.00	150	Vertical	Pass
3**	4029.600	35.68	-3.99	54.0	-18.32	AV	164.00	150	Vertical	Pass
4	5263.000	85.39	-0.93	--	--	Peak	334.00	150	Vertical	N/A
4**	5263.000	74.78	-0.93	--	--	AV	334.00	150	Vertical	N/A
5	11123.613	50.01	18.76	74.0	-23.99	Peak	212.00	150	Vertical	Pass
5**	11123.613	39.64	18.76	54.0	-14.36	AV	212.00	150	Vertical	Pass
6	15919.425	54.57	23.63	74.0	-19.43	Peak	349.00	150	Vertical	Pass
6**	15919.425	43.89	23.63	54.0	-10.11	AV	349.00	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	1188.000	44.46	-15.07	74.0	-29.54	Peak	183.00	150	Horizontal	Pass
1**	1188.000	42.03	-15.07	54.0	-11.97	AV	183.00	150	Horizontal	Pass
2	2862.000	42.46	-8.02	74.0	-31.54	Peak	352.00	150	Horizontal	Pass
2**	2862.000	33.27	-8.02	54.0	-20.73	AV	352.00	150	Horizontal	Pass
3	4068.000	46.93	-3.88	74.0	-27.07	Peak	39.00	150	Horizontal	Pass
3**	4068.000	35.24	-3.88	54.0	-18.76	AV	39.00	150	Horizontal	Pass
4	5301.200	97.49	0.28	--	--	Peak	151.00	150	Horizontal	N/A
4**	5301.200	90.52	0.28	--	--	AV	151.00	150	Horizontal	N/A
5	12225.887	50.21	20.44	74.0	-23.79	Peak	156.00	150	Horizontal	Pass
5**	12225.887	39.40	20.44	54.0	-14.60	AV	156.00	150	Horizontal	Pass
6	15607.838	54.81	23.51	74.0	-19.19	Peak	29.00	150	Horizontal	Pass
6**	15607.838	43.61	23.51	54.0	-10.39	AV	29.00	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	1188.200	47.20	-15.07	74.0	-26.80	Peak	291.00	150	Vertical	Pass
1**	1188.200	45.41	-15.07	54.0	-8.59	AV	291.00	150	Vertical	Pass
2	2778.100	42.41	-8.52	74.0	-31.59	Peak	138.00	150	Vertical	Pass
2**	2778.100	32.76	-8.52	54.0	-21.24	AV	138.00	150	Vertical	Pass
3	4175.200	47.08	-4.01	74.0	-26.92	Peak	299.00	150	Vertical	Pass
3**	4175.200	35.21	-4.01	54.0	-18.79	AV	299.00	150	Vertical	Pass
4	5298.400	87.19	0.26	--	--	Peak	74.00	150	Vertical	N/A
4**	5298.400	78.77	0.26	--	--	AV	74.00	150	Vertical	N/A
5	11569.812	50.24	19.83	74.0	-23.76	Peak	168.00	150	Vertical	Pass
5**	11569.812	37.97	19.83	54.0	-16.03	AV	168.00	150	Vertical	Pass
6	15693.674	55.65	23.58	74.0	-18.35	Peak	259.00	150	Vertical	Pass
6**	15693.674	43.04	23.58	54.0	-10.96	AV	259.00	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	1188.100	45.85	-15.07	74.0	-28.15	Peak	179.00	150	Horizontal	Pass
1**	1188.100	43.52	-15.07	54.0	-10.48	AV	179.00	150	Horizontal	Pass
2	2865.300	43.26	-8.05	74.0	-30.74	Peak	209.00	150	Horizontal	Pass
2**	2865.300	33.33	-8.05	54.0	-20.67	AV	209.00	150	Horizontal	Pass
3	4236.200	47.13	-3.39	74.0	-26.87	Peak	112.00	150	Horizontal	Pass
3**	4236.200	35.24	-3.39	54.0	-18.76	AV	112.00	150	Horizontal	Pass
4	5316.200	94.81	-0.02	--	--	Peak	209.00	150	Horizontal	N/A
4**	5316.200	87.28	-0.02	--	--	AV	209.00	150	Horizontal	N/A
5	11664.400	50.81	20.23	74.0	-23.19	Peak	137.00	150	Horizontal	Pass
5**	11664.400	38.58	20.23	54.0	-15.42	AV	137.00	150	Horizontal	Pass
6	16060.912	55.92	24.14	74.0	-18.08	Peak	59.00	150	Horizontal	Pass
6**	16060.912	42.99	24.14	54.0	-11.01	AV	59.00	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	1188.200	46.16	-15.07	74.0	-27.84	Peak	290.00	150	Vertical	Pass
1**	1188.200	43.92	-15.07	54.0	-10.08	AV	290.00	150	Vertical	Pass
2	2716.000	42.37	-8.79	74.0	-31.63	Peak	0.00	150	Vertical	Pass
2**	2716.000	32.48	-8.79	54.0	-21.52	AV	0.00	150	Vertical	Pass
3	4301.200	47.02	-3.52	74.0	-26.98	Peak	360.00	150	Vertical	Pass
3**	4301.200	36.01	-3.52	54.0	-17.99	AV	360.00	150	Vertical	Pass
4	5322.600	84.61	-0.03	--	--	Peak	72.00	150	Vertical	N/A
4**	5322.600	77.15	-0.03	--	--	AV	72.00	150	Vertical	N/A
5	11885.200	49.88	18.05	74.0	-24.12	Peak	177.00	150	Vertical	Pass
5**	11885.200	38.66	18.05	54.0	-15.34	AV	177.00	150	Vertical	Pass
6	15493.387	55.12	23.86	74.0	-18.88	Peak	28.00	150	Vertical	Pass
6**	15493.387	43.17	23.86	54.0	-10.83	AV	28.00	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	1187.900	45.28	-15.07	74.0	-28.72	Peak	172.00	150	Horizontal	Pass
1**	1187.900	42.53	-15.07	54.0	-11.47	AV	172.00	150	Horizontal	Pass
2	2763.400	42.12	-8.81	74.0	-31.88	Peak	183.00	150	Horizontal	Pass
2**	2763.400	32.24	-8.81	54.0	-21.76	AV	183.00	150	Horizontal	Pass
3	4136.000	47.06	-4.14	74.0	-26.94	Peak	274.00	150	Horizontal	Pass
3**	4136.000	36.52	-4.14	54.0	-17.48	AV	274.00	150	Horizontal	Pass
4	5501.000	92.31	0.47	--	--	Peak	212.00	150	Horizontal	N/A
4**	5501.000	85.78	0.47	--	--	AV	212.00	150	Horizontal	N/A
5	11677.050	50.09	20.10	74.0	-23.91	Peak	36.00	150	Horizontal	Pass
5**	11677.050	38.53	20.10	54.0	-15.47	AV	36.00	150	Horizontal	Pass
6	15664.538	55.08	23.49	74.0	-18.92	Peak	292.00	150	Horizontal	Pass
