# FCC RF Test Report

## (BLE)

| | |
|---|---|
| **Applicant:** | TECNO MOBILE LIMITED |
| **Address of Applicant:** | FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG |
| **Equipment Under Test (EUT)** | |
| Product Name: | Mobile Phone |
| Model No.: | BF7 |
| Trade Mark: | TECNO |
| **FCC ID:** | 2ADYY-BF7 |
| **Applicable Standards:** | FCC CFR Title 47 Part 15C (§15.247) |
| **Date of Sample Receipt:** | 12 May, 2023 |
| **Date of Test:** | 13 May, to 31 May, 2023 |
| **Date of Report Issued:** | 02 Jun, 2023 |
| **Test Result:** | PASS |

| | | | |
|---|---|---|---|
| ***Tested by:*** | Test Engineer | ***Date:*** | *02 Jun, 2023* |
| ***Reviewed by:*** | Project Engineer | ***Date:*** | *02 Jun, 2023* |
| ***Approved by:*** | Manager | ***Date:*** | *02 Jun, 2023* |

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in above the application standard version. Test results reported herein relate only to the item(s) tested.

# 1 Version

| Version No. | Date | Description |
|---|---|---|
| *00* | *02 Jun., 2023* | *Original* |
| | | |
| | | |
| | | |
| | | |

# 2 Contents

# 3 General Information

## 3.1 Client Information

| | |
|---|---|
| Applicant: | TECNO MOBILE LIMITED |
| Address: | FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG |
| Manufacturer: | TECNO MOBILE LIMITED |
| Address: | FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG |
| Factory: | SHENZHEN TECNO TECHNOLOGY CO., LTD. |
| Address: | 101, Building 24, Waijing Industrial Park, Fumin Community, Fucheng Street, Longhua District, Shenzhen City, P.R.China |

## 3.2 General Description of E.U.T.

| | |
|---|---|
| Product Name: | Mobile Phone |
| Model No.: | BF7 |
| Operation Frequency: | 2402 MHz - 2480 MHz |
| Channel Numbers: | 40 |
| Channel Separation: | 2MHz |
| Modulation Technology: | GFSK |
| Data Speed: | 1 Mbps (LE 1M PHY), 2 Mbps (LE 2M PHY), 125 kbps (LE Coded PHY, S=8), 500 kbps (LE Coded PHY, S=2) |
| Antenna Type: | Internal Antenna |
| Antenna Gain: | 1.1 dBi (declare by applicant) |
| Antenna transmit mode: | SISO (1TX, 1RX) |
| Power Supply: | Rechargeable Li-ion Polymer Battery DC3.85V, 4900mAh |
| AC Adapter: | Model: U100TSA<br>Input: AC100-240V, 50/60Hz, 0.3A<br>Output: DC 5.0V, 2.0A |
| Test Sample Condition: | The test samples were provided in good working order with no visible defects. |

## 3.3 Test Mode and Test Environment

| **Test Mode:** | |
|---|---|
| Transmitting mode | Keep the EUT in continuous transmitting with modulation |

***Remark:***

1. *For AC power line conducted emission and radiated spurious emission (below 1GHz), pre-scan all data speed, found 1 Mbps (LE 1M PHY) was worse case mode. The report only reflects the test data of worst mode.*
2. *Channel Low, Mid and High for each type band with rated data rate were chosen for full testing. The field strength of spurious radiation emission was measured as EUT stand-up position (H mode) and lie down position (E1, E2 mode) for these modes. Just the worst case position (H mode) shown in report.*

| **Operating Environment:** | |
|---|---|
| Temperature: | 15℃ ~ 35℃ |
| Humidity: | 20 % ~ 75 % RH |
| Atmospheric Pressure: | 1008 mbar |

## 3.4 Description of Test Auxiliary Equipment

The EUT has been tested as an independent unit.

## 3.5 Measurement Uncertainty

| Parameter | Expanded Uncertainty (Confidence of 95%(U = 2Uc(y))) |
|---|---|
| Conducted Emission for LISN (9kHz ~ 10MHz) | 1.9 dB |
| Conducted Emission for LISN (10MHz ~ 30MHz) | 2.6 dB |
| Radiated Emission (30MHz ~ 1GHz) (3m SAC) | 3.8 dB |
| Radiated Emission (1GHz ~ 18GHz) (3m SAC) | 3.6 dB |
| Radiated Emission (18GHz ~ 40GHz) (3m SAC) | 5.34 dB |

***Note:*** *All the measurement uncertainty value were shown with a coverage k=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.*

## 3.6 Additions to, Deviations, or Exclusions from the Method

No

## 3.7 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **FCC - Designation No.: CN1211**

JianYan Testing Group Shenzhen Co., Ltd. has been accredited as a testing laboratory by FCC(Federal Communications Commission). The test firm Registration No. is 727551.

- **ISED – CAB identifier.: CN0021**

The 3m Semi-anechoic chamber and 10m Semi-anechoic chamber of JianYan Testing Group Shenzhen Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

- **CNAS - Registration No.: CNAS L15527**

JianYan Testing Group Shenzhen Co., Ltd. is accredited to ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L15527.

- **A2LA - Registration No.: 4346.01**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: https://portal.a2la.org/scopepdf/4346-01.pdf

## 3.8 Laboratory Location

JianYan Testing Group Shenzhen Co., Ltd.
Address: No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.
Tel: +86-755-23118282, Fax: +86-755-23116366
Email: info-JYTee@lets.com, Website: http://jyt.lets.com

## 3.9 Test Instruments List

| Radiated Emission(3m SAC): | | | | | |
|---|---|---|---|---|---|
| **Test Equipment** | **Manufacturer** | **Model No.** | **Manage No.** | **Cal. Date (mm-dd-yy)** | **Cal. Due date (mm-dd-yy)** |
| 3m SAC | ETS | 9m*6m*6m | WXJ001-1 | 04-14-2021 | 04-13-2024 |
| Loop Antenna | Schwarzbeck | FMZB 1519 B | WXJ002-4 | 02-09-2023 | 02-08-2024 |
| BiConiLog Antenna | Schwarzbeck | VULB9163 | WXJ002 | 02-09-2023 | 02-08-2024 |
| Horn Antenna | Schwarzbeck | BBHA9120D | WXJ002-2 | 02-09-2023 | 02-08-2024 |
| Horn Antenna | Schwarzbeck | BBHA9170 | WXJ002-5 | 01-09-2023 | 01-08-2024 |
| Pre-amplifier (30MHz ~ 1GHz) | Schwarzbeck | BBV9743B | WXJ001-2 | 01-10-2023 | 01-09-2024 |
| Pre-amplifier (1GHz ~ 18GHz) | SKET | LNPA_0118G-50 | WXJ001-3 | 01-10-2023 | 01-09-2024 |
| Pre-amplifier (18GHz ~ 40GHz) | RF System | TRLA-180400G45B | WXJ002-7 | 01-11-2023 | 01-10-2024 |
| EMI Test Receiver | Rohde & Schwarz | ESRP7 | WXJ003-1 | 01-11-2023 | 01-10-2024 |
| Spectrum Analyzer | Rohde & Schwarz | FSP 30 | WXJ004 | 01-10-2023 | 01-09-2024 |
| Spectrum Analyzer | KEYSIGHT | N9010B | WXJ004-2 | 10-17-2022 | 10-16-2023 |
| Coaxial Cable (30MHz ~ 1GHz) | JYTSZ | JYT3M-1G-NN-8M | WXG001-4 | 01-18-2023 | 01-17-2024 |
| Coaxial Cable (1GHz ~ 18GHz) | JYTSZ | JYT3M-18G-NN-8M | WXG001-5 | 01-18-2023 | 01-17-2024 |
| Coaxial Cable (18GHz ~ 40GHz) | JYTSZ | JYT3M-40G-SS-8M | WXG001-7 | 01-18-2023 | 01-17-2024 |
| Band Reject Filter Group | Tonscend | JS0806-F | WXJ089 | N/A | |
| Test Software | Tonscend | TS+ | Version: 3.0.0.1 | | |

| Conducted Emission: | | | | | |
|---|---|---|---|---|---|
| **Test Equipment** | **Manufacturer** | **Model No.** | **Manage No.** | **Cal. Date (mm-dd-yy)** | **Cal. Due date (mm-dd-yy)** |
| EMI Test Receiver | Rohde & Schwarz | ESR3 | WXJ003-2 | 07-12-2022 | 07-11-2023 |
| LISN | Schwarzbeck | NSLK 8127 | QCJ001-13 | 01-10-2023 | 01-09-2024 |
| LISN | Rohde & Schwarz | ESH3-Z5 | WXJ005-1 | 01-11-2023 | 01-10-2024 |
| LISN Coaxial Cable (9kHz ~ 30MHz) | JYTSZ | JYTCE-1G-NN-2M | WXG003-1 | 02-22-2023 | 02-21-2024 |
| RF Switch | TOP PRECISION | RSU0301 | WXG003 | N/A | |
| Test Software | AUDIX | E3 | Version: 6.110919b | | |

