



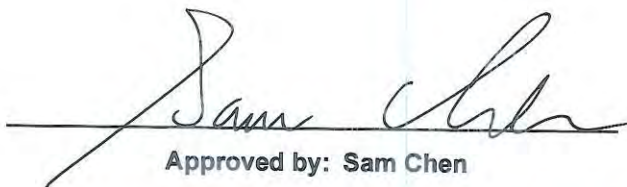
# FCC RADIO TEST REPORT

**FCC ID** : UIDW31  
**Equipment** : Wireless Router  
**Brand Name** : ARRIS  
**Model Name** : W31, W30  
**Applicant** : ARRIS  
3871 Lakefield Drive Suite 300, Suwanee, Georgia,  
30024 United States  
**Manufacturer** : ARRIS  
3871 Lakefield Drive Suite 300, Suwanee, Georgia,  
30024 United States  
**Standard** : 47 CFR FCC Part 15.247

The product was received on Sep. 03, 2019, and testing was started from Sep. 26, 2019 and completed on Nov. 09, 2019. 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 variant 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.)



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**Appendix F. Test Results of Emissions in Restricted Frequency Bands**

**Appendix G. Test Photos**

**Photographs of EUT v01**





### 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           | 15.247(a)       | 20dB Bandwidth                                      | PASS               | -      |
| 3.1           | 15.247(a)       | Carrier Frequency Separation                        | PASS               | -      |
| 3.2           | 15.247(b)       | Maximum Conducted Output Power                      | PASS               | -      |
| 3.3           | 15.247(a)       | Number of Hopping Frequencies and Hopping Band edge | PASS               | -      |
| 3.4           | 15.247(a)       | Time of Occupancy (Dwell Time)                      | PASS               | -      |
| 3.5           | 15.247(d)       | Emissions in Non-restricted Frequency Bands         | PASS               | -      |
| 3.6           | 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:**

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: Emily Chen**



# 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 |
|---------------|---------------|------------|------|
| 2.4-2.4835GHz | BT-BR(1Mbps)  | 1          | 1TX  |
| 2.4-2.4835GHz | BT-EDR(2Mbps) | 1          | 1TX  |
| 2.4-2.4835GHz | BT-EDR(3Mbps) | 1          | 1TX  |

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.
- ♦ Nss-Min is the minimum number of spatial streams.
- ♦ Nant is the number of outputs. e.g., 2(2, 3) means have 2 outputs for port 2 and port 3. 2 means have 2 outputs for port 1 and port 2.



1.1.2 Antenna Information

| Ant. | Brand    | Model Name   | Antenna Type                 | Connector | Gain (dBi) |
|------|----------|--------------|------------------------------|-----------|------------|
| 1    | PEGATRON | 1415-07GT000 | Dual band PCB dipole antenna | I-PEX     | Note       |
| 2    | PEGATRON | 1415-07GS000 | Dual band PCB dipole antenna | I-PEX     |            |
| 3    | PEGATRON | 1415-06WH000 | Dual band PCB dipole antenna | I-PEX     |            |
| 4    | PEGATRON | 1415-07GW000 | Dual band PCB dipole antenna | I-PEX     |            |
| 5    | PEGATRON | 1415-07GU000 | PCB dipole antenna           | I-PEX     |            |
| 6    | PEGATRON | 1415-07JP000 | PCB dipole antenna           | I-PEX     |            |
| 7    | PEGATRON | 1415-07JN000 | PCB dipole antenna           | I-PEX     |            |
| 8    | PEGATRON | 1415-07GX000 | PCB dipole antenna           | I-PEX     |            |
| 9    | PEGATRON | 1415-07JQ000 | PCB antenna                  | I-PEX     |            |
| 10   | PEGATRON | 1415-06MM000 | PCB dipole antenna           | I-PEX     |            |

Note:

| Ant. | Port | Uncorrelated (dBi) |               |               | Correlated (dBi) |               |               | (dBi)     |
|------|------|--------------------|---------------|---------------|------------------|---------------|---------------|-----------|
|      |      | 2.4GHz             | 5GHz Band 1~2 | 5GHz Band 3~4 | 2.4GHz           | 5GHz Band 1~2 | 5GHz Band 3~4 | Bluetooth |
| 1    | 1    | 4.73               | 4.35          | -             | 6.55             | 6.83          | -             | -         |
| 2    | 2    | 4.73               | 4.35          | -             | 6.55             | 6.83          | -             | -         |
| 3    | 3    | 4.73               | 4.35          | -             | 6.55             | 6.83          | -             | -         |
| 4    | 4    | 4.73               | 4.35          | -             | 6.55             | 6.83          | -             | -         |
| 5    | 1    | -                  | -             | 5.11          | -                | -             | 7.15          | -         |
| 6    | 2    | -                  | -             | 5.11          | -                | -             | 7.15          | -         |
| 7    | 3    | -                  | -             | 5.11          | -                | -             | 7.15          | -         |
| 8    | 4    | -                  | -             | 5.11          | -                | -             | 7.15          | -         |
| 9    | 1    | -                  | -             | -             | -                | -             | -             | 4.03      |
| 10   | -    | -                  | 5.00          | 5.00          | -                | -             | -             | -         |

Note 1: The above information was declared by manufacturer.

Note 2: The EUT has ten antennas.

**For Radio 1**

**WLAN 2.4GHz Functions**

**For IEEE 802.11b/g/n/ac/ax mode (4TX, 4RX):**

Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

**WLAN 5GHz Functions (1RX):**

Ant. 10 only supports the antenna receive function.



**For Radio 3**

**WLAN 5GHz Band 1~2 Functions**

**For IEEE 802.11a/n/ac/ax mode (4TX, 4RX):**

Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

**For Radio 2**

**WLAN 5GHz Band 3~4 Functions**

**For IEEE 802.11a/n/ac/ax mode (4TX, 4RX):**

Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

**For Radio 4**

**Bluetooth Functions (1TX, 1RX):**

Only Port 1 could transmit/receive simultaneously.

**1.1.3 Table for Radio Type**

| Radio No. | 2.4GHz | 5GHz Band 1~2    | 5GHz Band 3~4    | Bluetooth |
|-----------|--------|------------------|------------------|-----------|
| Radio 1   | V      | Only RX function | Only RX function | -         |
| Radio 2   | -      | -                | V                | -         |
| Radio 3   | -      | V                | -                | -         |
| Radio 4   | -      | -                | -                | V         |

**1.1.4 Mode Test Duty Cycle**

| Mode          | DC    | DCF(dB) | T(s)   | VBW(Hz) ≥ 1/T |
|---------------|-------|---------|--------|---------------|
| BT-BR(1Mbps)  | 0.769 | 1.14    | 2.944m | 1k            |
| BT-EDR(2Mbps) | 0.751 | 1.24    | 2.878m | 1k            |
| BT-EDR(3Mbps) | 0.785 | 1.05    | 2.892m | 1k            |

Note:

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

**1.1.5 EUT Operational Condition**

|                              |                    |
|------------------------------|--------------------|
| <b>EUT Power Type</b>        | From Power Adapter |
| <b>Test Software Version</b> | Telnet v1.27.2     |



1.1.6 Table for EUT Functions

| Type of Function                        | 2.4GHz | 5GHz Band 1~2 | 5GHz Band 3~4 |
|---|--------|---------------|---------------|
| Master (AP Router)                      | V      | V             | V             |
| Master (Extender)                       | -      | -             | V             |
| Bridge (Client without radar detection) | -      | -             | V             |
| Client without radar detection          | -      | -             | V             |

1.1.7 Table for Multiple Listing

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

| Model Name | Color of Device's Bottom |
|------------|--------------------------|
| W31        | Matte Black              |
| W30        | Silver                   |

From the above models, model name "W30" was selected as representative model for the test and its data was recorded in this report.

1.1.8 Table for Class II Change

This product is an extension of original one reported under Sporton project number: FR842742-01AC

Below is the table for the change of the product with respect to the original one.

| Modifications  | Performance Checking  |
|--|---|
| 1. Change the antenna and antenna models (all internal).<br>2. Changing the antenna location: antenna 2/5/6/7/8/9/10.<br><br>For the detail antenna information please refer to the section 1.1.2. | 1. 20dB Bandwidth AND Carrier Frequency Separation<br>2. Maximum Conducted Output Power<br>3. Number of Hopping Frequencies and Hopping oppBandedge<br>4. Time of Occupancy (Dwell Time)<br>5. Emissions in Non-restricted Frequency Bands<br>6. Emissions Restricted Frequency Bands |





## 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        | TH02-CB       | Owen Hsu      | 24.7~25.9°C / 59~64% | Sep. 26, 2019~<br>Nov. 09, 2019 |
| Radiated below 1GHz | 03CH05-CB     | KJ Chang      | 23.9~24.7°C / 57~59% | Oct. 17, 2019~<br>Oct. 29, 2019 |
| Radiated Above 1GHz | 03CH05-CB     | KJ Chang      | 23.8~25.7°C / 55~58% | Oct. 17, 2019~<br>Oct. 29, 2019 |

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                   |
|--------------------------------------|-------------|--------------------------|
| 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       | default       |
| 2440MHz       | default       |
| 2480MHz       | default       |
| BT-EDR(2Mbps) | -             |
| 2402MHz       | default       |
| 2440MHz       | default       |
| 2480MHz       | default       |
| BT-EDR(3Mbps) | -             |
| 2402MHz       | default       |
| 2440MHz       | default       |
| 2480MHz       | default       |



### 2.2 The Worst Case Measurement Configuration

| The Worst Case Mode for Following Conformance Tests |   |
|---|---|
| <b>Tests Item</b>                                   | 20dB Bandwidth<br>Carrier Frequency Separation<br>Maximum Conducted Output Power<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>   | CTX<br>There are two adapters (adapter 1 and adapter 2)<br>The worst case was found as Adapter 1 from testing result of previously. So the measurement will follow this same test configuration   |
| 1   | EUT - Radio 1 (WLAN 2.4GHz) + Adapter 1   |
| 2   | EUT - Radio 3 (WLAN 5GHz Band 1~2) + Adapter 1  |
| 3   | EUT - Radio 2 (WLAN 5GHz Band 3~4) + Adapter 1  |
| 4   | EUT - Radio 4 (Bluetooth) + Adapter 1   |
| For operating mode 2 is the worst case and it was record in this test report. |   |
| <b>Operating Mode &gt; 1GHz</b>   | CTX   |

| The Worst Case Mode for Following Conformance Tests                                   |   |
|---|---|
| <b>Tests Item</b>   | Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation                                   |
| <b>Operating Mode</b>   |   |
| 1   | Radio 1 (WLAN 2.4GHz) + Radio 3 (WLAN 5GHz Band 1~2) + Radio 2 (WLAN 5GHz Band 3~4) + Radio 4 (Bluetooth) |
| Refer to Sporton Test Report No.: FA842742-05 for Co-location RF Exposure Evaluation. |   |

Note: The EUT can only be use in Y axis position

### 2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.



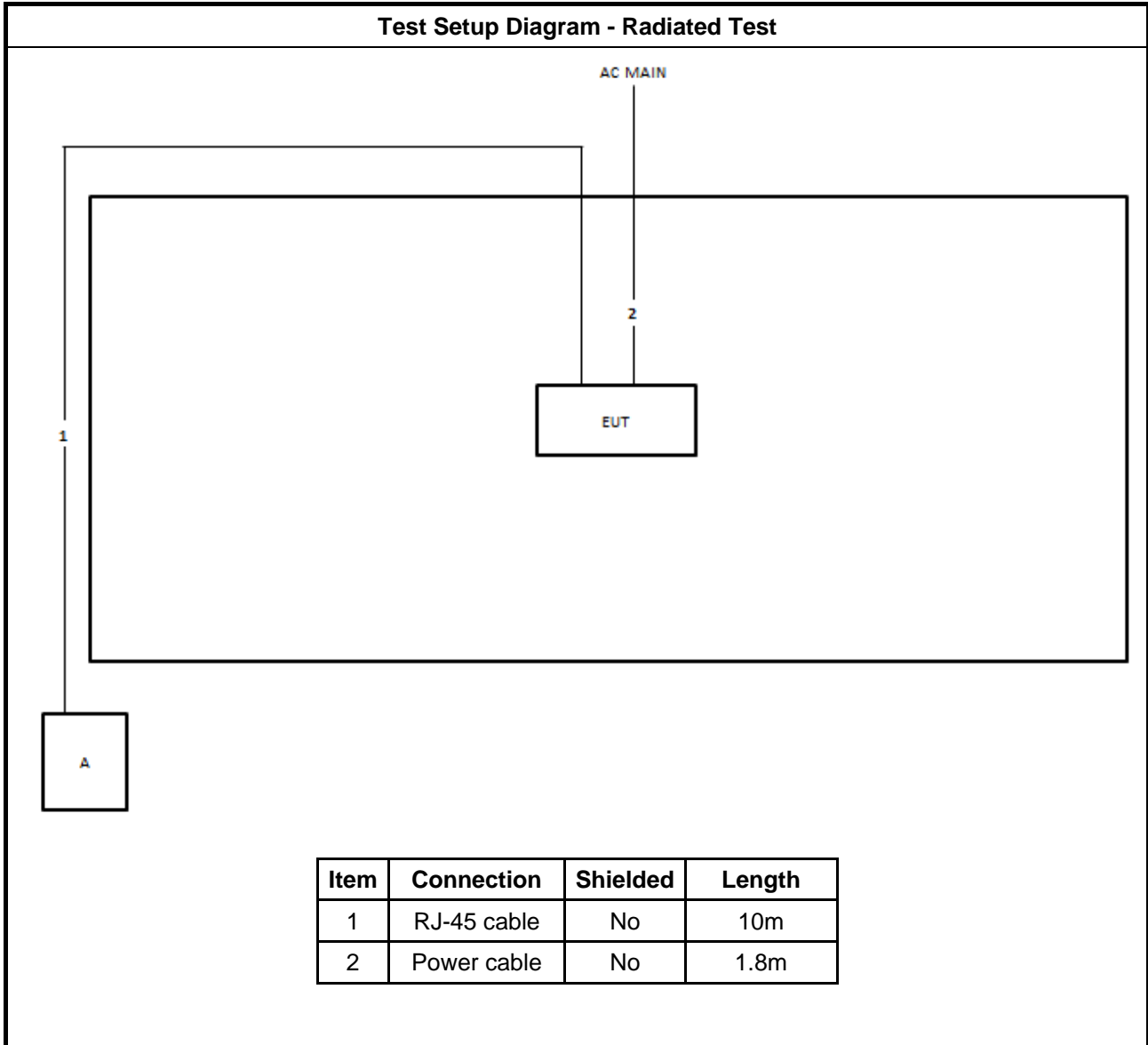
## 2.4 Accessories

| Accessories |                |            |                    |           |   |
|-------------|----------------|------------|--------------------|-----------|---|
| No.         | Equipment Name | Brand Name | Model Name         | P/N       | Rating  |
| 1           | Adapter 1      | APD        | WA-36L12FU         | AREP05681 | INPUT: 100-120V ~, 60Hz, 0.9A Max<br>OUTPUT: 12V, 3A    |
| 2           | Adapter 2      | NetBit     | NBS42D120<br>350VU | AREP05751 | INPUT: 100-120V ~, 50/60Hz, 1.0A<br>OUTPUT: 12.0V, 3.5A |

## 2.5 Support Equipment

| Support Equipment |           |            |            |        |
|-------------------|-----------|------------|------------|--------|
| No.               | Equipment | Brand Name | Model Name | FCC ID |
| A                 | NB        | DELL       | E4300      | N/A    |

## 2.6 Test Setup Diagram



### 3 Transmitter Test Result

#### 3.1 20dB Bandwidth and Carrier Frequency Separation

##### 3.1.1 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                   |  |

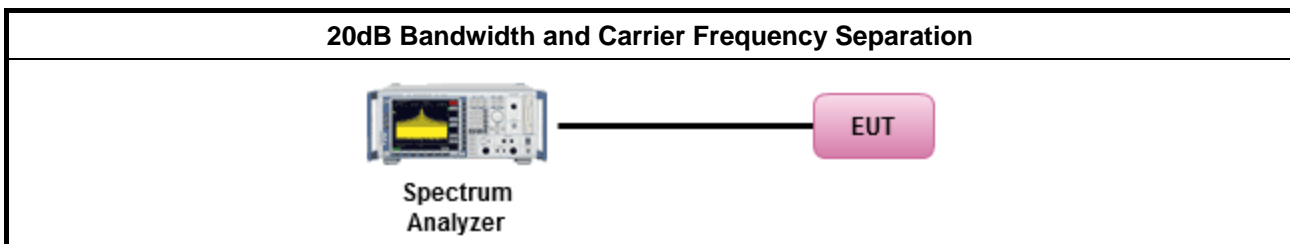
##### 3.1.2 Measuring Instruments

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

##### 3.1.4 Test Setup



##### 3.1.5 Test Result of 20dB Bandwidth

Refer as Appendix A

##### 3.1.6 Test Result of Carrier Frequency Separation

Refer as Appendix A

### 3.2 Maximum Conducted Output Power

#### 3.2.1 Maximum Conducted Output Power Limit

| Maximum Conducted Output Power Limit                                      |   |
|---|---|
| <ul style="list-style-type: none"> <li>▪ 902-928 MHz Band:</li> </ul>     |   |
|   | <ul style="list-style-type: none"> <li>▪ <math>N \geq 50</math>; Power 30dBm; EIRP 36dBm</li> </ul>         |
|   | <ul style="list-style-type: none"> <li>▪ <math>50 &gt; N \geq 25</math>; Power 24dBm; EIRP 30dBm</li> </ul> |
| <ul style="list-style-type: none"> <li>▪ 2400-2483.5 MHz Band:</li> </ul> |   |
|   | <ul style="list-style-type: none"> <li>▪ <math>N \geq 75</math>; Power 30dBm; EIRP 36dBm</li> </ul>         |
|   | <ul style="list-style-type: none"> <li>▪ <math>75 &gt; N \geq 15</math>; Power 21dBm; EIRP 27dBm</li> </ul> |
| <ul style="list-style-type: none"> <li>▪ 5725-5850 MHz Band:</li> </ul>   |   |
|   | <ul style="list-style-type: none"> <li>▪ <math>N \geq 75</math>; Power 30dBm; EIRP 36dBm</li> </ul>         |
| N: Number of Hopping Frequencies  |   |

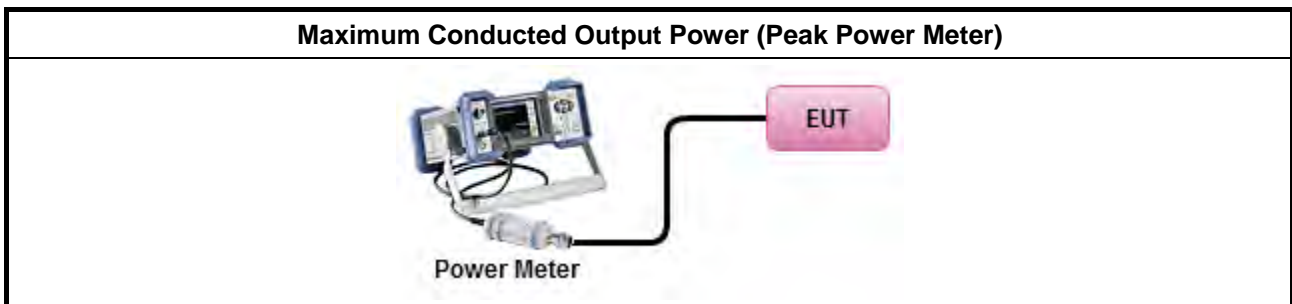
#### 3.2.2 Measuring Instruments

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

#### 3.2.3 Test Procedures

| Test Method   |
|---|
| <ul style="list-style-type: none"> <li>▪ Refer as ANSI C63.10-2013, clause 7.8.5 for output power measurement.</li> </ul> |

#### 3.2.4 Test Setup



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

Refer as Appendix B

### 3.3 Number of Hopping Frequencies and Hopping Bandedge

#### 3.3.1 Number of Hopping Frequencies Limit

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

#### 3.3.2 Hopping Bandedge Limit

Refer clause 3.5.1 and clause 3.6.1

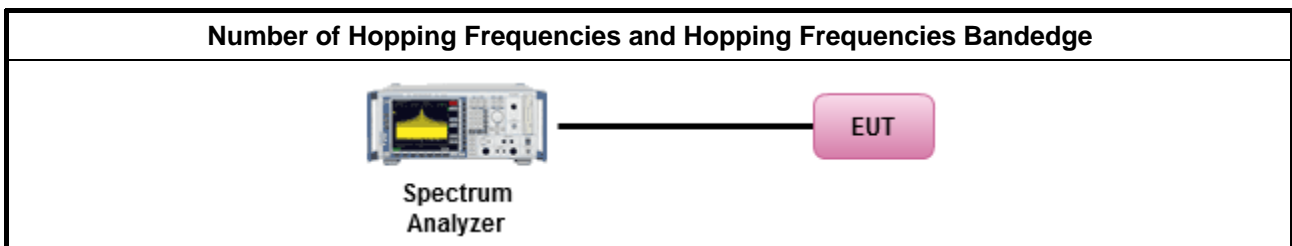
#### 3.3.3 Measuring Instruments

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

#### 3.3.4 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.  |

#### 3.3.5 Test Setup



#### 3.3.6 Test Result of Number of Hopping Frequencies

Refer as Appendix C

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

Refer as Appendix C



### 3.4 Time of Occupancy (Dwell Time)

#### 3.4.1 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  |  |

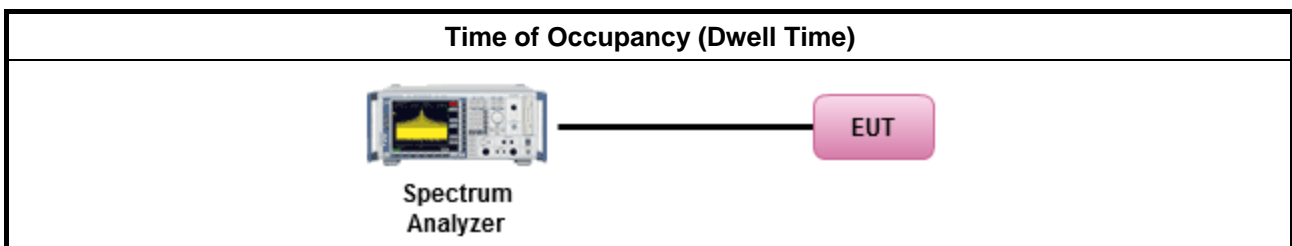
#### 3.4.2 Measuring Instruments

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

#### 3.4.3 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. |

#### 3.4.4 Test Setup



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

Refer as Appendix D

### 3.5 Emissions in Non-restricted Frequency Bands

#### 3.5.1 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.

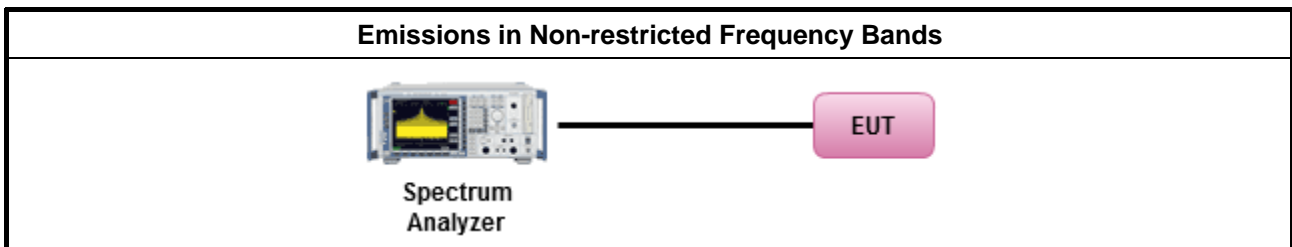
#### 3.5.2 Measuring Instruments

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

#### 3.5.3 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> |

#### 3.5.4 Test Setup



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

Refer as Appendix E



### 3.6 Emissions in Restricted Frequency Bands

#### 3.6.1 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.

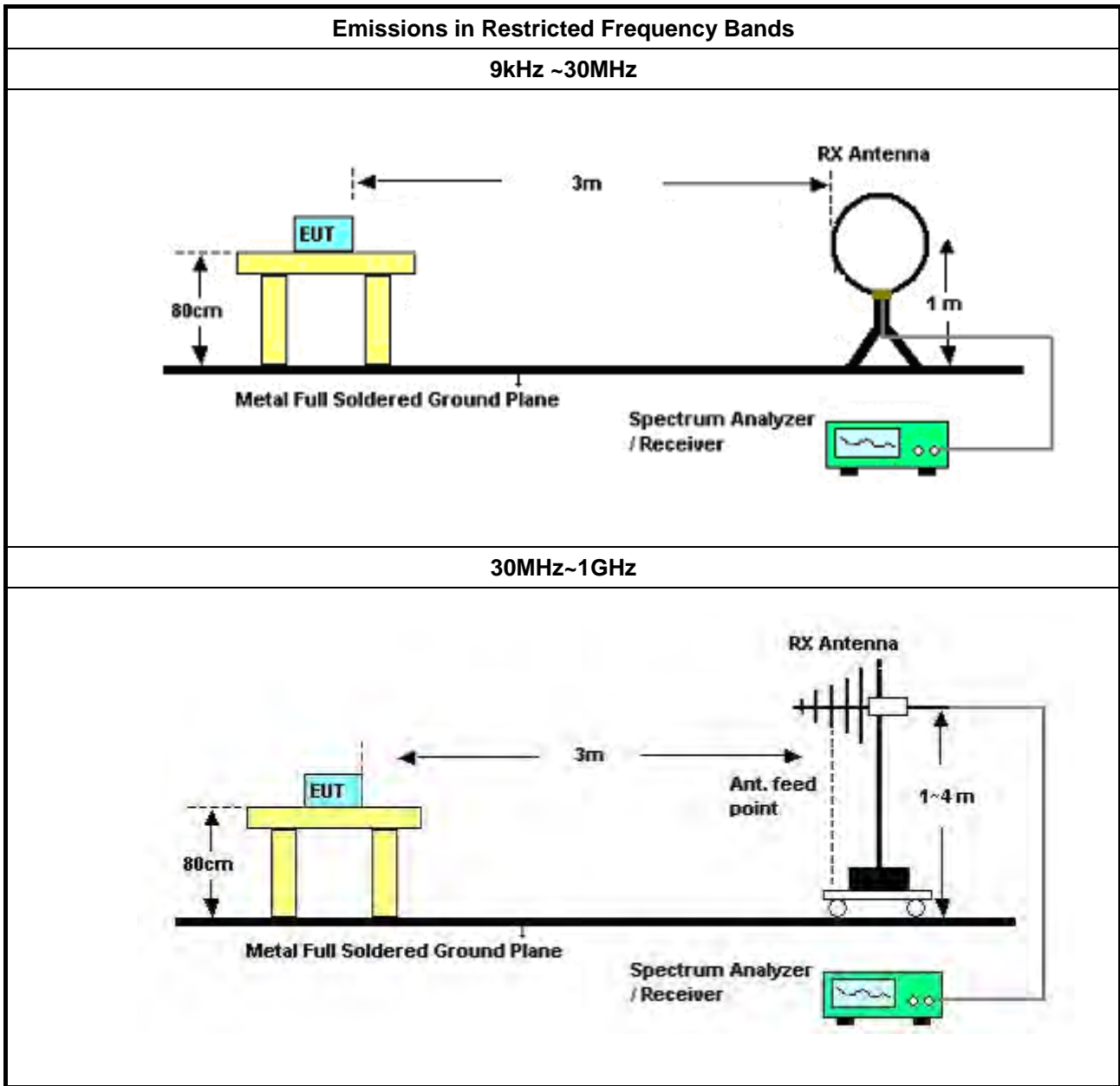
#### 3.6.2 Measuring Instruments

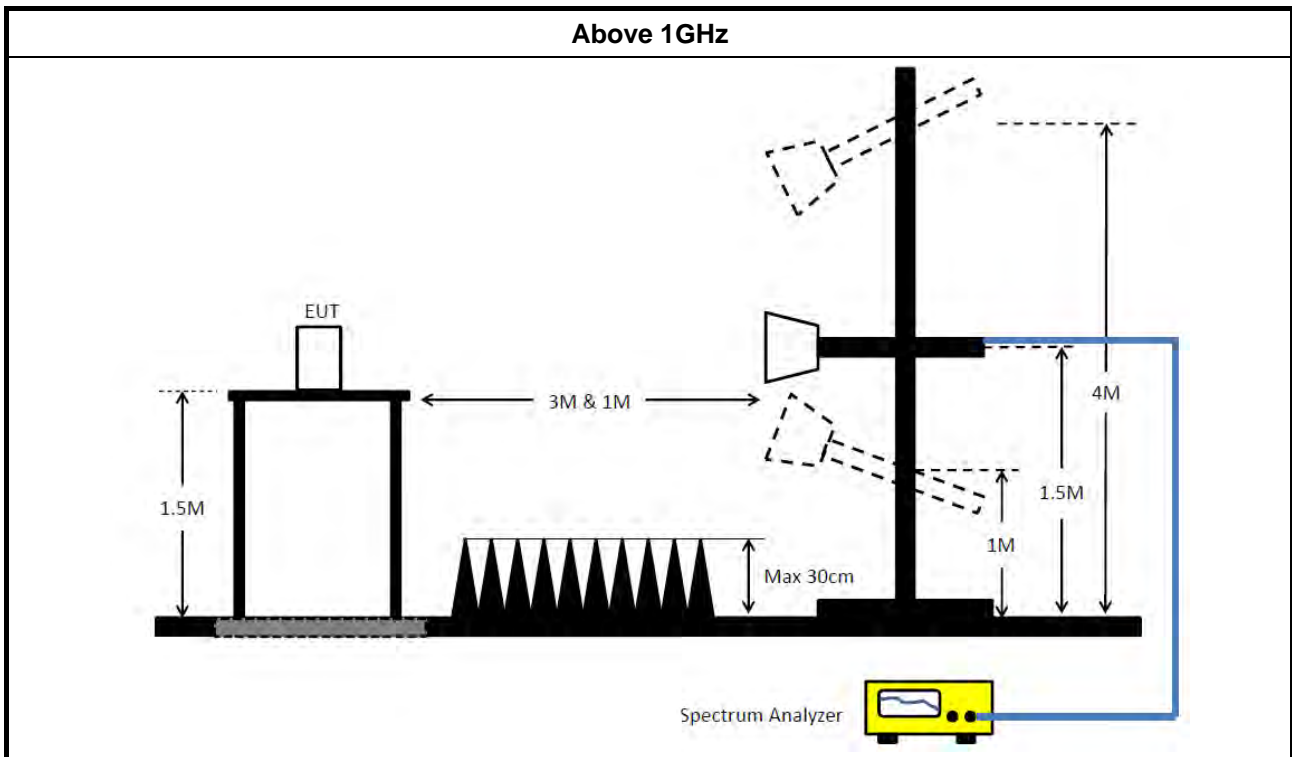
Refer a test equipment and calibration data table in this test report.

