FCC Part 15.247

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	**CIIPC Report**
Product Name:	**Dual Band 802.11 a/b/g/n, Bluetooth 5.0 SIP Module**
Model Name:	**M7DB**
Report Number :	**RLK200519001-00B**
Report Date :	**2020/07/02**
Reviewed By :	**Zeus Chen**

Prepared By:

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Revision History

Revision	Report Number	Issue Date	Description
1.0	RLK200519001-00B	2020/07/02	CIIPC Report[Note1]

Note1: The original report number is RLK200203002-00B, and the CIIPC report is for adding antenna (PIFA Antenna (MARS-31A8 WiFi Antenna))

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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**
Frequency Range	2402 - 2480 MHz
Number of Channels	79 Channels
Output Power	**<PIFA Antenna: MARS-31A8 WiFi Antenna>** BR-1Mbps: 17.83 dBm (0.0607 W) EDR-2Mbps: 17.55 dBm (0.0569W) EDR-3Mbps: 20.66 dBm (0.1164 W)
Modulation Type	BR-1Mbps: GFSK EDR-2Mbps: π/4-DQPSK EDR-3Mbps: 8-DPSK
Related Submittal(s)/Grant(s)	**FCC Part 15.247 DTS with FCC ID: XF6-M7DB7** **FCC Part 15.247 NII with FCC ID: XF6-M7DB7** **IC RSS-247 DTS with IC: 8407A-M7DB7** **IC RSS-247 LE-LAN with IC: 8407A-M7DB7**
Received Date	2020-05-19
Date of Test	2020-06-02 – 2020-06-23

**All measurement and test data in this report was gathered from production sample serial number: 191029005(Assigned by BACL, Linkou Laboratory).*

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 and Test Methodology

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 15.247 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
Radiated (966A)	2020-06-02 to 2020-06-15	19.8-20.6	49-56	Leo Cheng
Conducted (TH-02)	2020-06-06 to 2020-06-23	23.1-23.5	56-61	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.: TW3546. The Test Firm Registration No.: 181430.

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 BT (BR/EDR), there are totally 79 channels.

Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	**2402**	**39**	**2441**
1	2403	--	--
2	2404	--	--
3	2405	76	2478
--	--	77	2479
38	2440	**78**	**2480**

For BLE: Channel **0**, **39** and **78** were tested.

Radiated below 1G were tested worst output power.

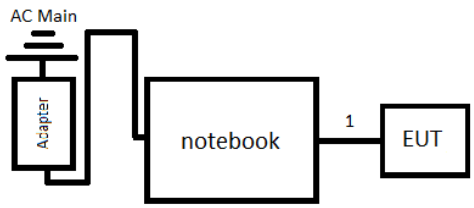
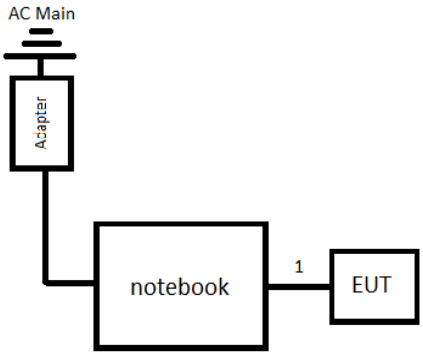
Worst Case of Power Setting				
EUT Exercise Software	FCC_PER_TEST_GUI.py			
PIFA Antenna (MARS-31A8 WiFi Antenna)				
Configuration	**NTX**	**Low CH**	**Mid CH**	**High CH**
BR-1Mbps	1	13	14	18
EDR-2Mbps	1	17	22	22
EDR-3Mbps	1	18	20	22

2.2 Support Equipment List and Details

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.

3 Summary of Test Results

FCC Rules	Description of Test	Result
§15.247(i), §1.1310, §2.1091	Maximum Permissible Exposure (MPE)	Compliance
ISEDC RSS-102 Sec 2.5.2	Exemption Limits for Routine Evaluation – RF Exposure Evaluation	Compliance
§15.203 ISEDC RSS-Gen Sec 6.8	Antenna Requirement	Compliance
§15.207(a) ISEDC RSS-Gen Sec 8.8	AC Line Conducted Emissions	Compliance[Note1]
§15.205, §15.209, §15.247(d) ISEDC RSS-247 Sec 5.5 ISED RSS-Gen Sec 8.9 and 8.10	Spurious Emissions	Compliance [Note3]
§15.247(a)(1) ISEDC RSS-247 Sec 5.1 ISEDC RSS-Gen Sec 6.7	20 dB Emission Bandwidth	Compliance [Note2]
§15.247(a)(1) ISEDC RSS-247 Sec 5.1(b)	Channel Separation Test	Compliance [Note2]
§15.247(a)(1)(iii) ISEDC RSS-247 Sec 5.1(d)	Time of Occupancy (Dwell Time)	Compliance [Note2]
§15.247(a)(1)(iii) ISEDC RSS-247 Sec 5.1(b)	Quantity of hopping channel Test	Compliance [Note2]
§15.247(b)(3) ISEDC RSS-247 Sec 5.1(b) ISEDC RSS-247 Sec 5.4(b)	Maximum Peak Output Power	Compliance
§15.247(d) ISEDC RSS-247 Sec 5.5	100 kHz Bandwidth of Frequency Band Edge	Compliance

Note1: Adding antenna not affect the conducted emission test rule, please refer to the original report. (Report No.: RLK200203002-00C)