| Conducted Method: | | | | | |
|---|---|---|---|---|---|
| **Test Equipment** | **Manufacturer** | **Model No.** | **Manage No.** | **Cal. Date (mm-dd-yy)** | **Cal. Due date (mm-dd-yy)** |
| Spectrum Analyzer | Keysight | N9010B | WXJ004-3 | 10-17-2022 | 10-16-2023 |
| Temperature Humidity Chamber | ZHONG ZHI | CZ-A-80D | WXJ032-3 | 01-09-2023 | 01-08-2025 |
| Power Detector Box | MWRFTEST | MW100-PSB | WXJ007-4 | 10-17-2022 | 10-16-2023 |
| DC Power Supply | Keysight | E3642A | WXJ025-2 | N/A | |
| RF Control Unit | MWRFTEST | MW100-RFCB | WXG006 | N/A | |
| Test Software | MWRFTEST | MTS 8310 | Version: 2.0.0.0 | | |

# 4 Measurement Setup and Procedure

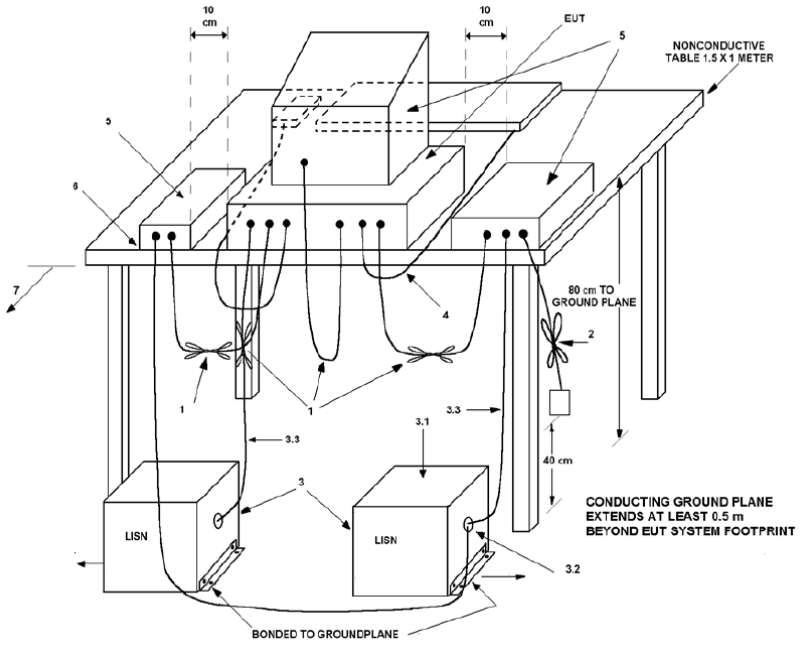
## 4.1 Test Channel

According to ANSI C63.10-2013 chapter 5.6.1 Table 4 requirement, select lowest channel, middle channel, and highest channel in the frequency range in which device operates for testing. The detailed frequency points are as follows:

| Lowest channel | | Middle channel | | Highest channel | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Channel No. | Frequency (MHz) | Channel No. | Frequency (MHz) |
| 0 | 2402 | 20 | 2442 | 39 | 2480 |

## 4.2 Test Setup

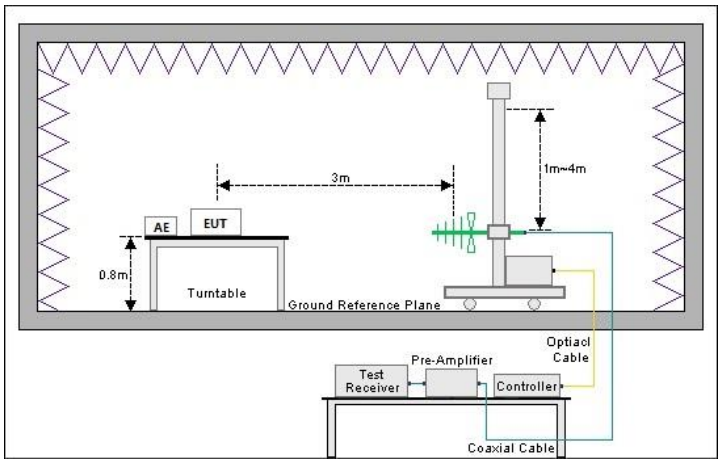
**1) Conducted emission measurement:**



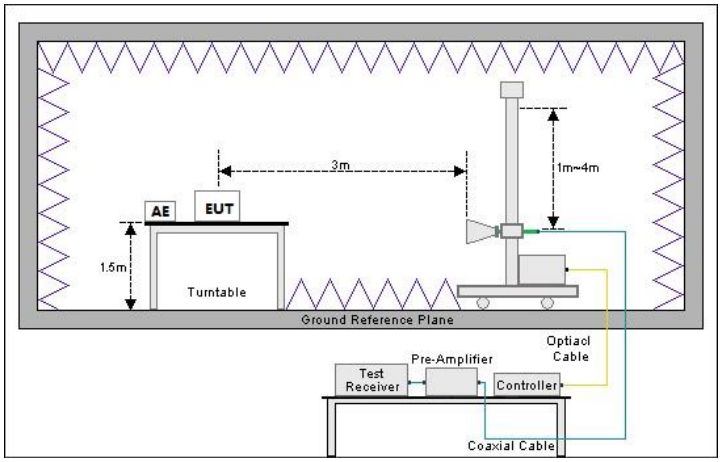

**Note:** The detailed descriptions please refer to Figure 8 of ANSI C63.4:2014.

**2) Radiated emission measurement:**

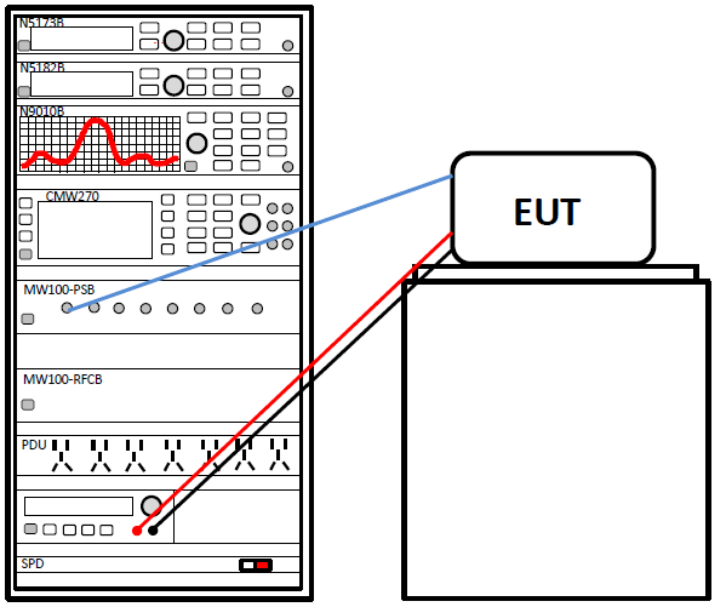
Below 1GHz (3m SAC)



Above 1GHz (3m SAC)




**3) Conducted test method**



## 4.3 Test Procedure

| Test method | Test step |
|---|---|
| Conducted emission | 1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment.<br>2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs).<br>3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement. |
| Radiated emission | **For below 1GHz:**<br>1. The EUT was placed on the tabletop of a rotating table 0.8 m the ground at a 3 m semi anechoic chamber. The measurement distance from the EUT to the receiving antenna is 3 m.<br>2. EUT works in each mode of operation that needs to be tested，and having the EUT continuously working, respectively on 3 axis (X, Y & Z) and considered typical configuration to obtain worst position. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations.<br>3. Open the test software to control the test antenna and test turntable. Perform the test, save the test results, and export the test data.<br><br>**For above 1GHz:**<br>1. The EUT was placed on the tabletop of a rotating table 1.5 m the ground at a 3 m fully anechoic room. The measurement distance from the EUT to the receiving antenna is 3 m.<br>2. EUT works in each mode of operation that needs to be tested，and having the EUT continuously working, respectively on 3 axis (X, Y & Z) and considered typical configuration to obtain worst position. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations.<br>3. Open the test software to control the test antenna and test turntable. Perform the test, save the test results, and export the test data. |
| Conducted test method | 1. The BLE antenna port of EUT was connected to the test port of the test system through an RF cable.<br>2. The EUT is keeping in continuous transmission mode and tested in all modulation modes.<br>3. Open the test software, prepare a test plan, and control the system through the software. After the test is completed, the test report is exported through the test software. |

