

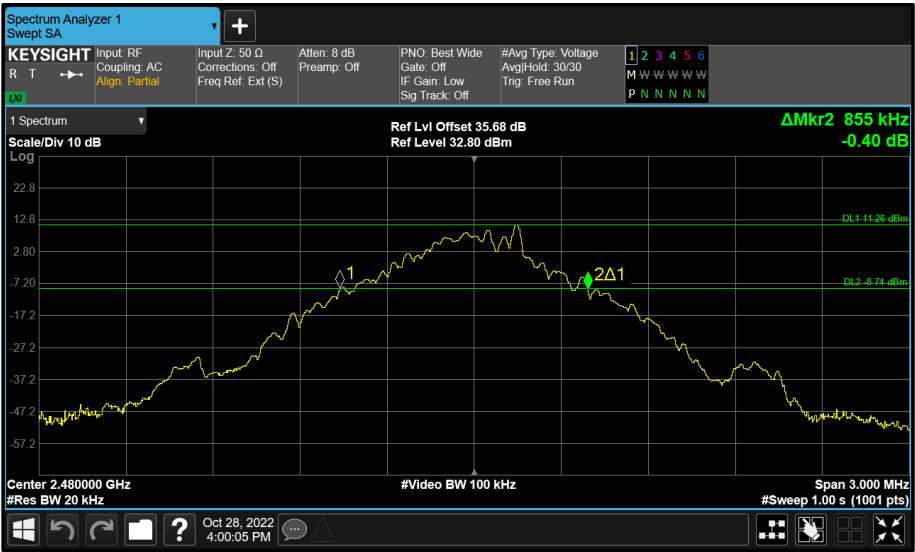


Figure 83 - Core 0 (A) 2480 MHz (CH78) 20 dB Bandwidth

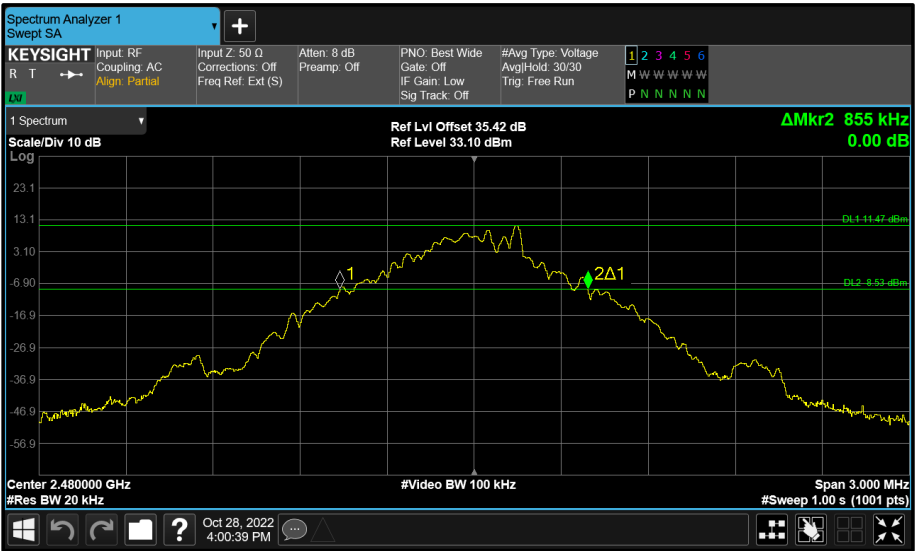


Figure 84 - Core 1 (B) 2480 MHz (CH78) 20 dB Bandwidth



| Test Configuration       |                                  |                 |              |
|--------------------------|----------------------------------|-----------------|--------------|
| Frequency Range:         | 2400-2483.5 MHz                  | Band:           | 2.4 GHz      |
| Limit Clause(s):         | FCC 15.247 (a)(1)<br>RSS-247 5.1 | Test Method(s): | C63.10 6.9.2 |
| Additional Reference(s): | -                                |                 |              |

| DUT Configuration      |                           |                          |   |
|------------------------|---------------------------|--------------------------|---|
| Mode:                  | iPA $\pi/4$ DQPSK (2-DH5) | Duty Cycle (%):          | - |
| Antenna Configuration: | SISO                      | DCCF (dB):               | - |
| Active Port(s):        | B (Core 1)                | Peak Antenna Gain (dBi): | - |

| Test Frequency (MHz) | 20 dB Bandwidth (MHz) |       |   |   |
|----------------------|-----------------------|-------|---|---|
|                      | A                     | B     | C | D |
| 2402                 | -                     | 1.330 | - | - |
| 2441                 | -                     | 1.325 | - | - |
| 2480                 | -                     | 1.330 | - | - |

**Table 48 - 20 dB Bandwidth Results**

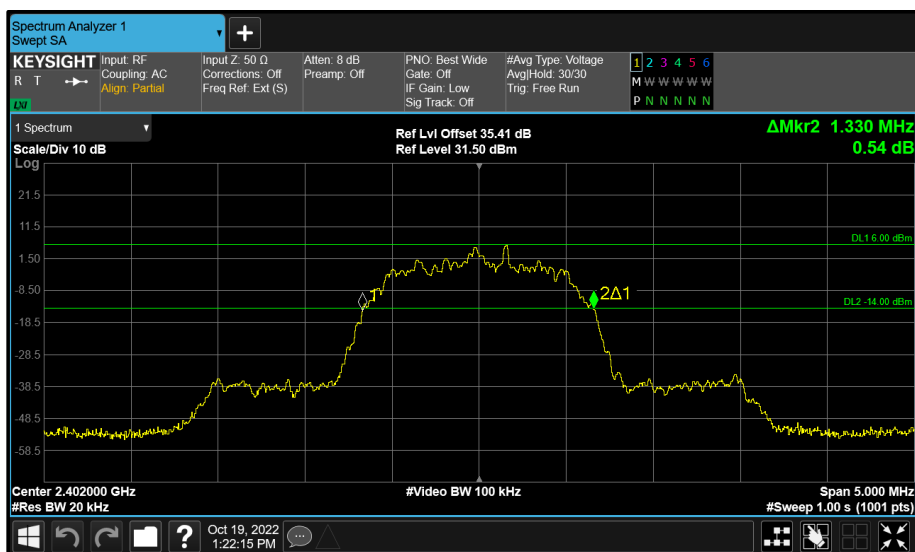


Figure 85 - Core 1 (B) 2402 MHz (CH0) 20 dB Bandwidth

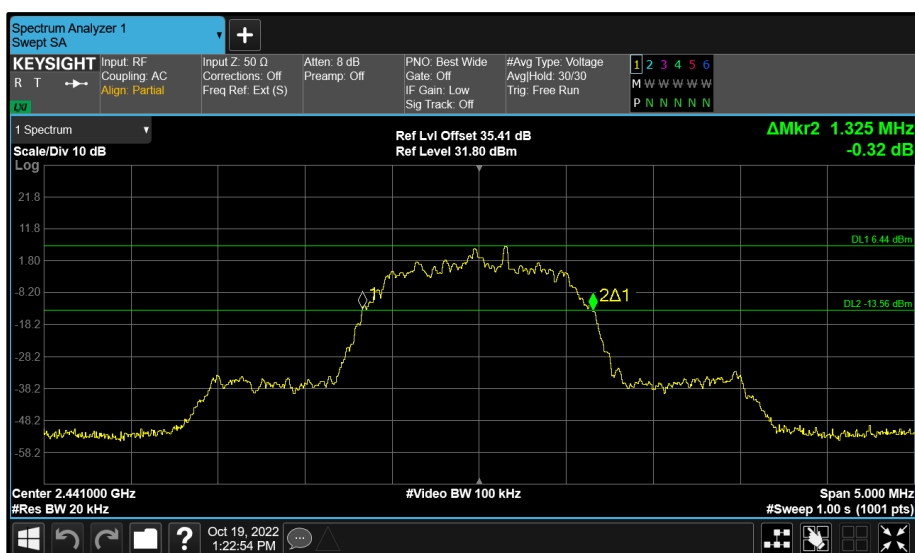


Figure 86 - Core 1 (B) 2441 MHz (CH39) 20 dB Bandwidth

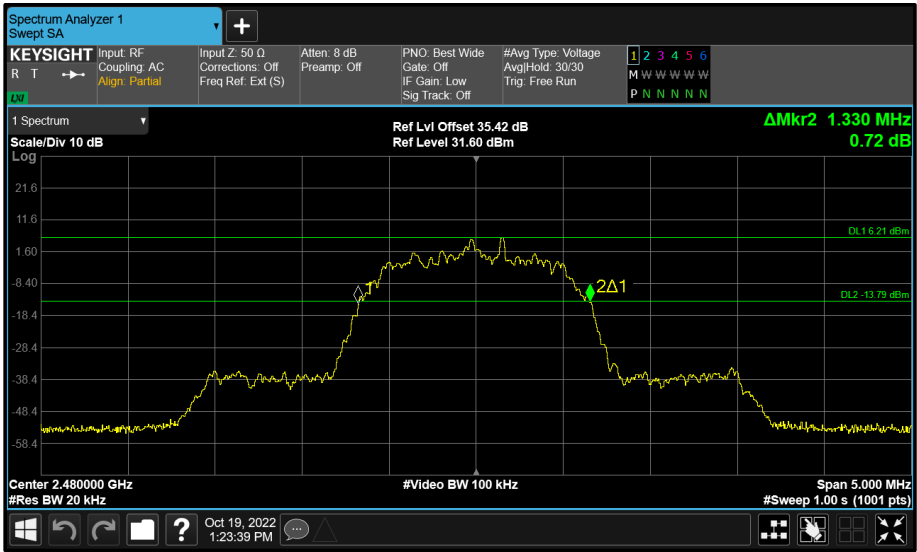


Figure 87 - Core 1 (B) 2480 MHz (CH78) 20 dB Bandwidth



| Test Configuration       |                                  |                 |              |
|--------------------------|----------------------------------|-----------------|--------------|
| Frequency Range:         | 2400-2483.5 MHz                  | Band:           | 2.4 GHz      |
| Limit Clause(s):         | FCC 15.247 (a)(1)<br>RSS-247 5.1 | Test Method(s): | C63.10 6.9.2 |
| Additional Reference(s): | -                                |                 |              |

| DUT Configuration      |                    |                          |   |
|------------------------|--------------------|--------------------------|---|
| Mode:                  | iPA 8-DPSK (3-DH5) | Duty Cycle (%):          | - |
| Antenna Configuration: | SISO               | DCCF (dB):               | - |
| Active Port(s):        | B (Core 1)         | Peak Antenna Gain (dBi): | - |

| Test Frequency (MHz) | 20 dB Bandwidth (MHz) |       |   |   |
|----------------------|-----------------------|-------|---|---|
|                      | A                     | B     | C | D |
| 2402                 | -                     | 1.265 | - | - |
| 2441                 | -                     | 1.260 | - | - |
| 2480                 | -                     | 1.265 | - | - |

**Table 49 - 20 dB Bandwidth Results**

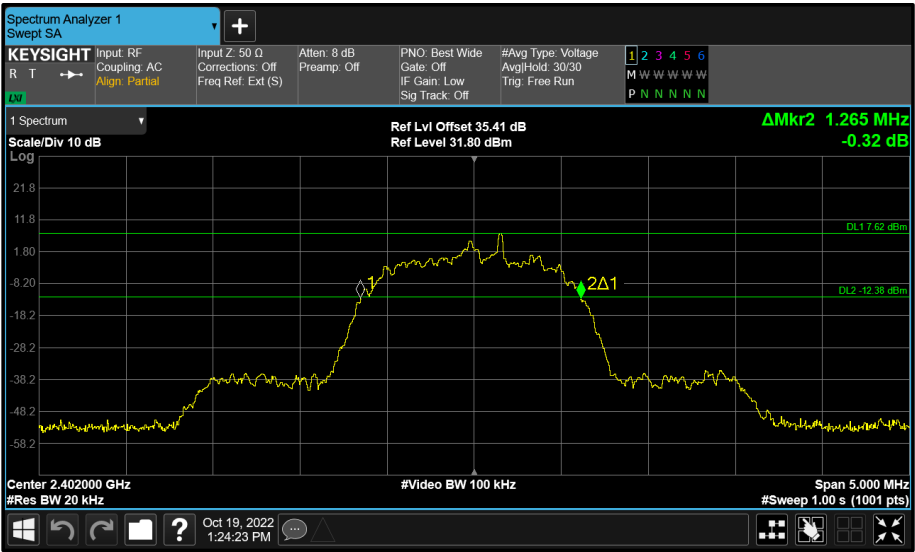


Figure 88 - Core 1 (B) 2402 MHz (CH0) 20 dB Bandwidth

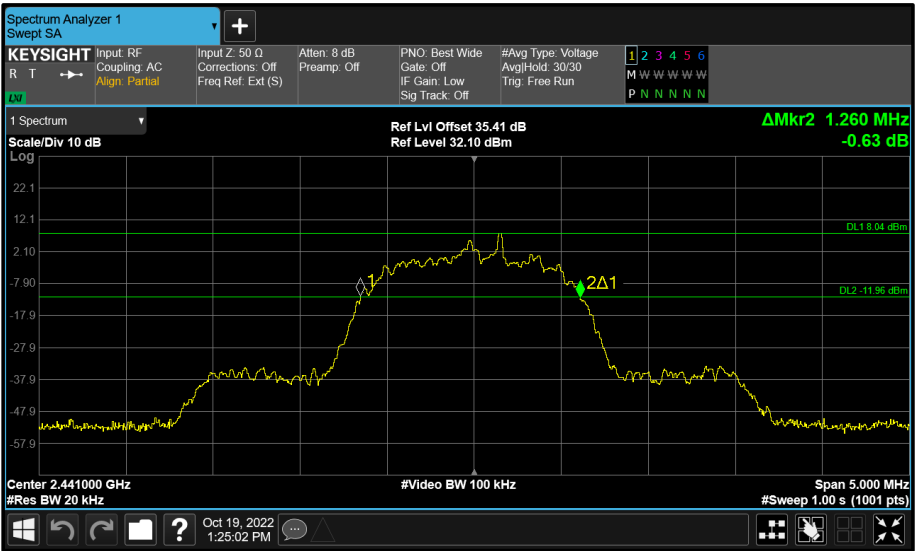


Figure 89 - Core 1 (B) 2441 MHz (CH39) 20 dB Bandwidth

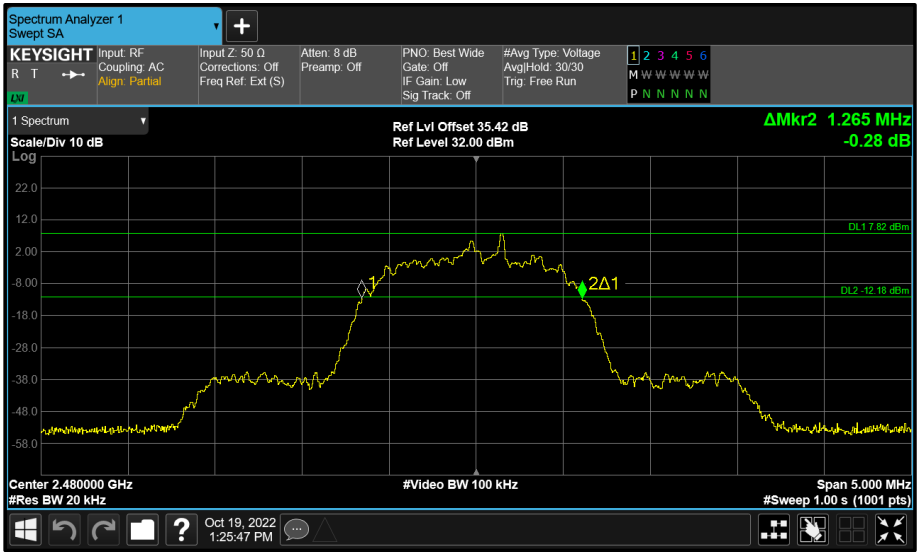


Figure 90 - Core 1 (B) 2480 MHz (CH78) 20 dB Bandwidth



| Test Configuration       |                                  |                 |              |
|--------------------------|----------------------------------|-----------------|--------------|
| Frequency Range:         | 2400-2483.5 MHz                  | Band:           | 2.4 GHz      |
| Limit Clause(s):         | FCC 15.247 (a)(1)<br>RSS-247 5.1 | Test Method(s): | C63.10 6.9.2 |
| Additional Reference(s): | -                                |                 |              |

| DUT Configuration      |                           |                          |   |
|------------------------|---------------------------|--------------------------|---|
| Mode:                  | iPA $\pi/4$ DQPSK (2-DH5) | Duty Cycle (%):          | - |
| Antenna Configuration: | SISO                      | DCCF (dB):               | - |
| Active Port(s):        | C (Core 2)                | Peak Antenna Gain (dBi): | - |

| Test Frequency (MHz) | 20 dB Bandwidth (MHz) |   |       |   |
|----------------------|-----------------------|---|-------|---|
|                      | A                     | B | C     | D |
| 2402                 | -                     | - | 1.330 | - |
| 2441                 | -                     | - | 1.325 | - |
| 2480                 | -                     | - | 1.330 | - |

**Table 50 - 20 dB Bandwidth Results**

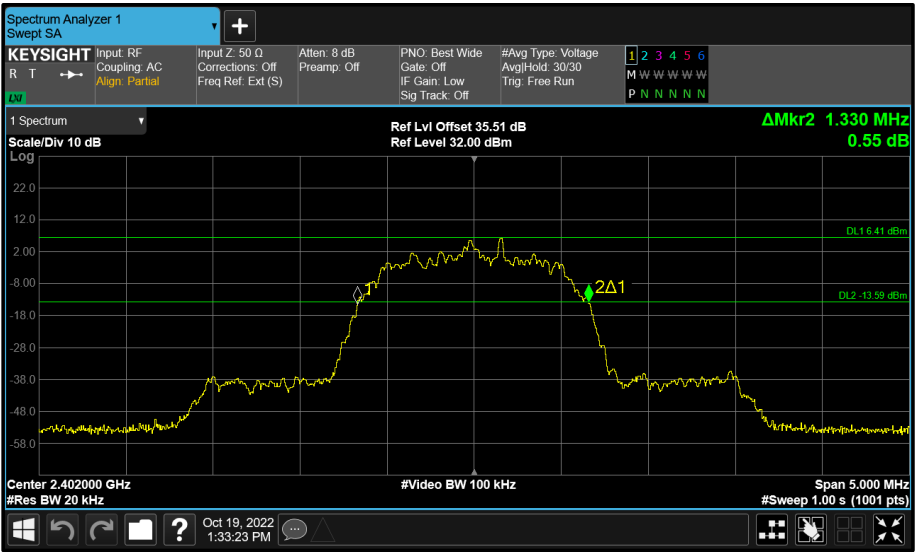


Figure 91 - Core 2 (C) 2402 MHz (CH0) 20 dB Bandwidth

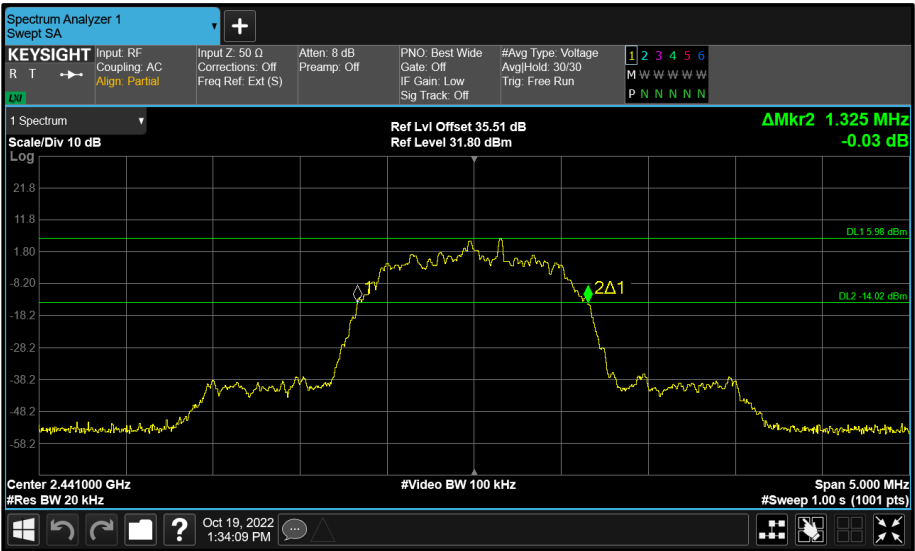


Figure 92 - Core 2 (C) 2441 MHz (CH39) 20 dB Bandwidth





| Test Configuration       |                                  |                 |              |
|--------------------------|----------------------------------|-----------------|--------------|
| Frequency Range:         | 2400-2483.5 MHz                  | Band:           | 2.4 GHz      |
| Limit Clause(s):         | FCC 15.247 (a)(1)<br>RSS-247 5.1 | Test Method(s): | C63.10 6.9.2 |
| Additional Reference(s): | -                                |                 |              |

| DUT Configuration      |                    |                          |   |
|------------------------|--------------------|--------------------------|---|
| Mode:                  | iPA 8-DPSK (3-DH5) | Duty Cycle (%):          | - |
| Antenna Configuration: | SISO               | DCCF (dB):               | - |
| Active Port(s):        | C (Core 2)         | Peak Antenna Gain (dBi): | - |

| Test Frequency (MHz) | 20 dB Bandwidth (MHz) |   |       |   |
|----------------------|-----------------------|---|-------|---|
|                      | A                     | B | C     | D |
| 2402                 | -                     | - | 1.265 | - |
| 2441                 | -                     | - | 1.260 | - |
| 2480                 | -                     | - | 1.265 | - |

**Table 51 - 20 dB Bandwidth Results**

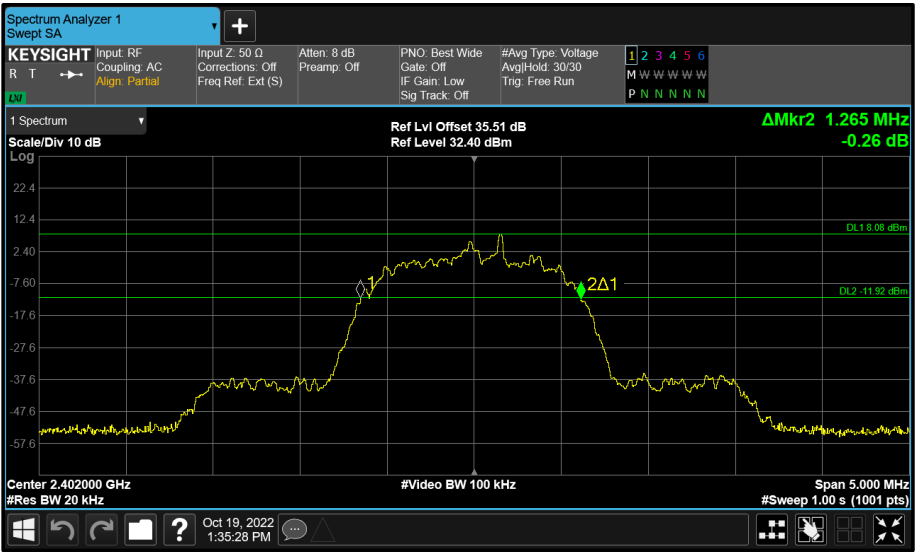


Figure 94 - Core 2 (C) 2402 MHz (CH0) 20 dB Bandwidth

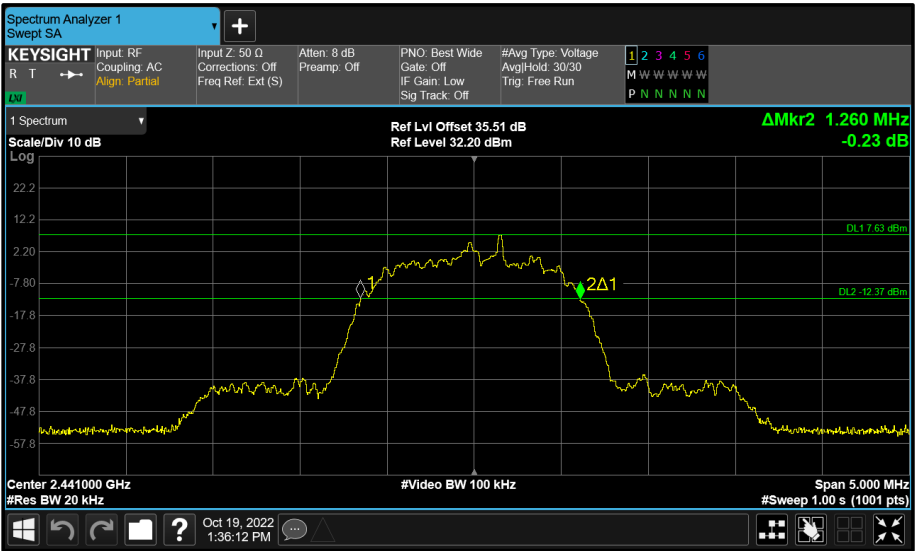


Figure 95 - Core 2 (C) 2441 MHz (CH39) 20 dB Bandwidth

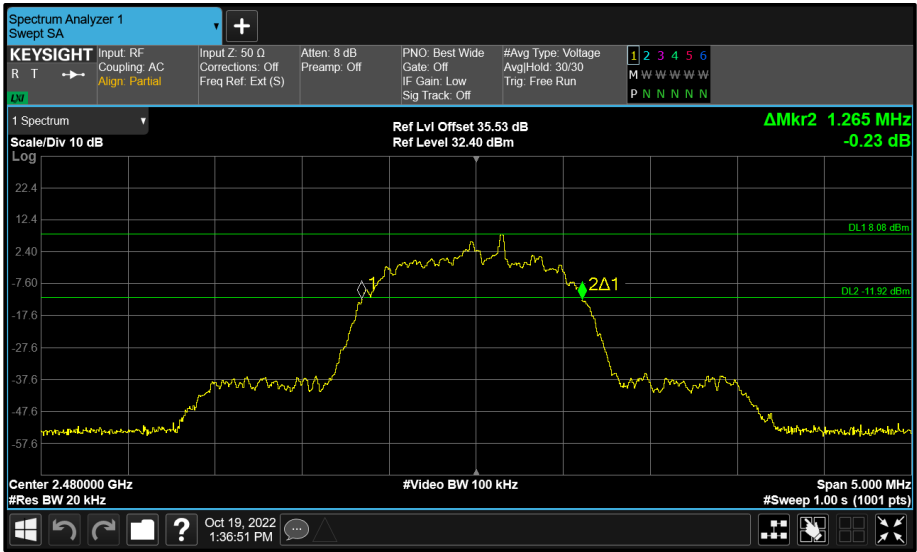


Figure 96 - Core 2 (C) 2480 MHz (CH78) 20 dB Bandwidth



| Test Configuration       |                                  |                 |              |
|--------------------------|----------------------------------|-----------------|--------------|
| Frequency Range:         | 2400-2483.5 MHz                  | Band:           | 2.4 GHz      |
| Limit Clause(s):         | FCC 15.247 (a)(1)<br>RSS-247 5.1 | Test Method(s): | C63.10 6.9.2 |
| Additional Reference(s): | -                                |                 |              |

| DUT Configuration      |                           |                          |   |
|------------------------|---------------------------|--------------------------|---|
| Mode:                  | iPA $\pi/4$ DQPSK (2-DH5) | Duty Cycle (%):          | - |
| Antenna Configuration: | Beamforming               | DCCF (dB):               | - |
| Active Port(s):        | A+B (Core 0 + Core 1)     | Peak Antenna Gain (dBi): | - |

| Test Frequency (MHz) | 20 dB Bandwidth (MHz) |       |   |   |
|----------------------|-----------------------|-------|---|---|
|                      | A                     | B     | C | D |
| 2402                 | 1.330                 | 1.325 | - | - |
| 2441                 | 1.325                 | 1.325 | - | - |
| 2480                 | 1.330                 | 1.330 | - | - |