Note2: The power reduce is not affect the result, please refer to the original report. (Report No.: RLK200203002-00C)

Note3: It is not affect the conducted Spurious Emissions, please refer to the original report. (Report No.: RLK200203002-00C)

4 FCC §15.247(i), § 1.1310, § 2.1091 – RF Exposure

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	2.00	1.5849	17.00	50.1187	20	0.0158	1
BR/EDR	2402-2480	2.00	1.5849	21.00	125.8925	20	0.0397	1
Wi-Fi 2.4G	2412-2462	2.00	1.5849	25.00	316.2278	20	0.0998	1
Wi-Fi 5G	5150-5850	2.00	1.5849	14.50	28.1838	20	0.0089	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 17.00 dBm (50.1187 mW) at 2402 MHz, Antenna Gain = 2.00 dBi, EIRP = 19.00 dBm (0.0794 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 (125.8925mW) at 2402 MHz, Antenna Gain = 2.00 dBi, EIRP = 23.00 dBm (0.1995 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 = 2.00 dBi, EIRP = 27.00 dBm (0.5012 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 = 2.00 dBi, EIRP = 16.45 dBm (0.0442 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-Gen 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 6.8: 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
JOINSOON ELECTRONICS MFG .CO,LTO	MARS-31A8 WiFi Antenna	PIFA	2.00	Compliance

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

7 FCC §15.209, §15.205, §15.247(d), RSS-Gen Sec 8.9, 8.10 and RSS-247 Sec 5.5 – Spurious Emissions

7.1 Applicable Standard

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.

As per FCC §15.247 (d) In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c).

As per RSS-Gen 8.9,

Except when the requirements applicable to a given device state otherwise, emissions from licence-exempt transmitters shall comply with the field strength limits shown in Table 4 and Table 5 below. Additionally, the level of any transmitter emission shall not exceed the level of the transmitter's fundamental emission.

Table 4 – General Field Strength Limits for Licence-Exempt Transmitters at Frequencies Above 30 MHz

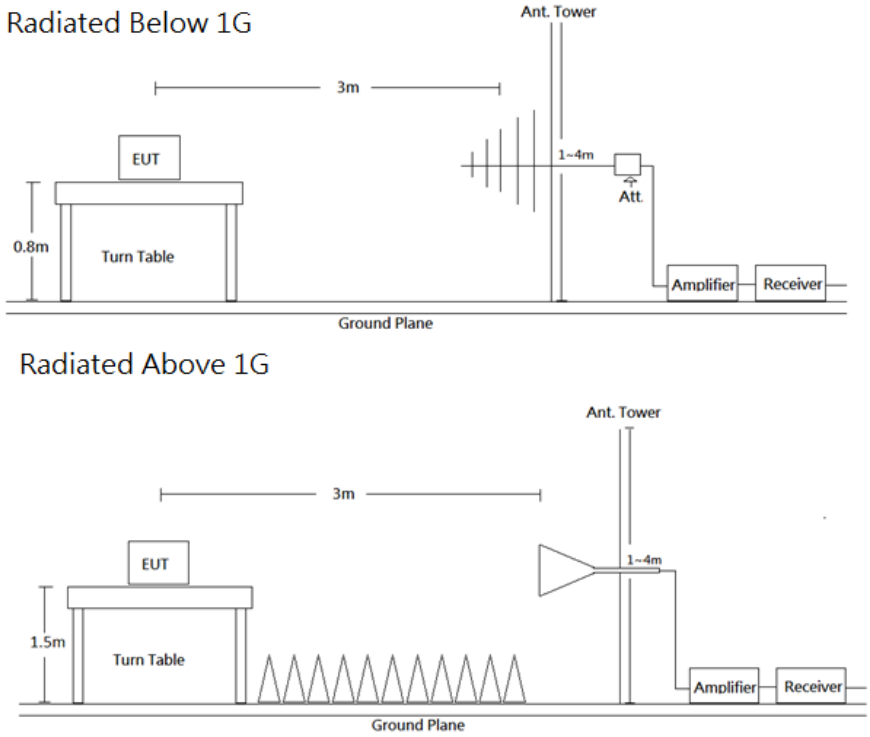
Frequency (MHz)	Field Strength (μv/m at 3 metres)
30-88	100
88-216	150
216-960	200
Above 960*	500

* Unless otherwise specified, for all frequencies greater than 1 GHz, the radiated emission limits for licence-exempt radio apparatus stated in applicable RSSs (including RSS-Gen) are based on measurements using a linear average detector function having a minimum resolution bandwidth of 1 MHz. If an average limit is specified for the EUT, then the peak emission shall also be measured with instrumentation properly adjusted for such factors as pulse desensitization to ensure the peak emission is less than 20 dB above the average limit.

Note: Transmitting devices are not permitted in restricted frequency bands unless stated otherwise in the specific RSS.

As per RSS-247 §5.5, in any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under Section 5.4(4), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

7.2 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, FCC 15.247, RSS-Gen and RSS-247 Limits.

The system was investigated from 30 MHz to 26.5 GHz. During the radiated emission test, the EMI test receiver was set with the following configurations measurement method 6.3 in ANSI C63.10.

Frequency Range	RBW	VBW	Detector	Measurement method
30-1000 MHz	120 kHz	/	QP	QP
Above 1 GHz	1 MHz	3 MHz	PK	PK
	1 MHz	10 Hz	RMS	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.