#### 3.6.3 Test Procedures

| Test Method  |  |
|--|--|
| <ul style="list-style-type: none"> <li>The average emission levels shall be measured in [hopping duty factor].</li> </ul>  |  |
| <ul style="list-style-type: none"> <li>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.</li> </ul>  |  |
| <ul style="list-style-type: none"> <li>For the transmitter unwanted emissions shall be measured using following options below:               <ul style="list-style-type: none"> <li>Refer as ANSI C63.10, clause 4.1.4.2.1 QP value.</li> <li>Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak.</li> <li>Refer as ANSI C63.10, clause 4.1.4.2.4 average value of hopping pulsed emissions.</li> </ul> </li> </ul> |  |

### 3.6.4 Test Setup





### 3.6.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

### 3.6.6 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.

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

Refer as Appendix F



## 4 Test Equipment and Calibration Data

| Instrument                        | Manufacturer | Model No.          | Serial No.       | Characteristics  | Calibration Date | Calibration Due Date | Remark                |
|-----------------------------------|--------------|--------------------|------------------|------------------|------------------|----------------------|-----------------------|
| Bilog Antenna with 6dB Attenuator | TESE & EMCI  | CBL 6112D & N-6-06 | 35236 & AT-N0610 | 30MHz ~ 2GHz     | Mar. 28, 2019    | Mar. 27, 2020        | Radiation (03CH05-CB) |
| Loop Antenna                      | Teseq        | HLA 6120           | 24155            | 9kHz - 30 MHz    | Mar. 29, 2019    | Mar. 28, 2020        | Radiation (03CH05-CB) |
| Horn Antenna                      | SCHWARZBECK  | BBHA9120D          | BBHA 9120D-1291  | 1GHz~18GHz       | Oct. 05, 2019    | Oct. 04, 2020        | Radiation (03CH05-CB) |
| Horn Antenna                      | SCHWARZBECK  | BBHA 9170          | BBHA9170507      | 15GHz ~ 40GHz    | Jun. 12, 2019    | Jun. 11, 2020        | Radiation (03CH05-CB) |
| Pre-Amplifier                     | EMCI         | EMC330N            | 980331           | 20MHz ~ 3GHz     | May 01, 2019     | Apr. 30, 2020        | Radiation (03CH05-CB) |
| Pre-Amplifier                     | EMCI         | EMC12630SE         | 980287           | 1GHz – 26.5GHz   | Apr. 16, 2019    | Apr. 15, 2020        | Radiation (03CH05-CB) |
| Pre-Amplifier                     | MITEQ        | TTA1840-35-HG      | 1864479          | 18GHz ~ 40GHz    | Jul. 03, 2019    | Jul. 02, 2020        | Radiation (03CH05-CB) |
| Spectrum Analyzer                 | R&S          | FSP40              | 100304           | 9kHz ~ 40GHz     | Aug. 15, 2019    | Aug. 14, 2020        | Radiation (03CH05-CB) |
| EMI Test Receiver                 | R&S          | ESCS               | 826547/017       | 9kHz ~ 2.75GHz   | May 15, 2019     | May 14, 2020         | Radiation (03CH05-CB) |
| RF Cable-low                      | Woken        | RG402              | LOW Cable-04+23  | 30MHz~1GHz       | Oct. 07, 2019    | Oct. 06, 2020        | Radiation (03CH05-CB) |
| RF Cable-high                     | Woken        | RG402              | High Cable-28    | 1GHz~18GHz       | Oct. 07, 2019    | Oct. 06, 2020        | Radiation (03CH05-CB) |
| RF Cable-high                     | Woken        | RG402              | High Cable-04+28 | 1GHz~18GHz       | Oct. 07, 2019    | Oct. 06, 2020        | Radiation (03CH05-CB) |
| RF Cable-high                     | Woken        | RG402              | High Cable-40G#1 | 18GHz ~ 40 GHz   | Jul. 24, 2019    | Jul. 23, 2020        | Radiation (03CH05-CB) |
| RF Cable-high                     | Woken        | RG402              | High Cable-40G#2 | 18GHz ~ 40 GHz   | Jul. 24, 2019    | Jul. 23, 2020        | Radiation (03CH05-CB) |
| Spectrum analyzer                 | R&S          | FSV40              | 101027           | 9kHz~40GHz       | Jul. 02, 2019    | Jul. 01, 2020        | Conducted (TH02-CB)   |
| Power Sensor                      | Anritsu      | MA2411B            | 1126203          | 300MHz~40GHz     | Sep. 11, 2019    | Sep. 10, 2020        | Conducted (TH02-CB)   |
| Power Meter                       | Anritsu      | ML2495A            | 1210004          | 300MHz~40GHz     | Sep. 11, 2019    | Sep. 10, 2020        | Conducted (TH02-CB)   |
| RF Cable-high                     | Woken        | RG402              | High Cable-01    | 1 GHz – 26.5 GHz | Oct. 08, 2018    | Oct. 07, 2019        | Conducted (TH02-CB)   |
| RF Cable-high                     | Woken        | RG402              | High Cable-01    | 1 GHz – 26.5 GHz | Oct. 07, 2019    | Oct. 06, 2020        | Conducted (TH02-CB)   |
| RF Cable-high                     | Woken        | RG402              | High Cable-02    | 1 GHz – 26.5 GHz | Oct. 08, 2018    | Oct. 07, 2019        | Conducted (TH02-CB)   |
| RF Cable-high                     | Woken        | RG402              | High Cable-02    | 1 GHz – 26.5 GHz | Oct. 07, 2019    | Oct. 06, 2020        | Conducted (TH02-CB)   |
| RF Cable-high                     | Woken        | RG402              | High Cable-3     | 1 GHz – 26.5 GHz | Oct. 24, 2018    | Oct. 23, 2019        | Conducted (TH02-CB)   |



| Instrument    | Manufacturer | Model No. | Serial No.    | Characteristics  | Calibration Date | Calibration Due Date | Remark              |
|---------------|--------------|-----------|---------------|------------------|------------------|----------------------|---------------------|
| RF Cable-high | Woken        | RG402     | High Cable-3  | 1 GHz – 26.5 GHz | Oct. 07, 2019    | Oct. 06, 2020        | Conducted (TH02-CB) |
| RF Cable-high | Woken        | RG402     | High Cable-04 | 1 GHz – 26.5 GHz | Oct. 08, 2018    | Oct. 07, 2019        | Conducted (TH02-CB) |
| RF Cable-high | Woken        | RG402     | High Cable-04 | 1 GHz – 26.5 GHz | Oct. 07, 2019    | Oct. 06, 2020        | Conducted (TH02-CB) |
| RF Cable-high | Woken        | RG402     | High Cable-05 | 1 GHz – 26.5 GHz | Oct. 08, 2018    | Oct. 07, 2019        | Conducted (TH02-CB) |
| RF Cable-high | Woken        | RG402     | High Cable-05 | 1 GHz – 26.5 GHz | Oct. 07, 2019    | Oct. 06, 2020        | Conducted (TH02-CB) |

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



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             | 932.5k          | 933KF1D  | 916.25k          | 928.75k         |
| BT-EDR(2Mbps) | 1.344M           | 1.231M          | 1M23G1D  | 1.341M           | 1.223M          |
| BT-EDR(3Mbps) | 1.304M           | 1.228M          | 1M23G1D  | 1.303M           | 1.219M          |

**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;

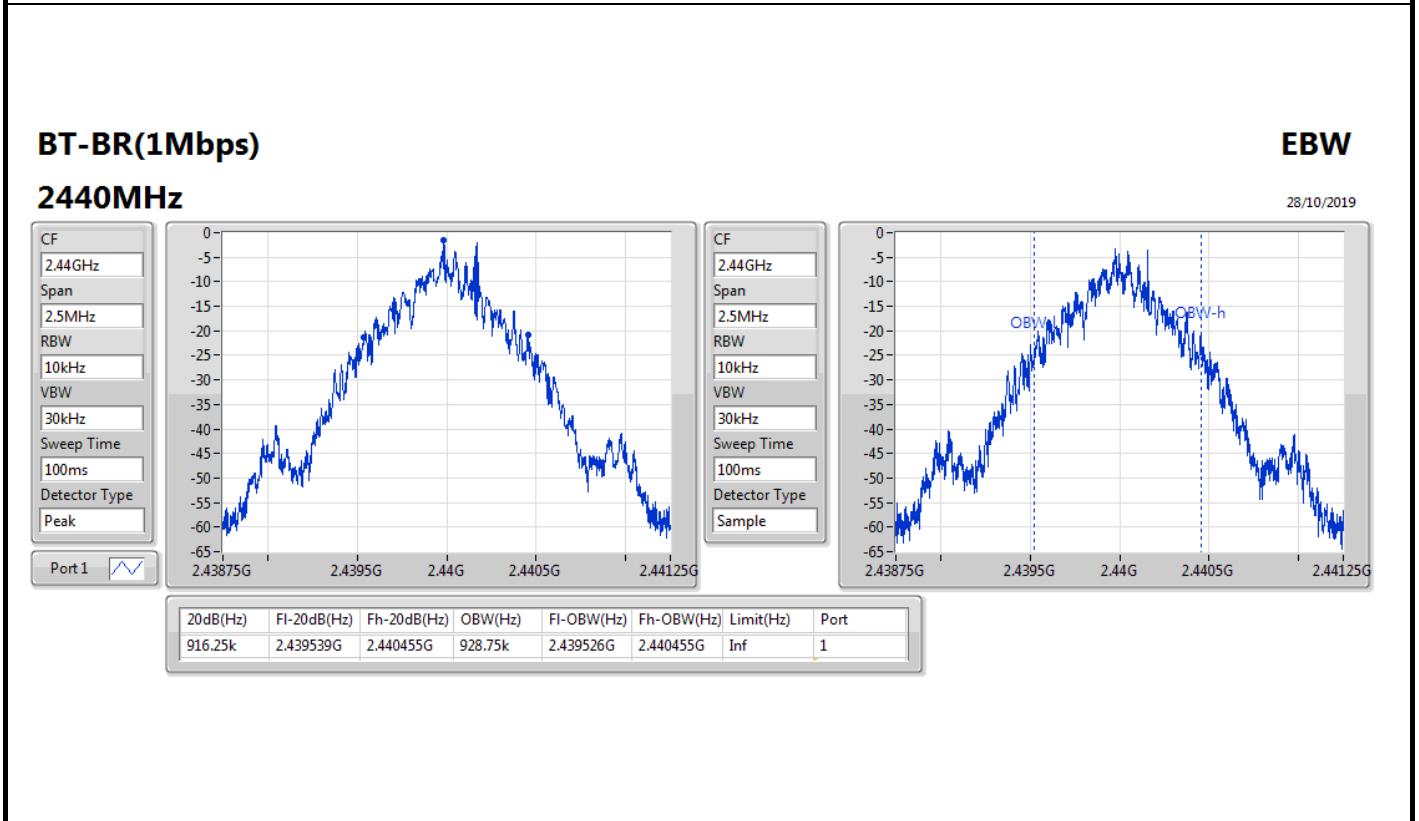
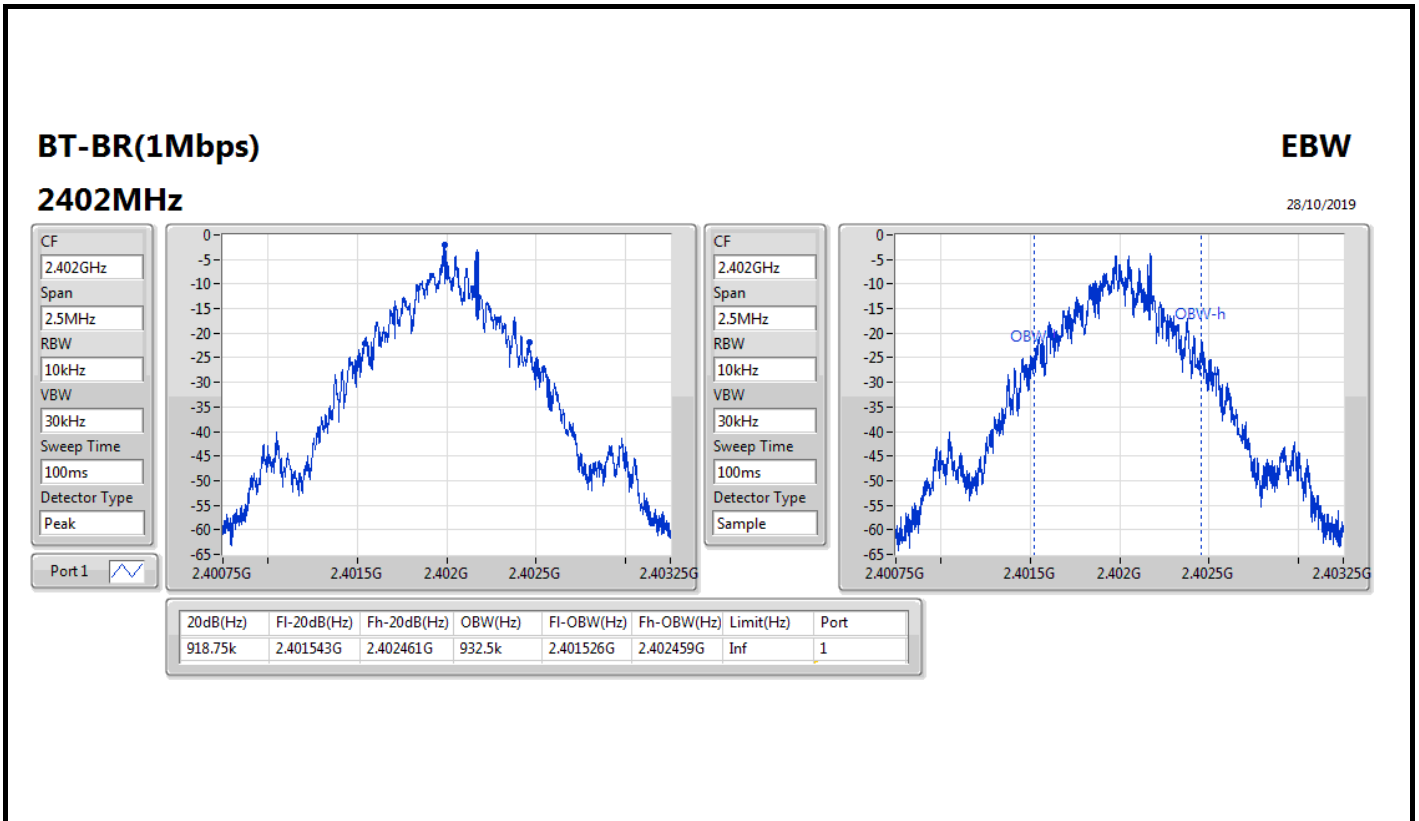




**Result**

| Mode          | Result | Limit (Hz) | Port 1-N dB (Hz) | Port 1-OBW (Hz) |
|---------------|--------|------------|------------------|-----------------|
| BT-BR(1Mbps)  | -      | -          | -                | -               |
| 2402MHz       | Pass   | Inf        | 918.75k          | 932.5k          |
| 2440MHz       | Pass   | Inf        | 916.25k          | 928.75k         |
| 2480MHz       | Pass   | Inf        | 920k             | 928.75k         |
| BT-EDR(2Mbps) | -      | -          | -                | -               |
| 2402MHz       | Pass   | Inf        | 1.341M           | 1.223M          |
| 2440MHz       | Pass   | Inf        | 1.341M           | 1.231M          |
| 2480MHz       | Pass   | Inf        | 1.344M           | 1.226M          |
| BT-EDR(3Mbps) | -      | -          | -                | -               |
| 2402MHz       | Pass   | Inf        | 1.303M           | 1.228M          |
| 2440MHz       | Pass   | Inf        | 1.303M           | 1.224M          |
| 2480MHz       | Pass   | Inf        | 1.304M           | 1.219M          |

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



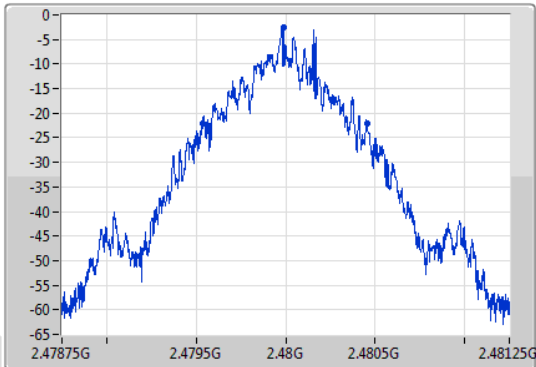
**BT-BR(1Mbps)**

**EBW**

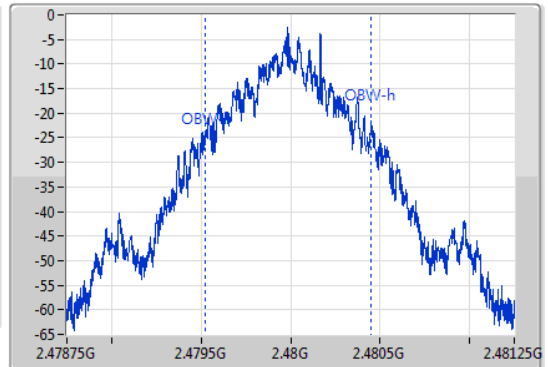
**2480MHz**

28/10/2019

CF  
2.48GHz  
Span  
2.5MHz  
RBW  
10kHz  
VBW  
30kHz  
Sweep Time  
100ms  
Detector Type  
Peak  
Port 1



CF  
2.48GHz  
Span  
2.5MHz  
RBW  
10kHz  
VBW  
30kHz  
Sweep Time  
100ms  
Detector Type  
Sample



| 20dB(Hz) | Fl-20dB(Hz) | Fh-20dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|----------|-------------|-------------|---------|------------|------------|-----------|------|
| 920k     | 2.479536G   | 2.480456G   | 928.75k | 2.479524G  | 2.480453G  | Inf       | 1    |

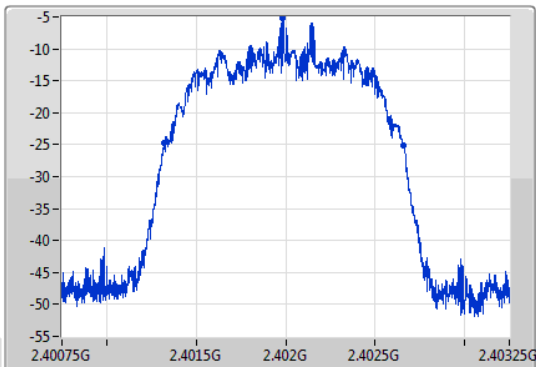
**BT-EDR(2Mbps)**

**EBW**

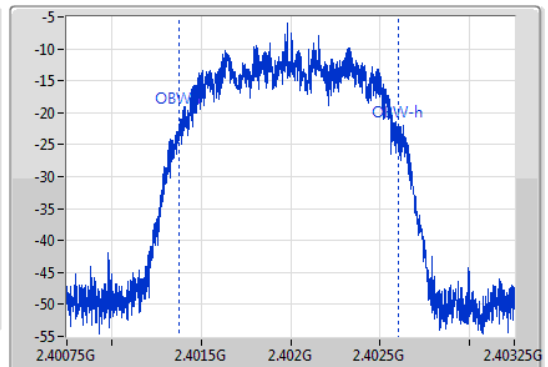
**2402MHz**

28/10/2019

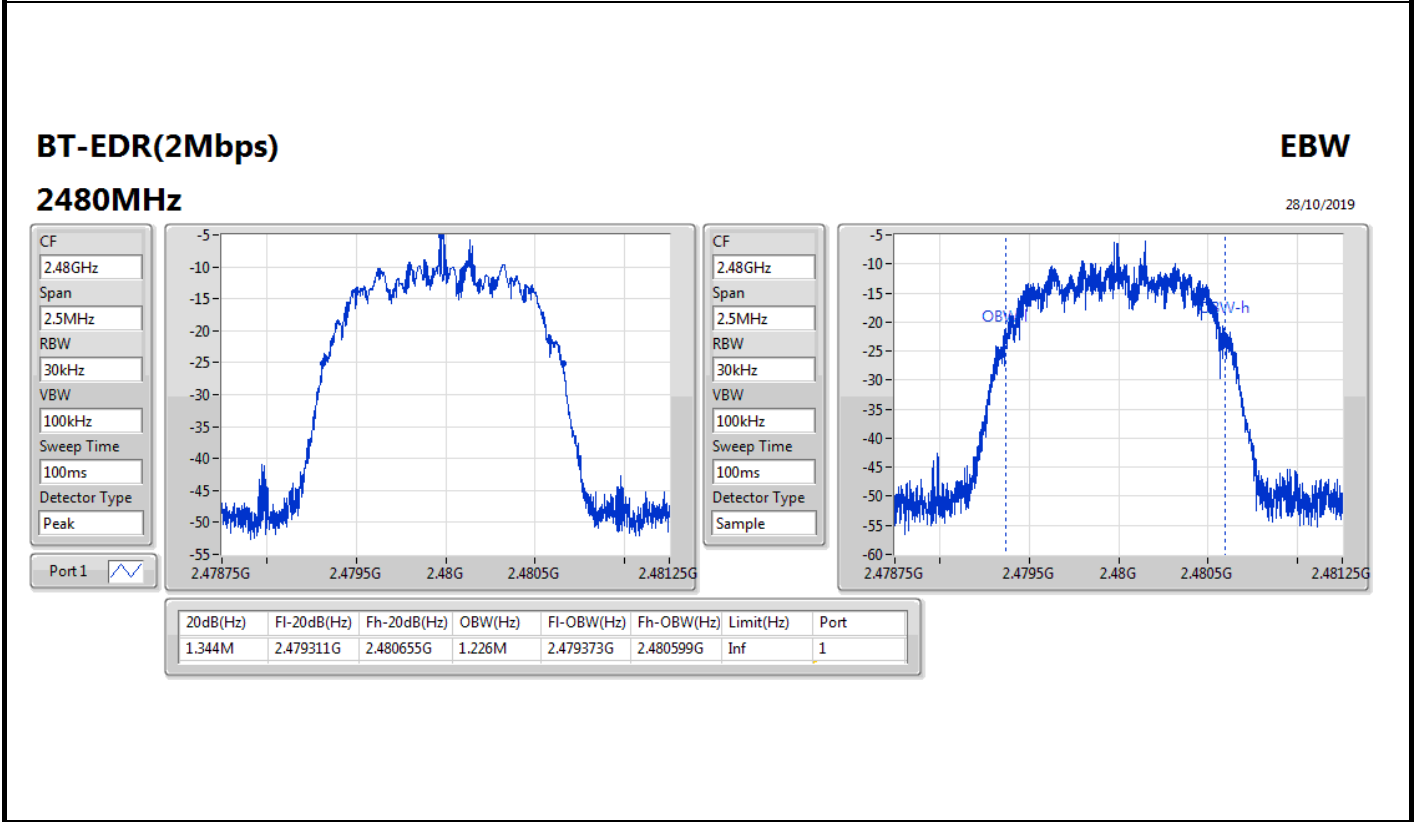
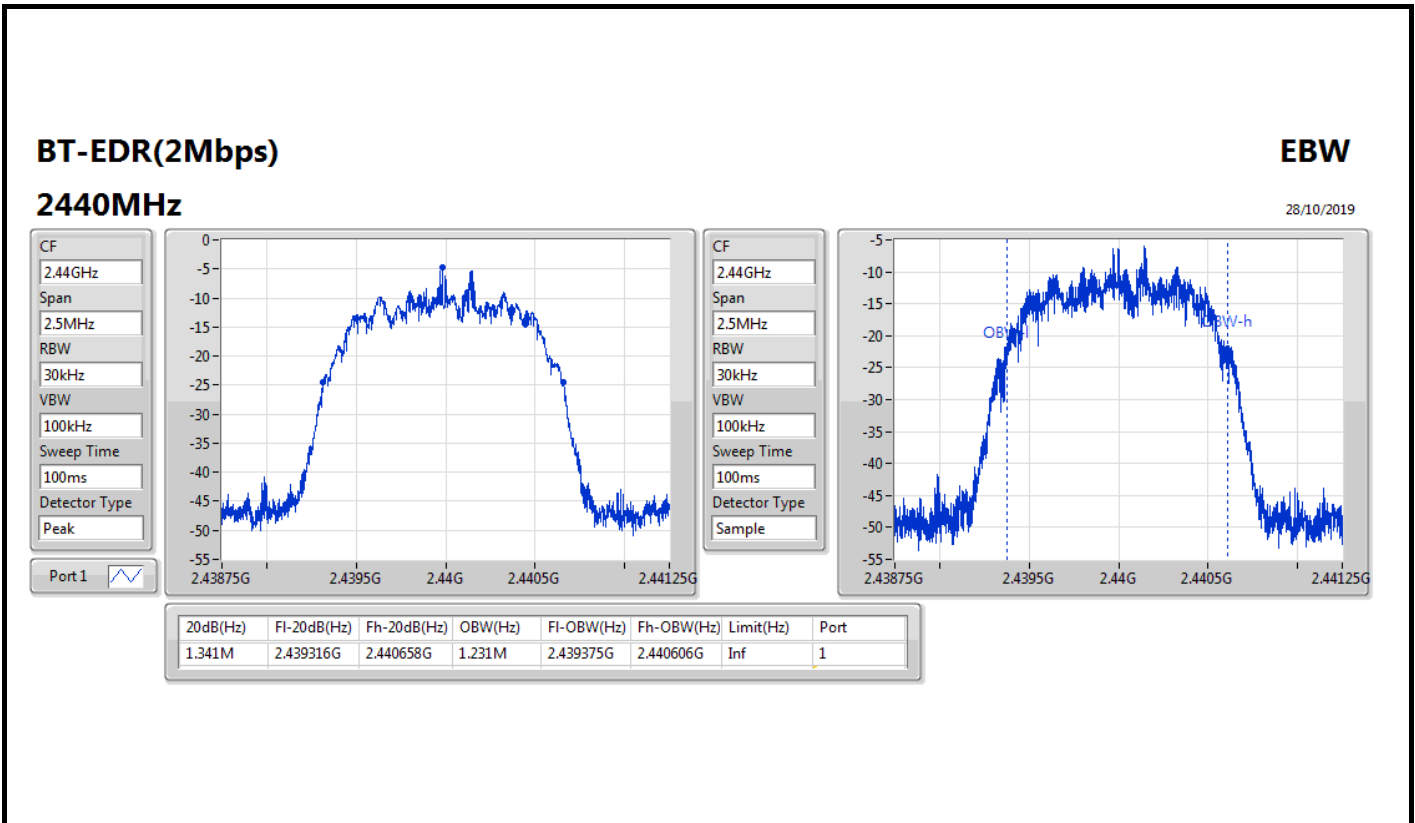
CF  
2.402GHz  
Span  
2.5MHz  
RBW  
30kHz  
VBW  
100kHz  
Sweep Time  
100ms  
Detector Type  
Peak  
Port 1

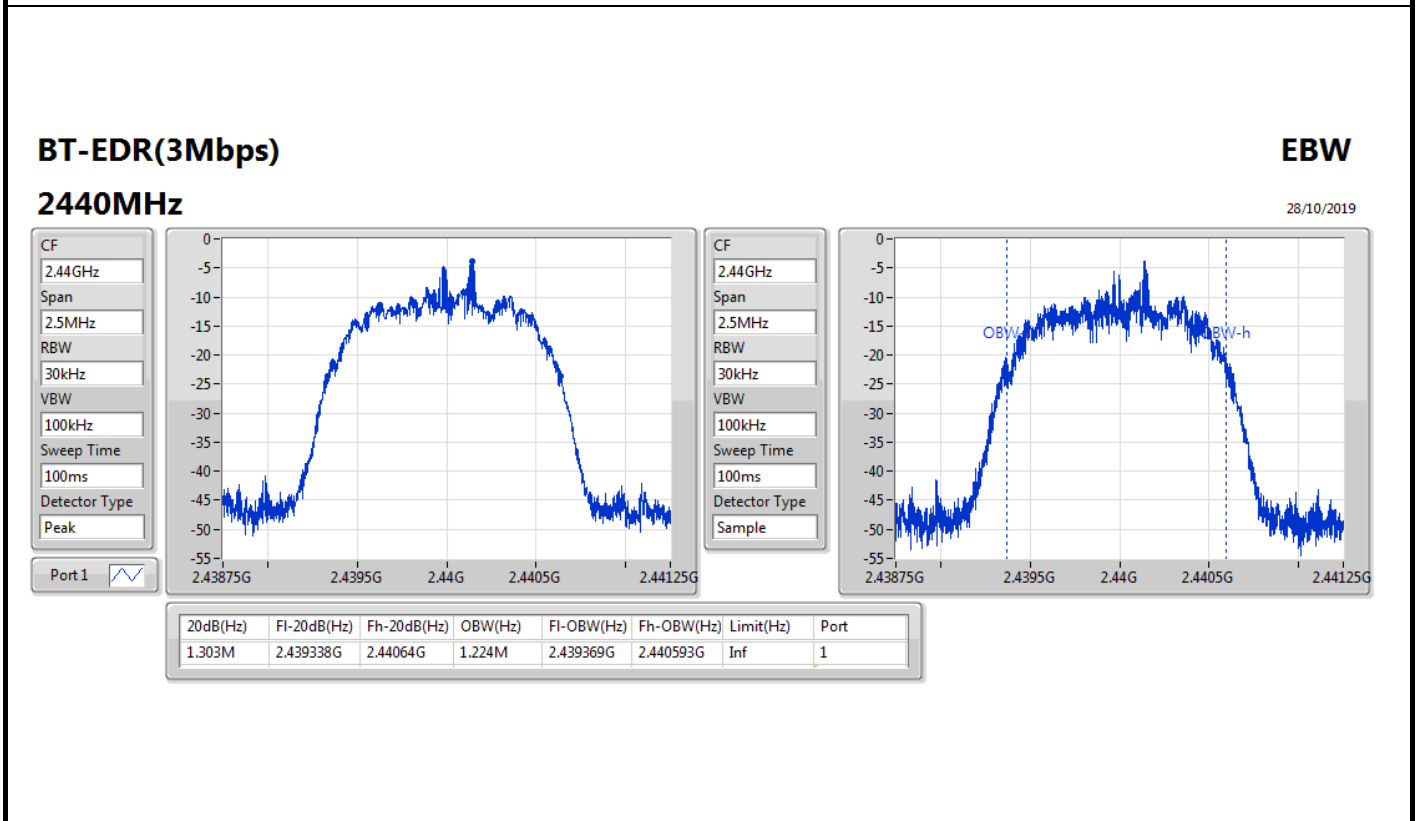
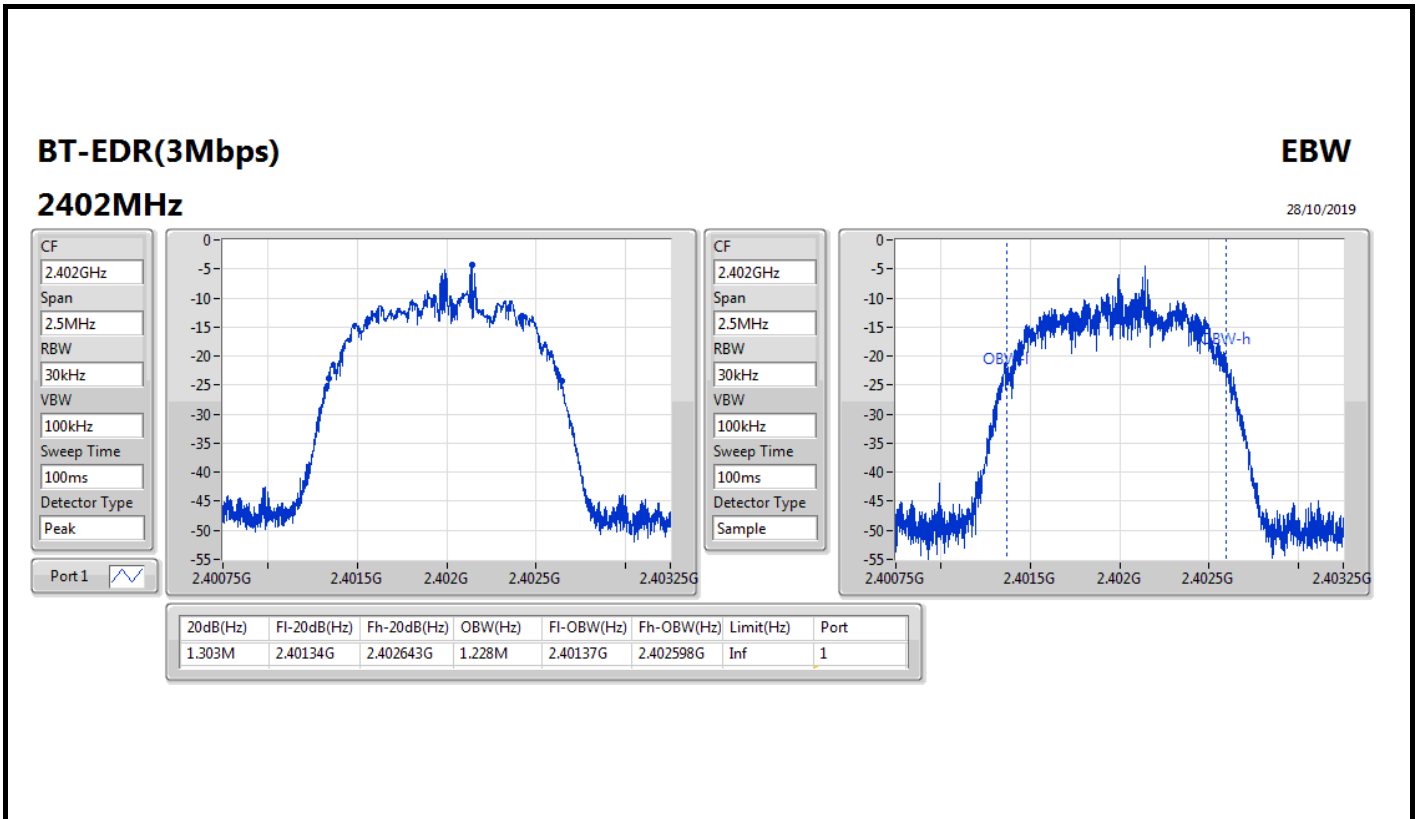


