



# FCC RADIO TEST REPORT

**FCC ID** : TVE-121101A  
**Equipment** : Wireless Network Extender  
**Brand Name** : FORTINET  
**Model Name** : FortiExtender 211Exxxxxx,  
FORTIEXTENDER-211Exxxxxx, FEX-211Exxxxxx  
(Please refer to section 1.1.5 for detail information.)  
**Applicant** : Fortinet, Inc.  
899 Kifer Road, Sunnyvale, CA 94086 USA  
**Manufacturer** : Fortinet, Inc.  
899 Kifer Road, Sunnyvale, CA 94086 USA  
**Standard** : 47 CFR FCC Part 15.247

The product was received on May 13, 2020, and testing was started from May 19, 2020 and completed on May 25, 2020. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Sam Chen

**SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory**

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



## Table of Contents

|                                                                                       |           |
|---------------------------------------------------------------------------------------|-----------|
| <b>History of this test report.....</b>                                               | <b>4</b>  |
| <b>Summary of Test Result.....</b>                                                    | <b>5</b>  |
| <b>1 General Description .....</b>                                                    | <b>6</b>  |
| 1.1 Information.....                                                                  | 6         |
| 1.2 Applicable Standards .....                                                        | 8         |
| 1.3 Testing Location Information .....                                                | 8         |
| 1.4 Measurement Uncertainty .....                                                     | 8         |
| <b>2 Test Configuration of EUT.....</b>                                               | <b>9</b>  |
| 2.1 Test Channel Mode .....                                                           | 9         |
| 2.2 The Worst Case Measurement Configuration.....                                     | 10        |
| 2.3 EUT Operation during Test .....                                                   | 11        |
| 2.4 Accessories .....                                                                 | 11        |
| 2.5 Support Equipment.....                                                            | 12        |
| 2.6 Test Setup Diagram .....                                                          | 13        |
| <b>3 Transmitter Test Result .....</b>                                                | <b>16</b> |
| 3.1 AC Power-line Conducted Emissions .....                                           | 16        |
| 3.2 20dB Bandwidth and Carrier Frequency Separation.....                              | 18        |
| 3.3 Maximum Conducted Output Power .....                                              | 19        |
| 3.4 Number of Hopping Frequencies and Hopping Bandedge .....                          | 20        |
| 3.5 Time of Occupancy (Dwell Time) .....                                              | 21        |
| 3.6 Emissions in Non-restricted Frequency Bands .....                                 | 22        |
| 3.7 Emissions in Restricted Frequency Bands.....                                      | 23        |
| <b>4 Test Equipment and Calibration Data .....</b>                                    | <b>26</b> |
| <b>Appendix A. Test Results of AC Power-line Conducted Emissions</b>                  |           |
| <b>Appendix B. Test Results of 20dB Bandwidth AND Carrier Frequency Separation</b>    |           |
| <b>Appendix C. Test Results of Maximum Conducted Output Power</b>                     |           |
| <b>Appendix D. Test Results of Number of Hopping Frequencies and Hopping Bandedge</b> |           |
| <b>Appendix E. Test Results of Time of Occupancy (Dwell Time)</b>                     |           |
| <b>Appendix F. Test Results of Emissions in Non-restricted Frequency Bands</b>        |           |
| <b>Appendix G. Test Results of Emissions in Restricted Frequency Bands</b>            |           |



**Appendix H. Test Photos**

**Photographs of EUT v01**



TEL : 886-3-656-9065  
FAX : 886-3-656-9085  
Report Template No.: CB-A10\_5 Ver1.2



## Summary of Test Result

| Report Clause | Ref Std. Clause | Test Items                                          | Result (PASS/FAIL) | Remark |
|---------------|-----------------|-----------------------------------------------------|--------------------|--------|
| 1.1.2         | 15.203          | Antenna Requirement                                 | PASS               | -      |
| 3.1           | 15.207          | AC Power-line Conducted Emissions                   | PASS               | -      |
| 3.2           | 15.247(a)       | 20dB Bandwidth                                      | PASS               | -      |
| 3.2           | 15.247(a)       | Carrier Frequency Separation                        | PASS               | -      |
| 3.3           | 15.247(b)       | Maximum Conducted Output Power                      | PASS               | -      |
| 3.4           | 15.247(a)       | Number of Hopping Frequencies and Hopping Band edge | PASS               | -      |
| 3.5           | 15.247(a)       | Time of Occupancy (Dwell Time)                      | PASS               | -      |
| 3.6           | 15.247(d)       | Emissions in Non-restricted Frequency Bands         | PASS               | -      |
| 3.7           | 15.247(d)       | Emissions in Restricted Frequency Bands             | PASS               | -      |

**Declaration of Conformity:**

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

**Comments and Explanations:**

1. The test configuration, test mode and test software were written in this test report are declared by the manufacturer.
2. The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

**Reviewed by: Sam Chen**

**Report Producer: Vicky Huang**



# 1 General Description

## 1.1 Information

### 1.1.1 RF General Information

| Frequency Range (MHz) | Bluetooth Version | Ch. Frequency (MHz) | Channel Number |
|-----------------------|-------------------|---------------------|----------------|
| 2400-2483.5           | BR / EDR          | 2402-2480           | 0-78 [79]      |

| Band | Mode   | BWch (MHz) | Nant |
|------|--------|------------|------|
| 2.4G | BT-BR  | 1          | 1    |
| 2.4G | BT-EDR | 1          | 1    |

Note:

- ♦ Bluetooth BR uses a GFSK (1Mbps).
- ♦ Bluetooth EDR uses a combination of  $\pi/4$ -DQPSK (2Mbps) and 8DPSK (3Mbps).
- ♦ Bluetooth BR/EDR uses as a system using FHSS modulation.
- ♦ BWch is the nominal channel bandwidth.

### 1.1.2 Antenna Information

| Ant. | Port | Brand | Model Name  | Antenna Type     | Connector | Gain (dBi) |
|------|------|-------|-------------|------------------|-----------|------------|
| 1    | 1    | -     | RF11C02360S | Printing Antenna | N/A       | 4          |

Note1: The above information was declared by manufacturer.

Note2: The EUT has one antenna.

#### For BT function:

For IEEE 802.15.1 Bluetooth mode (1TX/1RX)

Port 1 can be used as transmitting/receiving antenna.

### 1.1.3 Mode Test Duty Cycle

| Mode          | DC    | DCF(dB) | T(s)   | VBW(Hz) $\geq 1/T$ |
|---------------|-------|---------|--------|--------------------|
| BT-BR(1Mbps)  | 0.738 | 1.32    | 2.878m | 1k                 |
| BT-EDR(2Mbps) | 0.74  | 1.31    | 2.883m | 1k                 |
| BT-EDR(3Mbps) | 0.784 | 1.06    | 2.885m | 1k                 |

Note:

- ♦ DC is Duty Cycle.
- ♦ DCF is Duty Cycle Factor.

**1.1.4 EUT Operational Condition**

|                              |                                               |
|------------------------------|-----------------------------------------------|
| <b>EUT Power Type</b>        | From AC Adapter or PoE                        |
| <b>Test Software Version</b> | TeraTerm(v4.75) 、 WCN_Combol_Tool(v2.1916.00) |

**1.1.5 Table for Multiple Listing**

The model names in the following table are all refer to the identical product.

| Model Name                                                                                                                      | LTE Module                   | BT   | PCBA      | Description                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------|------------------------------|------|-----------|-------------------------------------------------------------------------------------------------------|
| FortiExtender 211Exxxxxx                                                                                                        | LTE module chip:<br>EM7565*1 | BT*1 | Same PCBA | All the models are identical, the difference model for difference brand served as marketing strategy. |
| FORTIEXTENDER-211Exxxxxx                                                                                                        | LTE module chip:<br>EM7565*1 | BT*1 | Same PCBA |                                                                                                       |
| FEX-211Exxxxxx                                                                                                                  | LTE module chip:<br>EM7565*1 | BT*1 | Same PCBA |                                                                                                       |
| (where “x” can be “0-9”, or “A-Z”, or “-”, or blank for marketing purposes or software changes only and no HW related changes.) |                              |      |           |                                                                                                       |

From the above models, model: FEX-211E was selected as representative model for the test and its data was recorded in this report.



## 1.2 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ 47 CFR FCC Part 15

The following reference test guidance is not within the scope of accreditation of TAF.

- ♦ FCC KDB 558074 D01 v05r02
- ♦ FCC KDB 414788 D01 v01r01

## 1.3 Testing Location Information

| Testing Location                    |        |                                                                                                                               |  |
|-------------------------------------|--------|-------------------------------------------------------------------------------------------------------------------------------|--|
| <input type="checkbox"/>            | HWA YA | ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)<br>TEL : 886-3-327-3456 FAX : 886-3-327-0973        |  |
| <input checked="" type="checkbox"/> | JHUBEI | ADD : No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.<br>TEL : 886-3-656-9065 FAX : 886-3-656-9085 |  |

| Test Condition           | Test Site No. | Test Engineer | Test Environment     | Test Date    |
|--------------------------|---------------|---------------|----------------------|--------------|
| RF Conducted             | TH01-CB       | Owen Hsu      | 22.4~23.6°C / 59~60% | May 20, 2020 |
| Radiated<br>(Below 1GHz) | 03CH04-CB     | Stim Sung     | 23.9~24.7°C / 65~67% | May 21, 2020 |
| Radiated<br>(Above 1GHz) | 03CH04-CB     | Cola Fan      | 22.9~24°C / 51~63%   | May 19, 2020 |
| AC Conduction            | CO01-CB       | Ryo Fan       | 22~24°C / 59~60%     | May 25, 2020 |

Test site Designation No. TW0006 with FCC.

Test site registered number IC 4086D with Industry Canada.

## 1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

| Test Items                           | Uncertainty | Remark                   |
|--------------------------------------|-------------|--------------------------|
| Conducted Emission (150kHz ~ 30MHz)  | 2.0 dB      | Confidence levels of 95% |
| Radiated Emission (30MHz ~ 1,000MHz) | 4.3 dB      | Confidence levels of 95% |
| Radiated Emission (1GHz ~ 18GHz)     | 4.3 dB      | Confidence levels of 95% |
| Radiated Emission (18GHz ~ 40GHz)    | 5.1 dB      | Confidence levels of 95% |
| Conducted Emission                   | 2.4 dB      | Confidence levels of 95% |
| Output Power Measurement             | 1.5 dB      | Confidence levels of 95% |
| Bandwidth Measurement                | 2%          | Confidence levels of 95% |



## 2 Test Configuration of EUT

### 2.1 Test Channel Mode

| Mode          | Power Setting |
|---------------|---------------|
| BT-BR(1Mbps)  | -             |
| 2402MHz       | 7             |
| 2440MHz       | 7             |
| 2480MHz       | 7             |
| BT-EDR(2Mbps) | -             |
| 2402MHz       | 7             |
| 2440MHz       | 7             |
| 2480MHz       | 7             |
| BT-EDR(3Mbps) | -             |
| 2402MHz       | 7             |
| 2440MHz       | 7             |
| 2480MHz       | 7             |

## 2.2 The Worst Case Measurement Configuration

| The Worst Case Mode for Following Conformance Tests                                                                           |                                                            |
|-------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| <b>Tests Item</b>                                                                                                             | AC power-line conducted emissions                          |
| <b>Condition</b>                                                                                                              | AC power-line conducted measurement for line and neutral   |
| <b>Operating Mode</b>                                                                                                         | Normal Link                                                |
| 1                                                                                                                             | EUT + GPS + Bluetooth + LTE Band 2(SIM Slot 1) + Adapter   |
| 2                                                                                                                             | EUT + GPS + Bluetooth + WCDMA Band 2(SIM Slot 1) + Adapter |
| Mode 1 has been evaluated to be the worst case between Mode 1~2, thus measurement for Mode 3 will follow this same test mode. |                                                            |
| 3                                                                                                                             | EUT + GPS + Bluetooth + LTE Band 2(SIM Slot 2) + PoE       |
| For operating mode 1 is the worst case and it was record in this test report.                                                 |                                                            |

| The Worst Case Mode for Following Conformance Tests |                                                                                                                                                                                                                        |
|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tests Item</b>                                   | 20dB Bandwidth<br>Carrier Frequency Separation<br>Maximum Conducted Output Power<br>Number of Hopping Frequencies<br>Hopping Bandedge<br>Time of Occupancy (Dwell Time)<br>Emissions in Non-restricted Frequency Bands |
| <b>Test Condition</b>                               | Conducted measurement at transmit chains                                                                                                                                                                               |

| The Worst Case Mode for Following Conformance Tests                                                                           |                                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tests Item</b>                                                                                                             | Emissions in Restricted Frequency Bands                                                                                                                                                                                                             |
| <b>Test Condition</b>                                                                                                         | Radiated measurement<br>If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type. |
| <b>Operating Mode &lt; 1GHz</b>                                                                                               | Normal Link                                                                                                                                                                                                                                         |
| 1                                                                                                                             | EUT at Z-axis + GPS + Bluetooth + LTE Band 2(SIM Slot 1) + Adapter                                                                                                                                                                                  |
| 2                                                                                                                             | EUT at Y-axis + GPS + Bluetooth + LTE Band 2(SIM Slot 1) + Adapter                                                                                                                                                                                  |
| Mode 1 has been evaluated to be the worst case between Mode 1~2, thus measurement for Mode 3 will follow this same test mode. |                                                                                                                                                                                                                                                     |
| 3                                                                                                                             | EUT at Z-axis + GPS + Bluetooth + WCDMA Band 2(SIM Slot 1) + Adapter                                                                                                                                                                                |
| Mode 1 has been evaluated to be the worst case among Mode 1~3, thus measurement for Mode 4 will follow this same test mode.   |                                                                                                                                                                                                                                                     |
| 4                                                                                                                             | EUT at Z-axis + GPS + Bluetooth + LTE Band 2(SIM Slot 2) + PoE                                                                                                                                                                                      |
| For operating mode 4 is the worst case and it was record in this test report.                                                 |                                                                                                                                                                                                                                                     |



|                                                                                                                                                                            |               |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| <b>Operating Mode &gt; 1GHz</b>                                                                                                                                            | CTX           |
| The EUT was performed at Z axis and Y axis position. The worst case was found at Y axis, so it was selected to perform test and its test result was written in the report. |               |
| 1                                                                                                                                                                          | EUT at Y-axis |

| <b>The Worst Case Mode for Following Conformance Tests</b>                         |                                                                         |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| <b>Tests Item</b>                                                                  | Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation |
| <b>Operating Mode</b>                                                              |                                                                         |
| 1                                                                                  | Bluetooth+WWAN(LTE)                                                     |
| 2                                                                                  | Bluetooth+WWAN(WCDMA)                                                   |
| Refer to Sporton Test Report No.: FA903129 for Co-location RF Exposure Evaluation. |                                                                         |

Note:

1. The EUT contains a certified WWAN module (FCC ID: N7NEM75)
2. The EUT was powered by Adapter or PoE, and the Adapter and PoE was for measurement only, would not be marketed.

The Adapter and PoE information as below:

| <b>Support Unit</b> | <b>Brand Name</b> | <b>Model Name</b> |
|---------------------|-------------------|-------------------|
| Adapter             | APD               | WA-30J12R         |
| PoE                 | Fortinet          | Fortiswitch 224E  |

## 2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

## 2.4 Accessories

N/A



## 2.5 Support Equipment

**For AC Conduction:**

| Support Equipment |                  |             |              |        |
|-------------------|------------------|-------------|--------------|--------|
| No.               | Equipment        | Brand Name  | Model Name   | FCC ID |
| A                 | SIM Card         | N/A         | N/A          | N/A    |
| B                 | LAN1 NB          | DELL        | E6430        | N/A    |
| C                 | LAN4 NB          | DELL        | E6430        | N/A    |
| D                 | Flash disk3.0    | Transcend   | JetFlash-700 | N/A    |
| E                 | iPad             | Apple       | A1430        | N/A    |
| F                 | LTE Base station | Anritsu     | MT8820C      | N/A    |
| G                 | GPS Simulator    | WELNAVIGATE | GS-100       | N/A    |
| H                 | WAN NB           | DELL        | E6430        | N/A    |
| I                 | Adapter          | APD         | WA-30J12R    | N/A    |

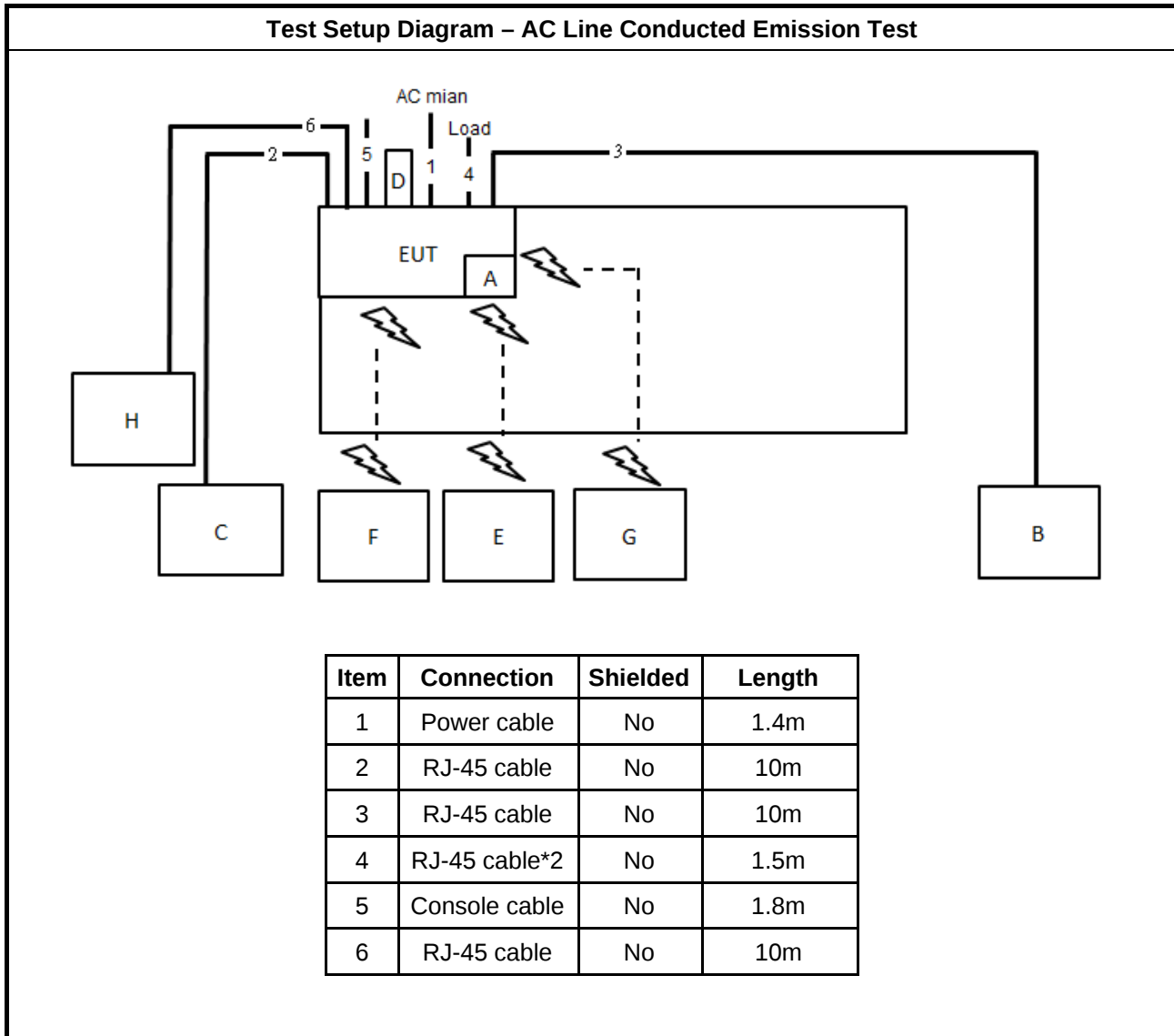
**For Radiated (below 1GHz):**

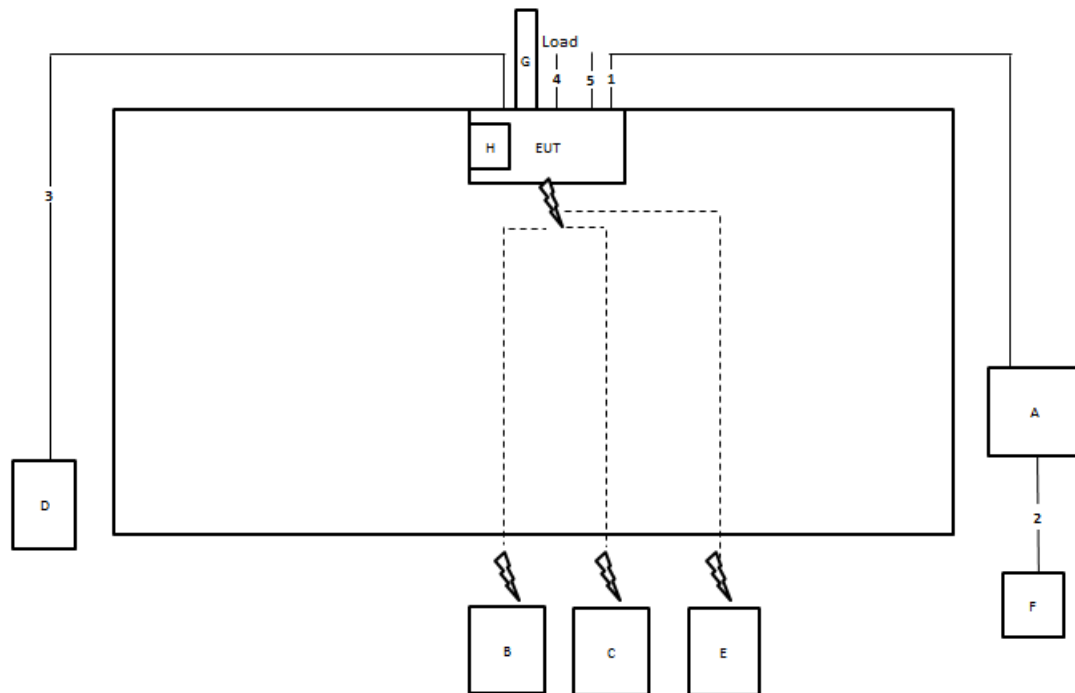
| Support Equipment |                  |               |                  |        |
|-------------------|------------------|---------------|------------------|--------|
| No.               | Equipment        | Brand Name    | Model Name       | FCC ID |
| A                 | PoE              | Fortinet      | Fortiswitch 224E | N/A    |
| B                 | iPad             | Apple         | A1430            | N/A    |
| C                 | LTE base station | Anritsu       | MT8820C          | N/A    |
| D                 | WAN NB           | DELL          | E4300            | N/A    |
| E                 | GPS Simulator    | WELNAVIGATE   | GS-100           | N/A    |
| F                 | LAN NB           | DELL          | E4300            | N/A    |
| G                 | Flash disk3.0    | Silicon Power | B06              | N/A    |
| H                 | SIM Card         | N/A           | N/A              | N/A    |

**For Radiated (above 1GHz) and RF Conducted:**

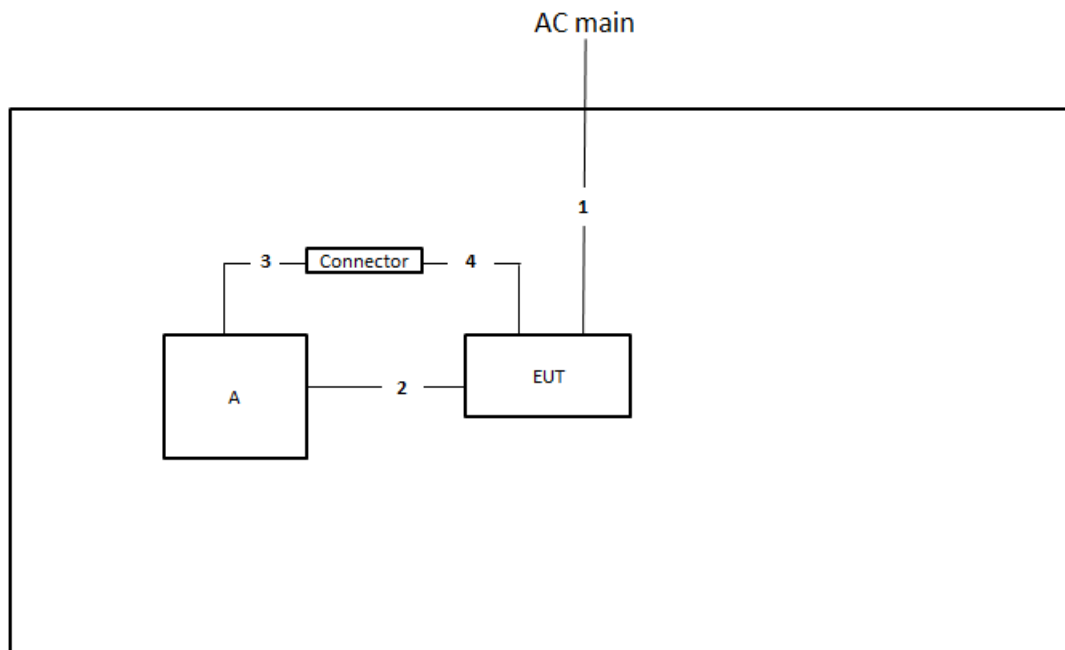
| Support Equipment |           |            |            |        |
|-------------------|-----------|------------|------------|--------|
| No.               | Equipment | Brand Name | Model Name | FCC ID |
| A                 | NB        | DELL       | E4300      | N/A    |
| B                 | Adapter   | APD        | WA-30J12R  | N/A    |

## 2.6 Test Setup Diagram



**Test Setup Diagram - Radiated Test < 1GHz**


| Item | Connection    | Shielded | Length |
|------|---------------|----------|--------|
| 1    | RJ-45 cable   | No       | 10m    |
| 2    | RJ-45 cable   | No       | 1.5m   |
| 3    | RJ-45 cable   | No       | 10m    |
| 4    | RJ-45 cable*3 | No       | 1.5m   |
| 5    | Console cable | No       | 1.8m   |

**Test Setup Diagram - Radiated Test > 1GHz**


| Item | Connection            | Shielded | Length |
|------|-----------------------|----------|--------|
| 1    | Power cable           | No       | 1.4m   |
| 2    | RJ-45 cable           | No       | 1.5m   |
| 3    | USB to RS-232 cable   | Yes      | 0.4m   |
| 4    | RS-232 to RJ-45 cable | No       | 1.5m   |



### 3 Transmitter Test Result

#### 3.1 AC Power-line Conducted Emissions

##### 3.1.1 AC Power-line Conducted Emissions Limit

| AC Power-line Conducted Emissions Limit |            |           |
|-----------------------------------------|------------|-----------|
| Frequency Emission (MHz)                | Quasi-Peak | Average   |
| 0.15-0.5                                | 66 - 56 *  | 56 - 46 * |
| 0.5-5                                   | 56         | 46        |
| 5-30                                    | 60         | 50        |

Note 1: \* Decreases with the logarithm of the frequency.

