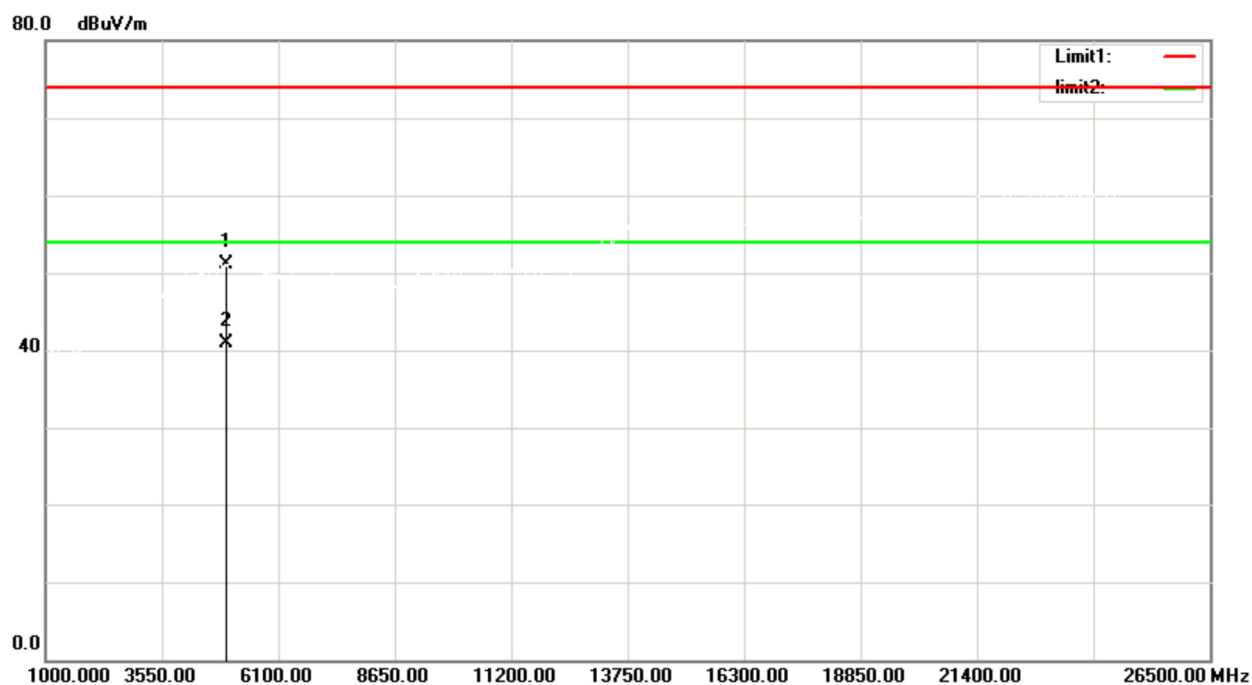


Test Mode: TX 2480 MHz_CH78_1Mbps

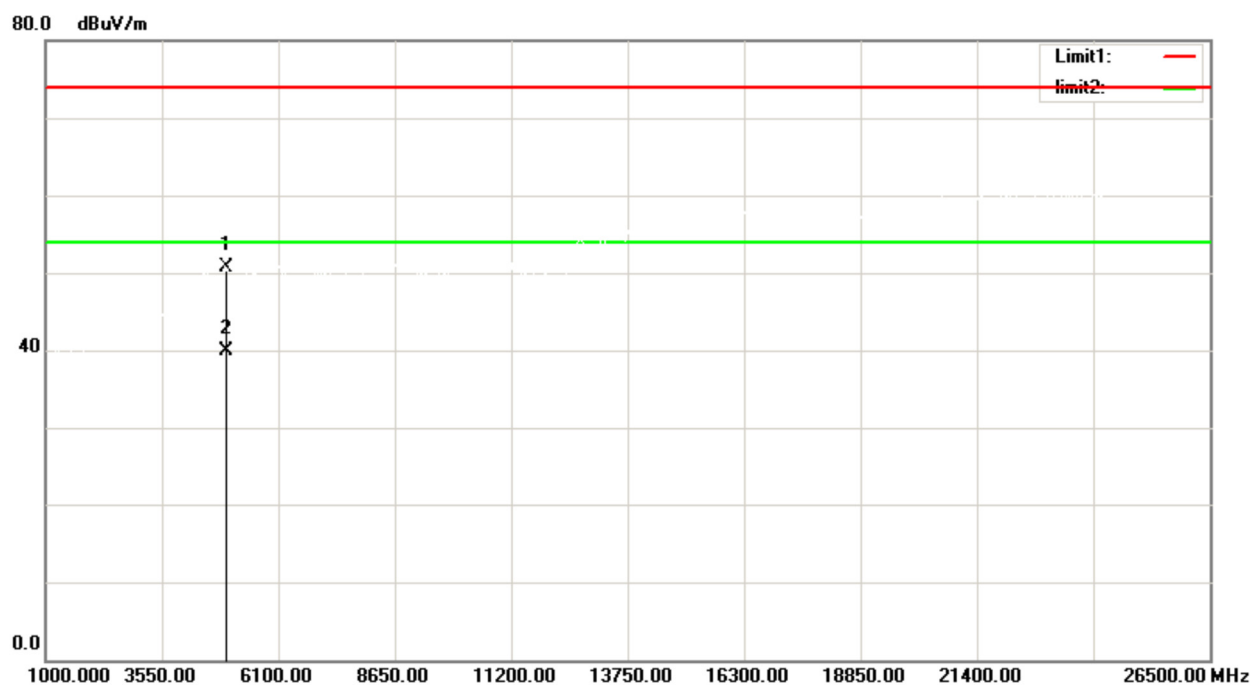
Vertical



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Over | Antenna Height | Table Degree | |
|-----|-----|----------|---------------|----------------|-------------|-------|--------|----------------|--------------|---------|
| | | MHz | dBuV | dB | dBuV/m | dB/m | dB | cm | degree | Comment |
| 1 | | 4960.000 | 52.87 | -1.76 | 51.11 | 74.00 | -22.89 | peak | 150 | 106 |
| 2 | * | 4960.000 | 42.61 | -1.76 | 40.85 | 54.00 | -13.15 | AVG | 150 | 106 |

