FCC Part 15.407

RSS-247 Issue 2, Feb 2017; RSS-Gen Issue 5, Mar 2019

TEST REPORT

For

Redpine Signals Inc

2107 N First Street, Suite 540, San Jose, CA 95131-2019, USA

FCC ID: XF6-M7DB7
IC: 8407A-M7DB7

Report Type	**Original Report**
Product Name:	**Dual Band 802.11 a/b/g/n, Bluetooth 5.0 SIP Module**
Model Name:	**M7DB**
Report Number :	**RLK200203002-00E**
Report Date :	**2020/05/18**
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Revision History

Revision	Report Number	Issue Date	Description
1.0	RLK200203002-00E	2020/05/18	Original Report

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1 General Information

1.1 Product Description for Equipment under Test (EUT)

Applicant	**Redpine Signals Inc** 2107 N First Street, Suite 540, San Jose, CA 95131-2019, USA
Manufacturer	**Redpine Signals Inc** 2107 N First Street, Suite 540, San Jose, CA 95131-2019, USA
Brand Name	REDPINE SIGNALS DRIVING WIRELESS CONVERGENCE
Product (Equipment)	**Dual Band 802.11 a/b/g/n, Bluetooth 5.0 SIP Module**
Model Name	**M7DB**
EUT Function	IEEE 802.11 an(HT20/HT40)
Frequency Range	UNII-1: 5150 MHz - 5250 MHz UNII-2a: 5250 MHz - 5350 MHz, UNII-2c: 5470 MHz - 5725 MHz UNII-3: 5725 MHz - 5850 MHz
Number of Channels	**For UNII-1:** IEEE 802.11a/n HT20: 4 Channels IEEE 802.11n HT40: 2 Channels **For UNII-2a:** IEEE 802.11a/n HT20: 4 Channels IEEE 802.11n HT40: 2 Channels **For UNII-2c:** IEEE 802.11a/n HT20: 11 Channels IEEE 802.11n HT40: 5 Channels **For UNII-3:** IEEE 802.11a/n HT20: 5 Channels IEEE 802.11n HT40: 2 Channels
Output Power	**<Dipole Antenna: TAOGLAS/GW.71.5153>** **For UNII-1:** IEEE 802.11a: 12.78 dBm (0.0190 W) IEEE 802.11n HT20: 13.61 dBm (0.0230 W) IEEE 802.11n HT40: 9.59 dBm (0.0091 W) **For UNII-2a:** IEEE 802.11a: 12.31 dBm (0.0170 W) IEEE 802.11n HT20: 12.55 dBm (0.0180 W) IEEE 802.11n HT40: 9.53 dBm (0.0090 W) **For UNII-2c:** IEEE 802.11a: 13.18 dBm (0.0208 W) IEEE 802.11n HT20: 13.14 dBm (0.0206 W) IEEE 802.11n HT40: 11.59 dBm (0.0144 W) **For UNII-3:** IEEE 802.11a: 13.98 dBm (0.0250 W) IEEE 802.11n HT20: 14.18 dBm (0.0262 W) IEEE 802.11n HT40: 11.82 dBm (0.0152 W)

Output Power	**<Dipole Antenna: Inside WLAN/PRO-IS-299>** **For UNII-1:** IEEE 802.11a: 12.78 dBm (0.0190 W) IEEE 802.11n HT20: 13.61 dBm (0.0230 W) IEEE 802.11n HT40: 9.59 dBm (0.0091 W) **For UNII-2a:** IEEE 802.11a: 12.31 dBm (0.0170 W) IEEE 802.11n HT20: 12.55 dBm (0.0180 W) IEEE 802.11n HT40: 9.53 dBm (0.0090 W) **For UNII-2c:** IEEE 802.11a: 13.36 dBm (0.0217 W) IEEE 802.11n HT20: 13.14 dBm (0.0206 W) IEEE 802.11n HT40: 11.98 dBm (0.0158 W) **For UNII-3:** IEEE 802.11a: 13.98 dBm (0.0250 W) IEEE 802.11n HT20: 14.18 dBm (0.0262 W) IEEE 802.11n HT40: 11.82 dBm (0.0152 W) **<PCB Antenna: Redpine Signals/RSIA7>** **For UNII-1:** IEEE 802.11a: 12.78 dBm (0.0190 W) IEEE 802.11n HT20: 13.61 dBm (0.0230 W) IEEE 802.11n HT40: 9.59 dBm (0.0091 W) **For UNII-2a:** IEEE 802.11a: 12.31 dBm (0.0170 W) IEEE 802.11n HT20: 12.55 dBm (0.0180 W) IEEE 802.11n HT40: 9.53 dBm (0.0090 W) **For UNII-2c:** IEEE 802.11a: 13.18 dBm (0.0208 W) IEEE 802.11n HT20: 13.14 dBm (0.0206 W) IEEE 802.11n HT40: 10.75 dBm (0.0119 W) **For UNII-3:** IEEE 802.11a: 13.98 dBm (0.0250 W) IEEE 802.11n HT20: 14.18 dBm (0.0262 W) IEEE 802.11n HT40: 11.82 dBm (0.0152 W) **<PIFA Antenna: SMARTEQ/4211613980>** **For UNII-1:** IEEE 802.11a: 12.78 dBm (0.0190 W) IEEE 802.11n HT20: 13.61 dBm (0.0230 W) IEEE 802.11n HT40: 9.59 dBm (0.0091 W) **For UNII-2a:** IEEE 802.11a: 12.31 dBm (0.0170 W) IEEE 802.11n HT20: 12.55 dBm (0.0180 W) IEEE 802.11n HT40: 9.53 dBm (0.0090 W) **For UNII-2c:** IEEE 802.11a: 13.29 dBm (0.0213 W) IEEE 802.11n HT20: 13.18 dBm (0.0208 W) IEEE 802.11n HT40: 12.56 dBm (0.0180 W) **For UNII-3:** IEEE 802.11a: 13.98 dBm (0.0250 W) IEEE 802.11n HT20: 14.18 dBm (0.0262 W) IEEE 802.11n HT40: 11.82 dBm (0.0152 W)

Modulation Type	OFDM
Received Date	2020-02-03
Date of Test	2020-02-10 to 2020-04-30
Related Submittal(s)/Grant(s)	**FCC Part 15.247 DTS with FCC ID: XF6-M7DB7** **FCC Part 15.247 DSS with FCC ID: XF6-M7DB7** **IC RSS-247 DTS with IC: 8407A-M7DB7** **IC RSS-247 FHSS with IC: 8407A-M7DB7**

1.2 Operation Condition of EUT

Power Operation (Voltage Range)	☐ AC 120 V/60 Hz ☐ Adapter ☐ By Power Cord.
	☒ DC Type ☒ DC Power Supply: 3.3V ☐ Battery: ☐ External from USB Cable ☐ External DC Adapter
	☐ Host System

1.3 Objective

The Objective of this Test Report was to document the compliance of the Redpine Signals Inc. Appliance (Model: M7DB) to the requirements of the following Standards:

- Part 2, Subpart J, Part 15, Subparts A and C, section 15.407 of the Federal Communication Commission's rules.
- ANSI C63.10-2013 of t American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.
- RSS-Gen Issue 5, Mar 2019— General Requirements for Compliance of Radio Apparatus
- RSS-247 Issue 2, Feb 2017— Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices

1.4 Measurement Uncertainty

Parameter	Expanded Measurement uncertainty
RF output power	± 1.488 dB
Occupied Channel Bandwidth	± 453.927 Hz
RF Conducted Emission test	± 2.77 dB
AC Power Line Conducted Emission	± 2.66 dB
Radiated Below 1G	± 3.57 dB
Radiated Above 1G	± 5.32 dB

The test results with statement of conformity, the decision rules are based on the specifications and standards. The test results will not take the measurement uncertainty into account.

1.5 Environmental Conditions and Test Date

Test Site	Test Date	Temperature (°C)	Relative Humidity (% RH)	Test Engineer
Conduction (CON-01)	2020-02-07	22.3	53	Blake Wang
Radiated (966A)	2020-02-10 to 2020-03-23	19.5-22.9	58-62	Leo Cheng
Conducted (TH-02)	2020-02-18 to 2020-04-30	16.9-19.5	50-55	Blake Wang

1.6 Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Linkou Laboratory) to collect test data is located on

☒ No.6, Wende 2Rd., Guishan Dist., Taoyuan City 33382, Taiwan (R.O.C.).

Bay Area Compliance Laboratories Corp. (Linkou Laboratory) Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 3546) by Mutual Recognition Agreement (MRA). The test site has been approved by the FCC under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database. The FCC Registration No.: 0027578244. Designation No.: TW1119. The Test Firm Registration No.: 311381. ISED#: 25102 and CAB identifier is TW3546.

2 System Test Configuration

2.1 Description of Test Configuration

The system was configured for testing in testing mode which was provided by manufacturer.

No special accessory, No modification was made to the EUT and No special equipment used during test.

- **For BW: 20MHz**

Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	120 Note	5600
40	5200	124 Note	5620
44	5220	128 Note	5640
48	5240	132	5660
52	5260	136	5680
56	5280	140	5700
60	5300	149	5745
64	5320	153	5765
100	5500	157	5785
104	5520	161	5805
108	5540	165	5825
112	5560	-	--
116	5580	-	--

For UNII-1: Channel 36, 40 and 48 were tested. For UNII-2a: Channel 52, 60 and 64 were tested. For UNII-2c: Channel 100, 116 and 140 were tested. For UNII-3: Channel 149, 157 and 165 were tested,

Note: Canada not support.

- **For BW: 40MHz**

Channel	Frequency (MHz)	Channel	Frequency (MHz)
38	5190	118 Note	5590
46	5230	126 Note	5630
54	5270	134	5670
62	5310	151	5755
102	5510	159	5795
110	5500	-	-

For UNII-1: Channel 38 and 46 were tested. For UNII-2a: Channel 54 and 62 were tested. For UNII-2c: Channel 102, 118,

Note: Canada not support.

Modulation Used for Conformance Test			
Configuration	**N_{TX}**	**Data Rate**	**Worst Data Rate**
802.11a mode	**1**	6-54 Mbps	6 Mbps
802.11n HT20 mode	**1**	MCS 0-7	MCS 0
802.11n HT40 mode	**1**	MCS 0-7	MCS 0

Worst Case of Power Setting					
EUT Exercise Software			FCC_PER_TEST_GUI.py		
< Dipole antenna (TAOGLAS GW.71.5153)>					
Configuration	**N_{TX}**	**UNII Band**	**Low CH**	**Mid CH**	**High CH**
802.11a mode	**1**	**UNII-1**	22	22	22
		UNII-2a	22	22	22
		UNII-2c	22	22	7
		UNII-3	22	22	22
802.11n HT20 mode	**1**	**UNII-1**	22	22	22
		UNII-2a	22	22	22
		UNII-2c	22	22	6
		UNII-3	22	22	22
802.11n HT40 mode	**1**	**UNII-1**	7	-	22
		UNII-2a	22	-	8
		UNII-2c	10	22	10
		UNII-3	22	-	22

Worst Case of Power Setting					
EUT Exercise Software			FCC_PER_TEST_GUI.py		
< Dipole antenna (Inside WLAN PRO-IS-299)>					
Configuration	N_{TX}	UNII Band	Low CH	Mid CH	High CH
802.11a mode	1	UNII-1	22	22	22
		UNII-2a	22	22	22
		UNII-2c	22	22	11
		UNII-3	22	22	22
802.11n HT20 mode	1	UNII-1	22	22	22
		UNII-2a	22	22	22
		UNII-2c	22	22	9
		UNII-3	22	22	22
802.11n HT40 mode	1	UNII-1	22	-	22
		UNII-2a	22	-	22
		UNII-2c	22	22	22
		UNII-3	22	-	22

Worst Case of Power Setting					
EUT Exercise Software			FCC_PER_TEST_GUI.py		
< PCB Antenna (Redpine Signals RSIA7)>					
Configuration	N_{TX}	UNII Band	Low CH	Mid CH	High CH
802.11a mode	1	UNII-1	22	22	22
		UNII-2a	22	22	22
		UNII-2c	22	22	7
		UNII-3	22	22	22
802.11n HT20 mode	1	UNII-1	22	22	22
		UNII-2a	22	22	22
		UNII-2c	22	22	6
		UNII-3	22	22	22
802.11n HT40 mode	1	UNII-1	7	-	22
		UNII-2a	22	-	8
		UNII-2c	10	22	10
		UNII-3	22	-	22

Worst Case of Power Setting					
EUT Exercise Software			FCC_PER_TEST_GUI.py		
< PIFA Antenna (SMARTEQ 4211613980)>					
Configuration	N_{TX}	UNII Band	Low CH	Mid CH	High CH
802.11a mode	1	UNII-1	22	22	22
		UNII-2a	22	22	22
		UNII-2c	12	22	10
		UNII-3	22	22	22
802.11n HT20 mode	1	UNII-1	22	22	22
		UNII-2a	22	22	22
		UNII-2c	12	22	9
		UNII-3	22	22	22
802.11n HT40 mode	1	UNII-1	9	-	22
		UNII-2a	22	-	9
		UNII-2c	8	9	22
		UNII-3	22	-	22

The worst-case data rates are determined to be as follows for each mode based upon investigation by measuring the Peak power and PSD across all date rates bandwidths, and modulations. Radiated below 1G were tested worst output power.

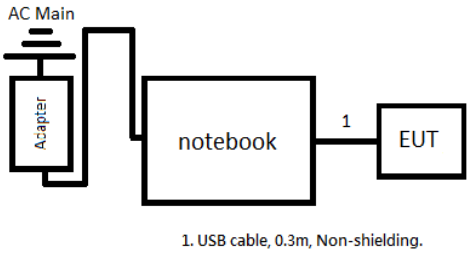
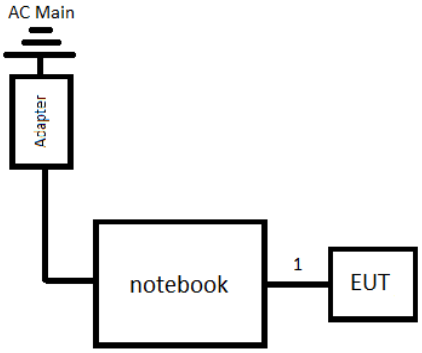
For Radiated Emission, Conducted Power and PSD had test for four antenna because the power setting is different, the result will be different. For Bandwidth only test one result that because the power not affect the result.