7.3 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

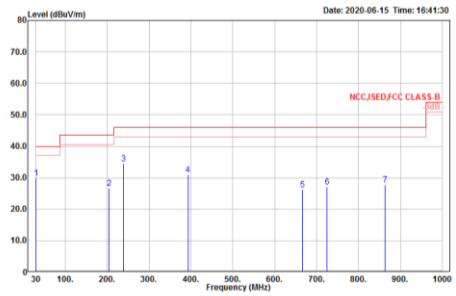
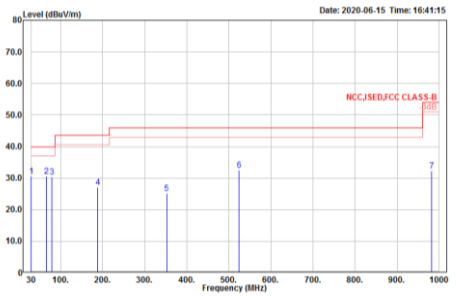
***Statement of Traceability:** The testing equipment's listed above have finished the calibration by Electronics Testing Center, Taiwan (ETC) or other laboratories which were accredited by TAF or equivalent organizations. The calibration result could be traceable to the International System of Units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

7.4 Radiated Emission Test Plot and Data

PIFA Antenna (MARS-31A8 WiFi Antenna)

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

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

Horizontal	Vertical
	

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	30.000	29.96	40.00	-10.04	38.72	-8.76	Peak
2	204.600	26.77	43.50	-16.73	48.28	-21.51	Peak
3	239.520	34.52	46.00	-11.48	56.33	-21.81	Peak
4	392.780	30.93	46.00	-15.07	49.19	-18.26	Peak
5	665.350	26.14	46.00	-19.86	39.35	-13.21	Peak
6	724.520	27.12	46.00	-18.88	39.60	-12.48	Peak
7	863.230	27.79	46.00	-18.21	38.53	-10.74	Peak

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	30.000	30.51	40.00	-9.49	39.27	-8.76	Peak
2	65.890	30.61	40.00	-9.39	54.94	-24.33	Peak
3	78.500	30.38	40.00	-9.62	55.17	-24.79	Peak
4	188.110	27.06	43.50	-16.44	49.40	-22.34	Peak
5	352.040	25.22	46.00	-20.78	44.27	-19.05	Peak
6	523.730	32.42	46.00	-13.58	47.95	-15.53	Peak
7	982.540	32.31	54.00	-21.69	41.87	-9.56	Peak

Note:

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-26.5 GHz)

BR-1Mbps mode:

Low CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
2354.800	37.30	54.00	-16.70	47.12	-9.82	Average
2354.800	50.78	74.00	-23.22	60.60	-9.82	Peak
2402.000	88.95			98.63	-9.68	Average
2402.000	104.42			114.10	-9.68	Peak
4804.000	45.79	54.00	-8.21	48.91	-3.12	Average
4804.000	54.79	74.00	-19.21	57.91	-3.12	Peak
7206.000	51.95	54.00	-2.05	48.27	3.68	Average
7206.000	62.09	74.00	-11.91	58.41	3.68	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
2351.500	34.93	54.00	-19.07	44.76	-9.83	Average
2351.500	49.64	74.00	-24.36	59.47	-9.83	Peak
2402.200	79.04			88.72	-9.68	Average
2402.200	91.74			101.42	-9.68	Peak
3202.700	31.66	54.00	-22.34	38.81	-7.15	Average
3202.700	45.41	74.00	-28.59	52.56	-7.15	Peak
4804.000	46.65	54.00	-7.35	49.77	-3.12	Average
4804.000	55.31	74.00	-18.69	58.43	-3.12	Peak
7206.000	52.99	54.00	-1.01	49.31	3.68	Average
7206.000	62.46	74.00	-11.54	58.78	3.68	Peak

Middle CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
2382.842	35.46	54.00	-18.54	45.19	-9.73	Average
2382.842	49.49	74.00	-24.51	59.22	-9.73	Peak
2441.164	89.14			98.70	-9.56	Average
2441.164	104.82			114.38	-9.56	Peak
2531.430	36.18	54.00	-17.82	45.41	-9.23	Average
2531.430	50.04	74.00	-23.96	59.27	-9.23	Peak
4882.000	45.88	54.00	-8.12	48.73	-2.85	Average
4882.000	54.63	74.00	-19.37	57.48	-2.85	Peak
7323.000	51.30	54.00	-2.70	47.29	4.01	Average
7323.000	61.77	74.00	-12.23	57.76	4.01	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
2330.570	35.01	54.00	-18.99	44.90	-9.89	Average
2330.570	49.38	74.00	-24.62	59.27	-9.89	Peak
2440.922	78.16			87.72	-9.56	Average
2440.922	90.72			100.28	-9.56	Peak
2506.262	35.78	54.00	-18.22	45.12	-9.34	Average
2506.262	50.59	74.00	-23.41	59.93	-9.34	Peak
4882.000	47.03	54.00	-6.97	49.88	-2.85	Average
4882.000	55.83	74.00	-18.17	58.68	-2.85	Peak
7323.000	53.32	54.00	-0.68	49.31	4.01	Average
7323.000	62.45	74.00	-11.55	58.44	4.01	Peak

High CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
2480.086	91.42			100.85	-9.43	Average
2480.086	107.60			117.03	-9.43	Peak
2484.432	42.95	54.00	-11.05	52.37	-9.42	Average
2484.432	55.61	74.00	-18.39	65.03	-9.42	Peak
4960.000	49.75	54.00	-4.25	52.29	-2.54	Average
4960.000	58.18	74.00	-15.82	60.72	-2.54	Peak
7440.000	52.35	54.00	-1.65	48.10	4.25	Average
7440.000	62.90	74.00	-11.10	58.65	4.25	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
2480.086	80.46			89.89	-9.43	Average
2480.086	93.76			103.19	-9.43	Peak
2499.684	36.43	54.00	-17.57	45.80	-9.37	Average
2499.684	51.33	74.00	-22.67	60.70	-9.37	Peak
4960.000	49.06	54.00	-4.94	51.60	-2.54	Average
4960.000	57.72	74.00	-16.28	60.26	-2.54	Peak
7440.000	53.57	54.00	-0.43	49.32	4.25	Average
7440.000	52.92	74.00	-21.08	48.67	4.25	Peak

EDR-2Mbps mode:

Low CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
2382.300	37.56	54.00	-16.44	47.30	-9.74	Average
2382.300	50.80	74.00	-23.20	60.54	-9.74	Peak
2401.900	88.17			97.85	-9.68	Average
2401.900	106.54			116.22	-9.68	Peak
4804.000	44.84	54.00	-9.16	47.96	-3.12	Average
4804.000	56.23	74.00	-17.77	59.35	-3.12	Peak
7206.000	51.66	54.00	-2.34	47.98	3.68	Average
7206.000	64.25	74.00	-9.75	60.57	3.68	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
2350.500	35.09	54.00	-18.91	44.92	-9.83	Average
2350.500	49.86	74.00	-24.14	59.69	-9.83	Peak
2402.300	78.02			87.70	-9.68	Average
2402.300	93.58			103.26	-9.68	Peak
3202.700	31.79	54.00	-22.21	38.94	-7.15	Average
3202.700	44.23	74.00	-29.77	51.38	-7.15	Peak
4804.000	44.24	54.00	-9.76	47.36	-3.12	Average
4804.000	55.51	74.00	-18.49	58.63	-3.12	Peak
7206.000	53.06	54.00	-0.94	49.38	3.68	Average
7206.000	65.35	74.00	-8.65	61.67	3.68	Peak

Middle CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
2373.404	35.88	54.00	-18.12	45.64	-9.76	Average
2373.404	50.07	74.00	-23.93	59.83	-9.76	Peak
2441.164	88.69			98.25	-9.56	Average
2441.164	106.96			116.52	-9.56	Peak
2531.430	36.38	54.00	-17.62	45.61	-9.23	Average
2531.430	50.41	74.00	-23.59	59.64	-9.23	Peak
4882.000	43.38	54.00	-10.62	46.23	-2.85	Average
4882.000	54.52	74.00	-19.48	57.37	-2.85	Peak
7323.000	51.11	54.00	-2.89	47.10	4.01	Average
7323.000	63.38	74.00	-10.62	59.37	4.01	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
2328.876	34.99	54.00	-19.01	44.88	-9.89	Average
2328.876	49.32	74.00	-24.68	59.21	-9.89	Peak
2441.406	77.11			86.67	-9.56	Average
2441.406	92.34			101.90	-9.56	Peak
2529.978	35.88	54.00	-18.12	45.12	-9.24	Average
2529.978	50.11	74.00	-23.89	59.35	-9.24	Peak
3254.700	36.27	54.00	-17.73	43.26	-6.99	Average
3254.700	47.78	74.00	-26.22	54.77	-6.99	Peak
4882.000	44.93	54.00	-9.07	47.78	-2.85	Average
4882.000	55.98	74.00	-18.02	58.83	-2.85	Peak
7323.000	53.26	54.00	-0.74	49.25	4.01	Average
7323.000	65.88	74.00	-8.12	61.87	4.01	Peak

High CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
2480.168	91.08			100.51	-9.43	Average
2480.168	109.89			119.32	-9.43	Peak
2483.500	44.40	54.00	-9.60	53.82	-9.42	Average
2483.500	63.54	74.00	-10.46	72.96	-9.42	Peak
4960.000	47.28	54.00	-6.72	49.82	-2.54	Average
4960.000	58.32	74.00	-15.68	60.86	-2.54	Peak
7440.000	50.76	54.00	-3.24	46.51	4.25	Average
7440.000	62.21	74.00	-11.79	57.96	4.25	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
2480.168	79.78			89.21	-9.43	Average
2480.168	95.50			104.93	-9.43	Peak
2483.500	37.24	54.00	-16.76	46.66	-9.42	Average
2483.500	51.21	74.00	-22.79	60.63	-9.42	Peak
3306.700	44.38	54.00	-9.62	51.22	-6.84	Average
3306.700	54.12	74.00	-19.88	60.96	-6.84	Peak
4960.000	46.35	54.00	-7.65	48.89	-2.54	Average
4960.000	57.27	74.00	-16.73	59.81	-2.54	Peak
7440.000	53.58	54.00	-0.42	49.33	4.25	Average
7440.000	65.36	74.00	-8.64	61.11	4.25	Peak

EDR-3Mbps mode:

Low CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
2389.200	37.67	54.00	-16.33	47.38	-9.71	Average
2389.200	51.03	74.00	-22.97	60.74	-9.71	Peak
2402.200	88.49			98.17	-9.68	Average
2402.200	107.15			116.83	-9.68	Peak
4804.000	45.17	54.00	-8.83	48.29	-3.12	Average
4804.000	56.69	74.00	-17.31	59.81	-3.12	Peak
7206.000	50.67	54.00	-3.33	46.99	3.68	Average
7206.000	64.53	74.00	-9.47	60.85	3.68	Peak
9608.000	52.72	74.00	-21.28	46.15	6.57	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
2385.700	35.27	54.00	-18.73	45.00	-9.73	Average
2385.700	49.79	74.00	-24.21	59.52	-9.73	Peak
2402.100	78.38			88.06	-9.68	Average
2402.100	94.26			103.94	-9.68	Peak
3202.700	33.04	54.00	-20.96	40.19	-7.15	Average
3202.700	46.78	74.00	-27.22	53.93	-7.15	Peak
4804.000	44.68	54.00	-9.32	47.80	-3.12	Average
4804.000	56.60	74.00	-17.40	59.72	-3.12	Peak
7206.000	52.96	54.00	-1.04	49.28	3.68	Average
7206.000	66.40	74.00	-7.60	62.72	3.68	Peak

Middle CH

Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
2377.276	35.72	54.00	-18.28	45.47	-9.75	Average
2377.276	50.05	74.00	-23.95	59.80	-9.75	Peak
2441.164	88.90			98.46	-9.56	Average
2441.164	107.59			117.15	-9.56	Peak
2492.226	36.23	54.00	-17.77	45.63	-9.40	Average
2492.226	50.76	74.00	-23.24	60.16	-9.40	Peak
3254.700	32.40	54.00	-21.60	39.39	-6.99	Average
3254.700	44.24	74.00	-29.76	51.23	-6.99	Peak
4882.000	45.00	54.00	-9.00	47.85	-2.85	Average
4882.000	56.18	74.00	-17.82	59.03	-2.85	Peak
7323.000	51.90	54.00	-2.10	47.89	4.01	Average
7323.000	65.64	74.00	-8.36	61.63	4.01	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
2375.824	35.15	54.00	-18.85	44.90	-9.75	Average
2375.824	49.32	74.00	-24.68	59.07	-9.75	Peak
2441.164	77.54			87.10	-9.56	Average
2441.164	93.24			102.80	-9.56	Peak
2513.038	35.79	54.00	-18.21	45.10	-9.31	Average
2513.038	50.49	74.00	-23.51	59.80	-9.31	Peak
3254.700	37.74	54.00	-16.26	44.73	-6.99	Average
3254.700	49.00	74.00	-25.00	55.99	-6.99	Peak
4882.000	44.92	54.00	-9.08	47.77	-2.85	Average
4882.000	56.61	74.00	-17.39	59.46	-2.85	Peak
7323.000	53.15	54.00	-0.85	49.14	4.01	Average
7323.000	66.56	74.00	-7.44	62.55	4.01	Peak

High CH

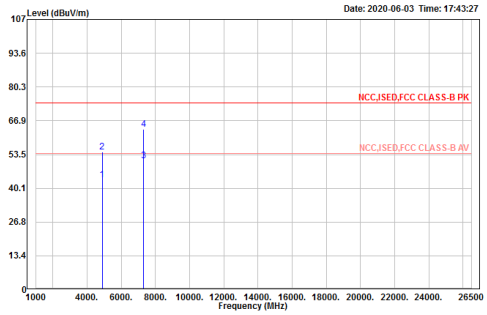
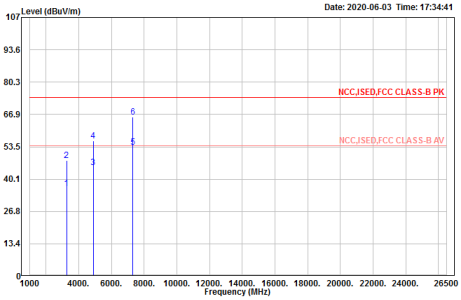
Horizontal

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
2480.004	90.67			100.10	-9.43	Average
2480.004	109.65			119.08	-9.43	Peak
2483.500	44.62	54.00	-9.38	54.04	-9.42	Average
2483.500	62.80	74.00	-11.20	72.22	-9.42	Peak
3306.700	36.70	54.00	-17.30	43.54	-6.84	Average
3306.700	46.64	74.00	-27.36	53.48	-6.84	Peak
4960.000	47.76	54.00	-6.24	50.30	-2.54	Average
4960.000	58.31	74.00	-15.69	60.85	-2.54	Peak
7440.000	49.77	54.00	-4.23	45.52	4.25	Average
7440.000	62.94	74.00	-11.06	58.69	4.25	Peak

Vertical

Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
2480.004	79.47			88.90	-9.43	Average
2480.004	95.30			104.73	-9.43	Peak
2483.500	37.34	54.00	-16.66	46.76	-9.42	Average
2483.500	51.39	74.00	-22.61	60.81	-9.42	Peak
3306.700	43.56	54.00	-10.44	50.40	-6.84	Average
3306.700	53.99	74.00	-20.01	60.83	-6.84	Peak
4960.000	46.44	54.00	-7.56	48.98	-2.54	Average
4960.000	57.14	74.00	-16.86	59.68	-2.54	Peak
7440.000	52.68	54.00	-1.32	48.43	4.25	Average
7440.000	65.57	74.00	-8.43	61.32	4.25	Peak

Above 1G (1 GHz-26.5 GHz): The worst mode: EDR-2Mbps Middle CH**.**

Horizontal	Vertical
	

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	4882.000	43.38	54.00	-10.62	46.23	-2.85	Average
2	4882.000	54.52	74.00	-19.48	57.37	-2.85	Peak
3	7323.000	51.11	54.00	-2.89	47.10	4.01	Average
4	7323.000	63.38	74.00	-10.62	59.37	4.01	Peak

