# FCC RADIO TEST REPORT

| | | |
|---|---|---|
| FCC ID | : | 2AHBN-AP63 |
| Equipment | : | Premium Outdoor 802.11ax WiFi and BLE Array AP |
| Brand Name | : | Mist |
| Model Name | : | AP63, AP63E |
| Applicant | : | Juniper Networks, Inc.<br>1133 Innovation Way, Sunnyvale, CA 94089, USA |
| Manufacturer | : | Juniper Networks, Inc.<br>1133 Innovation Way, Sunnyvale, CA 94089, USA |
| Standard | : | 47 CFR FCC Part 15.247 |

**The product was received on Apr. 16, 2020, and testing was started from Jul. 03, 2020 and completed on Jul. 27, 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 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: Cliff Chang

*SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory*
*No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)*

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# History of this test report

| Report No. | Version | Description | Issued Date |
|---|---|---|---|
| FR041650AA | 01 | Initial issue of report | Aug. 05, 2020 |
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# 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) | DTS Bandwidth | PASS | - |
| 3.3 | 15.247(b) | Maximum Conducted Output Power | PASS | - |
| 3.4 | 15.247(e) | Power Spectral Density | 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:**

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: Wendy Pan**

# 1 General Description

## 1.1 Information

### 1.1.1 RF General Information

| Frequency Range (MHz) | Bluetooth Mode | Ch. Frequency (MHz) | Channel Number |
|---|---|---|---|
| 2400-2483.5 | LE | 2402-2480 | 0-39 [40] |

| Band | Mode | BWch (MHz) | Nant |
|---|---|---|---|
| 2.4G | BT-LE(1Mbps) | 1 | 1 |
| 2.4G | BT-LE(2Mbps) | 2 | 1 |

Note:
- Bluetooth LE uses a GFSK modulation.
- BWch is the nominal channel bandwidth.

### 1.1.2 Antenna Information

**For Configuration 1 / Internal Antenna of EUT:**

| Ant. | Port | Brand | Model Name | Antenna Type | Connector | Antenna Gain(dBi) | | | Radio |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | WLAN 2.4GHz | WLAN 5GHz | Bluetooth | |
| 1 ~ 4 | 1~4 | Juniper | 81XKAF15,G35 | PIFA Antenna | I-PEX | - | 6 | - | R1-5GHz |
| 5~8 | 1~4 | Juniper | 81XKAF15,G35 | PIFA Antenna | I-PEX | 4 | - | - | R2-2.4GHz |
| 9~10 | 1~2 | Juniper | 81XKAF15,G35 | PIFA Antenna | I-PEX | 2.3 | 4.7 | - | R3-2.4GHz R3-5GHz |
| 11 ~ 18 | 1 | Juniper | 81XKAF15,G35 | PIFA Antenna | I-PEX | - | - | 5.1 | R4 |
| 19 | 1 | Juniper | 81XKAF15,G35 | PIFA Antenna | I-PEX | - | - | 4.3 | R4 |
| 20 | 1 | Juniper | 81XKAF15,G35 | PIFA Antenna | I-PEX | - | - | 1.4 | R4 |

Note: The above information was declared by manufacturer.

**For Radio 1 / 5GHz function:**
**For IEEE 802.11a/n/ac/ax mode (4TX/4RX):**
Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.
Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.
**For Radio 2 / 2.4GHz function:**
**For IEEE 802.11b/g/n/ax and VHT mode (4TX/4RX):**
Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.
Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.
**For Radio 3 / 2.4GHz function:**
**For IEEE 802.11b/g/n/ax and VHT mode (2TX/2RX):**
Port 1 and Port 2 can be used as transmitting/receiving antenna.
Port 1 and Port 2 could transmit/receive simultaneously.
**For Radio 3 / 5GHz function:**
**For IEEE 802.11b/g/n/ac/ax mode (2TX/2RX):**
Port 1 and Port 2 can be used as transmitting/receiving antenna.
Port 1 and Port 2 could transmit/receive simultaneously.
**For Radio 4 / Bluetooth function (1TX/1RX):**
Only Port 1 can be use as transmitting/receiving antenna.

**For Configuration 3 / Internal Antenna of EUT:**

| Ant. | Port | Brand | Model Name | Antenna Type | Connector | Antenna Gain(dBi) | | | | | Radio |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | WLAN 2.4GHz | WLAN 5GHz | | | Bluetooth | |
| | | | | | | | B1 (R1) | B4 (R2) | B1, B4 (R3) | | |
| 1 ~ 4 | R1:4~1<br>R2:1~4 | Juniper | 81XKAF15,G35 | PIFA Antenna | I-PEX | 4 | 6 | - | - | - | R1-5GHz<br>R2-2.4GHz |
| 5~8 | 1~4 | Juniper | 81XKAF15,G35 | PIFA Antenna | I-PEX | - | - | 6 | - | - | R2-5GHz |
| 9~10 | 1~2 | Juniper | 81XKAF15,G35 | PIFA Antenna | I-PEX | 2.3 | - | - | 4.7 | - | R3-2.4GHz<br>R3-5GHz |
| 11~18 | 1 | Juniper | 81XKAF15,G35 | PIFA Antenna | I-PEX | - | - | - | - | 5.1 | R4 |
| 19 | 1 | Juniper | 81XKAF15,G35 | PIFA Antenna | I-PEX | - | - | - | - | 4.3 | R4 |
| 20 | 1 | Juniper | 81XKAF15,G35 | PIFA Antenna | I-PEX | - | - | - | - | 1.4 | R4 |

Note: The above information was declared by manufacturer.

**For Radio 1 / 5GHz function:**
**For IEEE 802.11a/n/ac/ax mode (4TX/4RX):**
Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.
Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.
**For Radio 2 / 2.4GHz function:**
**For IEEE 802.11b/g/n/ax and VHT mode (4TX/4RX):**
Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.
Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.
**For Radio 2 / 5GHz Band 4 function:**
**For IEEE 802.11b/g/n/ac/ax mode (4TX/4RX):**
Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.
Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.
**For Radio 3 / 2.4GHz function:**
**For IEEE 802.11b/g/n/ax and VHT mode (2TX/2RX):**
Port 1 and Port 2 can be used as transmitting/receiving antenna.
Port 1 and Port 2 could transmit/receive simultaneously.
**For Radio 3 / 5GHz function:**
**For IEEE 802.11b/g/n/ac/ax mode (2TX/2RX):**
Port 1 and Port 2 can be used as transmitting/receiving antenna.
Port 1 and Port 2 could transmit/receive simultaneously.
**For Radio 4 / Bluetooth function (1TX/1RX):**
Only Port 1 can be use as transmitting/receiving antenna.

**For Configuration 2 / External Antenna of EUT:**

| Ant. | Port | Brand | Model Name | Antenna Type | Connector | Antenna Gain(dBi) | | | Radio |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | WLAN 2.4GHz | WLAN 5GHz | Bluetooth | |
| 1 | 1~4 | AccelTex | ATS-OO-245-46-6NP-36 | Omni Antenna | N-Style | 4 | 6 | - | R2-2.4GHz R1-5GHz |
| | 1~2 | AccelTex | ATS-OO-245-46-6NP-36 | Omni Antenna | N-Style | 4 | 6 | - | R3-2.4GHz R3-5GHz |
| 2 | 1~4 | AccelTex | ATS-OP-245-810-6NP-36 | Patch Antenna | N-Style | 8 | 10 | - | R2-2.4GHz R1-5GHz |
| | 1~2 | AccelTex | ATS-OP-245-810-6NP-36 | Patch Antenna | N-Style | 8 | 10 | - | R3-2.4GHz R3-5GHz |
| 3 ~ 10 | 1 | Juniper | 81XKAF15,G36 | PIFA Antenna | I-PEX | - | - | 5.1 | R4 |
| 11 | 1 | Juniper | 81XKAF15,G36 | PIFA Antenna | I-PEX | - | - | 4.3 | R4 |
| 12 | 1 | Juniper | 81XKAF15,G36 | PIFA Antenna | I-PEX | - | - | 1.4 | R4 |

Note: The above information was declared by manufacturer.

**For Radio 1 / 5GHz function:**
**For IEEE 802.11a/n/ac/ax mode (4TX/4RX):**
Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.
Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.
**For Radio 2 / 2.4GHz function:**
**For IEEE 802.11b/g/n/ax and VHT mode (4TX/4RX):**
Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.
Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.
**For Radio 3 / 2.4GHz function:**
**For IEEE 802.11b/g/n/ax and VHT mode (2TX/2RX):**
Port 1 and Port 2 can be used as transmitting/receiving antenna.
Port 1 and Port 2 could transmit/receive simultaneously.
**For Radio 3 / 5GHz function:**
**For IEEE 802.11b/g/n/ac/ax mode (2TX/2RX):**
Port 1 and Port 2 can be used as transmitting/receiving antenna.
Port 1 and Port 2 could transmit/receive simultaneously.
**For Radio 4 / Bluetooth function (1TX/1RX):**
Only Port 1 can be use as transmitting/receiving antenna.

### 1.1.3 Mode Test Duty Cycle

| Mode | DC | DCF(dB) | T(s) | VBW(Hz) ≥ 1/T |
|---|---|---|---|---|
| BT-LE(1Mbps) | 0.632 | 1.99 | 395u | 3k |
| BT-LE(2Mbps) | 0.333 | 4.78 | 209u | 10k |

Note:
- DC is Duty Cycle.
- DCF is Duty Cycle Factor.

### 1.1.4 EUT Operational Condition

| | | | | |
|---|---|---|---|---|
| **EUT Power Type** | From PoE | | | |
| **Function** | ☒ | Point-to-multipoint | ☐ | Point-to-point |
| **Test Software Version** | accessMTool 3.2.0.2 | | | |
| **Support Mode** | ☒ | LE 1M PHY: 1 Mb/s | | |
| | ☐ | LE Coded PHY (S=2): 500 Kb/s | | |
| | ☐ | LE Coded PHY (S=8): 125 Kb/s | | |
| | ☒ | LE 2M PHY: 2 Mb/s | | |

Note: The above information was declared by manufacturer.

### 1.1.5 Table for Multiple Listing

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

| Model Name | EUT | Description |
|---|---|---|
| AP63 | EUT 1 | The model name: AP63 indicates that it comes with internal antennas and The model name: AP63E indicates that the access point comes with external antenna connectors. |
| AP63E | EUT 2 | |

### 1.1.6 Table for EUT Configuration

| Configuration | EUT | Radio 1 | Radio 2 | Radio 3 | Radio 4 |
|---|---|---|---|---|---|
| 1 | 1 | WLAN 5GHz | WLAN 2.4GHz | WLAN 2.4GHz + WLAN 5GHz | Bluetooth |
| 2 | 2 | WLAN 5GHz | WLAN 2.4GHz | WLAN 2.4GHz + WLAN 5GHz | Bluetooth |
| 3 | 1 | WLAN 5GHz | WLAN 2.4GHz + WLAN 5GHz | WLAN 2.4GHz + WLAN 5GHz | Bluetooth |

Note: 1. The Bluetooth antennas are the same for EUT 1 and EUT 2, so there's only EUT 1 was tested and recorded in the report.
2. The above information was declared by manufacturer.
3. Configuration 1: Radio 1 in 5GHz support Band 1/4, Radio 3 in 5GHz support Band 1/4.
Configuration 2: Radio 1 in 5GHz support Band 1/4, Radio 3 in 5GHz support Band 1/4.
Configuration 3: Radio 1 in 5GHz support Band 1, Radio 2 in 5GHz support Band 4, Radio 3 in 5GHz support Band 1/4.
4. For test items AC Power-line Conducted Emissions, Unwanted Emissions below 1GHz and Radiated Emission Co-location the test configuration was declared by manufacturer as below:
Radio 1:WLAN 5GHz (Low Band) + Radio 2: WLAN 2.4GHz + Radio 3: WLAN 5GHz (High Band) + Radio 4: Bluetooth.

## 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
- ANSI C63.10-2013

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 | | | |
|---|---|---|---|
| ☐ | HWA YA | ADD : | No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) |
| | | TEL : | 886-3-327-3456 FAX : 886-3-327-0973 |
| ☒ | JHUBEI | ADD : | No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C. |
| | | TEL : | 886-3-656-9065 FAX : 886-3-656-9085 |

| Test Condition | Test Site No. | Test Engineer | Test Environment | Test Date |
|---|---|---|---|---|
| RF Conducted | TH03-CB | Benson Su | 24.8-26.6°C / 56-61% | Jul. 07, 2020 ~ Jul. 27, 2020 |
| Radiated<1GHz | 10CH01-CB | Ryo Fan | 22~23°C / 59~60% | Jul. 10, 2020 ~ Jul. 11, 2020 |
| Radiated>1GHz | 03CH03-CB | Eason Chen | 25.7-27.2°C / 58-61% | Jul. 03, 2020 ~ Jul. 24, 2020 |
| | 03CH06-CB | Eason Chen | 25.1-26.9°C / 58-60% | Jul. 03, 2020 ~ Jul. 24, 2020 |
| AC Conduction | CO01-CB | Max Lin | 22~23°C / 61~62% | Jul. 13, 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 Emissions below 1GHz | 4.8 dB | Confidence levels of 95% |
| Radiated Emission (1GHz ~ 18GHz) | 5.0 dB | Confidence levels of 95% |
| Radiated Emission (18GHz ~ 40GHz) | 4.6 dB | Confidence levels of 95% |
| Radiated Emission (40GHz ~ 60GHz) | 3.9 dB | Confidence levels of 95% |
| Radiated Emission (60GHz ~ 90GHz) | 4.5 dB | Confidence levels of 95% |
| Radiated Emission (90GHz ~ 200GHz) | 5.3 dB | Confidence levels of 95% |
| Conducted Emission | 2.8 dB | Confidence levels of 95% |

# 2 Test Configuration of EUT

## 2.1 Test Channel Mode

| Mode | Power Setting |
|---|---|
| BT-LE(1Mbps) | - |
| 2402MHz | Default |
| 2440MHz | Default |
| 2480MHz | Default |
| BT-LE(2Mbps) | - |
| 2402MHz | Default |
| 2440MHz | Default |
| 2480MHz | Default |

## 2.2 The Worst Case Measurement Configuration

| The Worst Case Mode for Following Conformance Tests | |
|---|---|
| **Tests Item** | AC power-line conducted emissions |
| **Condition** | AC power-line conducted measurement for line and neutral |
| **Operating Mode** | Normal Link |
| 1 | EUT 2 Radio 1 (WLAN 5GHz / Low Band) + Radio 2 (WLAN 2.4GHz) + Radio 3 (WLAN 5GHz / High Band) + Radio 4 (Bluetooth) + External Ant. 2 + PoE 1 |

| The Worst Case Mode for Following Conformance Tests | | |
|---|---|---|
| **Tests Item** | DTS Bandwidth<br>Maximum Conducted Output Power<br>Power Spectral Density<br>Emissions in Non-restricted Frequency Bands | |
| **Test Condition** | Conducted measurement at transmit chains | |
| | For Ant.11 ~ Ant.17 can be used as transmitting/receiving functions, but only one antenna can be used as transmitting/receiving functions at one time and the worst case was found at Ant.17. So the measurement will follow this same test configuration. | |
| **Test Mode** | 1 | EUT 1 + Ant. 17 (Directional Mode / Beam 7) |
| | 2 | EUT 1 + Ant. 19 (Beam 9) |
| | 3 | EUT 1 + Ant. 20 (Omni Mode) |

| The Worst Case Mode for Following Conformance Tests | |
|---|---|
| **Tests Item** | Emissions in Restricted Frequency Bands |
| **Test Condition** | 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. |
| **Operating Mode < 1GHz** | Normal Link |
| 1 | EUT 1 in Y axis Radio 1 (WLAN 5GHz / Low Band) + Radio 2 (WLAN 2.4GHz) + Radio 3 (WLAN 5GHz / High Band) + Radio 4 (Bluetooth) + PoE 1 |
| 2 | EUT 1 in Z axis Radio 1 (WLAN 5GHz / Low Band) + Radio 2 (WLAN 2.4GHz) + Radio 3 (WLAN 5GHz / High Band) + Radio 4 (Bluetooth) + PoE 1 |
| Mode 1 has been evaluated to be the worst case between Mode 1~2, thus measurement for Mode 3 ~ 4 will follow this same test mode. | |
| 3 | EUT 2 in Y axis Radio 1 (WLAN 5GHz / Low Band) + Radio 2 (WLAN 2.4GHz) + Radio 3 (WLAN 5GHz / High Band) + Radio 4 (Bluetooth) + External Ant. 1 + PoE 1 |
| 4 | EUT 2 in Y axis Radio 1 (WLAN 5GHz / Low Band) + Radio 2 (WLAN 2.4GHz) + Radio 3 (WLAN 5GHz / High Band) + Radio 4 (Bluetooth) + External Ant. 2 + PoE 1 |
| For operating mode 1 is the worst case and it was record in this test report. | |
| **Operating Mode > 1GHz** | CTX |
| **For Ant. 11 ~ Ant.18 (Directional Mode):**<br>Ant.11 ~ Ant.18 can be used as transmitting/receiving functions, but only one antenna can be used as transmitting/receiving functions at one time and the worst case was found at Ant.17. So the measurement will follow this same test configuration.<br>The EUT was performed at X、Y axis and Z axis and the worst case was found at Y axis. So the measurement will follow this same test configuration.<br>**For Ant. 19 (Beam 9):**<br>The EUT was performed at X、Y axis and Z axis and the worst case was found at Z axis. So the measurement will follow this same test configuration.<br>**For Ant. 20 (Omni Mode):**<br>The EUT was performed at X、Y axis and Z axis and the worst case was found at Y axis. So the measurement will follow this same test configuration. | |
| 1 | EUT 1 in Y axis + Ant. 17 (Directional Mode / Beam 7) |
| 2 | EUT 1 in Z axis + Ant. 19 (Beam 9) |
| 3 | EUT 1 in Y axis + Ant. 20 (Omni Mode) |

| The Worst Case Mode for Following Conformance Tests | |
|---|---|
| **Tests Item** | Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation |
| **For Configuration 1: EUT 1** | |
| 1 | Radio 1 (WLAN 5GHz) + Radio 2 (WLAN 2.4GHz) + Radio 3 (WLAN 2.4GHz) + Radio 4 (Bluetooth) |
| 2 | Radio 1 (WLAN 5GHz) + Radio 2 (WLAN 2.4GHz) + Radio 3 (WLAN 5GHz) + Radio 4 (Bluetooth) |
| **For Configuration 2: EUT 2** | |
| 3 | Radio 1 (WLAN 5GHz) + Radio 2 (WLAN 2.4GHz) + Radio 3 (WLAN 2.4GHz) + Radio 4 (Bluetooth) |
| 4 | Radio 1 (WLAN 5GHz) + Radio 2 (WLAN 2.4GHz) + Radio 3 (WLAN 5GHz) + Radio 4 (Bluetooth) |
| **For Configuration 3: EUT 1** | |
| 5 | Radio 1 (WLAN 5GHz / Low Band) + Radio 2 (WLAN 2.4GHz) + Radio 3 (WLAN 2.4GHz) + Radio 4 (Bluetooth) |
| 6 | Radio 1 (WLAN 5GHz / Low Band) + Radio 2 (WLAN 2.4GHz) + Radio 3 (WLAN 5GHz) + Radio 4 (Bluetooth) |
| 7 | Radio 1 (WLAN 5GHz / Low Band) + Radio 2 (WLAN 5GHz / High Band) + Radio 3 (WLAN 2.4GHz) + Radio 4 (Bluetooth) |
| 8 | Radio 1 (WLAN 5GHz / Low Band) + Radio 2 (WLAN 5GHz / High Band) + Radio 3 (WLAN 5GHz) + Radio 4 (Bluetooth) |
| Refer to Sporton Test Report No.: FA041650 for Co-location RF Exposure Evaluation. | |

Note: The PoE is for measurement only, would not be marketed.

PoE information as below:

| Power | Brand | Model |
|---|---|---|
| PoE 1 | YAMAHA | YPS-PoE-AT |
| PoE 2 | Buffalo | BIJ-POE-1P:T |

## 2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

## 2.4 Accessories

Flush Mount Bracket*1
Mounting Bracket*2
Seal*2

## 2.5 Support Equipment

**For AC Conduction and Radiated (below 1GHz):**

| Support Equipment | | | | |
|---|---|---|---|---|
| **No.** | **Equipment** | **Brand Name** | **Model Name** | **FCC ID** |
| A | PoE | YAMAHA | YPS-PoE-AT | N/A |
| B | 2.5G PC | DELL | T3400 | N/A |
| C | PoE LOAD | N/A | N/A | N/A |
| D | PoE LOAD NB | DELL | E6430 | N/A |
| E | 2.4G NB | DELL | E6430 | N/A |
| F | 5G-1 NB | DELL | E6430 | N/A |
| G | 5G-2 NB | DELL | E6430 | N/A |
| H | Smart phone | Samsung | Galaxy J2 | N/A |

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

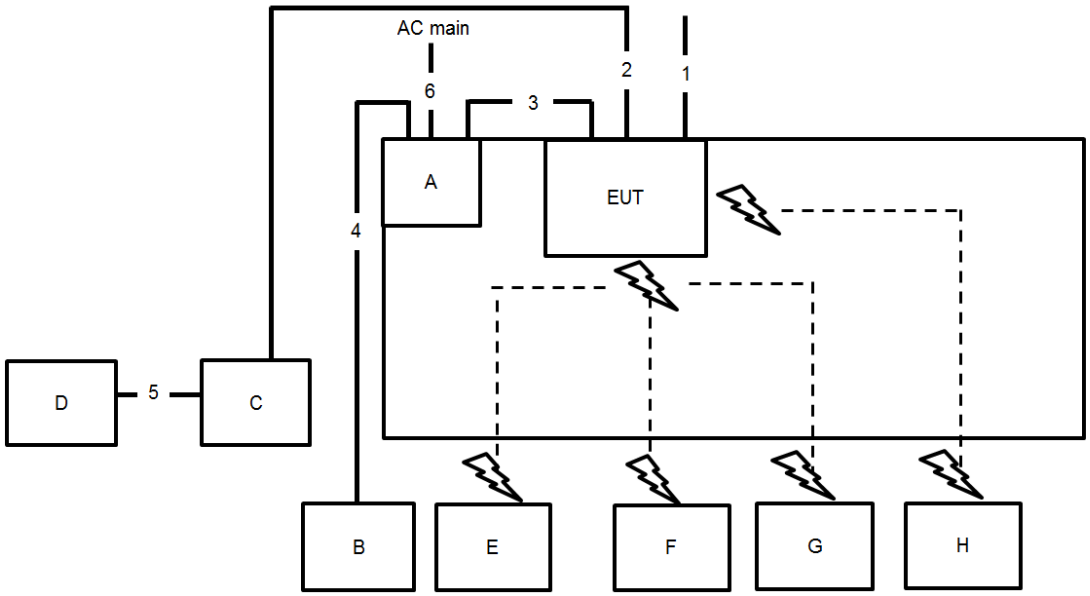
| Support Equipment | | | | |
|---|---|---|---|---|
| **No.** | **Equipment** | **Brand Name** | **Model Name** | **FCC ID** |
| A | PoE | Buffalo | BIJ-POE-1P:T | N/A |
| B | Notebook | DELL | E4300 | N/A |
| E | Bluetooth Test set | Anritsu | MT8852B | N/A |

**For RF Conducted:**

| Support Equipment | | | | |
|---|---|---|---|---|
| **No.** | **Equipment** | **Brand Name** | **Model Name** | **FCC ID** |
| A | Notebook | DELL | E4300 | N/A |
| B | PoE | Buffalo | BIJ-POE-1P:T | N/A |

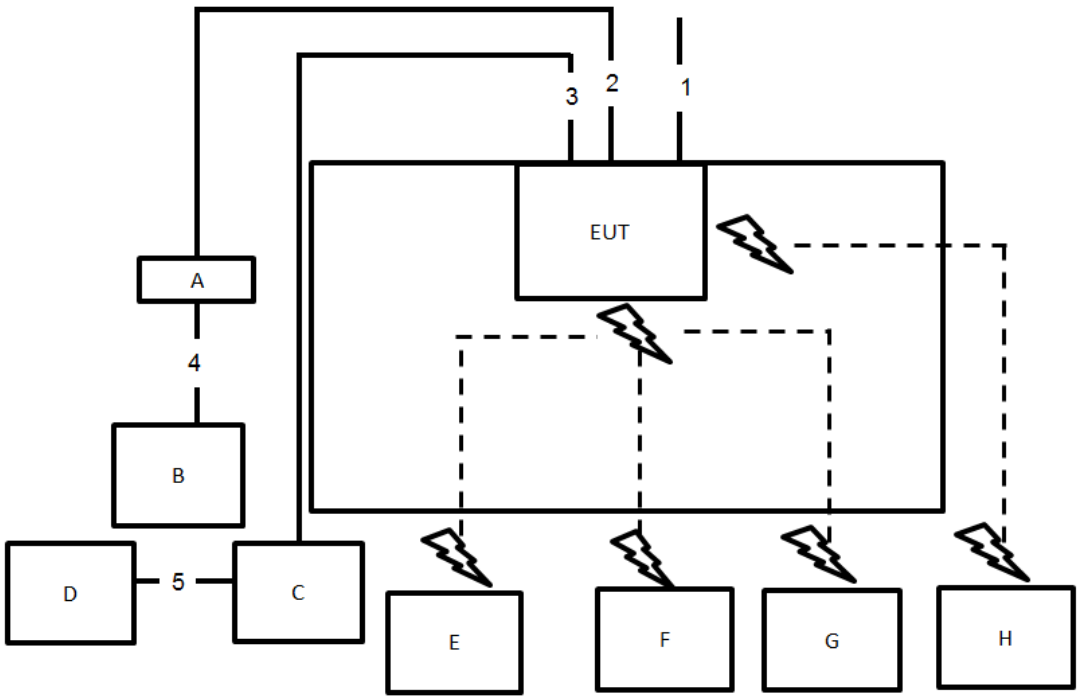
## 2.6 Test Setup Diagram

**Test Setup Diagram – AC Line Conducted Emission Test**



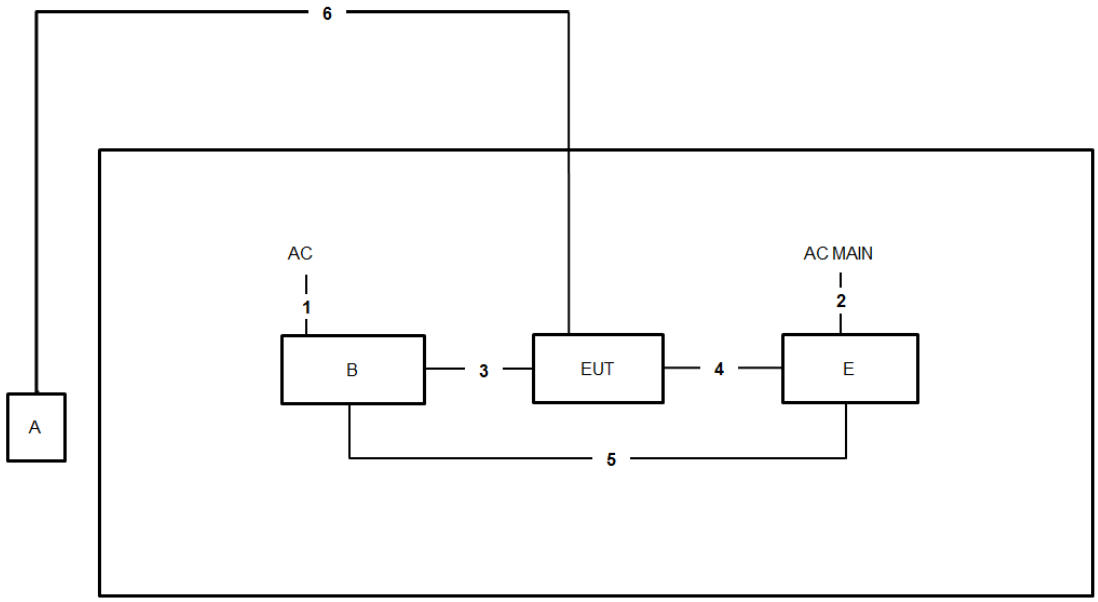

| Item | Connection | Shielded | Length |
|---|---|---|---|
| 1 | Ground cable | No | 1.5m |
| 2 | RJ-45 cable | No | 10m |
| 3 | RJ-45 cable | No | 1.5m |
| 4 | RJ-45 cable | No | 10m |
| 5 | RJ-45 cable | No | 1.5m |
| 6 | Power cable | No | 1.8m |

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




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

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




| Item | Connection | Shielded | Length |
|---|---|---|---|
| 1 | Power cable | No | 2.6m |
| 2 | Power cable | No | 1.9m |
| 3 | USB to Console | Yes | 1.8m |
| 4 | Control to RS-232 | No | 1.4m |
| 5 | GBIP to USB | Yes | 2m |
| 6 | Power cable | No | 10m |

# 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

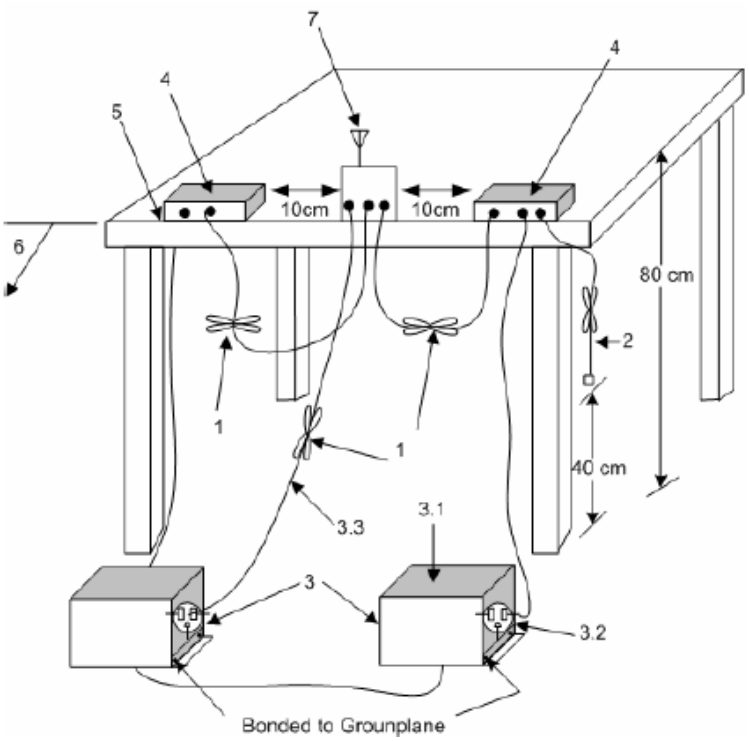
Refer a test equipment and calibration data table in this test report.

### 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

**AC Power-line Conducted Emissions**




1—Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long.
2—The I/O cables that are not connected to an accessory shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
3—EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50 Ω loads. LISN may be placed on top of, or immediately beneath, reference ground plane.
3.1—All other equipment powered from additional LISN(s).
3.2—A multiple-outlet strip may be used for multiple power cords of non-EUT equipment.
3.3—LISN at least 80 cm from nearest part of EUT chassis.
4—Non-EUT components of EUT system being tested.
5—Rear of EUT, including peripherals, shall all be aligned and flush with edge of tabletop.
6—Edge of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.
7—Antenna can be integral or detachable. If detachable, then the antenna shall be attached for this test.

### 1.1.1. Measurement Results Calculation

The measured Level is calculated using:

a. Corrected Reading (dBuV) = LISN Factor + Cable Loss + Read Level = Level

b. Margin = - Limit + (Read Level + LISN Factor + Cable Loss)

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

Refer as Appendix A

## 3.2 DTS Bandwidth

### 3.2.1 6dB Bandwidth Limit

| 6dB Bandwidth Limit |
|---|
| **Systems using digital modulation techniques:** |
| ▪ 6 dB bandwidth ≥ 500 kHz. |

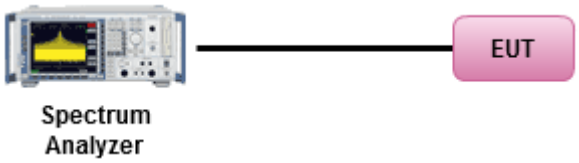
### 3.2.2 Measuring Instruments

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

### 3.2.3 Test Procedures

| Test Method | |
|---|---|
| ▪ For the emission bandwidth shall be measured using one of the options below: | |
| | ☒ Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.1 Option 1 for 6 dB bandwidth measurement. |
| | ☐ Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.2 Option 2 for 6 dB bandwidth measurement. |
| | ☐ Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing. |

### 3.2.4 Test Setup

| Emission Bandwidth |
|---|
|  |



### 3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

# 3.3 Maximum Conducted Output Power

## 3.3.1 Maximum Conducted Output Power Limit

| Maximum Conducted Output Power Limit | | |
|---|---|---|
| | ▪ If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W) | |
| | ▪ Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)$ dBm | |
| | ▪ Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)/3$ dBm | |
| | ▪ Smart antenna system (SAS): | |
| | | - Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)/3$ dBm |
| | | - Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)/3$ dBm |
| | | - Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 – (G_{TX} – 6)/3 + 8$dB dBm |
| **$P_{Out}$** = maximum peak conducted output power or maximum conducted output power in dBm,<br>**$G_{TX}$** = the maximum transmitting antenna directional gain in dBi. | | |

## 3.3.2 Measuring Instruments

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

### 3.3.3 Test Procedures

| Test Method | |
|---|---|
| ▪ Maximum Peak Conducted Output Power | |
| | ☐ Refer as FCC KDB 558074, clause 8.3.1.1 & C63.10 clause 11.9.1.1 (RBW ≥ EBW method). |
| | ☐ Refer as FCC KDB 558074, clause 8.3.1.3 & C63.10 clause 11.9.1.3 (peak power meter). |
| ▪ Maximum Conducted Output Power | |
| | [duty cycle ≥ 98% or external video / power trigger] |
| | ☐ Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.2 Method AVGSA-1. |
| | ☐ Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.3 Method AVGSA-1A. (alternative) |
| | duty cycle < 98% and average over on/off periods with duty factor |
| | ☐ Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.4 Method AVGSA-2. |
| | ☐ Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.5 Method AVGSA-2A (alternative) |
| | ☐ Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.6 Method AVGSA-3 |
| | ☐ Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.7 Method AVGSA-3A (alternative) |
| | Measurement using a power meter (PM) |
| | ☐ Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.1 Method AVGPM (using an RF average power meter). |
| | ☒ Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.2 Method AVGPM-G (using an gate RF average power meter). |
| ▪ For conducted measurement. | |
| | ▪ If the EUT supports multiple transmit chains using options given below:<br>Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them. |
| | ▪ If multiple transmit chains, EIRP calculation could be following as methods:<br>$P_{total} = P_1 + P_2 + \ldots + P_n$<br>(calculated in linear unit [mW] and transfer to log unit [dBm])<br>$EIRP_{total} = P_{total} + DG$ |

### 3.3.4 Test Setup

| Maximum Conducted Output Power (Power Meter) |
| --- |
|  |



### 3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

# 3.4 Power Spectral Density

## 3.4.1 Power Spectral Density Limit

| Power Spectral Density Limit |
|---|
| ▪ Power Spectral Density (PSD)≤8 dBm/3kHz |

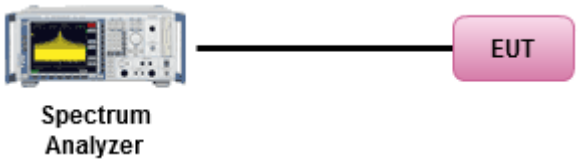
## 3.4.2 Measuring Instruments

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

## 3.4.3 Test Procedures

| Test Method | | |
|---|---|---|
| ▪ Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option). | | |
| | ☒ Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10 Method Max. PSD. | |
| | [duty cycle ≥ 98% or external video / power trigger] | |
| ▪ For conducted measurement. | | |
| | ▪ If The EUT supports multiple transmit chains using options given below: | |
| | | ☐ Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace. |
| | | ☐ Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits, |
| | | ☐ Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit. |

### 3.4.4 Test Setup

| Power Spectral Density |
| --- |
|   |

### 3.4.5 Test Result of Power Spectral Density

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 |
| Average output power procedure | 30 |
| 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.<br>Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average PSD level. | |

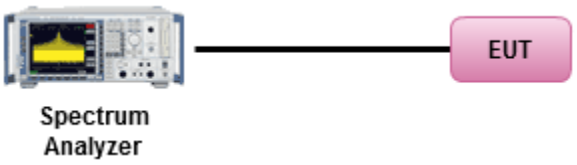
## 3.5.2 Measuring Instruments

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

## 3.5.3 Test Procedures

| Test Method |
|---|
| ▪ Refer as FCC KDB 558074, clause 8.5 for unwanted emissions into non-restricted bands. |

## 3.5.4 Test Setup

| Emissions in Non-restricted Frequency Bands |
|---|
|  |

## 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 below30 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.

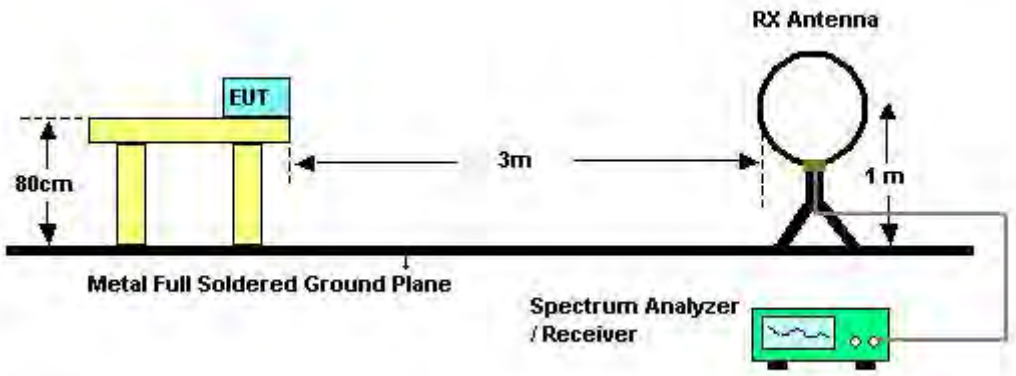
### 3.6.3 Test Procedures

| Test Method | | |
|---|---|---|
| ▪ The average emission levels shall be measured in [duty cycle ≥ 98 or 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 FCC KDB 558074, clause 8.6 for unwanted emissions into restricted bands. | |
| | | ☐ Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.1(trace averaging for duty cycle ≥98%). |
| | | ☐ Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.2(trace averaging + duty factor). |
| | | ☒ Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.3(Reduced VBW≥1/T). |
| | | ☐ Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time. |
| | | ☐ Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions. |
| | | ☒ Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.4 measurement procedure peak limit. |
| ▪ For the transmitter band-edge emissions shall be measured using following options below: | | |
| | ▪ Refer as FCC KDB 558074 clause 8.7 & c63.10 clause 11.13.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below. | |
| | ▪ Refer as FCC KDB 558074, clause 8.7 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements. | |
| | ▪ Refer as FCC KDB 558074, clause 8.7 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz). | |
| | ▪ For conducted unwanted emissions into restricted bands (absolute emission limits).<br>Devices with multiple transmit chains using options given below:<br>(1) Measure and sum the spectra across the outputs or<br>(2) Measure and add 10 log(N) dB | |
| | ▪ For FCC KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred. | |