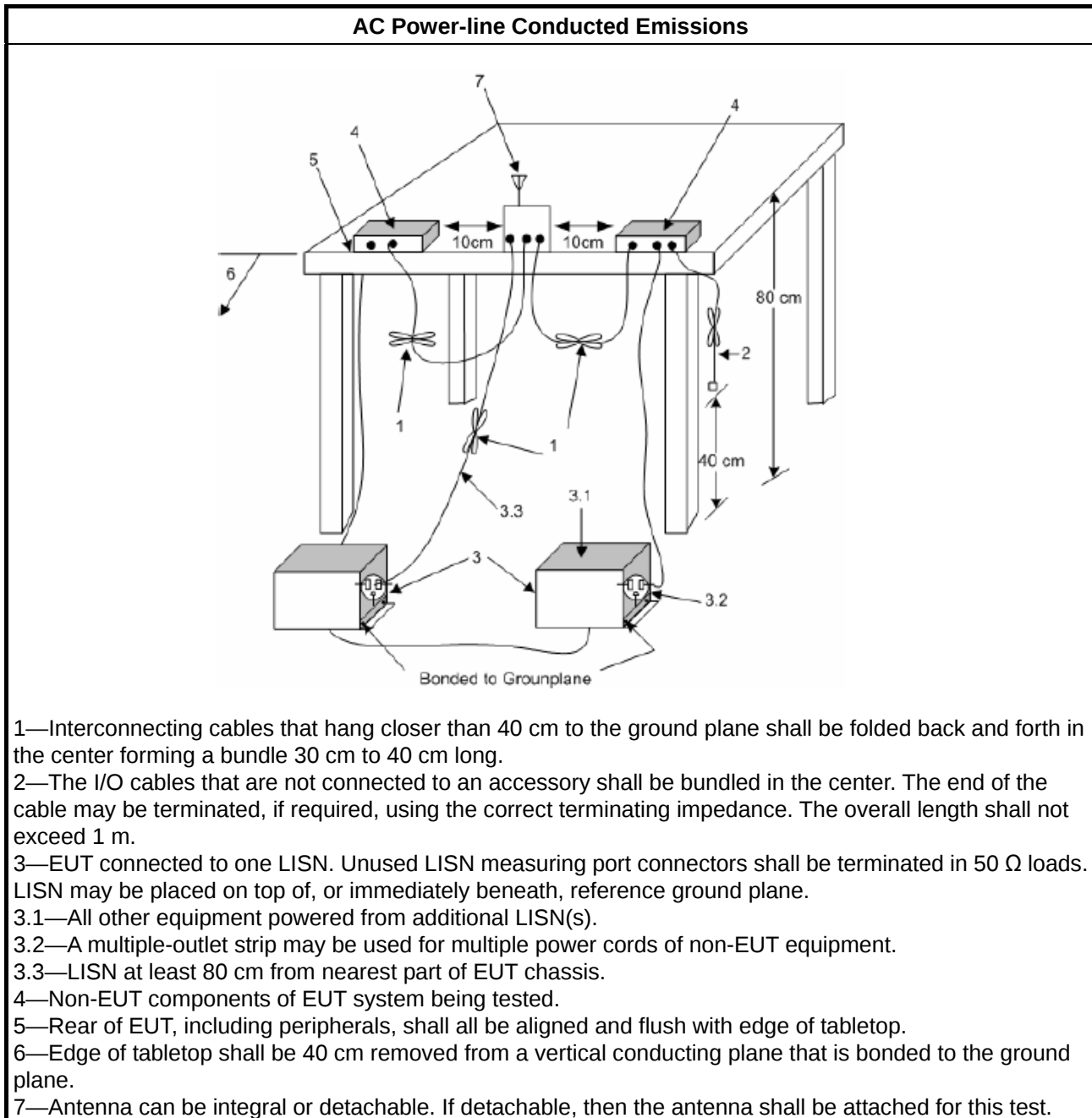
##### 3.1.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

##### 3.1.3 Test Procedures

| Test Method                                                                    |
|--------------------------------------------------------------------------------|
| ▪ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions. |

### 3.1.4 Test Setup



### 3.1.5 Measurement Results Calculation

The measured Level is calculated using:

- Corrected Reading (dBuV) = LISN Factor + Cable Loss + Read Level = Level
- Margin = - Limit + (Read Level + LISN Factor + Cable Loss)

### 3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

## 3.2 20dB Bandwidth and Carrier Frequency Separation

### 3.2.1 20dB Bandwidth and Carrier Frequency Separation Limit

| 20dB Bandwidth and Carrier Frequency Separation Limit for Frequency Hopping Systems |                                                                                                      |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| ▪ 902-928 MHz Band:                                                                 |                                                                                                      |
|                                                                                     | ▪ $N \geq 50$ and $ChS \geq \text{MAX}$ (20 dB bandwidth, 25 kHz); 20 dB bandwidth $\leq$ 250 kHz.   |
|                                                                                     | ▪ $50 > N \geq 25$ and $ChS \geq \text{MAX}$ (20 dB bandwidth, 25 kHz); 20 dB bandwidth $>$ 250 kHz. |
| ▪ 2400-2483.5 MHz Band:                                                             |                                                                                                      |
|                                                                                     | ▪ $N \geq 75$ and $ChS \geq \text{MAX}$ (20 dB bandwidth, 25 kHz).                                   |
|                                                                                     | ▪ $75 > N \geq 15$ and $ChS \geq \text{MAX}$ (20 dB bandwidth 2/3, 25 kHz).                          |
| ▪ 5725-5850 MHz Band:                                                               |                                                                                                      |
|                                                                                     | ▪ $N \geq 75$ and $ChS \geq \text{MAX}$ (20 dB bandwidth, 25 kHz); 20 dB bandwidth $\leq$ 1 MHz.     |
| N: Number of Hopping Frequencies; ChS: Hopping Channel Separation                   |                                                                                                      |

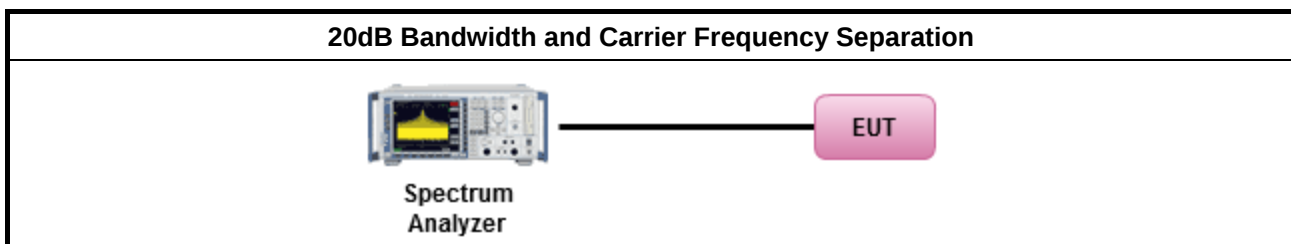
### 3.2.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

### 3.2.3 Test Procedures

| Test Method                                                                             |
|-----------------------------------------------------------------------------------------|
| ▪ Refer as ANSI C63.10-2013, clause 6.9.1 for 20 dB bandwidth measurement.              |
| ▪ Refer as ANSI C63.10-2013, clause 7.8.2 for carrier frequency separation measurement. |

### 3.2.4 Test Setup



### 3.2.5 Test Result of 20dB Bandwidth

Refer as Appendix B

### 3.2.6 Test Result of Carrier Frequency Separation

Refer as Appendix B

### 3.3 Maximum Conducted Output Power

#### 3.3.1 Maximum Conducted Output Power Limit

| Maximum Conducted Output Power Limit |                                              |
|--------------------------------------|----------------------------------------------|
| ▪ 902-928 MHz Band:                  |                                              |
|                                      | ▪ $N \geq 50$ ; Power 30dBm; EIRP 36dBm      |
|                                      | ▪ $50 > N \geq 25$ ; Power 24dBm; EIRP 30dBm |
| ▪ 2400-2483.5 MHz Band:              |                                              |
|                                      | ▪ $N \geq 75$ ; Power 30dBm; EIRP 36dBm      |
|                                      | ▪ $75 > N \geq 15$ ; Power 21dBm; EIRP 27dBm |
| ▪ 5725-5850 MHz Band:                |                                              |
|                                      | ▪ $N \geq 75$ ; Power 30dBm; EIRP 36dBm      |
| N: Number of Hopping Frequencies     |                                              |

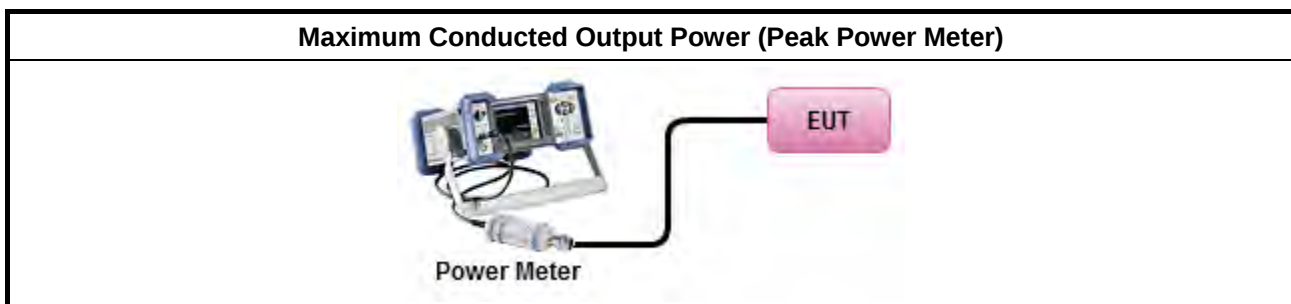
#### 3.3.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

#### 3.3.3 Test Procedures

| Test Method                                                             |
|-------------------------------------------------------------------------|
| ▪ Refer as ANSI C63.10-2013, clause 7.8.5 for output power measurement. |

#### 3.3.4 Test Setup



#### 3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

### 3.4 Number of Hopping Frequencies and Hopping Bandedge

#### 3.4.1 Number of Hopping Frequencies Limit

| Number of Hopping Frequencies Limit                                |                                                                                                      |
|--------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| ▪ 902-928 MHz Band:                                                |                                                                                                      |
|                                                                    | ▪ $N \geq 50$ and $ChS \geq \text{MAX}$ (20 dB bandwidth, 25 kHz); 20 dB bandwidth $\leq$ 250 kHz.   |
|                                                                    | ▪ $50 > N \geq 25$ and $ChS \geq \text{MAX}$ (20 dB bandwidth, 25 kHz); 20 dB bandwidth $>$ 250 kHz. |
| ▪ 2400-2483.5 MHz Band:                                            |                                                                                                      |
|                                                                    | ▪ $N \geq 75$ and $ChS \geq \text{MAX}$ (20 dB bandwidth, 25 kHz).                                   |
|                                                                    | ▪ $75 > N \geq 15$ and $ChS \geq \text{MAX}$ (20 dB bandwidth 2/3, 25 kHz).                          |
| ▪ 5725-5850 MHz Band:                                              |                                                                                                      |
|                                                                    | ▪ $N \geq 75$ and $ChS \geq \text{MAX}$ (20 dB bandwidth, 25 kHz); 20 dB bandwidth $\leq$ 1 MHz.     |
| N: Number of Hopping Frequencies; ChS : Hopping Channel Separation |                                                                                                      |

#### 3.4.2 Hopping Bandedge Limit

Refer clause 3.6.1 and clause 3.7.1

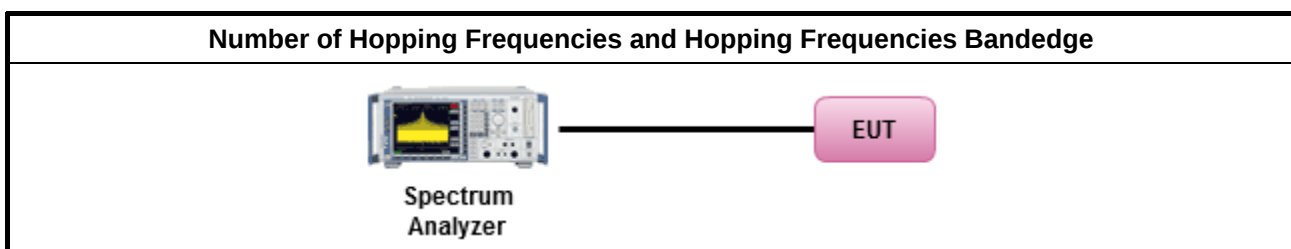
#### 3.4.3 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

#### 3.4.4 Test Procedures

| Test Method                                                                              |
|------------------------------------------------------------------------------------------|
| ▪ Refer as ANSI C63.10-2013, clause 7.8.3 for number of hopping frequencies measurement. |
| ▪ Refer as ANSI C63.10-2013, clause 7.8.6 for hopping frequencies Bandedge measurement.  |

#### 3.4.5 Test Setup



#### 3.4.6 Test Result of Number of Hopping Frequencies

Refer as Appendix D

#### 3.4.7 Test Result of Number of Hopping Frequencies Bandedge

Refer as Appendix D

### 3.5 Time of Occupancy (Dwell Time)

#### 3.5.1 Time of Occupancy (Dwell Time) Limit

| 20dB Bandwidth and Carrier Frequency Separation Limit for Frequency Hopping Systems |                                                    |
|-------------------------------------------------------------------------------------|----------------------------------------------------|
| ▪ 902-928 MHz Band:                                                                 |                                                    |
|                                                                                     | ▪ $N \geq 50$ ; 0.4s in 20s period                 |
|                                                                                     | ▪ $50 > N \geq 25$ ; 0.4s in 10s period            |
| ▪ 2400-2483.5 MHz Band:                                                             |                                                    |
|                                                                                     | ▪ $N \geq 75$ ; 0.4s in $N \times 0.4$ period      |
|                                                                                     | ▪ $75 > N \geq 15$ ; 0.4s in $N \times 0.4$ period |
| ▪ 5725-5850 MHz Band:                                                               |                                                    |
|                                                                                     | ▪ $N \geq 75$ ; 0.4s in 30s period                 |
| N: Number of Hopping Frequencies                                                    |                                                    |

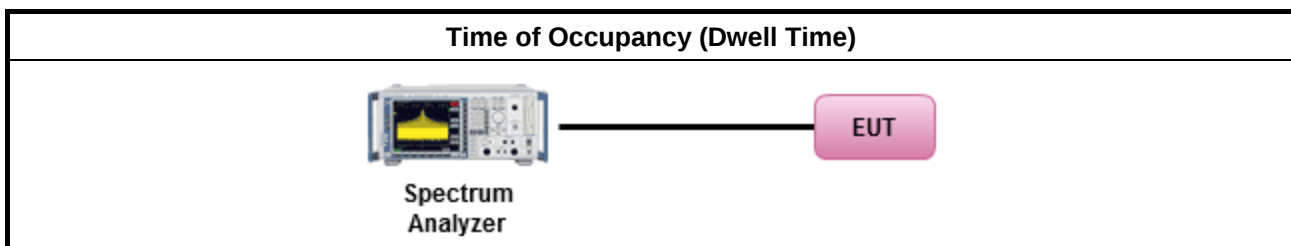
#### 3.5.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

#### 3.5.3 Test Procedures

| Test Method                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ▪ Refer as ANSI C63.10-2013, clause 7.8.4 for dwell time measurement.                                                                    |                                                                                                                                                                                                                                                                                                                                                  |
| ▪ Bluetooth ACL packets can be 1, 3, or 5 time slots. Following as dwell time. Operate DH5 at maximum dwell time and maximum duty cycle. |                                                                                                                                                                                                                                                                                                                                                  |
|                                                                                                                                          | ▪ 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 Packet permit maximum $1600 / 79 / 6 = 3.37$ hops per second in each channel. |

#### 3.5.4 Test Setup



#### 3.5.5 Test Result of Time of Occupancy (Dwell Time)

Refer as Appendix E

### 3.6 Emissions in Non-restricted Frequency Bands

#### 3.6.1 Emissions in Non-restricted Frequency Bands Limit

| Un-restricted Band Emissions Limit                                                                                                                                                                                                                                                                                                            |             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| RF output power procedure                                                                                                                                                                                                                                                                                                                     | Limit (dBc) |
| Peak output power procedure                                                                                                                                                                                                                                                                                                                   | 20          |
| Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak PSD level. |             |

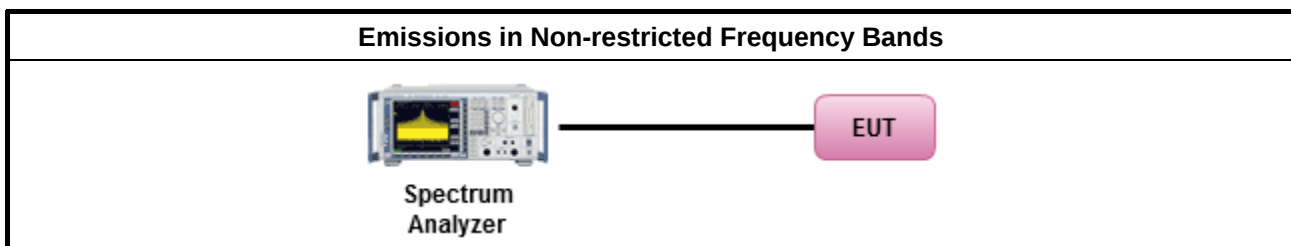
#### 3.6.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

#### 3.6.3 Test Procedures

| Test Method                                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>Refer as ANSI C63.10-2013, clause 7.8.8 for unwanted emissions into non-restricted bands.</li> </ul> |

#### 3.6.4 Test Setup



#### 3.6.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix F



### 3.7 Emissions in Restricted Frequency Bands

#### 3.7.1 Emissions in Restricted Frequency Bands Limit

| Restricted Band Emissions Limit |                       |                         |                      |
|---------------------------------|-----------------------|-------------------------|----------------------|
| Frequency Range (MHz)           | Field Strength (uV/m) | Field Strength (dBuV/m) | Measure Distance (m) |
| 0.009~0.490                     | 2400/F(kHz)           | 48.5 - 13.8             | 300                  |
| 0.490~1.705                     | 24000/F(kHz)          | 33.8 - 23               | 30                   |
| 1.705~30.0                      | 30                    | 29                      | 30                   |
| 30~88                           | 100                   | 40                      | 3                    |
| 88~216                          | 150                   | 43.5                    | 3                    |
| 216~960                         | 200                   | 46                      | 3                    |
| Above 960                       | 500                   | 54                      | 3                    |

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB / decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m.

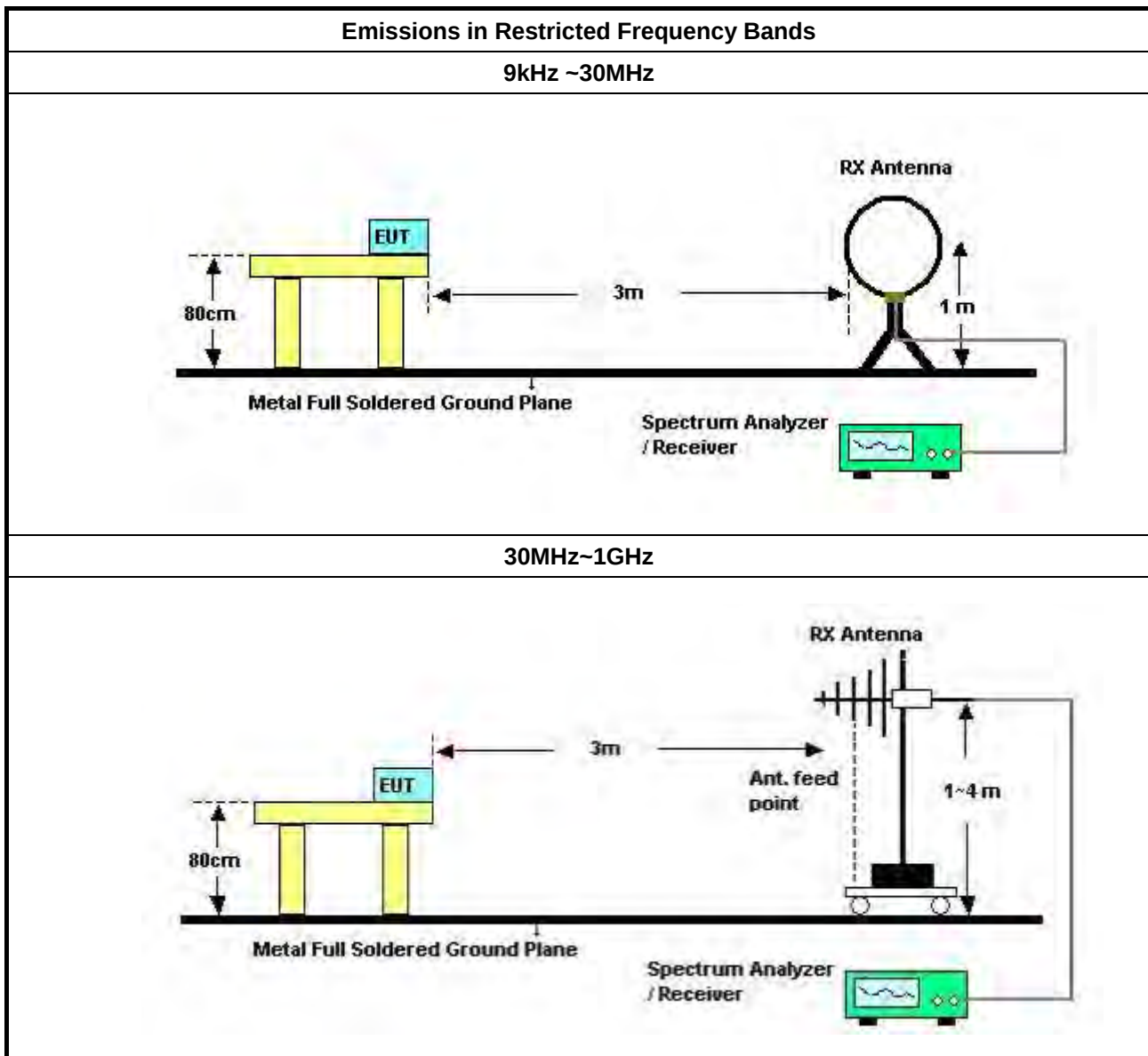
#### 3.7.2 Measuring Instruments

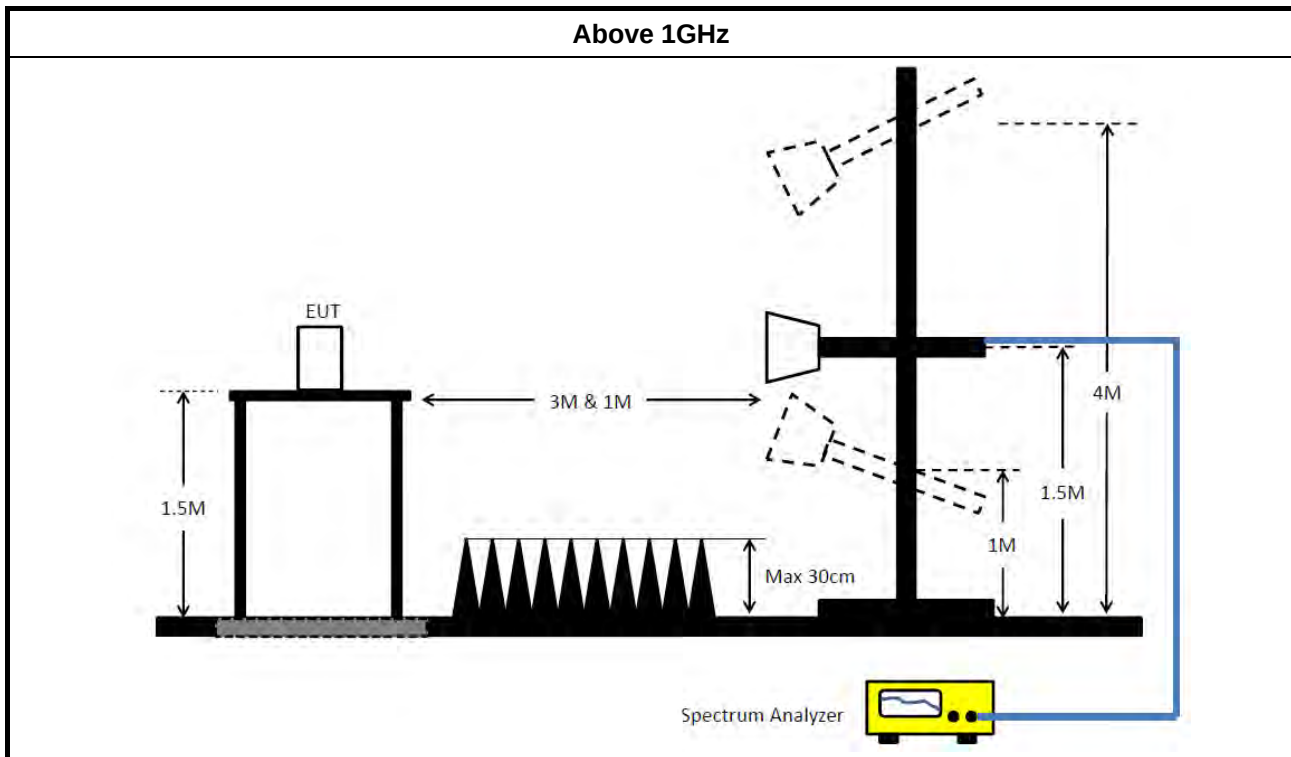
Refer a test equipment and calibration data table in this test report.

#### 3.7.3 Test Procedures

| Test Method                                                                                                                                                                 |                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| ▪ The average emission levels shall be measured in [hopping duty factor].                                                                                                   |                                                                                     |
| ▪ Refer as ANSI C63.10; clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band. |                                                                                     |
| ▪ For the transmitter unwanted emissions shall be measured using following options below:                                                                                   |                                                                                     |
|                                                                                                                                                                             | ▪ Refer as ANSI C63.10, clause 4.1.4.2.1 QP value.                                  |
|                                                                                                                                                                             | ▪ Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak.                |
|                                                                                                                                                                             | ▪ Refer as ANSI C63.10, clause 4.1.4.2.4 average value of hopping pulsed emissions. |

### 3.7.4 Test Setup





### 3.7.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor (if applicable) = Level.

### 3.7.6 Emissions in Restricted Frequency Bands (Below 30MHz)

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to KDB414788 Radiated Test Site, and the result came out very similar.

All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10 harmonic or 40 GHz, whichever is appropriate.

### 3.7.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix G



## 4 Test Equipment and Calibration Data

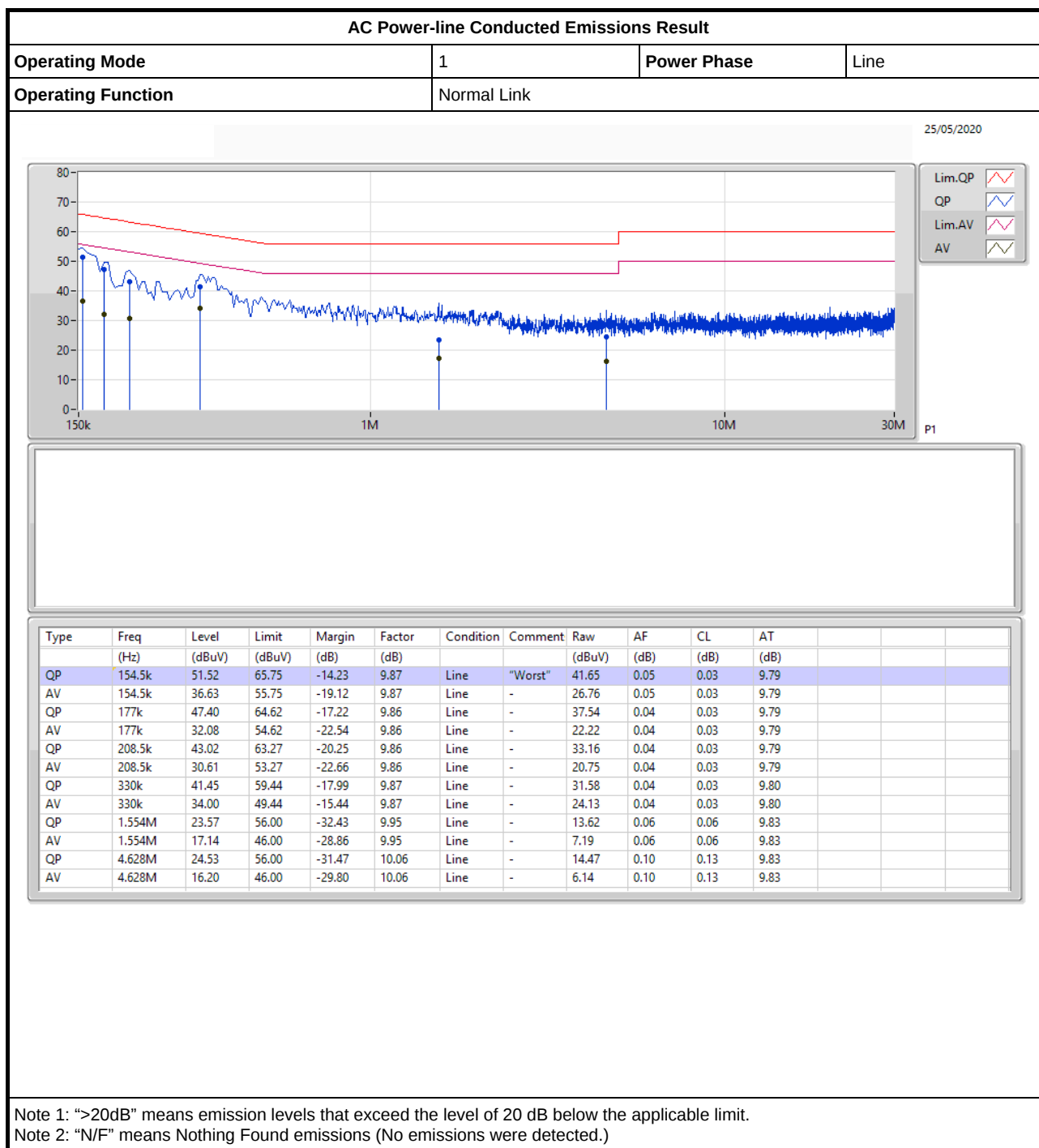
| Instrument                         | Manufacturer    | Model No.         | Serial No.       | Characteristics  | Calibration Date | Calibration Due Date | Remark                |
|------------------------------------|-----------------|-------------------|------------------|------------------|------------------|----------------------|-----------------------|
| EMI Receiver                       | Agilent         | N9038A            | My52260123       | 9kHz ~ 8.45GHz   | Feb. 26, 2020    | Feb. 25, 2021        | Conduction (CO01-CB)  |
| LISN                               | F.C.C.          | FCC-LISN-50-16-2  | 04083            | 150kHz ~ 100MHz  | Dec. 25, 2019    | Dec. 24, 2020        | Conduction (CO01-CB)  |
| LISN                               | Schwarzbeck     | NSLK 8127         | 8127647          | 9kHz ~ 30MHz     | Feb. 25, 2020    | Feb. 24, 2021        | Conduction (CO01-CB)  |
| COND Cable                         | Woken           | Cable             | Low cable-CO01   | 9kHz ~ 30MHz     | May 20, 2020     | May 19, 2021         | Conduction (CO01-CB)  |
| Software                           | Audix           | E3                | 6.120210n        | -                | N.C.R.           | N.C.R.               | Conduction (CO01-CB)  |
| BILOG ANTENNA with 6 dB attenuator | Schaffner & EMC | CBL6112B & N-6-06 | 22021&AT-N06 07  | 30MHz ~ 1GHz     | Oct. 12, 2019    | Oct. 11, 2020        | Radiation (03CH04-CB) |
| Horn Antenna                       | ETS • Lindgren  | 3115              | 00143147         | 750MHz~ 18GHz    | Oct. 22, 2019    | Oct. 21, 2020        | Radiation (03CH04-CB) |
| Horn Antenna                       | SCHWARZBECK     | BBHA 9170         | BBHA9170507      | 15GHz ~ 40GHz    | Jun. 12, 2019    | Jun. 11, 2020        | Radiation (03CH04-CB) |
| Pre-Amplifier                      | Agilent         | 310N              | 187291           | 0.1MHz ~ 1GHz    | Mar. 19, 2020    | Mar. 18, 2021        | Radiation (03CH04-CB) |
| Pre-Amplifier                      | Agilent         | 83017A            | MY53270063       | 0.5GHz ~ 26.5GHz | Mar. 11, 2020    | Mar. 10, 2021        | Radiation (03CH04-CB) |
| Pre-Amplifier                      | MITEQ           | TTA1840-35-H G    | 1864479          | 18GHz ~ 40GHz    | Jul. 03, 2019    | Jul. 02, 2020        | Radiation (03CH04-CB) |
| Loop Antenna                       | Teseq           | HLA 6120          | 24155            | 9kHz - 30 MHz    | Apr. 13, 2020    | Apr. 12, 2021        | Radiation (03CH04-CB) |
| Spectrum Analyzer                  | R&S             | FSP40             | 100142           | 9kHz~40GHz       | Dec. 18, 2019    | Dec. 17, 2020        | Radiation (03CH04-CB) |
| EMI Test Receiver                  | R&S             | ESCS              | 826547/017       | 9kHz ~ 2.75GHz   | May 13, 2020     | May 12, 2021         | Radiation (03CH04-CB) |
| RF Cable-low                       | Woken           | RG402             | Low Cable-03+22  | 30MHz ~ 1GHz     | Oct. 07, 2019    | Oct. 06, 2020        | Radiation (03CH04-CB) |
| RF Cable-high                      | Woken           | RG402             | High Cable-21    | 1GHz - 18GHz     | Oct. 07, 2019    | Oct. 06, 2020        | Radiation (03CH04-CB) |
| RF Cable-high                      | Woken           | RG402             | High Cable-21+22 | 1GHz - 18GHz     | Oct. 07, 2019    | Oct. 06, 2020        | Radiation (03CH04-CB) |
| RF Cable-high                      | Woken           | RG402             | High Cable-40G#1 | 18GHz ~ 40 GHz   | Jul. 24, 2019    | Jul. 23, 2020        | Radiation (03CH04-CB) |