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	3254.700	36.27	54.00	-17.73	43.26	-6.99	Average
2	3254.700	47.78	74.00	-26.22	54.77	-6.99	Peak
3	4882.000	44.93	54.00	-9.07	47.78	-2.85	Average
4	4882.000	55.98	74.00	-18.02	58.83	-2.85	Peak
5	7323.000	53.26	54.00	-0.74	49.25	4.01	Average
6	7323.000	65.88	74.00	-8.12	61.87	4.01	Peak

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

8 FCC §15.247(b)(1), RSS-247 Sec 5.1(b) and Sec 5.4(b)– Maximum Output Power

8.1 Applicable Standard

According to FCC §15.247(b) (1): For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.

According to RSS-247 Sec 5.1(b) and Sec 5.4(b):
FHSs shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, FHSs operating in the band 2400-2483.5 MHz may have hopping channel carrier frequencies that are separated by 25 kHz or two thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided that the systems operate with an output power no greater than 0.125 W.

For FHSs operating in the band 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1.0 W if the hopset uses 75 or more hopping channels; the maximum peak conducted output power shall not exceed 0.125 W if the hopset uses less than 75 hopping channels. The e.i.r.p. shall not exceed 4 W, except as provided in section 5.4(e).

8.2 Test Procedure

Place the EUT on a bench and set it in transmitting mode.
Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to Power sensor.

8.3 Test Equipment List and Details

Description	Manufacture	Model	Serial No.	Cal. Date.	Cal. Due.
Conducted Room(TH-02)					
USB Wideband Power Sensor	Agilent	U2021XA	MY56120026	2019/09/06	2020/09/05
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 Results

PIFA Antenna (MARS-31A8 WiFi Antenna)

Mode	CH	Freq. (MHz)	Peak Output Power		Ant Gain (dBi)	EIRP Peak Output Power		Limit (dBm)	EIRP Limit (dBm)
			(dBm)	(W)		(dBm)	(W)		
BR-1Mbps	Low	2402	14.92	0.0310	2.00	16.92	0.0492	21	36
	Middle	2440	15.48	0.0353	2.00	17.48	0.0560	21	36
	High	2480	17.83	0.0607	2.00	19.83	0.0962	21	36
EDR-2Mbps	Low	2402	17.55	0.0569	2.00	19.55	0.0902	21	36
	Middle	2440	18.17	0.0656	2.00	20.17	0.1040	21	36
	High	2480	20.61	0.1151	2.00	22.61	0.1824	21	36
EDR-3Mbps	Low	2402	18.64	0.0731	2.00	20.64	0.1159	21	36
	Middle	2440	19.03	0.0800	2.00	21.03	0.1268	21	36
	High	2480	20.66	0.1164	2.00	22.66	0.1845	21	36

Note1: Conducted Power Limit: 0.125W = 21 dBm, 4W = 36 dBm

Mode	CH	Freq. (MHz)	Average Output Power		Ant Gain (dBi)	EIRP Average Output Power		Limit (dBm)	EIRP Limit (dBm)
			(dBm)	(W)		(dBm)	(W)		
BR-1Mbps	Low	2402	13.47	0.0222	2.00	15.47	0.0352	21	36
	Middle	2440	14.03	0.0253	2.00	16.03	0.0401	21	36
	High	2480	16.35	0.0432	2.00	18.35	0.0684	21	36
EDR-2Mbps	Low	2402	14.01	0.0252	2.00	16.01	0.0399	21	36
	Middle	2440	14.70	0.0295	2.00	16.7	0.0468	21	36
	High	2480	17.32	0.0540	2.00	19.32	0.0855	21	36
EDR-3Mbps	Low	2402	14.71	0.0296	2.00	16.71	0.0469	21	36
	Middle	2440	15.07	0.0321	2.00	17.07	0.0509	21	36
	High	2480	17.46	0.0557	2.00	19.46	0.0883	21	36

Note1: Conducted Power Limit: 0.125W = 21 dBm, 4W = 36 dBm

Note2: Duty Cycle is 100% and Duty Factor is 0 dB

9 FCC §15.247(d) and RSS-247 Sec 5.5– 100 kHz Bandwidth of Frequency Band Edge

9.1 Applicable Standard

According to FCC §15.247(d), in any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emissions limits specified in §15.209(a) see §15.205(c)

According to RSS-247 Sec 5.5. In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under section 5.4(d), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

9.2 Test Procedure

Span = wide enough to capture the peak level of the emission operating on the channel closest to the band edge, as well as any modulation products which fall outside of the authorized band of operation.

RBW = 100 kHz VBW = 300 kHz.

Sweep = coupled. Detector function = peak Trace = max hold.