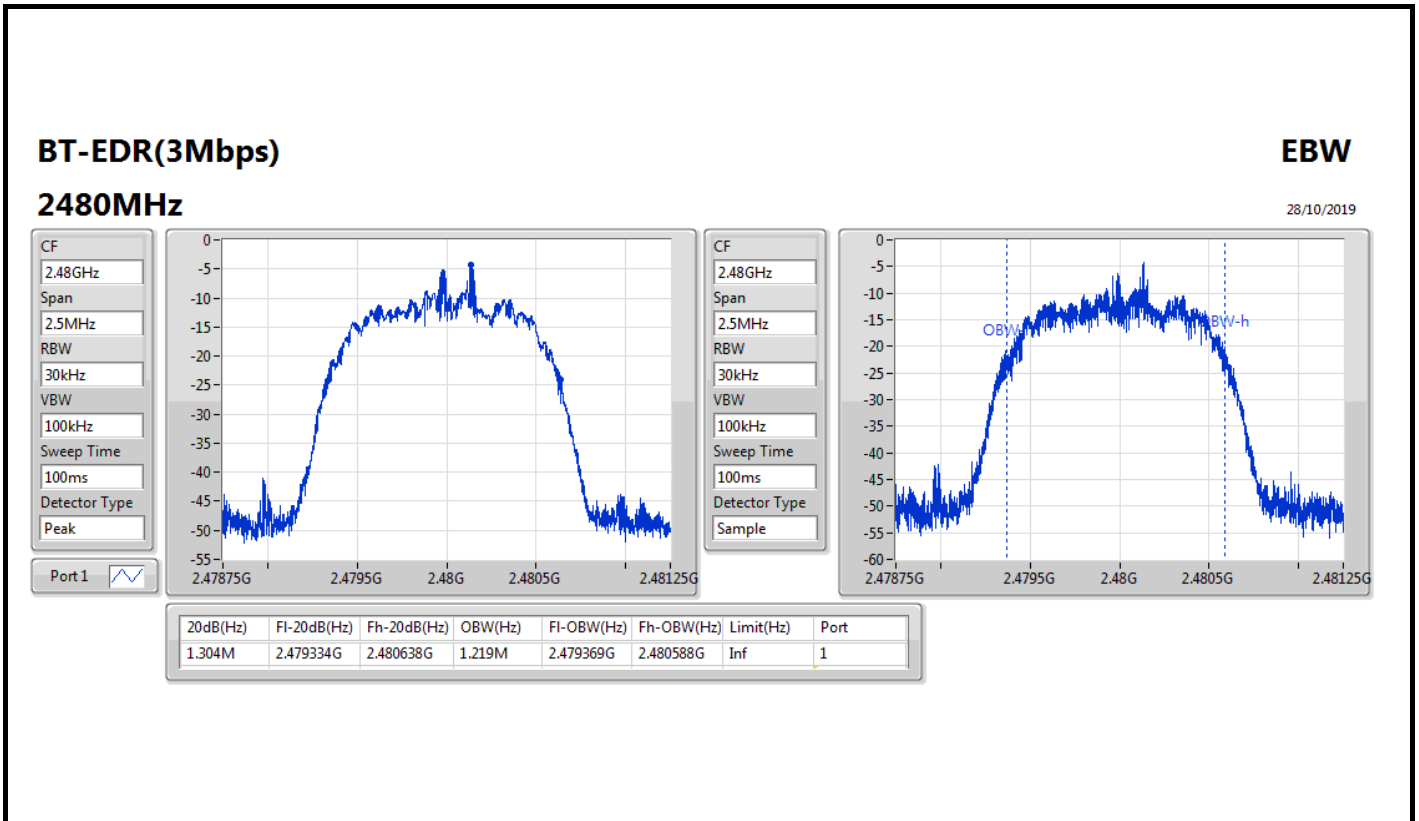
CF  
2.402GHz  
Span  
2.5MHz  
RBW  
30kHz  
VBW  
100kHz  
Sweep Time  
100ms  
Detector Type  
Sample



| 20dB(Hz) | Fl-20dB(Hz) | Fh-20dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|----------|-------------|-------------|---------|------------|------------|-----------|------|
| 1.341M   | 2.40132G    | 2.402661G   | 1.223M  | 2.401379G  | 2.402601G  | Inf       | 1    |









**Summary**

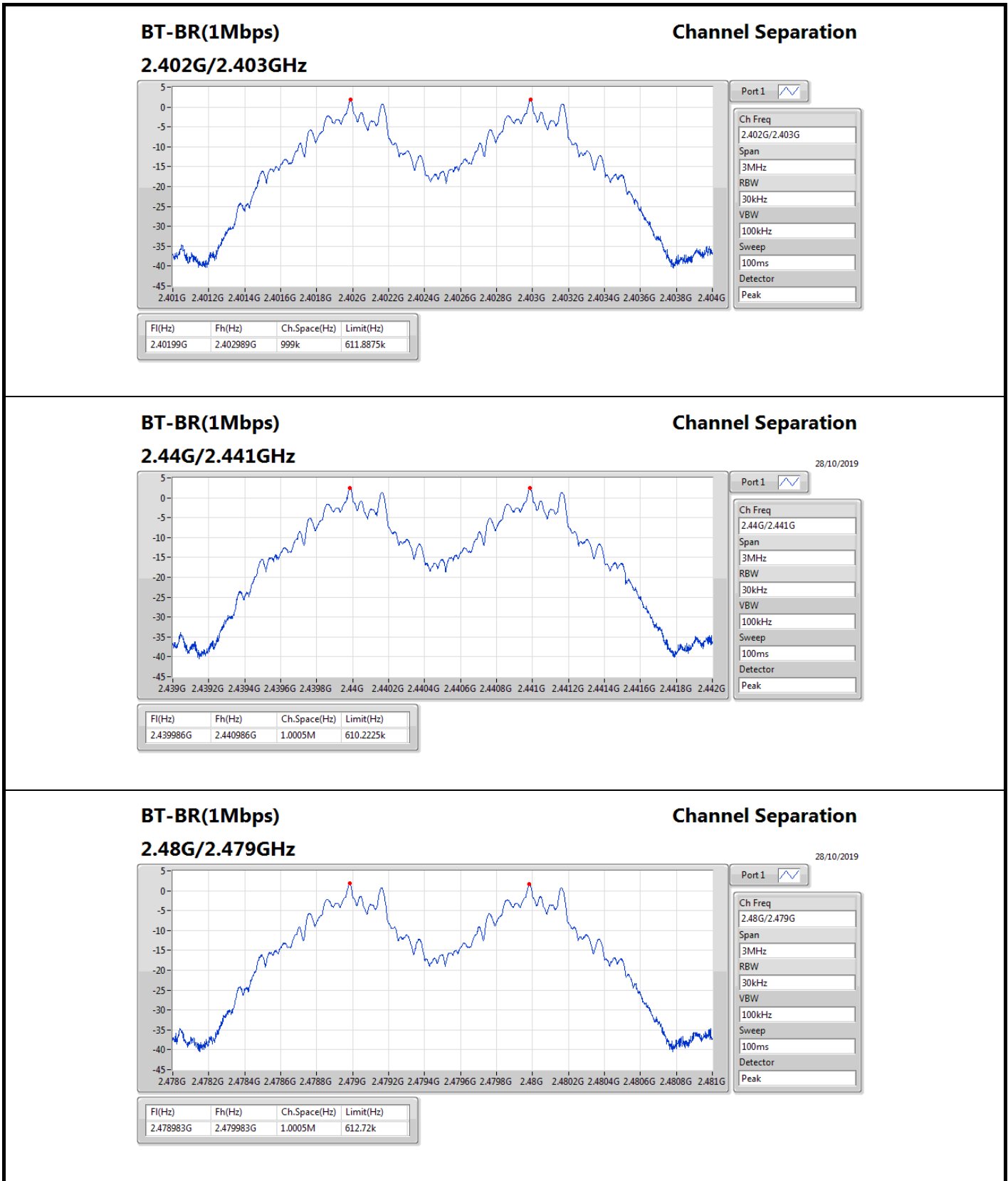
| Mode          | Max-Space<br>(Hz) | Min-Space<br>(Hz) |
|---------------|-------------------|-------------------|
| 2.4-2.4835GHz | -                 | -                 |
| BT-BR(1Mbps)  | 1.0005M           | 999k              |
| BT-EDR(2Mbps) | 1.0005M           | 1.0005M           |
| BT-EDR(3Mbps)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

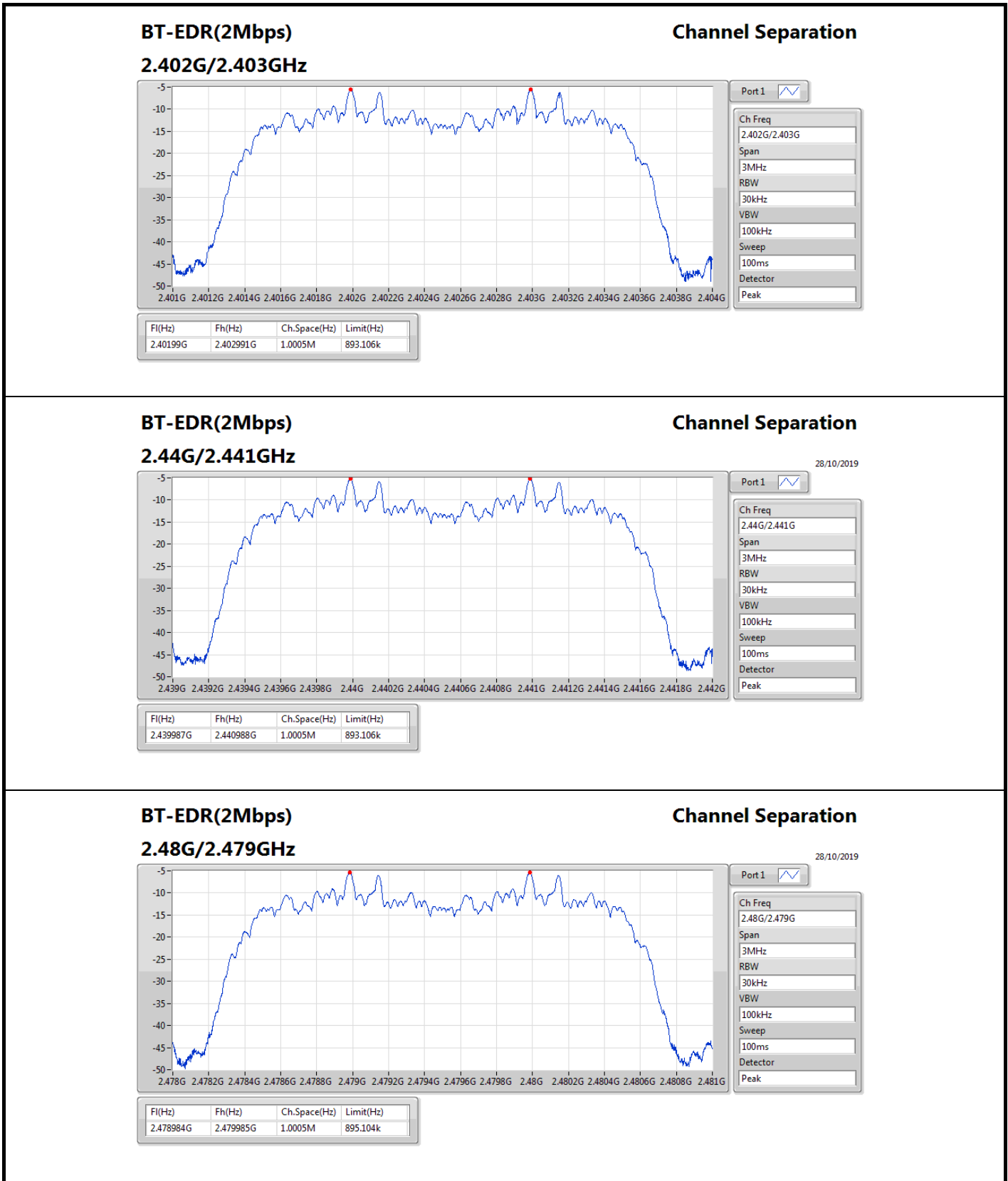


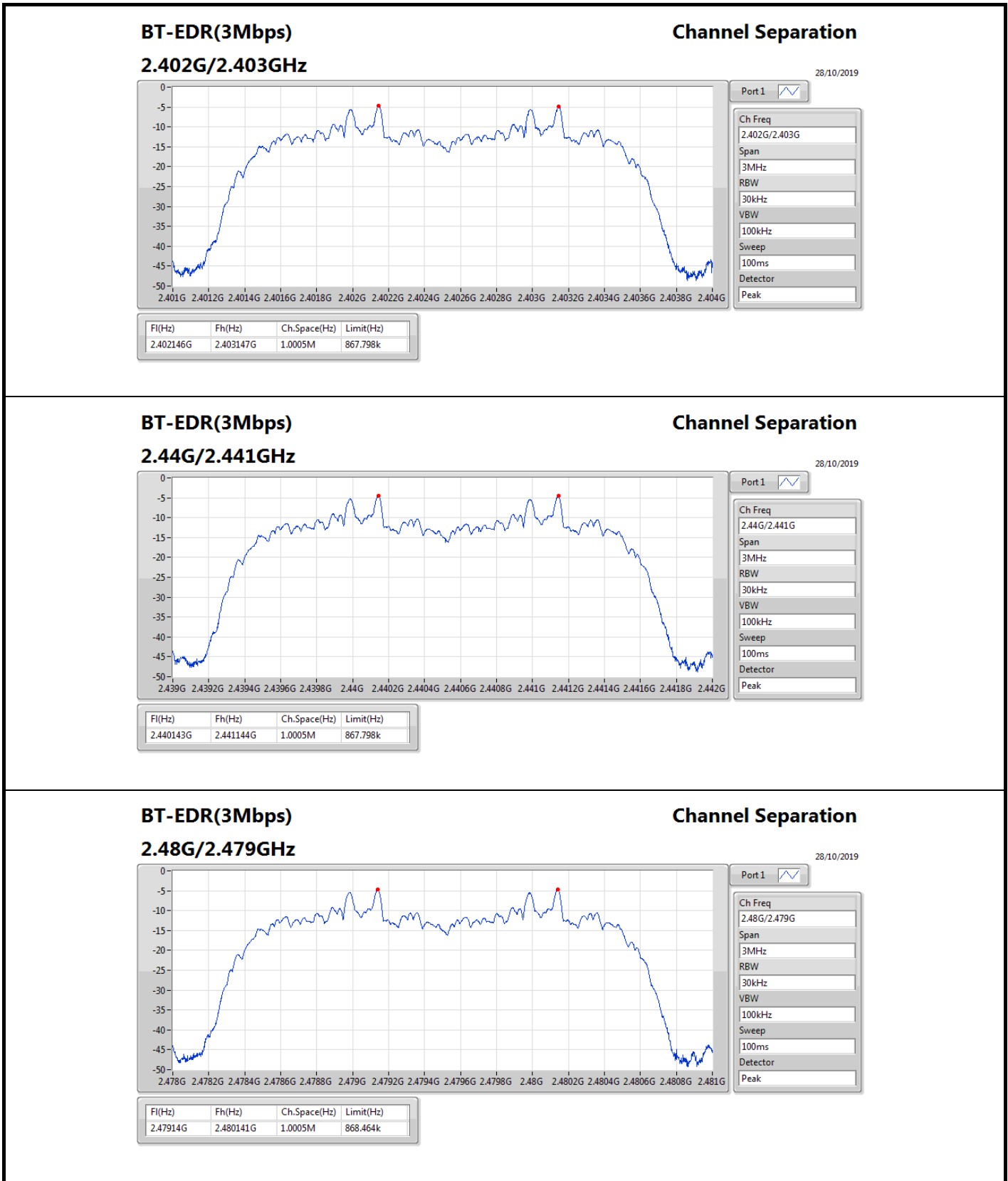
**Result**

| Mode          | Result | Fl<br>(Hz) | Fh<br>(Hz) | Ch.Space<br>(Hz) | Limit<br>(Hz) |
|---------------|--------|------------|------------|------------------|---------------|
| BT-BR(1Mbps)  | -      | -          | -          | -                | -             |
| 2402MHz       | Pass   | 2.40199G   | 2.402989G  | 999k             | 611.8875k     |
| 2440MHz       | Pass   | 2.439986G  | 2.440986G  | 1.0005M          | 610.2225k     |
| 2480MHz       | Pass   | 2.478983G  | 2.479983G  | 1.0005M          | 612.72k       |
| BT-EDR(2Mbps) | -      | -          | -          | -                | -             |
| 2402MHz       | Pass   | 2.40199G   | 2.402991G  | 1.0005M          | 893.106k      |
| 2440MHz       | Pass   | 2.439987G  | 2.440988G  | 1.0005M          | 893.106k      |
| 2480MHz       | Pass   | 2.478984G  | 2.479985G  | 1.0005M          | 895.104k      |
| BT-EDR(3Mbps) | -      | -          | -          | -                | -             |
| 2402MHz       | Pass   | 2.402146G  | 2.403147G  | 1.0005M          | 867.798k      |
| 2440MHz       | Pass   | 2.440143G  | 2.441144G  | 1.0005M          | 867.798k      |
| 2480MHz       | Pass   | 2.47914G   | 2.480141G  | 1.0005M          | 868.464k      |











**Summary**

| Mode          | Power (dBm) | Power (W) |
|---------------|-------------|-----------|
| 2.4-2.4835GHz | -           | -         |
| BT-BR(1Mbps)  | 2.30        | 0.00170   |
| BT-EDR(2Mbps) | -2.43       | 0.00057   |
| BT-EDR(3Mbps) | -2.17       | 0.00061   |



Result

| Mode          | Result | Gain (dBi) | Power (dBm) | Power Limit (dBm) |
|---------------|--------|------------|-------------|-------------------|
| BT-BR(1Mbps)  | -      | -          | -           | -                 |
| 2402MHz       | Pass   | 4.03       | 1.75        | 21.00             |
| 2440MHz       | Pass   | 4.03       | 2.30        | 21.00             |
| 2480MHz       | Pass   | 4.03       | 1.65        | 21.00             |
| BT-EDR(2Mbps) | -      | -          | -           | -                 |
| 2402MHz       | Pass   | 4.03       | -2.79       | 21.00             |
| 2440MHz       | Pass   | 4.03       | -2.53       | 21.00             |
| 2480MHz       | Pass   | 4.03       | -2.43       | 21.00             |
| BT-EDR(3Mbps) | -      | -          | -           | -                 |
| 2402MHz       | Pass   | 4.03       | -3.19       | 21.00             |
| 2440MHz       | Pass   | 4.03       | -2.17       | 21.00             |
| 2480MHz       | Pass   | 4.03       | -2.54       | 21.00             |

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



**Summary**

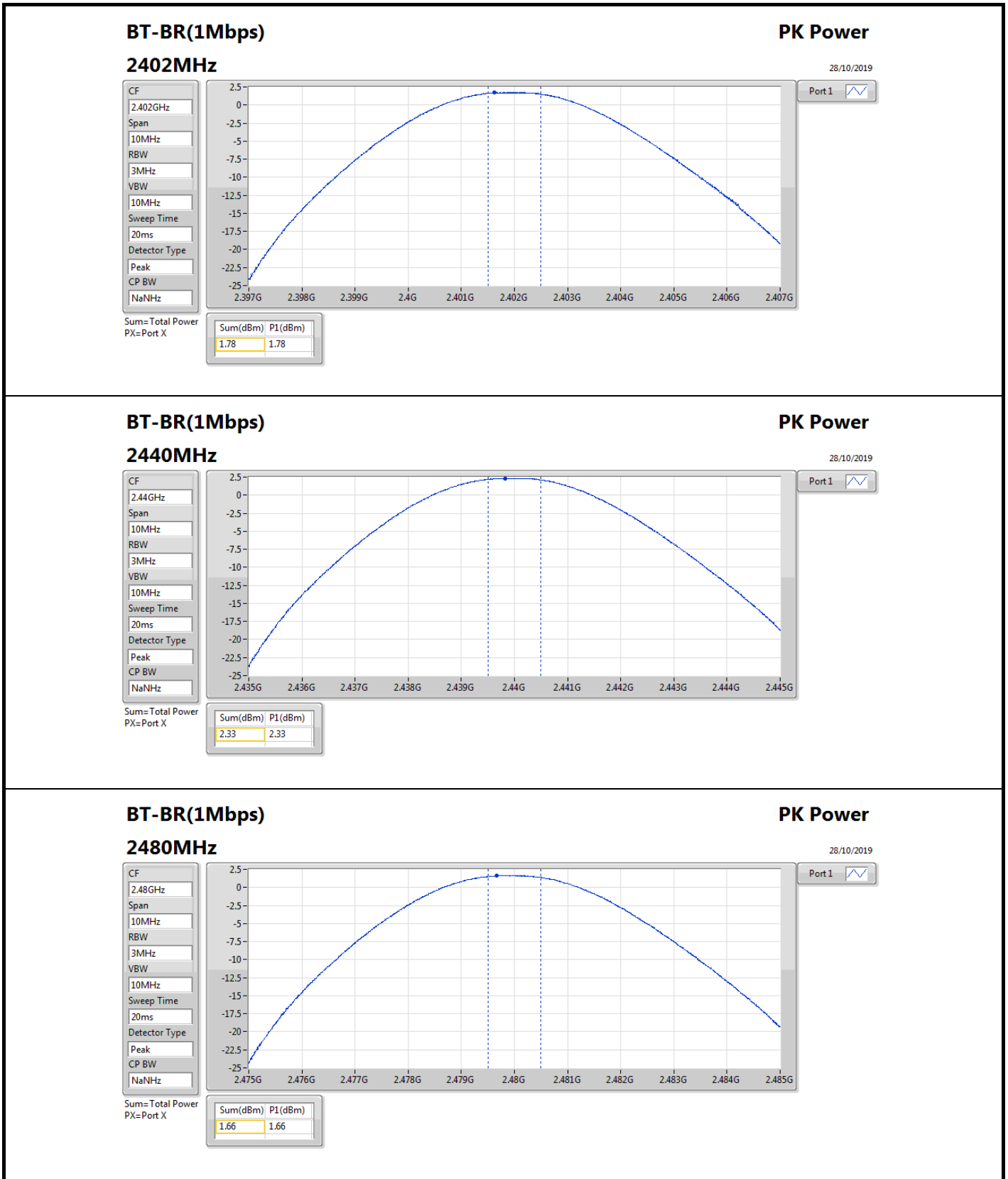
| Mode          | Power (dBm) | Power (W) |
|---------------|-------------|-----------|
| 2.4-2.4835GHz | -           | -         |
| BT-BR(1Mbps)  | 2.33        | 0.00171   |
| BT-EDR(2Mbps) | -0.54       | 0.00088   |
| BT-EDR(3Mbps) | -0.14       | 0.00097   |



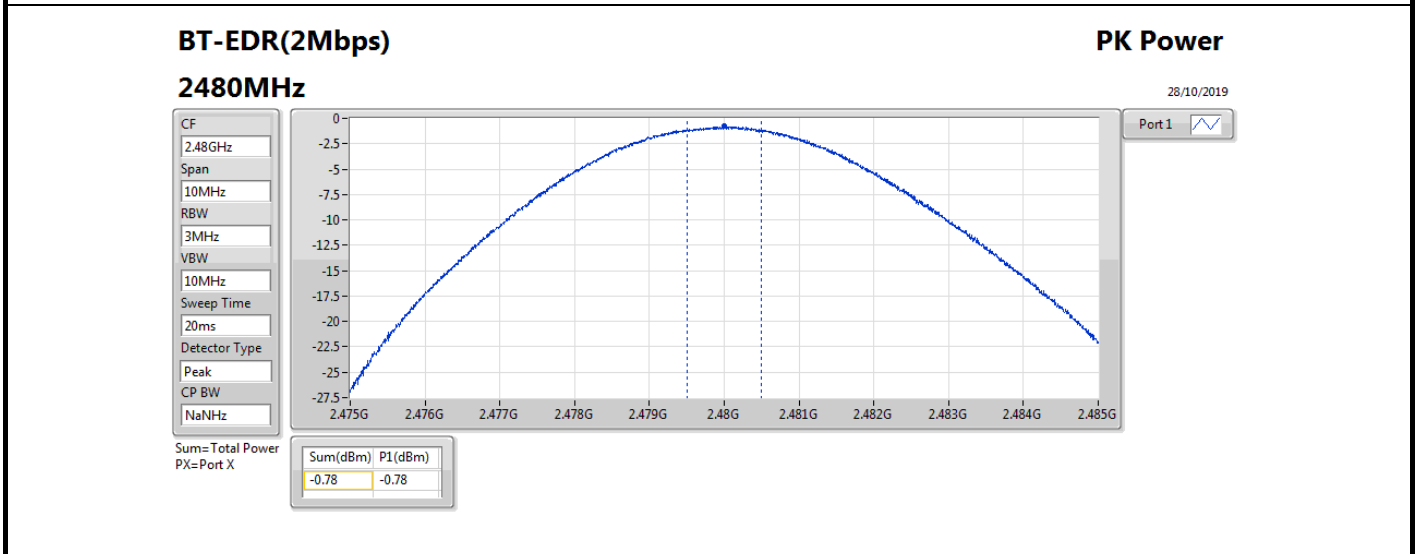
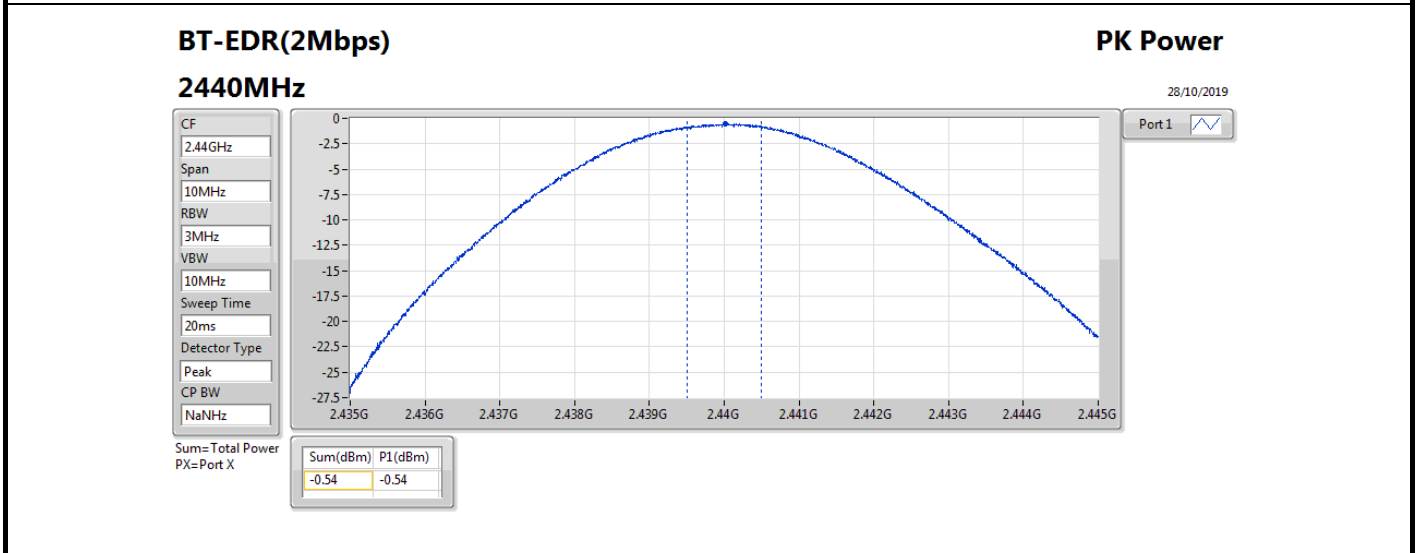
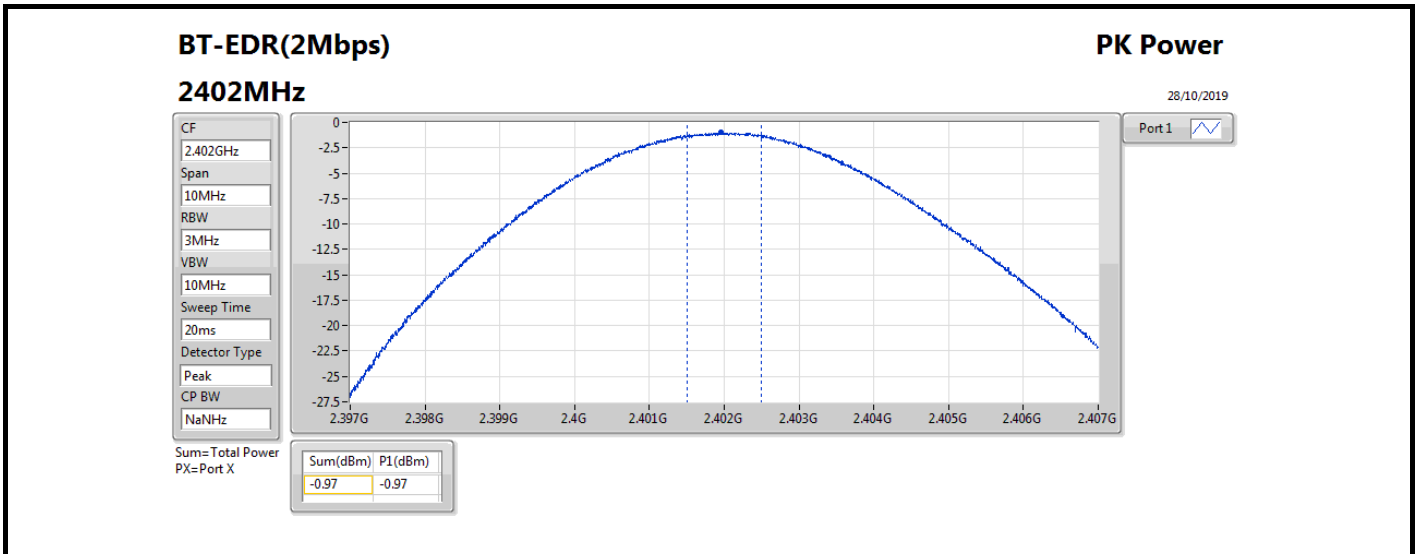
**Result**

