



## FCC Part 15.247

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

### TEST REPORT

For

### Silicon Labs

9th Floor, Maximus Towers 2B, Raheja Mindspace IT Park, APIIC Software Layout, Madhapur, Hyderabad,  
Telangana, India - 500 081

|   |                                  |
|---|----------------------------------|
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| <b>IC Identity:</b>   | IC: 8407A-B001P4V2P1             |
| <b>Product Name:</b>  | WiFi bgn, BT5.0 SIP Module       |
| <b>Model Name:</b>  | RS9116-B0014                     |
| <b>Report Number:</b>   | RLK201108002-00B                 |
| <b>Report Date:</b>   | 2021/01/16                       |
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**Note:** This test report is prepared for the customer shown above and for the device described herein.  
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## Revision History

| Revision | Report Number    | Issue Date | Description     |
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## 1 General Information

### 1.1 Product Description for Equipment under Test (EUT)

|  |  |
|--|--|
| <b>Applicant</b>                       | <b>Silicon Labs</b><br>9th Floor, Maximus Towers 2B, Raheja Mindspace IT Park, APIIC Software Layout, Madhapur, Hyderabad, Telangana, India - 500 081  |
| <b>Manufacturer</b>                    | <b>Silicon Labs</b><br>9th Floor, Maximus Towers 2B, Raheja Mindspace IT Park, APIIC Software Layout, Madhapur, Hyderabad, Telangana, India - 500 081  |
| <b>Brand Name</b>                      | Silicon Labs   |
| <b>Product (Equipment)</b>             | WiFi bgn, BT5.0 SIP Module   |
| <b>Model Name</b>                      | RS9116-B0014   |
| <b>Frequency Range</b>                 | 2402 - 2480 MHz  |
| <b>Number of Channels</b>              | 79 Channels  |
| <b>Output Power</b>                    | <p><b>Chip Antenna (FR05-S1-N-0-102) with 1.8Vdc</b><br/> BR-1Mbps: 17.20 dBm (0.0525 W)<br/> EDR-2Mbps: 17.77 dBm (0.0598 W)<br/> EDR-3Mbps: 17.94 dBm (0.0622 W)</p> <p><b>Chip Antenna (FR05-S1-N-0-102) with 3.3Vdc</b><br/> BR-1Mbps: 20.77 dBm (0.1194 W)<br/> EDR-2Mbps: 20.73 dBm (0.1183 W)<br/> EDR-3Mbps: 20.79 dBm (0.1199 W)</p> <p><b>Dipole Antenna (GW.34.5153) with 1.8Vdc</b><br/> BR-1Mbps: 16.72 dBm (0.0470 W)<br/> EDR-2Mbps: 17.33 dBm (0.0541 W)<br/> EDR-3Mbps: 17.53 dBm (0.0566 W)</p> <p><b>Dipole Antenna (GW.34.5153) with 3.3Vdc</b><br/> BR-1Mbps: 19.10dBm (0.0813 W)<br/> EDR-2Mbps: 20.65 dBm (0.1161 W)<br/> EDR-3Mbps: 20.78 dBm (0.1197 W)</p> |
| <b>Power Operation (Voltage Range)</b> | <input checked="" type="checkbox"/> DC Type<br><input checked="" type="checkbox"/> From Host System: 1.8Vdc/3.3Vdc   |
| <b>Modulation Type</b>                 | BR-1Mbps: GFSK; EDR-2Mbps: $\pi/4$ -DQPSK; EDR-3Mbps: 8-DPSK   |
| <b>Related Submittal(s)/Grant(s)</b>   | FCC Part 15.247 DSS with FCC ID: XF6-B001P4V2P1<br>FCC Part 15.247 DTS with FCC ID: XF6-B001P4V2P1   |
| <b>Received Date</b>                   | 2020/11/13   |
| <b>Date of Test</b>                    | 2020/11/27 - 2020/12/10  |

\*All measurement and test data in this report was gathered from production sample serial number: 201108002. Assigned by Bay Area Compliance Laboratories Corp. (Linkou Laboratory)

## 1.2 Objective and Test Methodology

The Objective of this Test Report was to document the compliance of the Silicon Labs. Appliance (Model: RS9116-B0014) 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 the 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

## 1.3 Measurement Uncertainty

| Parameter                        | Expanded Measurement uncertainty |
|----------------------------------|----------------------------------|
| RF output power with Power Meter | $\pm 1.488$ dB                   |
| Occupied Channel Bandwidth       | $\pm 453.927$ Hz                 |
| RF Conducted test with Spectrum  | $\pm 2.77$ dB                    |
| AC Power Line Conducted Emission | $\pm 2.66$ dB                    |
| Radiated Below 1G                | $\pm 3.57$ dB                    |
| Radiated Above 1G                | $\pm 5.32$ 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.

## 1.4 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.

For Radiated Emission, Conducted Power, Conducted Band Edge had test for four antenna because the power setting is different, the result will be different. For Bandwidth, Conducted Emission, Separation, Dwell Time, Hopping Channel Test only test one result that because the power not affect the result

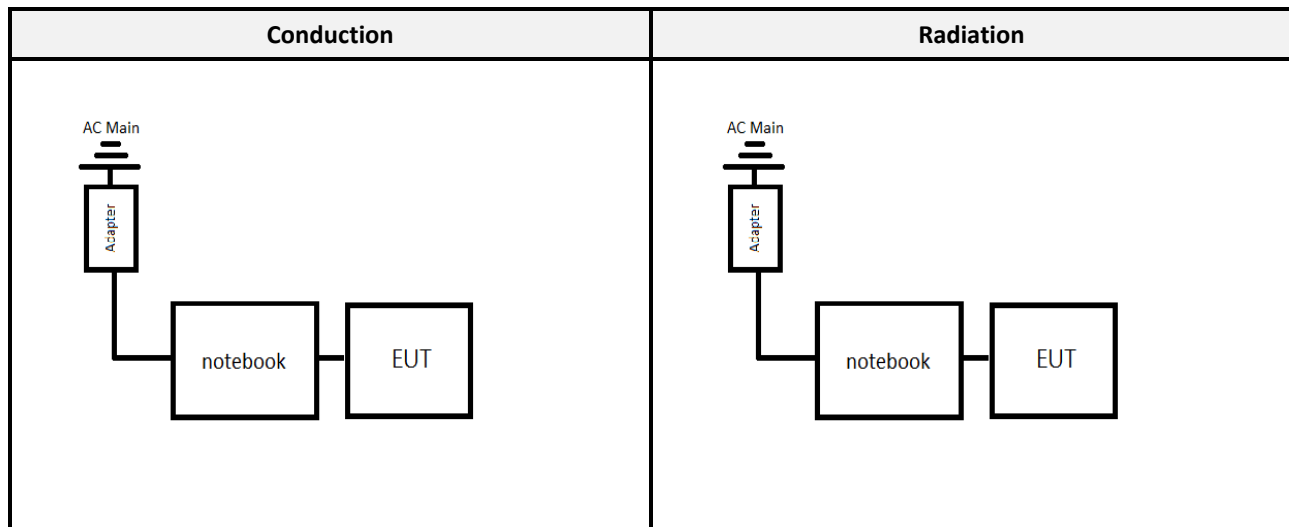
| Worst Case of Power Setting |                 |              |        |         |
|-----------------------------|-----------------|--------------|--------|---------|
| EUT Exercise Software       |                 | PER Test App |        |         |
| Configuration               | N <sub>TX</sub> | Low CH       | Mid CH | High CH |
| Chip 1.8V BR-1Mbps          | 1               | 22           | 22     | 22      |
| Chip 1.8V EDR-2Mbps         | 1               | 22           | 22     | 16      |
| Chip 1.8V EDR-3Mbps         | 1               | 22           | 22     | 14      |
| Chip 3.3V BR-1Mbps          | 1               | 20           | 20     | 22      |
| Chip 3.3V EDR-2Mbps         | 1               | 17           | 18     | 18      |
| Chip 3.3V EDR-3Mbps         | 1               | 16           | 17     | 17      |
| Dipole 1.8V BR-1Mbps        | 1               | 22           | 22     | 22      |
| Dipole 1.8V EDR-2Mbps       | 1               | 22           | 22     | 16      |
| Dipole 1.8V EDR-3Mbps       | 1               | 22           | 22     | 15      |
| Dipole 3.3V BR-1Mbps        | 1               | 20           | 20     | 21      |
| Dipole 3.3V EDR-2Mbps       | 1               | 17           | 18     | 18      |
| Dipole 3.3V EDR-3Mbps       | 1               | 16           | 17     | 17      |

## 2.2 Support Equipment List and Details

| No. | Description | Manufacturer | Model Number   | Serial Number |
|-----|-------------|--------------|----------------|---------------|
| A   | NoteBook    | DELL         | Latitude E6410 | PP27LA001     |

| No. | Description | Manufacturer                 | Model Number |
|-----|-------------|------------------------------|--------------|
| 1   | USB Cable   | Tensility International Corp | 10-02331     |

## 2.3 Block Diagram of Test Setup



## 2.4 Environmental Conditions and Test Date

| Test Site           | Test Date               | Temperature (°C) | Relative Humidity (% RH) | Test Engineer |
|---------------------|-------------------------|------------------|--------------------------|---------------|
| Conduction (Con-01) | 2020/12/09              | 24.6             | 58                       | Rui Zhan      |
| Radiated (966A)     | 2020/11/27 - 2020/12/10 | 19.5 - 21.5      | 55 - 61                  | Leo Cheng     |
| Conducted (TH-02)   | 2020/12/04 - 2020/12/10 | 22.5 - 23.2      | 57 - 60                  | Rui Zhan      |



### 3 Summary of Test Results

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

## 4 FCC§15.247(i), §1.1310, § 2.1091 – Maximum Permissible Exposure (MPE)

### 4.1 Applicable Standard

According to FCC §2.1093 and §1.1307(b) (1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

According to KDB 447498 D01 General RF Exposure Guidance v06

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot$

$[\sqrt{f(\text{GHz})}] \leq 3.0$  for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR, where

1.  $f(\text{GHz})$  is the RF channel transmit frequency in GHz.
2. Power and distance are rounded to the nearest mW and mm before calculation.
3. The result is rounded to one decimal place for comparison.
4. 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  mm, and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is  $< 5$  mm, a distance of 5 mm according to 4.1 f) is applied to determine SAR test exclusion.

### 4.2 RF Exposure Evaluation Result

#### MPE Evaluation:

| Mode       | Frequency Range (MHz) | Antenna Gain |           | Target Power |          | Evaluation Distance (cm) | Power Density (mW/cm <sup>2</sup> ) | MPE Limit (mW/cm <sup>2</sup> ) |
|------------|-----------------------|--------------|-----------|--------------|----------|--------------------------|-------------------------------------|---------------------------------|
|            |                       | (dBi)        | (numeric) | (dBm)        | (mW)     |                          |                                     |                                 |
| BLE        | 2402-2480             | 5.89         | 3.8815    | 22.00        | 158.4893 | 20                       | 0.1224                              | 1.0                             |
| BR/EDR     | 2402-2480             | 5.89         | 3.8815    | 21.00        | 125.8925 | 20                       | 0.0973                              | 1.0                             |
| Wi-Fi 2.4G | 2412-2462             | 5.89         | 3.8815    | 23.00        | 199.5262 | 20                       | 0.1542                              | 1.0                             |

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

**Result:** MPE evaluation of single and simultaneous transmission meet the requirement of standard.

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

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### 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<sup>6</sup> 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 22.00 dBm (158.4893 mW) at 2402 MHz, Antenna Gain = 5.89 dBi, EIRP = 27.89 dBm (0.6152 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 = 5.89 dBi, EIRP = 26.89 dBm (0.4887 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 23.00 dBm (199.5262 mW) at 2437 MHz, Antenna Gain = 5.89 dBi, EIRP = 28.89 dBm (0.7745 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.

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

**Result:** MPE evaluation of single and simultaneous transmission meet the requirement of standard.

## 6 FCC §15.203 – 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. Footnote 8 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 | Result     |
|---------|-----------------|--------------|--------------|------------|
| Fractus | FR05-S1-N-0-102 | Chip         | 1.70 dBi     | Compliance |
| TAOGLAS | GW.34.5153      | Dipole       | 5.89 dBi     | Compliance |

The EUT have an internal and external antennas arrangement and fulfill the requirement of this section.

## 7 FCC §15.207 and RSS-Gen Sec 8.8 - 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  $\mu$ H/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.

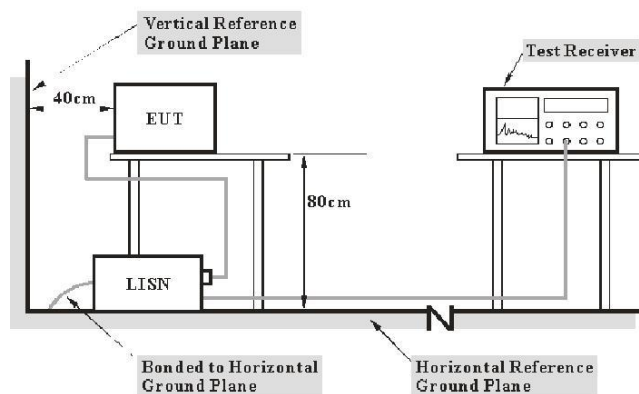
According to RSS-Gen 8.8 Conducted limits:

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  $\mu$ H/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 <sup>Note 1</sup> | 56 to 46 <sup>Note 2</sup> |
| 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        |

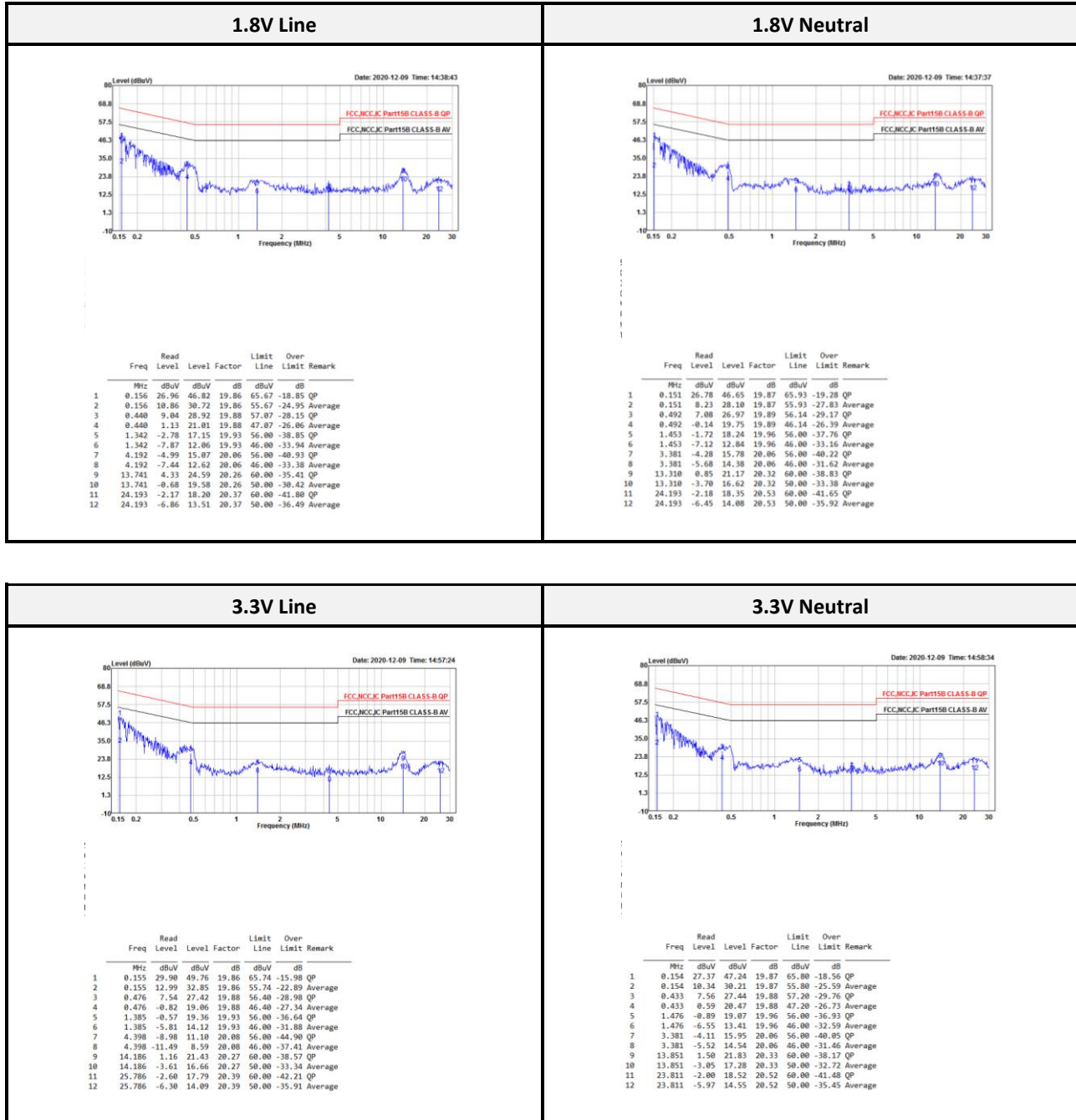
During the conducted emission test, the adapter was connected to the outlet of the LISN. Maximizing procedure was performed on the six (6) highest emissions of the EUT. All data was recorded in the Quasi-peak and average detection mode.

### 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     | 2020/09/14 | 2021/09/13 |
| Pulse Limiter                    | SCHWARZBECK     | VSTD 9561-F          | 00432      | 2020/09/11 | 2021/09/10 |
| ESR EMI Test Receiver            | Rohde & Schwarz | ESR3                 | 102430     | 2020/05/07 | 2021/05/06 |
| RF Cable                         | EMCI            | EMCCFD300-BM-BM-8000 | 180526     | 2020/08/18 | 2021/08/17 |
| 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



Note:

Level = Read Level + Factor

Over Limit (Margin) = Level – Limit Line

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



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

### 8.1 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**

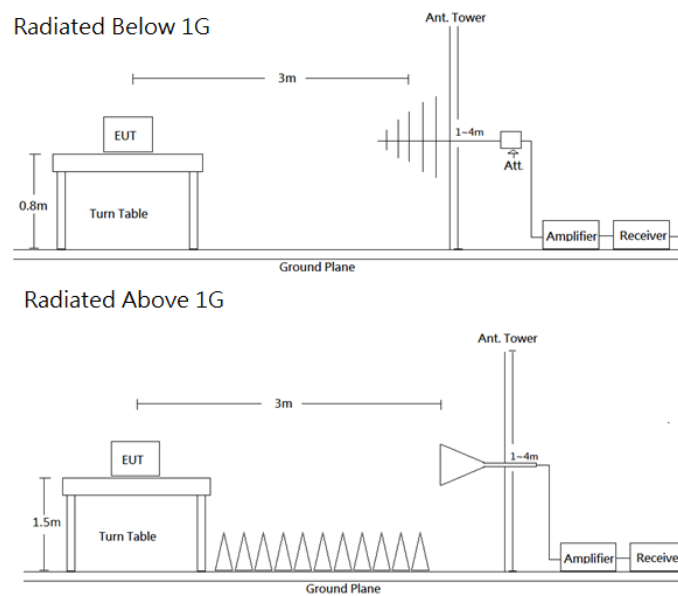
| <b>Frequency<br/>(MHz)</b> | <b>Field Strength<br/>(<math>\mu\text{V/m}</math> at 3 metres)</b> |
|----------------------------|--|
| 30-88                      | 100  |
| 88-216                     | 150  |
| 216-960                    | 200  |
| Above 960*                 | 500  |

\* 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.

## 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 15.247 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.

### 8.3 Test Equipment List and Details

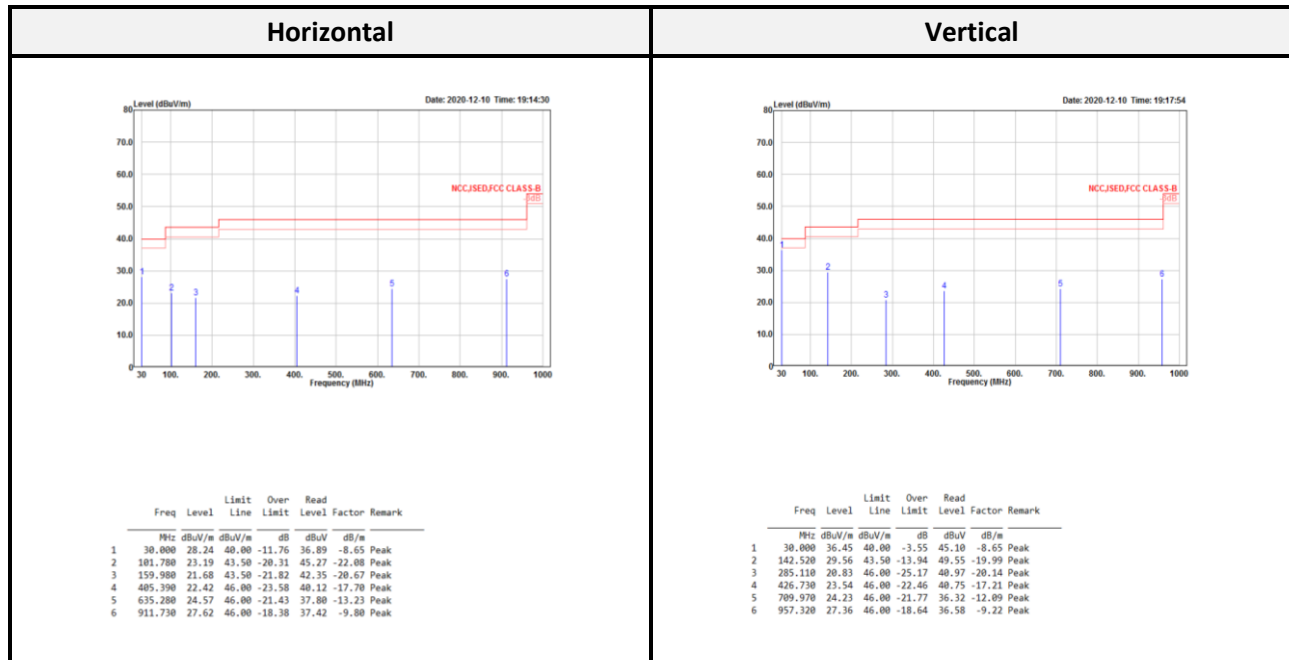
| Description                     | Manufacture                 | Model                 | Serial No.           | Cal. Date. | Cal. Due.  |
|---------------------------------|-----------------------------|-----------------------|----------------------|------------|------------|
| <b>Radiation 3M Room (966B)</b> |                             |                       |                      |            |            |
| 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 |
| Signal and Spectrum Analyzer    | Rohde & Schwarz             | FSV40                 | 101434               | 2020/05/07 | 2021/05/06 |
| Horn Antenna                    | ETS-Lindgren                | 3115                  | 00109141             | 2020/07/15 | 2021/07/14 |
| Horn Antenna                    | ETS-Lindgren                | 3160-09               | 00123852             | 2020/07/07 | 2021/07/06 |
| Preamplifier                    | A.H. Systems                | PAM-1840VH            | 174                  | 2020/03/25 | 2021/03/24 |
| Preamplifier                    | A.H. Systems                | PAM-0118              | 478                  | 2020/05/05 | 2021/05/04 |
| Microflex Cable (1m)            | EMCI                        | EMC102-KM-KM-1000     | 180524               | 2020/08/06 | 2021/08/05 |
| Microflex Cable (2m)            | EMCI                        | EMC106-SM-SM-2000     | 180516               | 2020/08/06 | 2021/08/05 |
| Microflex Cable (8m)            | UTIFLEX                     | UFA210A-1-3149-300300 | MFR 64639 232490-002 | 2020/08/06 | 2021/08/05 |
| 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      |
| <b>Conducted Room (TH-02)</b>   |                             |                       |                      |            |            |
| Spectrum Analyzer               | Rohde & Schwarz             | FSU26                 | 100406               | 2020/03/11 | 2021/03/10 |
| Cable                           | MTJ                         | MT40S                 | 620620-MT40S-100     | 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 Radiated Emission Test Plot and Data

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

**Below 1G (30 MHz-1 GHz)**



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)**

## **<Chip Antenna (FR05-S1-N-0-102) with 1.8V<sub>dc</sub>>**

| BR-1Mbps Horizontal Low CH |        |            |            |            |        |         |  | BR-1Mbps Vertical Low CH |        |            |            |            |        |         |  |
|----------------------------|--------|------------|------------|------------|--------|---------|--|--------------------------|--------|------------|------------|------------|--------|---------|--|
| Freq                       | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |  | Freq                     | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |  |
| MHz                        | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |  | MHz                      | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |  |
| 1 ! 2389.800               | 47.03  | 54.00      | -6.97      | 54.79      | -7.76  | Average |  | 1 ! 2388.900             | 38.03  | 54.00      | -15.97     | 45.79      | -7.76  | Average |  |
| 2 ! 2389.800               | 58.90  | 74.00      | -15.10     | 66.66      | -7.76  | Peak    |  | 2 ! 2388.900             | 53.56  | 74.00      | -20.44     | 61.32      | -7.76  | Peak    |  |
| 3 * 2402.200               | 99.62  |            |            | 107.35     | -7.73  | Average |  | 3 * 2402.200             | 92.29  |            |            | 100.02     | -7.73  | Average |  |
| 4 * 2402.200               | 117.90 |            |            | 125.63     | -7.73  | Peak    |  | 4 * 2402.200             | 110.12 |            |            | 117.85     | -7.73  | Peak    |  |
| 1 ! 3202.700               | 46.57  | 54.00      | -7.43      | 52.09      | -5.52  | Average |  | 1 ! 3202.700             | 41.17  | 54.00      | -12.83     | 46.69      | -5.52  | Average |  |
| 2 ! 3202.700               | 50.08  | 74.00      | -23.92     | 55.60      | -5.52  | Peak    |  | 2 ! 3202.700             | 43.68  | 74.00      | -30.32     | 49.20      | -5.52  | Peak    |  |
| 3 ! 4804.000               | 38.42  | 54.00      | -15.58     | 40.10      | -1.68  | Average |  | 3 ! 4804.000             | 41.60  | 54.00      | -12.40     | 43.28      | -1.68  | Average |  |
| 4 ! 4804.000               | 47.17  | 74.00      | -26.83     | 48.85      | -1.68  | Peak    |  | 4 ! 4804.000             | 50.08  | 74.00      | -23.92     | 51.76      | -1.68  | Peak    |  |
| 5 ! 7206.000               | 47.35  | 54.00      | -6.65      | 41.52      | 5.83   | Average |  | 5 ! 7206.000             | 48.02  | 54.00      | -5.98      | 42.19      | 5.83   | Average |  |
| 6 ! 7206.000               | 57.14  | 74.00      | -16.86     | 51.31      | 5.83   | Peak    |  | 6 ! 7206.000             | 57.97  | 74.00      | -16.03     | 52.14      | 5.83   | Peak    |  |

| BR-1Mbps Horizontal Middle CH |        |            |            |            |        |         |  | BR-1Mbps Vertical Middle CH |        |            |            |            |        |         |  |
|-------------------------------|--------|------------|------------|------------|--------|---------|--|-----------------------------|--------|------------|------------|------------|--------|---------|--|
| Freq                          | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |  | Freq                        | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |  |
| MHz                           | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |  | MHz                         | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |  |
| 1 ! 2388.892                  | 49.41  | 54.00      | -4.59      | 57.17      | -7.76  | Average |  | 1 ! 2388.664                | 37.08  | 54.00      | -16.92     | 44.87      | -7.79  | Average |  |
| 2 ! 2388.892                  | 56.02  | 74.00      | -17.98     | 63.78      | -7.76  | Peak    |  | 2 ! 2388.664                | 51.27  | 74.00      | -22.73     | 59.06      | -7.79  | Peak    |  |
| 3 * 2441.164                  | 109.61 |            |            | 117.26     | -7.65  | Average |  | 3 * 2441.164                | 103.09 |            |            | 110.74     | -7.65  | Average |  |
| 4 * 2441.164                  | 116.90 |            |            | 124.55     | -7.65  | Peak    |  | 4 * 2441.164                | 109.86 |            |            | 117.51     | -7.65  | Peak    |  |
| 5 ! 2495.614                  | 38.08  | 54.00      | -15.92     | 45.66      | -7.58  | Average |  | 5 ! 2533.366                | 37.44  | 54.00      | -16.56     | 44.89      | -7.45  | Average |  |
| 6 ! 2495.614                  | 55.71  | 74.00      | -18.29     | 63.29      | -7.58  | Peak    |  | 6 ! 2533.366                | 51.99  | 74.00      | -22.01     | 59.44      | -7.45  | Peak    |  |
| 1 ! 3254.700                  | 47.27  | 54.00      | -6.73      | 52.62      | -5.35  | Average |  | 1 ! 3254.700                | 44.37  | 54.00      | -9.63      | 49.72      | -5.35  | Average |  |
| 2 ! 3254.700                  | 50.07  | 74.00      | -23.93     | 55.42      | -5.35  | Peak    |  | 2 ! 3254.700                | 47.73  | 74.00      | -26.27     | 53.08      | -5.35  | Peak    |  |
| 3 ! 4882.000                  | 40.02  | 54.00      | -13.98     | 41.54      | -1.52  | Average |  | 3 ! 4882.000                | 44.91  | 54.00      | -9.09      | 46.43      | -1.52  | Average |  |
| 4 ! 4882.000                  | 48.79  | 74.00      | -25.21     | 50.31      | -1.52  | Peak    |  | 4 ! 4882.000                | 53.59  | 74.00      | -20.41     | 55.11      | -1.52  | Peak    |  |
| 5 ! 7323.000                  | 48.39  | 54.00      | -5.61      | 43.09      | 5.30   | Average |  | 5 ! 7323.000                | 48.93  | 54.00      | -5.07      | 43.63      | 5.30   | Average |  |
| 6 ! 7323.000                  | 58.25  | 74.00      | -15.75     | 52.95      | 5.30   | Peak    |  | 6 ! 7323.000                | 58.59  | 74.00      | -15.41     | 53.29      | 5.30   | Peak    |  |