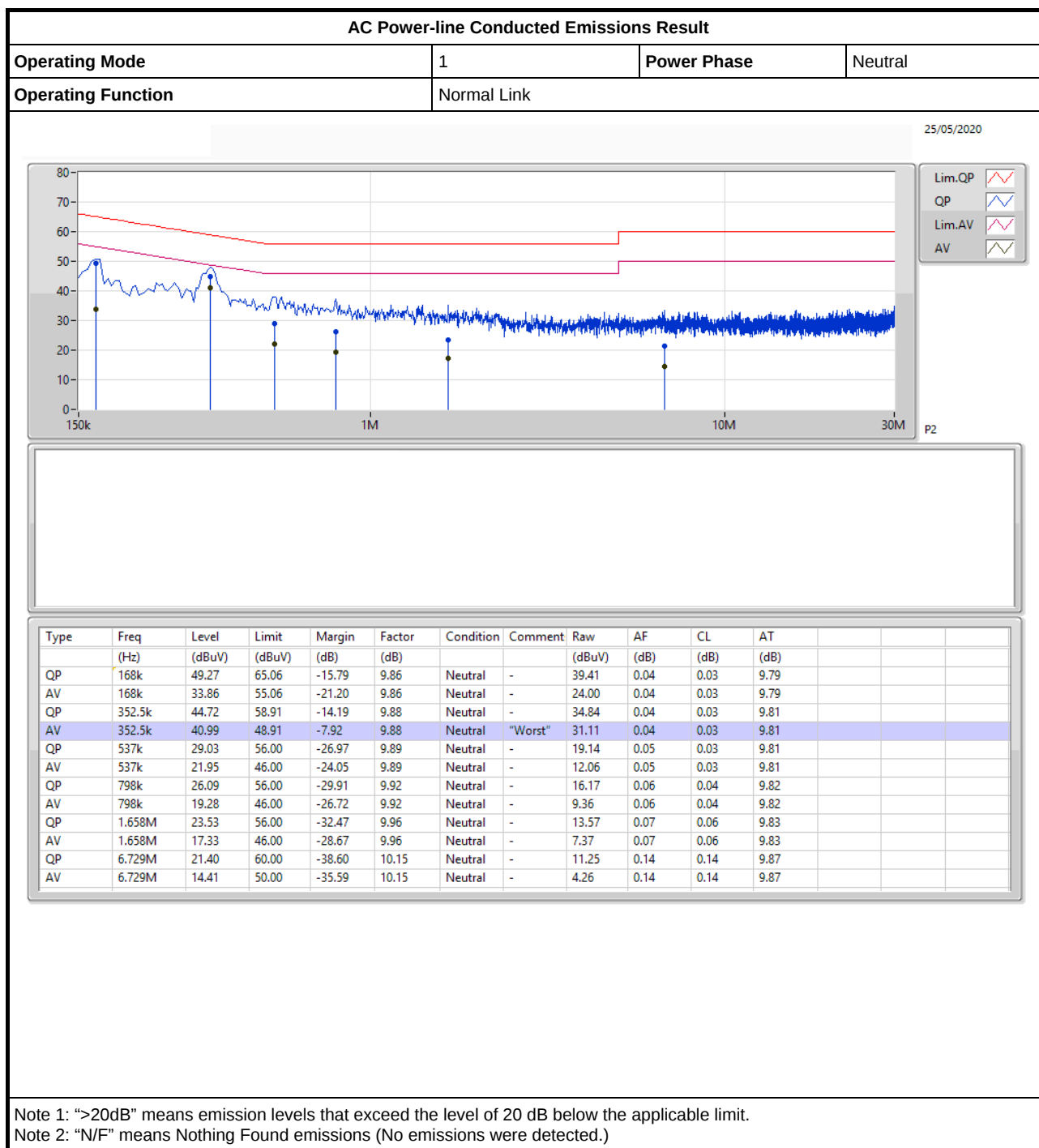


| Instrument        | Manufacturer        | Model No. | Serial No.       | Characteristics  | Calibration Date | Calibration Due Date | Remark                |
|-------------------|---------------------|-----------|------------------|------------------|------------------|----------------------|-----------------------|
| RF Cable-high     | Woken               | RG402     | High Cable-40G#2 | 18GHz ~ 40 GHz   | Jul. 24, 2019    | Jul. 23, 2020        | Radiation (03CH04-CB) |
| Spectrum analyzer | R&S                 | FSV40     | 100979           | 9kHz~40GHz       | May 05, 2020     | May 04, 2021         | Conducted (TH01-CB)   |
| RF Cable-high     | Woken               | RG402     | High Cable-06    | 1 GHz – 26.5 GHz | Oct. 07, 2019    | Oct. 06, 2020        | Conducted (TH01-CB)   |
| RF Cable-high     | Woken               | RG402     | High Cable-07    | 1 GHz –26.5 GHz  | Oct. 07, 2019    | Oct. 06, 2020        | Conducted (TH01-CB)   |
| RF Cable-high     | Woken               | RG402     | High Cable-08    | 1 GHz –26.5 GHz  | Oct. 07, 2019    | Oct. 06, 2020        | Conducted (TH01-CB)   |
| RF Cable-high     | Woken               | RG402     | High Cable-09    | 1 GHz –26.5 GHz  | Oct. 07, 2019    | Oct. 06, 2020        | Conducted (TH01-CB)   |
| RF Cable-high     | Woken               | RG402     | High Cable-10    | 1 GHz –26.5 GHz  | Oct. 07, 2019    | Oct. 06, 2020        | Conducted (TH01-CB)   |
| RF Cable-high     | Woken               | RG402     | High Cable-28    | 1 GHz –26.5 GHz  | Nov. 18, 2019    | Nov. 17, 2020        | Conducted (TH01-CB)   |
| Cable             | Marvelous Microwave | n/a       | Cable-REF-1      | 9k-1GHz          | Oct. 31, 2019    | Oct. 30, 2020        | Conducted (TH01-CB)   |
| Power Sensor      | Agilent             | E9327A    | US40442088       | 50MHz~18GHz      | Feb. 07, 2020    | Feb. 06, 2021        | Conducted (TH01-CB)   |
| Power Meter       | Agilent             | E4416A    | GB41291199       | 50MHz~18GHz      | Feb. 07, 2020    | Feb. 06, 2021        | Conducted (TH01-CB)   |

Note: Calibration Interval of instruments listed above is one year.

NCR means Non-Calibration required.





**Summary**

| Mode          | Max-N dB<br>(Hz) | Max-OBW<br>(Hz) | ITU-Code | Min-N dB<br>(Hz) | Min-OBW<br>(Hz) |
|---------------|------------------|-----------------|----------|------------------|-----------------|
| 2.4-2.4835GHz | -                | -               | -        | -                | -               |
| BT-BR(1Mbps)  | 920k             | 875.812k        | 876KF1D  | 920k             | 873.313k        |
| BT-EDR(2Mbps) | 1.22M            | 1.169M          | 1M17G1D  | 1.216M           | 1.167M          |
| BT-EDR(3Mbps) | 1.25M            | 1.183M          | 1M18G1D  | 1.248M           | 1.179M          |

**Max-N dB** = Maximum 20dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;

**Min-N dB** = Minimum 20dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

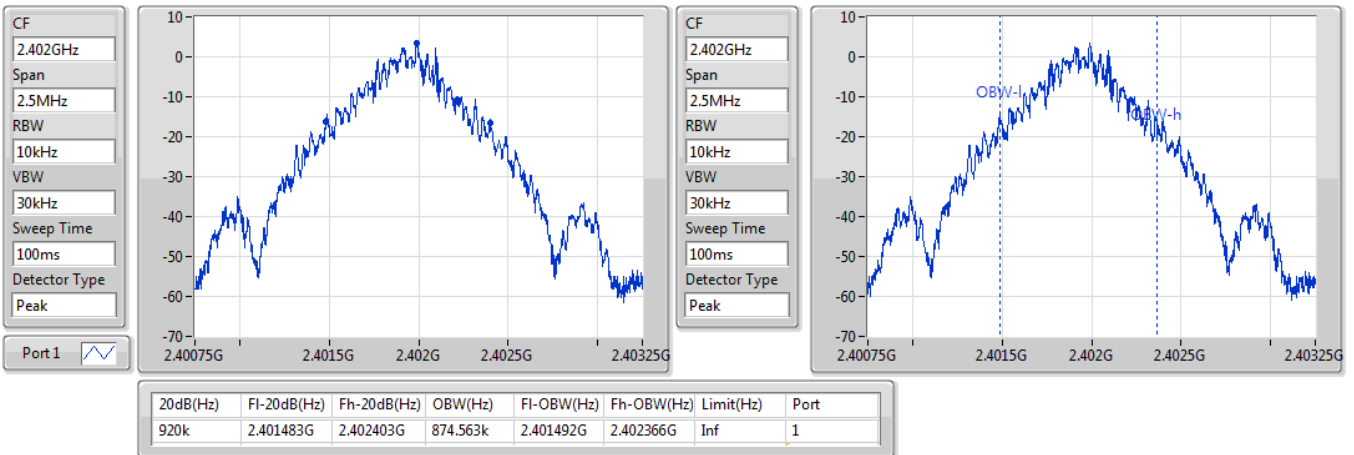
**Result**

| Mode          | Result | Limit<br>(Hz) | Port 1-N dB<br>(Hz) | Port 1-OBW<br>(Hz) |
|---------------|--------|---------------|---------------------|--------------------|
| BT-BR(1Mbps)  | -      | -             | -                   | -                  |
| 2402MHz       | Pass   | Inf           | 920k                | 874.563k           |
| 2440MHz       | Pass   | Inf           | 920k                | 875.812k           |
| 2480MHz       | Pass   | Inf           | 920k                | 873.313k           |
| BT-EDR(2Mbps) | -      | -             | -                   | -                  |
| 2402MHz       | Pass   | Inf           | 1.216M              | 1.168M             |
| 2440MHz       | Pass   | Inf           | 1.218M              | 1.169M             |
| 2480MHz       | Pass   | Inf           | 1.22M               | 1.167M             |
| BT-EDR(3Mbps) | -      | -             | -                   | -                  |
| 2402MHz       | Pass   | Inf           | 1.248M              | 1.183M             |
| 2440MHz       | Pass   | Inf           | 1.248M              | 1.179M             |
| 2480MHz       | Pass   | Inf           | 1.25M               | 1.179M             |

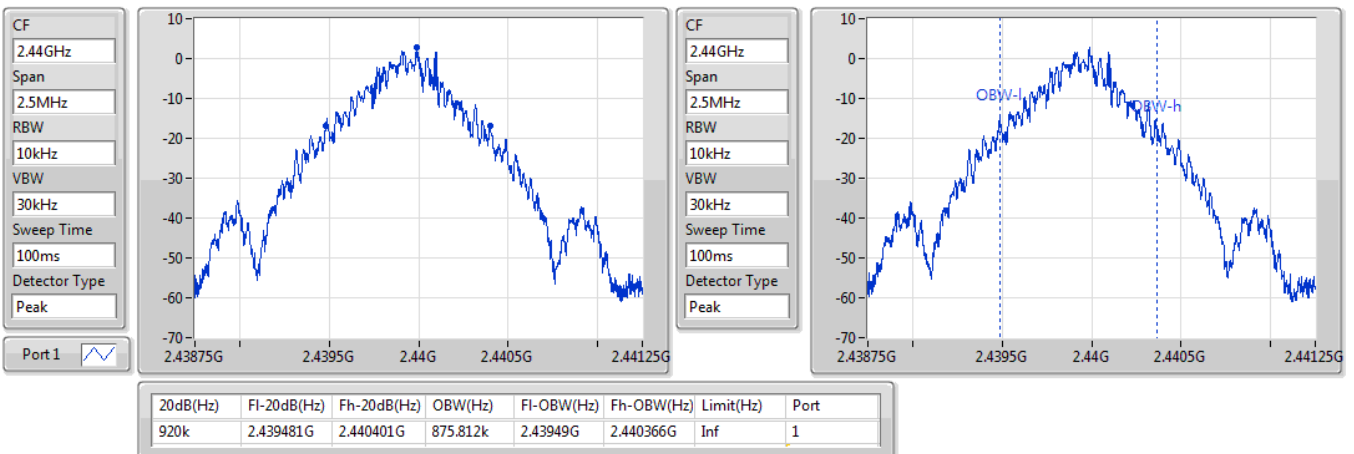
**Port X-N dB** = Port X 20dB down bandwidth; **Port X-OBW** = Port X 99% occupied bandwidth;

**BT-BR(1Mbps)**
**2402MHz**
**EBW**

20/05/2020

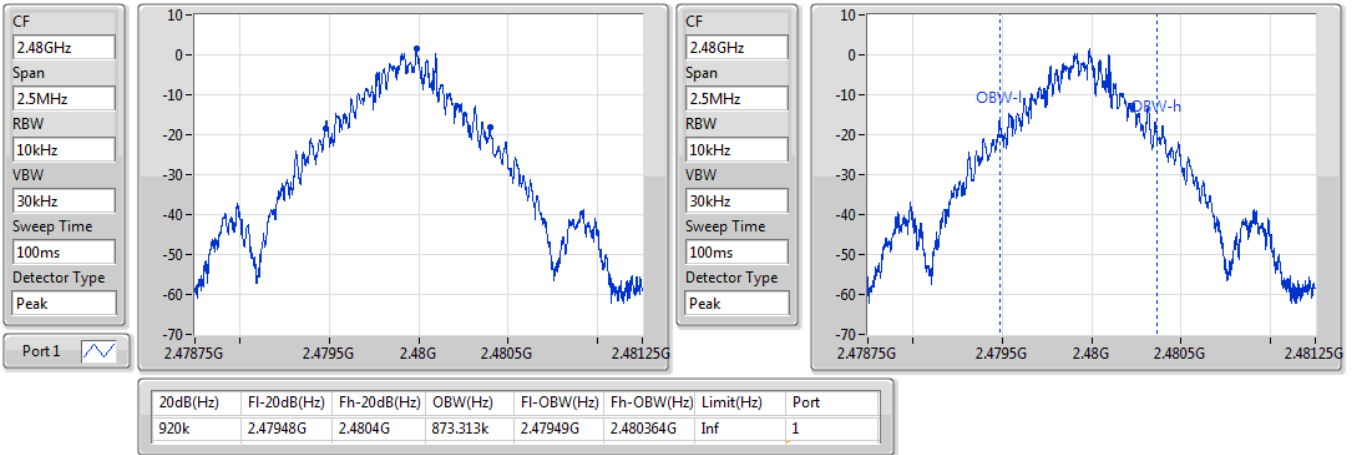

**BT-BR(1Mbps)**
**2440MHz**
**EBW**

20/05/2020

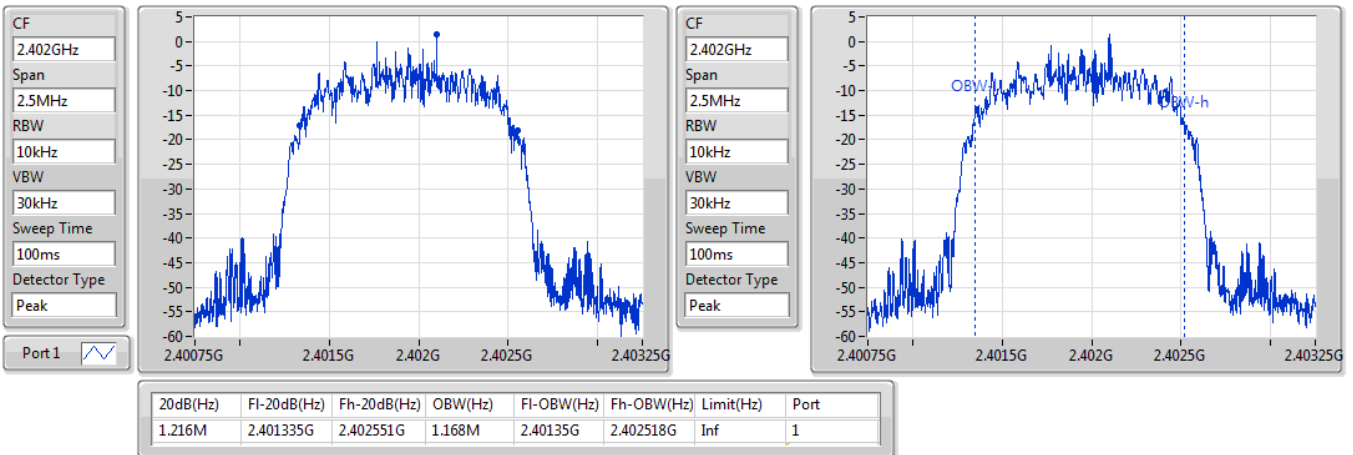


**BT-BR(1Mbps)**
**2480MHz**

20/05/2020

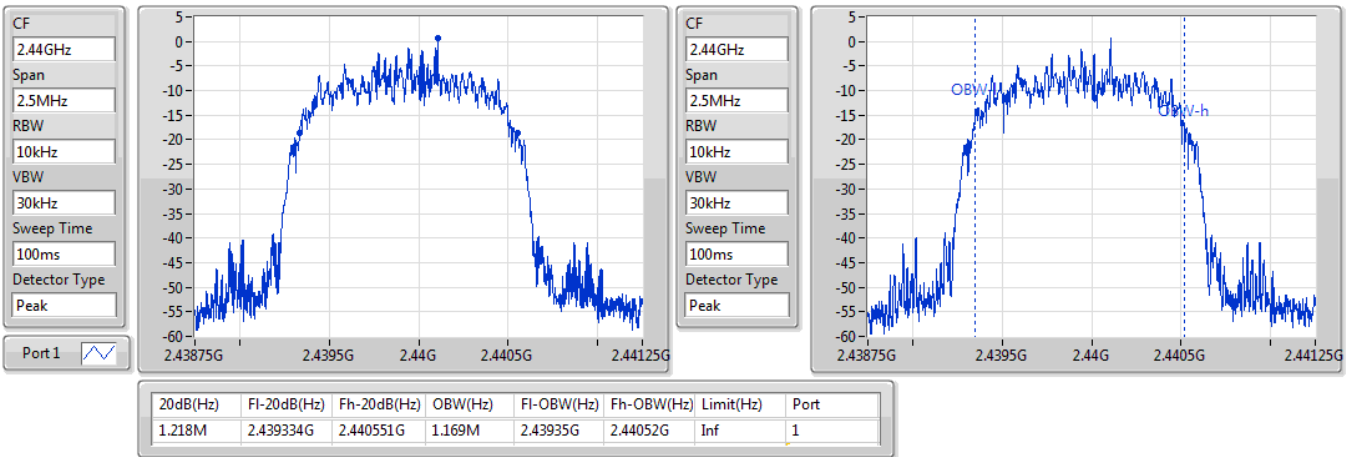

**BT-EDR(2Mbps)**
**2402MHz**

20/05/2020

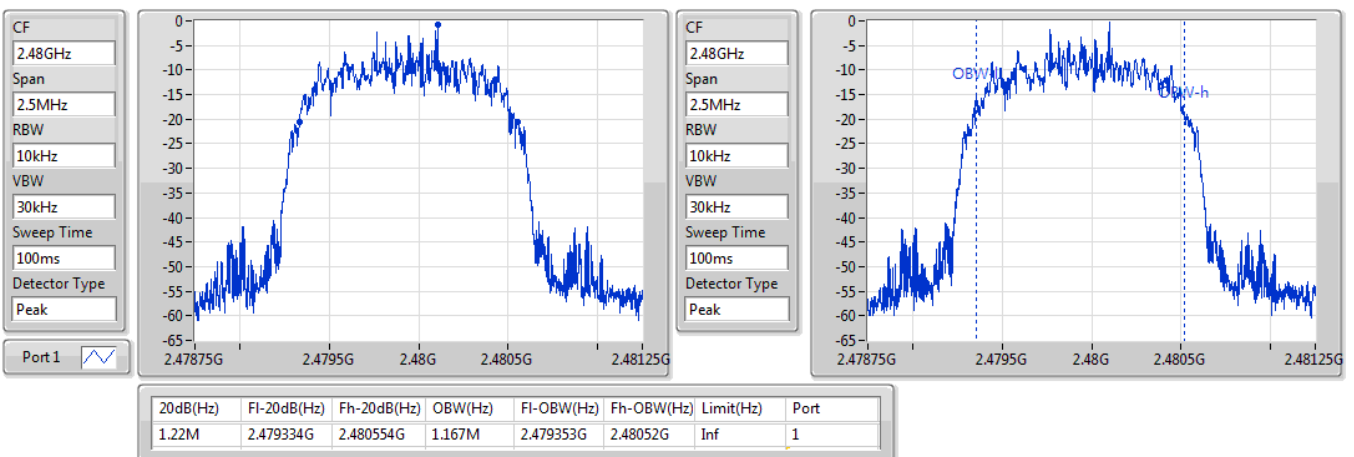


**BT-EDR(2Mbps)**
**EBW**
**2440MHz**

20/05/2020

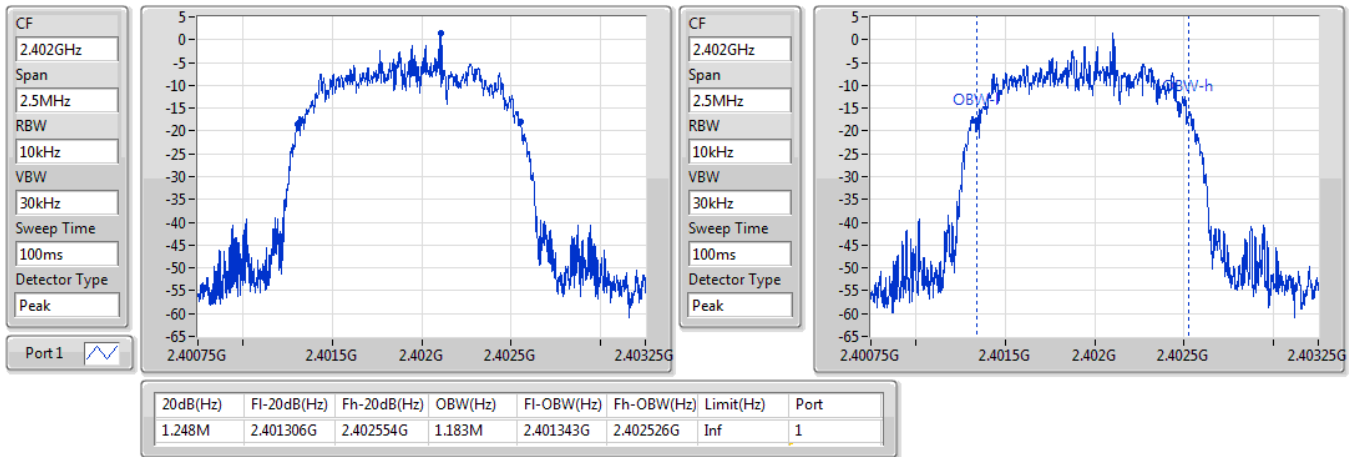

**BT-EDR(2Mbps)**
**EBW**
**2480MHz**

20/05/2020

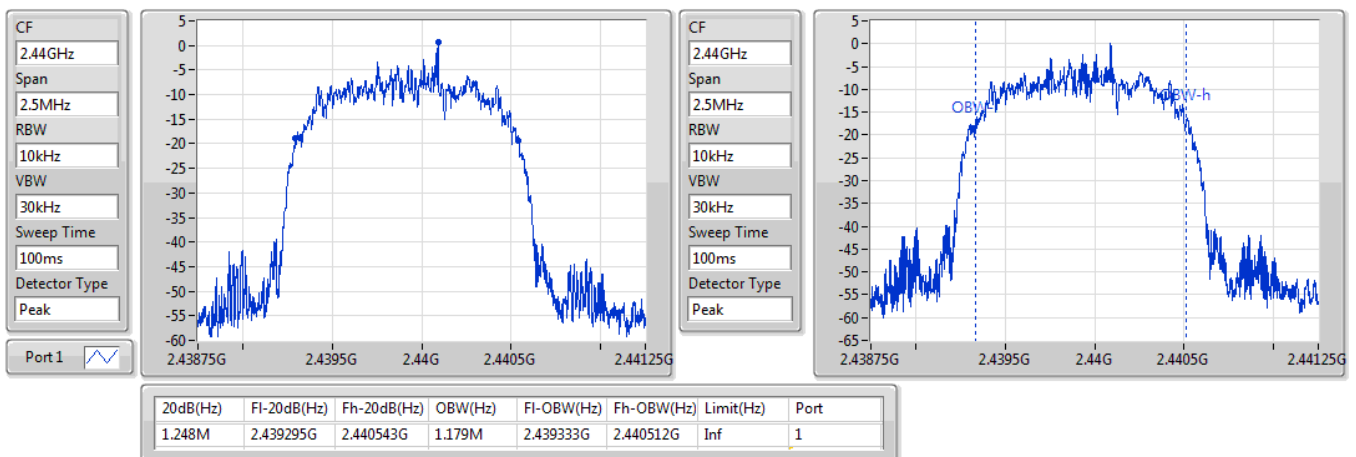


**BT-EDR(3Mbps)**
**EBW**
**2402MHz**

20/05/2020


**BT-EDR(3Mbps)**
**EBW**
**2440MHz**

20/05/2020

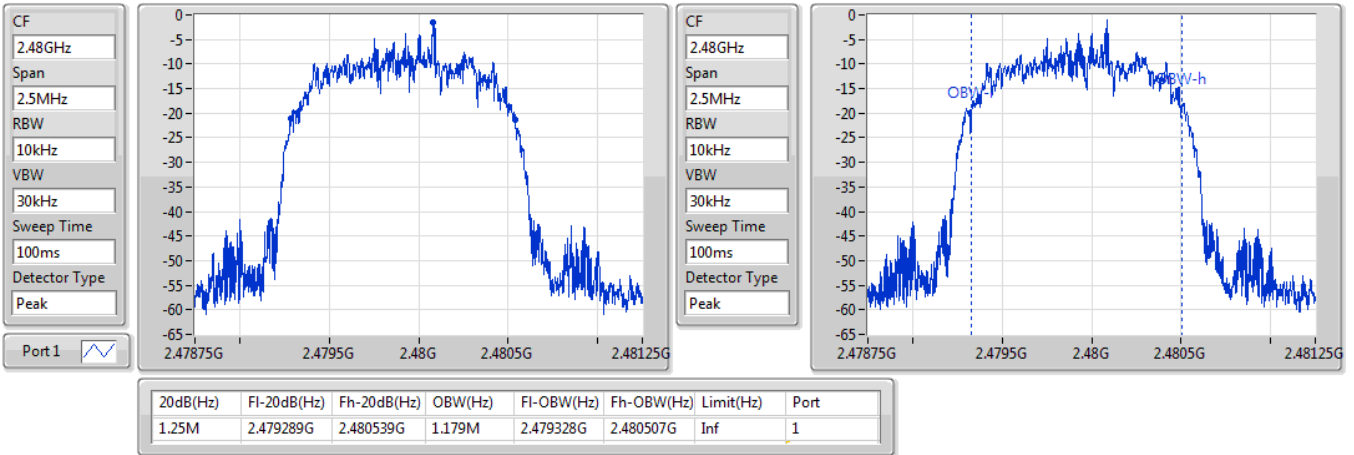


## BT-EDR(3Mbps)

2480MHz

EBW

20/05/2020





**Summary**

| Mode          | Max-Space<br>(Hz) | Min-Space<br>(Hz) |
|---------------|-------------------|-------------------|
| 2.4-2.4835GHz | -                 | -                 |
| BT-BR(1Mbps)  | 1.0005M           | 997.5k            |
| BT-EDR(2Mbps) | 1.0005M           | 999k              |
| BT-EDR(3Mbps) | 1.002M            | 999k              |

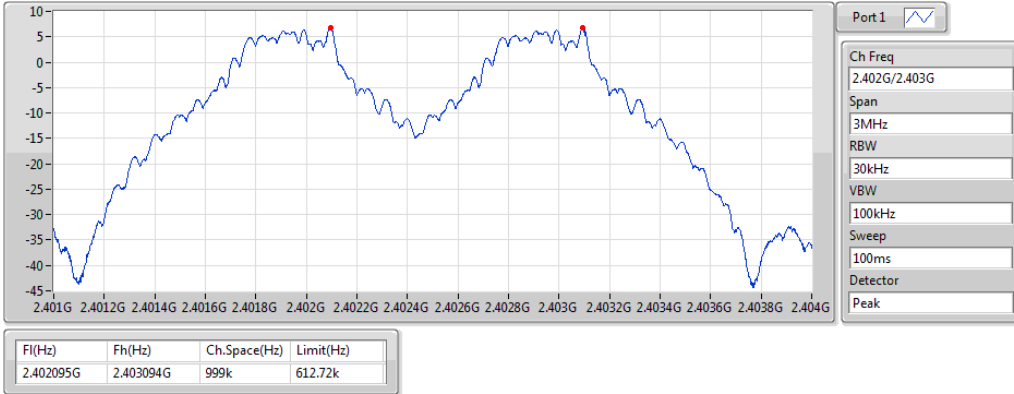
## Result

| Mode          | Result | Fl<br>(Hz) | Fh<br>(Hz) | Ch.Space<br>(Hz) | Limit<br>(Hz) |
|---------------|--------|------------|------------|------------------|---------------|
| BT-BR(1Mbps)  | -      | -          | -          | -                | -             |
| 2402MHz       | Pass   | 2.402095G  | 2.403094G  | 999k             | 612.72k       |
| 2440MHz       | Pass   | 2.440095G  | 2.441093G  | 997.5k           | 612.72k       |
| 2480MHz       | Pass   | 2.479092G  | 2.480093G  | 1.0005M          | 612.72k       |
| BT-EDR(2Mbps) | -      | -          | -          | -                | -             |
| 2402MHz       | Pass   | 2.4021G    | 2.4031G    | 1.0005M          | 809.856k      |
| 2440MHz       | Pass   | 2.440103G  | 2.441102G  | 999k             | 811.188k      |
| 2480MHz       | Pass   | 2.479101G  | 2.480102G  | 1.0005M          | 812.52k       |
| BT-EDR(3Mbps) | -      | -          | -          | -                | -             |
| 2402MHz       | Pass   | 2.402097G  | 2.403096G  | 999k             | 831.168k      |
| 2440MHz       | Pass   | 2.440083G  | 2.441084G  | 1.0005M          | 831.168k      |
| 2480MHz       | Pass   | 2.47908G   | 2.480082G  | 1.002M           | 832.5k        |