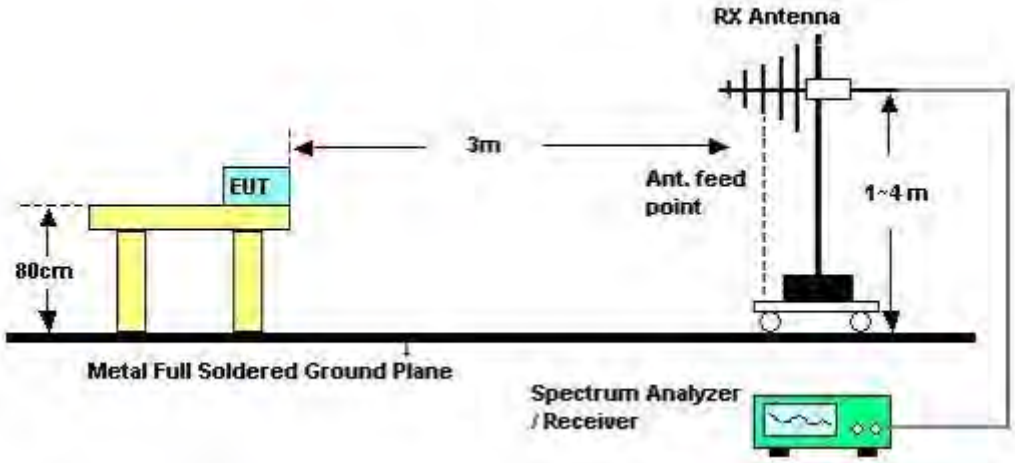
### 3.6.4 Test Setup

**Emissions in Restricted Frequency Bands**

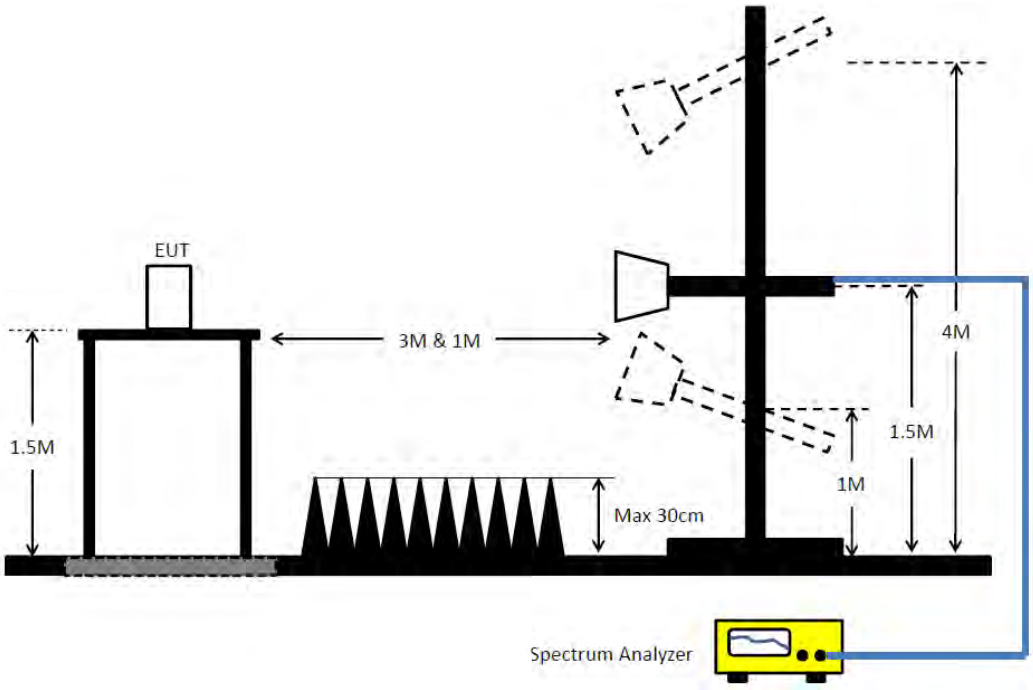
**9kHz ~30MHz**




**30MHz~1GHz**



**Above 1GHz**




### 3.6.5 Measurement Results Calculation

The measured Level is calculated using:
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor (if applicable) = 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 |
|---|---|---|---|---|---|---|---|
| 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) |
| Pulse Limiter | Rohde&Schwarz | ESH3-Z2 | 100430 | 9kHz ~ 30MHz | Jan. 31, 2020 | Jan. 30, 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) |
| Loop Antenna | Teseq | HLA 6120 | 24155 | 9kHz - 30 MHz | Apr. 13, 2020 | Apr. 12, 2021 | Radiation (10CH01-CB) |
| 10m Semi Anechoic Chamber | TDK | NSA | 10CH01-CB | 30MHz~1GHz 10m,3m | Jan. 30, 2020 | Jan. 29, 2021 | Radiation (10CH01-CB) |
| Pre-Amplifier | Agilent | 8447D | 2944A10783 | 9kHz ~ 1.3GHz | Mar. 19, 2020 | Mar. 18, 2021 | Radiation (10CH01-CB) |
| Pre-Amplifier | Agilent | 8447D | 2944A10784 | 9kHz ~ 1.3GHz | Mar. 11, 2020 | Mar. 10, 2021 | Radiation (10CH01-CB) |
| Low Cable | Woken | SUCOFLEX 104 | low cable-01 | 25MHz ~ 1GHz | Oct. 21, 2019 | Oct. 20, 2020 | Radiation (10CH01-CB) |
| High Cable | Woken | SUCOFLEX 104 | low cable-02 | 25MHz ~ 1GHz | Oct. 21, 2019 | Oct. 20, 2020 | Radiation (10CH01-CB) |
| Biconical Antenna | Schwarzbeck | VHBB 9124 | 324 | 30MHz ~ 200MHz | Apr. 20, 2020 | Apr. 19, 2021 | Radiation (10CH01-CB) |
| Log Antenna | Schwarzbeck | VUSLP 9111 | 247 | 200MHz ~ 1GHz | May 25, 2020 | May 24, 2021 | Radiation (10CH01-CB) |
| EMI Test Receiver | Rohde&Schwarz | ESCI | 100186 | 9kHz ~ 3GHz | Jul. 08, 2020 | Jul. 07, 2021 | Radiation (10CH01-CB) |
| Spectrum Analyzer | Rohde&Schwarz | FSV30 | 101026 | 9kHz ~ 30GHz | Mar. 03, 2020 | Mar. 02, 2021 | Radiation (10CH01-CB) |

| Instrument | Manufacturer | Model No. | Serial No. | Characteristics | Calibration Date | Calibration Due Date | Remark |
|---|---|---|---|---|---|---|---|
| Software | Audix | E3 | 6.120210m | - | N.C.R. | N.C.R. | Radiation (10CH01-CB) |
| Horn Antenna | ETS・Lindgren | 3115 | 6821 | 750MHz~18GHz | Jan. 20, 2020 | Jan. 19, 2021 | Radiation (03CH03-CB) |
| Horn Antenna | SCHWARZBECK | BBHA 9170 | BBHA9170507 | 15GHz ~ 40GHz | Jun. 11, 2020 | Jun. 10, 2021 | Radiation (03CH03-CB) |
| Pre-Amplifier | EMCI | EMC12630SE | 980383 | 1GHz ~ 26.5GHz | Aug. 02, 2019 | Aug. 01, 2020 | Radiation (03CH03-CB) |
| Amplifier | - | - | TF-130N-R1 | 18GHz ~ 40GHz | Jun. 19, 2020 | Jun. 18, 2021 | Radiation (03CH03-CB) |
| Spectrum Analyzer | R&S | FSP40 | 100019 | 9kHz ~ 40GHz | Jun. 09, 2020 | Jun. 08, 2021 | Radiation (03CH03-CB) |
| RF Cable-high | Woken | RG402 | High Cable-20+27(spare) | 1GHz ~ 18GHz | Jul. 03, 2020 | Jun. 02, 2021 | Radiation (03CH03-CB) |
| RF Cable-high | Woken | RG402 | High Cable-27(spare) | 1GHz ~ 18GHz | Jul. 03, 2020 | Jun. 02, 2021 | Radiation (03CH03-CB) |
| RF Cable-high | Woken | RG402 | High Cable-40G#1 | 18GHz ~ 40 GHz | Jul. 16, 2020 | Jul. 15, 2021 | Radiation (03CH03-CB) |
| RF Cable-high | Woken | RG402 | High Cable-40G#2 | 18GHz ~ 40 GHz | Jul. 16, 2020 | Jul. 15, 2021 | Radiation (03CH03-CB) |
| Horn Antenna | SCHWARZBECK | BBHA9120D | 9120D-1292 | 1GHz~18GHz | Jul. 17, 2019 | Jul. 16, 2020 | Radiation (03CH06-CB) |
| Horn Antenna | SCHWARZBECK | BBHA9120D | BBHA 9120D-1291 | 1GHz~18GHz | Oct. 05, 2019 | Oct. 04, 2020 | Radiation (03CH06-CB) |
| Horn Antenna | COM-POWER | AH-118 | 071028 | 1GHz ~ 18GHz | Jun. 09, 2020 | Jun. 08, 2021 | Radiation (03CH06-CB) |
| Horn Antenna | SCHWARZBECK | BBHA 9170 | BBHA9170507 | 15GHz ~ 40GHz | Jun. 11, 2020 | Jun. 10, 2021 | Radiation (03CH06-CB) |
| Pre-Amplifier | Agilent | 83017A | MY53270064 | 0.5GHz ~ 26.5GHz | May 07, 2020 | May 06, 2021 | Radiation (03CH06-CB) |
| Amplifier | - | - | TF-130N-R1 | 18GHz ~ 40GHz | Jun. 19, 2020 | Jun. 18, 2021 | Radiation (03CH06-CB) |
| Spectrum analyzer | R&S | FSP40 | 100080 | 9kHz~40GHz | Oct. 21, 2019 | Oct. 20, 2020 | Radiation (03CH06-CB) |

| Instrument | Manufacturer | Model No. | Serial No. | Characteristics | Calibration Date | Calibration Due Date | Remark |
|---|---|---|---|---|---|---|---|
| RF Cable-high | HUBER+SUHNER | RG402 | High Cable-05 | 1GHz~18GHz | Oct. 07, 2019 | Oct. 06, 2020 | Radiation (03CH06-CB) |
| RF Cable-high | HUBER+SUHNER | RG402 | High Cable-05+24 | 1GHz~18GHz | Oct. 07, 2019 | Oct. 06, 2020 | Radiation (03CH06-CB) |
| RF Cable-high | Woken | RG402 | High Cable-40G#1 | 18GHz ~ 40 GHz | Jul. 24, 2019 | Jul. 23, 2020 | Radiation (03CH06-CB) |
| RF Cable-high | Woken | RG402 | High Cable-40G#1 | 18GHz ~ 40 GHz | Jul. 16, 2020 | Jul. 15, 2021 | Radiation (03CH06-CB) |
| RF Cable-high | Woken | RG402 | High Cable-40G#2 | 18GHz ~ 40 GHz | Jul. 24, 2019 | Jul. 23, 2020 | Radiation (03CH06-CB) |
| RF Cable-high | Woken | RG402 | High Cable-40G#2 | 18GHz ~ 40 GHz | Jul. 16, 2020 | Jul. 15, 2021 | Radiation (03CH06-CB) |
| Spectrum analyzer | R&S | FSV40 | 101028 | 9kHz~40GHz | Nov. 01, 2019 | Oct. 31, 2020 | Conducted (TH03-CB) |
| Power Sensor | Anritsu | MA2411B | 1726195 | 300MHz~40GHz | Aug. 13, 2019 | Aug. 12, 2020 | Conducted (TH03-CB) |
| Power Meter | Anritsu | ML2495A | 1035008 | 300MHz~40GHz | Aug. 13, 2019 | Aug. 12, 2020 | Conducted (TH03-CB) |
| RF Cable-high | Woken | RG402 | High Cable-11 | 1 GHz – 26.5 GHz | Oct. 07, 2019 | Oct. 06, 2020 | Conducted (TH03-CB) |
| RF Cable-high | Woken | RG402 | High Cable-12 | 1 GHz – 26.5 GHz | Oct. 07, 2019 | Oct. 06, 2020 | Conducted (TH03-CB) |
| RF Cable-high | Woken | RG402 | High Cable-13 | 1 GHz – 26.5 GHz | Oct. 07, 2019 | Oct. 06, 2020 | Conducted (TH03-CB) |
| RF Cable-high | Woken | RG402 | High Cable-14 | 1 GHz – 26.5 GHz | Oct. 07, 2019 | Oct. 06, 2020 | Conducted (TH03-CB) |
| RF Cable-high | Woken | RG402 | High Cable-15 | 1 GHz – 26.5 GHz | Oct. 07, 2019 | Oct. 06, 2020 | Conducted (TH03-CB) |

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

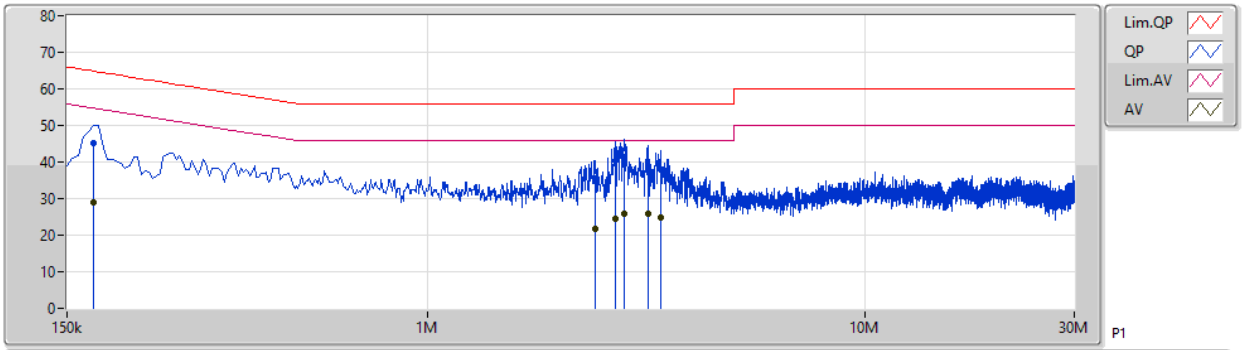
N.C.R. means Non-Calibration required.

**Summary**

| Mode | Result | Type | Freq (Hz) | Level (dBuV) | Limit (dBuV) | Margin (dB) | Factor (dB) | Condition |
|---|---|---|---|---|---|---|---|---|
| Mode 1 | Pass | QP | 2.783M | 41.60 | 56.00 | -14.40 | 10.00 | Neutral |

**Mode 1**

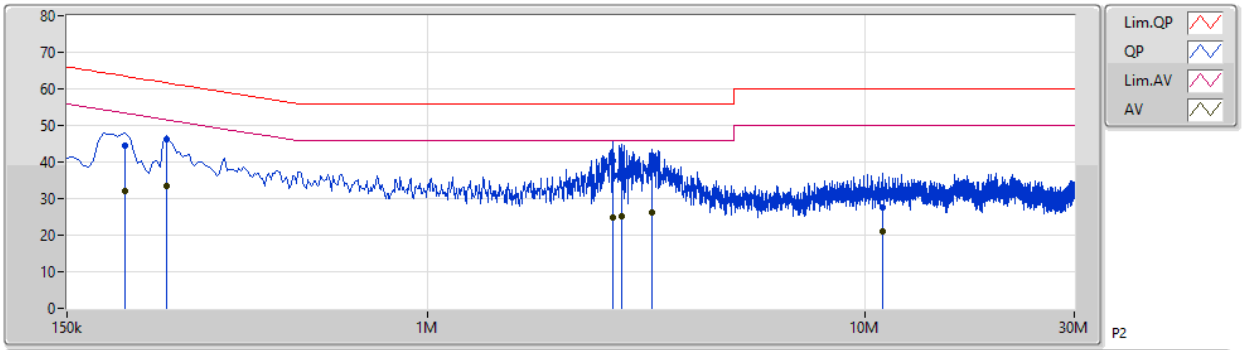
13/07/2020




| Type | Freq | Level | Limit | Margin | Factor | Condition | Comment | Raw | AF | CL | AT |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV) | (dBuV) | (dB) | (dB) | | | (dBuV) | (dB) | (dB) | (dB) |
| QP | 172.5k | 45.13 | 64.83 | -19.70 | 9.87 | Line | - | 35.26 | 0.05 | 0.03 | 9.79 |
| AV | 172.5k | 29.08 | 54.83 | -25.75 | 9.87 | Line | - | 19.21 | 0.05 | 0.03 | 9.79 |
| QP | 2.409M | 35.40 | 56.00 | -20.60 | 9.98 | Line | - | 25.42 | 0.07 | 0.09 | 9.82 |
| AV | 2.409M | 21.86 | 46.00 | -24.14 | 9.98 | Line | - | 11.88 | 0.07 | 0.09 | 9.82 |
| QP | 2.693M | 40.41 | 56.00 | -15.59 | 9.99 | Line | - | 30.42 | 0.07 | 0.10 | 9.82 |
| AV | 2.693M | 24.39 | 46.00 | -21.61 | 9.99 | Line | - | 14.40 | 0.07 | 0.10 | 9.82 |
| QP | 2.81M | 41.48 | 56.00 | -14.52 | 9.99 | Line | "Worst" | 31.49 | 0.07 | 0.10 | 9.82 |
| AV | 2.81M | 25.84 | 46.00 | -20.16 | 9.99 | Line | - | 15.85 | 0.07 | 0.10 | 9.82 |
| QP | 3.183M | 38.88 | 56.00 | -17.12 | 10.01 | Line | - | 28.87 | 0.08 | 0.11 | 9.82 |
| AV | 3.183M | 25.89 | 46.00 | -20.11 | 10.01 | Line | - | 15.88 | 0.08 | 0.11 | 9.82 |
| QP | 3.408M | 37.87 | 56.00 | -18.13 | 10.01 | Line | - | 27.86 | 0.08 | 0.12 | 9.81 |
| AV | 3.408M | 24.96 | 46.00 | -21.04 | 10.01 | Line | - | 14.95 | 0.08 | 0.12 | 9.81 |

**Mode 1**

13/07/2020




| Type | Freq | Level | Limit | Margin | Factor | Condition | Comment | Raw | AF | CL | AT |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV) | (dBuV) | (dB) | (dB) | | | (dBuV) | (dB) | (dB) | (dB) |
| QP | 204k | 44.55 | 63.44 | -18.89 | 9.86 | Neutral | - | 34.69 | 0.04 | 0.03 | 9.79 |
| AV | 204k | 31.95 | 53.44 | -21.49 | 9.86 | Neutral | - | 22.09 | 0.04 | 0.03 | 9.79 |
| QP | 253.5k | 46.18 | 61.64 | -15.46 | 9.87 | Neutral | - | 36.31 | 0.04 | 0.03 | 9.80 |
| AV | 253.5k | 33.35 | 51.64 | -18.29 | 9.87 | Neutral | - | 23.48 | 0.04 | 0.03 | 9.80 |
| QP | 2.648M | 40.51 | 56.00 | -15.49 | 9.99 | Neutral | - | 30.52 | 0.08 | 0.09 | 9.82 |
| AV | 2.648M | 24.84 | 46.00 | -21.16 | 9.99 | Neutral | - | 14.85 | 0.08 | 0.09 | 9.82 |
| QP | 2.783M | 41.60 | 56.00 | -14.40 | 10.00 | Neutral | "Worst" | 31.60 | 0.08 | 0.10 | 9.82 |
| AV | 2.783M | 25.19 | 46.00 | -20.81 | 10.00 | Neutral | - | 15.19 | 0.08 | 0.10 | 9.82 |
| QP | 3.264M | 39.31 | 56.00 | -16.69 | 10.01 | Neutral | - | 29.30 | 0.08 | 0.11 | 9.82 |
| AV | 3.264M | 26.08 | 46.00 | -19.92 | 10.01 | Neutral | - | 16.07 | 0.08 | 0.11 | 9.82 |
| QP | 10.946M | 27.70 | 60.00 | -32.30 | 10.27 | Neutral | - | 17.43 | 0.18 | 0.17 | 9.92 |
| AV | 10.946M | 20.92 | 50.00 | -29.08 | 10.27 | Neutral | - | 10.65 | 0.18 | 0.17 | 9.92 |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**
**Summary**

| Mode | Max-N dB (Hz) | Max-OBW (Hz) | ITU-Code | Min-N dB (Hz) | Min-OBW (Hz) |
|---|---|---|---|---|---|
| 2.4-2.4835GHz | - | - | - | - | - |
| BT-LE(1Mbps) | 717.5k | 1.052M | 1M05F1D | 702.5k | 1.044M |
| BT-LE(2Mbps) | 1.145M | 2.059M | 2M06F1D | 1.138M | 2.044M |

**Max-N dB** = Maximum 6dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;
**Min-N dB** = Minimum 6dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**
**Result**

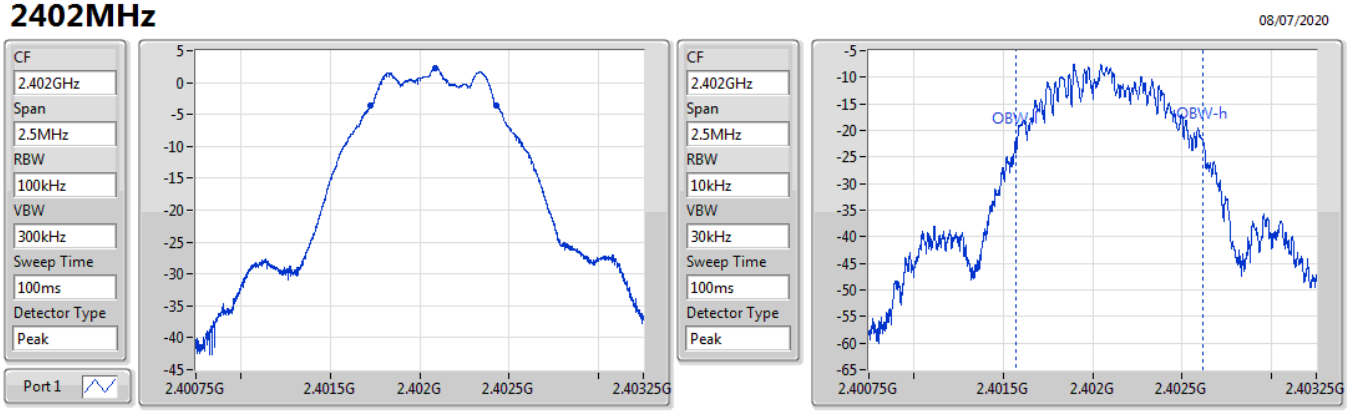
| Mode | Result | Limit (Hz) | Port 1-N dB (Hz) | Port 1-OBW (Hz) |
|---|---|---|---|---|
| BT-LE(1Mbps) | - | - | - | - |
| 2402MHz | Pass | 500k | 702.5k | 1.044M |
| 2440MHz | Pass | 500k | 711.25k | 1.049M |
| 2480MHz | Pass | 500k | 717.5k | 1.052M |
| BT-LE(2Mbps) | - | - | - | - |
| 2402MHz | Pass | 500k | 1.14M | 2.044M |
| 2440MHz | Pass | 500k | 1.138M | 2.046M |
| 2480MHz | Pass | 500k | 1.145M | 2.059M |

**Port X-N dB** = Port **X** 6dB down bandwidth; **Port X-OBW** = Port **X** 99% occupied bandwidth;

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(1Mbps)** **EBW**

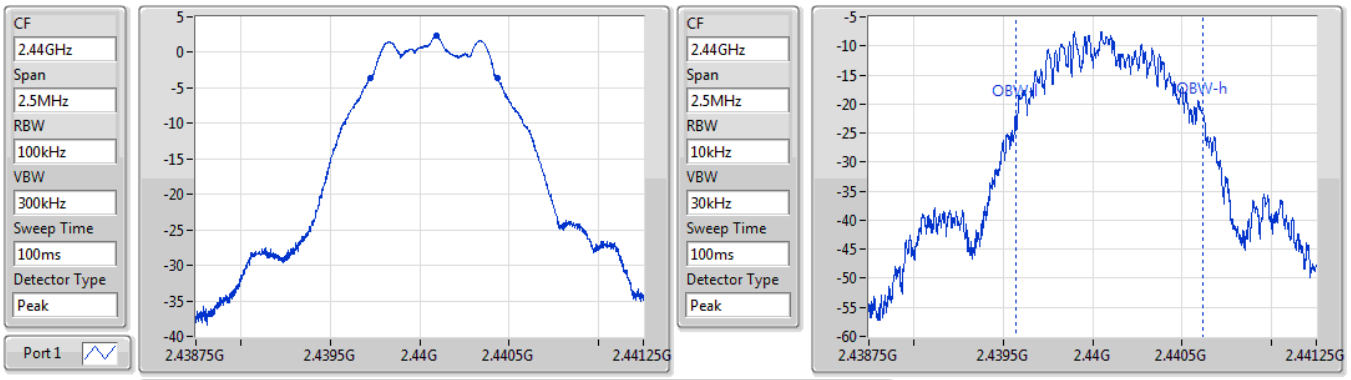
**2402MHz**




| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 702.5k | 2.401728G | 2.40243G | 1.044M | 2.40157G | 2.402615G | 500k | 1 |

**BT-LE(1Mbps)** **EBW**

**2440MHz**

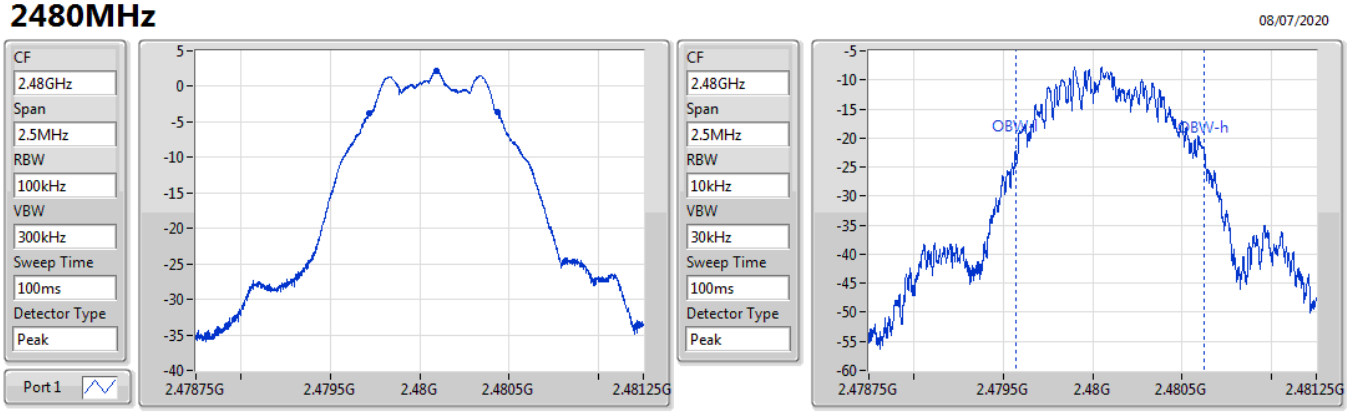



| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 711.25k | 2.439723G | 2.440434G | 1.049M | 2.439569G | 2.440618G | 500k | 1 |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(1Mbps)** **EBW**

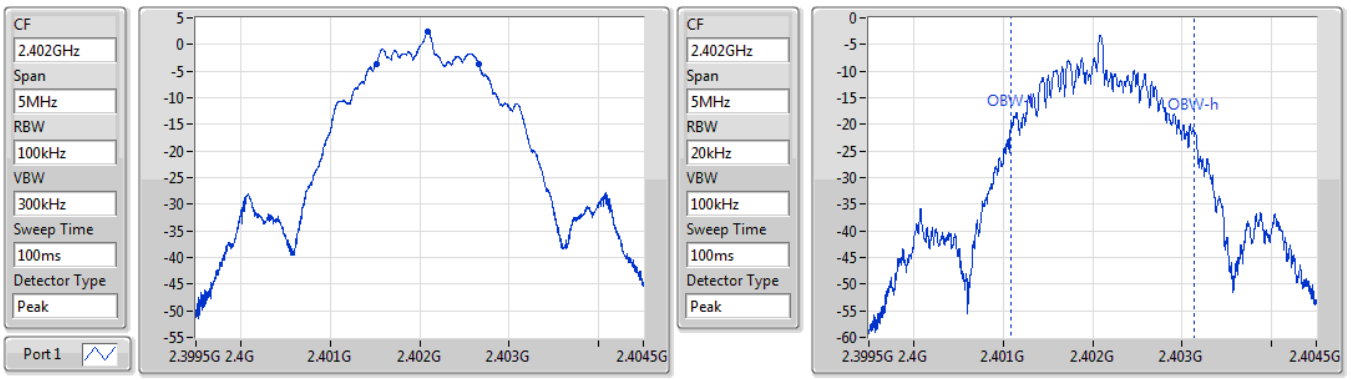
**2480MHz**




| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 717.5k | 2.47972G | 2.480438G | 1.052M | 2.47957G | 2.480622G | 500k | 1 |

**BT-LE(2Mbps)** **EBW**

**2402MHz**



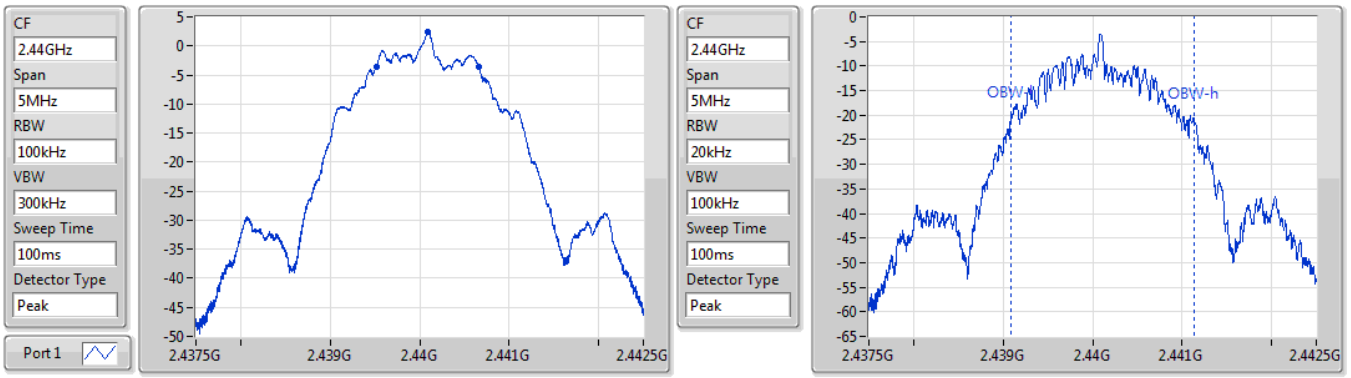

| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 1.14M | 2.401523G | 2.402663G | 2.044M | 2.401085G | 2.403129G | 500k | 1 |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(2Mbps)** **EBW**

**2440MHz**

08/07/2020

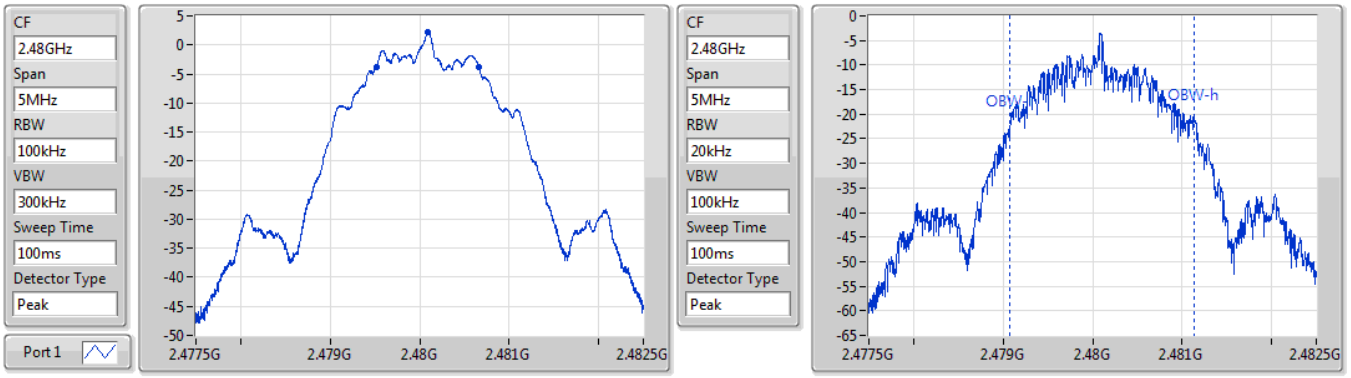



| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 1.138M | 2.43952G | 2.440658G | 2.046M | 2.439085G | 2.441132G | 500k | 1 |

**BT-LE(2Mbps)** **EBW**

**2480MHz**

08/07/2020




| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 1.145M | 2.479515G | 2.48066G | 2.059M | 2.47908G | 2.481139G | 500k | 1 |

## Test Mode: EUT 1 + Ant.19 (Beam 9)

### Summary

| Mode | Max-N dB (Hz) | Max-OBW (Hz) | ITU-Code | Min-N dB (Hz) | Min-OBW (Hz) |
|---|---|---|---|---|---|
| 2.4-2.4835GHz | - | - | - | - | - |
| BT-LE(1Mbps) | 717.5k | 1.052M | 1M05F1D | 702.5k | 1.044M |
| BT-LE(2Mbps) | 1.145M | 2.059M | 2M06F1D | 1.138M | 2.044M |

**Max-N dB** = Maximum 6dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;
**Min-N dB** = Minimum 6dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

### Result

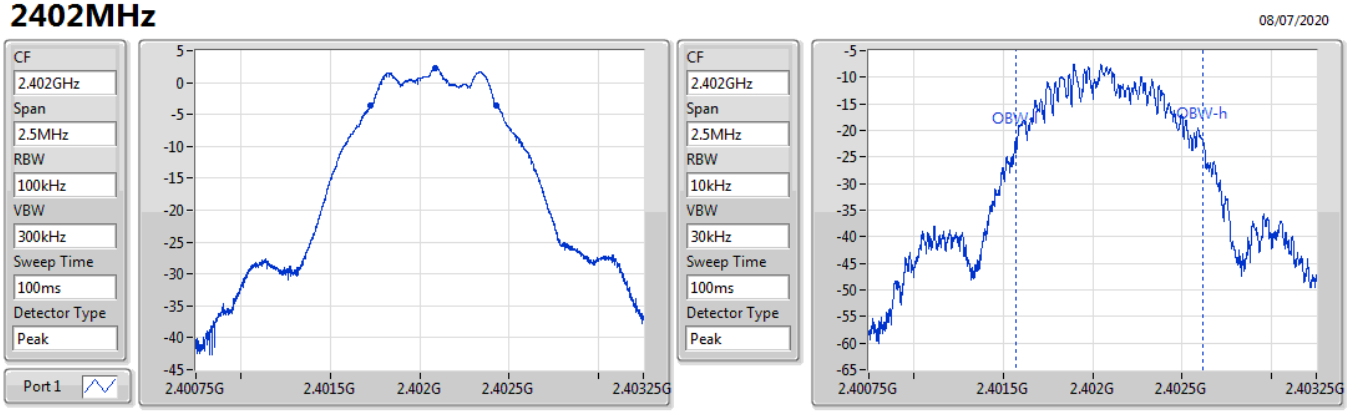
| Mode | Result | Limit (Hz) | Port 1-N dB (Hz) | Port 1-OBW (Hz) |
|---|---|---|---|---|
| BT-LE(1Mbps) | - | - | - | - |
| 2402MHz | Pass | 500k | 702.5k | 1.044M |
| 2440MHz | Pass | 500k | 711.25k | 1.049M |
| 2480MHz | Pass | 500k | 717.5k | 1.052M |
| BT-LE(2Mbps) | - | - | - | - |
| 2402MHz | Pass | 500k | 1.14M | 2.044M |
| 2440MHz | Pass | 500k | 1.138M | 2.046M |
| 2480MHz | Pass | 500k | 1.145M | 2.059M |

**Port X-N dB** = Port **X** 6dB down bandwidth; **Port X-OBW** = Port **X** 99% occupied bandwidth;

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(1Mbps)** **EBW**

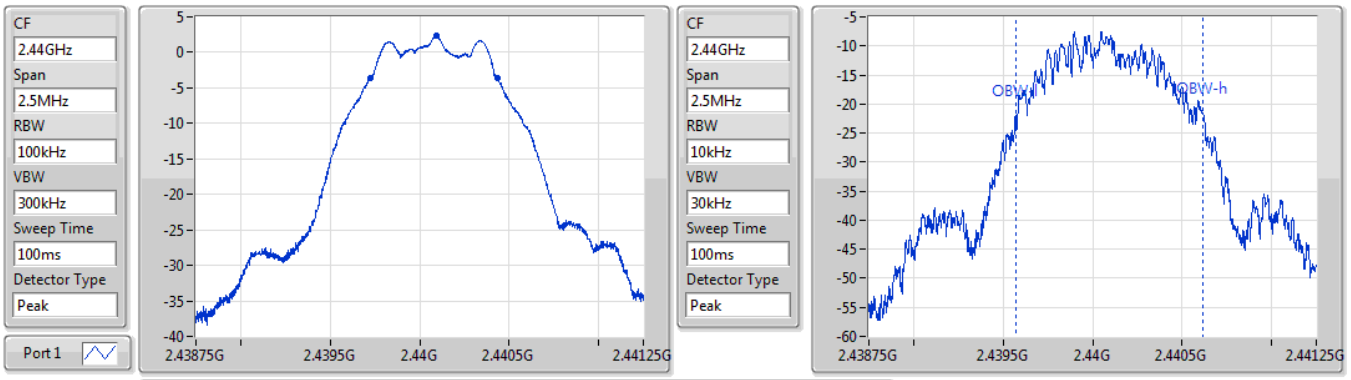
**2402MHz**




| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 702.5k | 2.401728G | 2.40243G | 1.044M | 2.40157G | 2.402615G | 500k | 1 |

**BT-LE(1Mbps)** **EBW**

**2440MHz**

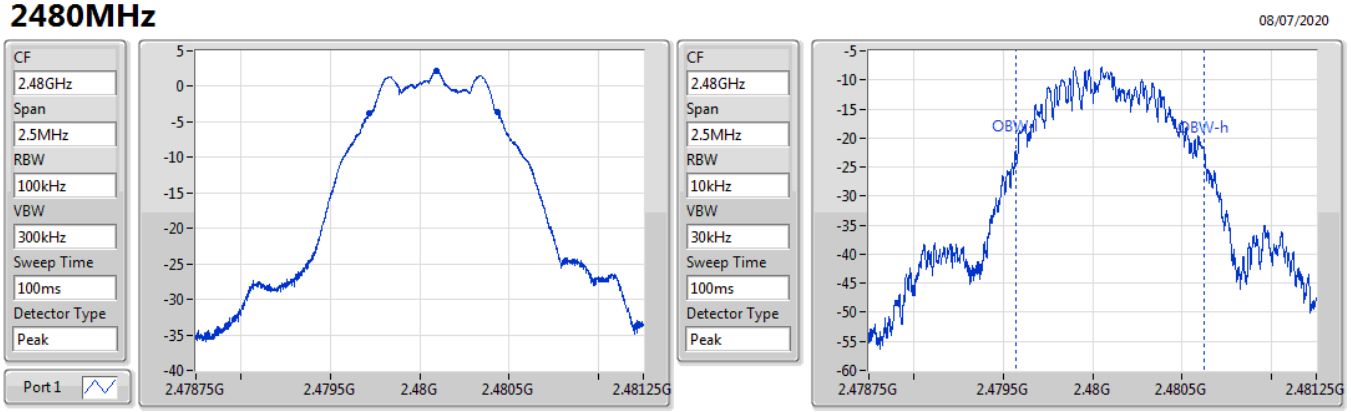



| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 711.25k | 2.439723G | 2.440434G | 1.049M | 2.439569G | 2.440618G | 500k | 1 |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

## BT-LE(1Mbps) EBW

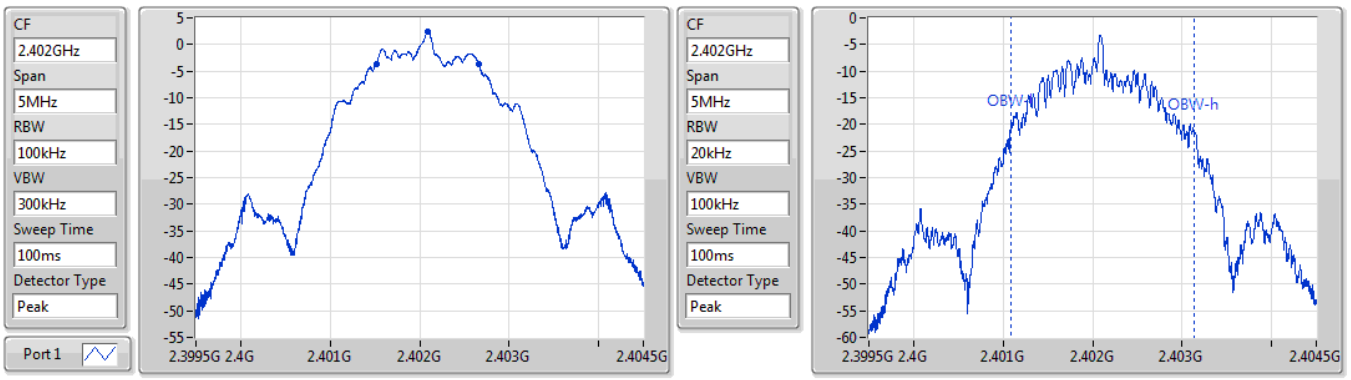
### 2480MHz




| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 717.5k | 2.47972G | 2.480438G | 1.052M | 2.47957G | 2.480622G | 500k | 1 |

## BT-LE(2Mbps) EBW

### 2402MHz



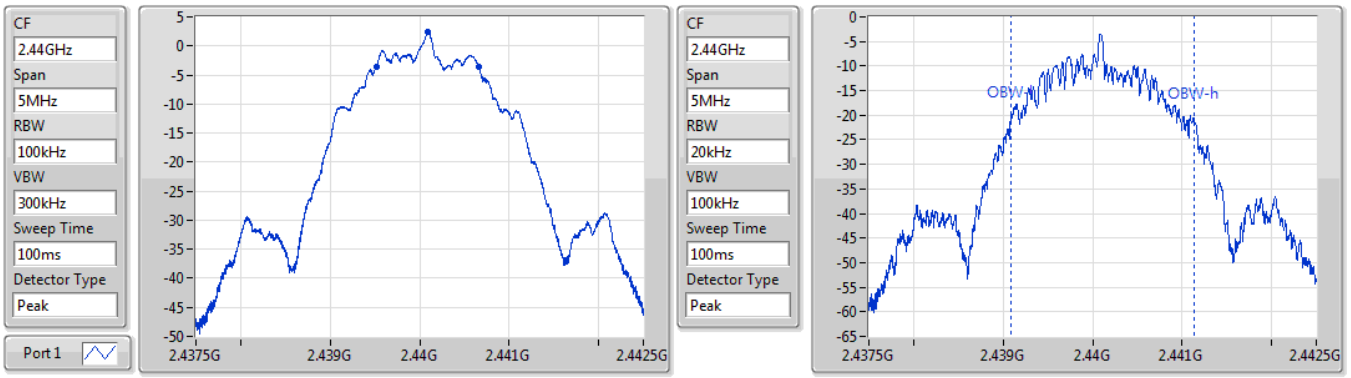

| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 1.14M | 2.401523G | 2.402663G | 2.044M | 2.401085G | 2.403129G | 500k | 1 |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(2Mbps)** **EBW**

**2440MHz**

08/07/2020

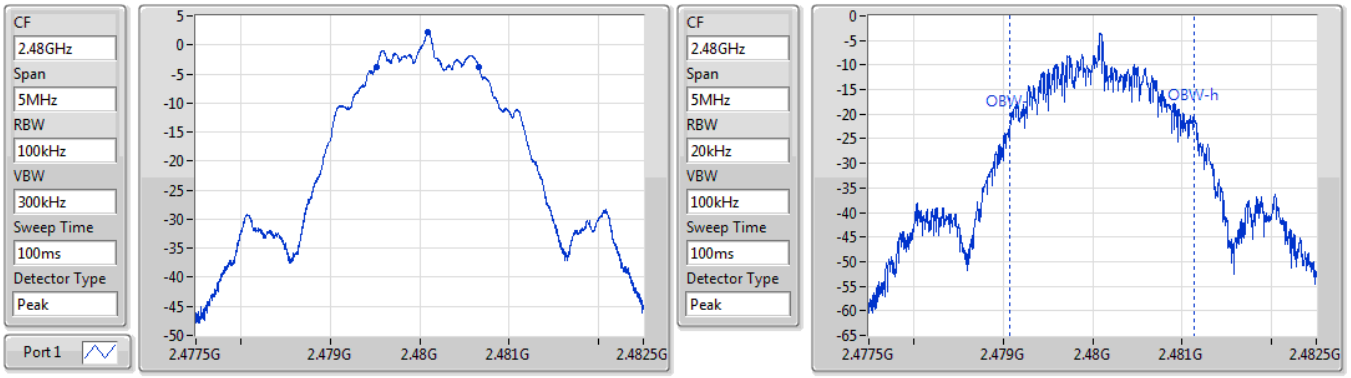



| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 1.138M | 2.43952G | 2.440658G | 2.046M | 2.439085G | 2.441132G | 500k | 1 |

**BT-LE(2Mbps)** **EBW**

**2480MHz**

08/07/2020




| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 1.145M | 2.479515G | 2.48066G | 2.059M | 2.47908G | 2.481139G | 500k | 1 |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**
**Summary**

| Mode | Max-N dB (Hz) | Max-OBW (Hz) | ITU-Code | Min-N dB (Hz) | Min-OBW (Hz) |
|---|---|---|---|---|---|
| 2.4-2.4835GHz | - | - | - | - | - |
| BT-LE(1Mbps) | 717.5k | 1.052M | 1M05F1D | 702.5k | 1.044M |
| BT-LE(2Mbps) | 1.145M | 2.059M | 2M06F1D | 1.138M | 2.044M |

**Max-N dB** = Maximum 6dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;
**Min-N dB** = Minimum 6dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**
**Result**

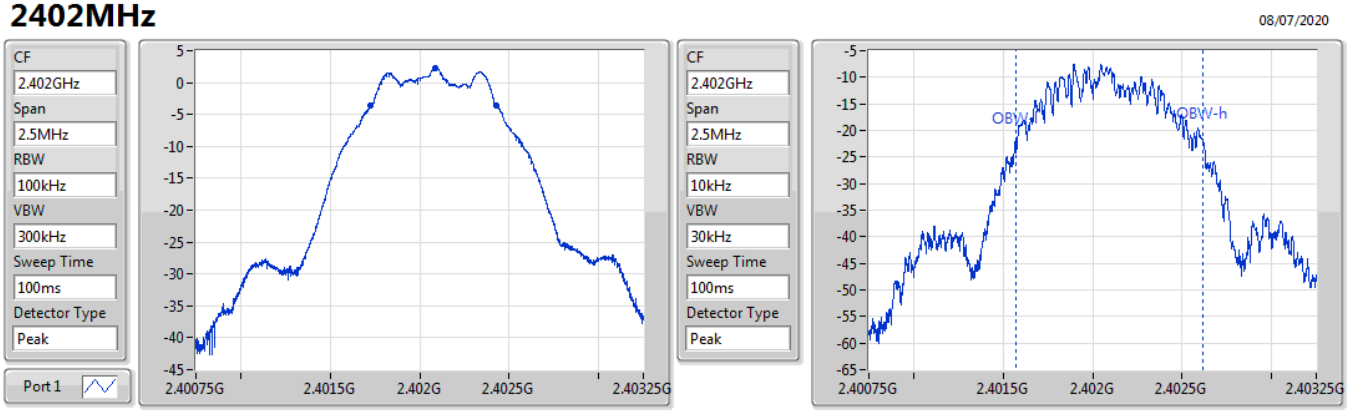
| Mode | Result | Limit (Hz) | Port 1-N dB (Hz) | Port 1-OBW (Hz) |
|---|---|---|---|---|
| BT-LE(1Mbps) | - | - | - | - |
| 2402MHz | Pass | 500k | 702.5k | 1.044M |
| 2440MHz | Pass | 500k | 711.25k | 1.049M |
| 2480MHz | Pass | 500k | 717.5k | 1.052M |
| BT-LE(2Mbps) | - | - | - | - |
| 2402MHz | Pass | 500k | 1.14M | 2.044M |
| 2440MHz | Pass | 500k | 1.138M | 2.046M |
| 2480MHz | Pass | 500k | 1.145M | 2.059M |

**Port X-N dB** = Port **X** 6dB down bandwidth; **Port X-OBW** = Port **X** 99% occupied bandwidth;

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(1Mbps)** **EBW**

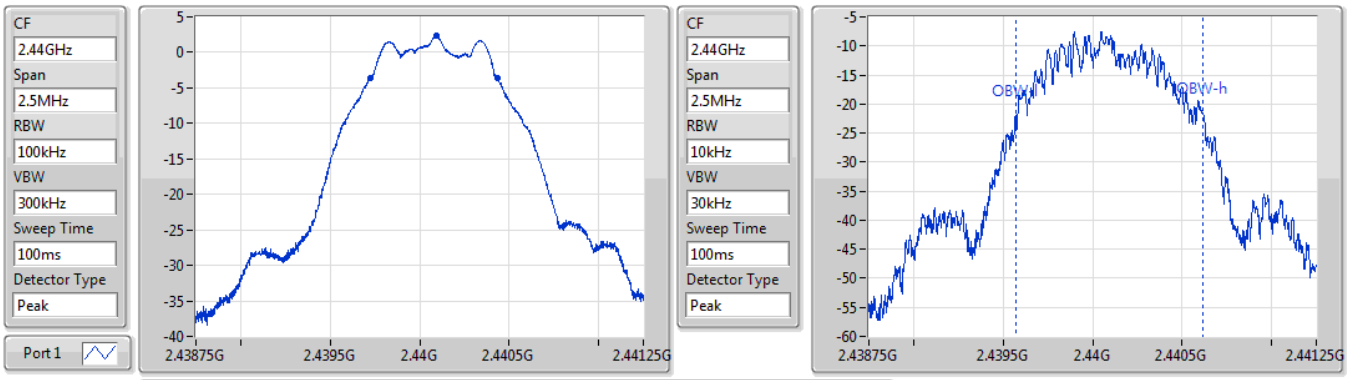
**2402MHz**




| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 702.5k | 2.401728G | 2.40243G | 1.044M | 2.40157G | 2.402615G | 500k | 1 |