# 5 Test Results

## 5.1 Summary

### 5.1.1 Clause and Data Summary

This report was amended on FCC ID: 2ADYY-BF7 follow FCC Class II Permissive Change. The original report: JYTSZ-R12-2201870, issued by JianYan Testing Group Shenzhen Co., Ltd. The differences between them as below: Replace the memory chip and change LTE B7 and BT and 2.4GWi-Fi duplexer supplier. So need to Spot test Conducted Output Power and Emissions in Non-restricted Frequency Bands.

| Test items | Standard clause | Test data | Result |
|---|---|---|---|
| Antenna Requirement | 15.203<br>15.247 (b)(4) | Please refer to JYTSZ-R12-2201870 | Pass[2] |
| AC Power Line Conducted Emission | 15.207 | Please refer to JYTSZ-R12-2201870 | Pass[2] |
| Conducted Output Power | 15.247 (b)(3) | See Section 5.2 | Pass[1] |
| 6dB Emission Bandwidth<br>99% Occupied Bandwidth | 15.247 (a)(2) | Please refer to JYTSZ-R12-2201870 | Pass[2] |
| Power Spectral Density | 15.247 (e) | Please refer to JYTSZ-R12-2201870 | Pass[2] |
| Band-edge Emission<br>Conduction Spurious Emission | 15.247 (d) | Please refer to JYTSZ-R12-2201870 | Pass[2] |
| Emissions in Restricted Frequency Bands | 15.205<br>15.247 (d) | Please refer to JYTSZ-R12-2201870 | Pass[2] |
| Emissions in Non-restricted Frequency Bands | 15.209<br>15.247(d) | See Section 5.3<br>Please refer to JYTSZ-R12-2201870 | Pass[1]<br>Pass[2] |
| ***Remark:***<br>*1. Pass[1]: The EUT complies with the essential requirements in the standard.*<br>*2. Pass[2]: Please refer to JYTSZ-R12-2201870 report, issued by JianYan Testing Group Shenzhen Co., Ltd.*<br>*3. The cable insertion loss used by "RF Output Power" and other conduction measurement items is 0.5dB (provided by the customer).* | | | |
| ***Test Method:*** | *ANSI C63.10-2013*<br>*KDB 558074 D01 15.247 Meas Guidance v05r02* | | |

### 5.1.2 Test Limit

<table>
<tr><th>Test items</th><th>Limit</th></tr>
<tr><td>AC Power Line Conducted Emission</td><td>
<table>
<tr><th rowspan="2">Frequency (MHz)</th><th colspan="2">Limit (dBµV)</th></tr>
<tr><th>Quasi-Peak</th><th>Average</th></tr>
<tr><td>0.15 – 0.5</td><td>66 to 56 Note 1</td><td>56 to 46 Note 1</td></tr>
<tr><td>0.5 – 5</td><td>56</td><td>46</td></tr>
<tr><td>5 – 30</td><td>60</td><td>50</td></tr>
<tr><td colspan="3">Note 1: The limit level in dBµV decreases linearly with the logarithm of frequency.<br>Note 2: The more stringent limit applies at transition frequencies.</td></tr>
</table>
</td></tr>
<tr><td>Conducted Output Power</td><td>For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt.</td></tr>
<tr><td>6dB Emission Bandwidth</td><td>The minimum 6 dB bandwidth shall be at least 500 kHz.</td></tr>
<tr><td>99% Occupied Bandwidth</td><td>N/A</td></tr>
<tr><td>Power Spectral Density</td><td>For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.</td></tr>
<tr><td>Band-edge Emission<br><br>Conduction Spurious Emission</td><td>In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).</td></tr>
<tr><td>Emissions in Restricted Frequency Bands<br><br>Emissions in Non-restricted Frequency Bands</td><td>
<table>
<tr><th rowspan="2">Frequency (MHz)</th><th colspan="2">Limit (dBµV/m)</th><th rowspan="2">Detector</th></tr>
<tr><th>@ 3m</th><th>@ 10m</th></tr>
<tr><td>30 – 88</td><td>40.0</td><td>30.0</td><td>Quasi-peak</td></tr>
<tr><td>88 – 216</td><td>43.5</td><td>33.5</td><td>Quasi-peak</td></tr>
<tr><td>216 – 960</td><td>46.0</td><td>36.0</td><td>Quasi-peak</td></tr>
<tr><td>960 – 1000</td><td>54.0</td><td>44.0</td><td>Quasi-peak</td></tr>
<tr><td colspan="4">Note: The more stringent limit applies at transition frequencies.</td></tr>
<tr><th rowspan="2">Frequency</th><th colspan="3">Limit (dBµV/m) @ 3m</th></tr>
<tr><th colspan="2">Average</th><th>Peake</th></tr>
<tr><td>Above 1 GHz</td><td colspan="2">54.0</td><td>74.0</td></tr>
<tr><td colspan="4">Note: The measurement bandwidth shall be 1 MHz or greater.</td></tr>
</table>
</td></tr>
</table>