## BT-BR(1Mbps)

## Channel Separation

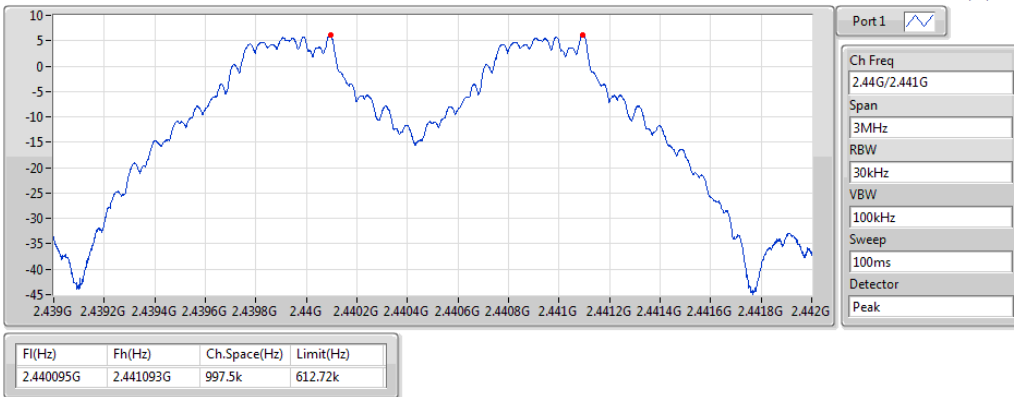
2.402G/2.403GHz



## BT-BR(1Mbps)

## Channel Separation

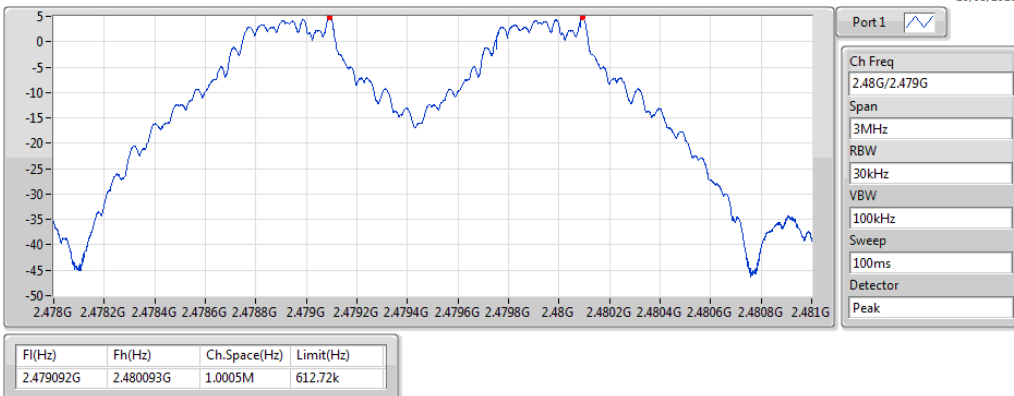
2.44G/2.441GHz



## BT-BR(1Mbps)

## Channel Separation

2.48G/2.479GHz

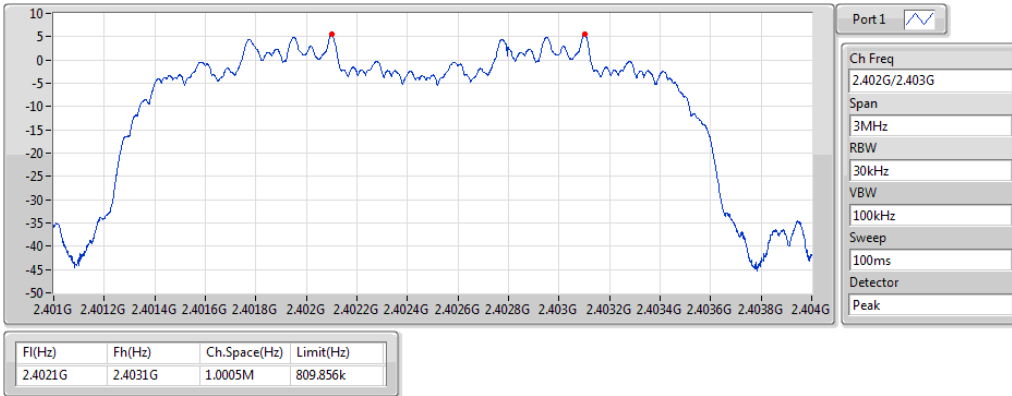


## BT-EDR(2Mbps)

2.402G/2.403GHz

## Channel Separation

20/05/2020

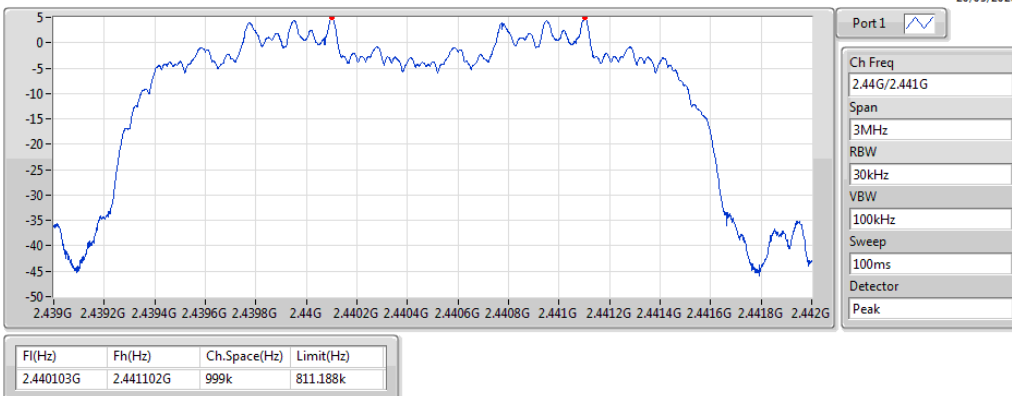


## BT-EDR(2Mbps)

2.44G/2.441GHz

## Channel Separation

20/05/2020

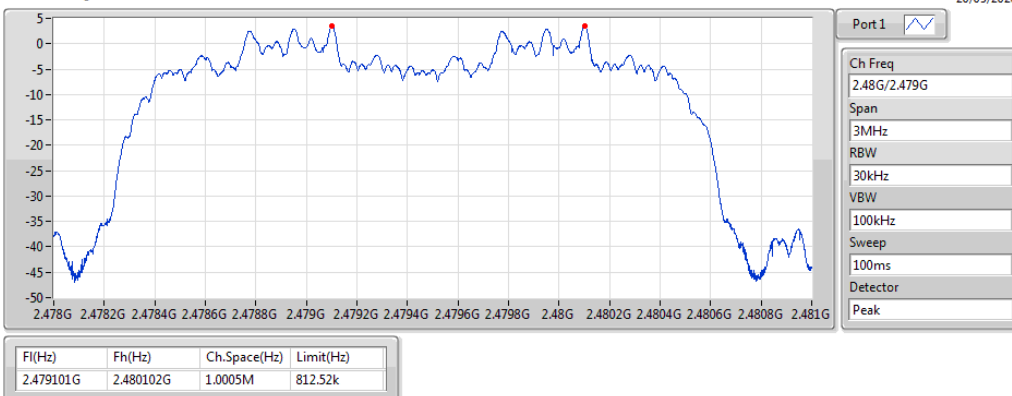


## BT-EDR(2Mbps)

2.48G/2.479GHz

## Channel Separation

20/05/2020

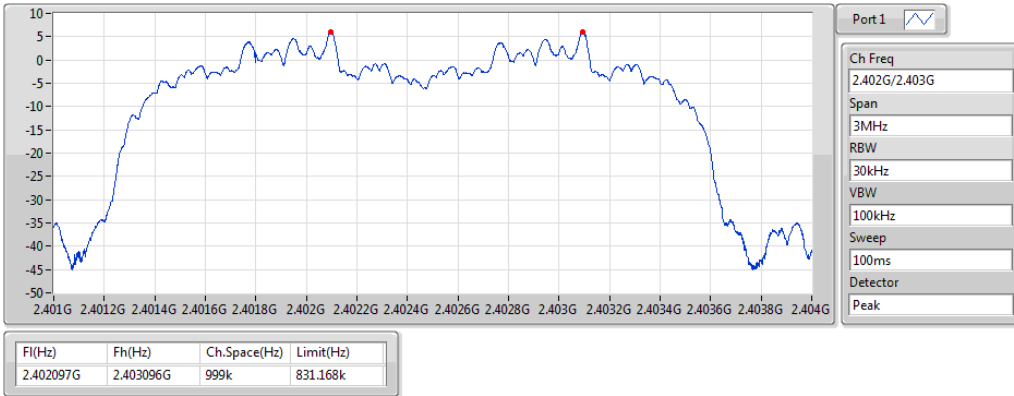


## BT-EDR(3Mbps)

2.402G/2.403GHz

## Channel Separation

20/05/2020

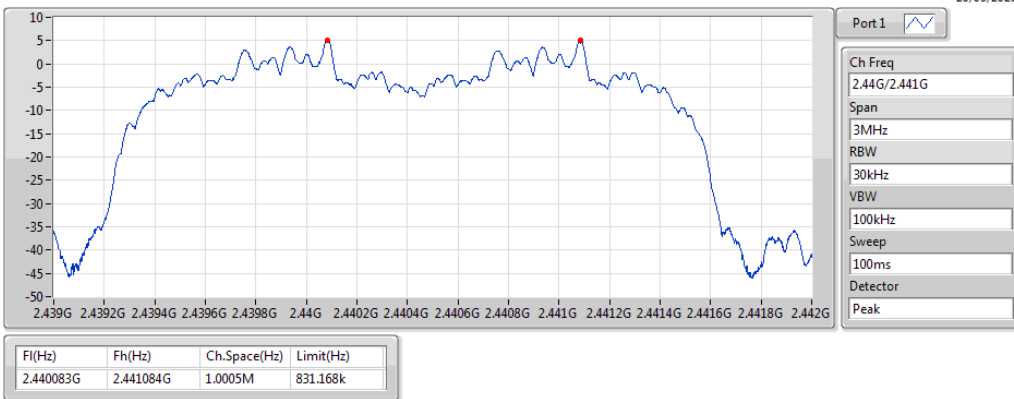


## BT-EDR(3Mbps)

2.44G/2.441GHz

## Channel Separation

20/05/2020

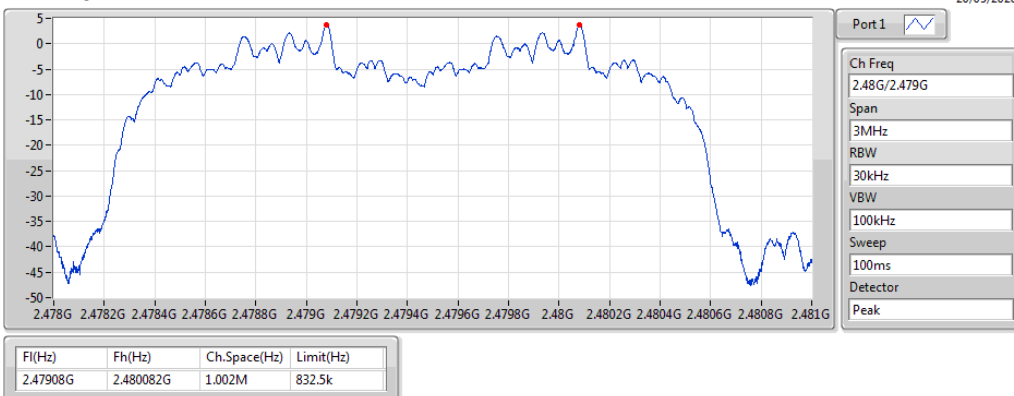


## BT-EDR(3Mbps)

2.48G/2.479GHz

## Channel Separation

20/05/2020





**Summary**

| Mode          | Power<br>(dBm) | Power<br>(W) |
|---------------|----------------|--------------|
| 2.4-2.4835GHz | -              | -            |
| BT-BR(1Mbps)  | 9.00           | 0.00794      |
| BT-EDR(2Mbps) | 6.55           | 0.00452      |
| BT-EDR(3Mbps) | 6.28           | 0.00425      |

**Result**

| Mode          | Result | Gain<br>(dBi) | Power<br>(dBm) | Power Limit<br>(dBm) |
|---------------|--------|---------------|----------------|----------------------|
| BT-BR(1Mbps)  | -      | -             | -              | -                    |
| 2402MHz       | Pass   | 4.00          | 9.00           | 21.00                |
| 2440MHz       | Pass   | 4.00          | 8.51           | 21.00                |
| 2480MHz       | Pass   | 4.00          | 7.07           | 21.00                |
| BT-EDR(2Mbps) | -      | -             | -              | -                    |
| 2402MHz       | Pass   | 4.00          | 6.55           | 21.00                |
| 2440MHz       | Pass   | 4.00          | 6.09           | 21.00                |
| 2480MHz       | Pass   | 4.00          | 4.60           | 21.00                |
| BT-EDR(3Mbps) | -      | -             | -              | -                    |
| 2402MHz       | Pass   | 4.00          | 6.28           | 21.00                |
| 2440MHz       | Pass   | 4.00          | 6.06           | 21.00                |
| 2480MHz       | Pass   | 4.00          | 4.22           | 21.00                |

**DG** = Directional Gain; **Port X** = Port X output power



**Summary**

| Mode          | Power<br>(dBm) | Power<br>(W) |
|---------------|----------------|--------------|
| 2.4-2.4835GHz | -              | -            |
| BT-BR(1Mbps)  | 9.28           | 0.00847      |
| BT-EDR(2Mbps) | 9.53           | 0.00897      |
| BT-EDR(3Mbps) | 9.79           | 0.00953      |

**Result**

| Mode          | Result | Gain<br>(dBi) | Power<br>(dBm) | Power Limit<br>(dBm) |
|---------------|--------|---------------|----------------|----------------------|
| BT-BR(1Mbps)  | -      | -             | -              | -                    |
| 2402MHz       | Pass   | 4.00          | 9.28           | 21.00                |
| 2440MHz       | Pass   | 4.00          | 8.80           | 21.00                |
| 2480MHz       | Pass   | 4.00          | 7.38           | 21.00                |
| BT-EDR(2Mbps) | -      | -             | -              | -                    |
| 2402MHz       | Pass   | 4.00          | 9.53           | 21.00                |
| 2440MHz       | Pass   | 4.00          | 9.01           | 21.00                |
| 2480MHz       | Pass   | 4.00          | 7.57           | 21.00                |
| BT-EDR(3Mbps) | -      | -             | -              | -                    |
| 2402MHz       | Pass   | 4.00          | 9.79           | 21.00                |
| 2440MHz       | Pass   | 4.00          | 9.17           | 21.00                |
| 2480MHz       | Pass   | 4.00          | 7.67           | 21.00                |

**DG** = Directional Gain; **Port X** = Port X output power

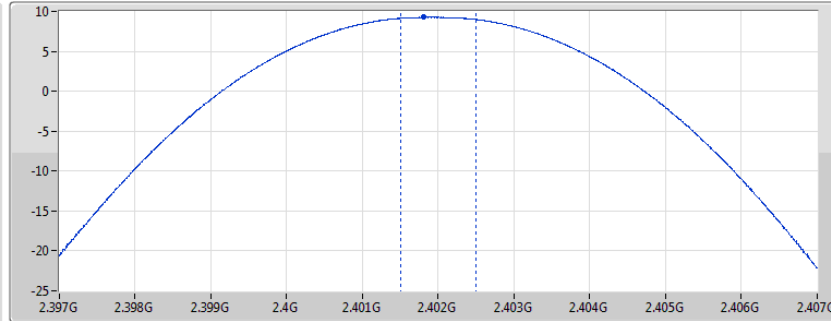
## BT-BR(1Mbps)

## PK Power

2402MHz

20/05/2020

CF  
2.402GHz  
Span  
10MHz  
RBW  
3MHz  
VBW  
10MHz  
Sweep Time  
20ms  
Detector Type  
Peak  
CP BW  
NaNHz



Port1

Sum=Total Power  
PX=Port X

| Sum(dBm) | P1(dBm) |
|----------|---------|
| 9.28     | 9.28    |

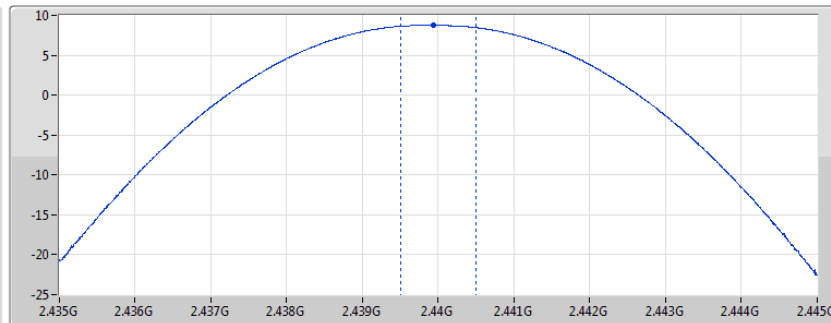
## BT-BR(1Mbps)

## PK Power

2440MHz

20/05/2020

CF  
2.44GHz  
Span  
10MHz  
RBW  
3MHz  
VBW  
10MHz  
Sweep Time  
20ms  
Detector Type  
Peak  
CP BW  
NaNHz



Port1

Sum=Total Power  
PX=Port X

| Sum(dBm) | P1(dBm) |
|----------|---------|
| 8.80     | 8.80    |

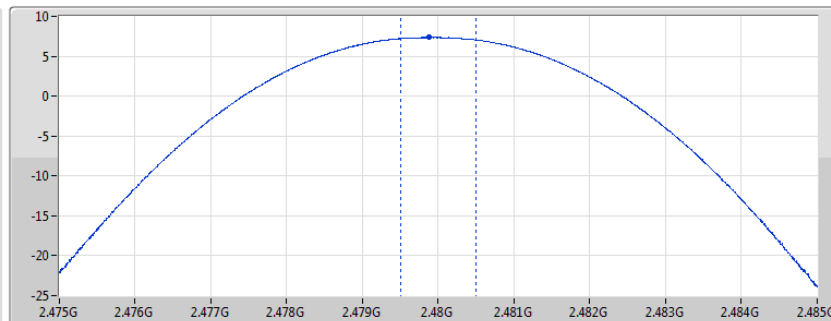
## BT-BR(1Mbps)

## PK Power

2480MHz

20/05/2020

CF  
2.48GHz  
Span  
10MHz  
RBW  
3MHz  
VBW  
10MHz  
Sweep Time  
20ms  
Detector Type  
Peak  
CP BW  
NaNHz



Port1

Sum=Total Power  
PX=Port X

| Sum(dBm) | P1(dBm) |
|----------|---------|
| 7.38     | 7.38    |

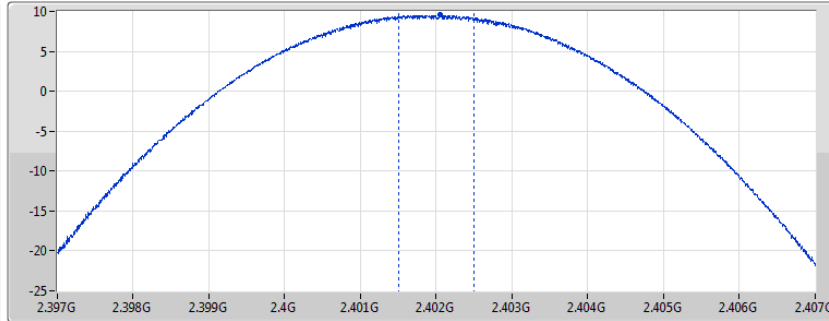
## BT-EDR(2Mbps)

## PK Power

2402MHz

20/05/2020

CF  
2.402GHz  
Span  
10MHz  
RBW  
3MHz  
VBW  
10MHz  
Sweep Time  
20ms  
Detector Type  
Peak  
CP BW  
NaNHz



Port1

Sum=Total Power  
PX=Port X

| Sum(dBm) | P1(dBm) |
|----------|---------|
| 9.53     | 9.53    |

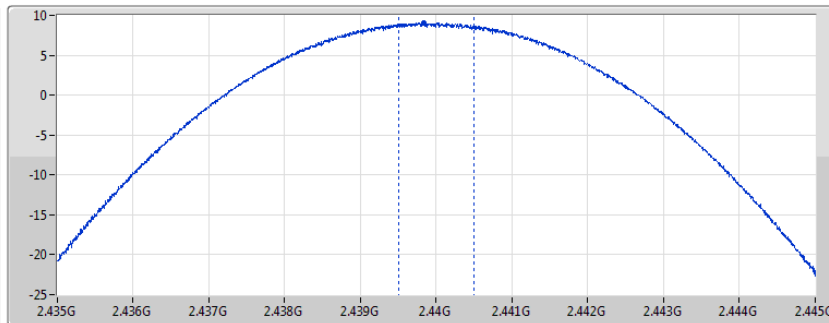
## BT-EDR(2Mbps)

## PK Power

2440MHz

20/05/2020

CF  
2.44GHz  
Span  
10MHz  
RBW  
3MHz  
VBW  
10MHz  
Sweep Time  
20ms  
Detector Type  
Peak  
CP BW  
NaNHz



Port1

Sum=Total Power  
PX=Port X

| Sum(dBm) | P1(dBm) |
|----------|---------|
| 9.01     | 9.01    |

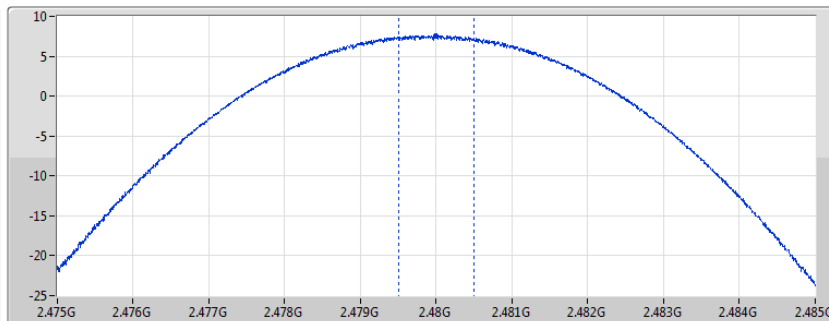
## BT-EDR(2Mbps)

## PK Power

2480MHz

20/05/2020

CF  
2.48GHz  
Span  
10MHz  
RBW  
3MHz  
VBW  
10MHz  
Sweep Time  
20ms  
Detector Type  
Peak  
CP BW  
NaNHz



Port1

Sum=Total Power  
PX=Port X

| Sum(dBm) | P1(dBm) |
|----------|---------|
| 7.57     | 7.57    |

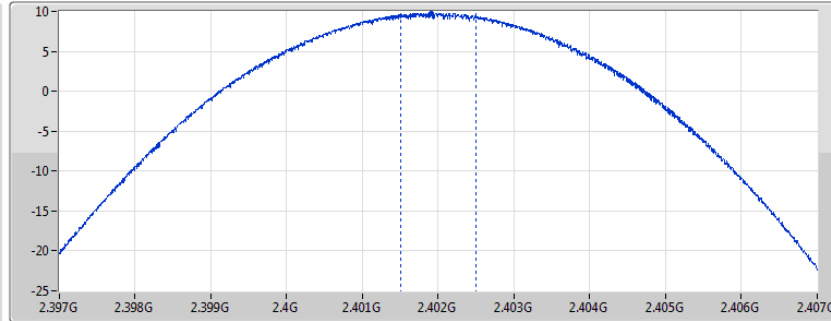
## BT-EDR(3Mbps)

## PK Power

2402MHz

20/05/2020

CF  
2.402GHz  
Span  
10MHz  
RBW  
3MHz  
VBW  
10MHz  
Sweep Time  
20ms  
Detector Type  
Peak  
CP BW  
NaNHz



Port1

Sum=Total Power  
PX=Port X

| Sum(dBm) | P1(dBm) |
|----------|---------|
| 9.79     | 9.79    |

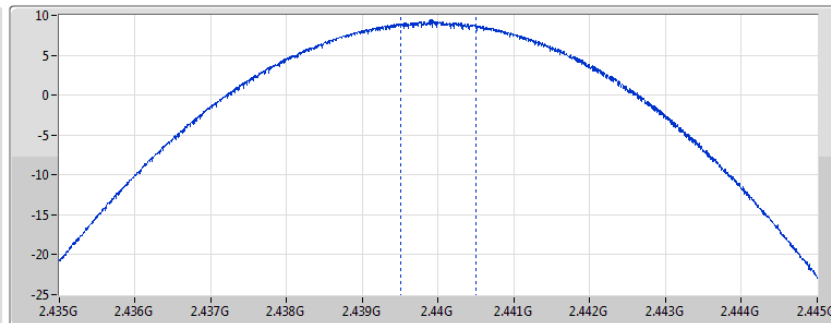
## BT-EDR(3Mbps)

## PK Power

2440MHz

20/05/2020

CF  
2.44GHz  
Span  
10MHz  
RBW  
3MHz  
VBW  
10MHz  
Sweep Time  
20ms  
Detector Type  
Peak  
CP BW  
NaNHz



Port1

Sum=Total Power  
PX=Port X

| Sum(dBm) | P1(dBm) |
|----------|---------|
| 9.17     | 9.17    |

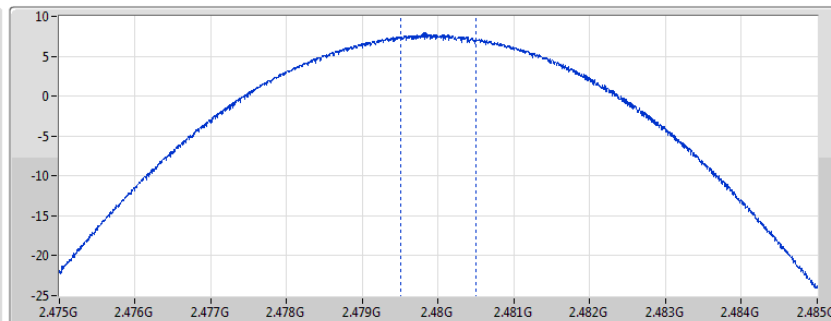
## BT-EDR(3Mbps)

## PK Power

2480MHz

20/05/2020

CF  
2.48GHz  
Span  
10MHz  
RBW  
3MHz  
VBW  
10MHz  
Sweep Time  
20ms  
Detector Type  
Peak  
CP BW  
NaNHz



Port1

Sum=Total Power  
PX=Port X

| Sum(dBm) | P1(dBm) |
|----------|---------|
| 7.67     | 7.67    |

**Summary**

| Mode          | Max-Hop No |
|---------------|------------|
| 2.4-2.4835GHz | -          |
| BT-BR(1Mbps)  | 79         |
| BT-EDR(2Mbps) | 79         |
| BT-EDR(3Mbps) | 79         |

**Result**

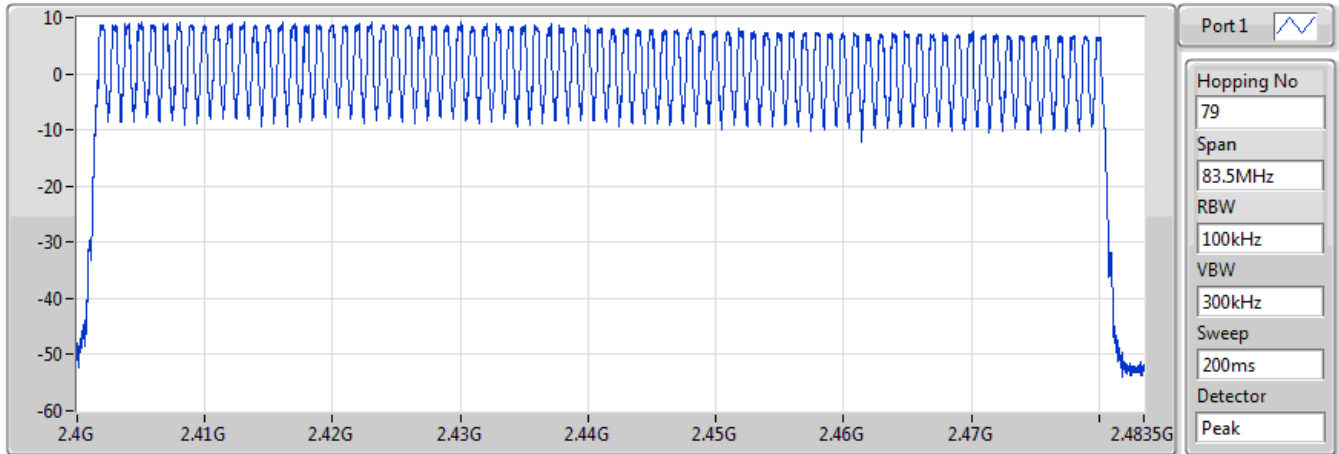
| Mode          | Result | Hopping No | Limit |
|---------------|--------|------------|-------|
| BT-BR(1Mbps)  | -      | -          | -     |
| 2440MHz       | Pass   | 79         | 15    |
| BT-EDR(2Mbps) | -      | -          | -     |
| 2440MHz       | Pass   | 79         | 15    |
| BT-EDR(3Mbps) | -      | -          | -     |
| 2440MHz       | Pass   | 79         | 15    |

### BT-BR(1Mbps)

2440MHz

### Hopping Ch

20/05/2020



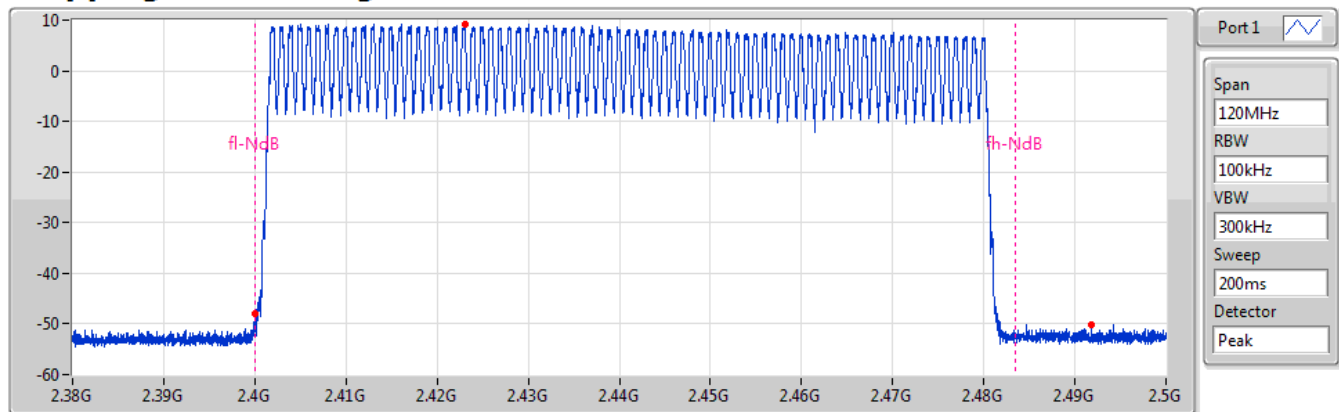
| Hopping No | Limit |
|------------|-------|
| 79         | 15    |