**BT-LE(1Mbps)** **EBW**

**2440MHz**

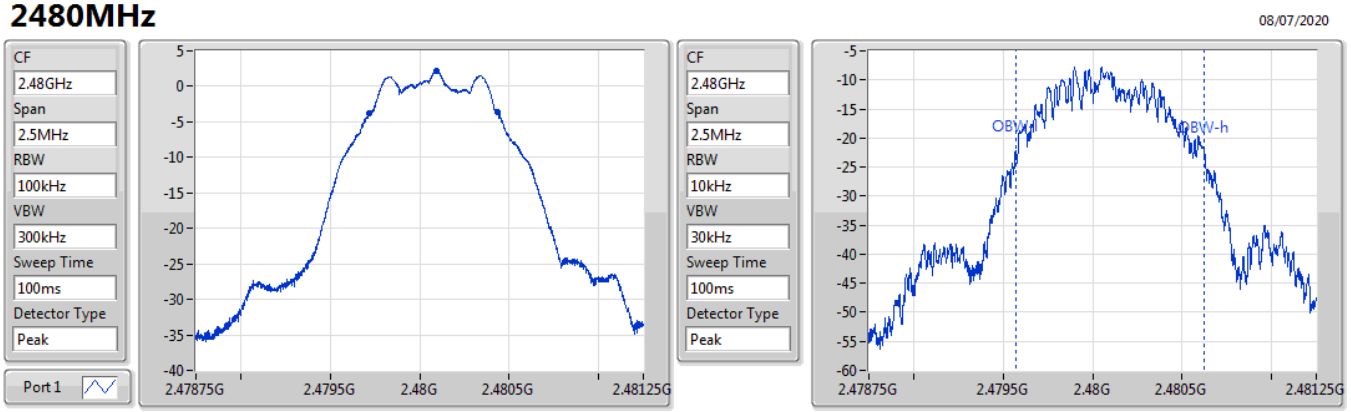



| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 711.25k | 2.439723G | 2.440434G | 1.049M | 2.439569G | 2.440618G | 500k | 1 |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

## BT-LE(1Mbps) EBW

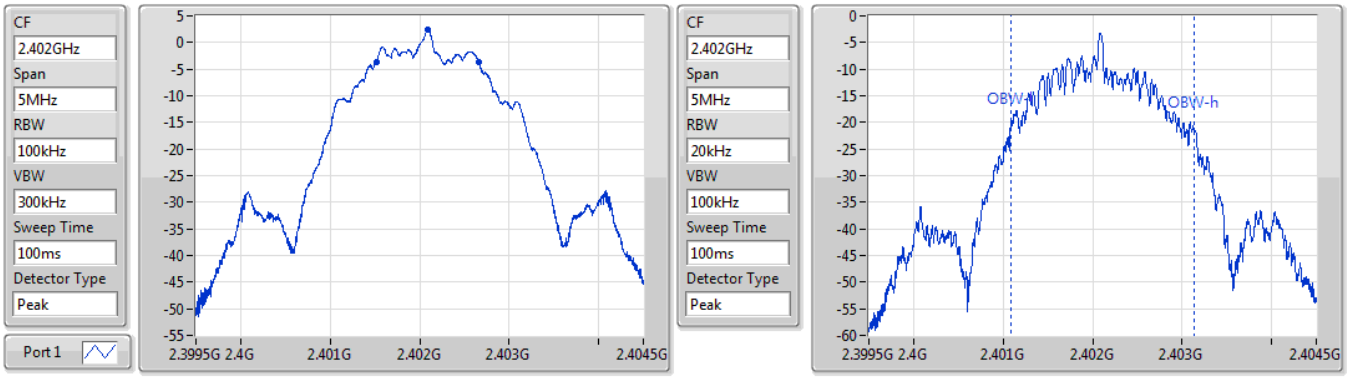
### 2480MHz




| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 717.5k | 2.47972G | 2.480438G | 1.052M | 2.47957G | 2.480622G | 500k | 1 |

## BT-LE(2Mbps) EBW

### 2402MHz

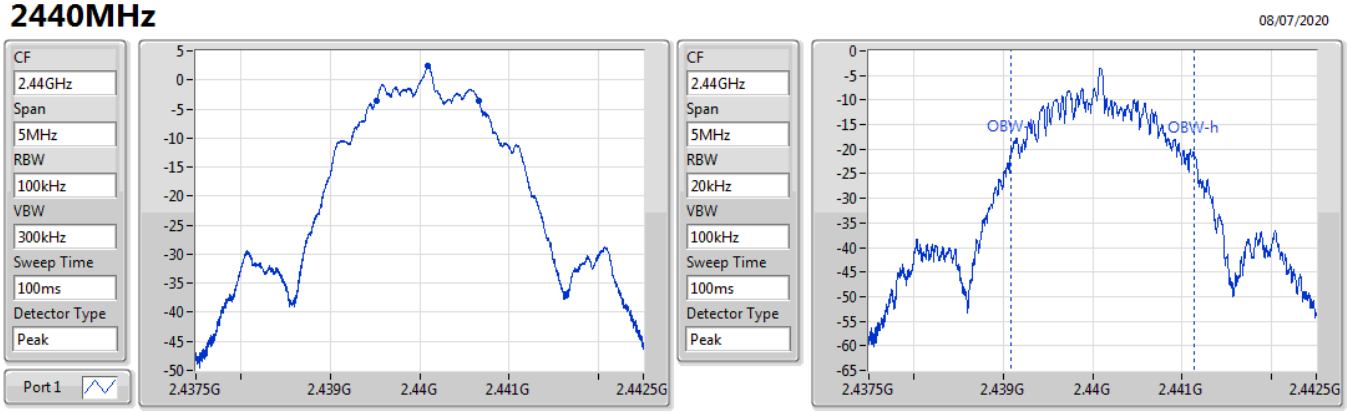



| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 1.14M | 2.401523G | 2.402663G | 2.044M | 2.401085G | 2.403129G | 500k | 1 |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(2Mbps)** **EBW**

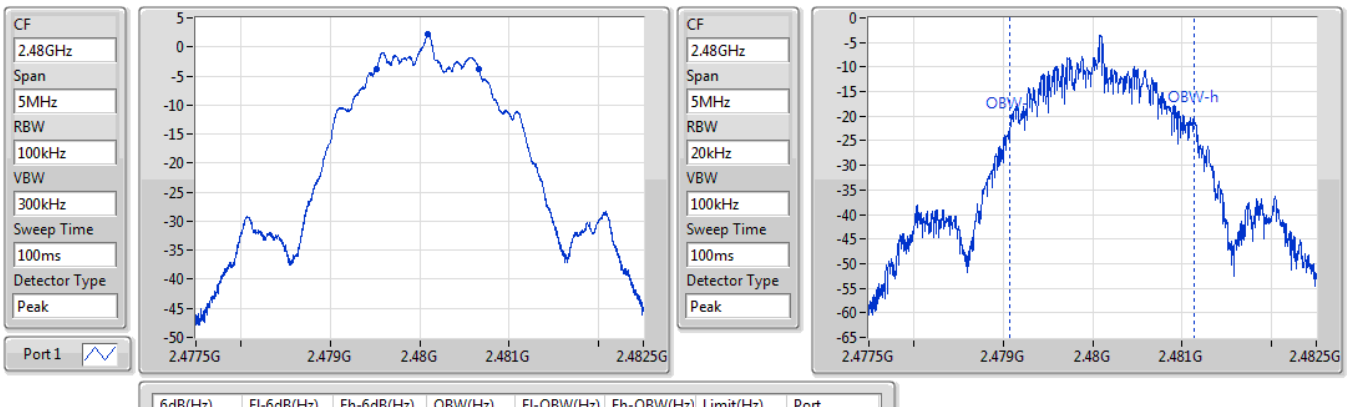
**2440MHz**




| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 1.138M | 2.43952G | 2.440658G | 2.046M | 2.439085G | 2.441132G | 500k | 1 |

**BT-LE(2Mbps)** **EBW**

**2480MHz**




| 6dB(Hz) | Fl-6dB(Hz) | Fh-6dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|---|---|---|---|---|---|---|---|
| 1.145M | 2.479515G | 2.48066G | 2.059M | 2.47908G | 2.481139G | 500k | 1 |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**
**Summary**

| Mode | Power (dBm) | Power (W) |
|---|---|---|
| 2.4-2.4835GHz | - | - |
| BT-LE(1Mbps) | 2.24 | 0.00167 |
| BT-LE(2Mbps) | 2.25 | 0.00168 |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**
**Result**

| Mode | Result | Gain (dBi) | Power (dBm) | Power Limit (dBm) |
|---|---|---|---|---|
| BT-LE(1Mbps) | - | - | - | - |
| 2402MHz | Pass | 5.10 | 2.24 | 30.00 |
| 2440MHz | Pass | 5.10 | 2.21 | 30.00 |
| 2480MHz | Pass | 5.10 | 2.05 | 30.00 |
| BT-LE(2Mbps) | - | - | - | - |
| 2402MHz | Pass | 5.10 | 2.25 | 30.00 |
| 2440MHz | Pass | 5.10 | 2.21 | 30.00 |
| 2480MHz | Pass | 5.10 | 2.03 | 30.00 |

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

**Test Mode: EUT 1 + Ant.19 (Beam 9)**
**Summary**

| Mode | Power (dBm) | Power (W) |
|---|---|---|
| 2.4-2.4835GHz | - | - |
| BT-LE(1Mbps) | 2.24 | 0.00167 |
| BT-LE(2Mbps) | 2.25 | 0.00168 |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**
**Result**

| Mode | Result | Gain (dBi) | Power (dBm) | Power Limit (dBm) |
|---|---|---|---|---|
| BT-LE(1Mbps) | - | - | - | - |
| 2402MHz | Pass | 4.30 | 2.24 | 30.00 |
| 2440MHz | Pass | 4.30 | 2.21 | 30.00 |
| 2480MHz | Pass | 4.30 | 2.05 | 30.00 |
| BT-LE(2Mbps) | - | - | - | - |
| 2402MHz | Pass | 4.30 | 2.25 | 30.00 |
| 2440MHz | Pass | 4.30 | 2.21 | 30.00 |
| 2480MHz | Pass | 4.30 | 2.03 | 30.00 |

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

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**
**Summary**

| Mode | Power (dBm) | Power (W) |
|---|---|---|
| 2.4-2.4835GHz | - | - |
| BT-LE(1Mbps) | 2.24 | 0.00167 |
| BT-LE(2Mbps) | 2.25 | 0.00168 |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**
**Result**

| Mode | Result | Gain (dBi) | Power (dBm) | Power Limit (dBm) |
|---|---|---|---|---|
| BT-LE(1Mbps) | - | - | - | - |
| 2402MHz | Pass | 1.40 | 2.24 | 30.00 |
| 2440MHz | Pass | 1.40 | 2.21 | 30.00 |
| 2480MHz | Pass | 1.40 | 2.05 | 30.00 |
| BT-LE(2Mbps) | - | - | - | - |
| 2402MHz | Pass | 1.40 | 2.25 | 30.00 |
| 2440MHz | Pass | 1.40 | 2.21 | 30.00 |
| 2480MHz | Pass | 1.40 | 2.03 | 30.00 |

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

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**
**Summary**

| Mode | PD (dBm/RBW) |
|---|---|
| 2.4-2.4835GHz | - |
| BT-LE(1Mbps) | -13.31 |
| BT-LE(2Mbps) | -15.68 |

RBW=3 kHz.

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**
**Result**

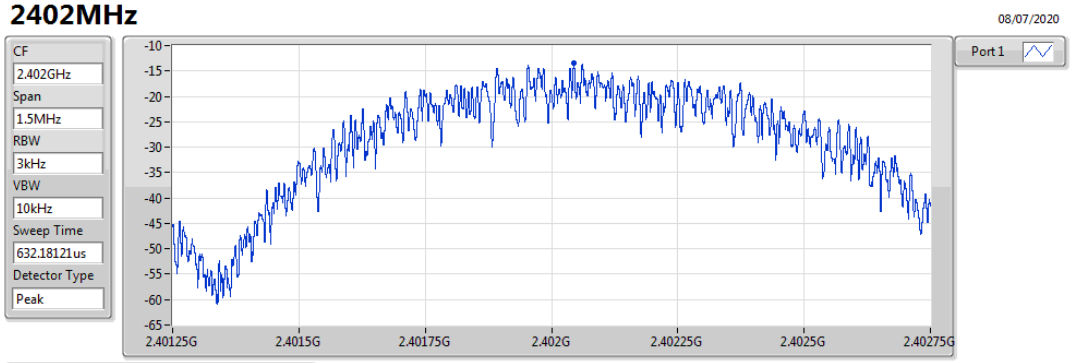
| Mode | Result | Gain (dBi) | PD (dBm/RBW) | PD Limit (dBm/RBW) |
|---|---|---|---|---|
| BT-LE(1Mbps) | - | - | - | - |
| 2402MHz | Pass | 5.10 | -13.39 | 8.00 |
| 2440MHz | Pass | 5.10 | -13.64 | 8.00 |
| 2480MHz | Pass | 5.10 | -13.31 | 8.00 |
| BT-LE(2Mbps) | - | - | - | - |
| 2402MHz | Pass | 5.10 | -15.68 | 8.00 |
| 2440MHz | Pass | 5.10 | -16.28 | 8.00 |
| 2480MHz | Pass | 5.10 | -16.38 | 8.00 |

**DG** = Directional Gain; RBW=3 kHz;
**PD** = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(1Mbps)** **PSD**

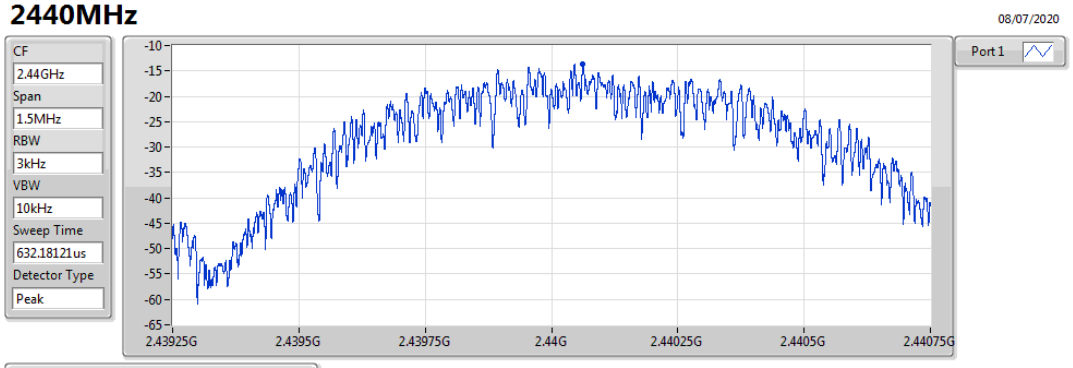
**2402MHz**




| Sum | PD | Port 1 |
|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| -13.39 | -13.39 | -13.39 |

**BT-LE(1Mbps)** **PSD**

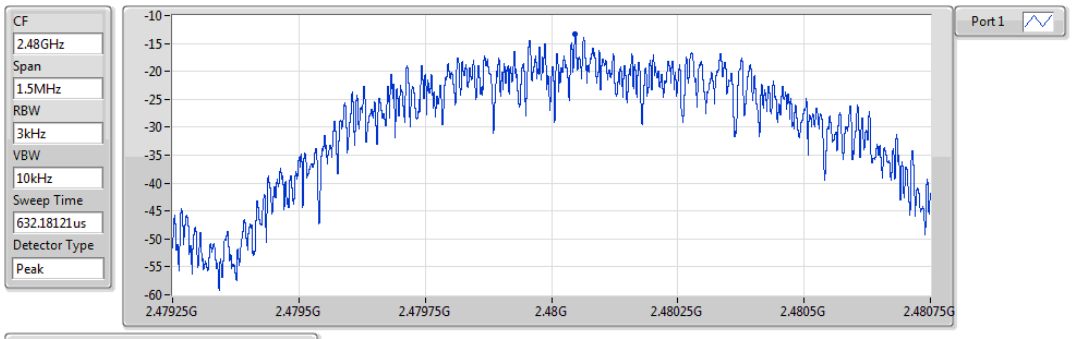
**2440MHz**




| Sum | PD | Port 1 |
|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| -13.64 | -13.64 | -13.64 |

**BT-LE(1Mbps)** **PSD**

**2480MHz**

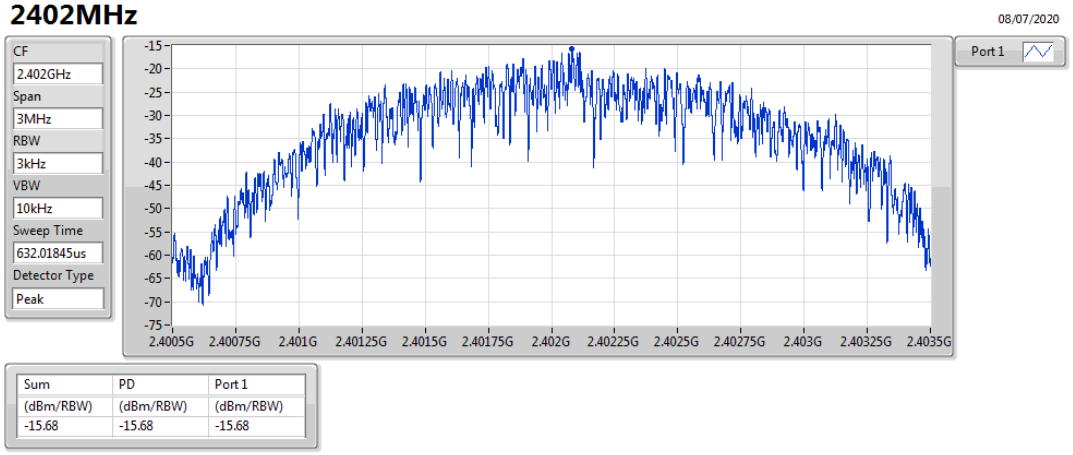



| Sum | PD | Port 1 |
|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| -13.31 | -13.31 | -13.31 |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(2Mbps)** **PSD**

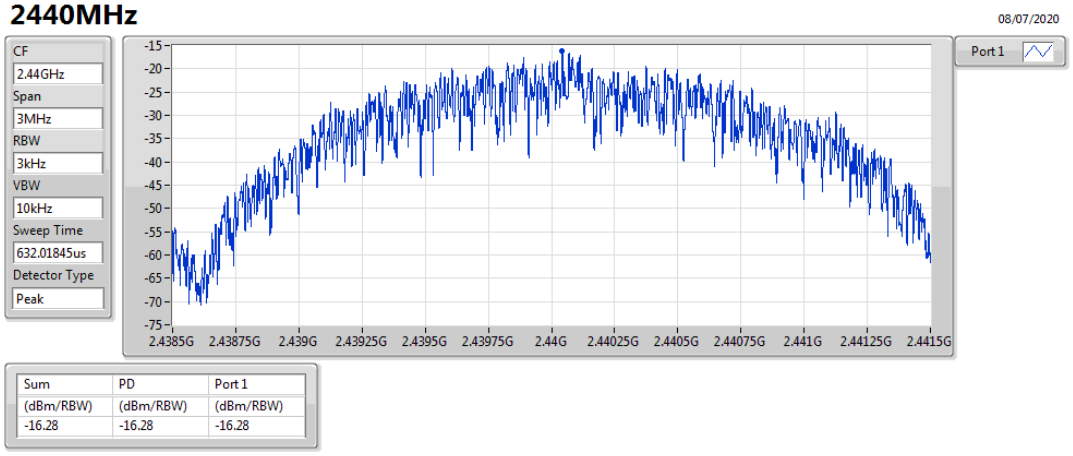
**2402MHz**




| Sum | PD | Port 1 |
|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| -15.68 | -15.68 | -15.68 |

**BT-LE(2Mbps)** **PSD**

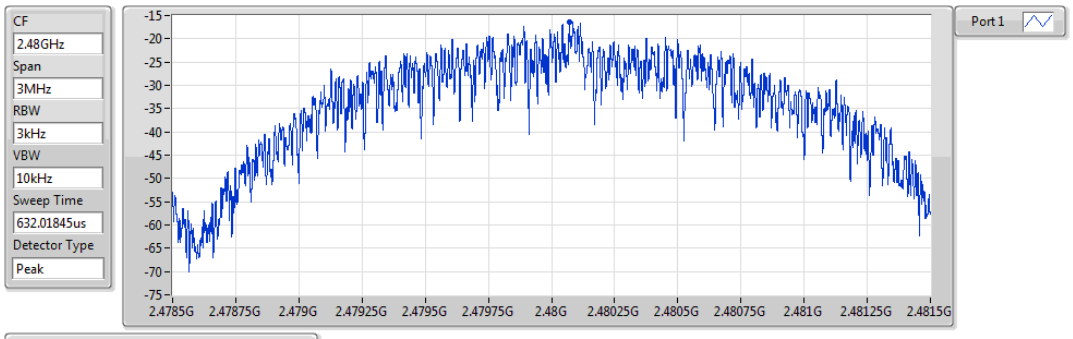
**2440MHz**




| Sum | PD | Port 1 |
|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| -16.28 | -16.28 | -16.28 |

**BT-LE(2Mbps)** **PSD**

**2480MHz**




| Sum | PD | Port 1 |
|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| -16.38 | -16.38 | -16.38 |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**
**Summary**

| Mode | PD (dBm/RBW) |
|---|---|
| 2.4-2.4835GHz | - |
| BT-LE(1Mbps) | -13.31 |
| BT-LE(2Mbps) | -15.68 |

RBW=3 kHz.

**Test Mode: EUT 1 + Ant.19 (Beam 9)**
**Result**

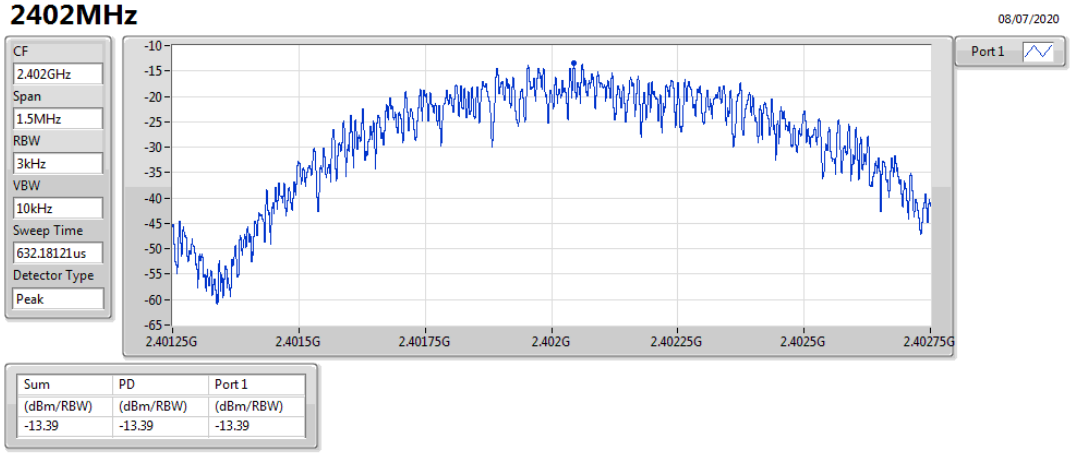
| Mode | Result | Gain (dBi) | PD (dBm/RBW) | PD Limit (dBm/RBW) |
|---|---|---|---|---|
| BT-LE(1Mbps) | - | - | - | - |
| 2402MHz | Pass | 4.30 | -13.39 | 8.00 |
| 2440MHz | Pass | 4.30 | -13.64 | 8.00 |
| 2480MHz | Pass | 4.30 | -13.31 | 8.00 |
| BT-LE(2Mbps) | - | - | - | - |
| 2402MHz | Pass | 4.30 | -15.68 | 8.00 |
| 2440MHz | Pass | 4.30 | -16.28 | 8.00 |
| 2480MHz | Pass | 4.30 | -16.38 | 8.00 |

**DG** = Directional Gain; RBW=3 kHz;
**PD** = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(1Mbps)** **PSD**

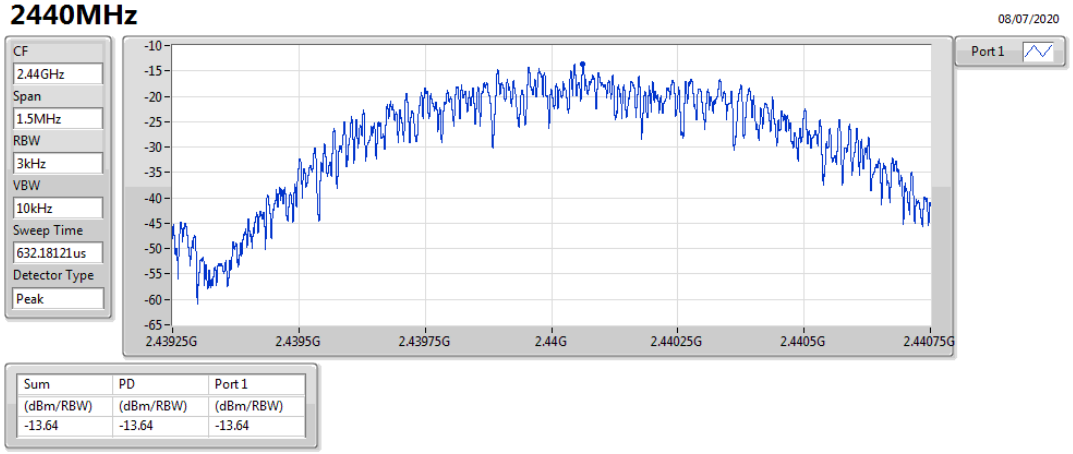
**2402MHz**




| Sum | PD | Port 1 |
|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| -13.39 | -13.39 | -13.39 |

**BT-LE(1Mbps)** **PSD**

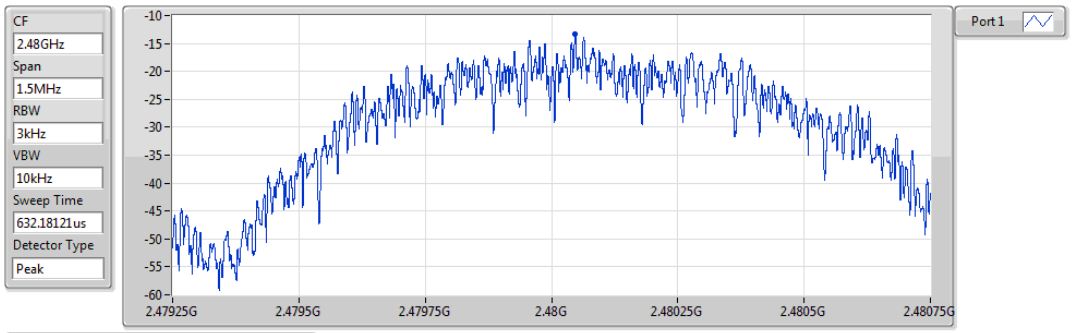
**2440MHz**




| Sum | PD | Port 1 |
|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| -13.64 | -13.64 | -13.64 |

**BT-LE(1Mbps)** **PSD**

**2480MHz**

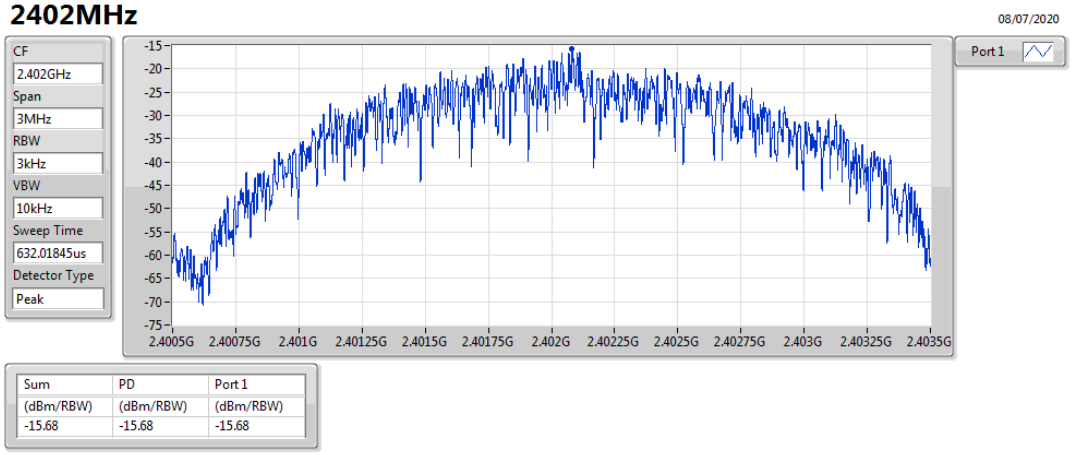



| Sum | PD | Port 1 |
|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| -13.31 | -13.31 | -13.31 |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(2Mbps)** **PSD**

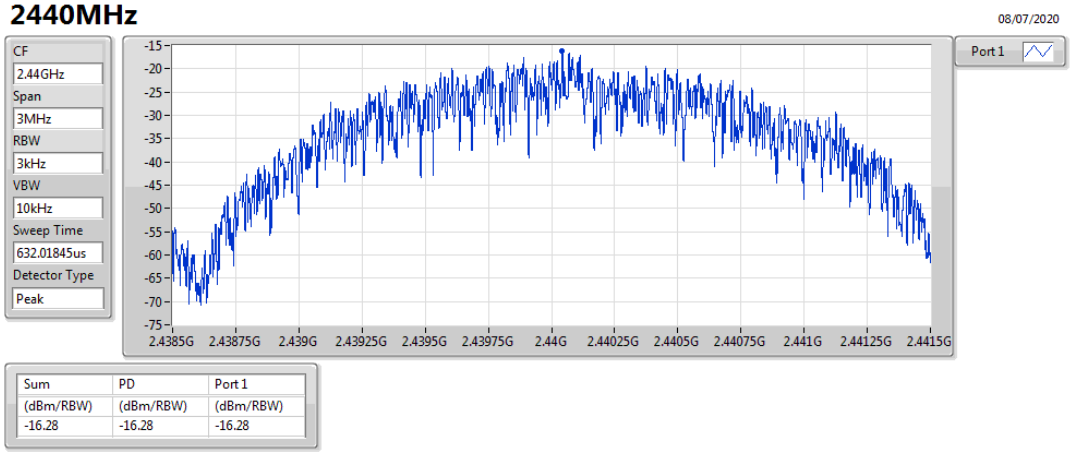
**2402MHz**




| Sum | PD | Port 1 |
|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| -15.68 | -15.68 | -15.68 |

**BT-LE(2Mbps)** **PSD**

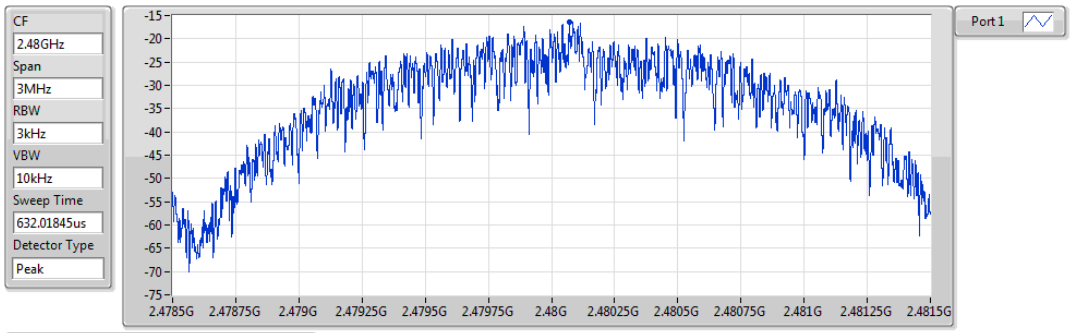
**2440MHz**




| Sum | PD | Port 1 |
|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| -16.28 | -16.28 | -16.28 |

**BT-LE(2Mbps)** **PSD**

**2480MHz**




| Sum | PD | Port 1 |
|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| -16.38 | -16.38 | -16.38 |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**
**Summary**

| Mode | PD (dBm/RBW) |
|---|---|
| 2.4-2.4835GHz | - |
| BT-LE(1Mbps) | -13.31 |
| BT-LE(2Mbps) | -15.68 |

RBW=3 kHz.

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**
**Result**

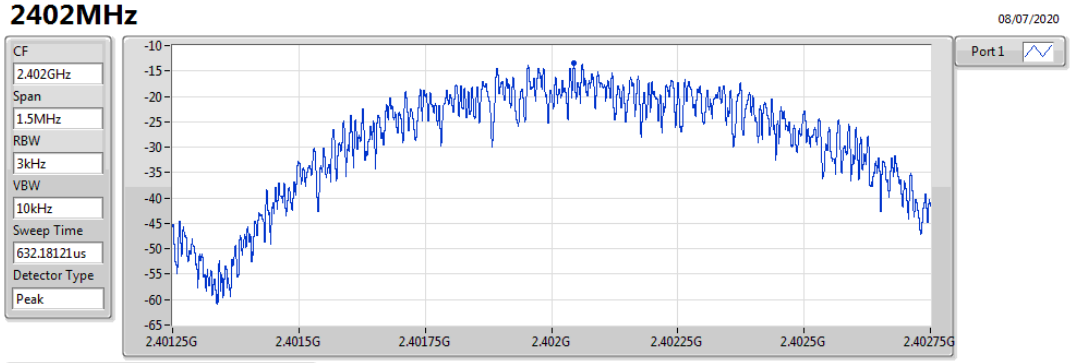
| Mode | Result | Gain (dBi) | PD (dBm/RBW) | PD Limit (dBm/RBW) |
|---|---|---|---|---|
| BT-LE(1Mbps) | - | - | - | - |
| 2402MHz | Pass | 1.40 | -13.39 | 8.00 |
| 2440MHz | Pass | 1.40 | -13.64 | 8.00 |
| 2480MHz | Pass | 1.40 | -13.31 | 8.00 |
| BT-LE(2Mbps) | - | - | - | - |
| 2402MHz | Pass | 1.40 | -15.68 | 8.00 |
| 2440MHz | Pass | 1.40 | -16.28 | 8.00 |
| 2480MHz | Pass | 1.40 | -16.38 | 8.00 |

**DG** = Directional Gain; RBW=3 kHz;
**PD** = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(1Mbps)** **PSD**

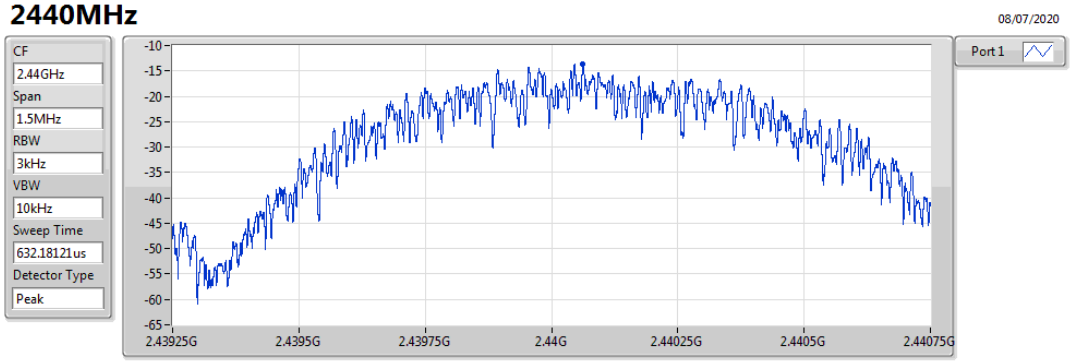
**2402MHz**




| Sum | PD | Port 1 |
|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| -13.39 | -13.39 | -13.39 |

**BT-LE(1Mbps)** **PSD**

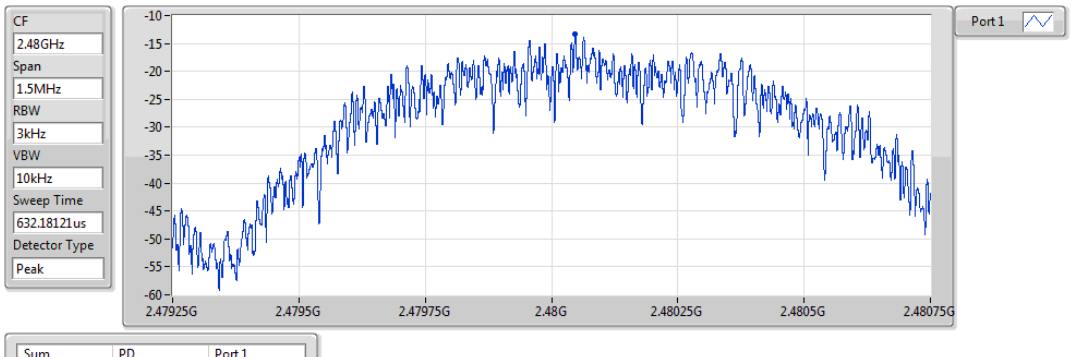
**2440MHz**




| Sum | PD | Port 1 |
|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| -13.64 | -13.64 | -13.64 |

**BT-LE(1Mbps)** **PSD**

**2480MHz**

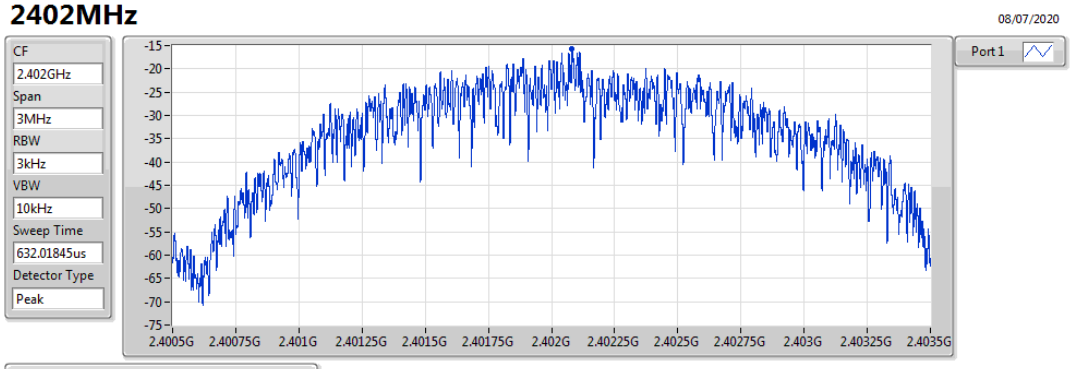



| Sum | PD | Port 1 |
|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| -13.31 | -13.31 | -13.31 |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(2Mbps)** **PSD**

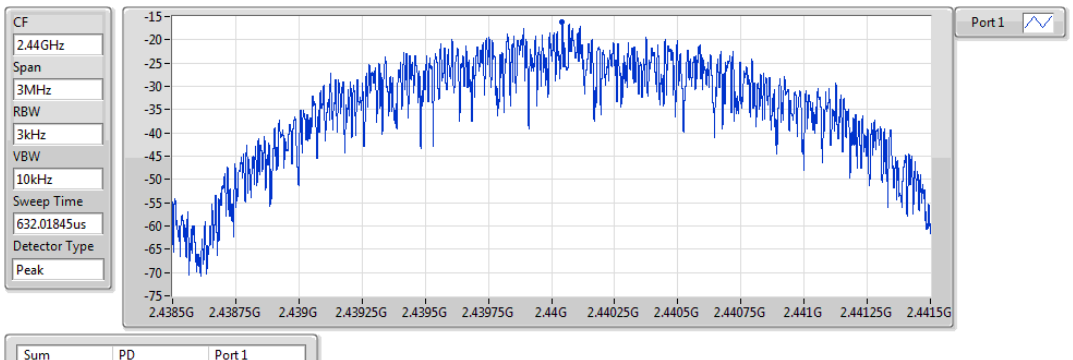
**2402MHz**




| Sum | PD | Port 1 |
|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| -15.68 | -15.68 | -15.68 |

**BT-LE(2Mbps)** **PSD**

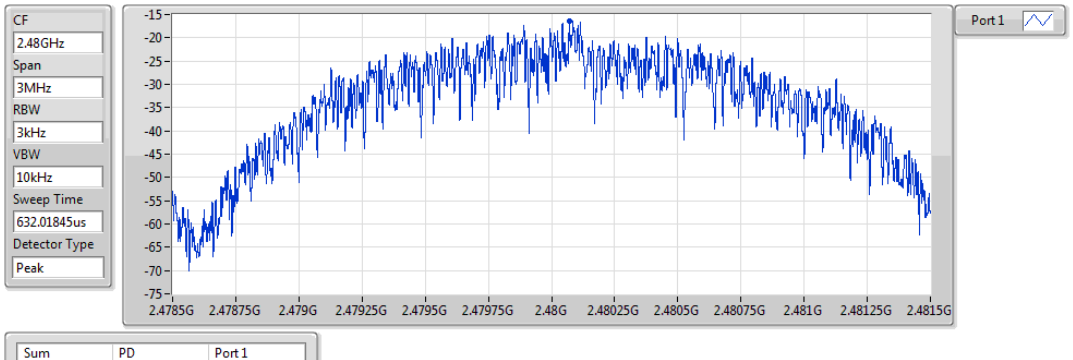
**2440MHz**




| Sum | PD | Port 1 |
|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| -16.28 | -16.28 | -16.28 |

**BT-LE(2Mbps)** **PSD**

**2480MHz**




| Sum | PD | Port 1 |
|---|---|---|
| (dBm/RBW) | (dBm/RBW) | (dBm/RBW) |
| -16.38 | -16.38 | -16.38 |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**
**Summary**

| Mode | Result | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.4-2.4835GHz | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| BT-LE(1Mbps) | Pass | 2.40205G | 2.10 | -27.90 | 159.84M | -45.81 | 2.39996G | -42.79 | 2.4G | -43.30 | 2.49094G | -50.46 | 24.65974G | -43.54 | 1 |
| BT-LE(2Mbps) | Pass | 2.40205G | 2.34 | -27.66 | 159.84M | -46.51 | 2.4G | -32.39 | 2.4G | -33.15 | 2.48704G | -51.35 | 24.56975G | -43.19 | 1 |

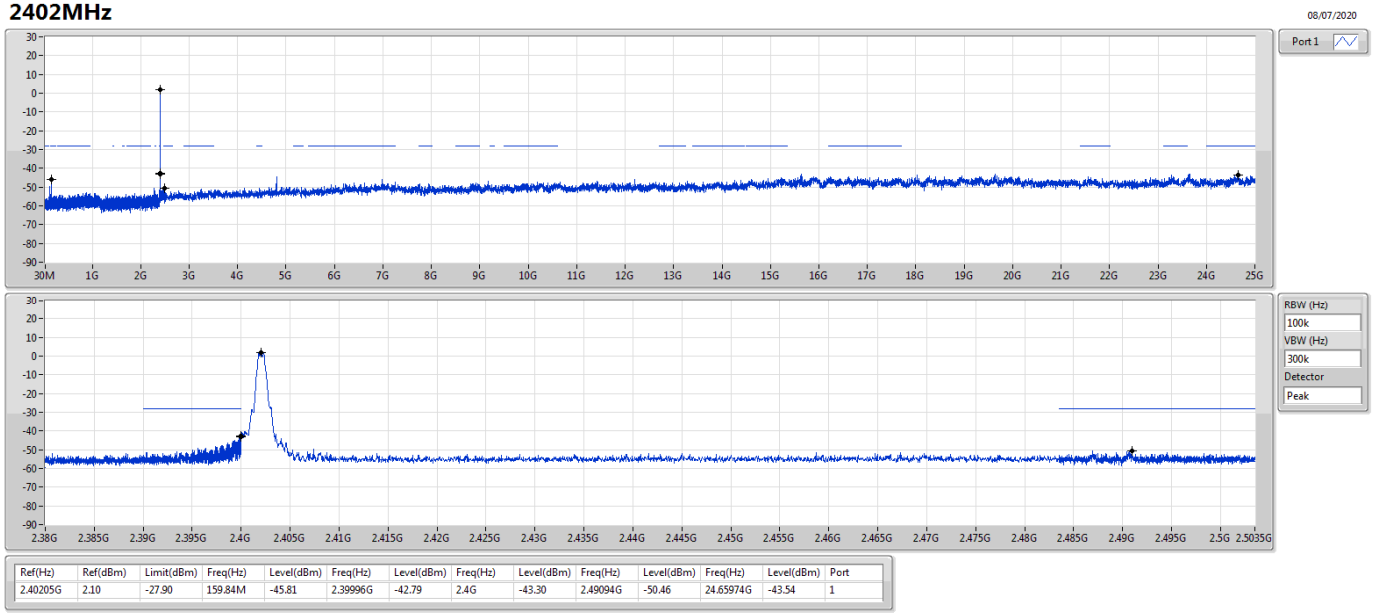
**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**
**Result**

| Mode | Result | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BT-LE(1Mbps) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2402MHz | Pass | 2.40205G | 2.10 | -27.90 | 159.84M | -45.81 | 2.39996G | -42.79 | 2.4G | -43.30 | 2.49094G | -50.46 | 24.65974G | -43.54 | 1 |
| 2440MHz | Pass | 2.40205G | 2.10 | -27.90 | 159.84M | -46.11 | 2.39088G | -52.32 | 2.4835G | -55.09 | 2.49508G | -51.80 | 24.60069G | -43.40 | 1 |
| 2480MHz | Pass | 2.40205G | 2.10 | -27.90 | 159.84M | -47.80 | 2.3917G | -50.61 | 2.4835G | -53.18 | 2.48387G | -49.84 | 24.61756G | -42.67 | 1 |
| BT-LE(2Mbps) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2402MHz | Pass | 2.40205G | 2.34 | -27.66 | 159.84M | -46.51 | 2.4G | -32.39 | 2.4G | -33.15 | 2.48704G | -51.35 | 24.56975G | -43.19 | 1 |
| 2440MHz | Pass | 2.40205G | 2.34 | -27.66 | 159.84M | -46.73 | 2.39308G | -52.50 | 2.4G | -55.33 | 2.48513G | -51.41 | 16.52163G | -43.05 | 1 |
| 2480MHz | Pass | 2.40205G | 2.34 | -27.66 | 159.84M | -45.73 | 2.39149G | -51.09 | 2.4835G | -54.33 | 2.49323G | -49.66 | 23.30714G | -42.52 | 1 |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(1Mbps)** **CSE NdB**