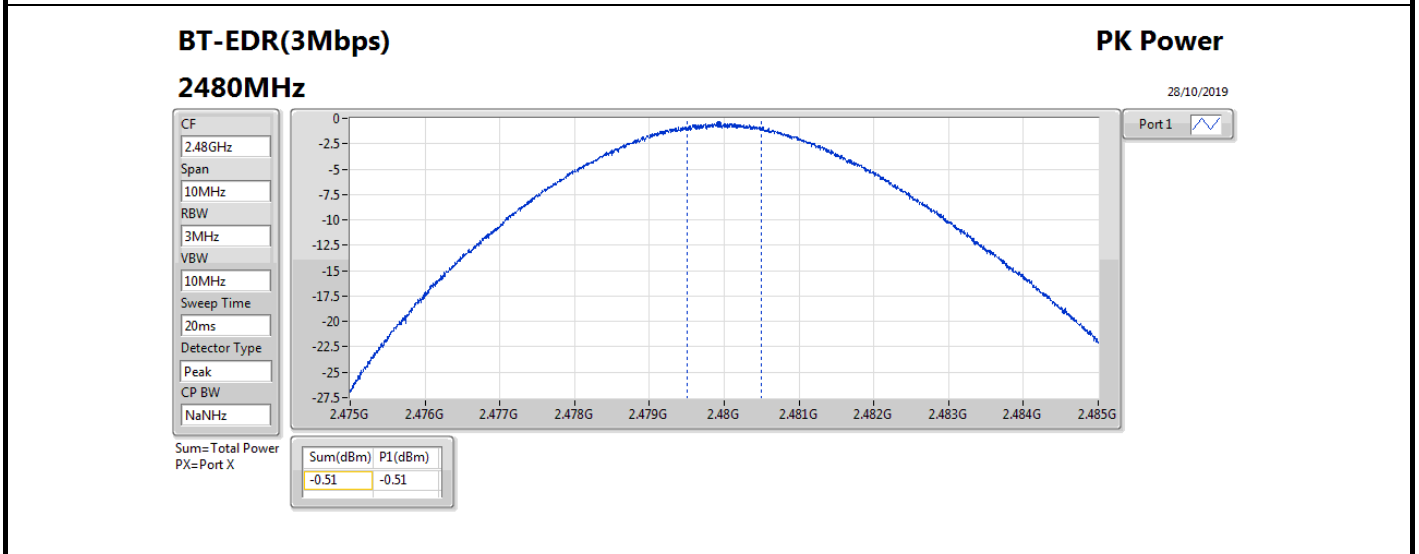
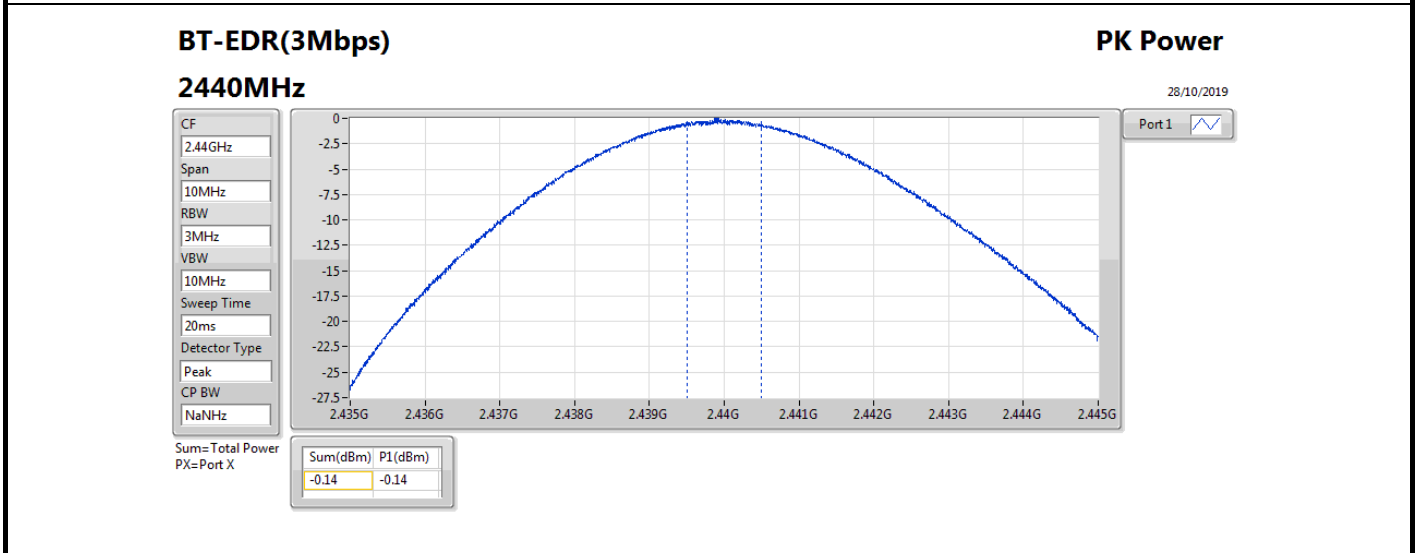
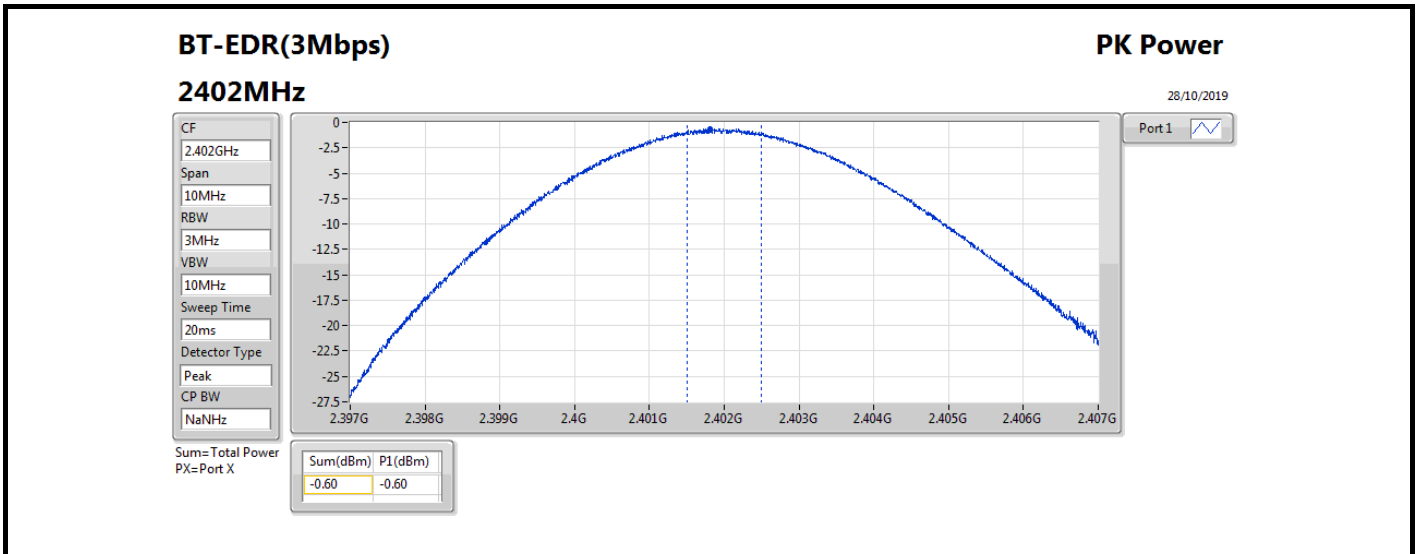
| Mode          | Result | Gain (dBi) | Power (dBm) | Power Limit (dBm) |
|---------------|--------|------------|-------------|-------------------|
| BT-BR(1Mbps)  | -      | -          | -           | -                 |
| 2402MHz       | Pass   | 4.03       | 1.78        | 21.00             |
| 2440MHz       | Pass   | 4.03       | 2.33        | 21.00             |
| 2480MHz       | Pass   | 4.03       | 1.66        | 21.00             |
| BT-EDR(2Mbps) | -      | -          | -           | -                 |
| 2402MHz       | Pass   | 4.03       | -0.97       | 21.00             |
| 2440MHz       | Pass   | 4.03       | -0.54       | 21.00             |
| 2480MHz       | Pass   | 4.03       | -0.78       | 21.00             |
| BT-EDR(3Mbps) | -      | -          | -           | -                 |
| 2402MHz       | Pass   | 4.03       | -0.60       | 21.00             |
| 2440MHz       | Pass   | 4.03       | -0.14       | 21.00             |
| 2480MHz       | Pass   | 4.03       | -0.51       | 21.00             |

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











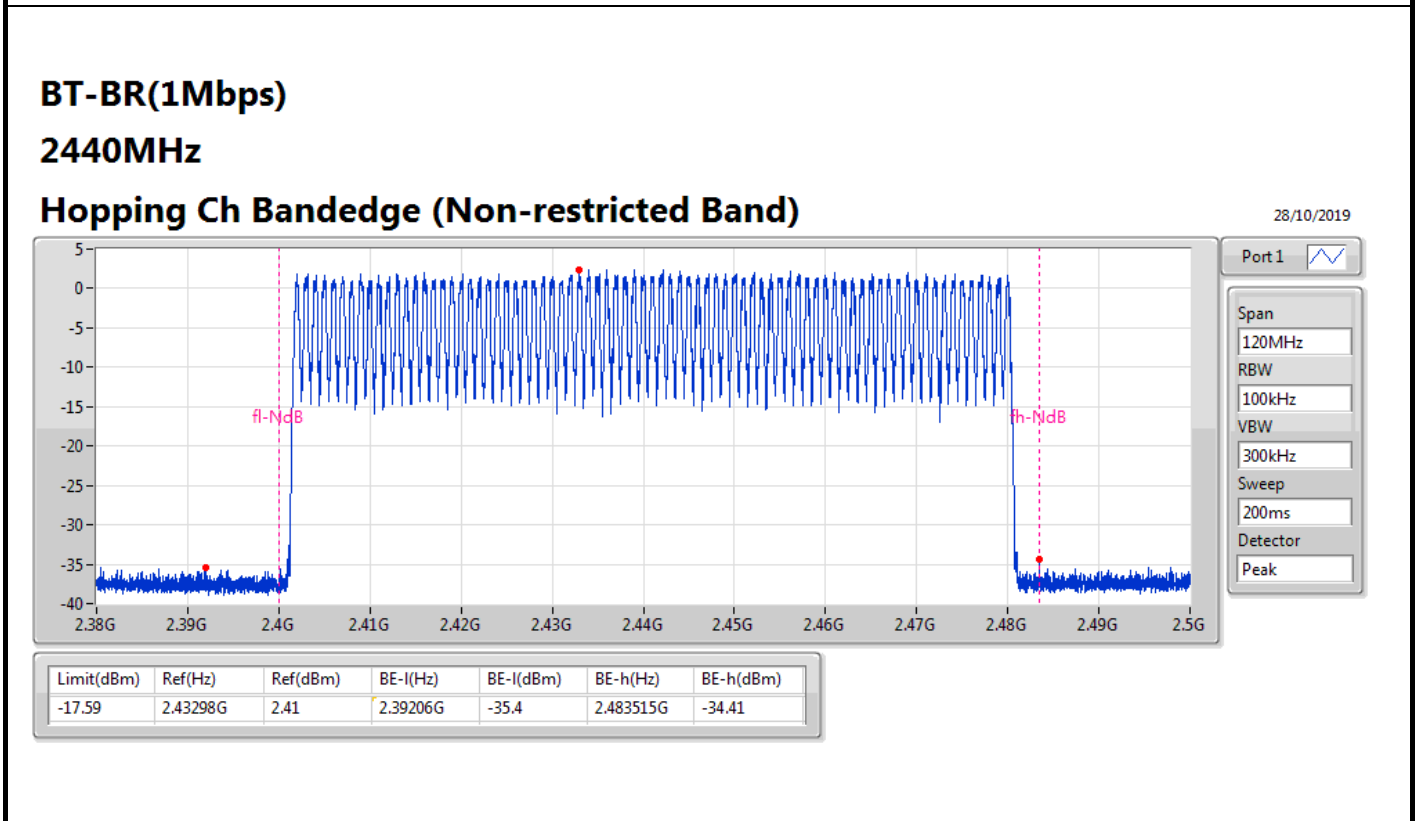
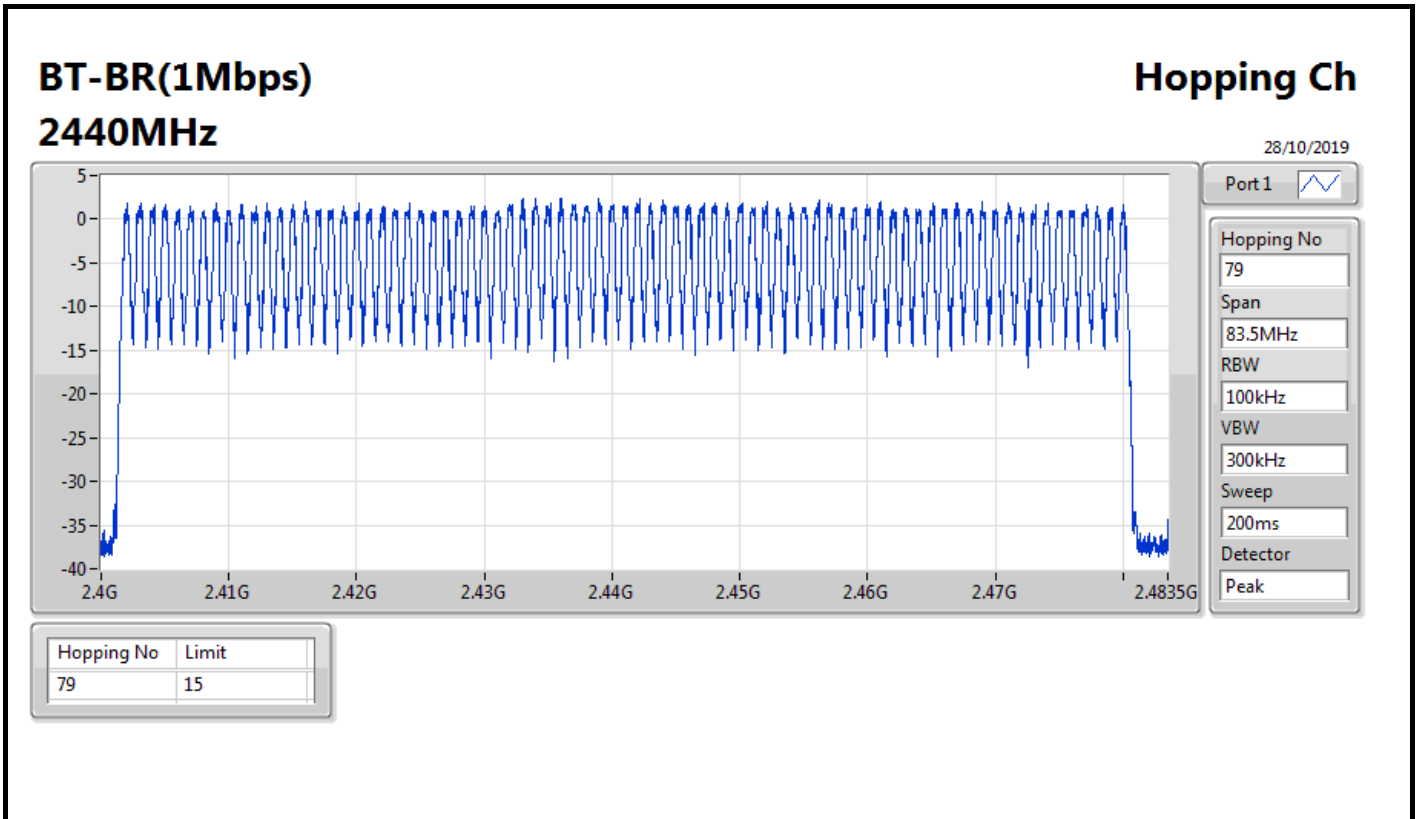
**Summary**

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



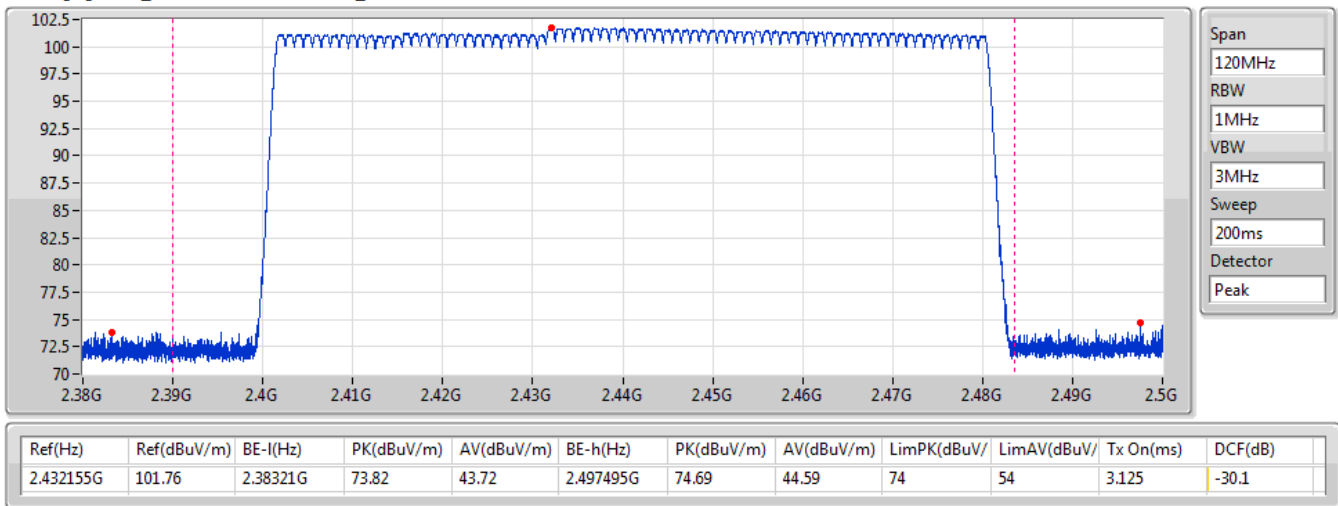
**Result**

| 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    |



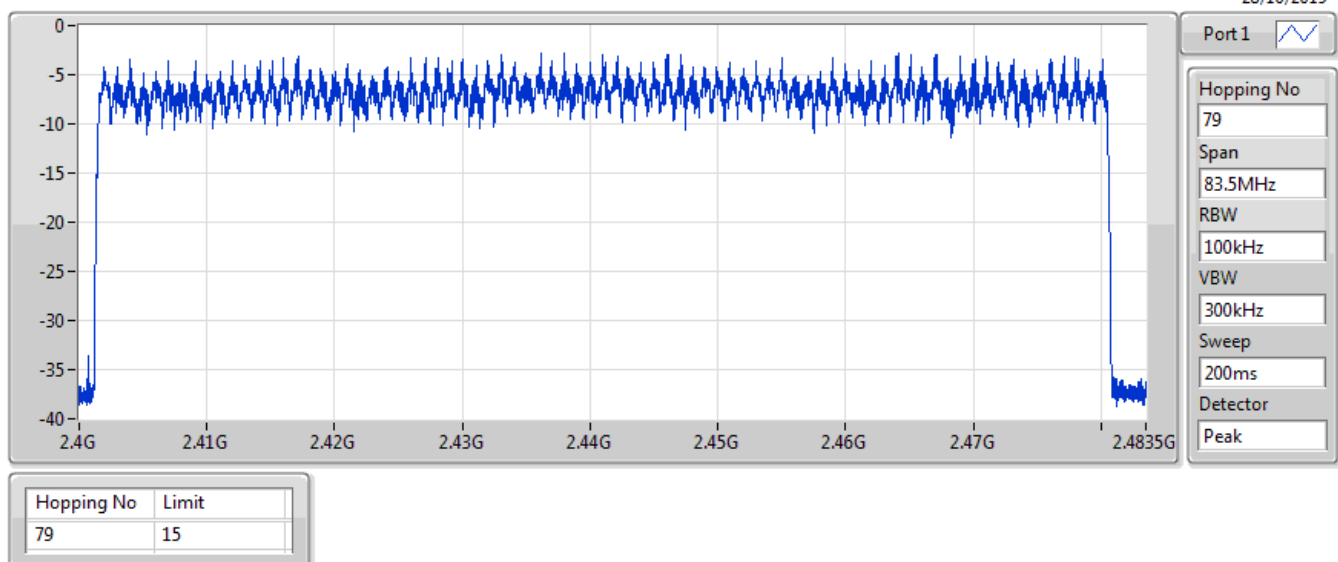
**BT-BR(1Mbps)**  
**2440MHz**  
**Hopping Ch Bandedge (Restricted Band)**

28/10/2019



**BT-EDR(2Mbps)** **Hopping Ch**  
**2440MHz**

28/10/2019



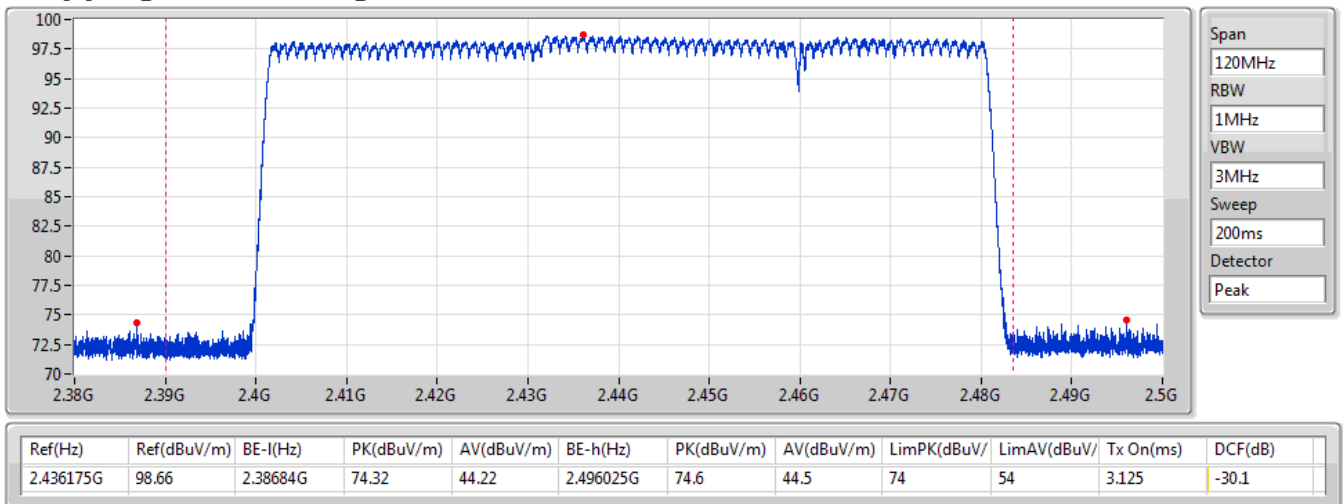
**BT-EDR(2Mbps)**  
**2440MHz**  
**Hopping Ch Bandedge (Non-restricted Band)**

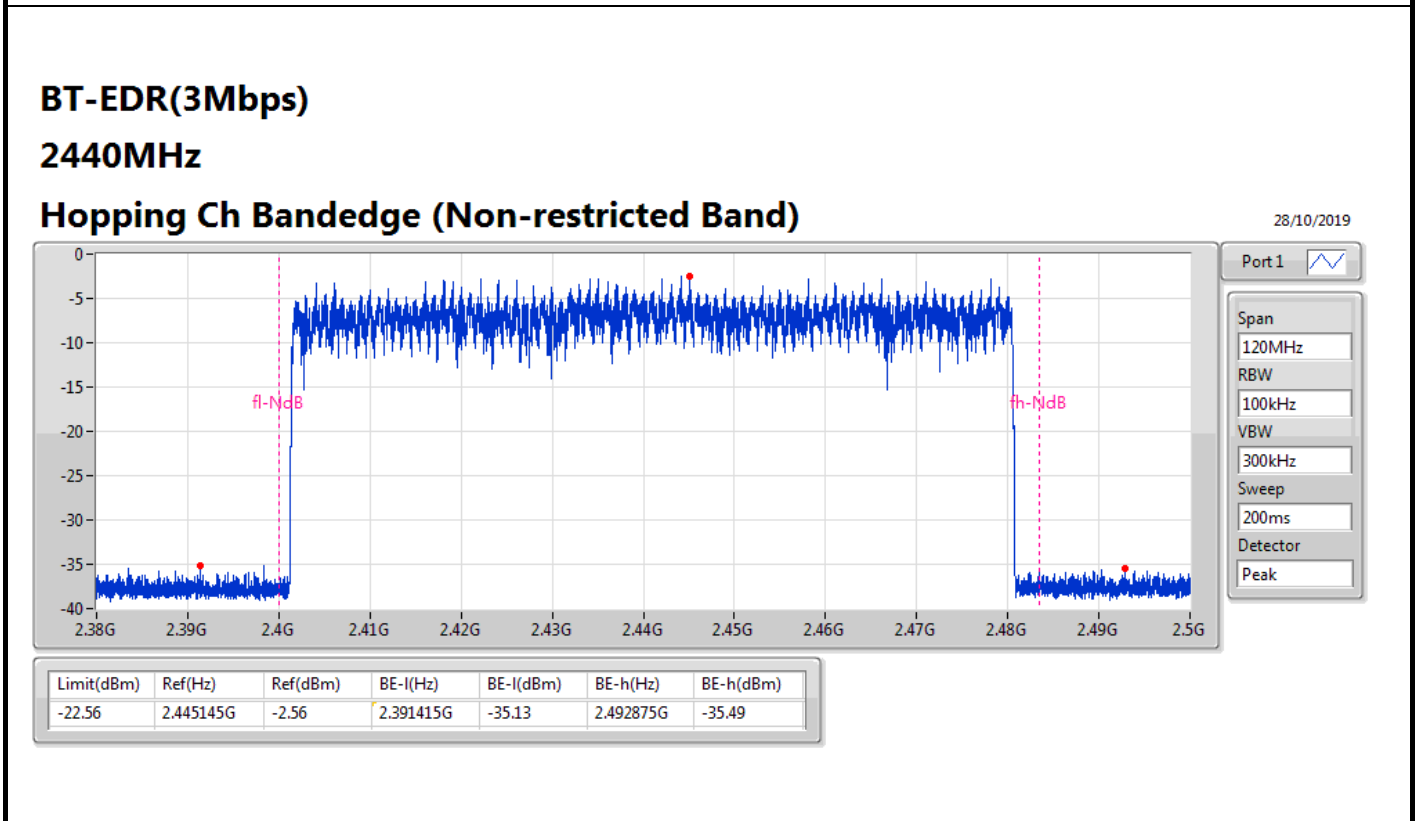
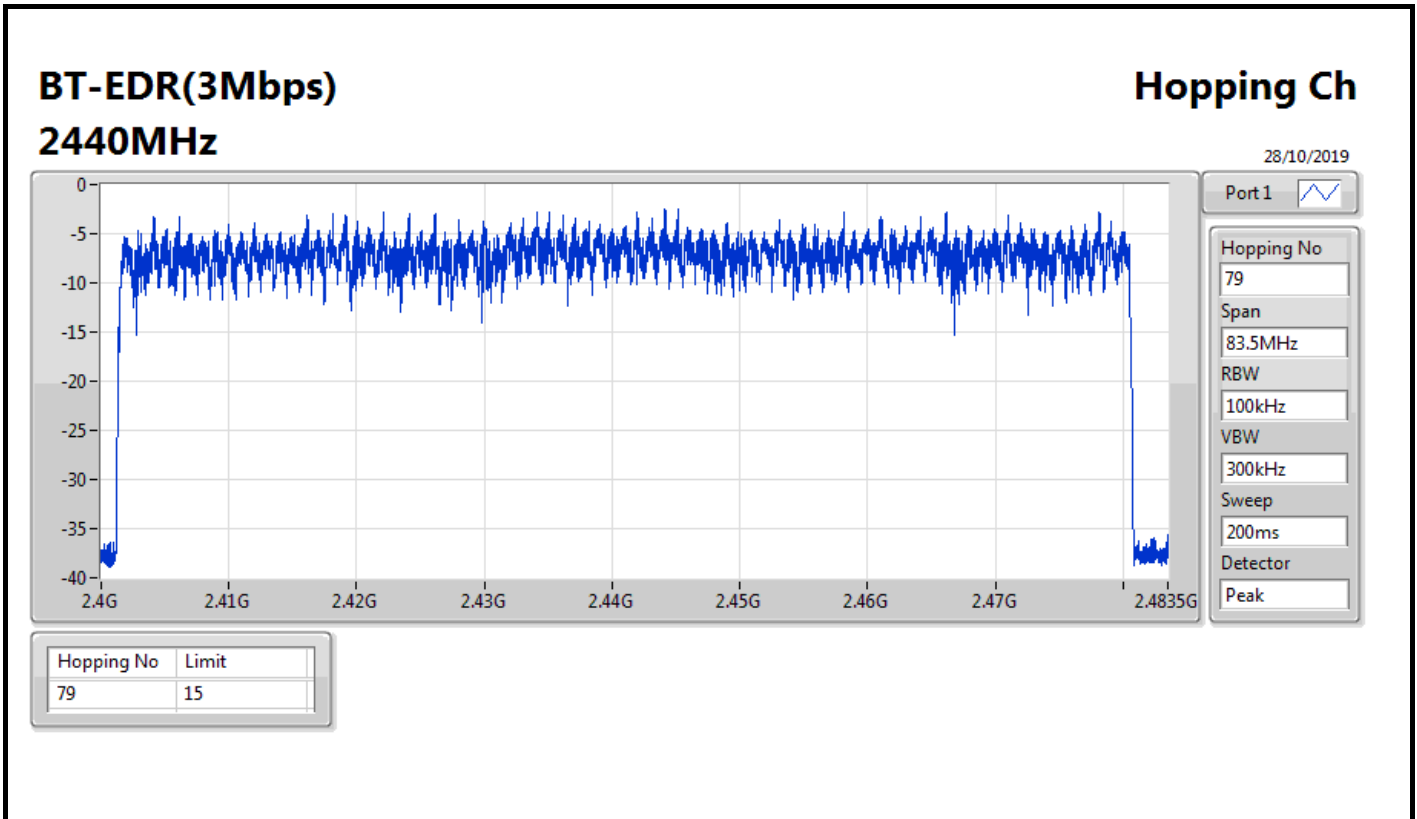
28/10/2019