| BR-1Mbps Horizontal High CH |        |            |            |            |        |         |  | BR-1Mbps Vertical High CH |        |            |            |            |        |         |  |
|-----------------------------|--------|------------|------------|------------|--------|---------|--|---------------------------|--------|------------|------------|------------|--------|---------|--|
| Freq                        | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |  | Freq                      | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |  |
| MHz                         | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |  | MHz                       | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |  |
| 1 * 2480.168                | 97.40  |            |            | 105.00     | -7.60  | Average |  | 1 * 2480.168              | 91.50  |            |            | 99.10      | -7.60  | Average |  |
| 2 * 2480.168                | 114.96 |            |            | 122.56     | -7.60  | Peak    |  | 2 * 2480.168              | 107.57 |            |            | 115.17     | -7.60  | Peak    |  |
| 3 ! 2483.530                | 47.80  | 54.00      | -6.20      | 55.39      | -7.59  | Average |  | 3 ! 2483.694              | 40.50  | 54.00      | -13.50     | 48.09      | -7.59  | Average |  |
| 4 ! 2483.530                | 67.30  | 74.00      | -6.70      | 74.89      | -7.59  | Peak    |  | 4 ! 2483.694              | 60.11  | 74.00      | -13.89     | 67.70      | -7.59  | Peak    |  |
| 1 ! 3306.700                | 47.74  | 54.00      | -6.26      | 52.97      | -5.23  | Average |  | 1 ! 3306.700              | 44.57  | 54.00      | -9.43      | 49.80      | -5.23  | Average |  |
| 2 ! 3306.700                | 49.97  | 74.00      | -24.03     | 55.20      | -5.23  | Peak    |  | 2 ! 3306.700              | 46.80  | 74.00      | -27.20     | 52.03      | -5.23  | Peak    |  |
| 3 ! 4960.000                | 42.06  | 54.00      | -11.94     | 43.40      | -1.34  | Average |  | 3 ! 4960.000              | 47.20  | 54.00      | -6.80      | 48.54      | -1.34  | Average |  |
| 4 ! 4960.000                | 50.56  | 74.00      | -23.44     | 51.90      | -1.34  | Peak    |  | 4 ! 4960.000              | 55.50  | 74.00      | -18.50     | 56.84      | -1.34  | Peak    |  |
| 5 ! 7440.000                | 46.59  | 54.00      | -7.41      | 40.95      | 5.64   | Average |  | 5 ! 7440.000              | 50.06  | 54.00      | -3.94      | 44.42      | 5.64   | Average |  |
| 6 ! 7440.000                | 56.27  | 74.00      | -17.73     | 50.63      | 5.64   | Peak    |  | 6 ! 7440.000              | 59.78  | 74.00      | -14.22     | 54.14      | 5.64   | Peak    |  |

| EDR-2Mbps Horizontal Low CH |          |        |               |               |               |        |         | EDR-2Mbps Vertical Low CH |          |        |               |               |               |        |         |
|-----------------------------|----------|--------|---------------|---------------|---------------|--------|---------|---------------------------|----------|--------|---------------|---------------|---------------|--------|---------|
|                             | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |                           | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |
|                             | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |                           | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |
| 1 !                         | 2390.000 | 45.05  | 54.00         | -8.95         | 52.81         | -7.76  | Average | 1 !                       | 2386.200 | 40.10  | 54.00         | -13.90        | 47.87         | -7.77  | Average |
| 2 !                         | 2390.000 | 59.80  | 74.00         | -14.20        | 67.56         | -7.76  | Peak    | 2                         | 2386.200 | 53.21  | 74.00         | -20.79        | 60.98         | -7.77  | Peak    |
| 3 *                         | 2402.300 | 97.45  |               |               | 105.18        | -7.73  | Average | 3 *                       | 2401.900 | 91.58  |               |               | 99.31         | -7.73  | Average |
| 4 *                         | 2402.300 | 117.10 |               |               | 124.83        | -7.73  | Peak    | 4 *                       | 2401.900 | 109.68 |               |               | 117.41        | -7.73  | Peak    |
| 1 !                         | 3202.700 | 45.29  | 54.00         | -8.71         | 50.81         | -5.52  | Average | 1 !                       | 3202.700 | 43.01  | 54.00         | -10.99        | 48.53         | -5.52  | Average |
| 2                           | 3202.700 | 47.70  | 74.00         | -26.30        | 53.22         | -5.52  | Peak    | 2                         | 3202.700 | 44.95  | 74.00         | -29.05        | 50.47         | -5.52  | Peak    |
| 3 !                         | 4804.000 | 34.42  | 54.00         | -19.58        | 36.10         | -1.68  | Average | 3 !                       | 4804.000 | 35.97  | 54.00         | -18.03        | 37.65         | -1.68  | Average |
| 4                           | 4804.000 | 45.83  | 74.00         | -28.17        | 47.51         | -1.68  | Peak    | 4                         | 4804.000 | 47.02  | 74.00         | -26.98        | 48.70         | -1.68  | Peak    |
| 5 !                         | 7206.000 | 42.45  | 54.00         | -11.55        | 36.62         | 5.83   | Average | 5 !                       | 7206.000 | 42.82  | 54.00         | -11.18        | 36.99         | 5.83   | Average |
| 6 !                         | 7206.000 | 54.32  | 74.00         | -19.68        | 48.49         | 5.83   | Peak    | 6 !                       | 7206.000 | 54.23  | 74.00         | -19.77        | 48.40         | 5.83   | Peak    |

| EDR-2Mbps Horizontal Middle CH |          |        |               |               |               |        |         | EDR-2Mbps Vertical Middle CH |          |        |               |               |               |        |         |
|--------------------------------|----------|--------|---------------|---------------|---------------|--------|---------|------------------------------|----------|--------|---------------|---------------|---------------|--------|---------|
|                                | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |                              | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |
|                                | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |                              | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |
| 1 !                            | 2385.504 | 40.43  | 54.00         | -13.57        | 48.20         | -7.77  | Average | 1 !                          | 2379.454 | 37.43  | 54.00         | -16.57        | 45.23         | -7.80  | Average |
| 2 !                            | 2385.504 | 58.46  | 74.00         | -15.54        | 66.23         | -7.77  | Peak    | 2                            | 2379.454 | 51.15  | 74.00         | -22.85        | 58.95         | -7.80  | Peak    |
| 3 *                            | 2441.164 | 97.11  |               |               | 104.76        | -7.65  | Average | 3 *                          | 2441.406 | 91.21  |               |               | 98.86         | -7.65  | Average |
| 4 *                            | 2441.164 | 116.52 |               |               | 124.17        | -7.65  | Peak    | 4 *                          | 2441.406 | 109.15 |               |               | 116.80        | -7.65  | Peak    |
| 5 !                            | 2483.514 | 40.26  | 54.00         | -13.74        | 47.85         | -7.59  | Average | 5 !                          | 2494.404 | 37.85  | 54.00         | -16.15        | 45.43         | -7.58  | Average |
| 6 !                            | 2483.514 | 58.08  | 74.00         | -15.92        | 65.67         | -7.59  | Peak    | 6                            | 2494.404 | 52.20  | 74.00         | -21.80        | 59.78         | -7.58  | Peak    |
| 1 !                            | 3254.700 | 47.28  | 54.00         | -6.72         | 52.63         | -5.35  | Average | 1 !                          | 3254.700 | 44.17  | 54.00         | -9.83         | 49.52         | -5.35  | Average |
| 2                              | 3254.700 | 49.64  | 74.00         | -24.36        | 54.99         | -5.35  | Peak    | 2                            | 3254.700 | 46.91  | 74.00         | -27.09        | 52.26         | -5.35  | Peak    |
| 3 !                            | 4882.000 | 36.88  | 54.00         | -17.12        | 38.40         | -1.52  | Average | 3 !                          | 4882.000 | 40.34  | 54.00         | -13.66        | 41.86         | -1.52  | Average |
| 4                              | 4882.000 | 47.78  | 74.00         | -26.22        | 49.30         | -1.52  | Peak    | 4                            | 4882.000 | 50.46  | 74.00         | -23.54        | 51.98         | -1.52  | Peak    |
| 5 !                            | 7323.000 | 44.39  | 54.00         | -9.61         | 39.09         | 5.30   | Average | 5 !                          | 7323.000 | 45.04  | 54.00         | -8.96         | 39.74         | 5.30   | Average |
| 6 !                            | 7323.000 | 54.92  | 74.00         | -19.08        | 49.62         | 5.30   | Peak    | 6 !                          | 7323.000 | 55.67  | 74.00         | -18.33        | 50.37         | 5.30   | Peak    |

| EDR-2Mbps Horizontal High CH |          |        |               |               |               |        |         | EDR-2Mbps Vertical High CH |          |        |               |               |               |        |         |
|------------------------------|----------|--------|---------------|---------------|---------------|--------|---------|----------------------------|----------|--------|---------------|---------------|---------------|--------|---------|
|                              | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |                            | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |
|                              | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |                            | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |
| 1 *                          | 2480.168 | 96.00  |               |               | 103.60        | -7.60  | Average | 1 *                        | 2479.922 | 89.89  |               |               | 97.49         | -7.60  | Average |
| 2 *                          | 2480.168 | 114.91 |               |               | 122.51        | -7.60  | Peak    | 2 *                        | 2479.922 | 107.16 |               |               | 114.76        | -7.60  | Peak    |
| 3 !                          | 2483.530 | 50.64  | 54.00         | -3.36         | 58.23         | -7.59  | Average | 3 !                        | 2483.530 | 44.62  | 54.00         | -9.38         | 52.21         | -7.59  | Average |
| 4 !                          | 2483.530 | 73.12  | 74.00         | -0.88         | 80.71         | -7.59  | Peak    | 4 !                        | 2483.530 | 64.24  | 74.00         | -9.76         | 71.83         | -7.59  | Peak    |
| 1 !                          | 3306.700 | 47.23  | 54.00         | -6.77         | 52.46         | -5.23  | Average | 1 !                        | 3306.700 | 43.36  | 54.00         | -10.64        | 48.59         | -5.23  | Average |
| 2                            | 3306.700 | 50.46  | 74.00         | -23.54        | 55.69         | -5.23  | Peak    | 2                          | 3306.700 | 45.98  | 74.00         | -28.02        | 51.21         | -5.23  | Peak    |
| 3 !                          | 4960.000 | 39.49  | 54.00         | -14.51        | 40.83         | -1.34  | Average | 3 !                        | 4960.000 | 42.88  | 54.00         | -11.12        | 44.22         | -1.34  | Average |
| 4                            | 4960.000 | 49.90  | 74.00         | -24.10        | 51.24         | -1.34  | Peak    | 4                          | 4960.000 | 53.14  | 74.00         | -20.86        | 54.48         | -1.34  | Peak    |
| 5 !                          | 7440.000 | 42.06  | 54.00         | -11.94        | 36.42         | 5.64   | Average | 5 !                        | 7440.000 | 45.14  | 54.00         | -8.86         | 39.50         | 5.64   | Average |
| 6                            | 7440.000 | 52.98  | 74.00         | -21.02        | 47.34         | 5.64   | Peak    | 6 !                        | 7440.000 | 55.33  | 74.00         | -18.67        | 49.69         | 5.64   | Peak    |



| EDR-3Mbps Horizontal Low CH |          |        |               |               |               |        |         | EDR-3Mbps Vertical Low CH |          |        |               |               |               |        |         |
|-----------------------------|----------|--------|---------------|---------------|---------------|--------|---------|---------------------------|----------|--------|---------------|---------------|---------------|--------|---------|
|                             | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |                           | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |
|                             | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |                           | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |
| 1 !                         | 2387.200 | 45.06  | 54.00         | -8.94         | 52.83         | -7.77  | Average | 1 !                       | 2362.000 | 40.45  | 54.00         | -13.55        | 48.29         | -7.84  | Average |
| 2 !                         | 2387.200 | 58.94  | 74.00         | -15.06        | 66.71         | -7.77  | Peak    | 2 !                       | 2362.000 | 54.05  | 74.00         | -19.95        | 61.89         | -7.84  | Peak    |
| 3 *                         | 2402.200 | 97.60  |               |               | 105.33        | -7.73  | Average | 3 *                       | 2402.200 | 91.82  |               |               | 99.55         | -7.73  | Average |
| 4 *                         | 2402.200 | 117.39 |               |               | 125.12        | -7.73  | Peak    | 4 *                       | 2402.200 | 110.07 |               |               | 117.80        | -7.73  | Peak    |
| 1 !                         | 3202.700 | 47.72  | 54.00         | -6.28         | 53.24         | -5.52  | Average | 1 !                       | 3202.700 | 43.01  | 54.00         | -10.99        | 48.53         | -5.52  | Average |
| 2                           | 3202.700 | 50.29  | 74.00         | -23.71        | 55.81         | -5.52  | Peak    | 2                         | 3202.700 | 41.02  | 74.00         | -32.98        | 46.54         | -5.52  | Peak    |
| 3 !                         | 4804.000 | 34.84  | 54.00         | -19.16        | 36.52         | -1.68  | Average | 3 !                       | 4804.000 | 36.26  | 54.00         | -17.74        | 37.94         | -1.68  | Average |
| 4                           | 4804.000 | 45.76  | 74.00         | -28.24        | 47.44         | -1.68  | Peak    | 4                         | 4804.000 | 47.83  | 74.00         | -26.17        | 49.51         | -1.68  | Peak    |
| 5 !                         | 7206.000 | 42.13  | 54.00         | -11.87        | 36.30         | 5.83   | Average | 5 !                       | 7206.000 | 45.77  | 54.00         | -8.23         | 39.94         | 5.83   | Average |
| 6 !                         | 7206.000 | 54.22  | 74.00         | -19.78        | 48.39         | 5.83   | Peak    | 6 !                       | 7206.000 | 54.28  | 74.00         | -19.72        | 48.45         | 5.83   | Peak    |

| EDR-3Mbps Horizontal Middle CH |          |        |               |               |               |        |         | EDR-3Mbps Vertical Middle CH |          |        |               |               |               |        |         |
|--------------------------------|----------|--------|---------------|---------------|---------------|--------|---------|------------------------------|----------|--------|---------------|---------------|---------------|--------|---------|
|                                | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |                              | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |
|                                | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |                              | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |
| 1 !                            | 2389.860 | 40.29  | 54.00         | -13.71        | 48.05         | -7.76  | Average | 1 !                          | 2385.988 | 37.33  | 54.00         | -16.67        | 45.10         | -7.77  | Average |
| 2 !                            | 2389.860 | 56.29  | 74.00         | -17.71        | 64.05         | -7.76  | Peak    | 2                            | 2385.988 | 51.81  | 74.00         | -22.19        | 59.58         | -7.77  | Peak    |
| 3 *                            | 2441.164 | 97.10  |               |               | 104.75        | -7.65  | Average | 3 *                          | 2441.164 | 91.46  |               |               | 99.11         | -7.65  | Average |
| 4 *                            | 2441.164 | 116.77 |               |               | 124.42        | -7.65  | Peak    | 4 *                          | 2441.164 | 109.60 |               |               | 117.25        | -7.65  | Peak    |
| 5 !                            | 2538.448 | 39.87  | 54.00         | -14.13        | 47.30         | -7.43  | Average | 5 !                          | 2513.280 | 37.68  | 54.00         | -16.32        | 45.21         | -7.53  | Average |
| 6 !                            | 2538.448 | 57.43  | 74.00         | -16.57        | 64.86         | -7.43  | Peak    | 6                            | 2513.280 | 52.23  | 74.00         | -21.77        | 59.76         | -7.53  | Peak    |
| 1 !                            | 3254.700 | 47.34  | 54.00         | -6.66         | 52.69         | -5.35  | Average | 1 !                          | 3254.700 | 42.74  | 54.00         | -11.26        | 48.09         | -5.35  | Average |
| 2                              | 3254.700 | 49.69  | 74.00         | -24.31        | 55.04         | -5.35  | Peak    | 2                            | 3254.700 | 47.09  | 74.00         | -26.91        | 52.44         | -5.35  | Peak    |
| 3 !                            | 4882.000 | 37.70  | 54.00         | -16.30        | 39.22         | -1.52  | Average | 3 !                          | 4882.000 | 40.88  | 54.00         | -13.12        | 42.40         | -1.52  | Average |
| 4                              | 4882.000 | 48.98  | 74.00         | -25.02        | 50.50         | -1.52  | Peak    | 4                            | 4882.000 | 51.78  | 74.00         | -22.22        | 53.30         | -1.52  | Peak    |
| 5 !                            | 7323.000 | 43.74  | 54.00         | -10.26        | 38.44         | 5.30   | Average | 5 !                          | 7323.000 | 45.01  | 54.00         | -8.99         | 39.71         | 5.30   | Average |
| 6 !                            | 7323.000 | 55.19  | 74.00         | -18.81        | 49.89         | 5.30   | Peak    | 6 !                          | 7323.000 | 56.94  | 74.00         | -17.06        | 51.64         | 5.30   | Peak    |

| EDR-3Mbps Horizontal High CH |          |        |               |               |               |        |         | EDR-3Mbps Vertical High CH |          |        |               |               |               |        |         |
|------------------------------|----------|--------|---------------|---------------|---------------|--------|---------|----------------------------|----------|--------|---------------|---------------|---------------|--------|---------|
|                              | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |                            | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |
|                              | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |                            | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |
| 1 *                          | 2480.168 | 95.04  |               |               | 102.64        | -7.60  | Average | 1 *                        | 2480.086 | 88.86  |               |               | 96.46         | -7.60  | Average |
| 2 *                          | 2480.168 | 113.98 |               |               | 121.58        | -7.60  | Peak    | 2 *                        | 2480.086 | 106.14 |               |               | 113.74        | -7.60  | Peak    |
| 3 !                          | 2483.500 | 50.59  | 54.00         | -3.41         | 58.18         | -7.59  | Average | 3 !                        | 2483.530 | 43.82  | 54.00         | -10.18        | 51.41         | -7.59  | Average |
| 4 !                          | 2483.500 | 67.26  | 74.00         | -6.74         | 74.85         | -7.59  | Peak    | 4 !                        | 2483.530 | 59.13  | 74.00         | -14.87        | 66.72         | -7.59  | Peak    |
| 1 !                          | 3306.700 | 47.72  | 54.00         | -6.28         | 52.95         | -5.23  | Average | 1 !                        | 3306.700 | 43.78  | 54.00         | -10.22        | 49.01         | -5.23  | Average |
| 2                            | 3306.700 | 49.96  | 74.00         | -24.04        | 55.19         | -5.23  | Peak    | 2                          | 3306.700 | 47.01  | 74.00         | -26.99        | 52.24         | -5.23  | Peak    |
| 3 !                          | 4960.000 | 39.76  | 54.00         | -14.24        | 41.10         | -1.34  | Average | 3 !                        | 4960.000 | 41.97  | 54.00         | -12.03        | 43.31         | -1.34  | Average |
| 4                            | 4960.000 | 46.86  | 74.00         | -27.14        | 48.20         | -1.34  | Peak    | 4                          | 4960.000 | 52.36  | 74.00         | -21.64        | 53.70         | -1.34  | Peak    |
| 5 !                          | 7440.000 | 40.63  | 54.00         | -13.37        | 34.99         | 5.64   | Average | 5 !                        | 7440.000 | 44.13  | 54.00         | -9.87         | 38.49         | 5.64   | Average |
| 6                            | 7440.000 | 52.93  | 74.00         | -21.07        | 47.29         | 5.64   | Peak    | 6 !                        | 7440.000 | 55.96  | 74.00         | -18.04        | 50.32         | 5.64   | Peak    |

<Chip Antenna (FR05-S1-N-0-102) with 3.3V<sub>dc</sub>>

| BR-1Mbps Horizontal Low CH |        |            |            |            |        |         |  | BR-1Mbps Vertical Low CH |        |            |            |            |        |         |  |
|----------------------------|--------|------------|------------|------------|--------|---------|--|--------------------------|--------|------------|------------|------------|--------|---------|--|
| Freq                       | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |  | Freq                     | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |  |
| MHz                        | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |  | MHz                      | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |  |
| 1 ! 2362.200               | 48.75  | 54.00      | -5.25      | 56.59      | -7.84  | Average |  | 1 ! 2362.300             | 43.56  | 54.00      | -10.44     | 51.40      | -7.84  | Average |  |
| 2 ! 2362.200               | 60.11  | 74.00      | -13.89     | 67.95      | -7.84  | Peak    |  | 2 ! 2362.300             | 54.67  | 74.00      | -19.33     | 62.51      | -7.84  | Peak    |  |
| 3 * 2402.200               | 100.78 |            |            | 108.51     | -7.73  | Average |  | 3 * 2402.200             | 96.78  |            |            | 104.51     | -7.73  | Average |  |
| 4 * 2402.200               | 119.33 |            |            | 127.06     | -7.73  | Peak    |  | 4 * 2402.200             | 114.40 |            |            | 122.13     | -7.73  | Peak    |  |
| 1 ! 3202.700               | 40.40  | 54.00      | -13.60     | 45.92      | -5.52  | Average |  | 1 ! 3202.700             | 35.97  | 54.00      | -18.03     | 41.49      | -5.52  | Average |  |
| 2 ! 3202.700               | 47.04  | 74.00      | -26.96     | 52.56      | -5.52  | Peak    |  | 2 ! 3202.700             | 43.92  | 74.00      | -30.08     | 49.44      | -5.52  | Peak    |  |
| 3 ! 4804.000               | 42.62  | 54.00      | -11.38     | 44.30      | -1.68  | Average |  | 3 ! 4804.000             | 51.34  | 54.00      | -2.66      | 53.02      | -1.68  | Average |  |
| 4 ! 4804.000               | 50.98  | 74.00      | -23.02     | 52.66      | -1.68  | Peak    |  | 4 ! 4804.000             | 54.01  | 74.00      | -19.99     | 55.69      | -1.68  | Peak    |  |
| 5 ! 7206.000               | 49.42  | 54.00      | -4.58      | 43.59      | 5.83   | Average |  | 5 ! 7206.000             | 49.80  | 54.00      | -4.20      | 43.97      | 5.83   | Average |  |
| 6 ! 7206.000               | 59.50  | 74.00      | -14.50     | 53.67      | 5.83   | Peak    |  | 6 ! 7206.000             | 60.02  | 74.00      | -13.98     | 54.19      | 5.83   | Peak    |  |
| 7 ! 12010.000              | 41.31  | 54.00      | -12.69     | 31.47      | 9.84   | Average |  | 7 ! 12010.000            | 40.04  | 54.00      | -13.96     | 30.20      | 9.84   | Average |  |
| 8 ! 12010.000              | 54.38  | 74.00      | -19.62     | 44.54      | 9.84   | Peak    |  | 8 ! 12010.000            | 53.75  | 74.00      | -20.25     | 43.91      | 9.84   | Peak    |  |

| BR-1Mbps Horizontal Middle CH |        |            |            |            |        |         |  | BR-1Mbps Vertical Middle CH |        |            |            |            |        |         |  |
|-------------------------------|--------|------------|------------|------------|--------|---------|--|-----------------------------|--------|------------|------------|------------|--------|---------|--|
| Freq                          | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |  | Freq                        | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |  |
| MHz                           | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |  | MHz                         | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |  |
| 1 ! 2385.988                  | 41.67  | 54.00      | -12.33     | 49.44      | -7.77  | Average |  | 1 ! 2383.326                | 37.62  | 54.00      | -16.38     | 45.40      | -7.78  | Average |  |
| 2 ! 2385.988                  | 55.14  | 74.00      | -18.86     | 62.91      | -7.77  | Peak    |  | 2 ! 2383.326                | 51.82  | 74.00      | -22.18     | 59.60      | -7.78  | Peak    |  |
| 3 * 2441.164                  | 100.22 |            |            | 107.87     | -7.65  | Average |  | 3 * 2441.164                | 95.55  |            |            | 103.20     | -7.65  | Average |  |
| 4 * 2441.164                  | 118.55 |            |            | 126.20     | -7.65  | Peak    |  | 4 * 2441.164                | 112.78 |            |            | 120.43     | -7.65  | Peak    |  |
| 5 ! 2499.486                  | 38.95  | 54.00      | -15.05     | 46.53      | -7.58  | Average |  | 5 ! 2531.188                | 37.74  | 54.00      | -16.26     | 45.20      | -7.46  | Average |  |
| 6 ! 2499.486                  | 54.32  | 74.00      | -19.68     | 61.90      | -7.58  | Peak    |  | 6 ! 2531.188                | 52.19  | 74.00      | -21.81     | 59.65      | -7.46  | Peak    |  |
| 1 ! 3254.700                  | 41.23  | 54.00      | -12.77     | 46.58      | -5.35  | Average |  | 1 ! 3254.700                | 39.27  | 54.00      | -14.73     | 44.62      | -5.35  | Average |  |
| 2 ! 3254.700                  | 47.69  | 74.00      | -26.31     | 53.04      | -5.35  | Peak    |  | 2 ! 3254.700                | 46.58  | 74.00      | -27.42     | 51.93      | -5.35  | Peak    |  |
| 3 ! 4882.000                  | 43.18  | 54.00      | -10.82     | 44.70      | -1.52  | Average |  | 3 ! 4882.000                | 47.69  | 54.00      | -6.31      | 49.21      | -1.52  | Average |  |
| 4 ! 4882.000                  | 51.68  | 74.00      | -22.32     | 53.20      | -1.52  | Peak    |  | 4 ! 4882.000                | 56.22  | 74.00      | -17.78     | 57.74      | -1.52  | Peak    |  |
| 5 ! 7323.000                  | 53.66  | 54.00      | -0.34      | 48.36      | 5.30   | Average |  | 5 ! 7323.000                | 49.25  | 54.00      | -4.75      | 43.95      | 5.30   | Average |  |
| 6 ! 7323.000                  | 64.16  | 74.00      | -9.84      | 58.86      | 5.30   | Peak    |  | 6 ! 7323.000                | 59.36  | 74.00      | -14.64     | 54.06      | 5.30   | Peak    |  |
| 7 ! 12205.000                 | 42.61  | 54.00      | -11.39     | 32.78      | 9.83   | Average |  | 7 ! 12205.000               | 43.13  | 54.00      | -10.87     | 33.30      | 9.83   | Average |  |
| 8 ! 12205.000                 | 56.04  | 74.00      | -17.96     | 46.21      | 9.83   | Peak    |  | 8 ! 12205.000               | 56.37  | 74.00      | -17.63     | 46.54      | 9.83   | Peak    |  |

| BR-1Mbps Horizontal High CH |        |            |            |            |        |         |  | BR-1Mbps Vertical High CH |        |            |            |            |        |         |  |
|-----------------------------|--------|------------|------------|------------|--------|---------|--|---------------------------|--------|------------|------------|------------|--------|---------|--|
| Freq                        | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |  | Freq                      | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |  |
| MHz                         | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |  | MHz                       | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |  |
| 1 * 2480.168                | 99.91  |            |            | 107.51     | -7.60  | Average |  | 1 * 2480.086              | 95.26  |            |            | 102.86     | -7.60  | Average |  |
| 2 * 2480.168                | 118.12 |            |            | 125.72     | -7.60  | Peak    |  | 2 * 2480.086              | 112.28 |            |            | 119.88     | -7.60  | Peak    |  |
| 3 ! 2483.776                | 49.38  | 54.00      | -4.62      | 56.97      | -7.59  | Average |  | 3 ! 2483.530              | 44.25  | 54.00      | -9.75      | 51.84      | -7.59  | Average |  |
| 4 ! 2483.776                | 69.28  | 74.00      | -4.72      | 76.87      | -7.59  | Peak    |  | 4 ! 2483.530              | 62.45  | 74.00      | -11.55     | 70.04      | -7.59  | Peak    |  |
| 1 ! 3306.700                | 40.91  | 54.00      | -13.09     | 46.14      | -5.23  | Average |  | 1 ! 3306.700              | 40.87  | 54.00      | -13.13     | 46.10      | -5.23  | Average |  |
| 2 ! 3306.700                | 47.36  | 74.00      | -26.64     | 52.59      | -5.23  | Peak    |  | 2 ! 3306.700              | 47.86  | 74.00      | -26.14     | 53.09      | -5.23  | Peak    |  |
| 3 ! 4960.000                | 48.37  | 54.00      | -5.63      | 49.71      | -1.34  | Average |  | 3 ! 4960.000              | 48.87  | 54.00      | -5.13      | 50.21      | -1.34  | Average |  |
| 4 ! 4960.000                | 56.83  | 74.00      | -17.17     | 58.17      | -1.34  | Peak    |  | 4 ! 4960.000              | 59.29  | 74.00      | -14.71     | 60.63      | -1.34  | Peak    |  |
| 5 ! 7440.000                | 49.63  | 54.00      | -4.37      | 43.99      | 5.64   | Average |  | 5 ! 7440.000              | 53.15  | 54.00      | -0.85      | 47.51      | 5.64   | Average |  |
| 6 ! 7440.000                | 59.91  | 74.00      | -14.09     | 54.27      | 5.64   | Peak    |  | 6 ! 7440.000              | 63.60  | 74.00      | -10.40     | 57.96      | 5.64   | Peak    |  |
| 7 ! 12400.000               | 41.74  | 54.00      | -12.26     | 32.63      | 9.11   | Average |  | 7 ! 12400.000             | 43.85  | 54.00      | -10.15     | 34.74      | 9.11   | Average |  |
| 8 ! 12400.000               | 54.80  | 74.00      | -19.20     | 45.69      | 9.11   | Peak    |  | 8 ! 12400.000             | 57.84  | 74.00      | -16.16     | 48.73      | 9.11   | Peak    |  |

| EDR-2Mbps Horizontal Low CH |        |            |            |            |        |         |  | EDR-2Mbps Vertical Low CH |        |            |            |            |        |         |  |
|-----------------------------|--------|------------|------------|------------|--------|---------|--|---------------------------|--------|------------|------------|------------|--------|---------|--|
| Freq                        | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |  | Freq                      | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |  |
| MHz                         | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |  | MHz                       | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |  |
| 1 ! 2384.000                | 46.41  | 54.00      | -7.59      | 54.19      | -7.78  | Average |  | 1 ! 2387.800              | 42.09  | 54.00      | -11.91     | 49.86      | -7.77  | Average |  |
| 2 ! 2384.000                | 59.44  | 74.00      | -14.56     | 67.22      | -7.78  | Peak    |  | 2 ! 2387.800              | 55.07  | 74.00      | -18.93     | 62.84      | -7.77  | Peak    |  |
| 3 * 2402.200                | 98.38  |            |            | 106.11     | -7.73  | Average |  | 3 * 2402.200              | 94.12  |            |            | 101.85     | -7.73  | Average |  |
| 4 * 2402.200                | 118.53 |            |            | 126.26     | -7.73  | Peak    |  | 4 * 2402.200              | 113.73 |            |            | 121.46     | -7.73  | Peak    |  |
| 1 ! 3202.700                | 40.70  | 54.00      | -13.30     | 46.22      | -5.52  | Average |  | 1 ! 3202.700              | 35.57  | 54.00      | -18.43     | 41.09      | -5.52  | Average |  |
| 2 ! 3202.700                | 47.28  | 74.00      | -26.72     | 52.80      | -5.52  | Peak    |  | 2 ! 3202.700              | 43.95  | 74.00      | -30.05     | 49.47      | -5.52  | Peak    |  |
| 3 ! 4804.000                | 39.59  | 54.00      | -14.41     | 41.27      | -1.68  | Average |  | 3 ! 4804.000              | 41.55  | 54.00      | -12.45     | 43.23      | -1.68  | Average |  |
| 4 ! 4804.000                | 50.46  | 74.00      | -23.54     | 52.14      | -1.68  | Peak    |  | 4 ! 4804.000              | 52.04  | 74.00      | -21.96     | 53.72      | -1.68  | Peak    |  |
| 5 ! 7206.000                | 52.59  | 54.00      | -1.41      | 46.76      | 5.83   | Average |  | 5 ! 7206.000              | 46.04  | 54.00      | -7.96      | 40.21      | 5.83   | Average |  |
| 6 ! 7206.000                | 59.44  | 74.00      | -14.56     | 53.61      | 5.83   | Peak    |  | 6 ! 7206.000              | 57.75  | 74.00      | -16.25     | 51.92      | 5.83   | Peak    |  |