6**	15664.538	43.56	23.49	54.0	-10.44	AV	292.00	150	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	1188.100	46.59	-15.07	74.0	-27.41	Peak	283.00	150	Vertical	Pass
1**	1188.100	44.87	-15.07	54.0	-9.13	AV	283.00	150	Vertical	Pass
2	2850.400	43.06	-8.20	74.0	-30.94	Peak	297.00	150	Vertical	Pass
2**	2850.400	32.80	-8.20	54.0	-21.20	AV	297.00	150	Vertical	Pass
3	4043.000	47.11	-3.90	74.0	-26.89	Peak	255.00	150	Vertical	Pass
3**	4043.000	34.71	-3.90	54.0	-19.29	AV	255.00	150	Vertical	Pass
4	5495.000	79.15	0.69	--	--	Peak	77.00	150	Vertical	N/A
4**	5495.000	72.96	0.69	--	--	AV	77.00	150	Vertical	N/A
5	12292.013	50.66	20.08	74.0	-23.34	Peak	285.00	150	Vertical	Pass
5**	12292.013	38.75	20.08	54.0	-15.25	AV	285.00	150	Vertical	Pass
6	15594.974	55.49	23.56	74.0	-18.51	Peak	7.00	150	Vertical	Pass
6**	15594.974	43.06	23.56	54.0	-10.94	AV	7.00	150	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	1188.200	44.93	-15.07	74.0	-29.07	Peak	176.00	150	Horizontal	Pass
1**	1188.200	41.67	-15.07	54.0	-12.33	AV	176.00	150	Horizontal	Pass
2	2833.200	41.78	-8.47	74.0	-32.22	Peak	75.00	150	Horizontal	Pass
2**	2833.200	33.08	-8.47	54.0	-20.92	AV	75.00	150	Horizontal	Pass
3	4319.600	47.42	-3.02	74.0	-26.58	Peak	0.00	150	Horizontal	Pass
3**	4319.600	36.12	-3.02	54.0	-17.88	AV	0.00	150	Horizontal	Pass
4	5578.600	97.18	0.79	--	--	Peak	207.00	150	Horizontal	N/A
4**	5578.600	90.38	0.79	--	--	AV	207.00	150	Horizontal	N/A
5	11581.600	49.60	19.91	74.0	-24.40	Peak	324.00	150	Horizontal	Pass
5**	11581.600	39.21	19.91	54.0	-14.79	AV	324.00	150	Horizontal	Pass
6	15487.612	55.83	23.77	74.0	-18.17	Peak	338.00	150	Horizontal	Pass
6**	15487.612	43.18	23.77	54.0	-10.82	AV	338.00	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	1187.700	45.59	-15.08	74.0	-28.41	Peak	293.00	150	Vertical	Pass
1**	1187.700	41.40	-15.08	54.0	-12.60	AV	293.00	150	Vertical	Pass
2	2813.800	42.31	-8.34	74.0	-31.69	Peak	78.00	150	Vertical	Pass
2**	2813.800	32.84	-8.34	54.0	-21.16	AV	78.00	150	Vertical	Pass
3	4257.600	47.32	-3.27	74.0	-26.68	Peak	76.00	150	Vertical	Pass
3**	4257.600	35.93	-3.27	54.0	-18.07	AV	76.00	150	Vertical	Pass
4	5583.200	82.82	0.72	--	--	Peak	64.00	150	Vertical	N/A
4**	5583.200	76.59	0.72	--	--	AV	64.00	150	Vertical	N/A
5	12265.850	50.85	20.34	74.0	-23.15	Peak	66.00	150	Vertical	Pass
5**	12265.850	38.47	20.34	54.0	-15.53	AV	66.00	150	Vertical	Pass
6	15939.637	55.82	23.90	74.0	-18.18	Peak	126.00	150	Vertical	Pass
6**	15939.637	44.33	23.90	54.0	-9.67	AV	126.00	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	1187.800	44.49	-15.07	74.0	-29.51	Peak	189.00	150	Horizontal	Pass
1**	1187.800	40.81	-15.07	54.0	-13.19	AV	189.00	150	Horizontal	Pass
2	2774.200	41.62	-8.51	74.0	-32.38	Peak	77.00	150	Horizontal	Pass
2**	2774.200	32.32	-8.51	54.0	-21.68	AV	77.00	150	Horizontal	Pass
3	4051.000	48.02	-3.78	74.0	-25.98	Peak	336.00	150	Horizontal	Pass
3**	4051.000	34.64	-3.78	54.0	-19.36	AV	336.00	150	Horizontal	Pass
4	5700.600	90.23	-0.83	--	--	Peak	211.00	150	Horizontal	N/A
4**	5700.600	82.69	-0.83	--	--	AV	211.00	150	Horizontal	N/A
5	11740.875	49.64	19.08	74.0	-24.36	Peak	113.00	150	Horizontal	Pass
5**	11740.875	37.27	19.08	54.0	-16.73	AV	113.00	150	Horizontal	Pass
6	15604.163	55.12	23.53	74.0	-18.88	Peak	34.00	150	Horizontal	Pass
6**	15604.163	44.44	23.53	54.0	-9.56	AV	34.00	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	1187.600	45.09	-15.08	74.0	-28.91	Peak	298.00	150	Vertical	Pass
1**	1187.600	39.42	-15.08	54.0	-14.58	AV	298.00	150	Vertical	Pass
2	2780.100	41.75	-8.55	74.0	-32.25	Peak	324.00	150	Vertical	Pass
2**	2780.100	31.83	-8.55	54.0	-22.17	AV	324.00	150	Vertical	Pass
3	4155.600	46.69	-3.54	74.0	-27.31	Peak	277.00	150	Vertical	Pass
3**	4155.600	34.75	-3.54	54.0	-19.25	AV	277.00	150	Vertical	Pass
4	5698.600	75.54	-0.80	--	--	Peak	174.00	150	Vertical	N/A
4**	5698.600	69.80	-0.80	--	--	AV	174.00	150	Vertical	N/A
5	11648.588	49.54	20.39	74.0	-24.46	Peak	252.00	150	Vertical	Pass
5**	11648.588	38.17	20.39	54.0	-15.83	AV	252.00	150	Vertical	Pass
6	15402.825	54.89	22.85	74.0	-19.11	Peak	60.00	150	Vertical	Pass
6**	15402.825	42.30	22.85	54.0	-11.70	AV	60.00	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	1187.700	43.99	-15.08	74.0	-30.01	Peak	218.00	150	Horizontal	Pass
1**	1187.700	39.71	-15.08	54.0	-14.29	AV	218.00	150	Horizontal	Pass
2	2824.800	41.65	-8.32	74.0	-32.35	Peak	296.00	150	Horizontal	Pass
2**	2824.800	31.77	-8.32	54.0	-22.23	AV	296.00	150	Horizontal	Pass
3	4219.200	47.67	-3.70	74.0	-26.33	Peak	14.00	150	Horizontal	Pass