### BT-BR(1Mbps)

2440MHz

### Hopping Ch Bandedge (Non-restricted Band)

20/05/2020



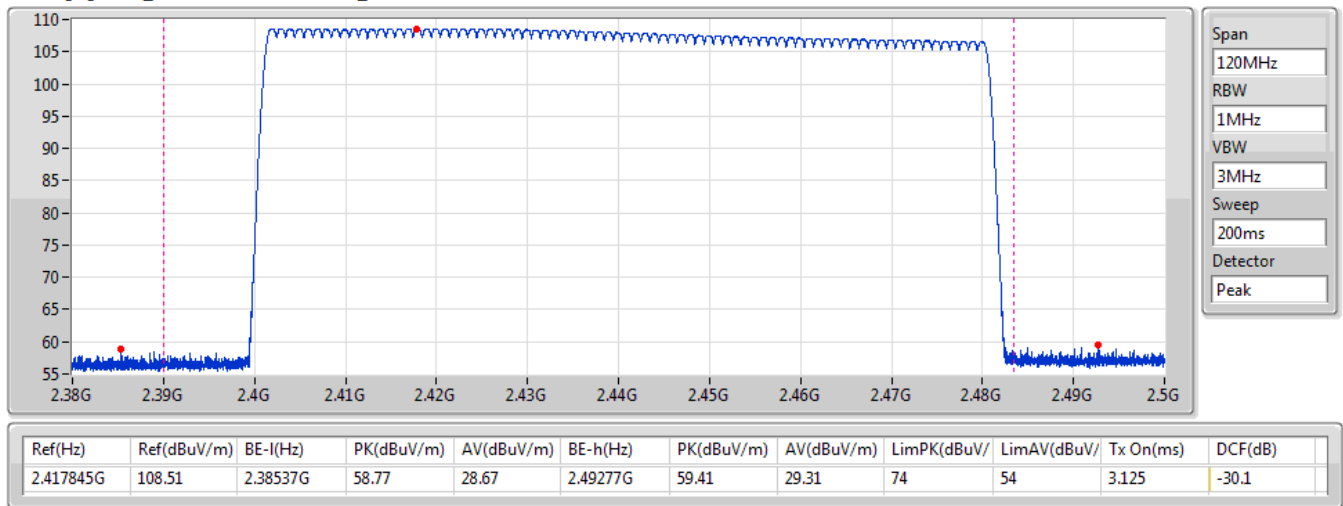
| Limit(dBm) | Ref(Hz)  | Ref(dBm) | BE-l(Hz)  | BE-l(dBm) | BE-h(Hz) | BE-h(dBm) |
|------------|----------|----------|-----------|-----------|----------|-----------|
| -10.8      | 2.42308G | 9.2      | 2.399995G | -48.01    | 2.49175G | -50.03    |

## BT-BR(1Mbps)

2440MHz

## Hopping Ch Bandedge (Restricted Band)

20/05/2020

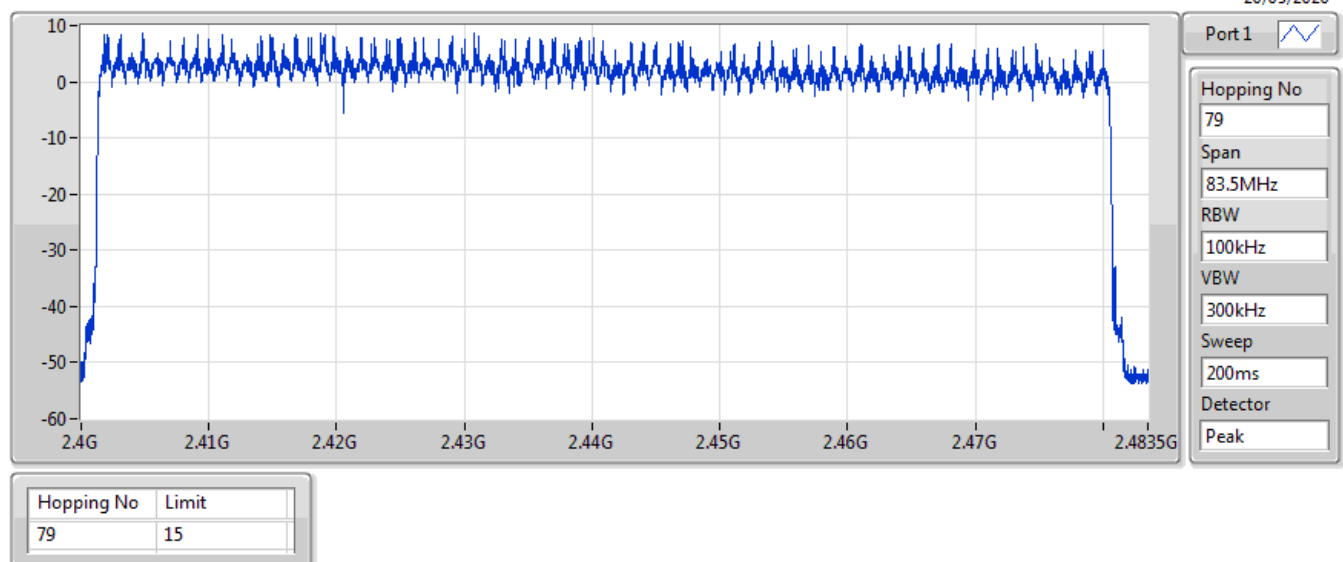


## BT-EDR(2Mbps)

2440MHz

## Hopping Ch

20/05/2020

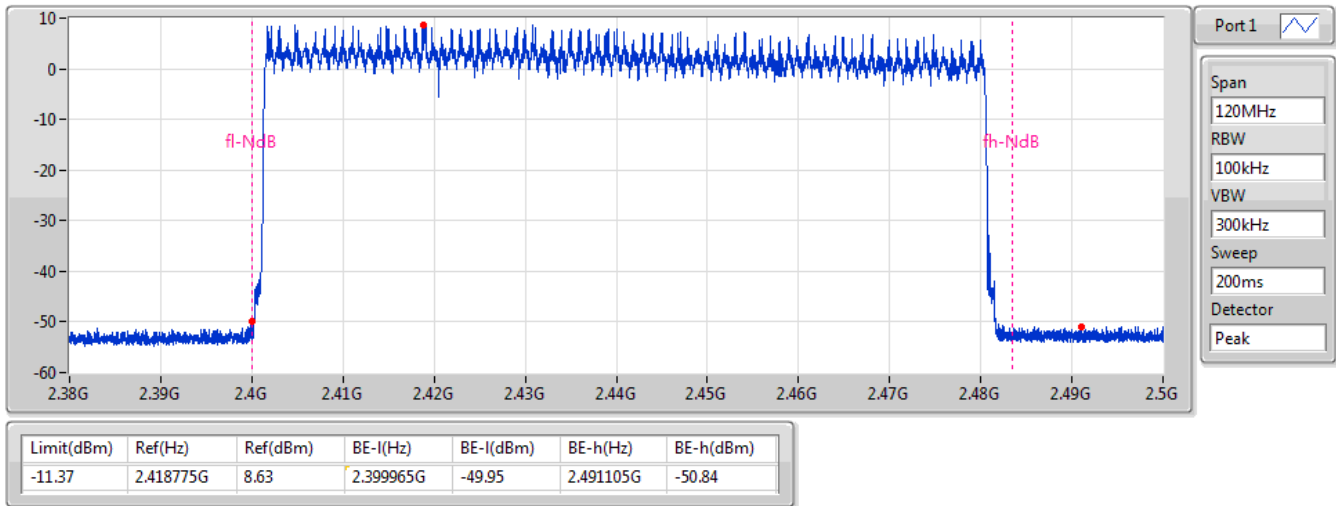


**BT-EDR(2Mbps)**

**2440MHz**

**Hopping Ch Bandedge (Non-restricted Band)**

20/05/2020

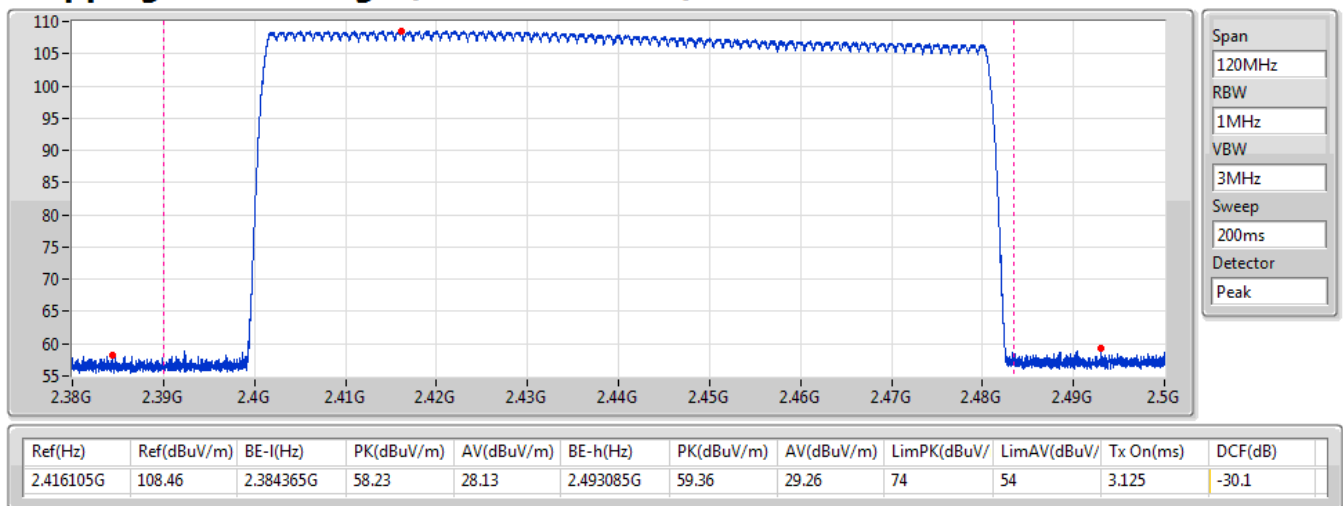


**BT-EDR(2Mbps)**

**2440MHz**

**Hopping Ch Bandedge (Restricted Band)**

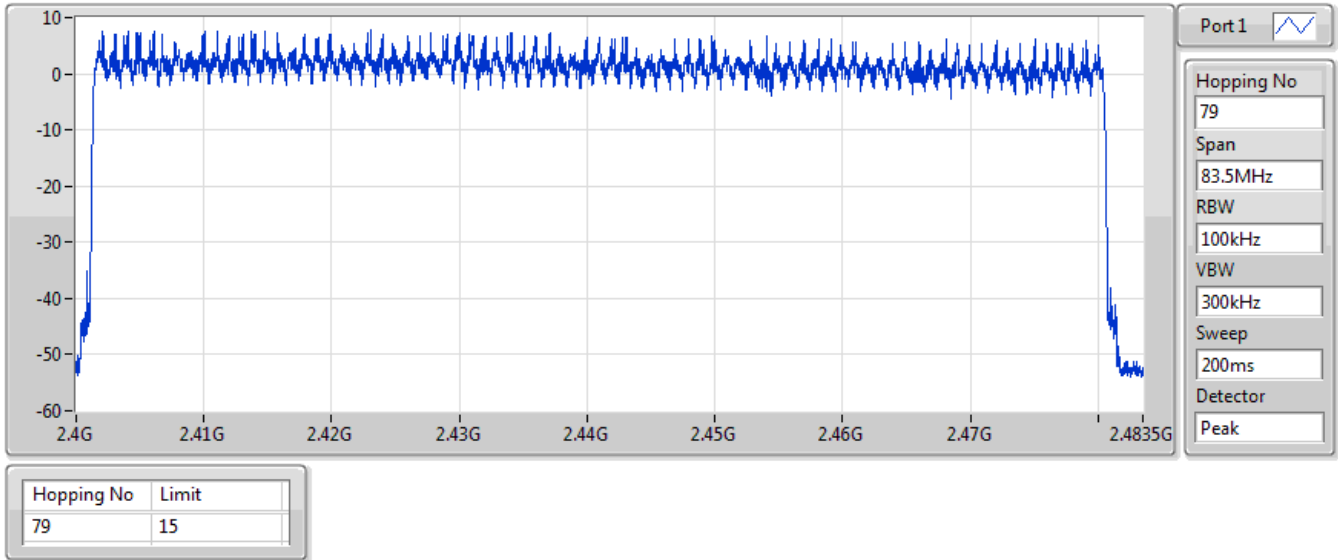
20/05/2020



### BT-EDR(3Mbps) 2440MHz

### Hopping Ch

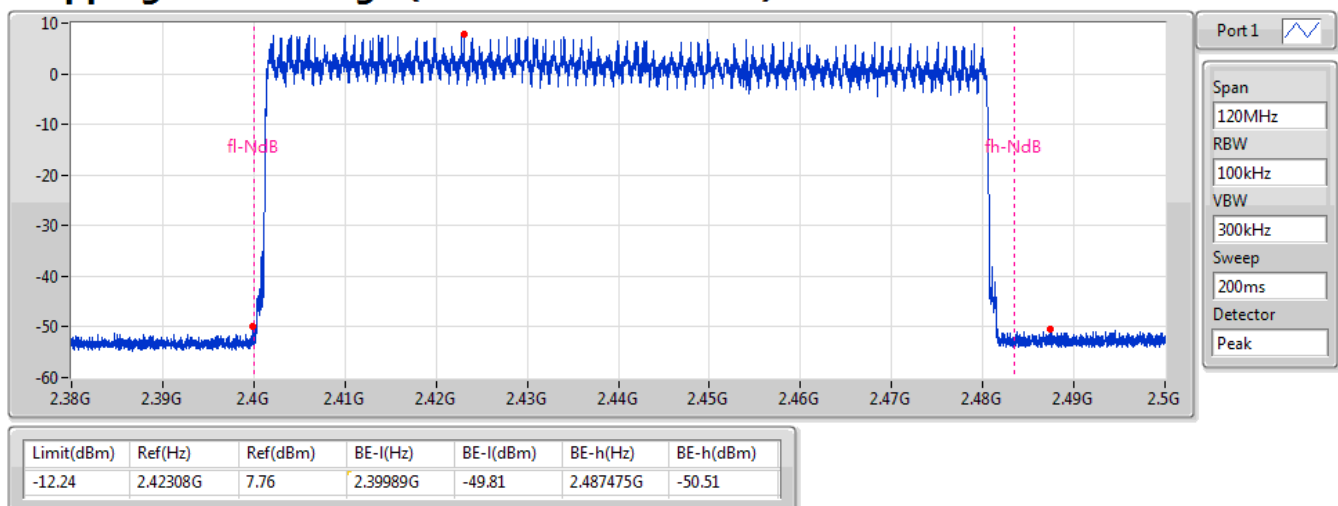
20/05/2020



### BT-EDR(3Mbps) 2440MHz

### Hopping Ch Bandedge (Non-restricted Band)

20/05/2020

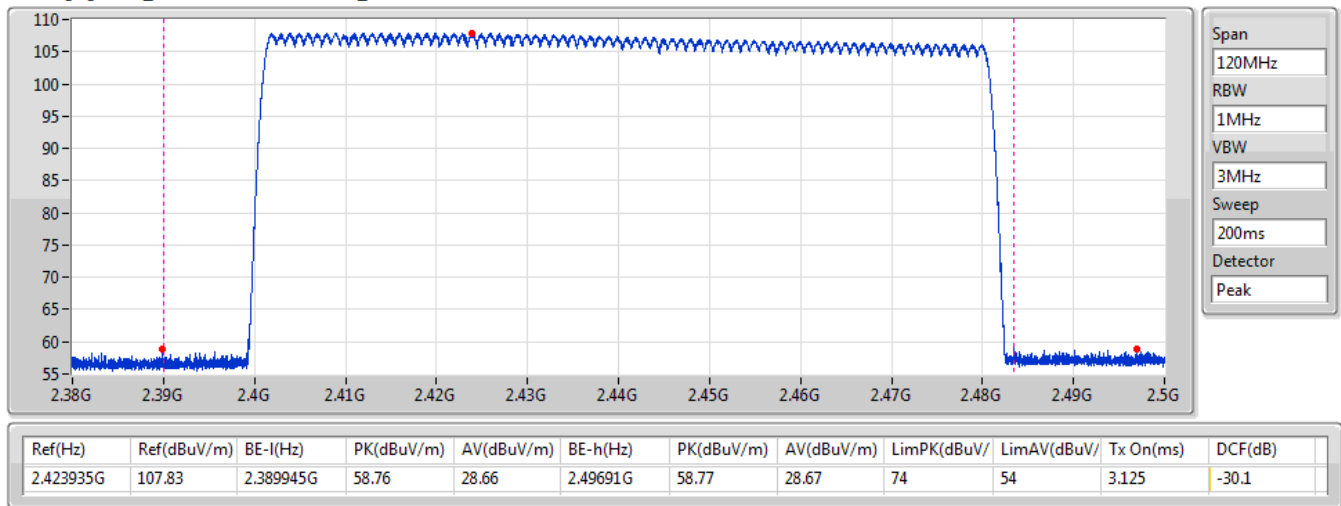


**BT-EDR(3Mbps)**

**2440MHz**

**Hopping Ch Bandedge (Restricted Band)**

20/05/2020





**Summary**

| Mode          | Max-Dwell<br>(s) |
|---------------|------------------|
| 2.4-2.4835GHz | -                |
| BT-BR(1Mbps)  | 306.9014m        |
| BT-EDR(2Mbps) | 307.2212m        |
| BT-EDR(3Mbps) | 307.4344m        |

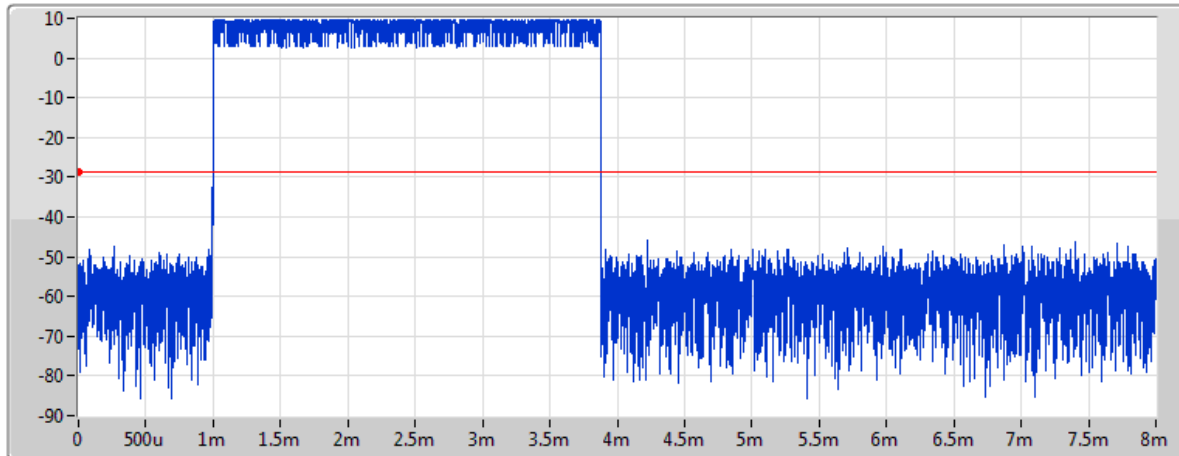
**Result**

| Mode          | Result | Period<br>(s) | Dwell<br>(s) | Limit<br>(s) | Tx On<br>(s) |
|---------------|--------|---------------|--------------|--------------|--------------|
| BT-BR(1Mbps)  | -      | -             | -            | -            | -            |
| 2440MHz       | Pass   | 31.6          | 306.9014m    | 400m         | 2.879m       |
| BT-EDR(2Mbps) | -      | -             | -            | -            | -            |
| 2440MHz       | Pass   | 31.6          | 307.2212m    | 400m         | 2.882m       |
| BT-EDR(3Mbps) | -      | -             | -            | -            | -            |
| 2440MHz       | Pass   | 31.6          | 307.4344m    | 400m         | 2.884m       |

## BT-BR(1Mbps)

2440MHz

20/05/2020



Port1

Ch Freq

2.44GHz

RBW

300kHz

VBW

1MHz

Sweep Time

8ms

TX Time

2.879ms

non AFH Mode

| Period(s) | Dwell(s)  | Limit(s) | Tx On(s) |
|-----------|-----------|----------|----------|
| 31.6      | 306.9014m | 400m     | 2.879m   |

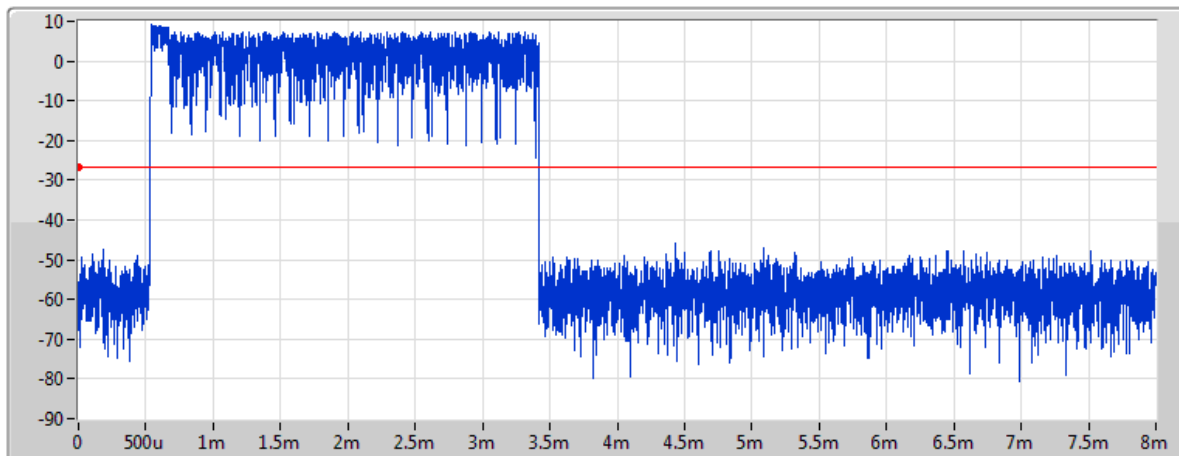
AFH Mode

| Period(s) | Dwell(s)  | Limit(s) | Tx On(s) |
|-----------|-----------|----------|----------|
| 8         | 153.4507m | 400m     | 2.879m   |

## BT-EDR(2Mbps)

2440MHz

20/05/2020



Port1

Ch Freq

2.44GHz

RBW

300kHz

VBW

1MHz

Sweep Time

8ms

TX Time

2.882ms

non AFH Mode

| Period(s) | Dwell(s)  | Limit(s) | Tx On(s) |
|-----------|-----------|----------|----------|
| 31.6      | 307.2212m | 400m     | 2.882m   |

AFH Mode

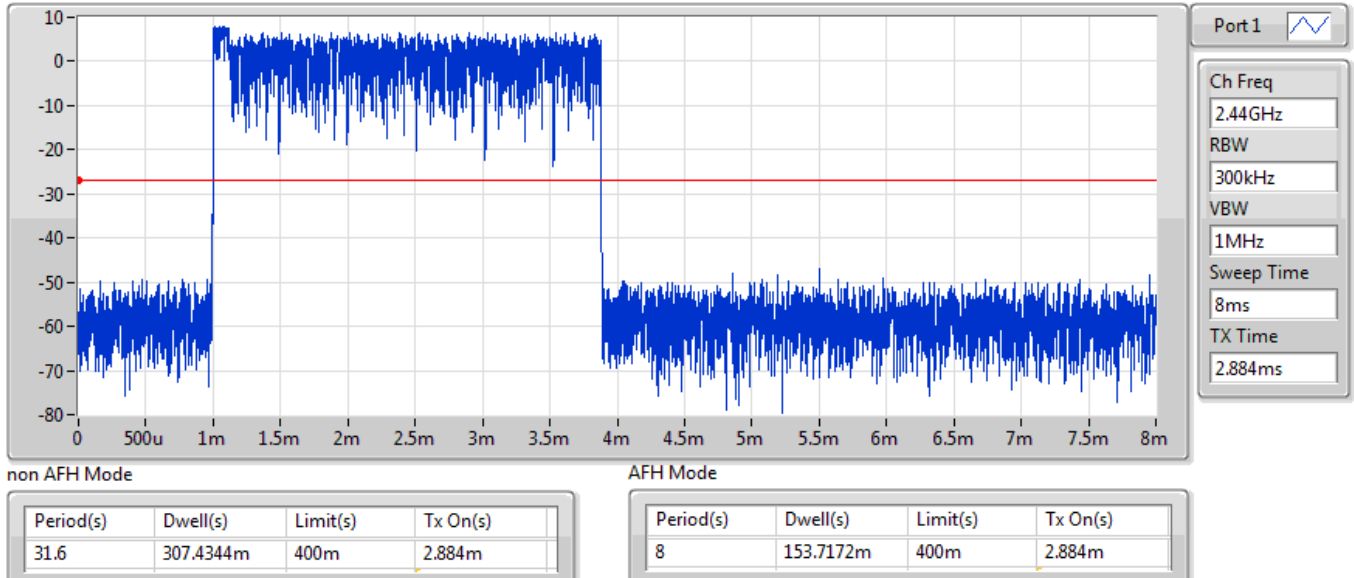
| Period(s) | Dwell(s)  | Limit(s) | Tx On(s) |
|-----------|-----------|----------|----------|
| 8         | 153.6106m | 400m     | 2.882m   |

## BT-EDR(3Mbps)

2440MHz

20/05/2020

## Dwell





Summary

| Mode          | Result | Ref<br>(Hz) | Ref<br>(dBm) | Limit<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Port |
|---------------|--------|-------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|------|
| 2.4-2.4835GHz | -      | -           | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -    |
| BT-BR(1Mbps)  | Pass   | 2.40209G    | 8.83         | -11.17         | 1.65179G     | -52.84         | 2.39985G     | -49.17         | 2.4G         | -51.29         | 2.48693G     | -51.54         | 24.57538G    | -42.42         | 1    |
| BT-EDR(2Mbps) | Pass   | 2.40175G    | 8.13         | -11.87         | 2.01164G     | -52.91         | 2.4G         | -49.84         | 2.4G         | -48.46         | 2.49167G     | -51.27         | 16.29667G    | -42.76         | 1    |
| BT-EDR(3Mbps) | Pass   | 2.48003G    | 5.01         | -14.99         | 749.69M      | -52.72         | 2.39171G     | -51.85         | 2.4835G      | -53.76         | 2.49382G     | -50.87         | 23.58834G    | -42.37         | 1    |

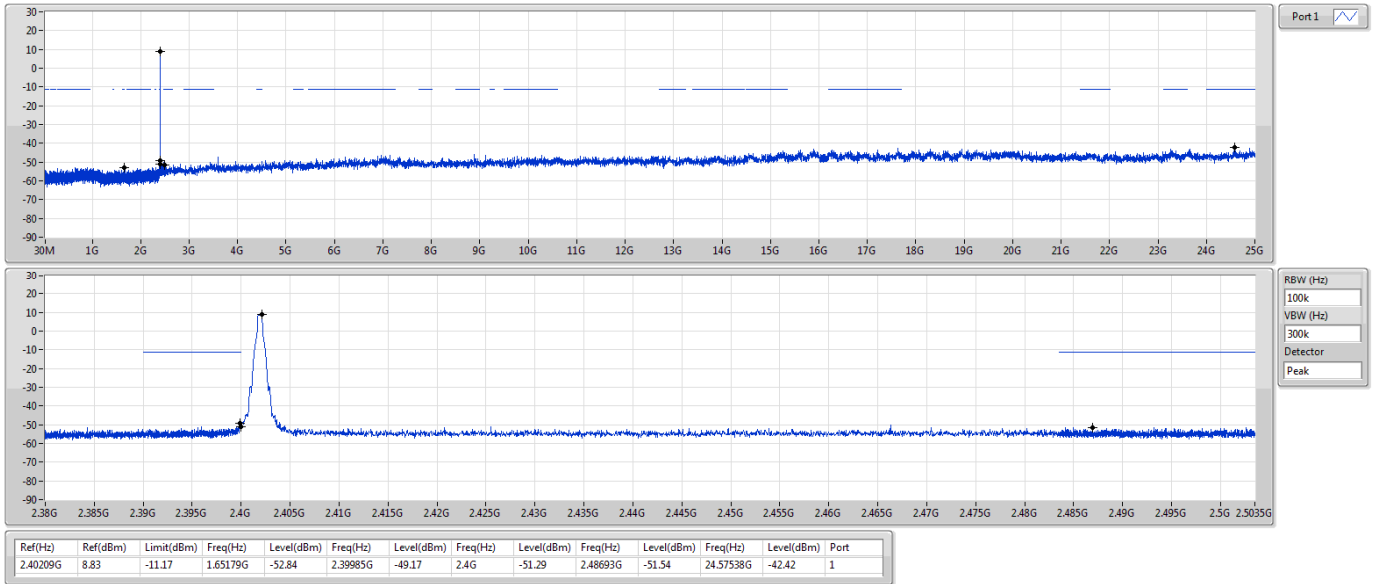
**Result**

| Mode          | Result | Ref<br>(Hz) | Ref<br>(dBm) | Limit<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Port |
|---------------|--------|-------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|------|
| BT-BR(1Mbps)  | -      | -           | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -    |
| 2402MHz       | Pass   | 2.40209G    | 8.83         | -11.17         | 1.65179G     | -52.84         | 2.39985G     | -49.17         | 2.4G         | -51.29         | 2.48693G     | -51.54         | 24.57538G    | -42.42         | 1    |
| 2440MHz       | Pass   | 2.44G       | 8.05         | -11.95         | 892.45M      | -51.95         | 2.39701G     | -51.62         | 2.4835G      | -55.00         | 2.50255G     | -51.32         | 24.68786G    | -42.81         | 1    |
| 2480MHz       | Pass   | 2.48012G    | 7.14         | -12.86         | 789.05M      | -52.27         | 2.39169G     | -51.94         | 2.4835G      | -53.67         | 2.48651G     | -51.03         | 23.32963G    | -42.89         | 1    |
| BT-EDR(2Mbps) | -      | -           | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -    |
| 2402MHz       | Pass   | 2.40175G    | 8.13         | -11.87         | 2.01164G     | -52.91         | 2.4G         | -49.84         | 2.4G         | -48.46         | 2.49167G     | -51.27         | 16.29667G    | -42.76         | 1    |
| 2440MHz       | Pass   | 2.44G       | 7.14         | -12.86         | 712.09M      | -52.15         | 2.39375G     | -52.12         | 2.4G         | -53.70         | 2.49244G     | -51.55         | 17.61834G    | -42.05         | 1    |
| 2480MHz       | Pass   | 2.48012G    | 6.04         | -13.96         | 711.21M      | -52.23         | 2.39751G     | -52.37         | 2.4835G      | -53.80         | 2.49277G     | -50.68         | 17.67739G    | -43.04         | 1    |
| BT-EDR(3Mbps) | -      | -           | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -    |
| 2402MHz       | Pass   | 2.40196G    | 7.67         | -12.33         | 2.30833G     | -52.51         | 2.39987G     | -49.14         | 2.4G         | -51.14         | 2.48592G     | -50.87         | 23.35776G    | -42.82         | 1    |
| 2440MHz       | Pass   | 2.44008G    | 7.41         | -12.59         | 665.97M      | -52.53         | 2.39895G     | -52.04         | 2.4835G      | -54.03         | 2.49067G     | -51.47         | 16.28823G    | -41.75         | 1    |
| 2480MHz       | Pass   | 2.48003G    | 5.01         | -14.99         | 749.69M      | -52.72         | 2.39171G     | -51.85         | 2.4835G      | -53.76         | 2.49382G     | -50.87         | 23.58834G    | -42.37         | 1    |

BT-BR(1Mbps)