| EDR-2Mbps Horizontal Middle CH |        |            |            |            |        |         |  | EDR-2Mbps Vertical Middle CH |        |            |            |            |        |         |  |
|--------------------------------|--------|------------|------------|------------|--------|---------|--|------------------------------|--------|------------|------------|------------|--------|---------|--|
| Freq                           | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |  | Freq                         | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |  |
| MHz                            | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |  | MHz                          | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |  |
| 1 ! 2359.852                   | 40.36  | 54.00      | -13.64     | 48.22      | -7.86  | Average |  | 1 ! 2384.536                 | 38.44  | 54.00      | -15.56     | 46.21      | -7.77  | Average |  |
| 2 ! 2359.852                   | 55.42  | 74.00      | -18.58     | 63.28      | -7.86  | Peak    |  | 2 ! 2384.536                 | 53.02  | 74.00      | -20.98     | 60.79      | -7.77  | Peak    |  |
| 3 * 2440.922                   | 98.15  |            |            | 105.80     | -7.65  | Average |  | 3 * 2441.164                 | 93.16  |            |            | 100.81     | -7.65  | Average |  |
| 4 * 2440.922                   | 118.27 |            |            | 125.92     | -7.65  | Peak    |  | 4 * 2441.164                 | 112.41 |            |            | 120.06     | -7.65  | Peak    |  |
| 5 ! 2500.696                   | 41.27  | 54.00      | -12.73     | 48.85      | -7.58  | Average |  | 5 ! 2487.386                 | 38.51  | 54.00      | -15.49     | 46.10      | -7.59  | Average |  |
| 6 ! 2500.696                   | 57.30  | 74.00      | -16.70     | 64.88      | -7.58  | Peak    |  | 6 ! 2487.386                 | 53.00  | 74.00      | -21.00     | 60.59      | -7.59  | Peak    |  |
| 1 ! 3254.700                   | 41.05  | 54.00      | -12.95     | 46.40      | -5.35  | Average |  | 1 ! 3254.700                 | 39.39  | 54.00      | -14.61     | 44.74      | -5.35  | Average |  |
| 2 ! 3254.700                   | 47.78  | 74.00      | -26.22     | 53.13      | -5.35  | Peak    |  | 2 ! 3254.700                 | 46.36  | 74.00      | -27.64     | 51.71      | -5.35  | Peak    |  |
| 3 ! 4882.000                   | 43.21  | 54.00      | -10.79     | 44.73      | -1.52  | Average |  | 3 ! 4882.000                 | 44.40  | 54.00      | -9.60      | 45.92      | -1.52  | Average |  |
| 4 ! 4882.000                   | 54.20  | 74.00      | -19.80     | 55.72      | -1.52  | Peak    |  | 4 ! 4882.000                 | 55.18  | 74.00      | -18.82     | 56.70      | -1.52  | Peak    |  |
| 5 ! 7323.000                   | 47.64  | 54.00      | -6.36      | 42.34      | 5.30   | Average |  | 5 ! 7323.000                 | 46.18  | 54.00      | -7.82      | 40.88      | 5.30   | Average |  |
| 6 ! 7323.000                   | 59.46  | 74.00      | -14.54     | 54.16      | 5.30   | Peak    |  | 6 ! 7323.000                 | 57.69  | 74.00      | -16.31     | 52.39      | 5.30   | Peak    |  |
| 7 ! 112205.000                 | 44.67  | 54.00      | -9.33      | 34.84      | 9.83   | Average |  | 7 ! 112205.000               | 49.74  | 54.00      | -4.26      | 39.91      | 9.83   | Average |  |
| 8 ! 112205.000                 | 56.31  | 74.00      | -17.69     | 46.48      | 9.83   | Peak    |  | 8 ! 112205.000               | 55.60  | 74.00      | -18.40     | 45.77      | 9.83   | Peak    |  |

| EDR-2Mbps Horizontal High CH |        |            |            |            |        |         |  | EDR-2Mbps Vertical High CH |        |            |            |            |        |         |  |
|------------------------------|--------|------------|------------|------------|--------|---------|--|----------------------------|--------|------------|------------|------------|--------|---------|--|
| Freq                         | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |  | Freq                       | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |  |
| MHz                          | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |  | MHz                        | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |  |
| 1 * 2480.168                 | 97.84  |            |            | 105.44     | -7.60  | Average |  | 1 * 2479.840               | 92.93  |            |            | 100.53     | -7.60  | Average |  |
| 2 * 2480.168                 | 117.68 |            |            | 125.28     | -7.60  | Peak    |  | 2 * 2479.840               | 111.64 |            |            | 119.24     | -7.60  | Peak    |  |
| 3 ! 2483.530                 | 51.83  | 54.00      | -2.17      | 59.42      | -7.59  | Average |  | 3 ! 2483.612               | 46.91  | 54.00      | -7.09      | 54.50      | -7.59  | Average |  |
| 4 ! 2483.530                 | 72.37  | 74.00      | -1.63      | 79.96      | -7.59  | Peak    |  | 4 ! 2483.612               | 65.11  | 74.00      | -8.89      | 72.70      | -7.59  | Peak    |  |
| 1 ! 3306.700                 | 41.28  | 54.00      | -12.72     | 46.51      | -5.23  | Average |  | 1 ! 3306.700               | 41.27  | 54.00      | -12.73     | 46.50      | -5.23  | Average |  |
| 2 ! 3306.700                 | 47.44  | 74.00      | -26.56     | 52.67      | -5.23  | Peak    |  | 2 ! 3306.700               | 47.86  | 74.00      | -26.14     | 53.09      | -5.23  | Peak    |  |
| 3 ! 4960.000                 | 45.75  | 54.00      | -8.25      | 47.09      | -1.34  | Average |  | 3 ! 4960.000               | 47.96  | 54.00      | -6.04      | 49.30      | -1.34  | Average |  |
| 4 ! 4960.000                 | 56.47  | 74.00      | -17.53     | 57.81      | -1.34  | Peak    |  | 4 ! 4960.000               | 59.30  | 74.00      | -14.70     | 60.64      | -1.34  | Peak    |  |
| 5 ! 7440.000                 | 47.66  | 54.00      | -6.34      | 42.02      | 5.64   | Average |  | 5 ! 7440.000               | 50.77  | 54.00      | -3.23      | 45.13      | 5.64   | Average |  |
| 6 ! 7440.000                 | 58.86  | 74.00      | -15.14     | 53.22      | 5.64   | Peak    |  | 6 ! 7440.000               | 62.19  | 74.00      | -11.81     | 56.55      | 5.64   | Peak    |  |
| 7 ! 112400.000               | 44.05  | 54.00      | -9.95      | 34.94      | 9.11   | Average |  | 7 ! 112400.000             | 41.92  | 54.00      | -12.08     | 32.81      | 9.11   | Average |  |
| 8 ! 112400.000               | 57.78  | 74.00      | -16.22     | 48.67      | 9.11   | Peak    |  | 8 ! 112400.000             | 56.25  | 74.00      | -17.75     | 47.14      | 9.11   | Peak    |  |

| EDR-3Mbps Horizontal Low CH |          |        |               |               |               |        |         | EDR-3Mbps Vertical Low CH |          |        |               |               |               |        |         |
|-----------------------------|----------|--------|---------------|---------------|---------------|--------|---------|---------------------------|----------|--------|---------------|---------------|---------------|--------|---------|
|                             | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |                           | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |
|                             | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |                           | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |
| 1 !                         | 2388.400 | 46.67  | 54.00         | -7.33         | 54.44         | -7.77  | Average | 1 !                       | 2388.900 | 42.30  | 54.00         | -11.70        | 50.06         | -7.76  | Average |
| 2 !                         | 2388.400 | 59.36  | 74.00         | -14.64        | 67.13         | -7.77  | Peak    | 2 !                       | 2388.900 | 54.59  | 74.00         | -19.41        | 62.35         | -7.76  | Peak    |
| 3 *                         | 2402.200 | 98.48  |               |               | 106.21        | -7.73  | Average | 3 *                       | 2402.100 | 94.49  |               |               | 102.22        | -7.73  | Average |
| 4 *                         | 2402.200 | 118.74 |               |               | 126.47        | -7.73  | Peak    | 4 *                       | 2402.100 | 114.19 |               |               | 121.92        | -7.73  | Peak    |
| 1 !                         | 3202.700 | 41.14  | 54.00         | -12.86        | 46.66         | -5.52  | Average | 1 !                       | 3202.700 | 35.94  | 54.00         | -18.06        | 41.46         | -5.52  | Average |
| 2                           | 3202.700 | 47.85  | 74.00         | -26.15        | 53.37         | -5.52  | Peak    | 2                         | 3202.700 | 43.81  | 74.00         | -30.19        | 49.33         | -5.52  | Peak    |
| 3 !                         | 4804.000 | 43.00  | 54.00         | -11.00        | 44.68         | -1.68  | Average | 3 !                       | 4804.000 | 42.49  | 54.00         | -11.51        | 44.17         | -1.68  | Average |
| 4 !                         | 4804.000 | 54.11  | 74.00         | -19.89        | 55.79         | -1.68  | Peak    | 4                         | 4804.000 | 53.00  | 74.00         | -21.00        | 54.68         | -1.68  | Peak    |
| 5 !                         | 7206.000 | 47.76  | 54.00         | -6.24         | 41.93         | 5.83   | Average | 5 !                       | 7206.000 | 46.37  | 54.00         | -7.63         | 40.54         | 5.83   | Average |
| 6 !                         | 7206.000 | 60.58  | 74.00         | -13.42        | 54.75         | 5.83   | Peak    | 6 !                       | 7206.000 | 59.08  | 74.00         | -14.92        | 53.25         | 5.83   | Peak    |

| EDR-3Mbps Horizontal Middle CH |          |        |               |               |               |        |         | EDR-3Mbps Vertical Middle CH |          |        |               |               |               |        |         |
|--------------------------------|----------|--------|---------------|---------------|---------------|--------|---------|------------------------------|----------|--------|---------------|---------------|---------------|--------|---------|
|                                | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |                              | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |
|                                | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |                              | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |
| 1 !                            | 2386.956 | 40.39  | 54.00         | -13.61        | 48.16         | -7.77  | Average | 1 !                          | 2381.148 | 37.76  | 54.00         | -16.24        | 45.55         | -7.79  | Average |
| 2 !                            | 2386.956 | 57.52  | 74.00         | -16.48        | 65.29         | -7.77  | Peak    | 2                            | 2381.148 | 51.89  | 74.00         | -22.11        | 59.68         | -7.79  | Peak    |
| 3 *                            | 2441.406 | 98.46  |               |               | 106.11        | -7.65  | Average | 3 *                          | 2441.406 | 94.17  |               |               | 101.82        | -7.65  | Average |
| 4 *                            | 2441.406 | 118.62 |               |               | 126.27        | -7.65  | Peak    | 4 *                          | 2441.406 | 113.60 |               |               | 121.25        | -7.65  | Peak    |
| 5 !                            | 2487.144 | 41.06  | 54.00         | -12.94        | 48.65         | -7.59  | Average | 5 !                          | 2489.080 | 38.11  | 54.00         | -15.89        | 45.70         | -7.59  | Average |
| 6 !                            | 2487.144 | 58.05  | 74.00         | -15.95        | 65.64         | -7.59  | Peak    | 6                            | 2489.080 | 52.49  | 74.00         | -21.51        | 60.08         | -7.59  | Peak    |
| 1 !                            | 3254.700 | 41.39  | 54.00         | -12.61        | 46.74         | -5.35  | Average | 1 !                          | 3254.700 | 39.55  | 54.00         | -14.45        | 44.90         | -5.35  | Average |
| 2                              | 3254.700 | 48.12  | 74.00         | -25.88        | 53.47         | -5.35  | Peak    | 2                            | 3254.700 | 47.23  | 74.00         | -26.77        | 52.58         | -5.35  | Peak    |
| 3 !                            | 4882.000 | 44.16  | 54.00         | -9.84         | 45.68         | -1.52  | Average | 3 !                          | 4882.000 | 44.16  | 54.00         | -9.84         | 45.68         | -1.52  | Average |
| 4 !                            | 4882.000 | 55.12  | 74.00         | -18.88        | 56.64         | -1.52  | Peak    | 4 !                          | 4882.000 | 55.06  | 74.00         | -18.94        | 56.58         | -1.52  | Peak    |
| 5 !                            | 7323.000 | 52.34  | 54.00         | -1.66         | 47.04         | 5.30   | Average | 5 !                          | 7323.000 | 49.53  | 54.00         | -4.47         | 44.23         | 5.30   | Average |
| 6 !                            | 7323.000 | 60.18  | 74.00         | -13.82        | 54.88         | 5.30   | Peak    | 6 !                          | 7323.000 | 60.83  | 74.00         | -13.17        | 55.53         | 5.30   | Peak    |

| EDR-3Mbps Horizontal High CH |          |        |               |               |               |        |         | EDR-3Mbps Vertical High CH |          |        |               |               |               |        |         |
|------------------------------|----------|--------|---------------|---------------|---------------|--------|---------|----------------------------|----------|--------|---------------|---------------|---------------|--------|---------|
|                              | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |                            | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |
|                              | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |                            | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |
| 1 *                          | 2480.168 | 97.88  |               |               | 105.48        | -7.60  | Average | 1 *                        | 2480.004 | 92.73  |               |               | 100.33        | -7.60  | Average |
| 2 *                          | 2480.168 | 117.80 |               |               | 125.40        | -7.60  | Peak    | 2 *                        | 2480.004 | 111.66 |               |               | 119.26        | -7.60  | Peak    |
| 3 !                          | 2483.530 | 50.85  | 54.00         | -3.15         | 58.44         | -7.59  | Average | 3 !                        | 2483.530 | 45.68  | 54.00         | -8.32         | 53.27         | -7.59  | Average |
| 4 !                          | 2483.530 | 70.34  | 74.00         | -3.66         | 77.93         | -7.59  | Peak    | 4 !                        | 2483.530 | 63.76  | 74.00         | -10.24        | 71.35         | -7.59  | Peak    |
| 1 !                          | 3306.700 | 40.79  | 54.00         | -13.21        | 46.02         | -5.23  | Average | 1 !                        | 3306.700 | 43.27  | 54.00         | -10.73        | 48.50         | -5.23  | Average |
| 2                            | 3306.700 | 47.10  | 74.00         | -26.90        | 52.33         | -5.23  | Peak    | 2                          | 3306.700 | 46.95  | 74.00         | -27.05        | 52.18         | -5.23  | Peak    |
| 3 !                          | 4960.000 | 44.39  | 54.00         | -9.61         | 45.73         | -1.34  | Average | 3 !                        | 4960.000 | 46.69  | 54.00         | -7.31         | 48.03         | -1.34  | Average |
| 4 !                          | 4960.000 | 54.80  | 74.00         | -19.20        | 56.14         | -1.34  | Peak    | 4 !                        | 4960.000 | 57.43  | 74.00         | -16.57        | 58.77         | -1.34  | Peak    |
| 5 !                          | 7440.000 | 45.83  | 54.00         | -8.17         | 40.19         | 5.64   | Average | 5 !                        | 7440.000 | 49.33  | 54.00         | -4.67         | 43.69         | 5.64   | Average |
| 6 !                          | 7440.000 | 57.80  | 74.00         | -16.20        | 52.16         | 5.64   | Peak    | 6 !                        | 7440.000 | 61.52  | 74.00         | -12.48        | 55.88         | 5.64   | Peak    |

< Dipole Antenna (GW.34.5153) with 1.8V<sub>dc</sub>>

| BR-1Mbps Horizontal Low CH |          |        |               |               |               |        |         | BR-1Mbps Vertical Low CH |          |        |               |               |               |        |         |
|----------------------------|----------|--------|---------------|---------------|---------------|--------|---------|--------------------------|----------|--------|---------------|---------------|---------------|--------|---------|
|                            | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |                          | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |
|                            | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |                          | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |
| 1 !                        | 2361.800 | 39.89  | 54.00         | -14.11        | 47.73         | -7.84  | Average | 1 !                      | 2389.900 | 49.25  | 54.00         | -4.75         | 57.01         | -7.76  | Average |
| 2                          | 2361.800 | 51.13  | 74.00         | -22.87        | 58.97         | -7.84  | Peak    | 2 !                      | 2389.900 | 58.89  | 74.00         | -15.11        | 66.65         | -7.76  | Peak    |
| 3 *                        | 2402.300 | 103.32 |               |               | 111.05        | -7.73  | Average | 3 *                      | 2402.200 | 115.91 |               |               | 123.64        | -7.73  | Average |
| 4 *                        | 2402.300 | 104.39 |               |               | 112.12        | -7.73  | Peak    | 4 *                      | 2402.200 | 117.01 |               |               | 124.74        | -7.73  | Peak    |
| 1 !                        | 3202.700 | 41.60  | 54.00         | -12.40        | 47.12         | -5.52  | Average | 1 !                      | 3202.700 | 38.07  | 54.00         | -15.93        | 43.59         | -5.52  | Average |
| 2                          | 3202.700 | 46.25  | 74.00         | -27.75        | 51.77         | -5.52  | Peak    | 2                        | 3202.700 | 43.28  | 74.00         | -30.72        | 48.80         | -5.52  | Peak    |
| 3 !                        | 4804.000 | 43.36  | 54.00         | -10.64        | 45.04         | -1.68  | Average | 3 !                      | 4804.000 | 44.03  | 54.00         | -9.97         | 45.71         | -1.68  | Average |
| 4                          | 4804.000 | 48.80  | 74.00         | -25.20        | 50.48         | -1.68  | Peak    | 4                        | 4804.000 | 48.42  | 74.00         | -25.58        | 50.10         | -1.68  | Peak    |
| 5 !                        | 7206.000 | 47.63  | 54.00         | -6.37         | 41.80         | 5.83   | Average | 5 !                      | 7206.000 | 50.88  | 54.00         | -3.12         | 45.05         | 5.83   | Average |
| 6                          | 7206.000 | 52.95  | 74.00         | -21.05        | 47.12         | 5.83   | Peak    | 6 !                      | 7206.000 | 59.92  | 74.00         | -14.08        | 54.09         | 5.83   | Peak    |

| BR-1Mbps Horizontal Middle CH |          |        |               |               |               |        |         | BR-1Mbps Vertical Middle CH |          |        |               |               |               |        |         |
|-------------------------------|----------|--------|---------------|---------------|---------------|--------|---------|-----------------------------|----------|--------|---------------|---------------|---------------|--------|---------|
|                               | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |                             | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |
|                               | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |                             | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |
| 1 !                           | 2333.958 | 37.02  | 54.00         | -16.98        | 44.93         | -7.91  | Average | 1 !                         | 2389.376 | 39.71  | 54.00         | -14.29        | 47.47         | -7.76  | Average |
| 2                             | 2333.958 | 50.67  | 74.00         | -23.33        | 58.58         | -7.91  | Peak    | 2                           | 2389.376 | 53.91  | 74.00         | -20.09        | 61.67         | -7.76  | Peak    |
| 3 *                           | 2441.164 | 104.37 |               |               | 112.02        | -7.65  | Average | 3 *                         | 2441.164 | 115.35 |               |               | 123.00        | -7.65  | Average |
| 4 *                           | 2441.164 | 105.44 |               |               | 113.09        | -7.65  | Peak    | 4 *                         | 2441.164 | 116.48 |               |               | 124.13        | -7.65  | Peak    |
| 5 !                           | 2545.708 | 37.96  | 54.00         | -16.04        | 45.35         | -7.39  | Average | 5 !                         | 2499.486 | 38.26  | 54.00         | -15.74        | 45.84         | -7.58  | Average |
| 6                             | 2545.708 | 51.14  | 74.00         | -22.86        | 58.53         | -7.39  | Peak    | 6                           | 2499.486 | 52.67  | 74.00         | -21.33        | 60.25         | -7.58  | Peak    |
| 1 !                           | 3254.700 | 42.80  | 54.00         | -11.20        | 48.15         | -5.35  | Average | 1 !                         | 3254.700 | 42.46  | 54.00         | -11.54        | 47.81         | -5.35  | Average |
| 2                             | 3254.700 | 48.44  | 74.00         | -25.56        | 53.79         | -5.35  | Peak    | 2                           | 3254.700 | 46.62  | 74.00         | -27.38        | 51.97         | -5.35  | Peak    |
| 3 !                           | 4882.000 | 43.04  | 54.00         | -10.96        | 44.56         | -1.52  | Average | 3 !                         | 4882.000 | 41.71  | 54.00         | -12.29        | 43.23         | -1.52  | Average |
| 4                             | 4882.000 | 47.67  | 74.00         | -26.33        | 49.19         | -1.52  | Peak    | 4                           | 4882.000 | 50.75  | 74.00         | -23.25        | 52.27         | -1.52  | Peak    |
| 5 !                           | 7323.000 | 47.10  | 54.00         | -6.90         | 41.80         | 5.30   | Average | 5 !                         | 7323.000 | 48.97  | 54.00         | -5.03         | 43.67         | 5.30   | Average |
| 6                             | 7323.000 | 53.06  | 74.00         | -20.94        | 47.76         | 5.30   | Peak    | 6 !                         | 7323.000 | 58.05  | 74.00         | -15.95        | 52.75         | 5.30   | Peak    |

| BR-1Mbps Horizontal High CH |          |        |               |               |               |        |         | BR-1Mbps Vertical High CH |          |        |               |               |               |        |         |
|-----------------------------|----------|--------|---------------|---------------|---------------|--------|---------|---------------------------|----------|--------|---------------|---------------|---------------|--------|---------|
|                             | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |                           | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |
|                             | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |                           | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |
| 1 *                         | 2480.004 | 103.73 |               |               | 111.33        | -7.60  | Average | 1 *                       | 2480.168 | 114.16 |               |               | 121.76        | -7.60  | Average |
| 2 *                         | 2480.004 | 104.72 |               |               | 112.32        | -7.60  | Peak    | 2 *                       | 2480.168 | 115.26 |               |               | 122.86        | -7.60  | Peak    |
| 3 !                         | 2483.940 | 40.52  | 54.00         | -13.48        | 48.11         | -7.59  | Average | 3 !                       | 2483.530 | 50.35  | 54.00         | -3.65         | 57.94         | -7.59  | Average |
| 4 !                         | 2483.940 | 57.29  | 74.00         | -16.71        | 64.88         | -7.59  | Peak    | 4 !                       | 2483.530 | 67.67  | 74.00         | -6.33         | 75.26         | -7.59  | Peak    |
| 1 !                         | 3306.700 | 44.33  | 54.00         | -9.67         | 49.56         | -5.23  | Average | 1 !                       | 3306.700 | 43.81  | 54.00         | -10.19        | 49.04         | -5.23  | Average |
| 2                           | 3306.700 | 48.82  | 74.00         | -25.18        | 54.05         | -5.23  | Peak    | 2                         | 3306.700 | 48.86  | 74.00         | -25.14        | 54.09         | -5.23  | Peak    |
| 3 !                         | 4960.000 | 44.34  | 54.00         | -9.66         | 45.68         | -1.34  | Average | 3 !                       | 4960.000 | 45.53  | 54.00         | -8.47         | 46.87         | -1.34  | Average |
| 4                           | 4960.000 | 49.92  | 74.00         | -24.08        | 51.26         | -1.34  | Peak    | 4                         | 4960.000 | 49.51  | 74.00         | -24.49        | 50.85         | -1.34  | Peak    |
| 5 !                         | 7440.000 | 45.28  | 54.00         | -8.72         | 39.64         | 5.64   | Average | 5 !                       | 7440.000 | 48.58  | 54.00         | -5.42         | 42.94         | 5.64   | Average |
| 6                           | 7440.000 | 47.79  | 74.00         | -26.21        | 42.15         | 5.64   | Peak    | 6                         | 7440.000 | 51.97  | 74.00         | -22.03        | 46.33         | 5.64   | Peak    |



| EDR-2Mbps Horizontal Low CH |        |            |            |            |        |         |  | EDR-2Mbps Vertical Low CH |        |            |            |            |        |         |  |
|-----------------------------|--------|------------|------------|------------|--------|---------|--|---------------------------|--------|------------|------------|------------|--------|---------|--|
| Freq                        | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |  | Freq                      | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |  |
| MHz                         | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |  | MHz                       | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |  |
| 1 ! 2325.300                | 36.28  | 54.00      | -17.72     | 44.20      | -7.92  | Average |  | 1 ! 2385.600              | 43.34  | 54.00      | -10.66     | 51.11      | -7.77  | Average |  |
| 2 2325.300                  | 51.40  | 74.00      | -22.60     | 59.32      | -7.92  | Peak    |  | 2 ! 2385.600              | 58.20  | 74.00      | -15.80     | 65.97      | -7.77  | Peak    |  |
| 3 * 2402.200                | 81.08  |            |            | 88.81      | -7.73  | Average |  | 3 * 2402.300              | 96.50  |            |            | 104.23     | -7.73  | Average |  |
| 4 * 2402.200                | 96.57  |            |            | 104.30     | -7.73  | Peak    |  | 4 * 2402.300              | 116.00 |            |            | 123.73     | -7.73  | Peak    |  |
| 1 ! 3202.700                | 41.59  | 54.00      | -12.41     | 47.11      | -5.52  | Average |  | 1 ! 3202.700              | 38.70  | 54.00      | -15.30     | 44.22      | -5.52  | Average |  |
| 2 3202.700                  | 45.75  | 74.00      | -28.25     | 51.27      | -5.52  | Peak    |  | 2 3202.700                | 42.66  | 74.00      | -31.34     | 48.18      | -5.52  | Peak    |  |
| 3 ! 4804.000                | 38.87  | 54.00      | -15.13     | 40.55      | -1.68  | Average |  | 3 ! 4804.000              | 39.86  | 54.00      | -14.14     | 41.54      | -1.68  | Average |  |
| 4 4804.000                  | 46.49  | 74.00      | -27.51     | 48.17      | -1.68  | Peak    |  | 4 4804.000                | 46.68  | 74.00      | -27.32     | 48.36      | -1.68  | Peak    |  |
| 5 ! 7206.000                | 42.98  | 54.00      | -11.02     | 37.15      | 5.83   | Average |  | 5 ! 7206.000              | 46.70  | 54.00      | -7.30      | 40.87      | 5.83   | Average |  |
| 6 7206.000                  | 48.04  | 74.00      | -25.96     | 42.21      | 5.83   | Peak    |  | 6 ! 7206.000              | 54.45  | 74.00      | -19.55     | 48.62      | 5.83   | Peak    |  |

| EDR-2Mbps Horizontal Middle CH |        |            |            |            |        |         |  | EDR-2Mbps Vertical Middle CH |        |            |            |            |        |         |  |
|--------------------------------|--------|------------|------------|------------|--------|---------|--|------------------------------|--------|------------|------------|------------|--------|---------|--|
| Freq                           | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |  | Freq                         | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |  |
| MHz                            | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |  | MHz                          | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |  |
| 1 ! 2367.354                   | 36.37  | 54.00      | -17.63     | 44.20      | -7.83  | Average |  | 1 ! 2386.230                 | 39.66  | 54.00      | -14.34     | 47.43      | -7.77  | Average |  |
| 2 2367.354                     | 50.71  | 74.00      | -23.29     | 58.54      | -7.83  | Peak    |  | 2 ! 2386.230                 | 54.93  | 74.00      | -19.07     | 62.70      | -7.77  | Peak    |  |
| 3 * 2440.922                   | 85.76  |            |            | 93.41      | -7.65  | Average |  | 3 * 2441.164                 | 97.00  |            |            | 104.65     | -7.65  | Average |  |
| 4 * 2440.922                   | 102.21 |            |            | 109.86     | -7.65  | Peak    |  | 4 * 2441.164                 | 116.42 |            |            | 124.07     | -7.65  | Peak    |  |
| 5 ! 2544.982                   | 37.46  | 54.00      | -16.54     | 44.87      | -7.41  | Average |  | 5 ! 2501.180                 | 40.28  | 54.00      | -13.72     | 47.86      | -7.58  | Average |  |
| 6 2544.982                     | 51.82  | 74.00      | -22.18     | 59.23      | -7.41  | Peak    |  | 6 ! 2501.180                 | 58.50  | 74.00      | -15.50     | 66.08      | -7.58  | Peak    |  |
| 1 ! 3254.700                   | 43.60  | 54.00      | -10.40     | 48.95      | -5.35  | Average |  | 1 ! 3254.700                 | 41.69  | 54.00      | -12.31     | 47.04      | -5.35  | Average |  |
| 2 3254.700                     | 47.08  | 74.00      | -26.92     | 52.43      | -5.35  | Peak    |  | 2 3254.700                   | 48.39  | 74.00      | -25.61     | 53.74      | -5.35  | Peak    |  |
| 3 ! 4882.000                   | 39.37  | 54.00      | -14.63     | 40.89      | -1.52  | Average |  | 3 ! 4882.000                 | 41.86  | 54.00      | -12.14     | 43.38      | -1.52  | Average |  |
| 4 4882.000                     | 46.15  | 74.00      | -27.85     | 47.67      | -1.52  | Peak    |  | 4 4882.000                   | 48.41  | 74.00      | -25.59     | 49.93      | -1.52  | Peak    |  |
| 5 ! 7320.000                   | 42.67  | 54.00      | -11.33     | 37.37      | 5.30   | Average |  | 5 ! 7323.000                 | 46.38  | 54.00      | -7.62      | 41.08      | 5.30   | Average |  |
| 6 7320.000                     | 48.44  | 74.00      | -25.56     | 43.14      | 5.30   | Peak    |  | 6 ! 7323.000                 | 54.02  | 74.00      | -19.98     | 48.72      | 5.30   | Peak    |  |

| EDR-2Mbps Horizontal High CH |        |            |            |            |        |         |  | EDR-2Mbps Vertical High CH |        |            |            |            |        |         |  |
|------------------------------|--------|------------|------------|------------|--------|---------|--|----------------------------|--------|------------|------------|------------|--------|---------|--|
| Freq                         | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |  | Freq                       | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |  |
| MHz                          | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |  | MHz                        | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |  |
| 1 * 2480.168                 | 85.61  |            |            | 93.21      | -7.60  | Average |  | 1 * 2480.168               | 95.87  |            |            | 103.47     | -7.60  | Average |  |
| 2 * 2480.168                 | 101.86 |            |            | 109.46     | -7.60  | Peak    |  | 2 * 2480.168               | 114.94 |            |            | 122.54     | -7.60  | Peak    |  |
| 3 ! 2483.530                 | 40.78  | 54.00      | -13.22     | 48.37      | -7.59  | Average |  | 3 ! 2483.500               | 49.87  | 54.00      | -4.13      | 57.46      | -7.59  | Average |  |
| 4 ! 2483.530                 | 58.37  | 74.00      | -15.63     | 65.96      | -7.59  | Peak    |  | 4 ! 2483.500               | 73.27  | 74.00      | -0.73      | 80.86      | -7.59  | Peak    |  |
| 1 ! 3306.700                 | 44.27  | 54.00      | -9.73      | 49.50      | -5.23  | Average |  | 1 ! 3306.700               | 43.75  | 54.00      | -10.25     | 48.98      | -5.23  | Average |  |
| 2 3306.700                   | 48.03  | 74.00      | -25.97     | 53.26      | -5.23  | Peak    |  | 2 3306.700                 | 48.18  | 74.00      | -25.82     | 53.41      | -5.23  | Peak    |  |
| 3 ! 4960.000                 | 40.77  | 54.00      | -13.23     | 42.11      | -1.34  | Average |  | 3 ! 4960.000               | 42.05  | 54.00      | -11.95     | 43.39      | -1.34  | Average |  |
| 4 4960.000                   | 46.87  | 74.00      | -27.13     | 48.21      | -1.34  | Peak    |  | 4 4960.000                 | 48.17  | 74.00      | -25.83     | 49.51      | -1.34  | Peak    |  |
| 5 ! 7440.000                 | 40.78  | 54.00      | -13.22     | 35.14      | 5.64   | Average |  | 5 ! 7440.000               | 43.91  | 54.00      | -10.09     | 38.27      | 5.64   | Average |  |
| 6 7440.000                   | 46.09  | 74.00      | -27.91     | 40.45      | 5.64   | Peak    |  | 6 7440.000                 | 47.64  | 74.00      | -26.36     | 42.00      | 5.64   | Peak    |  |