3**	4219.200	35.28	-3.70	54.0	-18.72	AV	14.00	150	Horizontal	Pass
4	5502.400	94.33	0.47	--	--	Peak	212.00	150	Horizontal	N/A
4**	5502.400	86.07	0.47	--	--	AV	212.00	150	Horizontal	N/A
5	12296.612	50.40	20.02	74.0	-23.60	Peak	344.00	150	Horizontal	Pass
5**	12296.612	38.26	20.02	54.0	-15.74	AV	344.00	150	Horizontal	Pass
6	15491.812	55.41	23.84	74.0	-18.59	Peak	256.00	150	Horizontal	Pass
6**	15491.812	43.77	23.84	54.0	-10.23	AV	256.00	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	1187.700	45.40	-15.08	74.0	-28.60	Peak	292.00	150	Vertical	Pass
1**	1187.700	40.94	-15.08	54.0	-13.06	AV	292.00	150	Vertical	Pass
2	2822.300	42.28	-8.38	74.0	-31.72	Peak	298.00	150	Vertical	Pass
2**	2822.300	32.55	-8.38	54.0	-21.45	AV	298.00	150	Vertical	Pass
3	4150.000	46.89	-3.46	74.0	-27.11	Peak	108.00	150	Vertical	Pass
3**	4150.000	35.59	-3.46	54.0	-18.41	AV	108.00	150	Vertical	Pass
4	5497.800	80.17	0.57	--	--	Peak	225.00	150	Vertical	N/A
4**	5497.800	71.91	0.57	--	--	AV	225.00	150	Vertical	N/A
5	12344.625	50.23	19.75	74.0	-23.77	Peak	48.00	150	Vertical	Pass
5**	12344.625	38.01	19.75	54.0	-15.99	AV	48.00	150	Vertical	Pass
6	15476.325	54.47	23.63	74.0	-19.53	Peak	65.00	150	Vertical	Pass
6**	15476.325	44.91	23.63	54.0	-9.09	AV	65.00	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	1188.000	43.82	-15.07	74.0	-30.18	Peak	219.00	150	Horizontal	Pass
1**	1188.000	40.70	-15.07	54.0	-13.30	AV	219.00	150	Horizontal	Pass
2	2805.000	42.11	-8.75	74.0	-31.89	Peak	62.00	150	Horizontal	Pass
2**	2805.000	31.71	-8.75	54.0	-22.29	AV	62.00	150	Horizontal	Pass
3	4071.400	47.20	-3.99	74.0	-26.80	Peak	232.00	150	Horizontal	Pass
3**	4071.400	34.80	-3.99	54.0	-19.20	AV	232.00	150	Horizontal	Pass
4	5583.200	98.02	0.72	--	--	Peak	202.00	150	Horizontal	N/A
4**	5583.200	89.56	0.72	--	--	AV	202.00	150	Horizontal	N/A
5	11656.063	49.99	20.32	74.0	-24.01	Peak	65.00	150	Horizontal	Pass
5**	11656.063	39.95	20.32	54.0	-14.05	AV	65.00	150	Horizontal	Pass
6	15972.187	54.84	24.00	74.0	-19.16	Peak	277.00	150	Horizontal	Pass
6**	15972.187	43.21	24.00	54.0	-10.79	AV	277.00	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	1188.400	46.11	-15.06	74.0	-27.89	Peak	283.00	150	Vertical	Pass
1**	1188.400	41.62	-15.06	54.0	-12.38	AV	283.00	150	Vertical	Pass
2	2883.000	42.65	-8.33	74.0	-31.35	Peak	32.00	150	Vertical	Pass
2**	2883.000	32.75	-8.33	54.0	-21.25	AV	32.00	150	Vertical	Pass
3	3969.400	46.56	-4.16	74.0	-27.44	Peak	83.00	150	Vertical	Pass
3**	3969.400	37.01	-4.16	54.0	-16.99	AV	83.00	150	Vertical	Pass
4	5577.400	84.27	0.73	--	--	Peak	63.00	150	Vertical	N/A
4**	5577.400	77.64	0.73	--	--	AV	63.00	150	Vertical	N/A
5	11622.713	50.26	20.25	74.0	-23.74	Peak	71.00	150	Vertical	Pass
5**	11622.713	37.74	20.25	54.0	-16.26	AV	71.00	150	Vertical	Pass
6	15627.263	55.37	23.49	74.0	-18.63	Peak	140.00	150	Vertical	Pass
6**	15627.263	43.92	23.49	54.0	-10.08	AV	140.00	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	1188.400	44.42	-15.06	74.0	-29.58	Peak	219.00	150	Horizontal	Pass
1**	1188.400	39.20	-15.06	54.0	-14.80	AV	219.00	150	Horizontal	Pass
2	2760.200	41.63	-8.85	74.0	-32.37	Peak	317.00	150	Horizontal	Pass
2**	2760.200	32.85	-8.85	54.0	-21.15	AV	317.00	150	Horizontal	Pass
3	4032.400	46.38	-3.98	74.0	-27.62	Peak	214.00	150	Horizontal	Pass
3**	4032.400	35.71	-3.98	54.0	-18.29	AV	214.00	150	Horizontal	Pass
4	5704.000	91.94	-0.66	--	--	Peak	214.00	150	Horizontal	N/A
4**	5704.000	84.63	-0.66	--	--	AV	214.00	150	Horizontal	N/A
5	11656.063	50.89	20.32	74.0	-23.11	Peak	100.00	150	Horizontal	Pass
5**	11656.063	38.62	20.32	54.0	-15.38	AV	100.00	150	Horizontal	Pass
6	15608.887	55.12	23.50	74.0	-18.88	Peak	273.00	150	Horizontal	Pass
6**	15608.887	44.48	23.50	54.0	-9.52	AV	273.00	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	1188.200	44.43	-15.07	74.0	-29.57	Peak	288.00	150	Vertical	Pass
1**	1188.200	41.25	-15.07	54.0	-12.75	AV	288.00	150	Vertical	Pass
2	2803.800	42.06	-8.73	74.0	-31.94	Peak	71.00	150	Vertical	Pass
2**	2803.800	31.26	-8.73	54.0	-22.74	AV	71.00	150	Vertical	Pass
3	4289.000	47.04	-3.85	74.0	-26.96	Peak	247.00	150	Vertical	Pass
3**	4289.000	35.63	-3.85	54.0	-18.37	AV	247.00	150	Vertical	Pass
4	5697.600	79.15	-0.73	--	--	Peak	328.00	150	Vertical	N/A
4**	5697.600	70.38	-0.73	--	--	AV	328.00	150	Vertical	N/A
5	11681.937	50.37	20.04	74.0	-23.63	Peak	220.00	150	Vertical	Pass
5**	11681.937	38.76	20.04	54.0	-15.24	AV	220.00	150	Vertical	Pass
6	15494.963	54.94	23.89	74.0	-19.06	Peak	118.00	150	Vertical	Pass
