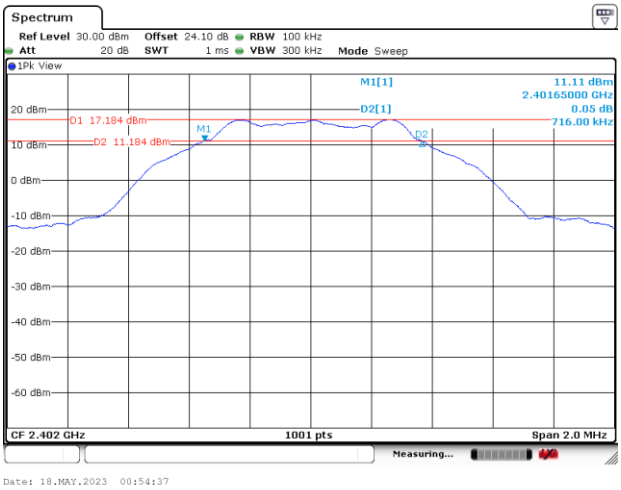
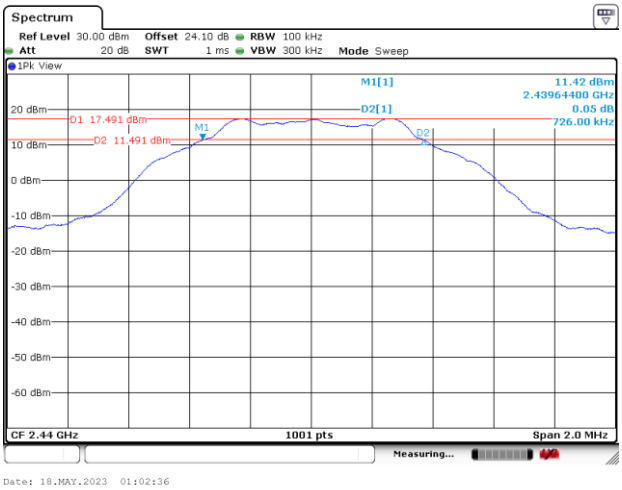
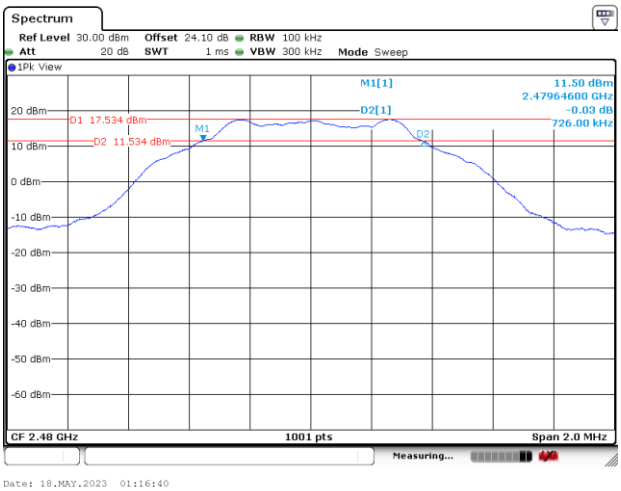
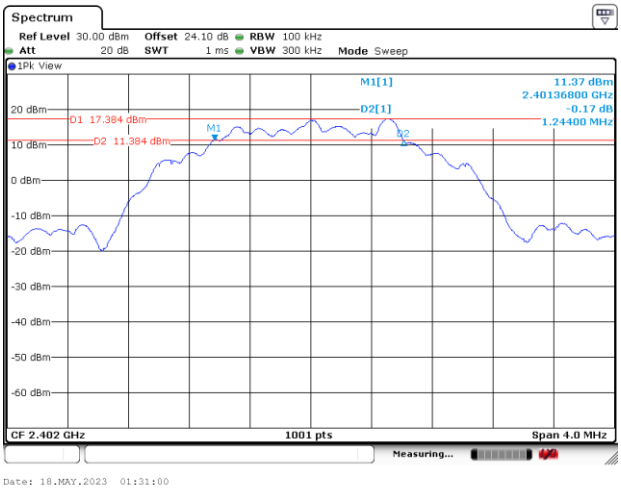
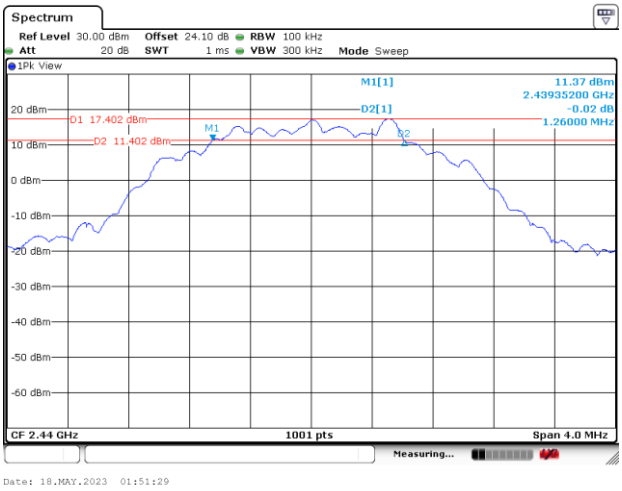
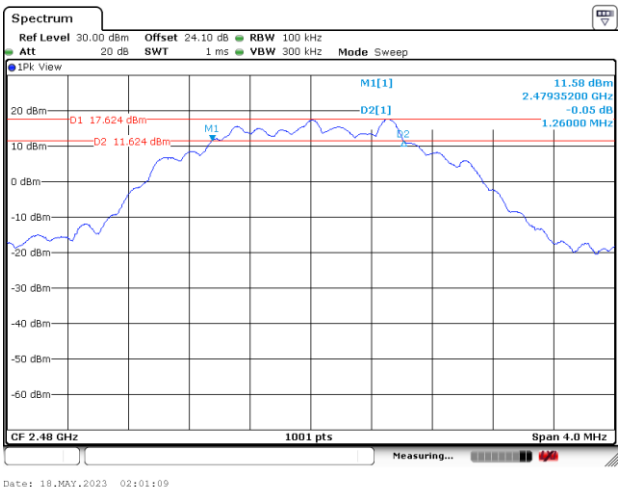
**MIMO <Ant. 3+4(4)>**

# 6dB Bandwidth

**<1Mbps>**

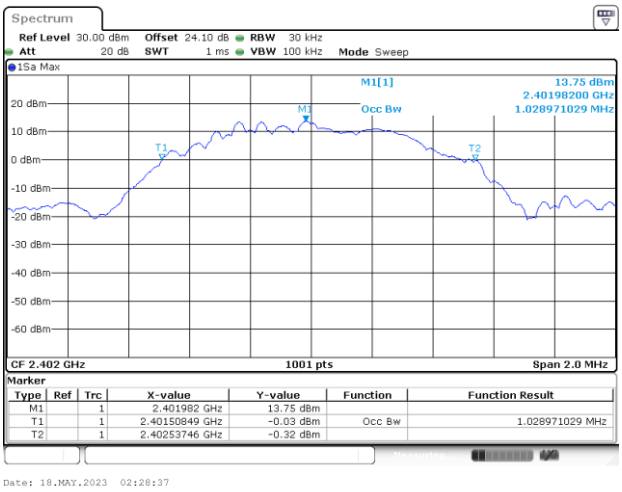
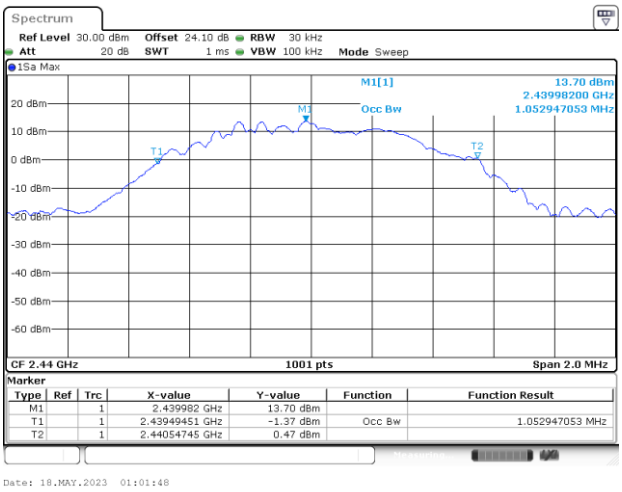
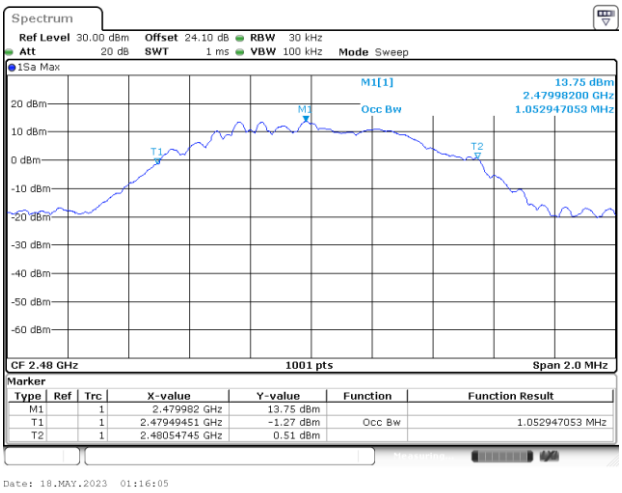
| 6 dB Bandwidth Plot on Channel 00 | 6 dB Bandwidth Plot on Channel 19 |
|---|---|
|  |  |
| **6 dB Bandwidth Plot on Channel 39** | |
|  | |

**<2Mbps>**

| 6 dB Bandwidth Plot on Channel 00 | 6 dB Bandwidth Plot on Channel 19 |
|---|---|
|  |  |
| **6 dB Bandwidth Plot on Channel 39** | |
|  | |

# 99% Occupied Bandwidth

**<1Mbps>**

| 99% Occupied Bandwidth Plot on Channel 00 | 99% Occupied Plot Bandwidth on Channel 19 |
|---|---|
|  |  |
| **99% Occupied Bandwidth Plot on Channel 39** | |
|  | |

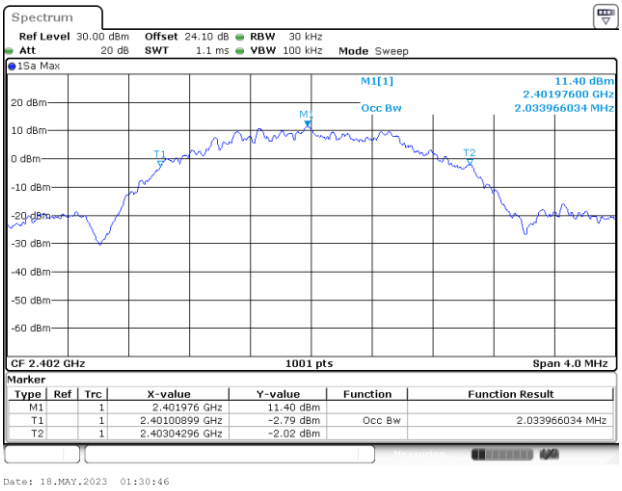
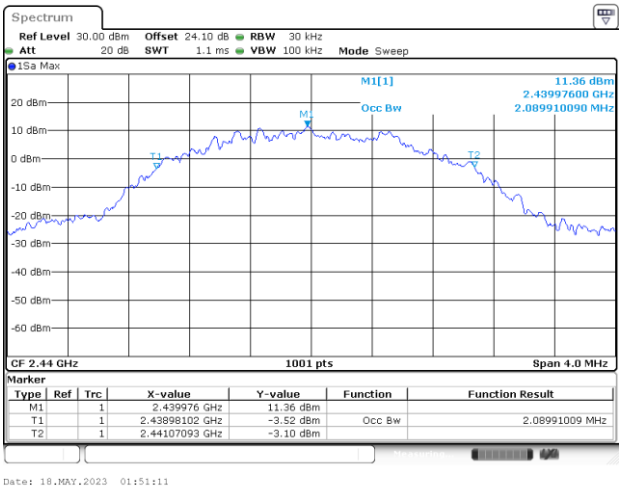
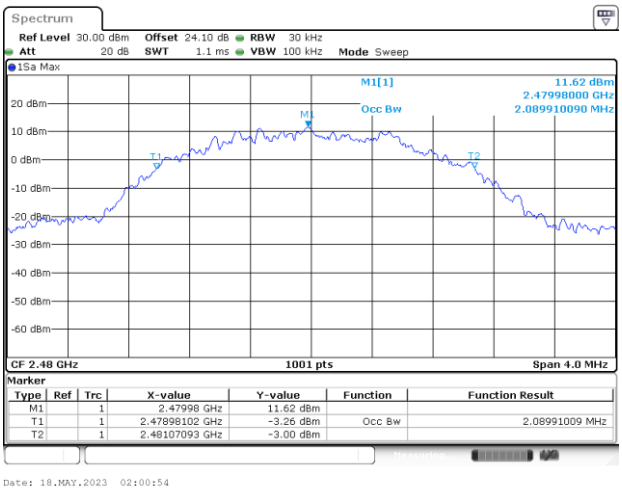






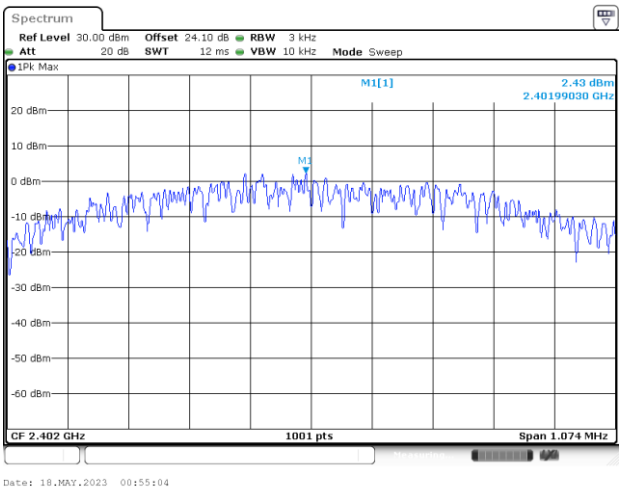
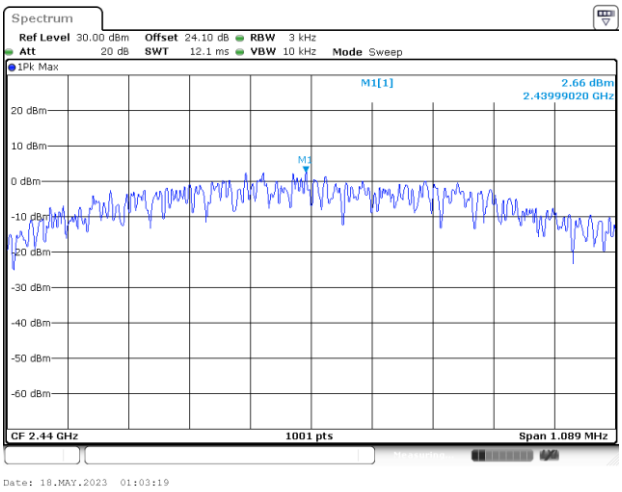
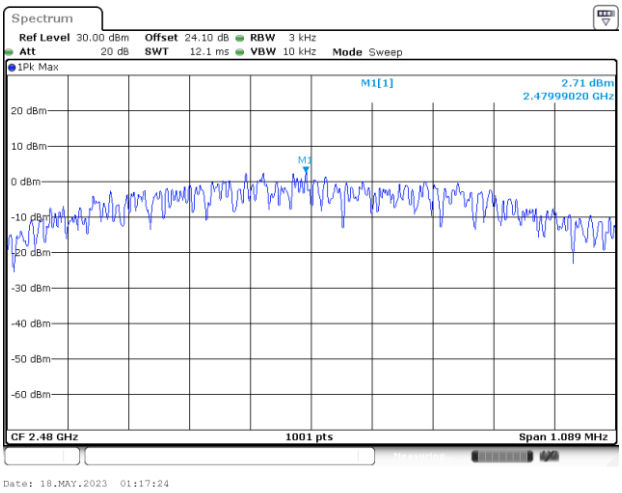
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

**<2Mbps>**

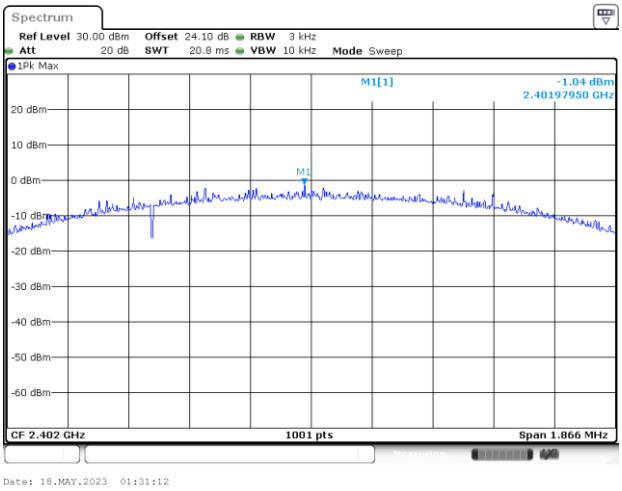
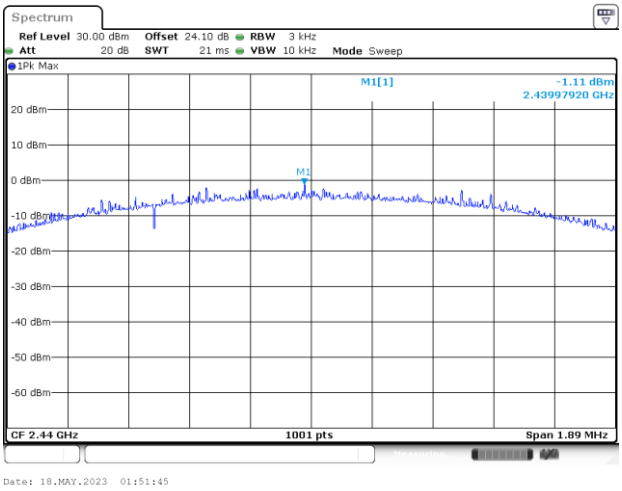
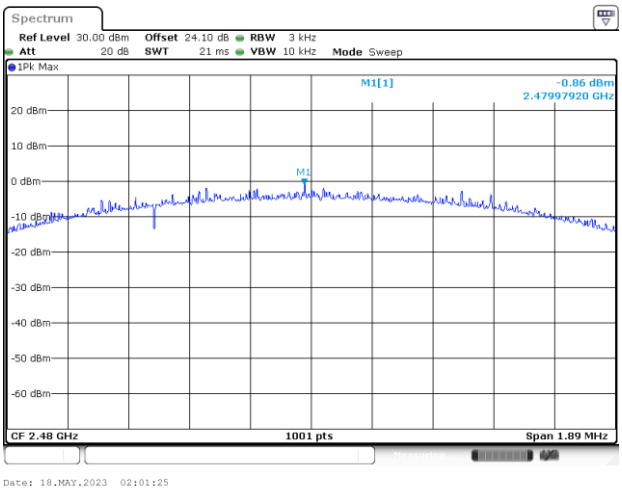
| 99% Occupied Bandwidth Plot on Channel 00 | 99% Occupied Plot Bandwidth on Channel 19 |
|---|---|
|  |  |
| **99% Occupied Bandwidth Plot on Channel 39** | |
|  | |

# Power Spectral Density (dBm/3kHz)

**<1Mbps>**

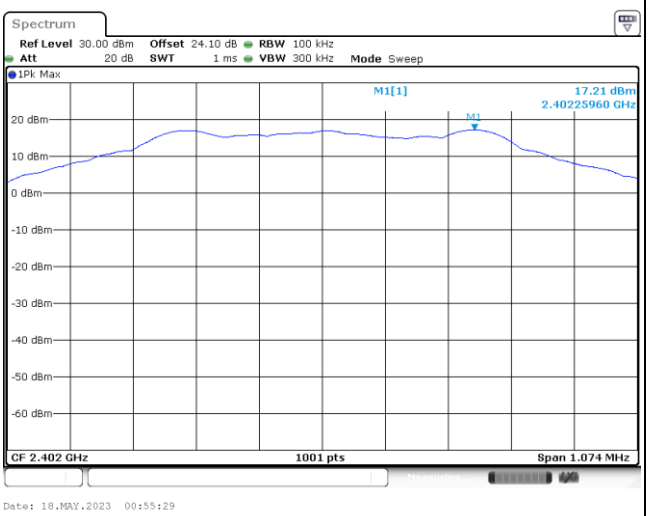
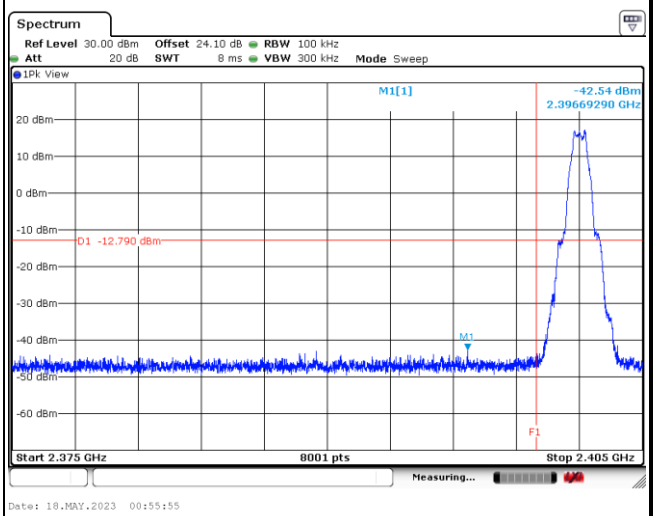
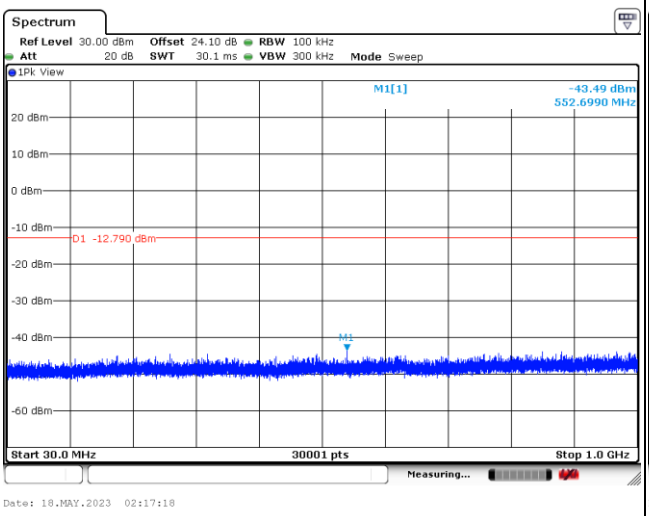
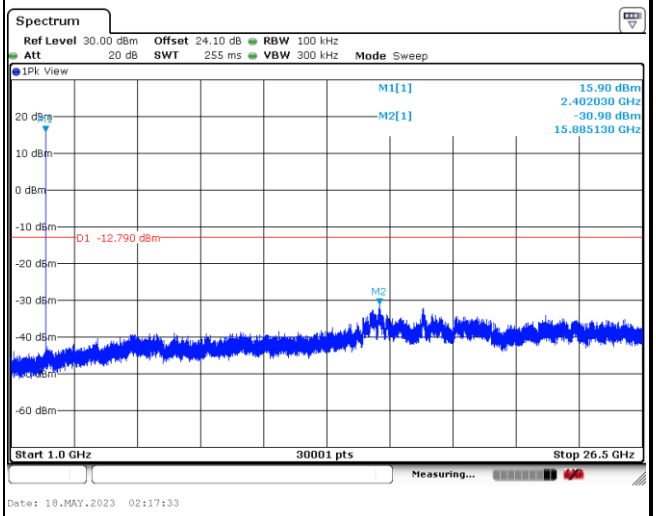
| Power Density (dBm/3kHz) Plot Channel 00 | Power Density (dBm/3kHz) Plot Channel 19 |
|---|---|
|  |  |
| **Power Density (dBm/3kHz Plot Channel 39** | |
|  | |