| EDR-3Mbps Horizontal Low CH |          |        |               |               |               |        |         | EDR-3Mbps Vertical Low CH |          |        |               |               |               |        |         |
|-----------------------------|----------|--------|---------------|---------------|---------------|--------|---------|---------------------------|----------|--------|---------------|---------------|---------------|--------|---------|
|                             | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |                           | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |
|                             | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |                           | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |
| 1 !                         | 2389.400 | 36.59  | 54.00         | -17.41        | 44.35         | -7.76  | Average | 1 !                       | 2388.200 | 43.54  | 54.00         | -10.46        | 51.31         | -7.77  | Average |
| 2                           | 2389.400 | 51.93  | 74.00         | -22.07        | 59.69         | -7.76  | Peak    | 2 !                       | 2388.200 | 57.65  | 74.00         | -16.35        | 65.42         | -7.77  | Peak    |
| 3 *                         | 2402.300 | 83.91  |               |               | 91.64         | -7.73  | Average | 3 *                       | 2402.200 | 96.65  |               |               | 104.38        | -7.73  | Average |
| 4 *                         | 2402.300 | 99.83  |               |               | 107.56        | -7.73  | Peak    | 4 *                       | 2402.200 | 116.28 |               |               | 124.01        | -7.73  | Peak    |
| 1 !                         | 3202.700 | 41.52  | 54.00         | -12.48        | 47.04         | -5.52  | Average | 1 !                       | 3202.700 | 40.84  | 54.00         | -13.16        | 46.36         | -5.52  | Average |
| 2                           | 3202.700 | 45.57  | 74.00         | -28.43        | 51.09         | -5.52  | Peak    | 2                         | 3202.700 | 44.57  | 74.00         | -29.43        | 50.09         | -5.52  | Peak    |
| 3 !                         | 4804.000 | 39.18  | 54.00         | -14.82        | 40.86         | -1.68  | Average | 3 !                       | 4804.000 | 40.39  | 54.00         | -13.61        | 42.07         | -1.68  | Average |
| 4                           | 4804.000 | 46.32  | 74.00         | -27.68        | 48.00         | -1.68  | Peak    | 4                         | 4804.000 | 47.28  | 74.00         | -26.72        | 48.96         | -1.68  | Peak    |
| 5 !                         | 7206.000 | 42.73  | 54.00         | -11.27        | 36.90         | 5.83   | Average | 5 !                       | 7206.000 | 46.44  | 54.00         | -7.56         | 40.61         | 5.83   | Average |
| 6                           | 7206.000 | 49.83  | 74.00         | -24.17        | 44.00         | 5.83   | Peak    | 6 !                       | 7206.000 | 54.95  | 74.00         | -19.05        | 49.12         | 5.83   | Peak    |

| EDR-3Mbps Horizontal Middle CH |          |        |               |               |               |        |         | EDR-3Mbps Vertical Middle CH |          |        |               |               |               |        |         |
|--------------------------------|----------|--------|---------------|---------------|---------------|--------|---------|------------------------------|----------|--------|---------------|---------------|---------------|--------|---------|
|                                | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |                              | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |
|                                | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |                              | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |
| 1 !                            | 2311.210 | 36.39  | 54.00         | -17.61        | 44.33         | -7.94  | Average | 1 !                          | 2385.262 | 39.04  | 54.00         | -14.96        | 46.81         | -7.77  | Average |
| 2                              | 2311.210 | 50.73  | 74.00         | -23.27        | 58.67         | -7.94  | Peak    | 2                            | 2385.262 | 53.92  | 74.00         | -20.08        | 61.69         | -7.77  | Peak    |
| 3 *                            | 2441.164 | 86.10  |               |               | 93.75         | -7.65  | Average | 3 *                          | 2441.164 | 96.92  |               |               | 104.57        | -7.65  | Average |
| 4 *                            | 2441.164 | 102.83 |               |               | 110.48        | -7.65  | Peak    | 4 *                          | 2441.164 | 116.52 |               |               | 124.17        | -7.65  | Peak    |
| 5 !                            | 2551.032 | 37.19  | 54.00         | -16.81        | 44.57         | -7.38  | Average | 5 !                          | 2488.596 | 39.84  | 54.00         | -14.16        | 47.43         | -7.59  | Average |
| 6                              | 2551.032 | 51.02  | 74.00         | -22.98        | 58.40         | -7.38  | Peak    | 6 !                          | 2488.596 | 58.39  | 74.00         | -15.61        | 65.98         | -7.59  | Peak    |
| 1 !                            | 3254.700 | 47.61  | 54.00         | -6.39         | 52.96         | -5.35  | Average | 1 !                          | 3254.700 | 44.63  | 54.00         | -9.37         | 49.98         | -5.35  | Average |
| 2                              | 3254.700 | 48.96  | 74.00         | -25.04        | 54.31         | -5.35  | Peak    | 2                            | 3254.700 | 46.92  | 74.00         | -27.08        | 52.27         | -5.35  | Peak    |
| 3 !                            | 4882.000 | 38.98  | 54.00         | -15.02        | 40.50         | -1.52  | Average | 3 !                          | 4882.000 | 42.24  | 54.00         | -11.76        | 43.76         | -1.52  | Average |
| 4                              | 4882.000 | 51.24  | 74.00         | -22.76        | 52.76         | -1.52  | Peak    | 4                            | 4882.000 | 52.68  | 74.00         | -21.32        | 54.20         | -1.52  | Peak    |
| 5 !                            | 7323.000 | 42.64  | 54.00         | -11.36        | 37.34         | 5.30   | Average | 5 !                          | 7323.000 | 43.68  | 54.00         | -10.32        | 38.38         | 5.30   | Average |
| 6 !                            | 7323.000 | 54.80  | 74.00         | -19.20        | 49.50         | 5.30   | Peak    | 6 !                          | 7323.000 | 56.35  | 74.00         | -17.65        | 51.05         | 5.30   | Peak    |

| EDR-3Mbps Horizontal High CH |          |        |               |               |               |        |         | EDR-3Mbps Vertical High CH |          |        |               |               |               |        |         |
|------------------------------|----------|--------|---------------|---------------|---------------|--------|---------|----------------------------|----------|--------|---------------|---------------|---------------|--------|---------|
|                              | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |                            | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |
|                              | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |                            | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |
| 1 *                          | 2480.168 | 84.90  |               |               | 92.50         | -7.60  | Average | 1 *                        | 2479.922 | 95.66  |               |               | 103.26        | -7.60  | Average |
| 2 *                          | 2480.168 | 101.18 |               |               | 108.78        | -7.60  | Peak    | 2 *                        | 2479.922 | 114.73 |               |               | 122.33        | -7.60  | Peak    |
| 3 !                          | 2483.530 | 40.54  | 54.00         | -13.46        | 48.13         | -7.59  | Average | 3 !                        | 2483.500 | 49.77  | 54.00         | -4.23         | 57.36         | -7.59  | Average |
| 4 !                          | 2483.530 | 59.52  | 74.00         | -14.48        | 67.11         | -7.59  | Peak    | 4 !                        | 2483.500 | 73.79  | 74.00         | -0.21         | 81.38         | -7.59  | Peak    |
| 1 !                          | 3306.700 | 48.06  | 54.00         | -5.94         | 53.29         | -5.23  | Average | 1 !                        | 3306.700 | 46.85  | 54.00         | -7.15         | 52.08         | -5.23  | Average |
| 2                            | 3306.700 | 51.78  | 74.00         | -22.22        | 57.01         | -5.23  | Peak    | 2                          | 3306.700 | 49.08  | 74.00         | -24.92        | 54.31         | -5.23  | Peak    |
| 3 !                          | 4960.000 | 43.41  | 54.00         | -10.59        | 44.75         | -1.34  | Average | 3 !                        | 4960.000 | 41.61  | 54.00         | -12.39        | 42.95         | -1.34  | Average |
| 4                            | 4960.000 | 49.45  | 74.00         | -24.55        | 50.79         | -1.34  | Peak    | 4                          | 4960.000 | 52.41  | 74.00         | -21.59        | 53.75         | -1.34  | Peak    |
| 5 !                          | 7440.000 | 41.84  | 54.00         | -12.16        | 36.20         | 5.64   | Average | 5 !                        | 7440.000 | 41.39  | 54.00         | -12.61        | 35.75         | 5.64   | Average |
| 6                            | 7440.000 | 46.61  | 74.00         | -27.39        | 40.97         | 5.64   | Peak    | 6 !                        | 7440.000 | 54.00  | 74.00         | -20.00        | 48.36         | 5.64   | Peak    |

< Dipole Antenna (GW.34.5153) with 3.3V<sub>dc</sub>>

| BR-1Mbps Horizontal Low CH |        |            |            |            |        |         | BR-1Mbps Vertical Low CH |        |            |            |            |        |         |
|----------------------------|--------|------------|------------|------------|--------|---------|--------------------------|--------|------------|------------|------------|--------|---------|
| Freq                       | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  | Freq                     | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |
| MHz                        | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         | MHz                      | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |
| 1 ! 2361.000               | 39.04  | 54.00      | -14.96     | 46.90      | -7.86  | Average | 1 ! 2389.200             | 48.88  | 54.00      | -5.12      | 56.64      | -7.76  | Average |
| 2 2361.000                 | 51.48  | 74.00      | -22.52     | 59.34      | -7.86  | Peak    | 2 ! 2389.200             | 60.54  | 74.00      | -13.46     | 68.30      | -7.76  | Peak    |
| 3 * 2402.200               | 89.83  |            |            | 97.56      | -7.73  | Average | 3 * 2402.300             | 100.40 |            |            | 108.13     | -7.73  | Average |
| 4 * 2402.200               | 106.55 |            |            | 114.28     | -7.73  | Peak    | 4 * 2402.300             | 119.08 |            |            | 126.81     | -7.73  | Peak    |
| 1 ! 3202.700               | 40.63  | 54.00      | -13.37     | 46.15      | -5.52  | Average | 1 ! 3202.700             | 38.46  | 54.00      | -15.54     | 43.98      | -5.52  | Average |
| 2 3202.700                 | 47.19  | 74.00      | -26.81     | 52.71      | -5.52  | Peak    | 2 3202.700               | 45.53  | 74.00      | -28.47     | 51.05      | -5.52  | Peak    |
| 3 ! 4804.000               | 46.20  | 54.00      | -7.80      | 47.88      | -1.68  | Average | 3 ! 4804.000             | 47.43  | 54.00      | -6.57      | 49.11      | -1.68  | Average |
| 4 ! 4804.000               | 54.55  | 74.00      | -19.45     | 56.23      | -1.68  | Peak    | 4 ! 4804.000             | 55.93  | 74.00      | -18.07     | 57.61      | -1.68  | Peak    |
| 5 ! 7206.000               | 49.12  | 54.00      | -4.88      | 43.29      | 5.83   | Average | 5 ! 7206.000             | 51.82  | 54.00      | -2.18      | 45.99      | 5.83   | Average |
| 6 ! 7206.000               | 59.25  | 74.00      | -14.75     | 53.42      | 5.83   | Peak    | 6 ! 7206.000             | 62.28  | 74.00      | -11.72     | 56.45      | 5.83   | Peak    |
|                            |        |            |            |            |        |         | 7 ! 12010.000            | 42.90  | 54.00      | -11.10     | 33.06      | 9.84   | Average |
|                            |        |            |            |            |        |         | 8 ! 12010.000            | 55.88  | 74.00      | -18.12     | 46.04      | 9.84   | Peak    |

| BR-1Mbps Horizontal Middle CH |        |            |            |            |        |         | BR-1Mbps Vertical Middle CH |        |            |            |            |        |         |
|-------------------------------|--------|------------|------------|------------|--------|---------|-----------------------------|--------|------------|------------|------------|--------|---------|
| Freq                          | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  | Freq                        | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |
| MHz                           | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         | MHz                         | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |
| 1 ! 2361.062                  | 37.22  | 54.00      | -16.78     | 45.08      | -7.86  | Average | 1 ! 2385.262                | 42.90  | 54.00      | -11.10     | 50.67      | -7.77  | Average |
| 2 2361.062                    | 51.21  | 74.00      | -22.79     | 59.07      | -7.86  | Peak    | 2 2385.262                  | 53.61  | 74.00      | -20.39     | 61.38      | -7.77  | Peak    |
| 3 * 2441.164                  | 90.83  |            |            | 98.48      | -7.65  | Average | 3 * 2441.164                | 103.07 |            |            | 110.72     | -7.65  | Average |
| 4 * 2441.164                  | 106.46 |            |            | 114.11     | -7.65  | Peak    | 4 * 2441.164                | 119.69 |            |            | 127.34     | -7.65  | Peak    |
| 5 ! 2527.800                  | 38.51  | 54.00      | -15.49     | 45.98      | -7.47  | Average | 5 ! 2485.208                | 41.21  | 54.00      | -12.79     | 48.80      | -7.59  | Average |
| 6 2527.800                    | 51.18  | 74.00      | -22.82     | 58.65      | -7.47  | Peak    | 6 ! 2485.208                | 56.67  | 74.00      | -17.33     | 64.26      | -7.59  | Peak    |
| 1 ! 3254.700                  | 43.00  | 54.00      | -11.00     | 48.35      | -5.35  | Average | 1 ! 3254.700                | 40.94  | 54.00      | -13.06     | 46.29      | -5.35  | Average |
| 2 3254.700                    | 49.34  | 74.00      | -24.66     | 54.69      | -5.35  | Peak    | 2 3254.700                  | 47.77  | 74.00      | -26.23     | 53.12      | -5.35  | Peak    |
| 3 ! 4882.000                  | 46.61  | 54.00      | -7.39      | 48.13      | -1.52  | Average | 3 ! 4882.000                | 49.01  | 54.00      | -4.99      | 50.53      | -1.52  | Average |
| 4 ! 4882.000                  | 54.96  | 74.00      | -19.04     | 56.48      | -1.52  | Peak    | 4 ! 4882.000                | 57.61  | 74.00      | -16.39     | 59.13      | -1.52  | Peak    |
| 5 ! 7323.000                  | 51.74  | 54.00      | -2.26      | 46.44      | 5.30   | Average | 5 ! 7323.000                | 52.49  | 54.00      | -1.51      | 47.19      | 5.30   | Average |
| 6 ! 7323.000                  | 56.95  | 74.00      | -17.05     | 51.65      | 5.30   | Peak    | 6 ! 7323.000                | 62.81  | 74.00      | -11.19     | 57.51      | 5.30   | Peak    |
|                               |        |            |            |            |        |         | 7 ! 12200.000               | 45.12  | 54.00      | -8.88      | 35.28      | 9.84   | Average |
|                               |        |            |            |            |        |         | 8 ! 12200.000               | 58.60  | 74.00      | -15.40     | 48.76      | 9.84   | Peak    |

| BR-1Mbps Horizontal High CH |        |            |            |            |        |         | BR-1Mbps Vertical High CH |        |            |            |            |        |         |
|-----------------------------|--------|------------|------------|------------|--------|---------|---------------------------|--------|------------|------------|------------|--------|---------|
| Freq                        | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  | Freq                      | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |
| MHz                         | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         | MHz                       | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |
| 1 * 2480.168                | 88.11  |            |            | 95.71      | -7.60  | Average | 1 * 2480.086              | 100.24 |            |            | 107.84     | -7.60  | Average |
| 2 * 2480.168                | 102.82 |            |            | 110.42     | -7.60  | Peak    | 2 * 2480.086              | 116.18 |            |            | 123.78     | -7.60  | Peak    |
| 3 ! 2519.774                | 35.67  | 54.00      | -18.33     | 43.18      | -7.51  | Average | 3 ! 2483.448              | 51.60  | 54.00      | -2.40      | 59.19      | -7.59  | Average |
| 4 2519.774                  | 52.82  | 74.00      | -21.18     | 60.33      | -7.51  | Peak    | 4 ! 2483.448              | 63.68  | 74.00      | -10.32     | 71.27      | -7.59  | Peak    |
| 1 ! 3306.700                | 40.13  | 54.00      | -13.87     | 45.36      | -5.23  | Average | 1 ! 3306.700              | 41.89  | 54.00      | -12.11     | 47.12      | -5.23  | Average |
| 2 3306.700                  | 48.23  | 74.00      | -25.77     | 53.46      | -5.23  | Peak    | 2 3306.700                | 48.64  | 74.00      | -25.36     | 53.87      | -5.23  | Peak    |
| 3 ! 4960.000                | 48.81  | 54.00      | -5.19      | 50.15      | -1.34  | Average | 3 ! 4960.000              | 49.54  | 54.00      | -4.46      | 50.88      | -1.34  | Average |
| 4 ! 4960.000                | 57.34  | 74.00      | -16.66     | 58.68      | -1.34  | Peak    | 4 ! 4960.000              | 58.24  | 74.00      | -15.76     | 59.58      | -1.34  | Peak    |
| 5 ! 7440.000                | 48.11  | 54.00      | -5.89      | 42.47      | 5.64   | Average | 5 ! 7440.000              | 50.83  | 54.00      | -3.17      | 45.19      | 5.64   | Average |
| 6 ! 7440.000                | 57.82  | 74.00      | -16.18     | 52.18      | 5.64   | Peak    | 6 ! 7440.000              | 60.76  | 74.00      | -13.24     | 55.12      | 5.64   | Peak    |
|                             |        |            |            |            |        |         | 7 ! 12400.000             | 44.56  | 54.00      | -9.44      | 35.45      | 9.11   | Average |
|                             |        |            |            |            |        |         | 8 ! 12400.000             | 58.31  | 74.00      | -15.69     | 49.20      | 9.11   | Peak    |



| EDR-2Mbps Horizontal Low CH |          |        |            |            |            |        |         | EDR-2Mbps Vertical Low CH |          |        |            |            |            |        |         |
|-----------------------------|----------|--------|------------|------------|------------|--------|---------|---------------------------|----------|--------|------------|------------|------------|--------|---------|
|                             | Freq     | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |                           | Freq     | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |
|                             | MHz      | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |                           | MHz      | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |
| 1 !                         | 2361.900 | 39.52  | 54.00      | -14.48     | 47.36      | -7.84  | Average | 1 !                       | 2362.200 | 46.11  | 54.00      | -7.89      | 53.95      | -7.84  | Average |
| 2                           | 2361.900 | 52.20  | 74.00      | -21.80     | 60.04      | -7.84  | Peak    | 2 !                       | 2362.200 | 58.98  | 74.00      | -15.02     | 66.82      | -7.84  | Peak    |
| 3 *                         | 2402.000 | 90.21  |            |            | 97.94      | -7.73  | Average | 3 *                       | 2401.900 | 102.65 |            |            | 110.38     | -7.73  | Average |
| 4 *                         | 2402.000 | 106.01 |            |            | 113.74     | -7.73  | Peak    | 4 *                       | 2401.900 | 118.81 |            |            | 126.54     | -7.73  | Peak    |
| 1 !                         | 3202.700 | 40.72  | 54.00      | -13.28     | 46.24      | -5.52  | Average | 1 !                       | 3202.700 | 37.19  | 54.00      | -16.81     | 42.71      | -5.52  | Average |
| 2                           | 3202.700 | 47.11  | 74.00      | -26.89     | 52.63      | -5.52  | Peak    | 2                         | 3202.700 | 44.41  | 74.00      | -29.59     | 49.93      | -5.52  | Peak    |
| 3 !                         | 4804.000 | 42.16  | 54.00      | -11.84     | 43.84      | -1.68  | Average | 3 !                       | 4804.000 | 43.13  | 54.00      | -10.87     | 44.81      | -1.68  | Average |
| 4                           | 4804.000 | 52.69  | 74.00      | -21.31     | 54.37      | -1.68  | Peak    | 4                         | 4804.000 | 53.86  | 74.00      | -20.14     | 55.54      | -1.68  | Peak    |
| 5 !                         | 7206.000 | 45.49  | 54.00      | -8.51      | 39.66      | 5.83   | Average | 5 !                       | 7206.000 | 48.84  | 54.00      | -5.16      | 43.01      | 5.83   | Average |
| 6 !                         | 7206.000 | 57.44  | 74.00      | -16.56     | 51.61      | 5.83   | Peak    | 6 !                       | 7206.000 | 60.93  | 74.00      | -13.07     | 55.10      | 5.83   | Peak    |

| EDR-2Mbps Horizontal Middle CH |          |        |            |            |            |        |         | EDR-2Mbps Vertical Middle CH |            |        |            |            |            |        |         |
|--------------------------------|----------|--------|------------|------------|------------|--------|---------|------------------------------|------------|--------|------------|------------|------------|--------|---------|
|                                | Freq     | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |                              | Freq       | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |
|                                | MHz      | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |                              | MHz        | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |
| 1 !                            | 2345.332 | 37.44  | 54.00      | -16.56     | 45.33      | -7.89  | Average | 1 !                          | 2379.696   | 41.83  | 54.00      | -12.17     | 49.62      | -7.79  | Average |
| 2                              | 2345.332 | 51.40  | 74.00      | -22.60     | 59.29      | -7.89  | Peak    | 2 !                          | 2379.696   | 57.05  | 74.00      | -16.95     | 64.84      | -7.79  | Peak    |
| 3 *                            | 2440.922 | 88.90  |            |            | 96.55      | -7.65  | Average | 3 *                          | 2441.164   | 102.52 |            |            | 110.17     | -7.65  | Average |
| 4 *                            | 2440.922 | 104.50 |            |            | 112.15     | -7.65  | Peak    | 4 *                          | 2441.164   | 119.42 |            |            | 127.07     | -7.65  | Peak    |
| 5 !                            | 2529.010 | 38.59  | 54.00      | -15.41     | 46.06      | -7.47  | Average | 5 !                          | 2491.500   | 44.33  | 54.00      | -9.67      | 51.92      | -7.59  | Average |
| 6                              | 2529.010 | 51.57  | 74.00      | -22.43     | 59.04      | -7.47  | Peak    | 6 !                          | 2491.500   | 58.98  | 74.00      | -15.02     | 66.57      | -7.59  | Peak    |
| 1 !                            | 3254.700 | 42.94  | 54.00      | -11.06     | 48.29      | -5.35  | Average | 1 !                          | 3254.700   | 40.80  | 54.00      | -13.20     | 46.15      | -5.35  | Average |
| 2                              | 3254.700 | 49.37  | 74.00      | -24.63     | 54.72      | -5.35  | Peak    | 2                            | 3254.700   | 47.18  | 74.00      | -26.82     | 52.53      | -5.35  | Peak    |
| 3 !                            | 4882.000 | 43.15  | 54.00      | -10.85     | 44.67      | -1.52  | Average | 3 !                          | 4882.000   | 46.14  | 54.00      | -7.86      | 47.66      | -1.52  | Average |
| 4                              | 4882.000 | 53.66  | 74.00      | -20.34     | 55.18      | -1.52  | Peak    | 4 !                          | 4882.000   | 57.21  | 74.00      | -16.79     | 58.73      | -1.52  | Peak    |
| 5 !                            | 7323.000 | 45.72  | 54.00      | -8.28      | 40.42      | 5.30   | Average | 5 !                          | 7323.000   | 49.50  | 54.00      | -4.50      | 44.20      | 5.30   | Average |
| 6 !                            | 7323.000 | 56.81  | 74.00      | -17.19     | 51.51      | 5.30   | Peak    | 6 !                          | 7323.000   | 61.09  | 74.00      | -12.91     | 55.79      | 5.30   | Peak    |
|                                |          |        |            |            |            |        |         | 7 !                          | 112205.000 | 42.84  | 54.00      | -11.16     | 33.01      | 9.83   | Average |
|                                |          |        |            |            |            |        |         | 8 !                          | 112205.000 | 57.29  | 74.00      | -16.71     | 47.46      | 9.83   | Peak    |

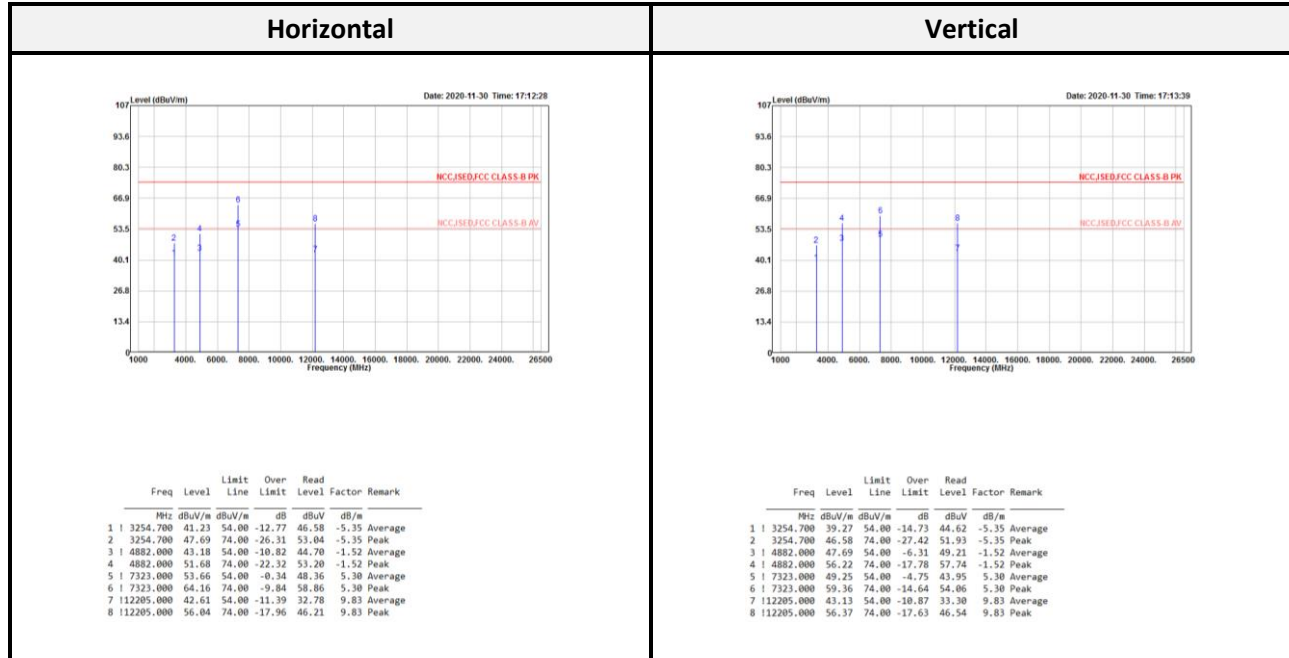
| EDR-2Mbps Horizontal High CH |          |        |            |            |            |        |         | EDR-2Mbps Vertical High CH |            |        |            |            |            |        |         |
|------------------------------|----------|--------|------------|------------|------------|--------|---------|----------------------------|------------|--------|------------|------------|------------|--------|---------|
|                              | Freq     | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |                            | Freq       | Level  | Limit Line | Over Limit | Read Level | Factor | Remark  |
|                              | MHz      | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |                            | MHz        | dBuV/m | dBuV/m     | dB         | dBuV       | dB/m   |         |
| 1 *                          | 2480.168 | 84.23  |            |            | 91.83      | -7.60  | Average | 1 *                        | 2480.168   | 97.91  |            |            | 105.51     | -7.60  | Average |
| 2 *                          | 2480.168 | 102.19 |            |            | 109.79     | -7.60  | Peak    | 2 *                        | 2480.168   | 116.82 |            |            | 124.42     | -7.60  | Peak    |
| 3 !                          | 2483.448 | 41.04  | 54.00      | -12.96     | 48.63      | -7.59  | Average | 3 !                        | 2483.612   | 52.85  | 54.00      | -1.15      | 60.44      | -7.59  | Average |
| 4                            | 2483.448 | 52.77  | 74.00      | -21.23     | 60.36      | -7.59  | Peak    | 4 !                        | 2483.612   | 64.43  | 74.00      | -9.57      | 72.02      | -7.59  | Peak    |
| 1 !                          | 3306.700 | 43.37  | 54.00      | -10.63     | 48.60      | -5.23  | Average | 1 !                        | 3306.700   | 41.73  | 54.00      | -12.27     | 46.96      | -5.23  | Average |
| 2                            | 3306.700 | 49.49  | 74.00      | -24.51     | 54.72      | -5.23  | Peak    | 2                          | 3306.700   | 48.63  | 74.00      | -25.37     | 53.86      | -5.23  | Peak    |
| 3 !                          | 4960.000 | 45.99  | 54.00      | -8.01      | 47.33      | -1.34  | Average | 3 !                        | 4960.000   | 46.28  | 54.00      | -7.72      | 47.62      | -1.34  | Average |
| 4 !                          | 4960.000 | 56.63  | 74.00      | -17.37     | 57.97      | -1.34  | Peak    | 4 !                        | 4960.000   | 57.60  | 74.00      | -16.40     | 58.94      | -1.34  | Peak    |
| 5 !                          | 7440.000 | 45.48  | 54.00      | -8.52      | 39.84      | 5.64   | Average | 5 !                        | 7440.000   | 48.07  | 54.00      | -5.93      | 42.43      | 5.64   | Average |
| 6 !                          | 7440.000 | 56.12  | 74.00      | -17.88     | 50.48      | 5.64   | Peak    | 6 !                        | 7440.000   | 58.96  | 74.00      | -15.04     | 53.32      | 5.64   | Peak    |
|                              |          |        |            |            |            |        |         | 7 !                        | 112400.000 | 42.96  | 54.00      | -11.04     | 33.85      | 9.11   | Average |
|                              |          |        |            |            |            |        |         | 8 !                        | 112400.000 | 56.97  | 74.00      | -17.03     | 47.86      | 9.11   | Peak    |