6**	15494.963	44.11	23.89	54.0	-9.89	AV	118.00	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	1188.200	42.58	-15.07	74.0	-31.42	Peak	184.00	150	Horizontal	Pass
1**	1188.200	39.43	-15.07	54.0	-14.57	AV	184.00	150	Horizontal	Pass
2	2717.100	41.73	-8.71	74.0	-32.27	Peak	3.00	150	Horizontal	Pass
2**	2717.100	32.74	-8.71	54.0	-21.26	AV	3.00	150	Horizontal	Pass
3	4072.200	47.24	-4.04	74.0	-26.76	Peak	41.00	150	Horizontal	Pass
3**	4072.200	35.16	-4.04	54.0	-18.84	AV	41.00	150	Horizontal	Pass
4	5745.800	97.18	0.38	--	--	Peak	212.00	150	Horizontal	N/A
4**	5745.800	90.46	0.38	--	--	AV	212.00	150	Horizontal	N/A
5	11660.662	50.02	20.26	74.0	-23.98	Peak	19.00	150	Horizontal	Pass
5**	11660.662	39.27	20.26	54.0	-14.73	AV	19.00	150	Horizontal	Pass
6	15488.137	54.97	23.78	74.0	-19.03	Peak	323.00	150	Horizontal	Pass
6**	15488.137	43.95	23.78	54.0	-10.05	AV	323.00	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	1188.400	44.36	-15.06	74.0	-29.64	Peak	290.00	150	Vertical	Pass
1**	1188.400	40.84	-15.06	54.0	-13.16	AV	290.00	150	Vertical	Pass
2	2728.600	41.89	-8.71	74.0	-32.11	Peak	63.00	150	Vertical	Pass
2**	2728.600	32.55	-8.71	54.0	-21.45	AV	63.00	150	Vertical	Pass
3	4033.400	47.07	-4.05	74.0	-26.93	Peak	312.00	150	Vertical	Pass
3**	4033.400	35.74	-4.05	54.0	-18.26	AV	312.00	150	Vertical	Pass
4	5739.800	85.54	-0.05	--	--	Peak	320.00	150	Vertical	N/A
4**	5739.800	79.16	-0.05	--	--	AV	320.00	150	Vertical	N/A
5	12150.563	50.54	19.92	74.0	-23.46	Peak	302.00	150	Vertical	Pass
5**	12150.563	38.04	19.92	54.0	-15.96	AV	302.00	150	Vertical	Pass
6	15483.412	55.54	23.70	74.0	-18.46	Peak	63.00	150	Vertical	Pass
6**	15483.412	42.74	23.70	54.0	-11.26	AV	63.00	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	1187.700	42.90	-15.08	74.0	-31.10	Peak	17.00	150	Horizontal	Pass
1**	1187.700	38.29	-15.08	54.0	-15.71	AV	17.00	150	Horizontal	Pass
2	2888.600	43.09	-8.15	74.0	-30.91	Peak	333.00	150	Horizontal	Pass
2**	2888.600	34.03	-8.15	54.0	-19.97	AV	333.00	150	Horizontal	Pass
3	3997.400	46.83	-4.56	74.0	-27.17	Peak	346.00	150	Horizontal	Pass
3**	3997.400	33.70	-4.56	54.0	-20.30	AV	346.00	150	Horizontal	Pass
4	5790.000	98.93	0.95	--	--	Peak	210.00	150	Horizontal	N/A
4**	5790.000	91.99	0.95	--	--	AV	210.00	150	Horizontal	N/A
5	11683.088	49.93	20.03	74.0	-24.07	Peak	321.00	150	Horizontal	Pass
5**	11683.088	38.57	20.03	54.0	-15.43	AV	321.00	150	Horizontal	Pass
6	15668.475	55.59	23.51	74.0	-18.41	Peak	288.00	150	Horizontal	Pass
6**	15668.475	43.34	23.51	54.0	-10.66	AV	288.00	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	1188.000	44.87	-15.07	74.0	-29.13	Peak	286.00	150	Vertical	Pass
1**	1188.000	42.20	-15.07	54.0	-11.80	AV	286.00	150	Vertical	Pass
2	2849.300	42.16	-8.22	74.0	-31.84	Peak	100.00	150	Vertical	Pass
2**	2849.300	32.09	-8.22	54.0	-21.91	AV	100.00	150	Vertical	Pass
3	3969.200	46.82	-4.16	74.0	-27.18	Peak	301.00	150	Vertical	Pass
3**	3969.200	35.87	-4.16	54.0	-18.13	AV	301.00	150	Vertical	Pass
4	5786.400	87.69	0.77	--	--	Peak	319.00	150	Vertical	N/A
4**	5786.400	81.44	0.77	--	--	AV	319.00	150	Vertical	N/A
5	11578.724	49.56	19.88	74.0	-24.44	Peak	360.00	150	Vertical	Pass
5**	11578.724	38.27	19.88	54.0	-15.73	AV	360.00	150	Vertical	Pass
6	15487.350	54.76	23.77	74.0	-19.24	Peak	2.00	150	Vertical	Pass
6**	15487.350	42.68	23.77	54.0	-11.32	AV	2.00	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	1037.200	45.92	-14.86	74.0	-28.08	Peak	93.00	150	Horizontal	Pass
1**	1037.200	37.27	-14.86	54.0	-16.73	AV	93.00	150	Horizontal	Pass
2	2832.000	41.75	-8.41	74.0	-32.25	Peak	182.00	150	Horizontal	Pass
2**	2832.000	33.16	-8.41	54.0	-20.84	AV	182.00	150	Horizontal	Pass
3	3959.400	47.16	-4.47	74.0	-26.84	Peak	335.00	150	Horizontal	Pass
3**	3959.400	35.00	-4.47	54.0	-19.00	AV	335.00	150	Horizontal	Pass
4	5822.800	99.54	0.87	--	--	Peak	208.00	150	Horizontal	N/A
4**	5822.800	93.76	0.87	--	--	AV	208.00	150	Horizontal	N/A
5	12206.338	50.37	20.44	74.0	-23.63	Peak	58.00	150	Horizontal	Pass
5**	12206.338	37.62	20.44	54.0	-16.38	AV	58.00	150	Horizontal	Pass
6	15959.326	55.56	23.99	74.0	-18.44	Peak	179.00	150	Horizontal	Pass
6**	15959.326	43.03	23.99	54.0	-10.97	AV	179.00	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	1187.600	43.99	-15.08	74.0	-30.01	Peak	284.00	150	Vertical	Pass
1**	1187.600	38.64	-15.08	54.0	-15.36	AV	284.00	150	Vertical	Pass
2	2863.000	42.61	-8.04	74.0	-31.39	Peak	6.00	150	Vertical	Pass
2**	2863.000	31.97	-8.04	54.0	-22.03	AV	6.00	150	Vertical	Pass
3	4321.800	47.96	-3.13	74.0	-26.04	Peak	154.00	150	Vertical	Pass
3**	4321.800	35.30	-3.13	54.0	-18.70	AV	154.00	150	Vertical	Pass