Test Mode: TX 2480 MHz_CH78_1Mbps

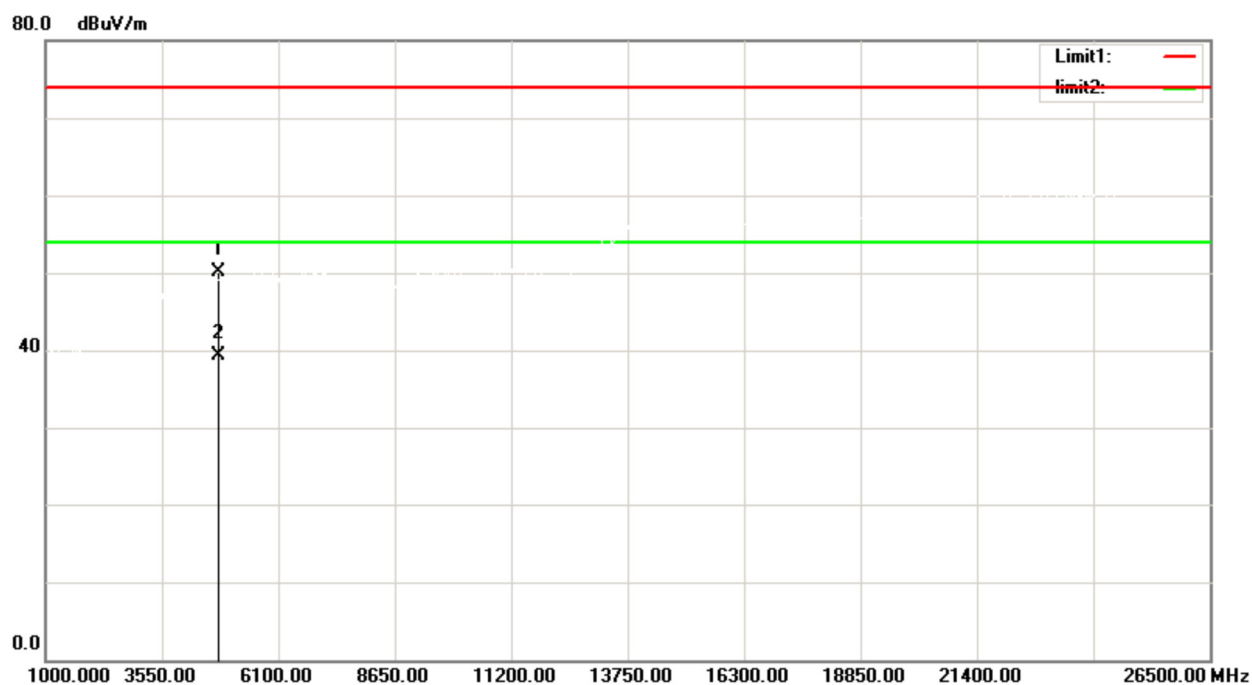
Horizontal



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Over | Antenna Height | Table Degree | |
|-----|-----|----------|---------------|----------------|-------------|-------|--------|----------------|--------------|---------|
| | | MHz | dBuV | dB | dBuV/m | dB/m | dB | cm | degree | Comment |
| 1 | | 4960.000 | 52.53 | -1.76 | 50.77 | 74.00 | -23.23 | peak | 150 | 44 |
| 2 | * | 4960.000 | 41.64 | -1.76 | 39.88 | 54.00 | -14.12 | AVG | 150 | 44 |