CSE NdB

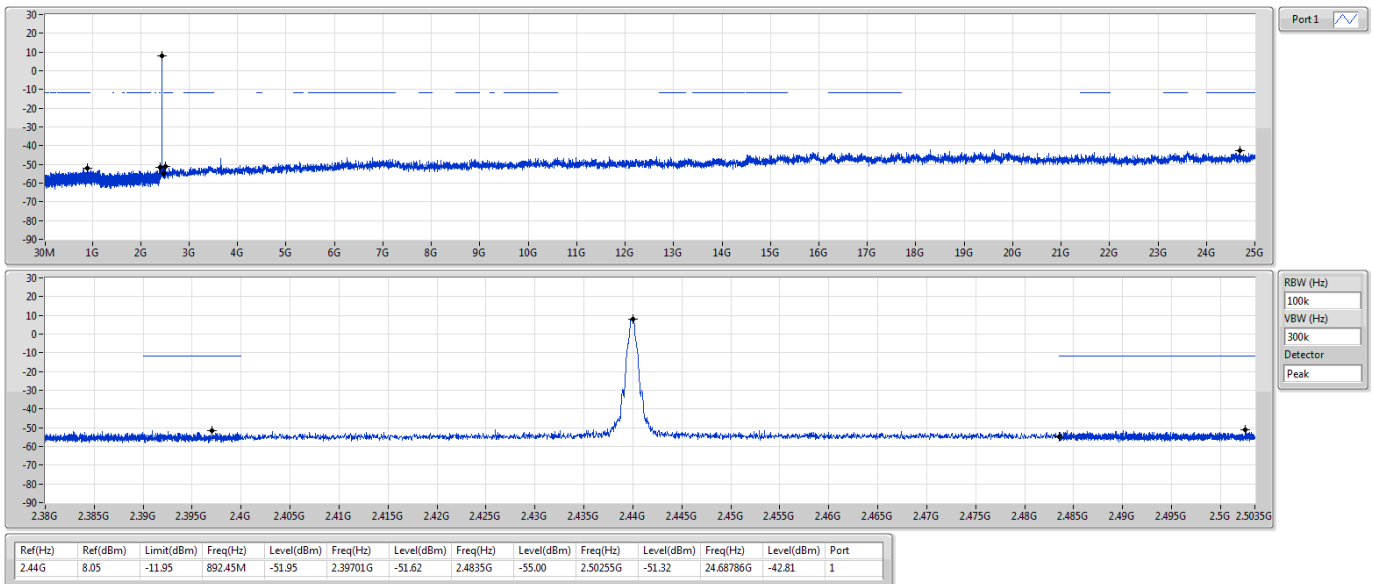
2402MHz



BT-BR(1Mbps)

CSE NdB

2440MHz

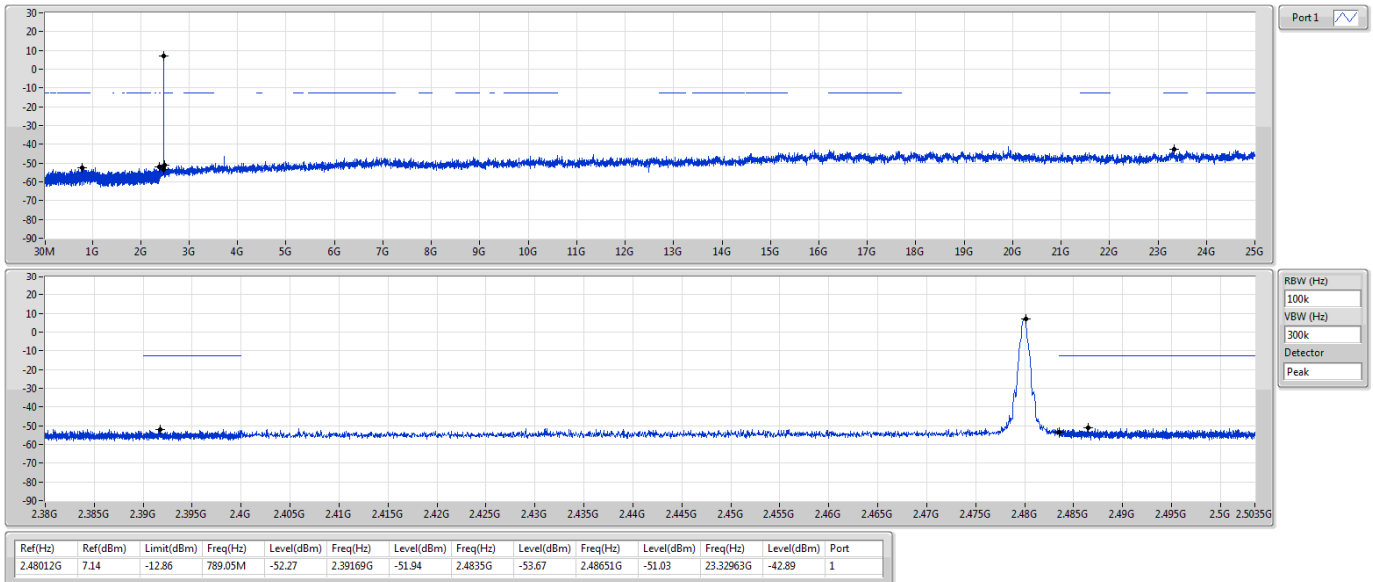


## BT-BR(1Mbps)

2480MHz

CSE NdB

20/05/2020

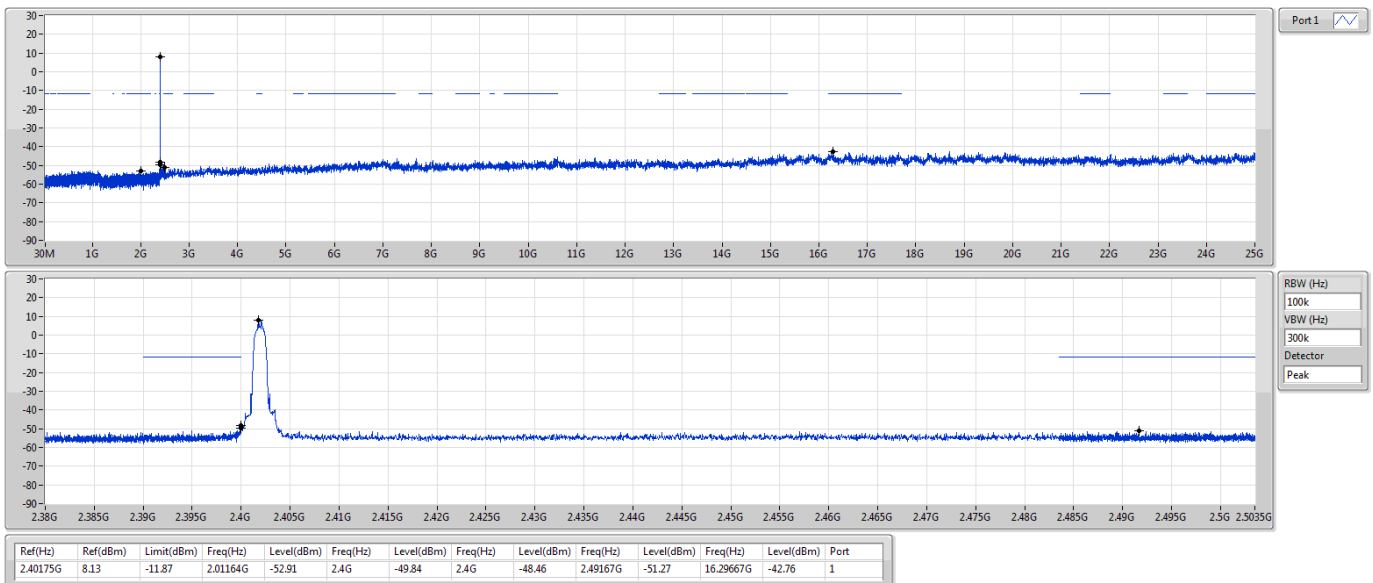


## BT-EDR(2Mbps)

2402MHz

CSE NdB

20/05/2020

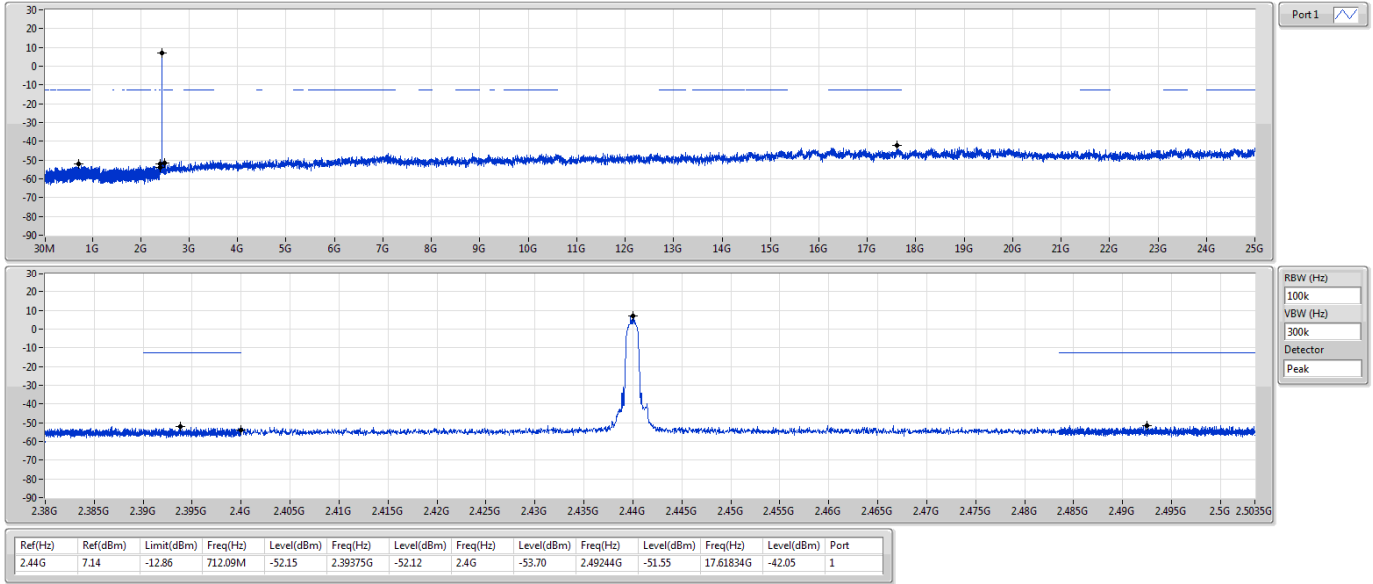


BT-EDR(2Mbps)

2440MHz

CSE NdB

20/05/2020

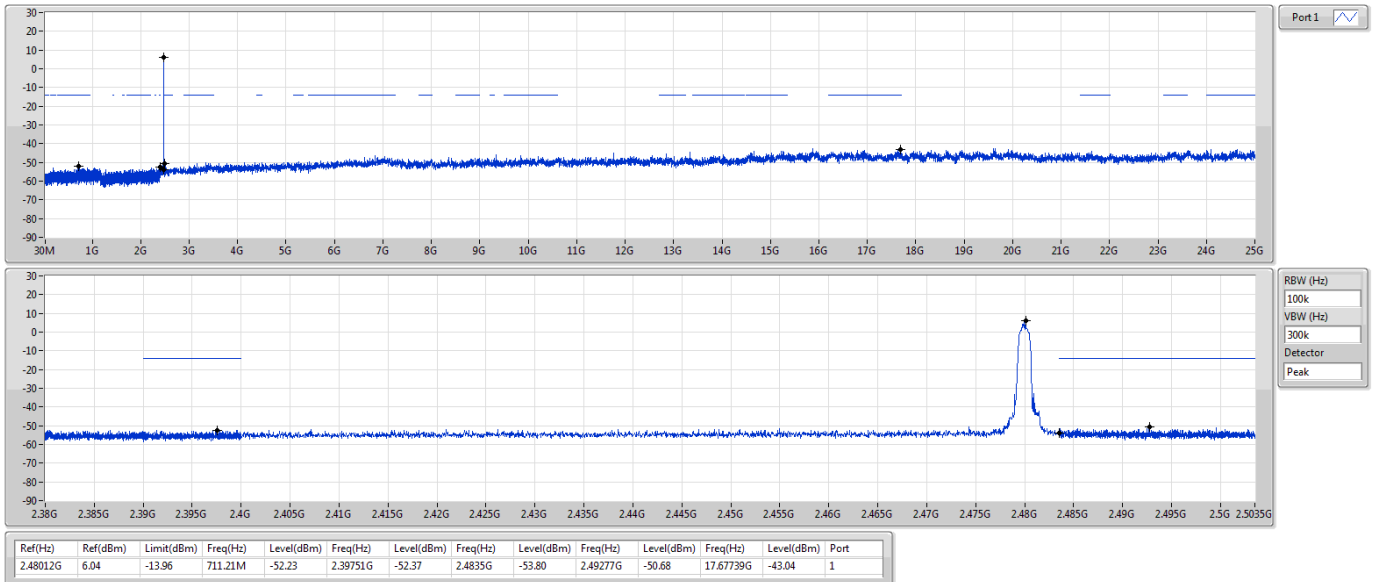


BT-EDR(2Mbps)

2480MHz

CSE NdB

20/05/2020



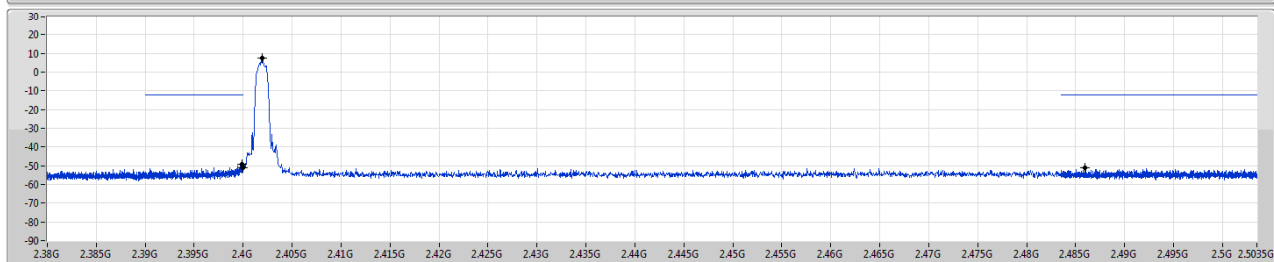
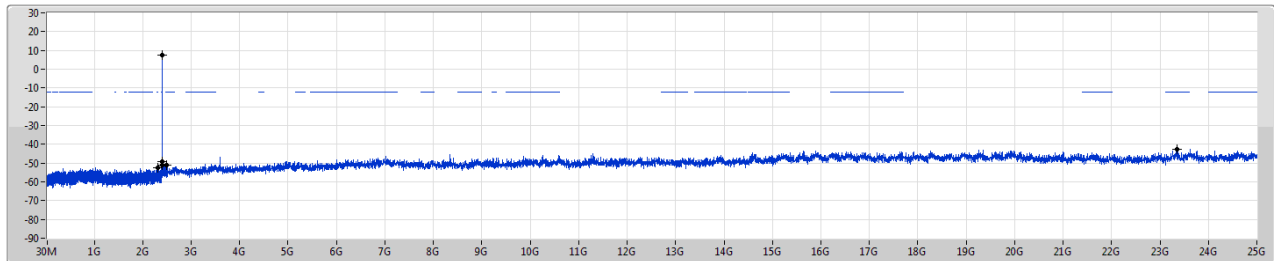
BT-EDR(3Mbps)

2402MHz

CSE NdB

20/05/2020

Port 1



RBW (Hz)  
100k  
VBW (Hz)  
300k  
Detector  
Peak

| Ref(Hz)  | Ref(dBm) | Limit(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Port |
|----------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|------|
| 2.40196G | 7.67     | -12.33     | 2.39833G | -52.51     | 2.39987G | -49.14     | 2.4G     | -51.14     | 2.48592G | -50.87     | 2.35776G | -42.82     | 1    |

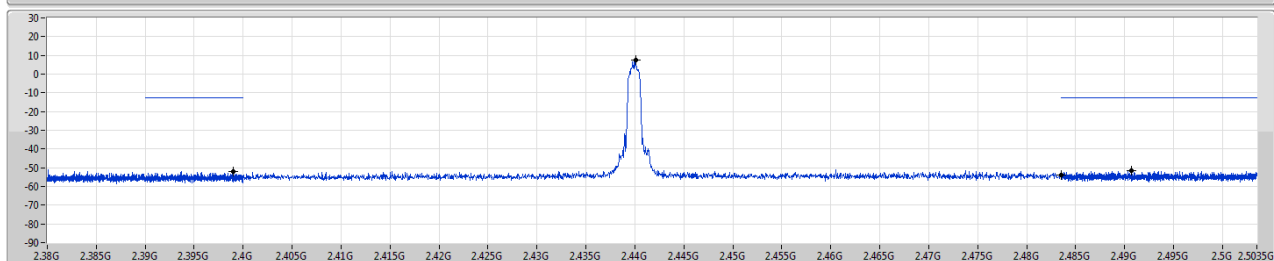
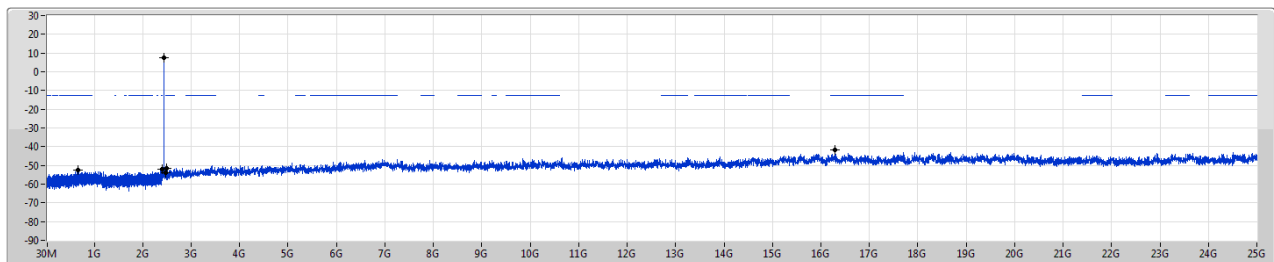
BT-EDR(3Mbps)

2440MHz

CSE NdB

20/05/2020

Port 1



RBW (Hz)  
100k  
VBW (Hz)  
300k  
Detector  
Peak

| Ref(Hz)  | Ref(dBm) | Limit(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz)  | Level(dBm) | Port |
|----------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|-----------|------------|------|
| 2.44008G | 7.41     | -12.39     | 665.97M  | -52.53     | 2.39895G | -52.04     | 2.4835G  | -54.03     | 2.49067G | -51.47     | 16.28823G | -41.75     | 1    |

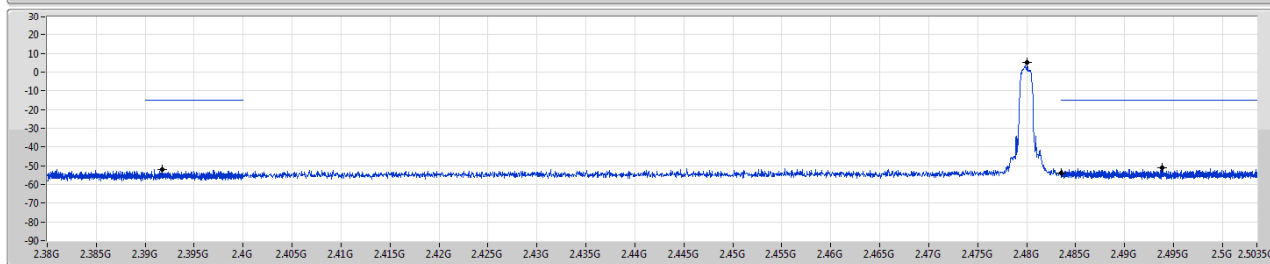
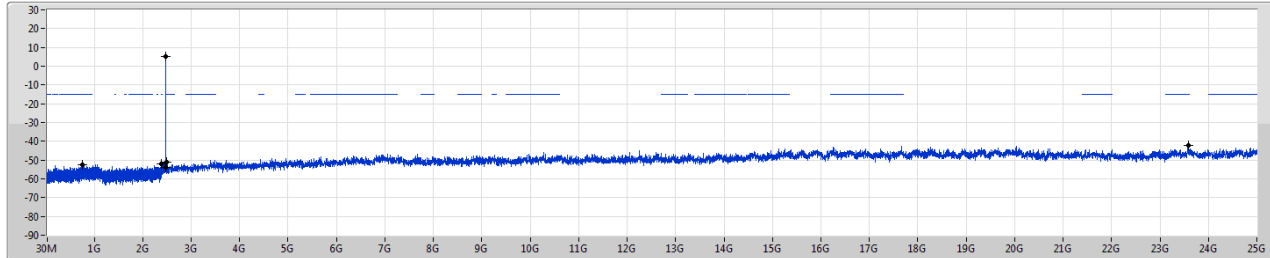
BT-EDR(3Mbps)

2480MHz

CSE NdB

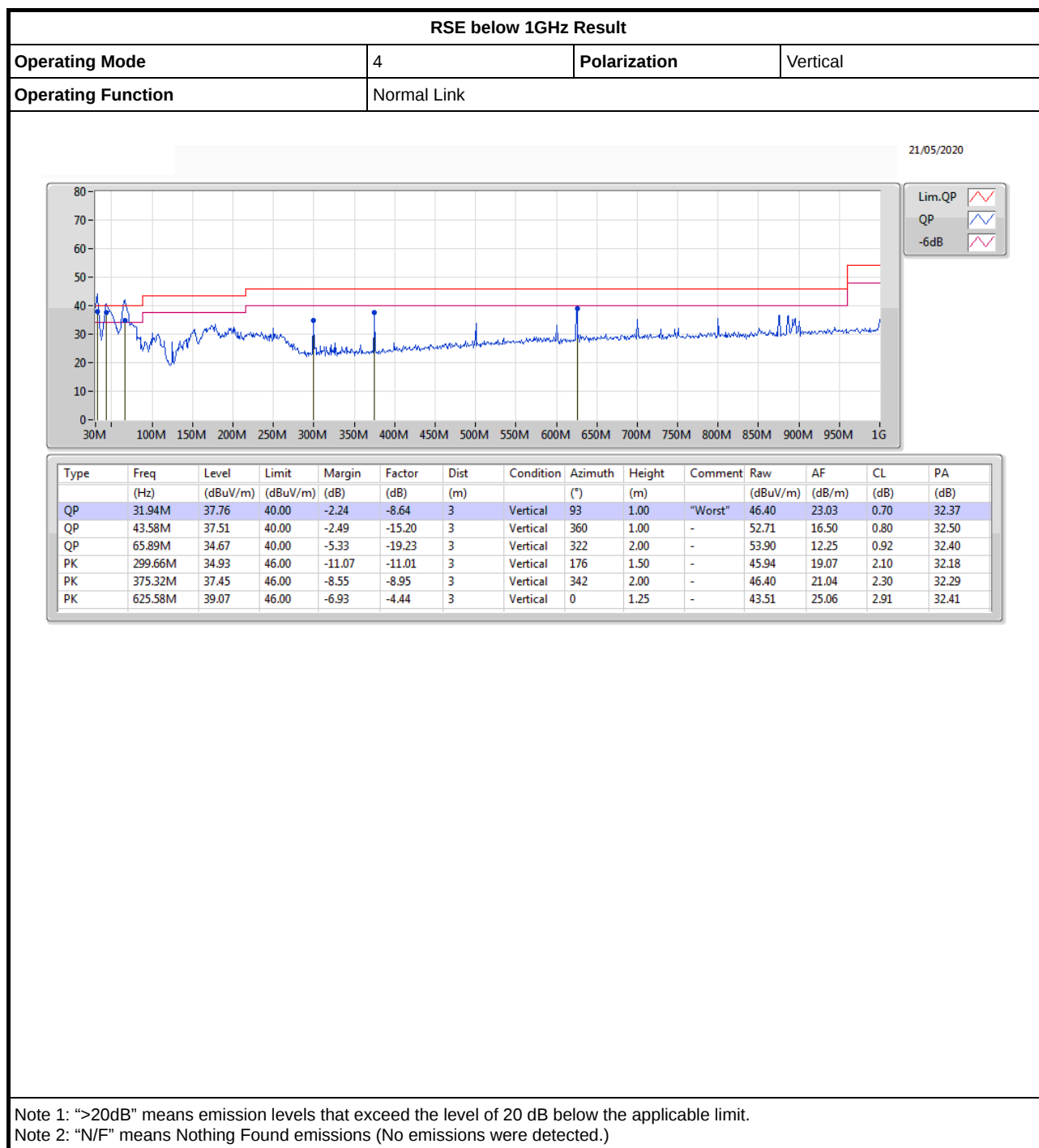
20/05/2020

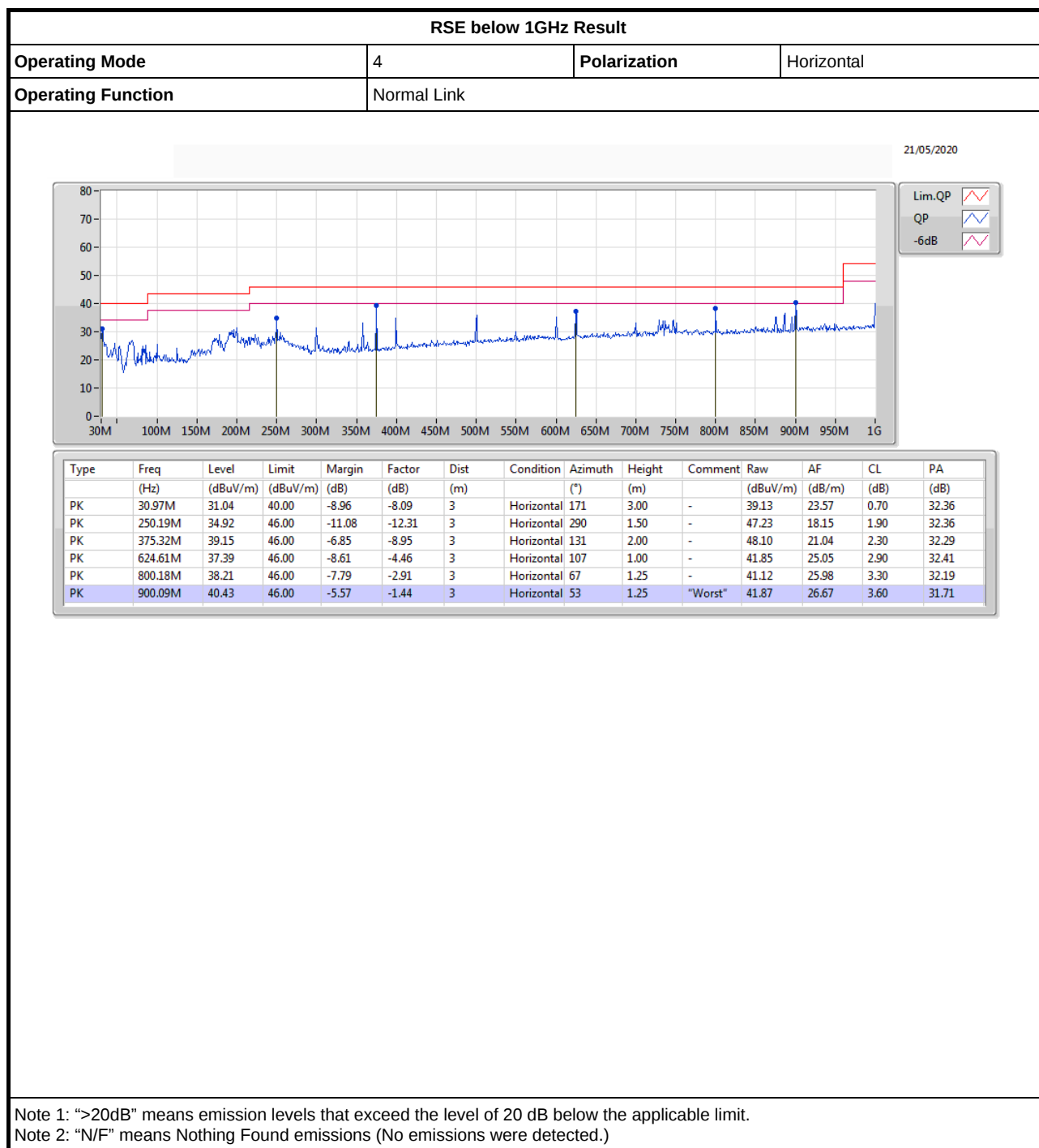
Port 1



RBW (Hz)  
100k  
VBW (Hz)  
300k  
Detector  
Peak

| Ref(Hz)  | Ref(dBm) | Limit(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz)  | Level(dBm) | Port |
|----------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|-----------|------------|------|
| 2.48003G | 5.01     | -14.99     | 749.69M  | -52.72     | 2.39171G | -51.85     | 2.4835G  | -53.76     | 2.49382G | -50.87     | 23.58834G | -42.37     | 1    |







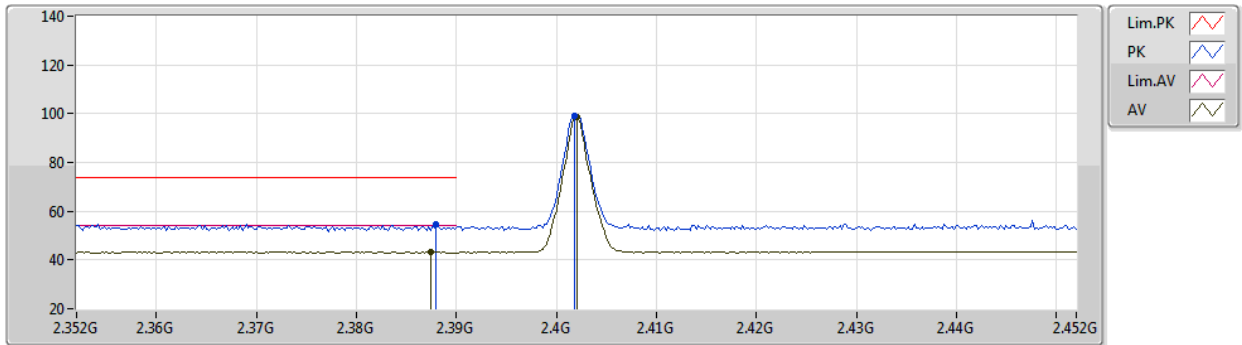
**Summary**

| Mode          | Result | Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Dist<br>(m) | Condition  | Azimuth<br>(°) | Height<br>(m) | Comments |
|---------------|--------|------|--------------|-------------------|-------------------|----------------|-------------|------------|----------------|---------------|----------|
| 2.4-2.4835GHz | -      | -    | -            | -                 | -                 | -              | -           | -          | -              | -             | -        |
| BT-BR(1Mbps)  | Pass   | AV   | 7.43973G     | 48.87             | 54.00             | -5.13          | 3           | Horizontal | 126            | 1.53          | -        |