**BT-EDR(2Mbps)**  
**2440MHz**  
**Hopping Ch Bandedge (Restricted Band)**

28/10/2019

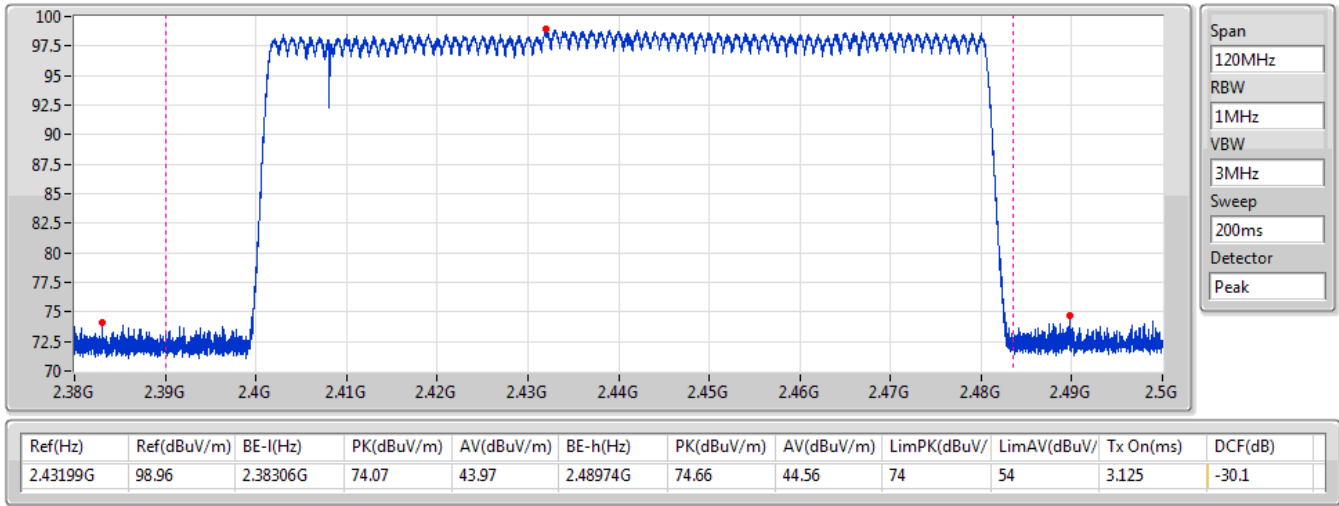






**BT-EDR(3Mbps)**  
**2440MHz**  
**Hopping Ch Bandedge (Restricted Band)**

28/10/2019





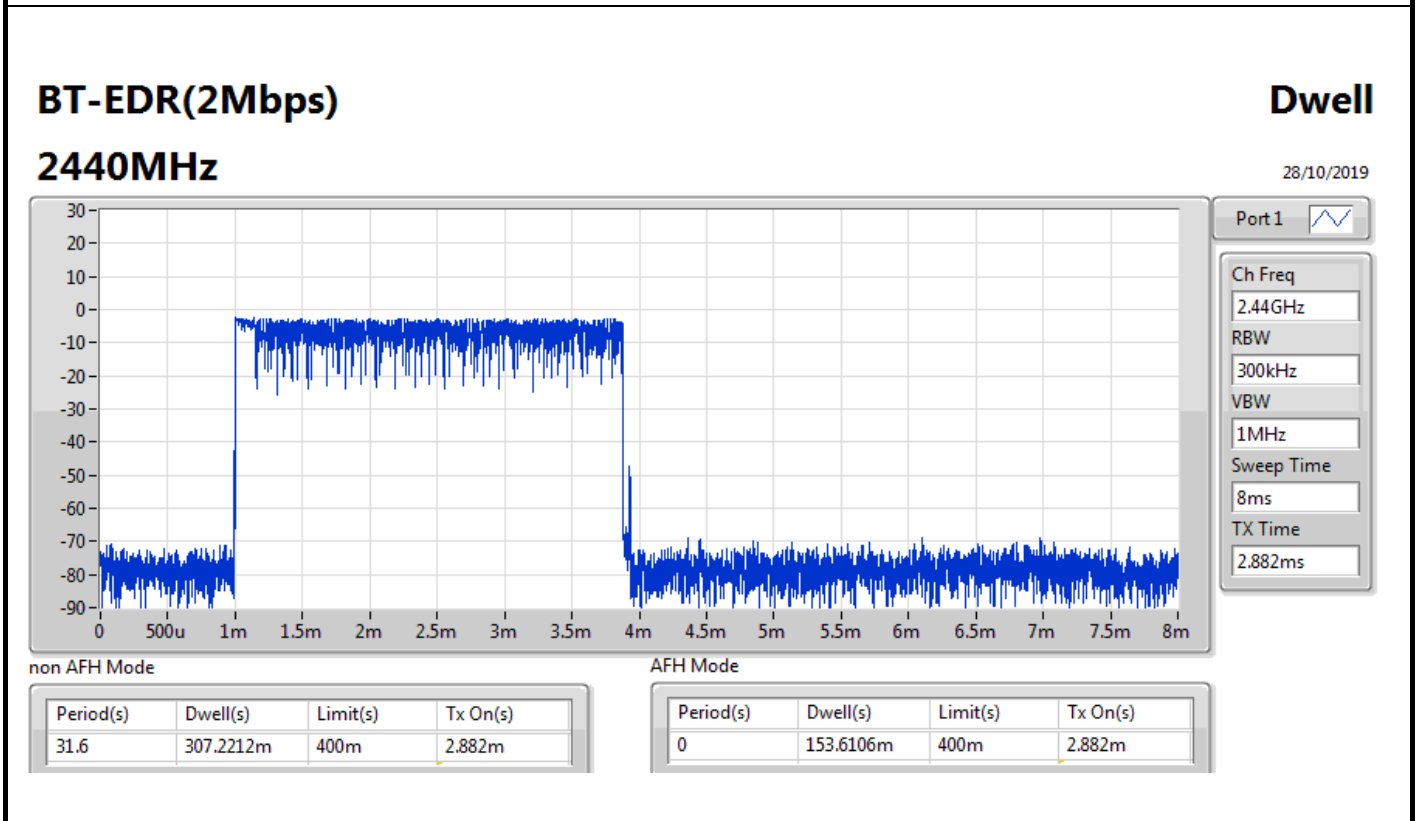
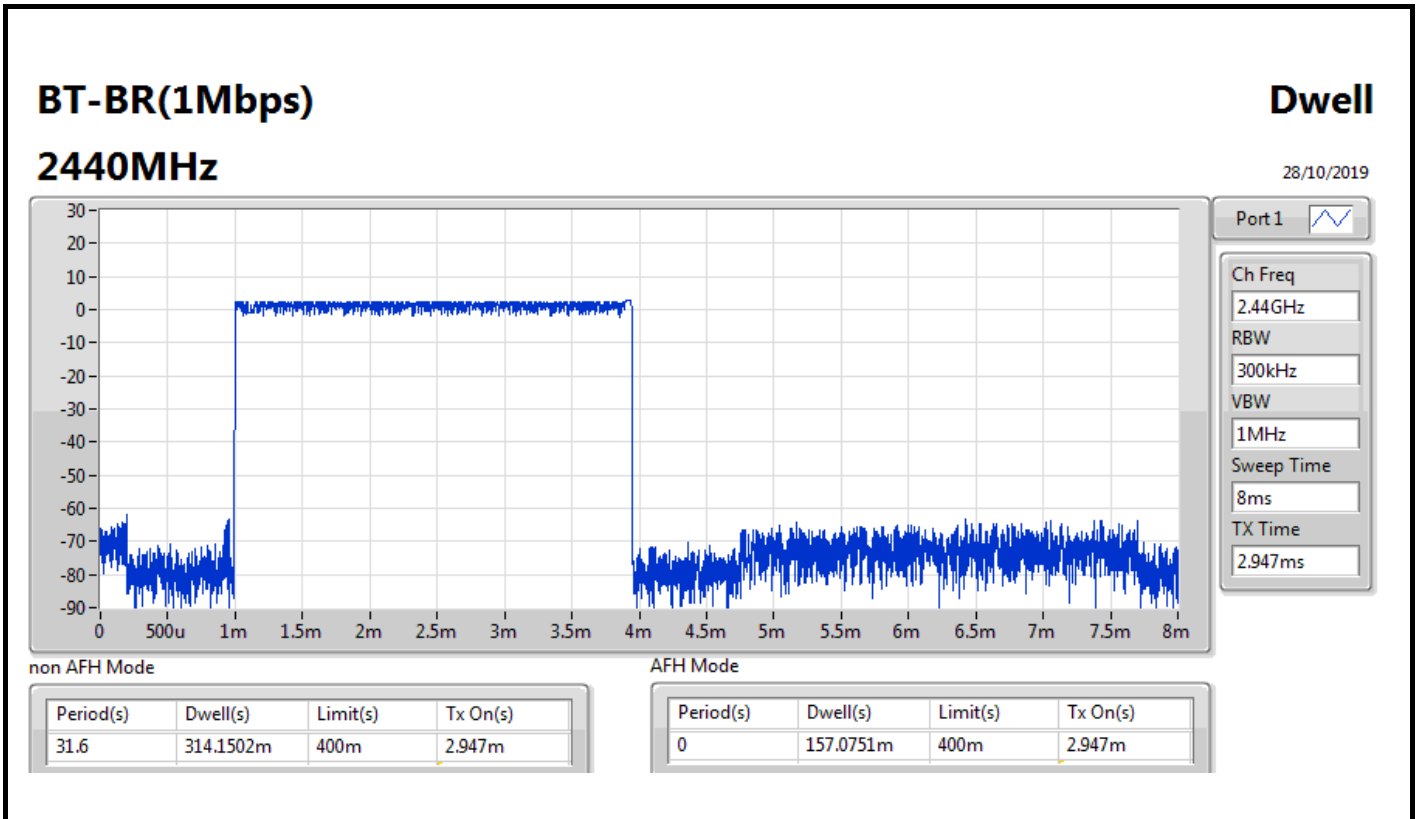
**Summary**

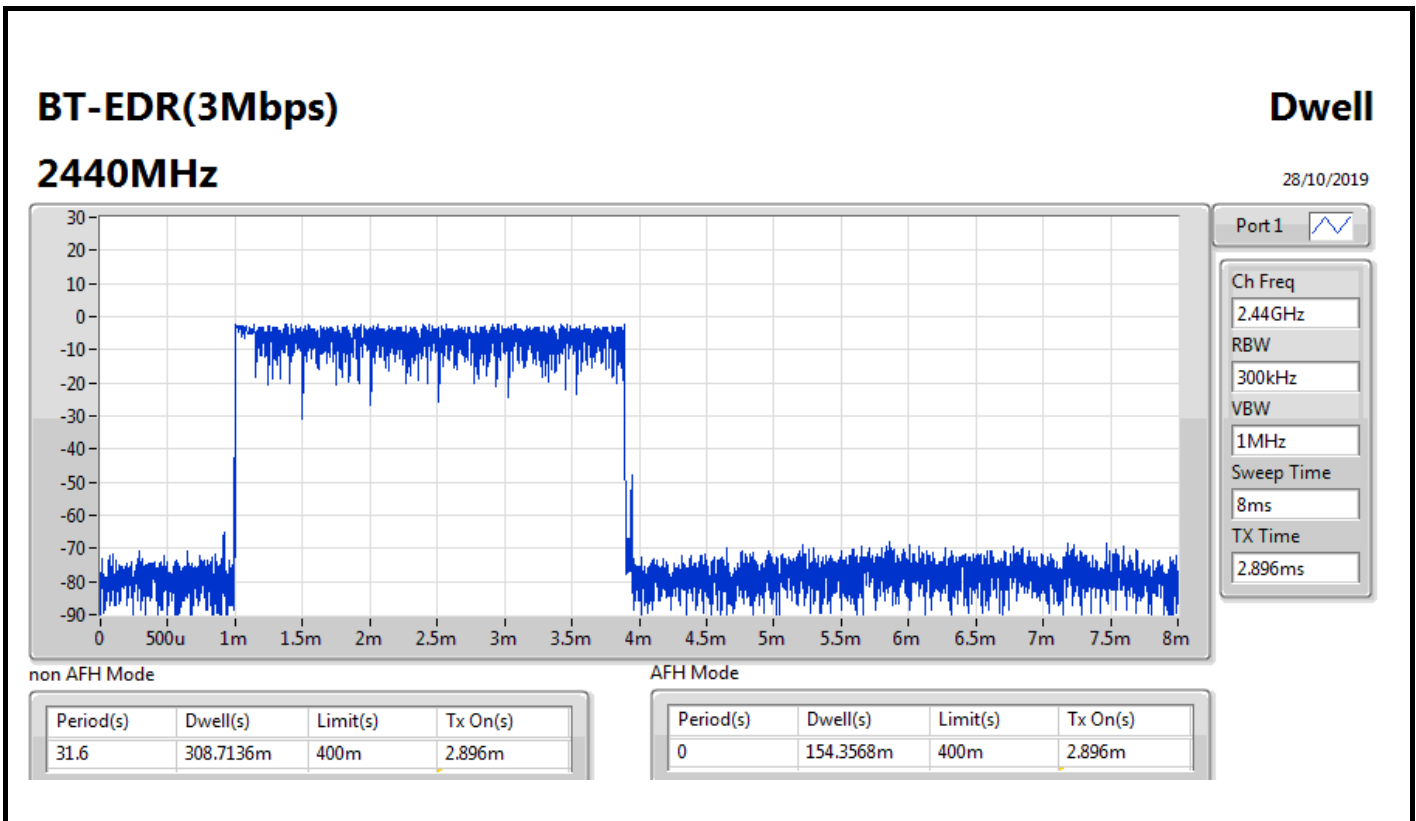
| <b>Mode</b>   | <b>Max-Dwell<br/>(s)</b> |
|---------------|--------------------------|
| 2.4-2.4835GHz | -                        |
| BT-BR(1Mbps)  | 314.1502m                |
| BT-EDR(2Mbps) | 307.2212m                |
| BT-EDR(3Mbps) | 308.7136m                |



Result

| Mode          | Result | Period (s) | Dwell (s) | Limit (s) | Tx On (s) |
|---------------|--------|------------|-----------|-----------|-----------|
| BT-BR(1Mbps)  | -      | -          | -         | -         | -         |
| 2440MHz       | Pass   | 31.6       | 314.1502m | 400m      | 2.947m    |
| BT-EDR(2Mbps) | -      | -          | -         | -         | -         |
| 2440MHz       | Pass   | 31.6       | 307.2212m | 400m      | 2.882m    |
| BT-EDR(3Mbps) | -      | -          | -         | -         | -         |
| 2440MHz       | Pass   | 31.6       | 308.7136m | 400m      | 2.896m    |







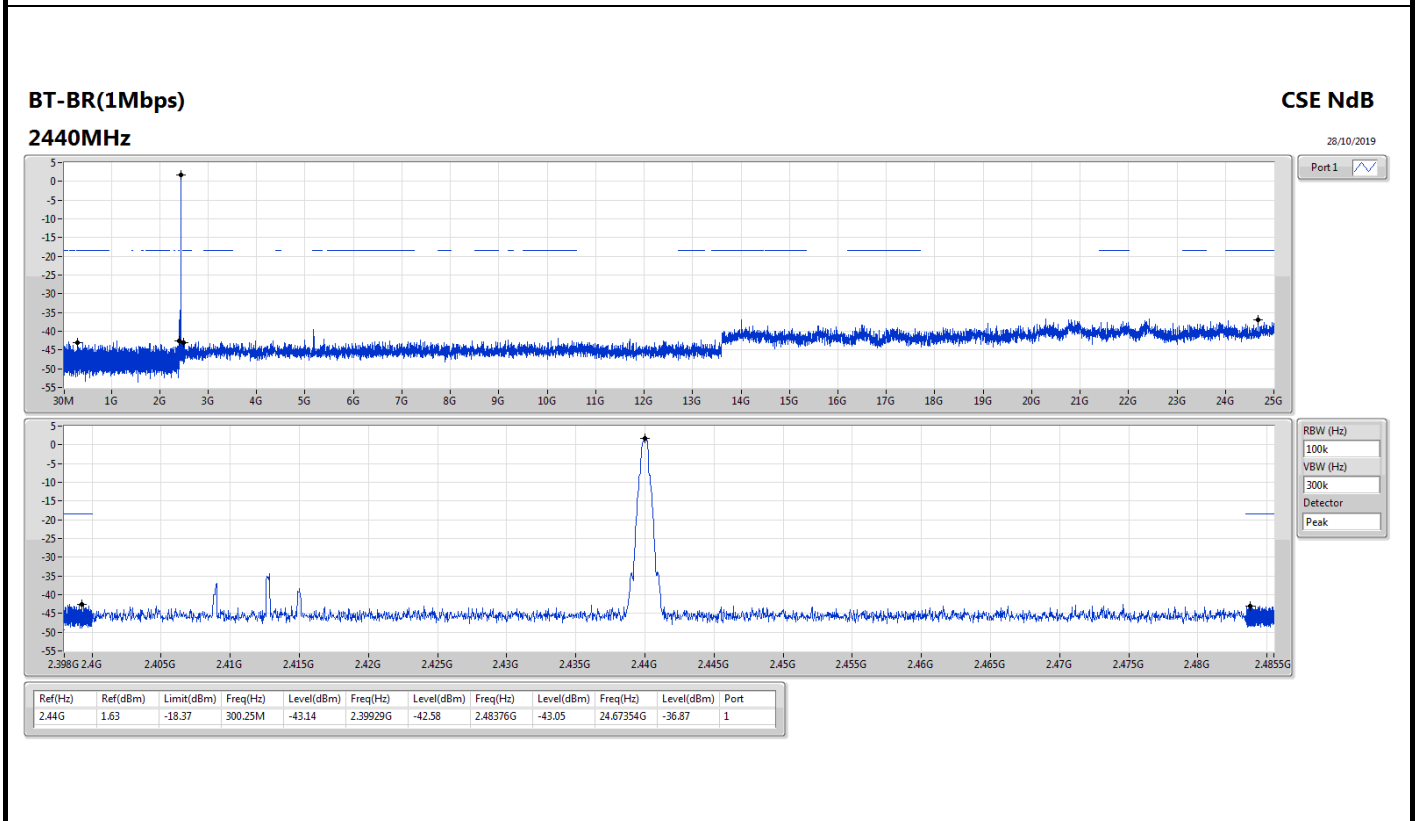
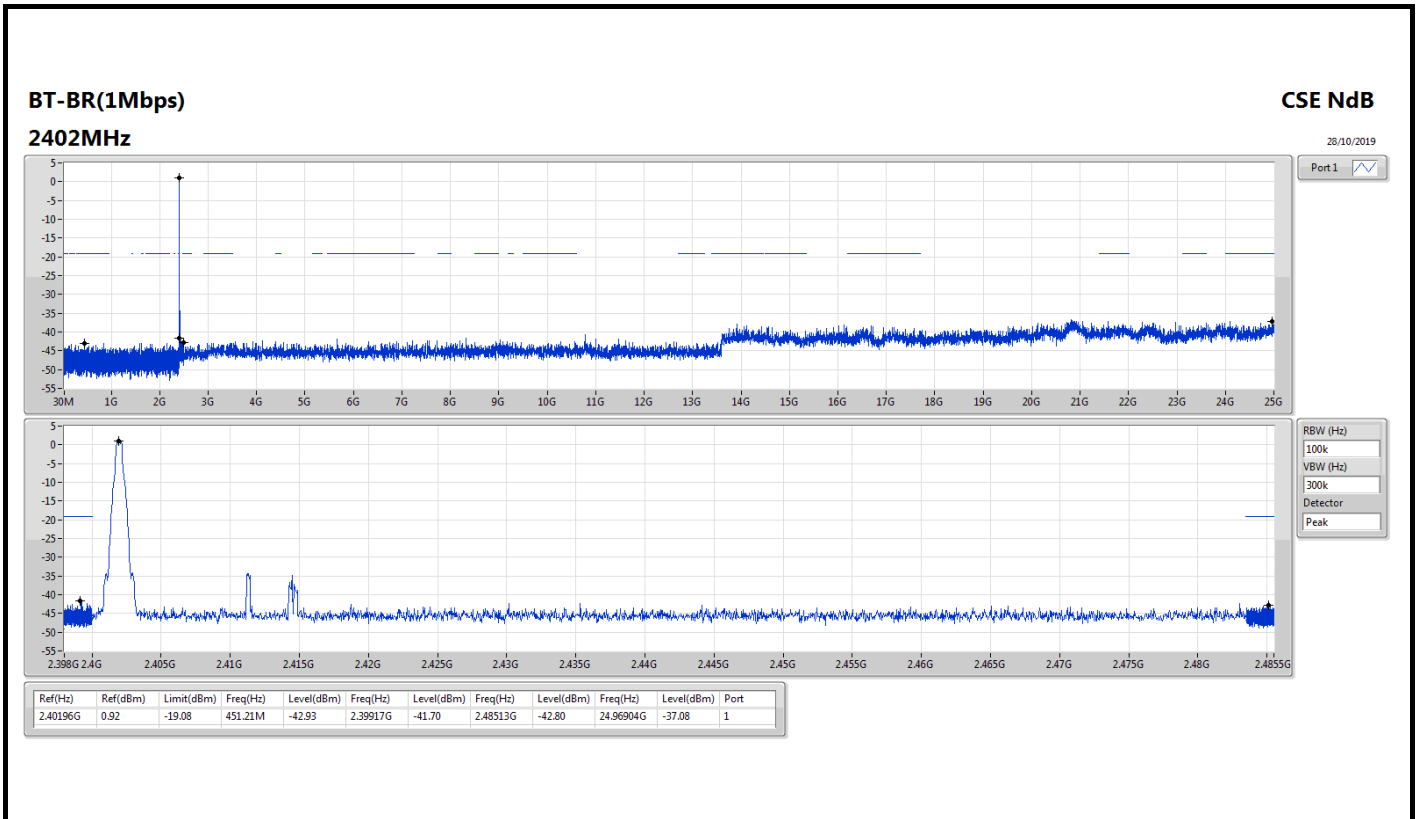
Summary

| 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) | Port |
|---------------|--------|-------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|------|
| 2.4-2.4835GHz | -      | -           | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -    |
| BT-BR(1Mbps)  | Pass   | 2.47999G    | 0.79         | -19.21         | 648.94M      | -42.84         | 2.39864G     | -41.76         | 2.48489G     | -42.36         | 24.90994G    | -36.60         | 1    |
| BT-EDR(2Mbps) | Pass   | 2.402G      | -3.87        | -23.87         | 782.73M      | -41.94         | 2.39933G     | -41.94         | 2.48448G     | -42.51         | 21.893G      | -36.58         | 1    |
| BT-EDR(3Mbps) | Pass   | 2.48008G    | -4.73        | -24.73         | 1.79357G     | -42.44         | 2.39883G     | -42.24         | 2.48397G     | -42.71         | 24.89024G    | -36.42         | 1    |

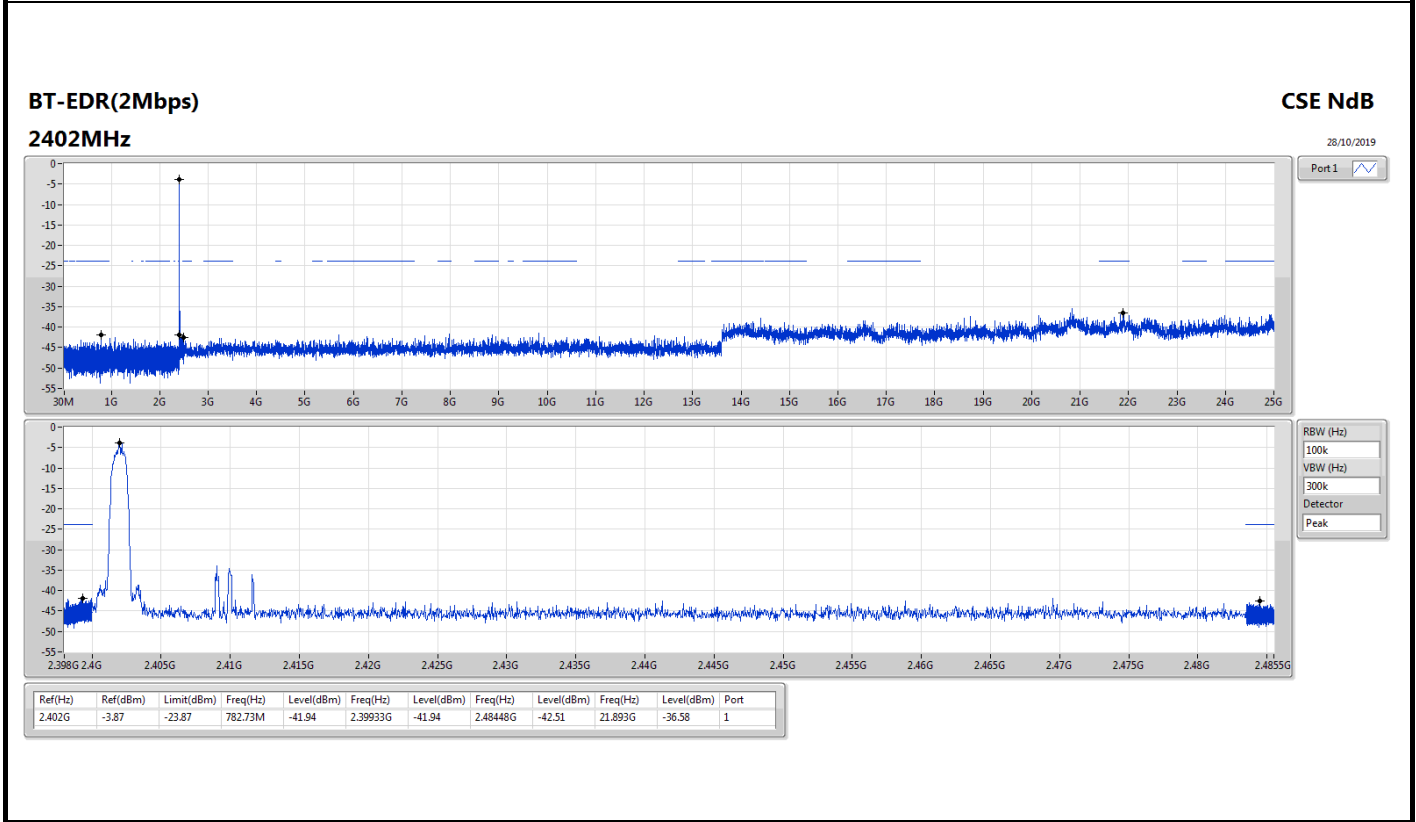
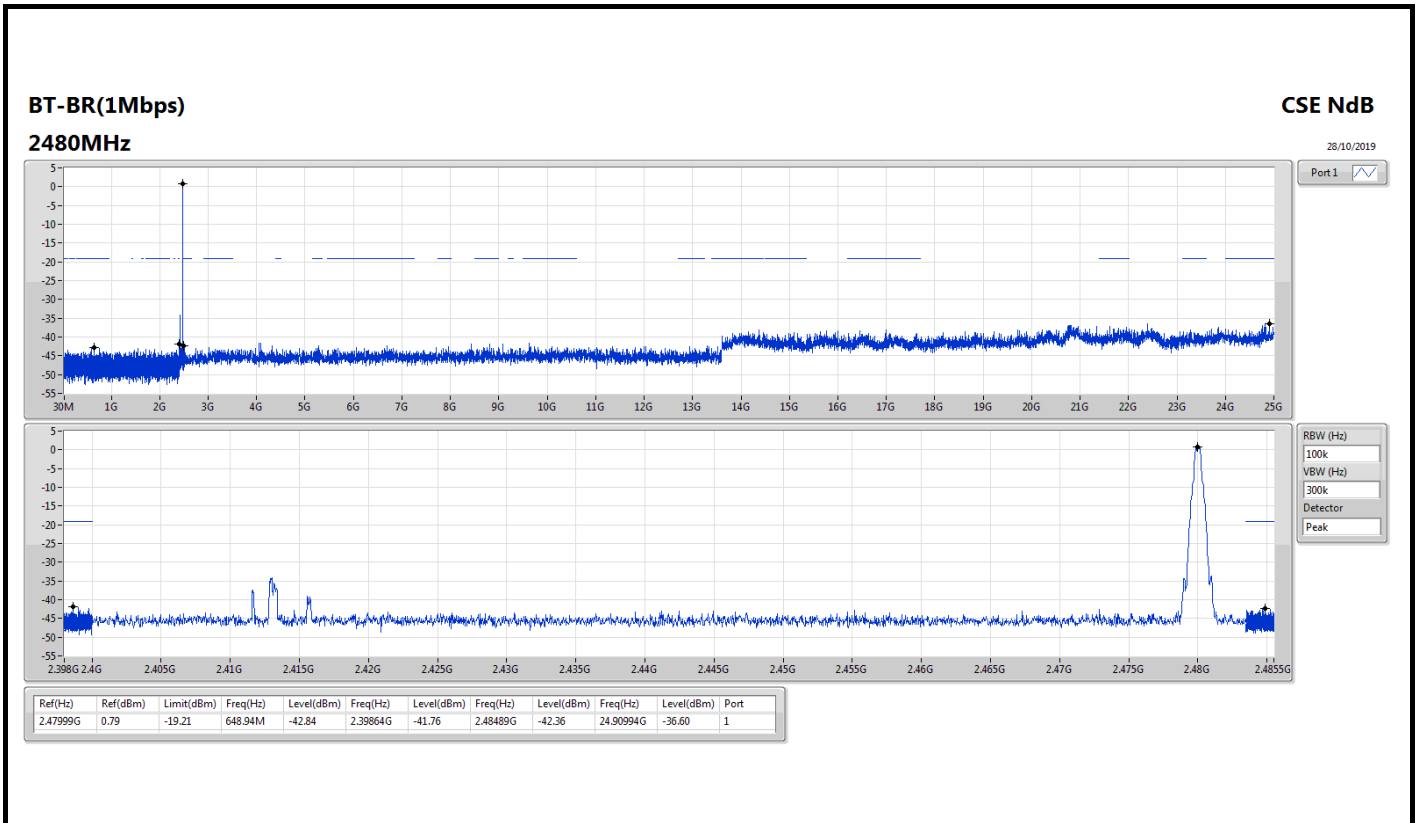