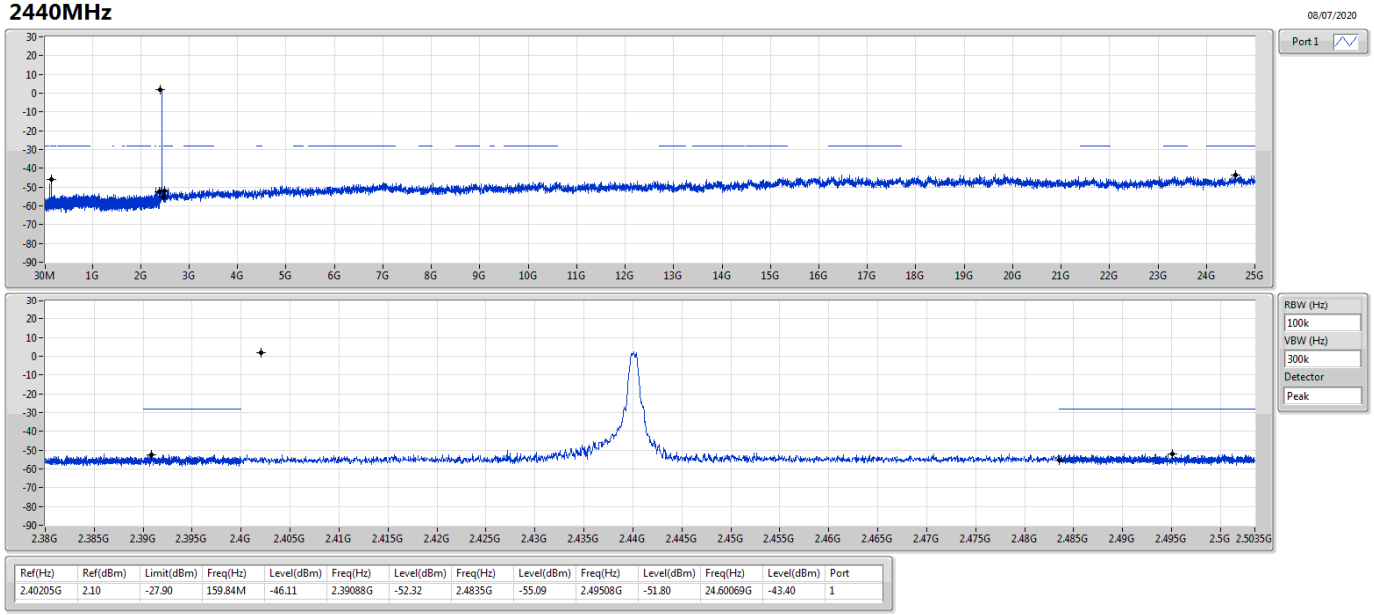
**2402MHz**




| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.40205G | 2.10 | -27.90 | 159.84M | -45.81 | 2.39996G | -42.79 | 2.4G | -43.30 | 2.49094G | -50.46 | 24.65974G | -43.54 | 1 |

**BT-LE(1Mbps)** **CSE NdB**

**2440MHz**

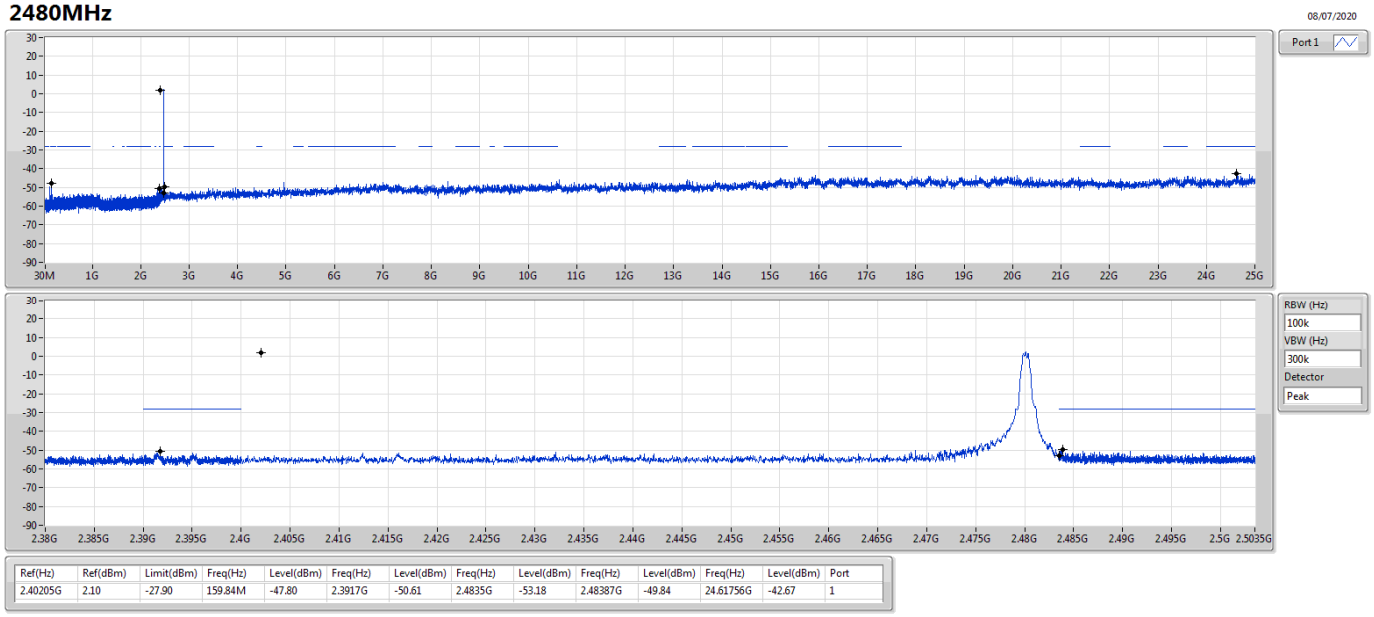



| Ref(Hz) | Ref(dBm) | Limit(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Port |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.40205G | 2.10 | -27.90 | 159.84M | -46.11 | 2.39088G | -52.32 | 2.4835G | -55.09 | 2.49508G | -51.80 | 24.60069G | -43.40 | 1 |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(1Mbps)** **CSE NdB**

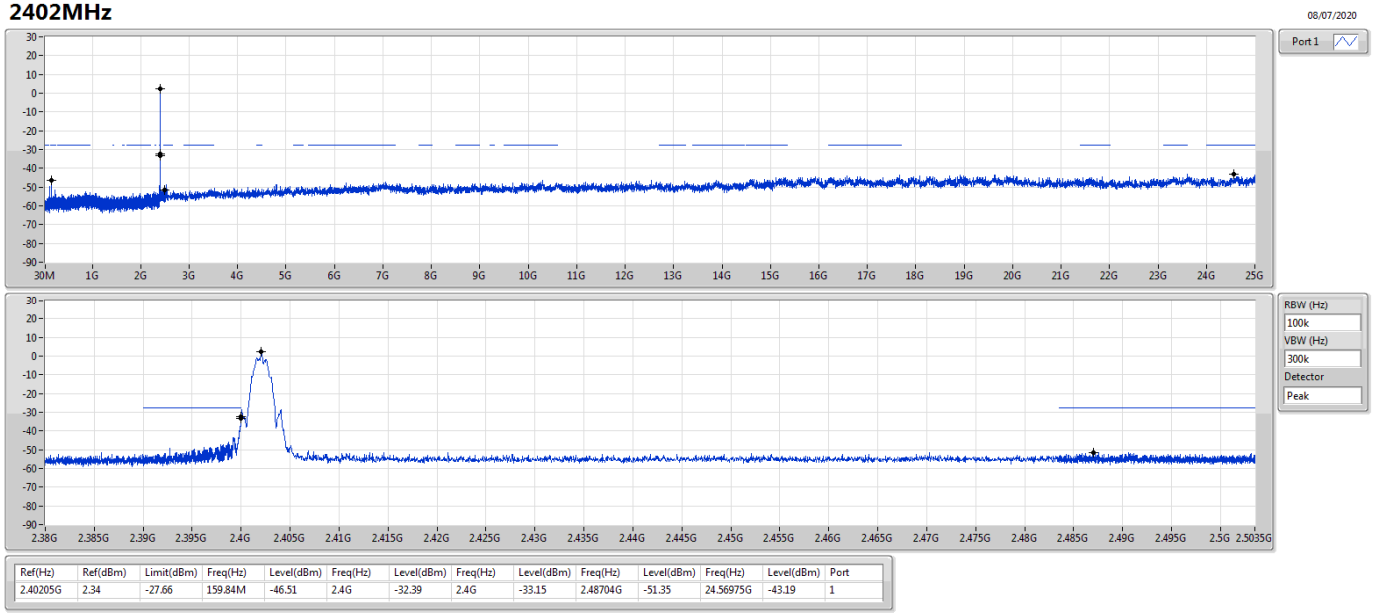
**2480MHz**




| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.40205G | 2.10 | -27.90 | 159.84M | -47.80 | 2.3917G | -50.61 | 2.4835G | -53.18 | 2.48387G | -49.84 | 24.61756G | -42.67 | 1 |

**BT-LE(2Mbps)** **CSE NdB**

**2402MHz**

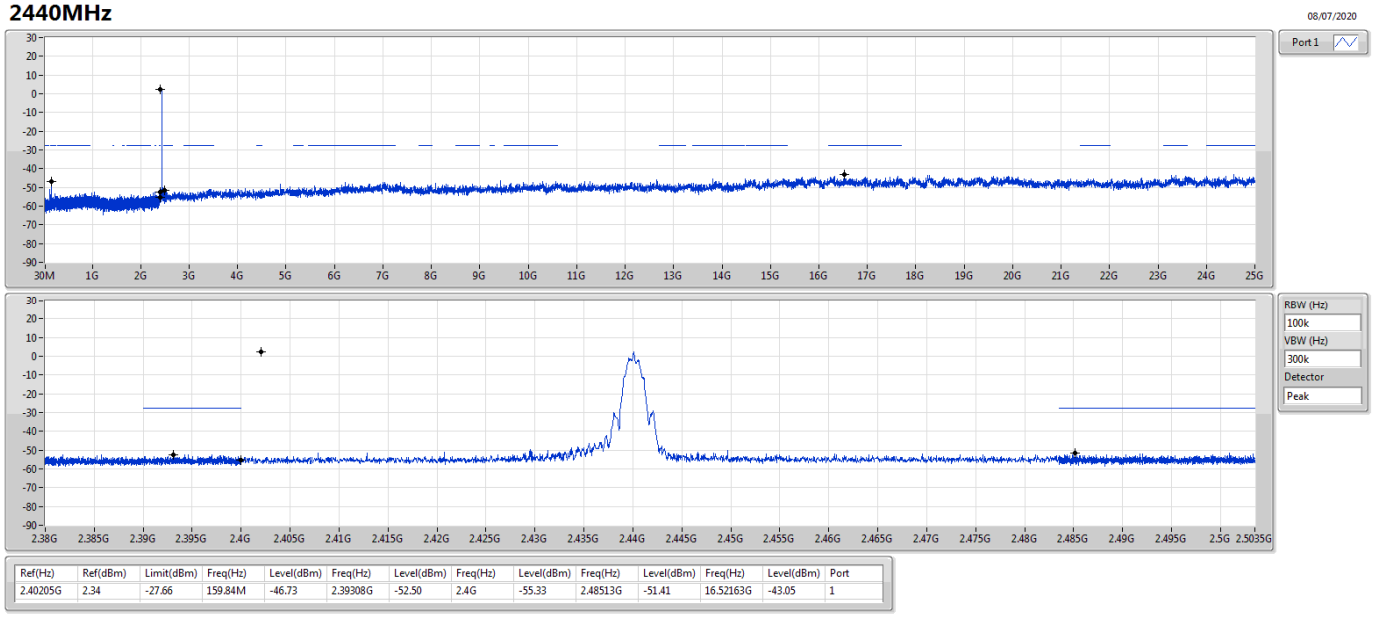



| Ref(Hz) | Ref(dBm) | Limit(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Port |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.40205G | 2.34 | -27.66 | 159.84M | -46.51 | 2.4G | -32.39 | 2.4G | -33.15 | 2.48704G | -51.35 | 24.56975G | -43.19 | 1 |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(2Mbps)** **CSE NdB**

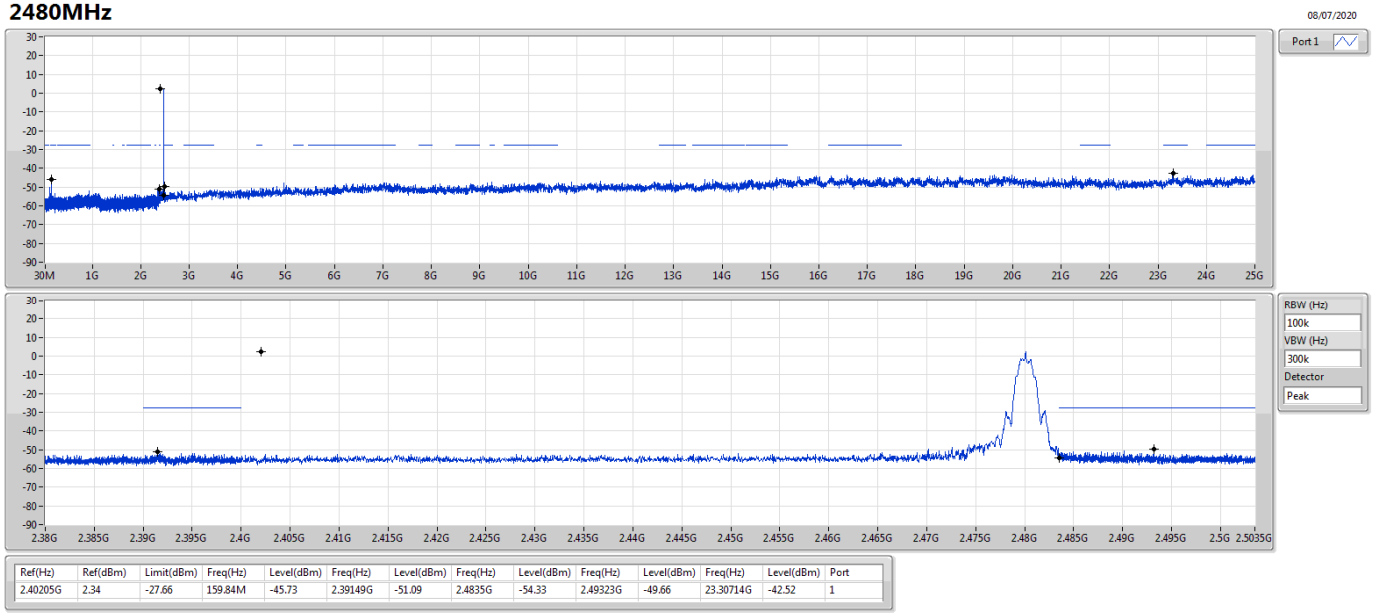
**2440MHz**




| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.40205G | 2.34 | -27.66 | 159.84M | -46.73 | 2.39308G | -52.50 | 2.4G | -55.33 | 2.48513G | -51.41 | 16.52163G | -43.05 | 1 |

**BT-LE(2Mbps)** **CSE NdB**

**2480MHz**




| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.40205G | 2.34 | -27.66 | 159.84M | -45.73 | 2.39149G | -51.09 | 2.4835G | -54.33 | 2.49323G | -49.66 | 23.30714G | -42.52 | 1 |

## Test Mode: EUT 1 + Ant.19 (Beam 9)

### Summary

| Mode | Result | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.4-2.4835GHz | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| BT-LE(1Mbps) | Pass | 2.40205G | 2.10 | -27.90 | 159.84M | -45.81 | 2.39996G | -42.79 | 2.4G | -43.30 | 2.49094G | -50.46 | 24.65974G | -43.54 | 1 |
| BT-LE(2Mbps) | Pass | 2.40205G | 2.34 | -27.66 | 159.84M | -46.51 | 2.4G | -32.39 | 2.4G | -33.15 | 2.48704G | -51.35 | 24.56975G | -43.19 | 1 |

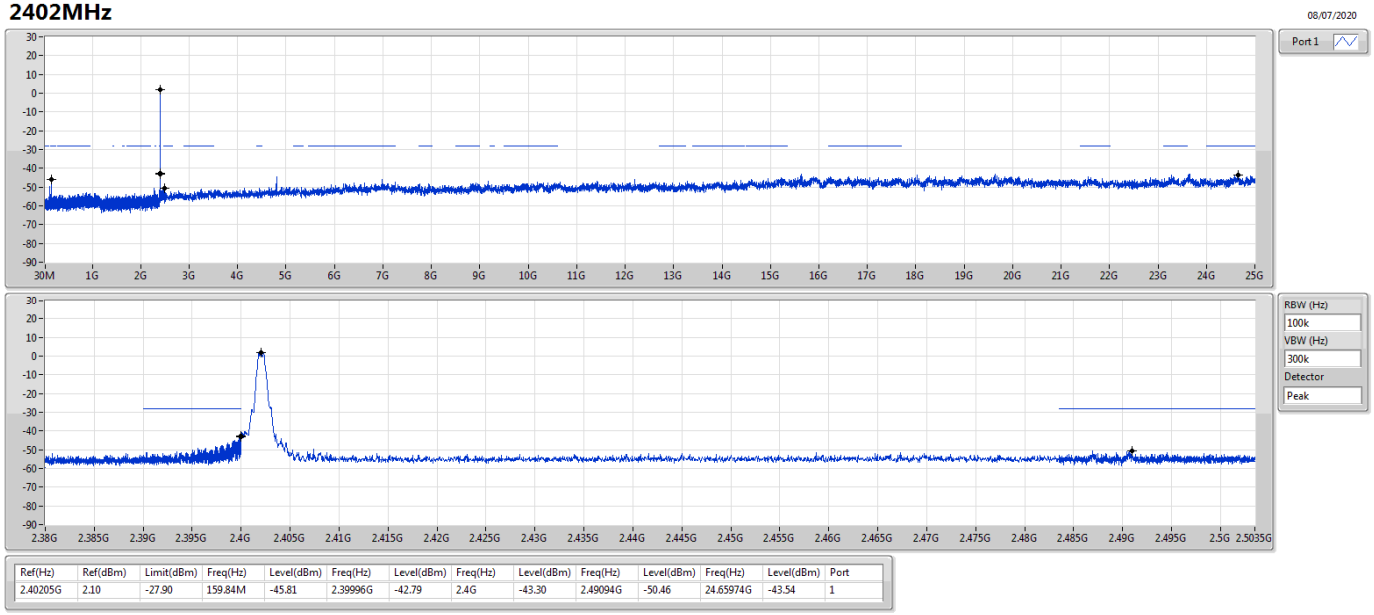
### Result

| Mode | Result | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BT-LE(1Mbps) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2402MHz | Pass | 2.40205G | 2.10 | -27.90 | 159.84M | -45.81 | 2.39996G | -42.79 | 2.4G | -43.30 | 2.49094G | -50.46 | 24.65974G | -43.54 | 1 |
| 2440MHz | Pass | 2.40205G | 2.10 | -27.90 | 159.84M | -46.11 | 2.39088G | -52.32 | 2.4835G | -55.09 | 2.49508G | -51.80 | 24.60069G | -43.40 | 1 |
| 2480MHz | Pass | 2.40205G | 2.10 | -27.90 | 159.84M | -47.80 | 2.3917G | -50.61 | 2.4835G | -53.18 | 2.48387G | -49.84 | 24.61756G | -42.67 | 1 |
| BT-LE(2Mbps) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2402MHz | Pass | 2.40205G | 2.34 | -27.66 | 159.84M | -46.51 | 2.4G | -32.39 | 2.4G | -33.15 | 2.48704G | -51.35 | 24.56975G | -43.19 | 1 |
| 2440MHz | Pass | 2.40205G | 2.34 | -27.66 | 159.84M | -46.73 | 2.39308G | -52.50 | 2.4G | -55.33 | 2.48513G | -51.41 | 16.52163G | -43.05 | 1 |
| 2480MHz | Pass | 2.40205G | 2.34 | -27.66 | 159.84M | -45.73 | 2.39149G | -51.09 | 2.4835G | -54.33 | 2.49323G | -49.66 | 23.30714G | -42.52 | 1 |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(1Mbps)** **CSE NdB**

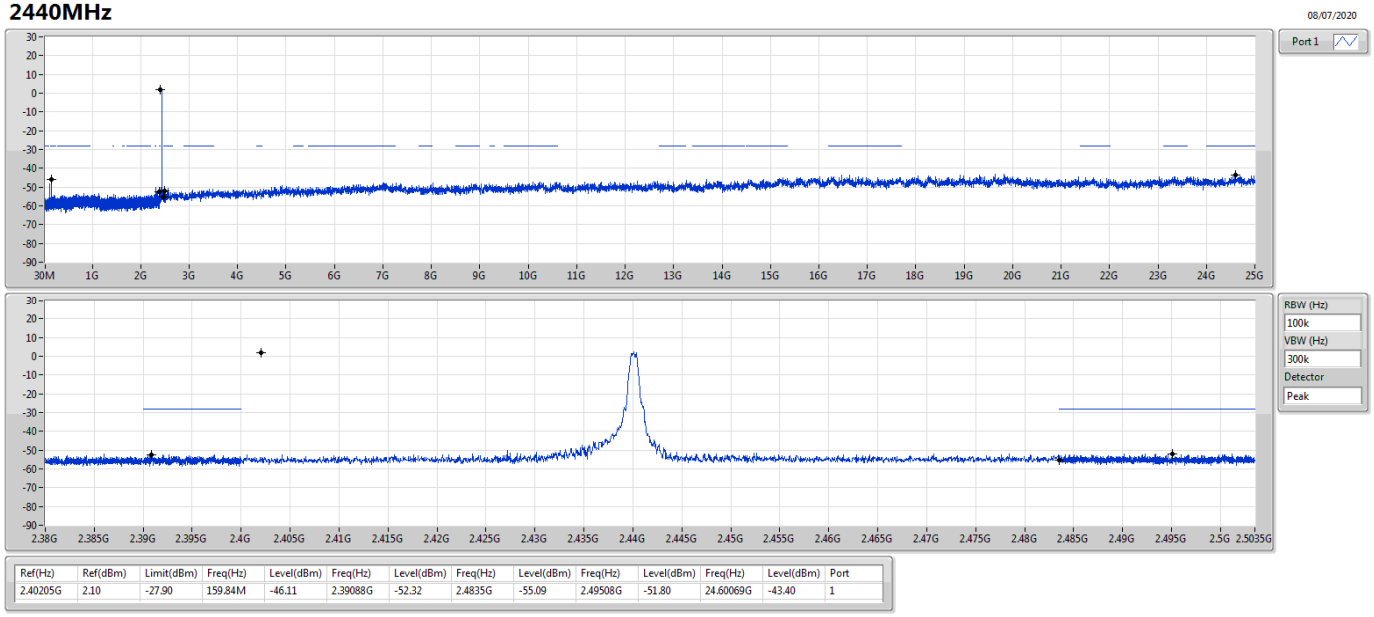
**2402MHz**




| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.40205G | 2.10 | -27.90 | 159.84M | -45.81 | 2.39996G | -42.79 | 2.4G | -43.30 | 2.49094G | -50.46 | 24.65974G | -43.54 | 1 |

**BT-LE(1Mbps)** **CSE NdB**

**2440MHz**

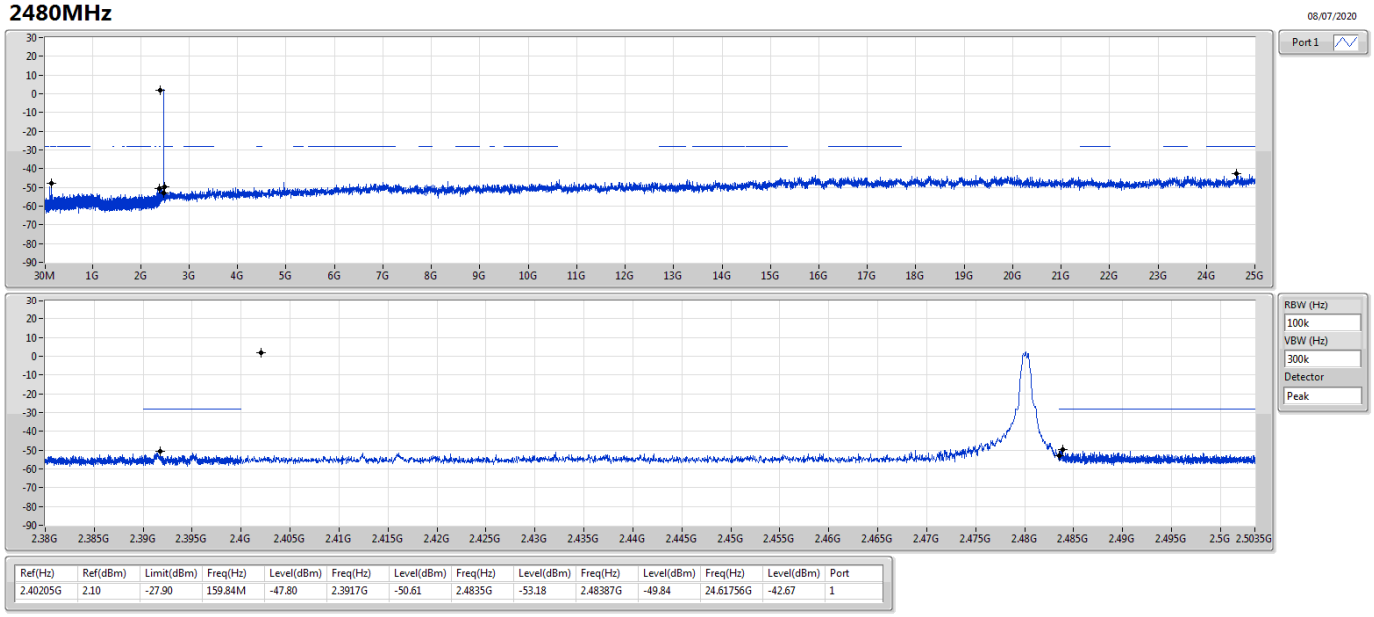



| Ref(Hz) | Ref(dBm) | Limit(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Port |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.40205G | 2.10 | -27.90 | 159.84M | -46.11 | 2.39088G | -52.32 | 2.4835G | -55.09 | 2.49508G | -51.80 | 24.60069G | -43.40 | 1 |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(1Mbps)** **CSE NdB**

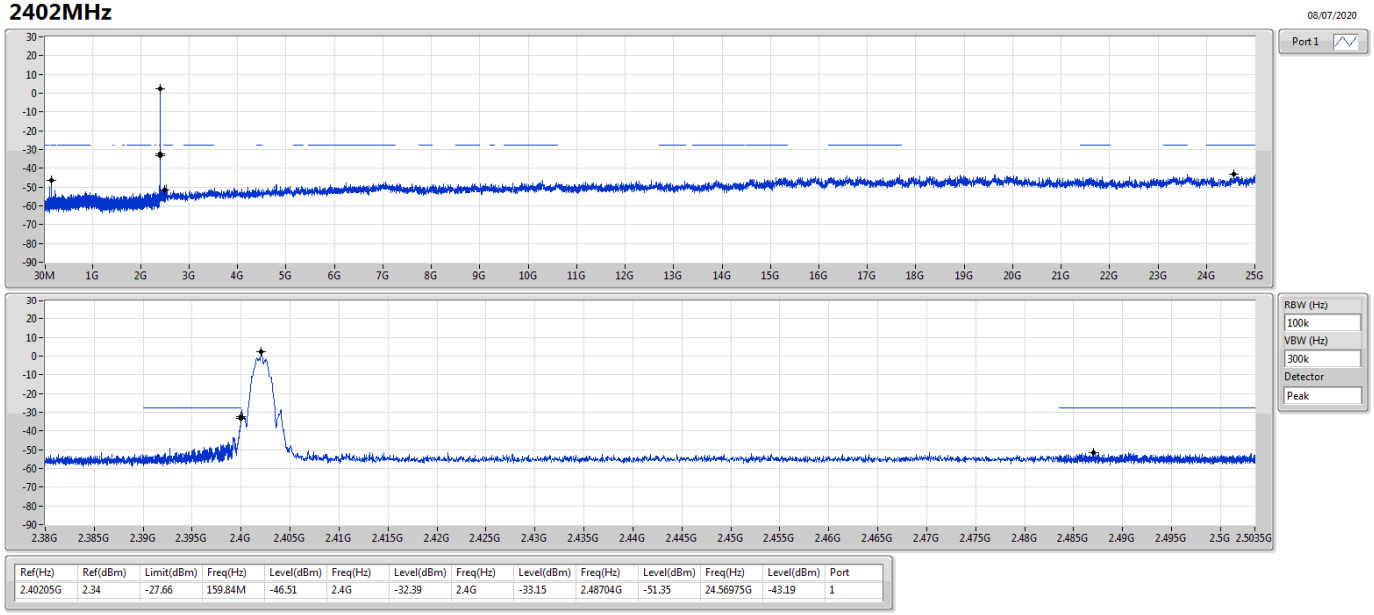
**2480MHz**




| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.40205G | 2.10 | -27.90 | 159.84M | -47.80 | 2.3917G | -50.61 | 2.4835G | -53.18 | 2.48387G | -49.84 | 24.61756G | -42.67 | 1 |

**BT-LE(2Mbps)** **CSE NdB**

**2402MHz**

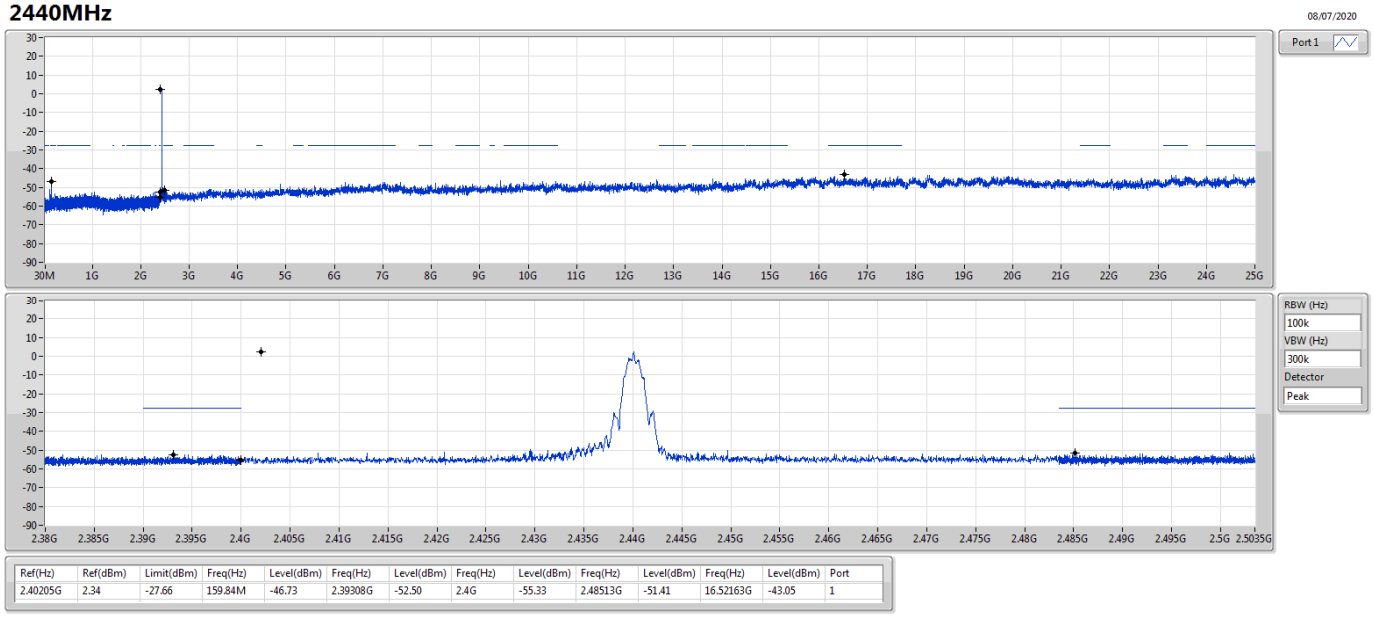



| Ref(Hz) | Ref(dBm) | Limit(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Port |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.40205G | 2.34 | -27.66 | 159.84M | -46.51 | 2.4G | -32.39 | 2.4G | -33.15 | 2.48704G | -51.35 | 24.56975G | -43.19 | 1 |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(2Mbps)** **CSE NdB**

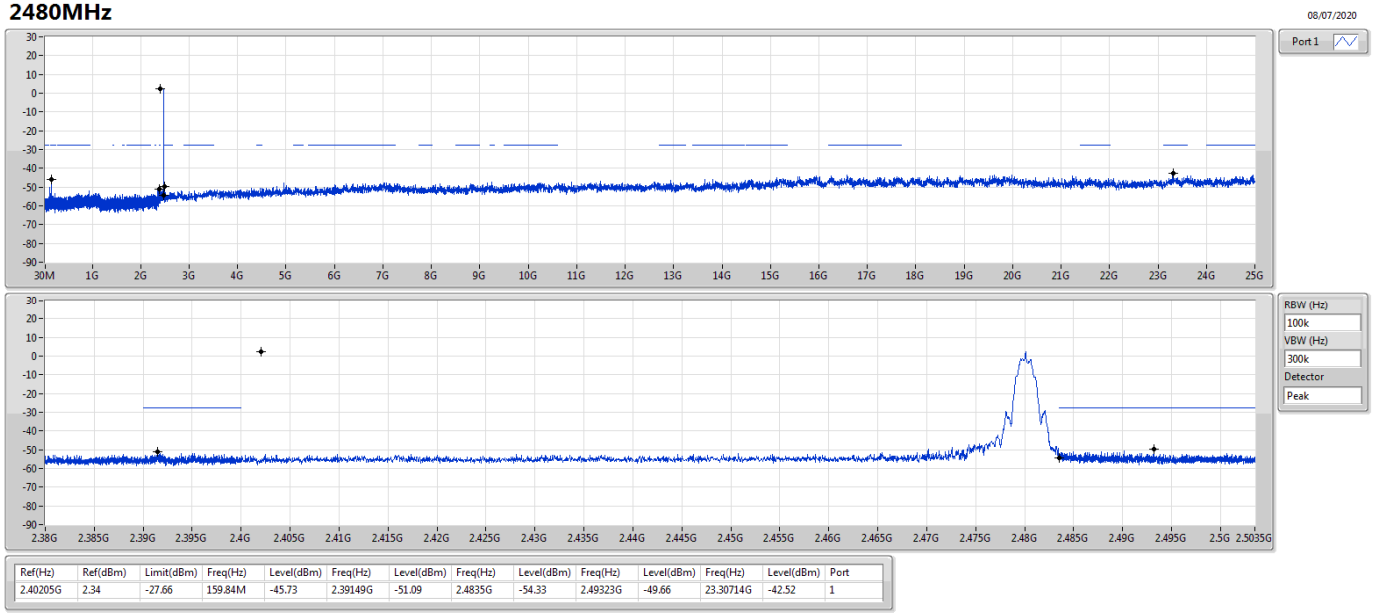
**2440MHz**




| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.40205G | 2.34 | -27.66 | 159.84M | -46.73 | 2.39308G | -52.50 | 2.4G | -55.33 | 2.48513G | -51.41 | 16.52163G | -43.05 | 1 |

**BT-LE(2Mbps)** **CSE NdB**

**2480MHz**




| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.40205G | 2.34 | -27.66 | 159.84M | -45.73 | 2.39149G | -51.09 | 2.4835G | -54.33 | 2.49323G | -49.66 | 23.30714G | -42.52 | 1 |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**
**Summary**

| Mode | Result | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.4-2.4835GHz | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| BT-LE(1Mbps) | Pass | 2.40205G | 2.10 | -27.90 | 159.84M | -45.81 | 2.39996G | -42.79 | 2.4G | -43.30 | 2.49094G | -50.46 | 24.65974G | -43.54 | 1 |
| BT-LE(2Mbps) | Pass | 2.40205G | 2.34 | -27.66 | 159.84M | -46.51 | 2.4G | -32.39 | 2.4G | -33.15 | 2.48704G | -51.35 | 24.56975G | -43.19 | 1 |

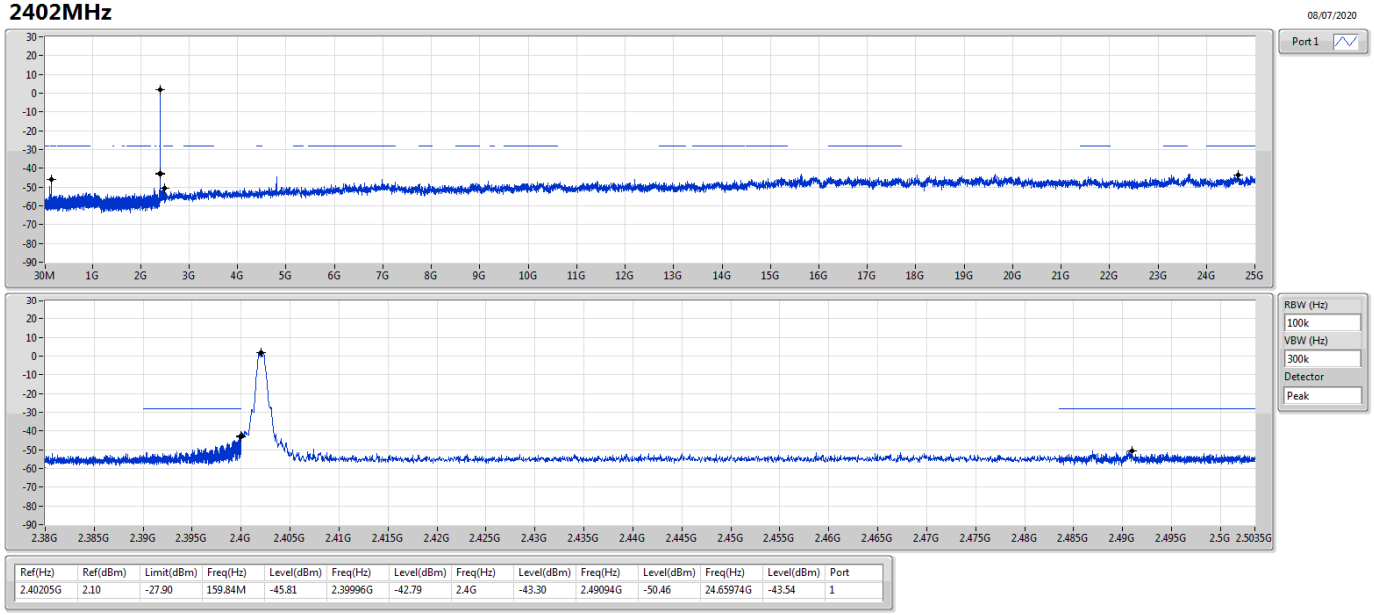
**Test Mode: EUT 1 + Ant.20 (Omni Mode)**
**Result**

| Mode | Result | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BT-LE(1Mbps) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2402MHz | Pass | 2.40205G | 2.10 | -27.90 | 159.84M | -45.81 | 2.39996G | -42.79 | 2.4G | -43.30 | 2.49094G | -50.46 | 24.65974G | -43.54 | 1 |
| 2440MHz | Pass | 2.40205G | 2.10 | -27.90 | 159.84M | -46.11 | 2.39088G | -52.32 | 2.4835G | -55.09 | 2.49508G | -51.80 | 24.60069G | -43.40 | 1 |
| 2480MHz | Pass | 2.40205G | 2.10 | -27.90 | 159.84M | -47.80 | 2.3917G | -50.61 | 2.4835G | -53.18 | 2.48387G | -49.84 | 24.61756G | -42.67 | 1 |
| BT-LE(2Mbps) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2402MHz | Pass | 2.40205G | 2.34 | -27.66 | 159.84M | -46.51 | 2.4G | -32.39 | 2.4G | -33.15 | 2.48704G | -51.35 | 24.56975G | -43.19 | 1 |
| 2440MHz | Pass | 2.40205G | 2.34 | -27.66 | 159.84M | -46.73 | 2.39308G | -52.50 | 2.4G | -55.33 | 2.48513G | -51.41 | 16.52163G | -43.05 | 1 |
| 2480MHz | Pass | 2.40205G | 2.34 | -27.66 | 159.84M | -45.73 | 2.39149G | -51.09 | 2.4835G | -54.33 | 2.49323G | -49.66 | 23.30714G | -42.52 | 1 |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(1Mbps)** **CSE NdB**

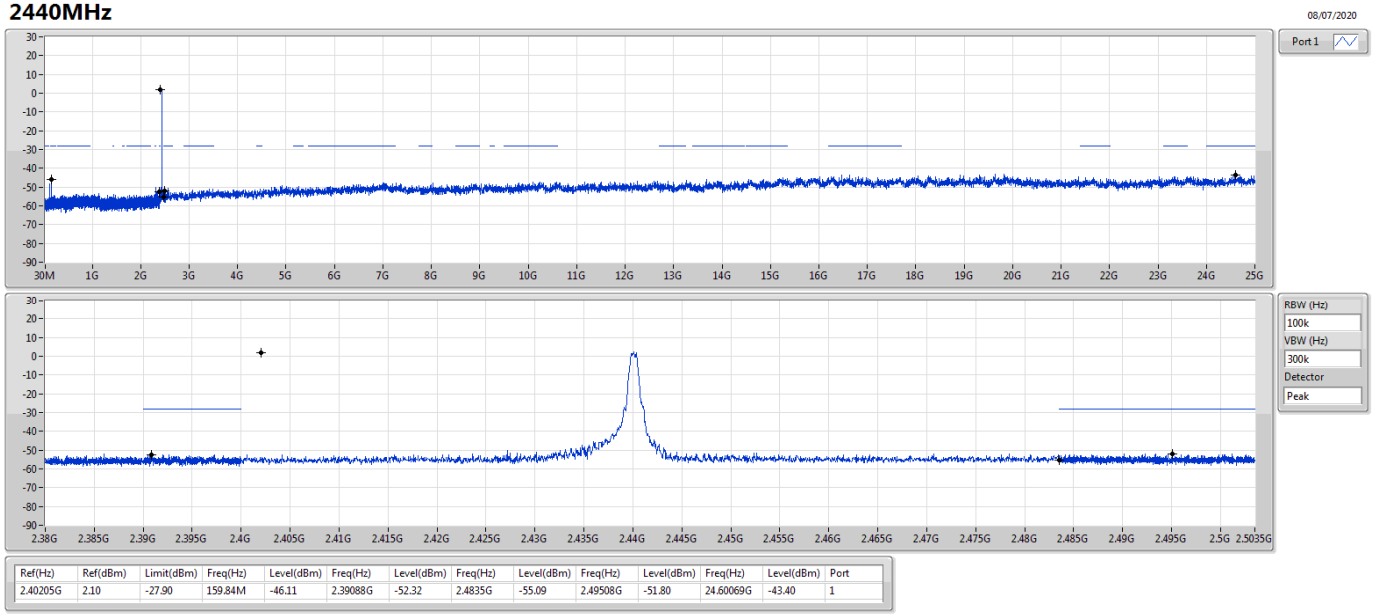
**2402MHz**




| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.40205G | 2.10 | -27.90 | 159.84M | -45.81 | 2.39996G | -42.79 | 2.4G | -43.30 | 2.49094G | -50.46 | 24.65974G | -43.54 | 1 |