**Table 52 - 20 dB Bandwidth Results**

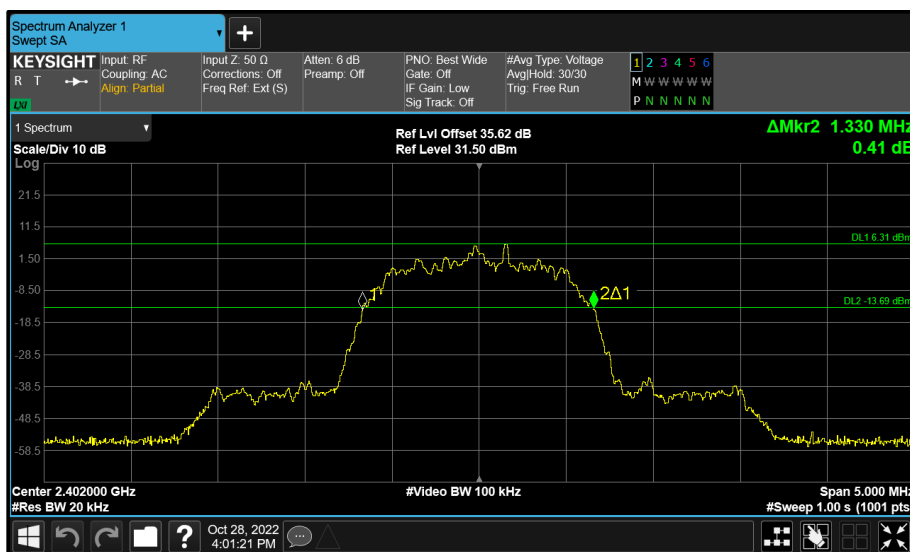


Figure 97 - Core 0 (A) 2402 MHz (CH0) 20 dB Bandwidth

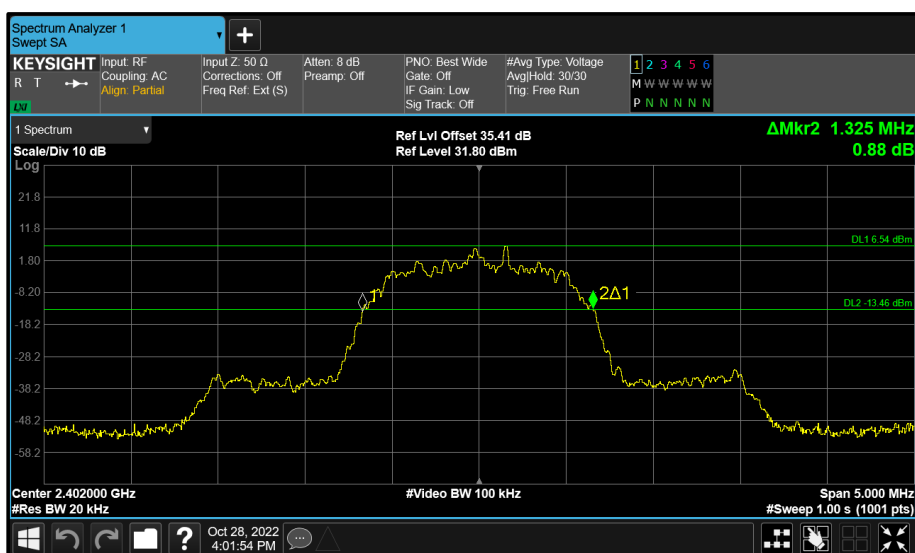


Figure 98 - Core 1 (B) 2402 MHz (CH0) 20 dB Bandwidth



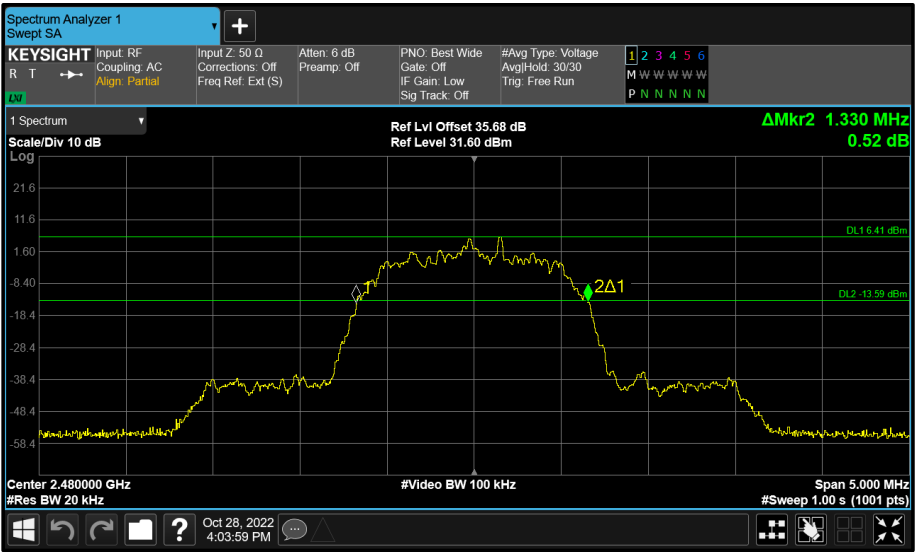


Figure 101 - Core 0 (A) 2480 MHz (CH78) 20 dB Bandwidth

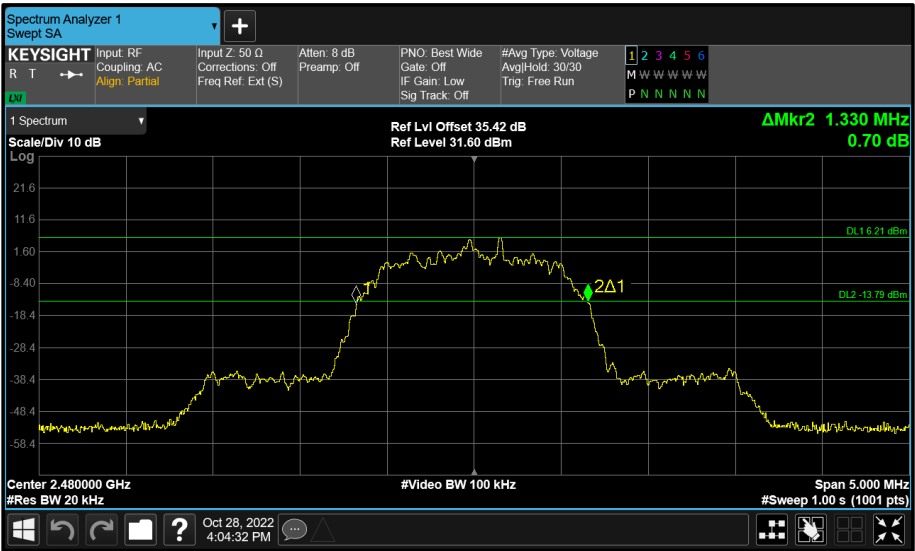


Figure 102 - Core 1 (B) 2480 MHz (CH78) 20 dB Bandwidth



| Test Configuration       |                                  |                 |              |
|--------------------------|----------------------------------|-----------------|--------------|
| Frequency Range:         | 2400-2483.5 MHz                  | Band:           | 2.4 GHz      |
| Limit Clause(s):         | FCC 15.247 (a)(1)<br>RSS-247 5.1 | Test Method(s): | C63.10 6.9.2 |
| Additional Reference(s): | -                                |                 |              |

| DUT Configuration      |                       |                          |   |
|------------------------|-----------------------|--------------------------|---|
| Mode:                  | iPA 8-DPSK (3-DH5)    | Duty Cycle (%):          | - |
| Antenna Configuration: | Beamforming           | DCCF (dB):               | - |
| Active Port(s):        | A+B (Core 0 + Core 1) | Peak Antenna Gain (dBi): | - |

| Test Frequency (MHz) | 20 dB Bandwidth (MHz) |       |   |   |
|----------------------|-----------------------|-------|---|---|
|                      | A                     | B     | C | D |
| 2402                 | 1.265                 | 1.265 | - | - |
| 2441                 | 1.260                 | 1.260 | - | - |
| 2480                 | 1.265                 | 1.265 | - | - |

**Table 53 - 20 dB Bandwidth Results**

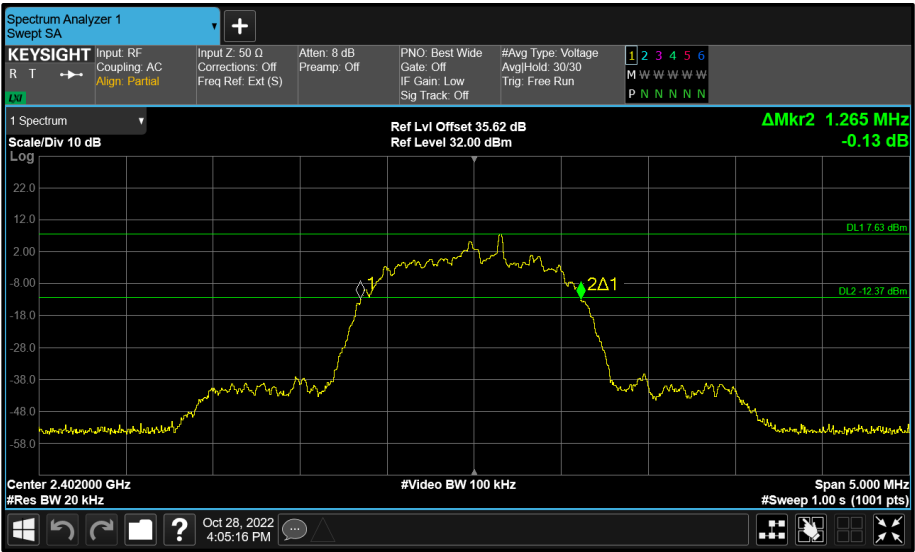


Figure 103 - Core 0 (A) 2402 MHz (CH0) 20 dB Bandwidth

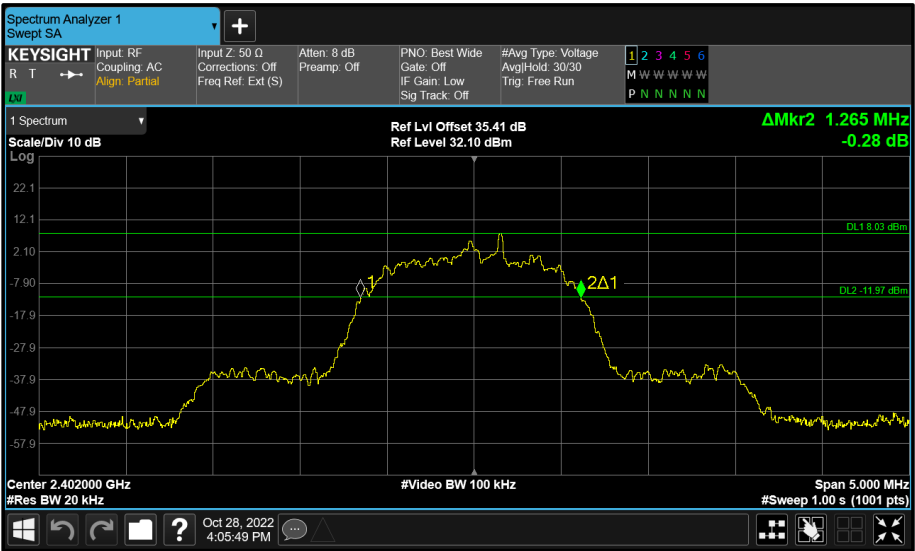


Figure 104 - Core 1 (B) 2402 MHz (CH0) 20 dB Bandwidth

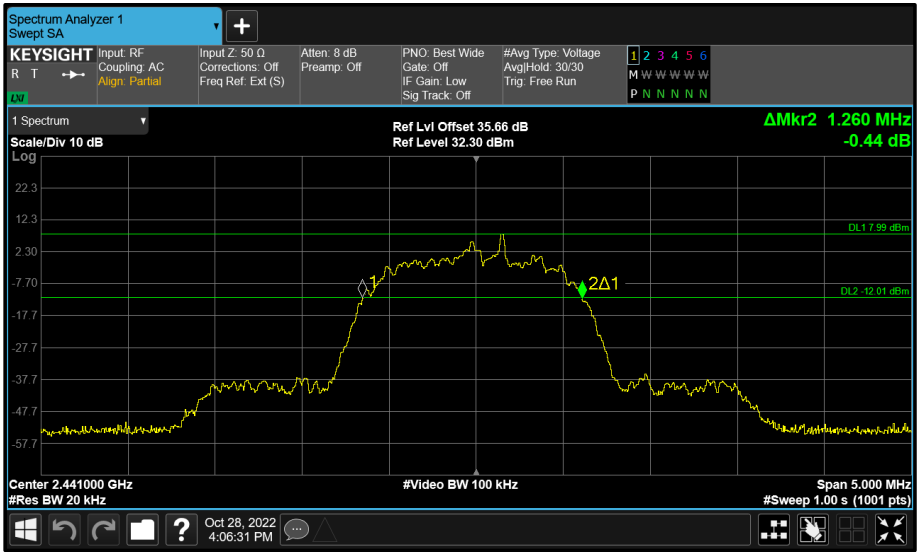


Figure 105 - Core 0 (A) 2441 MHz (CH39) 20 dB Bandwidth

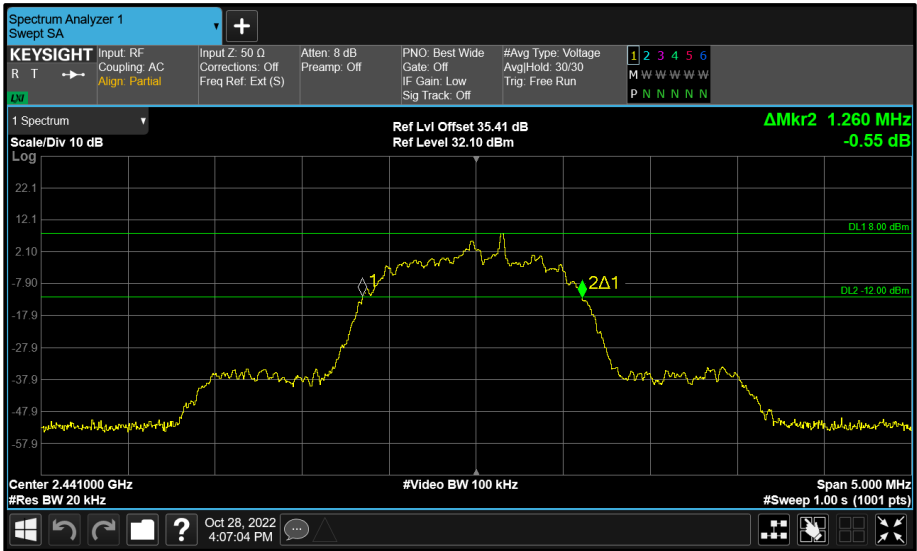


Figure 106 - Core 1 (B) 2441 MHz (CH39) 20 dB Bandwidth

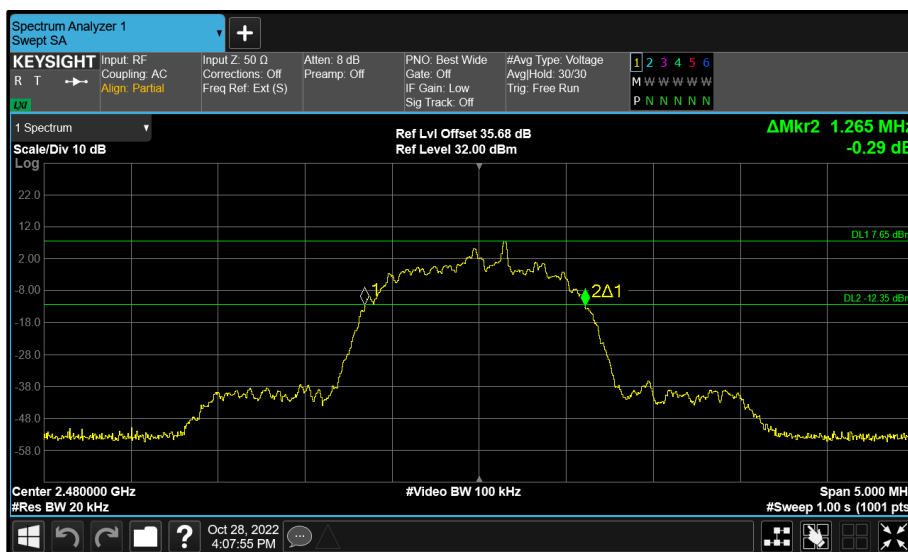


Figure 107 - Core 0 (A) 2480 MHz (CH78) 20 dB Bandwidth

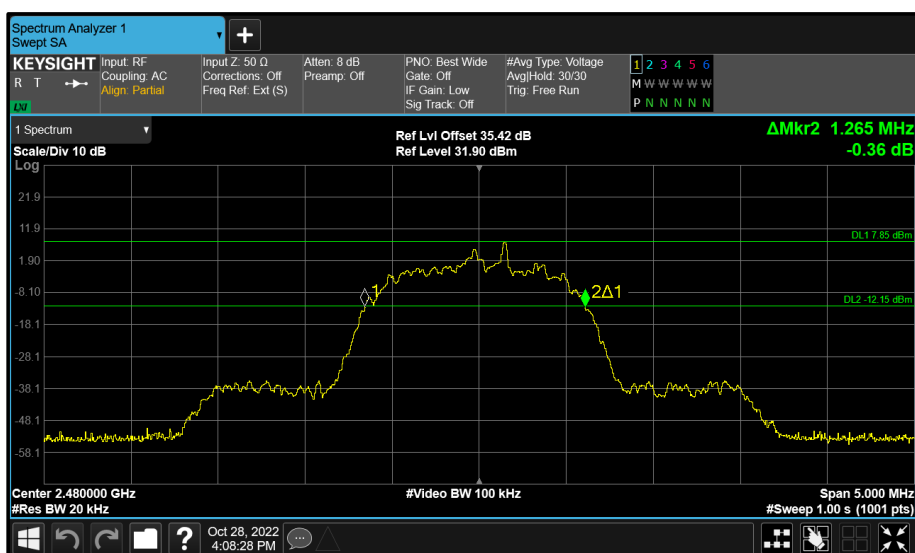


Figure 108 - Core 1 (B) 2480 MHz (CH78) 20 dB Bandwidth

FCC 47 CFR Part 15 and ISED RSS-247 Limit Clause

None specified.



## 2.5.7 Test Location and Test Equipment Used

This test was carried out in RF Laboratory 1.

| Instrument                   | Manufacturer          | Type No.                  | TE No. | Calibration Period (months) | Calibration Expiry Date |
|------------------------------|-----------------------|---------------------------|--------|-----------------------------|-------------------------|
| Multimeter                   | Fluke                 | 79 Series III             | 611    | 12                          | 21-Dec-2022             |
| Hygrometer                   | Rotronic              | I-1000                    | 3220   | 12                          | 05-Nov-2022             |
| Frequency Standard           | Spectracom            | SecureSync 1200-0408-0601 | 4393   | 6                           | 01-Feb-2023             |
| AC Programmable Power Supply | iTech                 | IT7324                    | 5226   | -                           | O/P Mon                 |
| MXA Signal Analyser          | Keysight Technologies | N9020B                    | 5529   | 24                          | 13-Sep-2024             |
| Signal Conditioning Unit     | TUV SUD               | SPECTRUM SCU002           | 5759   | 12                          | 05-Jul-2023             |

**Table 54**

O/P Mon – Output Monitored using calibrated equipment



## **2.6 Maximum Conducted Output Power**

### **2.6.1 Specification Reference**

FCC 47 CFR Part 15C, Clause 15.247 (b)  
ISED RSS-247, Clause 5.4  
ISED RSS-GEN, Clause 6.12

### **2.6.2 Equipment Under Test and Modification State**

A2780, S/N: NW3J007K67 - Modification State 0

### **2.6.3 Date of Test**

19-October-2022 to 28-October-2022

### **2.6.4 Test Method**

The test was performed in accordance with ANSI C63.10 clause 7.8.5.

MIMO output port summing was performed in accordance with KDB 662911 D01.