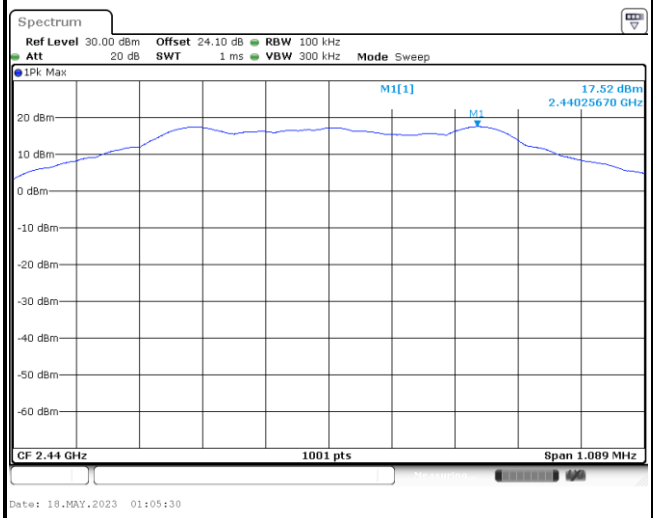
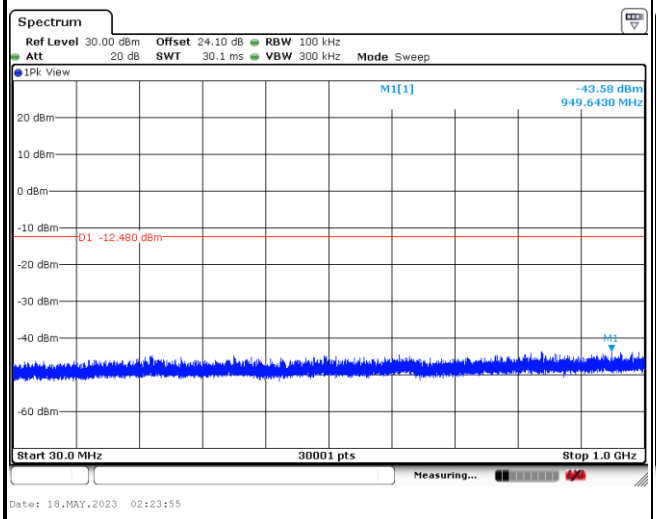
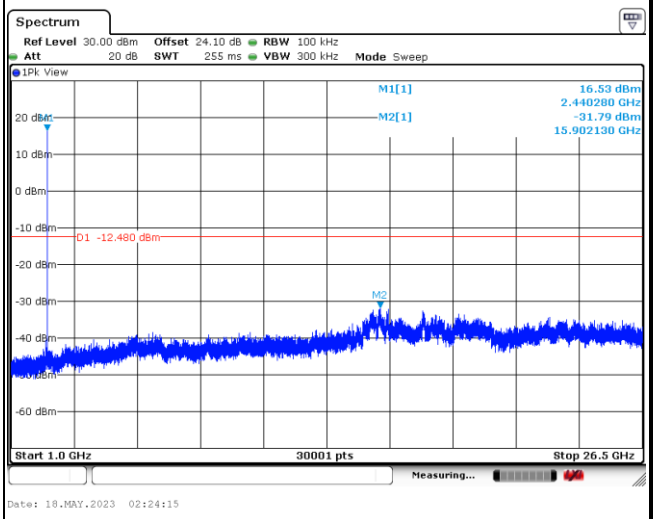
**<2Mbps>**

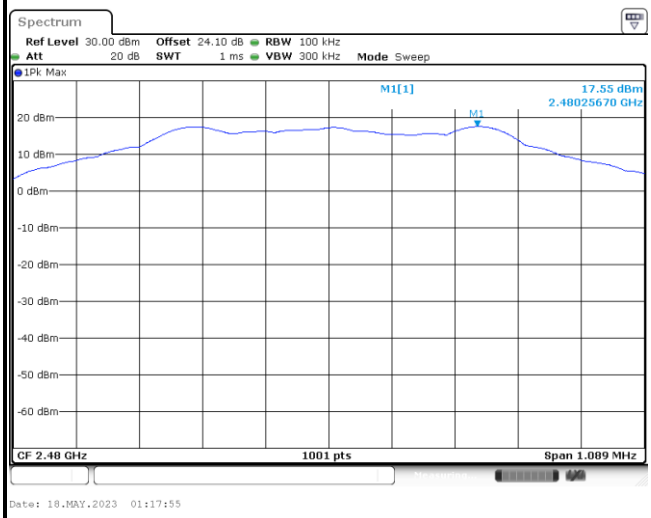
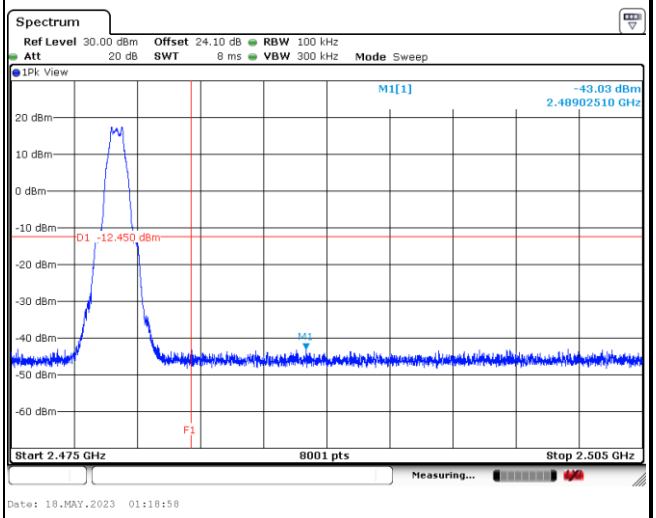
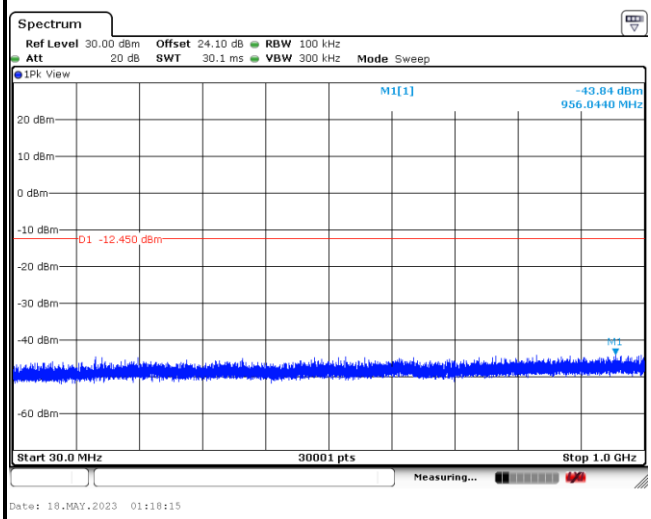
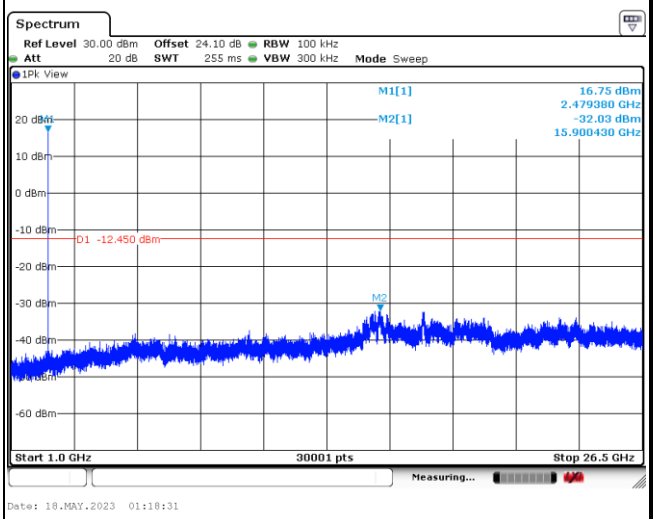
| Power Density (dBm/3kHz) Plot Channel 00 | Power Density (dBm/3kHz) Plot Channel 19 |
|---|---|
|  |  |
| **Power Density (dBm/3kHz Plot Channel 39** | |
|  | |

# Band Edge and Conducted Spurious Emission

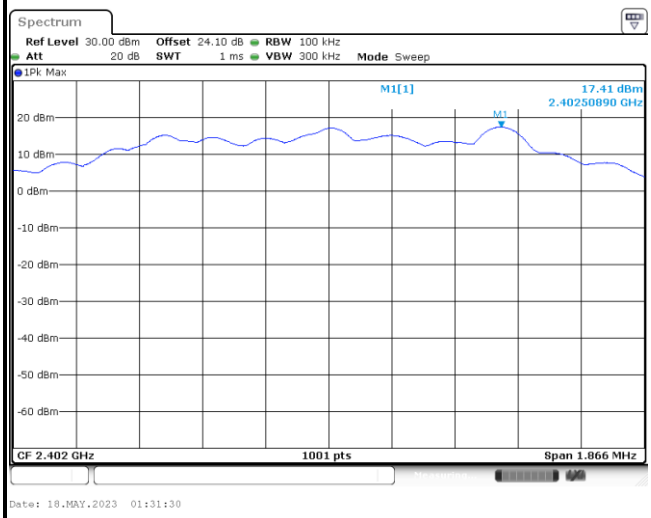
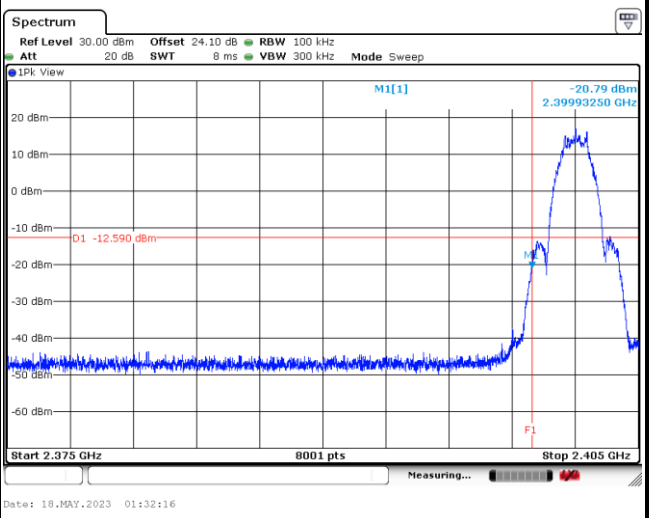
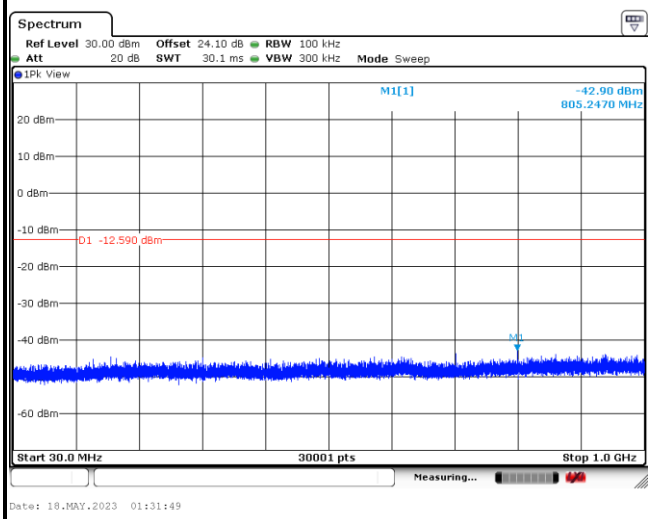
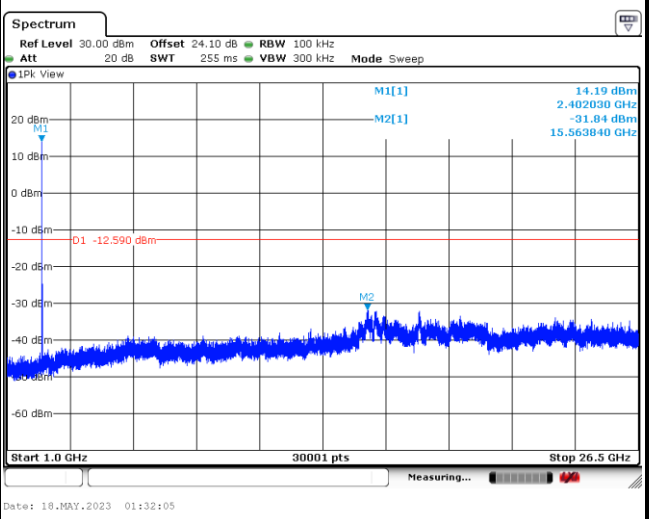
**<1Mbps>**

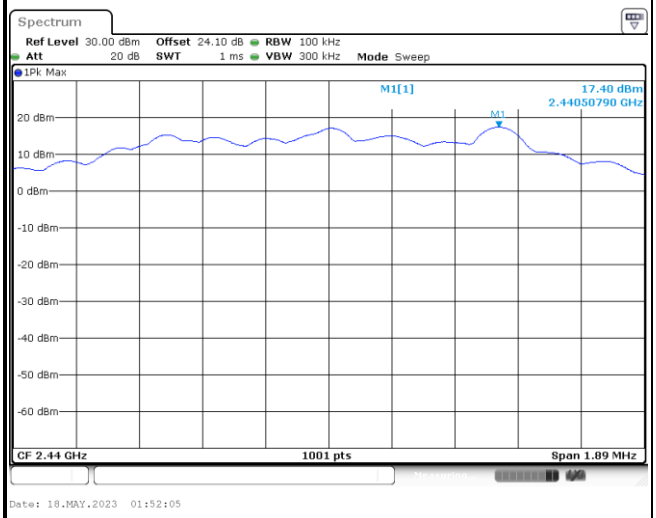
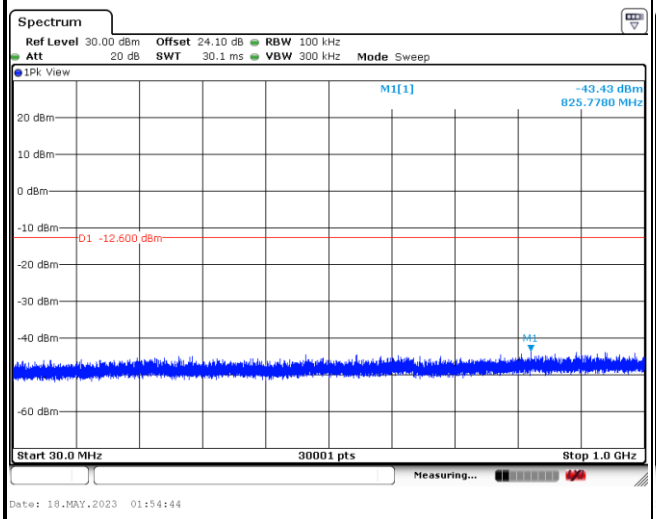
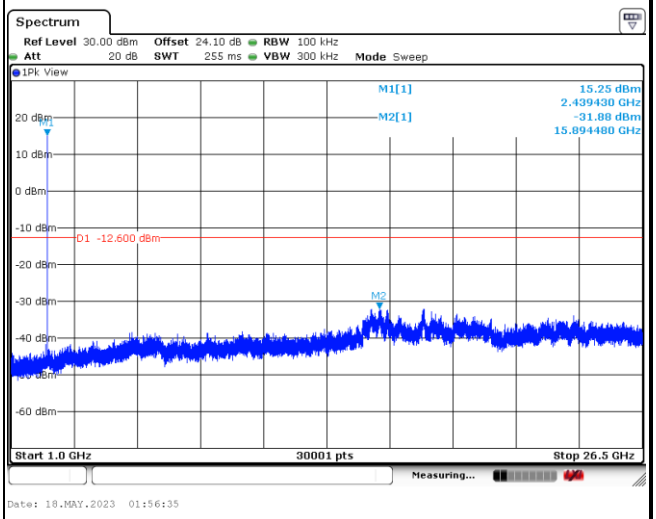
| Channel 00 | |
|---|---|
| **100kHz PSD reference Level Plot** | **Low Channel Plot** |
|  |  |
| **Spurious Emission 30MHz~1GHz Plot** | **Spurious Emission 1GHz~26.5GHz Plot** |
|  |  |

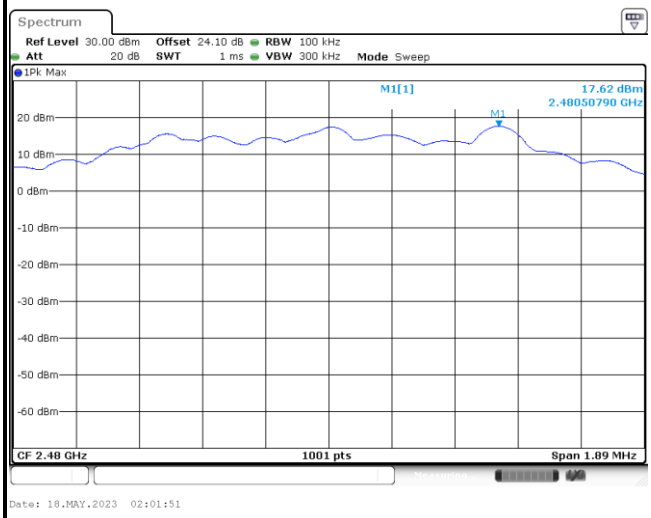
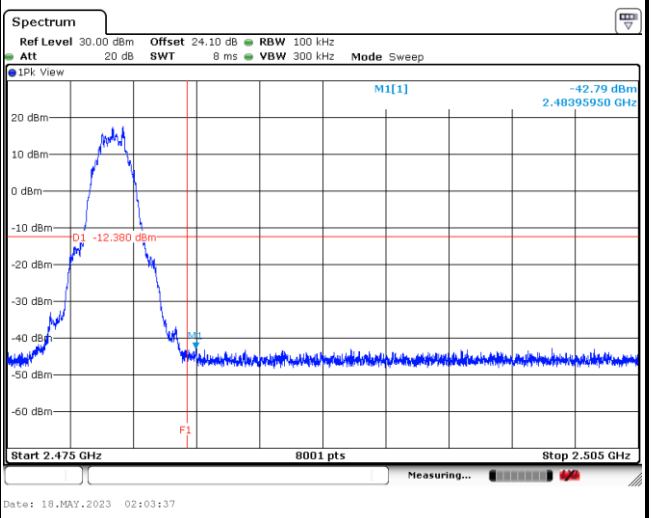
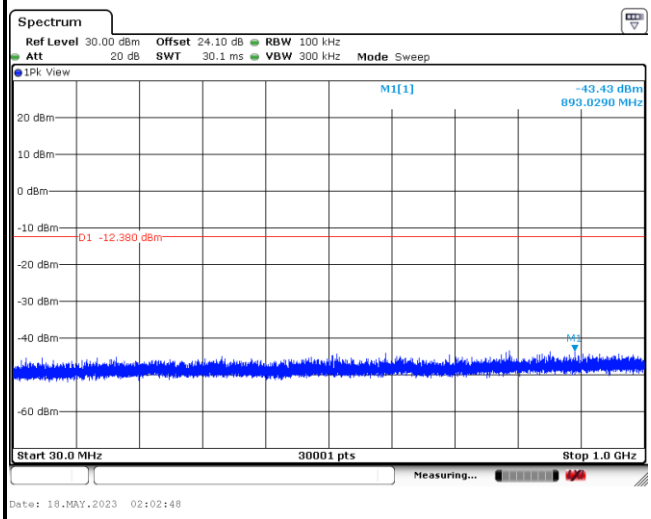
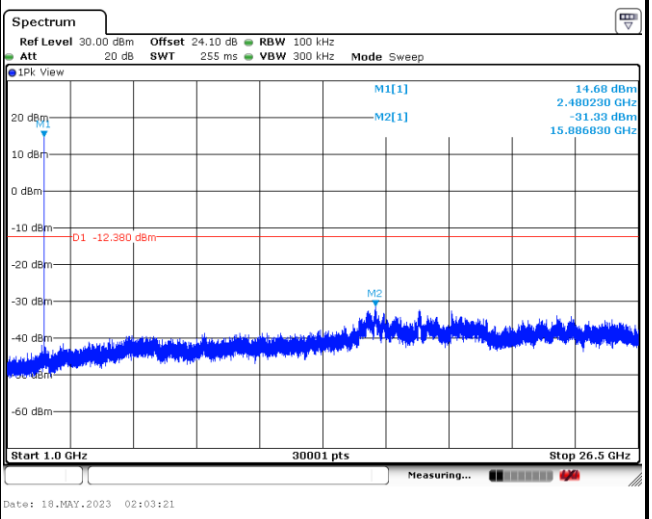
| Channel 19 | |
|---|---|
| **100kHz PSD reference Level Plot** | **Low Channel Plot** |
|  | |
| **Spurious Emission 30MHz~1GHz Plot** | **Spurious Emission 1GHz~26.5GHz Plot** |
|  |  |

| Channel 39 | |
|---|---|
| **100kHz PSD reference Level Plot** | **Low Channel Plot** |
|  |  |
| **Spurious Emission 30MHz~1GHz Plot** | **Spurious Emission 1GHz~26.5GHz Plot** |
|  |  |

**<2Mbps>**

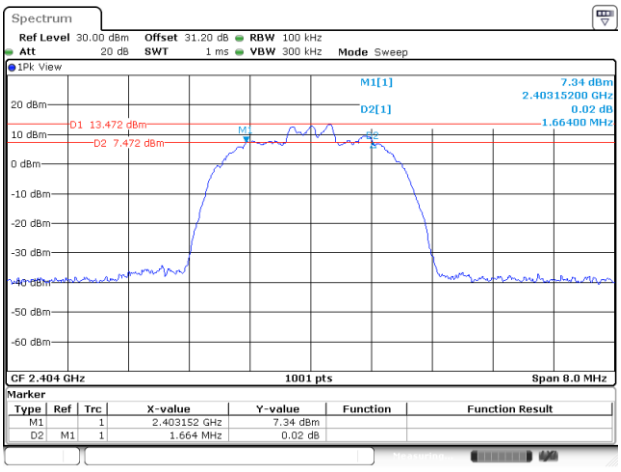
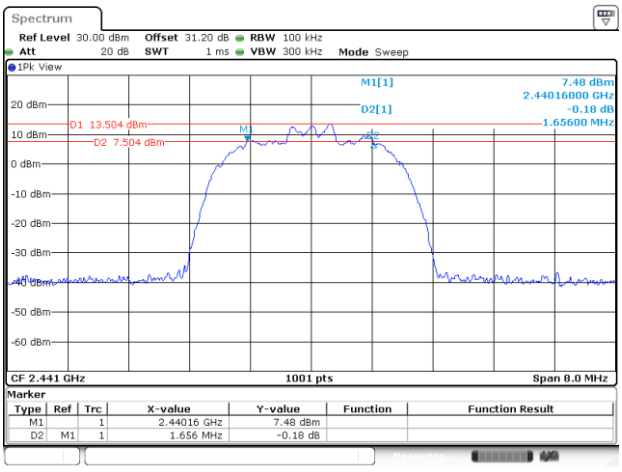
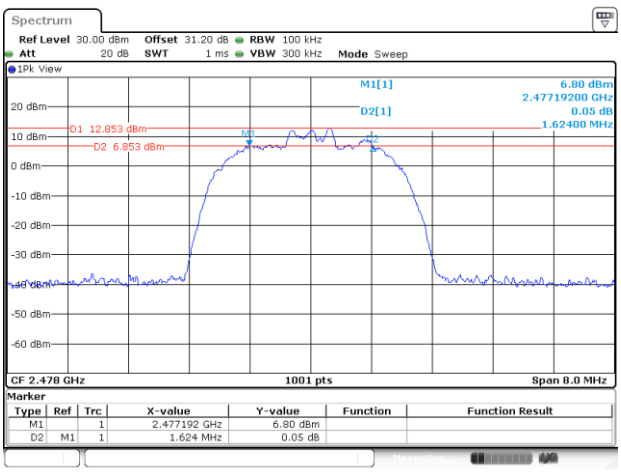
| Channel 00 | |
|---|---|
| **100kHz PSD reference Level Plot** | **Low Channel Plot** |
|  |  |
| **Spurious Emission 30MHz~1GHz Plot** | **Spurious Emission 1GHz~26.5GHz Plot** |
|  |  |

| Channel 19 | |
|---|---|
| **100kHz PSD reference Level Plot** | **Low Channel Plot** |
|  | |
| **Spurious Emission 30MHz~1GHz Plot** | **Spurious Emission 1GHz~26.5GHz Plot** |
|  |  |