**BT-LE(1Mbps)** **CSE NdB**

**2440MHz**

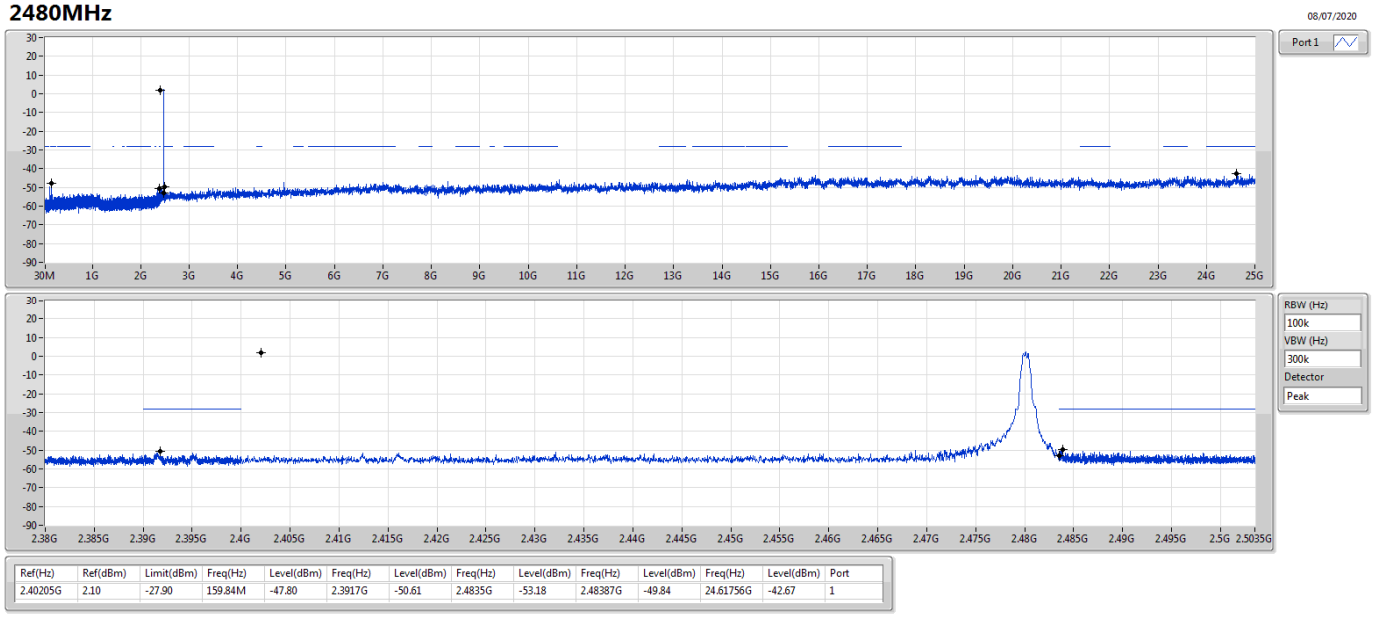



| Ref(Hz) | Ref(dBm) | Limit(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Port |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.40205G | 2.10 | -27.90 | 159.84M | -46.11 | 2.39088G | -52.32 | 2.4835G | -55.09 | 2.49508G | -51.80 | 24.60069G | -43.40 | 1 |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(1Mbps)** **CSE NdB**

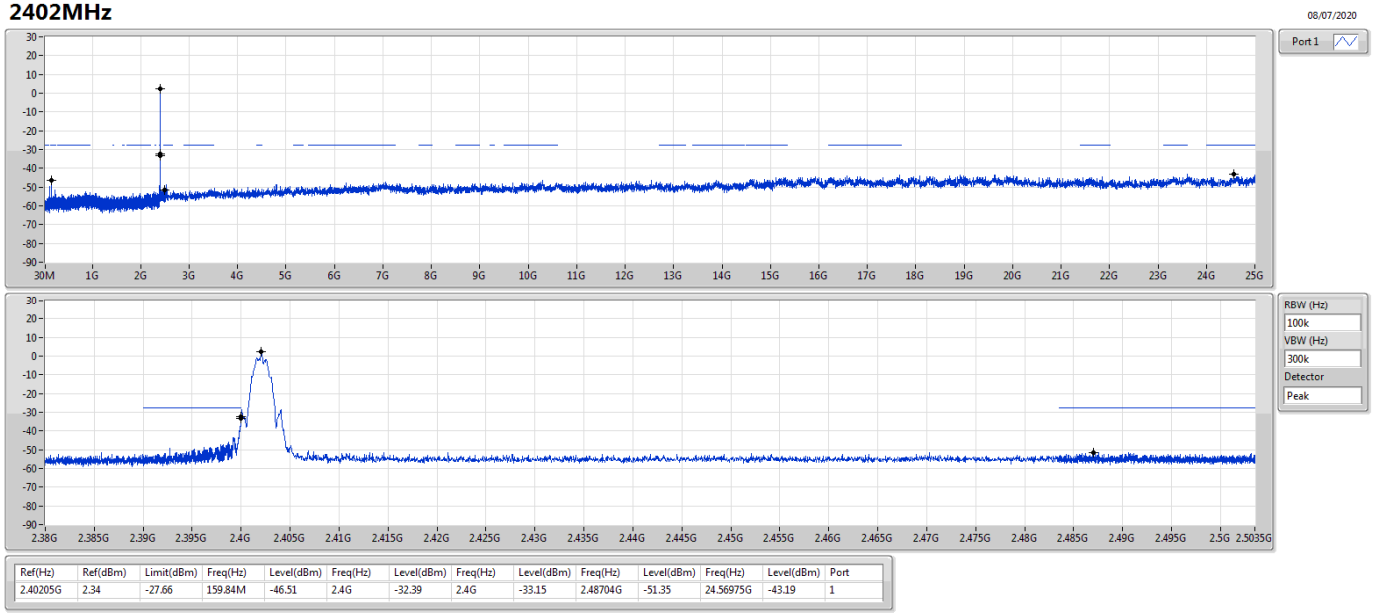
**2480MHz**




| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.40205G | 2.10 | -27.90 | 159.84M | -47.80 | 2.3917G | -50.61 | 2.4835G | -53.18 | 2.48387G | -49.84 | 24.61756G | -42.67 | 1 |

**BT-LE(2Mbps)** **CSE NdB**

**2402MHz**

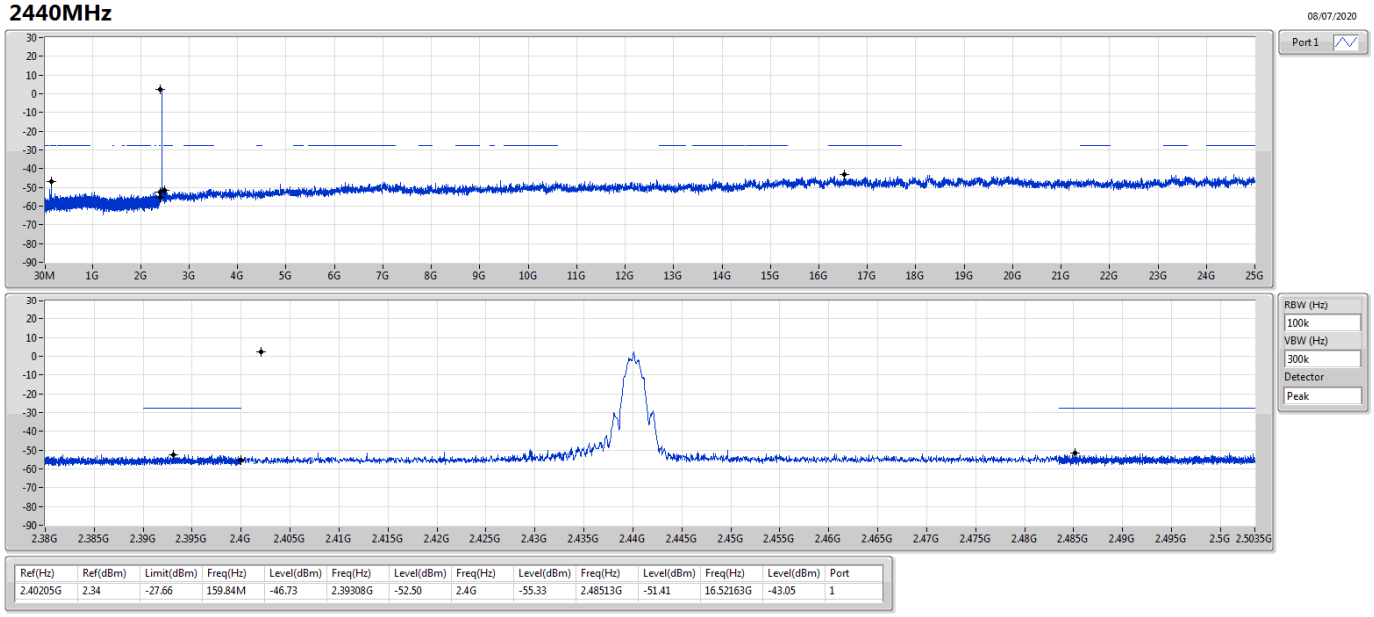



| Ref(Hz) | Ref(dBm) | Limit(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Freq(Hz) | Level(dBm) | Port |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.40205G | 2.34 | -27.66 | 159.84M | -46.51 | 2.4G | -32.39 | 2.4G | -33.15 | 2.48704G | -51.35 | 24.56975G | -43.19 | 1 |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(2Mbps)** **CSE NdB**

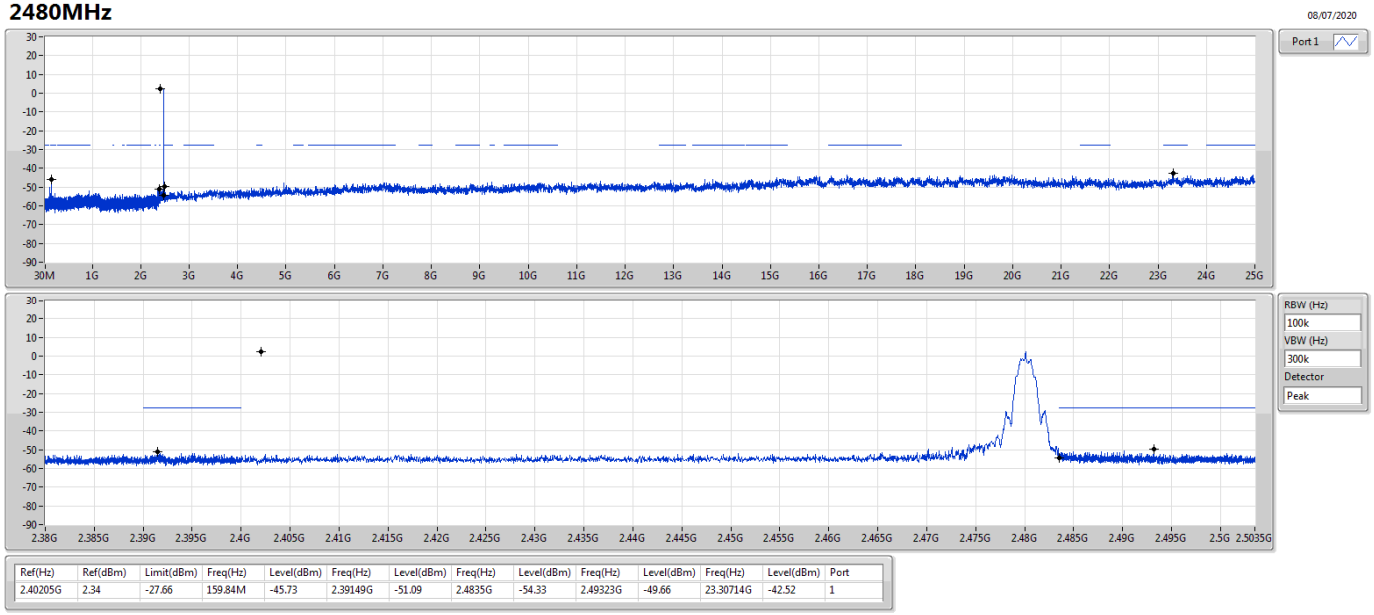
**2440MHz**




| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.40205G | 2.34 | -27.66 | 159.84M | -46.73 | 2.39308G | -52.50 | 2.4G | -55.33 | 2.48513G | -51.41 | 16.52163G | -43.05 | 1 |

**BT-LE(2Mbps)** **CSE NdB**

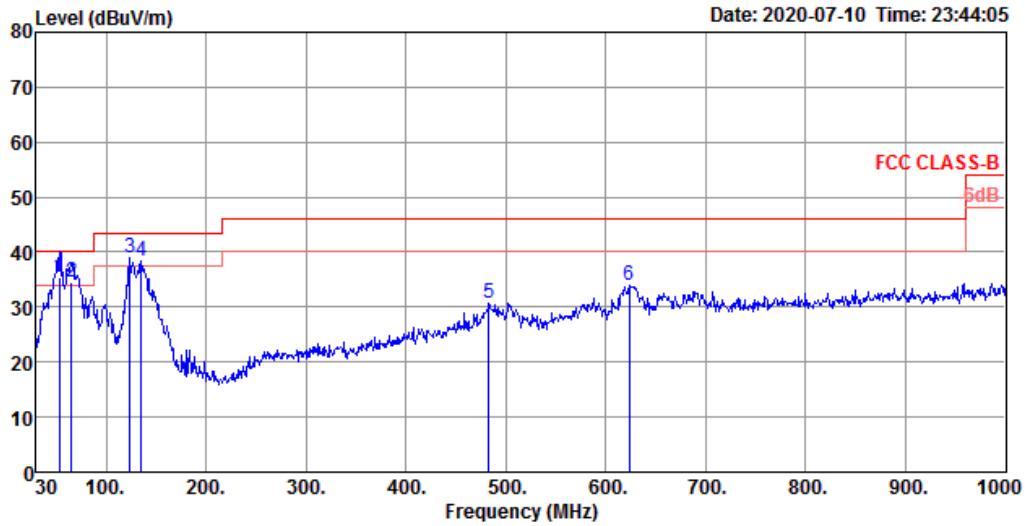
**2480MHz**




| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.40205G | 2.34 | -27.66 | 159.84M | -45.73 | 2.39149G | -51.09 | 2.4835G | -54.33 | 2.49323G | -49.66 | 23.30714G | -42.52 | 1 |

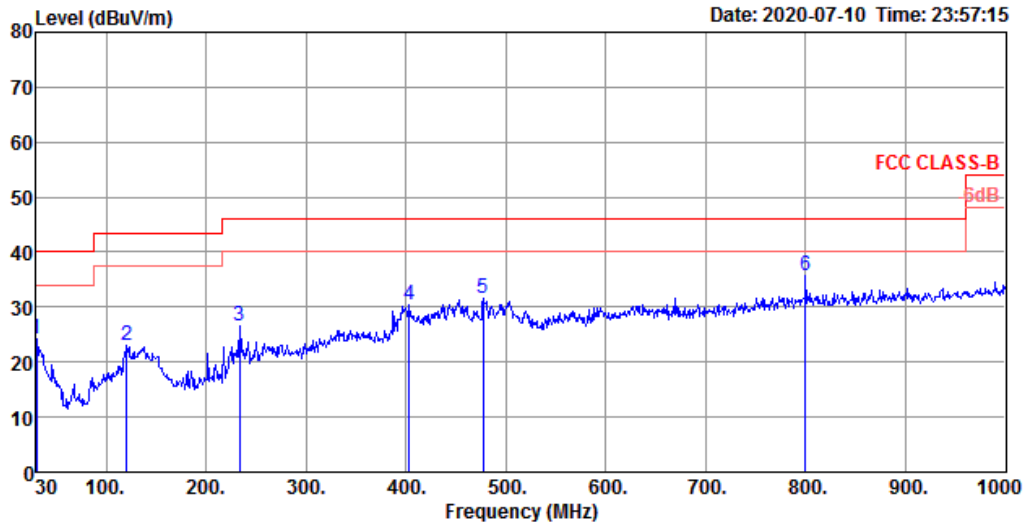
| Test Mode | Mode 1 | Frequency Range | 30 MHz to 1,000 MHz |
|---|---|---|---|

**Vertical 30 MHz to 1,000 MHz**




| | Freq | Level | Limit Line | Over Limit | Read Level | Preamp Factor | Antenna Factor | Cable Loss | Remark | A/Pos | T/Pos | Pol/Phase |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | dB/m | dB | | cm | deg | |
| 1 | 53.28 | 35.36 | 40.00 | -4.64 | 48.50 | 27.75 | 12.21 | 2.40 | QP | 200 | 344 | VERTICAL |
| 2 | 64.92 | 34.65 | 40.00 | -5.35 | 48.22 | 27.61 | 11.41 | 2.63 | QP | 300 | 187 | VERTICAL |
| 3 | 124.09 | 38.90 | 43.50 | -4.60 | 45.76 | 27.48 | 17.09 | 3.53 | Peak | 200 | 3 | VERTICAL |
| 4 | 134.76 | 38.45 | 43.50 | -5.05 | 45.48 | 27.40 | 16.69 | 3.68 | Peak | 200 | 306 | VERTICAL |
| 5 | 482.99 | 30.79 | 46.00 | -15.21 | 29.34 | 28.13 | 22.65 | 6.93 | Peak | 200 | 240 | VERTICAL |
| 6 | 623.64 | 33.92 | 46.00 | -12.08 | 30.02 | 28.24 | 24.22 | 7.92 | Peak | 100 | 360 | VERTICAL |

**Horizontal 30 MHz to 1,000 MHz**




| | Freq | Level | Limit Line | Over Limit | Read Level | Preamp Factor | Antenna Factor | Cable Loss | Remark | A/Pos | T/Pos | Pol/Phase |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | dB/m | dB | | cm | deg | |
| 1 | 30.00 | 24.24 | 40.00 | -15.76 | 26.93 | 27.72 | 23.22 | 1.81 | Peak | 100 | 330 | HORIZONTAL |
| 2 | 120.21 | 23.05 | 43.50 | -20.45 | 29.86 | 27.51 | 17.22 | 3.48 | Peak | 100 | 258 | HORIZONTAL |
| 3 | 233.70 | 26.51 | 46.00 | -19.49 | 32.99 | 27.02 | 15.72 | 4.82 | Peak | 100 | 352 | HORIZONTAL |
| 4 | 403.45 | 30.50 | 46.00 | -15.50 | 30.56 | 27.37 | 20.98 | 6.33 | Peak | 400 | 11 | HORIZONTAL |
| 5 | 477.17 | 31.65 | 46.00 | -14.35 | 30.26 | 28.10 | 22.59 | 6.90 | Peak | 100 | 342 | HORIZONTAL |
| 6 | 800.18 | 35.58 | 46.00 | -10.42 | 28.79 | 27.35 | 25.09 | 9.05 | Peak | 200 | 328 | HORIZONTAL |

## Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)

## Summary

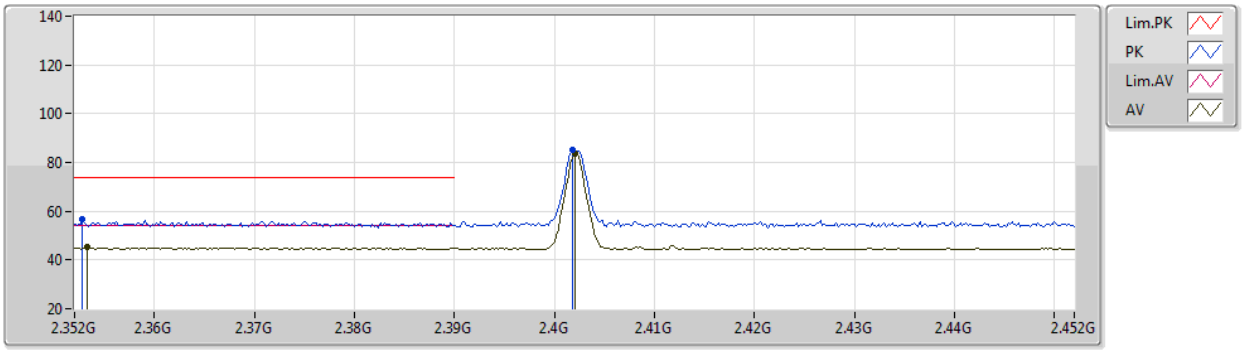
| Mode | Result | Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.4-2.4835GHz | - | - | - | - | - | - | - | - | - | - | - |
| BT-LE(1Mbps) | Pass | AV | 4.8041G | 53.57 | 54.00 | -0.43 | 3 | Horizontal | 172 | 1.46 | - |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(1Mbps)**

**2402MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-M-1

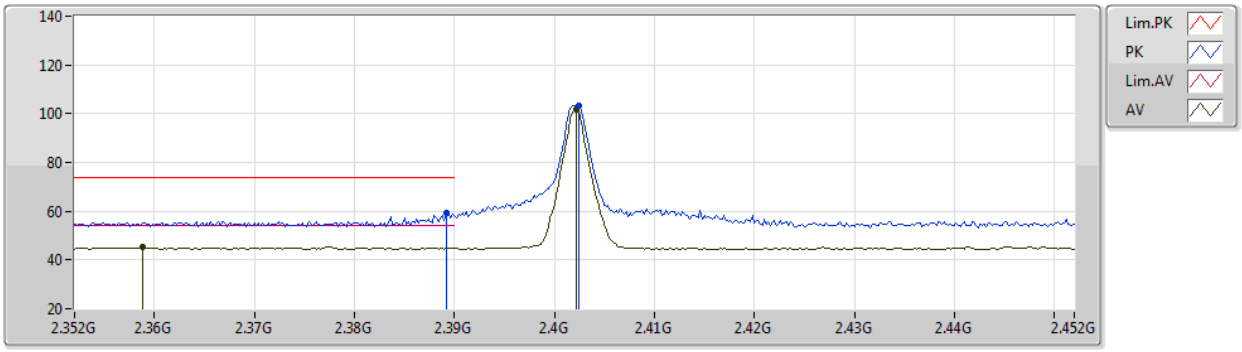
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.3528G | 56.89 | 74.00 | -17.11 | 25.17 | 3 | Vertical | 328 | 2.21 | - | 27.74 | 3.98 | - |
| AV | 2.3532G | 45.10 | 54.00 | -8.90 | 13.38 | 3 | Vertical | 328 | 2.21 | - | 27.74 | 3.98 | - |
| PK | 2.4018G | 84.94 | Inf | -Inf | 53.35 | 3 | Vertical | 328 | 2.21 | - | 27.59 | 4.00 | - |
| AV | 2.402G | 83.43 | Inf | -Inf | 51.84 | 3 | Vertical | 328 | 2.21 | - | 27.59 | 4.00 | - |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(1Mbps)**

**2402MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-M-1

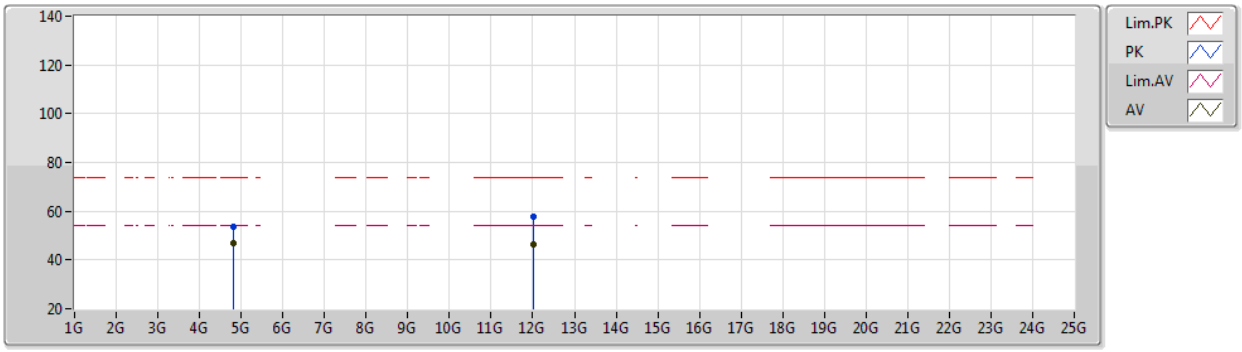
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.3892G | 59.35 | 74.00 | -14.65 | 27.73 | 3 | Horizontal | 122 | 1.89 | - | 27.63 | 3.99 | - |
| AV | 2.3588G | 45.26 | 54.00 | -8.74 | 13.56 | 3 | Horizontal | 122 | 1.89 | - | 27.72 | 3.98 | - |
| PK | 2.4024G | 103.29 | Inf | -Inf | 71.70 | 3 | Horizontal | 122 | 1.89 | - | 27.59 | 4.00 | - |
| AV | 2.4022G | 101.73 | Inf | -Inf | 70.14 | 3 | Horizontal | 122 | 1.89 | - | 27.59 | 4.00 | - |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(1Mbps)**

**2402MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-M-1

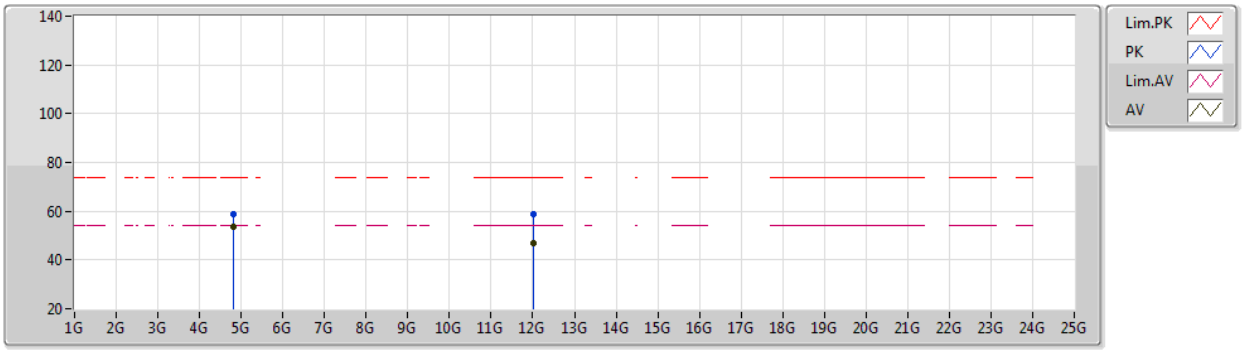
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.80474G | 53.79 | 74.00 | -20.21 | 49.23 | 3 | Vertical | 200 | 1.85 | - | 31.00 | 5.31 | 31.75 |
| AV | 4.80408G | 47.02 | 54.00 | -6.98 | 42.47 | 3 | Vertical | 200 | 1.85 | - | 31.00 | 5.31 | 31.76 |
| PK | 12.01184G | 57.98 | 74.00 | -16.02 | 44.94 | 3 | Vertical | 124 | 2.50 | - | 38.91 | 8.30 | 34.17 |
| AV | 12.01156G | 46.14 | 54.00 | -7.86 | 33.10 | 3 | Vertical | 124 | 2.50 | - | 38.91 | 8.30 | 34.17 |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(1Mbps)**

**2402MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-M-1

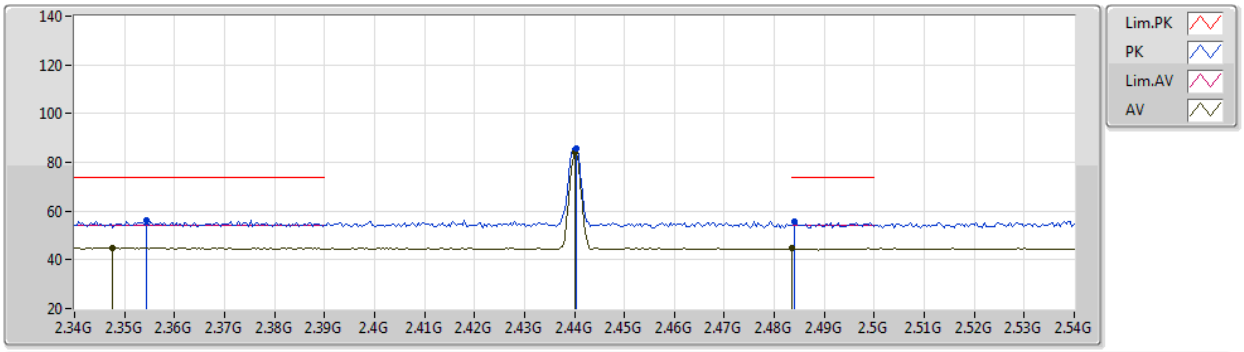
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.8047G | 59.05 | 74.00 | -14.95 | 54.49 | 3 | Horizontal | 172 | 1.46 | - | 31.00 | 5.31 | 31.75 |
| AV | 4.8041G | 53.57 | 54.00 | -0.43 | 49.02 | 3 | Horizontal | 172 | 1.46 | - | 31.00 | 5.31 | 31.76 |
| PK | 12.00942G | 58.58 | 74.00 | -15.42 | 45.54 | 3 | Horizontal | 183 | 2.73 | - | 38.91 | 8.30 | 34.17 |
| AV | 12.01116G | 46.87 | 54.00 | -7.13 | 33.83 | 3 | Horizontal | 183 | 2.73 | - | 38.91 | 8.30 | 34.17 |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(1Mbps)**

**2440MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-M-1

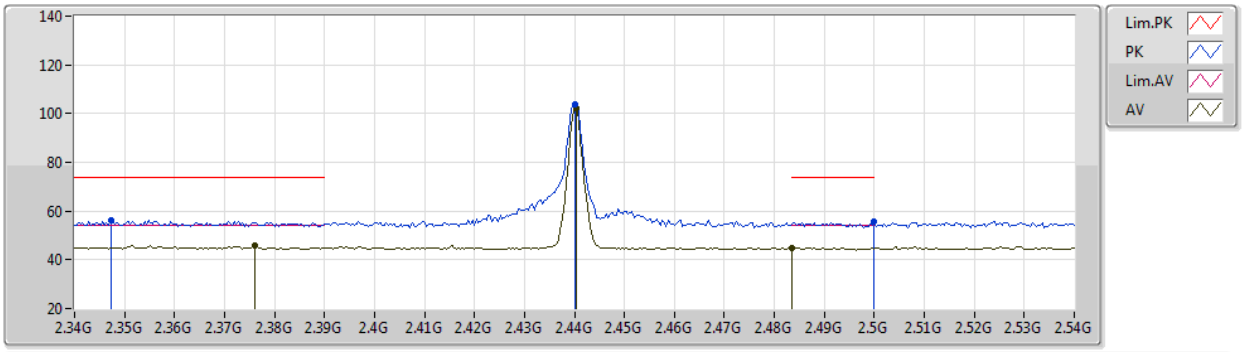
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.3544G | 56.03 | 74.00 | -17.97 | 24.31 | 3 | Vertical | 233 | 2.26 | - | 27.74 | 3.98 | - |
| AV | 2.3476G | 45.03 | 54.00 | -8.97 | 13.30 | 3 | Vertical | 233 | 2.26 | - | 27.76 | 3.97 | - |
| PK | 2.4404G | 85.90 | Inf | -Inf | 54.40 | 3 | Vertical | 233 | 2.26 | - | 27.48 | 4.02 | - |
| AV | 2.44G | 84.32 | Inf | -Inf | 52.82 | 3 | Vertical | 233 | 2.26 | - | 27.48 | 4.02 | - |
| PK | 2.484G | 55.61 | 74.00 | -18.39 | 24.22 | 3 | Vertical | 233 | 2.26 | - | 27.35 | 4.04 | - |
| AV | 2.4835G | 44.63 | 54.00 | -9.37 | 13.24 | 3 | Vertical | 233 | 2.26 | - | 27.35 | 4.04 | - |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(1Mbps)**

**2440MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-M-1

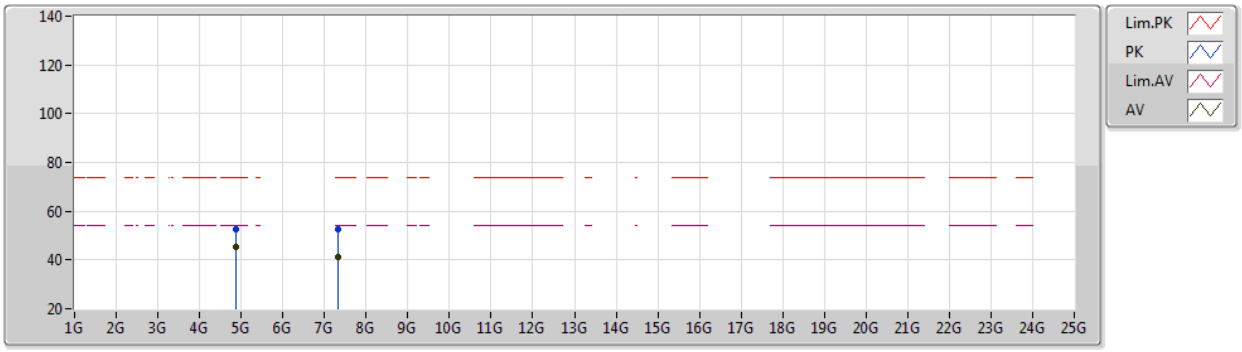
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.3472G | 56.45 | 74.00 | -17.55 | 24.72 | 3 | Horizontal | 121 | 1.80 | - | 27.76 | 3.97 | - |
| AV | 2.376G | 45.80 | 54.00 | -8.20 | 14.14 | 3 | Horizontal | 121 | 1.80 | - | 27.67 | 3.99 | - |
| PK | 2.44G | 103.64 | Inf | -Inf | 72.14 | 3 | Horizontal | 121 | 1.80 | - | 27.48 | 4.02 | - |
| AV | 2.4404G | 102.23 | Inf | -Inf | 70.73 | 3 | Horizontal | 121 | 1.80 | - | 27.48 | 4.02 | - |
| PK | 2.5G | 55.70 | 74.00 | -18.30 | 24.35 | 3 | Horizontal | 121 | 1.80 | - | 27.30 | 4.05 | - |
| AV | 2.4835G | 44.87 | 54.00 | -9.13 | 13.48 | 3 | Horizontal | 121 | 1.80 | - | 27.35 | 4.04 | - |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(1Mbps)**

**2440MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-M-1

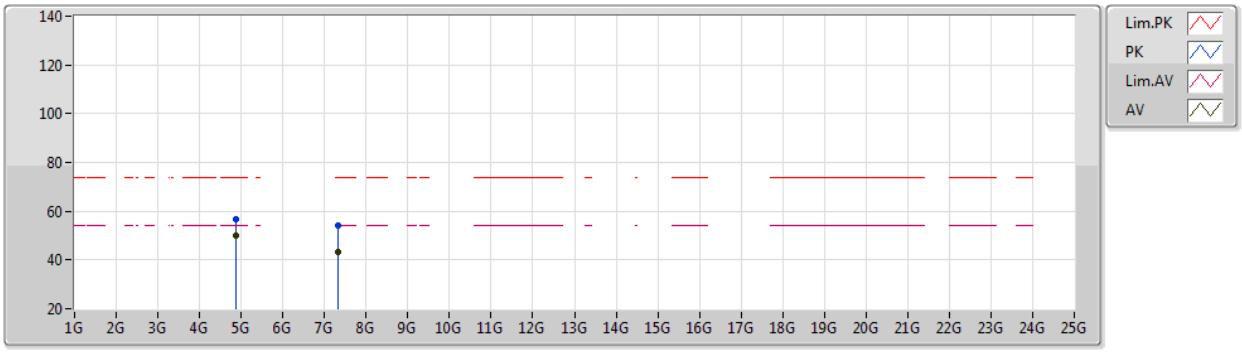
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.88066G | 52.77 | 74.00 | -21.23 | 47.94 | 3 | Vertical | 247 | 2.89 | - | 31.08 | 5.41 | 31.66 |
| AV | 4.87992G | 45.46 | 54.00 | -8.54 | 40.63 | 3 | Vertical | 247 | 2.89 | - | 31.08 | 5.41 | 31.66 |
| PK | 7.31912G | 52.52 | 74.00 | -21.48 | 42.33 | 3 | Vertical | 288 | 1.67 | - | 36.40 | 6.96 | 33.17 |
| AV | 7.31966G | 41.25 | 54.00 | -12.75 | 31.06 | 3 | Vertical | 288 | 1.67 | - | 36.40 | 6.96 | 33.17 |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(1Mbps)**

**2440MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-M-1

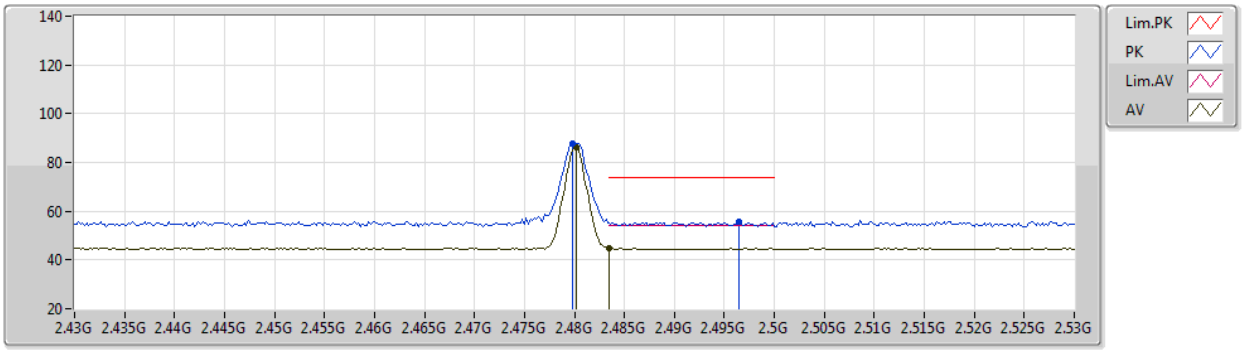
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.87956G | 56.63 | 74.00 | -17.37 | 51.80 | 3 | Horizontal | 172 | 1.59 | - | 31.08 | 5.41 | 31.66 |
| AV | 4.88012G | 50.18 | 54.00 | -3.82 | 45.35 | 3 | Horizontal | 172 | 1.59 | - | 31.08 | 5.41 | 31.66 |
| PK | 7.3196G | 54.24 | 74.00 | -19.76 | 44.05 | 3 | Horizontal | 201 | 2.43 | - | 36.40 | 6.96 | 33.17 |
| AV | 7.32094G | 43.18 | 54.00 | -10.82 | 32.99 | 3 | Horizontal | 201 | 2.43 | - | 36.40 | 6.96 | 33.17 |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(1Mbps)**

**2480MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-M-1

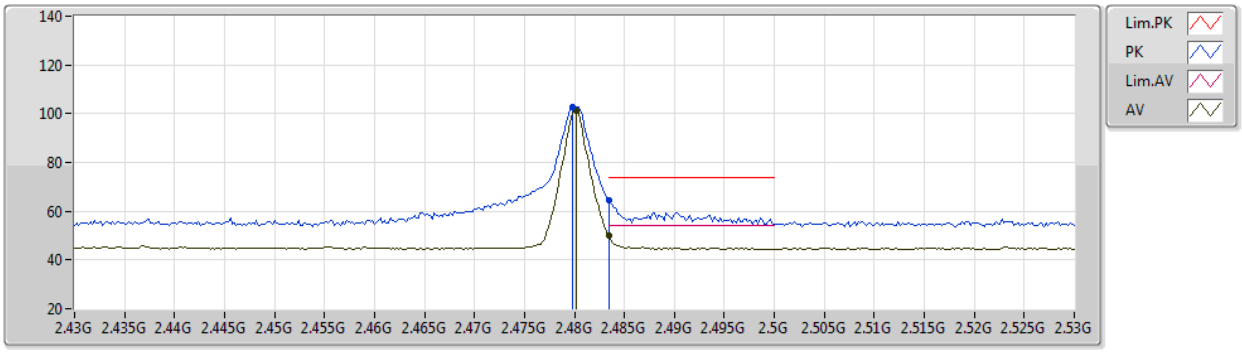
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.4798G | 87.95 | Inf | -Inf | 56.55 | 3 | Vertical | 210 | 2.24 | - | 27.36 | 4.04 | - |
| AV | 2.4802G | 86.45 | Inf | -Inf | 55.05 | 3 | Vertical | 210 | 2.24 | - | 27.36 | 4.04 | - |
| PK | 2.4964G | 55.50 | 74.00 | -18.50 | 24.14 | 3 | Vertical | 210 | 2.24 | - | 27.31 | 4.05 | - |
| AV | 2.4835G | 44.74 | 54.00 | -9.26 | 13.35 | 3 | Vertical | 210 | 2.24 | - | 27.35 | 4.04 | - |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(1Mbps)**

**2480MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-M-1

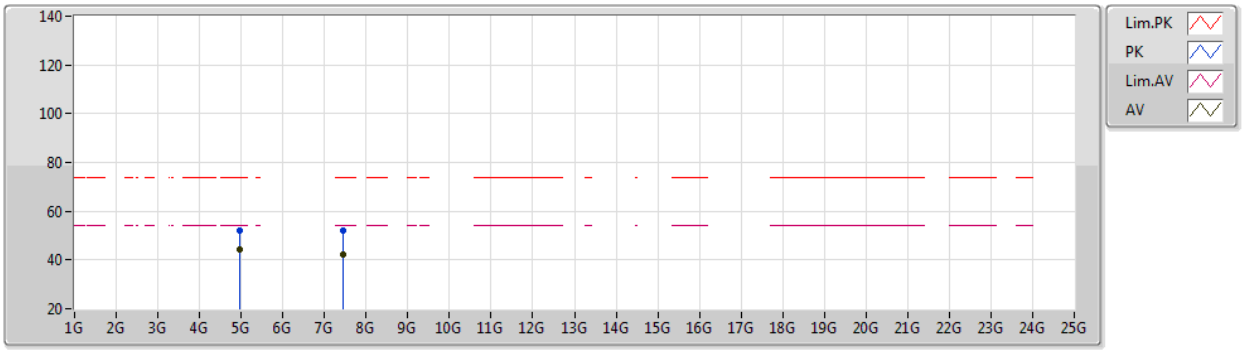
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.4798G | 102.73 | Inf | -Inf | 71.33 | 3 | Horizontal | 115 | 2.12 | - | 27.36 | 4.04 | - |
| AV | 2.4802G | 101.23 | Inf | -Inf | 69.83 | 3 | Horizontal | 115 | 2.12 | - | 27.36 | 4.04 | - |
| PK | 2.4835G | 64.74 | 74.00 | -9.26 | 33.35 | 3 | Horizontal | 115 | 2.12 | - | 27.35 | 4.04 | - |
| AV | 2.4835G | 49.94 | 54.00 | -4.06 | 18.55 | 3 | Horizontal | 115 | 2.12 | - | 27.35 | 4.04 | - |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(1Mbps)**

**2480MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-M-1

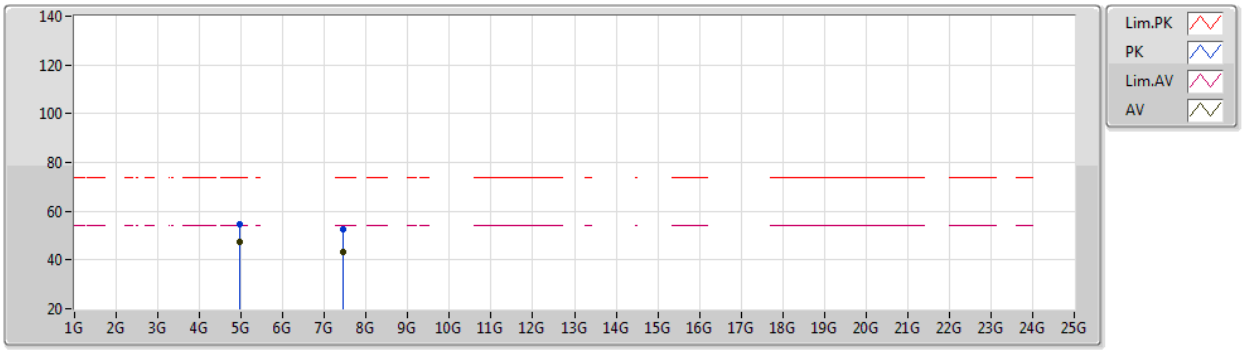
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.96052G | 51.89 | 74.00 | -22.11 | 46.58 | 3 | Vertical | 240 | 2.33 | - | 31.34 | 5.54 | 31.57 |
| AV | 4.96016G | 44.20 | 54.00 | -9.80 | 38.89 | 3 | Vertical | 240 | 2.33 | - | 31.34 | 5.54 | 31.57 |
| PK | 7.4382G | 51.88 | 74.00 | -22.12 | 41.62 | 3 | Vertical | 250 | 2.88 | - | 36.48 | 7.00 | 33.22 |
| AV | 7.44196G | 42.30 | 54.00 | -11.70 | 32.04 | 3 | Vertical | 250 | 2.88 | - | 36.48 | 7.00 | 33.22 |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(1Mbps)**

**2480MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-M-1

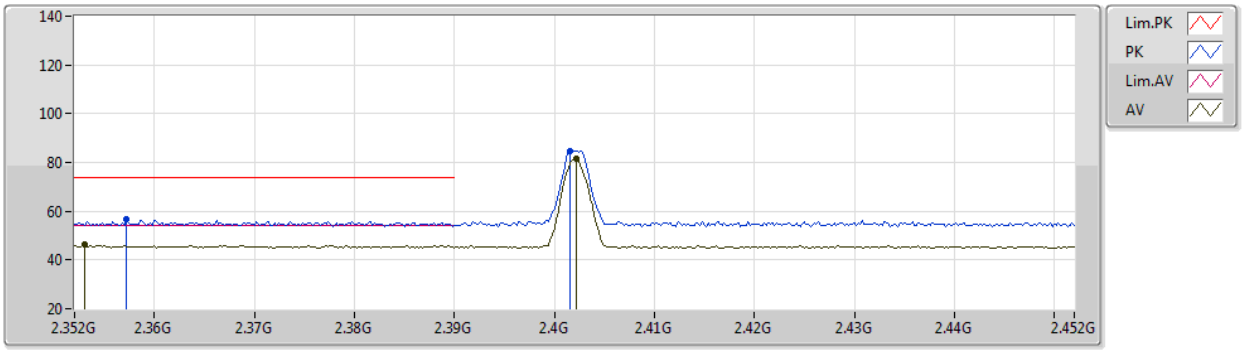
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.95968G | 54.69 | 74.00 | -19.31 | 49.38 | 3 | Horizontal | 145 | 1.78 | - | 31.34 | 5.54 | 31.57 |
| AV | 4.96016G | 47.65 | 54.00 | -6.35 | 42.34 | 3 | Horizontal | 145 | 1.78 | - | 31.34 | 5.54 | 31.57 |
| PK | 7.44175G | 52.52 | 74.00 | -21.48 | 42.26 | 3 | Horizontal | 211 | 2.07 | - | 36.48 | 7.00 | 33.22 |
| AV | 7.44237G | 43.36 | 54.00 | -10.64 | 33.10 | 3 | Horizontal | 211 | 2.07 | - | 36.48 | 7.00 | 33.22 |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(2Mbps)**