| EDR-3Mbps Horizontal Low CH |          |        |               |               |               |        |         | EDR-3Mbps Vertical Low CH |            |        |               |               |               |        |         |
|-----------------------------|----------|--------|---------------|---------------|---------------|--------|---------|---------------------------|------------|--------|---------------|---------------|---------------|--------|---------|
|                             | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |                           | Freq       | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |
|                             | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |                           | MHz        | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |
| 1 !                         | 2380.700 | 37.19  | 54.00         | -16.81        | 44.98         | -7.79  | Average | 1 !                       | 2362.200   | 46.07  | 54.00         | -7.93         | 53.91         | -7.84  | Average |
| 2                           | 2380.700 | 52.12  | 74.00         | -21.88        | 59.91         | -7.79  | Peak    | 2 !                       | 2362.200   | 57.81  | 74.00         | -16.19        | 65.65         | -7.84  | Peak    |
| 3 *                         | 2402.100 | 87.97  |               |               | 95.70         | -7.73  | Average | 3 *                       | 2402.200   | 98.48  |               |               | 106.21        | -7.73  | Average |
| 4 *                         | 2402.100 | 106.07 |               |               | 113.80        | -7.73  | Peak    | 4 *                       | 2402.200   | 118.69 |               |               | 126.42        | -7.73  | Peak    |
| 1 !                         | 3202.700 | 40.39  | 54.00         | -13.61        | 45.91         | -5.52  | Average | 1 !                       | 3202.700   | 37.11  | 54.00         | -16.89        | 42.63         | -5.52  | Average |
| 2                           | 3202.700 | 47.18  | 74.00         | -26.82        | 52.70         | -5.52  | Peak    | 2                         | 3202.700   | 44.32  | 74.00         | -29.68        | 49.84         | -5.52  | Peak    |
| 3 !                         | 4804.000 | 42.34  | 54.00         | -11.66        | 44.02         | -1.68  | Average | 3 !                       | 4804.000   | 43.55  | 54.00         | -10.45        | 45.23         | -1.68  | Average |
| 4                           | 4804.000 | 53.23  | 74.00         | -20.77        | 54.91         | -1.68  | Peak    | 4 !                       | 4804.000   | 54.30  | 74.00         | -19.70        | 55.98         | -1.68  | Peak    |
| 5 !                         | 7206.000 | 44.91  | 54.00         | -9.09         | 39.08         | 5.83   | Average | 5 !                       | 7206.000   | 48.86  | 54.00         | -5.14         | 43.03         | 5.83   | Average |
| 6 !                         | 7206.000 | 58.12  | 74.00         | -15.88        | 52.29         | 5.83   | Peak    | 6 !                       | 7206.000   | 61.93  | 74.00         | -12.07        | 56.10         | 5.83   | Peak    |
|                             |          |        |               |               |               |        |         | 7 !                       | 112010.000 | 39.84  | 54.00         | -14.16        | 30.00         | 9.84   | Average |
|                             |          |        |               |               |               |        |         | 8 !                       | 112010.000 | 54.23  | 74.00         | -19.77        | 44.39         | 9.84   | Peak    |

| EDR-3Mbps Horizontal Middle CH |          |        |               |               |               |        |         | EDR-3Mbps Vertical Middle CH |            |        |               |               |               |        |         |
|--------------------------------|----------|--------|---------------|---------------|---------------|--------|---------|------------------------------|------------|--------|---------------|---------------|---------------|--------|---------|
|                                | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |                              | Freq       | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |
|                                | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |                              | MHz        | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |
| 1 !                            | 2382.842 | 36.62  | 54.00         | -17.38        | 44.40         | -7.78  | Average | 1 !                          | 2383.326   | 40.13  | 54.00         | -13.87        | 47.91         | -7.78  | Average |
| 2                              | 2382.842 | 50.83  | 74.00         | -23.17        | 58.61         | -7.78  | Peak    | 2 !                          | 2383.326   | 55.36  | 74.00         | -18.64        | 63.14         | -7.78  | Peak    |
| 3 *                            | 2441.164 | 87.91  |               |               | 95.56         | -7.65  | Average | 3 *                          | 2441.164   | 99.32  |               |               | 106.97        | -7.65  | Average |
| 4 *                            | 2441.164 | 105.67 |               |               | 113.32        | -7.65  | Peak    | 4 *                          | 2441.164   | 119.54 |               |               | 127.19        | -7.65  | Peak    |
| 5 !                            | 2505.052 | 37.21  | 54.00         | -16.79        | 44.76         | -7.55  | Average | 5 !                          | 2497.308   | 41.29  | 54.00         | -12.71        | 48.87         | -7.58  | Average |
| 6                              | 2505.052 | 51.81  | 74.00         | -22.19        | 59.36         | -7.55  | Peak    | 6 !                          | 2497.308   | 59.15  | 74.00         | -14.85        | 66.73         | -7.58  | Peak    |
| 1 !                            | 3254.700 | 42.80  | 54.00         | -11.20        | 48.15         | -5.35  | Average | 1 !                          | 3254.700   | 40.91  | 54.00         | -13.09        | 46.26         | -5.35  | Average |
| 2                              | 3254.700 | 49.18  | 74.00         | -24.82        | 54.53         | -5.35  | Peak    | 2                            | 3254.700   | 47.36  | 74.00         | -26.64        | 52.71         | -5.35  | Peak    |
| 3 !                            | 4882.000 | 43.05  | 54.00         | -10.95        | 44.57         | -1.52  | Average | 3 !                          | 4882.000   | 46.10  | 54.00         | -7.90         | 47.62         | -1.52  | Average |
| 4                              | 4882.000 | 53.53  | 74.00         | -20.47        | 55.05         | -1.52  | Peak    | 4 !                          | 4882.000   | 57.07  | 74.00         | -16.93        | 58.59         | -1.52  | Peak    |
| 5 !                            | 7323.000 | 45.44  | 54.00         | -8.56         | 40.14         | 5.30   | Average | 5 !                          | 7323.000   | 49.42  | 54.00         | -4.58         | 44.12         | 5.30   | Average |
| 6 !                            | 7323.000 | 57.54  | 74.00         | -16.46        | 52.24         | 5.30   | Peak    | 6 !                          | 7323.000   | 62.68  | 74.00         | -11.32        | 57.38         | 5.30   | Peak    |
|                                |          |        |               |               |               |        |         | 7 !                          | 112205.000 | 43.88  | 54.00         | -10.12        | 34.05         | 9.83   | Average |
|                                |          |        |               |               |               |        |         | 8 !                          | 112205.000 | 57.79  | 74.00         | -16.21        | 47.96         | 9.83   | Peak    |

| EDR-3Mbps Horizontal High CH |          |        |               |               |               |        |         | EDR-3Mbps Vertical High CH |          |        |               |               |               |        |         |
|------------------------------|----------|--------|---------------|---------------|---------------|--------|---------|----------------------------|----------|--------|---------------|---------------|---------------|--------|---------|
|                              | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |                            | Freq     | Level  | Limit<br>Line | Over<br>Limit | Read<br>Level | Factor | Remark  |
|                              | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |                            | MHz      | dBuV/m | dBuV/m        | dB            | dBuV          | dB/m   |         |
| 1 *                          | 2479.840 | 86.17  |               |               | 93.77         | -7.60  | Average | 1 *                        | 2480.168 | 97.91  |               |               | 105.51        | -7.60  | Average |
| 2 *                          | 2479.840 | 103.39 |               |               | 110.99        | -7.60  | Peak    | 2 *                        | 2480.168 | 117.93 |               |               | 125.53        | -7.60  | Peak    |
| 3 !                          | 2483.530 | 40.72  | 54.00         | -13.28        | 48.31         | -7.59  | Average | 3 !                        | 2483.500 | 51.60  | 54.00         | -2.40         | 59.19         | -7.59  | Average |
| 4 !                          | 2483.530 | 56.08  | 74.00         | -17.92        | 63.67         | -7.59  | Peak    | 4 !                        | 2483.500 | 72.11  | 74.00         | -1.89         | 79.70         | -7.59  | Peak    |
| 1 !                          | 3306.700 | 43.24  | 54.00         | -10.76        | 48.47         | -5.23  | Average | 1 !                        | 3306.700 | 42.31  | 54.00         | -11.69        | 47.54         | -5.23  | Average |
| 2                            | 3306.700 | 49.68  | 74.00         | -24.32        | 54.91         | -5.23  | Peak    | 2                          | 3306.700 | 48.87  | 74.00         | -25.13        | 54.10         | -5.23  | Peak    |
| 3 !                          | 4960.000 | 45.40  | 54.00         | -8.60         | 46.74         | -1.34  | Average | 3 !                        | 4960.000 | 46.03  | 54.00         | -7.97         | 47.37         | -1.34  | Average |
| 4 !                          | 4960.000 | 56.08  | 74.00         | -17.92        | 57.42         | -1.34  | Peak    | 4 !                        | 4960.000 | 57.04  | 74.00         | -16.96        | 58.38         | -1.34  | Peak    |
| 5 !                          | 7440.000 | 45.74  | 54.00         | -8.26         | 40.10         | 5.64   | Average | 5 !                        | 7440.000 | 44.42  | 54.00         | -9.58         | 38.78         | 5.64   | Average |
| 6                            | 7440.000 | 52.30  | 74.00         | -21.70        | 46.66         | 5.64   | Peak    | 6 !                        | 7440.000 | 56.94  | 74.00         | -17.06        | 51.30         | 5.64   | Peak    |

**Above 1G (1 GHz-26.5 GHz):** The worst mode is Chip Antenna with 3.3V<sub>dc</sub> for BR-1M middle CH.



Level = Read Level + Factor

Over Limit = Level – Limit

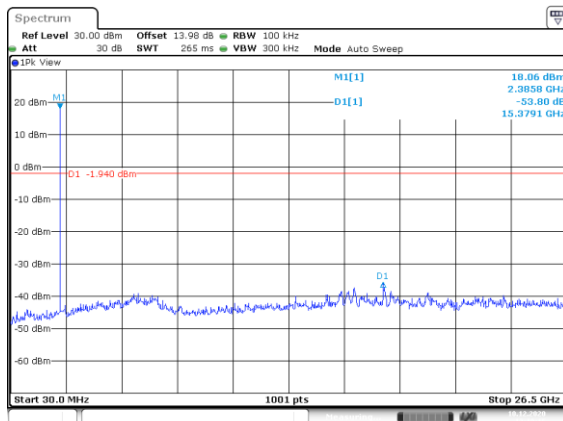
Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

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

### Conducted Spurious Emissions:

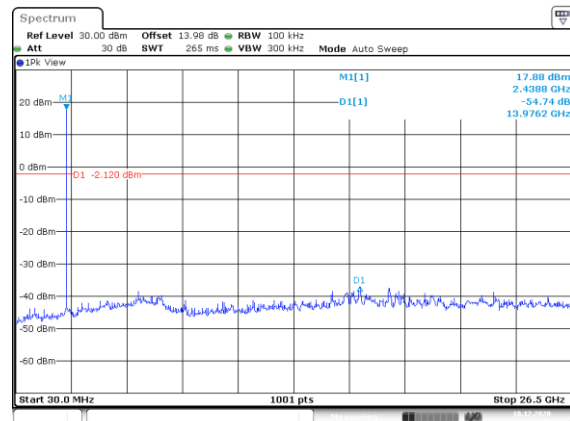
| Configuration | Channel | Frequency (MHz) | Delta Peak to Band Emission (dBc) | Limit (dBc) | Result     |
|---------------|---------|-----------------|-----------------------------------|-------------|------------|
| BLE-1Mbps     | Low     | 2402            | 53.80                             | ≥ 20        | Compliance |
|               | Mid     | 2440            | 54.74                             | ≥ 20        | Compliance |
|               | High    | 2480            | 46.58                             | ≥ 20        | Compliance |
| BLE-2Mbps     | Low     | 2402            | 49.13                             | ≥ 20        | Compliance |
|               | Mid     | 2440            | 42.42                             | ≥ 20        | Compliance |
|               | High    | 2480            | 41.78                             | ≥ 20        | Compliance |
| BLE-3Mbps     | Low     | 2402            | 41.88                             | ≥ 20        | Compliance |
|               | Mid     | 2440            | 43.07                             | ≥ 20        | Compliance |
|               | High    | 2480            | 52.72                             | ≥ 20        | Compliance |

### BR-1Mbps Low CH



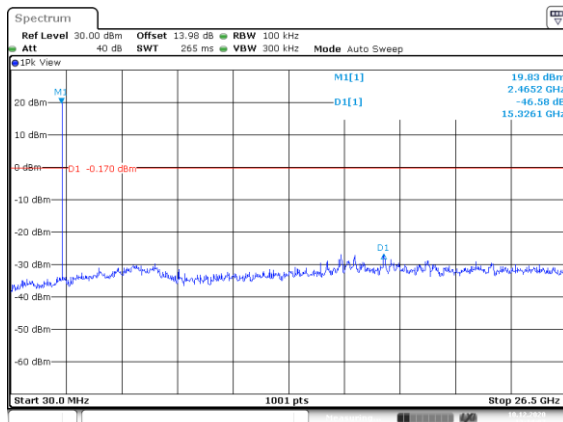
Date: 10 DEC.2020 12:10:14

### BR-1Mbps Middle CH



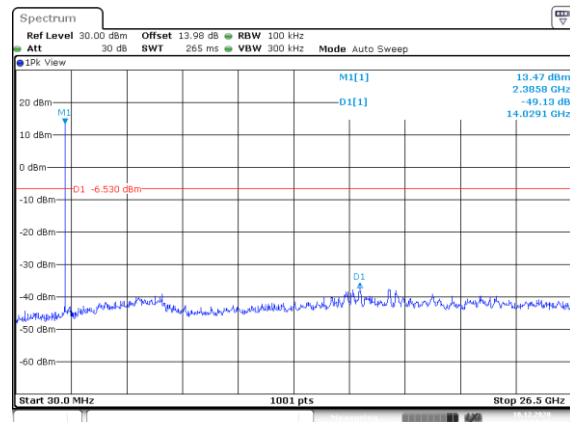
Date: 10 DEC.2020 12:12:15

### BR-1Mbps High CH



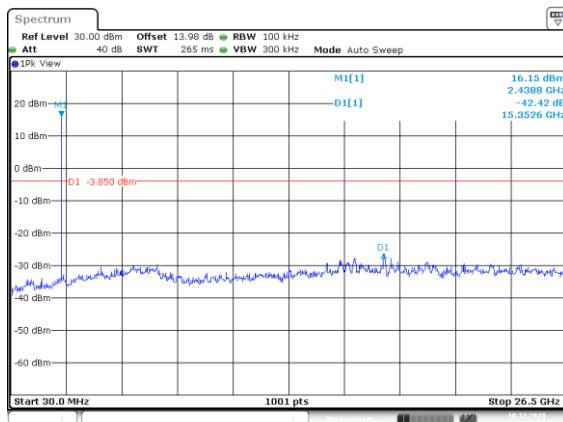
Date: 10 DEC.2020 12:14:06

### EDR-2Mbps Low CH



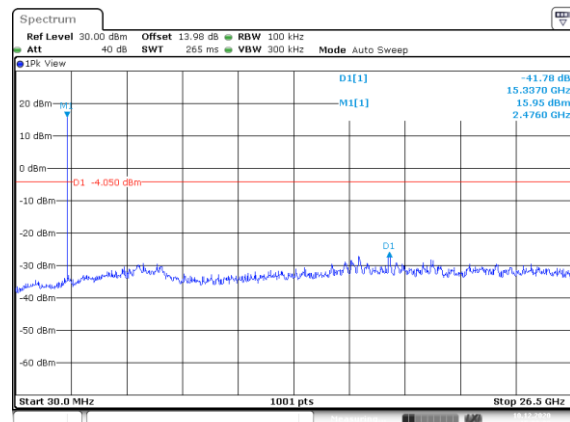
Date: 10 DEC.2020 12:16:06

### EDR-2Mbps Middle CH



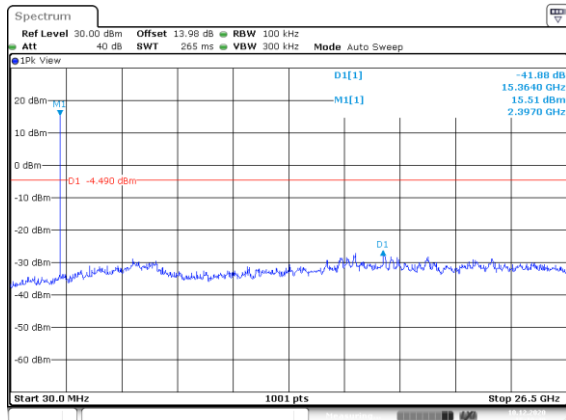
Date: 10 DEC.2020 12:17:35

### EDR-2Mbps High CH



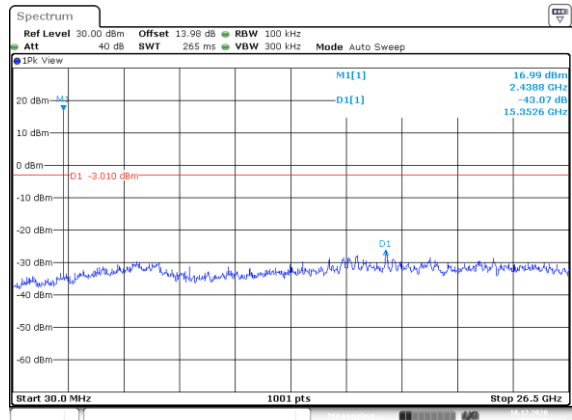
Date: 10 DEC.2020 15:09:09

### EDR-3Mbps Low CH



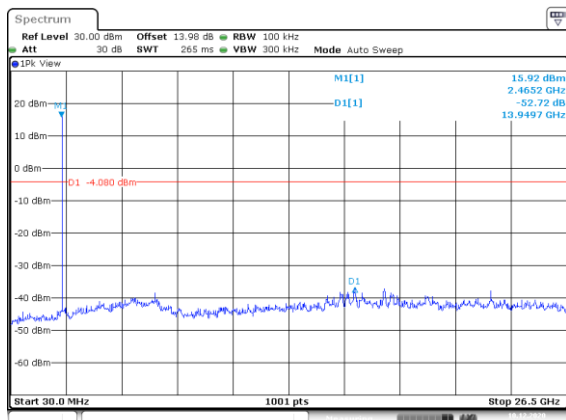
Date: 10 DEC.2020 15:10:49

### EDR-3Mbps Middle CH



Date: 10 DEC.2020 12:22:39

### EDR-3Mbps High CH



Date: 10 DEC.2020 12:24:06

## 9 FCC §15.247(a)(1) and RSS-Gen Sec 6.7– 20 dB Emission Bandwidth and 99% OBW

### 9.1 Applicable Standard

According to FCC §15.247(a) (1) the maximum 20 dB bandwidth of the hopping channel shall be presented.

According to RSS-247 §5.1

The bandwidth of a frequency hopping channel is the 20 dB emission bandwidth, measured with the hopping stopped. The system's radio frequency (RF) bandwidth is equal to the channel bandwidth multiplied by the number of channels in the hopset. The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudo randomly ordered list of hopping frequencies. The system receivers shall have input bandwidths that match the hopping

channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals

According to RSS-Gen §6.7,

The occupied bandwidth or the "99% emission bandwidth" is defined as the frequency range between two points, one above and the other below the carrier frequency, within which 99% of the total transmitted power of the fundamental transmitted emission is contained. The occupied bandwidth shall be reported for all equipment in addition to the specified bandwidth required in the applicable RSSs.

In some cases, the "x dB bandwidth" is required, which is defined as the frequency range between two points, one at the lowest frequency below and one at the highest frequency above the carrier frequency, at which the maximum power level of the transmitted emission is attenuated x dB below the maximum in-band power level of the modulated signal, where the two points are on the outskirts of the in-band emission.

The following conditions shall be observed for measuring the occupied bandwidth and x dB bandwidth:

- The transmitter shall be operated at its maximum carrier power measured under normal test conditions.
- The span of the spectrum analyzer shall be set large enough to capture all products of the modulation process, including the emission skirts, around the carrier frequency, but small enough to avoid having other emissions (e.g. on adjacent channels) within the span.
- The detector of the spectrum analyzer shall be set to "Sample". However, a peak, or peak hold, may be used in place of the sampling detector since this usually produces a wider bandwidth than the actual bandwidth (worst-case measurement). Use of a peak hold (or "Max Hold") may be necessary to determine the occupied / x dB bandwidth if the device is not transmitting continuously.

- The resolution bandwidth (RBW) shall be in the range of 1% to 5% of the actual occupied / x dB bandwidth and the video bandwidth (VBW) shall not be smaller than three times the RBW value. Video averaging is not permitted.

Note: It may be necessary to repeat the measurement a few times until the RBW and VBW are in compliance with the above requirement.

For the 99% emission bandwidth, the trace data points are recovered and directly summed in linear power level terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached, and that frequency recorded. The process is repeated for the highest frequency data points (starting at the highest frequency, at the right side of the span, and going down in frequency). This frequency is then recorded. The difference between the two recorded frequencies is the occupied bandwidth (or the 99% emission bandwidth).

## 9.2 Test Procedure

### 20dB Bandwidth:

- (1) Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- (2) Position the EUT without connection to measurement instrument. Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
- (3) Measure the frequency difference of two frequencies that were attenuated 20 dB from the reference level. Record the frequency difference as the emission bandwidth.
- (4) Repeat above procedures until all frequencies measured were complete.

### 99% Emission Bandwidth

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission.

The following procedure shall be used for measuring 99% power bandwidth:

- a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.
- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than [10 log (OBW/RBW)] below the reference level. Specific guidance is given in 4.1.5.2.

d) Step a) through step c) might require iteration to adjust within the specified range.

e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used.

Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.

f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.

g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.

h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

### 9.3 Test Equipment List and Details

| Description               | Manufacture     | Model   | Serial No.       | Cal. Date. | Cal. Due.  |
|---------------------------|-----------------|---------|------------------|------------|------------|
| Conducted Room(TH-02)     |                 |         |                  |            |            |
| Spectrum Analyzer         | Rohde & Schwarz | FSU26   | 100406           | 2020/03/11 | 2021/03/10 |
| Cable                     | MTJ             | MT40S   | 620620-MT40S-100 | Each use   | -          |
| SMA 10dB Fixed Attenuator | MVE             | 2W 6GHz | N/A              | Each use   | -          |

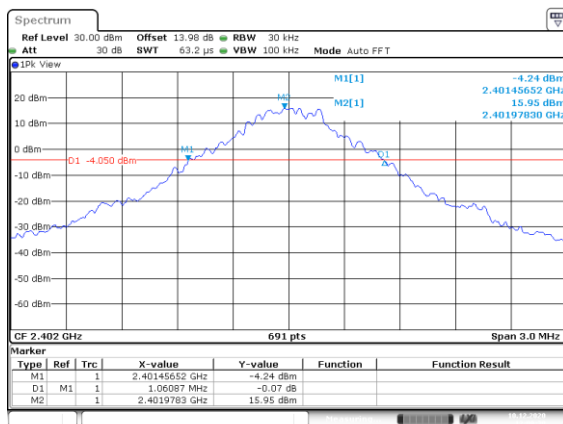
**\*Statement of Traceability:** The testing equipment's listed above have finished the calibration by Electronics Testing Center, Taiwan (ETC) or other laboratories which were accredited by TAF or equivalent organizations. The calibration result could be traceable to the International System of Units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



# 9.4 Test Results

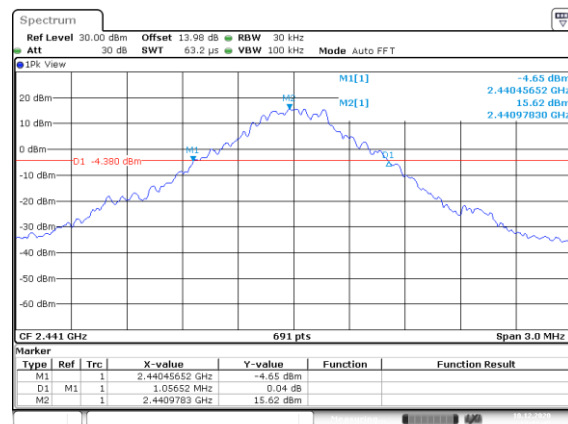
| Configuration | Channel | Frequency (MHz) | 20 dB Bandwidth (MHz) | 99% Occupied Bandwidth (MHz) |
|---------------|---------|-----------------|-----------------------|------------------------------|
| BR-1Mbps      | Low     | 2402            | 1.06                  | 0.92                         |
|               | Middle  | 2441            | 1.06                  | 0.92                         |
|               | High    | 2480            | 1.05                  | 0.91                         |
| EDR-2Mbps     | Low     | 2402            | 1.33                  | 1.20                         |
|               | Middle  | 2441            | 1.35                  | 1.22                         |
|               | High    | 2480            | 1.35                  | 1.25                         |
| EDR-3Mbps     | Low     | 2402            | 1.33                  | 1.20                         |
|               | Middle  | 2441            | 1.33                  | 1.22                         |
|               | High    | 2480            | 1.33                  | 1.24                         |