4	5823.000	87.79	0.86	--	--	Peak	181.00	150	Vertical	N/A
4**	5823.000	81.28	0.86	--	--	AV	181.00	150	Vertical	N/A
5	11688.263	49.64	19.97	74.0	-24.36	Peak	302.00	150	Vertical	Pass
5**	11688.263	37.83	19.97	54.0	-16.17	AV	302.00	150	Vertical	Pass
6	15554.025	55.23	23.60	74.0	-18.77	Peak	264.00	150	Vertical	Pass
6**	15554.025	44.03	23.60	54.0	-9.97	AV	264.00	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	1187.900	45.14	-15.07	74.0	-28.86	Peak	221.00	150	Horizontal	Pass
1**	1187.900	41.70	-15.07	54.0	-12.30	AV	221.00	150	Horizontal	Pass
2	2830.600	42.28	-8.30	74.0	-31.72	Peak	33.00	150	Horizontal	Pass
2**	2830.600	31.52	-8.30	54.0	-22.48	AV	33.00	150	Horizontal	Pass
3	4038.200	46.93	-4.02	74.0	-27.07	Peak	95.00	150	Horizontal	Pass
3**	4038.200	34.69	-4.02	54.0	-19.31	AV	95.00	150	Horizontal	Pass
4	5750.600	96.74	0.34	--	--	Peak	213.00	150	Horizontal	N/A
4**	5750.600	87.95	0.34	--	--	AV	213.00	150	Horizontal	N/A
5	12344.050	49.99	19.75	74.0	-24.01	Peak	360.00	150	Horizontal	Pass
5**	12344.050	40.11	19.75	54.0	-13.89	AV	360.00	150	Horizontal	Pass
6	15532.500	55.12	23.73	74.0	-18.88	Peak	134.00	150	Horizontal	Pass
6**	15532.500	43.02	23.73	54.0	-10.98	AV	134.00	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	1187.700	46.06	-15.08	74.0	-27.94	Peak	290.00	150	Vertical	Pass
1**	1187.700	40.62	-15.08	54.0	-13.38	AV	290.00	150	Vertical	Pass
2	2731.800	42.22	-8.71	74.0	-31.78	Peak	296.00	150	Vertical	Pass
2**	2731.800	33.77	-8.71	54.0	-20.23	AV	296.00	150	Vertical	Pass
3	4158.800	47.45	-3.54	74.0	-26.55	Peak	102.00	150	Vertical	Pass
3**	4158.800	35.60	-3.54	54.0	-18.40	AV	102.00	150	Vertical	Pass
4	5747.200	86.33	0.34	--	--	Peak	327.00	150	Vertical	N/A
4**	5747.200	78.43	0.34	--	--	AV	327.00	150	Vertical	N/A
5	12140.213	50.07	19.85	74.0	-23.93	Peak	0.00	150	Vertical	Pass
5**	12140.213	39.10	19.85	54.0	-14.90	AV	0.00	150	Vertical	Pass
6	15493.387	54.94	23.86	74.0	-19.06	Peak	66.00	150	Vertical	Pass
6**	15493.387	44.42	23.86	54.0	-9.58	AV	66.00	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	1188.500	43.82	-15.06	74.0	-30.18	Peak	187.00	150	Horizontal	Pass
1**	1188.500	38.56	-15.06	54.0	-15.44	AV	187.00	150	Horizontal	Pass
2	2868.000	42.54	-8.14	74.0	-31.46	Peak	223.00	150	Horizontal	Pass
2**	2868.000	32.87	-8.14	54.0	-21.13	AV	223.00	150	Horizontal	Pass
3	4029.200	47.40	-4.01	74.0	-26.60	Peak	20.00	150	Horizontal	Pass
3**	4029.200	35.54	-4.01	54.0	-18.46	AV	20.00	150	Horizontal	Pass
4	5783.000	101.77	0.93	--	--	Peak	203.00	150	Horizontal	N/A
4**	5783.000	92.15	0.93	--	--	AV	203.00	150	Horizontal	N/A
5	11671.875	50.30	20.15	74.0	-23.70	Peak	57.00	150	Horizontal	Pass
5**	11671.875	38.32	20.15	54.0	-15.68	AV	57.00	150	Horizontal	Pass
6	15923.888	55.09	23.70	74.0	-18.91	Peak	231.00	150	Horizontal	Pass
6**	15923.888	43.50	23.70	54.0	-10.50	AV	231.00	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	1188.000	45.61	-15.07	74.0	-28.39	Peak	284.00	150	Vertical	Pass
1**	1188.000	43.14	-15.07	54.0	-10.86	AV	284.00	150	Vertical	Pass
2	2873.900	42.63	-8.30	74.0	-31.37	Peak	152.00	150	Vertical	Pass
2**	2873.900	33.14	-8.30	54.0	-20.86	AV	152.00	150	Vertical	Pass
3	4022.600	46.68	-4.05	74.0	-27.32	Peak	243.00	150	Vertical	Pass
3**	4022.600	35.96	-4.05	54.0	-18.04	AV	243.00	150	Vertical	Pass
4	5788.800	86.56	1.01	--	--	Peak	326.00	150	Vertical	N/A
4**	5788.800	79.74	1.01	--	--	AV	326.00	150	Vertical	N/A
5	12355.838	50.27	19.67	74.0	-23.73	Peak	360.00	150	Vertical	Pass
5**	12355.838	37.97	19.67	54.0	-16.03	AV	360.00	150	Vertical	Pass
6	15983.737	55.80	24.01	74.0	-18.20	Peak	351.00	150	Vertical	Pass
6**	15983.737	42.58	24.01	54.0	-11.42	AV	351.00	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	1037.000	47.27	-14.85	74.0	-26.73	Peak	88.00	150	Horizontal	Pass
1**	1037.000	31.19	-14.85	54.0	-22.81	AV	88.00	150	Horizontal	Pass
2	2878.200	42.56	-8.31	74.0	-31.44	Peak	212.00	150	Horizontal	Pass
2**	2878.200	32.16	-8.31	54.0	-21.84	AV	212.00	150	Horizontal	Pass
3	4249.600	47.27	-3.18	74.0	-26.73	Peak	94.00	150	Horizontal	Pass
3**	4249.600	35.58	-3.18	54.0	-18.42	AV	94.00	150	Horizontal	Pass
4	5824.000	102.04	0.82	--	--	Peak	206.00	150	Horizontal	N/A
4**	5824.000	93.64	0.82	--	--	AV	206.00	150	Horizontal	N/A
5	12340.888	50.59	19.78	74.0	-23.41	Peak	32.00	150	Horizontal	Pass
5**	12340.888	39.10	19.78	54.0	-14.90	AV	32.00	150	Horizontal	Pass
6	15630.412	55.22	23.51	74.0	-18.78	Peak	311.00	150	Horizontal	Pass
6**	15630.412	43.69	23.51	54.0	-10.31	AV	311.00	150	Horizontal	Pass