### **2.6.5 Environmental Conditions**

|                     |                |
|---------------------|----------------|
| Ambient Temperature | 22.7 - 23.5 °C |
| Relative Humidity   | 52.6 - 56.9 %  |



## 2.6.6 Test Results

### 2.4 GHz Bluetooth - FHSS

| Test Configuration       |                                 |                 |              |
|--------------------------|---------------------------------|-----------------|--------------|
| Frequency Range:         | 2400-2483.5 MHz                 | Band:           | 2.4 GHz      |
| Limit Clause(s):         | 15.247 (b)(1)<br>RSS-247 5.4 b) | Test Method(s): | C63.10 7.8.5 |
| Additional Reference(s): | -                               |                 |              |

| DUT Configuration      |                           |                          |      |
|------------------------|---------------------------|--------------------------|------|
| Mode:                  | ePA $\pi/4$ DQPSK (2-DH5) | Duty Cycle (%):          | 76.8 |
| Antenna Configuration: | SISO                      | DCCF (dB):               | -    |
| Active Port(s):        | B (Core 1)                | Peak Antenna Gain (dBi): | 6.13 |

| Test Frequency (MHz) | Maximum Conducted Output Power (dBm) |       |   |   |          | Limit (dBm) | Margin (dB) |
|----------------------|--------------------------------------|-------|---|---|----------|-------------|-------------|
|                      | A                                    | B     | C | D | $\Sigma$ |             |             |
| 2402                 | -                                    | 18.76 | - | - | -        | 29.87       | -11.11      |
| 2441                 | -                                    | 18.80 | - | - | -        | 29.87       | -11.07      |
| 2480                 | -                                    | 19.36 | - | - | -        | 29.87       | -10.51      |

**Table 55 - FCC Maximum Conducted (peak) Output Power Results**

| Test Frequency (MHz) | Maximum Conducted Output Power (dBm) |       |   |   |          | Limit (dBm) | Margin (dB) | EIRP (dBm) | EIRP Limit (dBm) | EIRP Margin (dB) |
|----------------------|--------------------------------------|-------|---|---|----------|-------------|-------------|------------|------------------|------------------|
|                      | A                                    | B     | C | D | $\Sigma$ |             |             |            |                  |                  |
| 2402                 | -                                    | 18.76 | - | - | -        | 30.00       | -11.24      | 24.89      | 36.00            | -11.11           |
| 2441                 | -                                    | 18.80 | - | - | -        | 30.00       | -11.20      | 24.93      | 36.00            | -11.07           |
| 2480                 | -                                    | 19.36 | - | - | -        | 30.00       | -10.64      | 25.49      | 36.00            | -10.51           |

**Table 56 - ISED Maximum Conducted (peak) Output Power Results**



| Test Configuration       |                                 |                 |              |
|--------------------------|---------------------------------|-----------------|--------------|
| Frequency Range:         | 2400-2483.5 MHz                 | Band:           | 2.4 GHz      |
| Limit Clause(s):         | 15.247 (b)(1)<br>RSS-247 5.4 b) | Test Method(s): | C63.10 7.8.5 |
| Additional Reference(s): | -                               |                 |              |

| DUT Configuration      |                    |                          |      |
|------------------------|--------------------|--------------------------|------|
| Mode:                  | ePA 8-DPSK (3-DH5) | Duty Cycle (%):          | 76.9 |
| Antenna Configuration: | SISO               | DCCF (dB):               | -    |
| Active Port(s):        | B (Core 1)         | Peak Antenna Gain (dBi): | 6.13 |

| Test Frequency (MHz) | Maximum Conducted Output Power (dBm) |       |   |   |          | Limit (dBm) | Margin (dB) |
|----------------------|--------------------------------------|-------|---|---|----------|-------------|-------------|
|                      | A                                    | B     | C | D | $\Sigma$ |             |             |
| 2402                 | -                                    | 19.39 | - | - | -        | 29.87       | -10.48      |
| 2441                 | -                                    | 19.44 | - | - | -        | 29.87       | -10.43      |
| 2480                 | -                                    | 18.79 | - | - | -        | 29.87       | -11.08      |

**Table 57 - FCC Maximum Conducted (peak) Output Power Results**

| Test Frequency (MHz) | Maximum Conducted Output Power (dBm) |       |   |   |          | Limit (dBm) | Margin (dB) | EIRP (dBm) | EIRP Limit (dBm) | EIRP Margin (dB) |
|----------------------|--------------------------------------|-------|---|---|----------|-------------|-------------|------------|------------------|------------------|
|                      | A                                    | B     | C | D | $\Sigma$ |             |             |            |                  |                  |
| 2402                 | -                                    | 19.39 | - | - | -        | 30.00       | -10.61      | 25.52      | 36.00            | -10.48           |
| 2441                 | -                                    | 19.44 | - | - | -        | 30.00       | -10.56      | 25.57      | 36.00            | -10.43           |
| 2480                 | -                                    | 18.79 | - | - | -        | 30.00       | -11.21      | 24.92      | 36.00            | -11.08           |

**Table 58 - ISSED Maximum Conducted (peak) Output Power Results**



| Test Configuration       |                                                     |                 |              |
|--------------------------|-----------------------------------------------------|-----------------|--------------|
| Frequency Range:         | 2400-2483.5 MHz                                     | Band:           | 2.4 GHz      |
| Limit Clause(s):         | 15.247 (b)(1)<br>RSS-247 5.4 b)                     | Test Method(s): | C63.10 7.8.5 |
| Additional Reference(s): | 662911 D01 v02r01 F)2)d)(i), 662911 D01 v02r01 E)1) |                 |              |

| DUT Configuration      |                           |                          |      |
|------------------------|---------------------------|--------------------------|------|
| Mode:                  | ePA $\pi/4$ DQPSK (2-DH5) | Duty Cycle (%):          | 76.8 |
| Antenna Configuration: | Beamforming               | DCCF (dB):               | -    |
| Active Port(s):        | A+B (Core 0 + Core 1)     | Peak Antenna Gain (dBi): | 8.41 |

| Test Frequency (MHz) | Maximum Conducted Output Power (dBm) |       |   |   |          | Limit (dBm) | Margin (dB) |
|----------------------|--------------------------------------|-------|---|---|----------|-------------|-------------|
|                      | A                                    | B     | C | D | $\Sigma$ |             |             |
| 2402                 | 15.36                                | 15.87 | - | - | 18.64    | 27.59       | -8.96       |
| 2441                 | 15.27                                | 15.80 | - | - | 18.55    | 27.59       | -9.04       |
| 2480                 | 15.10                                | 15.77 | - | - | 18.46    | 27.59       | -9.13       |

**Table 59 - FCC Maximum Conducted (peak) Output Power Results**

| Test Frequency (MHz) | Maximum Conducted Output Power (dBm) |       |   |   |          | Limit (dBm) | Margin (dB) | EIRP (dBm) | EIRP Limit (dBm) | EIRP Margin (dB) |
|----------------------|--------------------------------------|-------|---|---|----------|-------------|-------------|------------|------------------|------------------|
|                      | A                                    | B     | C | D | $\Sigma$ |             |             |            |                  |                  |
| 2402                 | 15.36                                | 15.87 | - | - | 18.64    | 21.00       | -2.36       | 27.04      | 36.00            | -8.96            |
| 2441                 | 15.27                                | 15.80 | - | - | 18.55    | 21.00       | -2.45       | 26.96      | 36.00            | -9.04            |
| 2480                 | 15.10                                | 15.77 | - | - | 18.46    | 21.00       | -2.54       | 26.87      | 36.00            | -9.13            |

**Table 60 - ISSED Maximum Conducted (peak) Output Power Results**



| Test Configuration       |                                                     |                 |              |
|--------------------------|-----------------------------------------------------|-----------------|--------------|
| Frequency Range:         | 2400-2483.5 MHz                                     | Band:           | 2.4 GHz      |
| Limit Clause(s):         | 15.247 (b)(1)<br>RSS-247 5.4 b)                     | Test Method(s): | C63.10 7.8.5 |
| Additional Reference(s): | 662911 D01 v02r01 F)2)d)(i), 662911 D01 v02r01 E)1) |                 |              |

| DUT Configuration      |                       |                          |      |
|------------------------|-----------------------|--------------------------|------|
| Mode:                  | ePA 8-DPSK (3-DH5)    | Duty Cycle (%):          | 76.9 |
| Antenna Configuration: | Beamforming           | DCCF (dB):               | -    |
| Active Port(s):        | A+B (Core 0 + Core 1) | Peak Antenna Gain (dBi): | 8.41 |

| Test Frequency (MHz) | Maximum Conducted Output Power (dBm) |       |   |   |          | Limit (dBm) | Margin (dB) |
|----------------------|--------------------------------------|-------|---|---|----------|-------------|-------------|
|                      | A                                    | B     | C | D | $\Sigma$ |             |             |
| 2402                 | 16.45                                | 16.48 | - | - | 19.48    | 27.59       | -8.12       |
| 2441                 | 15.89                                | 16.34 | - | - | 19.13    | 27.59       | -8.46       |
| 2480                 | 15.76                                | 16.31 | - | - | 19.06    | 27.59       | -8.54       |

**Table 61 - FCC Maximum Conducted (peak) Output Power Results**

| Test Frequency (MHz) | Maximum Conducted Output Power (dBm) |       |   |   |          | Limit (dBm) | Margin (dB) | EIRP (dBm) | EIRP Limit (dBm) | EIRP Margin (dB) |
|----------------------|--------------------------------------|-------|---|---|----------|-------------|-------------|------------|------------------|------------------|
|                      | A                                    | B     | C | D | $\Sigma$ |             |             |            |                  |                  |
| 2402                 | 16.45                                | 16.48 | - | - | 19.48    | 21.00       | -1.52       | 27.88      | 36.00            | -8.12            |
| 2441                 | 15.89                                | 16.34 | - | - | 19.13    | 21.00       | -1.87       | 27.54      | 36.00            | -8.46            |
| 2480                 | 15.76                                | 16.31 | - | - | 19.06    | 21.00       | -1.94       | 27.46      | 36.00            | -8.54            |

**Table 62 - ISSED Maximum Conducted (peak) Output Power Results**



| Test Configuration       |                                 |                 |              |
|--------------------------|---------------------------------|-----------------|--------------|
| Frequency Range:         | 2400-2483.5 MHz                 | Band:           | 2.4 GHz      |
| Limit Clause(s):         | 15.247 (b)(1)<br>RSS-247 5.4 b) | Test Method(s): | C63.10 7.8.5 |
| Additional Reference(s): | -                               |                 |              |

| DUT Configuration      |                |                          |      |
|------------------------|----------------|--------------------------|------|
| Mode:                  | iPA GFSK (DH5) | Duty Cycle (%):          | 76.7 |
| Antenna Configuration: | SISO           | DCCF (dB):               | -    |
| Active Port(s):        | B (Core 1)     | Peak Antenna Gain (dBi): | 6.13 |

| Test Frequency (MHz) | Maximum Conducted Output Power (dBm) |       |   |   |          | Limit (dBm) | Margin (dB) |
|----------------------|--------------------------------------|-------|---|---|----------|-------------|-------------|
|                      | A                                    | B     | C | D | $\Sigma$ |             |             |
| 2402                 | -                                    | 13.38 | - | - | -        | 29.87       | -16.49      |
| 2441                 | -                                    | 13.37 | - | - | -        | 29.87       | -16.50      |
| 2480                 | -                                    | 13.42 | - | - | -        | 29.87       | -16.45      |

**Table 63 - FCC Maximum Conducted (peak) Output Power Results**

| Test Frequency (MHz) | Maximum Conducted Output Power (dBm) |       |   |   |          | Limit (dBm) | Margin (dB) | EIRP (dBm) | EIRP Limit (dBm) | EIRP Margin (dB) |
|----------------------|--------------------------------------|-------|---|---|----------|-------------|-------------|------------|------------------|------------------|
|                      | A                                    | B     | C | D | $\Sigma$ |             |             |            |                  |                  |
| 2402                 | -                                    | 13.38 | - | - | -        | 30.00       | -16.62      | 19.51      | 36.00            | -16.49           |
| 2441                 | -                                    | 13.37 | - | - | -        | 30.00       | -16.63      | 19.50      | 36.00            | -16.50           |
| 2480                 | -                                    | 13.42 | - | - | -        | 30.00       | -16.58      | 19.55      | 36.00            | -16.45           |

**Table 64 - ISSED Maximum Conducted (peak) Output Power Results**



| Test Configuration       |                                 |                 |              |
|--------------------------|---------------------------------|-----------------|--------------|
| Frequency Range:         | 2400-2483.5 MHz                 | Band:           | 2.4 GHz      |
| Limit Clause(s):         | 15.247 (b)(1)<br>RSS-247 5.4 b) | Test Method(s): | C63.10 7.8.5 |
| Additional Reference(s): | -                               |                 |              |

| DUT Configuration      |                |                          |      |
|------------------------|----------------|--------------------------|------|
| Mode:                  | iPA GFSK (DH5) | Duty Cycle (%):          | 76.7 |
| Antenna Configuration: | SISO           | DCCF (dB):               | -    |
| Active Port(s):        | C (Core 2)     | Peak Antenna Gain (dBi): | 6.02 |

| Test Frequency (MHz) | Maximum Conducted Output Power (dBm) |   |       |   |          | Limit (dBm) | Margin (dB) |
|----------------------|--------------------------------------|---|-------|---|----------|-------------|-------------|
|                      | A                                    | B | C     | D | $\Sigma$ |             |             |
| 2402                 | -                                    | - | 13.06 | - | -        | 29.98       | -16.92      |
| 2441                 | -                                    | - | 13.15 | - | -        | 29.98       | -16.83      |
| 2480                 | -                                    | - | 13.04 | - | -        | 29.98       | -16.94      |

**Table 65 - FCC Maximum Conducted (peak) Output Power Results**

| Test Frequency (MHz) | Maximum Conducted Output Power (dBm) |   |       |   |          | Limit (dBm) | Margin (dB) | EIRP (dBm) | EIRP Limit (dBm) | EIRP Margin (dB) |
|----------------------|--------------------------------------|---|-------|---|----------|-------------|-------------|------------|------------------|------------------|
|                      | A                                    | B | C     | D | $\Sigma$ |             |             |            |                  |                  |
| 2402                 | -                                    | - | 13.06 | - | -        | 30.00       | -16.94      | 19.08      | 36.00            | -16.92           |
| 2441                 | -                                    | - | 13.15 | - | -        | 30.00       | -16.85      | 19.17      | 36.00            | -16.83           |
| 2480                 | -                                    | - | 13.04 | - | -        | 30.00       | -16.96      | 19.06      | 36.00            | -16.94           |

**Table 66 - ISSED Maximum Conducted (peak) Output Power Results**



| Test Configuration       |                                                     |                 |              |
|--------------------------|-----------------------------------------------------|-----------------|--------------|
| Frequency Range:         | 2400-2483.5 MHz                                     | Band:           | 2.4 GHz      |
| Limit Clause(s):         | 15.247 (b)(1)<br>RSS-247 5.4 b)                     | Test Method(s): | C63.10 7.8.5 |
| Additional Reference(s): | 662911 D01 v02r01 F)2)d)(i), 662911 D01 v02r01 E)1) |                 |              |

| DUT Configuration      |                       |                          |      |
|------------------------|-----------------------|--------------------------|------|
| Mode:                  | iPA GFSK (DH5)        | Duty Cycle (%):          | 76.7 |
| Antenna Configuration: | Beamforming           | DCCF (dB):               | -    |
| Active Port(s):        | A+B (Core 0 + Core 1) | Peak Antenna Gain (dBi): | 8.41 |

| Test Frequency (MHz) | Maximum Conducted Output Power (dBm) |       |   |   |          | Limit (dBm) | Margin (dB) |
|----------------------|--------------------------------------|-------|---|---|----------|-------------|-------------|
|                      | A                                    | B     | C | D | $\Sigma$ |             |             |
| 2402                 | 13.18                                | 13.36 | - | - | 16.28    | 27.59       | -11.31      |
| 2441                 | 13.32                                | 13.34 | - | - | 16.34    | 27.59       | -11.25      |
| 2480                 | 12.79                                | 13.05 | - | - | 15.93    | 27.59       | -11.66      |

**Table 67 - FCC Maximum Conducted (peak) Output Power Results**

| Test Frequency (MHz) | Maximum Conducted Output Power (dBm) |       |   |   |          | Limit (dBm) | Margin (dB) | EIRP (dBm) | EIRP Limit (dBm) | EIRP Margin (dB) |
|----------------------|--------------------------------------|-------|---|---|----------|-------------|-------------|------------|------------------|------------------|
|                      | A                                    | B     | C | D | $\Sigma$ |             |             |            |                  |                  |
| 2402                 | 13.18                                | 13.36 | - | - | 16.28    | 21.00       | -4.72       | 24.69      | 36.00            | -11.31           |
| 2441                 | 13.32                                | 13.34 | - | - | 16.34    | 21.00       | -4.66       | 24.75      | 36.00            | -11.25           |
| 2480                 | 12.79                                | 13.05 | - | - | 15.93    | 21.00       | -5.07       | 24.34      | 36.00            | -11.66           |

**Table 68 - ISED Maximum Conducted (peak) Output Power Results**



| Test Configuration       |                                 |                 |              |
|--------------------------|---------------------------------|-----------------|--------------|
| Frequency Range:         | 2400-2483.5 MHz                 | Band:           | 2.4 GHz      |
| Limit Clause(s):         | 15.247 (b)(1)<br>RSS-247 5.4 b) | Test Method(s): | C63.10 7.8.5 |
| Additional Reference(s): | -                               |                 |              |

| DUT Configuration      |                           |                          |      |
|------------------------|---------------------------|--------------------------|------|
| Mode:                  | iPA $\pi/4$ DQPSK (2-DH5) | Duty Cycle (%):          | 77.1 |
| Antenna Configuration: | SISO                      | DCCF (dB):               | -    |
| Active Port(s):        | B (Core 1)                | Peak Antenna Gain (dBi): | 6.13 |

| Test Frequency (MHz) | Maximum Conducted Output Power (dBm) |       |   |   |          | Limit (dBm) | Margin (dB) |
|----------------------|--------------------------------------|-------|---|---|----------|-------------|-------------|
|                      | A                                    | B     | C | D | $\Sigma$ |             |             |
| 2402                 | -                                    | 11.48 | - | - | -        | 29.87       | -18.39      |
| 2441                 | -                                    | 11.81 | - | - | -        | 29.87       | -18.06      |
| 2480                 | -                                    | 11.64 | - | - | -        | 29.87       | -18.23      |

**Table 69 - FCC Maximum Conducted (peak) Output Power Results**

| Test Frequency (MHz) | Maximum Conducted Output Power (dBm) |       |   |   |          | Limit (dBm) | Margin (dB) | EIRP (dBm) | EIRP Limit (dBm) | EIRP Margin (dB) |
|----------------------|--------------------------------------|-------|---|---|----------|-------------|-------------|------------|------------------|------------------|
|                      | A                                    | B     | C | D | $\Sigma$ |             |             |            |                  |                  |
| 2402                 | -                                    | 11.48 | - | - | -        | 30.00       | -18.52      | 17.61      | 36.00            | -18.39           |
| 2441                 | -                                    | 11.81 | - | - | -        | 30.00       | -18.19      | 17.94      | 36.00            | -18.06           |
| 2480                 | -                                    | 11.64 | - | - | -        | 30.00       | -18.36      | 17.77      | 36.00            | -18.23           |

**Table 70 - ISSED Maximum Conducted (peak) Output Power Results**



| Test Configuration       |                                 |                 |              |
|--------------------------|---------------------------------|-----------------|--------------|
| Frequency Range:         | 2400-2483.5 MHz                 | Band:           | 2.4 GHz      |
| Limit Clause(s):         | 15.247 (b)(1)<br>RSS-247 5.4 b) | Test Method(s): | C63.10 7.8.5 |
| Additional Reference(s): | -                               |                 |              |

| DUT Configuration      |                    |                          |      |
|------------------------|--------------------|--------------------------|------|
| Mode:                  | iPA 8-DPSK (3-DH5) | Duty Cycle (%):          | 76.9 |
| Antenna Configuration: | SISO               | DCCF (dB):               | -    |
| Active Port(s):        | B (Core 1)         | Peak Antenna Gain (dBi): | 6.13 |

| Test Frequency (MHz) | Maximum Conducted Output Power (dBm) |       |   |   |          | Limit (dBm) | Margin (dB) |
|----------------------|--------------------------------------|-------|---|---|----------|-------------|-------------|
|                      | A                                    | B     | C | D | $\Sigma$ |             |             |
| 2402                 | -                                    | 11.83 | - | - | -        | 29.87       | -18.04      |
| 2441                 | -                                    | 12.13 | - | - | -        | 29.87       | -17.74      |
| 2480                 | -                                    | 11.99 | - | - | -        | 29.87       | -17.88      |

**Table 71 - FCC Maximum Conducted (peak) Output Power Results**

| Test Frequency (MHz) | Maximum Conducted Output Power (dBm) |       |   |   |          | Limit (dBm) | Margin (dB) | EIRP (dBm) | EIRP Limit (dBm) | EIRP Margin (dB) |
|----------------------|--------------------------------------|-------|---|---|----------|-------------|-------------|------------|------------------|------------------|
|                      | A                                    | B     | C | D | $\Sigma$ |             |             |            |                  |                  |
| 2402                 | -                                    | 11.83 | - | - | -        | 30.00       | -18.17      | 17.96      | 36.00            | -18.04           |
| 2441                 | -                                    | 12.13 | - | - | -        | 30.00       | -17.87      | 18.26      | 36.00            | -17.74           |
| 2480                 | -                                    | 11.99 | - | - | -        | 30.00       | -18.01      | 18.12      | 36.00            | -17.88           |

**Table 72 - ISSED Maximum Conducted (peak) Output Power Results**



| Test Configuration       |                                 |                 |              |
|--------------------------|---------------------------------|-----------------|--------------|
| Frequency Range:         | 2400-2483.5 MHz                 | Band:           | 2.4 GHz      |
| Limit Clause(s):         | 15.247 (b)(1)<br>RSS-247 5.4 b) | Test Method(s): | C63.10 7.8.5 |
| Additional Reference(s): | -                               |                 |              |

| DUT Configuration      |                           |                          |      |
|------------------------|---------------------------|--------------------------|------|
| Mode:                  | iPA $\pi/4$ DQPSK (2-DH5) | Duty Cycle (%):          | 76.8 |
| Antenna Configuration: | SISO                      | DCCF (dB):               | -    |
| Active Port(s):        | C (Core 2)                | Peak Antenna Gain (dBi): | 6.02 |

| Test Frequency (MHz) | Maximum Conducted Output Power (dBm) |   |       |   |          | Limit (dBm) | Margin (dB) |
|----------------------|--------------------------------------|---|-------|---|----------|-------------|-------------|
|                      | A                                    | B | C     | D | $\Sigma$ |             |             |
| 2402                 | -                                    | - | 11.95 | - | -        | 29.98       | -18.03      |
| 2441                 | -                                    | - | 11.76 | - | -        | 29.98       | -18.22      |
| 2480                 | -                                    | - | 11.98 | - | -        | 29.98       | -18.00      |

**Table 73 - FCC Maximum Conducted (peak) Output Power Results**

| Test Frequency (MHz) | Maximum Conducted Output Power (dBm) |   |       |   |          | Limit (dBm) | Margin (dB) | EIRP (dBm) | EIRP Limit (dBm) | EIRP Margin (dB) |
|----------------------|--------------------------------------|---|-------|---|----------|-------------|-------------|------------|------------------|------------------|
|                      | A                                    | B | C     | D | $\Sigma$ |             |             |            |                  |                  |
| 2402                 | -                                    | - | 11.95 | - | -        | 30.00       | -18.05      | 17.97      | 36.00            | -18.03           |
| 2441                 | -                                    | - | 11.76 | - | -        | 30.00       | -18.24      | 17.78      | 36.00            | -18.22           |
| 2480                 | -                                    | - | 11.98 | - | -        | 30.00       | -18.02      | 18.00      | 36.00            | -18.00           |

**Table 74 - ISSED Maximum Conducted (peak) Output Power Results**



| Test Configuration       |                                 |                 |              |
|--------------------------|---------------------------------|-----------------|--------------|
| Frequency Range:         | 2400-2483.5 MHz                 | Band:           | 2.4 GHz      |
| Limit Clause(s):         | 15.247 (b)(1)<br>RSS-247 5.4 b) | Test Method(s): | C63.10 7.8.5 |
| Additional Reference(s): | -                               |                 |              |

| DUT Configuration      |                    |                          |      |
|------------------------|--------------------|--------------------------|------|
| Mode:                  | iPA 8-DPSK (3-DH5) | Duty Cycle (%):          | 76.9 |
| Antenna Configuration: | SISO               | DCCF (dB):               | -    |
| Active Port(s):        | C (Core 2)         | Peak Antenna Gain (dBi): | 6.02 |

| Test Frequency (MHz) | Maximum Conducted Output Power (dBm) |   |       |   |          | Limit (dBm) | Margin (dB) |
|----------------------|--------------------------------------|---|-------|---|----------|-------------|-------------|
|                      | A                                    | B | C     | D | $\Sigma$ |             |             |
| 2402                 | -                                    | - | 12.36 | - | -        | 29.98       | -17.62      |
| 2441                 | -                                    | - | 12.17 | - | -        | 29.98       | -17.81      |
| 2480                 | -                                    | - | 12.35 | - | -        | 29.98       | -17.63      |

**Table 75 - FCC Maximum Conducted (peak) Output Power Results**

| Test Frequency (MHz) | Maximum Conducted Output Power (dBm) |   |       |   |          | Limit (dBm) | Margin (dB) | EIRP (dBm) | EIRP Limit (dBm) | EIRP Margin (dB) |
|----------------------|--------------------------------------|---|-------|---|----------|-------------|-------------|------------|------------------|------------------|
|                      | A                                    | B | C     | D | $\Sigma$ |             |             |            |                  |                  |
| 2402                 | -                                    | - | 12.36 | - | -        | 30.00       | -17.64      | 18.38      | 36.00            | -17.62           |
| 2441                 | -                                    | - | 12.17 | - | -        | 30.00       | -17.83      | 18.19      | 36.00            | -17.81           |
| 2480                 | -                                    | - | 12.35 | - | -        | 30.00       | -17.65      | 18.37      | 36.00            | -17.63           |