6 dB BW BR-1Mbps Low CH



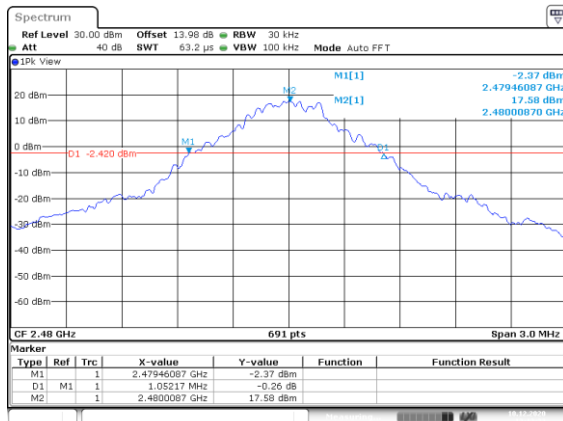
Date: 10, DEC, 2020 12:09:30

6 dB BW BR-1Mbps Middle CH



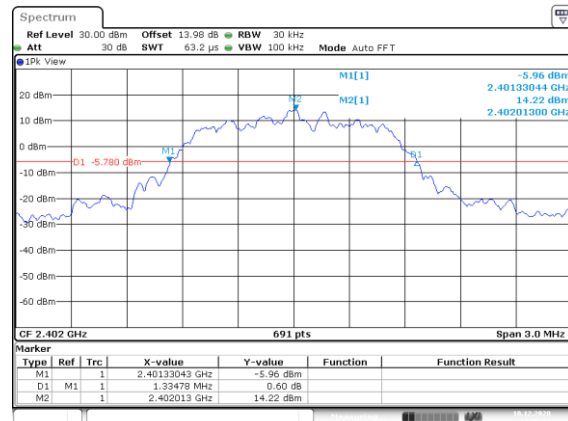
Date: 10, DEC, 2020 12:11:45

6 dB BW BR-1Mbps High CH



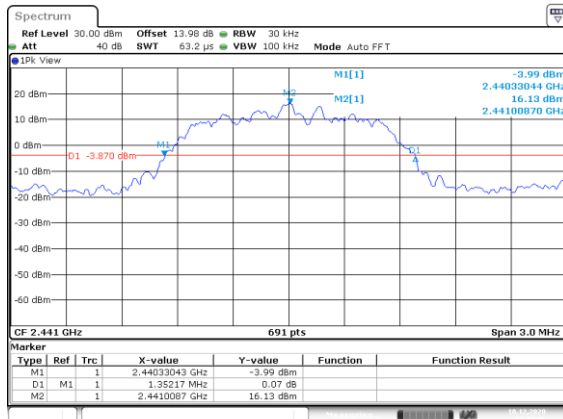
Date: 10, DEC, 2020 12:13:22

6 dB BW EDR-2Mbps Low CH



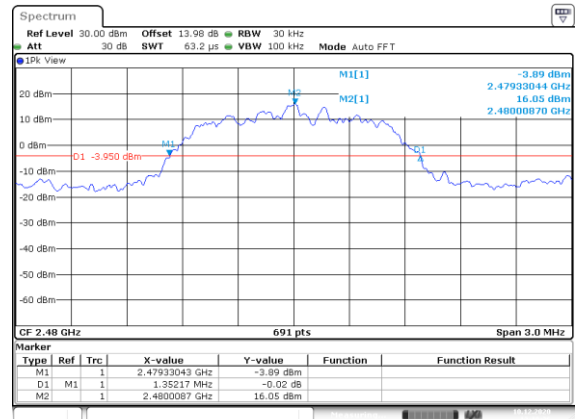
Date: 10, DEC, 2020 12:15:22

## 6 dB BW EDR-2Mbps Middle CH



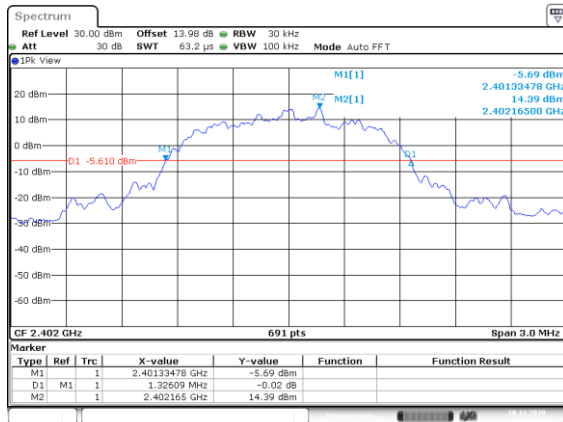
Date: 10 DEC 2020 12:17:06

## 6 dB BW EDR-2Mbps High CH



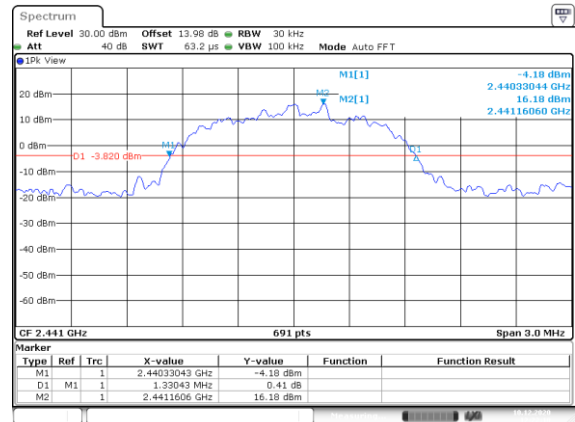
Date: 10 DEC 2020 12:18:25

## 6 dB BW EDR-3Mbps Low CH



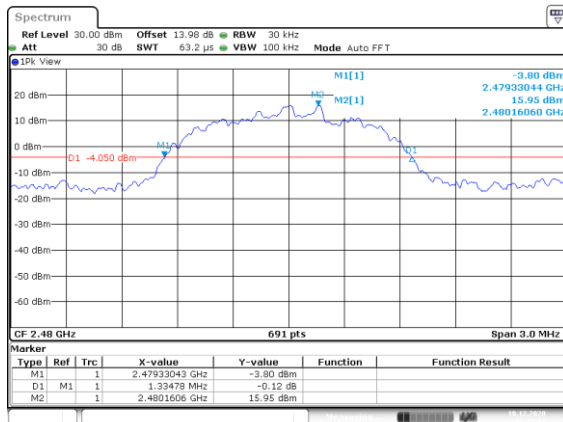
Date: 10 DEC 2020 12:20:15

## 6 dB BW EDR-3Mbps Middle CH



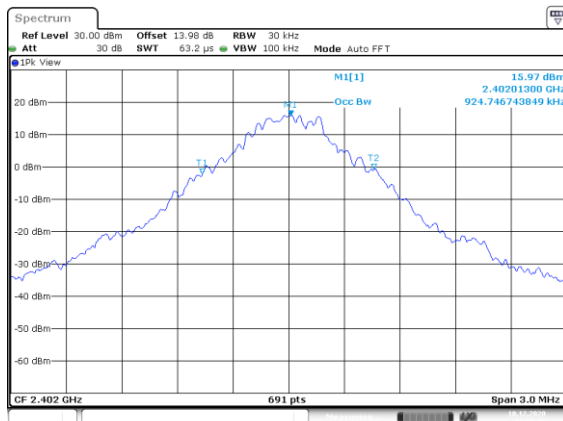
Date: 10 DEC 2020 12:22:10

## 6 dB BW EDR-3Mbps High CH



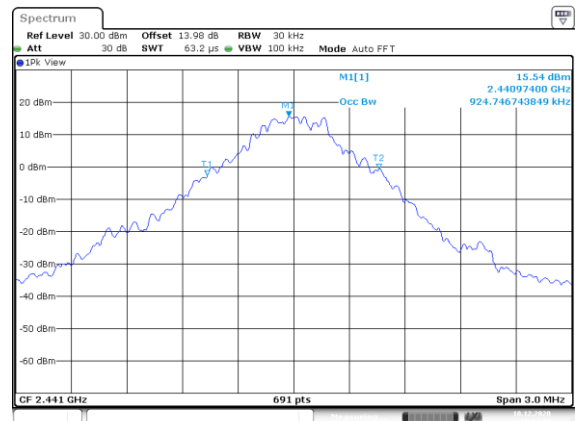
Date: 10 DEC 2020 12:23:22

### 99% OBW BR-1Mbps Low CH



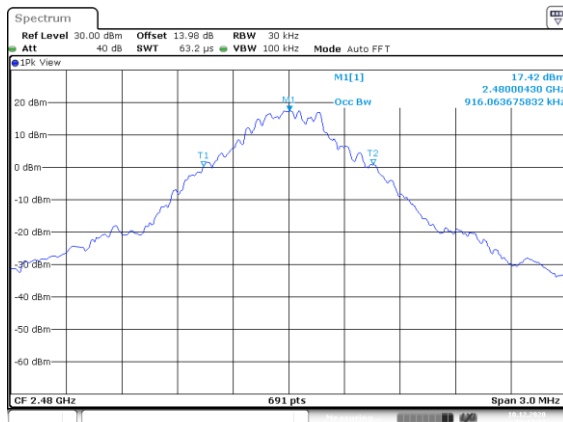
Date: 10 DEC 2020 12:09:45

### 99% OBW BR-1Mbps Middle CH



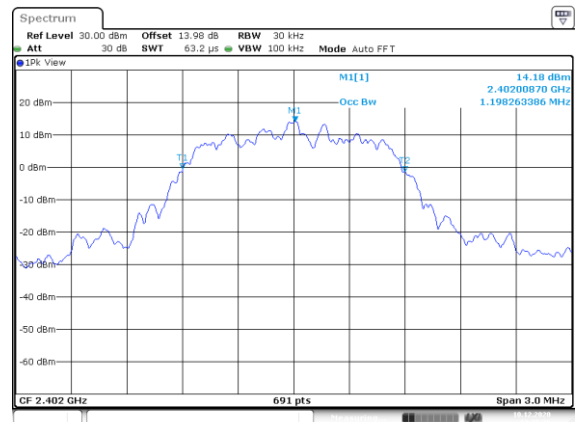
Date: 10 DEC 2020 12:12:00

### 99% OBW BR-1Mbps High CH



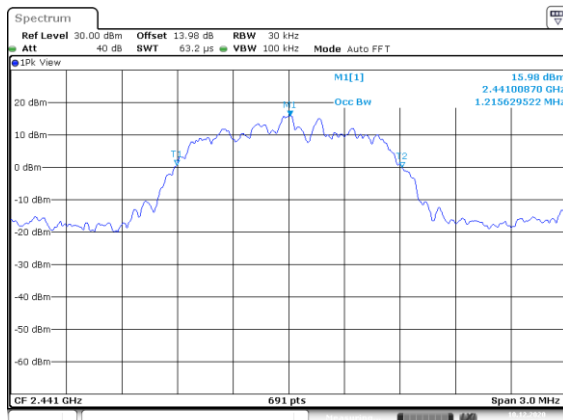
Date: 10 DEC 2020 12:13:37

### 99% OBW EDR-2Mbps Low CH



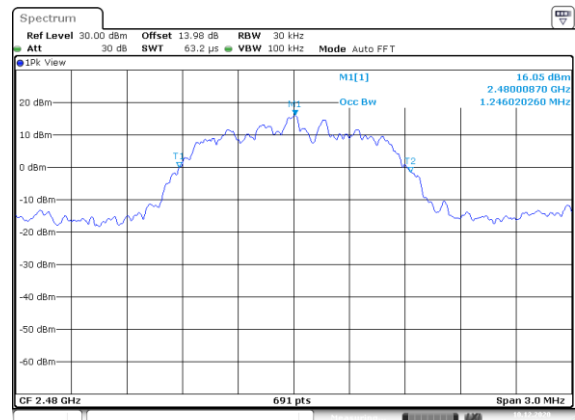
Date: 10 DEC 2020 12:15:36

### 99% OBW EDR-2Mbps Middle CH



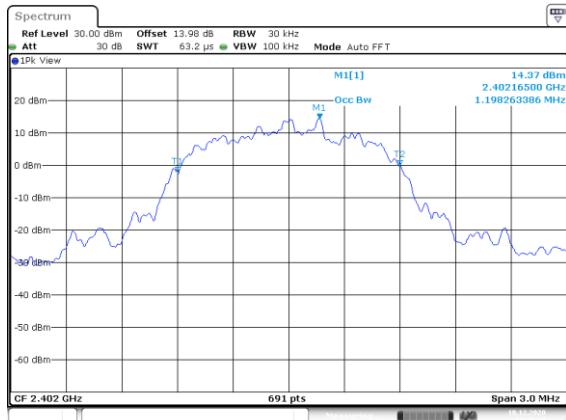
Date: 10 DEC 2020 12:17:21

### 99% OBW EDR-2Mbps High CH

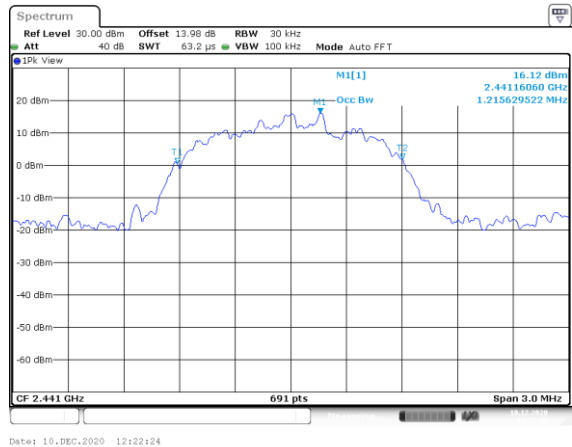


Date: 10 DEC 2020 12:18:40

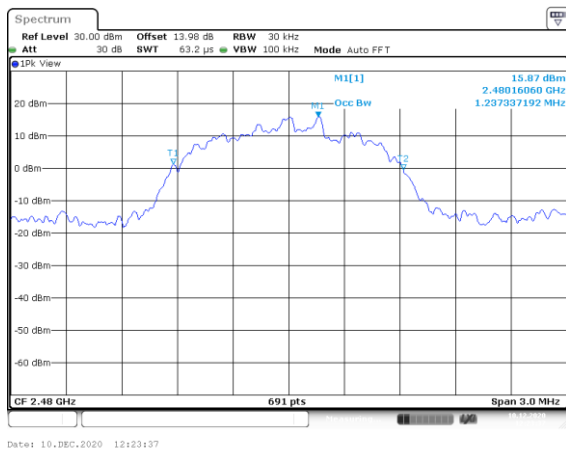
### 99% OBW EDR-3Mbps Low CH



### 99% OBW EDR-3Mbps Middle CH



### 99% OBW EDR-3Mbps High CH



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## 10 FCC §15.247(a)(1) and RSS-247 Sec 5.1(b)– Channel Separation Test

### 10.1 Applicable Standard

According to FCC §15.247(a) (1): Frequency hopping systems 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, frequency hopping systems operating in the 2400-2483.5 MHz band 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 the systems operate with an output power no greater than 125 mW. The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudo randomly ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

According to RSS-247 Sec 5.1(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.

### 10.2 Test Procedure

Span = wide enough to capture the peaks of two adjacent channels

Resolution (or IF) Bandwidth (RBW)  $\approx$  30% of the channel spacing, adjust as necessary to best identify the center of each individual channel. Video (or Average) Bandwidth (VBW)  $\geq$  RBW. Sweep = auto

Detector function = peak Trace = max hold

### 10.3 Test Equipment List and Details

| Description               | Manufacture     | Model   | Serial No.       | Cal. Date. | Cal. Due.  |
|---------------------------|-----------------|---------|------------------|------------|------------|
| Conducted Room(TH-02)     |                 |         |                  |            |            |
| Spectrum Analyzer         | Rohde & Schwarz | FSU26   | 100406           | 2020/03/11 | 2021/03/10 |
| Cable                     | MTJ             | MT40S   | 620620-MT40S-100 | Each use   | -          |
| SMA 10dB Fixed Attenuator | MVE             | 2W 6GHz | N/A              | Each use   | -          |

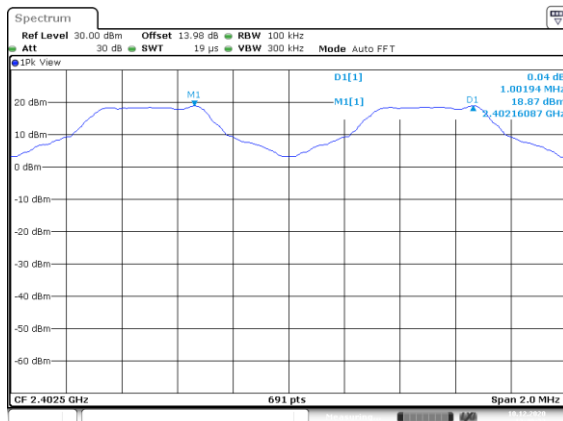
**\*Statement of Traceability:** The testing equipment's listed above have finished the calibration by Electronics Testing Center, Taiwan (ETC) or other laboratories which were accredited by TAF or equivalent organizations. The calibration result could be traceable to the International System of Units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

**10.4 Test Results**

| Mode      | Channel | Frequency (MHz) | 20 dBc BW (MHz) | Channel Separation (MHz) | Limit (MHz) | Result     |
|-----------|---------|-----------------|-----------------|--------------------------|-------------|------------|
| BR-1Mbps  | Low     | 2402            | 1.06            | 1.00                     | 0.707       | Compliance |
|           | Middle  | 2441            | 1.06            | 1.00                     | 0.704       | Compliance |
|           | High    | 2480            | 1.05            | 1.00                     | 0.701       | Compliance |
| EDR-2Mbps | Low     | 2402            | 1.33            | 1.00                     | 0.890       | Compliance |
|           | Middle  | 2441            | 1.35            | 1.00                     | 0.901       | Compliance |
|           | High    | 2480            | 1.35            | 1.00                     | 0.901       | Compliance |
| EDR-3Mbps | Low     | 2402            | 1.33            | 1.00                     | 0.884       | Compliance |
|           | Middle  | 2441            | 1.33            | 1.00                     | 0.887       | Compliance |
|           | High    | 2480            | 1.33            | 1.00                     | 0.890       | Compliance |

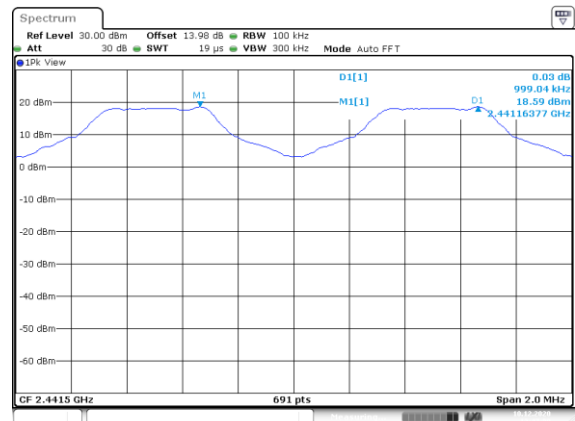
Note: Limit is >two-thirds of the 20 dB bandwidth

### BR-1Mbps Low CH



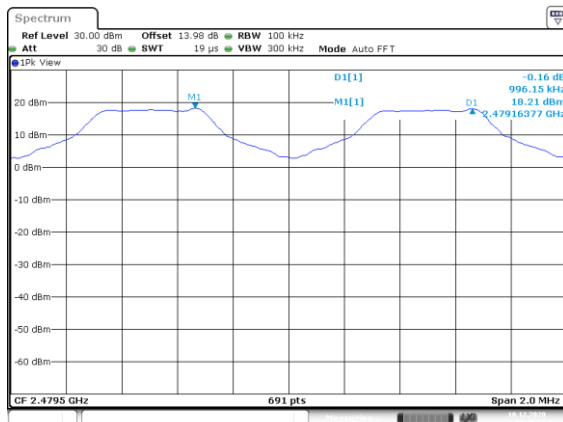
Date: 10 DEC.2020 12:48:23

### BR-1Mbps Middle CH



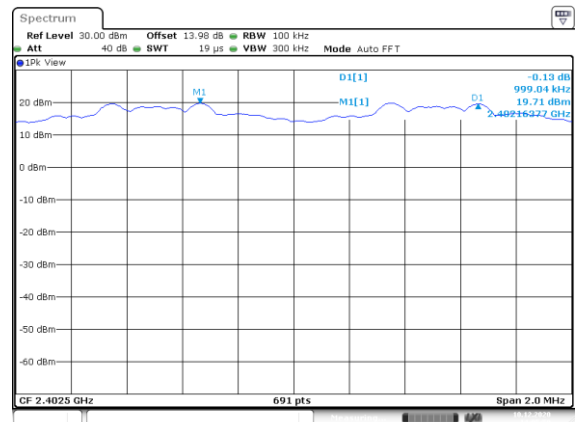
Date: 10 DEC.2020 12:47:09

### BR-1Mbps High CH



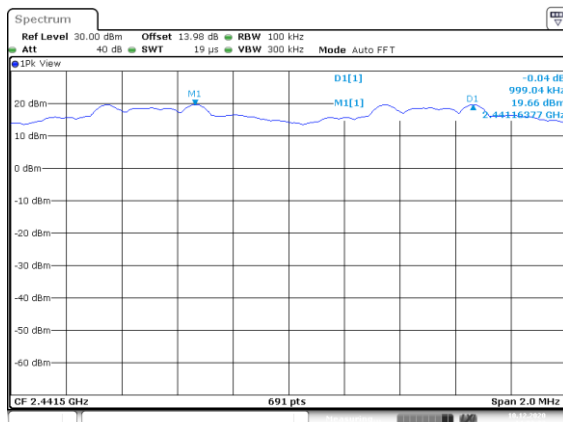
Date: 10 DEC.2020 12:45:55

### EDR-2Mbps Low CH



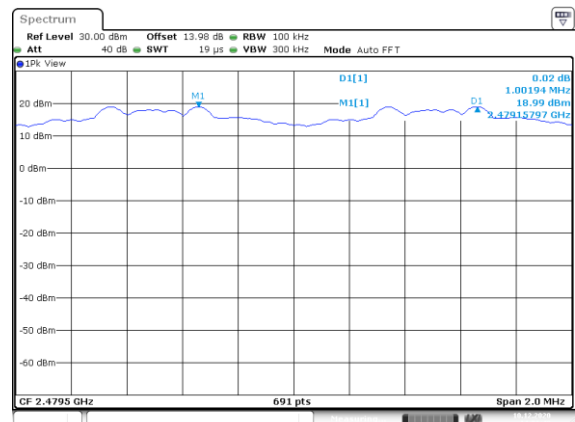
Date: 10 DEC.2020 14:05:50

### EDR-2Mbps Middle CH



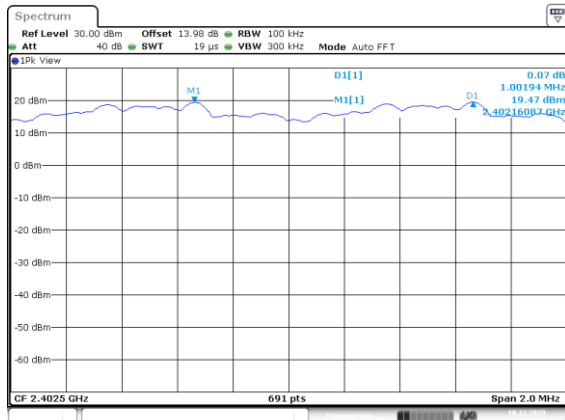
Date: 10 DEC.2020 14:03:23

### EDR-2Mbps High CH

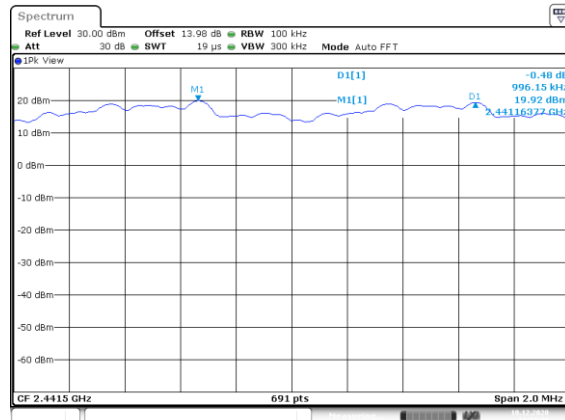


Date: 10 DEC.2020 14:01:49

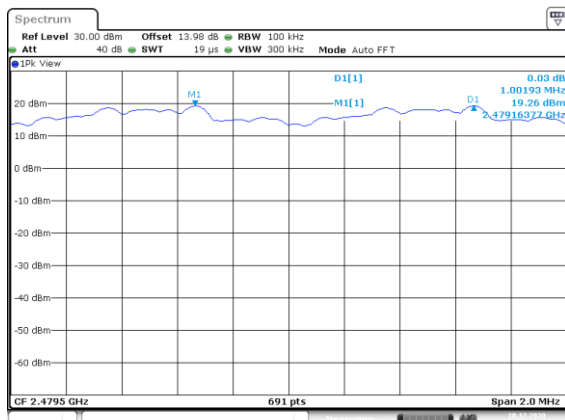
### EDR-3Mbps Low CH



### EDR-3Mbps Middle CH



### EDR-3Mbps High CH





## 11 FCC §15.247(a)(1)(iii) and RSS-247 Sec 5.1(d)– Time of Occupancy (Dwell Time)

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### 11.1 Applicable Standard

According to FCC §15.247(a)(1)(iii),

Frequency hopping systems in the 2400–2483.5 MHz band shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.

According to RSS-247 Sec 5.1(d),

FHSs operating in the band 2400-2483.5 MHz shall use at least 15 hopping channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds, multiplied by the number of hopping channels employed. Transmissions on particular hopping frequencies may be avoided or suppressed provided that at least 15 hopping channels are used.

### 11.2 Test Procedure

The EUT must have its hopping function enabled. Use the following spectrum analyzer settings: Span = zero span, centered on a hopping channel

RBW  $\leq$  channel spacing and where possible RBW should be set  $\gg 1/T$ , where T is the expected dwell time per channel

Sweep = as necessary to capture the entire dwell time per hopping channel Detector function = peak

Trace = max hold

Use the marker-delta function to determine the transmit time per hop. If this value varies with different modes of operation (data rate, modulation format, number of hopping channels, etc.), then repeat this test for each variation in transmit time.

Repeat the measurement using a longer sweep time to determine the number of hops over the period specified in the requirements. The sweep time shall be equal to, or less than, the period specified in the requirements.

Determine the number of hops over the sweep time and calculate the total number of hops in the period specified in the requirements, using the following equation:

(Number of hops in the period specified in the requirements) = (number of hops on spectrum analyzer) x (period specified in the requirements / analyzer sweep time)

The average time of occupancy is calculated from the transmit time per hop multiplied by the number of hops in the period specified. If the number of hops in a specific time varies with different modes of operation (data rate, modulation format, number of hopping channels, etc.), then repeat this test for each variation.

### 11.3 Test Equipment List and Details

| Description                  | Manufacture     | Model   | Serial No.       | Cal. Date. | Cal. Due.  |
|------------------------------|-----------------|---------|------------------|------------|------------|
| <b>Conducted Room(TH-02)</b> |                 |         |                  |            |            |
| Spectrum Analyzer            | Rohde & Schwarz | FSU26   | 100406           | 2020/03/11 | 2021/03/10 |
| Cable                        | MTJ             | MT40S   | 620620-MT40S-100 | Each use   | -          |
| SMA 10dB Fixed Attenuator    | MVE             | 2W 6GHz | N/A              | 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).

### 11.4 Test Results

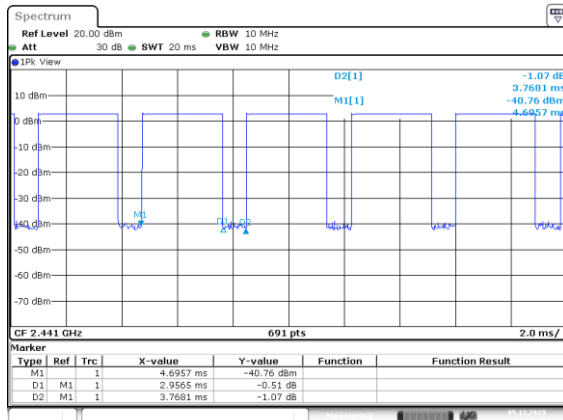
| Modulation Mode  | Pulse Time per Hop (ms) | Number of Pulse in<br>[0.4 x N sec] | Dwell Time in<br>[0.4 x N sec]<br>(s) | Dwell Time Limits (s) |
|------------------|-------------------------|-------------------------------------|---------------------------------------|-----------------------|
| <b>BR-1Mbps</b>  | 2.93                    | 106.7                               | 0.312                                 | 0.4                   |
| <b>EDR-2Mbps</b> | 2.93                    | 106.7                               | 0.312                                 | 0.4                   |
| <b>EDR-3Mbps</b> | 2.96                    | 106.7                               | 0.315                                 | 0.4                   |

Note1: Number of Pulse in [0.4 x N sec] =  $1600/79/6 \times (0.4 \times 79)$

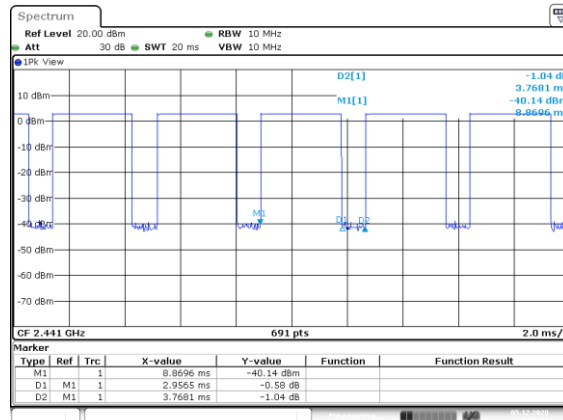
Note2: Dwell Time in [0.4 x N sec] = (Pulse Time \* Number of Pulse in [0.4 x N sec])/1000

Note3: Bluetooth ACL packets can be 1, 3, or 5 time slots. The DH1 packet can cover a single time slot. The DH3 packet can cover up to 3 time slots. The DH5 packet can cover up to 5 time slots. Operate DH5 at maximum dwell time and maximum duty cycle. A maximum length packet has duration of 5 time slots. The hopping rate is 1600 hops/second so the maximum dwell time is 5/1600 seconds, or 3.125ms.

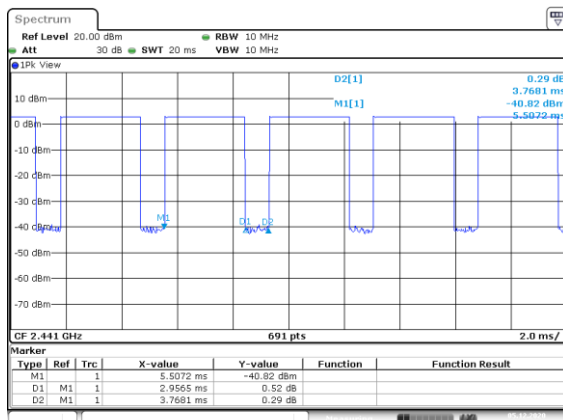
### DH5



### 2-DH5



### 3-DH5



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-

## 12 FCC §15.247(a)(1)(iii) and RSS-247 Sec 5.1(b)–Quantity of hopping channel Test

### 12.1 Applicable Standard

According to FCC §15.247(a)(1)(iii),

Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.

According to RSS-247 Sec 5.1(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.

### 12.2 Test Procedure

Span = the frequency band of operation.

RBW < 30% of the channel spacing or the 20 dB bandwidth, whichever is smaller VBW ≥ RBW.

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

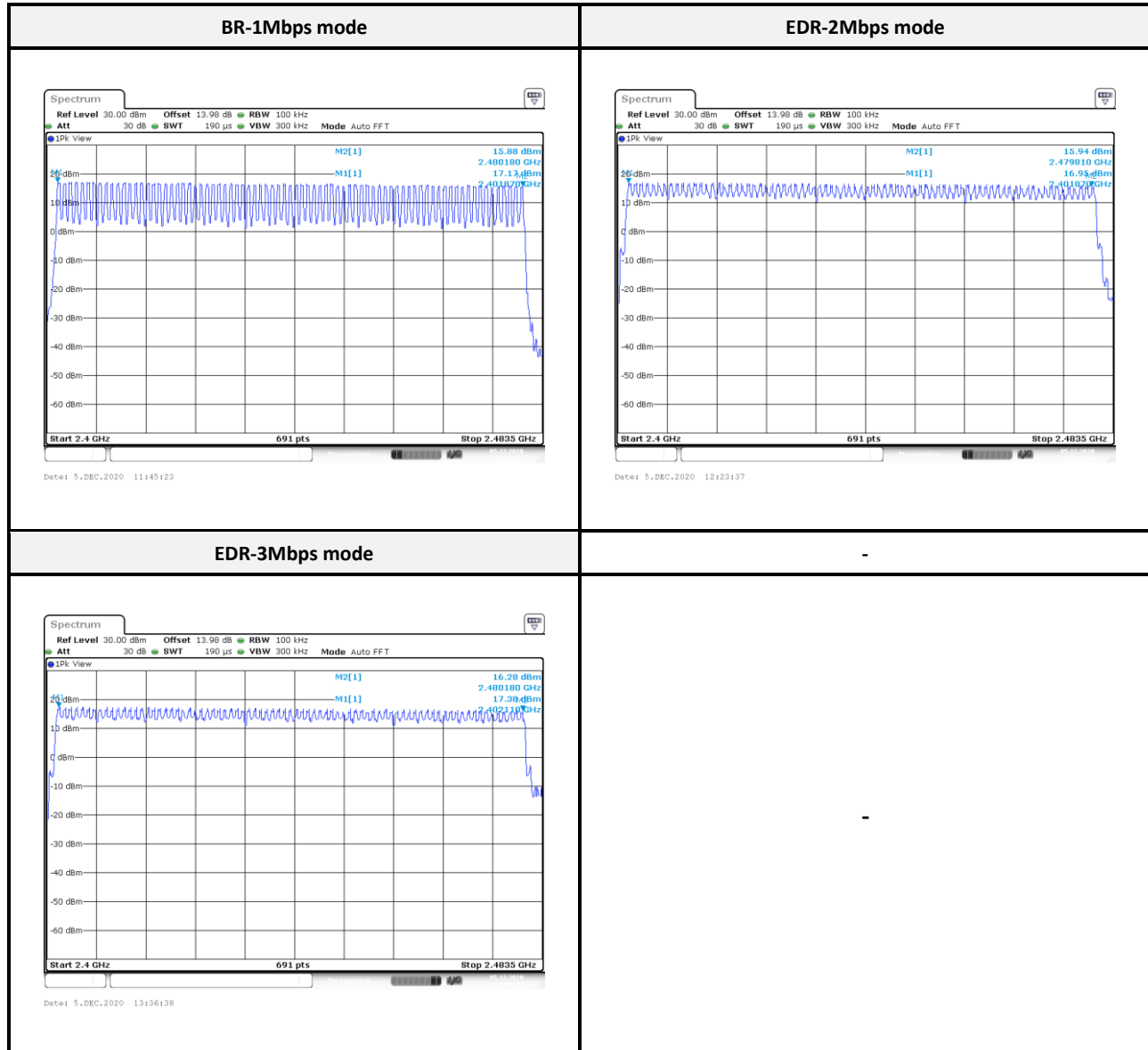
### 12.3 Test Equipment List and Details

| Description                  | Manufacture     | Model   | Serial No.       | Cal. Date. | Cal. Due.  |
|------------------------------|-----------------|---------|------------------|------------|------------|
| <b>Conducted Room(TH-02)</b> |                 |         |                  |            |            |
| Spectrum Analyzer            | Rohde & Schwarz | FSU26   | 100406           | 2020/03/11 | 2021/03/10 |
| Cable                        | MTJ             | MT40S   | 620620-MT40S-100 | Each use   | -          |
| SMA 10dB Fixed Attenuator    | MVE             | 2W 6GHz | N/A              | 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).

## 12.4 Test Results

| Mode      | Frequency Range (MHz) | Number of Hopping Channel | Limit (CH) | Result     |
|-----------|-----------------------|---------------------------|------------|------------|
| BR-1Mbps  | 2402-2480             | 79                        | >15        | Compliance |
| EDR-2Mbps | 2402-2480             | 79                        | >15        | Compliance |
| EDR-3Mbps | 2402-2480             | 79                        | >15        | Compliance |



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

#### 13.1 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.

#### 13.2 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.

#### 13.3 Test Equipment List and Details

| Description               | Manufacture     | Model   | Serial No.       | Cal. Date. | Cal. Due.  |
|---------------------------|-----------------|---------|------------------|------------|------------|
| Conducted Room(TH-02)     |                 |         |                  |            |            |
| Spectrum Analyzer         | Rohde & Schwarz | FSU26   | 100406           | 2020/03/11 | 2021/03/10 |
| USB Wideband Power Sensor | Agilent         | U2021XA | MY56120026       | 2020/09/14 | 2021/09/13 |
| Cable                     | MTJ             | MT40S   | 620620-MT40S-100 | 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).

### 13.4 Test Results

#### <Chip Antenna (FR05-S1-N-0-102) with 1.8V<sub>dc</sub>>

| Mode      | CH     | Freq.<br>(MHz) | Peak<br>Output Power |        | Ant Gain<br>(dBi) | EIRP Peak<br>Output Power |        | Limit<br>(dBm) | EIRP Limit<br>(dBm) |
|-----------|--------|----------------|----------------------|--------|-------------------|---------------------------|--------|----------------|---------------------|
|           |        |                | (dBm)                | (W)    |                   | (dBm)                     | (W)    |                |                     |
| BR-1Mbps  | Low    | 2402           | 17.20                | 0.0525 | 1.70              | 18.90                     | 0.0776 | 21             | 36                  |
|           | Middle | 2440           | 16.70                | 0.0468 | 1.70              | 18.40                     | 0.0692 | 21             | 36                  |
|           | High   | 2480           | 15.99                | 0.0397 | 1.70              | 17.69                     | 0.0587 | 21             | 36                  |
| EDR-2Mbps | Low    | 2402           | 17.77                | 0.0598 | 1.70              | 19.47                     | 0.0885 | 21             | 36                  |
|           | Middle | 2440           | 17.20                | 0.0525 | 1.70              | 18.90                     | 0.0776 | 21             | 36                  |
|           | High   | 2480           | 16.31                | 0.0428 | 1.70              | 18.01                     | 0.0632 | 21             | 36                  |
| EDR-3Mbps | Low    | 2402           | 17.94                | 0.0622 | 1.70              | 19.64                     | 0.0920 | 21             | 36                  |
|           | Middle | 2440           | 17.35                | 0.0543 | 1.70              | 19.05                     | 0.0804 | 21             | 36                  |
|           | High   | 2480           | 15.33                | 0.0341 | 1.70              | 17.03                     | 0.0505 | 21             | 36                  |

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

| Mode      | CH     | Freq.<br>(MHz) | Average<br>Output Power |        | Ant Gain<br>(dBi) | EIRP Average<br>Output Power |        | Limit<br>(dBm) | EIRP Limit<br>(dBm) |
|-----------|--------|----------------|-------------------------|--------|-------------------|------------------------------|--------|----------------|---------------------|
|           |        |                | (dBm)                   | (W)    |                   | (dBm)                        | (W)    |                |                     |
| BR-1Mbps  | Low    | 2402           | 17.11                   | 0.0514 | 1.70              | 18.81                        | 0.0760 | 21             | 36                  |
|           | Middle | 2440           | 16.60                   | 0.0457 | 1.70              | 18.30                        | 0.0676 | 21             | 36                  |
|           | High   | 2480           | 15.88                   | 0.0387 | 1.70              | 17.58                        | 0.0573 | 21             | 36                  |
| EDR-2Mbps | Low    | 2402           | 16.72                   | 0.0470 | 1.70              | 18.42                        | 0.0695 | 21             | 36                  |
|           | Middle | 2440           | 16.35                   | 0.0432 | 1.70              | 18.05                        | 0.0638 | 21             | 36                  |
|           | High   | 2480           | 15.51                   | 0.0356 | 1.70              | 17.21                        | 0.0526 | 21             | 36                  |
| EDR-3Mbps | Low    | 2402           | 16.94                   | 0.0494 | 1.70              | 18.64                        | 0.0731 | 21             | 36                  |
|           | Middle | 2440           | 16.51                   | 0.0448 | 1.70              | 18.21                        | 0.0662 | 21             | 36                  |
|           | High   | 2480           | 14.33                   | 0.0271 | 1.70              | 16.03                        | 0.0401 | 21             | 36                  |

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

Note2: Duty Cycle is 78.46% and Duty Factor is 1.05 dB, and the Average Output Power is already adding duty factor.