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

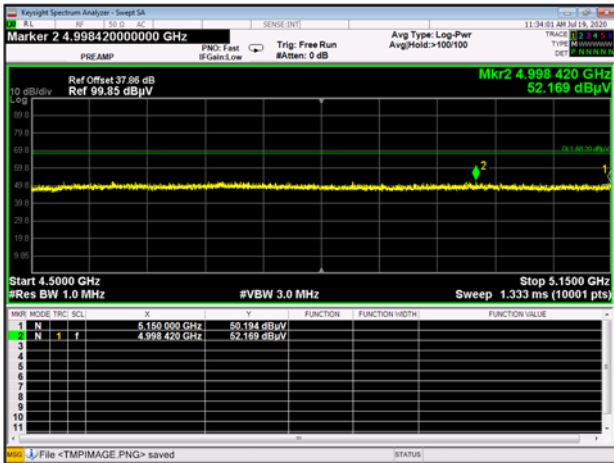
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1188.400	45.88	-15.06	74.0	-28.12	Peak	293.00	150	Vertical	Pass
1**	1188.400	42.33	-15.06	54.0	-11.67	AV	293.00	150	Vertical	Pass
2	2839.600	42.76	-8.50	74.0	-31.24	Peak	12.00	150	Vertical	Pass
2**	2839.600	33.22	-8.50	54.0	-20.78	AV	12.00	150	Vertical	Pass
3	4264.000	47.09	-3.23	74.0	-26.91	Peak	69.00	150	Vertical	Pass
3**	4264.000	35.61	-3.23	54.0	-18.39	AV	69.00	150	Vertical	Pass
4	5823.600	88.89	0.84	--	--	Peak	180.00	150	Vertical	N/A
4**	5823.600	82.67	0.84	--	--	AV	180.00	150	Vertical	N/A
5	10923.225	49.71	18.51	74.0	-24.29	Peak	154.00	150	Vertical	Pass
5**	10923.225	38.26	18.51	54.0	-15.74	AV	154.00	150	Vertical	Pass
6	15537.750	55.12	23.71	74.0	-18.88	Peak	29.00	150	Vertical	Pass
6**	15537.750	44.01	23.71	54.0	-9.99	AV	29.00	150	Vertical	Pass

A.6.2 Band Edge (Restricted-band)

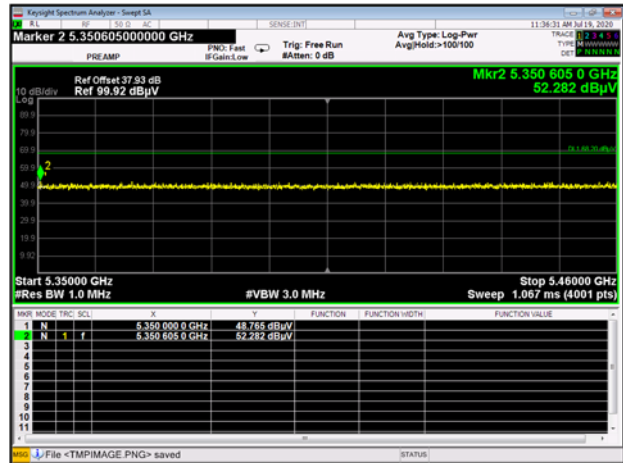
Test Band	Mode	Channel	Verdict
Band I	802.11a	Low	Pass
		High	Pass
	802.11n(HT20)	Low	Pass
		High	Pass
Band II	802.11a	Low	Pass
		High	Pass
	802.11n(HT20)	Low	Pass
		High	Pass
Band III	802.11a	Low	Pass
		High	Pass
	802.11n(HT20)	Low	Pass
		High	Pass
Band IV	802.11a	Low	Pass
		High	Pass
	802.11n(HT20)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