**Table 76 - ISSED Maximum Conducted (peak) Output Power Results**



| Test Configuration       |                                                     |                 |              |
|--------------------------|-----------------------------------------------------|-----------------|--------------|
| Frequency Range:         | 2400-2483.5 MHz                                     | Band:           | 2.4 GHz      |
| Limit Clause(s):         | 15.247 (b)(1)<br>RSS-247 5.4 b)                     | Test Method(s): | C63.10 7.8.5 |
| Additional Reference(s): | 662911 D01 v02r01 F)2)d)(i), 662911 D01 v02r01 E)1) |                 |              |

| DUT Configuration      |                           |                          |      |
|------------------------|---------------------------|--------------------------|------|
| Mode:                  | iPA $\pi/4$ DQPSK (2-DH5) | Duty Cycle (%):          | 77.1 |
| Antenna Configuration: | Beamforming               | DCCF (dB):               | -    |
| Active Port(s):        | A+B (Core 0 + Core 1)     | Peak Antenna Gain (dBi): | 8.41 |

| Test Frequency (MHz) | Maximum Conducted Output Power (dBm) |       |   |   |          | Limit (dBm) | Margin (dB) |
|----------------------|--------------------------------------|-------|---|---|----------|-------------|-------------|
|                      | A                                    | B     | C | D | $\Sigma$ |             |             |
| 2402                 | 11.55                                | 11.80 | - | - | 14.68    | 27.59       | -12.91      |
| 2441                 | 11.90                                | 11.78 | - | - | 14.85    | 27.59       | -12.74      |
| 2480                 | 11.58                                | 11.60 | - | - | 14.60    | 27.59       | -12.99      |

**Table 77 - FCC Maximum Conducted (peak) Output Power Results**

| Test Frequency (MHz) | Maximum Conducted Output Power (dBm) |       |   |   |          | Limit (dBm) | Margin (dB) | EIRP (dBm) | EIRP Limit (dBm) | EIRP Margin (dB) |
|----------------------|--------------------------------------|-------|---|---|----------|-------------|-------------|------------|------------------|------------------|
|                      | A                                    | B     | C | D | $\Sigma$ |             |             |            |                  |                  |
| 2402                 | 11.55                                | 11.80 | - | - | 14.68    | 21.00       | -6.32       | 23.09      | 36.00            | -12.91           |
| 2441                 | 11.90                                | 11.78 | - | - | 14.85    | 21.00       | -6.15       | 23.26      | 36.00            | -12.74           |
| 2480                 | 11.58                                | 11.60 | - | - | 14.60    | 21.00       | -6.40       | 23.01      | 36.00            | -12.99           |

**Table 78 - ISSED Maximum Conducted (peak) Output Power Results**



| Test Configuration       |                                                     |                 |              |
|--------------------------|-----------------------------------------------------|-----------------|--------------|
| Frequency Range:         | 2400-2483.5 MHz                                     | Band:           | 2.4 GHz      |
| Limit Clause(s):         | 15.247 (b)(1)<br>RSS-247 5.4 b)                     | Test Method(s): | C63.10 7.8.5 |
| Additional Reference(s): | 662911 D01 v02r01 F)2)d)(i), 662911 D01 v02r01 E)1) |                 |              |

| DUT Configuration      |                       |                          |      |
|------------------------|-----------------------|--------------------------|------|
| Mode:                  | iPA 8-DPSK (3-DH5)    | Duty Cycle (%):          | 76.9 |
| Antenna Configuration: | Beamforming           | DCCF (dB):               | -    |
| Active Port(s):        | A+B (Core 0 + Core 1) | Peak Antenna Gain (dBi): | 8.41 |

| Test Frequency (MHz) | Maximum Conducted Output Power (dBm) |       |   |   |          | Limit (dBm) | Margin (dB) |
|----------------------|--------------------------------------|-------|---|---|----------|-------------|-------------|
|                      | A                                    | B     | C | D | $\Sigma$ |             |             |
| 2402                 | 11.97                                | 12.14 | - | - | 15.07    | 27.59       | -12.52      |
| 2441                 | 12.31                                | 12.06 | - | - | 15.20    | 27.59       | -12.39      |
| 2480                 | 11.99                                | 11.94 | - | - | 14.97    | 27.59       | -12.62      |

**Table 79 - FCC Maximum Conducted (peak) Output Power Results**

| Test Frequency (MHz) | Maximum Conducted Output Power (dBm) |       |   |   |          | Limit (dBm) | Margin (dB) | EIRP (dBm) | EIRP Limit (dBm) | EIRP Margin (dB) |
|----------------------|--------------------------------------|-------|---|---|----------|-------------|-------------|------------|------------------|------------------|
|                      | A                                    | B     | C | D | $\Sigma$ |             |             |            |                  |                  |
| 2402                 | 11.97                                | 12.14 | - | - | 15.07    | 21.00       | -5.93       | 23.48      | 36.00            | -12.52           |
| 2441                 | 12.31                                | 12.06 | - | - | 15.20    | 21.00       | -5.80       | 23.61      | 36.00            | -12.39           |
| 2480                 | 11.99                                | 11.94 | - | - | 14.97    | 21.00       | -6.03       | 23.38      | 36.00            | -12.62           |

**Table 80 - ISED Maximum Conducted (peak) Output Power Results**

FCC 47 CFR Part 15, Limit Clause 15.247 (b)(3)

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt.

ISED RSS-247, Limit Clause 5.4 (d)

For DTSS employing digital modulation techniques operating in the bands 902-928 MHz and 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1 W. The e.i.r.p. shall not exceed 4 W, except as provided in section 5.4(e) of the specification.



## 2.6.7 Test Location and Test Equipment Used

This test was carried out in RF Laboratory 1.

| Instrument                   | Manufacturer | Type No.        | TE No. | Calibration Period (months) | Calibration Expiry Date |
|------------------------------|--------------|-----------------|--------|-----------------------------|-------------------------|
| Multimeter                   | Fluke        | 79 Series III   | 611    | 12                          | 21-Dec-2022             |
| Hygrometer                   | Rotronic     | I-1000          | 3220   | 12                          | 05-Nov-2022             |
| AC Programmable Power Supply | iTech        | IT7324          | 5226   | -                           | O/P Mon                 |
| Signal Conditioning Unit     | TUV SUD      | SPECTRUM SCU002 | 5759   | 12                          | 05-Jul-2023             |
| USB Power Sensor             | Boonton      | RTP5008         | 5830   | 12                          | 07-Jul-2023             |
| USB Power Sensor             | Boonton      | RTP5008         | 5832   | 12                          | 07-Jul-2023             |
| USB Power Sensor             | Boonton      | RTP5008         | 5833   | 12                          | 07-Jul-2023             |

**Table 81**

O/P Mon – Output Monitored using calibrated equipment



## **2.7 Spurious Radiated Emissions**

### **2.7.1 Specification Reference**

FCC 47 CFR Part 15C, Clause 15.247 (d) and 15.209  
ISED RSS-247, Clause 3.3 and 5.5  
ISED RSS-GEN, Clause 6.13 and 8.9

### **2.7.2 Equipment Under Test and Modification State**

A2780, S/N: FWC3JLYYHC - Modification State 0

### **2.7.3 Date of Test**

24-September-2022 to 27-September-2022

### **2.7.4 Test Method**

This test was performed in accordance with ANSI C63.10, clause 6.3, 6.5 and 6.6.

For frequencies > 1 GHz, plots for average measurements were taken in accordance with ANSI C63.10, clause 4.1.4.2.5 to characterize the EUT. Where emissions were detected, final average measurements were taken in accordance with ANSI C63.10, clause 4.1.4.2.2.  
The EUT was placed on the non-conducting platform in a manner typical of a normal installation.

Ports on the EUT were terminated with loads as described in ANSI C63.4 clause 6.2.4. For EUT's with multiple connectors of the same type, additional interconnecting cables were connected, and pre-scans performed to determine whether the level of the emissions were increased by >2 dB.

In the 30 MHz to 1 GHz range pre-scans were only performed on the mid channel (2441 MHz) only.

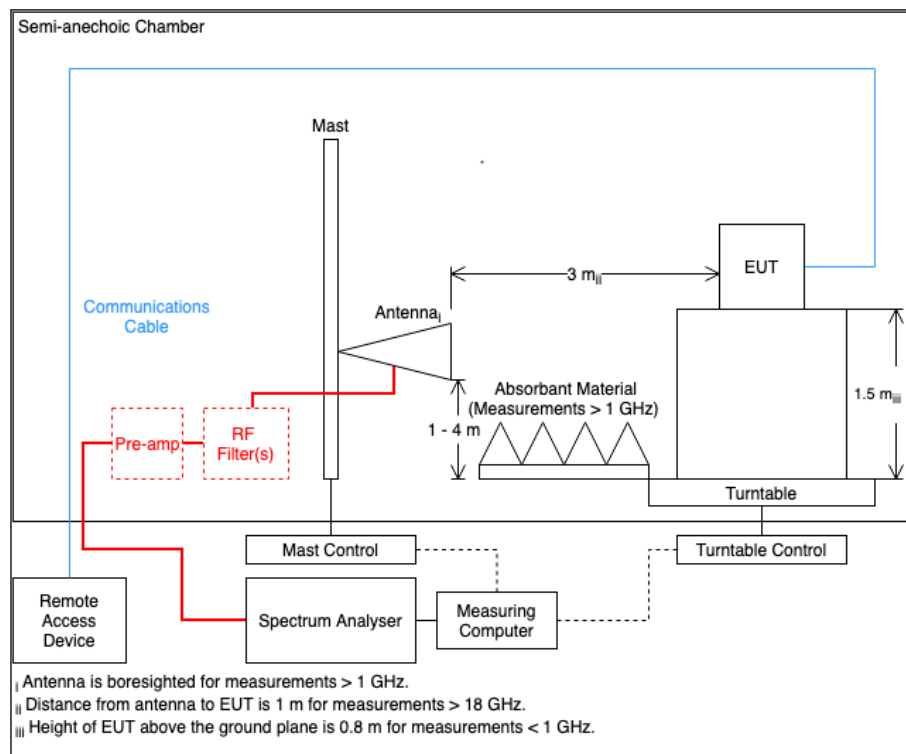
The plots shown are the characterisation of the EUT. The limits on the plots represent the most stringent case for restricted bands, (74/54 dBuV/m) when compared to 20 dBc outside restricted bands. The limits shown have been used as a threshold to determine where further measurements are necessary. Where results are within 10 dB of the limits shown on the plots, further investigation was carried out and reported in results tables.

The following conversion can be applied to convert from dBμV/m to μV/m:  
 $10^{(\text{Field Strength in dB}\mu\text{V/m}/20)}$

Above 18 GHz, the measurement distance was reduced to 1 m. The limit line was increased by  $20 \cdot \text{LOG}(3/1) = 9.54$  dB.

At a measurement distance of 1 meter the limit line was increased by  $20 \cdot \text{LOG}(3/1) = 9.54$  dB.

Where formal measurements have been necessary, the results have been presented in the emissions table.



|                     |                |
|---------------------|----------------|
| Ambient Temperature | 22.5 - 23.2 °C |
| Relative Humidity   | 38.2 - 46.7 %  |

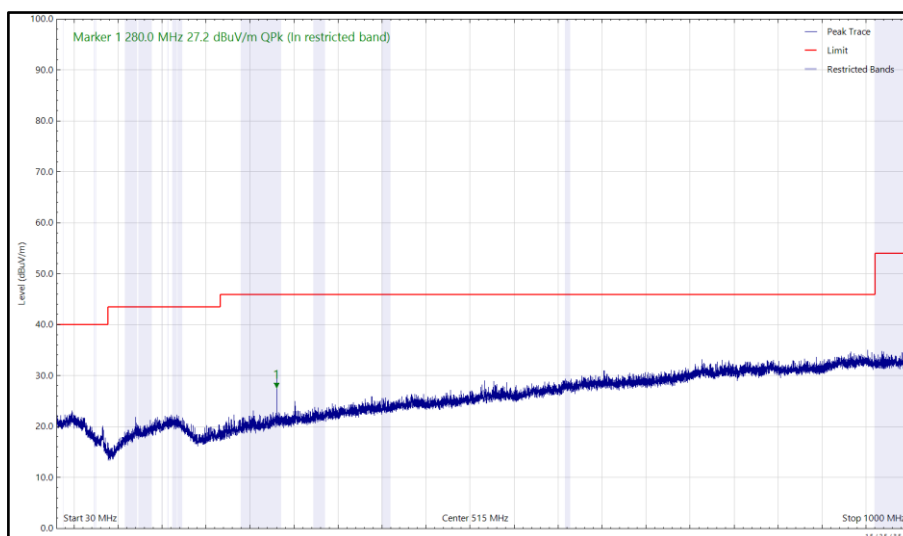
## 2.7.7 Test Results

### 2.4 GHz Bluetooth - FHSS

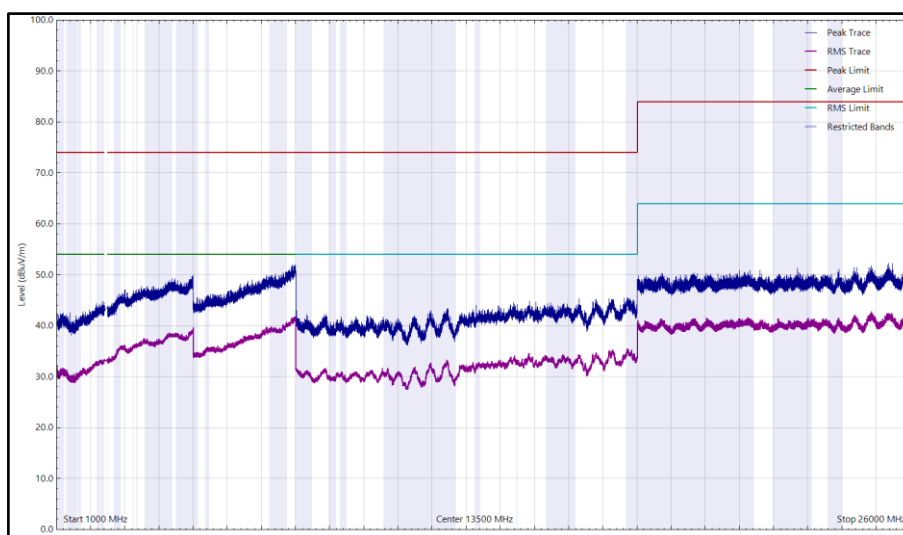
| Frequency (MHz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Angle (°) | Height (cm) | Polarisation |
|-----------------|----------------|----------------|-------------|----------|-----------|-------------|--------------|
| 279.987         | 27.20          | 46.00          | -18.80      | Q-Peak   | 83        | 110         | Horizontal   |

**Table 82 - 2441 MHz (CH39), DH5, iPA, Core 0 + Core 1, 30 MHz to 26 GHz**

No other emissions found within 10 dB of the limit.



**Figure 110 - 2441 MHz (CH39), DH5, iPA, Core 0 + Core 1, 30 MHz to 1 GHz, Horizontal (Peak)**



**Figure 111 - 2441 MHz (CH39), DH5, iPA, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal**

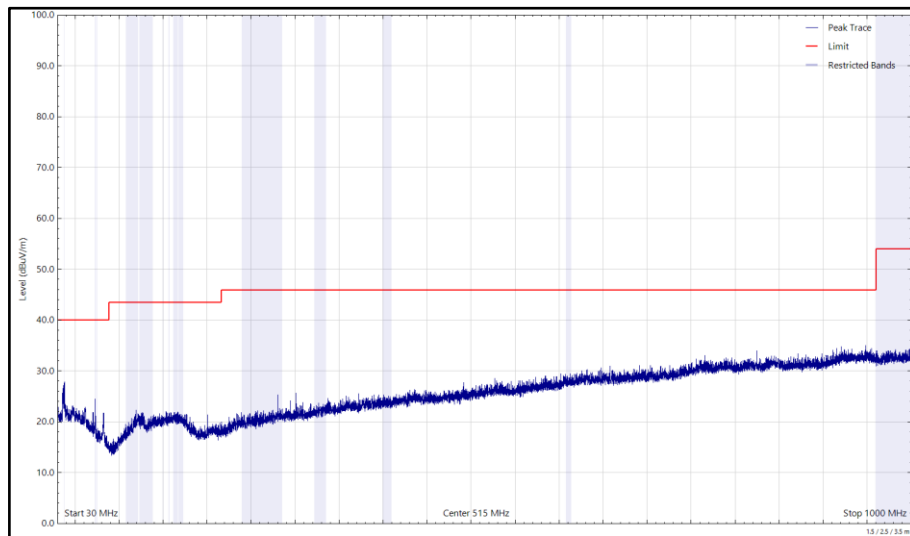


Figure 112 - 2441 MHz (CH39), DH5, iPA, Core 0 + Core 1, 30 MHz to 1 GHz, Vertical (Peak)

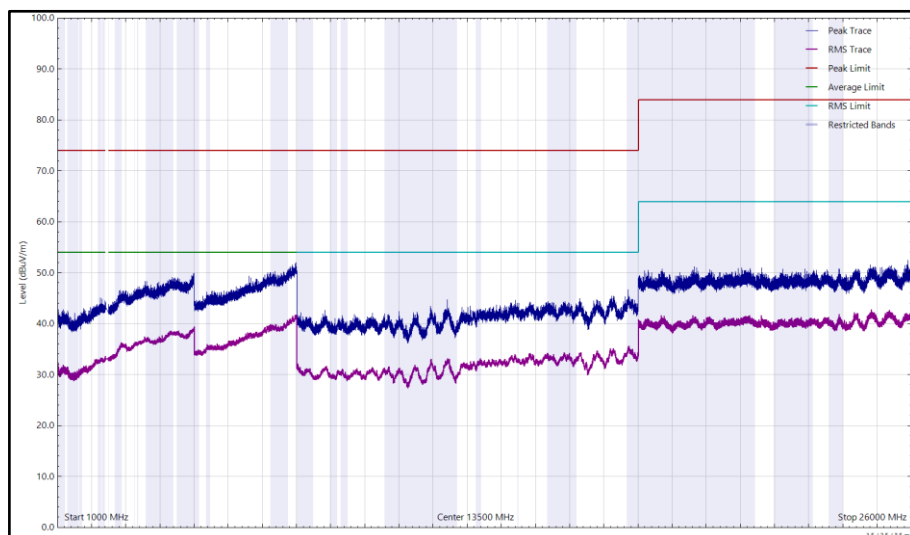
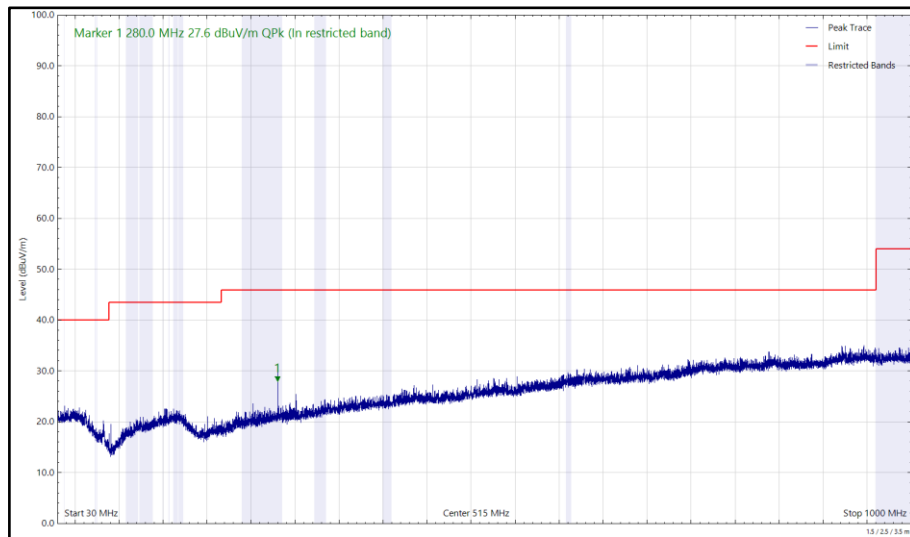


Figure 113 - 2441 MHz (CH39), DH5, iPA, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical

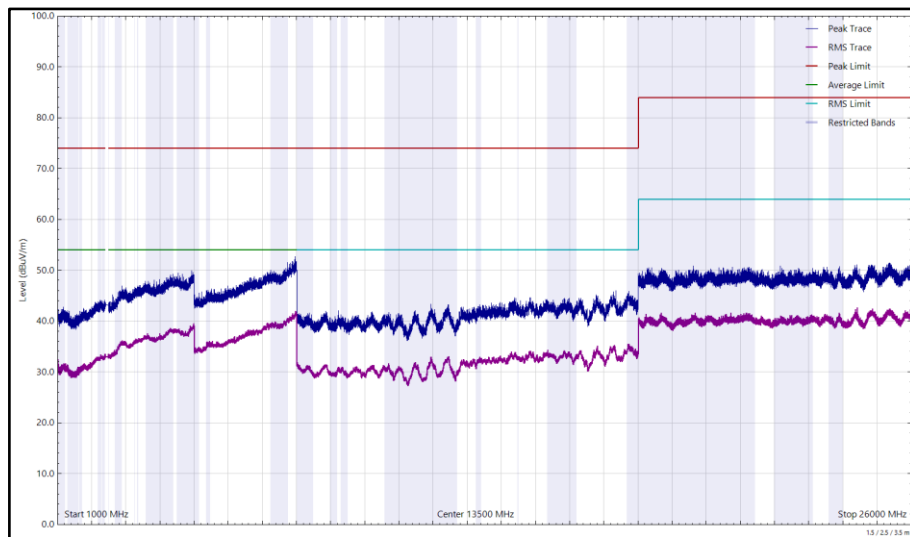
| Frequency (MHz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Angle (°) | Height (cm) | Polarisation |
|-----------------|----------------|----------------|-------------|----------|-----------|-------------|--------------|
| 280.011         | 27.58          | 46.00          | -18.42      | Q-Peak   | 97        | 102         | Horizontal   |

**Table 83 - 2441 MHz (CH39), DH5, iPA, Core 2, 30 MHz to 26 GHz**

No other emissions found within 10 dB of the limit.