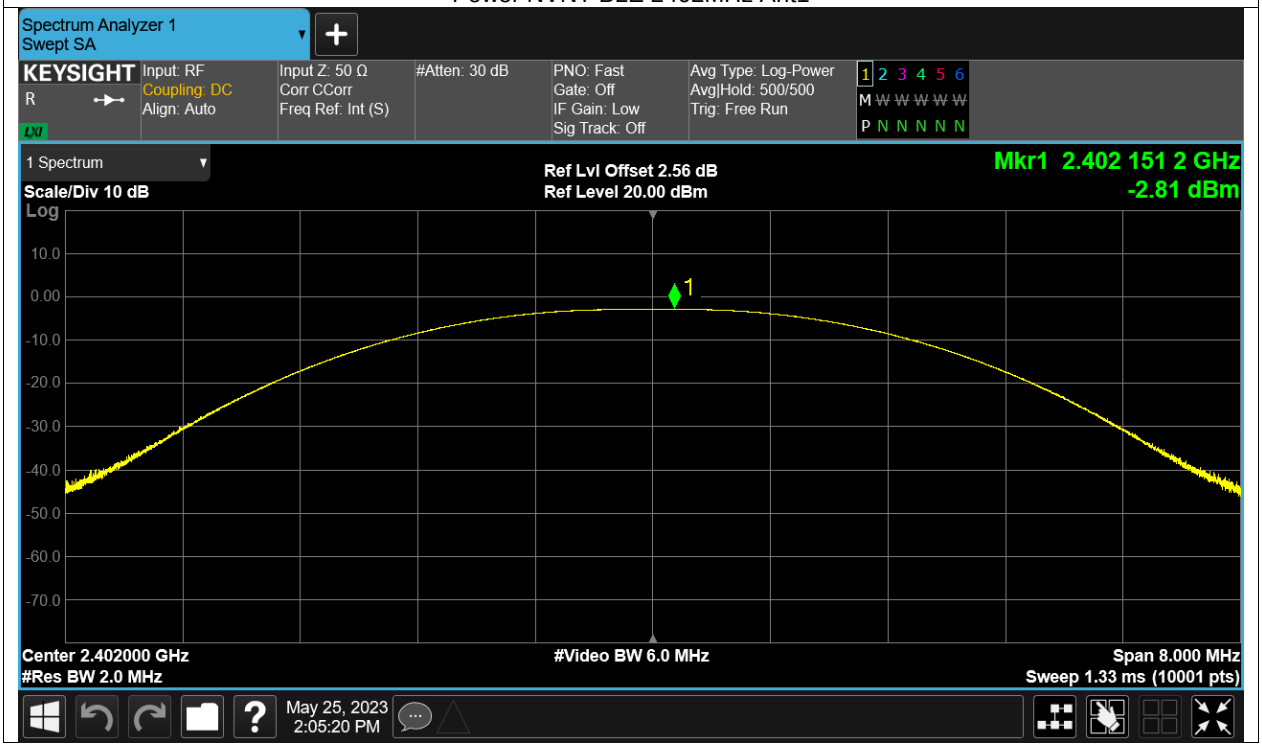
## 5.2 Conducted Output Power

**1M PHY:**

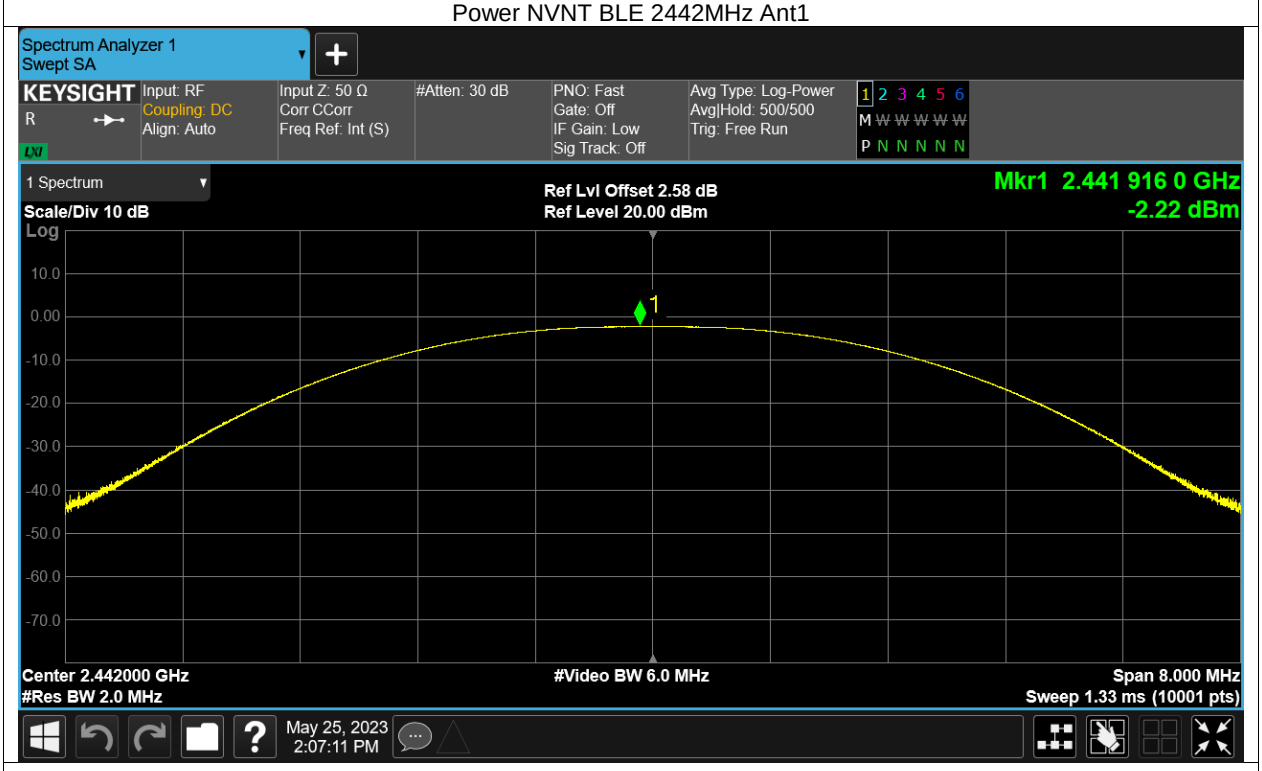
| Condition | Mode | Frequency (MHz) | Antenna | Conducted Power (dBm) | Limit (dBm) | Verdict |
|---|---|---|---|---|---|---|
| NVNT | BLE | 2402 | Ant1 | -2.813 | 30 | Pass |
| NVNT | BLE | 2442 | Ant1 | -2.221 | 30 | Pass |
| NVNT | BLE | 2480 | Ant1 | -3.075 | 30 | Pass |