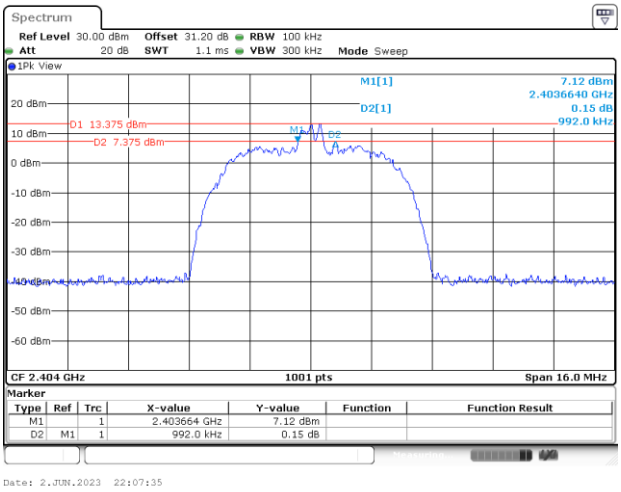
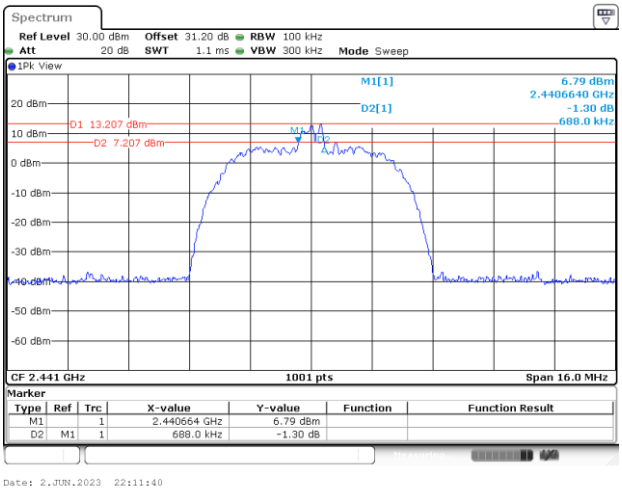
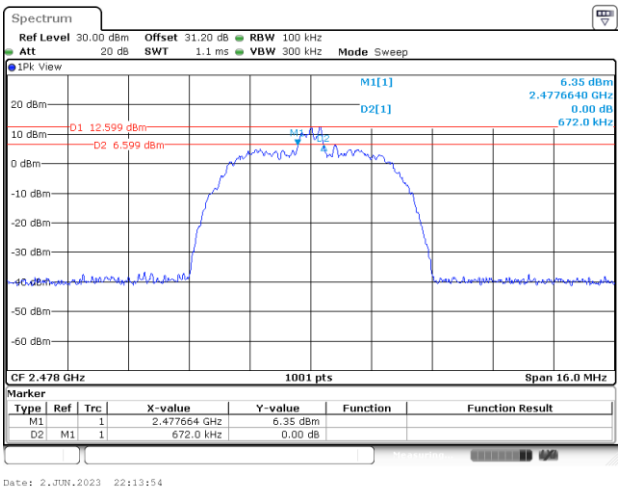
| Channel 39 | |
|---|---|
| **100kHz PSD reference Level Plot** | **Low Channel Plot** |
|  |  |
| **Spurious Emission 30MHz~1GHz Plot** | **Spurious Emission 1GHz~26.5GHz Plot** |
|  |  |

# 6dB Bandwidth

**<4Mbps>**

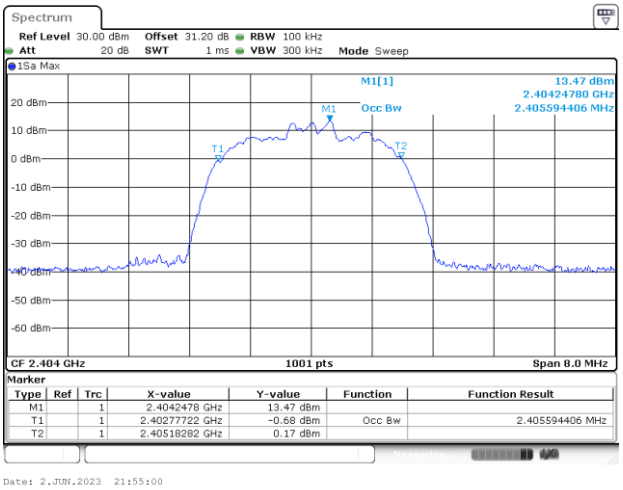
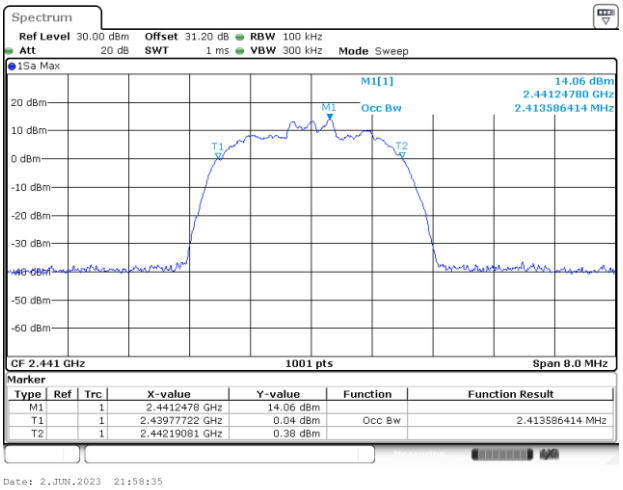
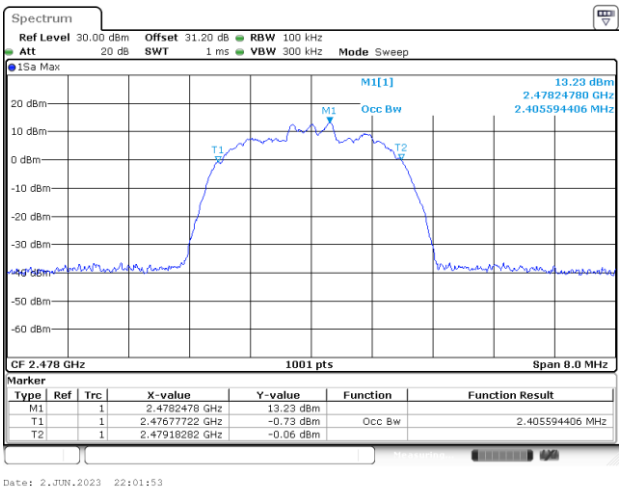
| 6 dB Bandwidth Plot on Channel 02 | 6 dB Bandwidth Plot on Channel 39 |
|---|---|
|  |  |
| **6 dB Bandwidth Plot on Channel 76** | |
|  | |

**<8Mbps>**

| 6 dB Bandwidth Plot on Channel 02 | 6 dB Bandwidth Plot on Channel 39 |
|---|---|
|  |  |
| **6 dB Bandwidth Plot on Channel 76** | |
|  | |

# 99% Occupied Bandwidth

**<4Mbps>**

| 99% Occupied Bandwidth Plot on Channel 02 | 99% Occupied Plot Bandwidth on Channel 39 |
|---|---|
|  |  |
| **99% Occupied Bandwidth Plot on Channel 76** | |
|  | |

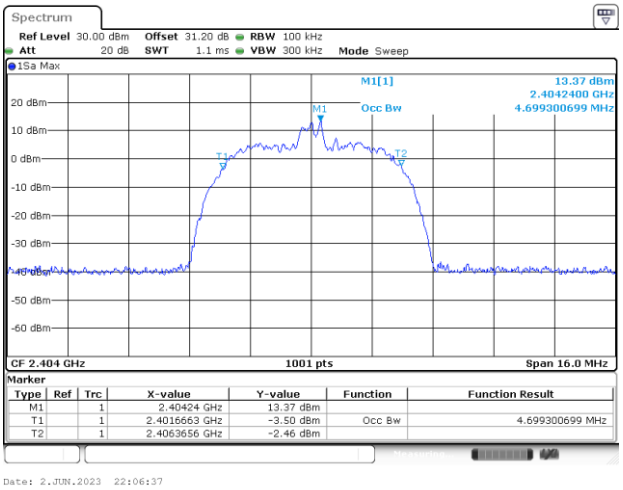
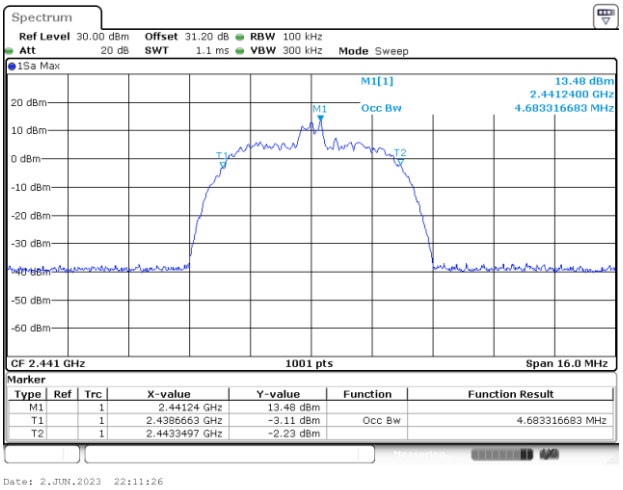
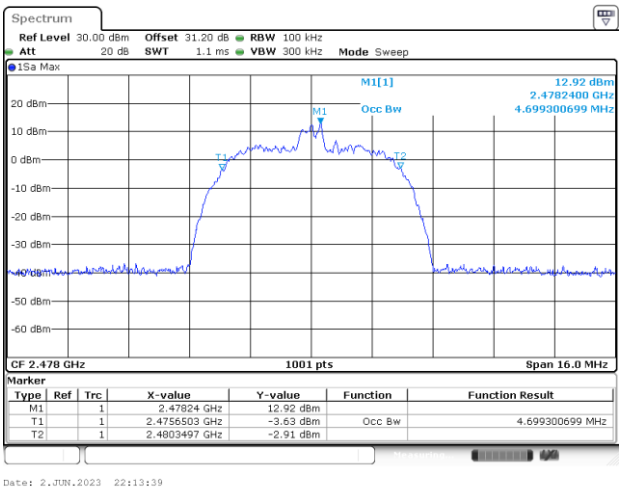






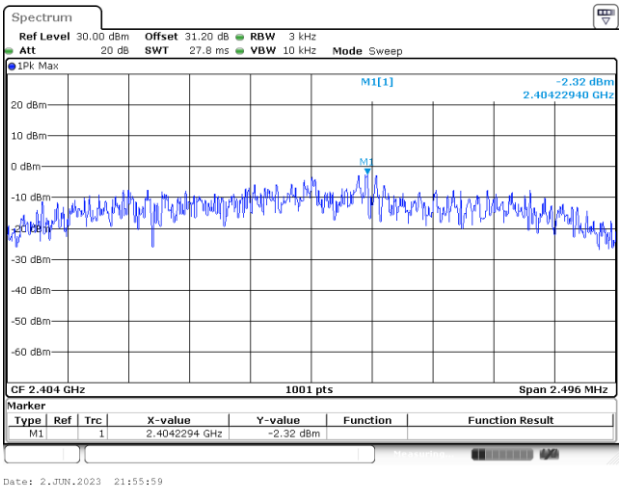
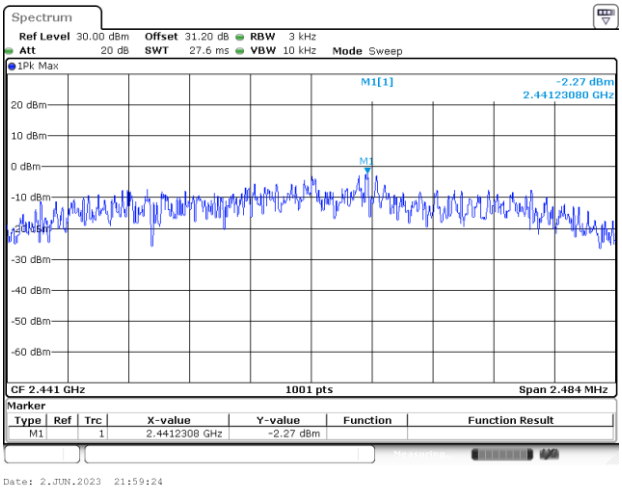
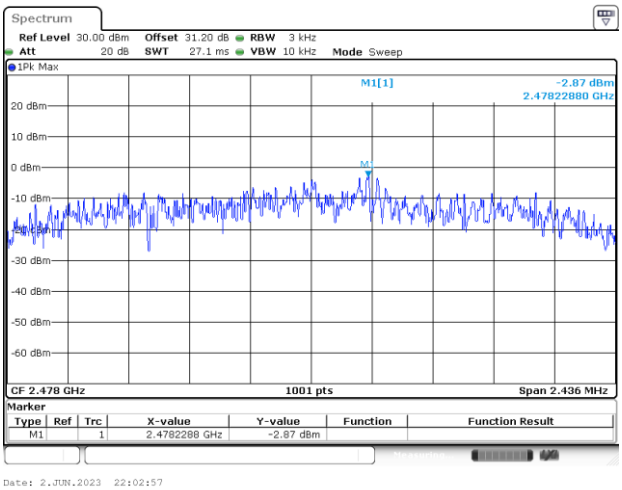
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

**<8Mbps>**

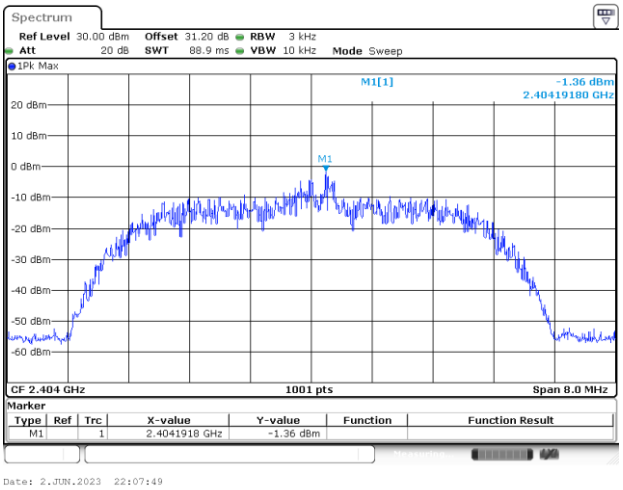
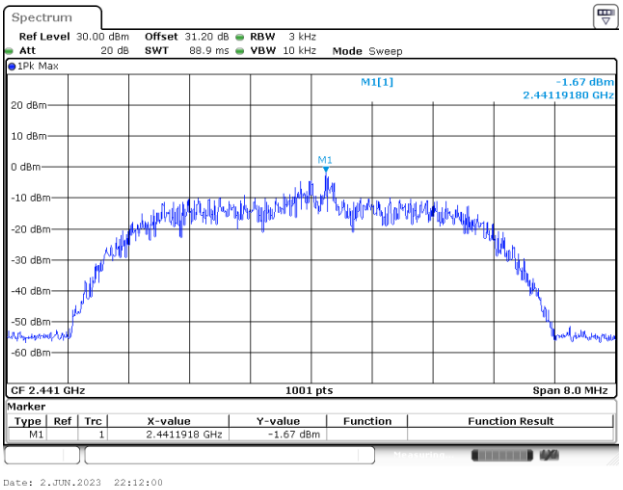
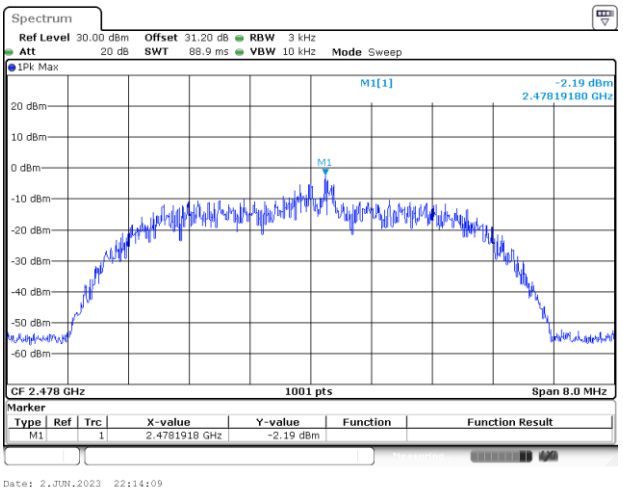
| 99% Occupied Bandwidth Plot on Channel 02 | 99% Occupied Plot Bandwidth on Channel 39 |
|---|---|
|  |  |
| **99% Occupied Bandwidth Plot on Channel 76** | |
|  | |

# Power Spectral Density (dBm/3kHz)

**<4Mbps>**

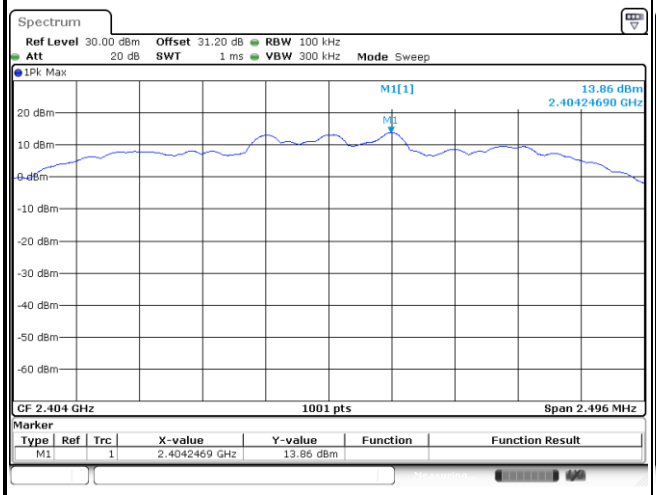
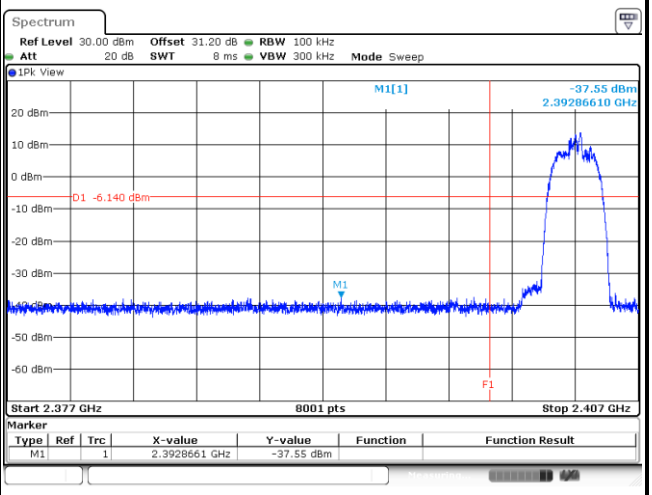
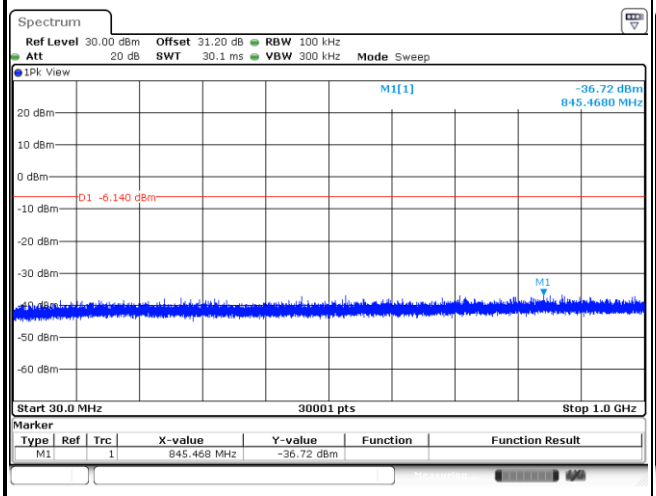
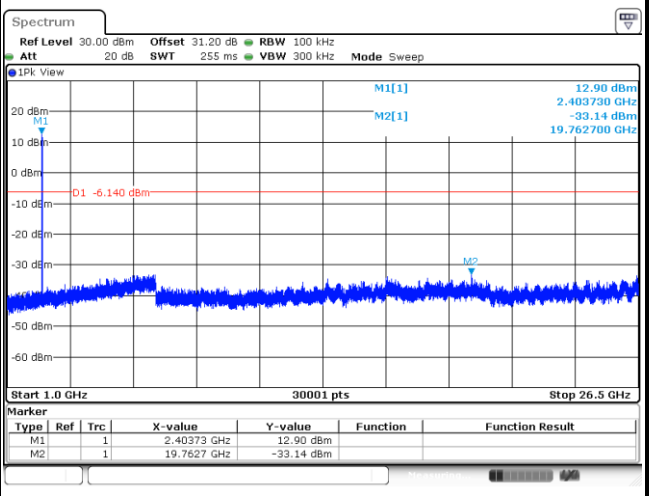
| Power Density (dBm/3kHz) Plot Channel 02 | Power Density (dBm/3kHz) Plot Channel 39 |
|---|---|
|  |  |
| **Power Density (dBm/3kHz Plot Channel 76** | |
|  | |

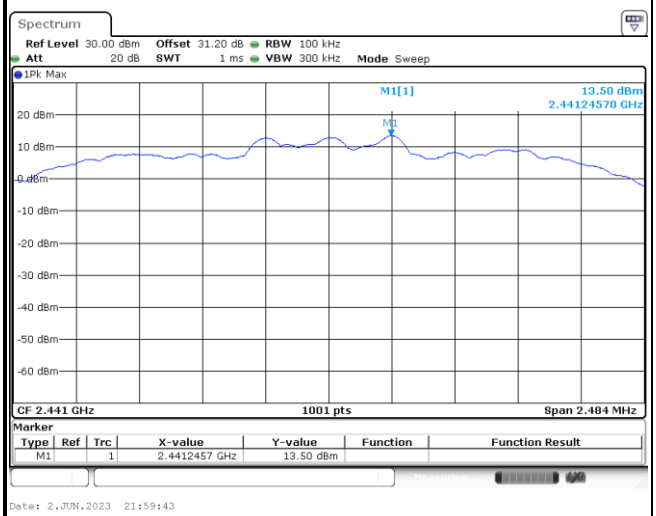
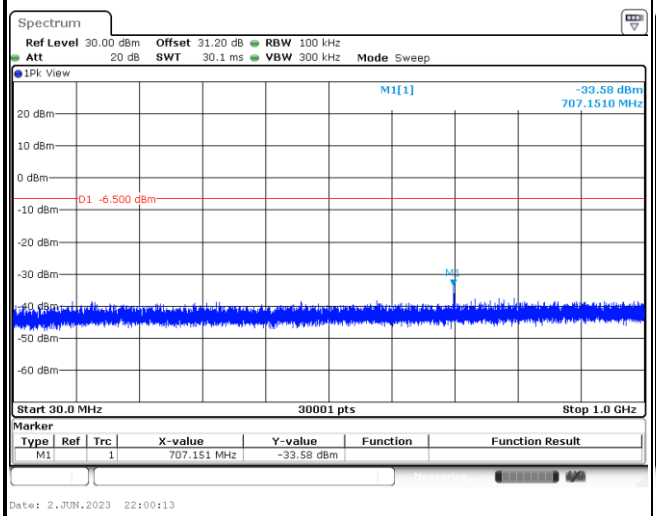
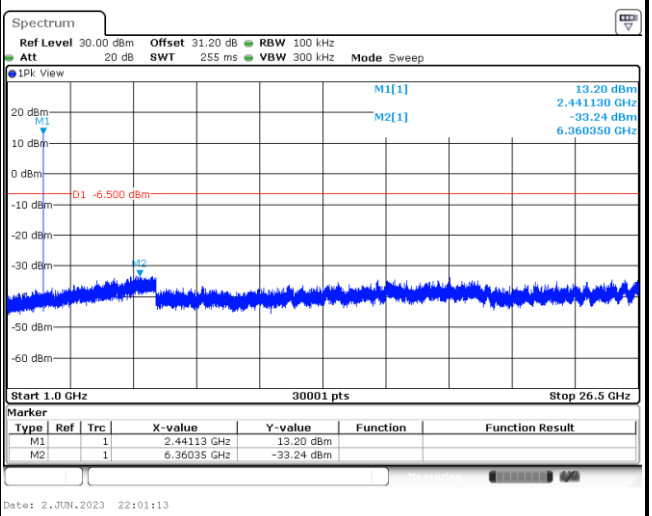
**<8Mbps>**