**Figure 114 - 2441 MHz (CH39), DH5, iPA, Core 2, 30 MHz to 1 GHz, Horizontal (Peak)**



**Figure 115 - 2441 MHz (CH39), DH5, iPA, Core 2, 1 GHz to 26 GHz, Horizontal**

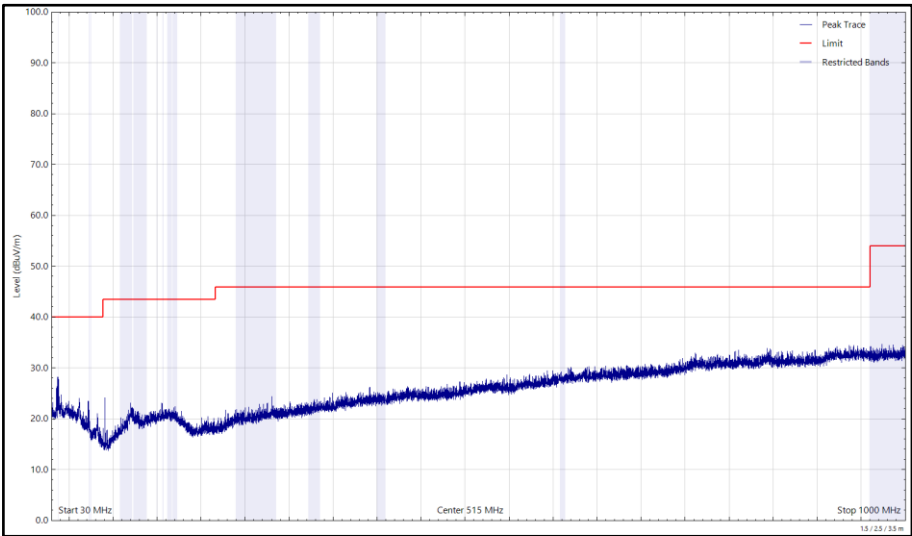


Figure 116 - 2441 MHz (CH39), DH5, iPA, Core 2, 30 MHz to 1 GHz, Vertical (Peak)

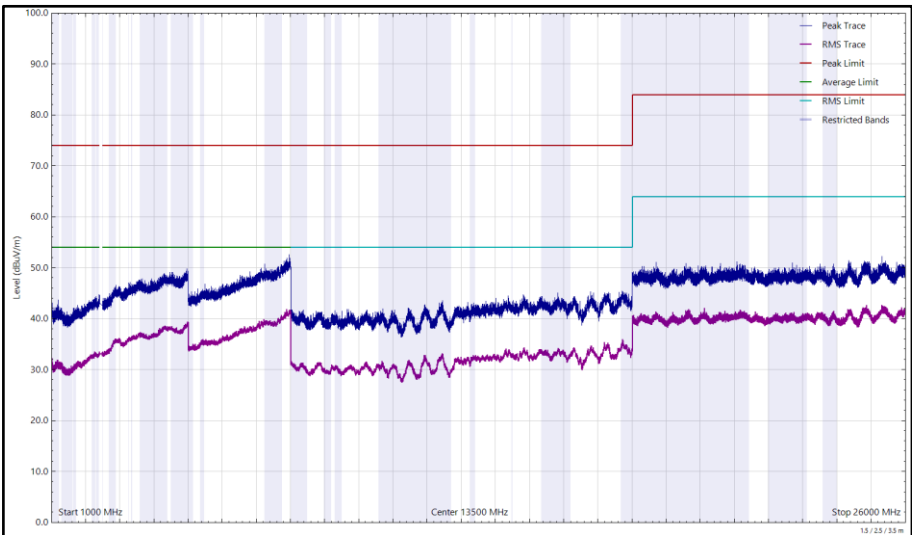
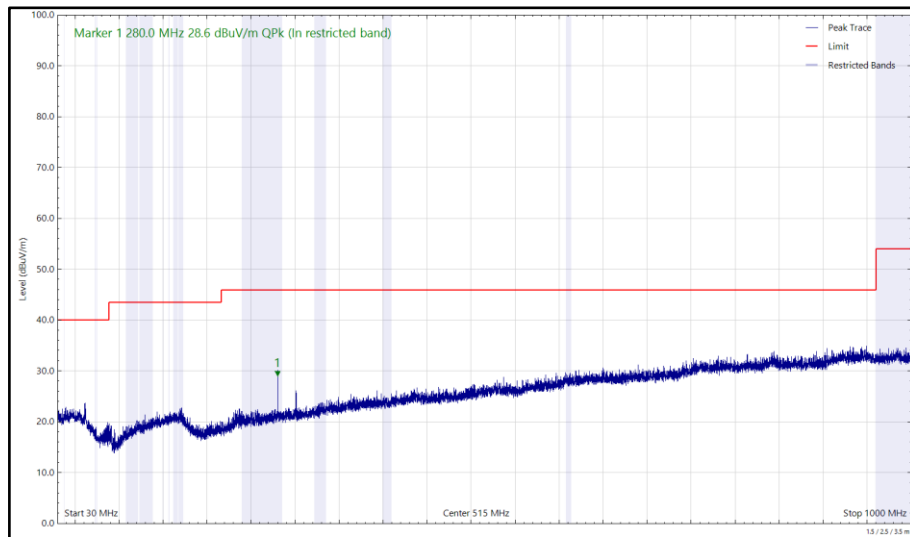


Figure 117 - 2441 MHz (CH39), DH5, iPA, Core 2, 1 GHz to 26 GHz, Vertical

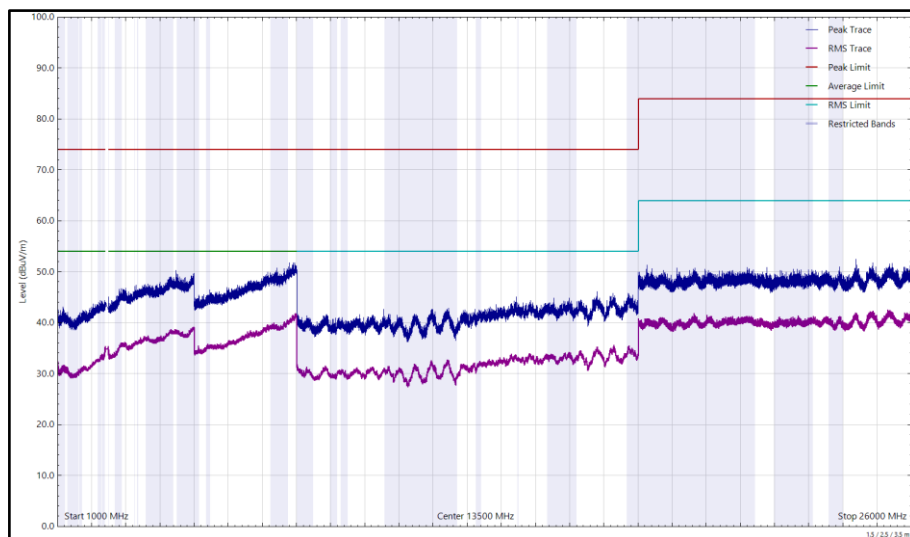
| Frequency (MHz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Angle (°) | Height (cm) | Polarisation |
|-----------------|----------------|----------------|-------------|----------|-----------|-------------|--------------|
| 279.997         | 28.63          | 46.00          | -17.37      | Q-Peak   | 113       | 106         | Horizontal   |

**Table 84 - 2441 MHz (CH39), 2-DH5, ePA, Core 0 + Core 1, 30 MHz to 26 GHz**

No other emissions found within 10 dB of the limit.



**Figure 118 - 2441 MHz (CH39), 2-DH5, ePA, Core 0 + Core 1, 30 MHz to 1 GHz, Horizontal (Peak)**



**Figure 119 - 2441 MHz (CH39), 2-DH5, ePA, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal**

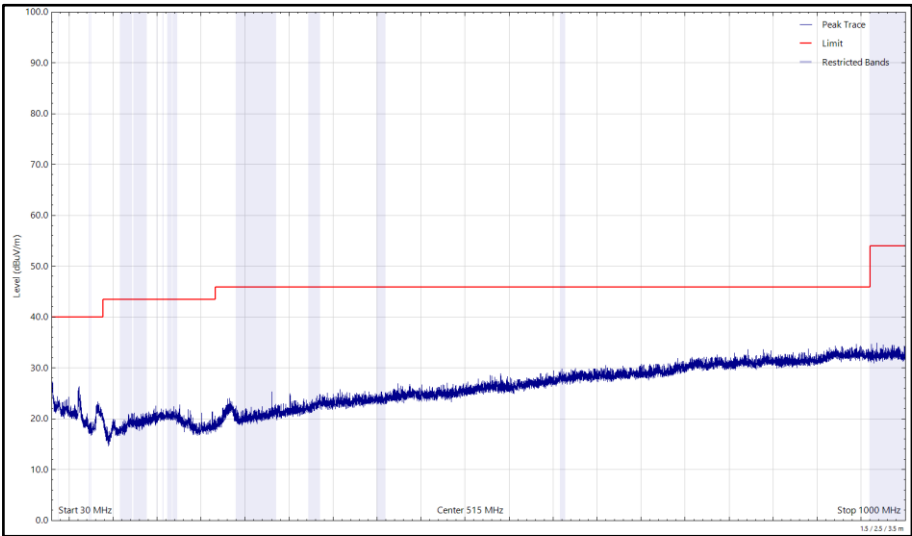


Figure 120 - 2441 MHz (CH39), 2-DH5, ePA, Core 0 + Core 1, 30 MHz to 1 GHz, Vertical (Peak)

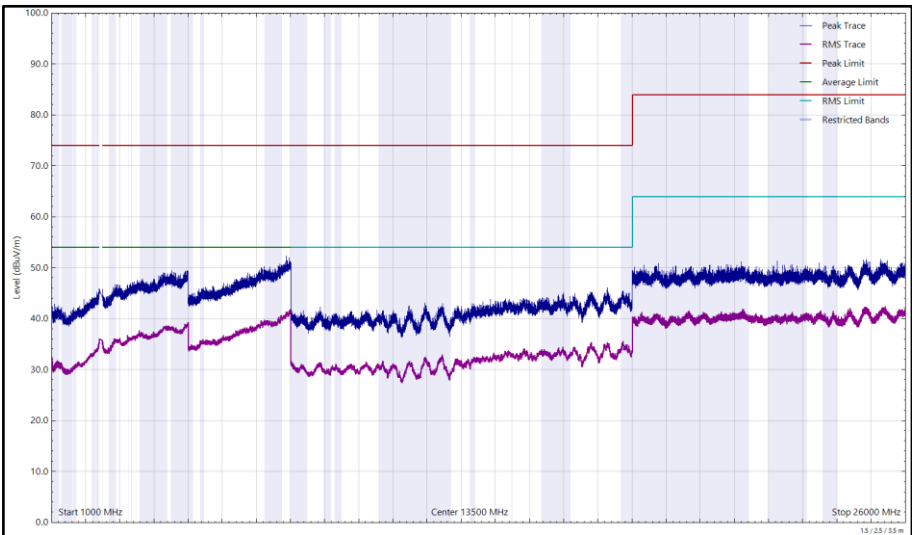
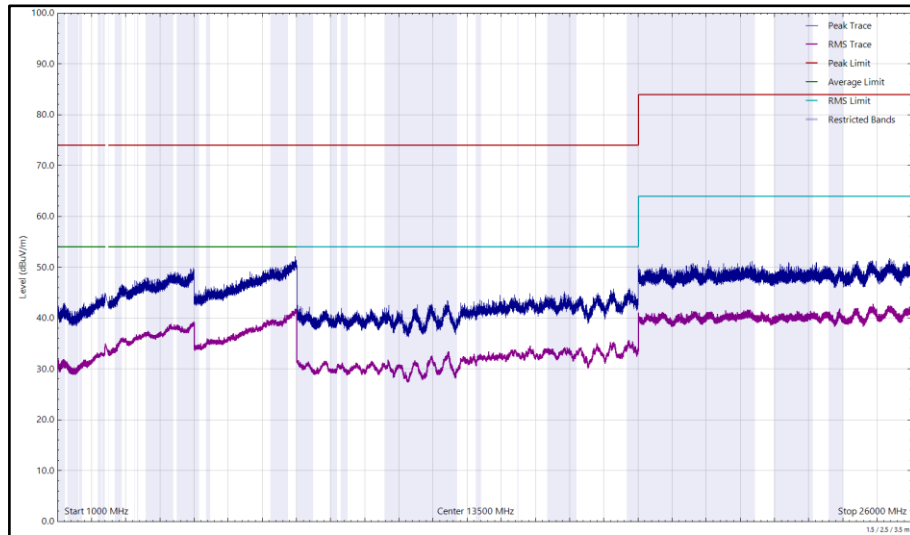


Figure 121 - 2441 MHz (CH39), 2-DH5, ePA, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical

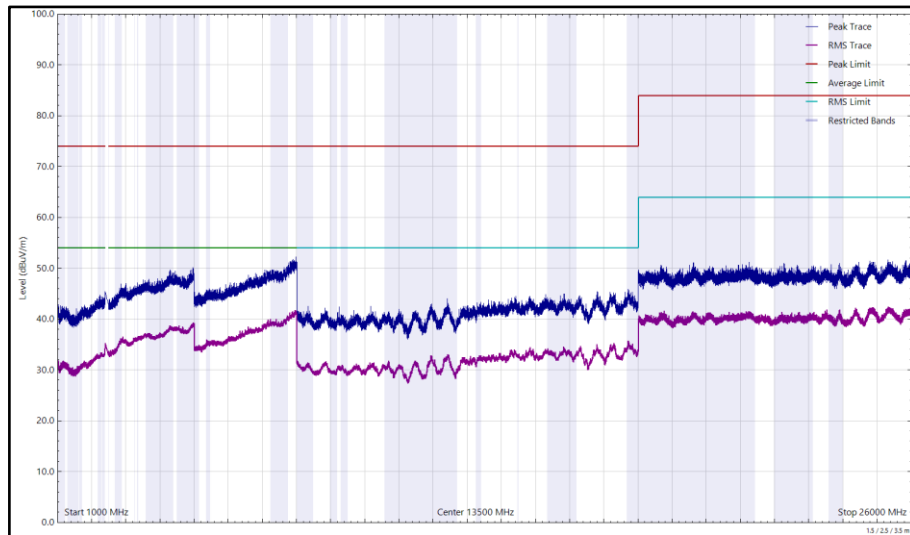
| Frequency (MHz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Angle (°) | Height (cm) | Polarisation |
|-----------------|----------------|----------------|-------------|----------|-----------|-------------|--------------|
| *               |                |                |             |          |           |             |              |

**Table 85 - 2402 MHz (CH0), DH5, iPA, Core 0 + Core 1, 1 GHz to 26 GHz**

\*No emissions found within 10 dB of the limit.



**Figure 122 - 2402 MHz (CH0), DH5, iPA, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal**



**Figure 123 - 2402 MHz (CH0), DH5, iPA, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical**



| Frequency (MHz) | Level (dBuv/m) | Limit (dBuv/m) | Margin (dB) | Detector | Angle (°) | Height (cm) | Polarisation |
|-----------------|----------------|----------------|-------------|----------|-----------|-------------|--------------|
| *               |                |                |             |          |           |             |              |

Table 86 - 2480 MHz (CH78), DH5, iPA, Core 0 + Core 1, 1 GHz to 26 GHz

\*No emissions found within 10 dB of the limit.

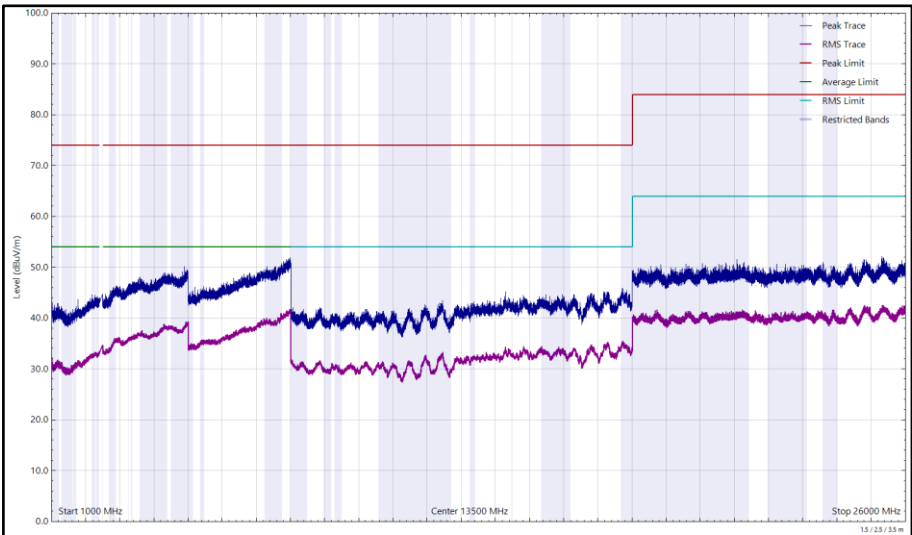


Figure 124 - 2480 MHz (CH78), DH5, iPA, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal

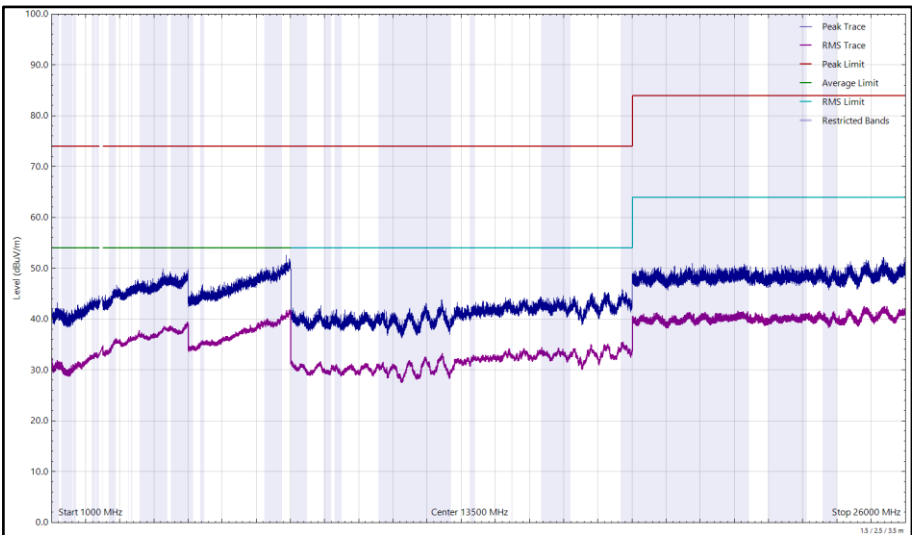


Figure 125 - 2480 MHz (CH78), DH5, iPA, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical



| Frequency (MHz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Angle (°) | Height (cm) | Polarisation |
|-----------------|----------------|----------------|-------------|----------|-----------|-------------|--------------|
| *               |                |                |             |          |           |             |              |

Table 87 - 2402 MHz (CH0), DH5, iPA, Core 2, 1 GHz to 26 GHz

\*No emissions found within 6 dB of the limit.

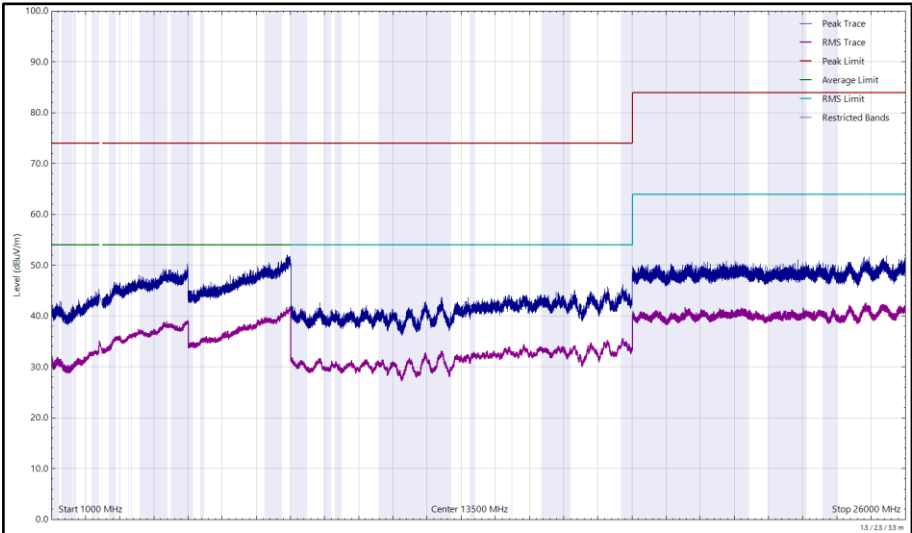


Figure 126 - 2402 MHz (CH0), DH5, iPA, Core 2, 1 GHz to 26 GHz, Horizontal

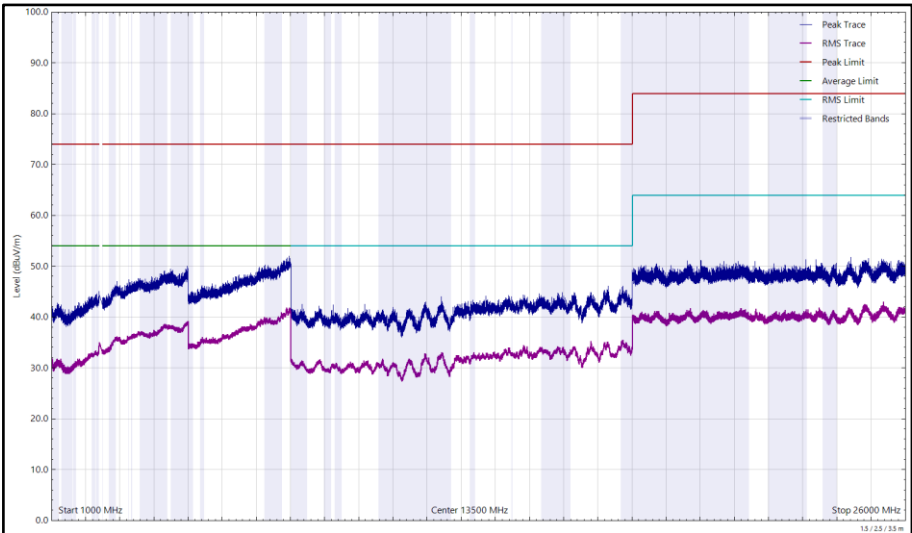
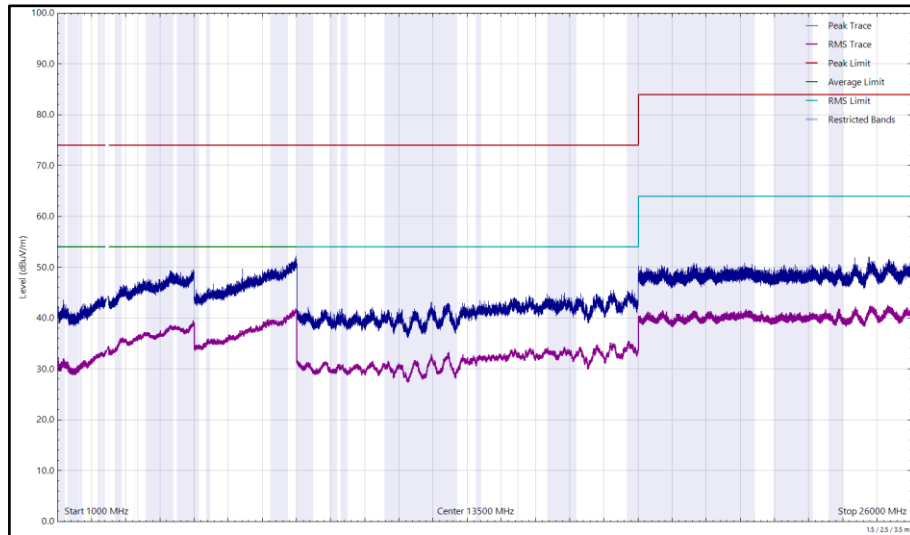


Figure 127 - 2402 MHz (CH0), DH5, iPA, Core 2, 1 GHz to 26 GHz, Vertical

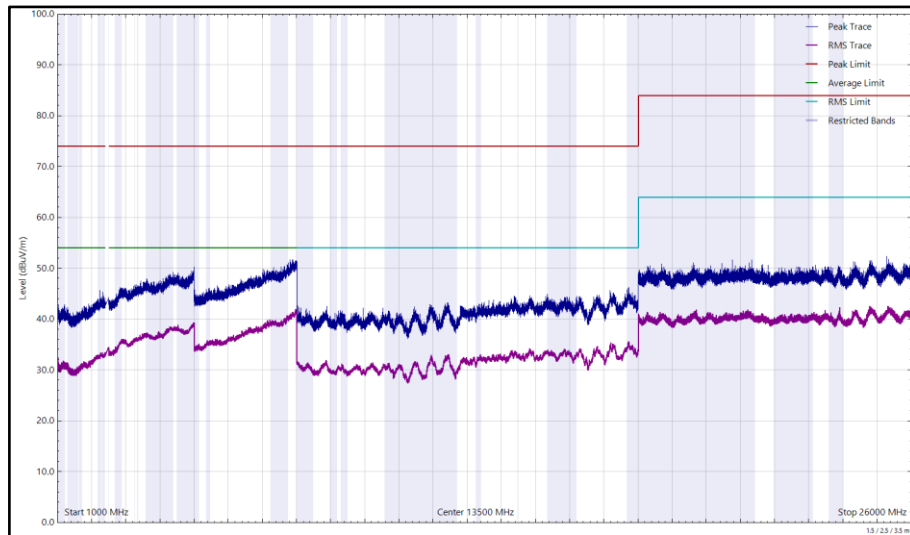
| Frequency (MHz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Angle (°) | Height (cm) | Polarisation |
|-----------------|----------------|----------------|-------------|----------|-----------|-------------|--------------|
| *               |                |                |             |          |           |             |              |

**Table 88 - 2480 MHz (CH78), DH5, iPA, Core 2, 1 GHz to 26 GHz**

\*No emissions found within 10 dB of the limit.



**Figure 128 - 2480 MHz (CH78), DH5, iPA, Core 2, 1 GHz to 26 GHz, Horizontal**

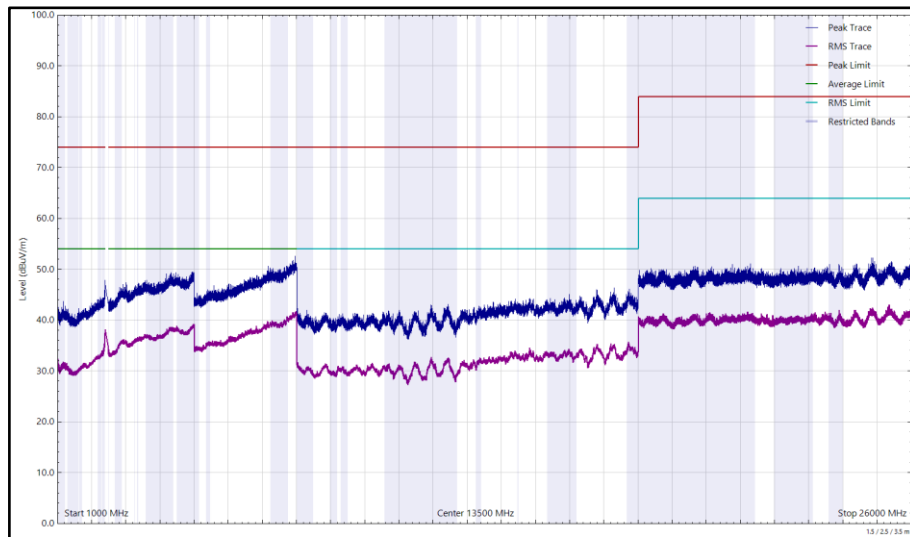


**Figure 129 - 2480 MHz (CH78), DH5, iPA, Core 2, 1 GHz to 26 GHz, Vertical**

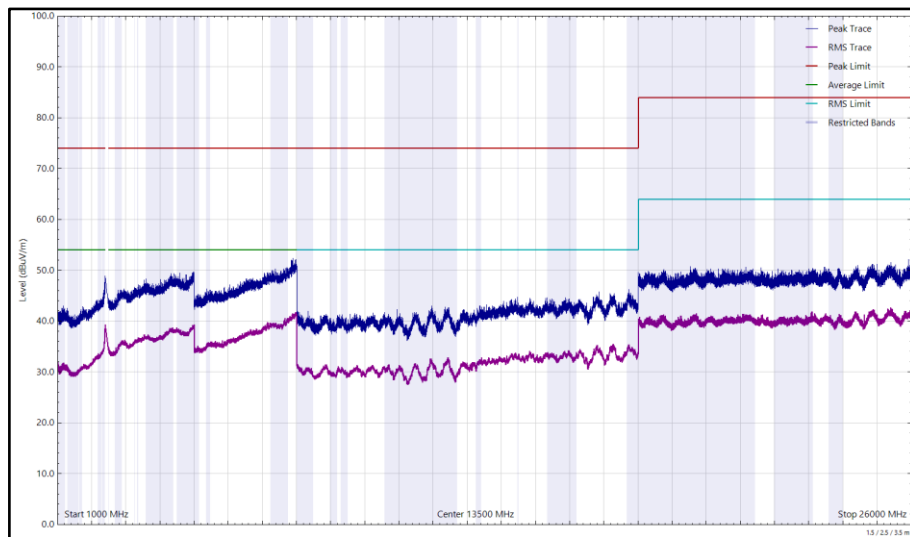
| Frequency (MHz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Angle (°) | Height (cm) | Polarisation |
|-----------------|----------------|----------------|-------------|----------|-----------|-------------|--------------|
| *               |                |                |             |          |           |             |              |

**Table 89 - 2402 MHz (CH0), 2-DH5, ePA, Core 0 + Core 1, 1 GHz to 26 GHz**

\*No emissions found within 10 dB of the limit.