2.2 Support Equipment and External Cable List

No.	Description	Manufacturer	Model Number
A	Notebook	DELL	Inspiron 15
B	Adapter	Chicony Power	HA65NS5-00 (DELL)

No.	Cable Description	Shielding Type	Length (m)	From	To
1	USB Cable	Non-Shielded	1	EUT	NB

2.3 Block Diagram of Test Setup

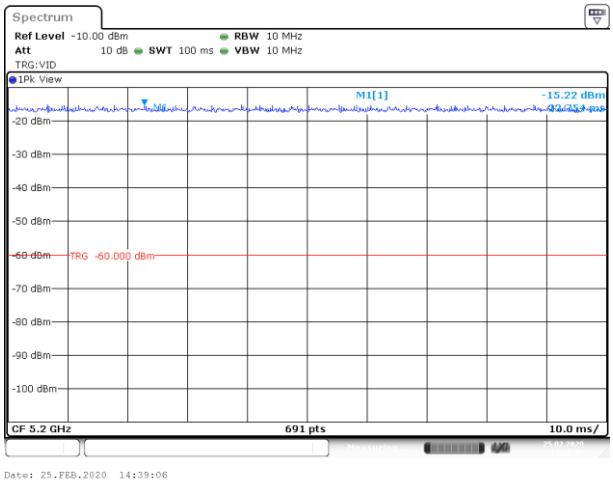
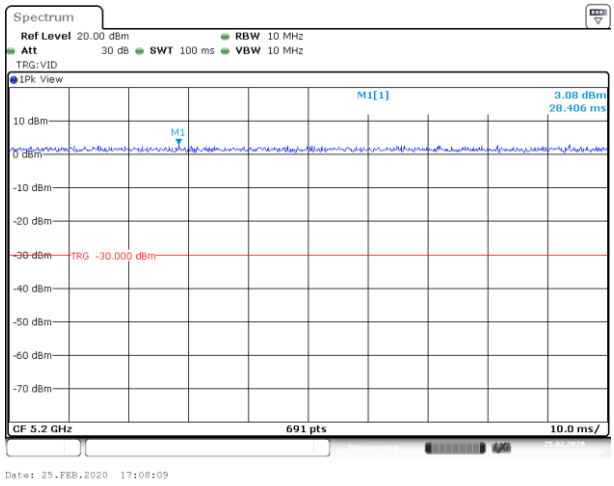
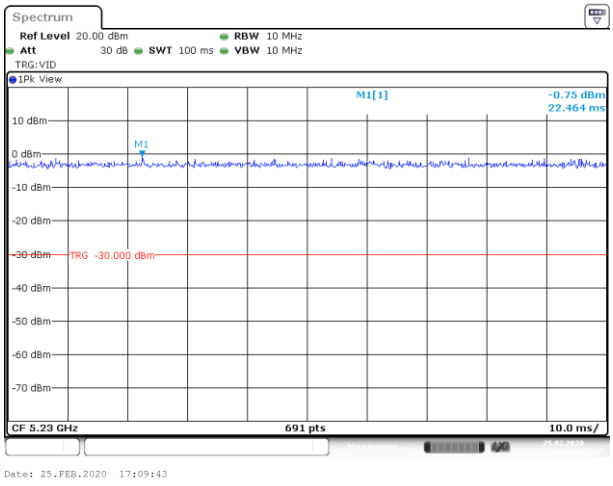
Conduction	Radiation
 1. USB cable, 0.3m, Non-shielding.	 1. USB cable, 0.3m, Non-shielding.

2.4 Duty Cycle

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01 section B:

All measurements are to be performed with the EUT transmitting at 100% duty cycle at its maximum power control level; however, if 100% duty cycle cannot be achieved, measurements of duty cycle, x, and maximum power transmission duration, T, are required for each tested mode of operation.

Configuration	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11a mode	100	100	100	0.00
802.11n HT20 mode	100	100	100	0.00
802.11n HT40 mode	100	100	100	0.00

802.11a mode	802.11n HT20 mode
	
802.11n HT40 mode	**-**
	-

3 Summary of Test Results

FCC/ISED Rules	Description of Test	Result
§1.1310, §2.1091, §15.407 (f)	Maximum Permissible Exposure (MPE)	Compliance
ISEDC RSS-102 Sec 2.5.2	Exemption Limits for Routine Evaluation – RF Exposure Evaluation	Compliance
§15.207(a), §15.407(b)(6) ISEDC RSS-Gen Sec 8.8	AC Line Conducted Emissions	Compliance
§15.205, §15.209, §15.407(b) ISEDC RSS-Gen Sec 8.9 and 8.10 ISEDC RSS-247 Sec 6.2	Spurious Emissions	Compliance
§15.407(a)(e) ISEDC RSS-247 Sec 6.2 ISEDC RSS-Gen Sec 6.7	Emission Bandwidth	Compliance
§15.407(a)(1) ISED RSS-247 Sec 6.2	Maximum Output Power	Compliance
§15.407(a)(1)(5) ISEDC RSS-247 Sec 6.2	Power Spectral Density	Compliance
FCC §15.407 (h) ISEDC RSS-247 Sec 6.3	Dynamic Frequency Selections (DFS)	Note1

Note[1]: Compliance test data was recorded in a separate report, please refer to Test Report: RLK200203002-00F

4 FCC §1.1310, §2.1091, §15.407(f) - Maximum Permissible Exposure (MPE)

4.1 Applicable Standard

According to subpart 15.247(i)and subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	**Electric Field Strength (V/m)**	**Magnetic Field Strength (A/m)**	**Power Density (mW/cm^2)**	**Averaging Time (minutes)**
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*($180/f^2$)	30
30–300	27.5	0.073	0.2	30
300–1500	/	/	f/1500	30
1500–100,000	/	/	1.0	30

*f = frequency in MHz; * = Plane-wave equivalent power density;*

According to §1.1310, and §2.1091 RF exposure is calculated.

Calculated Formulary: Predication of MPE limit at a given distance

$S = PG/4\pi R^2$ = power density (in appropriate units, e.g. mW/cm2);

P = power input to the antenna (in appropriate units, e.g., mW);

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

4.2 RF Exposure Evaluation Result

Mode	**Frequency Range (MHz)**	**Antenna Gain**		**Target Power**		**Evaluation Distance (cm)**	**Power Density (mW/cm^2)**	**MPE Limit (mW/cm^2)**
		(dBi)	**(numeric)**	**(dBm)**	**(mW)**			
BLE	2402-2480	3.80	2.3988	19.00	79.4328	20	0.0379	1
BR/EDR	2402-2480	3.80	2.3988	21.00	125.8925	20	0.0601	1
Wi-Fi 2.4G	2412-2472	3.80	2.3988	25.00	316.2278	20	0.1510	1
Wi-Fi 5G	5150-5850	5.50	3.5481	14.50	28.1838	20	0.0199	1

Note: Wi-Fi and BT can't simultaneously.

Result: MPE evaluation meet 20 cm the requirement of standard.

5 RSS-102 Sec 2.5.2- Exemption Limits for Routine Evaluation – RF Exposure Evaluation

5.1 Applicable Standard

According to subpart RSS-102 Sec 2.5.2,

> RF exposure evaluation is required if the separation distance between the user and/or bystander and the device's radiating element is greater than 20 cm, except when the device operates as follows:
>
> - below 20 MHz[6] and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 1 W (adjusted for tune-up tolerance);
> - at or above 20 MHz and below 48 MHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than $4.49/f^{0.5}$ W (adjusted for tune-up tolerance), where f is in MHz;
> - at or above 48 MHz and below 300 MHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 0.6 W (adjusted for tune-up tolerance);
> - at or above 300 MHz and below 6 GHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than $1.31 \times 10^{-2} f^{0.6834}$ W (adjusted for tune-up tolerance), where f is in MHz;
> - at or above 6 GHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 5 W (adjusted for tune-up tolerance).
>
> In these cases, the information contained in the RF exposure technical brief may be limited to information that demonstrates how the e.i.r.p. was derived.

5.2 RF Exposure Evaluation Result

BLE Max tune-up conducted output power is 19.00 dBm (79.4328 mW) at 2402 MHz, Antenna Gain = 3.80 dBi, EIRP = 22.80 dBm (0.1906 W), so the maximum conducted and E.I.R.P. source-based, time-averaged output is less than 2.68 W for general public use.

BR/EDR Max tune-up conducted output power is 21.00 dBm (125.8925 mW) at 2402 MHz, Antenna Gain = 3.80 dBi, EIRP = 24.80 dBm (0.3020 W), so the maximum conducted and E.I.R.P. source-based, time-averaged output is less than 2.68 W for general public use.

Wi-Fi 2.4G Max tune-up conducted output power is 25.00 dBm (316.2278 mW) at 2437 MHz, Antenna Gain = 3.80 dBi, EIRP = 28.80 dBm (0.7586 W), so the maximum conducted and E.I.R.P. source-based, time-averaged output is less than 2.70 W for general public use.

Wi-Fi 5G Max tune-up conducted output power is 14.50 dBm (28.1839 mW) at 5825 MHz, Antenna Gain = 5.50 dBi, EIRP = 20.00 dBm (0.1000 W), so the maximum conducted and E.I.R.P. source-based, time-averaged output is less than 4.90 W for general public use.

Note: Wi-Fi and BT can't simultaneously.

Result: MPE test exempted.

6 FCC §15.203 and RSS-247 Sec 6.8 – Antenna Requirements

6.1 Applicable Standard

According to § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited.

And according to FCC 47 CFR section 15.247 (b), if the transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna does not exceed 6dBi

According to RSS-Gen 6.3: Transmitter Antenna for Licence-Exempt Radio Apparatus

The applicant for equipment certification, as per RSP-100, must provide a list of all antenna types that may be used with the licence-exempt transmitter, indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna.

Licence-exempt transmitters that have received equipment certification may operate with different types of antennas. However, it is not permissible to exceed the maximum equivalent isotropically radiated power (e.i.r.p.) limits specified in the applicable standard (RSS) for the licence-exempt apparatus.

Testing shall be performed using the highest gain antenna of each combination of licence-exempt transmitter and antenna type, with the transmitter output power set at the maximum level.Footnote8 When a measurement at the antenna connector is used to determine RF output power, the effective gain of the device's antenna shall be stated, based on a measurement or on data from the antenna manufacturer.

User manuals for transmitters equipped with detachable antennas shall also contain the following notice in a conspicuous location:

This radio transmitter (identify the device by certification number) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Immediately following the above notice, the manufacturer shall provide a list of all antenna types approved for use with the transmitter, indicating the maximum permissible antenna gain (in dBi).

6.2 Antenna List and Details

Brand	Model	Antenna Type	Antenna Gain (dBi)	Result
TAOGLAS	GW.71.5153	Dipole	5.50	Compliance
SMARTEQ	4211613980	PIFA	2.00	Compliance
Inside WLAN	PRO-IS-299	Dipole	1.60	Compliance
Redpine Signals	RSIA7	PCB Antenna	1.25	Compliance

The EUT has an internal antenna arrangement, which was permanently attached, fulfill the requirement of this section.

7 FCC §15.207 and RSS-247 Sec 6.8 – AC Line Conducted Emissions

7.1 Applicable Standard

According to FCC §15.207,

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 or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 µH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequencies ranges.

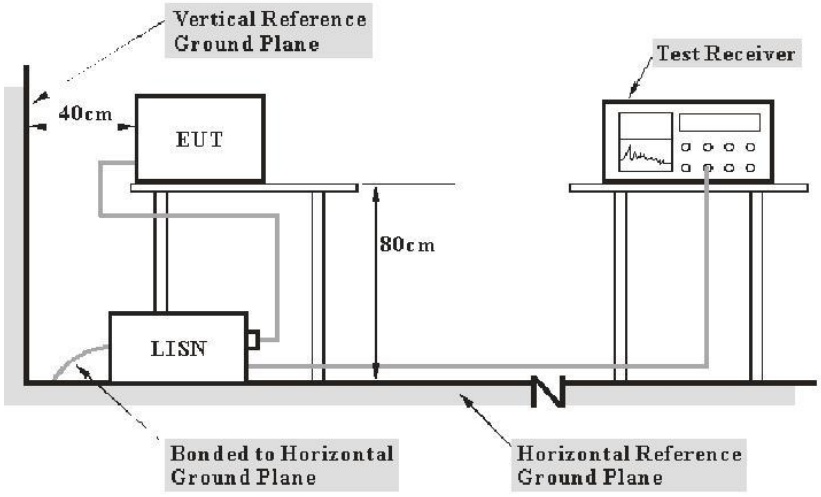
According to RSS-Gen 8.8 Conducted limits:

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 or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 µH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequencies ranges.

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-Peak	Average
0.15-0.5	66 to 56 Note 1	56 to 46 Note 2
0.5-5	56	46
5-30	60	50

Note 1: Decreases with the logarithm of the frequency. Note 2: A linear average detector is required

7.2 EUT Setup and Test Procedure



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 and RSS-Gen limits**,** The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz. During the conducted emission test, the EMI test receiver was set with the following configurations

Frequency Range	Receiver RBW
150 kHz - 30 MHz	9 kHz

During the conducted emission test, the adapter was connected to the outlet of the LISN. Maximizing procedure was performed on the six (6) highest emissions of the EUT. All data was recorded in the Quasi-peak and average detection mode.

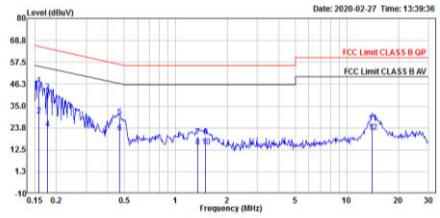
7.3 Test Equipment List and Details

Description	Manufacture	Model	Serial No.	Cal. Date.	Cal. Due.
AC Line Conduction Room (CON-01)					
Two-Line V-Network	Rohde & Schwarz	ENV216	100010	2019/09/02	2020/09/01
Pulse Limiter	SCHWARZBECK	VSTD 9561-F	00432	2019/08/28	2020/08/27
EMI Test Receiver	Rohde & Schwarz	ESR3	102448	2019/06/27	2020/06/23
RF Cable	EMCI	EMCCFD300-BM-BM-8000	180526	2019/08/08	2020/08/07
Software	Audix	e3 v9	E3LK-03	N.C.R	N.C.R

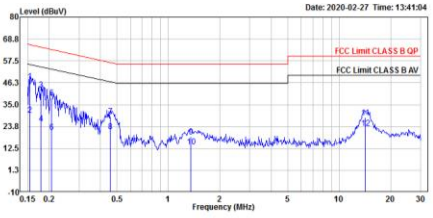
***Statement of Traceability:** The testing equipment's listed above have finished the calibration by Electronics Testing Center, Taiwan (ETC) or other laboratories which were accredited by TAF or equivalent organizations. The calibration result could be traceable to the International System of Units (SI).*

7.4 Test Data and Test Plot

Line	Neutral



	Freq	Read Level	Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	
1	0.159	25.85	45.79	19.94	65.54	-19.75	QP
2	0.159	10.08	30.02	19.94	55.54	-25.52	Average
3	0.177	22.33	42.27	19.94	64.61	-22.34	QP
4	0.177	3.43	23.37	19.94	54.61	-31.24	Average
5	0.469	9.28	29.24	19.96	56.54	-27.30	QP
6	0.469	1.37	21.33	19.96	46.54	-25.21	Average
7	1.342	-0.60	19.37	19.97	56.00	-36.63	QP
8	1.342	-5.97	14.00	19.97	46.00	-32.00	Average
9	1.488	-0.71	19.27	19.98	56.00	-36.73	QP
10	1.488	-5.76	14.22	19.98	46.00	-31.78	Average
11	14.074	6.26	26.40	20.14	60.00	-33.60	QP
12	14.074	1.29	21.43	20.14	50.00	-28.57	Average



	Freq	Read Level	Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	
1	0.154	27.03	46.98	19.95	65.80	-18.82	QP
2	0.154	9.71	29.66	19.95	55.80	-26.14	Average
3	0.180	22.55	42.49	19.94	64.48	-21.99	QP
4	0.180	5.29	25.23	19.94	54.48	-29.25	Average
5	0.206	18.49	38.43	19.94	63.35	-24.92	QP
6	0.206	1.04	20.98	19.94	53.35	-32.37	Average
7	0.458	9.00	28.97	19.97	56.74	-27.77	QP
8	0.458	1.38	21.35	19.97	46.74	-25.39	Average
9	1.352	-1.34	18.65	19.99	56.00	-37.35	QP
10	1.352	-6.57	13.42	19.99	46.00	-32.58	Average
11	14.186	8.25	28.49	20.24	60.00	-31.51	QP
12	14.186	2.62	22.86	20.24	50.00	-27.14	Average

Note1: Transmit Mode

Note2:

Level = Reading Level + Correct Factor

Over Limit = Level – Limit

Factor = (LISN, ISN, PLC or current probe) Factor + Cable Loss + Attenuator

8 FCC §15.209, §15.205 & §15.407(b), RSS-Gen Sec 8.9, 8.10 and RSS-247 Sec 6.2 – Spurious Unwanted Emissions

8.1 Applicable Standard

According to FCC §15.407(b),

Undesirable emission limits. Except as shown in paragraph (b) (7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(4) For transmitters operating in the 5.725-5.85 GHz band:

(i) 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.