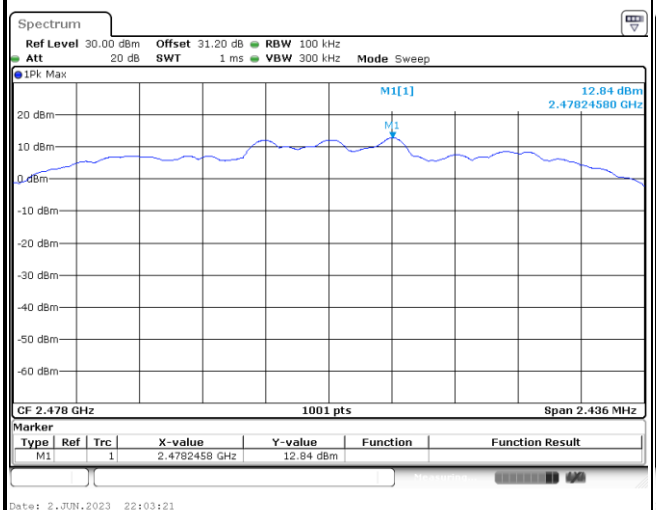
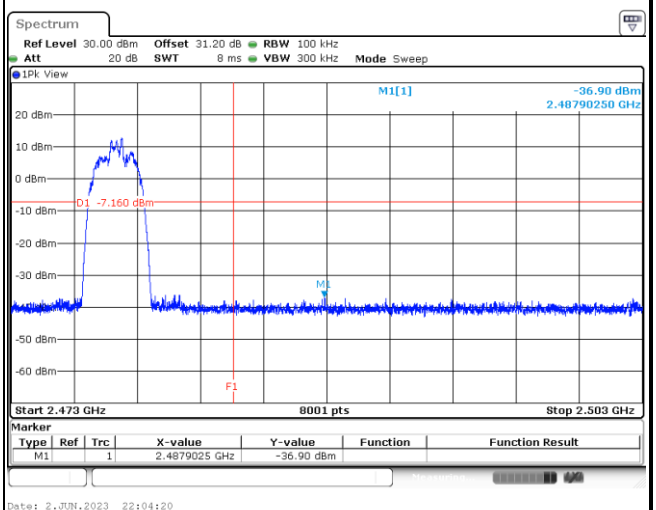
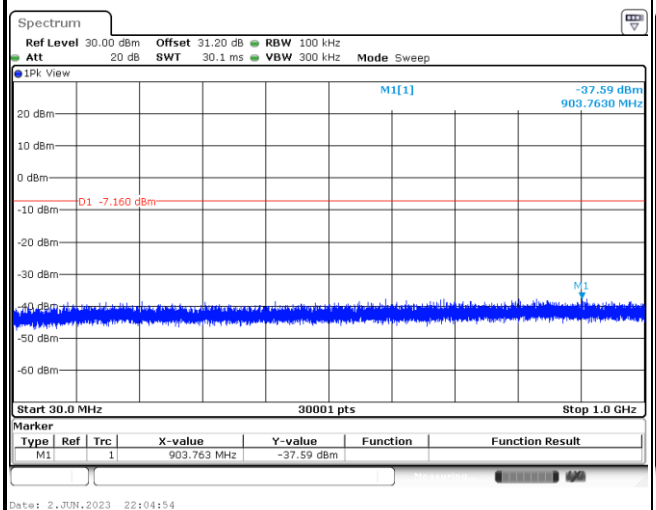
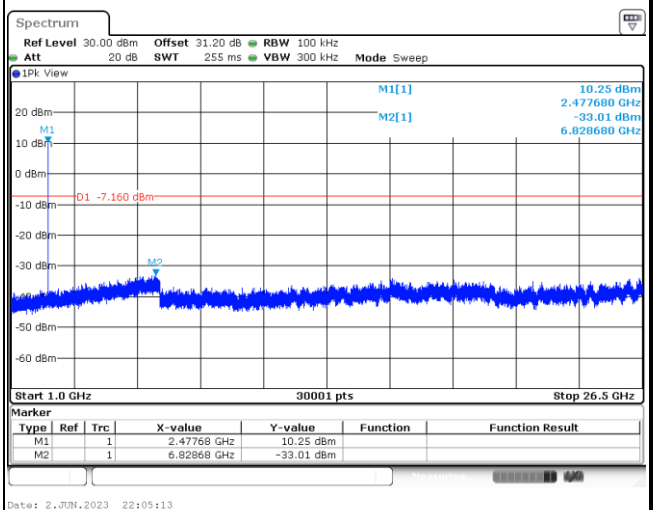
| Power Density (dBm/3kHz) Plot Channel 02 | Power Density (dBm/3kHz) Plot Channel 39 |
|---|---|
|  |  |
| **Power Density (dBm/3kHz Plot Channel 76** | |
|  | |

# Band Edge and Spurious Emission

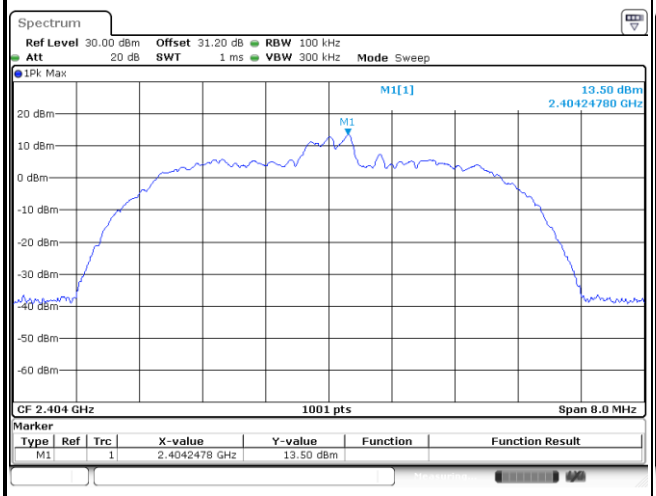
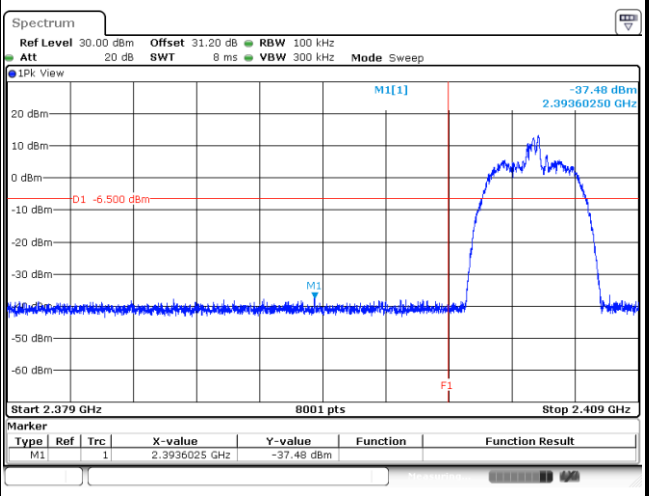
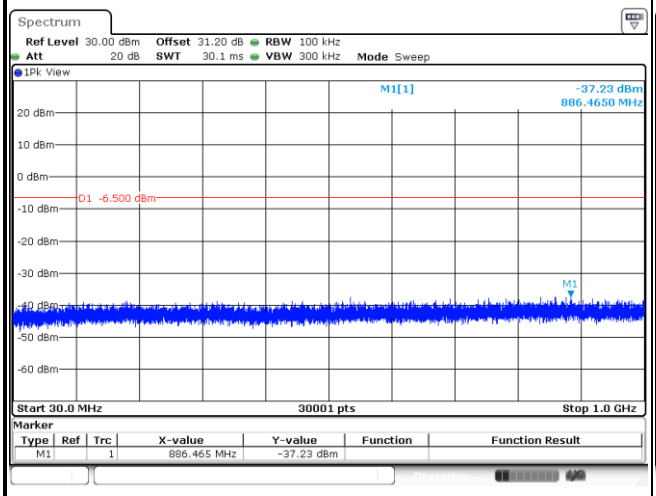
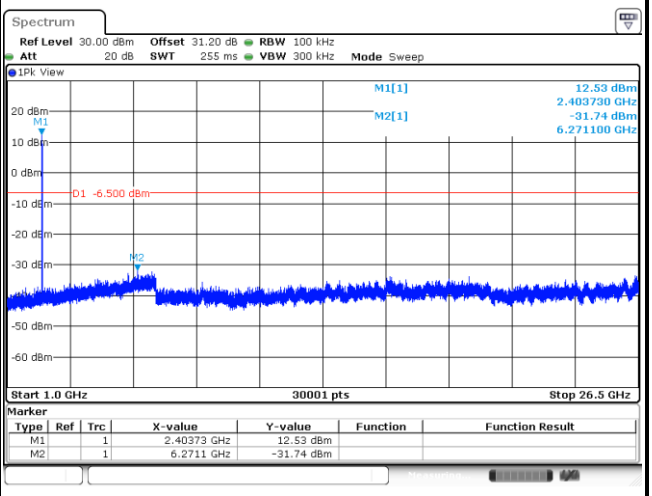
**<4Mbps>**

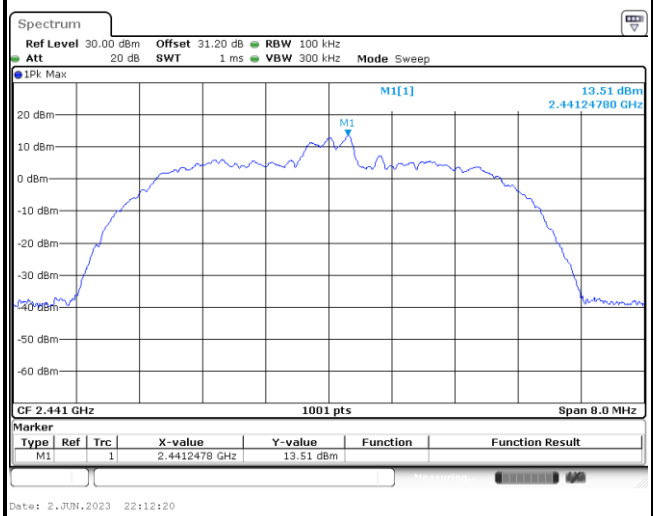
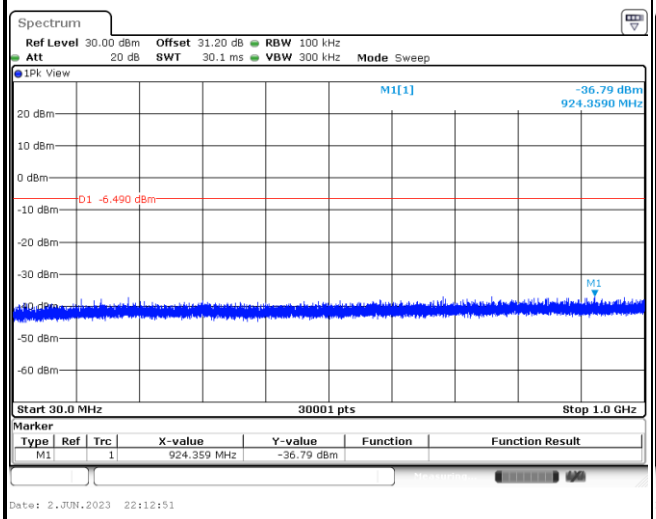
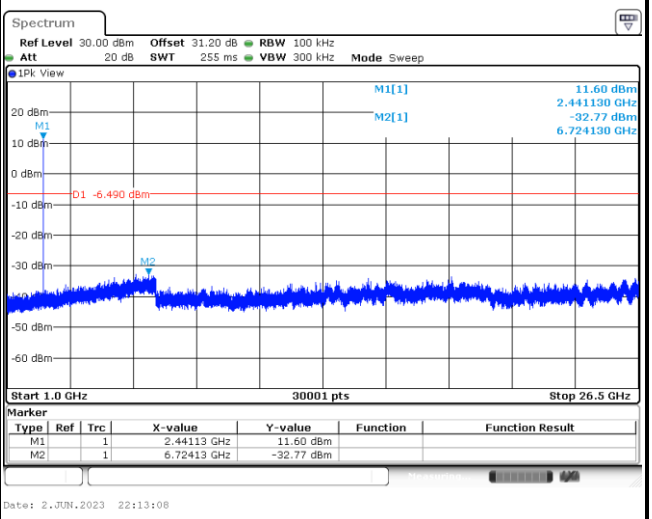
| Channel 02 | |
|---|---|
| **100kHz PSD reference Level Plot** | **Low Channel Plot** |
|  |  |
| **Spurious Emission 30MHz~1GHz Plot** | **Spurious Emission 1GHz~26.5GHz Plot** |
|  |  |

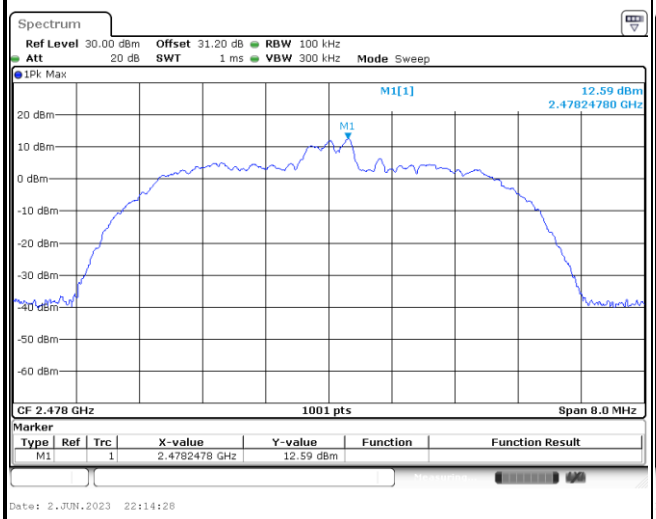
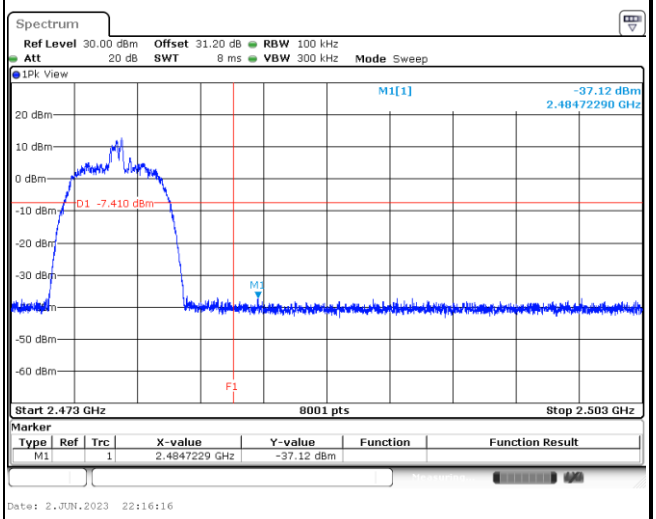
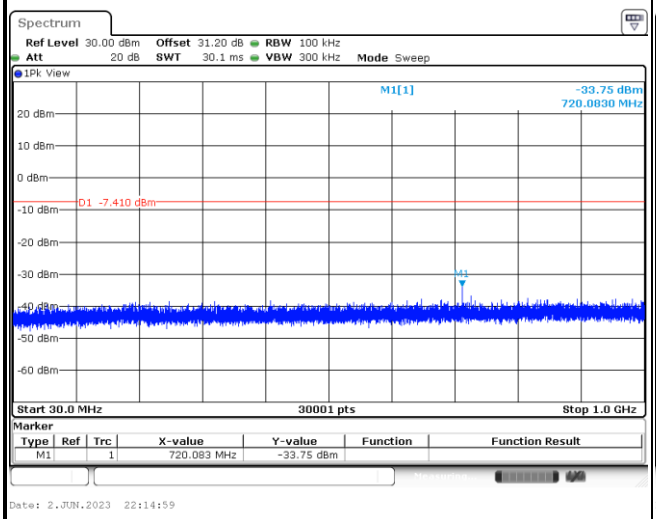
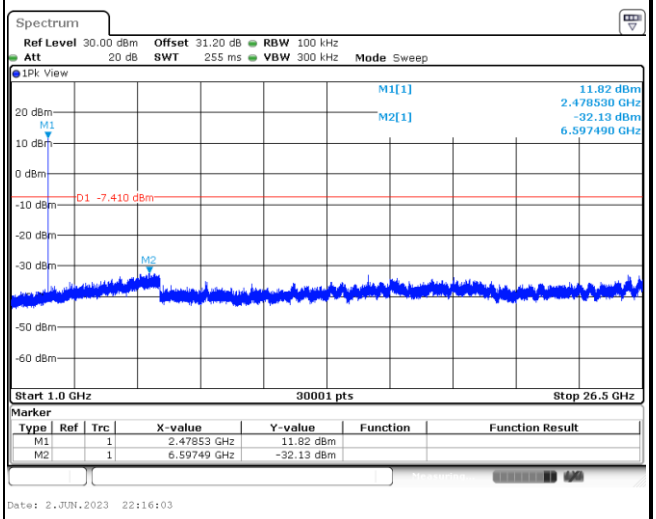
| Channel 39 | |
|---|---|
| **100kHz PSD reference Level Plot** | **Middle Channel Plot** |
|  | |
| **Spurious Emission 30MHz~1GHz Plot** | **Spurious Emission 1GHz~26.5GHz Plot** |
|  |  |

| Channel 76 | |
|---|---|
| **100kHz PSD reference Level Plot** | **High Channel Plot** |
|  |  |
| **Spurious Emission 30MHz~1GHz Plot** | **Spurious Emission 1GHz~26.5GHz Plot** |
|  |  |

**<8Mbps>**

| Channel 02 | |
|---|---|
| **100kHz PSD reference Level Plot** | **Low Channel Plot** |
|  |  |
| **Spurious Emission 30MHz~1GHz Plot** | **Spurious Emission 1GHz~26.5GHz Plot** |
|  |  |

| Channel 39 | |
|---|---|
| **100kHz PSD reference Level Plot** | **Middle Channel Plot** |
|  | |
| **Spurious Emission 30MHz~1GHz Plot** | **Spurious Emission 1GHz~26.5GHz Plot** |
|  |  |

| Channel 76 | |
|---|---|
| **100kHz PSD reference Level Plot** | **High Channel Plot** |
|  |  |
| **Spurious Emission 30MHz~1GHz Plot** | **Spurious Emission 1GHz~26.5GHz Plot** |
|  |  |

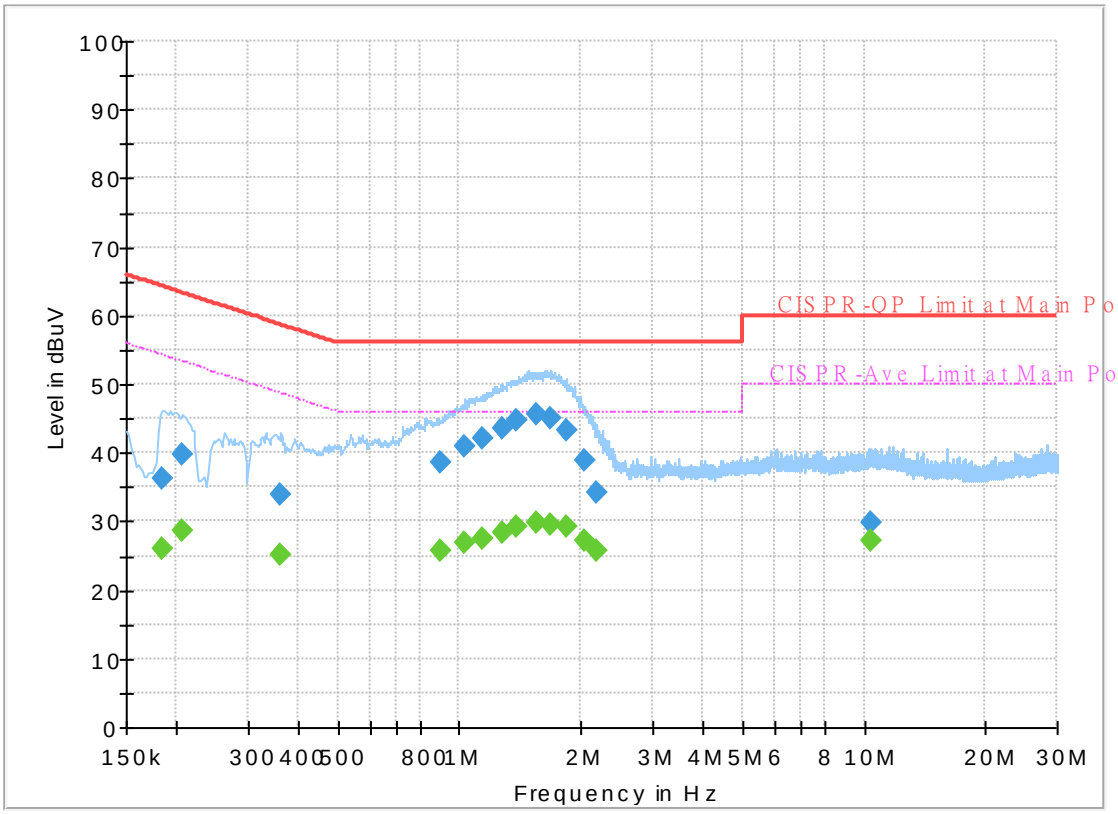
# Appendix B. AC Conducted Emission Test Results

| | | | |
|---|---|---|---|
| **Test Engineer :** | Calvin Wang | **Temperature :** | 23~26℃ |
| | | **Relative Humidity :** | 45~55% |

# EUT Information

| | |
|---|---|
| Report NO : | 2D0206-01 |
| Test Mode : | Mode 1 |
| Test Voltage : | 120Vac/60Hz |
| Phase : | Line |