**Figure 130 - 2402 MHz (CH0), 2-DH5, ePA, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal**



**Figure 131 - 2402 MHz (CH0), 2-DH5, ePA, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical**



| Frequency (MHz) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Angle (°) | Height (cm) | Polarisation |
|-----------------|----------------|----------------|-------------|----------|-----------|-------------|--------------|
| *               |                |                |             |          |           |             |              |

Table 90 - 2480 MHz (CH78), 2-DH5, ePA, Core 0 + Core 1, 1 GHz to 26 GHz

\*No emissions found within 10 dB of the limit.

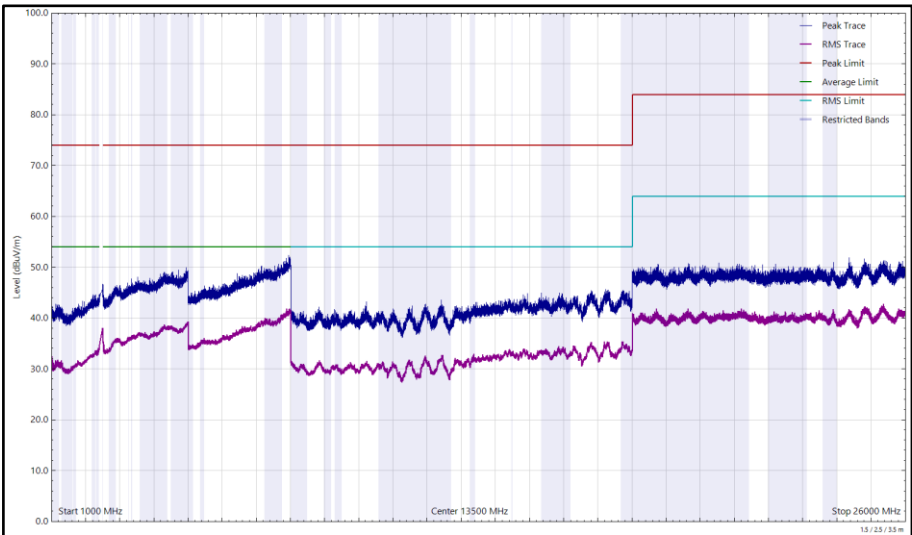


Figure 132 - 2480 MHz (CH78), 2-DH5, ePA, Core 0 + Core 1, 1 GHz to 26 GHz, Horizontal

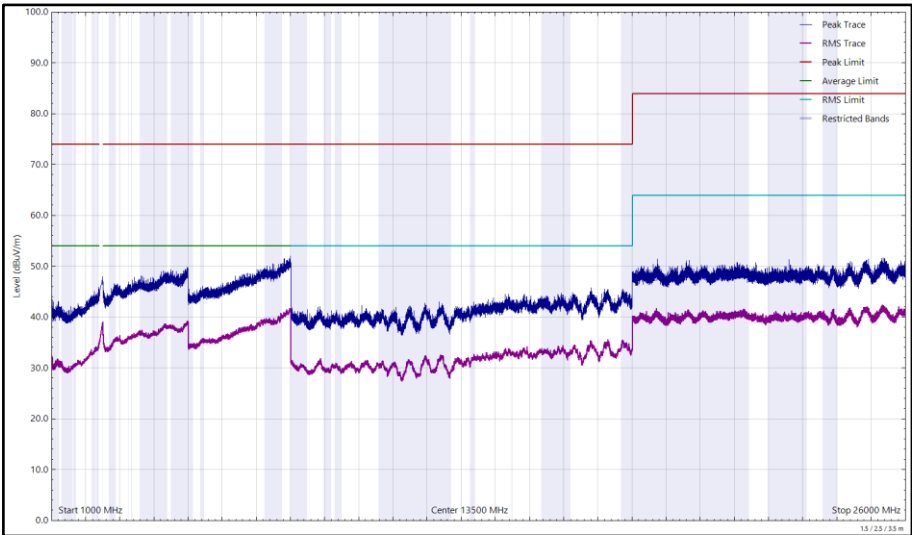


Figure 133 - 2480 MHz (CH78), 2-DH5, ePA, Core 0 + Core 1, 1 GHz to 26 GHz, Vertical



FCC 47 CFR Part 15, Limit Clause 15.247 (d)

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

Attenuation below the general limits specified in § 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in 15.209(a).

ISED RSS-247, Limit Clause 5.5

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under Section 5.4(4), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

In addition, radiated emissions which fall in the restricted bands, as defined in RSS-GEN, clause 8.10, must also comply with the radiated emission limits specified in RSS-GEN clause 8.9.

## 2.7.8 Test Location and Test Equipment Used

This test was carried out in RF Chamber 16.

| Instrument                          | Manufacturer    | Type No.             | TE No. | Calibration Period (months) | Calibration Expiry Date |
|-------------------------------------|-----------------|----------------------|--------|-----------------------------|-------------------------|
| Emissions Software                  | TUV SUD         | EmX V3.1.4           | 5125   | -                           | Software                |
| Cable (18GHz)                       | Junkosha        | MWX221-04000NMSNMS/B | 5262   | 12                          | 04-Aug-2023             |
| Cable (18 GHz)                      | Junkosha        | MWX221-04000NMSNMS/B | 5263   | 12                          | 24-Jan-2023             |
| Test Receiver                       | Rohde & Schwarz | ESW44                | 5914   | 12                          | 21-Feb-2023             |
| Cable (K Type 2m)                   | Junkosha        | MWX241-02000KMSKMS/B | 5935   | 12                          | 14-May-2023             |
| DRG Horn Antenna (7.5-18GHz)        | Schwarzbeck     | HWRD750              | 5940   | 12                          | 29-May-2023             |
| TRILOG Super Broadband Test Antenna | Schwarzbeck     | VULB 9168            | 5944   | 24                          | 03-Feb-2024             |
| 1500W (300V 12A) AC Power Supply    | iTech           | IT7324               | 5957   | -                           | O/P Mon                 |
| 3m Semi-Anechoic Chamber            | Schaffner       | RF Chamber 16        | 5972   | 36                          | 24-May-2025             |
| Mast & Turntable Controller         | Maturo Gmbh     | FCU3.0               | 5973   | -                           | TU                      |
| Tilt Antenna Mast                   | Maturo Gmbh     | BAM4.5-P             | 5974   | -                           | TU                      |



| Instrument                                   | Manufacturer        | Type No.                  | TE No. | Calibration Period (months) | Calibration Expiry Date |
|----------------------------------------------|---------------------|---------------------------|--------|-----------------------------|-------------------------|
| Turntable                                    | Maturo Gmbh         | TT1.5SI                   | 5975   | -                           | TU                      |
| Cable (SMA to SMA 1m)                        | Junkosha            | MWX221-01000AMSAMS/A      | 6018   | 12                          | 06-Jun-2023             |
| Cable (SMA to SMA 3m)                        | Junkosha            | MWX221-03000AMSAMS/A      | 6021   | 12                          | 06-Jun-2023             |
| Cable (N to N 3m)                            | Junkosha            | MWX221-03000NMSNMS/A      | 6025   | 12                          | 05-Jun-2023             |
| Cable (SMA to SMA 6m)                        | Junkosha            | MWX221-06000AMSAMS/B      | 6026   | 12                          | 07-Jun-2023             |
| Cable (N to N 6m)                            | Junkosha            | MWX221-06000NMSNMS/B      | 6027   | 12                          | 05-Jun-2023             |
| Horn Antenna (1-10 GHz)                      | Schwarzbeck         | BBHA9120B                 | 6142   | 12                          | 26-Jun-2023             |
| Digital Multimeter                           | Fluke               | 115                       | 6146   | 12                          | 16-Jun-2023             |
| Humidity & Temperature meter                 | R.S Components      | 1364                      | 6148   | 12                          | 17-Jun-2023             |
| Double Ridge Active Horn Antenna (18-40 GHz) | Com-Power           | AHA-840                   | 6188   | 24                          | 02-Jun-2024             |
| SAC Switch Unit                              | TUV SUD             | SSU002                    | 6190   | 12                          | 08-Aug-2023             |
| 8GHz Highpass Filter                         | Wainwright          | WHKX 7150 8000 18000 50SS | 6196   | 12                          | 15-Jul-2023             |
| Pre Amp 8 - 18 GHz                           | Wright Technologies | APS06 0061                | 6200   | 12                          | 19-Jul-2023             |
| Attenuator 4dB                               | Pasternack          | PE7074-4                  | 6203   | 24                          | 16-Jul-2024             |
| Cable (SMA to SMA 20cm)                      | TUV SUD             | MH-FH 8-18                | 6220   | 12                          | 10-Aug-2023             |

**Table 91**

TU – Traceability Unscheduled



## **2.8 Authorised Band Edges**

### **2.8.1 Specification Reference**

FCC 47 CFR Part 15C, Clause 15.247 (d)  
ISED RSS-247, Clause 5.5

### **2.8.2 Equipment Under Test and Modification State**

A2780, S/N: FWC3JLYYHC - Modification State 0

### **2.8.3 Date of Test**

10-August-2022 to 11-August-2022

### **2.8.4 Test Method**

The test was performed in accordance with ANSI C63.10, clause 6.10.4.

### **2.8.5 Environmental Conditions**

|                     |                |
|---------------------|----------------|
| Ambient Temperature | 22.5 - 23.0 °C |
| Relative Humidity   | 42.4 - 65.3 %  |

## 2.8.6 Test Results

### 2.4 GHz Bluetooth - FHSS

#### iPA

| Mode    | Modulation    | Core | Packet Type | Tx Frequency (MHz) | Band Edge Frequency (MHz) | Level (dBc) |
|---------|---------------|------|-------------|--------------------|---------------------------|-------------|
| Static  | GFSK          | 1    | DH5         | 2402               | 2400.0                    | -53.34      |
| Static  | $\pi/4$ DQPSK | 1    | 2-DH5       | 2402               | 2400.0                    | -46.08      |
| Static  | 8-DPSK        | 1    | 3-DH5       | 2402               | 2400.0                    | -46.06      |
| Hopping | GFSK          | 1    | DH5         | 2402               | 2400.0                    | -67.26      |
| Hopping | $\pi/4$ DQPSK | 1    | 2-DH5       | 2402               | 2400.0                    | -51.44      |
| Hopping | 8-DPSK        | 1    | 3-DH5       | 2402               | 2400.0                    | -51.35      |

Table 92 - Authorised Band Edge Results

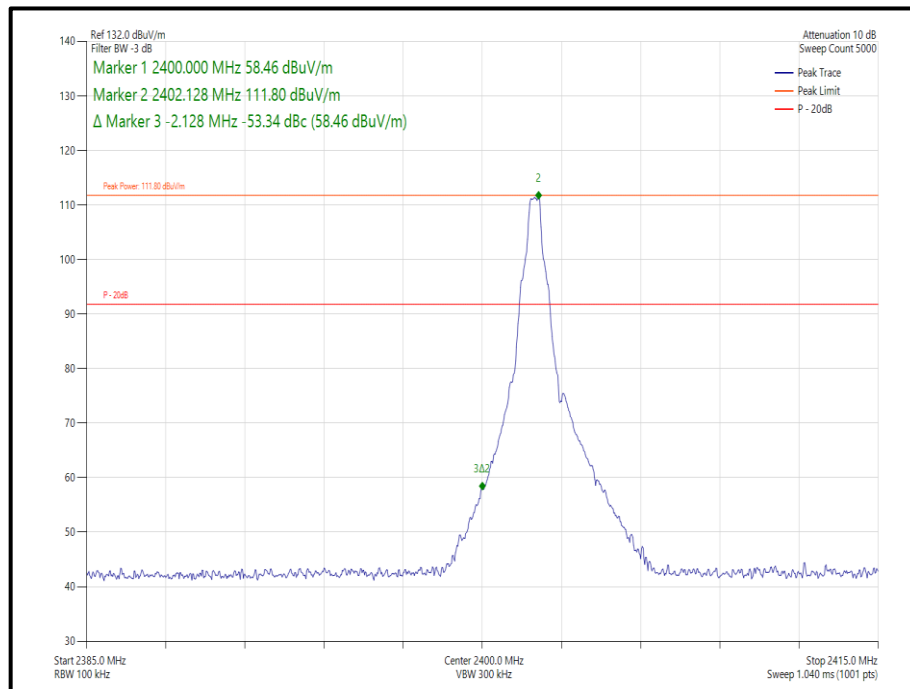


Figure 134 - Static - GFSK/DH5 - 2402 MHz - Band Edge Frequency 2400.0 MHz

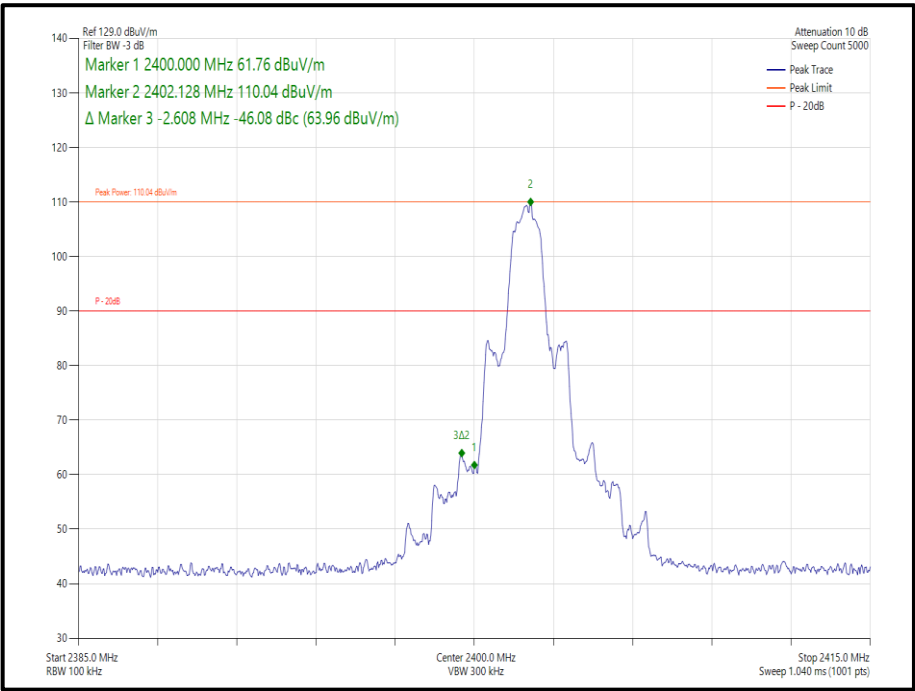


Figure 135 - Static -  $\pi/4$  DQPSK/2-DH5 - 2402 MHz - Band Edge Frequency 2400.0 MHz

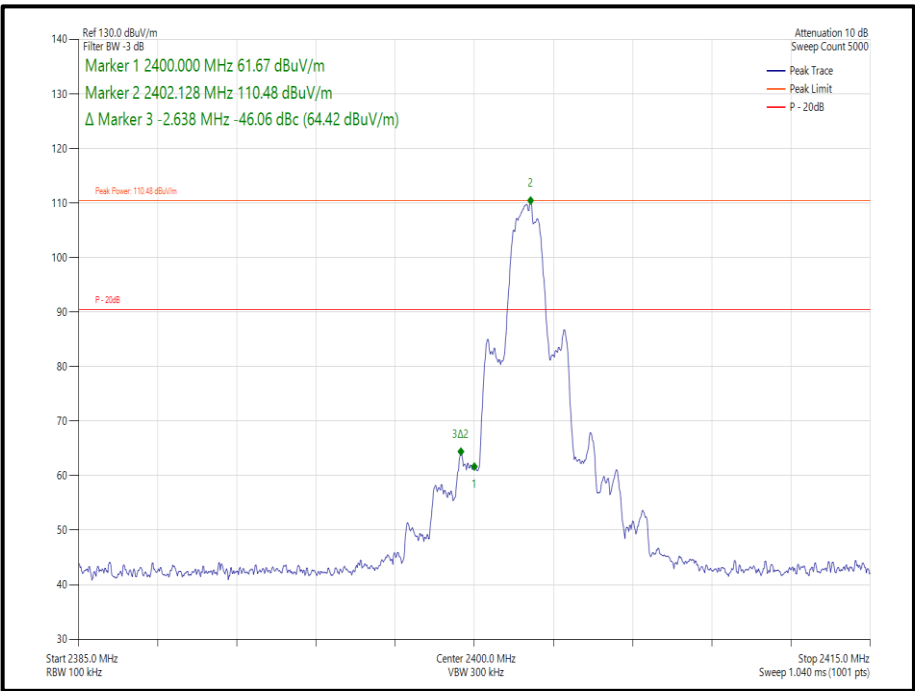


Figure 136 - Static - 8-DPSK/3-DH5 - 2402 MHz - Band Edge Frequency 2400.0 MHz

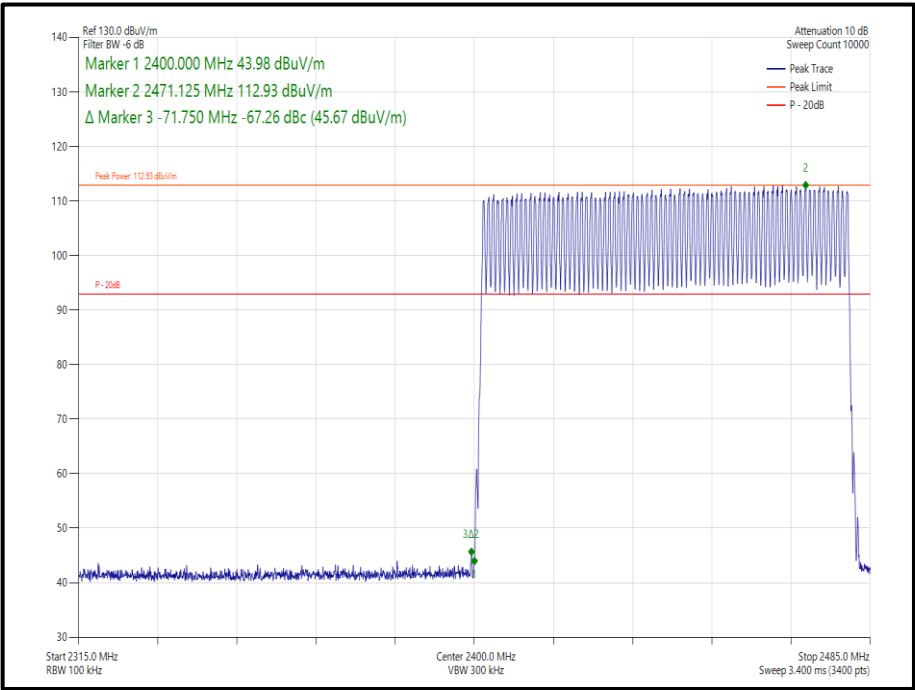


Figure 137 - Hopping - GFSK/DH5 - Band Edge Frequency 2400.0 MHz

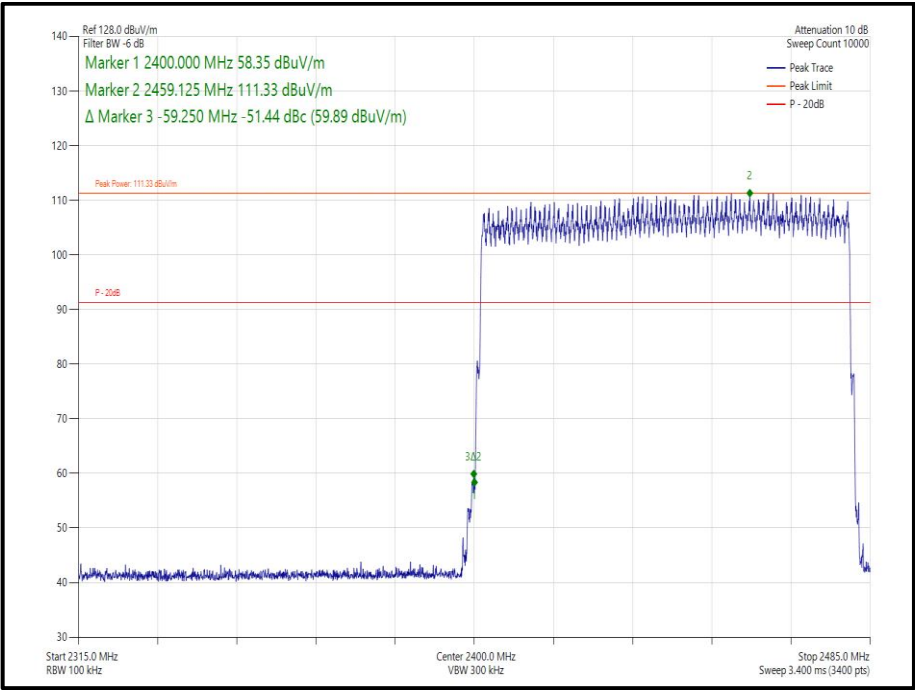


Figure 138 - Hopping -  $\pi/4$  DQPSK/2-DH5 - Band Edge Frequency 2400.0 MHz

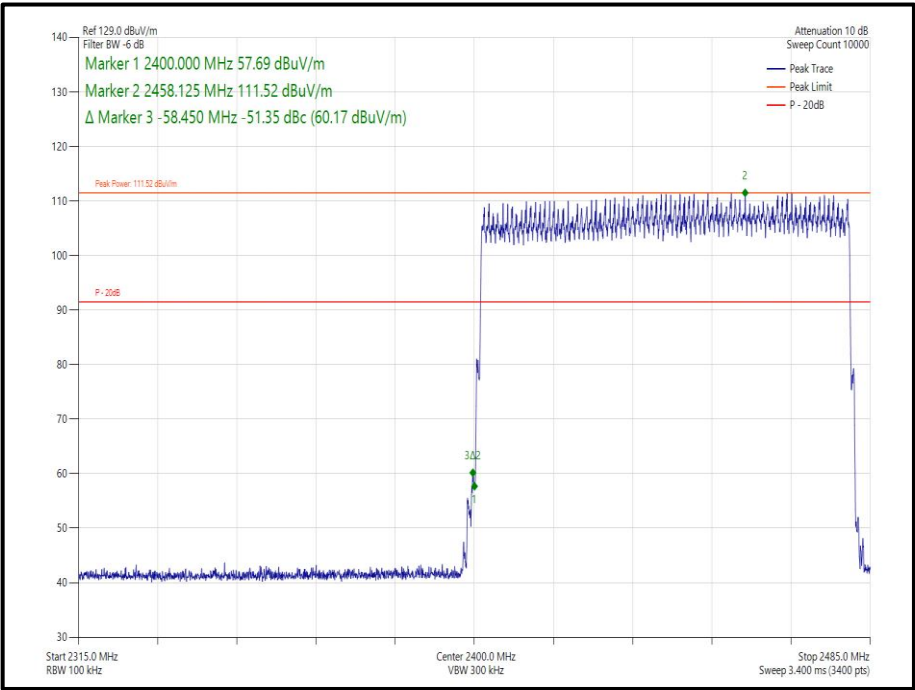


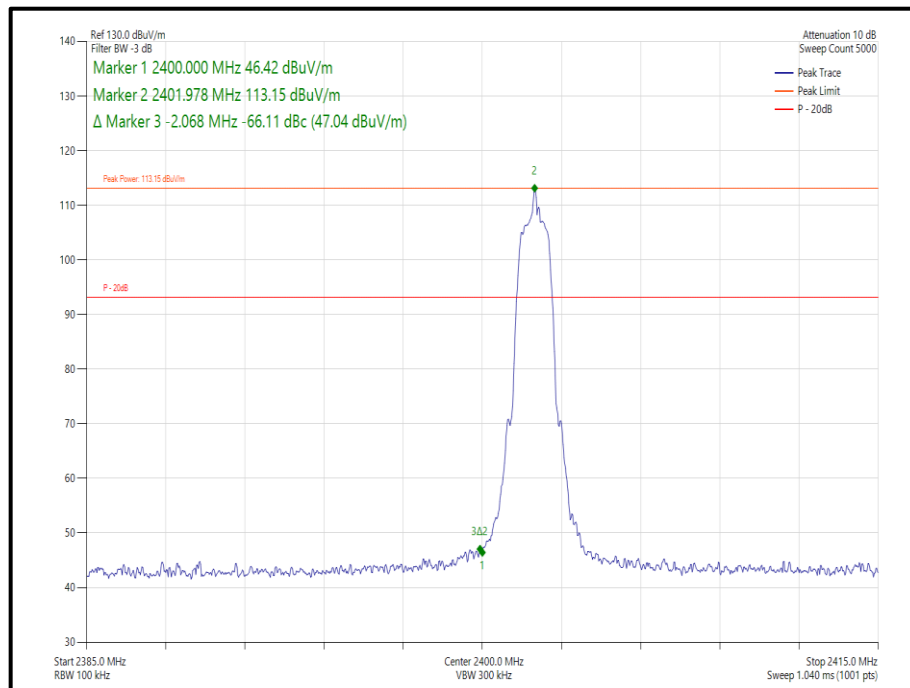
Figure 139 - Hopping - 8-DPSK/3-DH5 - Band Edge Frequency 2400.0 MHz