<Chip Antenna (FR05-S1-N-0-102) with 3.3V<sub>dc</sub>>

| Mode      | CH     | Freq.<br>(MHz) | Peak<br>Output Power |        | Ant Gain<br>(dBi) | EIRP Peak<br>Output Power |        | Limit<br>(dBm) | EIRP Limit<br>(dBm) |
|-----------|--------|----------------|----------------------|--------|-------------------|---------------------------|--------|----------------|---------------------|
|           |        |                | (dBm)                | (W)    |                   | (dBm)                     | (W)    |                |                     |
| BR-1Mbps  | Low    | 2402           | 19.15                | 0.0822 | 1.70              | 20.85                     | 0.1216 | 21             | 36                  |
|           | Middle | 2440           | 18.82                | 0.0762 | 1.70              | 20.52                     | 0.1127 | 21             | 36                  |
|           | High   | 2480           | 20.77                | 0.1194 | 1.70              | 22.47                     | 0.1766 | 21             | 36                  |
| EDR-2Mbps | Low    | 2402           | 19.76                | 0.0946 | 1.70              | 21.46                     | 0.1400 | 21             | 36                  |
|           | Middle | 2440           | 20.73                | 0.1183 | 1.70              | 22.43                     | 0.1750 | 21             | 36                  |
|           | High   | 2480           | 20.23                | 0.1054 | 1.70              | 21.93                     | 0.1560 | 21             | 36                  |
| EDR-3Mbps | Low    | 2402           | 19.93                | 0.0984 | 1.70              | 21.63                     | 0.1455 | 21             | 36                  |
|           | Middle | 2440           | 20.79                | 0.1199 | 1.70              | 22.49                     | 0.1774 | 21             | 36                  |
|           | High   | 2480           | 20.28                | 0.1067 | 1.70              | 21.98                     | 0.1578 | 21             | 36                  |

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

| Mode      | CH     | Freq.<br>(MHz) | Average<br>Output Power |        | Ant Gain<br>(dBi) | EIRP Average<br>Output Power |        | Limit<br>(dBm) | EIRP Limit<br>(dBm) |
|-----------|--------|----------------|-------------------------|--------|-------------------|------------------------------|--------|----------------|---------------------|
|           |        |                | (dBm)                   | (W)    |                   | (dBm)                        | (W)    |                |                     |
| BR-1Mbps  | Low    | 2402           | 18.87                   | 0.0771 | 1.70              | 20.57                        | 0.1140 | 21             | 36                  |
|           | Middle | 2440           | 18.57                   | 0.0719 | 1.70              | 20.27                        | 0.1064 | 21             | 36                  |
|           | High   | 2480           | 20.60                   | 0.1148 | 1.70              | 22.30                        | 0.1698 | 21             | 36                  |
| EDR-2Mbps | Low    | 2402           | 17.13                   | 0.0516 | 1.70              | 18.83                        | 0.0764 | 21             | 36                  |
|           | Middle | 2440           | 18.93                   | 0.0782 | 1.70              | 20.63                        | 0.1156 | 21             | 36                  |
|           | High   | 2480           | 18.76                   | 0.0752 | 1.70              | 20.46                        | 0.1112 | 21             | 36                  |
| EDR-3Mbps | Low    | 2402           | 16.98                   | 0.0499 | 1.70              | 18.68                        | 0.0738 | 21             | 36                  |
|           | Middle | 2440           | 18.78                   | 0.0755 | 1.70              | 20.48                        | 0.1117 | 21             | 36                  |
|           | High   | 2480           | 18.61                   | 0.0726 | 1.70              | 20.31                        | 0.1074 | 21             | 36                  |

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

Note2: Duty Cycle is 78.46% and Duty Factor is 1.05 dB, and the Average Output Power is already adding duty factor.



< Dipole Antenna (GW.34.5153) with 1.8V<sub>dc</sub>>

| Mode      | CH     | Freq.<br>(MHz) | Peak<br>Output Power |        | Ant Gain<br>(dBi) | EIRP Peak<br>Output Power |        | Limit<br>(dBm) | EIRP Limit<br>(dBm) |
|-----------|--------|----------------|----------------------|--------|-------------------|---------------------------|--------|----------------|---------------------|
|           |        |                | (dBm)                | (W)    |                   | (dBm)                     | (W)    |                |                     |
| BR-1Mbps  | Low    | 2402           | 16.72                | 0.0470 | 5.89              | 22.61                     | 0.1824 | 21             | 36                  |
|           | Middle | 2440           | 16.16                | 0.0413 | 5.89              | 22.05                     | 0.1603 | 21             | 36                  |
|           | High   | 2480           | 15.58                | 0.0361 | 5.89              | 21.47                     | 0.1403 | 21             | 36                  |
| EDR-2Mbps | Low    | 2402           | 17.33                | 0.0541 | 5.89              | 23.22                     | 0.2099 | 21             | 36                  |
|           | Middle | 2440           | 16.79                | 0.0478 | 5.89              | 22.68                     | 0.1854 | 21             | 36                  |
|           | High   | 2480           | 15.93                | 0.0392 | 5.89              | 21.82                     | 0.1521 | 21             | 36                  |
| EDR-3Mbps | Low    | 2402           | 17.53                | 0.0566 | 5.89              | 23.42                     | 0.2198 | 21             | 36                  |
|           | Middle | 2440           | 16.93                | 0.0493 | 5.89              | 22.82                     | 0.1914 | 21             | 36                  |
|           | High   | 2480           | 15.95                | 0.0394 | 5.89              | 21.84                     | 0.1528 | 21             | 36                  |

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

| Mode      | CH     | Freq.<br>(MHz) | Average<br>Output Power |        | Ant Gain<br>(dBi) | EIRP Average<br>Output Power |        | Limit<br>(dBm) | EIRP Limit<br>(dBm) |
|-----------|--------|----------------|-------------------------|--------|-------------------|------------------------------|--------|----------------|---------------------|
|           |        |                | (dBm)                   | (W)    |                   | (dBm)                        | (W)    |                |                     |
| BR-1Mbps  | Low    | 2402           | 16.60                   | 0.0457 | 5.89              | 22.49                        | 0.1774 | 21             | 36                  |
|           | Middle | 2440           | 16.06                   | 0.0404 | 5.89              | 21.95                        | 0.1567 | 21             | 36                  |
|           | High   | 2480           | 15.47                   | 0.0352 | 5.89              | 21.36                        | 0.1368 | 21             | 36                  |
| EDR-2Mbps | Low    | 2402           | 16.34                   | 0.0431 | 5.89              | 22.23                        | 0.1671 | 21             | 36                  |
|           | Middle | 2440           | 15.98                   | 0.0396 | 5.89              | 21.87                        | 0.1538 | 21             | 36                  |
|           | High   | 2480           | 15.13                   | 0.0326 | 5.89              | 21.02                        | 0.1265 | 21             | 36                  |
| EDR-3Mbps | Low    | 2402           | 16.56                   | 0.0453 | 5.89              | 22.45                        | 0.1758 | 21             | 36                  |
|           | Middle | 2440           | 16.12                   | 0.0409 | 5.89              | 22.01                        | 0.1589 | 21             | 36                  |
|           | High   | 2480           | 15.08                   | 0.0322 | 5.89              | 20.97                        | 0.1250 | 21             | 36                  |

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

Note2: Duty Cycle is 78.46% and Duty Factor is 1.05 dB, and the Average Output Power is already adding duty factor.

< Dipole Antenna (GW.34.5153) with 3.3V<sub>dc</sub>>

| Mode      | CH     | Freq.<br>(MHz) | Peak<br>Output Power |        | Ant Gain<br>(dBi) | EIRP Peak<br>Output Power |        | Limit<br>(dBm) | EIRP Limit<br>(dBm) |
|-----------|--------|----------------|----------------------|--------|-------------------|---------------------------|--------|----------------|---------------------|
|           |        |                | (dBm)                | (W)    |                   | (dBm)                     | (W)    |                |                     |
| BR-1Mbps  | Low    | 2402           | 19.10                | 0.0813 | 5.89              | 24.99                     | 0.3155 | 21             | 36                  |
|           | Middle | 2440           | 18.78                | 0.0755 | 5.89              | 24.67                     | 0.2931 | 21             | 36                  |
|           | High   | 2480           | 20.58                | 0.1143 | 5.89              | 26.47                     | 0.4436 | 21             | 36                  |
| EDR-2Mbps | Low    | 2402           | 19.77                | 0.0948 | 5.89              | 25.66                     | 0.3681 | 21             | 36                  |
|           | Middle | 2440           | 20.65                | 0.1161 | 5.89              | 26.54                     | 0.4508 | 21             | 36                  |
|           | High   | 2480           | 20.11                | 0.1026 | 5.89              | 26.00                     | 0.3981 | 21             | 36                  |
| EDR-3Mbps | Low    | 2402           | 19.91                | 0.0979 | 5.89              | 25.80                     | 0.3802 | 21             | 36                  |
|           | Middle | 2440           | 20.78                | 0.1197 | 5.89              | 26.67                     | 0.4645 | 21             | 36                  |
|           | High   | 2480           | 20.21                | 0.1050 | 5.89              | 26.10                     | 0.4074 | 21             | 36                  |

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

| Mode      | CH     | Freq.<br>(MHz) | Average<br>Output Power |        | Ant Gain<br>(dBi) | EIRP Average<br>Output Power |        | Limit<br>(dBm) | EIRP Limit<br>(dBm) |
|-----------|--------|----------------|-------------------------|--------|-------------------|------------------------------|--------|----------------|---------------------|
|           |        |                | (dBm)                   | (W)    |                   | (dBm)                        | (W)    |                |                     |
| BR-1Mbps  | Low    | 2402           | 18.83                   | 0.0764 | 5.89              | 24.72                        | 0.2965 | 21             | 36                  |
|           | Middle | 2440           | 18.53                   | 0.0713 | 5.89              | 24.42                        | 0.2767 | 21             | 36                  |
|           | High   | 2480           | 20.37                   | 0.1089 | 5.89              | 26.26                        | 0.4227 | 21             | 36                  |
| EDR-2Mbps | Low    | 2402           | 17.17                   | 0.0521 | 5.89              | 23.06                        | 0.2023 | 21             | 36                  |
|           | Middle | 2440           | 18.93                   | 0.0782 | 5.89              | 24.82                        | 0.3034 | 21             | 36                  |
|           | High   | 2480           | 18.67                   | 0.0736 | 5.89              | 24.56                        | 0.2858 | 21             | 36                  |
| EDR-3Mbps | Low    | 2402           | 16.99                   | 0.0500 | 5.89              | 22.88                        | 0.1941 | 21             | 36                  |
|           | Middle | 2440           | 18.83                   | 0.0764 | 5.89              | 24.72                        | 0.2965 | 21             | 36                  |
|           | High   | 2480           | 18.59                   | 0.0723 | 5.89              | 24.48                        | 0.2805 | 21             | 36                  |

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

Note2: Duty Cycle is 78.46% and Duty Factor is 1.05 dB, and the Average Output Power is already adding duty factor.

## 14 FCC §15.247(d) – 100 kHz Bandwidth of Frequency Band Edge

### 14.1 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)

### 14.2 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.

### 14.3 Test Equipment List and Details

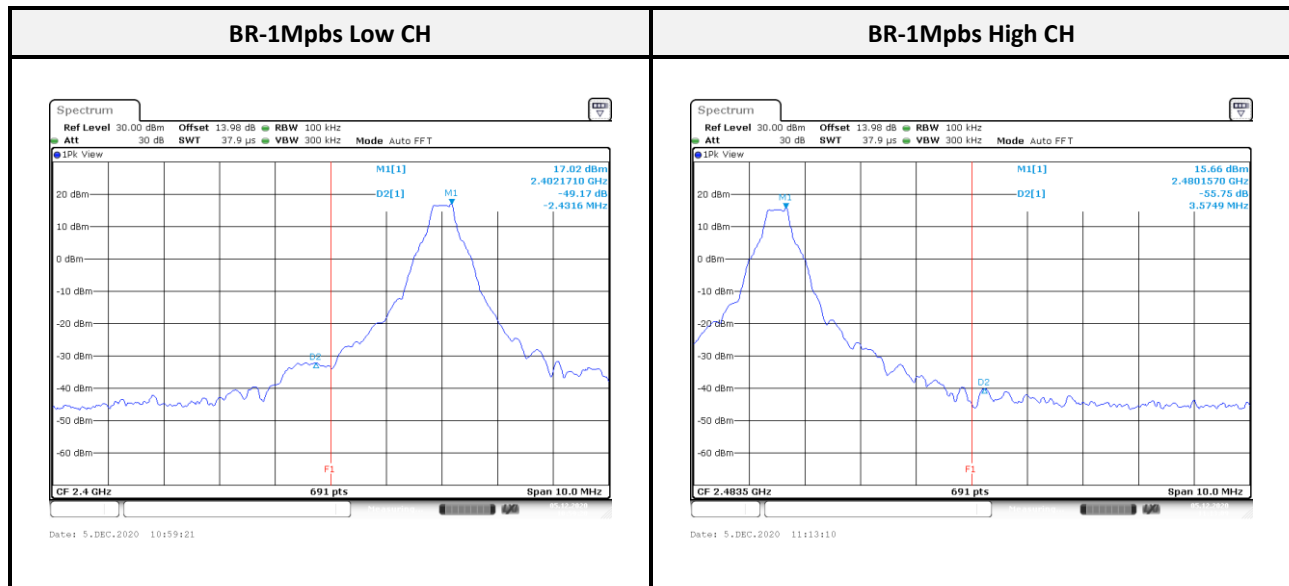
| Description               | Manufacture     | Model   | Serial No.       | Cal. Date. | Cal. Due.  |
|---------------------------|-----------------|---------|------------------|------------|------------|
| Conducted Room(TH-02)     |                 |         |                  |            |            |
| Spectrum Analyzer         | Rohde & Schwarz | FSU26   | 100406           | 2020/03/11 | 2021/03/10 |
| Cable                     | MTJ             | MT40S   | 620620-MT40S-100 | Each use   | -          |
| SMA 10dB Fixed Attenuator | MVE             | 2W 6GHz | N/A              | 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).

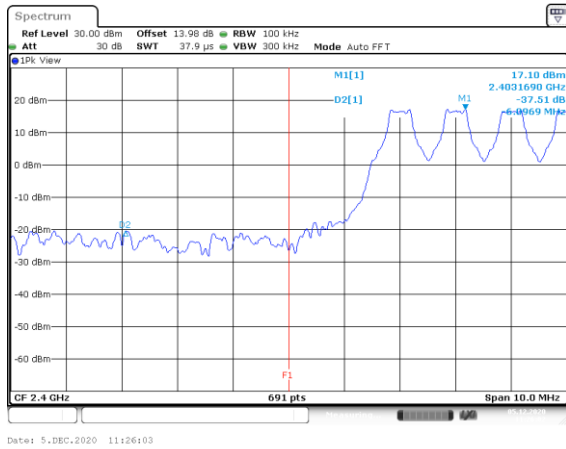
# 14.4 Test Results

<Chip Antenna (FR05-S1-N-0-102) with 1.8V<sub>dc</sub>>

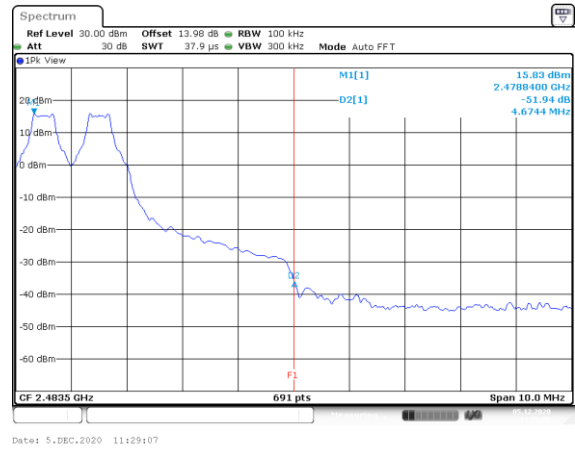
| Mode              | Channel | Frequency (MHz) | Delta Peak to Band Emission (dBc) | Limit (dBc) | Result     |
|-------------------|---------|-----------------|-----------------------------------|-------------|------------|
| BR-1Mbps          | Low     | 2402            | 49.17                             | ≥ 20        | Compliance |
|                   | High    | 2480            | 55.75                             | ≥ 20        | Compliance |
| BR-1Mbps Hopping  | Low     | 2402            | 37.51                             | ≥ 20        | Compliance |
|                   | High    | 2480            | 51.94                             | ≥ 20        | Compliance |
| EDR-2Mbps         | Low     | 2402            | 36.89                             | ≥ 20        | Compliance |
|                   | High    | 2480            | 48.95                             | ≥ 20        | Compliance |
| EDR-2Mbps Hopping | Low     | 2402            | 35.61                             | ≥ 20        | Compliance |
|                   | High    | 2480            | 26.09                             | ≥ 20        | Compliance |
| EDR-3Mbps         | Low     | 2402            | 34.97                             | ≥ 20        | Compliance |
|                   | High    | 2480            | 54.70                             | ≥ 20        | Compliance |
| EDR-3Mbps Hopping | Low     | 2402            | 35.86                             | ≥ 20        | Compliance |
|                   | High    | 2480            | 45.21                             | ≥ 20        | Compliance |



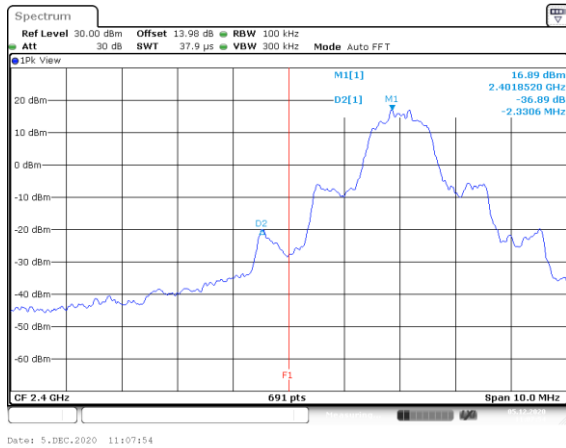
### BR-1Mbps Hopping Low CH



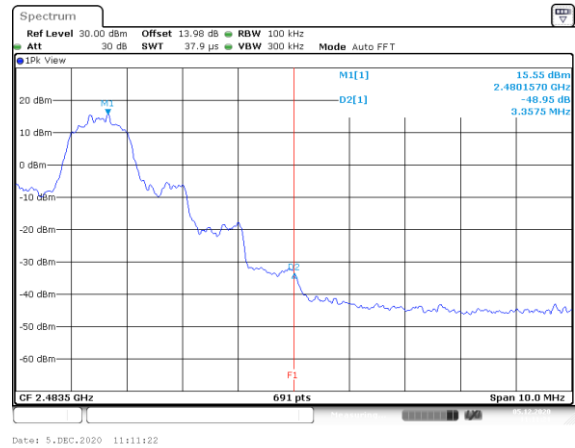
### BR-1Mbps Hopping High CH



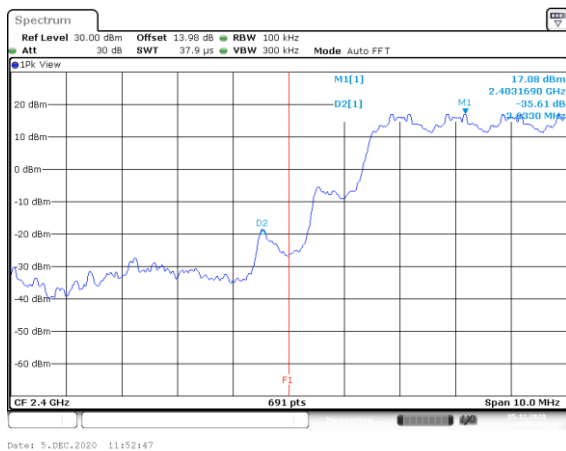
### EDR-2Mbps Low CH



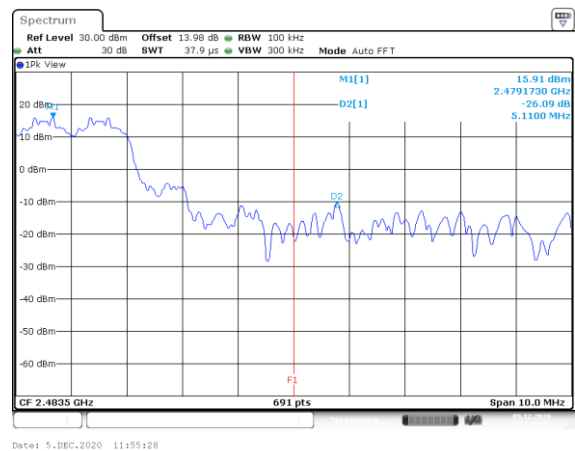
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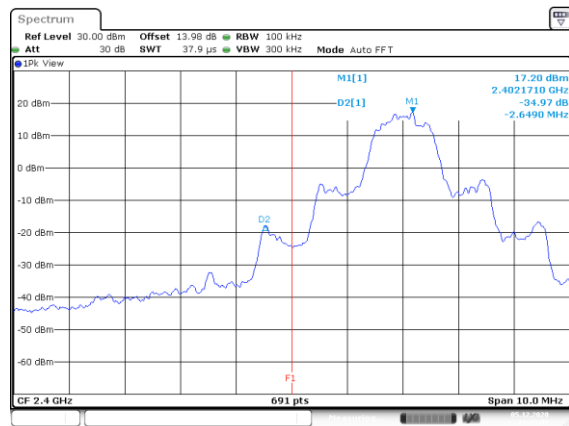
### EDR-2Mbps Hopping Low CH



### EDR-2Mbps Hopping High CH

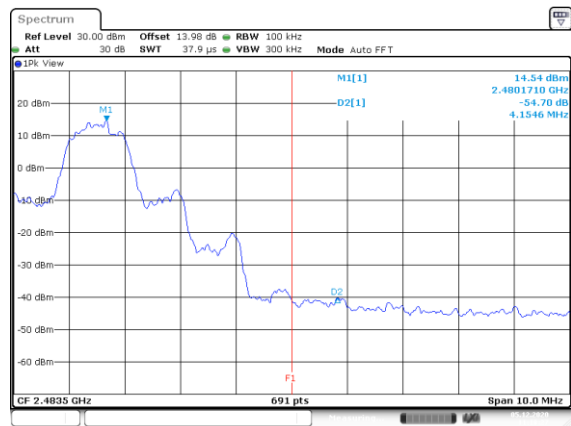


### EDR-3Mbps Low CH



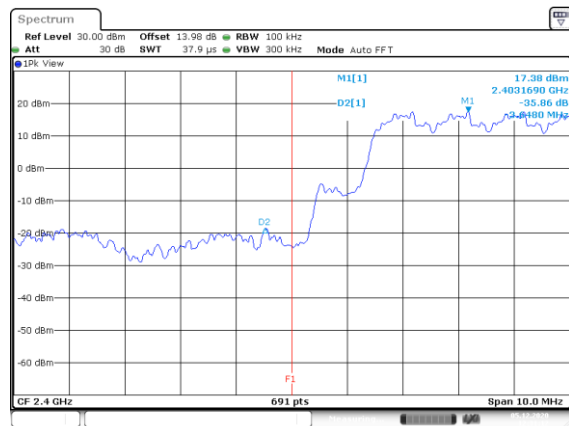
Date: 5.DEC.2020 11:15:09

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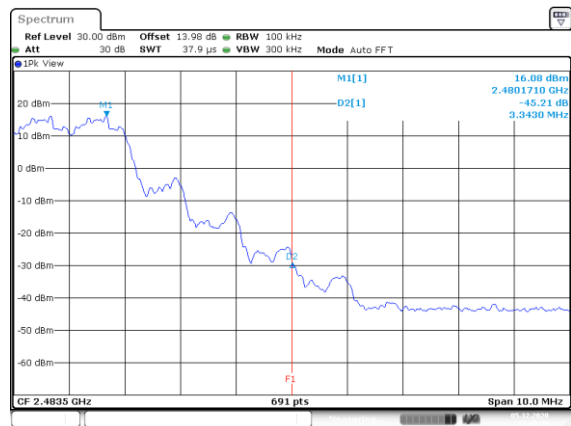
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Date: 5.DEC.2020 12:31:12

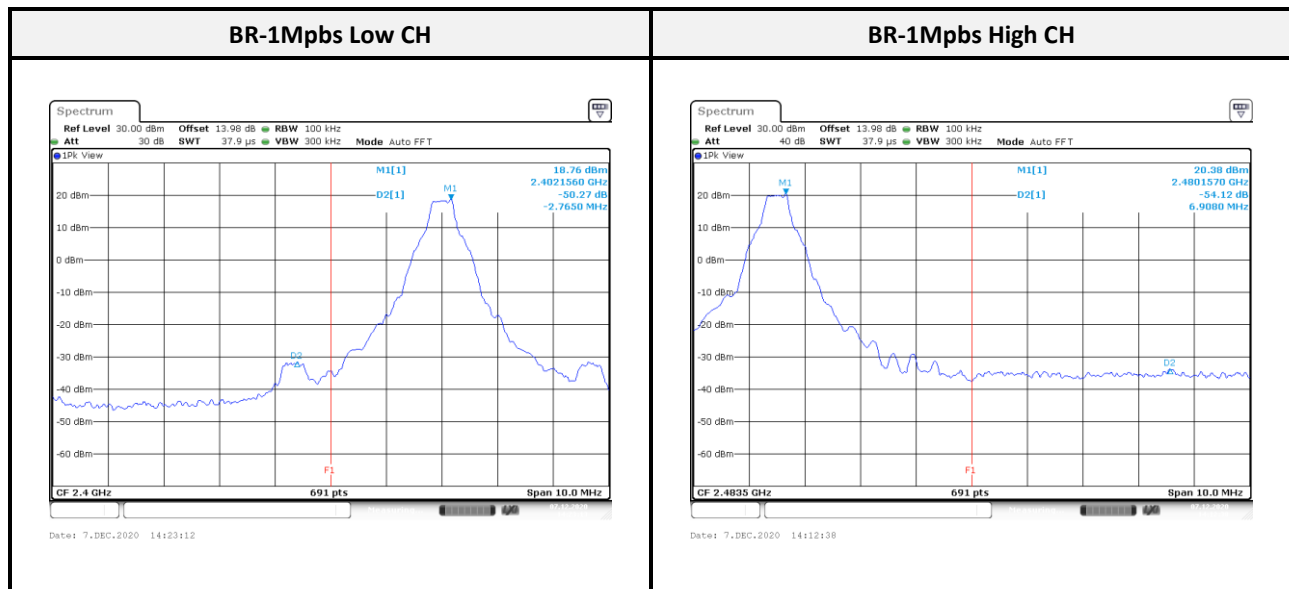
### EDR-3Mbps Hopping High CH



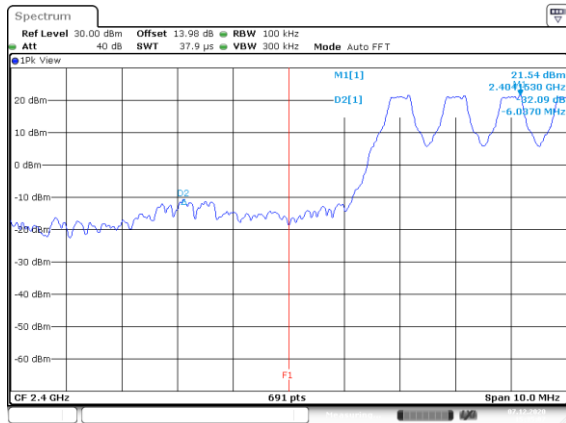
Date: 5.DEC.2020 12:46:49

<Chip Antenna (FR05-S1-N-0-102) with 3.3V<sub>dc</sub>>

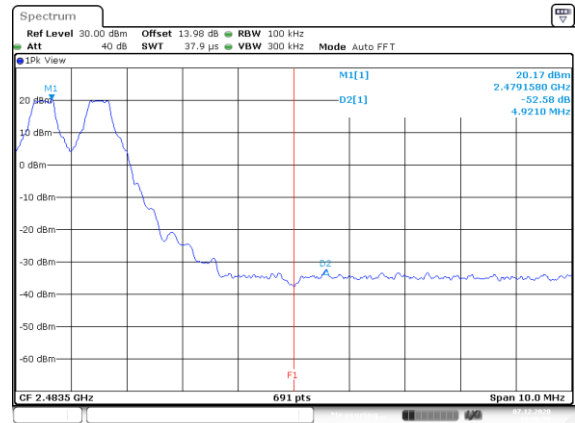
| Mode              | Channel | Frequency (MHz) | Delta Peak to Band Emission (dBc) | Limit (dBc) | Result     |
|-------------------|---------|-----------------|-----------------------------------|-------------|------------|
| BR-1Mbps          | Low     | 2402            | 50.27                             | ≥ 20        | Compliance |
|                   | High    | 2480            | 54.12                             | ≥ 20        | Compliance |
| BR-1Mbps Hopping  | Low     | 2402            | 32.09                             | ≥ 20        | Compliance |
|                   | High    | 2480            | 52.58                             | ≥ 20        | Compliance |
| EDR-2Mbps         | Low     | 2402            | 47.68                             | ≥ 20        | Compliance |
|                   | High    | 2480            | 53.06                             | ≥ 20        | Compliance |
| EDR-2Mbps Hopping | Low     | 2402            | 37.33                             | ≥ 20        | Compliance |
|                   | High    | 2480            | 50.33                             | ≥ 20        | Compliance |
| EDR-3Mbps         | Low     | 2402            | 49.03                             | ≥ 20        | Compliance |
|                   | High    | 2480            | 53.46                             | ≥ 20        | Compliance |
| EDR-3Mbps Hopping | Low     | 2402            | 26.32                             | ≥ 20        | Compliance |
|                   | High    | 2480            | 46.64                             | ≥ 20        | Compliance |