Full Spectrum




# Final_Result

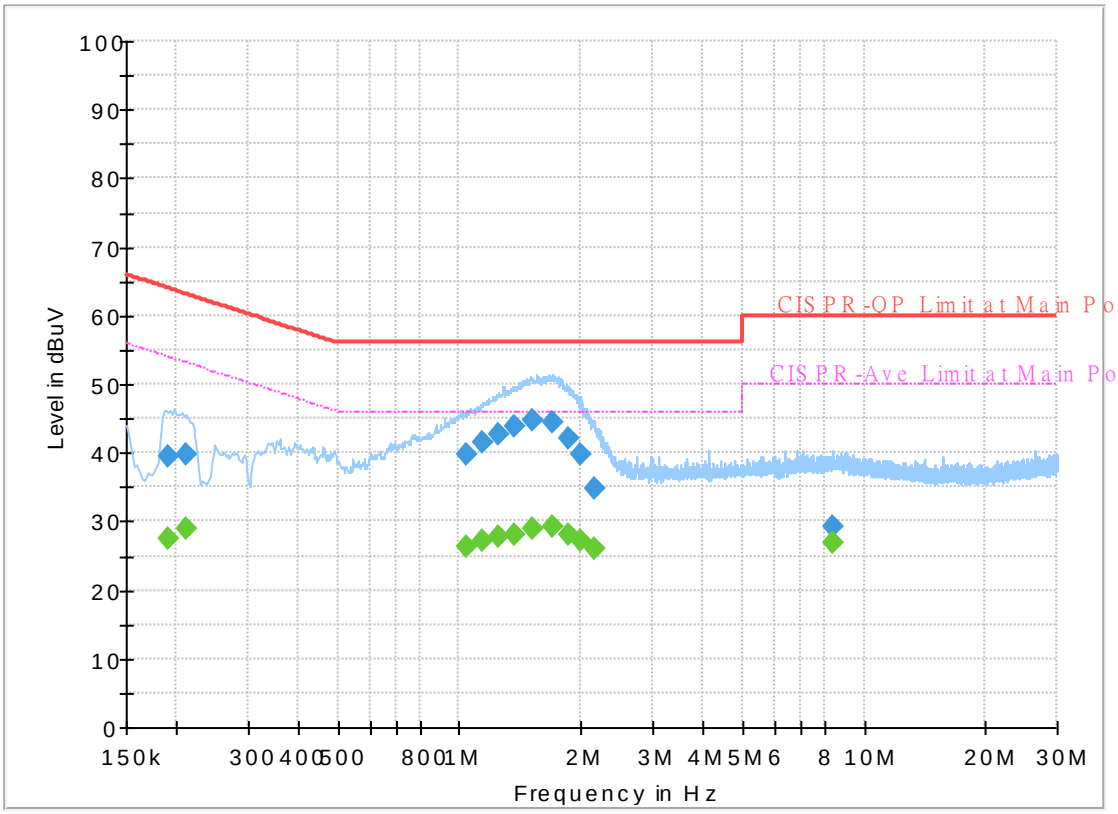
| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Line | Filter | Corr. (dB) |
|---|---|---|---|---|---|---|---|
| 0.183750 | --- | 25.98 | 54.31 | 28.33 | L1 | OFF | 19.9 |
| 0.183750 | 36.40 | --- | 64.31 | 27.91 | L1 | OFF | 19.9 |
| 0.206250 | --- | 28.66 | 53.36 | 24.70 | L1 | OFF | 19.9 |
| 0.206250 | 39.71 | --- | 63.36 | 23.65 | L1 | OFF | 19.9 |
| 0.361500 | --- | 25.26 | 48.69 | 23.43 | L1 | OFF | 19.9 |
| 0.361500 | 33.92 | --- | 58.69 | 24.77 | L1 | OFF | 19.9 |
| 0.897000 | --- | 25.81 | 46.00 | 20.19 | L1 | OFF | 19.9 |
| 0.897000 | 38.51 | --- | 56.00 | 17.49 | L1 | OFF | 19.9 |
| 1.034250 | --- | 27.01 | 46.00 | 18.99 | L1 | OFF | 19.9 |
| 1.034250 | 40.91 | --- | 56.00 | 15.09 | L1 | OFF | 19.9 |
| 1.144500 | --- | 27.59 | 46.00 | 18.41 | L1 | OFF | 19.9 |
| 1.144500 | 42.04 | --- | 56.00 | 13.96 | L1 | OFF | 19.9 |
| 1.279500 | --- | 28.44 | 46.00 | 17.56 | L1 | OFF | 19.9 |
| 1.279500 | 43.68 | --- | 56.00 | 12.32 | L1 | OFF | 19.9 |
| 1.378500 | --- | 29.29 | 46.00 | 16.71 | L1 | OFF | 19.9 |
| 1.378500 | 44.60 | --- | 56.00 | 11.40 | L1 | OFF | 19.9 |
| 1.554000 | --- | 29.94 | 46.00 | 16.06 | L1 | OFF | 19.9 |
| 1.554000 | 45.48 | --- | 56.00 | 10.52 | L1 | OFF | 19.9 |
| 1.689000 | --- | 29.56 | 46.00 | 16.44 | L1 | OFF | 19.9 |
| 1.689000 | 44.92 | --- | 56.00 | 11.08 | L1 | OFF | 19.9 |
| 1.830750 | --- | 29.16 | 46.00 | 16.84 | L1 | OFF | 19.9 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.830750 | 43.42 | --- | 56.00 | 12.58 | L1 | OFF | 19.9 |
| 2.037750 | --- | 27.32 | 46.00 | 18.68 | L1 | OFF | 19.9 |
| 2.037750 | 38.76 | --- | 56.00 | 17.24 | L1 | OFF | 19.9 |
| 2.179500 | --- | 25.85 | 46.00 | 20.15 | L1 | OFF | 19.9 |
| 2.179500 | 34.10 | --- | 56.00 | 21.90 | L1 | OFF | 19.9 |
| 10.340250 | --- | 27.18 | 50.00 | 22.82 | L1 | OFF | 20.3 |
| 10.340250 | 29.89 | --- | 60.00 | 30.11 | L1 | OFF | 20.3 |

# EUT Information

| | |
|---|---|
| Report NO : | 2D0206-01 |
| Test Mode : | Mode 1 |
| Test Voltage : | 120Vac/60Hz |
| Phase : | Neutral |

Full Spectrum




# Final_Result

| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Line | Filter | Corr. (dB) |
|---|---|---|---|---|---|---|---|
| 0.190500 | --- | 27.38 | 54.02 | 26.64 | N | OFF | 19.9 |
| 0.190500 | 39.57 | --- | 64.02 | 24.45 | N | OFF | 19.9 |
| 0.210750 | --- | 28.98 | 53.18 | 24.20 | N | OFF | 19.9 |
| 0.210750 | 39.79 | --- | 63.18 | 23.39 | N | OFF | 19.9 |
| 1.038750 | --- | 26.24 | 46.00 | 19.76 | N | OFF | 19.9 |
| 1.038750 | 39.90 | --- | 56.00 | 16.10 | N | OFF | 19.9 |
| 1.135500 | --- | 27.08 | 46.00 | 18.92 | N | OFF | 19.9 |
| 1.135500 | 41.38 | --- | 56.00 | 14.62 | N | OFF | 19.9 |
| 1.248000 | --- | 27.84 | 46.00 | 18.16 | N | OFF | 19.9 |
| 1.248000 | 42.82 | --- | 56.00 | 13.18 | N | OFF | 19.9 |
| 1.369500 | --- | 28.20 | 46.00 | 17.80 | N | OFF | 19.9 |
| 1.369500 | 43.75 | --- | 56.00 | 12.25 | N | OFF | 19.9 |
| 1.513500 | --- | 28.92 | 46.00 | 17.08 | N | OFF | 19.9 |
| 1.513500 | 44.60 | --- | 56.00 | 11.40 | N | OFF | 19.9 |
| 1.704750 | --- | 29.20 | 46.00 | 16.80 | N | OFF | 19.9 |
| 1.704750 | 44.34 | --- | 56.00 | 11.66 | N | OFF | 19.9 |
| 1.860000 | --- | 28.08 | 46.00 | 17.92 | N | OFF | 19.9 |
| 1.860000 | 41.98 | --- | 56.00 | 14.02 | N | OFF | 19.9 |
| 1.997250 | --- | 27.26 | 46.00 | 18.74 | N | OFF | 19.9 |
| 1.997250 | 39.67 | --- | 56.00 | 16.33 | N | OFF | 19.9 |
| 2.150250 | --- | 25.91 | 46.00 | 20.09 | N | OFF | 19.9 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **2.150250** | **34.71** | **---** | **56.00** | **21.29** | **N** | **OFF** | **19.9** |
| **8.333250** | **---** | **26.84** | **50.00** | **23.16** | **N** | **OFF** | **20.2** |
| **8.333250** | **29.12** | **---** | **60.00** | **30.88** | **N** | **OFF** | **20.2** |

# Appendix C. Radiated Spurious Emission

| | | | |
|---|---|---|---|
| **Test Engineer :** | Michael Liu, Bank Lin and Wen-Kai Lu | **Temperature :** | 20.1~23.1°C |
| | | **Relative Humidity :** | 55~65% |

**MIMO <Ant. 3+4>**

**<1Mbps>**

## 2.4GHz 2400~2483.5MHz

## BLE (Band Edge @ 3m)

| BLE | Note | Frequency | Level | Margin | Limit Line | Read Level | Antenna Factor | Path Loss | Preamp Factor | Ant Pos | Table Pos | Peak Avg. | Pol. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ( MHz ) | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | ( dBμV ) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | (P/A) | (H/V) |
| BLE CH 00 2402MHz | | 2377.2 | 51.24 | -22.76 | 74 | 37.84 | 26.9 | 18.96 | 32.46 | 119 | 182 | P | H |
| | | 2388.435 | 41.38 | -12.62 | 54 | 27.96 | 26.9 | 18.98 | 32.46 | 119 | 182 | A | H |
| | * | 2402 | 110.45 | - | - | 97.02 | 26.9 | 19 | 32.47 | 119 | 182 | P | H |
| | * | 2402 | 110 | - | - | 96.57 | 26.9 | 19 | 32.47 | 119 | 182 | A | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 2323.02 | 51.24 | -22.76 | 74 | 37.91 | 26.9 | 18.85 | 32.42 | 105 | 87 | P | V |
| | | 2370.9 | 41.63 | -12.37 | 54 | 28.24 | 26.9 | 18.94 | 32.45 | 105 | 87 | A | V |
| | * | 2402 | 113.18 | - | - | 99.75 | 26.9 | 19 | 32.47 | 105 | 87 | P | V |
| | * | 2402 | 112.21 | - | - | 98.78 | 26.9 | 19 | 32.47 | 105 | 87 | A | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| BLE CH 19 2440MHz | | 2337.36 | 51.86 | -22.14 | 74 | 38.51 | 26.9 | 18.88 | 32.43 | 139 | 182 | P | H |
| | | 2370.64 | 41.29 | -12.71 | 54 | 27.9 | 26.9 | 18.94 | 32.45 | 139 | 182 | A | H |
| | * | 2440 | 111.42 | - | - | 97.86 | 26.98 | 19.08 | 32.5 | 139 | 182 | P | H |
| | * | 2440 | 110.93 | - | - | 97.37 | 26.98 | 19.08 | 32.5 | 139 | 182 | A | H |
| | | 2498.16 | 51.63 | -22.37 | 74 | 38.08 | 26.9 | 19.19 | 32.54 | 139 | 182 | P | H |
| | | 2499.6 | 41.66 | -12.34 | 54 | 28.11 | 26.9 | 19.19 | 32.54 | 139 | 182 | A | H |
| | | 2381.04 | 51.9 | -22.1 | 74 | 38.5 | 26.9 | 18.96 | 32.46 | 100 | 85 | P | V |
| | | 2389.68 | 41.49 | -12.51 | 54 | 28.07 | 26.9 | 18.98 | 32.46 | 100 | 85 | A | V |
| | * | 2440 | 115.97 | - | - | 102.41 | 26.98 | 19.08 | 32.5 | 100 | 85 | P | V |
| | * | 2440 | 115.52 | - | - | 101.96 | 26.98 | 19.08 | 32.5 | 100 | 85 | A | V |
| | | 2495.6 | 51.1 | -22.9 | 74 | 37.54 | 26.91 | 19.19 | 32.54 | 100 | 85 | P | V |
| | | 2488.4 | 41.86 | -12.14 | 54 | 28.3 | 26.92 | 19.17 | 32.53 | 100 | 85 | A | V |

| BLE | Note | Frequency ( MHz ) | Level ( dBµV/m ) | Margin ( dB ) | Limit Line ( dBµV/m ) | Read Level ( dBµV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BLE CH 39 2480MHz | * | 2480 | 115.56 | - | - | 101.99 | 26.94 | 19.16 | 32.53 | 231 | 146 | P | H |
| | * | 2480 | 115.09 | - | - | 101.52 | 26.94 | 19.16 | 32.53 | 231 | 146 | A | H |
| | | 2483.92 | 53.78 | -20.22 | 74 | 40.22 | 26.93 | 19.16 | 32.53 | 231 | 146 | P | H |
| | | 2483.52 | 43.69 | -10.31 | 54 | 30.13 | 26.93 | 19.16 | 32.53 | 231 | 146 | A | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | * | 2480 | 115.13 | - | - | 101.56 | 26.94 | 19.16 | 32.53 | 100 | 62 | P | V |
| | * | 2480 | 114.53 | - | - | 100.96 | 26.94 | 19.16 | 32.53 | 100 | 62 | A | V |
| | | 2483.76 | 52.39 | -21.61 | 74 | 38.83 | 26.93 | 19.16 | 32.53 | 100 | 62 | P | V |
| | | 2483.6 | 43.49 | -10.51 | 54 | 29.93 | 26.93 | 19.16 | 32.53 | 100 | 62 | A | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| **Remark** | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

## 2.4GHz 2400~2483.5MHz

## BLE (Harmonic @ 3m)

| BLE | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Margin ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BLE CH 00 2402MHz | | 4804 | 46.72 | -27.28 | 74 | 33.38 | 32.42 | 14.51 | 33.59 | - | - | P | H |
| | | | | | | | | | | | | | H |
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| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 4804 | 47.36 | -26.64 | 74 | 34.02 | 32.42 | 14.51 | 33.59 | - | - | P | V |
| | | | | | | | | | | | | | V |
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| BLE | Note | Frequency ( MHz ) | Level ( dBµV/m ) | Margin ( dB ) | Limit Line ( dBµV/m ) | Read Level ( dBµV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 4880 | 47.4 | -26.6 | 74 | 33.91 | 32.6 | 14.46 | 33.57 | - | - | P | H |
| | | 7320 | 52.53 | -21.47 | 74 | 33.96 | 37.94 | 16.58 | 35.95 | - | - | P | H |
| | | 7320 | 41.76 | -12.24 | 54 | 23.19 | 37.94 | 16.58 | 35.95 | - | - | A | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
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| | | | | | | | | | | | | | H |
| **BLE CH 19 2440MHz** | | | | | | | | | | | | | H |
| | | 4880 | 46.84 | -27.16 | 74 | 33.35 | 32.6 | 14.46 | 33.57 | - | - | P | V |
| | | 7320 | 51.88 | -22.12 | 74 | 33.31 | 37.94 | 16.58 | 35.95 | - | - | P | V |
| | | 7320 | 41.83 | -12.17 | 54 | 23.26 | 37.94 | 16.58 | 35.95 | - | - | A | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |

| BLE | Note | Frequency ( MHz ) | Level ( dBµV/m ) | Margin ( dB ) | Limit Line ( dBµV/m ) | Read Level ( dBµV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 4960 | 46.33 | -27.67 | 74 | 32.79 | 32.7 | 14.4 | 33.56 | - | - | P | H |
| | | 7440 | 51.3 | -22.7 | 74 | 32.64 | 37.82 | 16.88 | 36.04 | - | - | P | H |
| | | 7440 | 41.22 | -12.78 | 54 | 22.56 | 37.82 | 16.88 | 36.04 | - | - | A | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
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| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| BLE CH 39 2480MHz | | 4960 | 46.57 | -27.43 | 74 | 33.03 | 32.7 | 14.4 | 33.56 | - | - | P | V |
| | | 7440 | 51.71 | -22.29 | 74 | 33.05 | 37.82 | 16.88 | 36.04 | - | - | P | V |
| | | 7440 | 41.23 | -12.77 | 54 | 22.57 | 37.82 | 16.88 | 36.04 | - | - | A | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

**Remark**

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.

**<2Mbps>**

## 2.4GHz 2400~2483.5MHz

## BLE (Band Edge @ 3m)

| BLE | Note | Frequency | Level | Margin | Limit Line | Read Level | Antenna Factor | Path Loss | Preamp Factor | Ant Pos | Table Pos | Peak Avg. | Pol. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ( MHz ) | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | ( dBμV ) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | (P/A) | (H/V) |
| BLE CH 00 2402MHz | | 2388.54 | 50.86 | -23.14 | 74 | 37.44 | 26.9 | 18.98 | 32.46 | 182 | 140 | P | H |
| | | 2384.445 | 40.76 | -13.24 | 54 | 27.35 | 26.9 | 18.97 | 32.46 | 182 | 140 | A | H |
| | * | 2402 | 113.86 | - | - | 100.43 | 26.9 | 19 | 32.47 | 182 | 140 | P | H |
| | * | 2402 | 112.17 | - | - | 98.74 | 26.9 | 19 | 32.47 | 182 | 140 | A | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 2351.475 | 51.87 | -22.13 | 74 | 38.5 | 26.9 | 18.91 | 32.44 | 109 | 87 | P | V |
| | | 2389.59 | 40.86 | -13.14 | 54 | 27.44 | 26.9 | 18.98 | 32.46 | 109 | 87 | A | V |
| | * | 2402 | 113.27 | - | - | 99.84 | 26.9 | 19 | 32.47 | 109 | 87 | P | V |
| | * | 2402 | 111.25 | - | - | 97.82 | 26.9 | 19 | 32.47 | 109 | 87 | A | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| BLE CH 19 2440MHz | | 2334.64 | 51.38 | -22.62 | 74 | 38.03 | 26.9 | 18.88 | 32.43 | 117 | 138 | P | H |
| | | 2375.12 | 40.69 | -13.31 | 54 | 27.3 | 26.9 | 18.95 | 32.46 | 117 | 138 | A | H |
| | * | 2440 | 114.4 | - | - | 100.84 | 26.98 | 19.08 | 32.5 | 117 | 138 | P | H |
| | * | 2440 | 112.47 | - | - | 98.91 | 26.98 | 19.08 | 32.5 | 117 | 138 | A | H |
| | | 2490.64 | 50.69 | -23.31 | 74 | 37.12 | 26.92 | 19.18 | 32.53 | 117 | 138 | P | H |
| | | 2483.92 | 40.87 | -13.13 | 54 | 27.31 | 26.93 | 19.16 | 32.53 | 117 | 138 | A | H |
| | | 2379.76 | 51 | -23 | 74 | 37.6 | 26.9 | 18.96 | 32.46 | 100 | 84 | P | V |
| | | 2374.96 | 40.75 | -13.25 | 54 | 27.35 | 26.9 | 18.95 | 32.45 | 100 | 84 | A | V |
| | * | 2440 | 114.91 | - | - | 101.35 | 26.98 | 19.08 | 32.5 | 100 | 84 | P | V |
| | * | 2440 | 113.23 | - | - | 99.67 | 26.98 | 19.08 | 32.5 | 100 | 84 | A | V |
| | | 2495.04 | 50.68 | -23.32 | 74 | 37.12 | 26.91 | 19.19 | 32.54 | 100 | 84 | P | V |
| | | 2494.32 | 40.98 | -13.02 | 54 | 27.43 | 26.91 | 19.18 | 32.54 | 100 | 84 | A | V |

| BLE | Note | Frequency ( MHz ) | Level ( dBµV/m ) | Margin ( dB ) | Limit Line ( dBµV/m ) | Read Level ( dBµV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BLE CH 39 2480MHz | * | 2480 | 114.01 | - | - | 100.44 | 26.94 | 19.16 | 32.53 | 143 | 142 | P | H |
| | * | 2480 | 112.36 | - | - | 98.79 | 26.94 | 19.16 | 32.53 | 143 | 142 | A | H |
| | | 2483.56 | 55.62 | -18.38 | 74 | 42.06 | 26.93 | 19.16 | 32.53 | 143 | 142 | P | H |
| | | 2483.52 | 49.99 | -4.01 | 54 | 36.43 | 26.93 | 19.16 | 32.53 | 143 | 142 | A | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | * | 2480 | 113.69 | - | - | 100.12 | 26.94 | 19.16 | 32.53 | 100 | 86 | P | V |
| | * | 2480 | 112 | - | - | 98.43 | 26.94 | 19.16 | 32.53 | 100 | 86 | A | V |
| | | 2483.6 | 56.3 | -17.7 | 74 | 42.74 | 26.93 | 19.16 | 32.53 | 100 | 86 | P | V |
| | | 2483.52 | 50.01 | -3.99 | 54 | 36.45 | 26.93 | 19.16 | 32.53 | 100 | 86 | A | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| Remark | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

## 2.4GHz 2400~2483.5MHz

## BLE (Harmonic @ 3m)

| BLE | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Margin ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BLE CH 00 2402MHz | | 4804 | 46.85 | -27.15 | 74 | 33.51 | 32.42 | 14.51 | 33.59 | - | - | P | H |
| | | | | | | | | | | | | | H |
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| | | | | | | | | | | | | | H |
| | | 4804 | 47.21 | -26.79 | 74 | 33.87 | 32.42 | 14.51 | 33.59 | - | - | P | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |

| BLE | Note | Frequency ( MHz ) | Level ( dBµV/m ) | Margin ( dB ) | Limit Line ( dBµV/m ) | Read Level ( dBµV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 4880 | 46.64 | -27.36 | 74 | 33.15 | 32.6 | 14.46 | 33.57 | - | - | P | H |
| | | 7320 | 50.61 | -23.39 | 74 | 32.04 | 37.94 | 16.58 | 35.95 | - | - | P | H |
| | | | | | | | | | | | | | H |
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| BLE CH 19 2440MHz | | | | | | | | | | | | | H |
| | | 4880 | 47.44 | -26.56 | 74 | 33.95 | 32.6 | 14.46 | 33.57 | - | - | P | V |
| | | 7320 | 50.75 | -23.25 | 74 | 32.18 | 37.94 | 16.58 | 35.95 | - | - | P | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |

| BLE | Note | Frequency ( MHz ) | Level ( dBµV/m ) | Margin ( dB ) | Limit Line ( dBµV/m ) | Read Level ( dBµV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 4960 | 46.5 | -27.5 | 74 | 32.96 | 32.7 | 14.4 | 33.56 | - | - | P | H |
| | | 7440 | 50.78 | -23.22 | 74 | 32.12 | 37.82 | 16.88 | 36.04 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
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| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| BLE CH 39 2480MHz | | 4960 | 46.57 | -27.43 | 74 | 33.03 | 32.7 | 14.4 | 33.56 | - | - | P | V |
| | | 7440 | 50.28 | -23.72 | 74 | 31.62 | 37.82 | 16.88 | 36.04 | - | - | P | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |

**Remark**

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.

## Emission above 18GHz

## 2.4GHz BLE (SHF)

| BT | Note | Frequency | Level | Margin | Limit | Read | Antenna | Path | Preamp | Ant | Table | Peak | Pol. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Line | Level | Factor | Loss | Factor | Pos | Pos | Avg. | |
| | | ( MHz ) | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | (dBμV) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | (P/A) | (H/V) |
| 2.4GHz BLE SHF | | 38812 | 50.4 | -23.6 | 74 | 41.15 | 43.87 | 28.57 | 63.19 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
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| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 38812 | 50.84 | -23.16 | 74 | 41.59 | 43.87 | 28.57 | 63.19 | - | - | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |

**Remark**

1. No other spurious found.
2. All results are PASS against limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.

## Emission below 1GHz

## 2.4GHz BLE (LF)

| BLE | Note | Frequency | Level | Margin | Limit | Read | Antenna | Path | Preamp | Ant | Table | Peak | Pol. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Line | Level | Factor | Loss | Factor | Pos | Pos | Avg. | |
| | | ( MHz ) | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | (dBμV) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | (P/A) | (H/V) |
| 2.4GHz BLE LF | | 58.13 | 27.73 | -12.27 | 40 | 46.91 | 11.8 | 1.76 | 32.74 | - | - | P | H |
| | | 123.12 | 29.98 | -13.52 | 43.5 | 42.77 | 17.49 | 2.41 | 32.69 | - | - | P | H |
| | | 556.71 | 28.45 | -17.55 | 46 | 30.62 | 26 | 4.77 | 32.94 | - | - | P | H |
| | | 662.44 | 29.85 | -16.15 | 46 | 31.39 | 26.25 | 5.11 | 32.9 | - | - | P | H |
| | | 736.16 | 36.58 | -9.42 | 46 | 36.15 | 27.82 | 5.38 | 32.77 | - | - | P | H |
| | | 946.65 | 35.81 | -10.19 | 46 | 30.47 | 30.8 | 6.09 | 31.55 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 46.49 | 28.77 | -11.23 | 40 | 43.66 | 16.26 | 1.6 | 32.75 | - | - | P | V |
| | | 58.13 | 30.35 | -9.65 | 40 | 49.53 | 11.8 | 1.76 | 32.74 | - | - | P | V |
| | | 120.21 | 27.2 | -16.3 | 43.5 | 40.04 | 17.46 | 2.39 | 32.69 | - | - | P | V |
| | | 263.77 | 20.73 | -25.27 | 46 | 30.23 | 19.9 | 3.35 | 32.75 | - | - | P | V |
| | | 544.1 | 26.59 | -19.41 | 46 | 30.38 | 24.43 | 4.71 | 32.93 | - | - | P | V |
| | | 960.23 | 36.04 | -17.96 | 54 | 30.01 | 31.3 | 6.15 | 31.42 | - | - | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

**Remark**

1. No other spurious found.
2. All results are PASS against limit line.
3. The emission position marked as “-” means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only.