9.3 Test Equipment List and Details

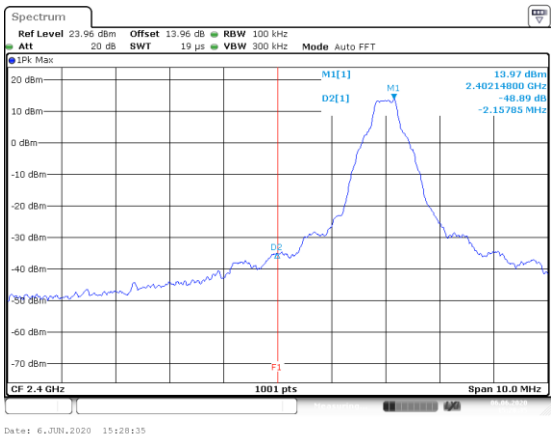
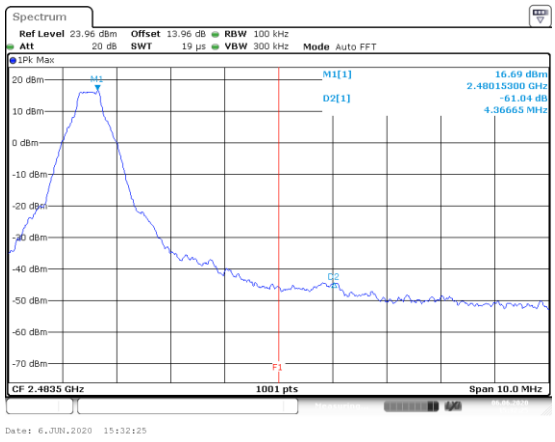
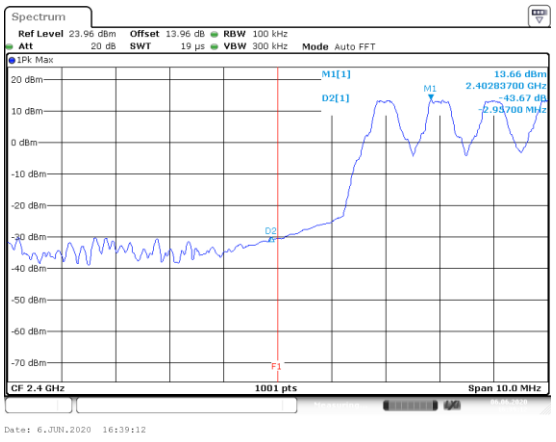
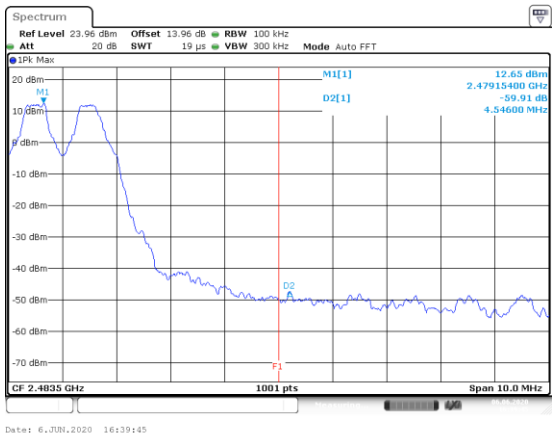
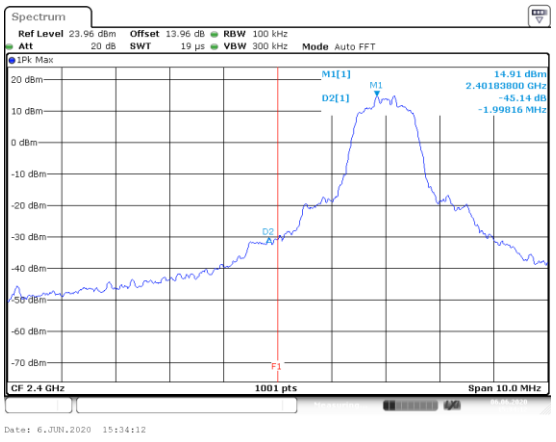
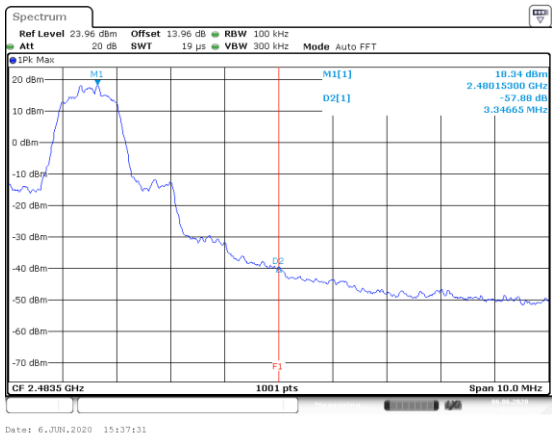
Description	Manufacture	Model	Serial No.	Cal. Date.	Cal. Due.
Conducted Room(TH-02)					
Signal Analyzer 40GHZ	Rohde & Schwarz	FSV40-N	102248	2019/09/11	2020/09/10
RF Cable	MTJ	MT40S	MT40S-001	Each Use	/