# BT-BR(1Mbps)

## 2402MHz\_TX

19/05/2020



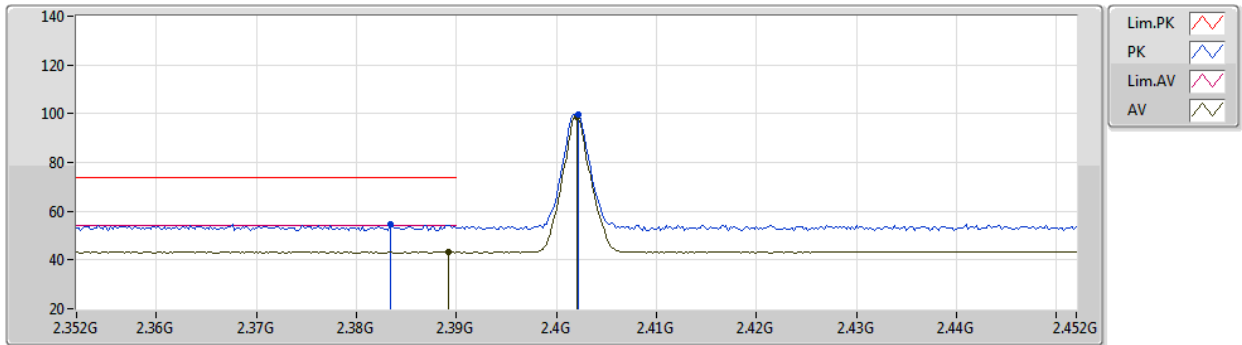
EUT Y\_1TX  
Setting 7  
04-F-C-4

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Raw<br>(dBuV) | Dist<br>(m) | Condition | Azimuth<br>(°) | Height<br>(m) | Comment | AF<br>(dB) | CL<br>(dB) | PA<br>(dB) |
|------|--------------|-------------------|-------------------|----------------|---------------|-------------|-----------|----------------|---------------|---------|------------|------------|------------|
| PK   | 2.388G       | 54.70             | 74.00             | -19.30         | 24.49         | 3           | Vertical  | 136            | 1.89          | -       | 27.51      | 2.70       | -          |
| AV   | 2.3874G      | 43.22             | 54.00             | -10.78         | 13.01         | 3           | Vertical  | 136            | 1.89          | -       | 27.51      | 2.70       | -          |
| PK   | 2.4018G      | 99.36             | Inf               | -Inf           | 69.15         | 3           | Vertical  | 136            | 1.89          | -       | 27.51      | 2.70       | -          |
| AV   | 2.402G       | 98.44             | Inf               | -Inf           | 68.23         | 3           | Vertical  | 136            | 1.89          | -       | 27.51      | 2.70       | -          |

# BT-BR(1Mbps)

## 2402MHz\_TX

19/05/2020



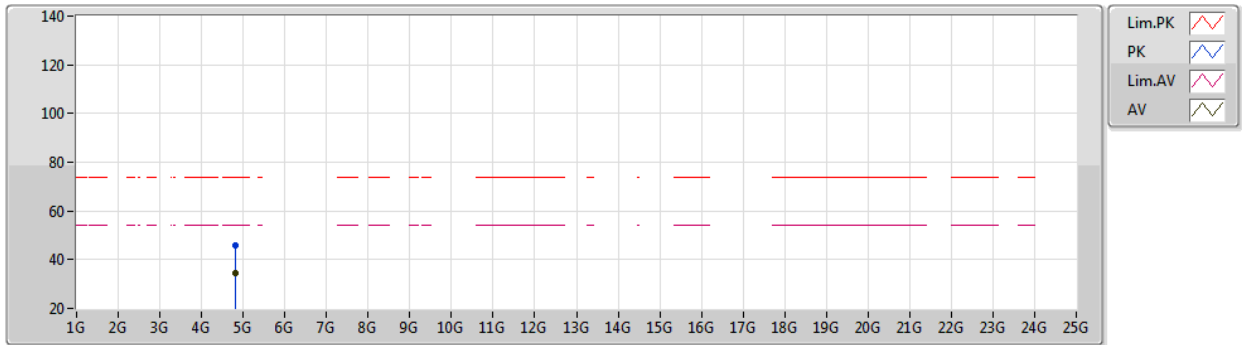
EUT Y\_1TX  
Setting 7  
04-F-C-4

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Raw<br>(dBuV) | Dist<br>(m) | Condition  | Azimuth<br>(°) | Height<br>(m) | Comment | AF<br>(dB) | CL<br>(dB) | PA<br>(dB) |
|------|--------------|-------------------|-------------------|----------------|---------------|-------------|------------|----------------|---------------|---------|------------|------------|------------|
| PK   | 2.3834G      | 54.47             | 74.00             | -19.53         | 24.25         | 3           | Horizontal | 64             | 2.01          | -       | 27.52      | 2.70       | -          |
| AV   | 2.3892G      | 43.24             | 54.00             | -10.76         | 13.03         | 3           | Horizontal | 64             | 2.01          | -       | 27.51      | 2.70       | -          |
| PK   | 2.4022G      | 99.62             | Inf               | -Inf           | 69.41         | 3           | Horizontal | 64             | 2.01          | -       | 27.51      | 2.70       | -          |
| AV   | 2.402G       | 98.68             | Inf               | -Inf           | 68.47         | 3           | Horizontal | 64             | 2.01          | -       | 27.51      | 2.70       | -          |

# BT-BR(1Mbps)

19/05/2020

## 2402MHz\_TX



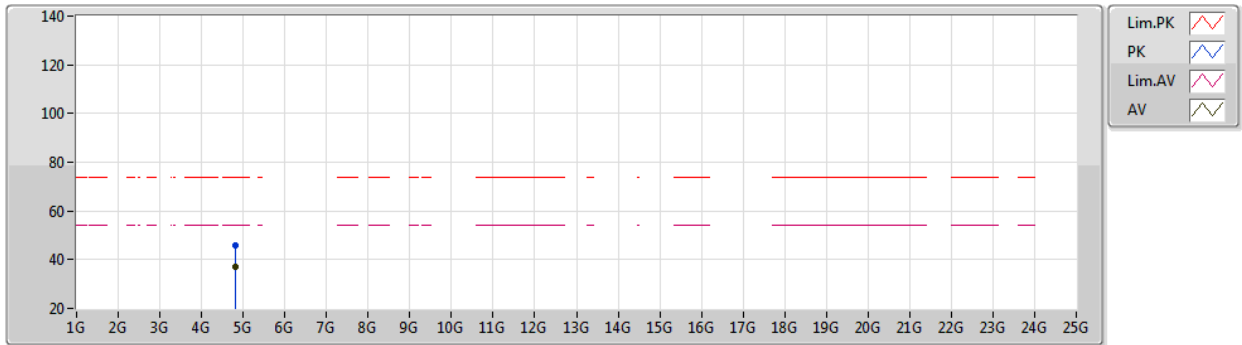
EUT Y\_1TX  
Setting 7  
04-F-C-4

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Raw<br>(dBuV) | Dist<br>(m) | Condition | Azimuth<br>(°) | Height<br>(m) | Comment | AF<br>(dB) | CL<br>(dB) | PA<br>(dB) |
|------|--------------|-------------------|-------------------|----------------|---------------|-------------|-----------|----------------|---------------|---------|------------|------------|------------|
| PK   | 4.804G       | 46.05             | 74.00             | -27.95         | 42.52         | 3           | Vertical  | 360            | 2.53          | -       | 32.52      | 4.51       | 33.50      |
| AV   | 4.80383G     | 34.55             | 54.00             | -19.45         | 31.02         | 3           | Vertical  | 360            | 2.53          | -       | 32.52      | 4.51       | 33.50      |

# BT-BR(1Mbps)

19/05/2020

## 2402MHz\_TX



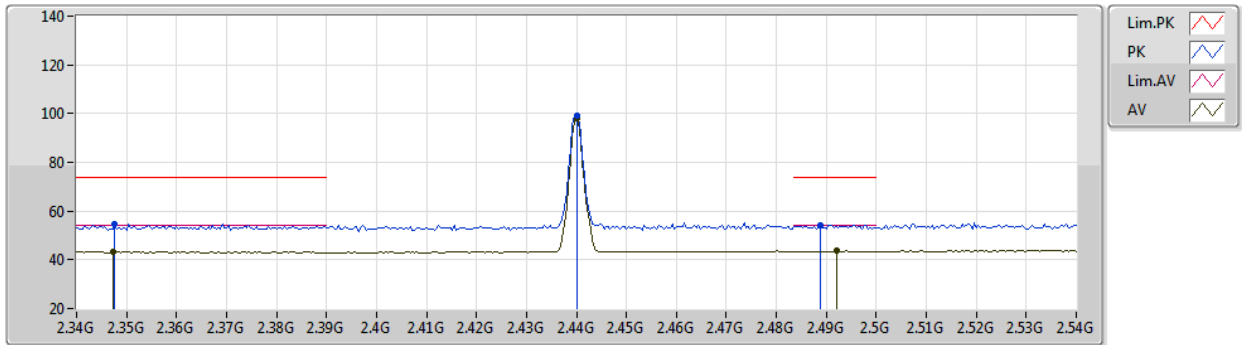
EUT Y\_1TX  
Setting 7  
04-F-C-4

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Raw<br>(dBuV) | Dist<br>(m) | Condition  | Azimuth<br>(°) | Height<br>(m) | Comment | AF<br>(dB) | CL<br>(dB) | PA<br>(dB) |
|------|--------------|-------------------|-------------------|----------------|---------------|-------------|------------|----------------|---------------|---------|------------|------------|------------|
| PK   | 4.80412G     | 46.10             | 74.00             | -27.90         | 42.57         | 3           | Horizontal | 234            | 1.80          | -       | 32.52      | 4.51       | 33.50      |
| AV   | 4.80383G     | 37.21             | 54.00             | -16.79         | 33.68         | 3           | Horizontal | 234            | 1.80          | -       | 32.52      | 4.51       | 33.50      |

# BT-BR(1Mbps)

## 2440MHz\_TX

19/05/2020



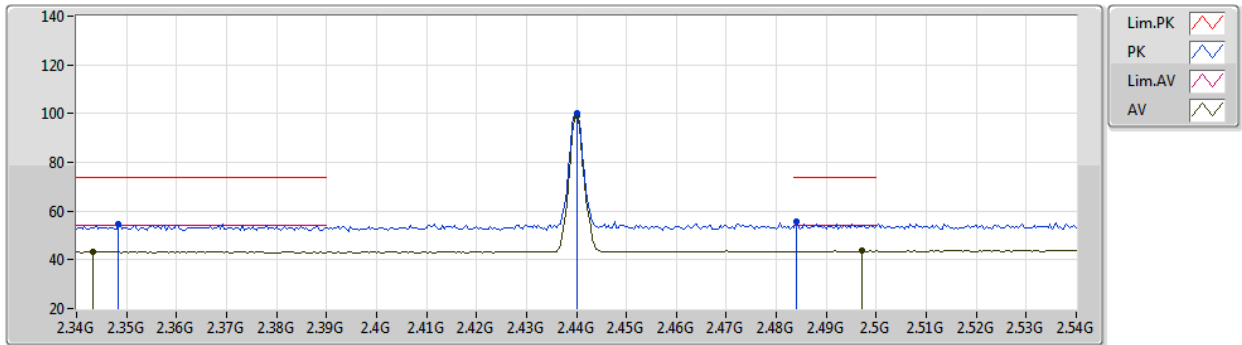
EUT\_Y\_1TX  
Setting 7  
04-F-C-4

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Raw<br>(dBuV) | Dist<br>(m) | Condition | Azimuth<br>(°) | Height<br>(m) | Comment | AF<br>(dB) | CL<br>(dB) | PA<br>(dB) |
|------|--------------|-------------------|-------------------|----------------|---------------|-------------|-----------|----------------|---------------|---------|------------|------------|------------|
| PK   | 2.3476G      | 54.89             | 74.00             | -19.11         | 24.64         | 3           | Vertical  | 127            | 1.89          | -       | 27.55      | 2.70       | -          |
| AV   | 2.3472G      | 43.19             | 54.00             | -10.81         | 12.94         | 3           | Vertical  | 127            | 1.89          | -       | 27.55      | 2.70       | -          |
| PK   | 2.44G        | 99.03             | Inf               | -Inf           | 68.67         | 3           | Vertical  | 127            | 1.89          | -       | 27.66      | 2.70       | -          |
| AV   | 2.44G        | 97.88             | Inf               | -Inf           | 67.52         | 3           | Vertical  | 127            | 1.89          | -       | 27.66      | 2.70       | -          |
| PK   | 2.4888G      | 54.39             | 74.00             | -19.61         | 23.83         | 3           | Vertical  | 127            | 1.89          | -       | 27.86      | 2.70       | -          |
| AV   | 2.492G       | 43.55             | 54.00             | -10.45         | 12.98         | 3           | Vertical  | 127            | 1.89          | -       | 27.87      | 2.70       | -          |

# BT-BR(1Mbps)

## 2440MHz\_TX

19/05/2020



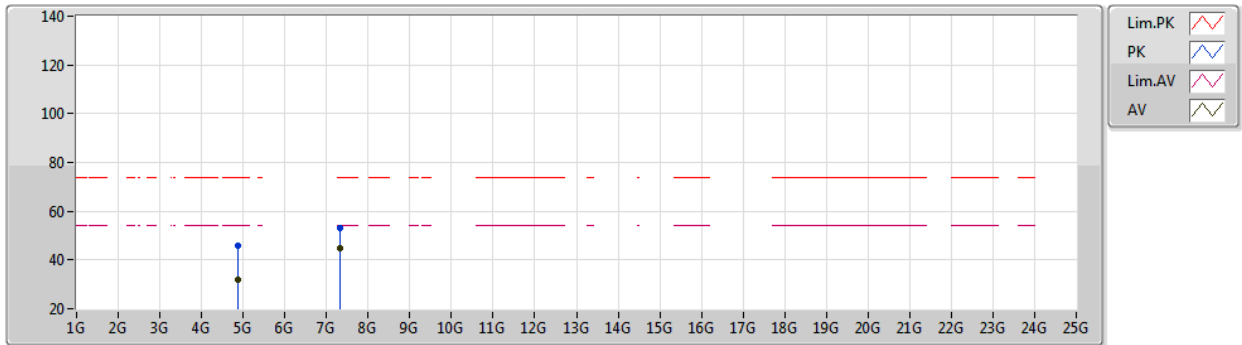
EUT Y\_1TX  
Setting 7  
04-F-C-4

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Raw<br>(dBuV) | Dist<br>(m) | Condition  | Azimuth<br>(°) | Height<br>(m) | Comment | AF<br>(dB) | CL<br>(dB) | PA<br>(dB) |
|------|--------------|-------------------|-------------------|----------------|---------------|-------------|------------|----------------|---------------|---------|------------|------------|------------|
| PK   | 2.3484G      | 54.79             | 74.00             | -19.21         | 24.54         | 3           | Horizontal | 66             | 1.75          | -       | 27.55      | 2.70       | -          |
| AV   | 2.3432G      | 43.38             | 54.00             | -10.62         | 13.12         | 3           | Horizontal | 66             | 1.75          | -       | 27.56      | 2.70       | -          |
| PK   | 2.44G        | 99.92             | Inf               | -Inf           | 69.56         | 3           | Horizontal | 66             | 1.75          | -       | 27.66      | 2.70       | -          |
| AV   | 2.44G        | 99.02             | Inf               | -Inf           | 68.66         | 3           | Horizontal | 66             | 1.75          | -       | 27.66      | 2.70       | -          |
| PK   | 2.484G       | 55.63             | 74.00             | -18.37         | 25.09         | 3           | Horizontal | 66             | 1.75          | -       | 27.84      | 2.70       | -          |
| AV   | 2.4972G      | 43.72             | 54.00             | -10.28         | 13.13         | 3           | Horizontal | 66             | 1.75          | -       | 27.89      | 2.70       | -          |

# BT-BR(1Mbps)

## 2440MHz\_TX

19/05/2020



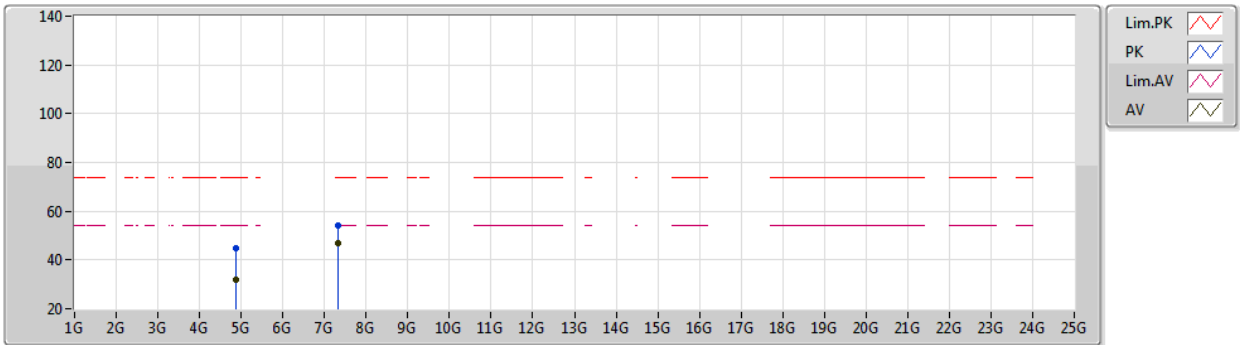
EUT Y\_1TX  
Setting 7  
04-F-C-4

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Raw<br>(dBuV) | Dist<br>(m) | Condition | Azimuth<br>(°) | Height<br>(m) | Comment | AF<br>(dB) | CL<br>(dB) | PA<br>(dB) |
|------|--------------|-------------------|-------------------|----------------|---------------|-------------|-----------|----------------|---------------|---------|------------|------------|------------|
| PK   | 4.88069G     | 46.11             | 74.00             | -27.89         | 42.11         | 3           | Vertical  | 65             | 1.38          | -       | 32.82      | 4.62       | 33.44      |
| AV   | 4.88009G     | 31.96             | 54.00             | -22.04         | 27.96         | 3           | Vertical  | 65             | 1.38          | -       | 32.82      | 4.62       | 33.44      |
| PK   | 7.3197G      | 53.20             | 74.00             | -20.80         | 44.13         | 3           | Vertical  | 250            | 1.50          | -       | 37.52      | 5.52       | 33.97      |
| AV   | 7.31974G     | 44.99             | 54.00             | -9.01          | 35.92         | 3           | Vertical  | 250            | 1.50          | -       | 37.52      | 5.52       | 33.97      |

# BT-BR(1Mbps)

## 2440MHz\_TX

19/05/2020



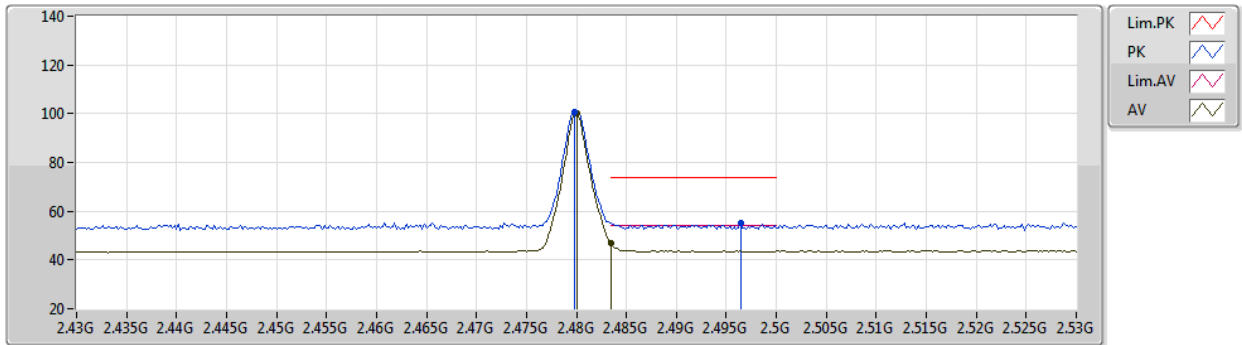
EUT Y\_1TX  
Setting 7  
04-F-C-4

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Raw<br>(dBuV) | Dist<br>(m) | Condition  | Azimuth<br>(°) | Height<br>(m) | Comment | AF<br>(dB) | CL<br>(dB) | PA<br>(dB) |
|------|--------------|-------------------|-------------------|----------------|---------------|-------------|------------|----------------|---------------|---------|------------|------------|------------|
| PK   | 4.87847G     | 45.08             | 74.00             | -28.92         | 41.10         | 3           | Horizontal | 96             | 2.19          | -       | 32.81      | 4.62       | 33.45      |
| AV   | 4.88033G     | 31.91             | 54.00             | -22.09         | 27.91         | 3           | Horizontal | 96             | 2.19          | -       | 32.82      | 4.62       | 33.44      |
| PK   | 7.31978G     | 54.00             | 74.00             | -20.00         | 44.93         | 3           | Horizontal | 140            | 1.60          | -       | 37.52      | 5.52       | 33.97      |
| AV   | 7.3198G      | 46.69             | 54.00             | -7.31          | 37.62         | 3           | Horizontal | 140            | 1.60          | -       | 37.52      | 5.52       | 33.97      |

# BT-BR(1Mbps)

## 2480MHz\_TX

19/05/2020



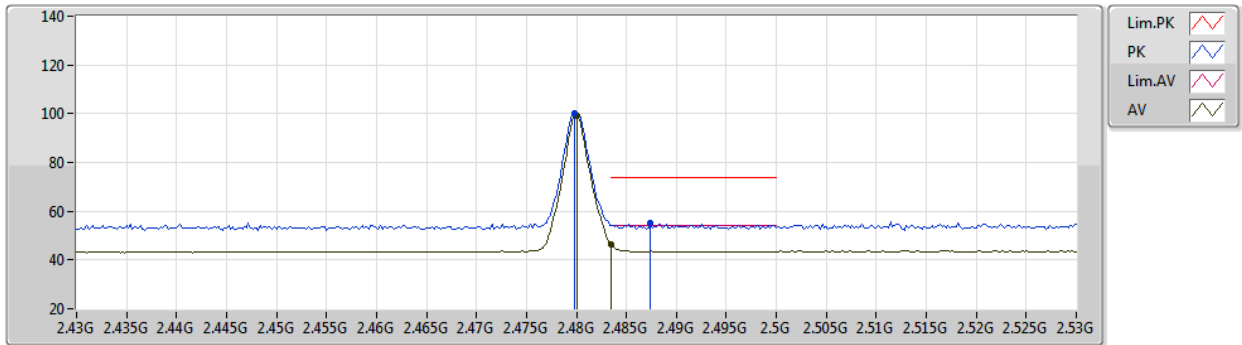
EUT Y\_1TX  
Setting 7  
04-F-C-4

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Raw<br>(dBuV) | Dist<br>(m) | Condition | Azimuth<br>(°) | Height<br>(m) | Comment | AF<br>(dB) | CL<br>(dB) | PA<br>(dB) |
|------|--------------|-------------------|-------------------|----------------|---------------|-------------|-----------|----------------|---------------|---------|------------|------------|------------|
| PK   | 2.4798G      | 100.61            | Inf               | -Inf           | 70.09         | 3           | Vertical  | 134            | 2.11          | -       | 27.82      | 2.70       | -          |
| AV   | 2.48G        | 99.98             | Inf               | -Inf           | 69.46         | 3           | Vertical  | 134            | 2.11          | -       | 27.82      | 2.70       | -          |
| PK   | 2.4964G      | 55.27             | 74.00             | -18.73         | 24.68         | 3           | Vertical  | 134            | 2.11          | -       | 27.89      | 2.70       | -          |
| AV   | 2.4835G      | 46.69             | 54.00             | -7.31          | 16.16         | 3           | Vertical  | 134            | 2.11          | -       | 27.83      | 2.70       | -          |

# BT-BR(1Mbps)

## 2480MHz\_TX

19/05/2020



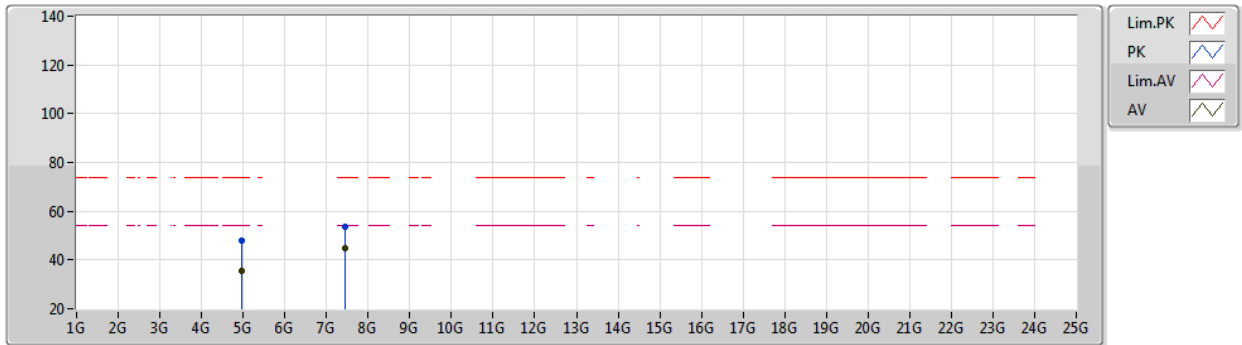
EUT Y\_1TX  
Setting 7  
04-F-C-4

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Raw<br>(dBuV) | Dist<br>(m) | Condition  | Azimuth<br>(°) | Height<br>(m) | Comment | AF<br>(dB) | CL<br>(dB) | PA<br>(dB) |
|------|--------------|-------------------|-------------------|----------------|---------------|-------------|------------|----------------|---------------|---------|------------|------------|------------|
| PK   | 2.4798G      | 100.23            | Inf               | -Inf           | 69.71         | 3           | Horizontal | 69             | 1.80          | -       | 27.82      | 2.70       | -          |
| AV   | 2.48G        | 99.36             | Inf               | -Inf           | 68.84         | 3           | Horizontal | 69             | 1.80          | -       | 27.82      | 2.70       | -          |
| PK   | 2.4874G      | 54.94             | 74.00             | -19.06         | 24.39         | 3           | Horizontal | 69             | 1.80          | -       | 27.85      | 2.70       | -          |
| AV   | 2.4835G      | 46.56             | 54.00             | -7.44          | 16.03         | 3           | Horizontal | 69             | 1.80          | -       | 27.83      | 2.70       | -          |

# BT-BR(1Mbps)

## 2480MHz\_TX

19/05/2020



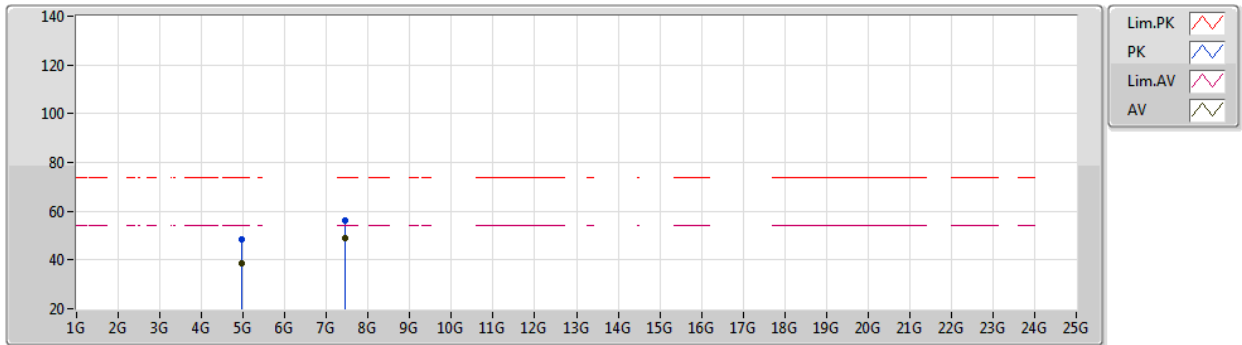
EUT Y\_1TX  
Setting 7  
04-F-C-4

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Raw<br>(dBuV) | Dist<br>(m) | Condition | Azimuth<br>(°) | Height<br>(m) | Comment | AF<br>(dB) | CL<br>(dB) | PA<br>(dB) |
|------|--------------|-------------------|-------------------|----------------|---------------|-------------|-----------|----------------|---------------|---------|------------|------------|------------|
| PK   | 4.95987G     | 48.06             | 74.00             | -25.94         | 43.69         | 3           | Vertical  | 315            | 1.00          | -       | 33.02      | 4.74       | 33.39      |
| AV   | 4.95981G     | 35.53             | 54.00             | -18.47         | 31.16         | 3           | Vertical  | 315            | 1.00          | -       | 33.02      | 4.74       | 33.39      |
| PK   | 7.4397G      | 53.56             | 74.00             | -20.44         | 44.32         | 3           | Vertical  | 247            | 1.55          | -       | 37.60      | 5.70       | 34.06      |
| AV   | 7.43973G     | 44.62             | 54.00             | -9.38          | 35.38         | 3           | Vertical  | 247            | 1.55          | -       | 37.60      | 5.70       | 34.06      |

# BT-BR(1Mbps)

## 2480MHz\_TX

19/05/2020



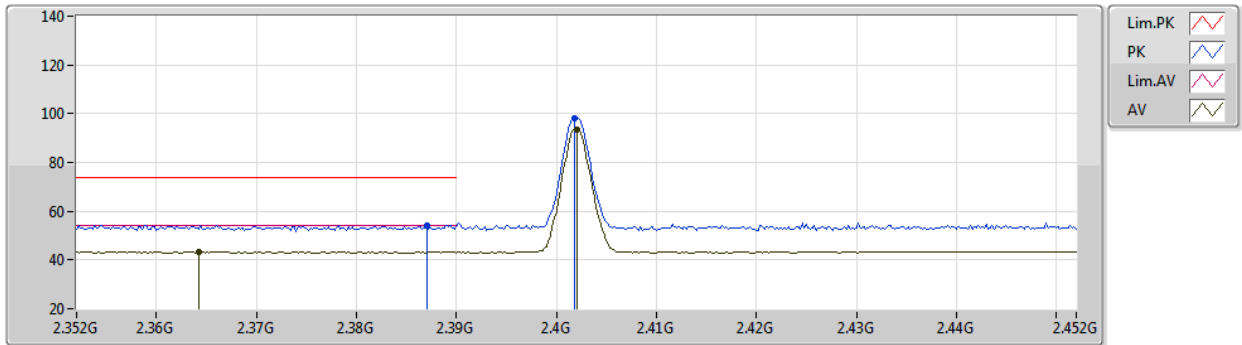
EUT Y\_1TX  
Setting 7  
04-F-C-4

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Raw<br>(dBuV) | Dist<br>(m) | Condition  | Azimuth<br>(°) | Height<br>(m) | Comment | AF<br>(dB) | CL<br>(dB) | PA<br>(dB) |
|------|--------------|-------------------|-------------------|----------------|---------------|-------------|------------|----------------|---------------|---------|------------|------------|------------|
| PK   | 4.9601G      | 48.58             | 74.00             | -25.42         | 44.21         | 3           | Horizontal | 39             | 1.80          | -       | 33.02      | 4.74       | 33.39      |
| AV   | 4.95981G     | 38.74             | 54.00             | -15.26         | 34.37         | 3           | Horizontal | 39             | 1.80          | -       | 33.02      | 4.74       | 33.39      |
| PK   | 7.43976G     | 56.18             | 74.00             | -17.82         | 46.94         | 3           | Horizontal | 126            | 1.53          | -       | 37.60      | 5.70       | 34.06      |
| AV   | 7.43973G     | 48.87             | 54.00             | -5.13          | 39.63         | 3           | Horizontal | 126            | 1.53          | -       | 37.60      | 5.70       | 34.06      |