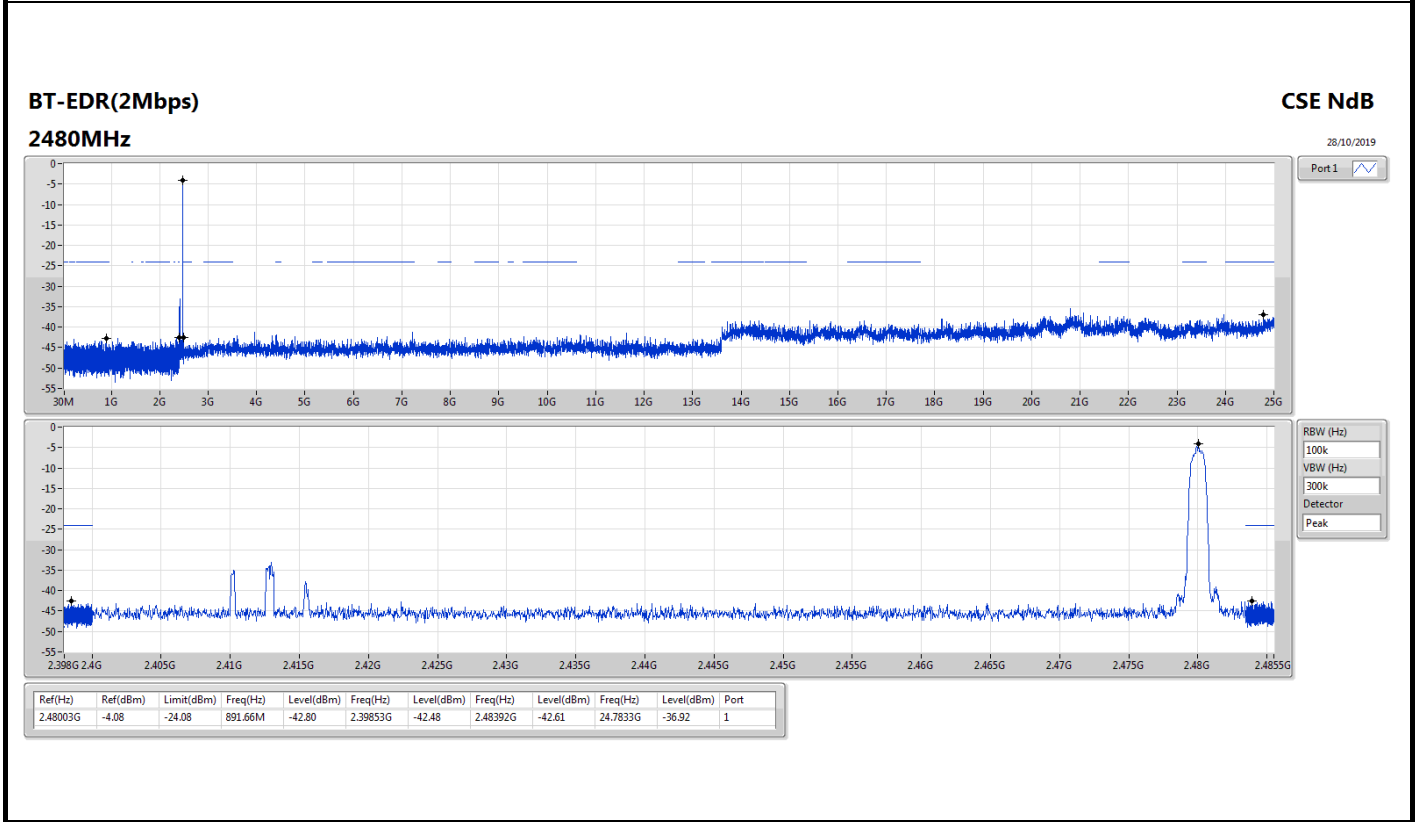
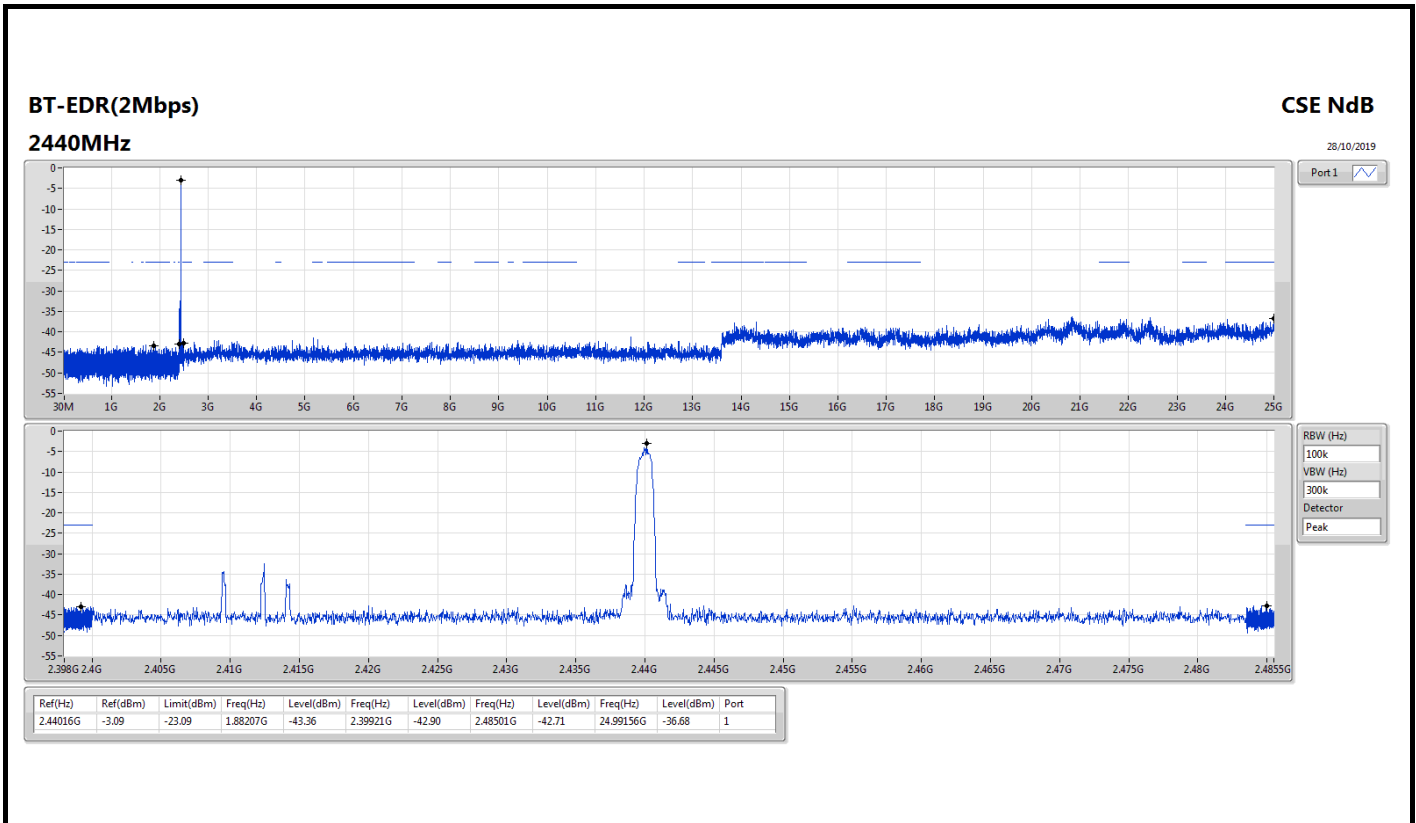
Result

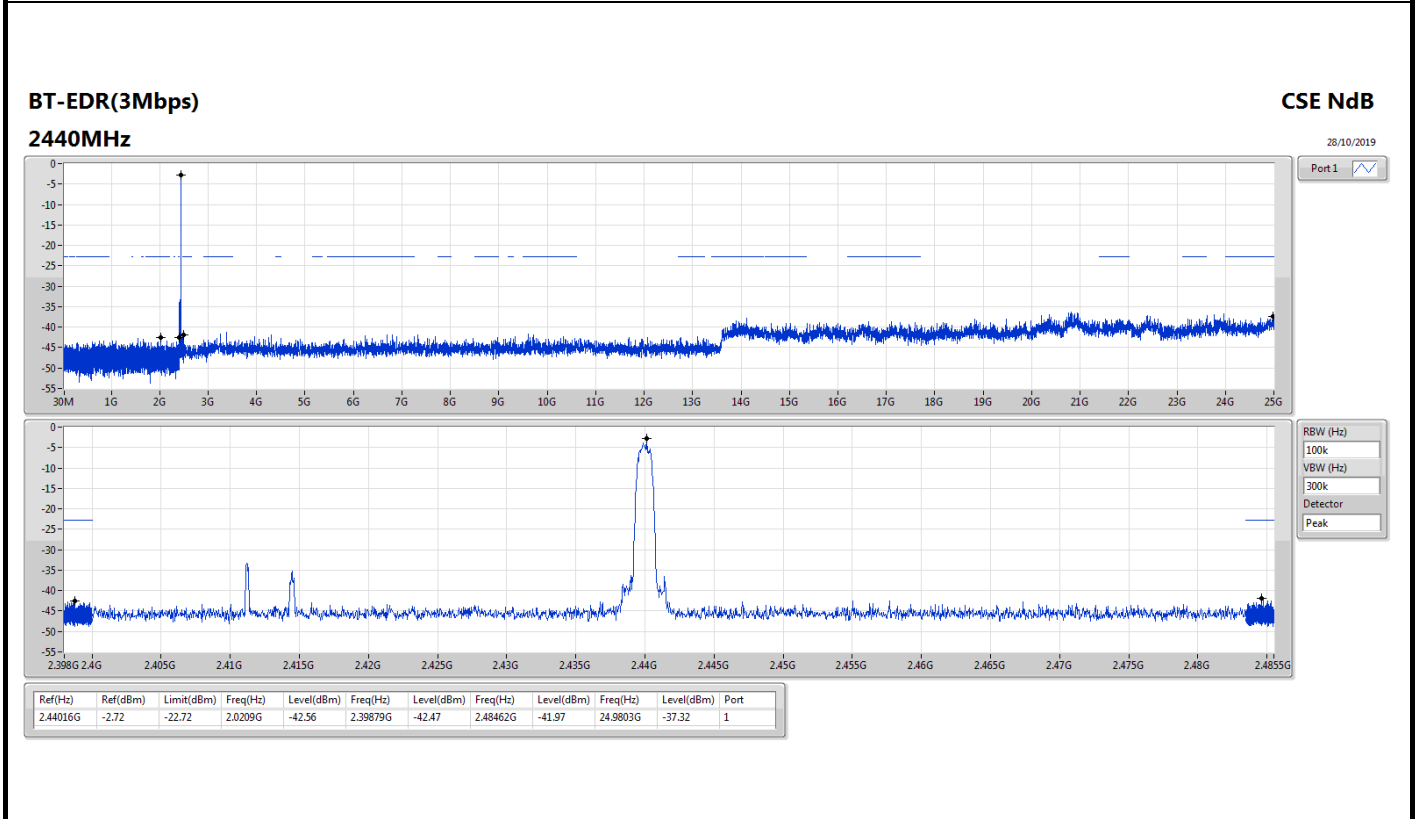
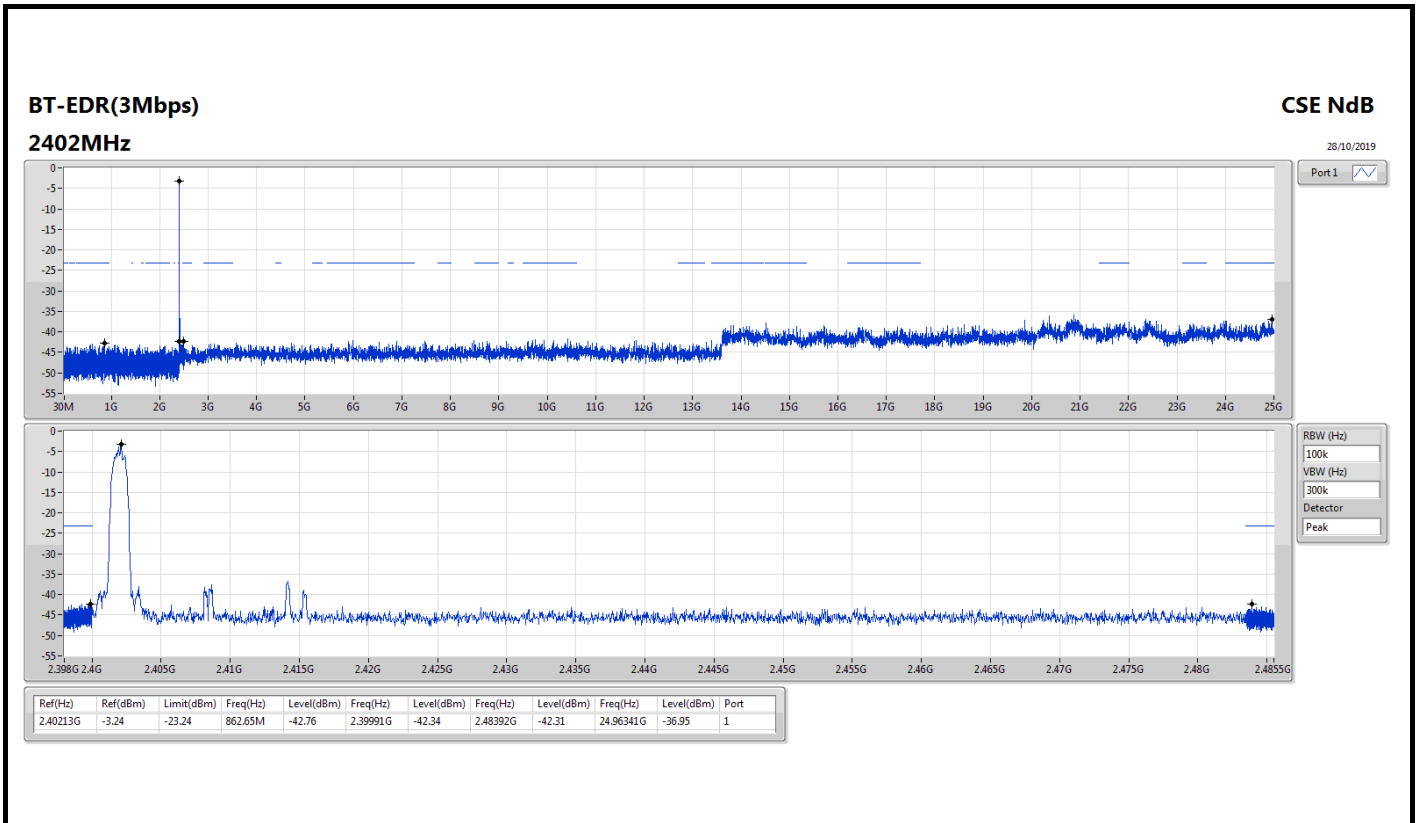
| Mode          | Result | Ref<br>(Hz) | Ref<br>(dBm) | Limit<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Freq<br>(Hz) | Level<br>(dBm) | Port |
|---------------|--------|-------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|------|
| BT-BR(1Mbps)  | -      | -           | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -    |
| 2402MHz       | Pass   | 2.40196G    | 0.92         | -19.08         | 451.21M      | -42.93         | 2.39917G     | -41.70         | 2.48513G     | -42.80         | 24.96904G    | -37.08         | 1    |
| 2440MHz       | Pass   | 2.44G       | 1.63         | -18.37         | 300.25M      | -43.14         | 2.39929G     | -42.58         | 2.48376G     | -43.05         | 24.67354G    | -36.87         | 1    |
| 2480MHz       | Pass   | 2.47999G    | 0.79         | -19.21         | 648.94M      | -42.84         | 2.39864G     | -41.76         | 2.48489G     | -42.36         | 24.90994G    | -36.60         | 1    |
| BT-EDR(2Mbps) | -      | -           | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -    |
| 2402MHz       | Pass   | 2.402G      | -3.87        | -23.87         | 782.73M      | -41.94         | 2.39933G     | -41.94         | 2.48448G     | -42.51         | 21.893G      | -36.58         | 1    |
| 2440MHz       | Pass   | 2.44016G    | -3.09        | -23.09         | 1.88207G     | -43.36         | 2.39921G     | -42.90         | 2.48501G     | -42.71         | 24.99156G    | -36.68         | 1    |
| 2480MHz       | Pass   | 2.48003G    | -4.08        | -24.08         | 891.66M      | -42.80         | 2.39853G     | -42.48         | 2.48392G     | -42.61         | 24.7833G     | -36.92         | 1    |
| BT-EDR(3Mbps) | -      | -           | -            | -              | -            | -              | -            | -              | -            | -              | -            | -              | -    |
| 2402MHz       | Pass   | 2.40213G    | -3.24        | -23.24         | 862.65M      | -42.76         | 2.39991G     | -42.34         | 2.48392G     | -42.31         | 24.96341G    | -36.95         | 1    |
| 2440MHz       | Pass   | 2.44016G    | -2.72        | -22.72         | 2.0209G      | -42.56         | 2.39879G     | -42.47         | 2.48462G     | -41.97         | 24.9803G     | -37.32         | 1    |
| 2480MHz       | Pass   | 2.48008G    | -4.73        | -24.73         | 1.79357G     | -42.44         | 2.39883G     | -42.24         | 2.48397G     | -42.71         | 24.89024G    | -36.42         | 1    |

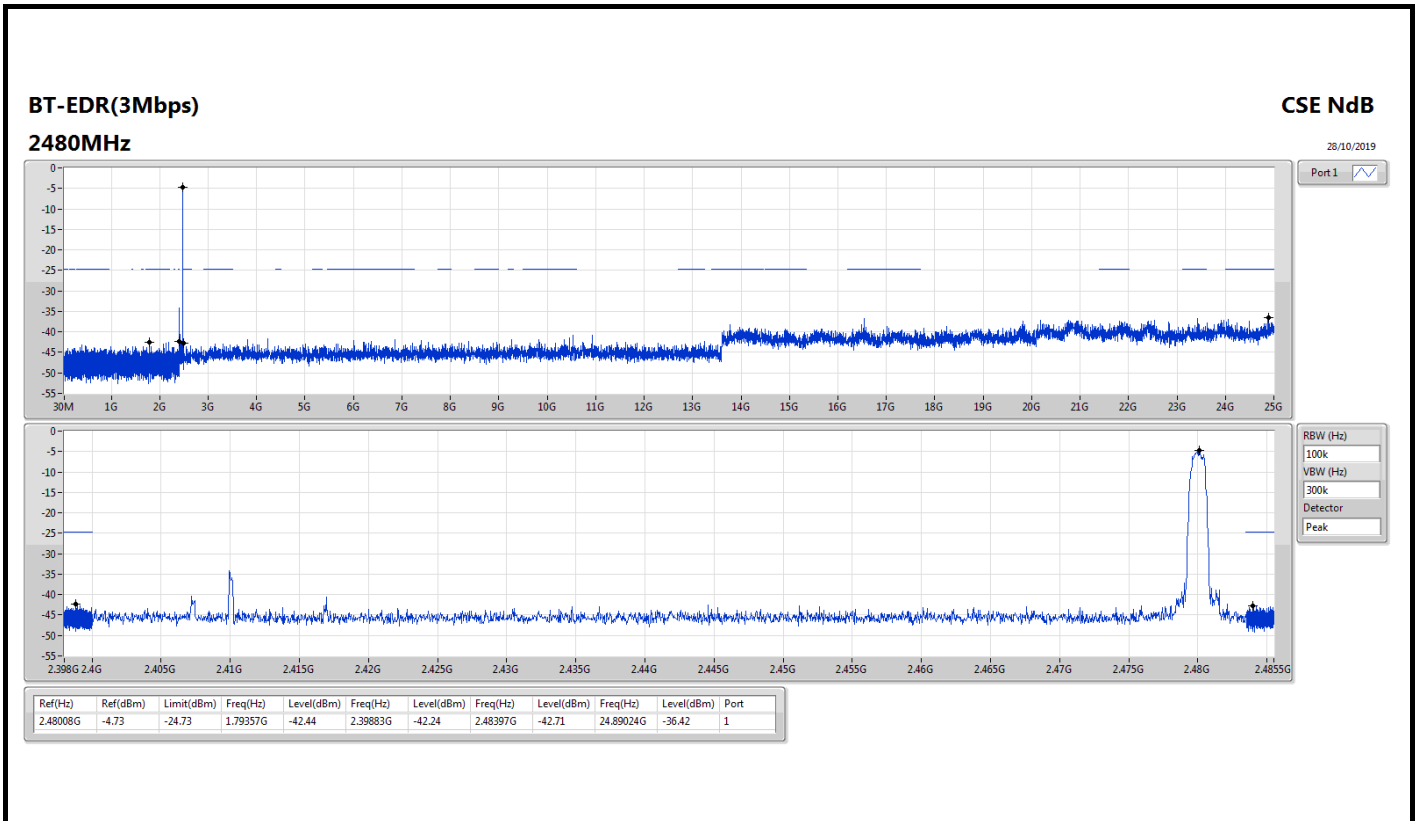






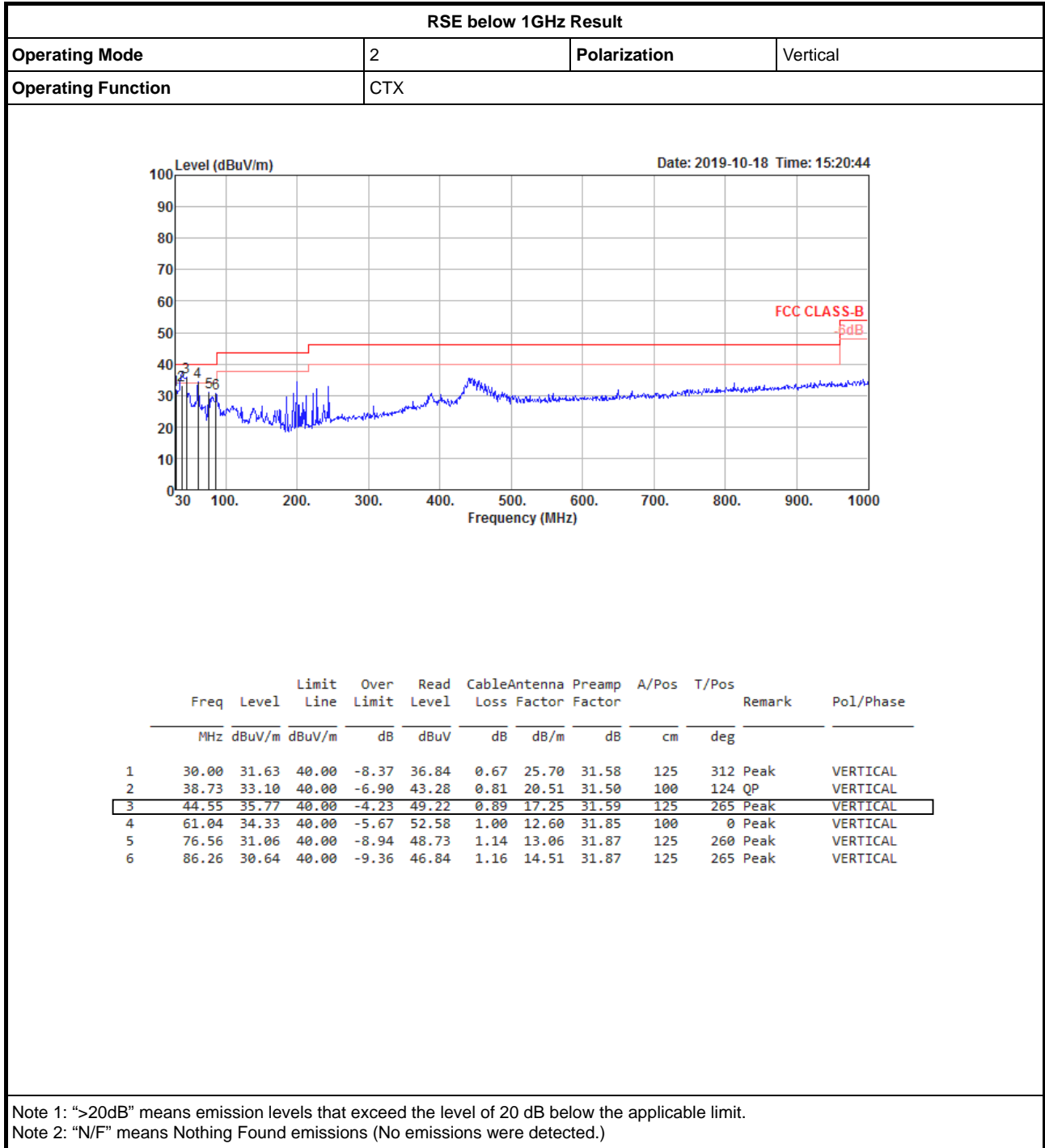






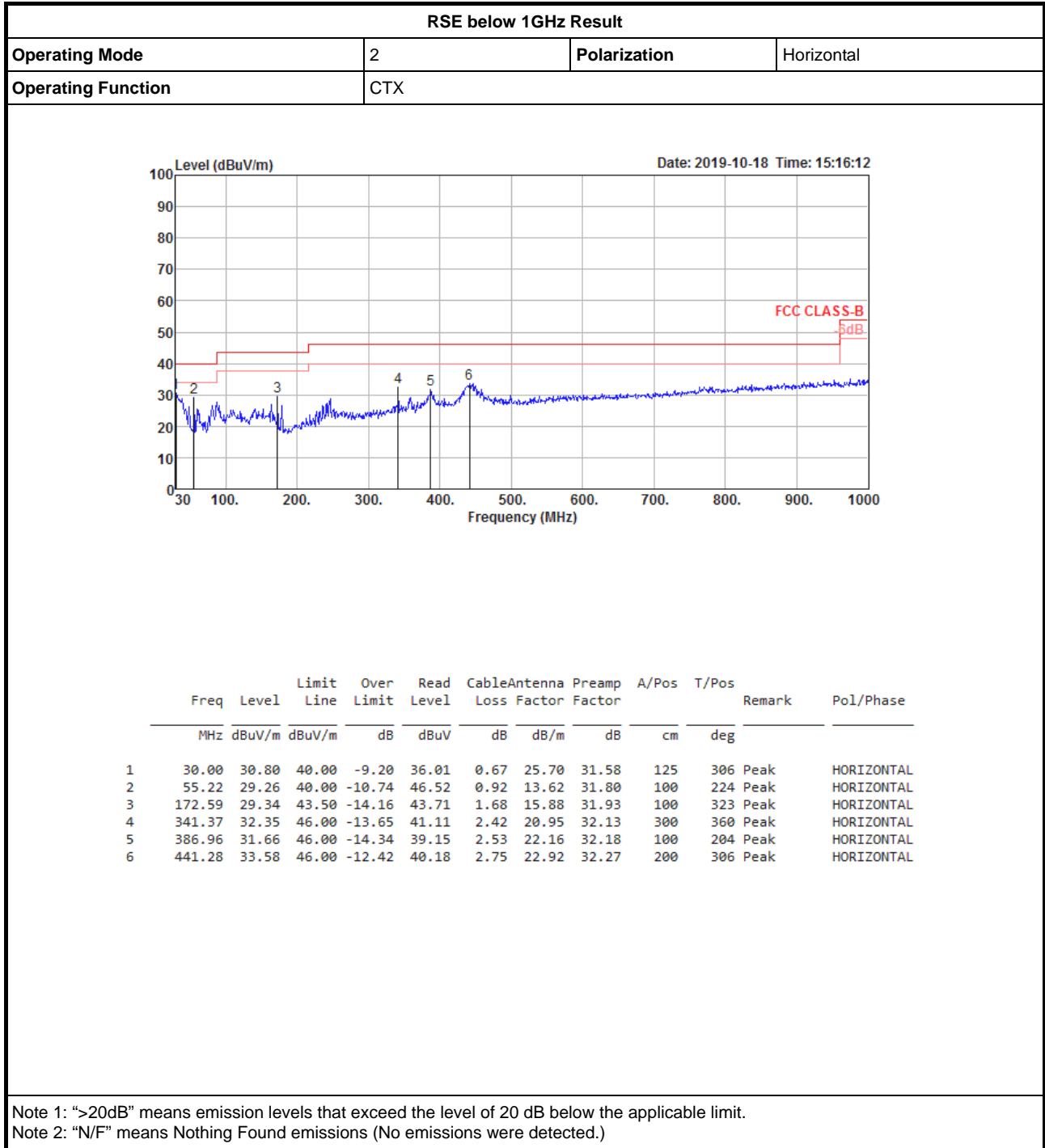


RSE below 1GHz Result





# RSE below 1GHz Result





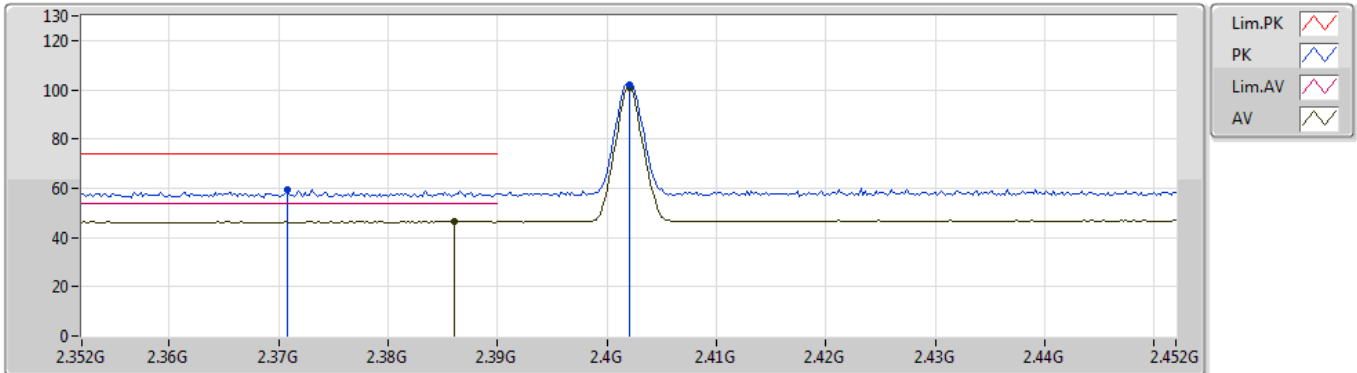
Summary

| Mode          | Result | Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Factor<br>(dB) | Dist<br>(m) | Condition | Azimuth<br>(°) | Height<br>(m) | Comments |
|---------------|--------|------|--------------|-------------------|-------------------|----------------|----------------|-------------|-----------|----------------|---------------|----------|
| 2.4-2.4835GHz | -      | -    | -            | -                 | -                 | -              | -              | -           | -         | -              | -             | -        |
| BT-BR(1Mbps)  | Pass   | AV   | 2.4835G      | 47.21             | 54.00             | -6.79          | 31.39          | 3           | Vertical  | 230            | 1.00          | -        |