(ii) Devices certified before March 2, 2017 with antenna gain greater than 10 dBi may demonstrate compliance with the emission limits in §15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease by March 2, 2018. Devices certified before March 2, 2018 with antenna gain of 10 dBi or less may demonstrate compliance with the emission limits in §15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease before March 2, 2020.

(5) The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.

(6) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209. Further.

(7) The provisions of §15.205 apply to intentional radiators operating under this section.

(8) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipment permits.

As per FCC §15.35(d): Unless otherwise specified, on any frequency or frequencies above 1000 MHz, the radiated emission limits are based on the use of measurement instrumentation employing an average detector function. Unless otherwise specified, measurements above 1000 MHz shall be performed using a minimum resolution bandwidth of 1MHz.

As Per FCC §15.205(a) except as show in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090-0.110	13.36-13.41	399.9-410	4.5-5.15
0.495-0.505	16.42-16.423	608-614	5.35-5.46
2.1735-2.1905	16.69475-16.69525	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	Above 38.6

As per FCC §15.209(a): Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

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

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

According to ISED RSS-247 Sec 6.2,

- The outermost carrier frequencies or channels shall be used when measuring unwanted emissions. Such carrier or channel centre frequencies are to be indicated in the test report.

- For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. Any unwanted emissions that fall into the band 5250-5350 MHz shall be attenuated below the channel power by at least 26 dB, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth (i.e. 99% bandwidth), above 5250 MHz. The 26 dB bandwidth may fall into the 5250-5350 MHz band; however, if the occupied bandwidth also falls within the 5250-5350 MHz band, the transmission is considered as intentional and the devices shall comply with all requirements in the band 5250-5350 MHz including implementing dynamic frequency selection (DFS) and TPC, on the portion of the emission that resides in the 5250-5350 MHz band

- Devices shall comply with the following:

a) All emissions outside the band 5250-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p.; or
b) All emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. and its power shall comply with the spectral power density for operation within the band 5150-5250 MHz. The device, except devices installed in vehicles, shall be labelled or include in the user manual the following text “for indoor use only.”

- Emissions outside the band 5470-5725 MHz shall not exceed -27 dBm/MHz e.i.r.p. However, devices with bandwidth overlapping the band edge of 5725 MHz can meet the emission limit of -27 dBm/MHz e.i.r.p. at 5850 MHz instead of 5725 MHz.

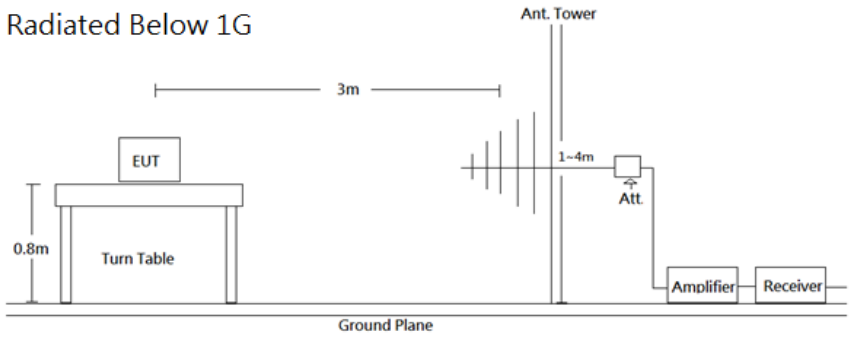
- Devices operating in the band 5725-5850 MHz with antenna gain greater than 10 dBi can have unwanted emissions that comply with either the limits in this section or in section 5.5 until six (6) months after the publication date of this standard for certification. Certified devices that do not comply with emission limits in this section shall not be manufactured, imported, distributed, leased, offered for sale or sold after April 1, 2018.

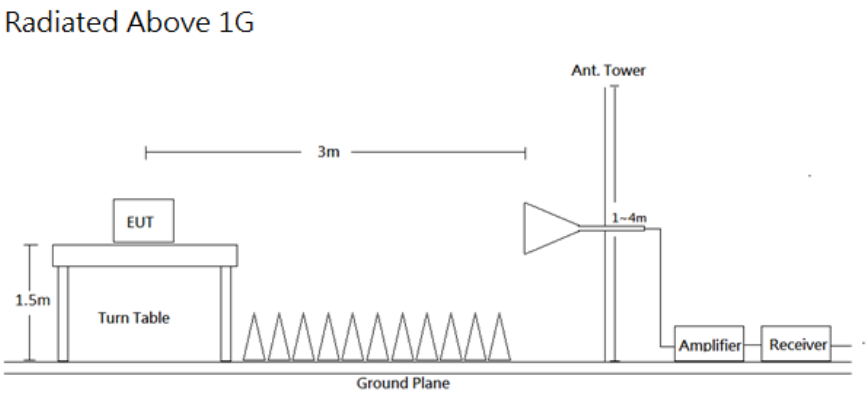
- Devices operating in the band 5725-5850 MHz with antenna gain of 10 dBi or less can have unwanted emissions that comply with either the limits in this section or in section 5.5 until April 1, 2018 for certification. Certified devices that do not comply with emission limits in this section shall not be manufactured, imported, distributed, leased, offered for sale or sold after April 1, 2020.

Devices operating in the band 5725-5850 MHz shall have e.i.r.p. of unwanted emissions comply with the following:

a) 27 dBm/MHz at frequencies from the band edges decreasing linearly to 15.6 dBm/MHz at 5 MHz above or below the band edges;
b) 15.6 dBm/MHz at 5 MHz above or below the band edges decreasing linearly to 10 dBm/MHz at 25 MHz above or below the band edges;
c) 10 dBm/MHz at 25 MHz above or below the band edges decreasing linearly to -27 dBm/MHz at 75 MHz above or below the band edges; and
d) -27 dBm/MHz at frequencies more than 75 MHz above or below the band edges.

8.2 EUT Setup and Test Procedure





Radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC Part 15.209 and FCC 15.407 Limits.

The system was investigated from 30 MHz to 40 GHz. During the radiated emission test, the EMI test receiver was set with the following configurations measurement method 6.3 in ANSI C63.10-2013.

Frequency Range	RBW	VBW	Duty cycle	Measurement method
30-1000 MHz	120 kHz	/	-	QP
Above 1 GHz	1 MHz	3 MHz	-	PK
	1 MHz	10 Hz	>98%	Ave
	1 MHz	1/T	<98%	Ave

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations. All data was recorded in the Quasi-peak detector mode from 30 MHz to 1 GHz and PK and average detector modes for frequencies above 1 GHz.

8.3 Test Equipment List and Details

Description	Manufacture	Model	Serial No.	Cal. Date.	Cal. Due.
Radiation 3M Room (966A)					
Active Loop	EMCO	6502	0001-3322	2020/03/16	2021/03/15
Bilog Antenna/6 dB Attenuator	SUNOL SCIENCES & EMEC /EMCI	JB3/N-6-06	A111513/AT-N0668	2020/03/19	2021/03/18
Horn Antenna	ETS-Lindgren	3115	00109141	2019/07/05	2020/07/04
Horn Antenna	ETS-Lindgren	3160-09	00123852	2019/07/11	2020/07/10
Preamplifier	A.H. Systems	PAM-0118	470	2020/03/16	2021/03/15
Preamplifier	A.H. Systems	PAM-1840VH	174	2020/03/25	2021/03/24
Signal and Spectrum Analyzer	Rohde & Schwarz	FSV40	101456	2019/07/12	2020/07/11
Microflex Cable (1m)	EMCI	EMC106-SM-SM-2000	180515	2019/08/07	2020/08/06
Microflex Cable (2m)	MTJ	H0919	00000-MT28A-100	2019/08/07	2020/08/06
Microflex Cable (8m)	UTIFLEX	UFA210A-1-3149-300300	MFR 64639 232490-001	2019/08/07	2020/08/06
Turn Table	Chaintek	T-200-S-1	003501	N.C.R	N.C.R
Antenna Tower	Chaintek	MBD-400-1	003504	N.C.R	N.C.R
Controller	Chaintek	3000-1	003507	N.C.R	N.C.R
Software	Audix	e3 v9	E3LK-01	N.C.R	N.C.R
Conducted Room(TH-02)					
Signal Analyzer 40GHZ	Rohde & Schwarz	FSV40-N	102248	2019/09/11	2020/09/10
RF Cable	MTJ	MT40S	MT40S-001	Each Use	/

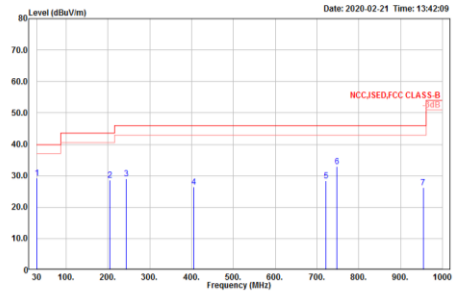
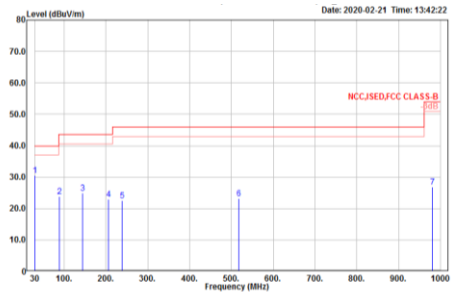
***Statement of Traceability:** The testing equipment's listed above have finished the calibration by Electronics Testing Center, Taiwan (ETC) or other laboratories which were accredited by TAF or equivalent organizations. The calibration result could be traceable to the International System of Units (SI).*

8.4 Test Data and Test Plot

<Dipole Antenna: TAOGLAS/GW.71.5153>

Transmitting mode (Pre-scan with three orthogonal axis, and worse case as X axis)

Below 1G (30 MHz-1 GHz) test the output power worst mode

Horizontal	Vertical
	

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m		
1	30.000	29.24	40.00	-10.76	35.37	-6.13	Peak	horizontal
2	204.600	28.62	43.50	-14.88	48.08	-19.46	Peak	horizontal
3	244.370	29.04	46.00	-16.96	48.73	-19.69	Peak	horizontal
4	404.420	26.54	46.00	-19.46	42.53	-15.99	Peak	horizontal
5	721.610	28.48	46.00	-17.52	39.15	-10.67	Peak	horizontal
6	746.830	33.06	46.00	-12.94	43.24	-10.18	Peak	horizontal
7	953.440	26.24	46.00	-19.76	34.07	-7.83	Peak	horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m		
1	30.970	30.61	40.00	-9.39	37.45	-6.84	Peak	vertical
2	88.200	23.92	43.50	-19.58	47.07	-23.15	Peak	vertical
3	144.460	24.92	43.50	-18.58	43.51	-18.59	Peak	vertical
4	205.570	22.87	43.50	-20.63	42.57	-19.70	Peak	vertical
5	239.520	22.60	46.00	-23.40	42.29	-19.69	Peak	vertical
6	517.910	23.29	46.00	-22.71	37.10	-13.81	Peak	vertical
7	980.600	26.82	54.00	-27.18	34.35	-7.53	Peak	vertical

Level = Read Level + Factor

Over Limit = Level – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

Spurious emissions more than 20 dB below the limit were not reported

Above 1G (1 GHz-40 GHz) in UNII-1:

802.11a mode:

Low CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5148.100	52.10	54.00	-1.90	51.75	0.35	Average
5148.100	71.05	74.00	-2.95	70.70	0.35	Peak
5182.300	95.82			95.57	0.25	Average
5182.300	106.49			106.24	0.25	Peak
6906.600	61.96	68.20	-6.24	57.52	4.44	Peak
10360.000	50.84	68.20	-17.36	41.62	9.22	Peak
15540.000	45.90	54.00	-8.10	31.71	14.19	Average
15540.000	57.46	74.00	-16.54	43.27	14.19	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5148.100	48.30	54.00	-5.70	47.95	0.35	Average
5148.100	64.69	74.00	-9.31	64.34	0.35	Peak
5177.800	88.06			87.81	0.25	Average
5177.800	98.68			98.43	0.25	Peak
6906.600	56.27	68.20	-11.93	51.83	4.44	Peak
10360.000	51.08	68.20	-17.12	41.86	9.22	Peak
15540.000	45.16	54.00	-8.84	30.97	14.19	Average
15540.000	55.96	74.00	-18.04	41.77	14.19	Peak

Middle CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5101.600	46.73	54.00	-7.27	46.25	0.48	Average
5101.600	60.08	74.00	-13.92	59.60	0.48	Peak
5202.400	95.91			95.66	0.25	Average
5202.400	106.40			106.15	0.25	Peak
5382.400	46.49	54.00	-7.51	46.32	0.17	Average
5382.400	61.07	74.00	-12.93	60.90	0.17	Peak
6933.330	59.35	68.20	-8.85	54.97	4.38	Peak
10400.000	50.49	68.20	-17.71	41.10	9.39	Peak
15600.000	45.42	54.00	-8.58	31.25	14.17	Average
15600.000	56.73	74.00	-17.27	42.56	14.17	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5129.600	46.54	54.00	-7.46	46.13	0.41	Average
5129.600	60.77	74.00	-13.23	60.36	0.41	Peak
5203.600	85.96			85.70	0.26	Average
5203.600	95.70			95.44	0.26	Peak
5444.400	46.58	54.00	-7.42	46.33	0.25	Average
5444.400	60.81	74.00	-13.19	60.56	0.25	Peak
6933.330	54.35	68.20	-13.85	49.97	4.38	Peak
10400.000	50.03	68.20	-18.17	40.64	9.39	Peak
15600.000	45.42	54.00	-8.58	31.25	14.17	Average
15600.000	57.60	74.00	-16.40	43.43	14.17	Peak

High CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5118.000	46.80	54.00	-7.20	46.36	0.44	Average
5118.000	60.96	74.00	-13.04	60.52	0.44	Peak
5238.000	96.67			96.43	0.24	Average
5238.000	107.15			106.91	0.24	Peak
5358.000	46.53	54.00	-7.47	46.33	0.20	Average
5358.000	60.07	74.00	-13.93	59.87	0.20	Peak
6986.640	58.88	68.20	-9.32	54.69	4.19	Peak
10480.000	49.76	68.20	-18.44	40.57	9.19	Peak
15720.000	45.51	54.00	-8.49	31.21	14.30	Average
15720.000	59.18	74.00	-14.82	44.88	14.30	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5070.800	46.71	54.00	-7.29	46.13	0.58	Average
5070.800	61.22	74.00	-12.78	60.64	0.58	Peak
5239.600	86.88			86.65	0.23	Average
5239.600	96.71			96.48	0.23	Peak
5400.800	46.23	54.00	-7.77	46.11	0.12	Average
5400.800	59.90	74.00	-14.10	59.78	0.12	Peak
6986.640	55.99	68.20	-12.21	51.80	4.19	Peak
10480.000	50.80	68.20	-17.40	41.61	9.19	Peak
15720.000	45.46	54.00	-8.54	31.16	14.30	Average
15720.000	60.60	74.00	-13.40	46.30	14.30	Peak

802.11n HT20 mode:

Low CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5149.900	53.60	54.00	-0.40	53.25	0.35	Average
5149.900	72.53	74.00	-1.47	72.18	0.35	Peak
5181.550	95.48			95.24	0.24	Average
5181.550	106.39			106.15	0.24	Peak
6906.600	63.05	68.20	-5.15	58.61	4.44	Peak
10360.000	50.31	68.20	-17.89	41.09	9.22	Peak
15540.000	46.37	54.00	-7.63	32.18	14.19	Average
15540.000	55.59	74.00	-18.41	41.40	14.19	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5149.450	50.45	54.00	-3.55	50.10	0.35	Average
5149.450	66.31	74.00	-7.69	65.96	0.35	Peak
5178.700	88.05			87.80	0.25	Average
5178.700	98.68			98.43	0.25	Peak
6906.600	55.83	68.20	-12.37	51.39	4.44	Peak
10360.000	50.08	68.20	-18.12	40.86	9.22	Peak
15540.000	44.83	54.00	-9.17	30.64	14.19	Average
15540.000	55.80	74.00	-18.20	41.61	14.19	Peak

Middle CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5102.800	47.13	54.00	-6.87	46.66	0.47	Average
5102.800	60.93	74.00	-13.07	60.46	0.47	Peak
5198.000	95.96			95.70	0.26	Average
5198.000	106.58			106.32	0.26	Peak
5352.000	46.56	54.00	-7.44	46.34	0.22	Average
5352.000	61.45	74.00	-12.55	61.23	0.22	Peak
6933.300	60.85	68.20	-7.35	56.47	4.38	Peak
10400.000	51.62	68.20	-16.58	42.23	9.39	Peak
15600.000	45.56	54.00	-8.44	31.39	14.17	Average
15600.000	58.11	74.00	-15.89	43.94	14.17	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5120.400	46.82	54.00	-7.18	46.39	0.43	Average
5120.400	61.62	74.00	-12.38	61.19	0.43	Peak
5198.800	87.56			87.31	0.25	Average
5198.800	97.95			97.70	0.25	Peak
5373.200	46.65	54.00	-7.35	46.47	0.18	Average
5373.200	61.69	74.00	-12.31	61.51	0.18	Peak
6933.300	55.20	68.20	-13.00	50.82	4.38	Peak
10400.000	50.73	68.20	-17.47	41.34	9.39	Peak
15600.000	45.50	54.00	-8.50	31.33	14.17	Average
15600.000	57.96	74.00	-16.04	43.79	14.17	Peak

High CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5130.000	46.72	54.00	-7.28	46.31	0.41	Average
5130.000	60.89	74.00	-13.11	60.48	0.41	Peak
5241.600	96.48			96.26	0.22	Average
5241.600	107.25			107.03	0.22	Peak
5365.200	46.90	54.00	-7.10	46.71	0.19	Average
5365.200	61.35	74.00	-12.65	61.16	0.19	Peak
6986.600	58.52	68.20	-9.68	54.33	4.19	Peak
10480.000	49.83	68.20	-18.37	40.64	9.19	Peak
15720.000	46.18	54.00	-7.82	31.88	14.30	Average
15720.000	60.31	74.00	-13.69	46.01	14.30	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5102.000	46.88	54.00	-7.12	46.41	0.47	Average
5102.000	60.57	74.00	-13.43	60.10	0.47	Peak
5241.600	87.48			87.26	0.22	Average
5241.600	98.28			98.06	0.22	Peak
5423.600	46.72	54.00	-7.28	46.54	0.18	Average
5423.600	60.83	74.00	-13.17	60.65	0.18	Peak
6986.600	55.15	68.20	-13.05	50.84	4.31	Peak
10480.000	50.38	68.20	-17.82	41.19	9.19	Peak
15720.000	45.97	54.00	-8.03	31.67	14.30	Average
15720.000	60.14	74.00	-13.86	45.84	14.30	Peak

802.11n HT40 mode:

Low CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5149.680	53.09	54.00	-0.91	52.74	0.35	Average
5149.680	68.22	74.00	-5.78	67.87	0.35	Peak
5195.600	87.09			86.84	0.25	Average
5195.600	98.35			98.10	0.25	Peak
10380.000	50.45	68.20	-17.75	41.09	9.36	Peak
15570.000	44.41	54.00	-9.59	30.23	14.18	Average
15570.000	56.34	74.00	-17.66	42.16	14.18	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5149.360	48.80	54.00	-5.20	48.45	0.35	Average
5149.360	64.53	74.00	-9.47	64.18	0.35	Peak
5184.560	79.03			78.79	0.24	Average
5184.560	90.34			90.10	0.24	Peak
10380.000	49.32	68.20	-18.88	39.96	9.36	Peak
15570.000	43.57	54.00	-10.43	29.39	14.18	Average
15570.000	55.49	74.00	-18.51	41.31	14.18	Peak

High CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5138.000	46.96	54.00	-7.04	46.57	0.39	Average
5138.000	60.93	74.00	-13.07	60.54	0.39	Peak
5234.000	91.01			90.75	0.26	Average
5234.000	102.50			102.24	0.26	Peak
5368.800	46.59	54.00	-7.41	46.40	0.19	Average
5368.800	60.94	74.00	-13.06	60.75	0.19	Peak
10460.000	49.31	68.20	-18.89	39.98	9.33	Peak
15690.000	45.35	54.00	-8.65	31.05	14.30	Average
15690.000	59.38	74.00	-14.62	45.08	14.30	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5149.600	46.95	54.00	-7.05	46.60	0.35	Average
5149.600	61.17	74.00	-12.83	60.82	0.35	Peak
5234.000	80.98			80.72	0.26	Average
5234.000	92.04			91.78	0.26	Peak
5446.800	46.74	54.00	-7.26	46.47	0.27	Average
5446.800	60.69	74.00	-13.31	60.42	0.27	Peak
10460.000	50.22	68.20	-17.98	40.89	9.33	Peak
15690.000	45.16	54.00	-8.84	30.86	14.30	Average
15690.000	59.18	74.00	-14.82	44.88	14.30	Peak

Above 1G (1 GHz-40 GHz) in UNII-2a:

802.11a mode:

Low CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5141.600	46.66	54.00	-7.34	46.28	0.38	Average
5141.600	60.23	74.00	-13.77	59.85	0.38	Peak
5265.200	96.92			96.76	0.16	Average
5265.200	106.96			106.80	0.16	Peak
5448.000	46.59	54.00	-7.41	46.32	0.27	Average
5448.000	62.17	74.00	-11.83	61.90	0.27	Peak
! 7013.300	58.83	68.20	-9.37	54.62	4.21	Peak
!10520.000	51.14	68.20	-17.06	42.30	8.84	Peak
!15780.000	45.59	54.00	-8.41	31.56	14.03	Average
!15780.000	59.15	74.00	-14.85	45.12	14.03	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5089.200	46.73	54.00	-7.27	46.20	0.53	Average
5089.200	61.27	74.00	-12.73	60.74	0.53	Peak
5257.600	85.82			85.65	0.17	Average
5257.600	96.53			96.36	0.17	Peak
5359.200	46.57	54.00	-7.43	46.37	0.20	Average
5359.200	60.41	74.00	-13.59	60.21	0.20	Peak
7013.300	54.15	68.20	-14.05	49.94	4.21	Peak
10520.000	50.03	68.20	-18.17	41.19	8.84	Peak
15780.000	46.33	54.00	-7.67	32.30	14.03	Average
15780.000	59.45	74.00	-14.55	45.42	14.03	Peak

Middle CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5145.600	46.54	54.00	-7.46	46.18	0.36	Average
5145.600	60.40	74.00	-13.60	60.04	0.36	Peak
5302.400	97.46			97.25	0.21	Average
5302.400	107.82			107.61	0.21	Peak
5431.600	46.58	54.00	-7.42	46.38	0.20	Average
5431.600	61.68	74.00	-12.32	61.48	0.20	Peak
7066.640	56.48	68.20	-11.72	51.87	4.61	Peak
10600.000	36.18	54.00	-17.82	26.90	9.28	Average
10600.000	51.27	74.00	-22.73	41.99	9.28	Peak
15900.000	44.41	54.00	-9.59	30.56	13.85	Average
15900.000	57.72	74.00	-16.28	43.87	13.85	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5113.200	46.51	54.00	-7.49	46.06	0.45	Average
5113.200	60.70	74.00	-13.30	60.25	0.45	Peak
5299.600	87.53			87.32	0.21	Average
5299.600	97.70			97.49	0.21	Peak
5410.800	46.37	54.00	-7.63	46.22	0.15	Average
5410.800	60.74	74.00	-13.26	60.59	0.15	Peak
7066.640	53.53	68.20	-14.67	48.92	4.61	Peak
10600.000	36.79	54.00	-17.21	27.51	9.28	Average
10600.000	50.43	74.00	-23.57	41.15	9.28	Peak
15900.000	45.34	54.00	-8.66	31.49	13.85	Average
15900.000	57.26	74.00	-16.74	43.41	13.85	Peak

High CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5317.700	97.87			97.64	0.23	Average
5317.700	108.54			108.31	0.23	Peak
5351.020	49.76	54.00	-4.24	49.54	0.22	Average
5351.020	68.86	74.00	-5.14	68.64	0.22	Peak
7093.260	54.73	68.20	-13.47	49.98	4.75	Peak
10640.000	37.75	54.00	-16.25	27.85	9.90	Average
10640.000	51.10	74.00	-22.90	41.20	9.90	Peak
15960.000	44.76	54.00	-9.24	31.11	13.65	Average
15960.000	58.66	74.00	-15.34	45.01	13.65	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5317.280	87.40			87.17	0.23	Average
5317.280	97.94			97.71	0.23	Peak
5370.060	46.62	54.00	-7.38	46.44	0.18	Average
5370.060	60.63	74.00	-13.37	60.45	0.18	Peak
7093.260	54.49	68.20	-13.71	49.69	4.80	Peak
10640.000	37.04	54.00	-16.96	27.14	9.90	Average
10640.000	51.35	74.00	-22.65	41.45	9.90	Peak
15960.000	45.50	54.00	-8.50	31.85	13.65	Average
15960.000	58.10	74.00	-15.90	44.45	13.65	Peak

802.11n HT20 mode:

Low CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5116.000	46.89	54.00	-7.11	46.45	0.44	Average
5116.000	60.53	74.00	-13.47	60.09	0.44	Peak
5262.800	97.10			96.93	0.17	Average
5262.800	107.71			107.54	0.17	Peak
5444.400	46.76	54.00	-7.24	46.51	0.25	Average
5444.400	60.62	74.00	-13.38	60.37	0.25	Peak
7013.300	61.45	68.20	-6.75	57.24	4.21	Peak
10520.000	50.50	68.20	-17.70	41.66	8.84	Peak
15780.000	45.59	54.00	-8.41	31.56	14.03	Average
15780.000	60.48	74.00	-13.52	46.45	14.03	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5108.800	46.84	54.00	-7.16	46.38	0.46	Average
5108.800	60.73	74.00	-13.27	60.27	0.46	Peak
5257.600	87.01			86.84	0.17	Average
5257.600	97.50			97.33	0.17	Peak
5368.400	46.81	54.00	-7.19	46.62	0.19	Average
5368.400	60.79	74.00	-13.21	60.60	0.19	Peak
7013.300	55.47	68.20	-12.73	51.26	4.21	Peak
10520.000	51.19	68.20	-17.01	42.35	8.84	Peak
15780.000	45.48	54.00	-8.52	31.45	14.03	Average
15780.000	59.53	74.00	-14.47	45.50	14.03	Peak

Middle CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5103.200	46.88	54.00	-7.12	46.41	0.47	Average
5103.200	60.58	74.00	-13.42	60.11	0.47	Peak
5298.400	97.73			97.54	0.19	Average
5298.400	107.48			107.29	0.19	Peak
5447.600	46.92	54.00	-7.08	46.65	0.27	Average
5447.600	61.02	74.00	-12.98	60.75	0.27	Peak
7066.600	59.74	68.20	-8.46	55.13	4.61	Peak
10600.000	36.89	54.00	-17.11	27.61	9.28	Average
10600.000	51.38	74.00	-22.62	42.10	9.28	Peak
15900.000	45.20	54.00	-8.80	31.35	13.85	Average
15900.000	57.91	74.00	-16.09	44.06	13.85	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5144.800	46.73	54.00	-7.27	46.37	0.36	Average
5144.800	60.47	74.00	-13.53	60.11	0.36	Peak
5303.200	87.08			86.86	0.22	Average
5303.200	97.48			97.26	0.22	Peak
5446.400	46.77	54.00	-7.23	46.50	0.27	Average
5446.400	60.55	74.00	-13.45	60.28	0.27	Peak
7066.600	54.17	68.20	-14.03	49.56	4.61	Peak
10600.000	36.91	54.00	-17.09	27.63	9.28	Average
10600.000	51.74	74.00	-22.26	42.46	9.28	Peak
15900.000	45.06	54.00	-8.94	31.21	13.85	Average
15900.000	58.05	74.00	-15.95	44.20	13.85	Peak

High CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5317.840	97.43			97.20	0.23	Average
5317.840	107.99			107.76	0.23	Peak
5350.600	51.86	54.00	-2.14	51.64	0.22	Average
5350.600	69.48	74.00	-4.52	69.26	0.22	Peak
7093.300	57.38	68.20	-10.82	52.63	4.75	Peak
10640.000	38.33	54.00	-15.67	28.43	9.90	Average
10640.000	51.05	74.00	-22.95	41.15	9.90	Peak
15960.000	44.90	54.00	-9.10	31.25	13.65	Average
15960.000	58.15	74.00	-15.85	44.50	13.65	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5318.260	86.88			86.65	0.23	Average
5318.260	97.77			97.54	0.23	Peak
5350.320	47.07	54.00	-6.93	46.85	0.22	Average
5350.320	61.68	74.00	-12.32	61.46	0.22	Peak
7093.300	53.60	68.20	-14.60	48.85	4.75	Peak
10640.000	38.04	54.00	-15.96	28.14	9.90	Average
10640.000	53.20	74.00	-20.80	43.30	9.90	Peak
15960.000	44.06	54.00	-9.94	30.41	13.65	Average
15960.000	58.65	74.00	-15.35	45.00	13.65	Peak