**<4Mbps>**

## 2.4GHz 2400~2483.5MHz

## BT (Band Edge @ 3m)

| BT | Note | Frequency | Level | Margin | Limit Line | Read Level | Antenna Factor | Path Loss | Preamp Factor | Ant Pos | Table Pos | Peak Avg. | Pol. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ( MHz ) | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | ( dBμV ) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | (P/A) | (H/V) |
| BT CH02 2404MHz | | 2370.69 | 50.72 | -23.28 | 74 | 37.33 | 26.9 | 18.94 | 32.45 | 187 | 139 | P | H |
| | | 2389.905 | 40.52 | -13.48 | 54 | 27.11 | 26.9 | 18.98 | 32.47 | 187 | 139 | A | H |
| | * | 2404 | 110.58 | - | - | 97.13 | 26.91 | 19.01 | 32.47 | 187 | 139 | P | H |
| | * | 2404 | 107.25 | - | - | 93.8 | 26.91 | 19.01 | 32.47 | 187 | 139 | A | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 2326.695 | 50.85 | -23.15 | 74 | 37.51 | 26.9 | 18.86 | 32.42 | 103 | 87 | P | V |
| | | 2389.905 | 40.45 | -13.55 | 54 | 27.04 | 26.9 | 18.98 | 32.47 | 103 | 87 | A | V |
| | * | 2404 | 109.83 | - | - | 96.38 | 26.91 | 19.01 | 32.47 | 103 | 86 | P | V |
| | * | 2404 | 106.4 | - | - | 92.95 | 26.91 | 19.01 | 32.47 | 103 | 86 | A | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| BT CH 39 2441MHz | | 2388.88 | 50.9 | -23.1 | 74 | 37.48 | 26.9 | 18.98 | 32.46 | 178 | 139 | P | H |
| | | 2389.52 | 40.31 | -13.69 | 54 | 26.89 | 26.9 | 18.98 | 32.46 | 178 | 139 | A | H |
| | * | 2441 | 111.15 | - | - | 97.59 | 26.98 | 19.08 | 32.5 | 178 | 139 | P | H |
| | * | 2441 | 107.72 | - | - | 94.16 | 26.98 | 19.08 | 32.5 | 178 | 139 | A | H |
| | | 2493.52 | 50.81 | -23.19 | 74 | 37.26 | 26.91 | 19.18 | 32.54 | 178 | 139 | P | H |
| | | 2489.68 | 40.65 | -13.35 | 54 | 27.09 | 26.92 | 19.17 | 32.53 | 178 | 139 | A | H |
| | | 2344.08 | 50.32 | -23.68 | 74 | 36.96 | 26.9 | 18.89 | 32.43 | 100 | 85 | P | V |
| | | 2367.44 | 40.29 | -13.71 | 54 | 26.9 | 26.9 | 18.94 | 32.45 | 100 | 85 | A | V |
| | * | 2441 | 110.39 | - | - | 96.83 | 26.98 | 19.08 | 32.5 | 100 | 85 | P | V |
| | * | 2441 | 107.11 | - | - | 93.55 | 26.98 | 19.08 | 32.5 | 100 | 85 | A | V |
| | | 2494.48 | 50.58 | -23.42 | 74 | 37.03 | 26.91 | 19.18 | 32.54 | 100 | 85 | P | V |
| | | 2495.76 | 40.63 | -13.37 | 54 | 27.07 | 26.91 | 19.19 | 32.54 | 100 | 85 | A | V |

| BT | Note | Frequency ( MHz ) | Level ( dBµV/m ) | Margin ( dB ) | Limit Line ( dBµV/m ) | Read Level ( dBµV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BT CH 76 2478MHz | * | 2478 | 109.22 | - | - | 95.66 | 26.94 | 19.15 | 32.53 | 238 | 133 | P | H |
| | * | 2478 | 105.82 | - | - | 92.26 | 26.94 | 19.15 | 32.53 | 238 | 133 | A | H |
| | | 2486.28 | 52.91 | -21.09 | 74 | 39.34 | 26.93 | 19.17 | 32.53 | 238 | 133 | P | H |
| | | 2483.72 | 42.93 | -11.07 | 54 | 29.37 | 26.93 | 19.16 | 32.53 | 238 | 133 | A | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | * | 2478 | 108.91 | - | - | 95.35 | 26.94 | 19.15 | 32.53 | 106 | 86 | P | V |
| | * | 2478 | 105.57 | - | - | 92.01 | 26.94 | 19.15 | 32.53 | 106 | 86 | A | V |
| | | 2483.72 | 51.99 | -22.01 | 74 | 38.43 | 26.93 | 19.16 | 32.53 | 106 | 86 | P | V |
| | | 2483.56 | 42.88 | -11.12 | 54 | 29.32 | 26.93 | 19.16 | 32.53 | 106 | 86 | A | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| Remark | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

## 2.4GHz 2400~2483.5MHz

## BT (Harmonic @ 3m)

| BT | Note | Frequency ( MHz ) | Level ( dBµV/m ) | Margin ( dB ) | Limit Line ( dBµV/m ) | Read Level ( dBµV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BT CH 02 2404MHz | | 4808 | 45.98 | -28.02 | 74 | 32.63 | 32.43 | 14.51 | 33.59 | - | - | P | H |
| | | 7212 | 50.27 | -23.73 | 74 | 32.16 | 37.57 | 16.41 | 35.87 | - | - | P | H |
| | | | | | | | | | | | | | H |
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| | | | | | | | | | | | | | H |
| | | 4808 | 46.63 | -27.37 | 74 | 33.28 | 32.43 | 14.51 | 33.59 | - | - | P | V |
| | | 7212 | 50.1 | -23.9 | 74 | 31.99 | 37.57 | 16.41 | 35.87 | - | - | P | V |
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| BT | Note | Frequency ( MHz ) | Level ( dBµV/m ) | Margin ( dB ) | Limit Line ( dBµV/m ) | Read Level ( dBµV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 4882 | 46.46 | -27.54 | 74 | 32.98 | 32.6 | 14.45 | 33.57 | - | - | P | H |
| | | 7323 | 49.98 | -24.02 | 74 | 31.4 | 37.95 | 16.58 | 35.95 | - | - | P | H |
| | | | | | | | | | | | | | H |
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| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| BT CH 39 2441MHz | | 4882 | 46.43 | -27.57 | 74 | 32.95 | 32.6 | 14.45 | 33.57 | - | - | P | V |
| | | 7323 | 50.39 | -23.61 | 74 | 31.81 | 37.95 | 16.58 | 35.95 | - | - | P | V |
| | | | | | | | | | | | | | V |
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| BT | Note | Frequency ( MHz ) | Level ( dBµV/m ) | Margin ( dB ) | Limit Line ( dBµV/m ) | Read Level ( dBµV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BT CH 76 2478MHz | | 4956 | 46.24 | -27.76 | 74 | 32.7 | 32.7 | 14.4 | 33.56 | - | - | P | H |
| | | 7434 | 49.91 | -24.09 | 74 | 31.25 | 37.83 | 16.86 | 36.03 | - | - | P | H |
| | | | | | | | | | | | | | H |
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| | | | | | | | | | | | | | H |
| | | 4956 | 46.81 | -27.19 | 74 | 33.27 | 32.7 | 14.4 | 33.56 | - | - | P | V |
| | | 7434 | 50.85 | -23.15 | 74 | 32.19 | 37.83 | 16.86 | 36.03 | - | - | P | V |
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| | | | | | | | | | | | | | V |

**Remark**

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.

**<8Mbps>**

## 2.4GHz 2400~2483.5MHz

## BT (Band Edge @ 3m)

| BT | Note | Frequency | Level | Margin | Limit Line | Read Level | Antenna Factor | Path Loss | Preamp Factor | Ant Pos | Table Pos | Peak Avg. | Pol. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ( MHz ) | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | ( dBμV ) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | (P/A) | (H/V) |
| BT CH02 2404MHz | | 2315.565 | 50.71 | -23.29 | 74 | 37.38 | 26.9 | 18.84 | 32.41 | 159 | 135 | P | H |
| | | 2389.065 | 40.42 | -13.58 | 54 | 27 | 26.9 | 18.98 | 32.46 | 159 | 135 | A | H |
| | * | 2404 | 110.42 | - | - | 96.97 | 26.91 | 19.01 | 32.47 | 159 | 135 | P | H |
| | * | 2404 | 105.87 | - | - | 92.42 | 26.91 | 19.01 | 32.47 | 159 | 135 | A | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 2365.755 | 50.97 | -23.03 | 74 | 37.59 | 26.9 | 18.93 | 32.45 | 325 | 63 | P | V |
| | | 2388.645 | 40.3 | -13.7 | 54 | 26.88 | 26.9 | 18.98 | 32.46 | 325 | 63 | A | V |
| | * | 2404 | 107.74 | - | - | 94.29 | 26.91 | 19.01 | 32.47 | 325 | 63 | P | V |
| | * | 2404 | 102.36 | - | - | 88.91 | 26.91 | 19.01 | 32.47 | 325 | 63 | A | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| BT CH 39 2441MHz | | 2325.04 | 50.98 | -23.02 | 74 | 37.64 | 26.9 | 18.86 | 32.42 | 112 | 136 | P | H |
| | | 2387.28 | 40.32 | -13.68 | 54 | 26.9 | 26.9 | 18.98 | 32.46 | 112 | 136 | A | H |
| | * | 2441 | 111.18 | - | - | 97.62 | 26.98 | 19.08 | 32.5 | 112 | 136 | P | H |
| | * | 2441 | 105.83 | - | - | 92.27 | 26.98 | 19.08 | 32.5 | 112 | 136 | A | H |
| | | 2494.88 | 51.41 | -22.59 | 74 | 37.85 | 26.91 | 19.19 | 32.54 | 112 | 136 | P | H |
| | | 2484.96 | 40.59 | -13.41 | 54 | 27.02 | 26.93 | 19.17 | 32.53 | 112 | 136 | A | H |
| | | 2341.2 | 50.72 | -23.28 | 74 | 37.36 | 26.9 | 18.89 | 32.43 | 352 | 66 | P | V |
| | | 2389.84 | 40.42 | -13.58 | 54 | 27.01 | 26.9 | 18.98 | 32.47 | 352 | 66 | A | V |
| | * | 2441 | 107.85 | - | - | 94.29 | 26.98 | 19.08 | 32.5 | 352 | 66 | P | V |
| | * | 2441 | 103.47 | - | - | 89.91 | 26.98 | 19.08 | 32.5 | 352 | 66 | A | V |
| | | 2490.32 | 50.37 | -23.63 | 74 | 36.8 | 26.92 | 19.18 | 32.53 | 352 | 66 | P | V |
| | | 2489.76 | 40.59 | -13.41 | 54 | 27.02 | 26.92 | 19.18 | 32.53 | 352 | 66 | A | V |

| BT | Note | Frequency ( MHz ) | Level ( dBµV/m ) | Margin ( dB ) | Limit Line ( dBµV/m ) | Read Level ( dBµV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BT CH 76 2478MHz | * | 2478 | 109.64 | - | - | 96.08 | 26.94 | 19.15 | 32.53 | 112 | 136 | P | H |
| | * | 2478 | 104.71 | - | - | 91.15 | 26.94 | 19.15 | 32.53 | 112 | 136 | A | H |
| | | 2483.92 | 62.67 | -11.33 | 74 | 49.11 | 26.93 | 19.16 | 32.53 | 112 | 136 | P | H |
| | | 2483.52 | 52.36 | -1.64 | 54 | 38.8 | 26.93 | 19.16 | 32.53 | 112 | 136 | A | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | * | 2478 | 106.99 | - | - | 93.43 | 26.94 | 19.15 | 32.53 | 349 | 63 | P | V |
| | * | 2478 | 101.71 | - | - | 88.15 | 26.94 | 19.15 | 32.53 | 349 | 63 | A | V |
| | | 2483.96 | 60.76 | -13.24 | 74 | 47.2 | 26.93 | 19.16 | 32.53 | 349 | 63 | P | V |
| | | 2483.52 | 50.08 | -3.92 | 54 | 36.52 | 26.93 | 19.16 | 32.53 | 349 | 63 | A | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| Remark | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

## 2.4GHz 2400~2483.5MHz

## BT (Harmonic @ 3m)

| BT | Note | Frequency ( MHz ) | Level ( dBµV/m ) | Margin ( dB ) | Limit Line ( dBµV/m ) | Read Level ( dBµV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BT CH 02 2404MHz | | 4808 | 46.16 | -27.84 | 74 | 32.81 | 32.43 | 14.51 | 33.59 | - | - | P | H |
| | | 7212 | 50.28 | -23.72 | 74 | 32.17 | 37.57 | 16.41 | 35.87 | - | - | P | H |
| | | | | | | | | | | | | | H |
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| | | | | | | | | | | | | | H |
| | | 4808 | 46.49 | -27.51 | 74 | 33.14 | 32.43 | 14.51 | 33.59 | - | - | P | V |
| | | 7212 | 50.23 | -23.77 | 74 | 32.12 | 37.57 | 16.41 | 35.87 | - | - | P | V |
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| BT | Note | Frequency ( MHz ) | Level ( dBµV/m ) | Margin ( dB ) | Limit Line ( dBµV/m ) | Read Level ( dBµV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 4882 | 46.95 | -27.05 | 74 | 33.47 | 32.6 | 14.45 | 33.57 | - | - | P | H |
| | | 7323 | 50.48 | -23.52 | 74 | 31.9 | 37.95 | 16.58 | 35.95 | - | - | P | H |
| | | | | | | | | | | | | | H |
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| | | | | | | | | | | | | | H |
| BT CH 39 2441MHz | | | | | | | | | | | | | H |
| | | 4882 | 46.63 | -27.37 | 74 | 33.15 | 32.6 | 14.45 | 33.57 | - | - | P | V |
| | | 7323 | 50.35 | -23.65 | 74 | 31.77 | 37.95 | 16.58 | 35.95 | - | - | P | V |
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| | | | | | | | | | | | | | V |

| BT | Note | Frequency ( MHz ) | Level ( dBµV/m ) | Margin ( dB ) | Limit Line ( dBµV/m ) | Read Level ( dBµV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BT CH 76 2478MHz | | 4956 | 47.62 | -26.38 | 74 | 34.08 | 32.7 | 14.4 | 33.56 | - | - | P | H |
| | | 7434 | 49.86 | -24.14 | 74 | 31.2 | 37.83 | 16.86 | 36.03 | - | - | P | H |
| | | | | | | | | | | | | | H |
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| | | | | | | | | | | | | | H |
| | | 4956 | 45.85 | -28.15 | 74 | 32.31 | 32.7 | 14.4 | 33.56 | - | - | P | V |
| | | 7434 | 49.75 | -24.25 | 74 | 31.09 | 37.83 | 16.86 | 36.03 | - | - | P | V |
| | | | | | | | | | | | | | V |
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**Remark**

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.

## Emission above 18GHz

## 2.4GHz BT (SHF)

| BT | Note | Frequency | Level | Margin | Limit | Read | Antenna | Path | Preamp | Ant | Table | Peak | Pol. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Line | Level | Factor | Loss | Factor | Pos | Pos | Avg. | |
| | | ( MHz ) | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | (dBμV) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | (P/A) | (H/V) |
| 2.4GHz BT SHF | | 38482 | 49.55 | -38.65 | 88.2 | 41.65 | 43.01 | 28.35 | 63.46 | - | - | P | H |
| | | | | | | | | | | | | | H |
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| | | | | | | | | | | | | | H |
| | | 38482 | 50.32 | -37.88 | 88.2 | 42.42 | 43.01 | 28.35 | 63.46 | - | - | P | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |

**Remark**

1. No other spurious found.
2. All results are PASS against limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.

## Emission below 1GHz

## 2.4GHz BT (LF)

| BT | Note | Frequency | Level | Margin | Limit | Read | Antenna | Path | Preamp | Ant | Table | Peak | Pol. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Line | Level | Factor | Loss | Factor | Pos | Pos | Avg. | |
| | | ( MHz ) | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | (dBμV) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | (P/A) | (H/V) |
| 2.4GHz BT LF | | 58.13 | 26.38 | -13.62 | 40 | 45.56 | 11.8 | 1.76 | 32.74 | - | - | P | H |
| | | 84.32 | 22.92 | -17.08 | 40 | 39.68 | 13.9 | 2.05 | 32.71 | - | - | P | H |
| | | 123.12 | 29.71 | -13.79 | 43.5 | 42.5 | 17.49 | 2.41 | 32.69 | - | - | P | H |
| | | 309.36 | 21.78 | -24.22 | 46 | 31.74 | 19.2 | 3.61 | 32.77 | - | - | P | H |
| | | 736.16 | 37.96 | -8.04 | 46 | 37.53 | 27.82 | 5.38 | 32.77 | - | - | P | H |
| | | 944.71 | 35.79 | -10.21 | 46 | 30.59 | 30.68 | 6.09 | 31.57 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 58.13 | 30.57 | -9.43 | 40 | 49.75 | 11.8 | 1.76 | 32.74 | - | - | P | V |
| | | 119.24 | 28.59 | -14.91 | 43.5 | 41.55 | 17.35 | 2.38 | 32.69 | - | - | P | V |
| | | 200.72 | 18.88 | -24.62 | 43.5 | 33.59 | 15.01 | 2.99 | 32.71 | - | - | P | V |
| | | 610.06 | 29.13 | -16.87 | 46 | 31.43 | 25.7 | 4.96 | 32.96 | - | - | P | V |
| | | 736.16 | 37.18 | -8.82 | 46 | 36.75 | 27.82 | 5.38 | 32.77 | - | - | P | V |
| | | 956.35 | 36.45 | -9.55 | 46 | 30.54 | 31.23 | 6.14 | 31.46 | - | - | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

**Remark**

1. No other spurious found.
2. All results are PASS against limit line.
3. The emission position marked as “-” means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only.

**Note symbol**

| | |
|---|---|
| * | **Fundamental Frequency** which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency. |
| ! | Test result is **over limit** line. |
| P/A | **P**eak or **A**verage |
| H/V | **H**orizontal or **V**ertical |

## A calculation example for radiated spurious emission is shown as below:

| BT | Note | Frequency | Level | Margin | Limit | Read | Antenna | Path | Preamp | Ant | Table | Peak | Pol. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Line | Level | Factor | Loss | Factor | Pos | Pos | Avg. | |
| | | ( MHz ) | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | ( dBμV ) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | (P/A) | (H/V) |
| BT CH 00 2402MHz | | 2390 | 55.45 | -18.55 | 74 | 54.51 | 32.22 | 4.58 | 35.86 | 103 | 308 | P | H |
| | | 2390 | 43.54 | -10.46 | 54 | 42.6 | 32.22 | 4.58 | 35.86 | 103 | 308 | A | H |

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) =

Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

3. Margin(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

**For Peak Limit @ 2390MHz:**

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)

= 55.45 (dBμV/m)

2. Margin(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

**For Average Limit @ 2390MHz:**

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

2. Margin(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

**Both peak and average measured complies with the limit line, so test result is “PASS”.**

# Appendix D. Radiated Spurious Emission Plots

| | | | |
|---|---|---|---|
| **Test Engineer :** | Michael Liu, Bank Lin and Wen-Kai Lu | **Temperature :** | 20.1~23.1°C |
| | | **Relative Humidity :** | 55~65% |

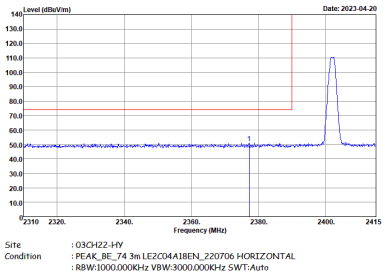
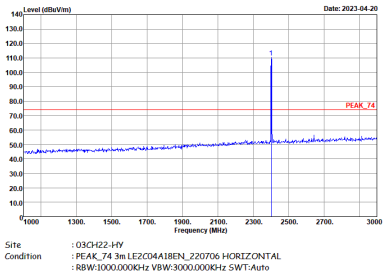
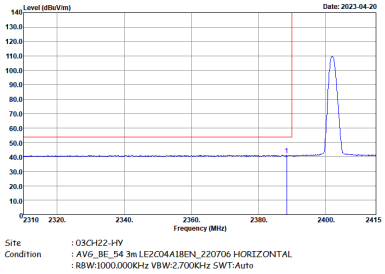
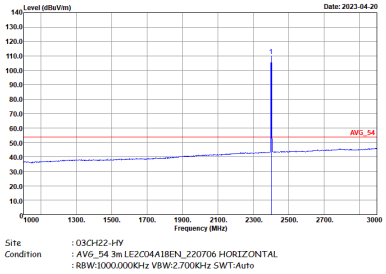
## Note symbol

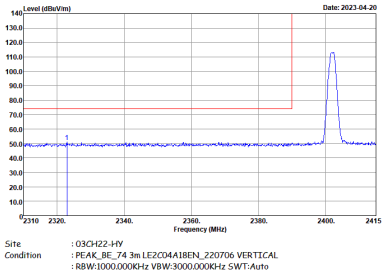
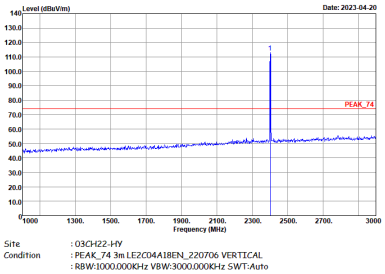
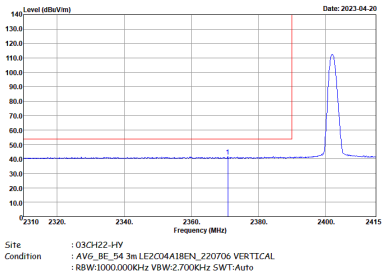
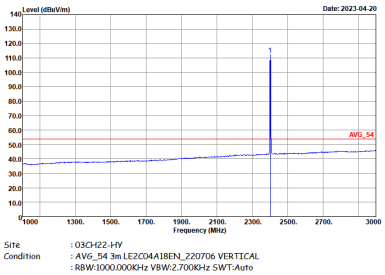
| | |
|---|---|
| -L | **Low channel location** |
| -R | **High channel location** |

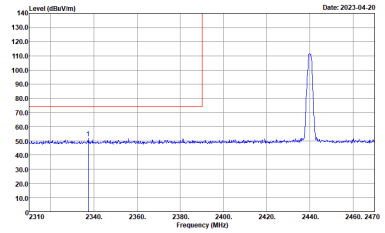
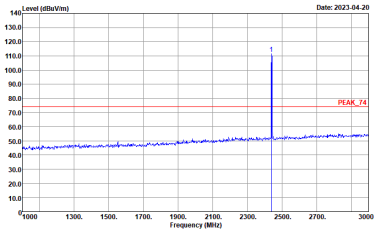
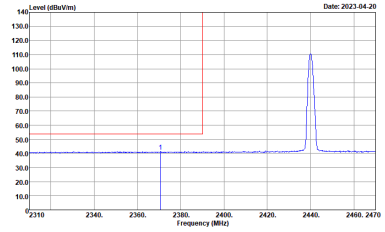
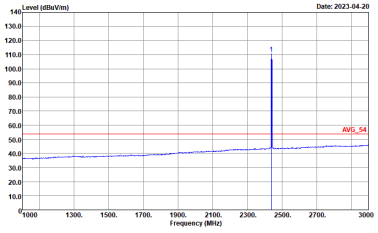
**MIMO <Ant. 3+4>**