Test Plots

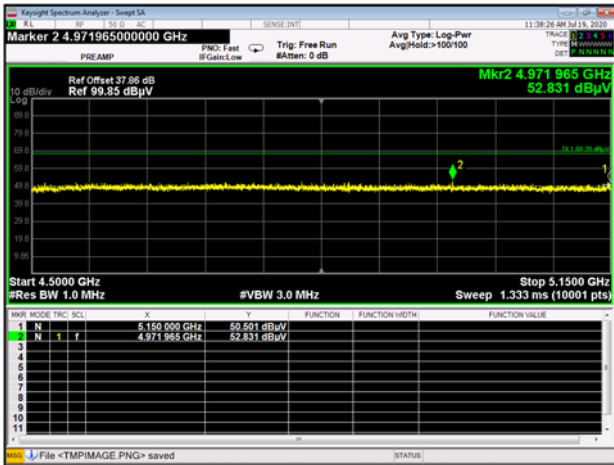
Band I 11a CH36 Peak



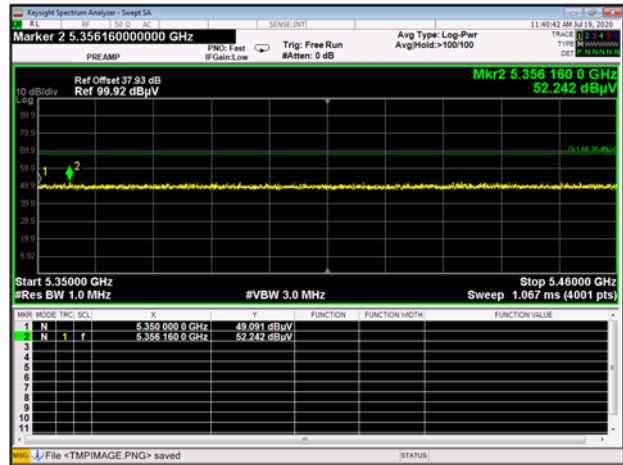
Band I 11a CH48 Peak



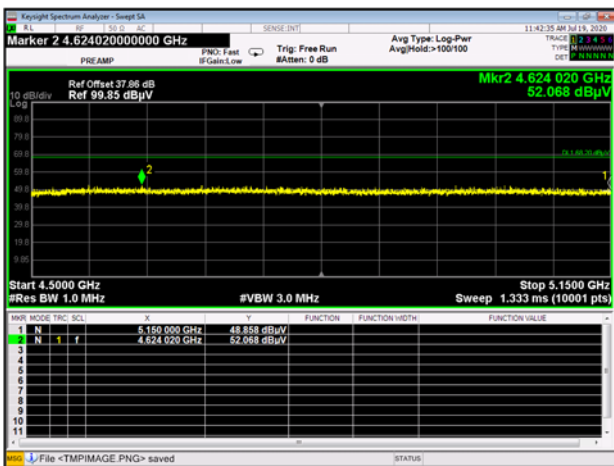
Band I 11n20 CH36 Peak



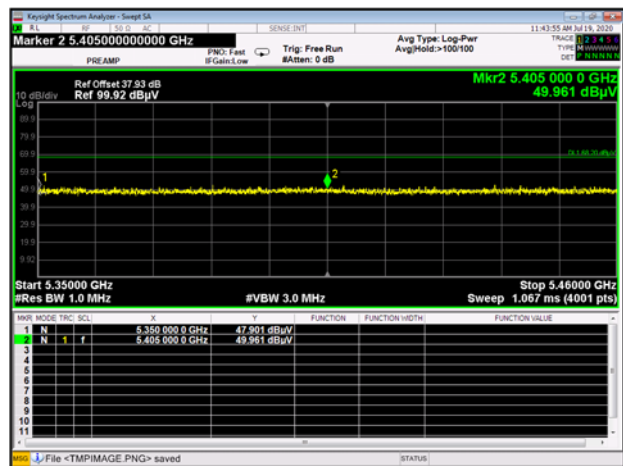
Band I 11n20 CH48 Peak



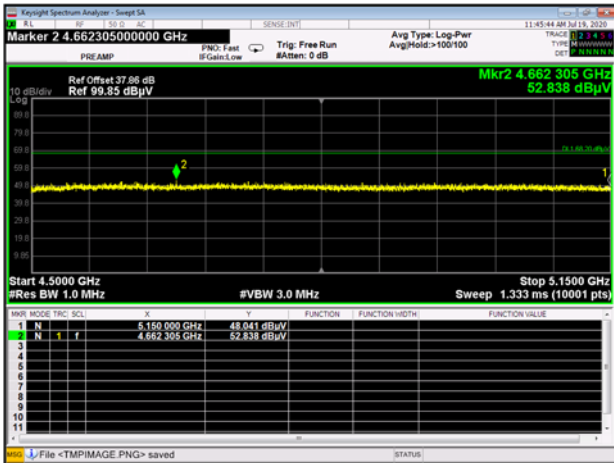
Band II 11a CH52 Peak



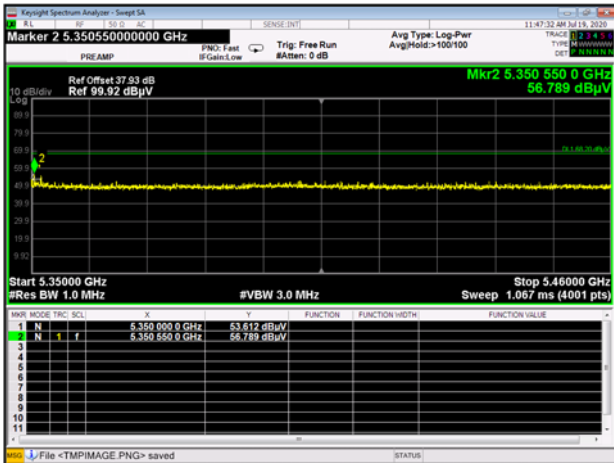
Band II 11a CH64 Peak



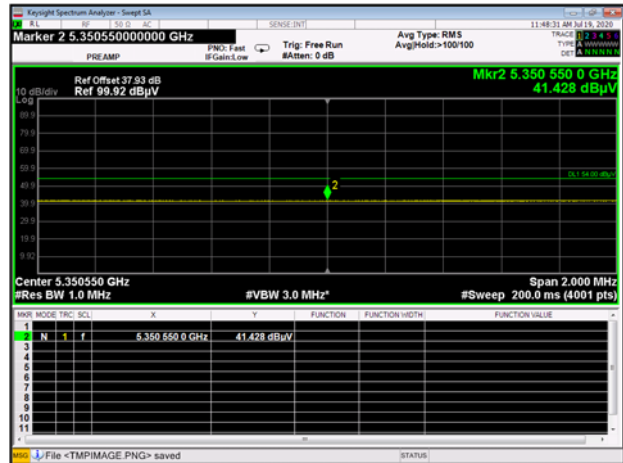
Band II 11n20 CH52 Peak



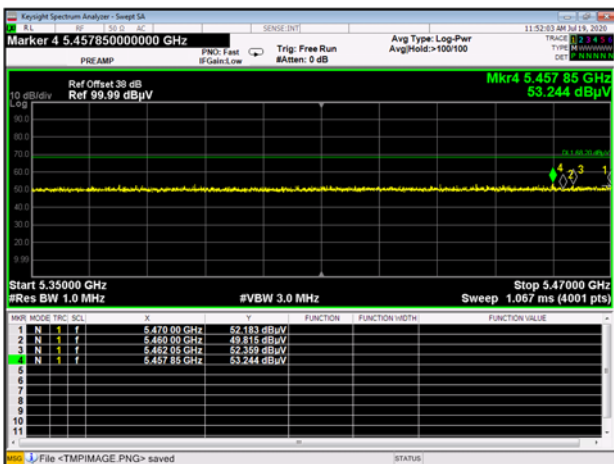
Band II 11n20 CH64 Peak



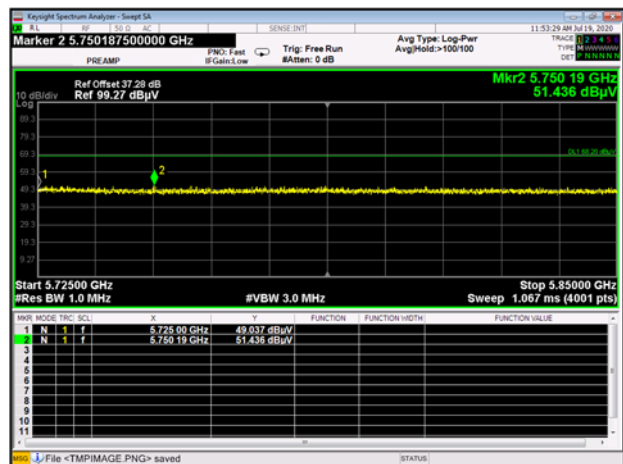