**2402MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-M-1

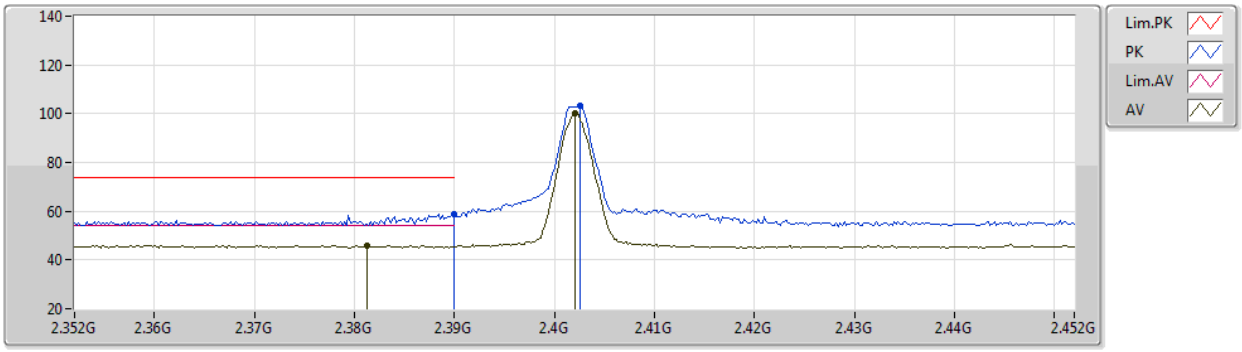
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.3572G | 56.55 | 74.00 | -17.45 | 24.84 | 3 | Vertical | 276 | 1.31 | - | 27.73 | 3.98 | - |
| AV | 2.353G | 46.20 | 54.00 | -7.80 | 14.48 | 3 | Vertical | 276 | 1.31 | - | 27.74 | 3.98 | - |
| PK | 2.4016G | 84.65 | Inf | -Inf | 53.05 | 3 | Vertical | 276 | 1.31 | - | 27.60 | 4.00 | - |
| AV | 2.4022G | 81.76 | Inf | -Inf | 50.17 | 3 | Vertical | 276 | 1.31 | - | 27.59 | 4.00 | - |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(2Mbps)**

**2402MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-M-1

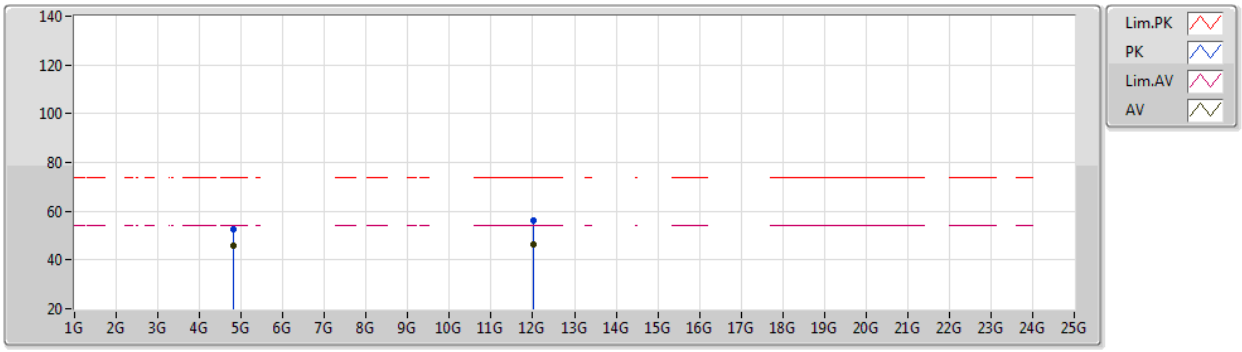
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.39G | 58.78 | 74.00 | -15.22 | 27.15 | 3 | Horizontal | 298 | 1.88 | - | 27.63 | 4.00 | - |
| AV | 2.3812G | 45.90 | 54.00 | -8.10 | 14.25 | 3 | Horizontal | 298 | 1.88 | - | 27.66 | 3.99 | - |
| PK | 2.4026G | 103.02 | Inf | -Inf | 71.43 | 3 | Horizontal | 298 | 1.88 | - | 27.59 | 4.00 | - |
| AV | 2.402G | 100.19 | Inf | -Inf | 68.60 | 3 | Horizontal | 298 | 1.88 | - | 27.59 | 4.00 | - |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(2Mbps)**

**2402MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-O-1

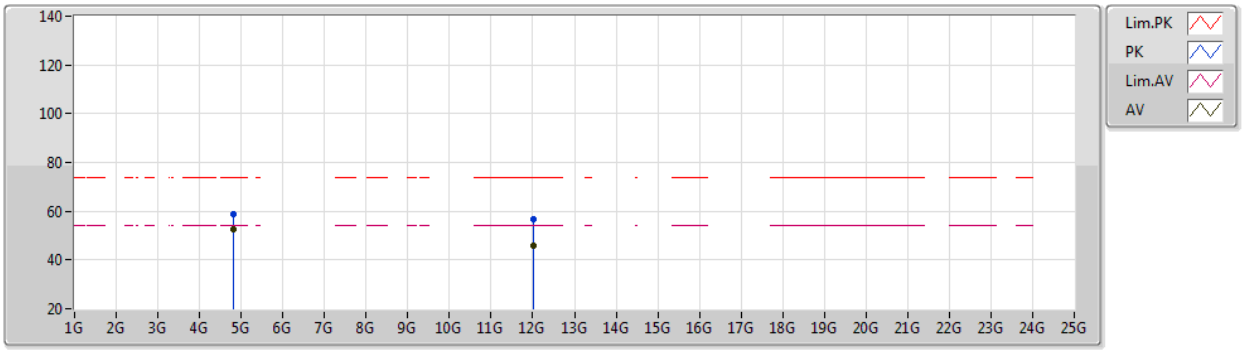
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.80418G | 52.65 | 74.00 | -21.35 | 48.09 | 3 | Vertical | 41 | 1.87 | - | 31.00 | 5.31 | 31.75 |
| AV | 4.8041G | 45.65 | 54.00 | -8.35 | 41.10 | 3 | Vertical | 41 | 1.87 | - | 31.00 | 5.31 | 31.76 |
| PK | 12.0142G | 56.15 | 74.00 | -17.85 | 43.11 | 3 | Vertical | 223 | 2.48 | - | 38.91 | 8.30 | 34.17 |
| AV | 12.0228G | 46.15 | 54.00 | -7.85 | 33.10 | 3 | Vertical | 223 | 2.48 | - | 38.91 | 8.31 | 34.17 |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(2Mbps)**

**2402MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-O-1

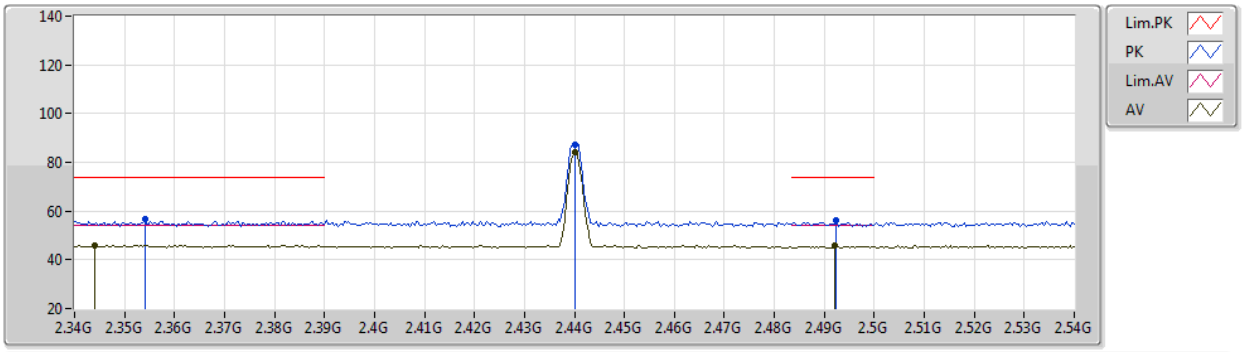
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.8052G | 59.02 | 74.00 | -14.98 | 54.45 | 3 | Horizontal | 354 | 1.65 | - | 31.01 | 5.31 | 31.75 |
| AV | 4.80414G | 52.78 | 54.00 | -1.22 | 48.23 | 3 | Horizontal | 354 | 1.65 | - | 31.00 | 5.31 | 31.76 |
| PK | 12.01338G | 56.48 | 74.00 | -17.52 | 43.44 | 3 | Horizontal | 357 | 1.30 | - | 38.91 | 8.30 | 34.17 |
| AV | 12.01194G | 45.68 | 54.00 | -8.32 | 32.64 | 3 | Horizontal | 357 | 1.30 | - | 38.91 | 8.30 | 34.17 |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(2Mbps)**

**2440MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-O-1

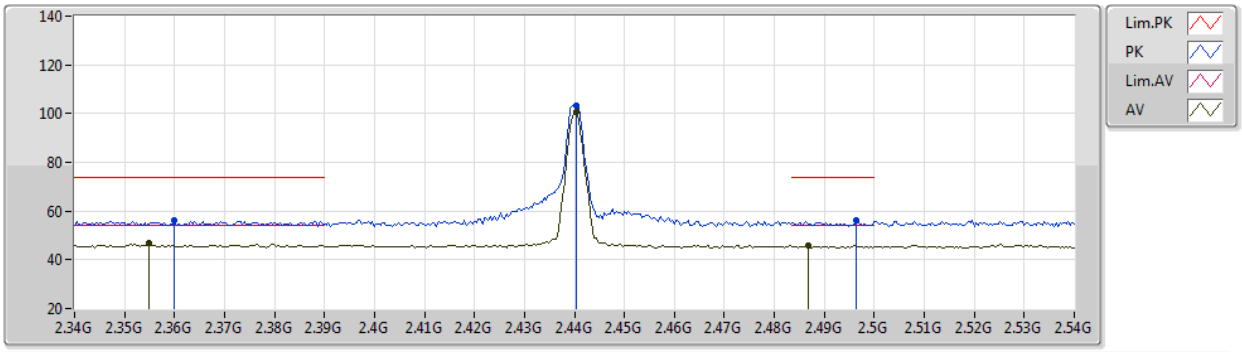
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.354G | 56.53 | 74.00 | -17.47 | 24.81 | 3 | Vertical | 35 | 2.07 | - | 27.74 | 3.98 | - |
| AV | 2.344G | 46.03 | 54.00 | -7.97 | 14.29 | 3 | Vertical | 35 | 2.07 | - | 27.77 | 3.97 | - |
| PK | 2.44G | 87.13 | Inf | -Inf | 55.63 | 3 | Vertical | 35 | 2.07 | - | 27.48 | 4.02 | - |
| AV | 2.44G | 84.20 | Inf | -Inf | 52.70 | 3 | Vertical | 35 | 2.07 | - | 27.48 | 4.02 | - |
| PK | 2.4924G | 56.11 | 74.00 | -17.89 | 24.74 | 3 | Vertical | 35 | 2.07 | - | 27.32 | 4.05 | - |
| AV | 2.492G | 45.76 | 54.00 | -8.24 | 14.39 | 3 | Vertical | 35 | 2.07 | - | 27.32 | 4.05 | - |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(2Mbps)**

**2440MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-O-1

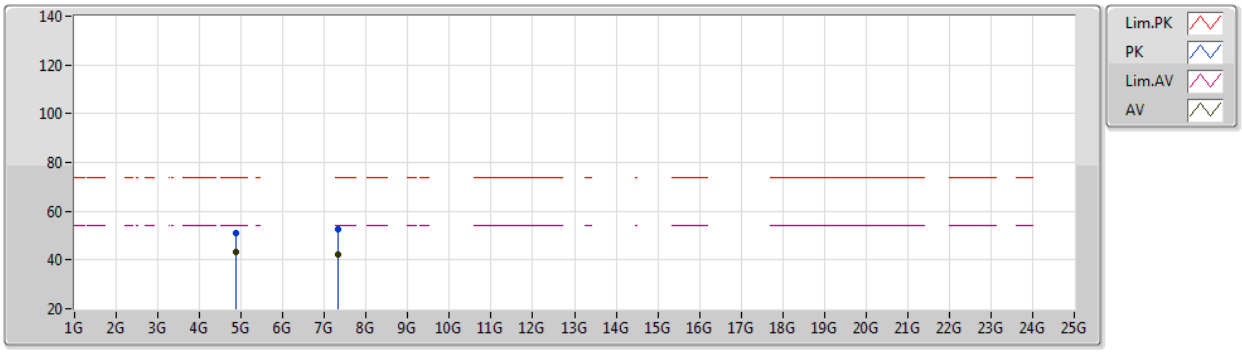
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.36G | 56.08 | 74.00 | -17.92 | 24.38 | 3 | Horizontal | 303 | 1.96 | - | 27.72 | 3.98 | - |
| AV | 2.3548G | 46.78 | 54.00 | -7.22 | 15.06 | 3 | Horizontal | 303 | 1.96 | - | 27.74 | 3.98 | - |
| PK | 2.4404G | 103.45 | Inf | -Inf | 71.95 | 3 | Horizontal | 303 | 1.96 | - | 27.48 | 4.02 | - |
| AV | 2.4404G | 100.62 | Inf | -Inf | 69.12 | 3 | Horizontal | 303 | 1.96 | - | 27.48 | 4.02 | - |
| PK | 2.4964G | 56.13 | 74.00 | -17.87 | 24.77 | 3 | Horizontal | 303 | 1.96 | - | 27.31 | 4.05 | - |
| AV | 2.4868G | 45.82 | 54.00 | -8.18 | 14.44 | 3 | Horizontal | 303 | 1.96 | - | 27.34 | 4.04 | - |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(2Mbps)**

**2440MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-O-1

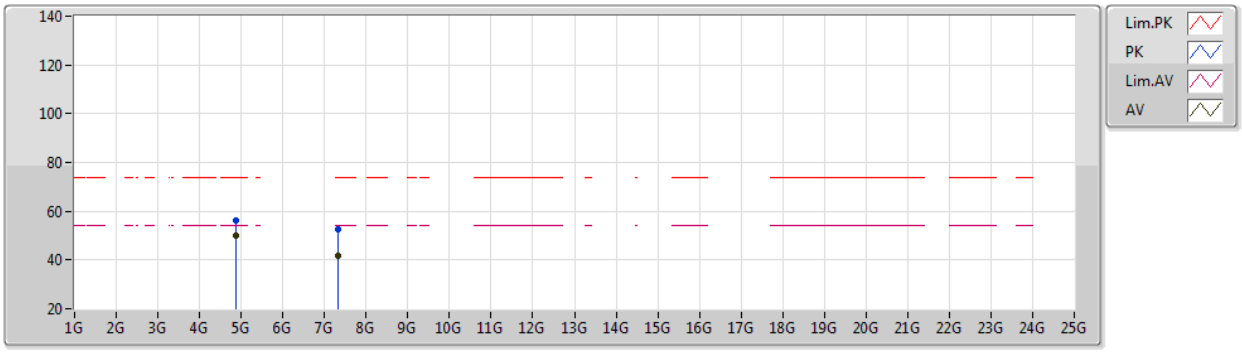
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.879G | 50.92 | 74.00 | -23.08 | 46.10 | 3 | Vertical | 145 | 2.48 | - | 31.08 | 5.41 | 31.67 |
| AV | 4.88028G | 43.44 | 54.00 | -10.56 | 38.61 | 3 | Vertical | 145 | 2.48 | - | 31.08 | 5.41 | 31.66 |
| PK | 7.32074G | 52.52 | 74.00 | -21.48 | 42.33 | 3 | Vertical | 168 | 2.33 | - | 36.40 | 6.96 | 33.17 |
| AV | 7.3216G | 42.24 | 54.00 | -11.76 | 32.05 | 3 | Vertical | 168 | 2.33 | - | 36.40 | 6.96 | 33.17 |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(2Mbps)**

**2440MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-O-1

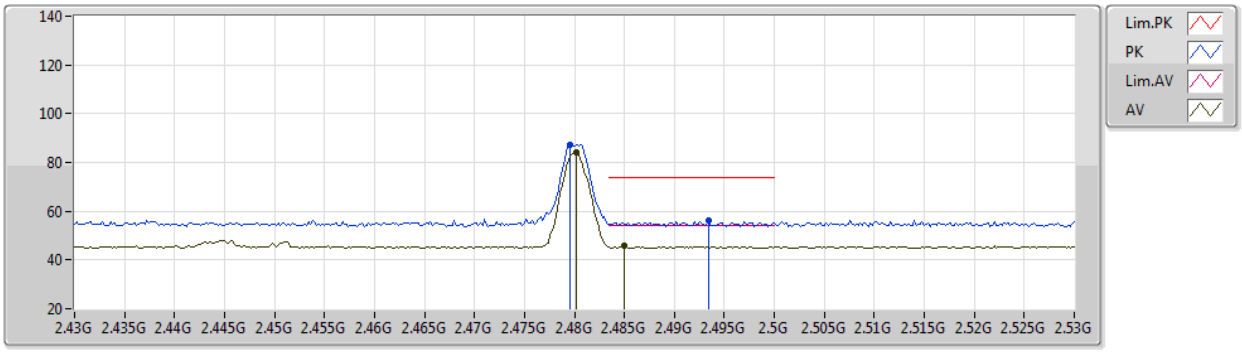
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.88008G | 56.36 | 74.00 | -17.64 | 51.53 | 3 | Horizontal | 351 | 1.62 | - | 31.08 | 5.41 | 31.66 |
| AV | 4.87908G | 50.02 | 54.00 | -3.98 | 45.20 | 3 | Horizontal | 351 | 1.62 | - | 31.08 | 5.41 | 31.67 |
| PK | 7.32326G | 52.52 | 74.00 | -21.48 | 42.33 | 3 | Horizontal | 333 | 2.38 | - | 36.40 | 6.96 | 33.17 |
| AV | 7.32018G | 41.60 | 54.00 | -12.40 | 31.41 | 3 | Horizontal | 333 | 2.38 | - | 36.40 | 6.96 | 33.17 |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(2Mbps)**

**2480MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-O-1

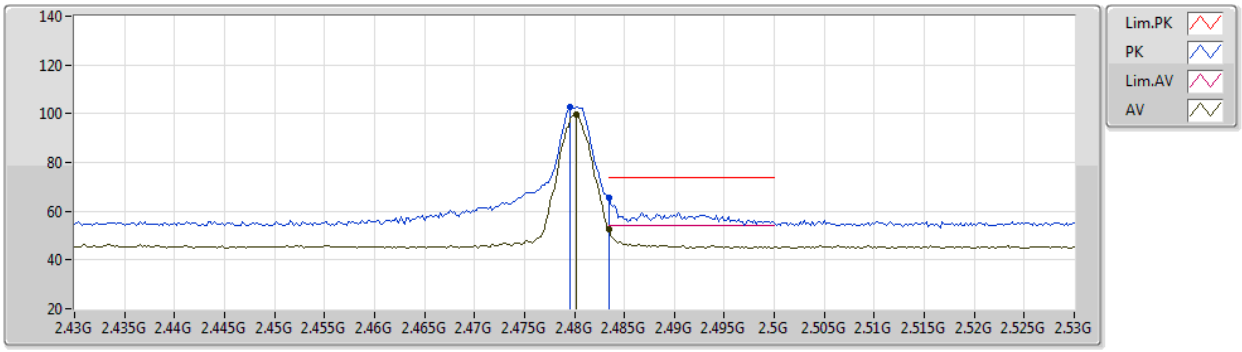
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.4796G | 87.14 | Inf | -Inf | 55.74 | 3 | Vertical | 28 | 2.06 | - | 27.36 | 4.04 | - |
| AV | 2.4802G | 84.22 | Inf | -Inf | 52.82 | 3 | Vertical | 28 | 2.06 | - | 27.36 | 4.04 | - |
| PK | 2.4934G | 56.19 | 74.00 | -17.81 | 24.82 | 3 | Vertical | 28 | 2.06 | - | 27.32 | 4.05 | - |
| AV | 2.485G | 45.64 | 54.00 | -8.36 | 14.26 | 3 | Vertical | 28 | 2.06 | - | 27.34 | 4.04 | - |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(2Mbps)**

**2480MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-O-1

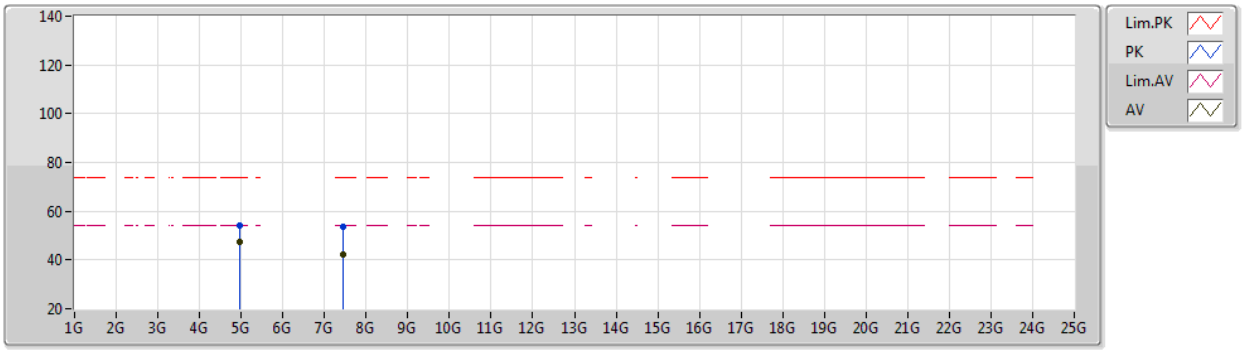
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.4796G | 102.56 | Inf | -Inf | 71.16 | 3 | Horizontal | 303 | 2.11 | - | 27.36 | 4.04 | - |
| AV | 2.4802G | 99.70 | Inf | -Inf | 68.30 | 3 | Horizontal | 303 | 2.11 | - | 27.36 | 4.04 | - |
| PK | 2.4835G | 65.46 | 74.00 | -8.54 | 34.07 | 3 | Horizontal | 303 | 2.11 | - | 27.35 | 4.04 | - |
| AV | 2.4835G | 52.41 | 54.00 | -1.59 | 21.02 | 3 | Horizontal | 303 | 2.11 | - | 27.35 | 4.04 | - |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(2Mbps)**

**2480MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-O-1

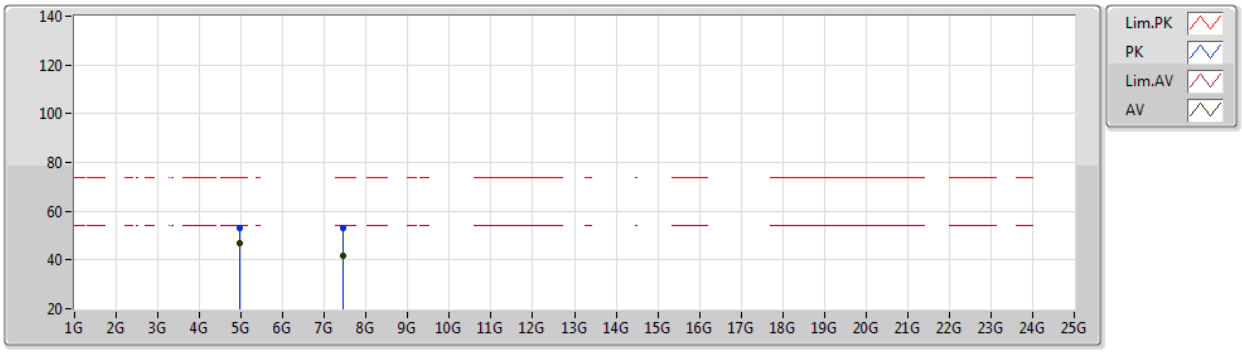
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.9592G | 54.09 | 74.00 | -19.91 | 48.79 | 3 | Vertical | 67 | 3.00 | - | 31.34 | 5.53 | 31.57 |
| AV | 4.9592G | 47.44 | 54.00 | -6.56 | 42.14 | 3 | Vertical | 67 | 3.00 | - | 31.34 | 5.53 | 31.57 |
| PK | 7.44058G | 53.51 | 74.00 | -20.49 | 43.25 | 3 | Vertical | 102 | 2.14 | - | 36.48 | 7.00 | 33.22 |
| AV | 7.44026G | 42.03 | 54.00 | -11.97 | 31.77 | 3 | Vertical | 102 | 2.14 | - | 36.48 | 7.00 | 33.22 |

**Test Mode: EUT 1 + Ant.17 (Directional Mode / Beam 7)**

**BT-LE(2Mbps)**

**2480MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-O-1

| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.96118G | 53.30 | 74.00 | -20.70 | 47.99 | 3 | Horizontal | 323 | 1.77 | - | 31.34 | 5.54 | 31.57 |
| AV | 4.96016G | 46.91 | 54.00 | -7.09 | 41.60 | 3 | Horizontal | 323 | 1.77 | - | 31.34 | 5.54 | 31.57 |
| PK | 7.4404G | 53.30 | 74.00 | -20.70 | 43.04 | 3 | Horizontal | 298 | 2.53 | - | 36.48 | 7.00 | 33.22 |
| AV | 7.4389G | 41.82 | 54.00 | -12.18 | 31.56 | 3 | Horizontal | 298 | 2.53 | - | 36.48 | 7.00 | 33.22 |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**
**Summary**

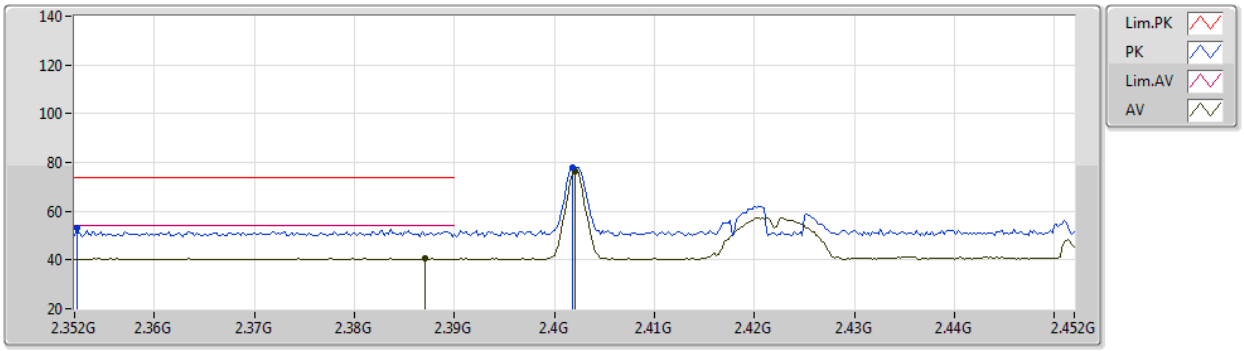
| Mode | Result | Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.4-2.4835GHz | - | - | - | - | - | - | - | - | - | - | - |
| BT-LE(1Mbps) | Pass | AV | 4.96009G | 51.63 | 54.00 | -2.37 | 3 | Vertical | 318 | 3.00 | - |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(1Mbps)**

**2402MHz_TX**

07/07/2020




EUT Z_1TX
Setting default
03-A-J-7

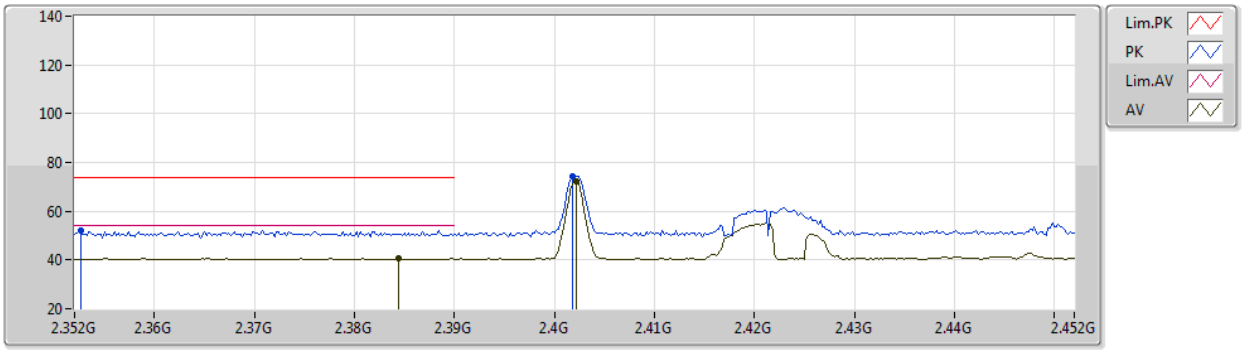
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.3522G | 52.90 | 74.00 | -21.10 | 24.42 | 3 | Vertical | 251 | 1.97 | - | 28.00 | 0.48 | - |
| AV | 2.387G | 40.71 | 54.00 | -13.29 | 12.15 | 3 | Vertical | 251 | 1.97 | - | 28.07 | 0.49 | - |
| PK | 2.4018G | 77.90 | Inf | -Inf | 49.29 | 3 | Vertical | 251 | 1.97 | - | 28.11 | 0.50 | - |
| AV | 2.402G | 76.31 | Inf | -Inf | 47.70 | 3 | Vertical | 251 | 1.97 | - | 28.11 | 0.50 | - |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(1Mbps)**

**2402MHz_TX**

07/07/2020




EUT Z_1TX
Setting default
03-A-J-7

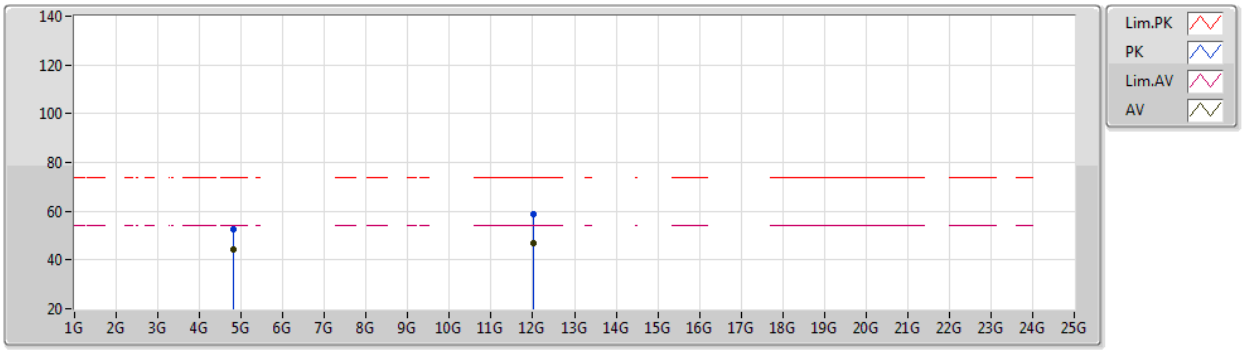
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.3526G | 52.23 | 74.00 | -21.77 | 23.74 | 3 | Horizontal | 311 | 2.75 | - | 28.01 | 0.48 | - |
| AV | 2.3844G | 40.66 | 54.00 | -13.34 | 12.10 | 3 | Horizontal | 311 | 2.75 | - | 28.07 | 0.49 | - |
| PK | 2.4018G | 74.17 | Inf | -Inf | 45.56 | 3 | Horizontal | 311 | 2.75 | - | 28.11 | 0.50 | - |
| AV | 2.4022G | 72.43 | Inf | -Inf | 43.82 | 3 | Horizontal | 311 | 2.75 | - | 28.11 | 0.50 | - |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(1Mbps)**

**2402MHz_TX**

07/07/2020




EUT Z_1TX
Setting default
03-A-J-7

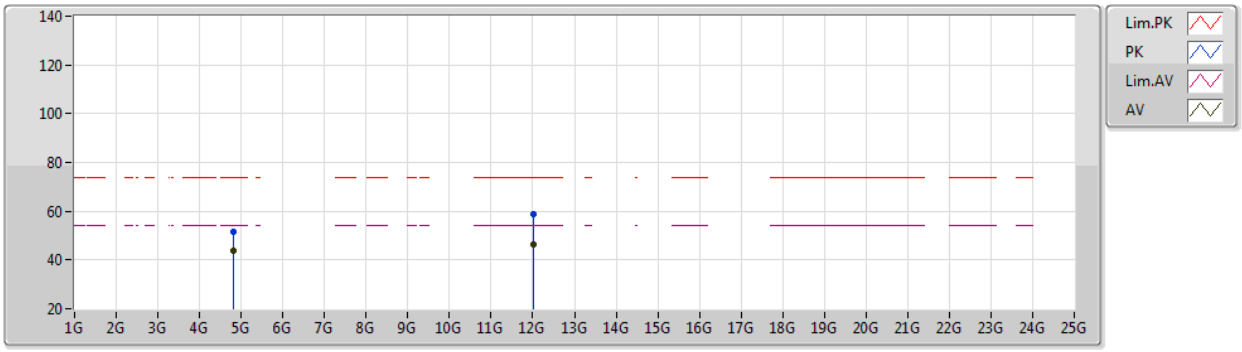
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.80379G | 52.34 | 74.00 | -21.66 | 48.16 | 3 | Vertical | 47 | 2.39 | - | 33.22 | 5.80 | 34.84 |
| AV | 4.80413G | 44.54 | 54.00 | -9.46 | 40.36 | 3 | Vertical | 47 | 2.39 | - | 33.22 | 5.80 | 34.84 |
| PK | 12.0102G | 58.60 | 74.00 | -15.40 | 41.86 | 3 | Vertical | 240 | 1.20 | - | 39.10 | 12.40 | 34.76 |
| AV | 12.009G | 46.65 | 54.00 | -7.35 | 29.91 | 3 | Vertical | 240 | 1.20 | - | 39.10 | 12.40 | 34.76 |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(1Mbps)**

**2402MHz_TX**

07/07/2020




EUT Z_1TX
Setting default
03-A-J-7

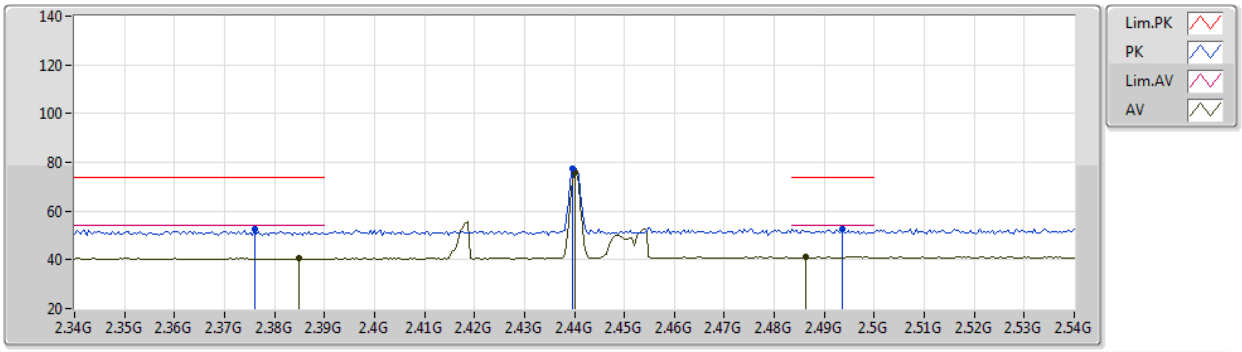
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.8045G | 51.66 | 74.00 | -22.34 | 47.48 | 3 | Horizontal | 206 | 2.30 | - | 33.22 | 5.80 | 34.84 |
| AV | 4.80398G | 43.58 | 54.00 | -10.42 | 39.40 | 3 | Horizontal | 206 | 2.30 | - | 33.22 | 5.80 | 34.84 |
| PK | 12.01082G | 58.75 | 74.00 | -15.25 | 42.01 | 3 | Horizontal | 202 | 1.41 | - | 39.10 | 12.40 | 34.76 |
| AV | 12.01028G | 46.53 | 54.00 | -7.47 | 29.79 | 3 | Horizontal | 202 | 1.41 | - | 39.10 | 12.40 | 34.76 |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(1Mbps)**

**2440MHz_TX**

07/07/2020




EUT Z_1TX
Setting default
03-A-J-7

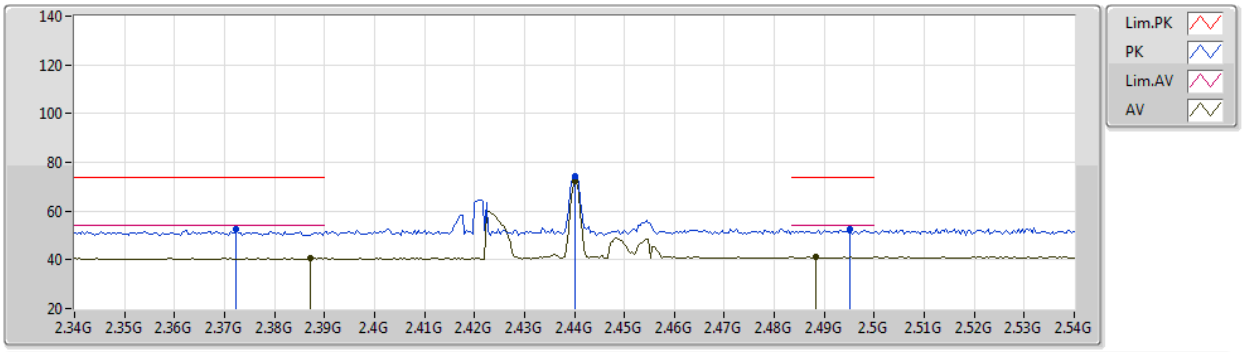
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.376G | 52.72 | 74.00 | -21.28 | 24.18 | 3 | Vertical | 208 | 2.44 | - | 28.05 | 0.49 | - |
| AV | 2.3848G | 40.68 | 54.00 | -13.32 | 12.12 | 3 | Vertical | 208 | 2.44 | - | 28.07 | 0.49 | - |
| PK | 2.4396G | 77.52 | Inf | -Inf | 48.76 | 3 | Vertical | 208 | 2.44 | - | 28.26 | 0.50 | - |
| AV | 2.44G | 75.84 | Inf | -Inf | 47.08 | 3 | Vertical | 208 | 2.44 | - | 28.26 | 0.50 | - |
| PK | 2.4936G | 52.62 | 74.00 | -21.38 | 23.65 | 3 | Vertical | 208 | 2.44 | - | 28.47 | 0.50 | - |
| AV | 2.4864G | 41.23 | 54.00 | -12.77 | 12.28 | 3 | Vertical | 208 | 2.44 | - | 28.45 | 0.50 | - |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(1Mbps)**

**2440MHz_TX**

07/07/2020




EUT Z_1TX
Setting default
03-A-J-7

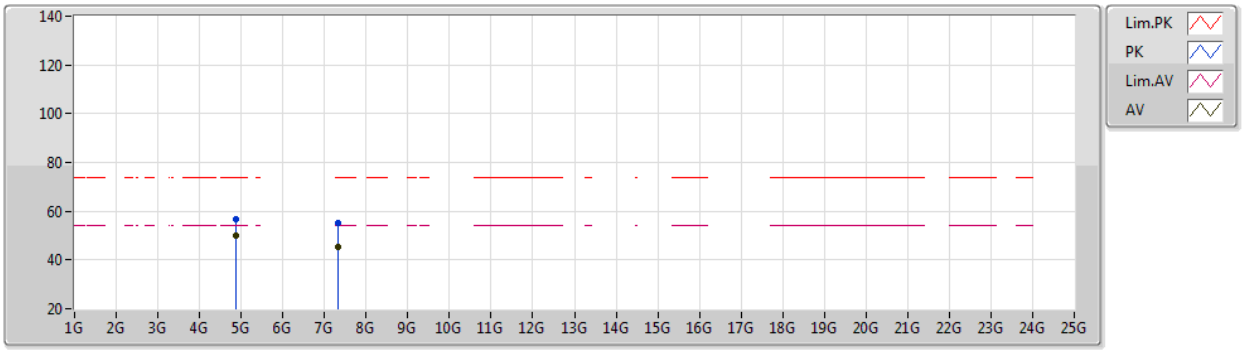
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.3724G | 52.68 | 74.00 | -21.32 | 24.15 | 3 | Horizontal | 309 | 2.94 | - | 28.04 | 0.49 | - |
| AV | 2.3872G | 40.63 | 54.00 | -13.37 | 12.07 | 3 | Horizontal | 309 | 2.94 | - | 28.07 | 0.49 | - |
| PK | 2.44G | 74.12 | Inf | -Inf | 45.36 | 3 | Horizontal | 309 | 2.94 | - | 28.26 | 0.50 | - |
| AV | 2.44G | 72.40 | Inf | -Inf | 43.64 | 3 | Horizontal | 309 | 2.94 | - | 28.26 | 0.50 | - |
| PK | 2.4952G | 52.47 | 74.00 | -21.53 | 23.49 | 3 | Horizontal | 309 | 2.94 | - | 28.48 | 0.50 | - |
| AV | 2.4884G | 41.16 | 54.00 | -12.84 | 12.21 | 3 | Horizontal | 309 | 2.94 | - | 28.45 | 0.50 | - |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(1Mbps)**

**2440MHz_TX**

07/07/2020




EUT Z_1TX
Setting default
03-A-J-7

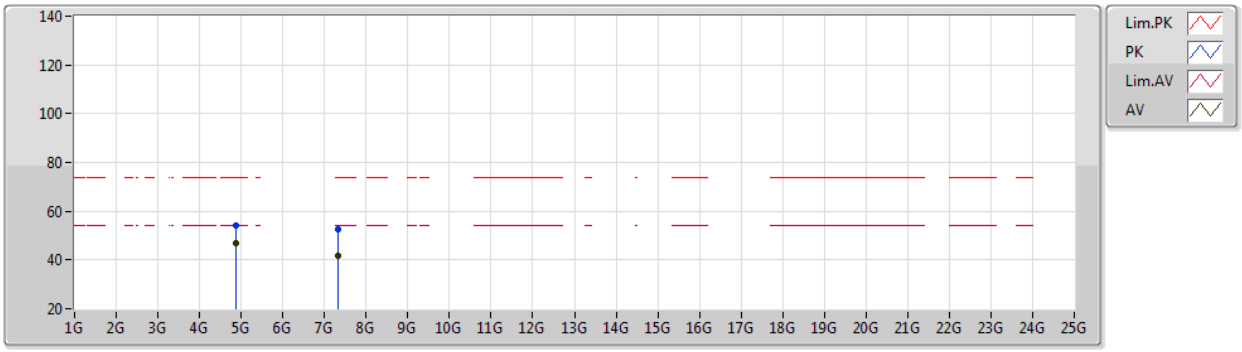
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.88072G | 56.88 | 74.00 | -17.12 | 52.34 | 3 | Vertical | 321 | 2.39 | - | 33.52 | 5.80 | 34.78 |
| AV | 4.88014G | 49.89 | 54.00 | -4.11 | 45.35 | 3 | Vertical | 321 | 2.39 | - | 33.52 | 5.80 | 34.78 |
| PK | 7.3211G | 55.17 | 74.00 | -18.83 | 46.44 | 3 | Vertical | 73 | 2.11 | - | 36.72 | 7.07 | 35.06 |
| AV | 7.31965G | 45.09 | 54.00 | -8.91 | 36.36 | 3 | Vertical | 73 | 2.11 | - | 36.72 | 7.07 | 35.06 |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(1Mbps)**