## 2.4 GHz Bluetooth (FHSS)

### ePA

| Mode    | Modulation    | Core | Packet Type | Tx Frequency (MHz) | Band Edge Frequency (MHz) | Level (dBc) |
|---------|---------------|------|-------------|--------------------|---------------------------|-------------|
| Static  | $\pi/4$ DQPSK | 1    | 2-DH5       | 2402               | 2400.0                    | -66.11      |
| Static  | 8-DPSK        | 1    | 3-DH5       | 2402               | 2400.0                    | -65.36      |
| Hopping | $\pi/4$ DQPSK | 1    | 2-DH5       | 2402               | 2400.0                    | -67.88      |
| Hopping | 8-DPSK        | 1    | 3-DH5       | 2402               | 2400.0                    | -68.05      |

**Table 93 - Authorised Band Edge Results**



**Figure 140 - Static -  $\pi/4$  DQPSK/2-DH5 - 2402 MHz - Band Edge Frequency 2400.0 MHz**

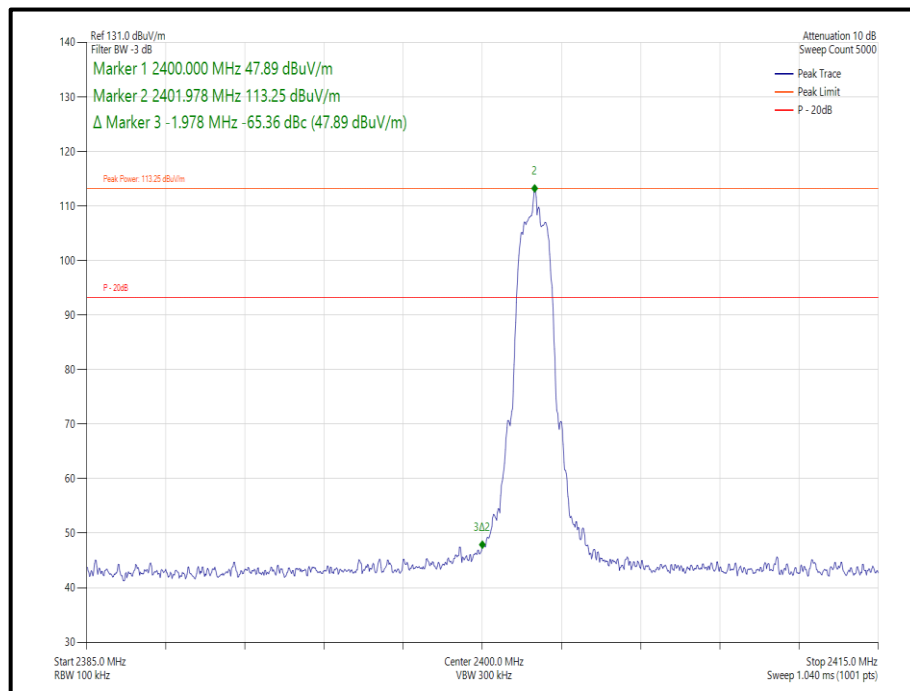


Figure 141 - Static - 8-DPSK/3-DH5 - 2402 MHz - Band Edge Frequency 2400.0 MHz

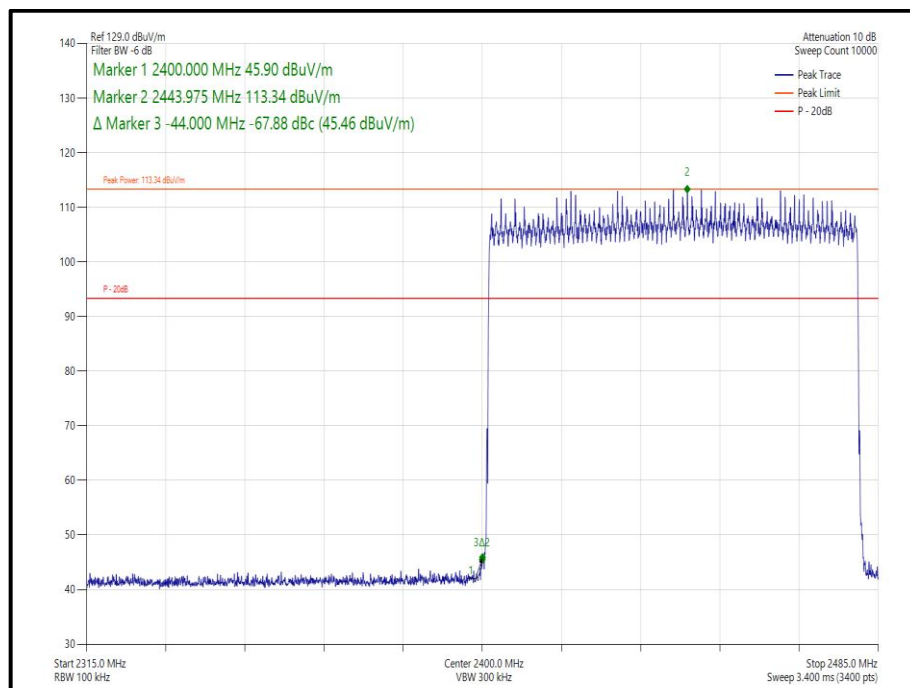


Figure 142 - Hopping -  $\pi/4$  DQPSK/2-DH5 - Band Edge Frequency 2400.0 MHz

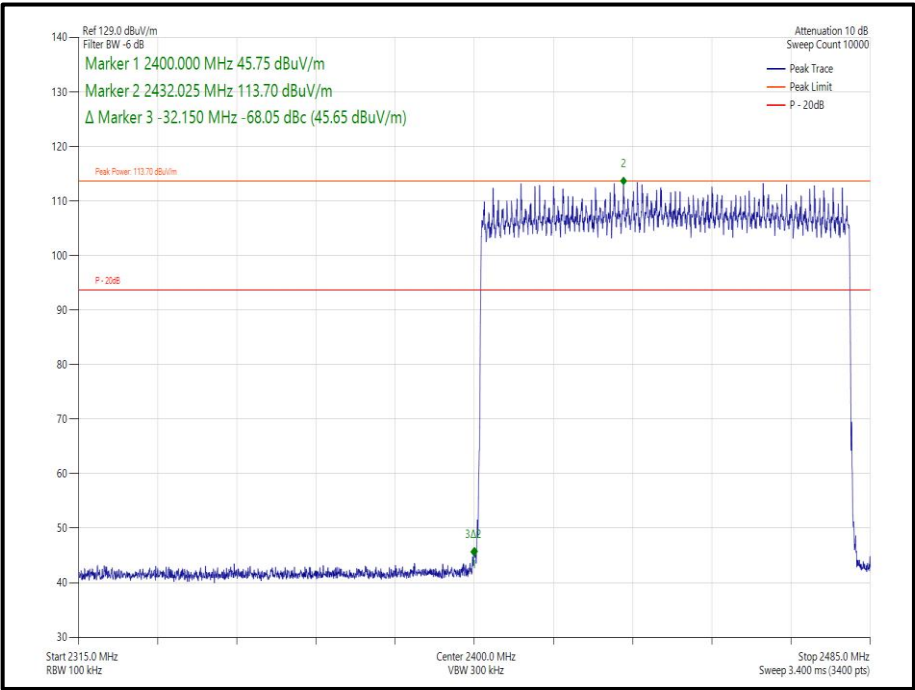


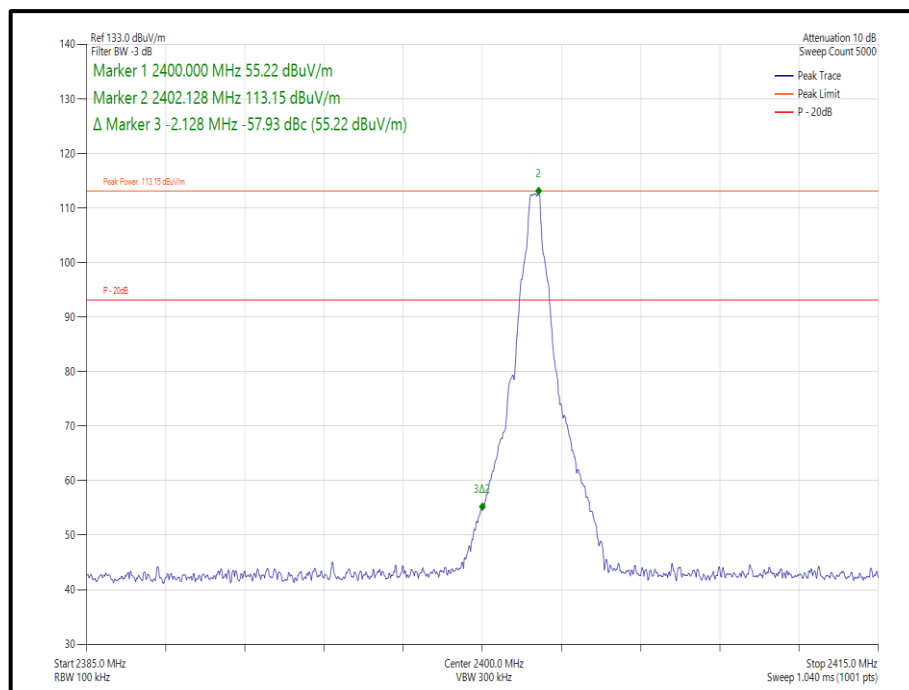
figure 143 - Hopping - 8-DPSK/3-DH5 - Band Edge Frequency 2400.0 MHz

## 2.4 GHz Bluetooth (FHSS)

### iPA

| Mode    | Modulation    | Core | Packet Type | Tx Frequency (MHz) | Band Edge Frequency (MHz) | Level (dBc) |
|---------|---------------|------|-------------|--------------------|---------------------------|-------------|
| Static  | GFSK          | 2    | DH5         | 2402               | 2400.0                    | -57.93      |
| Static  | $\pi/4$ DQPSK | 2    | 2-DH5       | 2402               | 2400.0                    | -52.50      |
| Static  | 8-DPSK        | 2    | 3-DH5       | 2402               | 2400.0                    | -54.20      |
| Hopping | GFSK          | 2    | DH5         | 2402               | 2400.0                    | -68.90      |
| Hopping | $\pi/4$ DQPSK | 2    | 2-DH5       | 2402               | 2400.0                    | -56.85      |
| Hopping | 8-DPSK        | 2    | 3-DH5       | 2402               | 2400.0                    | -56.75      |

**Table 94 - Authorised Band Edge Results**



**Figure 144 - Static - GFSK/DH5 - 2402 MHz - Band Edge Frequency 2400.0 MHz**

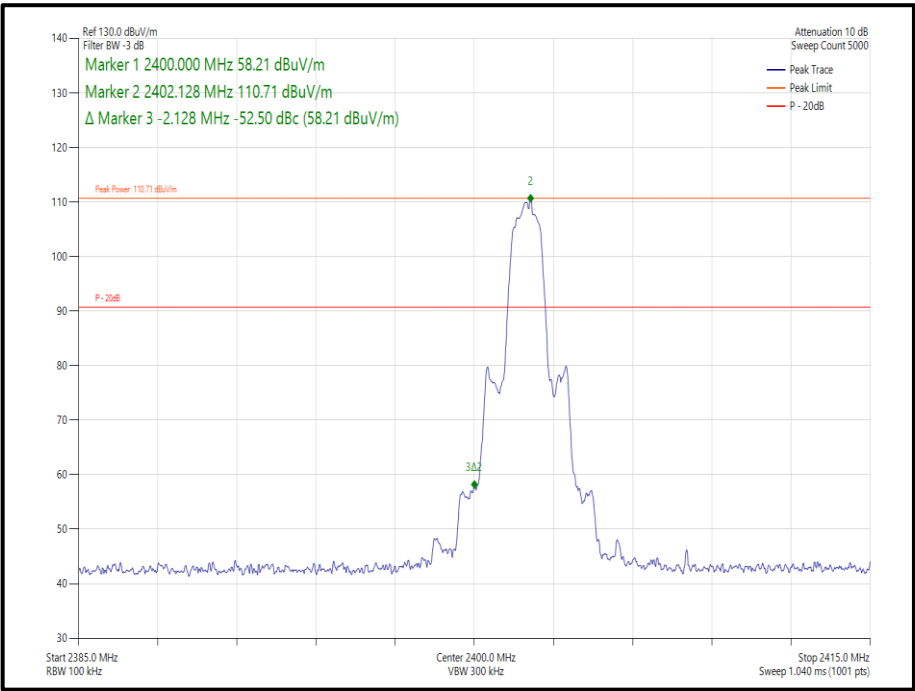


Figure 145 - Static -  $\pi/4$  DQPSK/2-DH5 - 2402 MHz - Band Edge Frequency 2400.0 MHz

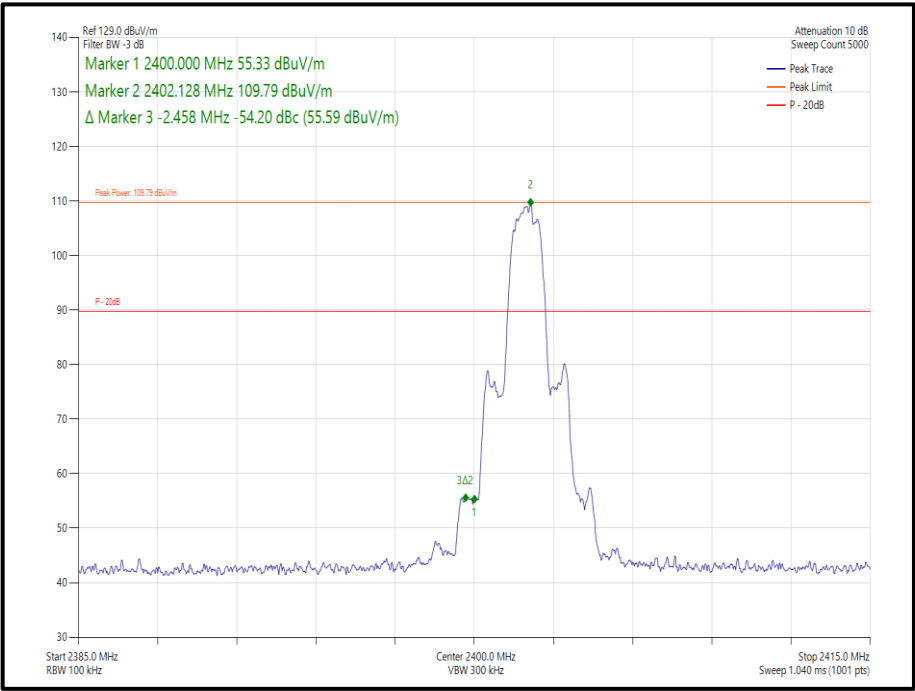


Figure 146 - Static - 8-DPSK/3-DH5 - 2402 MHz - Band Edge Frequency 2400.0 MHz

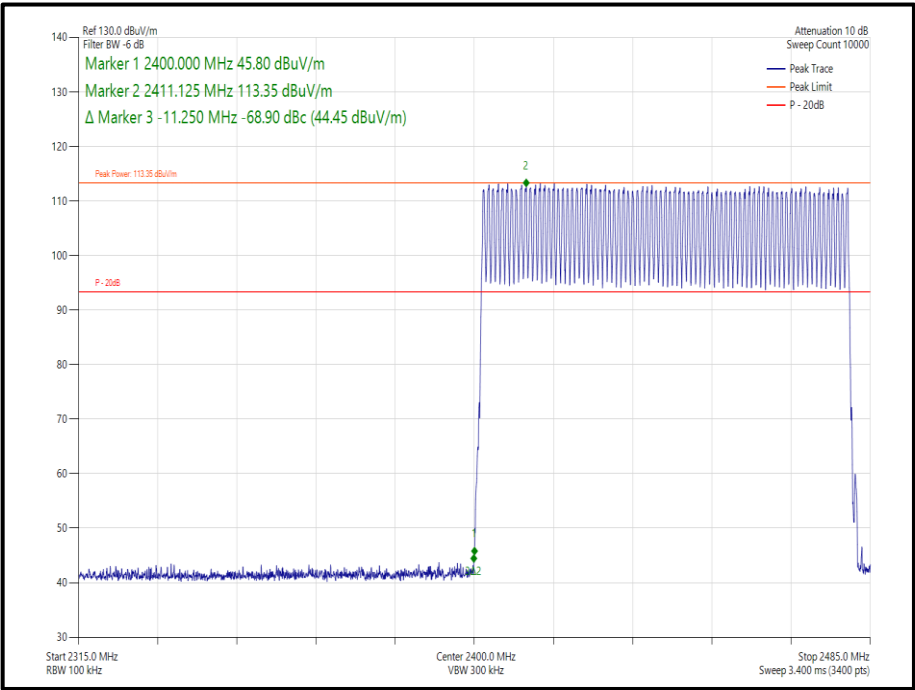


Figure 147 - Hopping - GFSK/DH5 - Band Edge Frequency 2400.0 MHz

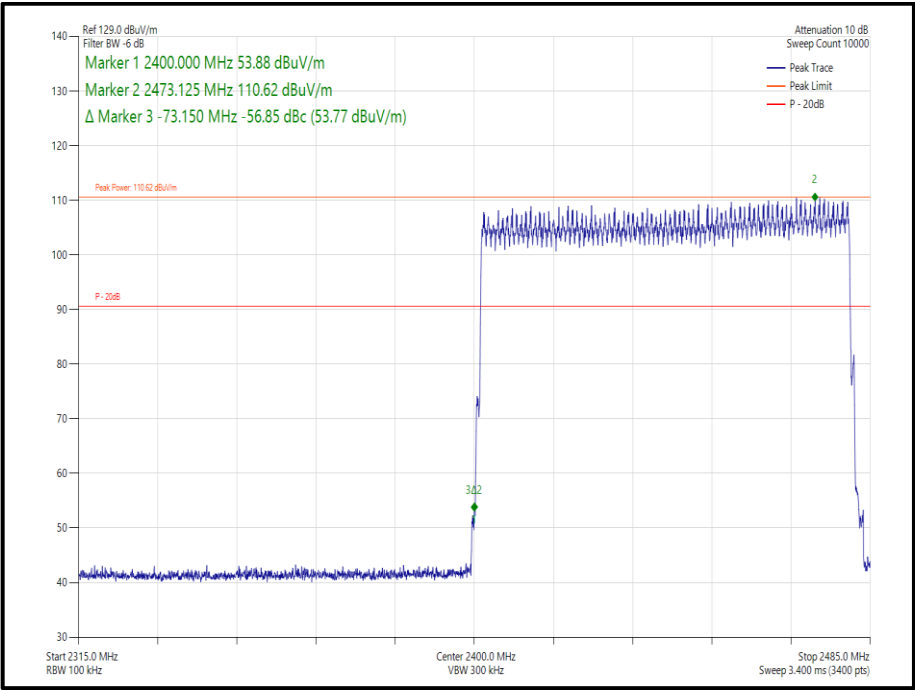


Figure 148 - Hopping -  $\pi/4$  DQPSK/2-DH5 - Band Edge Frequency 2400.0 MHz

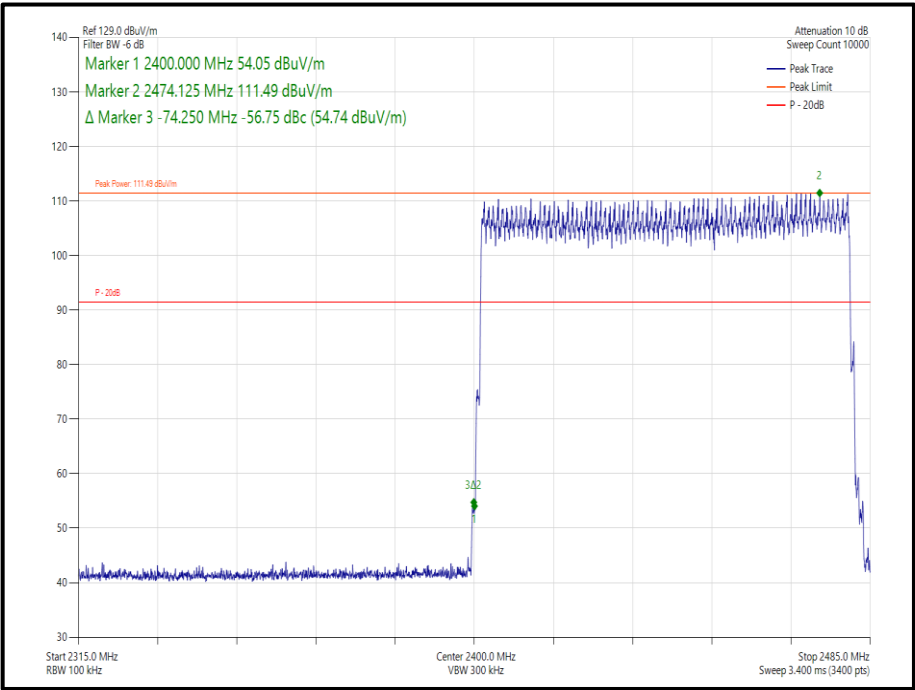


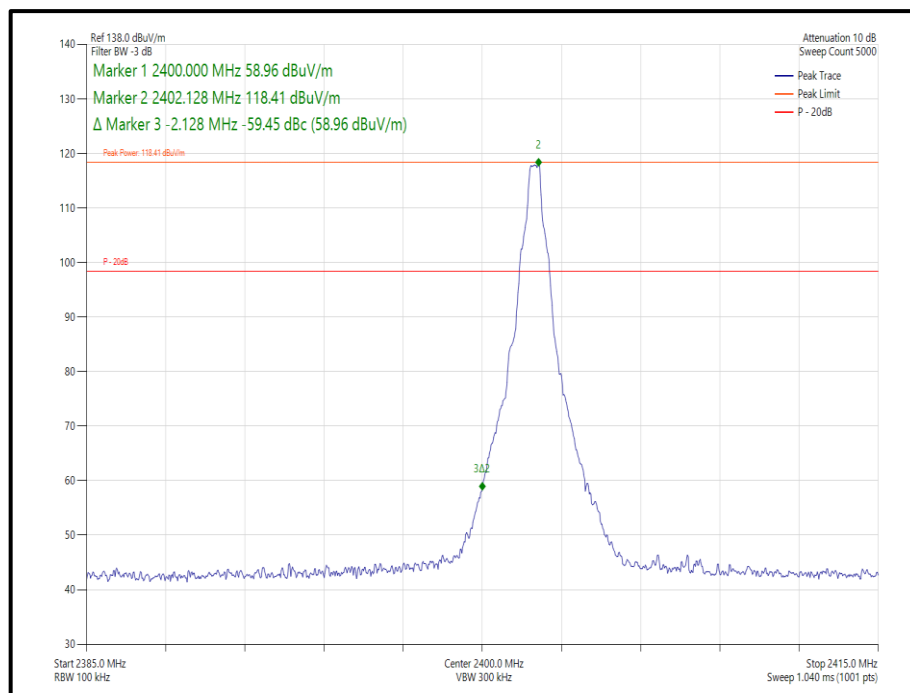
Figure 149 - Hopping - 8-DPSK/3-DH5 - Band Edge Frequency 2400.0 MHz