**BT-BR(1Mbps)**

18/10/2019

**2402MHz\_TX**



EUT Y\_1TX  
Setting Default  
02-B-2  
FSU(100015)

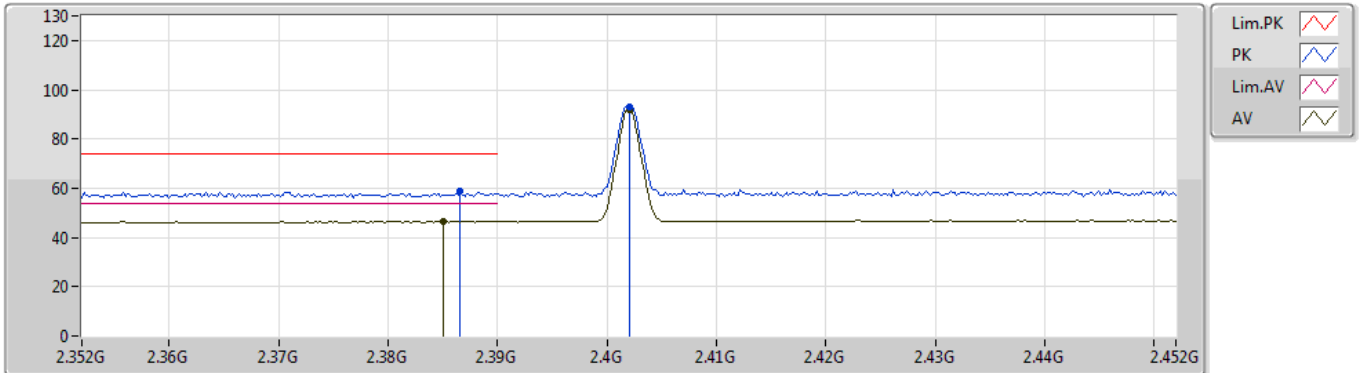
| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Factor (dB) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | Raw (dBuV) |
|------|-----------|----------------|----------------|-------------|-------------|----------|-----------|-------------|------------|---------|------------|
| PK   | 2.3708G   | 59.65          | 74.00          | -14.35      | 31.16       | 3        | Vertical  | 289         | 1.24       | -       | 28.49      |
| AV   | 2.386G    | 46.61          | 54.00          | -7.39       | 31.19       | 3        | Vertical  | 289         | 1.24       | -       | 15.42      |
| PK   | 2.402G    | 101.84         | Inf            | -Inf        | 31.23       | 3        | Vertical  | 289         | 1.24       | -       | 70.61      |
| AV   | 2.402G    | 100.82         | Inf            | -Inf        | 31.23       | 3        | Vertical  | 289         | 1.24       | -       | 69.59      |



**BT-BR(1Mbps)**

18/10/2019

**2402MHz\_TX**



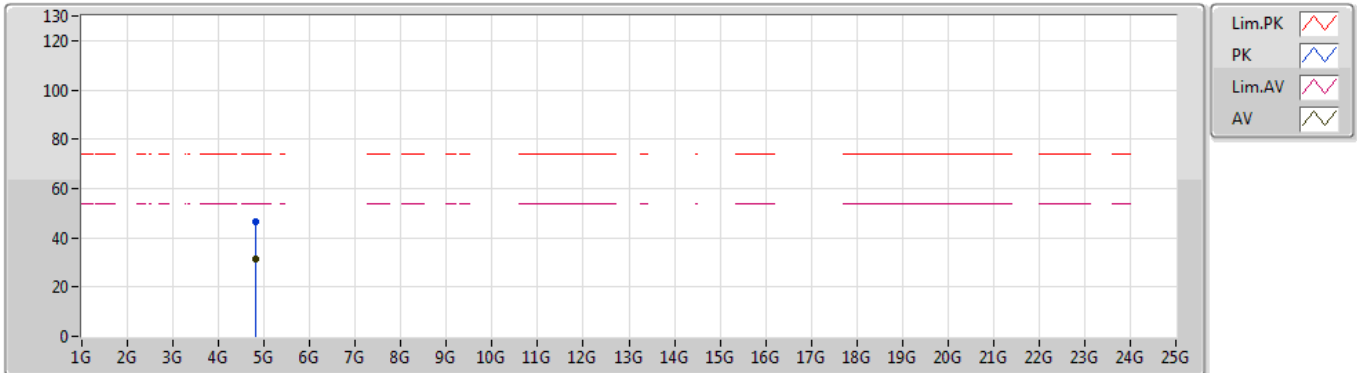
EUT Y\_1TX  
 Setting Default  
 02-B-2  
 FSU(100015)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Factor (dB) | Dist (m) | Condition  | Azimuth (°) | Height (m) | Comment | Raw (dBuV) |
|------|-----------|----------------|----------------|-------------|-------------|----------|------------|-------------|------------|---------|------------|
| PK   | 2.3866G   | 58.69          | 74.00          | -15.31      | 31.20       | 3        | Horizontal | 295         | 2.75       | -       | 27.49      |
| AV   | 2.385G    | 46.51          | 54.00          | -7.49       | 31.19       | 3        | Horizontal | 295         | 2.75       | -       | 15.32      |
| PK   | 2.402G    | 93.18          | Inf            | -Inf        | 31.23       | 3        | Horizontal | 295         | 2.75       | -       | 61.95      |
| AV   | 2.402G    | 92.11          | Inf            | -Inf        | 31.23       | 3        | Horizontal | 295         | 2.75       | -       | 60.88      |

**BT-BR(1Mbps)**

18/10/2019

**2402MHz\_TX**



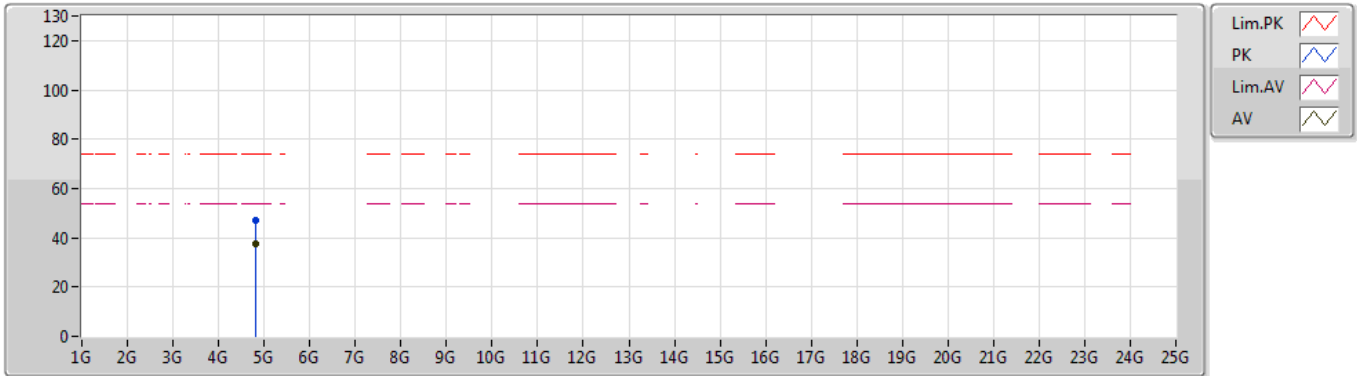
EUT Y\_1TX  
Setting Default  
02-B-2  
FSU(100015)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Factor (dB) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | Raw (dBuV) |
|------|-----------|----------------|----------------|-------------|-------------|----------|-----------|-------------|------------|---------|------------|
| PK   | 4.80362G  | 46.41          | 74.00          | -27.59      | 7.12        | 3        | Vertical  | 354         | 1.90       | -       | 39.29      |
| AV   | 4.80411G  | 31.61          | 54.00          | -22.39      | 7.12        | 3        | Vertical  | 354         | 1.90       | -       | 24.49      |

**BT-BR(1Mbps)**

18/10/2019

**2402MHz\_TX**



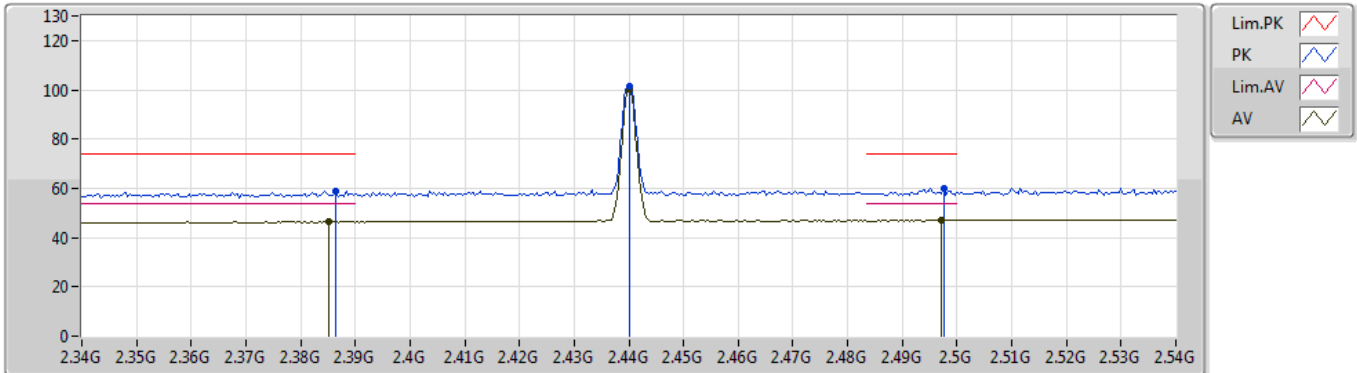
EUT Y\_1TX  
 Setting Default  
 02-B-2  
 FSU(100015)

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Factor<br>(dB) | Dist<br>(m) | Condition  | Azimuth<br>(°) | Height<br>(m) | Comment | Raw<br>(dBuV) |
|------|--------------|-------------------|-------------------|----------------|----------------|-------------|------------|----------------|---------------|---------|---------------|
| PK   | 4.80301G     | 47.12             | 74.00             | -26.88         | 7.12           | 3           | Horizontal | 80             | 1.60          | -       | 40.00         |
| AV   | 4.80388G     | 37.46             | 54.00             | -16.54         | 7.12           | 3           | Horizontal | 80             | 1.60          | -       | 30.34         |

**BT-BR(1Mbps)**

18/10/2019

**2440MHz\_TX**



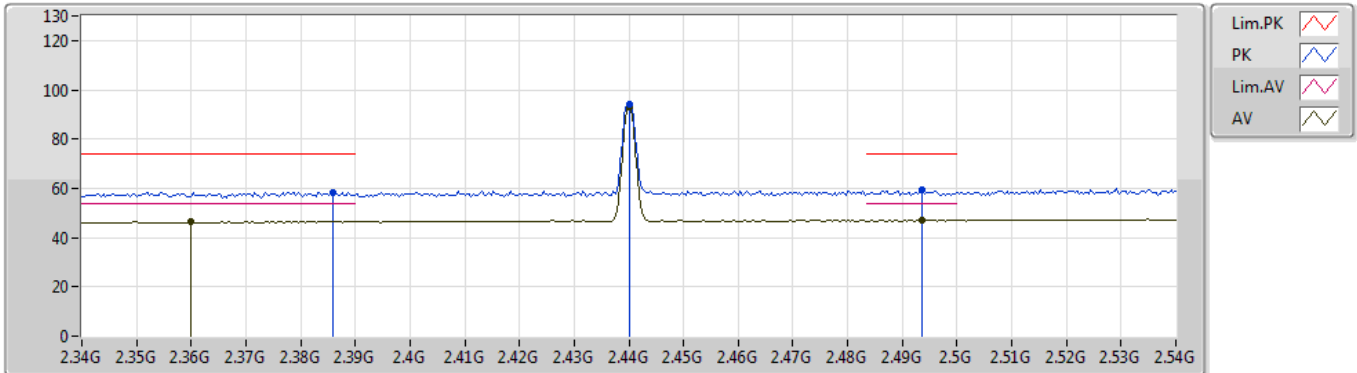
EUT Y\_1TX  
Setting Default  
02-B-2  
FSU(100015)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Factor (dB) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | Raw (dBuV) |
|------|-----------|----------------|----------------|-------------|-------------|----------|-----------|-------------|------------|---------|------------|
| PK   | 2.3864G   | 59.06          | 74.00          | -14.94      | 31.20       | 3        | Vertical  | 242         | 1.00       | -       | 27.86      |
| AV   | 2.3852G   | 46.40          | 54.00          | -7.60       | 31.19       | 3        | Vertical  | 242         | 1.00       | -       | 15.21      |
| PK   | 2.44G     | 101.46         | Inf            | -Inf        | 31.31       | 3        | Vertical  | 242         | 1.00       | -       | 70.15      |
| AV   | 2.44G     | 100.46         | Inf            | -Inf        | 31.31       | 3        | Vertical  | 242         | 1.00       | -       | 69.15      |
| PK   | 2.4976G   | 59.92          | 74.00          | -14.08      | 31.43       | 3        | Vertical  | 242         | 1.00       | -       | 28.49      |
| AV   | 2.4972G   | 46.96          | 54.00          | -7.04       | 31.43       | 3        | Vertical  | 242         | 1.00       | -       | 15.53      |

**BT-BR(1Mbps)**

18/10/2019

**2440MHz\_TX**



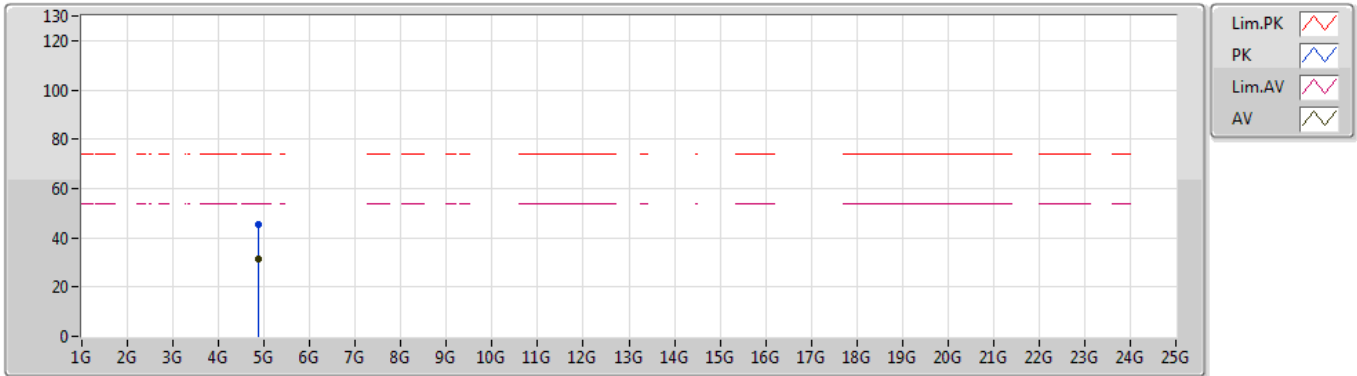
EUT Y\_1TX  
Setting Default  
02-B-2  
FSU(100015)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Factor (dB) | Dist (m) | Condition  | Azimuth (°) | Height (m) | Comment | Raw (dBuV) |
|------|-----------|----------------|----------------|-------------|-------------|----------|------------|-------------|------------|---------|------------|
| PK   | 2.386G    | 58.50          | 74.00          | -15.50      | 31.19       | 3        | Horizontal | 286         | 2.19       | -       | 27.31      |
| AV   | 2.36G     | 46.43          | 54.00          | -7.57       | 31.13       | 3        | Horizontal | 286         | 2.19       | -       | 15.30      |
| PK   | 2.44G     | 94.10          | Inf            | -Inf        | 31.31       | 3        | Horizontal | 286         | 2.19       | -       | 62.79      |
| AV   | 2.44G     | 93.09          | Inf            | -Inf        | 31.31       | 3        | Horizontal | 286         | 2.19       | -       | 61.78      |
| PK   | 2.4936G   | 59.43          | 74.00          | -14.57      | 31.42       | 3        | Horizontal | 286         | 2.19       | -       | 28.01      |
| AV   | 2.4936G   | 47.12          | 54.00          | -6.88       | 31.42       | 3        | Horizontal | 286         | 2.19       | -       | 15.70      |

**BT-BR(1Mbps)**

18/10/2019

**2440MHz\_TX**



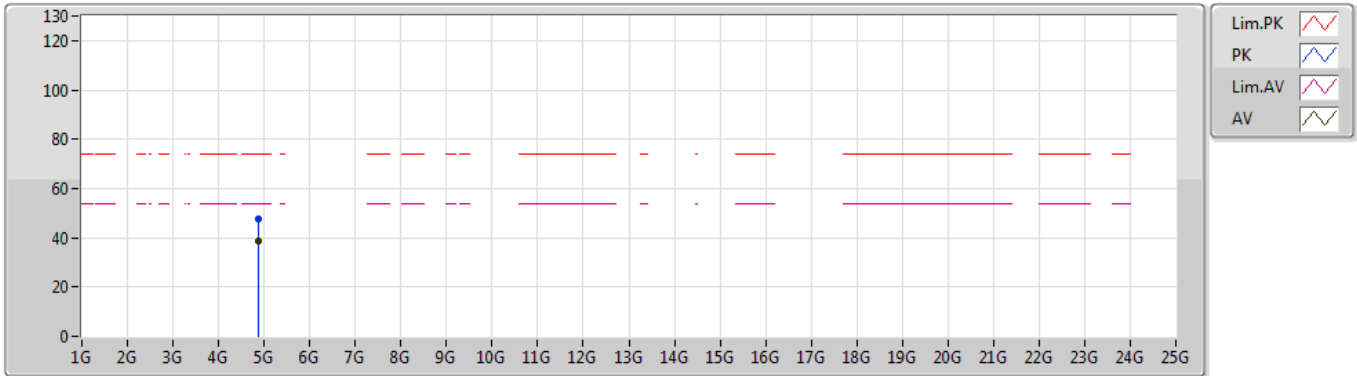
EUT Y\_1TX  
Setting Default  
02-B-2  
FSU(100015)

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Factor<br>(dB) | Dist<br>(m) | Condition | Azimuth<br>(°) | Height<br>(m) | Comment | Raw<br>(dBuV) |
|------|--------------|-------------------|-------------------|----------------|----------------|-------------|-----------|----------------|---------------|---------|---------------|
| PK   | 4.88065G     | 45.59             | 74.00             | -28.41         | 7.30           | 3           | Vertical  | 156            | 2.00          | -       | 38.29         |
| AV   | 4.8805G      | 31.28             | 54.00             | -22.72         | 7.30           | 3           | Vertical  | 156            | 2.00          | -       | 23.98         |

**BT-BR(1Mbps)**

18/10/2019

**2440MHz\_TX**



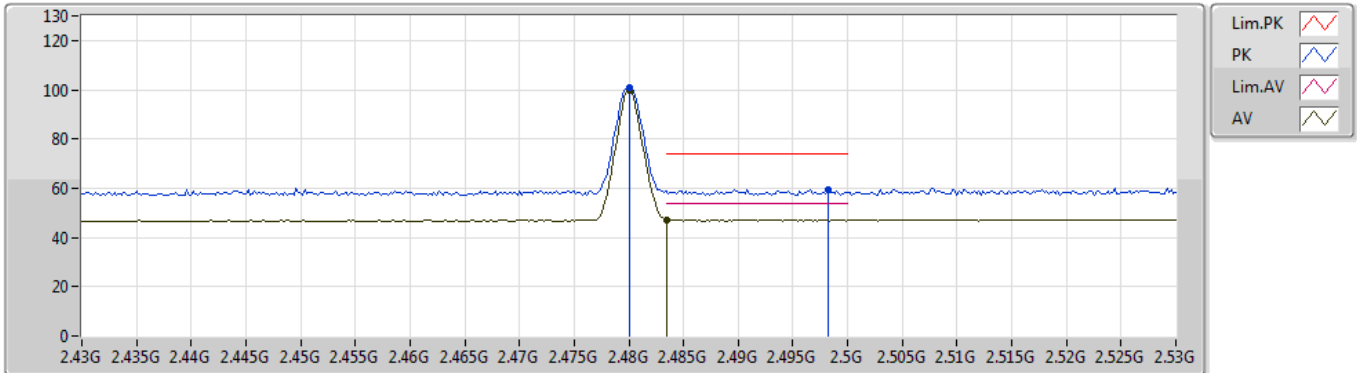
EUT Y\_1TX  
 Setting Default  
 02-B-2  
 FSU(100015)

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Factor<br>(dB) | Dist<br>(m) | Condition  | Azimuth<br>(°) | Height<br>(m) | Comment | Raw<br>(dBuV) |
|------|--------------|-------------------|-------------------|----------------|----------------|-------------|------------|----------------|---------------|---------|---------------|
| PK   | 4.88034G     | 47.87             | 74.00             | -26.13         | 7.30           | 3           | Horizontal | 102            | 2.00          | -       | 40.57         |
| AV   | 4.87997G     | 38.89             | 54.00             | -15.11         | 7.30           | 3           | Horizontal | 102            | 2.00          | -       | 31.59         |

### BT-BR(1Mbps)

18/10/2019

### 2480MHz\_TX



EUT Y\_1TX  
Setting Default  
02-B-2  
FSU(100015)

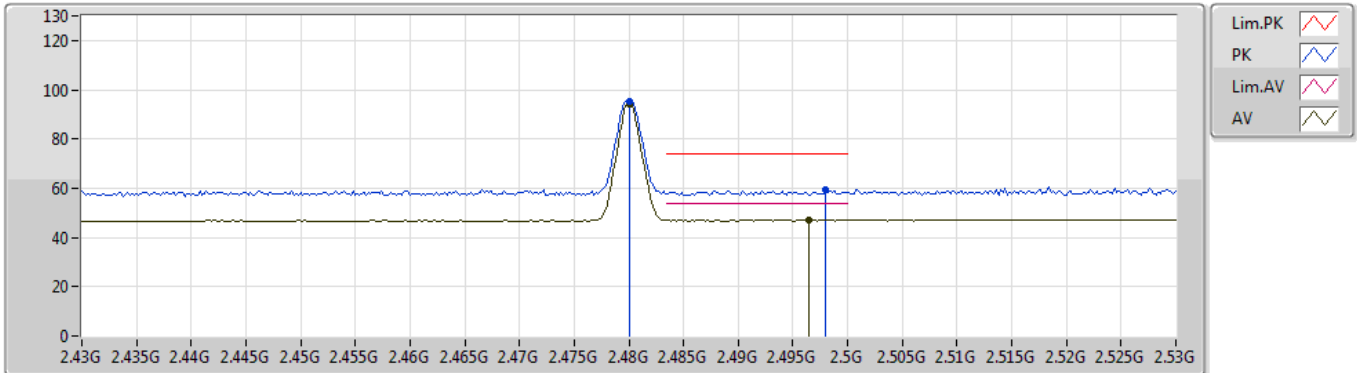
| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Factor<br>(dB) | Dist<br>(m) | Condition | Azimuth<br>(°) | Height<br>(m) | Comment | Raw<br>(dBuV) |
|------|--------------|-------------------|-------------------|----------------|----------------|-------------|-----------|----------------|---------------|---------|---------------|
| PK   | 2.48G        | 100.60            | Inf               | -Inf           | 31.39          | 3           | Vertical  | 230            | 1.00          | -       | 69.21         |
| AV   | 2.48G        | 99.54             | Inf               | -Inf           | 31.39          | 3           | Vertical  | 230            | 1.00          | -       | 68.15         |
| PK   | 2.4982G      | 59.26             | 74.00             | -14.74         | 31.43          | 3           | Vertical  | 230            | 1.00          | -       | 27.83         |
| AV   | 2.4835G      | 47.21             | 54.00             | -6.79          | 31.39          | 3           | Vertical  | 230            | 1.00          | -       | 15.82         |



**BT-BR(1Mbps)**

18/10/2019

**2480MHz\_TX**



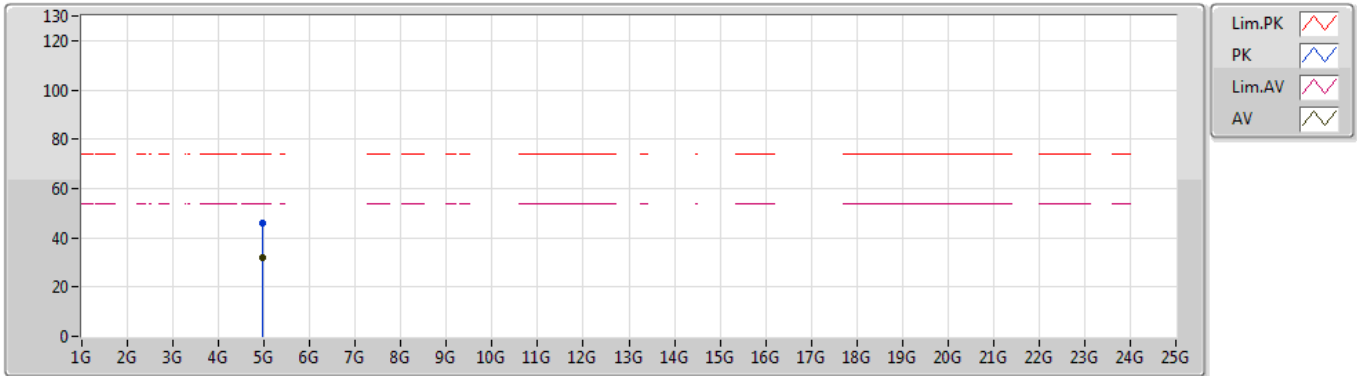
EUT Y\_1TX  
Setting Default  
02-B-2  
FSU(100015)

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Factor<br>(dB) | Dist<br>(m) | Condition  | Azimuth<br>(°) | Height<br>(m) | Comment | Raw<br>(dBuV) |
|------|--------------|-------------------|-------------------|----------------|----------------|-------------|------------|----------------|---------------|---------|---------------|
| PK   | 2.48G        | 95.33             | Inf               | -Inf           | 31.39          | 3           | Horizontal | 240            | 1.93          | -       | 63.94         |
| AV   | 2.48G        | 94.35             | Inf               | -Inf           | 31.39          | 3           | Horizontal | 240            | 1.93          | -       | 62.96         |
| PK   | 2.498G       | 59.18             | 74.00             | -14.82         | 31.43          | 3           | Horizontal | 240            | 1.93          | -       | 27.75         |
| AV   | 2.4964G      | 47.04             | 54.00             | -6.96          | 31.42          | 3           | Horizontal | 240            | 1.93          | -       | 15.62         |

**BT-BR(1Mbps)**

18/10/2019

**2480MHz\_TX**



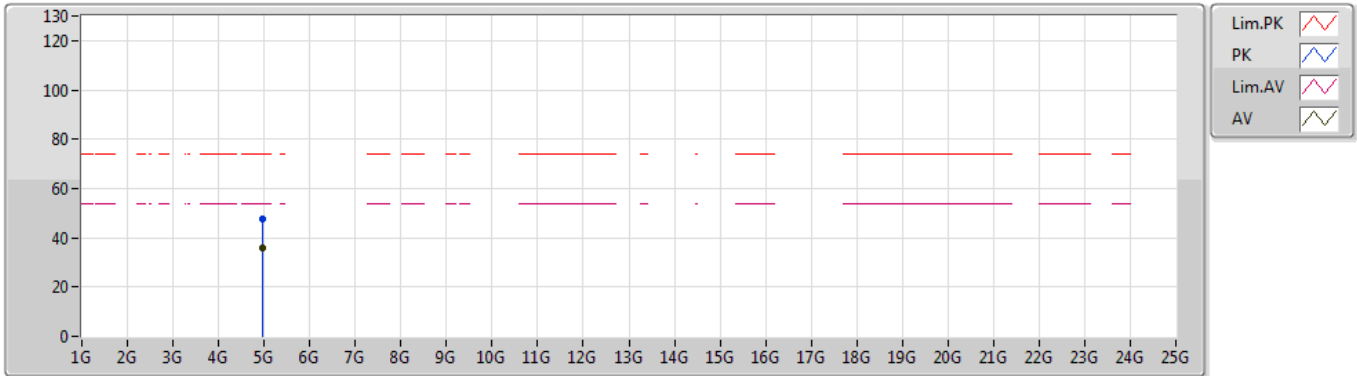
EUT Y\_1TX  
Setting Default  
02-B-2  
FSU(100015)

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Factor<br>(dB) | Dist<br>(m) | Condition | Azimuth<br>(°) | Height<br>(m) | Comment | Raw<br>(dBuV) |
|------|--------------|-------------------|-------------------|----------------|----------------|-------------|-----------|----------------|---------------|---------|---------------|
| PK   | 4.9597G      | 46.18             | 74.00             | -27.82         | 7.48           | 3           | Vertical  | 341            | 2.00          | -       | 38.70         |
| AV   | 4.96005G     | 31.77             | 54.00             | -22.23         | 7.48           | 3           | Vertical  | 341            | 2.00          | -       | 24.29         |