Band II 11n20 CH64 AV



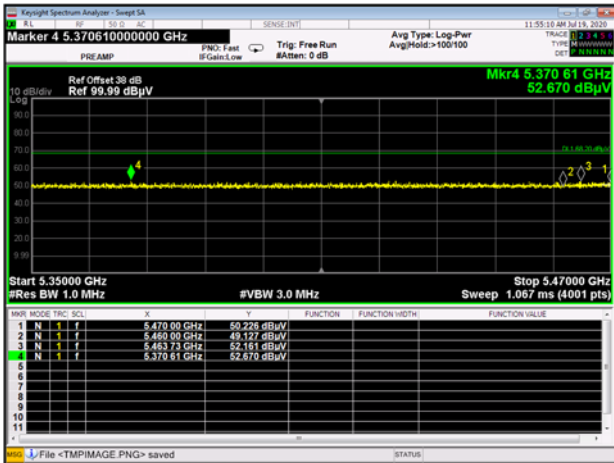
Band III 11a CH100 Peak



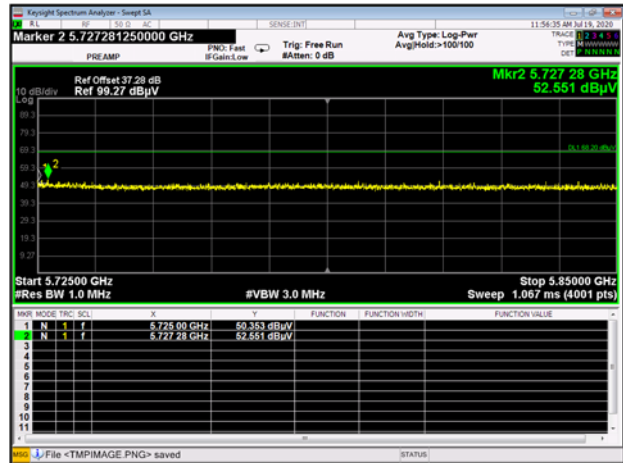
Band III 11a CH140 Peak



Band III 11n20 CH100 Peak



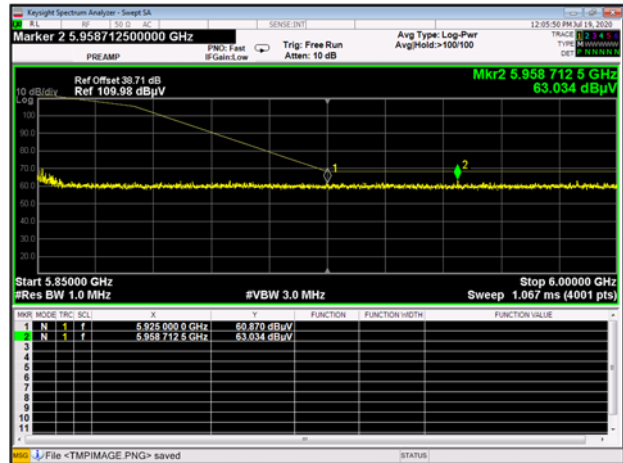
Band III 11n20 CH140 Peak



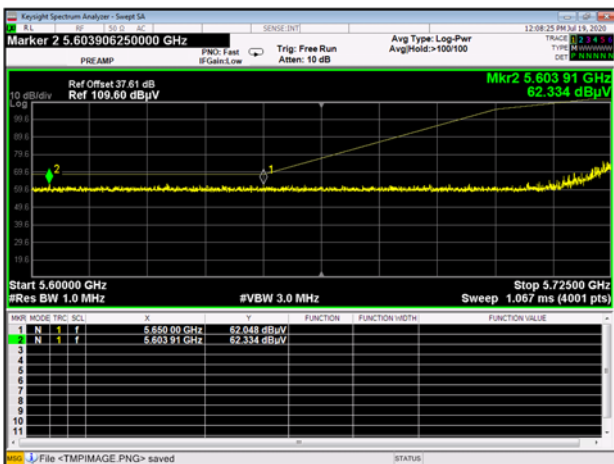
Band IV 11a CH149 Peak



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-SZ2070396-AR.PDF".

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document "BL-SZ2070396-AW.PDF".

ANNEX D EUT INTERNAL PHOTOS

Please refer the document "BL-SZ2070396-AI.PDF".

--END OF REPORT--