## 2.4 GHz Bluetooth (FHSS)

### iPA

| Mode    | Modulation    | Core | Packet Type | Tx Frequency (MHz) | Band Edge Frequency (MHz) | Level (dBc) |
|---------|---------------|------|-------------|--------------------|---------------------------|-------------|
| Static  | GFSK          | 0-1  | DH5         | 2402               | 2400.0                    | -59.45      |
| Static  | $\pi/4$ DQPSK | 0-1  | 2-DH5       | 2402               | 2400.0                    | -55.81      |
| Static  | 8-DPSK        | 0-1  | 3-DH5       | 2402               | 2400.0                    | -56.44      |
| Hopping | GFSK          | 0-1  | DH5         | 2402               | 2400.0                    | -71.58      |
| Hopping | $\pi/4$ DQPSK | 0-1  | 2-DH5       | 2402               | 2400.0                    | -60.38      |
| Hopping | 8-DPSK        | 0-1  | 3-DH5       | 2402               | 2400.0                    | -60.53      |

**Table 95 - Authorised Band Edge Results**



**Figure 150 - Static - GFSK/DH5 - 2402 MHz - Band Edge Frequency 2400.0 MHz**

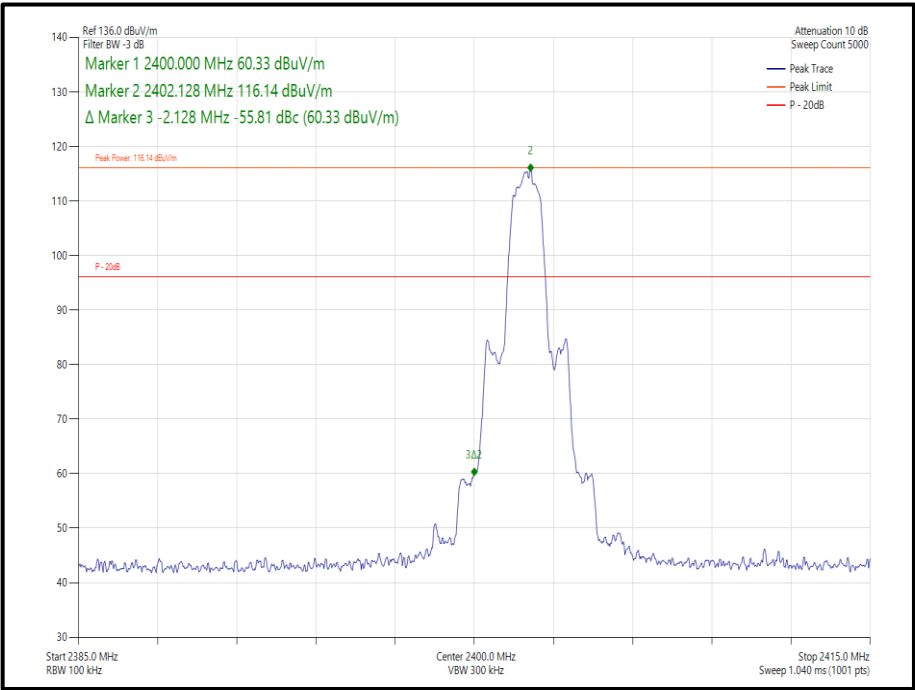


Figure 151 - Static -  $\pi/4$  DQPSK/2-DH5 - 2402 MHz - Band Edge Frequency 2400.0 MHz

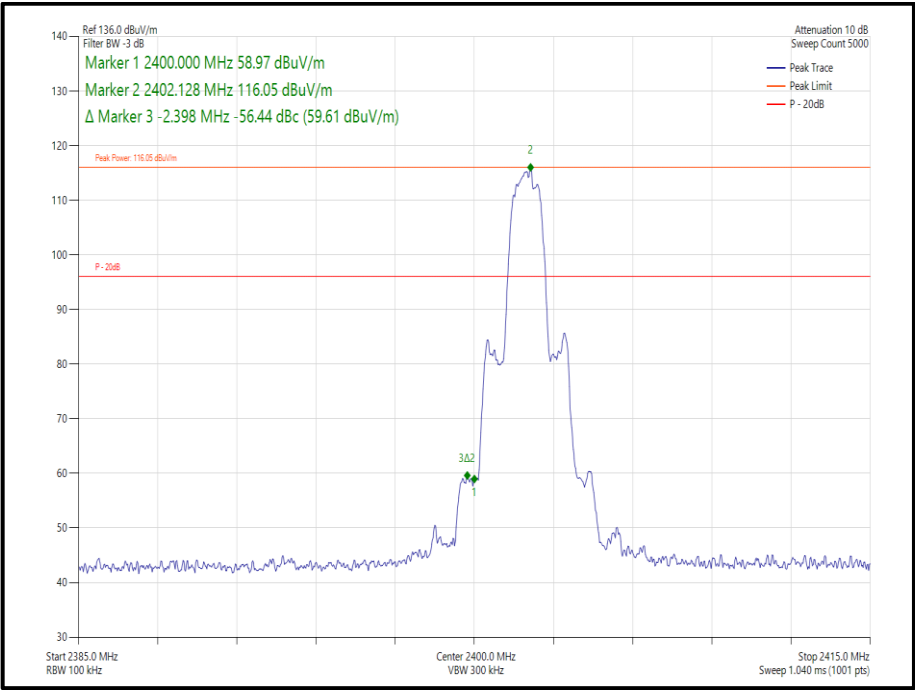


Figure 152 - Static - 8-DPSK/3-DH5 - 2402 MHz - Band Edge Frequency 2400.0 MHz

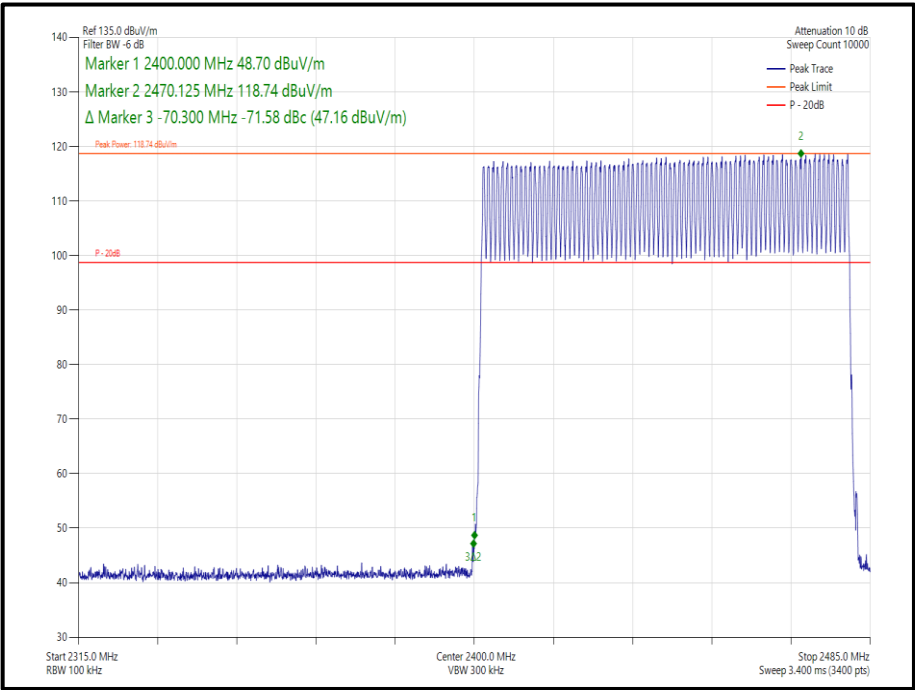


Figure 153 - Hopping - GFSK/DH5 - Band Edge Frequency 2400.0 MHz

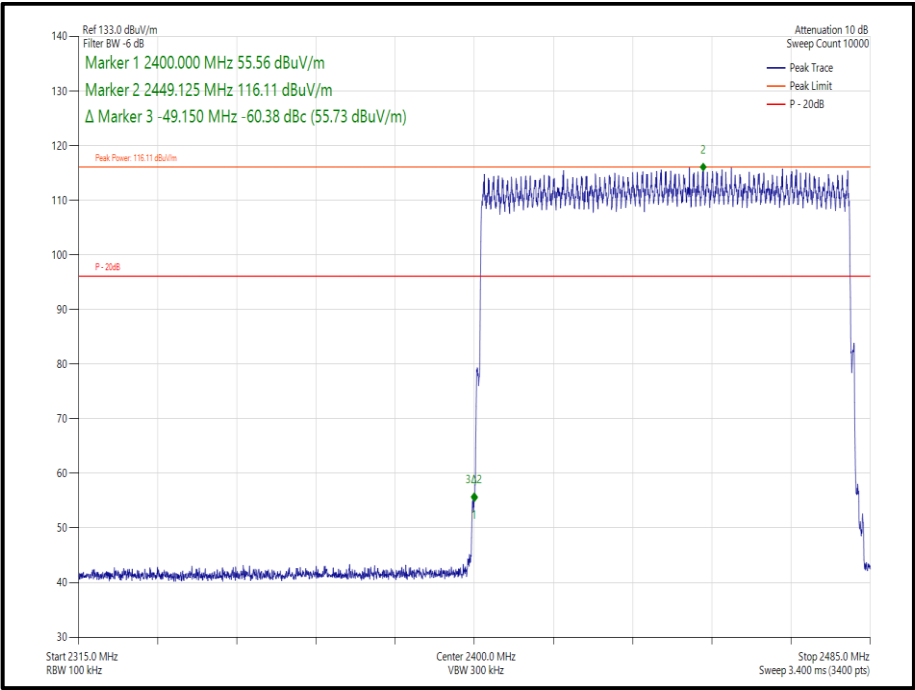


Figure 154 - Hopping -  $\pi/4$  DQPSK/2-DH5 - Band Edge Frequency 2400.0 MHz

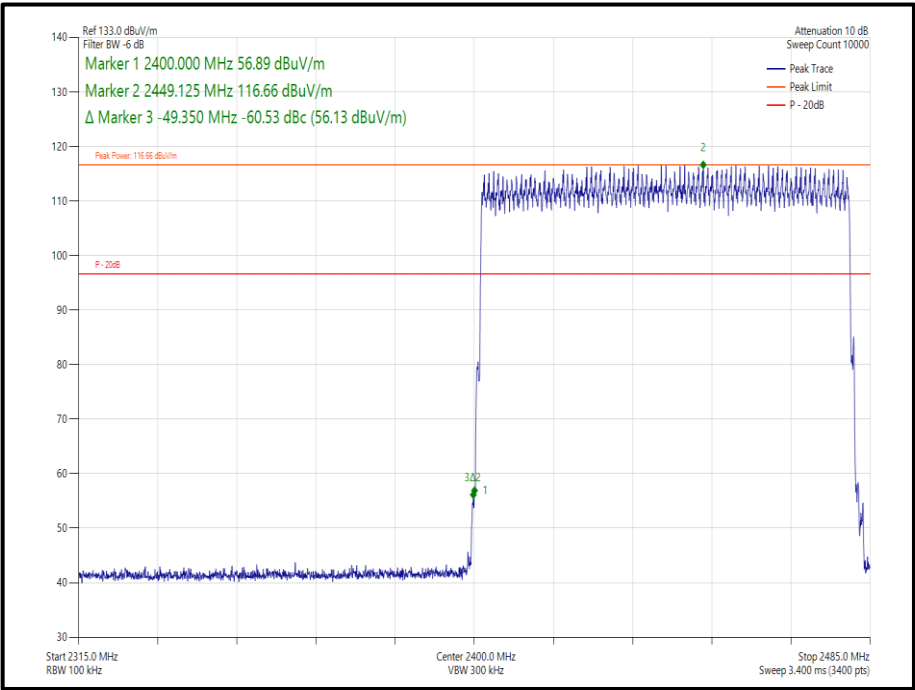


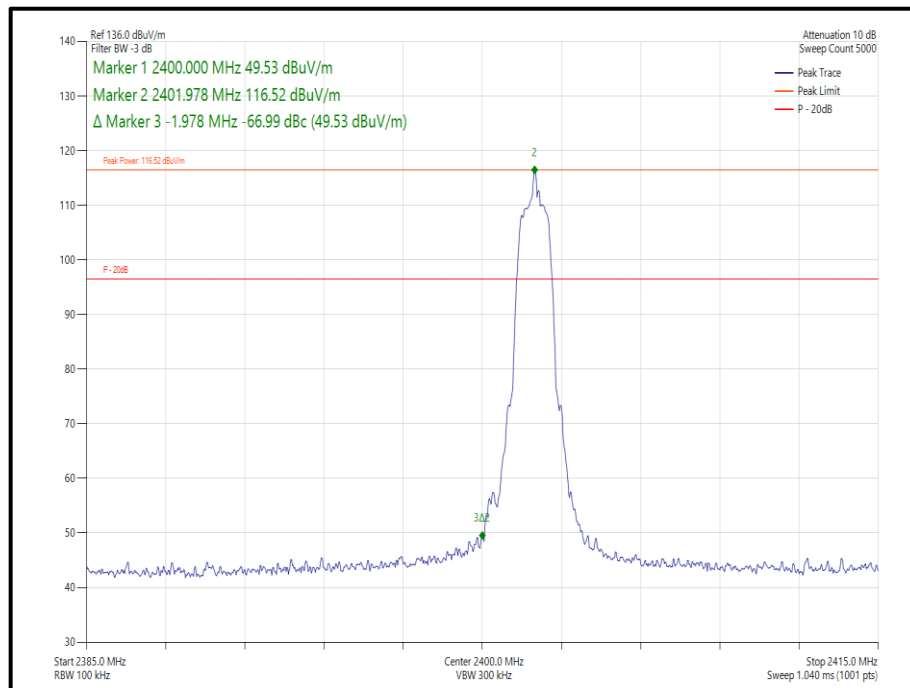
Figure 155 - Hopping - 8-DPSK/3-DH5 - Band Edge Frequency 2400.0 MHz

## 2.4 GHz Bluetooth (FHSS)

### ePA

| Mode    | Modulation    | Core | Packet Type | Tx Frequency (MHz) | Band Edge Frequency (MHz) | Level (dBc) |
|---------|---------------|------|-------------|--------------------|---------------------------|-------------|
| Static  | $\pi/4$ DQPSK | 0-1  | 2-DH5       | 2402               | 2400.0                    | -66.99      |
| Static  | 8-DPSK        | 0-1  | 3-DH5       | 2402               | 2400.0                    | -66.89      |
| Hopping | $\pi/4$ DQPSK | 0-1  | 2-DH5       | 2402               | 2400.0                    | -69.63      |
| Hopping | 8-DPSK        | 0-1  | 3-DH5       | 2402               | 2400.0                    | -69.33      |

**Table 96 - Authorised Band Edge Results**



**Figure 156 - Static -  $\pi/4$  DQPSK/2-DH5 - 2402 MHz - Band Edge Frequency 2400.0 MHz**

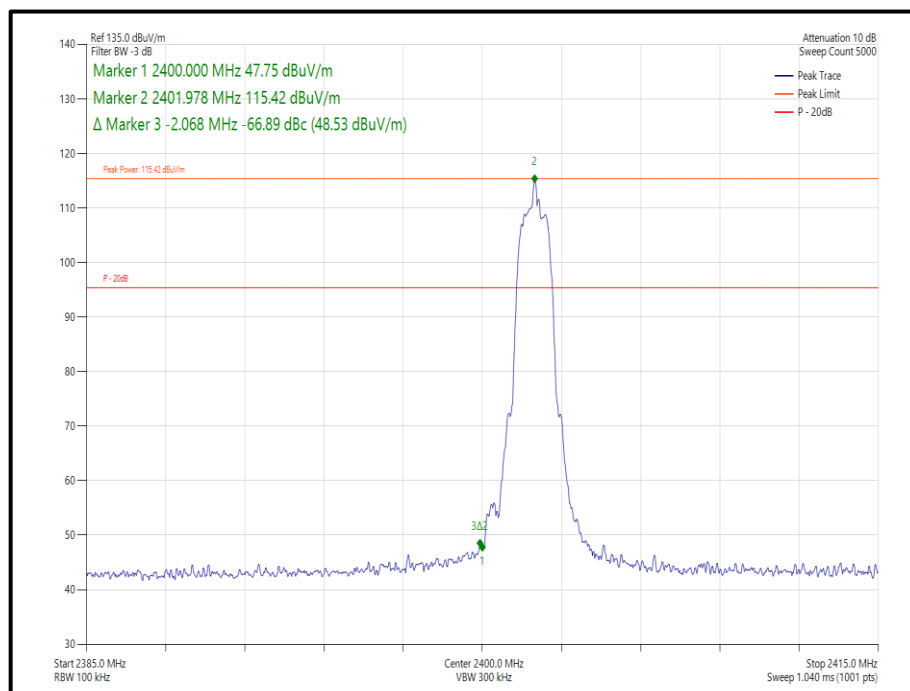


Figure 157 - Static - 8-DPSK/3-DH5 - 2402 MHz - Band Edge Frequency 2400.0 MHz

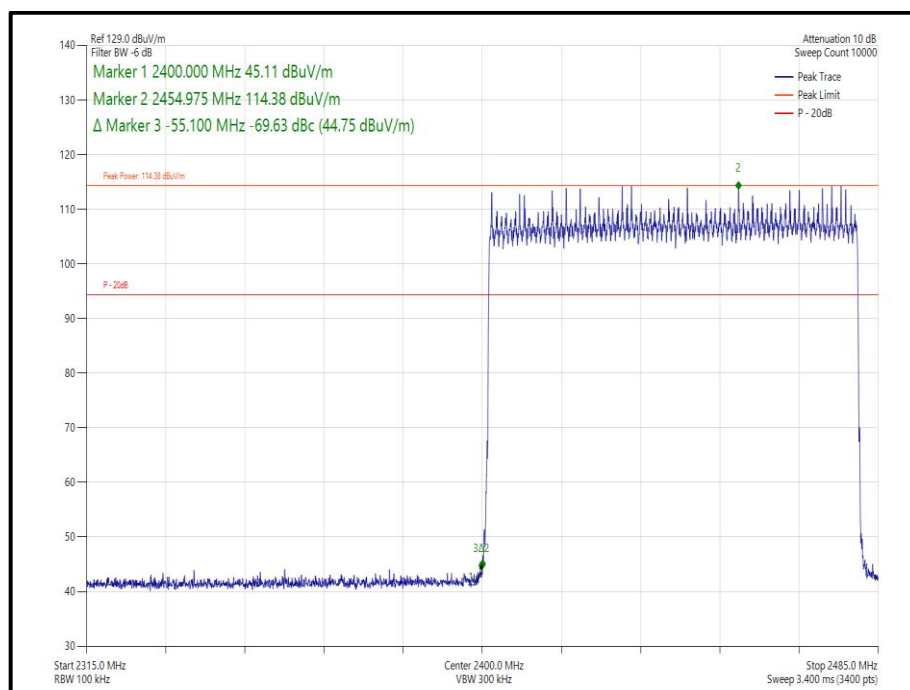
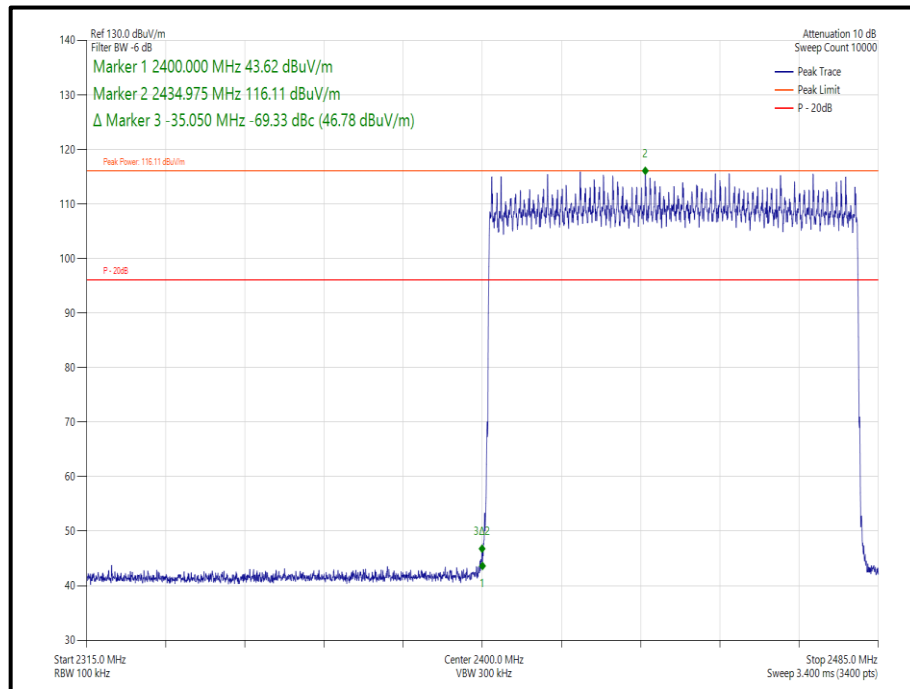


Figure 158 - Hopping -  $\pi/4$  DQPSK/2-DH5 - Band Edge Frequency 2400.0 MHz



**Figure 159 - Hopping - 8-DPSK/3-DH5 - Band Edge Frequency 2400.0 MHz**

FCC 47 CFR Part 15, Limit Clause 15.247 (d)

20 dB below the fundamental measured in a 100 kHz bandwidth using a peak detector. If the transmitter complies with the conducted power limits, based on the use of RMS averaging over a time interval, the attenuation required shall be 30 dB below the fundamental instead of 20 dB.

ISED RSS-247, Limit Clause 5.5

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under Section 5.4(4), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.



## 2.8.7 Test Location and Test Equipment Used

This test was carried out in RF Chamber 16.

| Instrument                       | Manufacturer    | Type No.             | TE No. | Calibration Period (months) | Calibration Expiry Date |
|----------------------------------|-----------------|----------------------|--------|-----------------------------|-------------------------|
| Test Receiver                    | Rohde & Schwarz | ESW44                | 5914   | 12                          | 21-Feb-2023             |
| 1500W (300V 12A) AC Power Supply | iTech           | IT7324               | 5957   | -                           | O/P Mon                 |
| 3m Semi-Anechoic Chamber         | Schaffner       | RF Chamber 16        | 5972   | 36                          | 24-May-2025             |
| Mast & Turntable Controller      | Maturo Gmbh     | FCU3.0               | 5973   | -                           | TU                      |
| Tilt Antenna Mast                | Maturo Gmbh     | BAM4.5-P             | 5974   | -                           | TU                      |
| Turntable                        | Maturo Gmbh     | TT1.5SI              | 5975   | -                           | TU                      |
| Cable (SMA to SMA 1m)            | Junkosha        | MWX221-01000AMSAMS/A | 5996   | 12                          | 06-Jun-2023             |
| Cable (N to N 1m)                | Junkosha        | MWX221-01000NMSNMS/B | 5999   | 12                          | 05-Jun-2023             |
| Cable (N to N 7m)                | Junkosha        | MWX221-07000NMSNMS/B | 6005   | 12                          | 05-Jun-2023             |
| Cable (N to N 8m)                | Junkosha        | MWX221-08000NMSNMS/A | 6006   | 12                          | 05-Jun-2023             |
| Horn Antenna (1-10 GHz)          | Schwarzbeck     | BBHA9120B            | 6140   | 12                          | 21-Jun-2023             |
| Digital Multimeter               | Fluke           | 115                  | 6146   | 12                          | 16-Jun-2023             |
| Humidity & Temperature meter     | R.S Components  | 1364                 | 6148   | 12                          | 17-Jun-2023             |
| SAC Switch Unit                  | TUV SUD         | SSU002               | 6190   | 12                          | 08-Aug-2023             |

**Table 97**

TU - Traceability Unscheduled

O/P Mon – Output Monitored using calibrated equipment



### 3 Measurement Uncertainty

For a 95% confidence level, the measurement uncertainties for defined systems are:

| Test Name                                              | Measurement Uncertainty                                        |
|--------------------------------------------------------|----------------------------------------------------------------|
| Restricted Band Edges                                  | 30 MHz to 1 GHz: $\pm 5.2$ dB<br>1 GHz to 40 GHz: $\pm 6.3$ dB |
| Frequency Hopping Systems - Average Time of Occupancy  | -                                                              |
| Frequency Hopping Systems - Channel Separation         | $\pm 20.51$ kHz                                                |
| Frequency Hopping Systems - Number of Hopping Channels | -                                                              |
| Frequency Hopping Systems - 20 dB Bandwidth            | $\pm 23.51$ kHz                                                |
| Maximum Conducted Output Power                         | $\pm 1.38$ dB                                                  |
| Spurious Radiated Emissions                            | $\pm 3.2$ dB                                                   |
| Authorised Band Edges                                  | 30 MHz to 1 GHz: $\pm 5.2$ dB<br>1 GHz to 40 GHz: $\pm 6.3$ dB |

**Table 98**

#### Measurement Uncertainty Decision Rule – Accuracy Method

Determination of conformity with the specification limits is based on the decision rule according to IEC Guide 115:2021, Clause 4.4.3 (Procedure 2). The measurement results are directly compared with the test limit to determine conformance with the requirements of the standard.

Risk: The uncertainty of measurement about the measured result is negligible with regard to the final pass/fail decision. The measurement result can be directly compared with the test limit to determine conformance with the requirement (compare IEC Guide 115). The level of risk to falsely accept and falsely reject items is further described in ILAC-G8.