**BT-BR(1Mbps)**

18/10/2019

**2480MHz\_TX**



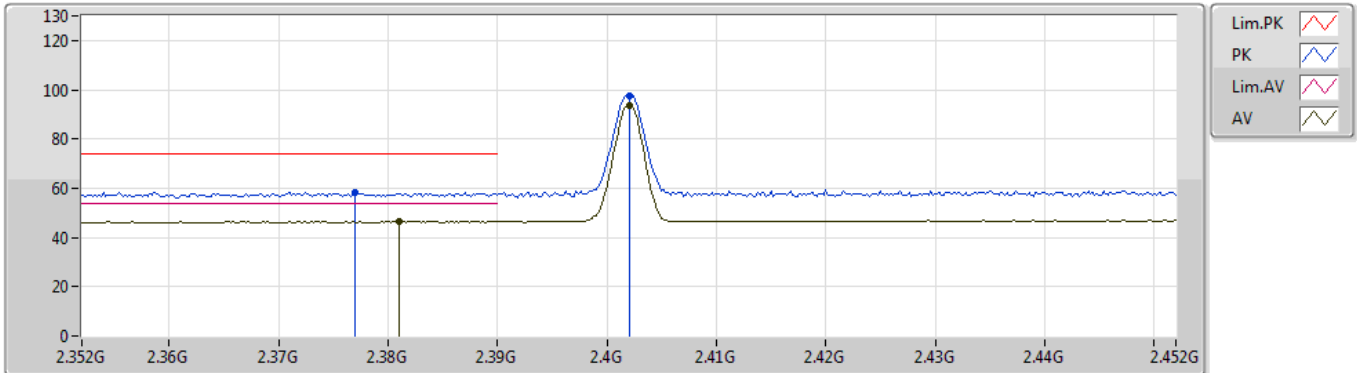
EUT Y\_1TX  
 Setting Default  
 02-B-2  
 FSU(100015)

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Factor<br>(dB) | Dist<br>(m) | Condition  | Azimuth<br>(°) | Height<br>(m) | Comment | Raw<br>(dBuV) |
|------|--------------|-------------------|-------------------|----------------|----------------|-------------|------------|----------------|---------------|---------|---------------|
| PK   | 4.9605G      | 47.61             | 74.00             | -26.39         | 7.48           | 3           | Horizontal | 69             | 2.65          | -       | 40.13         |
| AV   | 4.95975G     | 36.03             | 54.00             | -17.97         | 7.48           | 3           | Horizontal | 69             | 2.65          | -       | 28.55         |

### BT-EDR(3Mbps)

18/10/2019

### 2402MHz\_TX



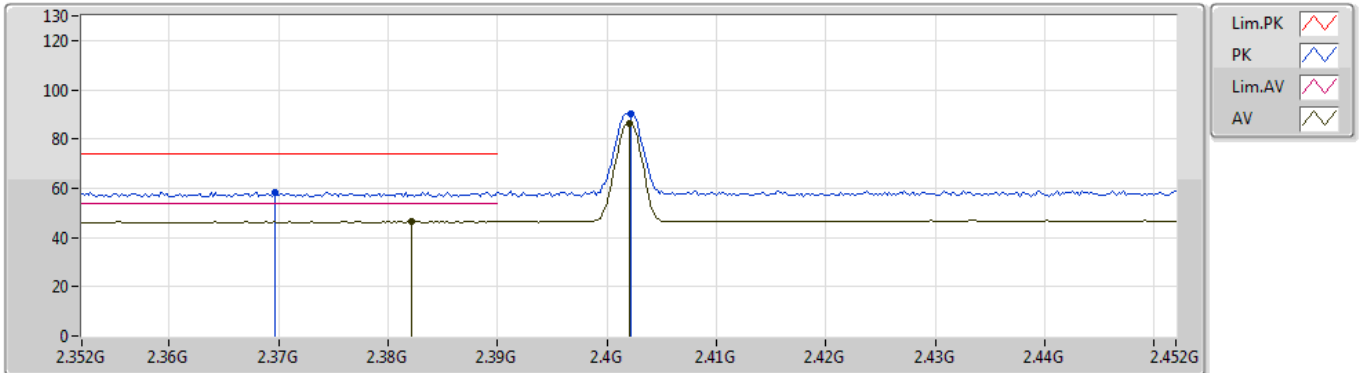
EUT Y\_1TX  
 Setting Default  
 02-B-2  
 FSU(100015)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Factor (dB) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | Raw (dBuV) |
|------|-----------|----------------|----------------|-------------|-------------|----------|-----------|-------------|------------|---------|------------|
| PK   | 2.377G    | 58.44          | 74.00          | -15.56      | 31.17       | 3        | Vertical  | 189         | 1.22       | -       | 27.27      |
| AV   | 2.381G    | 46.47          | 54.00          | -7.53       | 31.19       | 3        | Vertical  | 189         | 1.22       | -       | 15.28      |
| PK   | 2.402G    | 97.42          | Inf            | -Inf        | 31.23       | 3        | Vertical  | 189         | 1.22       | -       | 66.19      |
| AV   | 2.402G    | 93.47          | Inf            | -Inf        | 31.23       | 3        | Vertical  | 189         | 1.22       | -       | 62.24      |

**BT-EDR(3Mbps)**

18/10/2019

**2402MHz\_TX**



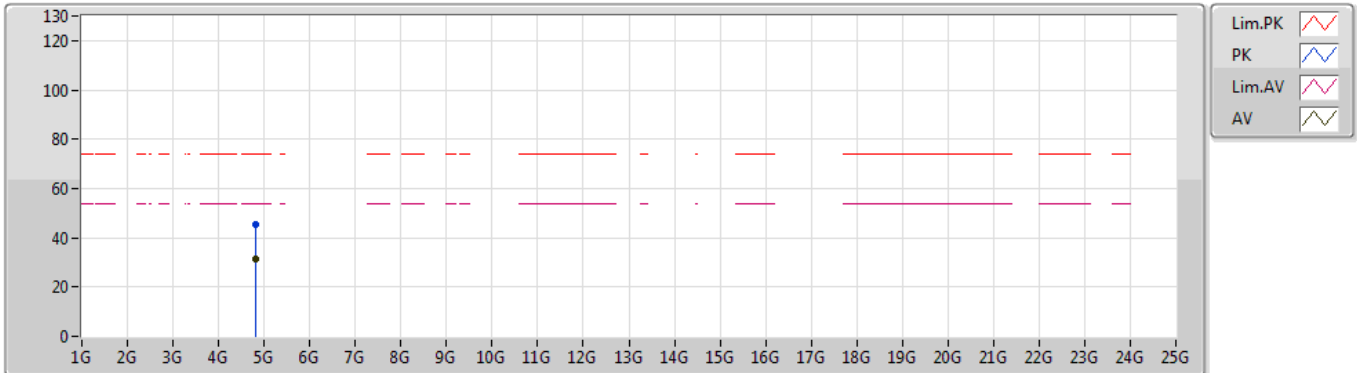
EUT Y\_1TX  
 Setting Default  
 02-B-2  
 FSU(100015)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Factor (dB) | Dist (m) | Condition  | Azimuth (°) | Height (m) | Comment | Raw (dBuV) |
|------|-----------|----------------|----------------|-------------|-------------|----------|------------|-------------|------------|---------|------------|
| PK   | 2.3696G   | 58.47          | 74.00          | -15.53      | 31.16       | 3        | Horizontal | 232         | 2.74       | -       | 27.31      |
| AV   | 2.3822G   | 46.39          | 54.00          | -7.61       | 31.19       | 3        | Horizontal | 232         | 2.74       | -       | 15.20      |
| PK   | 2.4022G   | 90.23          | Inf            | -Inf        | 31.23       | 3        | Horizontal | 232         | 2.74       | -       | 59.00      |
| AV   | 2.402G    | 86.23          | Inf            | -Inf        | 31.23       | 3        | Horizontal | 232         | 2.74       | -       | 55.00      |

### BT-EDR(3Mbps)

18/10/2019

### 2402MHz\_TX



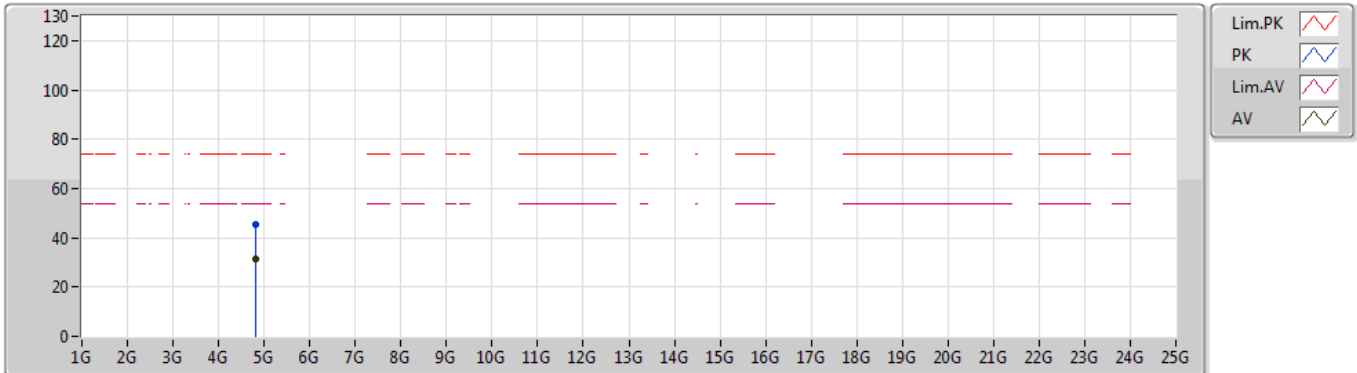
EUT Y\_1TX  
Setting Default  
02-B-2  
FSU(100015)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Factor (dB) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | Raw (dBuV) |
|------|-----------|----------------|----------------|-------------|-------------|----------|-----------|-------------|------------|---------|------------|
| PK   | 4.80714G  | 45.35          | 74.00          | -28.65      | 7.12        | 3        | Vertical  | 187         | 2.07       | -       | 38.23      |
| AV   | 4.80324G  | 31.61          | 54.00          | -22.39      | 7.12        | 3        | Vertical  | 187         | 2.07       | -       | 24.49      |

### BT-EDR(3Mbps)

18/10/2019

### 2402MHz\_TX



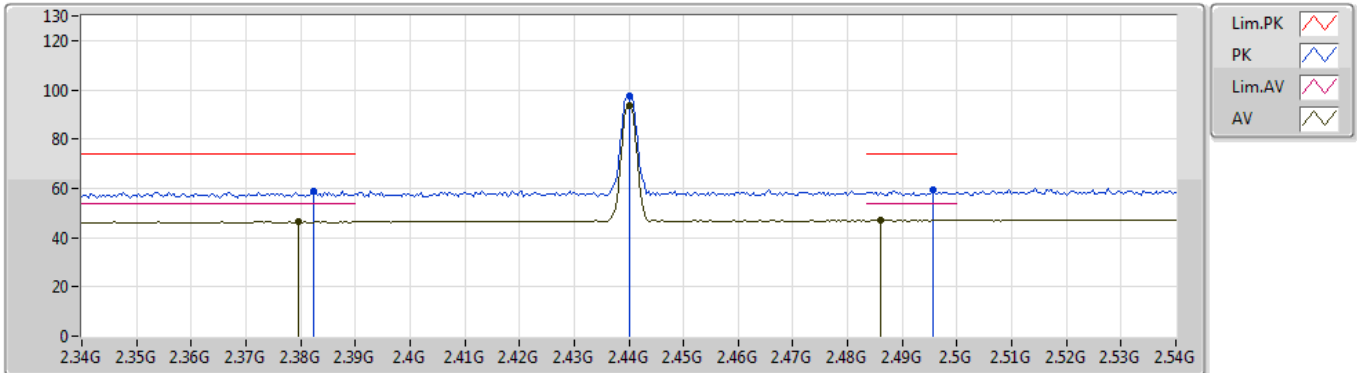
EUT Y\_1TX  
Setting Default  
02-B-2  
FSU(100015)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Factor (dB) | Dist (m) | Condition  | Azimuth (°) | Height (m) | Comment | Raw (dBuV) |
|------|-----------|----------------|----------------|-------------|-------------|----------|------------|-------------|------------|---------|------------|
| PK   | 4.80494G  | 45.40          | 74.00          | -28.60      | 7.12        | 3        | Horizontal | 20          | 2.66       | -       | 38.28      |
| AV   | 4.80336G  | 31.48          | 54.00          | -22.52      | 7.12        | 3        | Horizontal | 20          | 2.66       | -       | 24.36      |

**BT-EDR(3Mbps)**

18/10/2019

**2440MHz\_TX**



EUT Y\_1TX  
Setting Default  
02-B-2  
FSU(100015)

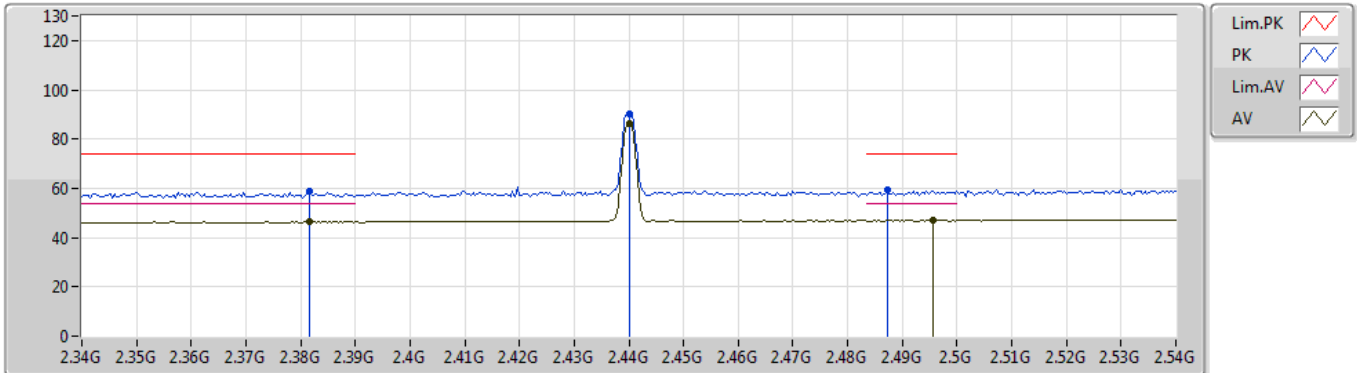
| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Factor (dB) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | Raw (dBuV) |
|------|-----------|----------------|----------------|-------------|-------------|----------|-----------|-------------|------------|---------|------------|
| PK   | 2.3824G   | 58.62          | 74.00          | -15.38      | 31.19       | 3        | Vertical  | 200         | 1.26       | -       | 27.43      |
| AV   | 2.3796G   | 46.61          | 54.00          | -7.39       | 31.18       | 3        | Vertical  | 200         | 1.26       | -       | 15.43      |
| PK   | 2.44G     | 97.39          | Inf            | -Inf        | 31.31       | 3        | Vertical  | 200         | 1.26       | -       | 66.08      |
| AV   | 2.44G     | 93.41          | Inf            | -Inf        | 31.31       | 3        | Vertical  | 200         | 1.26       | -       | 62.10      |
| PK   | 2.4956G   | 59.52          | 74.00          | -14.48      | 31.42       | 3        | Vertical  | 200         | 1.26       | -       | 28.10      |
| AV   | 2.486G    | 46.95          | 54.00          | -7.05       | 31.40       | 3        | Vertical  | 200         | 1.26       | -       | 15.55      |



**BT-EDR(3Mbps)**

18/10/2019

**2440MHz\_TX**



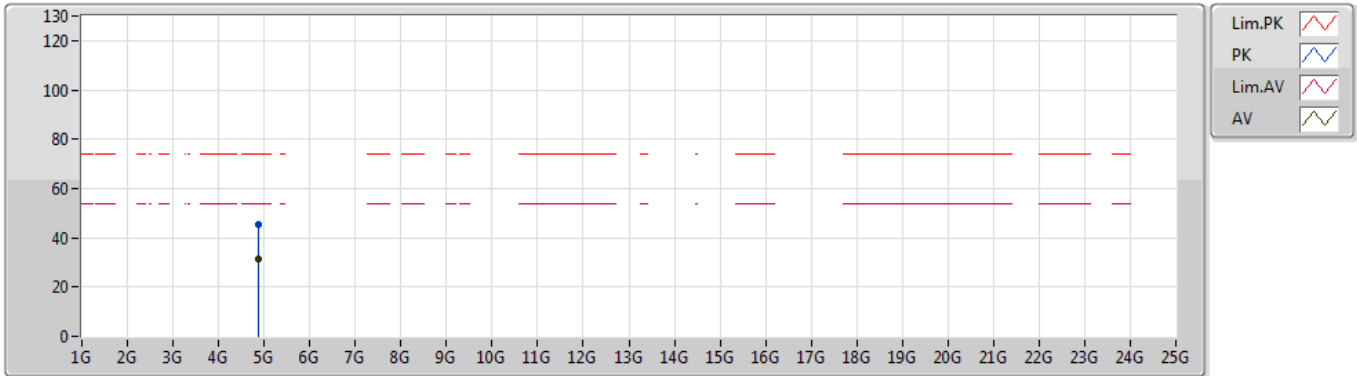
EUT Y\_1TX  
Setting Default  
02-B-2  
FSU(100015)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Factor (dB) | Dist (m) | Condition  | Azimuth (°) | Height (m) | Comment | Raw (dBuV) |
|------|-----------|----------------|----------------|-------------|-------------|----------|------------|-------------|------------|---------|------------|
| PK   | 2.3816G   | 58.73          | 74.00          | -15.27      | 31.19       | 3        | Horizontal | 209         | 2.19       | -       | 27.54      |
| AV   | 2.3816G   | 46.48          | 54.00          | -7.52       | 31.19       | 3        | Horizontal | 209         | 2.19       | -       | 15.29      |
| PK   | 2.44G     | 90.36          | Inf            | -Inf        | 31.31       | 3        | Horizontal | 209         | 2.19       | -       | 59.05      |
| AV   | 2.44G     | 86.32          | Inf            | -Inf        | 31.31       | 3        | Horizontal | 209         | 2.19       | -       | 55.01      |
| PK   | 2.4872G   | 59.37          | 74.00          | -14.63      | 31.40       | 3        | Horizontal | 209         | 2.19       | -       | 27.97      |
| AV   | 2.4956G   | 47.00          | 54.00          | -7.00       | 31.42       | 3        | Horizontal | 209         | 2.19       | -       | 15.58      |

### BT-EDR(3Mbps)

18/10/2019

### 2440MHz\_TX



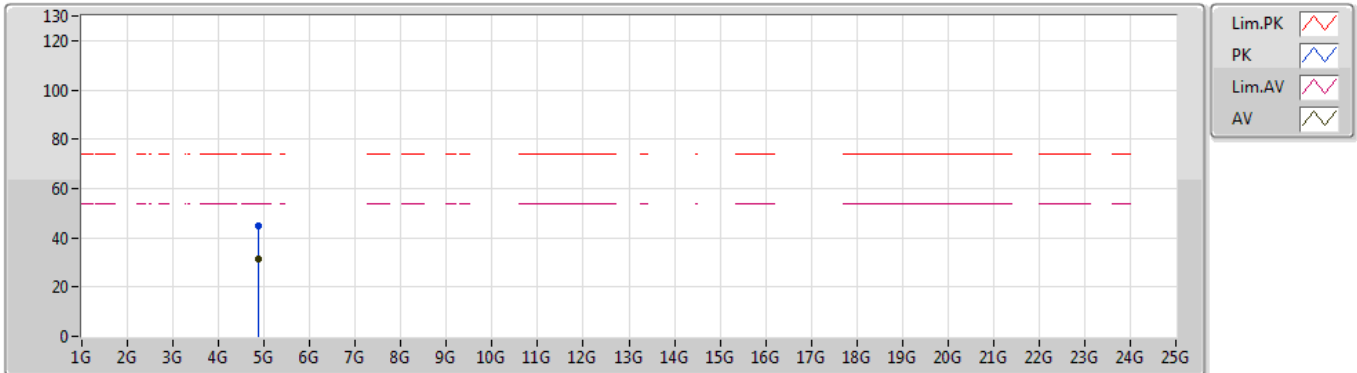
EUT Y\_1TX  
Setting Default  
02-B-2  
FSU(100015)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Factor (dB) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | Raw (dBuV) |
|------|-----------|----------------|----------------|-------------|-------------|----------|-----------|-------------|------------|---------|------------|
| PK   | 4.881666G | 45.12          | 74.00          | -28.88      | 7.31        | 3        | Vertical  | 257         | 2.96       | -       | 37.81      |
| AV   | 4.875G    | 31.65          | 54.00          | -22.35      | 7.29        | 3        | Vertical  | 257         | 2.96       | -       | 24.36      |

### BT-EDR(3Mbps)

18/10/2019

### 2440MHz\_TX



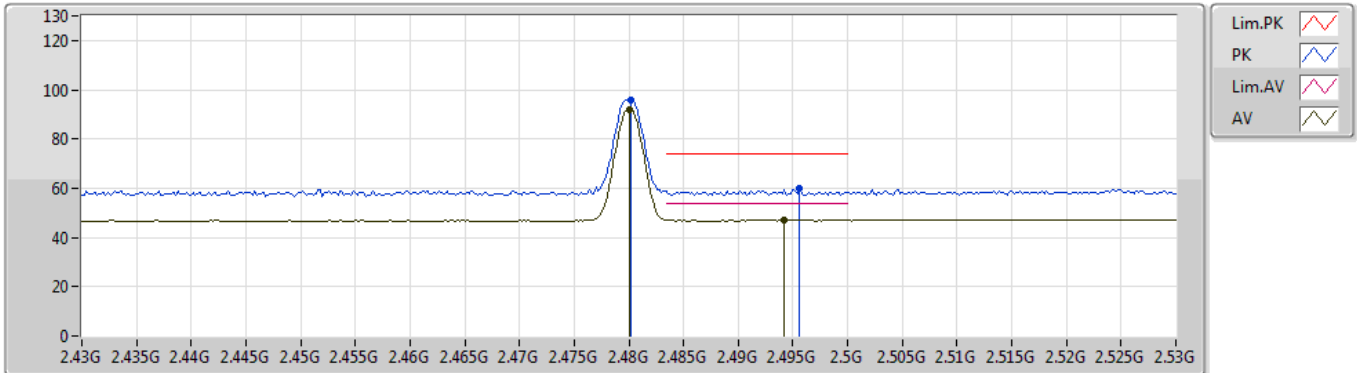
EUT Y\_1TX  
Setting Default  
02-B-2  
FSU(100015)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Factor (dB) | Dist (m) | Condition  | Azimuth (°) | Height (m) | Comment | Raw (dBuV) |
|------|-----------|----------------|----------------|-------------|-------------|----------|------------|-------------|------------|---------|------------|
| PK   | 4.8795G   | 44.99          | 74.00          | -29.01      | 7.30        | 3        | Horizontal | 178         | 2.85       | -       | 37.69      |
| AV   | 4.87912G  | 31.51          | 54.00          | -22.49      | 7.30        | 3        | Horizontal | 178         | 2.85       | -       | 24.21      |

**BT-EDR(3Mbps)**

18/10/2019

**2480MHz\_TX**



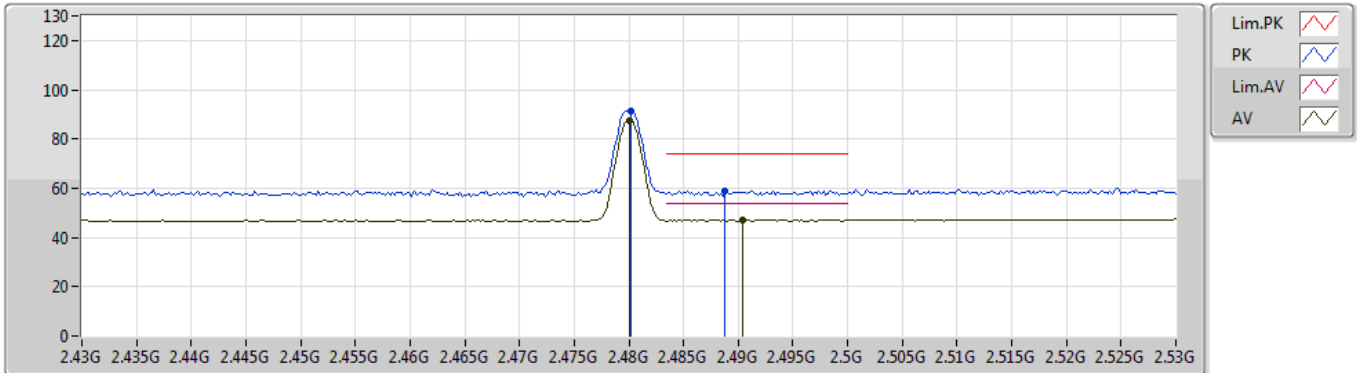
EUT Y\_1TX  
Setting Default  
02-B-2  
FSU(100015)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Factor (dB) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comment | Raw (dBuV) |
|------|-----------|----------------|----------------|-------------|-------------|----------|-----------|-------------|------------|---------|------------|
| PK   | 2.4802G   | 95.82          | Inf            | -Inf        | 31.39       | 3        | Vertical  | 61          | 1.07       | -       | 64.43      |
| AV   | 2.48G     | 91.76          | Inf            | -Inf        | 31.39       | 3        | Vertical  | 61          | 1.07       | -       | 60.37      |
| PK   | 2.4956G   | 60.16          | 74.00          | -13.84      | 31.42       | 3        | Vertical  | 61          | 1.07       | -       | 28.74      |
| AV   | 2.4942G   | 47.00          | 54.00          | -7.00       | 31.42       | 3        | Vertical  | 61          | 1.07       | -       | 15.58      |

**BT-EDR(3Mbps)**

18/10/2019

**2480MHz\_TX**



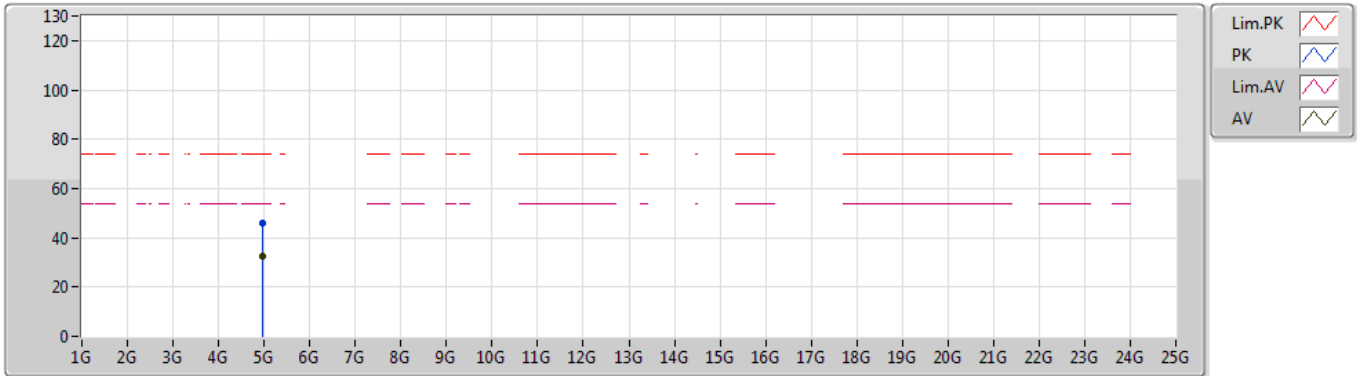
EUT Y\_1TX  
 Setting Default  
 02-B-2  
 FSU(100015)

| Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Factor (dB) | Dist (m) | Condition  | Azimuth (°) | Height (m) | Comment | Raw (dBuV) |
|------|-----------|----------------|----------------|-------------|-------------|----------|------------|-------------|------------|---------|------------|
| PK   | 2.4802G   | 91.44          | Inf            | -Inf        | 31.39       | 3        | Horizontal | 204         | 1.93       | -       | 60.05      |
| AV   | 2.48G     | 87.32          | Inf            | -Inf        | 31.39       | 3        | Horizontal | 204         | 1.93       | -       | 55.93      |
| PK   | 2.4888G   | 59.10          | 74.00          | -14.90      | 31.41       | 3        | Horizontal | 204         | 1.93       | -       | 27.69      |
| AV   | 2.4904G   | 47.07          | 54.00          | -6.93       | 31.41       | 3        | Horizontal | 204         | 1.93       | -       | 15.66      |

### BT-EDR(3Mbps)

18/10/2019

### 2480MHz\_TX



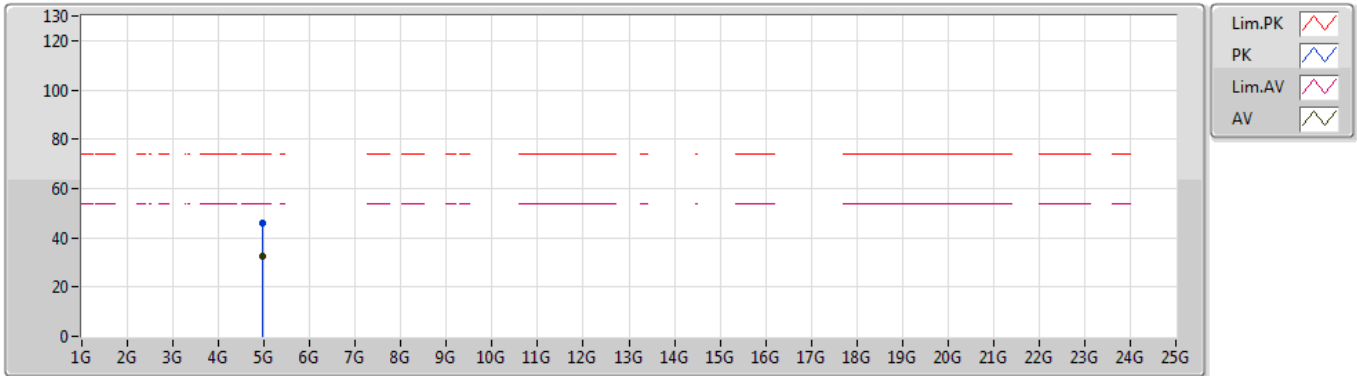
EUT Y\_1TX  
Setting Default  
02-B-2  
FSU(100015)

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Factor<br>(dB) | Dist<br>(m) | Condition | Azimuth<br>(°) | Height<br>(m) | Comment | Raw<br>(dBuV) |
|------|--------------|-------------------|-------------------|----------------|----------------|-------------|-----------|----------------|---------------|---------|---------------|
| PK   | 4.95628G     | 46.02             | 74.00             | -27.98         | 7.48           | 3           | Vertical  | 305            | 1.96          | -       | 38.54         |
| AV   | 4.96654G     | 32.61             | 54.00             | -21.39         | 7.50           | 3           | Vertical  | 305            | 1.96          | -       | 25.11         |

### BT-EDR(3Mbps)

18/10/2019

### 2480MHz\_TX



EUT Y\_1TX  
Setting Default  
02-B-2  
FSU(100015)

| Type | Freq<br>(Hz) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Factor<br>(dB) | Dist<br>(m) | Condition  | Azimuth<br>(°) | Height<br>(m) | Comment | Raw<br>(dBuV) |
|------|--------------|-------------------|-------------------|----------------|----------------|-------------|------------|----------------|---------------|---------|---------------|
| PK   | 4.96248G     | 46.14             | 74.00             | -27.86         | 7.49           | 3           | Horizontal | 99             | 2.53          | -       | 38.65         |
| AV   | 4.96352G     | 32.42             | 54.00             | -21.58         | 7.49           | 3           | Horizontal | 99             | 2.53          | -       | 24.93         |