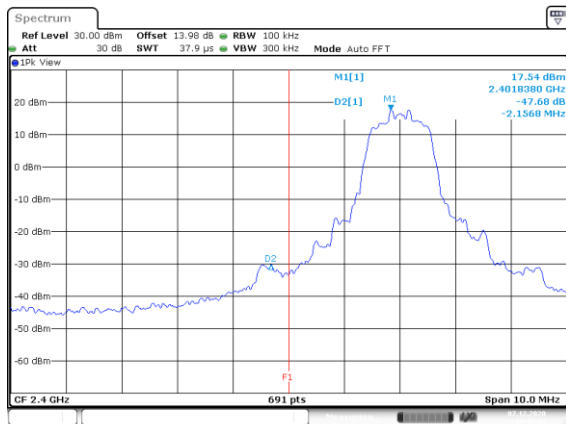
### BR-1Mbps Hopping Low CH



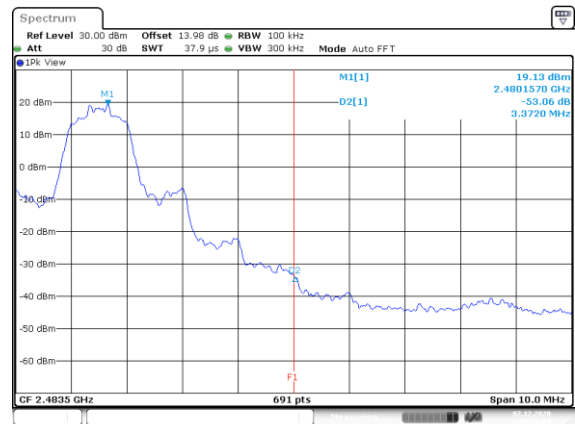
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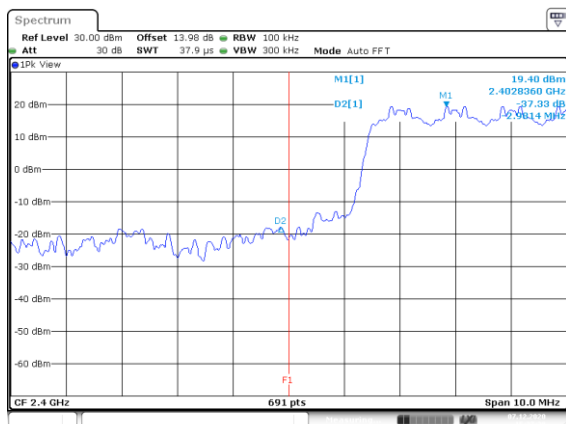
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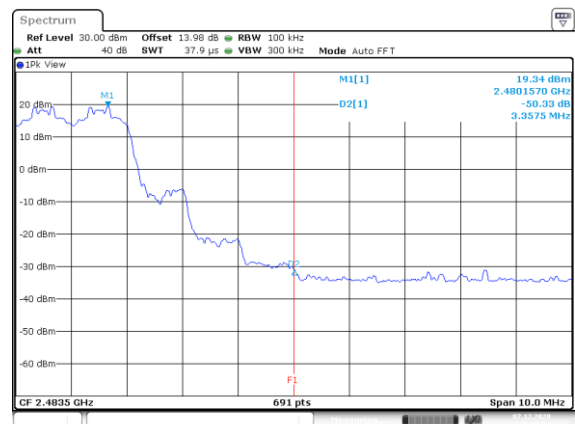
### EDR-2Mbps High CH



### EDR-2Mbps Hopping Low CH

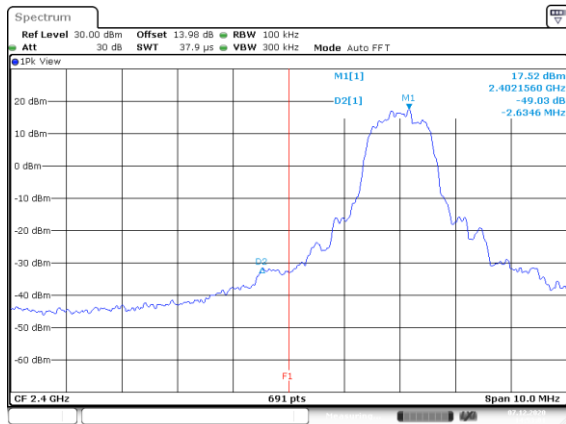


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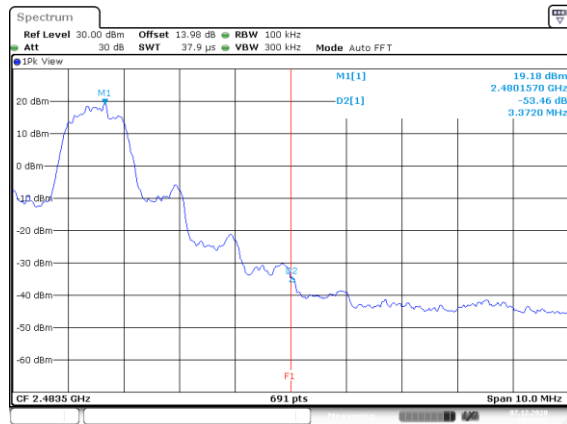


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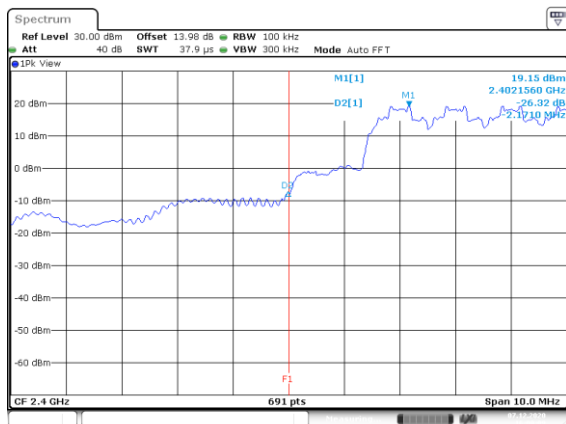
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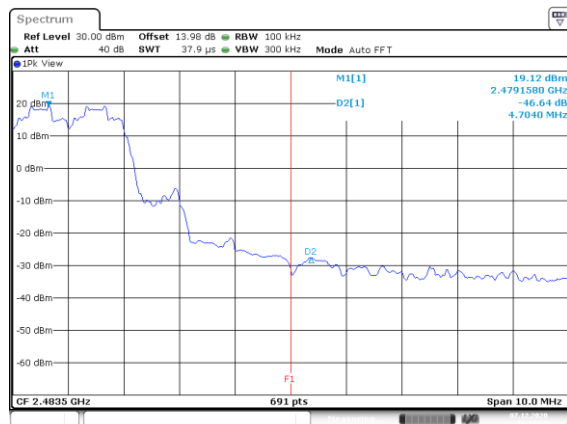
Date: 7.DEC.2020 14:56:33

### EDR-3Mbps Hopping Low CH



Date: 7.DEC.2020 16:09:09

### EDR-3Mbps Hopping High CH

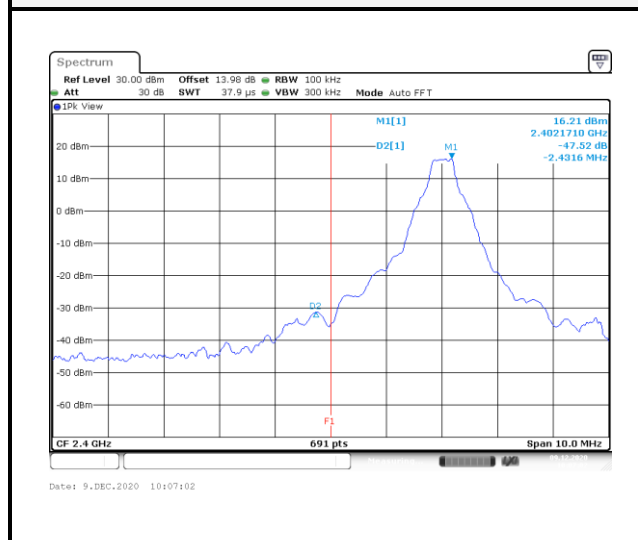


Date: 7.DEC.2020 16:17:22

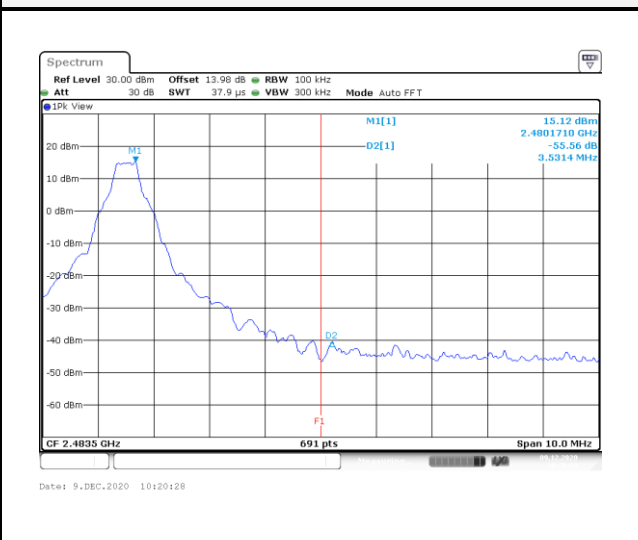
< Dipole Antenna (GW.34.5153) with 1.8V<sub>dc</sub>>

| Mode              | Channel | Frequency (MHz) | Delta Peak to Band Emission (dBc) | Limit (dBc) | Result     |
|-------------------|---------|-----------------|-----------------------------------|-------------|------------|
| BR-1Mbps          | Low     | 2402            | 47.52                             | ≥ 20        | Compliance |
|                   | High    | 2480            | 55.56                             | ≥ 20        | Compliance |
| BR-1Mbps Hopping  | Low     | 2402            | 47.14                             | ≥ 20        | Compliance |
|                   | High    | 2480            | 22.91                             | ≥ 20        | Compliance |
| EDR-2Mbps         | Low     | 2402            | 36.92                             | ≥ 20        | Compliance |
|                   | High    | 2480            | 48.56                             | ≥ 20        | Compliance |
| EDR-2Mbps Hopping | Low     | 2402            | 38.38                             | ≥ 20        | Compliance |
|                   | High    | 2480            | 45.79                             | ≥ 20        | Compliance |
| EDR-3Mbps         | Low     | 2402            | 34.28                             | ≥ 20        | Compliance |
|                   | High    | 2480            | 49.81                             | ≥ 20        | Compliance |
| EDR-3Mbps Hopping | Low     | 2402            | 34.83                             | ≥ 20        | Compliance |
|                   | High    | 2480            | 44.25                             | ≥ 20        | Compliance |

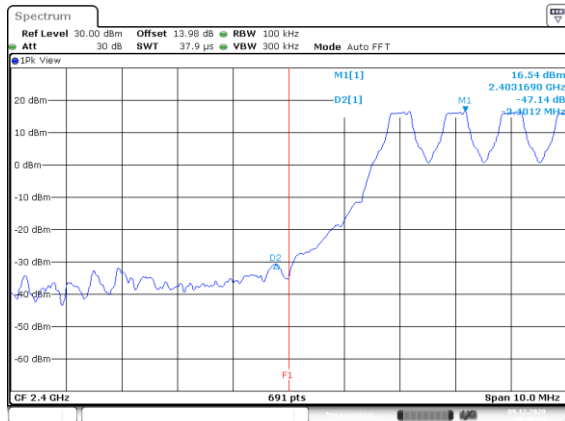
BR-1Mbps Low CH



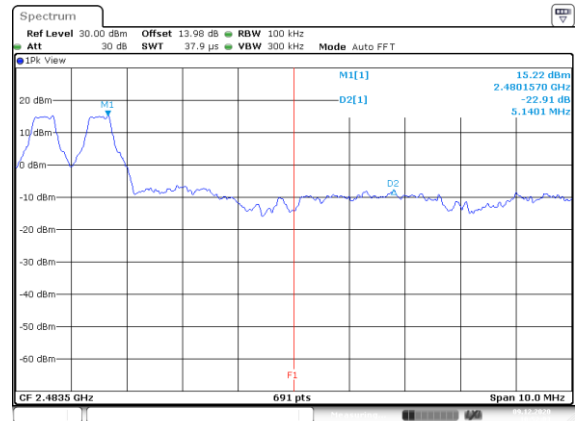
BR-1Mbps High CH



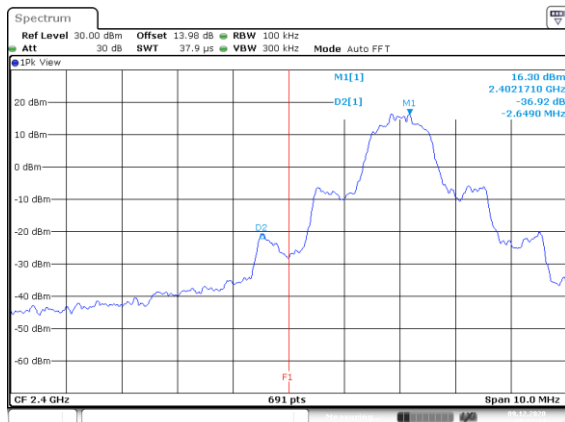
### BR-1Mbps Hopping Low CH



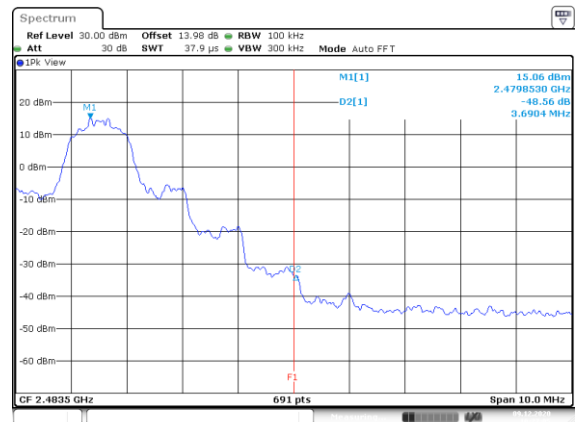
### BR-1Mbps Hopping High CH



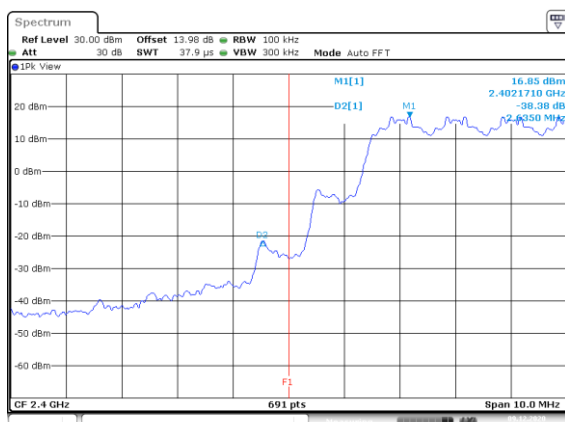
### EDR-2Mbps Low CH



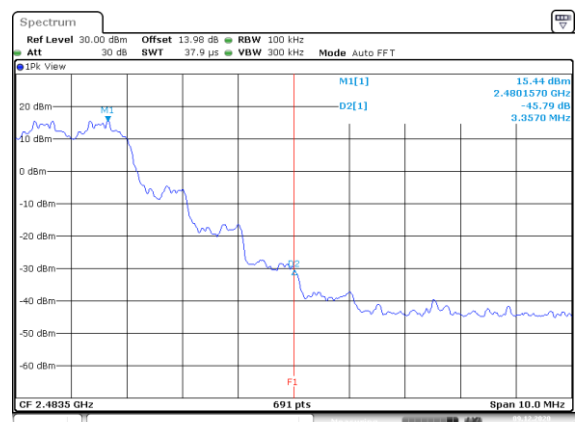
### EDR-2Mbps High CH



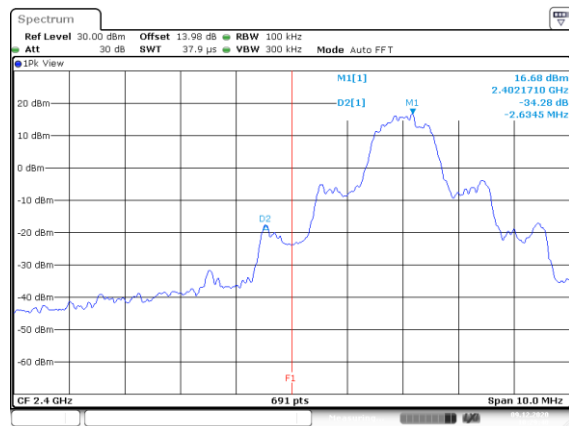
### EDR-2Mbps Hopping Low CH



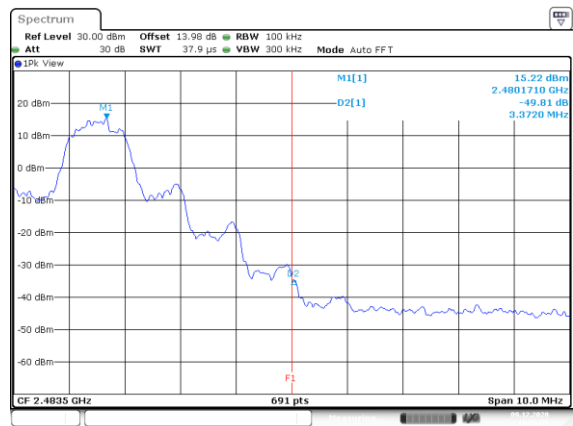
### EDR-2Mbps Hopping High CH



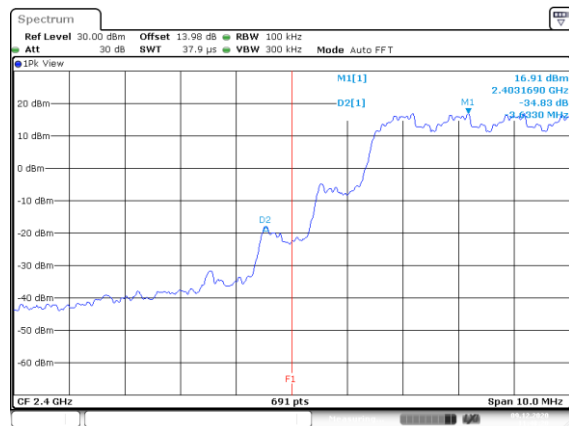
### EDR-3Mbps Low CH



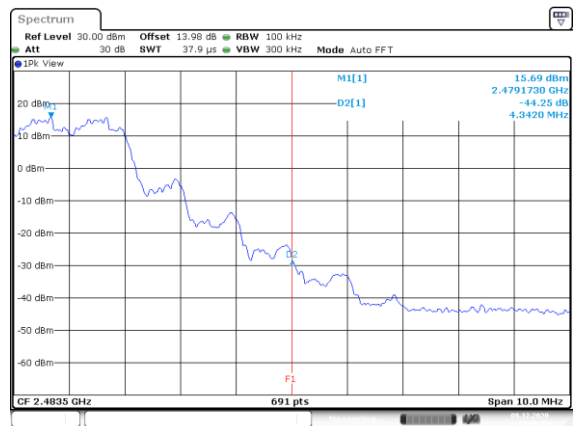
### EDR-3Mbps High CH



### EDR-3Mbps Hopping Low CH

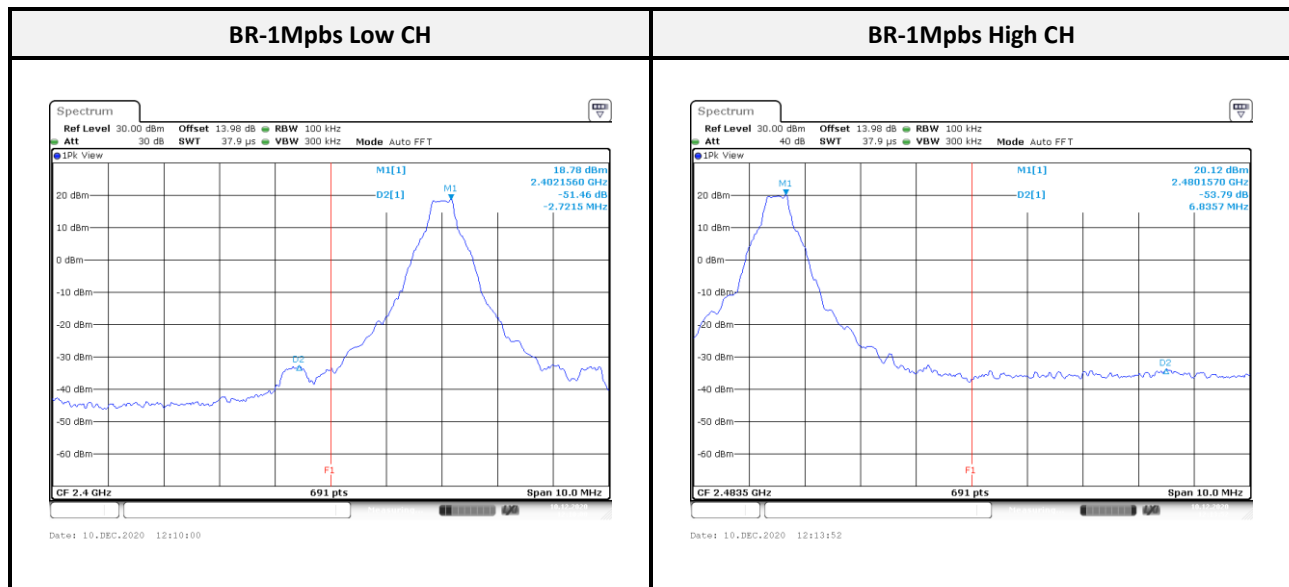


### EDR-3Mbps Hopping High CH

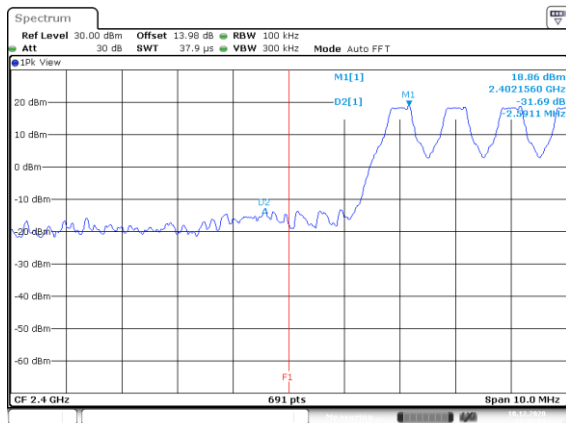


< Dipole Antenna (GW.34.5153) with 3.3V<sub>dc</sub>>

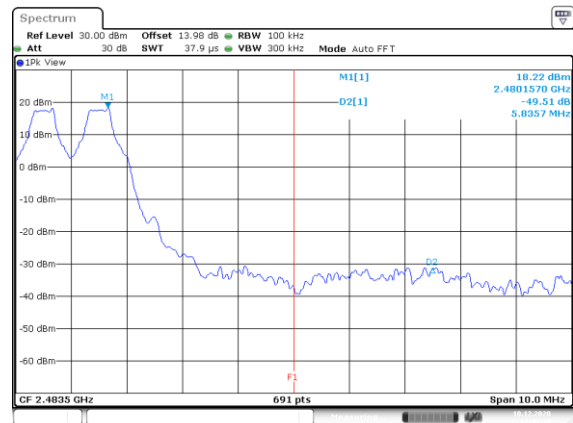
| Mode              | Channel | Frequency (MHz) | Delta Peak to Band Emission (dBc) | Limit (dBc) | Result     |
|-------------------|---------|-----------------|-----------------------------------|-------------|------------|
| BR-1Mbps          | Low     | 2402            | 51.46                             | ≥ 20        | Compliance |
|                   | High    | 2480            | 53.79                             | ≥ 20        | Compliance |
| BR-1Mbps Hopping  | Low     | 2402            | 31.69                             | ≥ 20        | Compliance |
|                   | High    | 2480            | 49.51                             | ≥ 20        | Compliance |
| EDR-2Mbps         | Low     | 2402            | 46.11                             | ≥ 20        | Compliance |
|                   | High    | 2480            | 53.84                             | ≥ 20        | Compliance |
| EDR-2Mbps Hopping | Low     | 2402            | 35.74                             | ≥ 20        | Compliance |
|                   | High    | 2480            | 27.75                             | ≥ 20        | Compliance |
| EDR-3Mbps         | Low     | 2402            | 45.44                             | ≥ 20        | Compliance |
|                   | High    | 2480            | 53.16                             | ≥ 20        | Compliance |
| EDR-3Mbps Hopping | Low     | 2402            | 34.43                             | ≥ 20        | Compliance |
|                   | High    | 2480            | 27.80                             | ≥ 20        | Compliance |



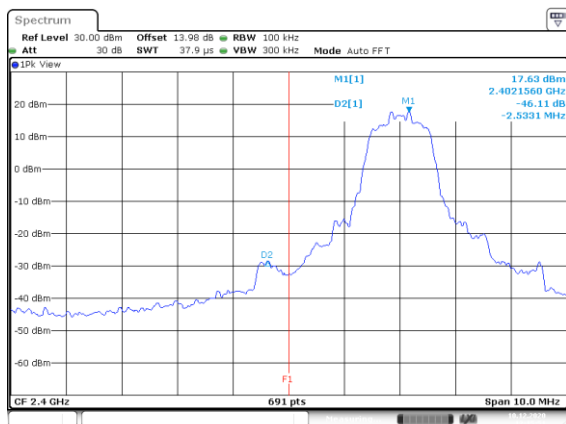
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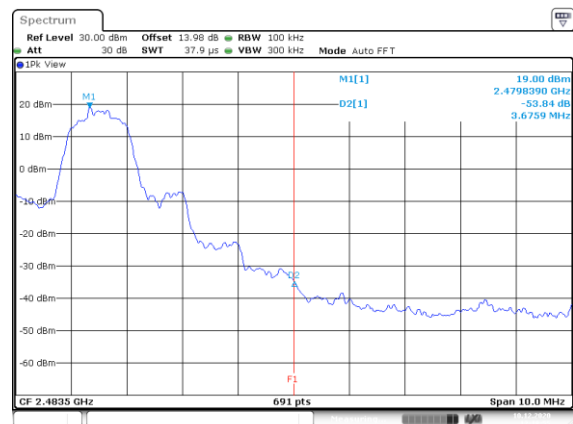
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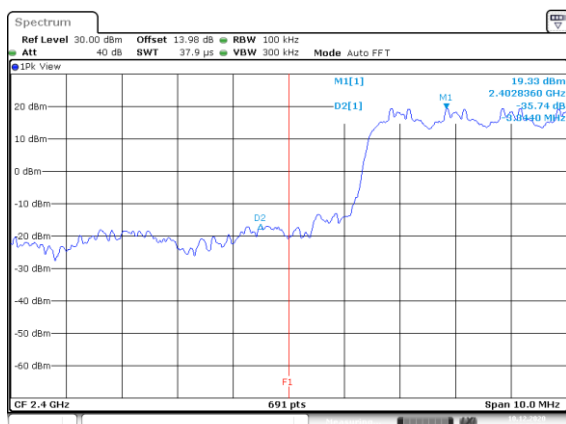
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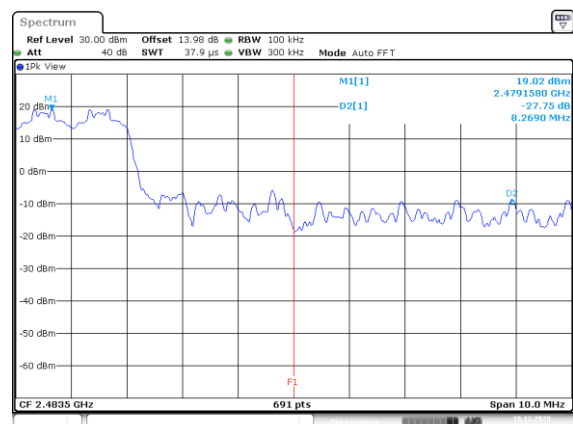
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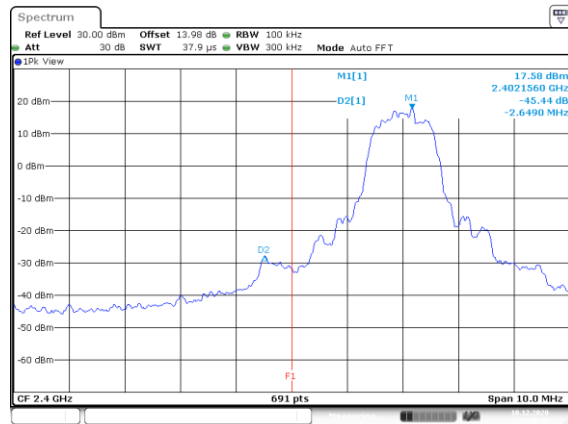
### EDR-2Mbps Hopping Low CH



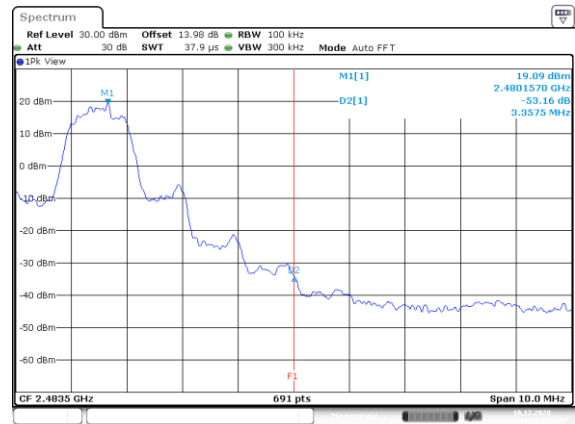
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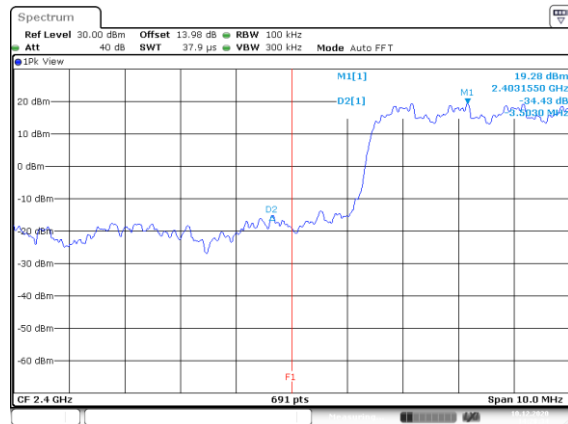
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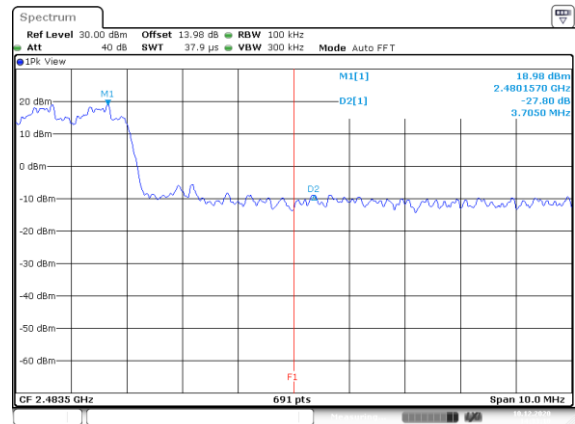
### EDR-3Mbps High CH



### EDR-3Mbps Hopping Low CH



### EDR-3Mbps Hopping High CH



----- END OF REPORT -----