**2440MHz_TX**

07/07/2020




EUT Z_1TX
Setting default
03-A-J-7

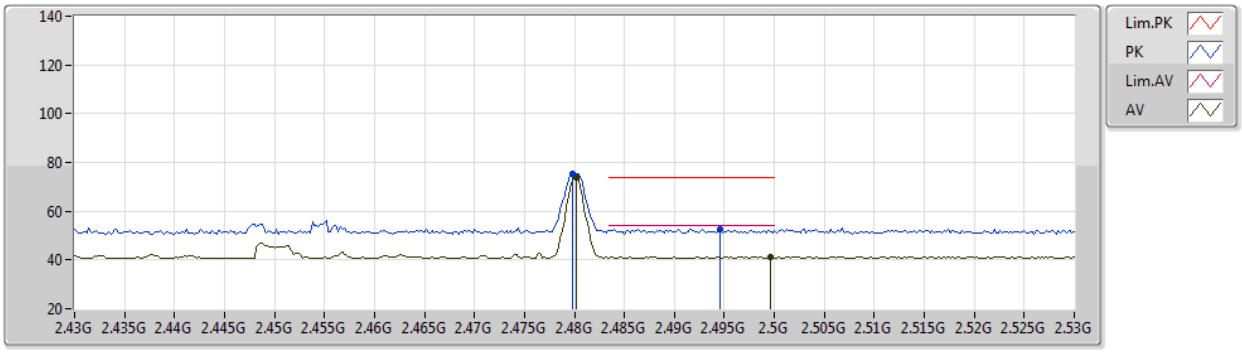
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.8802G | 54.15 | 74.00 | -19.85 | 49.61 | 3 | Horizontal | 313 | 2.35 | - | 33.52 | 5.80 | 34.78 |
| AV | 4.8802G | 46.82 | 54.00 | -7.18 | 42.28 | 3 | Horizontal | 313 | 2.35 | - | 33.52 | 5.80 | 34.78 |
| PK | 7.32056G | 52.43 | 74.00 | -21.57 | 43.70 | 3 | Horizontal | 102 | 1.80 | - | 36.72 | 7.07 | 35.06 |
| AV | 7.31961G | 41.89 | 54.00 | -12.11 | 33.16 | 3 | Horizontal | 102 | 1.80 | - | 36.72 | 7.07 | 35.06 |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(1Mbps)**

**2480MHz_TX**

07/07/2020




EUT Z_1TX
Setting default
03-A-J-7

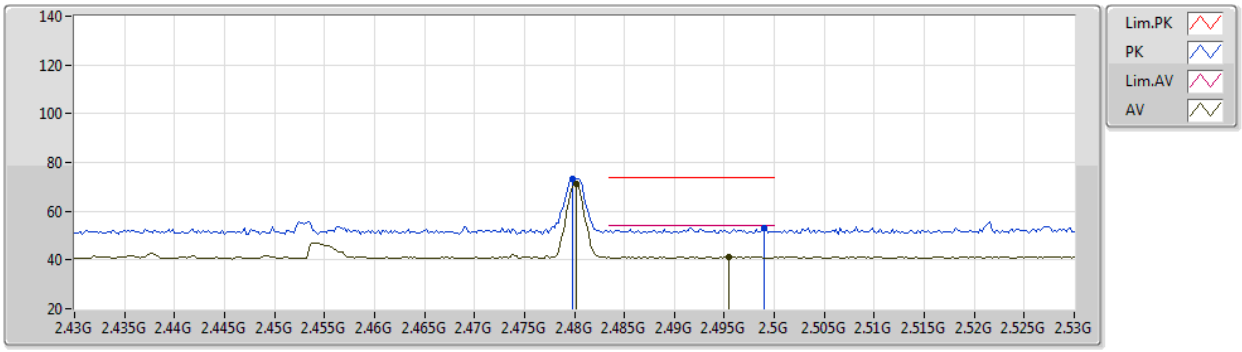
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.4798G | 75.41 | Inf | -Inf | 46.49 | 3 | Vertical | 196 | 2.61 | - | 28.42 | 0.50 | - |
| AV | 2.4802G | 73.75 | Inf | -Inf | 44.83 | 3 | Vertical | 196 | 2.61 | - | 28.42 | 0.50 | - |
| PK | 2.4946G | 52.71 | 74.00 | -21.29 | 23.73 | 3 | Vertical | 196 | 2.61 | - | 28.48 | 0.50 | - |
| AV | 2.4996G | 41.30 | 54.00 | -12.70 | 12.30 | 3 | Vertical | 196 | 2.61 | - | 28.50 | 0.50 | - |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(1Mbps)**

**2480MHz_TX**

07/07/2020




EUT Z_1TX
Setting default
03-A-J-7

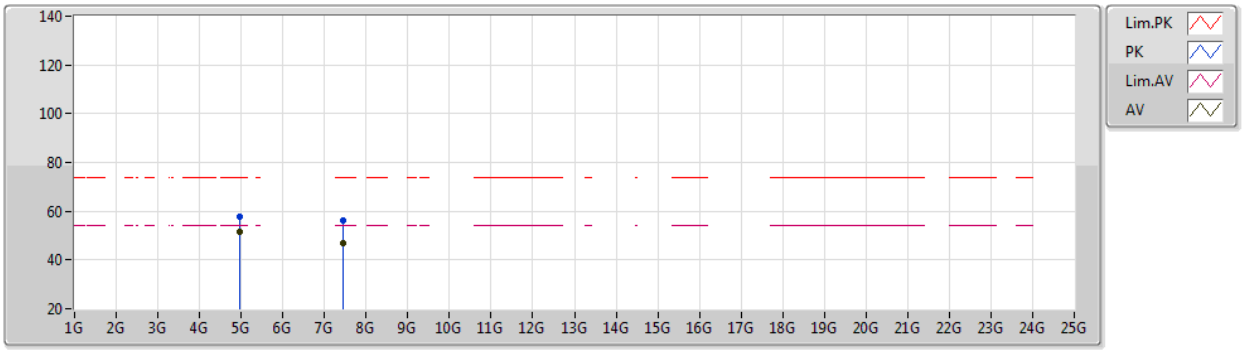
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.4798G | 73.44 | Inf | -Inf | 44.52 | 3 | Horizontal | 156 | 2.94 | - | 28.42 | 0.50 | - |
| AV | 2.4802G | 71.34 | Inf | -Inf | 42.42 | 3 | Horizontal | 156 | 2.94 | - | 28.42 | 0.50 | - |
| PK | 2.499G | 53.21 | 74.00 | -20.79 | 24.21 | 3 | Horizontal | 156 | 2.94 | - | 28.50 | 0.50 | - |
| AV | 2.4954G | 41.21 | 54.00 | -12.79 | 12.23 | 3 | Horizontal | 156 | 2.94 | - | 28.48 | 0.50 | - |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(1Mbps)**

**2480MHz_TX**

07/07/2020




EUT Z_1TX
Setting default
03-A-J-7

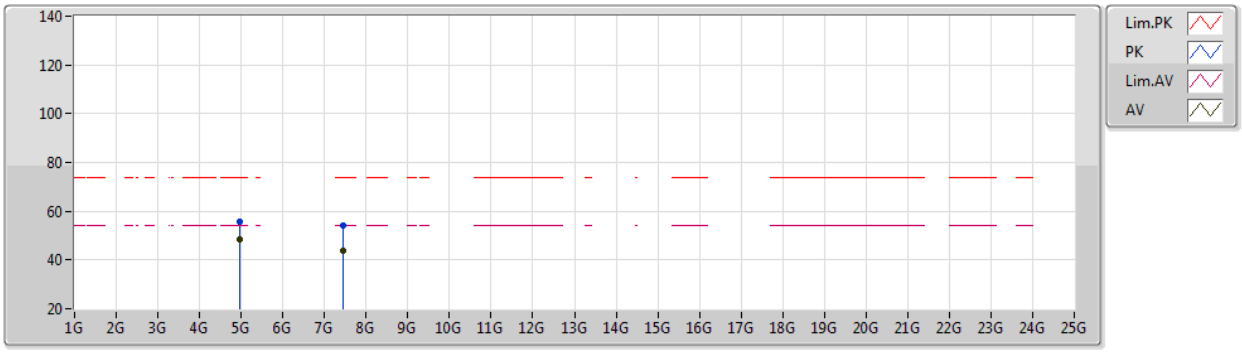
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.96022G | 57.95 | 74.00 | -16.05 | 53.20 | 3 | Vertical | 318 | 3.00 | - | 33.66 | 5.80 | 34.71 |
| AV | 4.96009G | 51.63 | 54.00 | -2.37 | 46.88 | 3 | Vertical | 318 | 3.00 | - | 33.66 | 5.80 | 34.71 |
| PK | 7.44094G | 56.02 | 74.00 | -17.98 | 47.17 | 3 | Vertical | 82 | 2.01 | - | 36.76 | 7.14 | 35.05 |
| AV | 7.43955G | 46.86 | 54.00 | -7.14 | 38.01 | 3 | Vertical | 82 | 2.01 | - | 36.76 | 7.14 | 35.05 |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(1Mbps)**

**2480MHz_TX**

07/07/2020




EUT Z_1TX
Setting default
03-A-J-7

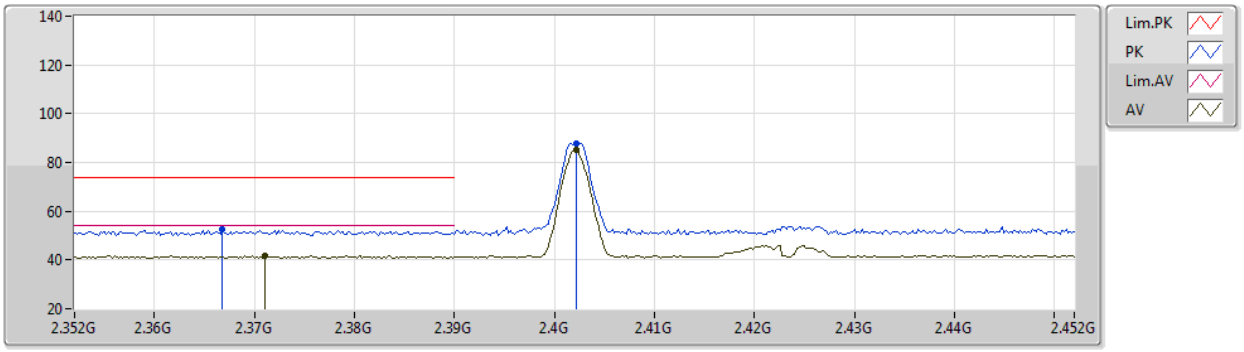
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.96056G | 55.70 | 74.00 | -18.30 | 50.95 | 3 | Horizontal | 187 | 2.14 | - | 33.66 | 5.80 | 34.71 |
| AV | 4.9601G | 48.61 | 54.00 | -5.39 | 43.86 | 3 | Horizontal | 187 | 2.14 | - | 33.66 | 5.80 | 34.71 |
| PK | 7.44089G | 54.03 | 74.00 | -19.97 | 45.18 | 3 | Horizontal | 10 | 1.87 | - | 36.76 | 7.14 | 35.05 |
| AV | 7.43965G | 43.97 | 54.00 | -10.03 | 35.12 | 3 | Horizontal | 10 | 1.87 | - | 36.76 | 7.14 | 35.05 |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(2Mbps)**

**2402MHz_TX**

07/07/2020




EUT Z_1TX
Setting default
03-A-N-2

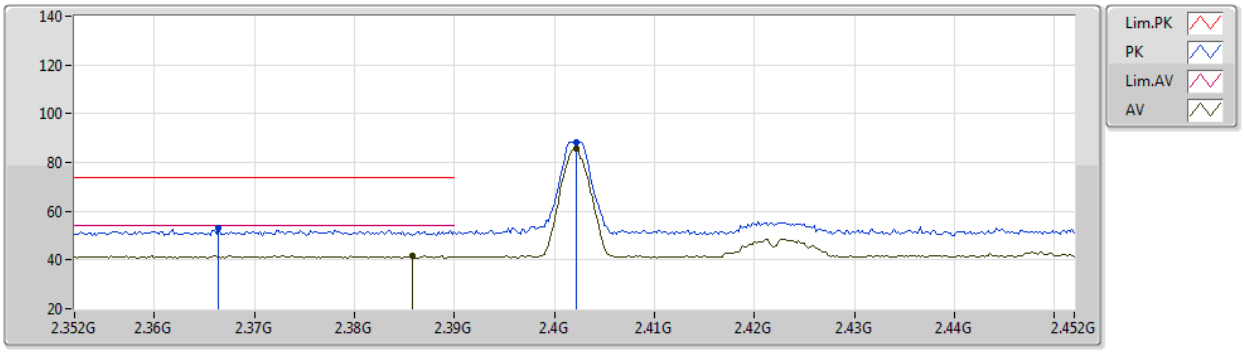
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.3668G | 52.49 | 74.00 | -21.51 | 23.98 | 3 | Vertical | 233 | 3.00 | - | 28.03 | 0.48 | - |
| AV | 2.371G | 41.72 | 54.00 | -12.28 | 13.19 | 3 | Vertical | 233 | 3.00 | - | 28.04 | 0.49 | - |
| PK | 2.4022G | 87.68 | Inf | -Inf | 59.07 | 3 | Vertical | 233 | 3.00 | - | 28.11 | 0.50 | - |
| AV | 2.4022G | 84.93 | Inf | -Inf | 56.32 | 3 | Vertical | 233 | 3.00 | - | 28.11 | 0.50 | - |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(2Mbps)**

**2402MHz_TX**

07/07/2020




EUT Z_1TX
Setting default
03-A-N-2

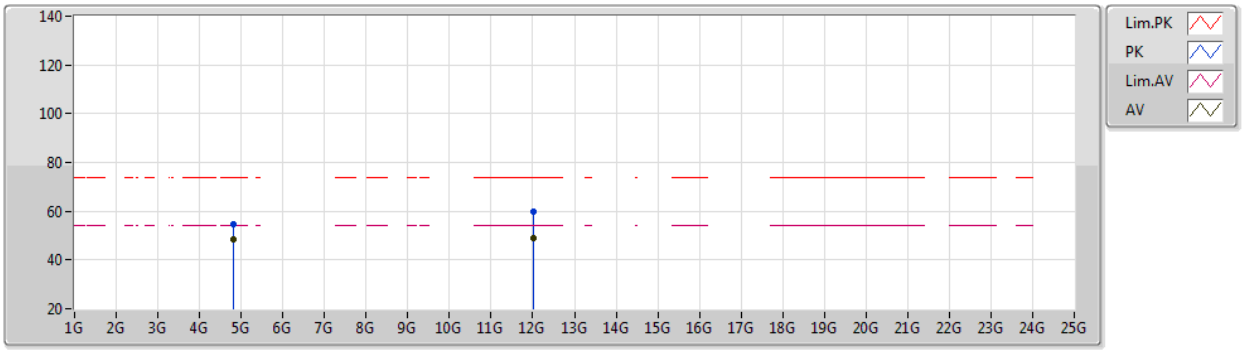
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.3664G | 53.07 | 74.00 | -20.93 | 24.56 | 3 | Horizontal | 336 | 3.00 | - | 28.03 | 0.48 | - |
| AV | 2.3858G | 41.94 | 54.00 | -12.06 | 13.38 | 3 | Horizontal | 336 | 3.00 | - | 28.07 | 0.49 | - |
| PK | 2.4022G | 88.38 | Inf | -Inf | 59.77 | 3 | Horizontal | 336 | 3.00 | - | 28.11 | 0.50 | - |
| AV | 2.4022G | 85.53 | Inf | -Inf | 56.92 | 3 | Horizontal | 336 | 3.00 | - | 28.11 | 0.50 | - |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(2Mbps)**

**2402MHz_TX**

07/07/2020




EUT Z_1TX
Setting default
03-A-N-2

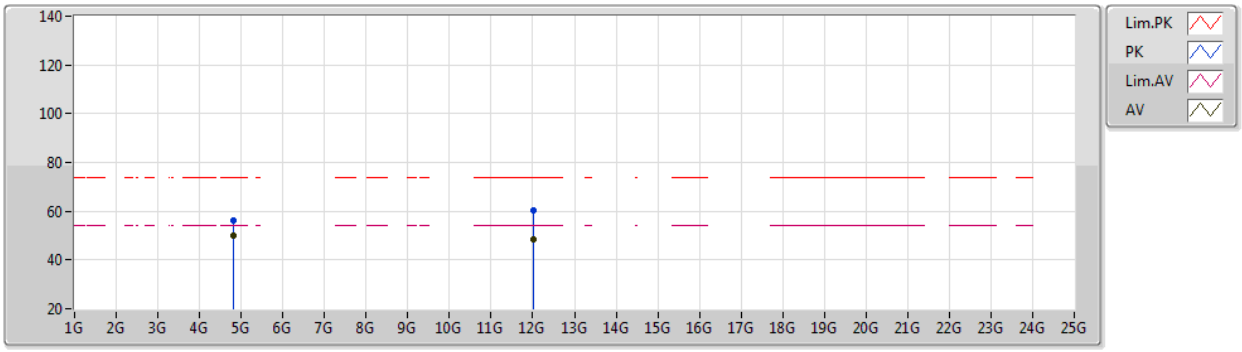
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.80418G | 54.91 | 74.00 | -19.09 | 50.73 | 3 | Vertical | 91 | 2.44 | - | 33.22 | 5.80 | 34.84 |
| AV | 4.8032G | 48.66 | 54.00 | -5.34 | 44.49 | 3 | Vertical | 91 | 2.44 | - | 33.21 | 5.80 | 34.84 |
| PK | 12.01044G | 59.66 | 74.00 | -14.34 | 42.92 | 3 | Vertical | 0 | 1.73 | - | 39.10 | 12.40 | 34.76 |
| AV | 12.01304G | 49.22 | 54.00 | -4.78 | 32.47 | 3 | Vertical | 0 | 1.73 | - | 39.10 | 12.40 | 34.75 |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(2Mbps)**

**2402MHz_TX**

07/07/2020




EUT Z_1TX
Setting default
03-A-N-2

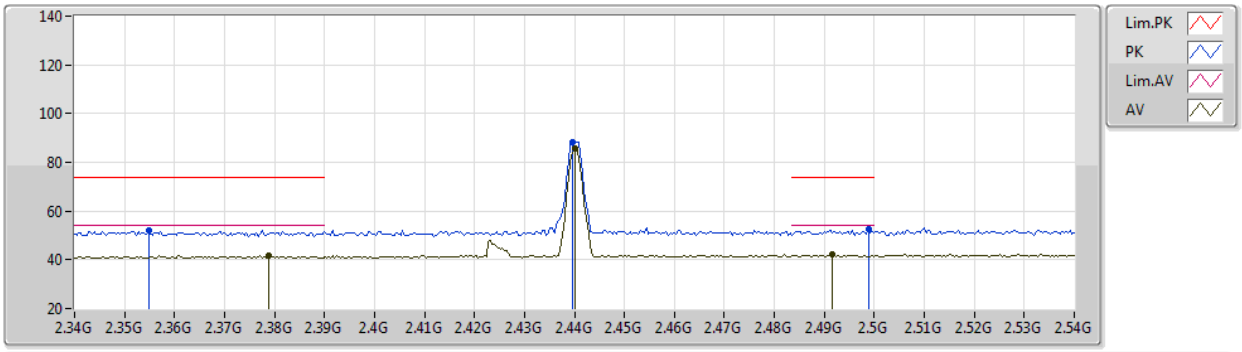
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.8052G | 56.25 | 74.00 | -17.75 | 52.07 | 3 | Horizontal | 329 | 2.69 | - | 33.22 | 5.80 | 34.84 |
| AV | 4.80416G | 50.05 | 54.00 | -3.95 | 45.87 | 3 | Horizontal | 329 | 2.69 | - | 33.22 | 5.80 | 34.84 |
| PK | 12.00876G | 60.09 | 74.00 | -13.91 | 43.35 | 3 | Horizontal | 103 | 2.29 | - | 39.10 | 12.40 | 34.76 |
| AV | 12.00882G | 48.62 | 54.00 | -5.38 | 31.88 | 3 | Horizontal | 103 | 2.29 | - | 39.10 | 12.40 | 34.76 |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(2Mbps)**

**2440MHz_TX**

07/07/2020




EUT Z_1TX
Setting default
03-A-N-2

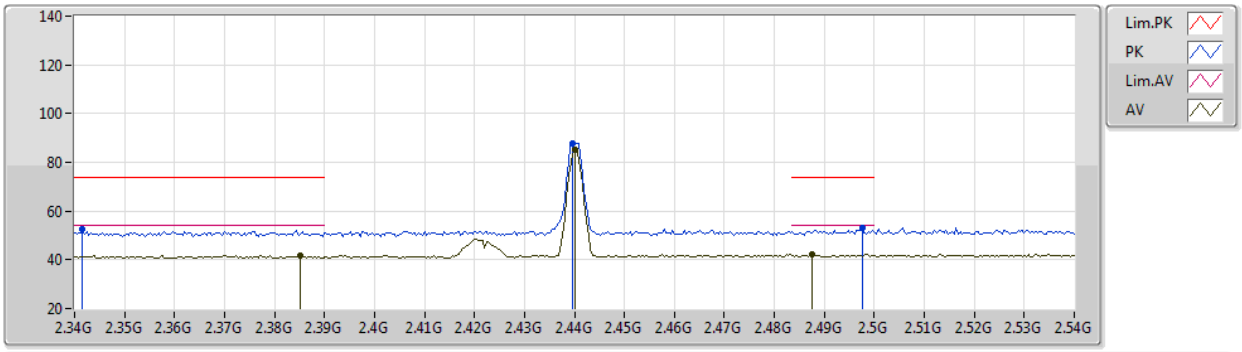
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.3548G | 51.98 | 74.00 | -22.02 | 23.49 | 3 | Vertical | 215 | 2.74 | - | 28.01 | 0.48 | - |
| AV | 2.3788G | 41.83 | 54.00 | -12.17 | 13.28 | 3 | Vertical | 215 | 2.74 | - | 28.06 | 0.49 | - |
| PK | 2.4396G | 88.50 | Inf | -Inf | 59.74 | 3 | Vertical | 215 | 2.74 | - | 28.26 | 0.50 | - |
| AV | 2.44G | 85.68 | Inf | -Inf | 56.92 | 3 | Vertical | 215 | 2.74 | - | 28.26 | 0.50 | - |
| PK | 2.4988G | 52.47 | 74.00 | -21.53 | 23.47 | 3 | Vertical | 215 | 2.74 | - | 28.50 | 0.50 | - |
| AV | 2.4916G | 41.99 | 54.00 | -12.01 | 13.02 | 3 | Vertical | 215 | 2.74 | - | 28.47 | 0.50 | - |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(2Mbps)**

**2440MHz_TX**

07/07/2020




EUT Z_1TX
Setting default
03-A-N-2

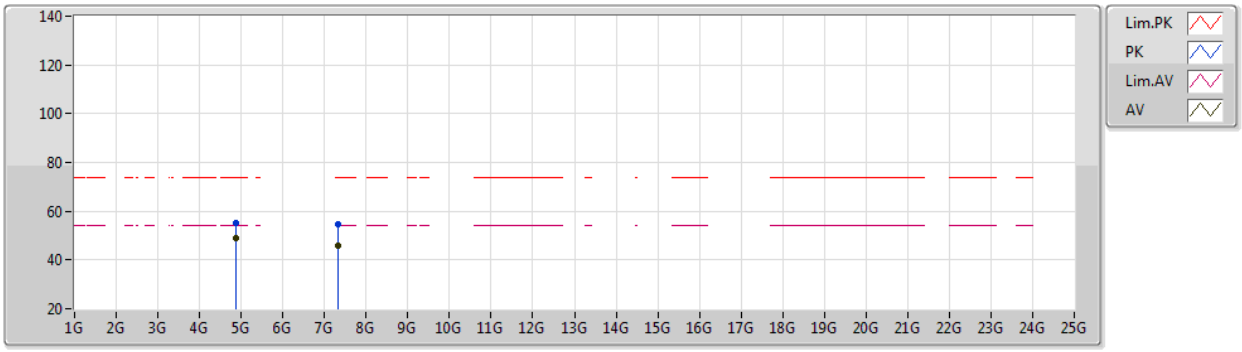
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.3416G | 52.47 | 74.00 | -21.53 | 24.02 | 3 | Horizontal | 332 | 3.00 | - | 27.98 | 0.47 | - |
| AV | 2.3852G | 41.67 | 54.00 | -12.33 | 13.11 | 3 | Horizontal | 332 | 3.00 | - | 28.07 | 0.49 | - |
| PK | 2.4396G | 87.96 | Inf | -Inf | 59.20 | 3 | Horizontal | 332 | 3.00 | - | 28.26 | 0.50 | - |
| AV | 2.44G | 85.18 | Inf | -Inf | 56.42 | 3 | Horizontal | 332 | 3.00 | - | 28.26 | 0.50 | - |
| PK | 2.4976G | 52.96 | 74.00 | -21.04 | 23.97 | 3 | Horizontal | 332 | 3.00 | - | 28.49 | 0.50 | - |
| AV | 2.4876G | 42.09 | 54.00 | -11.91 | 13.14 | 3 | Horizontal | 332 | 3.00 | - | 28.45 | 0.50 | - |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(2Mbps)**

**2440MHz_TX**

07/07/2020




EUT Z_1TX
Setting default
03-A-N-2

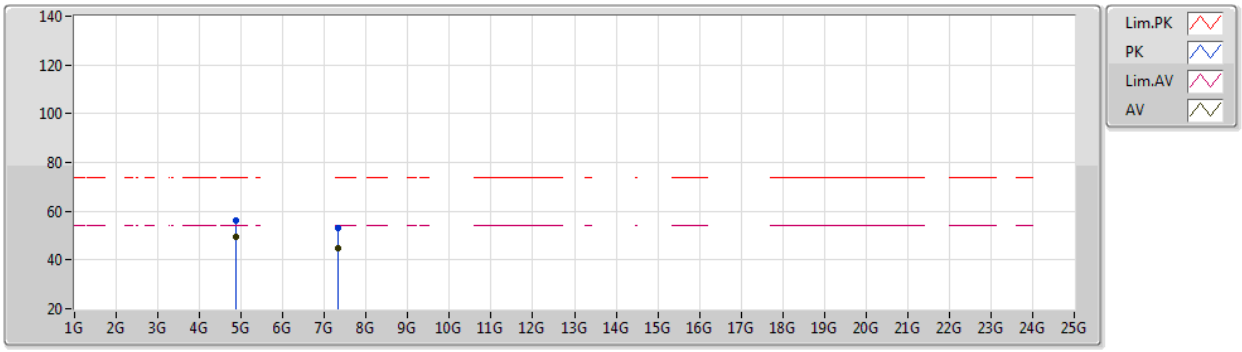
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.88026G | 55.40 | 74.00 | -18.60 | 50.86 | 3 | Vertical | 61 | 2.06 | - | 33.52 | 5.80 | 34.78 |
| AV | 4.8792G | 49.08 | 54.00 | -4.92 | 44.54 | 3 | Vertical | 61 | 2.06 | - | 33.52 | 5.80 | 34.78 |
| PK | 7.32018G | 54.81 | 74.00 | -19.19 | 46.08 | 3 | Vertical | 59 | 2.07 | - | 36.72 | 7.07 | 35.06 |
| AV | 7.31886G | 46.12 | 54.00 | -7.88 | 37.39 | 3 | Vertical | 59 | 2.07 | - | 36.72 | 7.07 | 35.06 |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(2Mbps)**

**2440MHz_TX**

07/07/2020




EUT Z_1TX
Setting default
03-A-N-2

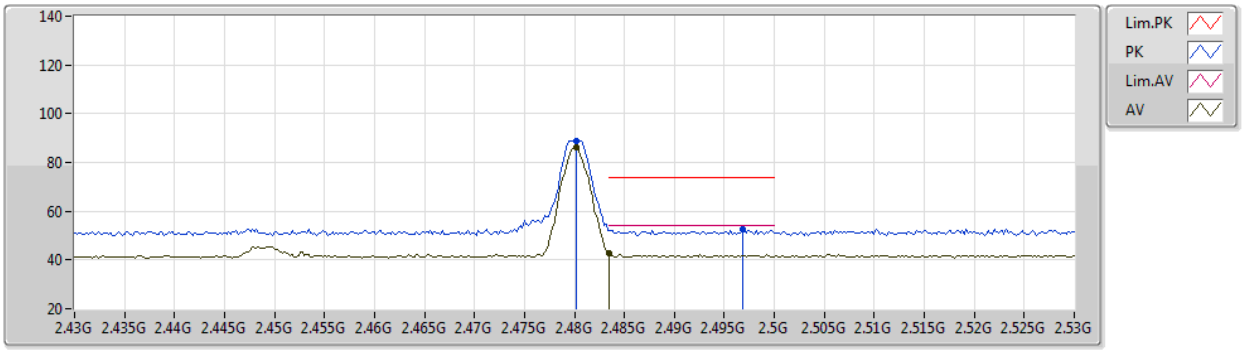
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.87908G | 56.09 | 74.00 | -17.91 | 51.55 | 3 | Horizontal | 337 | 2.52 | - | 33.52 | 5.80 | 34.78 |
| AV | 4.87914G | 49.46 | 54.00 | -4.54 | 44.92 | 3 | Horizontal | 337 | 2.52 | - | 33.52 | 5.80 | 34.78 |
| PK | 7.3205G | 53.11 | 74.00 | -20.89 | 44.38 | 3 | Horizontal | 162 | 1.95 | - | 36.72 | 7.07 | 35.06 |
| AV | 7.31894G | 44.67 | 54.00 | -9.33 | 35.94 | 3 | Horizontal | 162 | 1.95 | - | 36.72 | 7.07 | 35.06 |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(2Mbps)**

**2480MHz_TX**

07/07/2020




EUT Z_1TX
Setting default
03-A-N-2

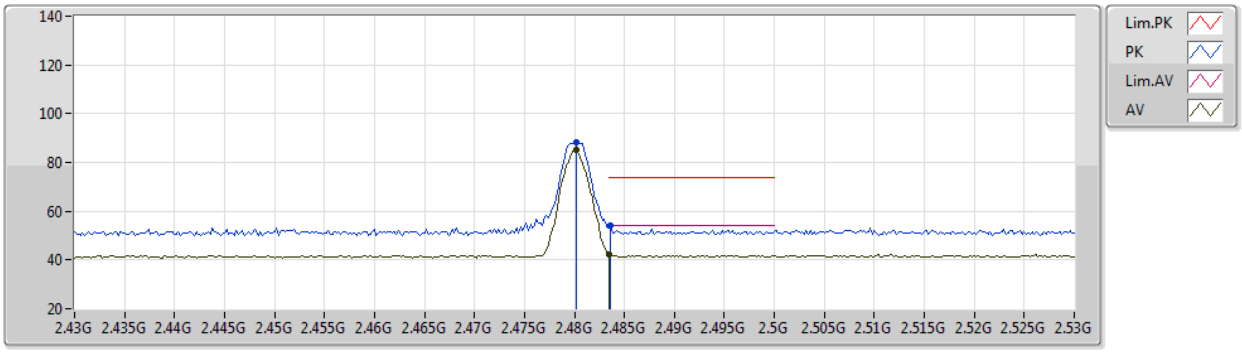
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.4802G | 88.97 | Inf | -Inf | 60.05 | 3 | Vertical | 206 | 2.72 | - | 28.42 | 0.50 | - |
| AV | 2.4802G | 85.96 | Inf | -Inf | 57.04 | 3 | Vertical | 206 | 2.72 | - | 28.42 | 0.50 | - |
| PK | 2.4968G | 52.61 | 74.00 | -21.39 | 23.62 | 3 | Vertical | 206 | 2.72 | - | 28.49 | 0.50 | - |
| AV | 2.4835G | 42.54 | 54.00 | -11.46 | 13.61 | 3 | Vertical | 206 | 2.72 | - | 28.43 | 0.50 | - |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(2Mbps)**

**2480MHz_TX**

07/07/2020




EUT Z_1TX
Setting default
03-A-N-2

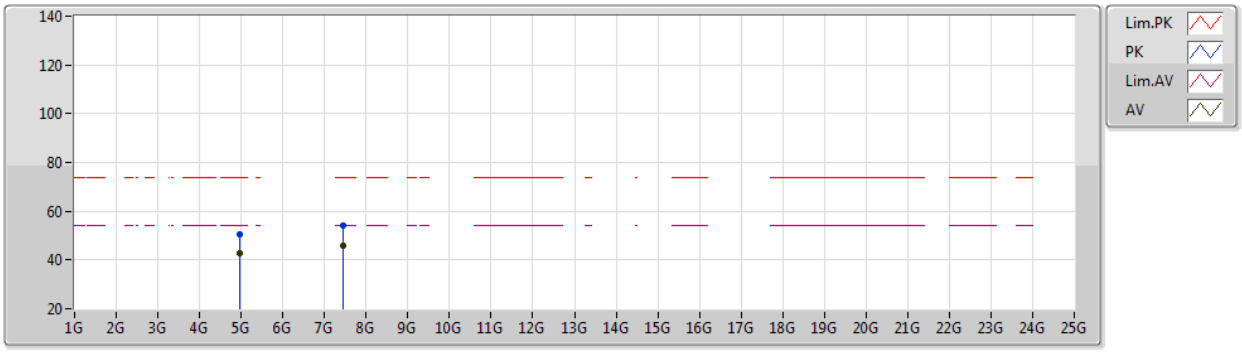
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.4802G | 88.02 | Inf | -Inf | 59.10 | 3 | Horizontal | 331 | 2.96 | - | 28.42 | 0.50 | - |
| AV | 2.4802G | 85.14 | Inf | -Inf | 56.22 | 3 | Horizontal | 331 | 2.96 | - | 28.42 | 0.50 | - |
| PK | 2.4836G | 54.22 | 74.00 | -19.78 | 25.29 | 3 | Horizontal | 331 | 2.96 | - | 28.43 | 0.50 | - |
| AV | 2.4835G | 42.39 | 54.00 | -11.61 | 13.46 | 3 | Horizontal | 331 | 2.96 | - | 28.43 | 0.50 | - |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(2Mbps)**

**2480MHz_TX**

07/07/2020




EUT Z_1TX
Setting default
03-A-N-2

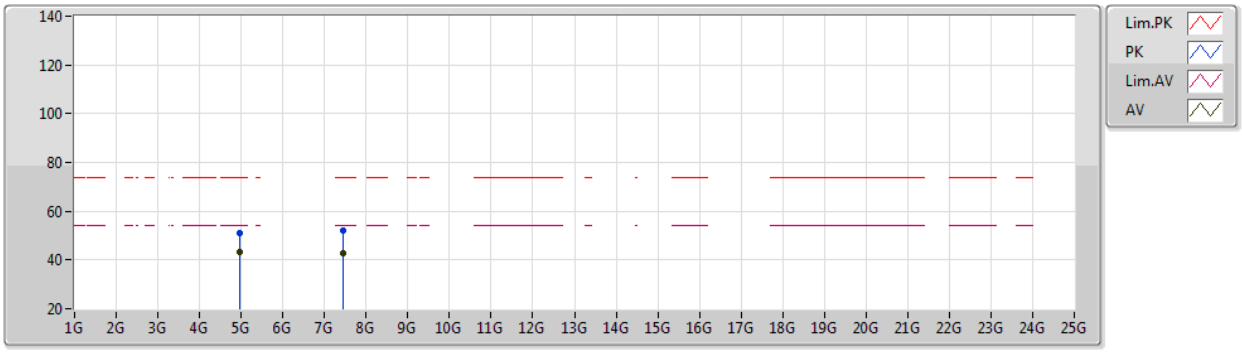
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.95922G | 50.68 | 74.00 | -23.32 | 45.93 | 3 | Vertical | 242 | 2.18 | - | 33.66 | 5.80 | 34.71 |
| AV | 4.96014G | 42.67 | 54.00 | -11.33 | 37.92 | 3 | Vertical | 242 | 2.18 | - | 33.66 | 5.80 | 34.71 |
| PK | 7.43888G | 53.98 | 74.00 | -20.02 | 45.13 | 3 | Vertical | 83 | 2.09 | - | 36.76 | 7.14 | 35.05 |
| AV | 7.4389G | 45.64 | 54.00 | -8.36 | 36.79 | 3 | Vertical | 83 | 2.09 | - | 36.76 | 7.14 | 35.05 |

**Test Mode: EUT 1 + Ant.19 (Beam 9)**

**BT-LE(2Mbps)**

**2480MHz_TX**

07/07/2020




EUT Z_1TX
Setting default
03-A-N-2

| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.96018G | 51.15 | 74.00 | -22.85 | 46.40 | 3 | Horizontal | 291 | 2.39 | - | 33.66 | 5.80 | 34.71 |
| AV | 4.95918G | 43.33 | 54.00 | -10.67 | 38.58 | 3 | Horizontal | 291 | 2.39 | - | 33.66 | 5.80 | 34.71 |
| PK | 7.44174G | 52.13 | 74.00 | -21.87 | 43.28 | 3 | Horizontal | 66 | 1.93 | - | 36.76 | 7.14 | 35.05 |
| AV | 7.43904G | 42.93 | 54.00 | -11.07 | 34.08 | 3 | Horizontal | 66 | 1.93 | - | 36.76 | 7.14 | 35.05 |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**
**Summary**

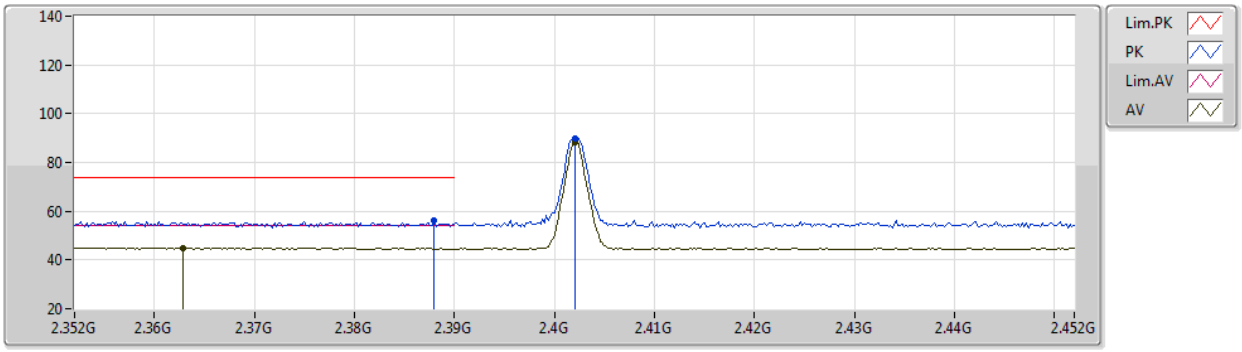
| Mode | Result | Type | Freq (Hz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Dist (m) | Condition | Azimuth (°) | Height (m) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.4-2.4835GHz | - | - | - | - | - | - | - | - | - | - | - |
| BT-LE(2Mbps) | Pass | AV | 2.4835G | 50.67 | 54.00 | -3.33 | 3 | Horizontal | 321 | 2.01 | - |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(1Mbps)**

**2402MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-M-1

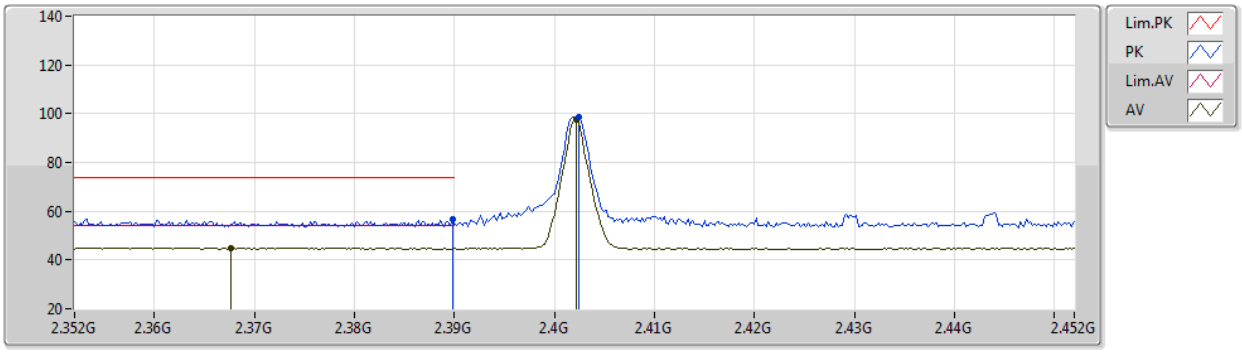
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.388G | 56.08 | 74.00 | -17.92 | 24.45 | 3 | Vertical | 169 | 2.00 | - | 27.64 | 3.99 | - |
| AV | 2.3628G | 44.86 | 54.00 | -9.14 | 13.17 | 3 | Vertical | 169 | 2.00 | - | 27.71 | 3.98 | - |
| PK | 2.402G | 89.70 | Inf | -Inf | 58.11 | 3 | Vertical | 169 | 2.00 | - | 27.59 | 4.00 | - |
| AV | 2.402G | 88.31 | Inf | -Inf | 56.72 | 3 | Vertical | 169 | 2.00 | - | 27.59 | 4.00 | - |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(1Mbps)**

**2402MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-M-1

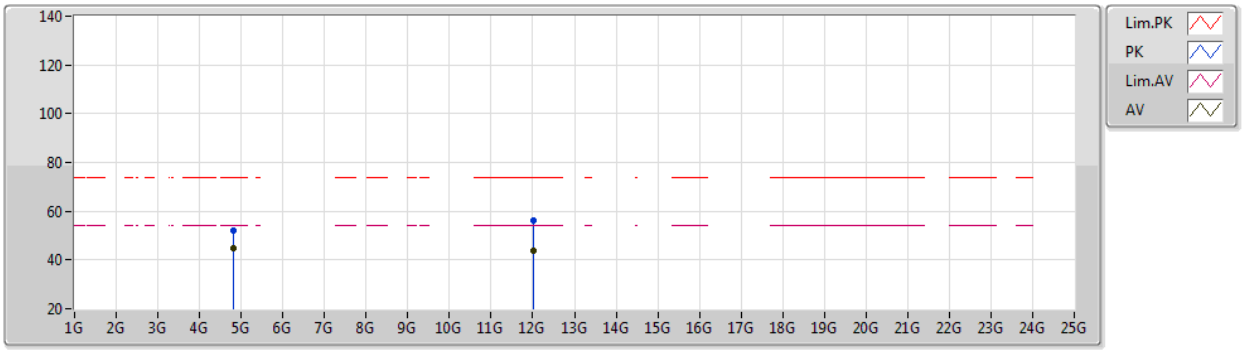
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.3898G | 56.94 | 74.00 | -17.06 | 25.32 | 3 | Horizontal | 238 | 1.87 | - | 27.63 | 3.99 | - |
| AV | 2.3676G | 44.98 | 54.00 | -9.02 | 13.30 | 3 | Horizontal | 238 | 1.87 | - | 27.70 | 3.98 | - |
| PK | 2.4024G | 98.87 | Inf | -Inf | 67.28 | 3 | Horizontal | 238 | 1.87 | - | 27.59 | 4.00 | - |
| AV | 2.4022G | 97.42 | Inf | -Inf | 65.83 | 3 | Horizontal | 238 | 1.87 | - | 27.59 | 4.00 | - |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(1Mbps)**

**2402MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-M-1

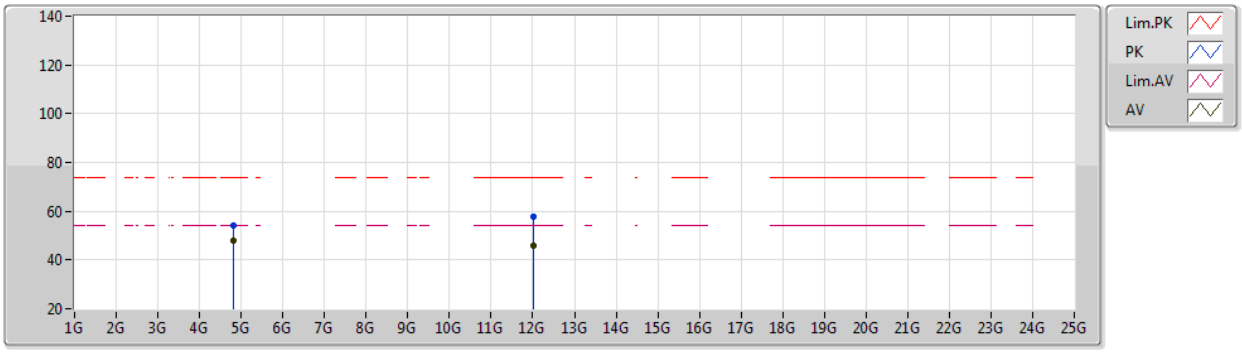
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.80472G | 52.27 | 74.00 | -21.73 | 47.71 | 3 | Vertical | 199 | 1.83 | - | 31.00 | 5.31 | 31.75 |
| AV | 4.80412G | 44.81 | 54.00 | -9.19 | 40.26 | 3 | Vertical | 199 | 1.83 | - | 31.00 | 5.31 | 31.76 |
| PK | 12.00937G | 56.10 | 74.00 | -17.90 | 43.06 | 3 | Vertical | 256 | 2.62 | - | 38.91 | 8.30 | 34.17 |
| AV | 12.01057G | 43.73 | 54.00 | -10.27 | 30.69 | 3 | Vertical | 256 | 2.62 | - | 38.91 | 8.30 | 34.17 |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(1Mbps)**