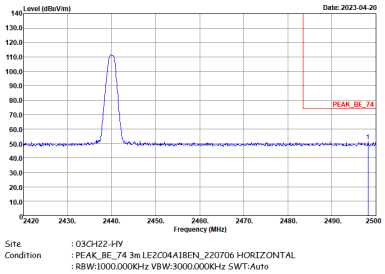
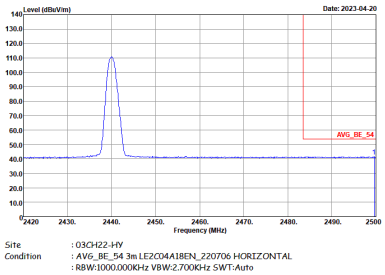
**<1Mbps>**

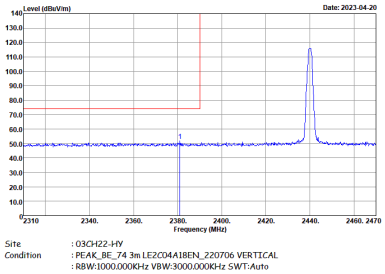
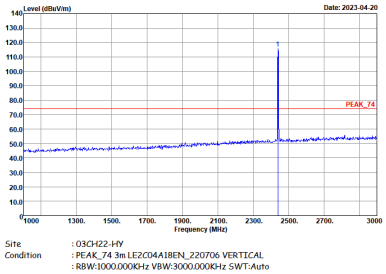
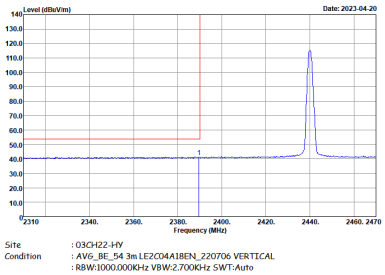
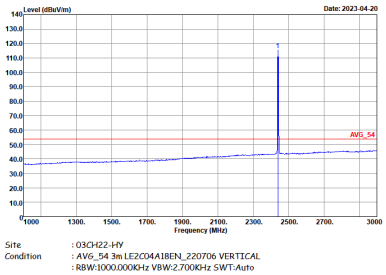
## 2.4GHz 2400~2483.5MHz
## BLE (Band Edge @ 3m)

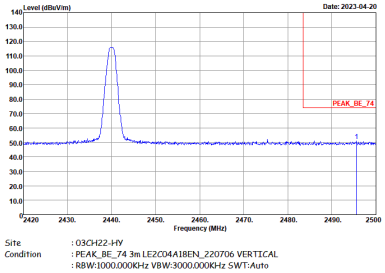
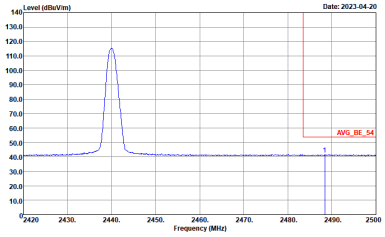
| BLE | 2.4GHz 2400~2483.5MHz Band Edge @ 3m | |
|---|---|---|
| | BLE CH00 2402MHz | |
| | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  |  |

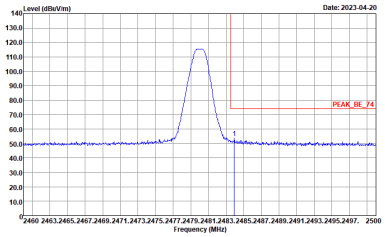
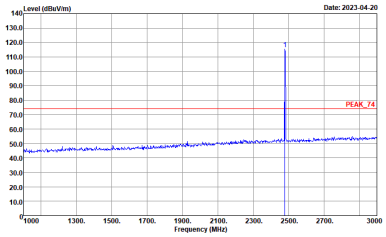
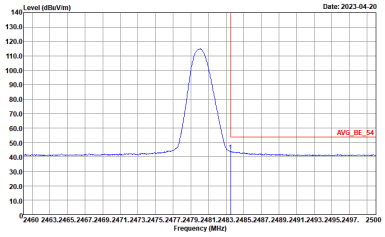
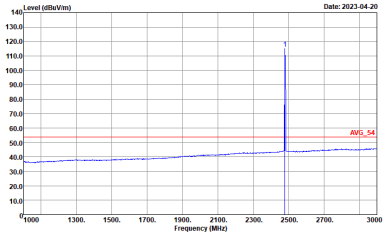
| BLE | 2.4GHz 2400~2483.5MHz Band Edge @ 3m | |
|---|---|---|
| | BLE CH00 2402MHz | |
| | Vertical | Fundamental |
| Peak |  <br>Site : 03CH22-HY<br>Condition : PEAK_BE_74 3m LE2C04A18EN_220706 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto |  <br>Site : 03CH22-HY<br>Condition : PEAK_74 3m LE2C04A18EN_220706 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto |
| Avg |  <br>Site : 03CH22-HY<br>Condition : AVG_BE_54 3m LE2C04A18EN_220706 VERTICAL<br>: RBW:1000.000KHz VBW:2.700KHz SWT:Auto |  <br>Site : 03CH22-HY<br>Condition : AVG_54 3m LE2C04A18EN_220706 VERTICAL<br>: RBW:1000.000KHz VBW:2.700KHz SWT:Auto |

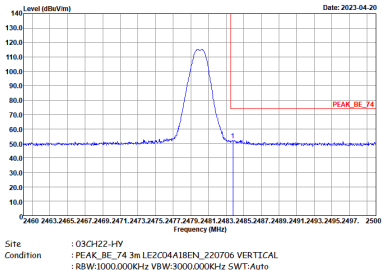
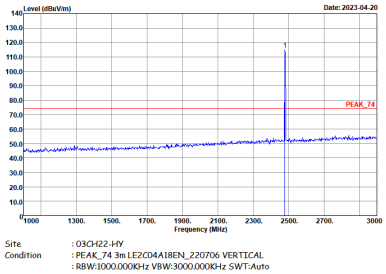
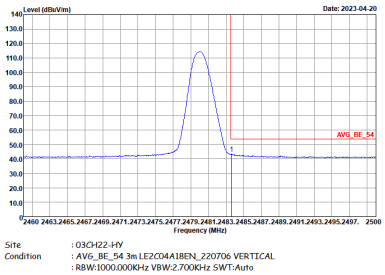
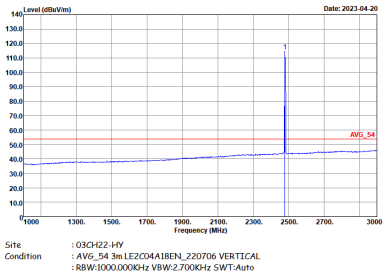
| BLE | 2.4GHz 2400~2483.5MHz Band Edge @ 3m | |
|---|---|---|
| | BLE CH19 2440MHz - L | |
| | Horizontal | Fundamental |
| Peak |  <br>Site : 03CH22-HV<br>Condition : PEAK_8E_74 3m LE2C04A18EN_220706 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto |  <br>Site : 03CH22-HV<br>Condition : PEAK_74 3m LE2C04A18EN_220706 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto |
| Avg. |  <br>Site : 03CH22-HV<br>Condition : AVG_8E_54 3m LE2C04A18EN_220706 HORIZONTAL<br>: RBW:1000.000KHz VBW:2.700KHz SWT:Auto |  <br>Site : 03CH22-HV<br>Condition : AVG_54 3m LE2C04A18EN_220706 HORIZONTAL<br>: RBW:1000.000KHz VBW:2.700KHz SWT:Auto |

| BLE | 2.4GHz 2400~2483.5MHz Band Edge @ 3m | |
|---|---|---|
| | BLE CH19 2440MHz - R | |
| | Horizontal | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

| BLE | 2.4GHz 2400~2483.5MHz Band Edge @ 3m | |
|---|---|---|
| | BLE CH19 2440MHz - L | |
| | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  |  |

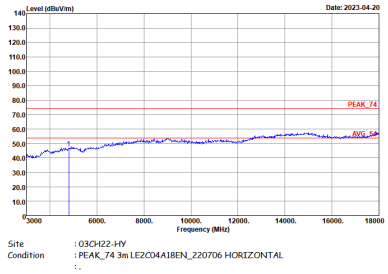
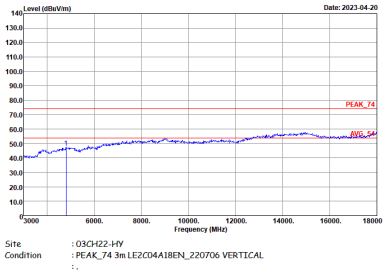
| BLE | 2.4GHz 2400~2483.5MHz Band Edge @ 3m | |
|---|---|---|
| | BLE CH19 2440MHz - R | |
| | Vertical | Fundamental |
| Peak |  <br>Site : 03CH22-HY<br>Condition : PEAK_BE_74 3m LE2C04A18EN_220706 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto | Left blank |
| Avg. |  <br>Site : 03CH22-HY<br>Condition : AVG_BE_54 3m LE2C04A18EN_220706 VERTICAL<br>: RBW:1000.000KHz VBW:2.700KHz SWT:Auto | Left blank |

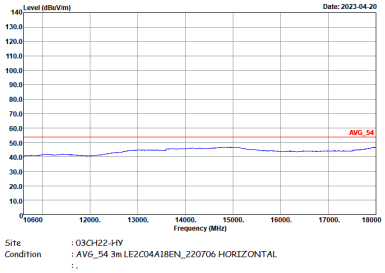
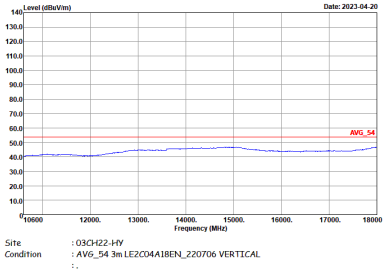
| BLE | 2.4GHz 2400~2483.5MHz Band Edge @ 3m | |
|---|---|---|
| | BLE CH39 2480MHz | |
| | Horizontal | Fundamental |
| Peak |  <br>Site : 03CH22-HY<br>Condition : PEAK_BE_74 3m LE2C04A18EN_220706 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto |  <br>Site : 03CH22-HY<br>Condition : PEAK_74 3m LE2C04A18EN_220706 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto |
| Avg. |  <br>Site : 03CH22-HY<br>Condition : AVG_BE_54 3m LE2C04A18EN_220706 HORIZONTAL<br>: RBW:1000.000KHz VBW:2.700KHz SWT:Auto |  <br>Site : 03CH22-HY<br>Condition : AVG_54 3m LE2C04A18EN_220706 HORIZONTAL<br>: RBW:1000.000KHz VBW:2.700KHz SWT:Auto |

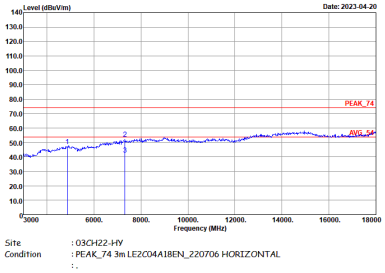
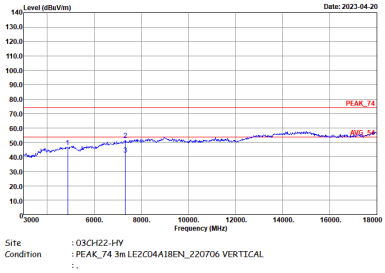
| BLE | 2.4GHz 2400~2483.5MHz Band Edge @ 3m | |
|---|---|---|
| | BLE CH39 2480MHz | |
| | Vertical | Fundamental |
| Peak |  <br>Site : 03CH22-HY<br>Condition : PEAK_BE_74 3m LE2C04A18EN_220706 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto |  <br>Site : 03CH22-HY<br>Condition : PEAK_74 3m LE2C04A18EN_220706 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto |
| Avg. |  <br>Site : 03CH22-HY<br>Condition : AVG_BE_54 3m LE2C04A18EN_220706 VERTICAL<br>: RBW:1000.000KHz VBW:2.700KHz SWT:Auto |  <br>Site : 03CH22-HY<br>Condition : AVG_54 3m LE2C04A18EN_220706 VERTICAL<br>: RBW:1000.000KHz VBW:2.700KHz SWT:Auto |

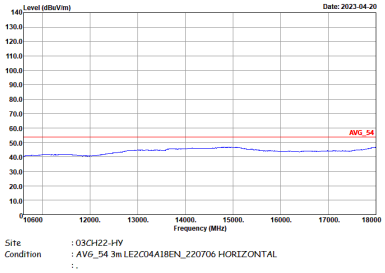
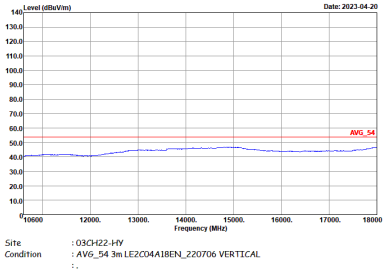
## 2.4GHz 2400~2483.5MHz

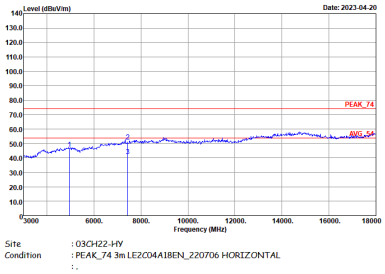
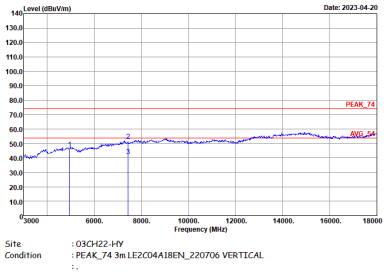
## BLE (Harmonic @ 3m)

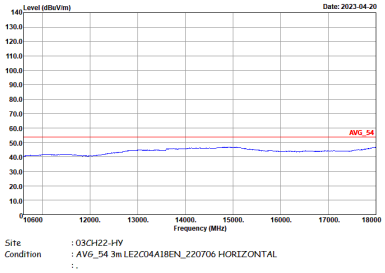
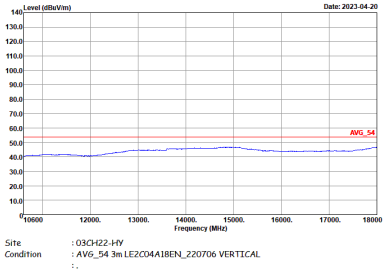
| BLE | 2.4GHz 2400~2483.5MHz Harmonic @ 3m | |
|---|---|---|
| | BLE CH00 2402MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

| BLE | 2.4GHz 2400~2483.5MHz Harmonic @ 3m | |
|---|---|---|
| | BLE CH00 2402MHz | |
| | Horizontal | Vertical |
| 10.6G ~18G Avg. |  |  |

| BLE | 2.4GHz 2400~2483.5MHz Harmonic @ 3m | |
|---|---|---|
| | BLE CH19 2440MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

| BLE | 2.4GHz 2400~2483.5MHz Harmonic @ 3m | |
|---|---|---|
| | BLE CH19 2440MHz | |
| | Horizontal | Vertical |
| 10.6G ~18G Avg. |  |  |

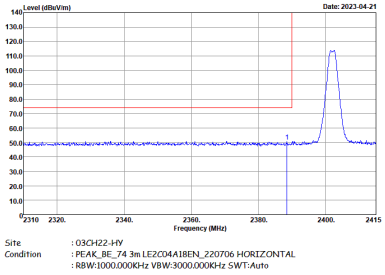
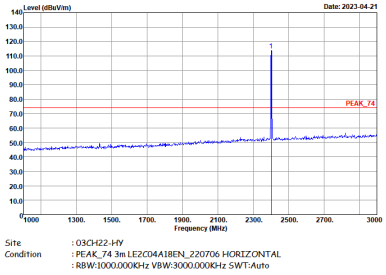
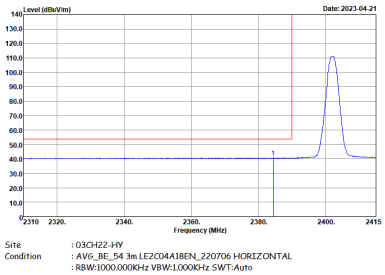
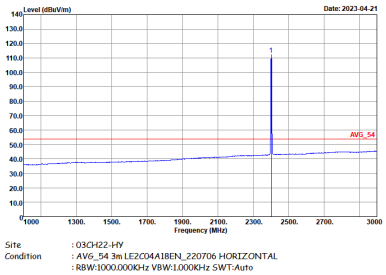
| BLE | 2.4GHz 2400~2483.5MHz Harmonic @ 3m | |
|---|---|---|
| | BLE CH39 2480MHz | |
| | Horizontal | Vertical |
| Peak |  |  |

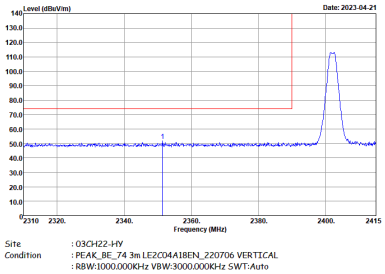
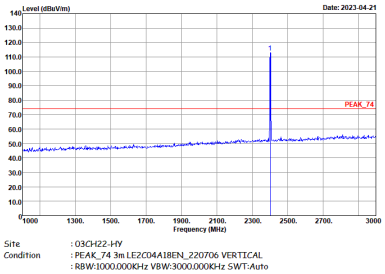
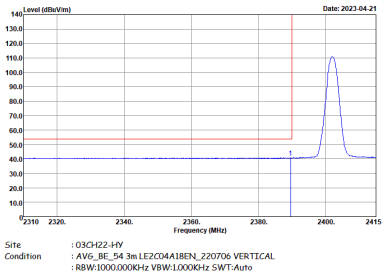
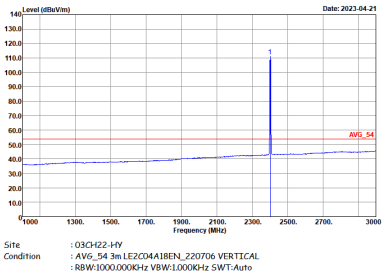
| BLE | 2.4GHz 2400~2483.5MHz Harmonic @ 3m | |
|---|---|---|
| | BLE CH39 2480MHz | |
| | Horizontal | Vertical |
| 10.6G ~18G Avg. |  |  |

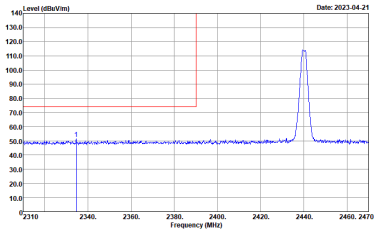
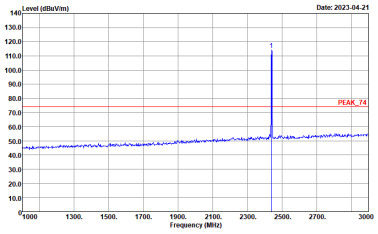
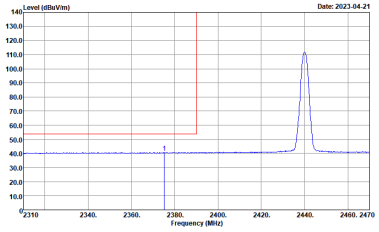
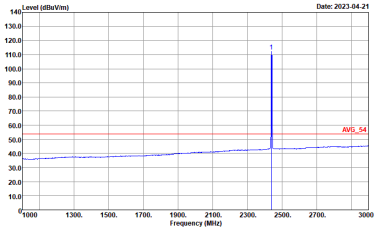
**<2Mbps>**

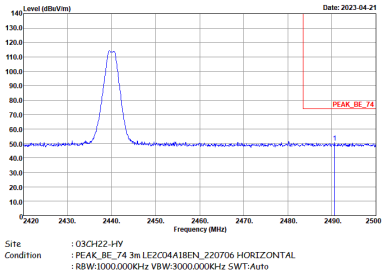
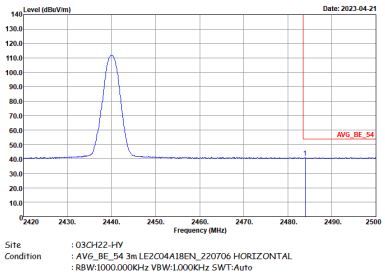
## 2.4GHz 2400~2483.5MHz

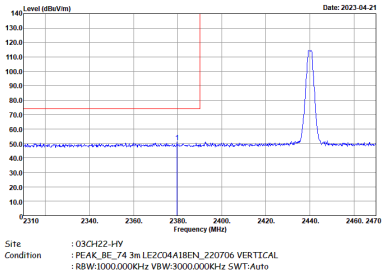
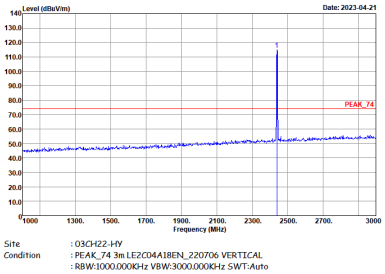
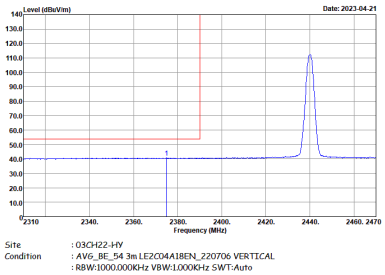
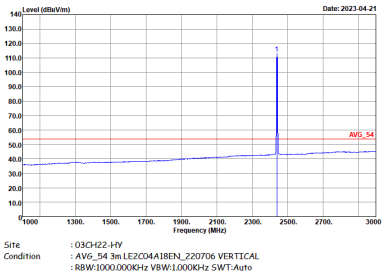
## BLE (Band Edge @ 3m)

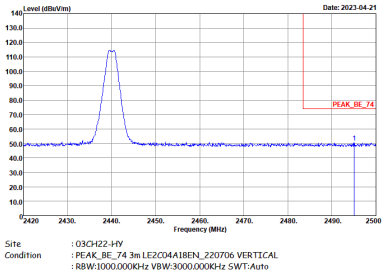
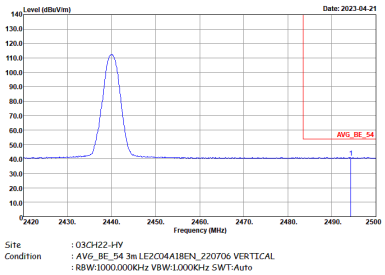
| BLE | 2.4GHz 2400~2483.5MHz Band Edge @ 3m | |
|---|---|---|
| | BLE CH00 2402MHz | |
| | Horizontal | Fundamental |
| Peak |  |  |
| Avg. |  |  |

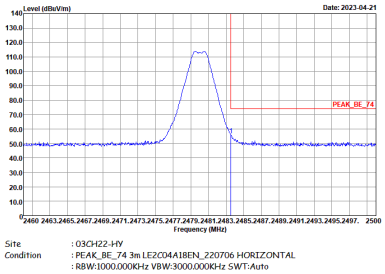
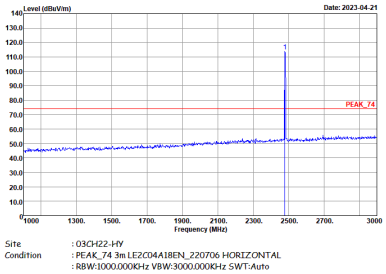
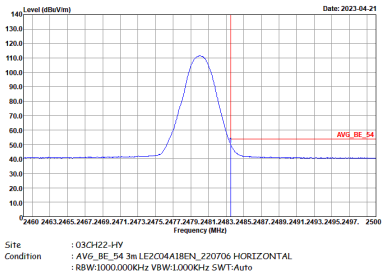
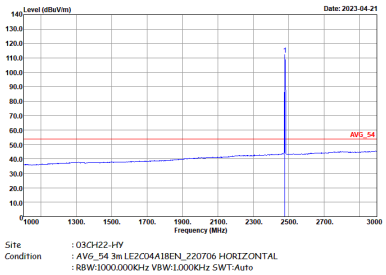
| BLE | 2.4GHz 2400~2483.5MHz Band Edge @ 3m | |
|---|---|---|
| | BLE CH00 2402MHz | |
| | Vertical | Fundamental |
| Peak |  <br>Site : 03CH22-HY<br>Condition : PEAK_BE_74 3m LE2C04A18EN_220706 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto |  <br>Site : 03CH22-HY<br>Condition : PEAK_74 3m LE2C04A18EN_220706 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto |
| Avg |  <br>Site : 03CH22-HY<br>Condition : AVG_BE_54 3m LE2C04A18EN_220706 VERTICAL<br>: RBW:1000.000KHz VBW:1.000KHz SWT:Auto |  <br>Site : 03CH22-HY<br>Condition : AVG_54 3m LE2C04A18EN_220706 VERTICAL<br>: RBW:1000.000KHz VBW:1.000KHz SWT:Auto |