802.11n HT40 mode:

Low CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5113.200	46.85	54.00	-7.15	46.40	0.45	Average
5113.200	60.97	74.00	-13.03	60.52	0.45	Peak
5264.800	91.59			91.43	0.16	Average
5264.800	102.41			102.25	0.16	Peak
5427.600	47.05	54.00	-6.95	46.87	0.18	Average
5427.600	61.31	74.00	-12.69	61.13	0.18	Peak
10540.000	50.53	68.20	-17.67	41.76	8.77	Peak
15810.000	45.25	54.00	-8.75	31.32	13.93	Average
15810.000	58.39	74.00	-15.61	44.46	13.93	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5120.800	46.75	54.00	-7.25	46.32	0.43	Average
5120.800	60.46	74.00	-13.54	60.03	0.43	Peak
5287.600	81.35			81.18	0.17	Average
5287.600	91.07			90.90	0.17	Peak
5432.400	46.74	54.00	-7.26	46.54	0.20	Average
5432.400	61.06	74.00	-12.94	60.86	0.20	Peak
10540.000	49.31	68.20	-18.89	40.54	8.77	Peak
15810.000	45.59	54.00	-8.41	31.66	13.93	Average
15810.000	58.53	74.00	-15.47	44.60	13.93	Peak

High CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5315.440	90.05			89.82	0.23	Average
5315.440	101.43			101.20	0.23	Peak
5350.160	53.62	54.00	-0.38	53.40	0.22	Average
5350.160	71.25	74.00	-2.75	71.03	0.22	Peak
!10620.000	37.19	54.00	-16.81	27.51	9.68	Average
10620.000	50.25	74.00	-23.75	40.57	9.68	Peak
!15930.000	44.81	54.00	-9.19	31.05	13.76	Average
!15930.000	58.44	74.00	-15.56	44.68	13.76	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5304.400	81.03			80.82	0.21	Average
5304.400	91.72			91.51	0.21	Peak
5350.160	48.20	54.00	-5.80	47.98	0.22	Average
5350.160	63.96	74.00	-10.04	63.74	0.22	Peak
10620.000	37.85	54.00	-16.15	28.14	9.71	Average
10620.000	50.49	74.00	-23.51	40.78	9.71	Peak
15930.000	44.87	54.00	-9.13	31.12	13.75	Average
15930.000	57.94	74.00	-16.06	44.19	13.75	Peak

Above 1G (1 GHz-40 GHz) in UNII-2c:

802.11a mode:

Low CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5456.320	49.84	54.00	-4.16	49.52	0.32	Average
5456.320	68.20	74.00	-5.80	67.88	0.32	Peak
5502.300	97.18			96.67	0.51	Average
5502.300	107.87			107.36	0.51	Peak
7333.300	49.85	54.00	-4.15	44.08	5.77	Average
7333.300	54.55	74.00	-19.45	48.83	5.72	Peak
11000.000	37.07	54.00	-16.93	27.04	10.03	Average
11000.000	50.09	74.00	-23.91	40.06	10.03	Peak
16500.000	57.46	68.20	-10.74	42.71	14.75	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5459.180	47.17	54.00	-6.83	46.84	0.33	Average
5459.180	61.74	74.00	-12.26	61.41	0.33	Peak
5502.300	90.31			89.80	0.51	Average
5502.300	101.11			100.60	0.51	Peak
7333.300	47.48	54.00	-6.52	41.76	5.72	Average
7333.300	53.91	74.00	-20.09	48.14	5.77	Peak
11000.000	36.83	54.00	-17.17	26.80	10.03	Average
11000.000	51.20	74.00	-22.80	41.17	10.03	Peak
16500.000	56.29	68.20	-11.91	41.54	14.75	Peak

Middle CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5447.500	46.87	54.00	-7.13	46.60	0.27	Average
5447.500	61.27	74.00	-12.73	61.00	0.27	Peak
5582.400	97.44			96.70	0.74	Average
5582.400	107.91			107.17	0.74	Peak
5756.060	62.68	68.20	-5.52	61.39	1.29	Peak
7440.000	50.48	54.00	-3.52	44.43	6.05	Average
7440.000	54.62	74.00	-19.38	48.57	6.05	Peak
11160.000	37.37	54.00	-16.63	27.14	10.23	Average
11160.000	50.56	74.00	-23.44	40.33	10.23	Peak
16740.000	58.78	68.20	-9.42	43.24	15.54	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5450.540	46.80	54.00	-7.20	46.51	0.29	Average
5450.540	61.26	74.00	-12.74	60.97	0.29	Peak
5577.460	90.94			90.21	0.73	Average
5577.460	101.13			100.40	0.73	Peak
5767.840	62.63	68.20	-5.57	61.32	1.31	Peak
7440.000	48.03	54.00	-5.97	41.98	6.05	Average
7440.000	54.04	74.00	-19.96	47.98	6.06	Peak
11160.000	37.15	54.00	-16.85	26.92	10.23	Average
11160.000	50.89	74.00	-23.11	40.66	10.23	Peak
16740.000	57.76	68.20	-10.44	42.21	15.55	Peak

High CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5702.100	93.26			91.94	1.32	Average
5702.100	104.09			102.77	1.32	Peak
5728.280	67.37	68.20	-0.83	66.07	1.30	Peak
11400.000	38.34	54.00	-15.66	27.60	10.74	Average
11400.000	51.36	74.00	-22.64	40.62	10.74	Peak
17100.000	58.29	68.20	-9.91	41.76	16.53	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5701.440	85.99			84.67	1.32	Average
5701.440	96.60			95.28	1.32	Peak
5781.850	63.37	68.20	-4.83	62.04	1.33	Peak
11400.000	38.01	54.00	-15.99	27.27	10.74	Average
11400.000	50.96	74.00	-23.04	40.22	10.74	Peak
17100.000	58.45	68.20	-9.75	41.92	16.53	Peak

802.11n HT20 mode:

Low CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5456.100	51.91	54.00	-2.09	51.59	0.32	Average
5456.100	70.23	74.00	-3.77	69.91	0.32	Peak
5501.750	97.68			97.17	0.51	Average
5501.750	108.02			107.51	0.51	Peak
7333.300	50.35	54.00	-3.65	44.63	5.72	Average
7333.300	57.92	74.00	-16.08	52.20	5.72	Peak
11000.000	37.41	54.00	-16.59	27.38	10.03	Average
11000.000	50.67	74.00	-23.33	40.64	10.03	Peak
16500.000	56.73	68.20	-11.47	41.98	14.75	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5459.840	48.29	54.00	-5.71	47.96	0.33	Average
5459.840	64.71	74.00	-9.29	64.38	0.33	Peak
5501.420	91.44			90.93	0.51	Average
5501.420	102.27			101.76	0.51	Peak
7333.300	47.76	54.00	-6.24	42.04	5.72	Average
7333.300	55.16	74.00	-18.84	49.44	5.72	Peak
11000.000	38.16	54.00	-15.84	28.13	10.03	Average
11000.000	51.18	74.00	-22.82	41.15	10.03	Peak
16500.000	57.87	68.20	-10.33	43.12	14.75	Peak

Middle CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5411.020	46.92	54.00	-7.08	46.76	0.16	Average
5411.020	60.45	74.00	-13.55	60.29	0.16	Peak
5578.220	97.60			96.86	0.74	Average
5578.220	108.09			107.35	0.74	Peak
5738.960	62.64	68.20	-5.56	61.37	1.27	Peak
7440.000	51.46	54.00	-2.54	45.41	6.05	Average
7440.000	58.00	74.00	-16.00	51.95	6.05	Peak
11160.000	37.87	54.00	-16.13	27.64	10.23	Average
11160.000	50.30	74.00	-23.70	40.07	10.23	Peak
16740.000	58.69	68.20	-9.51	43.15	15.54	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5420.140	46.93	54.00	-7.07	46.77	0.16	Average
5420.140	60.45	74.00	-13.55	60.29	0.16	Peak
5578.980	92.26			91.52	0.74	Average
5578.980	102.12			101.38	0.74	Peak
5763.280	62.40	68.20	-5.80	61.10	1.30	Peak
7440.000	49.68	54.00	-4.32	43.62	6.06	Average
7440.000	55.33	74.00	-18.67	49.28	6.05	Peak
11160.000	37.94	54.00	-16.06	27.71	10.23	Average
11160.000	50.85	74.00	-23.15	40.62	10.23	Peak
16740.000	57.50	68.20	-10.70	41.96	15.54	Peak

High CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5701.440	91.96			90.64	1.32	Average
5701.440	103.04			101.72	1.32	Peak
5725.750	67.27	68.20	-0.93	65.97	1.30	Peak
11400.000	38.21	54.00	-15.79	27.47	10.74	Average
11400.000	52.48	74.00	-21.52	41.74	10.74	Peak
17100.000	58.57	68.20	-9.63	42.04	16.53	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5701.440	86.20			84.88	1.32	Average
5701.440	97.08			95.76	1.32	Peak
5725.420	64.51	68.20	-3.69	63.21	1.30	Peak
11400.000	38.65	54.00	-15.35	27.91	10.74	Average
11400.000	51.71	74.00	-22.29	40.97	10.74	Peak
17100.000	57.69	68.20	-10.51	41.16	16.53	Peak

802.11n HT40 mode:

Low CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5459.670	53.57	54.00	-0.43	53.24	0.33	Average
5459.670	72.01	74.00	-1.99	71.68	0.33	Peak
5513.620	90.96			90.42	0.54	Average
5513.620	102.49			101.95	0.54	Peak
11020.000	37.29	54.00	-16.71	27.16	10.13	Average
11020.000	50.87	74.00	-23.13	40.74	10.13	Peak
16530.000	55.94	68.20	-12.26	41.11	14.83	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5459.800	49.98	54.00	-4.02	49.65	0.33	Average
5459.800	67.03	74.00	-6.97	66.70	0.33	Peak
5515.570	85.03			84.49	0.54	Average
5515.570	96.37			95.83	0.54	Peak
11020.000	37.42	54.00	-16.58	27.29	10.13	Average
11020.000	49.57	74.00	-24.43	39.44	10.13	Peak
16530.000	55.61	68.20	-12.59	40.78	14.83	Peak

Middle CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5450.920	47.39	54.00	-6.61	47.10	0.29	Average
5450.920	60.84	74.00	-13.16	60.55	0.29	Peak
5553.900	92.31			91.65	0.66	Average
5553.900	103.15			102.49	0.66	Peak
5748.840	62.73	68.20	-5.47	61.46	1.27	Peak
!11100.000	37.58	54.00	-16.42	27.21	10.37	Average
11100.000	50.79	74.00	-23.21	40.42	10.37	Peak
!16650.000	58.11	68.20	-10.09	43.08	15.03	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5459.280	47.04	54.00	-6.96	46.71	0.33	Average
5459.280	60.40	74.00	-13.60	60.07	0.33	Peak
5544.780	87.06			86.43	0.63	Average
5544.780	98.39			97.76	0.63	Peak
5768.220	62.56	68.20	-5.64	61.25	1.31	Peak
11100.000	37.84	54.00	-16.16	27.47	10.37	Average
11100.000	50.86	74.00	-23.14	40.49	10.37	Peak
16650.000	58.94	68.20	-9.26	43.91	15.03	Peak

High CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5675.650	91.46			90.27	1.19	Average
5675.650	102.56			101.37	1.19	Peak
5727.850	67.70	68.20	-0.50	66.41	1.29	Peak
!11510.000	38.09	54.00	-15.91	27.36	10.73	Average
11510.000	50.55	74.00	-23.45	39.82	10.73	Peak
!17010.000	57.53	68.20	-10.67	41.93	15.60	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5652.700	85.16			84.13	1.03	Average
5652.700	96.05			95.02	1.03	Peak
5728.300	62.96	68.20	-5.24	61.66	1.30	Peak
11340.000	37.84	54.00	-16.16	27.38	10.46	Average
11340.000	50.34	74.00	-23.66	39.88	10.46	Peak
17010.000	57.02	68.20	-11.18	41.42	15.60	Peak

Above 1G (1 GHz-40 GHz) in UNII-3:

802.11a mode:

Low CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5644.200	61.41	68.20	-6.79	60.43	0.98	Peak
5695.680	62.11	102.02	-39.91	60.80	1.31	Peak
5719.080	78.68	110.54	-31.86	77.38	1.30	Peak
5747.880	108.91			107.63	1.28	Peak
5860.920	63.67	109.14	-45.47	61.71	1.96	Peak
5917.800	65.27	73.51	-8.24	62.80	2.47	Peak
5945.160	63.57	68.20	-4.63	61.10	2.47	Peak
11490.000	37.41	54.00	-16.59	26.71	10.70	Average
11490.000	51.43	74.00	-22.57	40.73	10.70	Peak
17235.000	58.49	68.20	-9.71	41.52	16.97	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5642.400	61.44	68.20	-6.76	60.47	0.97	Peak
5666.880	62.41	80.73	-18.32	61.27	1.14	Peak
5719.080	71.39	110.54	-39.15	70.09	1.30	Peak
5747.880	100.63			99.35	1.28	Peak
5863.440	63.78	108.43	-44.65	61.80	1.98	Peak
5891.880	64.58	92.67	-28.09	62.26	2.32	Peak
5964.600	64.19	68.20	-4.01	61.76	2.43	Peak
11490.000	37.47	54.00	-16.53	26.77	10.70	Average
11490.000	50.90	74.00	-23.10	40.20	10.70	Peak
17235.000	59.13	68.20	-9.07	42.16	16.97	Peak

Middle CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5611.800	61.85	68.20	-6.35	61.04	0.81	Peak
5660.040	62.34	75.66	-13.32	61.25	1.09	Peak
5714.760	62.08	109.33	-47.25	60.78	1.30	Peak
5787.840	109.81			108.48	1.33	Peak
5872.800	63.22	105.82	-42.60	61.13	2.09	Peak
5895.840	64.44	89.74	-25.30	62.06	2.38	Peak
5928.600	65.16	68.20	-3.04	62.66	2.50	Peak
11570.000	37.57	54.00	-16.43	26.81	10.76	Average
11570.000	50.80	74.00	-23.20	40.04	10.76	Peak
17355.000	59.60	68.20	-8.60	41.89	17.71	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5642.040	61.75	68.20	-6.45	60.78	0.97	Peak
5677.680	62.67	88.72	-26.05	61.47	1.20	Peak
5714.760	61.90	109.33	-47.43	60.60	1.30	Peak
5782.800	100.74			99.41	1.33	Peak
5874.240	63.60	105.41	-41.81	61.48	2.12	Peak
5917.800	64.10	73.51	-9.41	61.63	2.47	Peak
5941.200	64.98	68.20	-3.22	62.50	2.48	Peak
11570.000	37.63	54.00	-16.37	26.87	10.76	Average
11570.000	50.67	74.00	-23.33	39.91	10.76	Peak
17355.000	59.05	68.20	-9.15	41.34	17.71	Peak

High CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5644.920	61.27	68.20	-6.93	60.28	0.99	Peak
5689.920	61.87	97.77	-35.90	60.60	1.27	Peak
5703.600	61.72	106.21	-44.49	60.39	1.33	Peak
5828.880	109.48			107.92	1.56	Peak
5855.160	76.20	110.76	-34.56	74.32	1.88	Peak
5922.840	64.66	69.79	-5.13	62.18	2.48	Peak
5946.240	64.15	68.20	-4.05	61.68	2.47	Peak
!11650.000	38.27	54.00	-15.73	27.37	10.90	Average
11650.000	51.72	74.00	-22.28	40.82	10.90	Peak
!17473.000	59.75	68.20	-8.45	41.69	18.06	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5640.600	61.33	68.20	-6.87	60.37	0.96	Peak
5679.480	62.51	90.05	-27.54	61.29	1.22	Peak
5715.480	62.20	109.54	-47.34	60.89	1.31	Peak
5827.440	99.11			97.56	1.55	Peak
5855.880	67.94	110.55	-42.61	66.04	1.90	Peak
5916.360	64.66	74.57	-9.91	62.20	2.46	Peak
5930.760	65.26	68.20	-2.94	62.76	2.50	Peak
11650.000	38.10	54.00	-15.90	27.25	10.85	Average
11650.000	52.68	74.00	-21.32	41.83	10.85	Peak
17475.000	58.91	68.20	-9.29	40.85	18.06	Peak

802.11n HT20 mode:

Low CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5637.000	61.95	68.20	-6.25	61.01	0.94	Peak
5698.560	63.98	104.14	-40.16	62.65	1.33	Peak
5719.080	76.73	110.54	-33.81	75.43	1.30	Peak
5749.320	108.88			107.61	1.27	Peak
5860.200	63.76	109.34	-45.58	61.82	1.94	Peak
5914.920	64.71	75.63	-10.92	62.25	2.46	Peak
5935.080	64.71	68.20	-3.49	62.23	2.48	Peak
11490.000	38.33	54.00	-15.67	27.63	10.70	Average
11490.000	51.37	74.00	-22.63	40.67	10.70	Peak
17235.000	59.19	68.20	-9.01	42.22	16.97	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5640.600	61.84	68.20	-6.36	60.88	0.96	Peak
5667.240	61.79	80.99	-19.20	60.65	1.14	Peak
5719.080	68.87	110.54	-41.67	67.57	1.30	Peak
5748.240	100.29			99.01	1.28	Peak
5855.880	63.42	110.55	-47.13	61.52	1.90	Peak
5918.880	64.41	72.71	-8.30	61.95	2.46	Peak
5967.120	64.17	68.20	-4.03	61.73	2.44	Peak
11490.000	38.17	54.00	-15.83	27.47	10.70	Average
11490.000	50.55	74.00	-23.45	39.85	10.70	Peak
17235.000	59.43	68.20	-8.77	42.46	16.97	Peak

Middle CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5619.360	61.50	68.20	-6.70	60.66	0.84	Peak
5683.080	62.05	92.72	-30.67	60.82	1.23	Peak
5713.320	61.86	108.93	-47.07	60.55	1.31	Peak
5780.640	109.50			108.17	1.33	Peak
5859.480	63.97	109.54	-45.57	62.04	1.93	Peak
5903.040	64.52	84.41	-19.89	62.09	2.43	Peak
5945.880	64.18	68.20	-4.02	61.71	2.47	Peak
!11570.000	37.99	54.00	-16.01	27.23	10.76	Average
11570.000	52.01	74.00	-21.99	41.25	10.76	Peak
!17355.000	59.92	68.20	-8.28	42.21	17.71	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5643.840	61.10	68.20	-7.10	60.12	0.98	Peak
5659.320	62.13	75.12	-12.99	61.05	1.08	Peak
5701.440	61.83	105.60	-43.77	60.51	1.32	Peak
5788.560	99.78			98.45	1.33	Peak
5869.560	63.85	106.72	-42.87	61.78	2.07	Peak
5891.160	64.20	93.21	-29.01	61.88	2.32	Peak
5952.000	63.76	68.20	-4.44	61.30	2.46	Peak
11570.000	38.41	54.00	-15.59	27.65	10.76	Average
11570.000	51.43	74.00	-22.57	40.67	10.76	Peak
17355.000	59.55	68.20	-8.65	41.84	17.71	Peak

High CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5641.680	61.65	68.20	-6.55	60.68	0.97	Peak
5693.520	62.17	100.42	-38.25	60.88	1.29	Peak
5709.360	62.36	107.82	-45.46	61.05	1.31	Peak
5826.720	109.30			107.76	1.54	Peak
5855.520	76.09	110.65	-34.56	74.20	1.89	Peak
5907.360	64.11	81.22	-17.11	61.67	2.44	Peak
5928.600	64.38	68.20	-3.82	61.88	2.50	Peak
11650.000	38.73	54.00	-15.27	27.83	10.90	Average
11650.000	52.23	74.00	-21.77	41.33	10.90	Peak
17475.000	59.07	68.20	-9.13	41.01	18.06	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5648.160	61.32	68.20	-6.88	60.31	1.01	Peak
5692.080	62.24	99.36	-37.12	60.95	1.29	Peak
5709.360	61.46	107.82	-46.36	60.15	1.31	Peak
5823.120	100.67			99.16	1.51	Peak
5857.680	64.42	110.05	-45.63	62.51	1.91	Peak
5901.600	64.99	85.48	-20.49	62.56	2.43	Peak
5936.520	64.11	68.20	-4.09	61.63	2.48	Peak
11650.000	38.93	54.00	-15.07	28.03	10.90	Average
11650.000	51.99	74.00	-22.01	41.09	10.90	Peak
17475.000	59.39	68.20	-8.81	41.33	18.06	Peak

802.11n HT40 mode:

Low CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5616.840	61.52	68.20	-6.68	60.68	0.84	Peak
5697.840	66.61	103.61	-37.00	65.29	1.32	Peak
5719.080	78.33	110.54	-32.21	77.03	1.30	Peak
5760.840	105.02			103.72	1.30	Peak
5865.240	63.54	107.93	-44.39	61.53	2.01	Peak
5909.880	64.81	79.36	-14.55	62.37	2.44	Peak
5955.600	64.06	68.20	-4.14	61.61	2.45	Peak
11510.000	38.27	54.00	-15.73	27.54	10.73	Average
11510.000	50.76	74.00	-23.24	40.03	10.73	Peak
17265.000	58.12	68.20	-10.08	41.02	17.10	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5638.440	60.98	68.20	-7.22	60.04	0.94	Peak
5693.880	62.45	100.69	-38.24	61.16	1.29	Peak
5718.720	70.06	110.44	-40.38	68.75	1.31	Peak
5749.320	96.42			95.15	1.27	Peak
5860.920	63.30	109.14	-45.84	61.34	1.96	Peak
5895.120	64.46	90.27	-25.81	62.09	2.37	Peak
5949.120	64.77	68.20	-3.43	62.31	2.46	Peak
!11510.000	38.60	54.00	-15.40	27.87	10.73	Average
11510.000	50.22	74.00	-23.78	39.49	10.73	Peak
!17265.000	58.54	68.20	-9.66	41.44	17.10	Peak

High CH

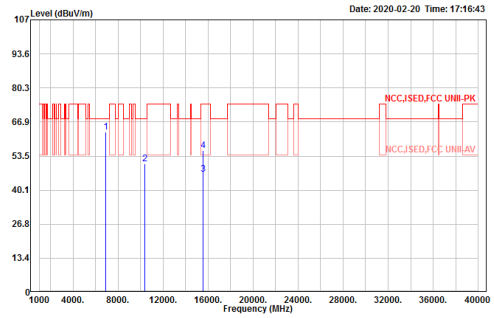
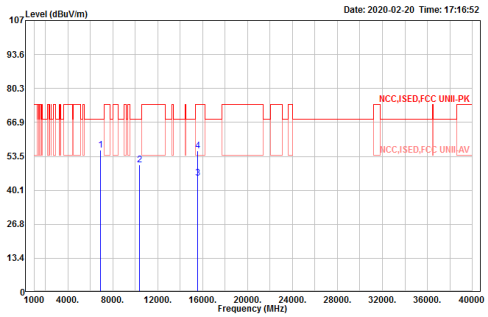
Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5643.480	61.51	68.20	-6.69	60.53	0.98	Peak
5670.480	62.37	83.39	-21.02	61.21	1.16	Peak
5712.600	62.26	108.73	-46.47	60.95	1.31	Peak
5800.800	104.97			103.66	1.31	Peak
5858.040	66.27	109.95	-43.68	64.35	1.92	Peak
5909.520	64.28	79.62	-15.34	61.84	2.44	Peak
5969.280	65.31	68.20	-2.89	62.89	2.42	Peak
!11590.000	38.83	54.00	-15.17	28.06	10.77	Average
11590.000	50.85	74.00	-23.15	40.08	10.77	Peak
!17385.000	58.34	68.20	-9.86	40.53	17.81	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5622.960	61.78	68.20	-6.42	60.92	0.86	Peak
5685.240	62.37	94.31	-31.94	61.11	1.26	Peak
5714.040	61.93	109.13	-47.20	60.63	1.30	Peak
5789.280	95.39			94.07	1.32	Peak
5866.680	63.38	107.53	-44.15	61.36	2.02	Peak
5909.520	64.36	79.62	-15.26	61.92	2.44	Peak
5939.760	63.71	68.20	-4.49	61.24	2.47	Peak
!11590.000	38.11	54.00	-15.89	27.34	10.77	Average
11590.000	51.17	74.00	-22.83	40.40	10.77	Peak
!17385.000	58.06	68.20	-10.14	40.25	17.81	Peak

Above 1G (1 GHz-40 GHz): test the worst mode: UNII-1 802.11n HT20 Low CH.

Horizontal	Vertical
	

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m		
1	6906.600	63.05	68.20	-5.15	58.61	4.44	Peak	horizontal
2	10360.000	50.31	68.20	-17.89	41.09	9.22	Peak	horizontal
3	15540.000	46.37	54.00	-7.63	32.18	14.19	Average	horizontal
4	15540.000	55.59	74.00	-18.41	41.40	14.19	Peak	horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m		
1	6906.600	55.83	68.20	-12.37	51.39	4.44	Peak	vertical
2	10360.000	50.08	68.20	-18.12	40.86	9.22	Peak	vertical
3	15540.000	44.83	54.00	-9.17	30.64	14.19	Average	vertical
4	15540.000	55.80	74.00	-18.20	41.61	14.19	Peak	vertical

Level = Read Level + Factor

Over Limit = Level – Limit

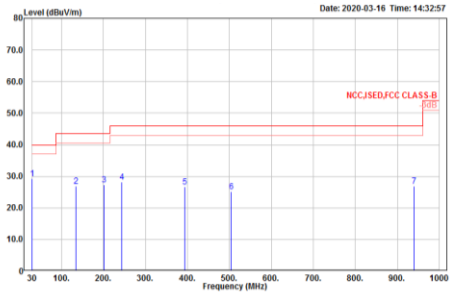
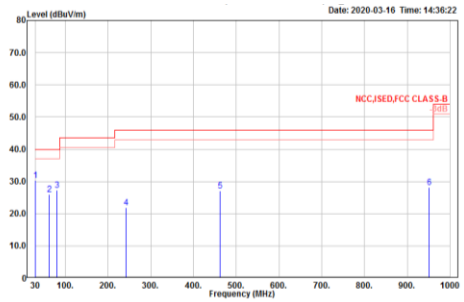
Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

Spurious emissions more than 20 dB below the limit were not reported

< Dipole antenna (Inside WLAN PRO-IS-299)>

Transmitting mode (Pre-scan with three orthogonal axis, and worse case as Y axis)

Below 1G (30 MHz-1 GHz) test the output power worst mode

Horizontal	Vertical
	

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m		
1	30.000	29.27	40.00	-10.73	35.50	-6.23	Peak	horizontal
2	134.760	26.83	43.50	-16.67	44.44	-17.61	Peak	horizontal
3	200.720	27.25	43.50	-16.25	45.68	-18.43	Peak	horizontal
4	244.370	28.27	46.00	-17.73	47.86	-19.59	Peak	horizontal
5	393.750	26.69	46.00	-19.31	42.67	-15.98	Peak	horizontal
6	504.330	25.19	46.00	-20.81	39.03	-13.84	Peak	horizontal
7	938.890	26.96	46.00	-19.04	34.50	-7.54	Peak	horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m		
1	30.000	30.44	40.00	-9.56	36.67	-6.23	Peak	vertical
2	62.980	26.00	40.00	-14.00	48.18	-22.18	Peak	vertical
3	80.440	27.38	40.00	-12.62	50.30	-22.92	Peak	vertical
4	241.460	21.80	46.00	-24.20	41.39	-19.59	Peak	vertical
5	461.650	27.01	46.00	-18.99	41.59	-14.58	Peak	vertical
6	951.500	28.10	46.00	-17.90	35.53	-7.43	Peak	vertical

Level = Read Level + Factor

Over Limit = Level – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

Spurious emissions more than 20 dB below the limit were not reported

Above 1G (1 GHz-40 GHz) in UNII-1:

802.11a mode:

Low CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5101.000	46.86	54.00	-7.14	46.38	0.48	Average
5101.000	60.74	74.00	-13.26	60.26	0.48	Peak
5181.550	79.18			78.94	0.24	Average
5181.550	89.75			89.51	0.24	Peak
6906.700	58.24	68.20	-9.96	53.78	4.46	Peak
10360.000	51.75	68.20	-16.45	42.53	9.22	Peak
15540.000	45.60	54.00	-8.40	31.41	14.19	Average
15540.000	56.93	74.00	-17.07	42.74	14.19	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5149.300	46.92	54.00	-7.08	46.57	0.35	Average
5149.300	61.29	74.00	-12.71	60.94	0.35	Peak
5182.300	82.13			81.88	0.25	Average
5182.300	92.83			92.58	0.25	Peak
6906.700	57.18	68.20	-11.02	52.74	4.44	Peak
10360.000	49.90	68.20	-18.30	40.68	9.22	Peak
15540.000	44.82	54.00	-9.18	30.63	14.19	Average
15540.000	56.99	74.00	-17.01	42.80	14.19	Peak

Middle CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5120.000	46.54	54.00	-7.46	46.11	0.43	Average
5120.000	60.37	74.00	-13.63	59.94	0.43	Peak
5202.400	79.21			78.96	0.25	Average
5202.400	89.36			89.11	0.25	Peak
5414.800	46.26	54.00	-7.74	46.10	0.16	Average
5414.800	60.48	74.00	-13.52	60.32	0.16	Peak
6933.300	58.07	68.20	-10.13	53.68	4.39	Peak
10400.000	50.82	68.20	-17.38	41.43	9.39	Peak
15600.000	45.86	54.00	-8.14	31.69	14.17	Average
15600.000	58.64	74.00	-15.36	44.47	14.17	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5134.800	46.53	54.00	-7.47	46.13	0.40	Average
5134.800	60.68	74.00	-13.32	60.28	0.40	Peak
5202.400	83.43			83.18	0.25	Average
5202.400	93.59			93.34	0.25	Peak
5419.200	46.47	54.00	-7.53	46.30	0.17	Average
5419.200	60.48	74.00	-13.52	60.31	0.17	Peak
6933.300	57.96	68.20	-10.24	53.57	4.39	Peak
10400.000	50.19	68.20	-18.01	40.80	9.39	Peak
15600.000	45.44	54.00	-8.56	31.27	14.17	Average
15600.000	57.87	74.00	-16.13	43.70	14.17	Peak

High CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5079.200	46.88	54.00	-7.12	46.32	0.56	Average
5079.200	60.46	74.00	-13.54	59.90	0.56	Peak
5238.400	76.24			76.00	0.24	Average
5238.400	86.06			85.82	0.24	Peak
5437.600	46.44	54.00	-7.56	46.21	0.23	Average
5437.600	60.21	74.00	-13.79	59.98	0.23	Peak
6986.700	56.71	68.20	-11.49	52.46	4.25	Peak
10480.000	50.23	68.20	-17.97	41.04	9.19	Peak
15720.000	45.71	54.00	-8.29	31.41	14.30	Average
15720.000	59.71	74.00	-14.29	45.41	14.30	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5102.400	46.61	54.00	-7.39	46.14	0.47	Average
5102.400	60.49	74.00	-13.51	60.02	0.47	Peak
5238.000	83.67			83.43	0.24	Average
5238.000	93.78			93.54	0.24	Peak
5395.600	46.52	54.00	-7.48	46.38	0.14	Average
5395.600	60.51	74.00	-13.49	60.37	0.14	Peak
6986.700	56.84	68.20	-11.36	52.66	4.18	Peak
10480.000	47.84	68.20	-20.36	38.65	9.19	Peak
15720.000	45.70	54.00	-8.30	31.40	14.30	Average
15720.000	60.56	74.00	-13.44	46.26	14.30	Peak

802.11n HT20 mode:

Low CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5147.350	46.92	54.00	-7.08	46.57	0.35	Average
5147.350	61.16	74.00	-12.84	60.81	0.35	Peak
5181.550	77.78			77.54	0.24	Average
5181.550	88.62			88.38	0.24	Peak
6906.700	56.60	68.20	-11.60	52.16	4.44	Peak
10360.000	50.12	68.20	-18.08	40.90	9.22	Peak
15540.000	43.04	54.00	-10.96	28.85	14.19	Average
15540.000	58.04	74.00	-15.96	43.85	14.19	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5149.300	47.05	54.00	-6.95	46.70	0.35	Average
5149.300	62.35	74.00	-11.65	62.00	0.35	Peak
5181.850	80.57			80.32	0.25	Average
5181.850	90.67			90.42	0.25	Peak
6906.700	57.70	68.20	-10.50	53.26	4.44	Peak
10360.000	51.08	68.20	-17.12	41.86	9.22	Peak
15540.000	43.70	54.00	-10.30	29.51	14.19	Average
15540.000	57.22	74.00	-16.78	43.03	14.19	Peak

Middle CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5114.400	46.70	54.00	-7.30	46.25	0.45	Average
5114.400	60.69	74.00	-13.31	60.24	0.45	Peak
5202.000	78.91			78.65	0.26	Average
5202.000	89.43			89.17	0.26	Peak
5437.600	46.56	54.00	-7.44	46.33	0.23	Average
5437.600	60.57	74.00	-13.43	60.34	0.23	Peak
6933.300	56.97	68.20	-11.23	52.59	4.38	Peak
10400.000	50.63	68.20	-17.57	41.24	9.39	Peak
15600.000	43.91	54.00	-10.09	29.74	14.17	Average
15600.000	58.85	74.00	-15.15	44.68	14.17	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5059.600	46.77	54.00	-7.23	46.16	0.61	Average
5059.600	60.67	74.00	-13.33	60.06	0.61	Peak
5202.400	81.48			81.23	0.25	Average
5202.400	91.35			91.10	0.25	Peak
5446.000	46.62	54.00	-7.38	46.35	0.27	Average
5446.000	60.94	74.00	-13.06	60.67	0.27	Peak
6933.300	57.32	68.20	-10.88	52.94	4.38	Peak
10400.000	50.79	68.20	-17.41	41.40	9.39	Peak
15600.000	43.35	54.00	-10.65	29.18	14.17	Average
15600.000	58.85	74.00	-15.15	44.68	14.17	Peak

High CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5084.800	46.89	54.00	-7.11	46.35	0.54	Average
5084.800	60.41	74.00	-13.59	59.87	0.54	Peak
5241.600	78.40			78.18	0.22	Average
5241.600	89.07			88.85	0.22	Peak
5431.200	46.45	54.00	-7.55	46.25	0.20	Average
5431.200	60.19	74.00	-13.81	59.99	0.20	Peak
6986.700	56.06	68.20	-12.14	51.88	4.18	Peak
10480.000	50.63	68.20	-17.57	41.44	9.19	Peak
15720.000	45.77	54.00	-8.23	31.47	14.30	Average
15720.000	59.61	74.00	-14.39	45.31	14.30	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5130.400	46.61	54.00	-7.39	46.20	0.41	Average
5130.400	60.88	74.00	-13.12	60.47	0.41	Peak
5241.600	82.54			82.32	0.22	Average
5241.600	92.79			92.57	0.22	Peak
5436.400	46.52	54.00	-7.48	46.29	0.23	Average
5436.400	60.37	74.00	-13.63	60.14	0.23	Peak
6986.700	57.01	68.20	-11.19	52.83	4.18	Peak
10480.000	51.34	68.20	-16.86	42.15	9.19	Peak
15720.000	45.98	54.00	-8.02	31.68	14.30	Average
15720.000	59.59	74.00	-14.41	45.29	14.30	Peak

802.11n HT40 mode:

Low CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5145.040	47.96	54.00	-6.04	47.60	0.36	Average
5145.040	62.70	74.00	-11.30	62.34	0.36	Peak
5195.600	73.35			73.10	0.25	Average
5195.600	84.30			84.05	0.25	Peak
6920.000	59.84	68.20	-8.36	55.38	4.46	Peak
10380.000	50.10	68.20	-18.10	40.74	9.36	Peak
15570.000	43.50	54.00	-10.50	29.32	14.18	Average
15570.000	56.98	74.00	-17.02	42.80	14.18	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5144.400	48.36	54.00	-5.64	48.00	0.36	Average
5144.400	62.03	74.00	-11.97	61.67	0.36	Peak
5193.840	77.08			76.83	0.25	Average
5193.840	88.13			87.88	0.25	Peak
6920.000	59.92	68.20	-8.28	55.46	4.46	Peak
10380.000	50.82	68.20	-17.38	41.46	9.36	Peak
15570.000	43.39	54.00	-10.61	29.21	14.18	Average
15570.000	56.88	74.00	-17.12	42.70	14.18	Peak

High CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5106.800	46.69	54.00	-7.31	46.22	0.47	Average
5106.800	61.03	74.00	-12.97	60.56	0.47	Peak
5213.200	72.44			72.17	0.27	Average
5213.200	82.94			82.67	0.27	Peak
5432.800	46.56	54.00	-7.44	46.36	0.20	Average
5432.800	60.90	74.00	-13.10	60.70	0.20	Peak
6973.300	55.72	68.20	-12.48	51.47	4.25	Peak
10460.000	49.50	68.20	-18.70	40.22	9.28	Peak
15690.000	43.49	54.00	-10.51	29.19	14.30	Average
15690.000	59.21	74.00	-14.79	44.91	14.30	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5140.000	46.60	54.00	-7.40	46.22	0.38	Average
5140.000	60.93	74.00	-13.07	60.55	0.38	Peak
5236.000	77.61			77.36	0.25	Average
5236.000	89.34			89.09	0.25	Peak
5437.600	46.59	54.00	-7.41	46.36	0.23	Average
5437.600	61.02	74.00	-12.98	60.79	0.23	Peak
6973.300	57.32	68.20	-10.88	53.07	4.25	Peak
10460.000	49.73	68.20	-18.47	40.45	9.28	Peak
15690.000	43.41	54.00	-10.59	29.11	14.30	Average
15690.000	59.48	74.00	-14.52	45.18	14.30	Peak

Above 1G (1 GHz-40 GHz) in UNII-2a:

802.11a mode:

Low CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5060.400	46.71	54.00	-7.29	46.11	0.60	Average
5060.400	60.96	74.00	-13.04	60.36	0.60	Peak
5257.600	77.49			77.32	0.17	Average
5257.600	88.16			87.99	0.17	Peak
5422.400	46.48	54.00	-7.52	46.31	0.17	Average
5422.400	60.56	74.00	-13.44	60.39	0.17	Peak
7013.300	56.06	68.20	-12.14	51.89	4.17	Peak
10520.000	50.22	68.20	-17.98	41.38	8.84	Peak
15780.000	45.63	54.00	-8.37	31.60	14.03	Average
15780.000	59.05	74.00	-14.95	45.02	14.03	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5061.200	46.85	54.00	-7.15	46.25	0.60	Average
5061.200	60.68	74.00	-13.32	60.08	0.60	Peak
5257.600	83.33			83.16	0.17	Average
5257.600	93.92			93.75	0.17	Peak
5442.800	46.35	54.00	-7.65	46.10	0.25	Average
5442.800	60.38	74.00	-13.62	60.13	0.25	Peak
7013.300	56.10	68.20	-12.10	51.93	4.17	Peak
10520.000	51.16	68.20	-17.04	42.32	8.84	Peak
15780.000	45.77	54.00	-8.23	31.74	14.03	Average
15780.000	59.11	74.00	-14.89	45.08	14.03	Peak

Middle CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5142.000	46.62	54.00	-7.38	46.24	0.38	Average
5142.000	60.58	74.00	-13.42	60.20	0.38	Peak
5299.600	77.20			76.99	0.21	Average
5299.600	87.43			87.22	0.21	Peak
5388.000	46.48	54.00	-7.52	46.33	0.15	Average
5388.000	59.71	74.00	-14.29	59.56	0.15	Peak
7066.700	47.87	68.20	-20.33	43.28	4.59	Peak
10600.000	36.81	54.00	-17.19	27.53	9.28	Average
10600.000	50.51	74.00	-23.49	41.23	9.28	Peak
15900.000	44.14	54.00	-9.86	30.29	13.85	Average
15900.000	58.47	74.00	-15.53	44.61	13.86	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5109.200	46.56	54.00	-7.44	46.10	0.46	Average
5109.200	60.83	74.00	-13.17	60.37	0.46	Peak
5298.000	83.95			83.76	0.19	Average
5298.000	94.53			94.34	0.19	Peak
5434.800	46.42	54.00	-7.58	46.21	0.21	Average
5434.800	60.59	74.00	-13.41	60.38	0.21	Peak
7066.700	52.24	68.20	-15.96	47.65	4.59	Peak
10600.000	37.11	54.00	-16.89	27.83	9.28	Average
10600.000	51.02	74.00	-22.98	41.74	9.28	Peak
15900.000	44.02	54.00	-9.98	30.17	13.85	Average
15900.000	58.99	74.00	-15.01	45.14	13.85	Peak

High CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5323.600	77.64			77.40	0.24	Average
5323.600	87.50			87.26	0.24	Peak
5418.000	46.42	54.00	-7.58	46.25	0.17	Average
5418.000	60.87	74.00	-13.13	60.70	0.17	Peak
7093.300	49.07	68.20	-19.13	44.27	4.80	Peak
10640.000	42.09	54.00	-11.91	32.19	9.90	Average
10640.000	51.79	74.00	-22.21	41.89	9.90	Peak
15960.000	46.20	54.00	-7.80	32.55	13.65	Average
15960.000	59.14	74.00	-14.86	45.49	13.65	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5319.600	83.66			83.43	0.23	Average
5319.600	94.06			93.83	0.23	Peak
5416.400	46.46	54.00	-7.54	46.30	0.16	Average
5416.400	60.22	74.00	-13.78	60.06	0.16	Peak
7093.300	52.35	68.20	-15.85	47.55	4.80	Peak
10640.000	37.07	54.00	-16.93	27.17	9.90	Average
10640.000	50.52	74.00	-23.48	40.62	9.90	Peak
15960.000	45.64	54.00	-8.36	31.99	13.65	Average
15960.000	59.47	74.00	-14.53	45.82	13.65	Peak

802.11n HT20 mode:

Low CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5072.000	46.89	54.00	-7.11	46.32	0.57	Average
5072.000	60.42	74.00	-13.58	59.85	0.57	Peak
5262.400	77.62			77.45	0.17	Average
5262.400	87.72			87.55	0.17	Peak
5446.000	46.58	54.00	-7.42	46.31	0.27	Average
5446.000	60.38	74.00	-13.62	60.11	0.27	Peak
7013.300	55.73	68.20	-12.47	51.53	4.20	Peak
10520.000	51.02	68.20	-17.18	42.18	8.84	Peak
15780.000	45.89	54.00	-8.11	31.86	14.03	Average
15780.000	58.68	74.00	-15.32	44.65	14.03	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5104.000	46.67	54.00	-7.33	46.20	0.47	Average
5104.000	60.13	74.00	-13.87	59.66	0.47	Peak
5258.000	82.37			82.19	0.18	Average
5258.000	93.09			92.91	0.18	Peak
5419.200	46.72	54.00	-7.28	46.55	0.17	Average
5419.200	60.95	74.00	-13.05	60.78	0.17	Peak
7013.300	57.00	68.20	-11.20	52.80	4.20	Peak
10520.000	50.36	68.20	-17.84	41.52	8.84	Peak
15780.000	45.59	54.00	-8.41	31.56	14.03	Average
15780.000	59.65	74.00	-14.35	45.62	14.03	Peak

Middle CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5088.400	46.68	54.00	-7.32	46.15	0.53	Average
5088.400	60.56	74.00	-13.44	60.03	0.53	Peak
5301.600	77.32			77.11	0.21	Average
5301.600	87.39			87.18	0.21	Peak
5447.200	46.58	54.00	-7.42	46.31	0.27	Average
5447.200	60.34	74.00	-13.66	60.07	0.27	Peak
7066.700	55.47	68.20	-12.73	50.73	4.74	Peak
10600.000	37.42	54.00	-16.58	28.14	9.28	Average
10600.000	51.40	74.00	-22.60	42.12	9.28	Peak
15900.000	44.49	54.00	-9.51	30.64	13.85	Average
15900.000	56.01	74.00	-17.99	42.16	13.85	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5074.400	46.78	54.00	-7.22	46.21	0.57	Average
5074.400	60.43	74.00	-13.57	59.86	0.57	Peak
5298.800	83.55			83.34	0.21	Average
5298.800	93.73			93.52	0.21	Peak
5435.200	46.42	54.00	-7.58	46.20	0.22	Average
5435.200	60.70	74.00	-13.30	60.48	0.22	Peak
7066.700	53.37	68.20	-14.83	48.63	4.74	Peak
10600.000	37.39	54.00	-16.61	28.11	9.28	Average
10600.000	50.97	74.00	-23.03	41.69	9.28	Peak
15900.000	44.62	54.00	-9.38	30.77	13.85	Average
15900.000	58.74	74.00	-15.26	44.89	13.85	Peak

High CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5321.340	77.59			77.35	0.24	Average
5321.340	88.45			88.21	0.24	Peak
5437.400	46.53	54.00	-7.47	46.30	0.23	Average
5437.400	60.83	74.00	-13.17	60.60	0.23	Peak
7093.300	56.29	68.20	-11.91	51.55	4.74	Peak
10640.000	38.01	54.00	-15.99	28.11	9.90	Average
10640.000	50.74	74.00	-23.26	40.84	9.90	Peak
15960.000	44.88	54.00	-9.12	31.23	13.65	Average
15960.000	60.17	74.00	-13.83	46.52	13.65	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5321.340	83.76			83.52	0.24	Average
5321.340	94.82			94.58	0.24	Peak
5444.680	46.58	54.00	-7.42	46.33	0.25	Average
5444.680	61.54	74.00	-12.46	61.29	0.25	Peak
7093.300	57.65	68.20	-10.55	52.91	4.74	Peak
10640.000	38.53	54.00	-15.47	28.63	9.90	Average
10640.000	52.45	74.00	-21.55	42.55	9.90	Peak
15960.000	44.94	54.00	-9.06	31.29	13.65	Average
15960.000	59.45	74.00	-14.55	45.80	13.65	Peak

802.11n HT40 mode:

Low CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5075.600	46.82	54.00	-7.18	46.25	0.57	Average
5075.600	60.01	74.00	-13.99	59.44	0.57	Peak
5266.400	71.71			71.55	0.16	Average
5266.400	82.39			82.23	0.16	Peak
5399.600	46.47	54.00	-7.53	46.35	0.12	Average
5399.600	59.83	74.00	-14.17	59.71	0.12	Peak
7026.700	54.79	68.20	-13.41	50.62	4.17	Peak
10540.000	48.91	68.20	-19.29	40.13	8.78	Peak
15810.000	43.02	54.00	-10.98	29.09	13.93	Average
15810.000	56.91	74.00	-17.09	42.98	13.93	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5140.000	46.49	54.00	-7.51	46.11	0.38	Average
5140.000	59.96	74.00	-14.04	59.58	0.38	Peak
5273.200	77.50			77.36	0.14	Average
5273.200	88.64			88.50	0.14	Peak
5394.400	46.46	54.00	-7.54	46.33	0.13	Average
5394.400	60.58	74.00	-13.42	60.45	0.13	Peak
7026.700	54.35	68.20	-13.85	50.18	4.17	Peak
10540.000	48.93	68.20	-19.27	40.15	8.78	Peak
15810.000	43.79	54.00	-10.21	29.86	13.93	Average
15810.000	56.45	74.00	-17.55	42.52	13.93	Peak

High CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5315.600	71.44	68.20	3.24	71.21	0.23	Average
5315.600	82.77	68.20	14.57	82.54	0.23	Peak
5352.240	46.47			46.25	0.22	Average
5352.240	61.11			60.89	0.22	Peak
7080.000	47.56	68.20	-20.64	42.84	4.72	Peak
10620.000	37.53	54.00	-16.47	27.85	9.68	Average
10620.000	51.04	74.00	-22.96	41.36	9.68	Peak
15930.000	45.02	54.00	-8.98	31.27	13.75	Average
15930.000	57.71	74.00	-16.29	43.96	13.75	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5314.640	78.20	68.20	10.00	77.97	0.23	Average
5314.640	89.20	68.20	21.00	88.97	0.23	Peak
5352.400	47.96			47.74	0.22	Average
5352.400	62.35			62.13	0.22	Peak
7080.000	50.56	68.20	-17.64	45.82	4.74	Peak
10620.000	37.32	54.00	-16.68	27.64	9.68	Average
10620.000	50.57	74.00	-23.43	40.89	9.68	Peak
15930.000	45.15	54.00	-8.85	31.40	13.75	Average
15930.000	57.76	74.00	-16.24	44.01	13.75	Peak

Above 1G (1 GHz-40 GHz) in UNII-2c:

802.11a mode:

Low CH

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
	5454.340	46.67	54.00	-7.33	46.37	0.30	Average
	5454.340	60.94	74.00	-13.06	60.64	0.30	Peak
	5501.530	83.76			83.25	0.51	Average
	5501.530	94.22			93.71	0.51	Peak
	7333.300	33.00	54.00	-21.00	27.23	5.77	Average
	7333.300	50.00	74.00	-24.00	44.23	5.77	Peak
	11000.000	36.47	54.00	-17.53	26.44	10.03	Average
	11000.000	50.85	74.00	-23.15	40.82	10.03	Peak
	16500.000	56.92	68.20	-11.28	42.17	14.75	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
	5459.620	47.21	54.00	-6.79	46.88	0.33	Average
	5459.620	61.48	74.00	-12.52	61.15	0.33	Peak
	5501.640	92.24			91.73	0.51	Average
	5501.640	102.99			102.48	0.51	Peak
	7333.300	49.24	54.00	-4.76	43.47	5.77	Average
	7333.300	54.05	74.00	-19.95	48.28	5.77	Peak
	11000.000	36.86	54.00	-17.14	26.83	10.03	Average
	11000.000	50.52	74.00	-23.48	40.49	10.03	Peak
	16500.000	56.57	68.20	-11.63	41.82	14.75	Peak

Middle CH

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
	5445.600	46.80	54.00	-7.20	46.53	0.27	Average
	5445.600	60.36	74.00	-13.64	60.09	0.27	Peak
	5577.840	84.95			84.22	0.73	Average
	5577.840	95.54			94.81	0.73	Peak
	5775.820	63.02	68.20	-5.18	61.70	1.32	Peak
!	7440.000	40.22	54.00	-13.78	34.16	6.06	Average
	7440.000	49.59	74.00	-24.41	43.53	6.06	Peak
!	11160.000	37.21	54.00	-16.79	26.98	10.23	Average
	11160.000	50.43	74.00	-23.57	40.20	10.23	Peak
!	16740.000	58.10	68.20	-10.10	42.56	15.54	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
	5457.760	46.87	54.00	-7.13	46.55	0.32	Average
	5457.760	61.13	74.00	-12.87	60.81	0.32	Peak
	5581.640	93.31			92.57	0.74	Average
	5581.640	103.76			103.02	0.74	Peak
	5739.340	62.88	68.20	-5.32	61.61	1.27	Peak
	7440.000	49.61	54.00	-4.39	43.55	6.06	Average
	7440.000	54.25	74.00	-19.75	48.19	6.06	Peak
	11160.000	37.36	54.00	-16.64	27.13	10.23	Average
	11160.000	50.41	74.00	-23.59	40.18	10.23	Peak
	16740.000	57.48	68.20	-10.72	41.94	15.54	Peak

High CH

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
	5702.100	85.08			83.76	1.32	Average
	5702.100	95.79			94.47	1.32	Peak
	5728.280	64.03	68.20	-4.17	62.73	1.30	Peak
!	7600.000	39.76	54.00	-14.24	33.75	6.01	Average
	7600.000	49.88	74.00	-24.12	43.87	6.01	Peak
!	11400.000	37.05	54.00	-16.95	26.31	10.74	Average
	11400.000	52.21	74.00	-21.79	41.47	10.74	Peak
!	17100.000	57.89	68.20	-10.31	41.36	16.53	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
	5702.100	91.87			90.55	1.32	Average
	5702.100	102.68			101.36	1.32	Peak
	5725.310	67.29	68.20	-0.91	65.99	1.30	Peak
	7600.000	49.57	54.00	-4.43	43.56	6.01	Average
	7600.000	54.52	74.00	-19.48	48.51	6.01	Peak
	11400.000	37.18	54.00	-16.82	26.44	10.74	Average
	11400.000	51.52	74.00	-22.48	40.78	10.74	Peak
	17100.000	57.84	68.20	-10.36	41.31	16.53	Peak

802.11n HT20 mode:

Low CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5450.600	46.82	54.00	-7.18	46.53	0.29	Average
5450.600	61.79	74.00	-12.21	61.50	0.29	Peak
5501.530	82.74			82.23	0.51	Average
5501.530	93.59			93.08	0.51	Peak
! 7333.300	48.53	54.00	-5.47	42.76	5.77	Average
7333.300	51.49	74.00	-22.51	45.72	5.77	Peak
!11000.000	37.63	54.00	-16.37	27.60	10.03	Average
11000.000	50.34	74.00	-23.66	40.31	10.03	Peak
!16500.000	56.78	68.20	-11.42	42.07	14.71	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5458.410	47.63	54.00	-6.37	47.30	0.33	Average
5458.410	63.15	74.00	-10.85	62.82	0.33	Peak
5498.230	91.96			91.46	0.50	Average
5498.230	102.44			101.94	0.50	Peak
7333.300	48.94	54.00	-5.06	43.27	5.67	Average
7333.300	51.10	74.00	-22.90	45.33	5.77	Peak
11000.000	37.22	74.00	-36.78	27.19	10.03	Average
11000.000	50.42	74.00	-23.58	40.39	10.03	Peak
16500.000	56.93	68.20	-11.27	42.18	14.75	Peak

Middle CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5449.780	46.60	54.00	-7.40	46.32	0.28	Average
5449.780	60.77	74.00	-13.23	60.49	0.28	Peak
5578.980	85.98			85.24	0.74	Average
5578.980	96.71			95.97	0.74	Peak
5774.300	62.43	68.20	-5.77	61.11	1.32	Peak
7440.000	41.45	54.00	-12.55	35.39	6.06	Average
7440.000	49.20	74.00	-24.80	43.14	6.06	Peak
11160.000	38.13	54.00	-15.87	27.90	10.23	Average
11160.000	51.11	74.00	-22.89	40.88	10.23	Peak
16740.000	57.70	68.20	-10.50	42.12	15.58	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5458.140	46.65	54.00	-7.35	46.32	0.33	Average
5458.140	60.19	74.00	-13.81	59.86	0.33	Peak
5581.640	94.74			94.00	0.74	Average
5581.640	105.64			104.90	0.74	Peak
5763.660	63.71	68.20	-4.49	62.41	1.30	Peak
7440.000	47.36	54.00	-6.64	41.30	6.06	Average
7440.000	51.55	74.00	-22.45	45.49	6.06	Peak
11160.000	38.10	54.00	-15.90	27.87	10.23	Average
11160.000	51.20	74.00	-22.80	40.97	10.23	Peak
16740.000	57.28	68.20	-10.92	41.70	15.58	Peak

High CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5701.550	83.30			81.98	1.32	Average
5701.550	94.18			92.86	1.32	Peak
5794.610	63.15	68.20	-5.05	61.83	1.32	Peak
! 7600.000	42.47	54.00	-11.53	36.46	6.01	Average
7600.000	50.50	74.00	-23.50	44.49	6.01	Peak
!11400.000	38.12	54.00	-15.88	27.38	10.74	Average
11400.000	50.86	74.00	-23.14	40.12	10.74	Peak
!17100.000	58.02	68.20	-10.18	41.44	16.58	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5701.550	90.53			89.21	1.32	Average
5701.550	101.34			100.02	1.32	Peak
5725.090	67.27	68.20	-0.93	65.97	1.30	Peak
7600.000	47.55	54.00	-6.45	41.54	6.01	Average
7600.000	52.84	74.00	-21.16	46.83	6.01	Peak
11400.000	37.83	54.00	-16.17	27.09	10.74	Average
11400.000	52.33	74.00	-21.67	41.59	10.74	Peak
17107.000	58.03	68.20	-10.17	41.45	16.58	Peak

802.11n HT40 mode:

Low CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5438.870	47.39	54.00	-6.61	47.16	0.23	Average
5438.870	60.92	74.00	-13.08	60.69	0.23	Peak
5515.570	78.65			78.11	0.54	Average
5515.570	90.17			89.63	0.54	Peak
7346.700	41.75	54.00	-12.25	35.94	5.81	Average
7346.700	48.63	74.00	-25.37	42.82	5.81	Peak
11020.000	36.02	54.00	-17.98	25.89	10.13	Average
11020.000	50.41	74.00	-23.59	40.28	10.13	Peak
16530.000	56.55	68.20	-11.65	41.74	14.81	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5459.800	50.46	54.00	-3.54	50.13	0.33	Average
5459.800	67.54	74.00	-6.46	67.21	0.33	Peak
5513.750	88.53			87.99	0.54	Average
5513.750	99.61			99.07	0.54	Peak
7346.700	43.69	54.00	-10.31	37.85	5.84	Average
7346.700	51.48	74.00	-22.52	45.67	5.81	Peak
11020.000	36.06	54.00	-17.94	25.93	10.13	Average
11020.000	50.22	74.00	-23.78	40.09	10.13	Peak
16530.000	57.10	68.20	-11.10	42.27	14.83	Peak

Middle CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5451.300	46.65	54.00	-7.35	46.36	0.29	Average
5451.300	60.92	74.00	-13.08	60.63	0.29	Peak
5556.180	79.88			79.22	0.66	Average
5556.180	90.48			89.82	0.66	Peak
5772.020	62.03	68.20	-6.17	60.71	1.32	Peak
7400.000	38.22	54.00	-15.78	32.25	5.97	Average
7400.000	49.24	74.00	-24.76	43.27	5.97	Peak
11100.000	38.21	54.00	-15.79	27.84	10.37	Average
11100.000	51.17	74.00	-22.83	40.80	10.37	Peak
16650.000	56.89	68.20	-11.31	41.91	14.98	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5452.060	46.71	54.00	-7.29	46.41	0.30	Average
5452.060	60.13	74.00	-13.87	59.83	0.30	Peak
5554.660	88.98			88.32	0.66	Average
5554.660	99.50			98.84	0.66	Peak
5760.620	61.96	68.20	-6.24	60.66	1.30	Peak
7400.000	42.58	54.00	-11.42	36.61	5.97	Average
7400.000	50.84	74.00	-23.16	44.87	5.97	Peak
11100.000	37.07	54.00	-16.93	26.70	10.37	Average
11100.000	51.29	74.00	-22.71	40.92	10.37	Peak
16650.000	57.40	68.20	-10.80	42.42	14.98	Peak

High CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5665.900	80.38			79.24	1.14	Average
5665.900	91.50			90.36	1.14	Peak
5797.300	63.24	68.20	-4.96	61.92	1.32	Peak
7560.000	38.75	54.00	-15.25	32.66	6.09	Average
7560.000	49.05	74.00	-24.95	42.96	6.09	Peak
11340.000	39.09	54.00	-14.91	28.63	10.46	Average
11340.000	52.17	74.00	-21.83	41.71	10.46	Peak
17010.000	58.41	68.20	-9.79	42.70	15.71	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
5673.700	89.03			87.85	1.18	Average
5673.700	100.19			99.01	1.18	Peak
5725.600	63.93	68.20	-4.27	62.63	1.30	Peak
7560.000	42.65	54.00	-11.35	36.56	6.09	Average
7560.000	51.75	74.00	-22.25	45.66	6.09	Peak
11340.000	39.03	54.00	-14.97	28.57	10.46	Average
11340.000	50.52	74.00	-23.48	40.06	10.46	Peak
17010.000	58.19	68.20	-10.01	42.48	15.71	Peak