**2402MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-M-1

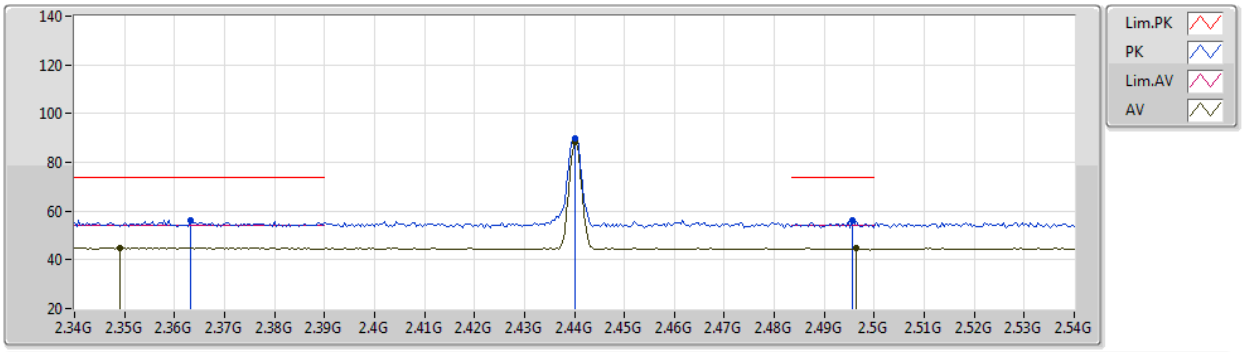
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.80362G | 54.25 | 74.00 | -19.75 | 49.70 | 3 | Horizontal | 149 | 1.60 | - | 31.00 | 5.31 | 31.76 |
| AV | 4.80422G | 47.79 | 54.00 | -6.21 | 43.23 | 3 | Horizontal | 149 | 1.60 | - | 31.00 | 5.31 | 31.75 |
| PK | 12.01159G | 57.96 | 74.00 | -16.04 | 44.92 | 3 | Horizontal | 330 | 2.45 | - | 38.91 | 8.30 | 34.17 |
| AV | 12.01163G | 45.65 | 54.00 | -8.35 | 32.61 | 3 | Horizontal | 330 | 2.45 | - | 38.91 | 8.30 | 34.17 |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(1Mbps)**

**2440MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-M-1

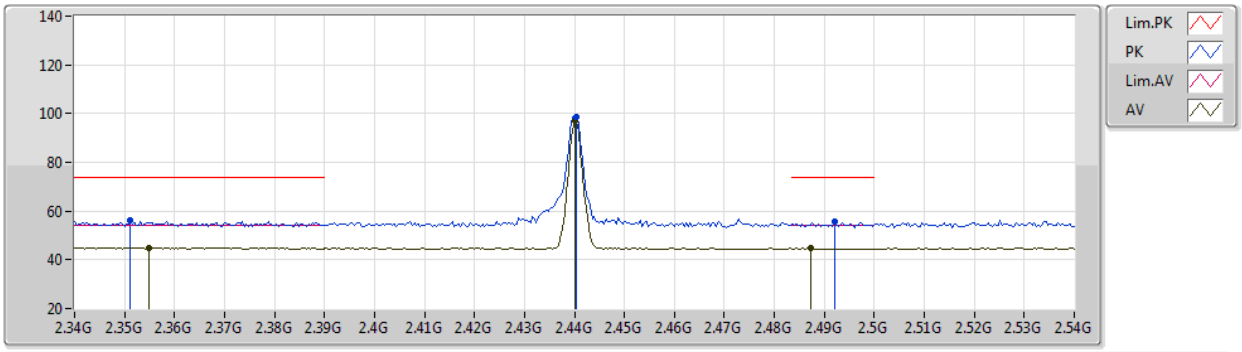
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.3632G | 56.45 | 74.00 | -17.55 | 24.76 | 3 | Vertical | 164 | 1.74 | - | 27.71 | 3.98 | - |
| AV | 2.3492G | 44.98 | 54.00 | -9.02 | 13.26 | 3 | Vertical | 164 | 1.74 | - | 27.75 | 3.97 | - |
| PK | 2.44G | 89.81 | Inf | -Inf | 58.31 | 3 | Vertical | 164 | 1.74 | - | 27.48 | 4.02 | - |
| AV | 2.44G | 88.25 | Inf | -Inf | 56.75 | 3 | Vertical | 164 | 1.74 | - | 27.48 | 4.02 | - |
| PK | 2.4956G | 56.09 | 74.00 | -17.91 | 24.73 | 3 | Vertical | 164 | 1.74 | - | 27.31 | 4.05 | - |
| AV | 2.4964G | 44.68 | 54.00 | -9.32 | 13.32 | 3 | Vertical | 164 | 1.74 | - | 27.31 | 4.05 | - |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(1Mbps)**

**2440MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-M-1

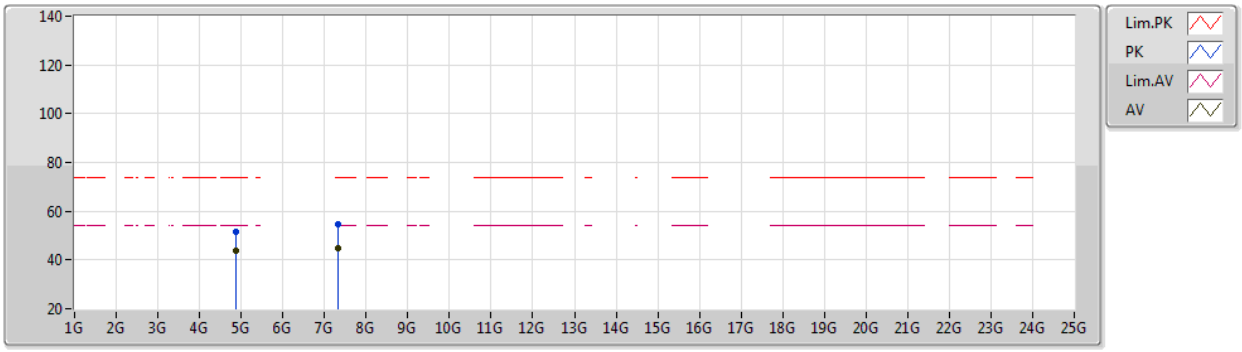
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.3512G | 56.21 | 74.00 | -17.79 | 24.48 | 3 | Horizontal | 135 | 1.80 | - | 27.75 | 3.98 | - |
| AV | 2.3548G | 44.99 | 54.00 | -9.01 | 13.27 | 3 | Horizontal | 135 | 1.80 | - | 27.74 | 3.98 | - |
| PK | 2.4404G | 98.65 | Inf | -Inf | 67.15 | 3 | Horizontal | 135 | 1.80 | - | 27.48 | 4.02 | - |
| AV | 2.44G | 97.12 | Inf | -Inf | 65.62 | 3 | Horizontal | 135 | 1.80 | - | 27.48 | 4.02 | - |
| PK | 2.492G | 55.72 | 74.00 | -18.28 | 24.35 | 3 | Horizontal | 135 | 1.80 | - | 27.32 | 4.05 | - |
| AV | 2.4872G | 44.68 | 54.00 | -9.32 | 13.30 | 3 | Horizontal | 135 | 1.80 | - | 27.34 | 4.04 | - |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(1Mbps)**

**2440MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-M-1

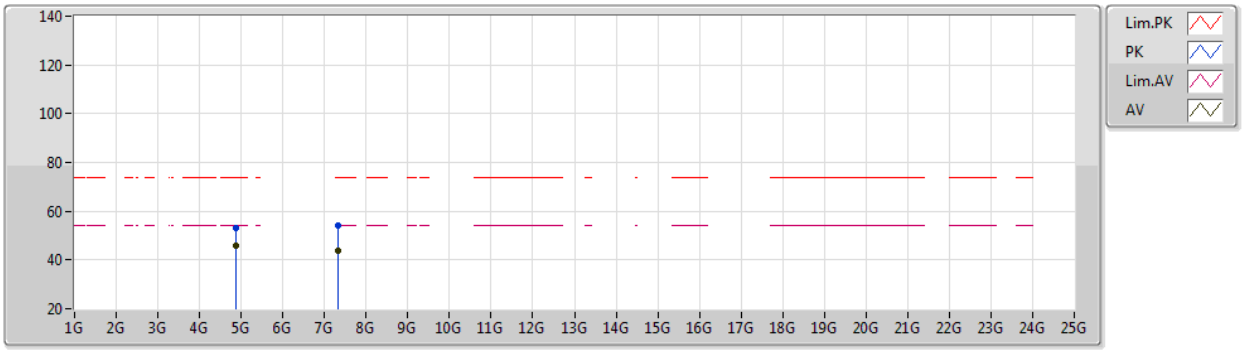
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.87973G | 51.46 | 74.00 | -22.54 | 46.63 | 3 | Vertical | 252 | 2.06 | - | 31.08 | 5.41 | 31.66 |
| AV | 4.88012G | 43.61 | 54.00 | -10.39 | 38.78 | 3 | Vertical | 252 | 2.06 | - | 31.08 | 5.41 | 31.66 |
| PK | 7.3209G | 54.57 | 74.00 | -19.43 | 44.38 | 3 | Vertical | 175 | 1.00 | - | 36.40 | 6.96 | 33.17 |
| AV | 7.31933G | 44.57 | 54.00 | -9.43 | 34.38 | 3 | Vertical | 175 | 1.00 | - | 36.40 | 6.96 | 33.17 |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(1Mbps)**

**2440MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-M-1

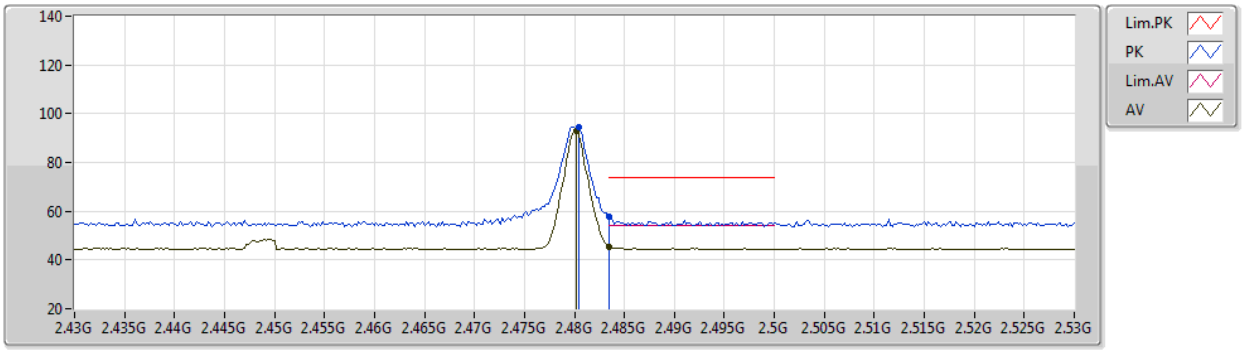
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.88061G | 52.99 | 74.00 | -21.01 | 48.16 | 3 | Horizontal | 174 | 2.37 | - | 31.08 | 5.41 | 31.66 |
| AV | 4.88009G | 45.76 | 54.00 | -8.24 | 40.93 | 3 | Horizontal | 174 | 2.37 | - | 31.08 | 5.41 | 31.66 |
| PK | 7.32115G | 54.13 | 74.00 | -19.87 | 43.94 | 3 | Horizontal | 116 | 1.03 | - | 36.40 | 6.96 | 33.17 |
| AV | 7.32081G | 43.56 | 54.00 | -10.44 | 33.37 | 3 | Horizontal | 116 | 1.03 | - | 36.40 | 6.96 | 33.17 |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(1Mbps)**

**2480MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-M-1

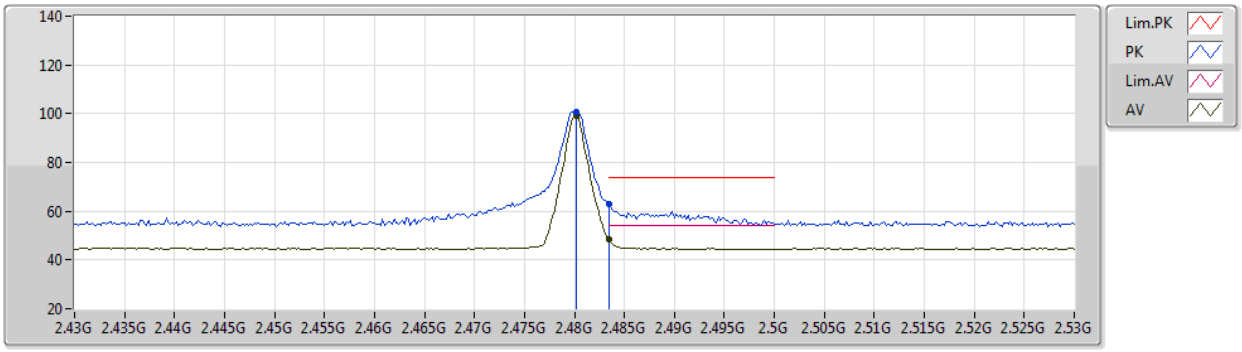
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.4804G | 94.26 | Inf | -Inf | 62.86 | 3 | Vertical | 213 | 2.97 | - | 27.36 | 4.04 | - |
| AV | 2.4802G | 92.82 | Inf | -Inf | 61.42 | 3 | Vertical | 213 | 2.97 | - | 27.36 | 4.04 | - |
| PK | 2.4835G | 57.94 | 74.00 | -16.06 | 26.55 | 3 | Vertical | 213 | 2.97 | - | 27.35 | 4.04 | - |
| AV | 2.4835G | 45.36 | 54.00 | -8.64 | 13.97 | 3 | Vertical | 213 | 2.97 | - | 27.35 | 4.04 | - |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(1Mbps)**

**2480MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-M-1

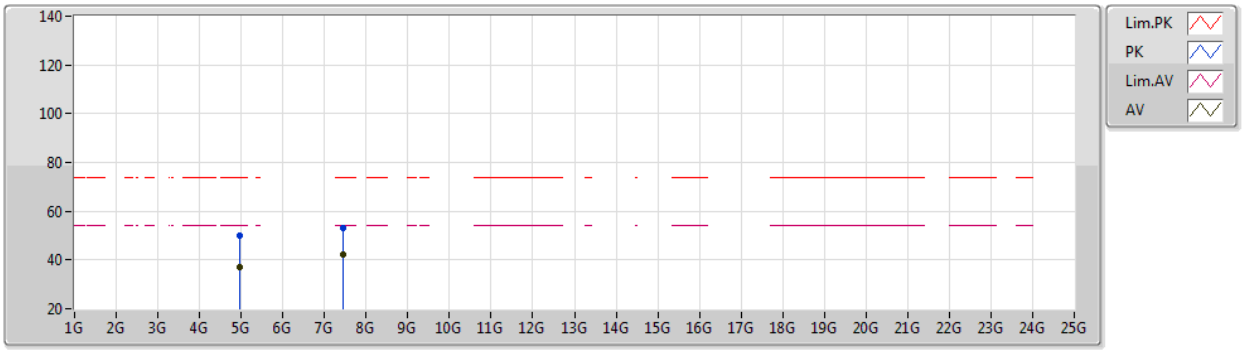
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.4802G | 100.53 | Inf | -Inf | 69.13 | 3 | Horizontal | 138 | 1.99 | - | 27.36 | 4.04 | - |
| AV | 2.4802G | 99.02 | Inf | -Inf | 67.62 | 3 | Horizontal | 138 | 1.99 | - | 27.36 | 4.04 | - |
| PK | 2.4835G | 62.83 | 74.00 | -11.17 | 31.44 | 3 | Horizontal | 138 | 1.99 | - | 27.35 | 4.04 | - |
| AV | 2.4835G | 48.32 | 54.00 | -5.68 | 16.93 | 3 | Horizontal | 138 | 1.99 | - | 27.35 | 4.04 | - |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(1Mbps)**

**2480MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-M-1

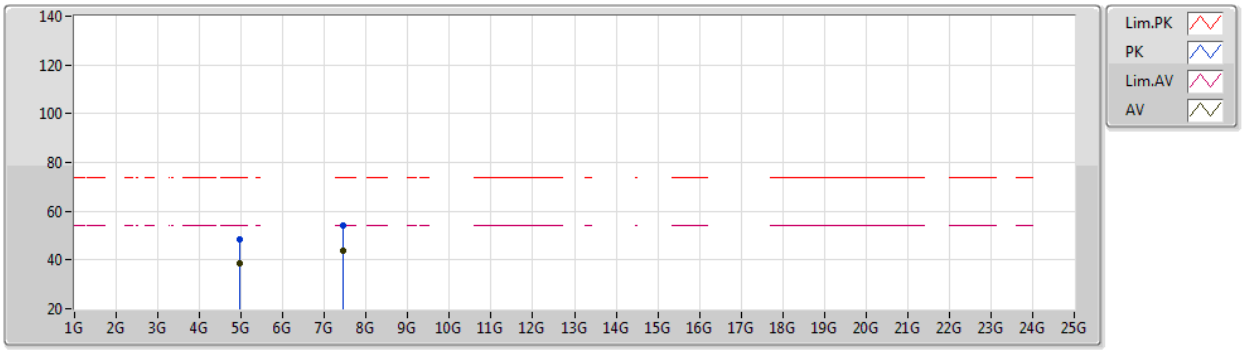
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.96052G | 49.86 | 74.00 | -24.14 | 44.55 | 3 | Vertical | 6 | 1.52 | - | 31.34 | 5.54 | 31.57 |
| AV | 4.96004G | 37.27 | 54.00 | -16.73 | 31.96 | 3 | Vertical | 6 | 1.52 | - | 31.34 | 5.54 | 31.57 |
| PK | 7.44153G | 53.13 | 74.00 | -20.87 | 42.87 | 3 | Vertical | 343 | 3.00 | - | 36.48 | 7.00 | 33.22 |
| AV | 7.44037G | 42.06 | 54.00 | -11.94 | 31.80 | 3 | Vertical | 343 | 3.00 | - | 36.48 | 7.00 | 33.22 |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(1Mbps)**

**2480MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-M-1

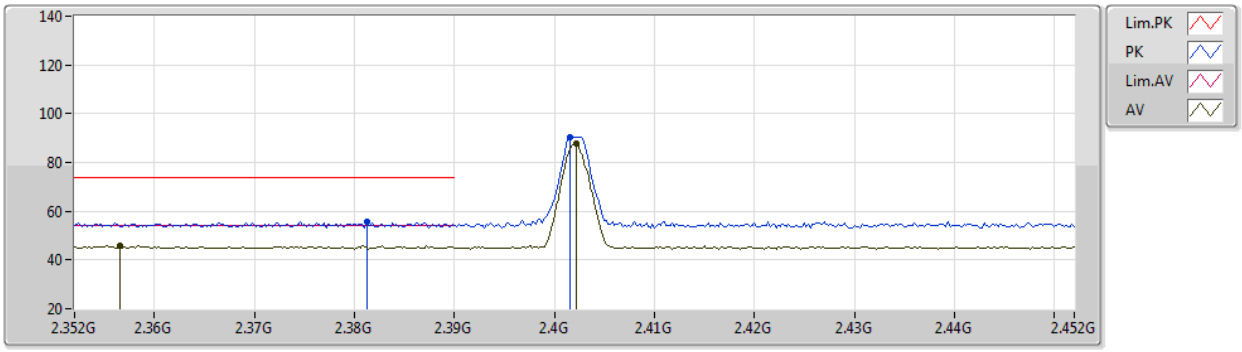
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.96078G | 48.52 | 74.00 | -25.48 | 43.21 | 3 | Horizontal | 356 | 1.59 | - | 31.34 | 5.54 | 31.57 |
| AV | 4.96018G | 38.87 | 54.00 | -15.13 | 33.56 | 3 | Horizontal | 356 | 1.59 | - | 31.34 | 5.54 | 31.57 |
| PK | 7.43796G | 54.24 | 74.00 | -19.76 | 43.98 | 3 | Horizontal | 175 | 1.47 | - | 36.48 | 7.00 | 33.22 |
| AV | 7.43996G | 43.69 | 54.00 | -10.31 | 33.43 | 3 | Horizontal | 175 | 1.47 | - | 36.48 | 7.00 | 33.22 |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(2Mbps)**

**2402MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-O-1

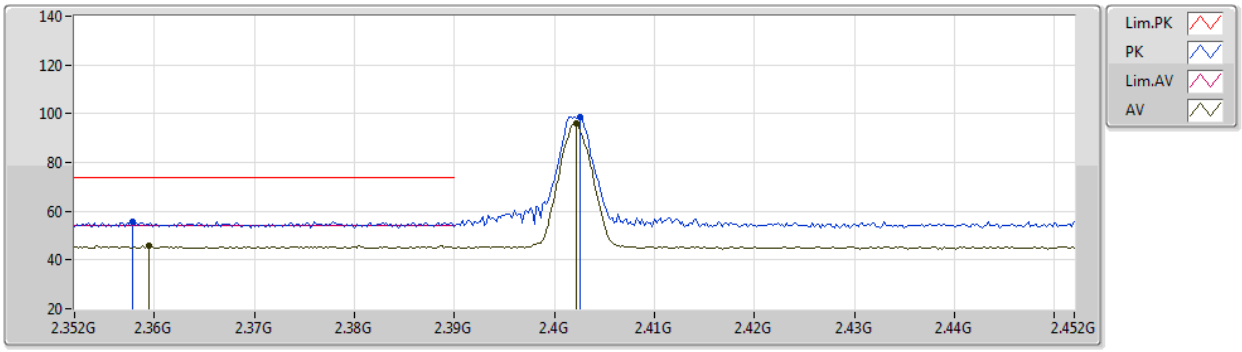
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.3812G | 55.77 | 74.00 | -18.23 | 24.12 | 3 | Vertical | 346 | 1.97 | - | 27.66 | 3.99 | - |
| AV | 2.3566G | 46.00 | 54.00 | -8.00 | 14.29 | 3 | Vertical | 346 | 1.97 | - | 27.73 | 3.98 | - |
| PK | 2.4016G | 90.40 | Inf | -Inf | 58.80 | 3 | Vertical | 346 | 1.97 | - | 27.60 | 4.00 | - |
| AV | 2.4022G | 87.58 | Inf | -Inf | 55.99 | 3 | Vertical | 346 | 1.97 | - | 27.59 | 4.00 | - |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(2Mbps)**

**2402MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-O-1

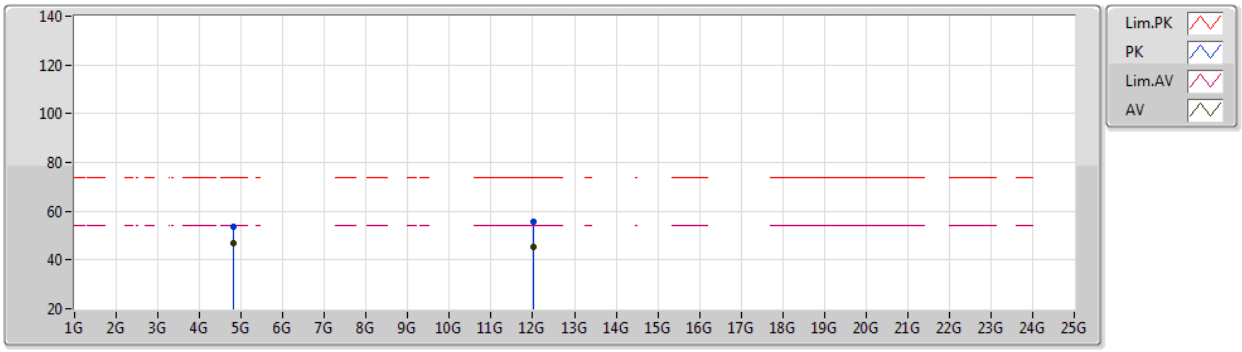
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.3578G | 55.94 | 74.00 | -18.06 | 24.23 | 3 | Horizontal | 56 | 1.86 | - | 27.73 | 3.98 | - |
| AV | 2.3594G | 45.91 | 54.00 | -8.09 | 14.21 | 3 | Horizontal | 56 | 1.86 | - | 27.72 | 3.98 | - |
| PK | 2.4026G | 98.59 | Inf | -Inf | 67.00 | 3 | Horizontal | 56 | 1.86 | - | 27.59 | 4.00 | - |
| AV | 2.4022G | 95.86 | Inf | -Inf | 64.27 | 3 | Horizontal | 56 | 1.86 | - | 27.59 | 4.00 | - |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(2Mbps)**

**2402MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-O-1

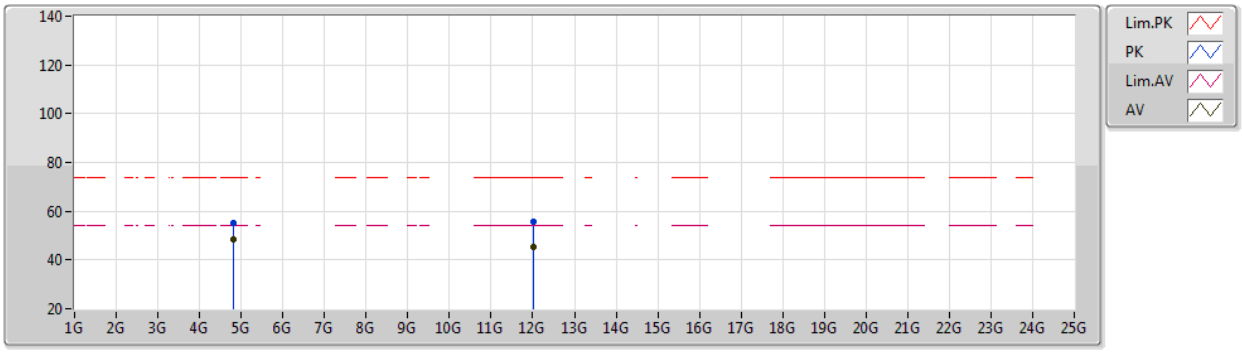
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.80428G | 53.43 | 74.00 | -20.57 | 48.87 | 3 | Vertical | 323 | 1.77 | - | 31.00 | 5.31 | 31.75 |
| AV | 4.8032G | 46.71 | 54.00 | -7.29 | 42.17 | 3 | Vertical | 323 | 1.77 | - | 31.00 | 5.30 | 31.76 |
| PK | 12.00822G | 55.46 | 74.00 | -18.54 | 42.43 | 3 | Vertical | 176 | 2.34 | - | 38.90 | 8.30 | 34.17 |
| AV | 12.0137G | 45.32 | 54.00 | -8.68 | 32.28 | 3 | Vertical | 176 | 2.34 | - | 38.91 | 8.30 | 34.17 |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(2Mbps)**

**2402MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-O-1

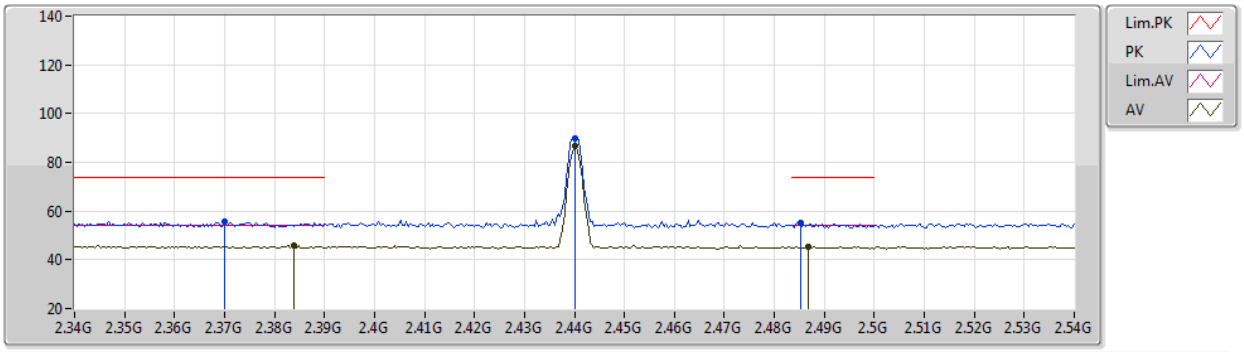
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.8042G | 55.37 | 74.00 | -18.63 | 50.81 | 3 | Horizontal | 355 | 1.35 | - | 31.00 | 5.31 | 31.75 |
| AV | 4.80318G | 48.31 | 54.00 | -5.69 | 43.77 | 3 | Horizontal | 355 | 1.35 | - | 31.00 | 5.30 | 31.76 |
| PK | 12.00678G | 55.72 | 74.00 | -18.28 | 42.69 | 3 | Horizontal | 235 | 1.23 | - | 38.90 | 8.30 | 34.17 |
| AV | 12.0055G | 45.12 | 54.00 | -8.88 | 32.09 | 3 | Horizontal | 235 | 1.23 | - | 38.90 | 8.30 | 34.17 |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(2Mbps)**

**2440MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-O-1

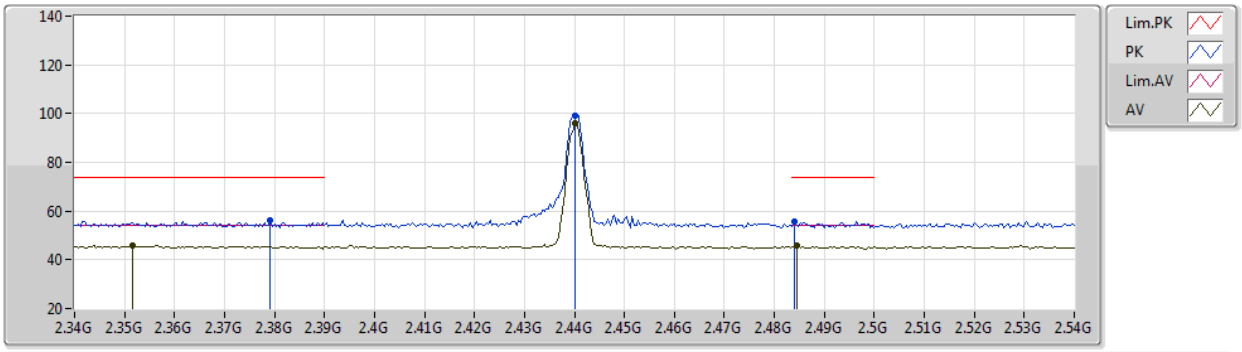
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.37G | 55.83 | 74.00 | -18.17 | 24.16 | 3 | Vertical | 343 | 1.76 | - | 27.69 | 3.98 | - |
| AV | 2.384G | 45.96 | 54.00 | -8.04 | 14.32 | 3 | Vertical | 343 | 1.76 | - | 27.65 | 3.99 | - |
| PK | 2.44G | 89.67 | Inf | -Inf | 58.17 | 3 | Vertical | 343 | 1.76 | - | 27.48 | 4.02 | - |
| AV | 2.44G | 86.83 | Inf | -Inf | 55.33 | 3 | Vertical | 343 | 1.76 | - | 27.48 | 4.02 | - |
| PK | 2.4852G | 54.97 | 74.00 | -19.03 | 23.59 | 3 | Vertical | 343 | 1.76 | - | 27.34 | 4.04 | - |
| AV | 2.4868G | 45.55 | 54.00 | -8.45 | 14.17 | 3 | Vertical | 343 | 1.76 | - | 27.34 | 4.04 | - |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(2Mbps)**

**2440MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-O-1

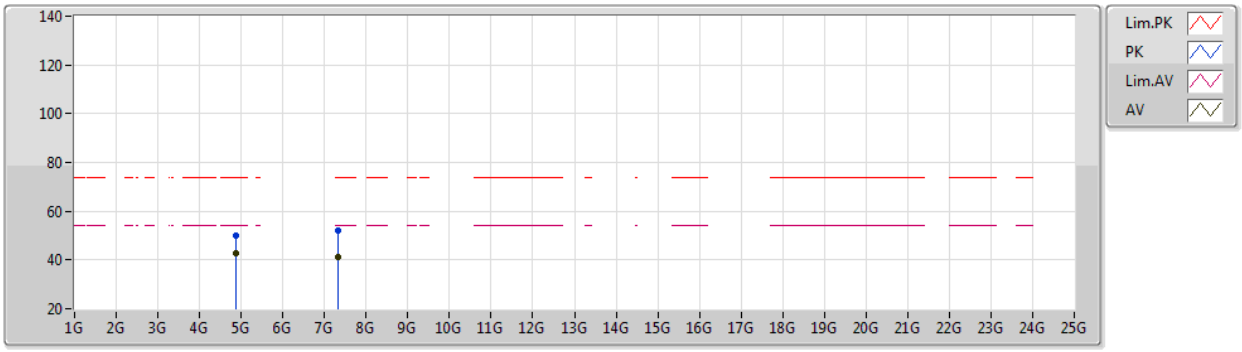
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.3792G | 56.26 | 74.00 | -17.74 | 24.61 | 3 | Horizontal | 308 | 2.05 | - | 27.66 | 3.99 | - |
| AV | 2.3516G | 45.63 | 54.00 | -8.37 | 13.90 | 3 | Horizontal | 308 | 2.05 | - | 27.75 | 3.98 | - |
| PK | 2.44G | 98.94 | Inf | -Inf | 67.44 | 3 | Horizontal | 308 | 2.05 | - | 27.48 | 4.02 | - |
| AV | 2.44G | 96.03 | Inf | -Inf | 64.53 | 3 | Horizontal | 308 | 2.05 | - | 27.48 | 4.02 | - |
| PK | 2.484G | 55.53 | 74.00 | -18.47 | 24.14 | 3 | Horizontal | 308 | 2.05 | - | 27.35 | 4.04 | - |
| AV | 2.4844G | 45.84 | 54.00 | -8.16 | 14.45 | 3 | Horizontal | 308 | 2.05 | - | 27.35 | 4.04 | - |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(2Mbps)**

**2440MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-O-1

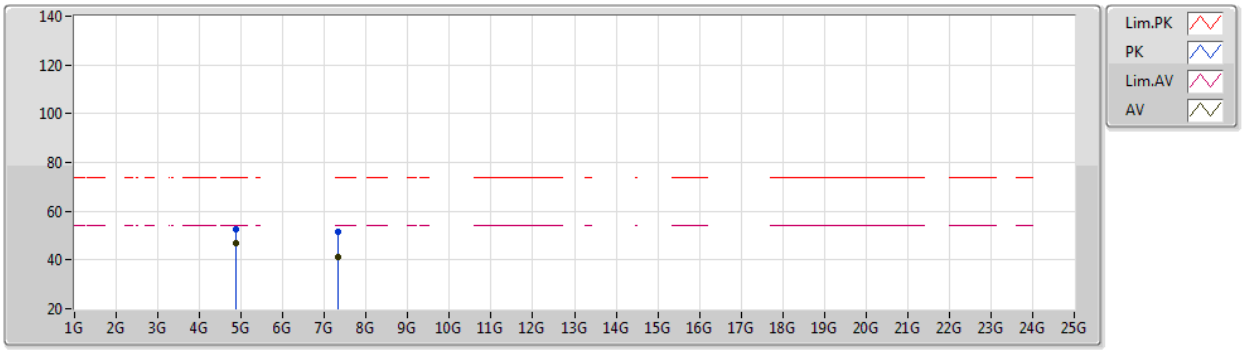
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.87926G | 50.01 | 74.00 | -23.99 | 45.18 | 3 | Vertical | 84 | 2.27 | - | 31.08 | 5.41 | 31.66 |
| AV | 4.88016G | 42.96 | 54.00 | -11.04 | 38.13 | 3 | Vertical | 84 | 2.27 | - | 31.08 | 5.41 | 31.66 |
| PK | 7.31958G | 51.99 | 74.00 | -22.01 | 41.80 | 3 | Vertical | 228 | 2.01 | - | 36.40 | 6.96 | 33.17 |
| AV | 7.32076G | 41.28 | 54.00 | -12.72 | 31.09 | 3 | Vertical | 228 | 2.01 | - | 36.40 | 6.96 | 33.17 |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(2Mbps)**

**2440MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-O-1

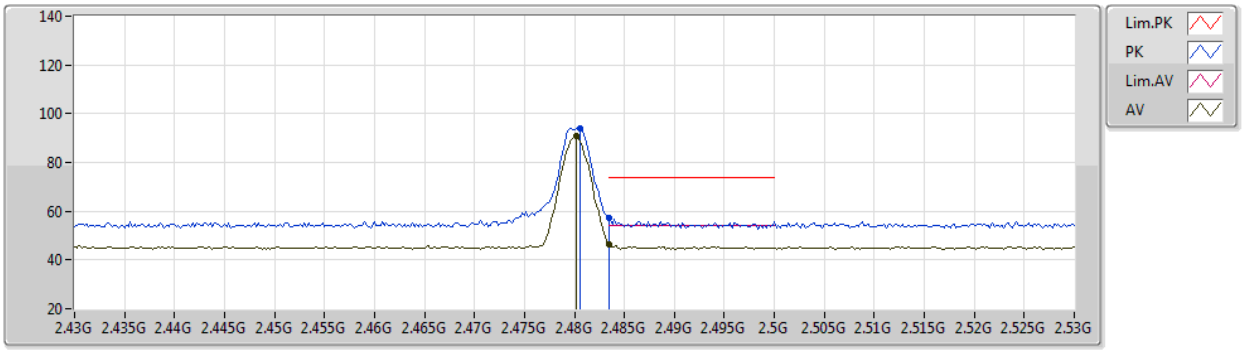
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.87922G | 52.46 | 74.00 | -21.54 | 47.63 | 3 | Horizontal | 356 | 1.63 | - | 31.08 | 5.41 | 31.66 |
| AV | 4.88018G | 46.96 | 54.00 | -7.04 | 42.13 | 3 | Horizontal | 356 | 1.63 | - | 31.08 | 5.41 | 31.66 |
| PK | 7.32368G | 51.80 | 74.00 | -22.20 | 41.61 | 3 | Horizontal | 342 | 1.26 | - | 36.40 | 6.96 | 33.17 |
| AV | 7.32006G | 41.38 | 54.00 | -12.62 | 31.19 | 3 | Horizontal | 342 | 1.26 | - | 36.40 | 6.96 | 33.17 |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(2Mbps)**

**2480MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-O-1

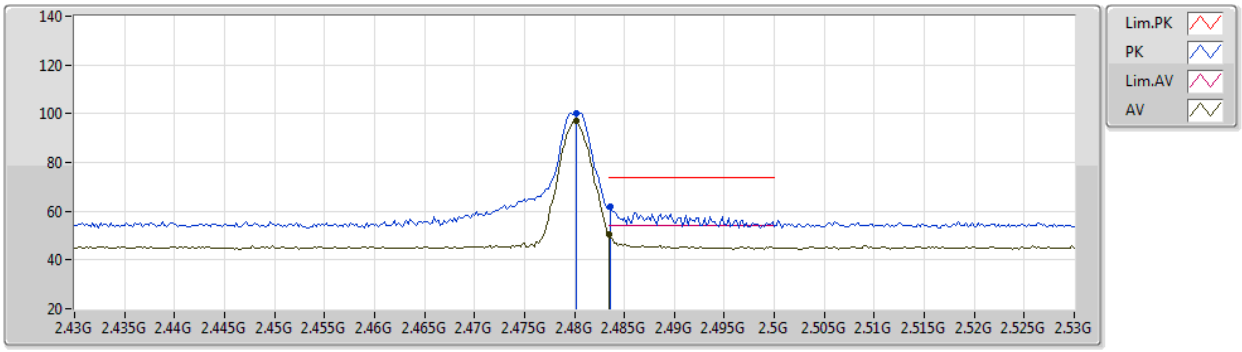
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.4806G | 93.93 | Inf | -Inf | 62.53 | 3 | Vertical | 31 | 2.97 | - | 27.36 | 4.04 | - |
| AV | 2.4802G | 90.89 | Inf | -Inf | 59.49 | 3 | Vertical | 31 | 2.97 | - | 27.36 | 4.04 | - |
| PK | 2.4835G | 57.27 | 74.00 | -16.73 | 25.88 | 3 | Vertical | 31 | 2.97 | - | 27.35 | 4.04 | - |
| AV | 2.4835G | 46.45 | 54.00 | -7.55 | 15.06 | 3 | Vertical | 31 | 2.97 | - | 27.35 | 4.04 | - |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(2Mbps)**

**2480MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-O-1

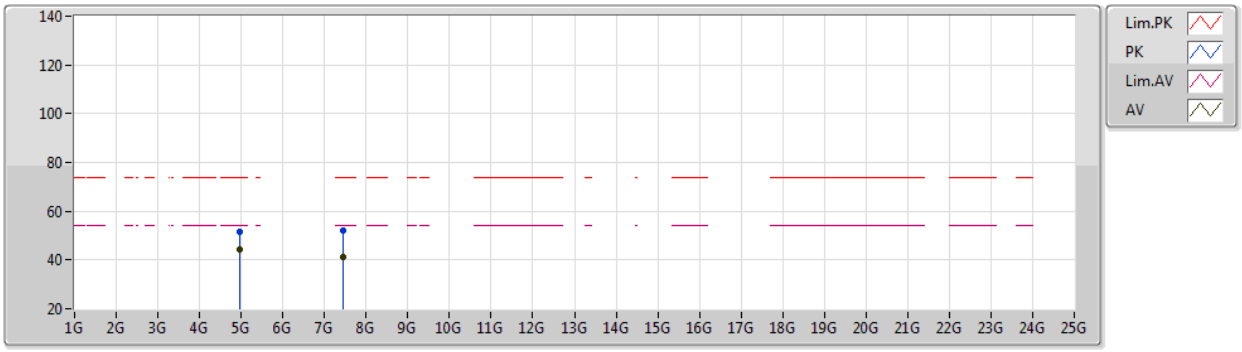
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 2.4802G | 100.16 | Inf | -Inf | 68.76 | 3 | Horizontal | 321 | 2.01 | - | 27.36 | 4.04 | - |
| AV | 2.4802G | 97.29 | Inf | -Inf | 65.89 | 3 | Horizontal | 321 | 2.01 | - | 27.36 | 4.04 | - |
| PK | 2.4836G | 61.81 | 74.00 | -12.19 | 30.42 | 3 | Horizontal | 321 | 2.01 | - | 27.35 | 4.04 | - |
| AV | 2.4835G | 50.67 | 54.00 | -3.33 | 19.28 | 3 | Horizontal | 321 | 2.01 | - | 27.35 | 4.04 | - |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(2Mbps)**

**2480MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-O-1

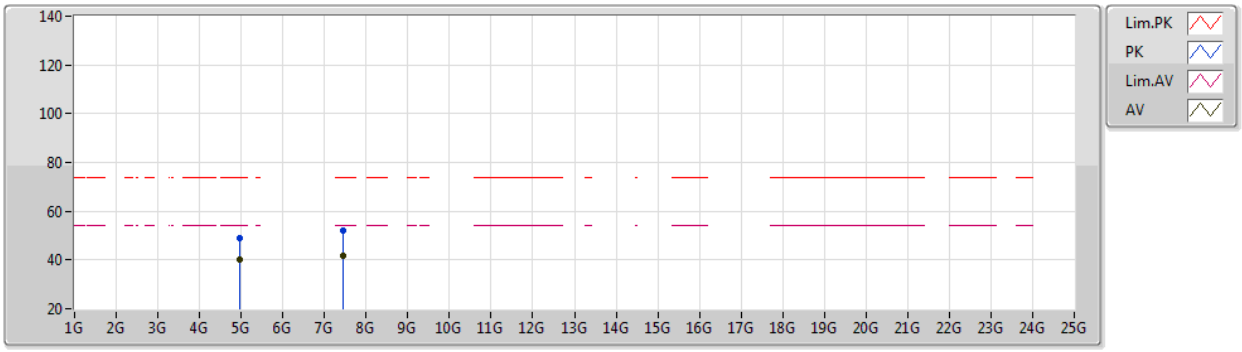
| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.96074G | 51.61 | 74.00 | -22.39 | 46.30 | 3 | Vertical | 237 | 1.95 | - | 31.34 | 5.54 | 31.57 |
| AV | 4.96G | 44.19 | 54.00 | -9.81 | 38.88 | 3 | Vertical | 237 | 1.95 | - | 31.34 | 5.54 | 31.57 |
| PK | 7.4444G | 51.90 | 74.00 | -22.10 | 41.63 | 3 | Vertical | 117 | 2.17 | - | 36.49 | 7.00 | 33.22 |
| AV | 7.44002G | 41.46 | 54.00 | -12.54 | 31.20 | 3 | Vertical | 117 | 2.17 | - | 36.48 | 7.00 | 33.22 |

**Test Mode: EUT 1 + Ant.20 (Omni Mode)**

**BT-LE(2Mbps)**

**2480MHz_TX**

07/07/2020




EUT Y_1TX
Setting default
06-F-O-1

| Type | Freq | Level | Limit | Margin | Raw | Dist | Condition | Azimuth | Height | Comment | AF | CL | PA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Hz) | (dBuV/m) | (dBuV/m) | (dB) | (dBuV) | (m) | | (°) | (m) | | (dB) | (dB) | (dB) |
| PK | 4.9611G | 48.96 | 74.00 | -25.04 | 43.65 | 3 | Horizontal | 360 | 1.45 | - | 31.34 | 5.54 | 31.57 |
| AV | 4.96018G | 40.38 | 54.00 | -13.62 | 35.07 | 3 | Horizontal | 360 | 1.45 | - | 31.34 | 5.54 | 31.57 |
| PK | 7.4407G | 52.17 | 74.00 | -21.83 | 41.91 | 3 | Horizontal | 286 | 2.46 | - | 36.48 | 7.00 | 33.22 |
| AV | 7.43608G | 41.72 | 54.00 | -12.28 | 31.47 | 3 | Horizontal | 286 | 2.46 | - | 36.47 | 7.00 | 33.22 |