Test Graphs

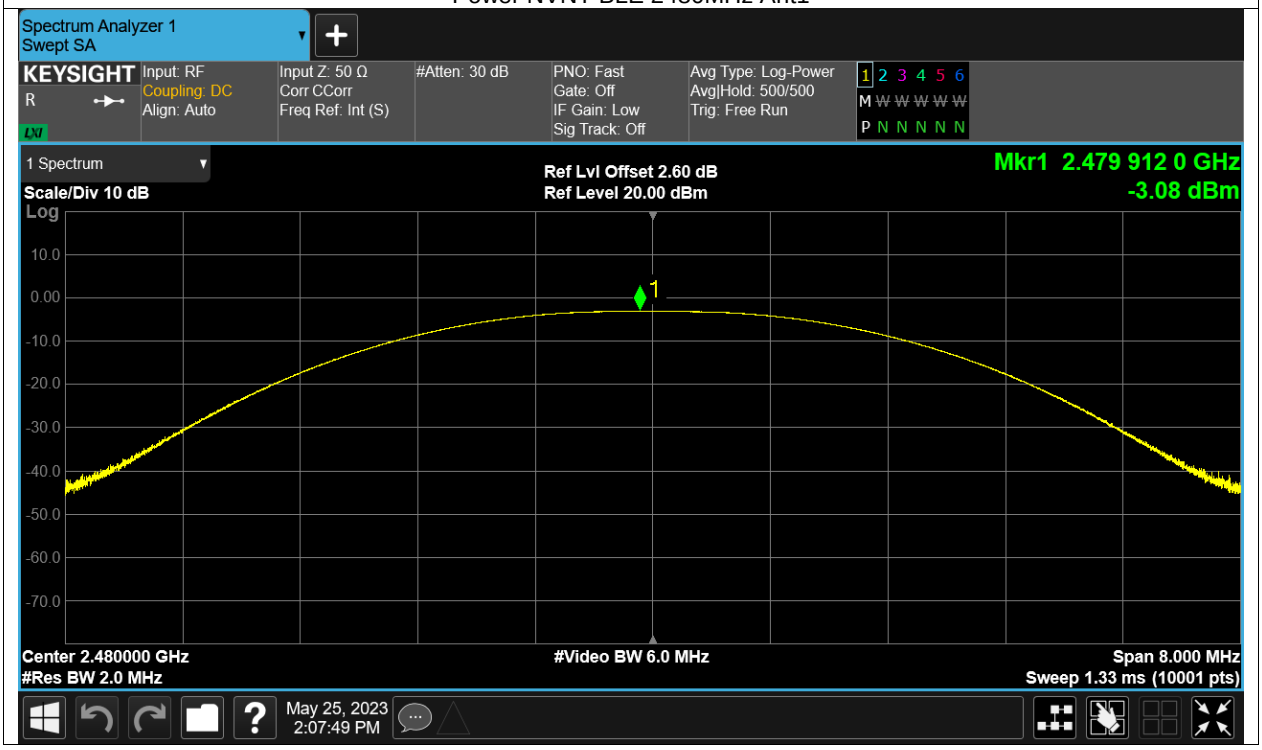
Power NVNT BLE 2402MHz Ant1



Power NVNT BLE 2442MHz Ant1




Power NVNT BLE 2480MHz Ant1

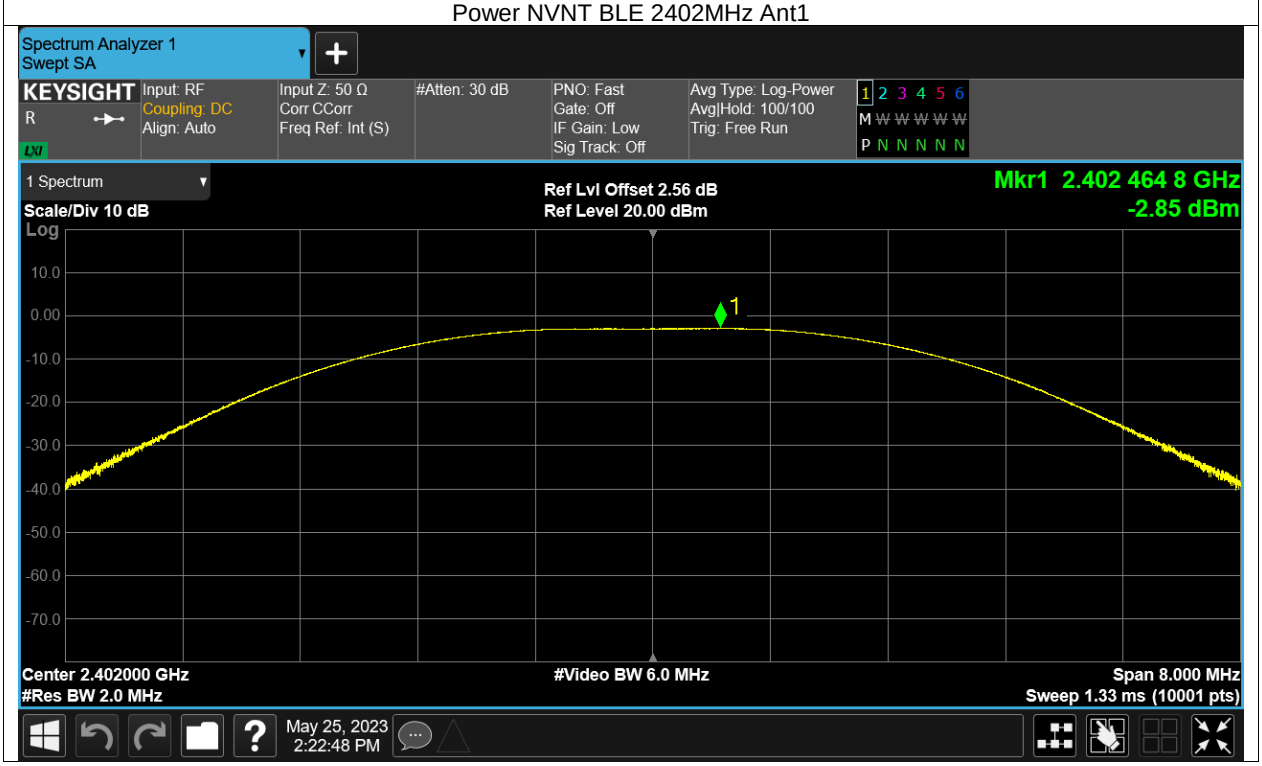


**2M PHY:**

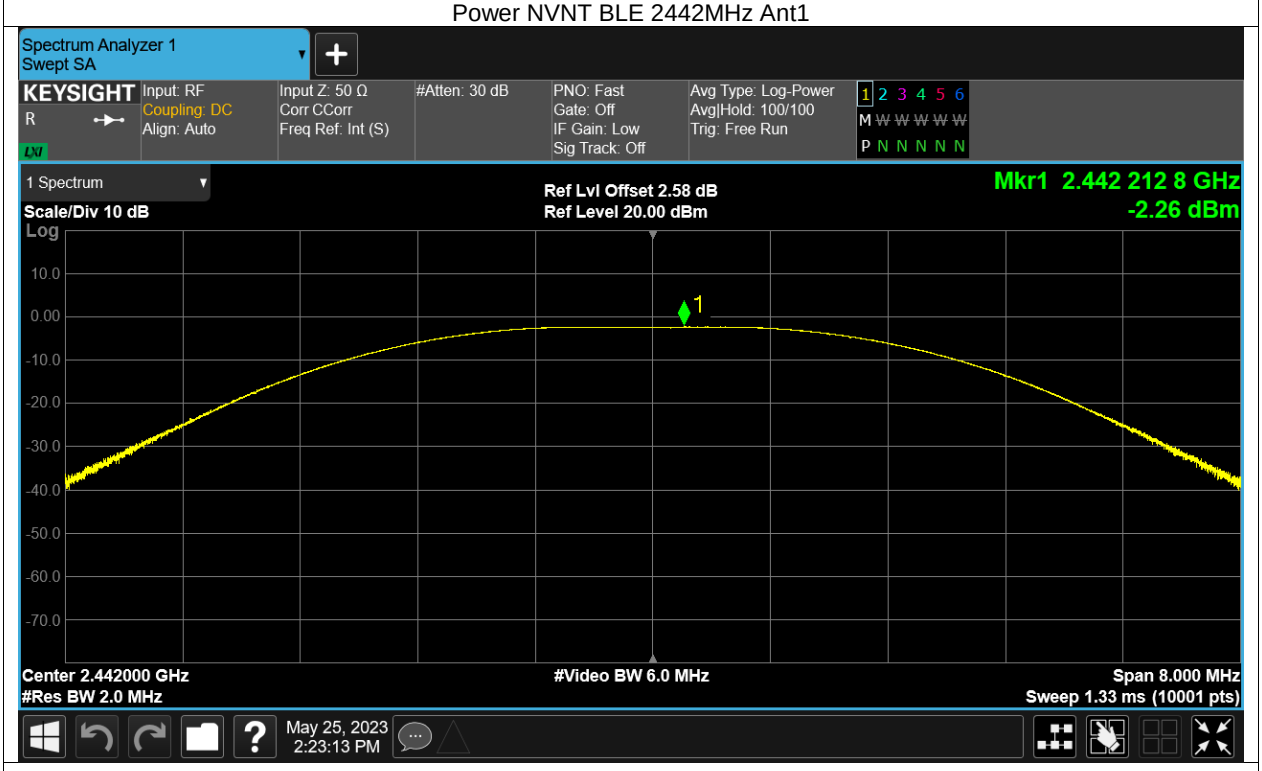
| Condition | Mode | Frequency (MHz) | Antenna | Conducted Power (dBm) | Limit (dBm) | Verdict |
|---|---|---|---|---|---|---|
| NVNT | BLE | 2402 | Ant1 | -2.85 | 30 | Pass |
| NVNT | BLE | 2442 | Ant1 | -2.262 | 30 | Pass |
| NVNT | BLE | 2480 | Ant1 | -3.108 | 30 | Pass |