# BT-EDR(3Mbps)

19/05/2020

## 2402MHz\_TX



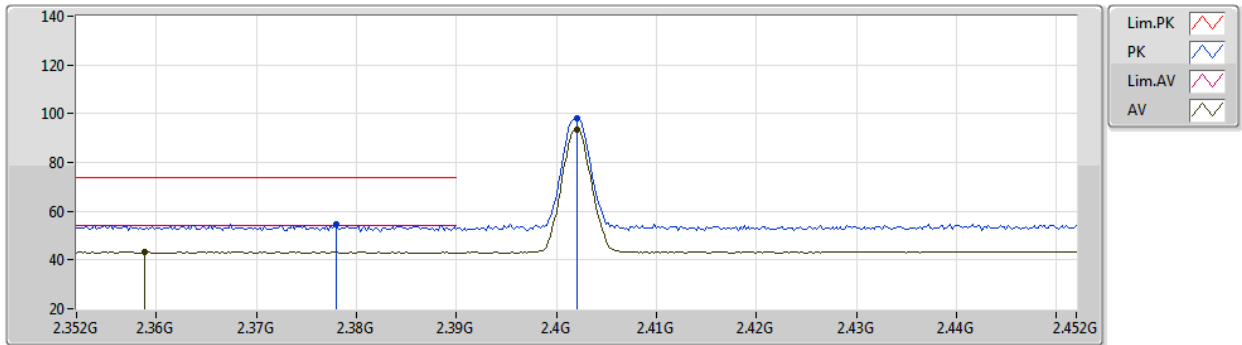
EUT Y\_1TX  
Setting 7  
04-F-C-4

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Raw<br>(dBuV) | Dist<br>(m) | Condition | Azimuth<br>(°) | Height<br>(m) | Comment | AF<br>(dB) | CL<br>(dB) | PA<br>(dB) |
|------|--------------|-------------------|-------------------|----------------|---------------|-------------|-----------|----------------|---------------|---------|------------|------------|------------|
| PK   | 2.387G       | 54.28             | 74.00             | -19.72         | 24.07         | 3           | Vertical  | 120            | 1.82          | -       | 27.51      | 2.70       | -          |
| AV   | 2.3642G      | 43.22             | 54.00             | -10.78         | 12.98         | 3           | Vertical  | 120            | 1.82          | -       | 27.54      | 2.70       | -          |
| PK   | 2.4018G      | 98.32             | Inf               | -Inf           | 68.11         | 3           | Vertical  | 120            | 1.82          | -       | 27.51      | 2.70       | -          |
| AV   | 2.402G       | 93.41             | Inf               | -Inf           | 63.20         | 3           | Vertical  | 120            | 1.82          | -       | 27.51      | 2.70       | -          |

# BT-EDR(3Mbps)

19/05/2020

## 2402MHz\_TX



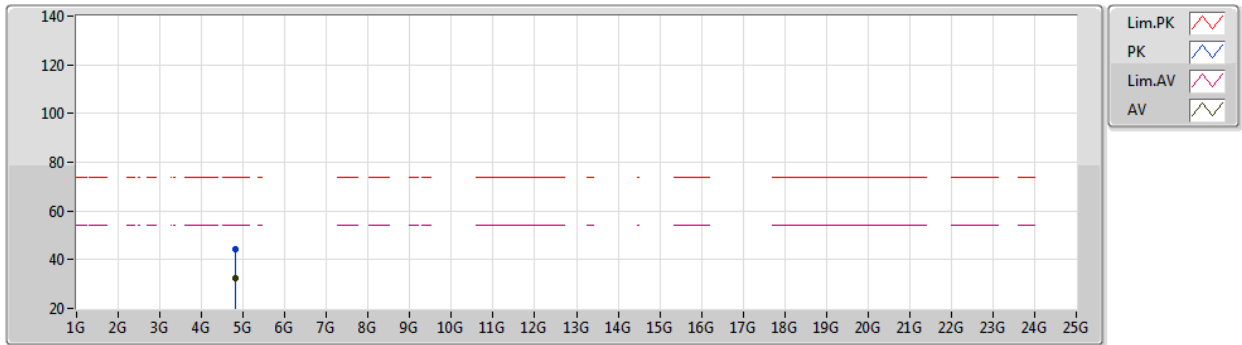
EUT Y\_1TX  
Setting 7  
04-F-C-4

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Raw<br>(dBuV) | Dist<br>(m) | Condition  | Azimuth<br>(°) | Height<br>(m) | Comment | AF<br>(dB) | CL<br>(dB) | PA<br>(dB) |
|------|--------------|-------------------|-------------------|----------------|---------------|-------------|------------|----------------|---------------|---------|------------|------------|------------|
| PK   | 2.378G       | 54.59             | 74.00             | -19.41         | 24.37         | 3           | Horizontal | 66             | 1.95          | -       | 27.52      | 2.70       | -          |
| AV   | 2.3588G      | 43.26             | 54.00             | -10.74         | 13.02         | 3           | Horizontal | 66             | 1.95          | -       | 27.54      | 2.70       | -          |
| PK   | 2.402G       | 98.23             | Inf               | -Inf           | 68.02         | 3           | Horizontal | 66             | 1.95          | -       | 27.51      | 2.70       | -          |
| AV   | 2.402G       | 93.32             | Inf               | -Inf           | 63.11         | 3           | Horizontal | 66             | 1.95          | -       | 27.51      | 2.70       | -          |

# BT-EDR(3Mbps)

19/05/2020

## 2402MHz\_TX



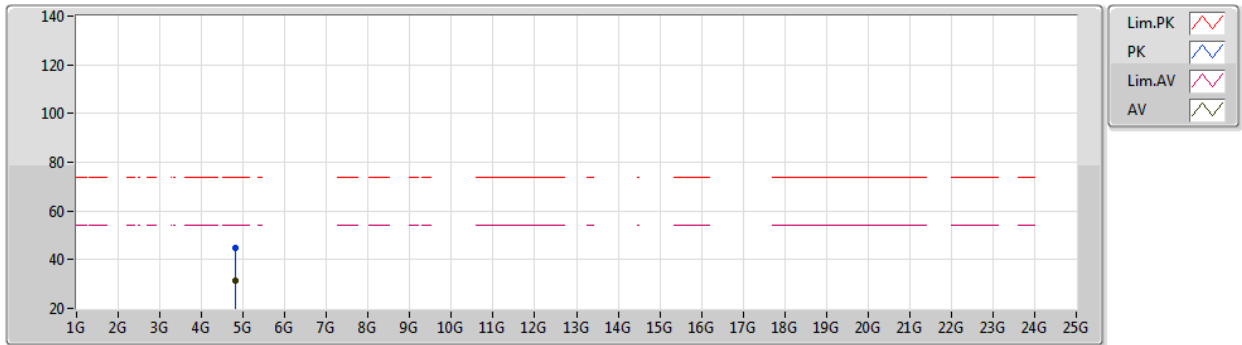
EUT Y\_1TX  
Setting 7  
04-F-C-4

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Raw<br>(dBuV) | Dist<br>(m) | Condition | Azimuth<br>(°) | Height<br>(m) | Comment | AF<br>(dB) | CL<br>(dB) | PA<br>(dB) |
|------|--------------|-------------------|-------------------|----------------|---------------|-------------|-----------|----------------|---------------|---------|------------|------------|------------|
| PK   | 4.80298G     | 44.39             | 74.00             | -29.61         | 40.88         | 3           | Vertical  | 93             | 1.79          | -       | 32.51      | 4.50       | 33.50      |
| AV   | 4.80376G     | 32.41             | 54.00             | -21.59         | 28.88         | 3           | Vertical  | 93             | 1.79          | -       | 32.52      | 4.51       | 33.50      |

# BT-EDR(3Mbps)

19/05/2020

## 2402MHz\_TX



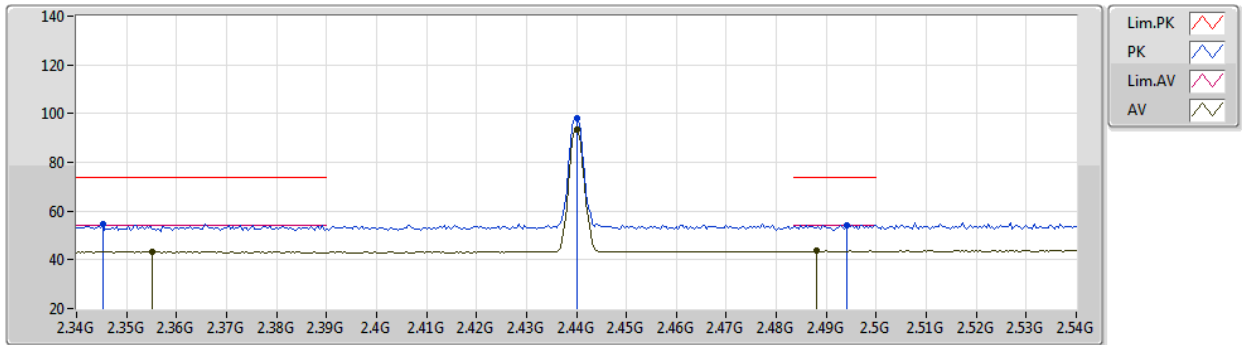
EUT Y\_1TX  
Setting 7  
04-F-C-4

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Raw<br>(dBuV) | Dist<br>(m) | Condition  | Azimuth<br>(°) | Height<br>(m) | Comment | AF<br>(dB) | CL<br>(dB) | PA<br>(dB) |
|------|--------------|-------------------|-------------------|----------------|---------------|-------------|------------|----------------|---------------|---------|------------|------------|------------|
| PK   | 4.80541G     | 45.00             | 74.00             | -29.00         | 41.47         | 3           | Horizontal | 140            | 1.56          | -       | 32.52      | 4.51       | 33.50      |
| AV   | 4.80471G     | 31.45             | 54.00             | -22.55         | 27.92         | 3           | Horizontal | 140            | 1.56          | -       | 32.52      | 4.51       | 33.50      |

# BT-EDR(3Mbps)

19/05/2020

## 2440MHz\_TX



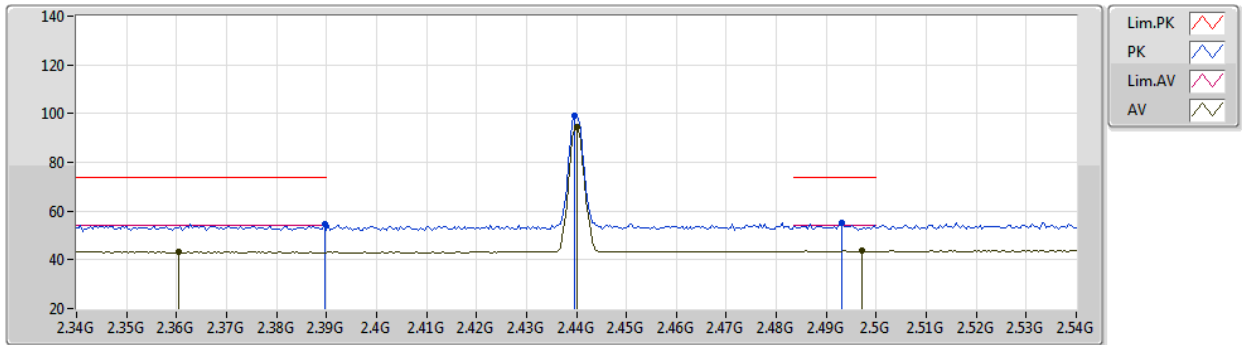
EUT\_Y\_1TX  
Setting 7  
04-F-C-4

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Raw<br>(dBuV) | Dist<br>(m) | Condition | Azimuth<br>(°) | Height<br>(m) | Comment | AF<br>(dB) | CL<br>(dB) | PA<br>(dB) |
|------|--------------|-------------------|-------------------|----------------|---------------|-------------|-----------|----------------|---------------|---------|------------|------------|------------|
| PK   | 2.3452G      | 54.75             | 74.00             | -19.25         | 24.50         | 3           | Vertical  | 127            | 1.90          | -       | 27.55      | 2.70       | -          |
| AV   | 2.3552G      | 43.33             | 54.00             | -10.67         | 13.09         | 3           | Vertical  | 127            | 1.90          | -       | 27.54      | 2.70       | -          |
| PK   | 2.44G        | 98.19             | Inf               | -Inf           | 67.83         | 3           | Vertical  | 127            | 1.90          | -       | 27.66      | 2.70       | -          |
| AV   | 2.44G        | 93.23             | Inf               | -Inf           | 62.87         | 3           | Vertical  | 127            | 1.90          | -       | 27.66      | 2.70       | -          |
| PK   | 2.494G       | 54.39             | 74.00             | -19.61         | 23.81         | 3           | Vertical  | 127            | 1.90          | -       | 27.88      | 2.70       | -          |
| AV   | 2.488G       | 43.61             | 54.00             | -10.39         | 13.06         | 3           | Vertical  | 127            | 1.90          | -       | 27.85      | 2.70       | -          |

# BT-EDR(3Mbps)

## 2440MHz\_TX

19/05/2020



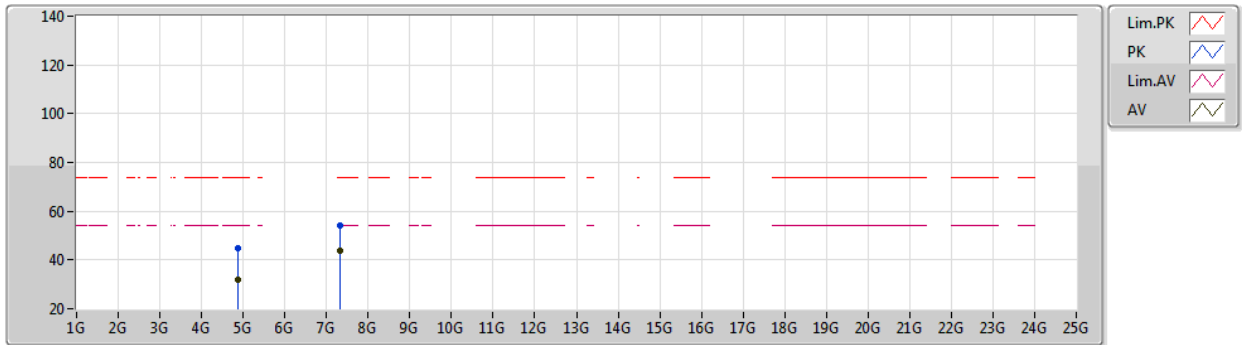
EUT\_Y\_1TX  
Setting 7  
04-F-C-4

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Raw<br>(dBuV) | Dist<br>(m) | Condition  | Azimuth<br>(°) | Height<br>(m) | Comment | AF<br>(dB) | CL<br>(dB) | PA<br>(dB) |
|------|--------------|-------------------|-------------------|----------------|---------------|-------------|------------|----------------|---------------|---------|------------|------------|------------|
| PK   | 2.3896G      | 54.70             | 74.00             | -19.30         | 24.49         | 3           | Horizontal | 63             | 1.75          | -       | 27.51      | 2.70       | -          |
| AV   | 2.3604G      | 43.30             | 54.00             | -10.70         | 13.06         | 3           | Horizontal | 63             | 1.75          | -       | 27.54      | 2.70       | -          |
| PK   | 2.4396G      | 99.11             | Inf               | -Inf           | 68.75         | 3           | Horizontal | 63             | 1.75          | -       | 27.66      | 2.70       | -          |
| AV   | 2.44G        | 94.23             | Inf               | -Inf           | 63.87         | 3           | Horizontal | 63             | 1.75          | -       | 27.66      | 2.70       | -          |
| PK   | 2.4932G      | 54.96             | 74.00             | -19.04         | 24.39         | 3           | Horizontal | 63             | 1.75          | -       | 27.87      | 2.70       | -          |
| AV   | 2.4972G      | 43.67             | 54.00             | -10.33         | 13.08         | 3           | Horizontal | 63             | 1.75          | -       | 27.89      | 2.70       | -          |

# BT-EDR(3Mbps)

19/05/2020

## 2440MHz\_TX



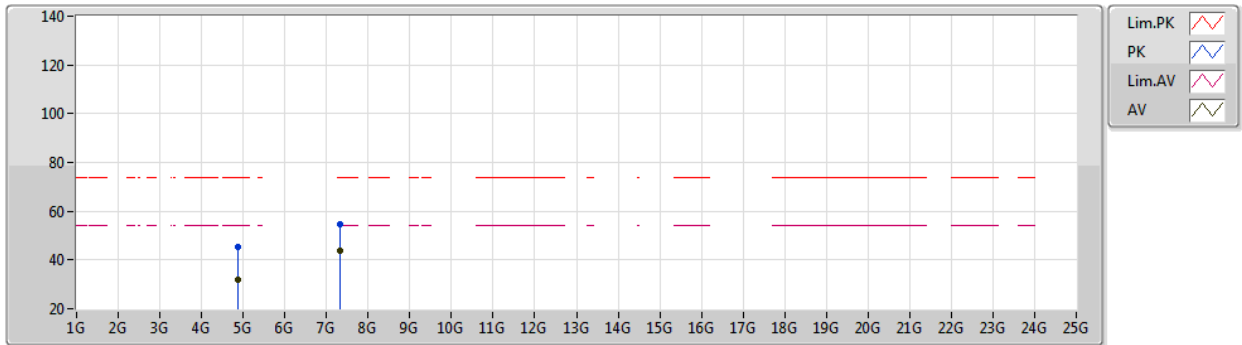
EUT\_Y\_1TX  
Setting 7  
04-F-C-4

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Raw<br>(dBuV) | Dist<br>(m) | Condition | Azimuth<br>(°) | Height<br>(m) | Comment | AF<br>(dB) | CL<br>(dB) | PA<br>(dB) |
|------|--------------|-------------------|-------------------|----------------|---------------|-------------|-----------|----------------|---------------|---------|------------|------------|------------|
| PK   | 4.87934G     | 45.00             | 74.00             | -29.00         | 41.00         | 3           | Vertical  | 135            | 2.55          | -       | 32.82      | 4.62       | 33.44      |
| AV   | 4.88104G     | 31.86             | 54.00             | -22.14         | 27.86         | 3           | Vertical  | 135            | 2.55          | -       | 32.82      | 4.62       | 33.44      |
| PK   | 7.31949G     | 53.90             | 74.00             | -20.10         | 44.83         | 3           | Vertical  | 247            | 1.49          | -       | 37.52      | 5.52       | 33.97      |
| AV   | 7.31973G     | 43.58             | 54.00             | -10.42         | 34.51         | 3           | Vertical  | 247            | 1.49          | -       | 37.52      | 5.52       | 33.97      |

# BT-EDR(3Mbps)

19/05/2020

## 2440MHz\_TX



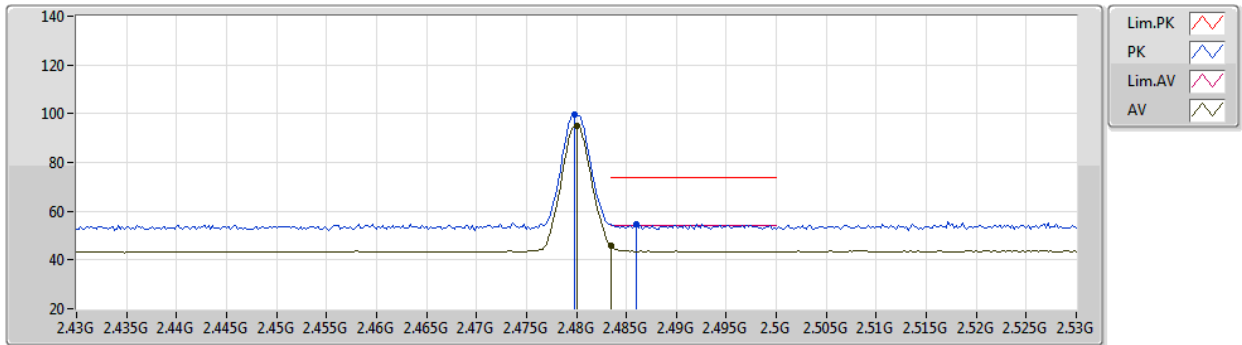
EUT Y\_1TX  
Setting 7  
04-F-C-4

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Raw<br>(dBuV) | Dist<br>(m) | Condition  | Azimuth<br>(°) | Height<br>(m) | Comment | AF<br>(dB) | CL<br>(dB) | PA<br>(dB) |
|------|--------------|-------------------|-------------------|----------------|---------------|-------------|------------|----------------|---------------|---------|------------|------------|------------|
| PK   | 4.88211G     | 45.15             | 74.00             | -28.85         | 41.14         | 3           | Horizontal | 317            | 1.95          | -       | 32.83      | 4.62       | 33.44      |
| AV   | 4.87926G     | 31.88             | 54.00             | -22.12         | 27.88         | 3           | Horizontal | 317            | 1.95          | -       | 32.82      | 4.62       | 33.44      |
| PK   | 7.31996G     | 54.43             | 74.00             | -19.57         | 45.36         | 3           | Horizontal | 124            | 1.49          | -       | 37.52      | 5.52       | 33.97      |
| AV   | 7.3198G      | 43.55             | 54.00             | -10.45         | 34.48         | 3           | Horizontal | 124            | 1.49          | -       | 37.52      | 5.52       | 33.97      |

# BT-EDR(3Mbps)

19/05/2020

## 2480MHz\_TX



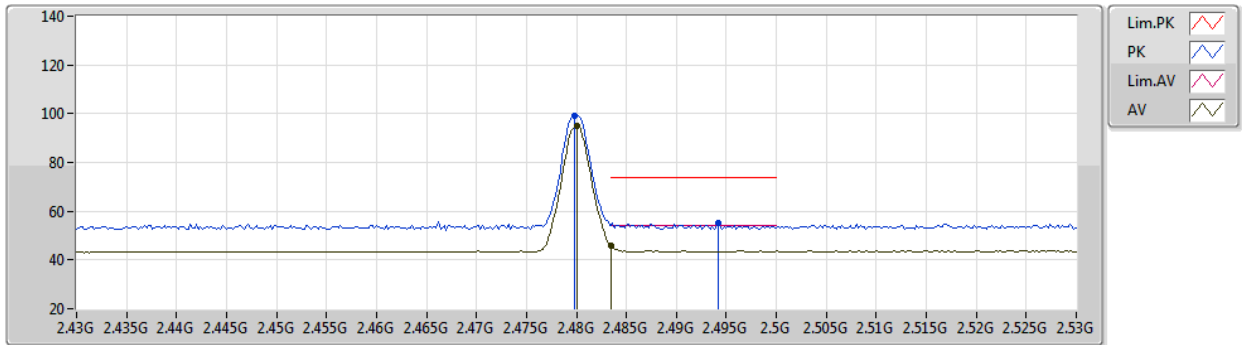
EUT Y\_1TX  
Setting 7  
04-F-C-4

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Raw<br>(dBuV) | Dist<br>(m) | Condition | Azimuth<br>(°) | Height<br>(m) | Comment | AF<br>(dB) | CL<br>(dB) | PA<br>(dB) |
|------|--------------|-------------------|-------------------|----------------|---------------|-------------|-----------|----------------|---------------|---------|------------|------------|------------|
| PK   | 2.4798G      | 99.63             | Inf               | -Inf           | 69.11         | 3           | Vertical  | 133            | 2.11          | -       | 27.82      | 2.70       | -          |
| AV   | 2.48G        | 94.83             | Inf               | -Inf           | 64.31         | 3           | Vertical  | 133            | 2.11          | -       | 27.82      | 2.70       | -          |
| PK   | 2.486G       | 54.64             | 74.00             | -19.36         | 24.10         | 3           | Vertical  | 133            | 2.11          | -       | 27.84      | 2.70       | -          |
| AV   | 2.4835G      | 45.81             | 54.00             | -8.19          | 15.28         | 3           | Vertical  | 133            | 2.11          | -       | 27.83      | 2.70       | -          |

# BT-EDR(3Mbps)

19/05/2020

## 2480MHz\_TX



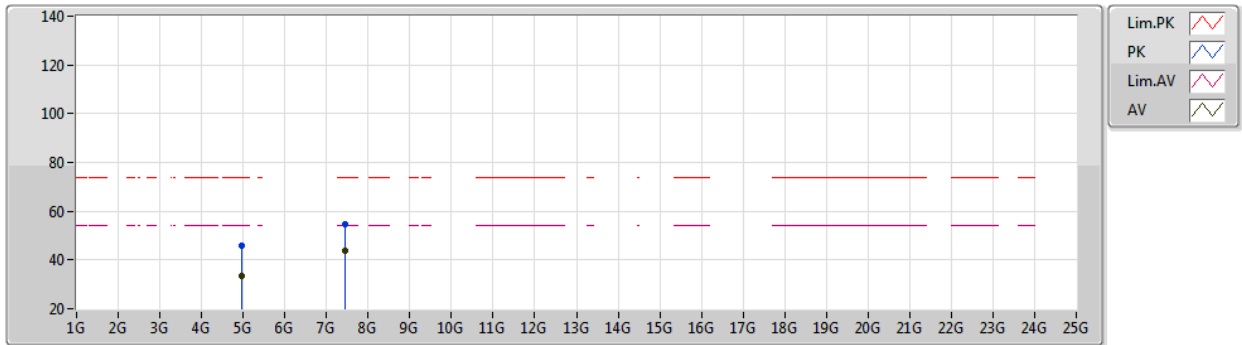
EUT Y\_1TX  
Setting 7  
04-F-C-4

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Raw<br>(dBuV) | Dist<br>(m) | Condition  | Azimuth<br>(°) | Height<br>(m) | Comment | AF<br>(dB) | CL<br>(dB) | PA<br>(dB) |
|------|--------------|-------------------|-------------------|----------------|---------------|-------------|------------|----------------|---------------|---------|------------|------------|------------|
| PK   | 2.4798G      | 99.22             | Inf               | -Inf           | 68.70         | 3           | Horizontal | 67             | 1.80          | -       | 27.82      | 2.70       | -          |
| AV   | 2.48G        | 94.77             | Inf               | -Inf           | 64.25         | 3           | Horizontal | 67             | 1.80          | -       | 27.82      | 2.70       | -          |
| PK   | 2.4942G      | 55.19             | 74.00             | -18.81         | 24.61         | 3           | Horizontal | 67             | 1.80          | -       | 27.88      | 2.70       | -          |
| AV   | 2.4835G      | 45.79             | 54.00             | -8.21          | 15.26         | 3           | Horizontal | 67             | 1.80          | -       | 27.83      | 2.70       | -          |

# BT-EDR(3Mbps)

19/05/2020

## 2480MHz\_TX



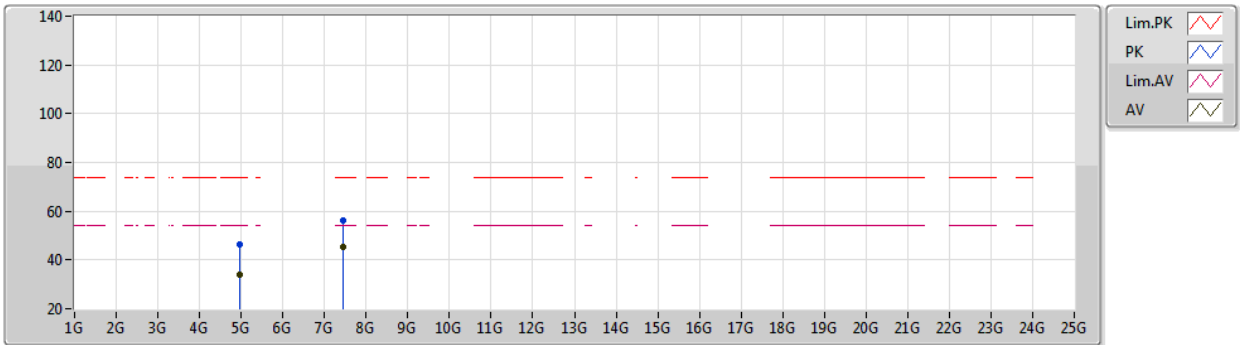
EUT Y\_1TX  
Setting 7  
04-F-C-4

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Raw<br>(dBuV) | Dist<br>(m) | Condition | Azimuth<br>(°) | Height<br>(m) | Comment | AF<br>(dB) | CL<br>(dB) | PA<br>(dB) |
|------|--------------|-------------------|-------------------|----------------|---------------|-------------|-----------|----------------|---------------|---------|------------|------------|------------|
| PK   | 4.95823G     | 45.69             | 74.00             | -28.31         | 41.33         | 3           | Vertical  | 199            | 1.55          | -       | 33.02      | 4.74       | 33.40      |
| AV   | 4.95987G     | 33.32             | 54.00             | -20.68         | 28.95         | 3           | Vertical  | 199            | 1.55          | -       | 33.02      | 4.74       | 33.39      |
| PK   | 7.4397G      | 54.40             | 74.00             | -19.60         | 45.16         | 3           | Vertical  | 244            | 1.58          | -       | 37.60      | 5.70       | 34.06      |
| AV   | 7.43973G     | 44.03             | 54.00             | -9.97          | 34.79         | 3           | Vertical  | 244            | 1.58          | -       | 37.60      | 5.70       | 34.06      |

# BT-EDR(3Mbps)

19/05/2020

## 2480MHz\_TX



EUT Y\_1TX  
Setting 7  
04-F-C-4

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Raw<br>(dBuV) | Dist<br>(m) | Condition  | Azimuth<br>(°) | Height<br>(m) | Comment | AF<br>(dB) | CL<br>(dB) | PA<br>(dB) |
|------|--------------|-------------------|-------------------|----------------|---------------|-------------|------------|----------------|---------------|---------|------------|------------|------------|
| PK   | 4.95991G     | 46.39             | 74.00             | -27.61         | 42.02         | 3           | Horizontal | 72             | 1.77          | -       | 33.02      | 4.74       | 33.39      |
| AV   | 4.96027G     | 33.96             | 54.00             | -20.04         | 29.59         | 3           | Horizontal | 72             | 1.77          | -       | 33.02      | 4.74       | 33.39      |
| PK   | 7.43959G     | 56.21             | 74.00             | -17.79         | 46.97         | 3           | Horizontal | 124            | 1.60          | -       | 37.60      | 5.70       | 34.06      |
| AV   | 7.43982G     | 45.57             | 54.00             | -8.43          | 36.33         | 3           | Horizontal | 124            | 1.60          | -       | 37.60      | 5.70       | 34.06      |