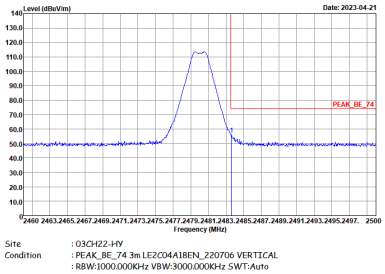
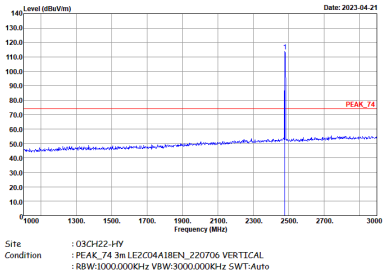
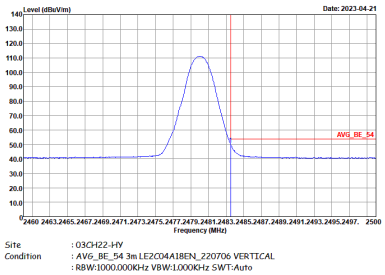
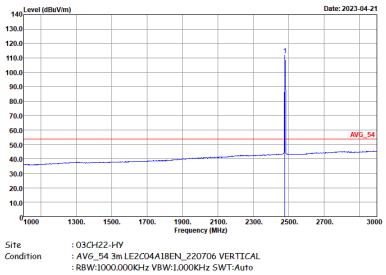
| BLE | 2.4GHz 2400~2483.5MHz Band Edge @ 3m | |
|---|---|---|
| | BLE CH19 2440MHz - L | |
| | Horizontal | Fundamental |
| Peak |  <br>Site : 03CH22-HV<br>Condition : PEAK_8E_74 3m LE2C04A18EN_220706 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto |  <br>Site : 03CH22-HV<br>Condition : PEAK_74 3m LE2C04A18EN_220706 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto |
| Avg. |  <br>Site : 03CH22-HV<br>Condition : AVG_8E_54 3m LE2C04A18EN_220706 HORIZONTAL<br>: RBW:1000.000KHz VBW:1.000KHz SWT:Auto |  <br>Site : 03CH22-HV<br>Condition : AVG_54 3m LE2C04A18EN_220706 HORIZONTAL<br>: RBW:1000.000KHz VBW:1.000KHz SWT:Auto |

| BLE | 2.4GHz 2400~2483.5MHz Band Edge @ 3m | |
|---|---|---|
| | BLE CH19 2440MHz - R | |
| | Horizontal | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

| BLE | 2.4GHz 2400~2483.5MHz Band Edge @ 3m | |
|---|---|---|
| | BLE CH19 2440MHz - L | |
| | Vertical | Fundamental |
| Peak |  |  |
| Avg. |  |  |

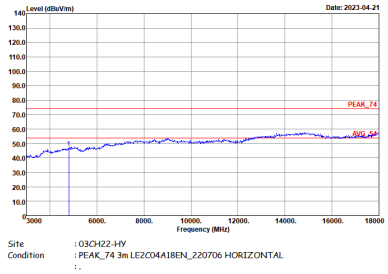
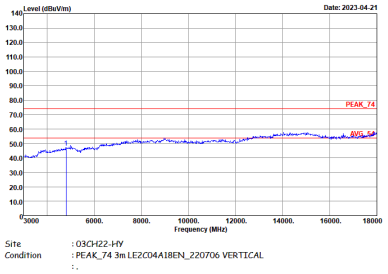
| BLE | 2.4GHz 2400~2483.5MHz Band Edge @ 3m | |
|---|---|---|
| | BLE CH19 2440MHz - R | |
| | Vertical | Fundamental |
| Peak |  | Left blank |
| Avg. |  | Left blank |

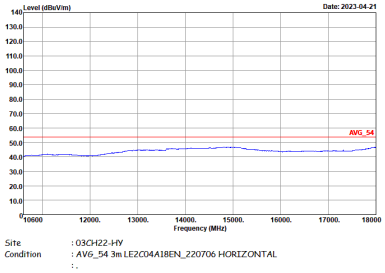
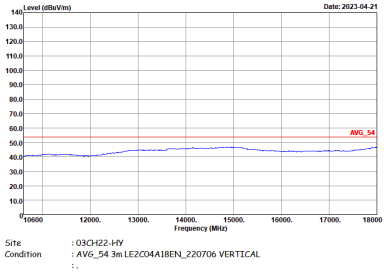
| BLE | 2.4GHz 2400~2483.5MHz Band Edge @ 3m | |
|---|---|---|
| | BLE CH39 2480MHz | |
| | Horizontal | Fundamental |
| Peak |  <br>Site : 03CH22-HY<br>Condition : PEAK_BE_74 3m LE2C04A18EN_220706 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto |  <br>Site : 03CH22-HY<br>Condition : PEAK_74 3m LE2C04A18EN_220706 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto |
| Avg. |  <br>Site : 03CH22-HY<br>Condition : AVG_BE_54 3m LE2C04A18EN_220706 HORIZONTAL<br>: RBW:1000.000KHz VBW:1.000KHz SWT:Auto |  <br>Site : 03CH22-HY<br>Condition : AVG_54 3m LE2C04A18EN_220706 HORIZONTAL<br>: RBW:1000.000KHz VBW:1.000KHz SWT:Auto |

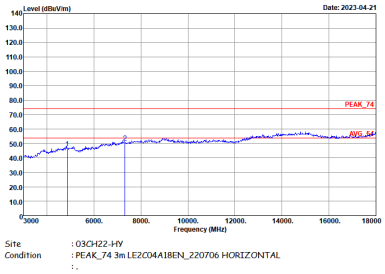
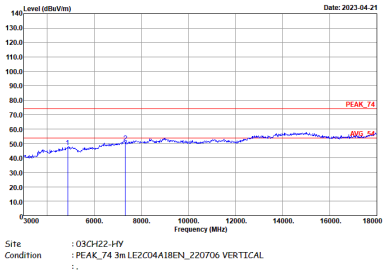
| BLE | 2.4GHz 2400~2483.5MHz Band Edge @ 3m | |
|---|---|---|
| | BLE CH39 2480MHz | |
| | Vertical | Fundamental |
| Peak |  <br>Site : 03CH22-HY<br>Condition : PEAK_BE_74 3m LE2C04A18EN_220706 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto |  <br>Site : 03CH22-HY<br>Condition : PEAK_74 3m LE2C04A18EN_220706 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto |
| Avg. |  <br>Site : 03CH22-HY<br>Condition : AVG_BE_54 3m LE2C04A18EN_220706 VERTICAL<br>: RBW:1000.000KHz VBW:1.000KHz SWT:Auto |  <br>Site : 03CH22-HY<br>Condition : AVG_54 3m LE2C04A18EN_220706 VERTICAL<br>: RBW:1000.000KHz VBW:1.000KHz SWT:Auto |

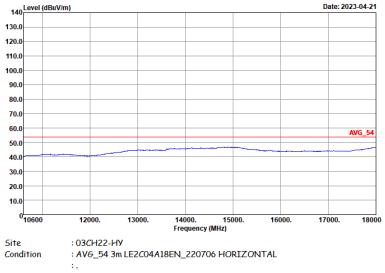
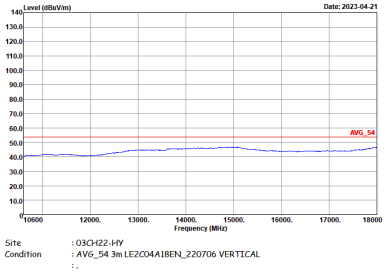
## 2.4GHz 2400~2483.5MHz

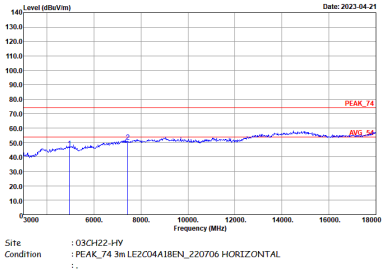
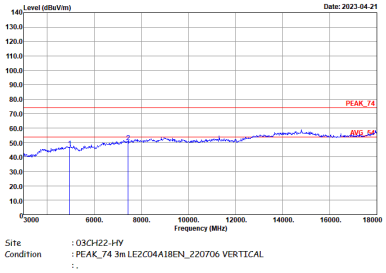
## BLE (Harmonic @ 3m)

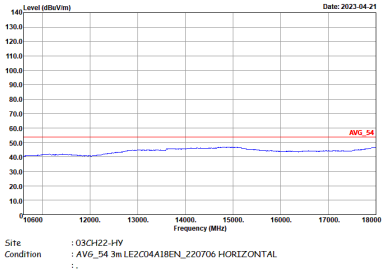
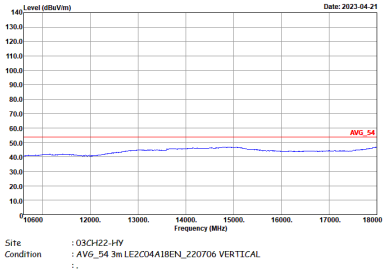
| BLE | 2.4GHz 2400~2483.5MHz Harmonic @ 3m | |
|---|---|---|
| | BLE CH00 2402MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

| BLE | 2.4GHz 2400~2483.5MHz Harmonic @ 3m | |
|---|---|---|
| | BLE CH00 2402MHz | |
| | Horizontal | Vertical |
| 10.6G ~18G Avg. |  |  |

| BLE | 2.4GHz 2400~2483.5MHz Harmonic @ 3m | |
|---|---|---|
| | BLE CH19 2440MHz | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

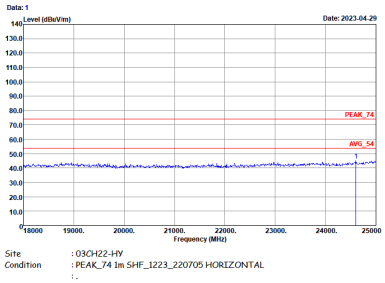
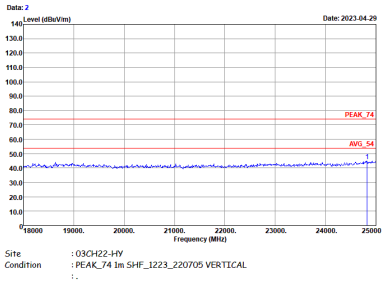
| BLE | 2.4GHz 2400~2483.5MHz Harmonic @ 3m | |
|---|---|---|
| | BLE CH19 2440MHz | |
| | Horizontal | Vertical |
| 10.6G ~18G Avg. |  |  |

| BLE | 2.4GHz 2400~2483.5MHz Harmonic @ 3m | |
|---|---|---|
| | BLE CH39 2480MHz | |
| | Horizontal | Vertical |
| Peak |  |  |

| BLE | 2.4GHz 2400~2483.5MHz Harmonic @ 3m | |
|---|---|---|
| | BLE CH39 2480MHz | |
| | Horizontal | Vertical |
| 10.6G ~18G Avg. |  |  |

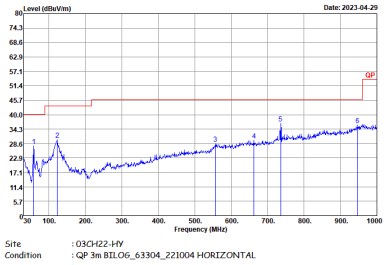
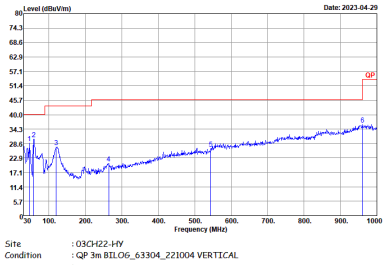
## Emission above 18GHz

## 2.4GHz BLE (SHF @ 1m)

| BLE | 2.4GHz 2400~2483.5MHz | |
|---|---|---|
| | BLE SHF | |
| | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

## Emission below 1GHz

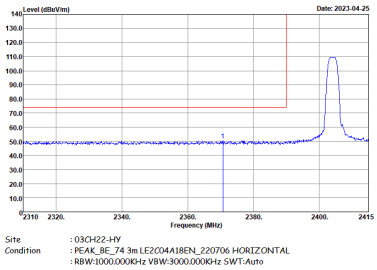
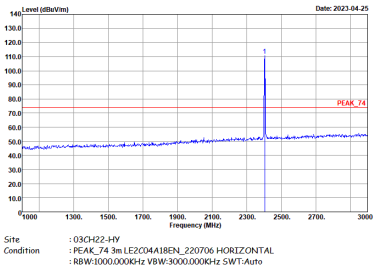
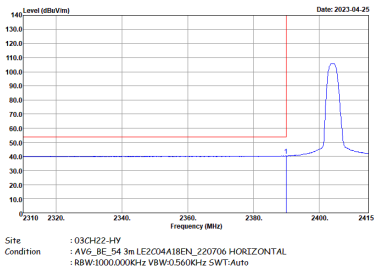
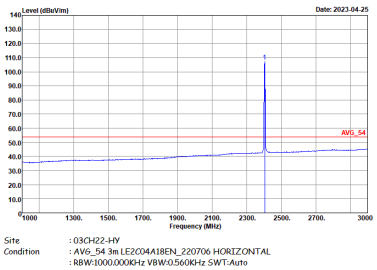
## 2.4GHz BLE (LF)

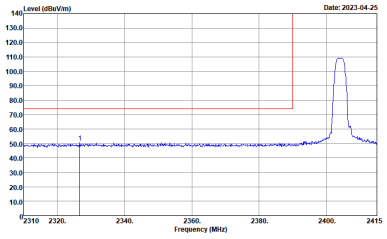
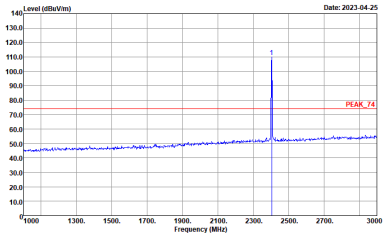
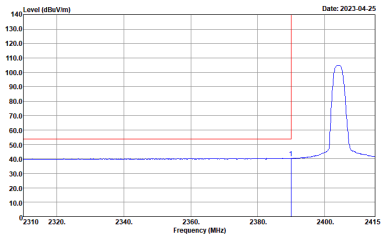
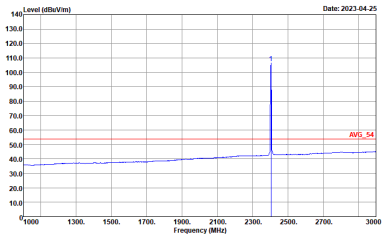
| BLE | 2.4GHz 2400~2483.5MHz | |
|---|---|---|
| | BLE LF | |
| | Horizontal | Vertical |
| QP / Peak |  |  |

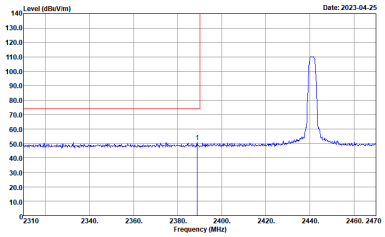
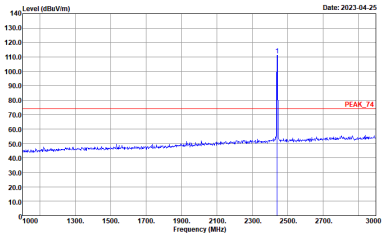
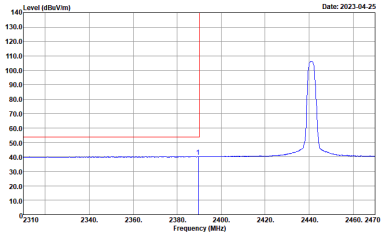
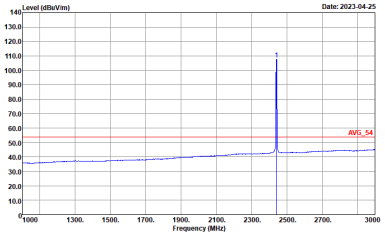
**<4Mbps>**

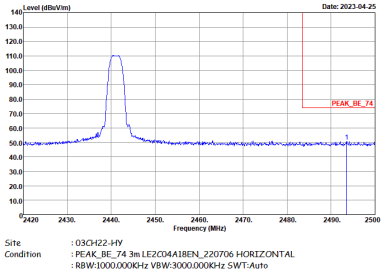
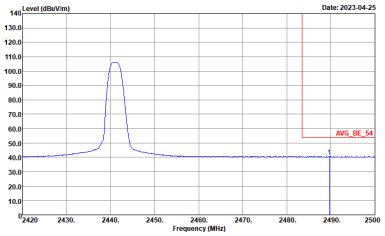
## 2.4GHz 2400~2483.5MHz

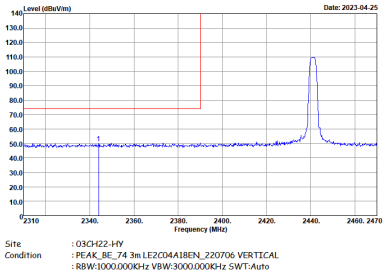
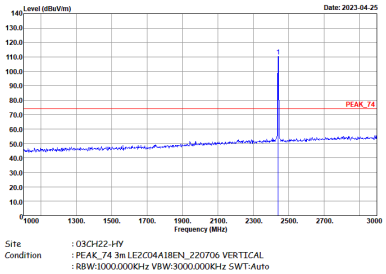
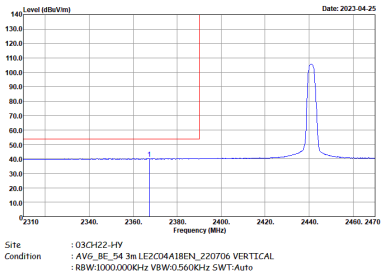
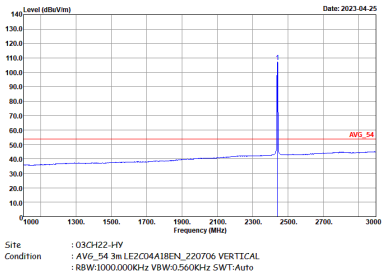
## BT (Band Edge @ 3m)

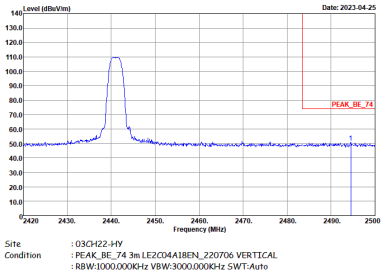
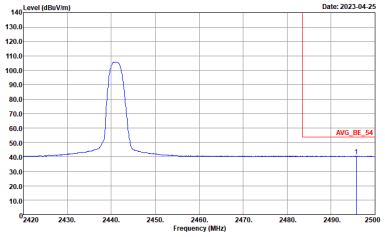
| BT | 2.4GHz 2400~2483.5MHz Band Edge @ 3m | |
|---|---|---|
| | BT CH02 2404MHz | |
| | Horizontal | Fundamental |
| Peak |  |  |
| Avg |  |  |

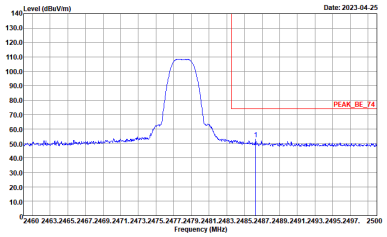
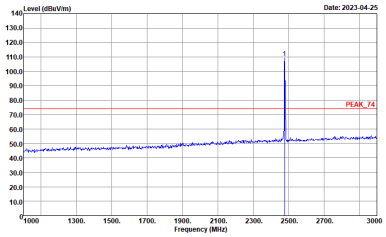
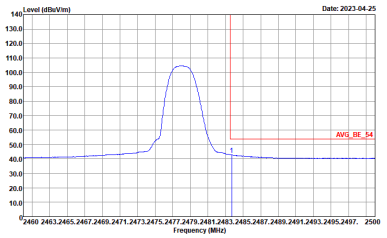
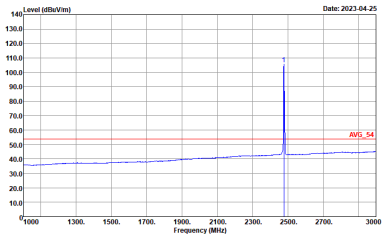
| BT | 2.4GHz 2400~2483.5MHz Band Edge @ 3m | |
|---|---|---|
| | BT CH02 2404MHz | |
| | Vertical | Fundamental |
| Peak |  |  |
| Avg |  |  |

| BT | 2.4GHz 2400~2483.5MHz Band Edge @ 3m | |
|---|---|---|
| | BT CH39 2441MHz | |
| | Horizontal | Fundamental |
| Peak |  <br>Site : 03CH22-HY<br>Condition : PEAK_BE_74 3m LE2C04A18EN_220706 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto |  <br>Site : 03CH22-HY<br>Condition : PEAK_74 3m LE2C04A18EN_220706 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto |
| Avg |  <br>Site : 03CH22-HY<br>Condition : AVG_BE_54 3m LE2C04A18EN_220706 HORIZONTAL<br>: RBW:1000.000KHz VBW:0.560KHz SWT:Auto |  <br>Site : 03CH22-HY<br>Condition : AVG_54 3m LE2C04A18EN_220706 HORIZONTAL<br>: RBW:1000.000KHz VBW:0.560KHz SWT:Auto |

| BT | 2.4GHz 2400~2483.5MHz Band Edge @ 3m | |
|---|---|---|
| | BT CH39 2441MHz | |
| | Horizontal | Fundamental |
| Peak |  <br>Site : 03CH22-HY<br>Condition : PEAK_BE_74 3m LE2C04A18EN_220706 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto | |
| Avg |  <br>Site : 03CH22-HY<br>Condition : AVG_BE_54 3m LE2C04A18EN_220706 HORIZONTAL<br>: RBW:1000.000KHz VBW:0.560KHz SWT:Auto | |

| BT | 2.4GHz 2400~2483.5MHz Band Edge @ 3m | |
|---|---|---|
| | BT CH39 2441MHz | |
| | Vertical | Fundamental |
| Peak |  |  |
| Avg |  |  |

| BT | 2.4GHz 2400~2483.5MHz Band Edge @ 3m | |
|---|---|---|
| | BT CH39 2441MHz | |
| | Vertical | Fundamental |
| Peak |  <br>Site : 03CH22-HY<br>Condition : PEAK_BE_74 3m LE2C04A18EN_220706 VERTICAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto | |
| Avg |  <br>Site : 03CH22-HY<br>Condition : AVG_BE_54 3m LE2C04A18EN_220706 VERTICAL<br>: RBW:1000.000KHz VBW:0.560KHz SWT:Auto | |

| BT | 2.4GHz 2400~2483.5MHz Band Edge @ 3m | |
|---|---|---|
| | BT CH78 2480MHz | |
| | Horizontal | Fundamental |
| Peak |  <br>Site : 03CH22-HY<br>Condition : PEAK_BE_74 3m LE2C04A18EN_220706 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto |  <br>Site : 03CH22-HY<br>Condition : PEAK_74 3m LE2C04A18EN_220706 HORIZONTAL<br>: RBW:1000.000KHz VBW:3000.000KHz SWT:Auto |
| Avg |  <br>Site : 03CH22-HY<br>Condition : AVG_BE_54 3m LE2C04A18EN_220706 HORIZONTAL<br>: RBW:1000.000KHz VBW:0.560KHz SWT:Auto |  <br>Site : 03CH22-HY<br>Condition : AVG_54 3m LE2C04A18EN_220706 HORIZONTAL<br>: RBW:1000.000KHz VBW:0.560KHz SWT:Auto |