Test Graphs

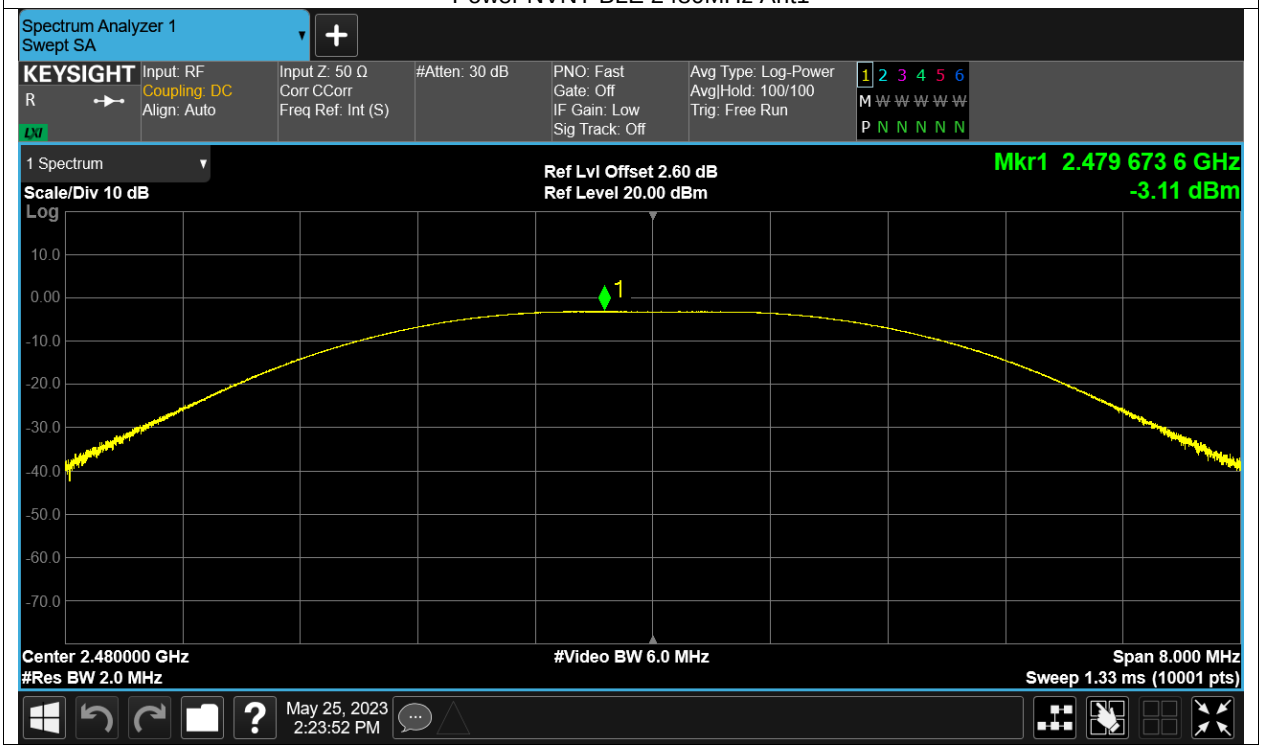
Power NVNT BLE 2402MHz Ant1



Power NVNT BLE 2442MHz Ant1




Power NVNT BLE 2480MHz Ant1

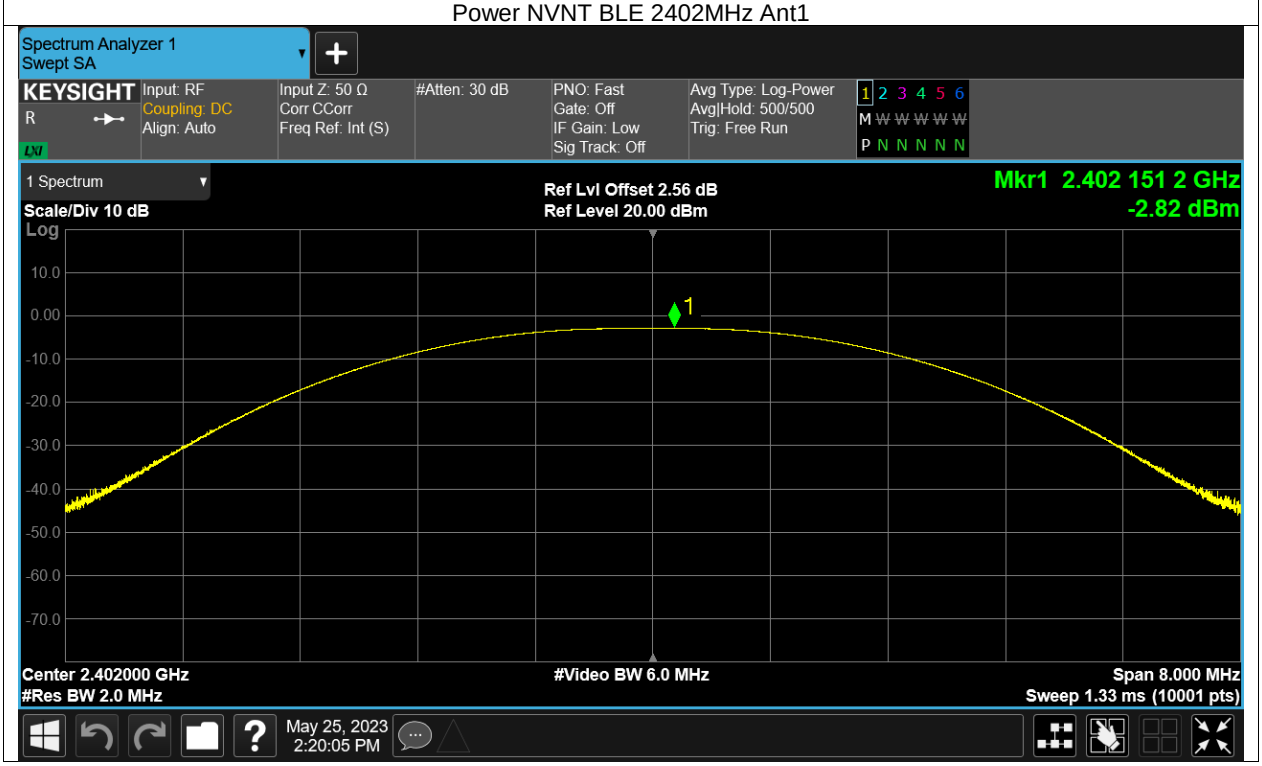


**PHY, S=2:**

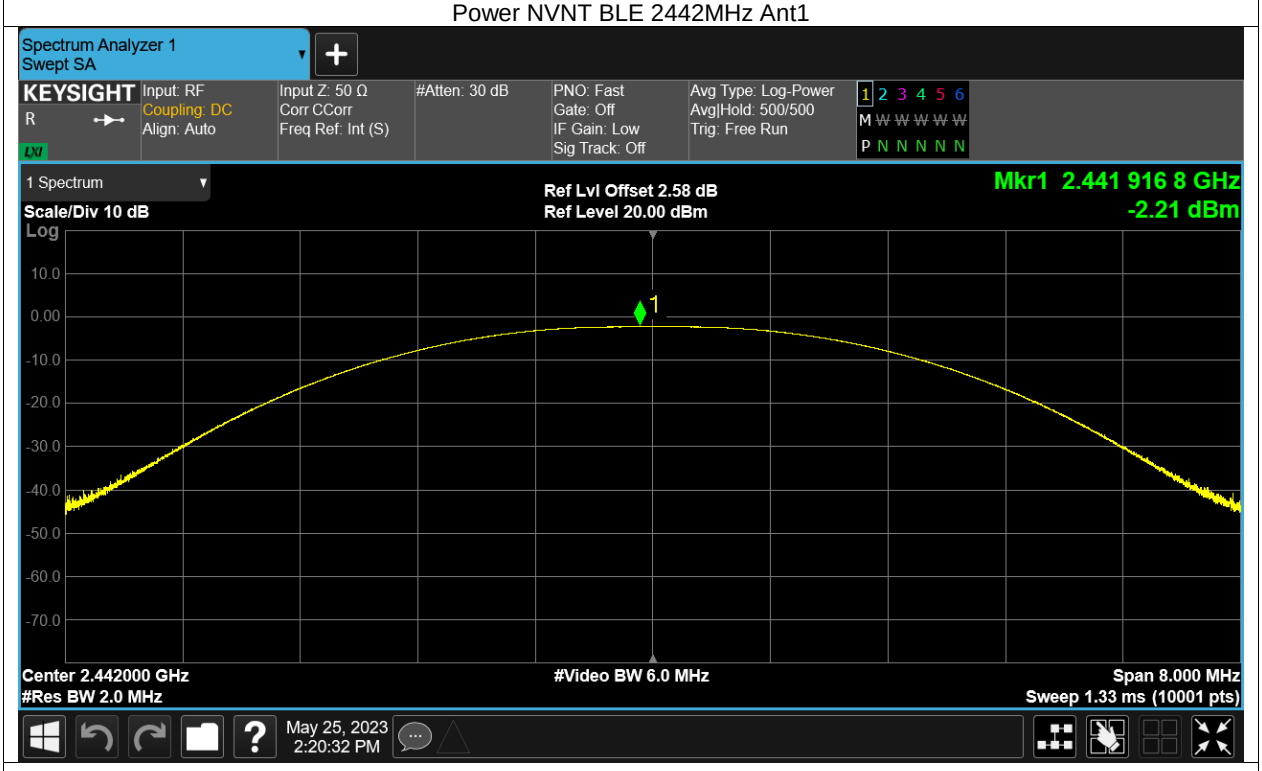
| Condition | Mode | Frequency (MHz) | Antenna | Conducted Power (dBm) | Limit (dBm) | Verdict |
|---|---|---|---|---|---|---|
| NVNT | BLE | 2402 | Ant1 | -2.815 | 30 | Pass |
| NVNT | BLE | 2442 | Ant1 | -2.212 | 30 | Pass |
| NVNT | BLE | 2480 | Ant1 | -3.039 | 30 | Pass |