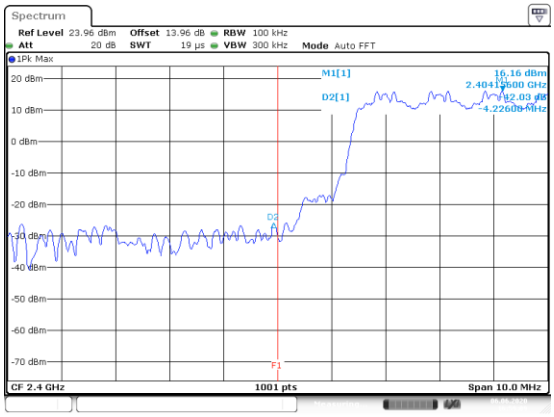
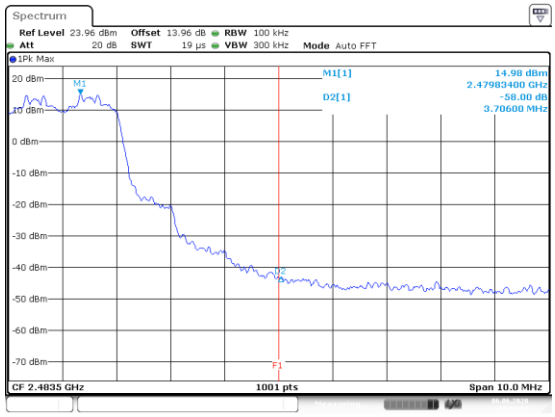
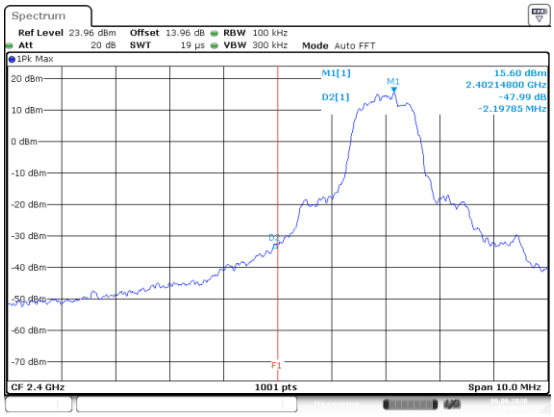
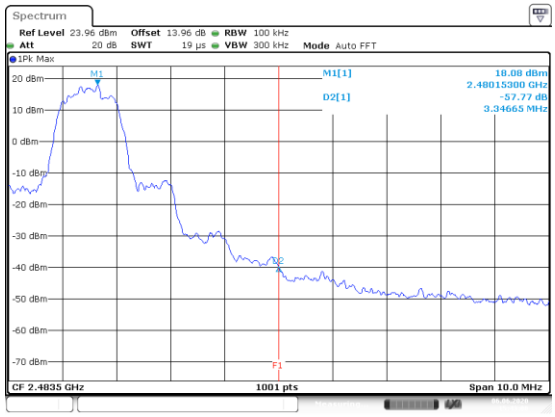
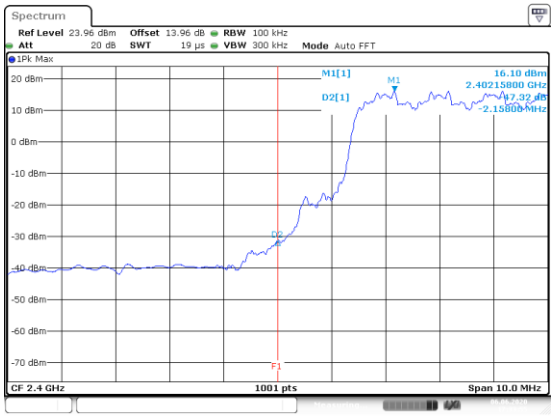
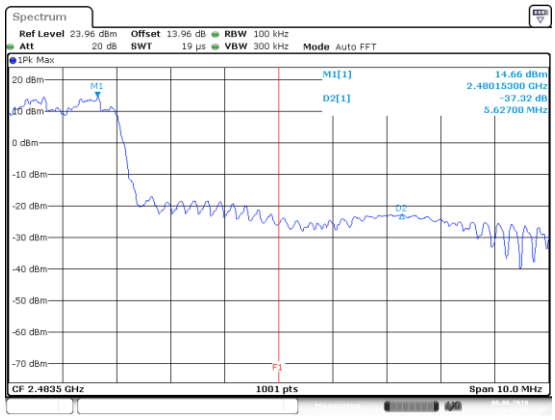
***Statement of Traceability:** The testing equipment's listed above have finished the calibration by Electronics Testing Center, Taiwan (ETC) or other laboratories which were accredited by TAF or equivalent organizations. The calibration result could be traceable to the International System of Units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

9.4 Test Results

PIFA Antenna (MARS-31A8 WiFi Antenna)

Channel	Frequency (MHz)	Delta Peak to Band Emission (dBc)	Limit (dBc)	Result
BR-1Mbps mode				
Low	2402	48.89	≥ 20	Compliance
High	2480	61.04	≥ 20	Compliance
BR-1Mbps Hopping mode				
Low	2402	43.67	≥ 20	Compliance
High	2480	59.91	≥ 20	Compliance
EDR-2Mbps mode				
Low	2402	45.14	≥ 20	Compliance
High	2480	57.88	≥ 20	Compliance
EDR-2Mbps Hopping mode				
Low	2402	42.03	≥ 20	Compliance
High	2480	58.00	≥ 20	Compliance
EDR-3Mbps mode				
Low	2402	47.99	≥ 20	Compliance
High	2480	57.77	≥ 20	Compliance
EDR-3Mbps Hopping mode				
Low	2402	47.32	≥ 20	Compliance
High	2480	37.32	≥ 20	Compliance

BR-1Mbps Left Side	BR-1Mbps Right Side
	
BR-1Mbps Hopping Left Side	**BR-1Mbps Hopping Right Side**
	
EDR-2Mbps Left Side	**EDR-2Mbps Right Side**
	

EDR-2Mbps Hopping Left Side	EDR-2Mbps Hopping Right Side
	
EDR-3Mbps Left Side	**EDR-3Mbps Right Side**
	
EDR-3Mbps Hopping Left Side	**EDR-3Mbps Hopping Right Side**
	

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