Test Graphs

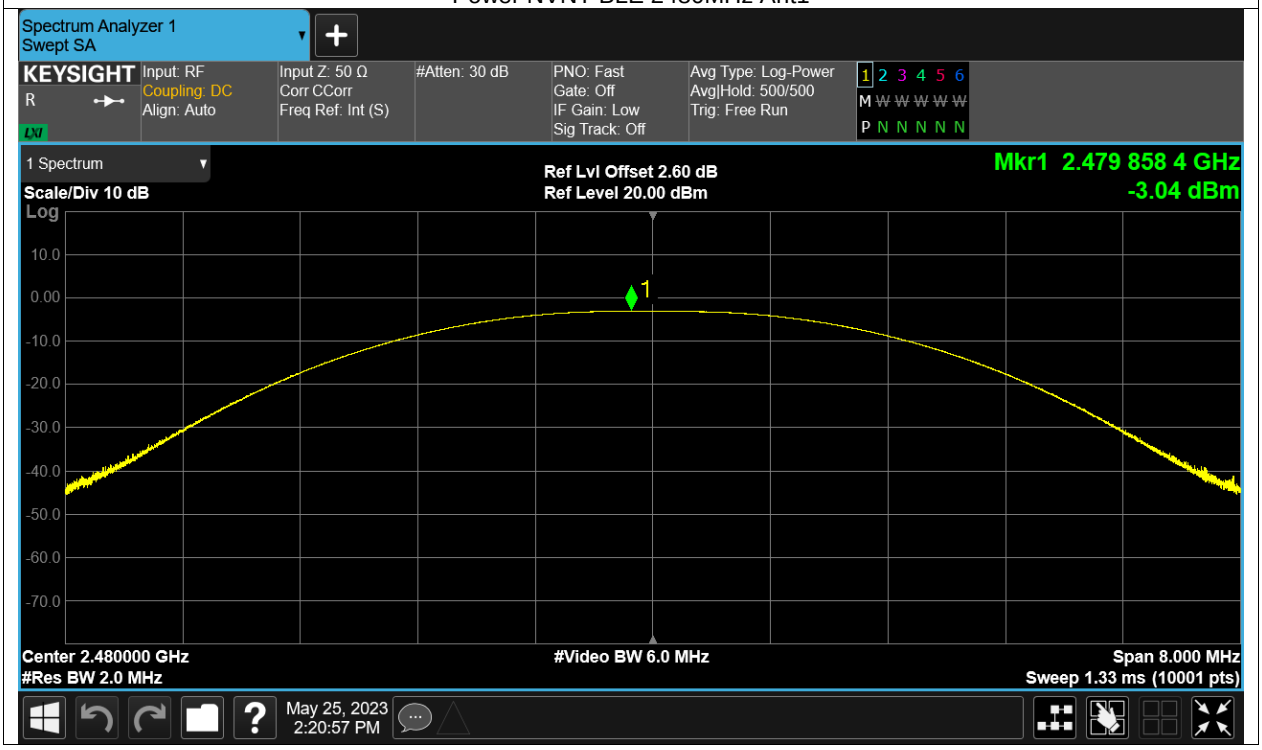
Power NVNT BLE 2402MHz Ant1



Power NVNT BLE 2442MHz Ant1




Power NVNT BLE 2480MHz Ant1

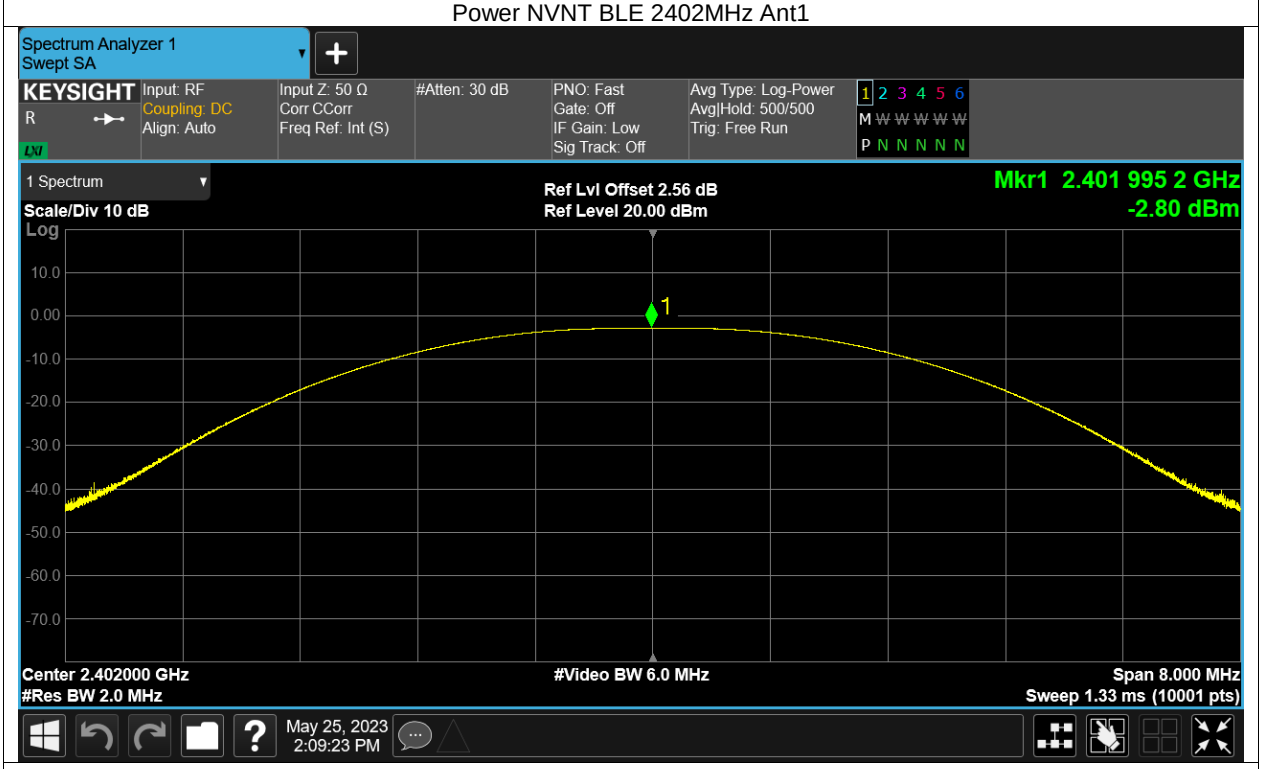


**PHY, S=8:**

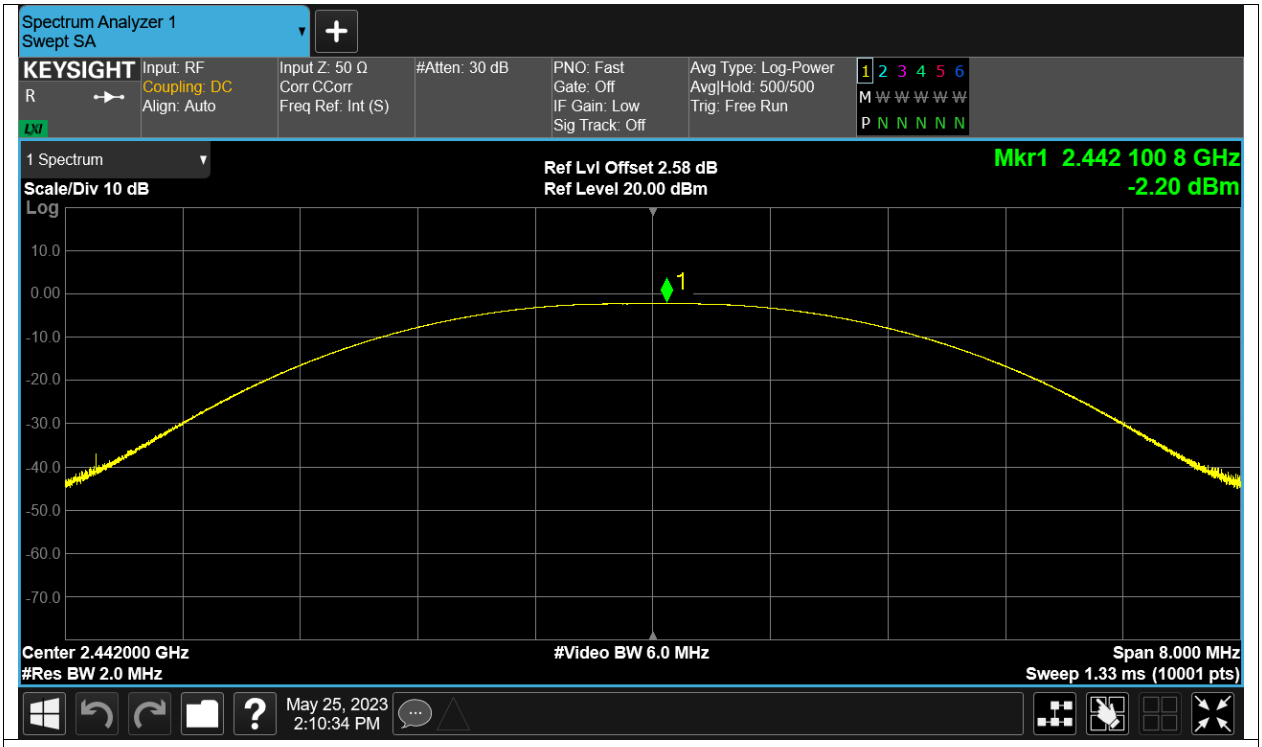
| Condition | Mode | Frequency (MHz) | Antenna | Conducted Power (dBm) | Limit (dBm) | Verdict |
|---|---|---|---|---|---|---|
| NVNT | BLE | 2402 | Ant1 | -2.798 | 30 | Pass |
| NVNT | BLE | 2442 | Ant1 | -2.204 | 30 | Pass |
| NVNT | BLE | 2480 | Ant1 | -3.054 | 30 | Pass |

Test Graphs

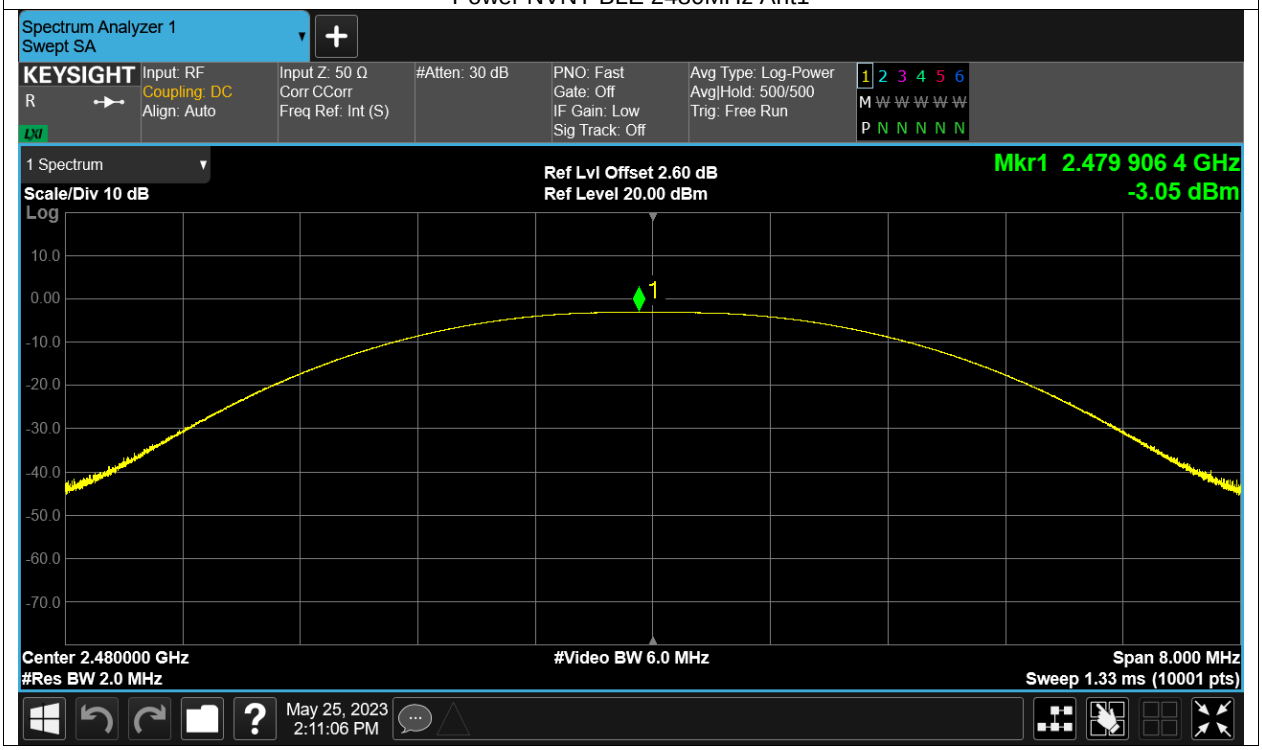
Power NVNT BLE 2402MHz Ant1




Power NVNT BLE 2442MHz Ant1




Power NVNT BLE 2480MHz Ant1



## 5.3 Emissions in Non-restricted Frequency Bands

**Above 1GHz:**

| BLE Tx (LE 1M PHY) | | | | | | |
|---|---|---|---|---|---|---|
| Test channel: Lowest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 4804.00 | 56.15 | -9.08 | 47.07 | 74.00 | 26.93 | Vertical |
| 4804.00 | 57.36 | -9.08 | 48.28 | 74.00 | 25.72 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 4804.00 | 48.42 | -9.08 | 39.34 | 54.00 | 14.66 | Vertical |
| 4804.00 | 48.20 | -9.08 | 39.12 | 54.00 | 14.88 | Horizontal |
| | | | | | | |
| Test channel: Middle channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 4884.00 | 56.33 | -8.59 | 47.74 | 74.00 | 26.26 | Vertical |
| 4884.00 | 57.41 | -8.59 | 48.82 | 74.00 | 25.18 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 4884.00 | 48.73 | -8.59 | 40.14 | 54.00 | 13.86 | Vertical |
| 4884.00 | 48.40 | -8.59 | 39.81 | 54.00 | 14.19 | Horizontal |
| | | | | | | |
| Test channel: Highest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 4960.00 | 56.54 | -8.03 | 48.51 | 74.00 | 25.49 | Vertical |
| 4960.00 | 56.92 | -8.03 | 48.89 | 74.00 | 25.11 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 4960.00 | 48.48 | -8.03 | 40.45 | 54.00 | 13.55 | Vertical |
| 4960.00 | 47.86 | -8.03 | 39.83 | 54.00 | 14.17 | Horizontal |

***Remark:***

1. *Level = Reading + Factor.*
2. *Test Frequency up to 25GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.*

| BLE Tx (LE 2M PHY) | | | | | | |
|---|---|---|---|---|---|---|
| Test channel: Lowest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 4804.00 | 56.32 | -9.08 | 47.24 | 74.00 | 26.76 | Vertical |
| 4804.00 | 56.91 | -9.08 | 47.83 | 74.00 | 26.17 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 4804.00 | 48.10 | -9.08 | 39.02 | 54.00 | 14.98 | Vertical |
| 4804.00 | 47.71 | -9.08 | 38.63 | 54.00 | 15.37 | Horizontal |
| | | | | | | |
| Test channel: Middle channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 4884.00 | 56.51 | -8.59 | 47.92 | 74.00 | 26.08 | Vertical |
| 4884.00 | 57.73 | -8.59 | 49.14 | 74.00 | 24.86 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 4884.00 | 48.18 | -8.59 | 39.59 | 54.00 | 14.41 | Vertical |
| 4884.00 | 48.36 | -8.59 | 39.77 | 54.00 | 14.23 | Horizontal |
| | | | | | | |
| Test channel: Highest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 4960.00 | 56.12 | -8.03 | 48.09 | 74.00 | 25.91 | Vertical |
| 4960.00 | 57.49 | -8.03 | 49.46 | 74.00 | 24.54 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 4960.00 | 47.92 | -8.03 | 39.89 | 54.00 | 14.11 | Vertical |
| 4960.00 | 47.81 | -8.03 | 39.78 | 54.00 | 14.22 | Horizontal |

***Remark:***

*1. Level = Reading + Factor.*

2. *Test Frequency up to 25GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.*

| BEL Tx (LE Coded PHY, S=2) | | | | | | |
|---|---|---|---|---|---|---|
| Test channel: Lowest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 4804.00 | 55.93 | -9.08 | 46.85 | 74.00 | 27.15 | Vertical |
| 4804.00 | 57.55 | -9.08 | 48.47 | 74.00 | 25.53 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 4804.00 | 48.66 | -9.08 | 39.58 | 54.00 | 14.42 | Vertical |
| 4804.00 | 47.90 | -9.08 | 38.82 | 54.00 | 15.18 | Horizontal |
| | | | | | | |
| Test channel: Middle channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 4884.00 | 55.93 | -8.59 | 47.34 | 74.00 | 26.66 | Vertical |
| 4884.00 | 57.01 | -8.59 | 48.42 | 74.00 | 25.58 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 4884.00 | 48.55 | -8.59 | 39.96 | 54.00 | 14.04 | Vertical |
| 4884.00 | 48.33 | -8.59 | 39.74 | 54.00 | 14.26 | Horizontal |
| | | | | | | |
| Test channel: Highest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 4960.00 | 56.05 | -8.03 | 48.02 | 74.00 | 25.98 | Vertical |
| 4960.00 | 57.01 | -8.03 | 48.98 | 74.00 | 25.02 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 4960.00 | 48.30 | -8.03 | 40.27 | 54.00 | 13.73 | Vertical |
| 4960.00 | 47.97 | -8.03 | 39.94 | 54.00 | 14.06 | Horizontal |

***Remark:***

*1. Level = Reading + Factor.*

2. *Test Frequency up to 25GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.*

| BEL Tx (LE Coded PHY, S=8) | | | | | | |
|---|---|---|---|---|---|---|
| Test channel: Lowest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 4804.00 | 55.90 | -9.08 | 46.82 | 74.00 | 27.18 | Vertical |
| 4804.00 | 57.48 | -9.08 | 48.40 | 74.00 | 25.60 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 4804.00 | 48.54 | -9.08 | 39.46 | 54.00 | 14.54 | Vertical |
| 4804.00 | 48.17 | -9.08 | 39.09 | 54.00 | 14.91 | Horizontal |
| | | | | | | |
| Test channel: Middle channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 4884.00 | 56.21 | -8.59 | 47.62 | 74.00 | 26.38 | Vertical |
| 4884.00 | 57.67 | -8.59 | 49.08 | 74.00 | 24.92 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 4884.00 | 48.66 | -8.59 | 40.07 | 54.00 | 13.93 | Vertical |
| 4884.00 | 47.85 | -8.59 | 39.26 | 54.00 | 14.74 | Horizontal |
| | | | | | | |
| Test channel: Highest channel | | | | | | |
| Detector: Peak Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 4960.00 | 56.01 | -8.03 | 47.98 | 74.00 | 26.02 | Vertical |
| 4960.00 | 56.94 | -8.03 | 48.91 | 74.00 | 25.09 | Horizontal |
| Detector: Average Value | | | | | | |
| Frequency (MHz) | Read Level (dBμV) | Factor (dB) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Polarization |
| 4960.00 | 48.24 | -8.03 | 40.21 | 54.00 | 13.79 | Vertical |
| 4960.00 | 48.56 | -8.03 | 40.53 | 54.00 | 13.47 | Horizontal |

***Remark:***

*1. Level = Reading + Factor.*

2. *Test Frequency up to 25GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.*

------End of report------