Test Mode: TX 2402 MHz_CH00_3Mbps

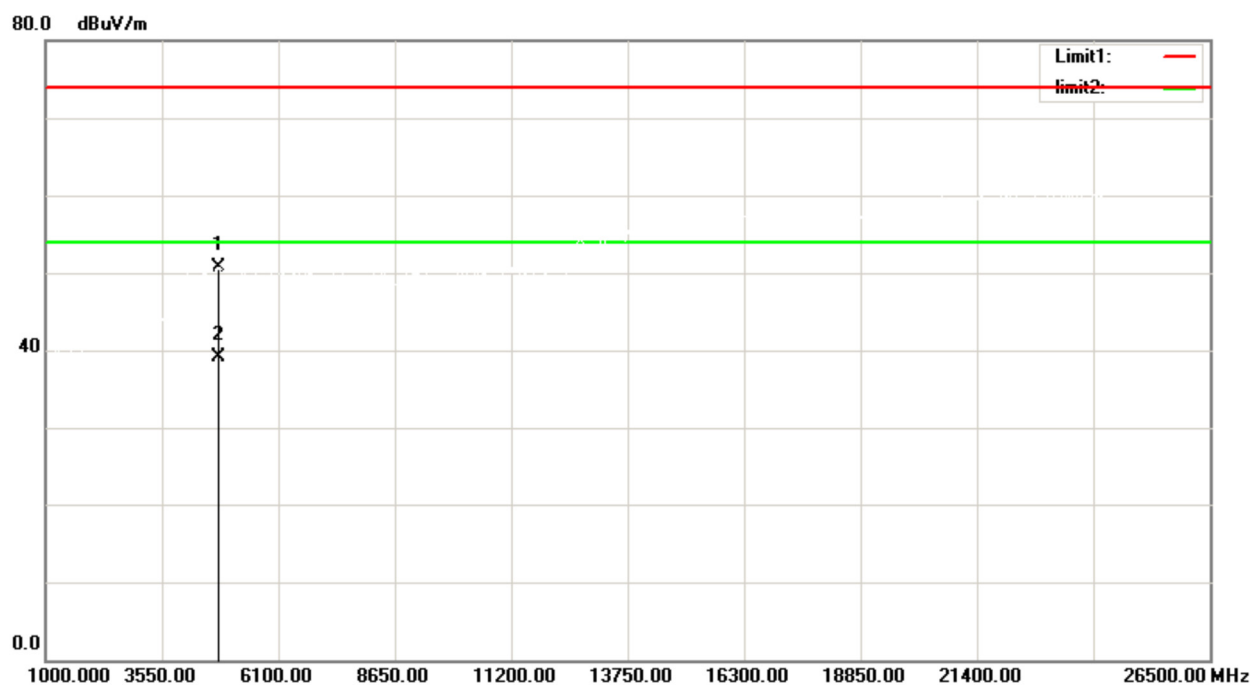
Vertical



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Over | Antenna Height | Table Degree | |
|-----|-----|----------|---------------|----------------|-------------|-------|--------|----------------|--------------|---------|
| | | MHz | dBuV | dB | dBuV/m | dB/m | dB | cm | degree | Comment |
| 1 | | 4804.000 | 52.00 | -1.90 | 50.10 | 74.00 | -23.90 | peak | 150 | 99 |
| 2 | * | 4804.000 | 41.15 | -1.90 | 39.25 | 54.00 | -14.75 | AVG | 150 | 99 |

Test Mode: TX 2402 MHz_CH00_3Mbps

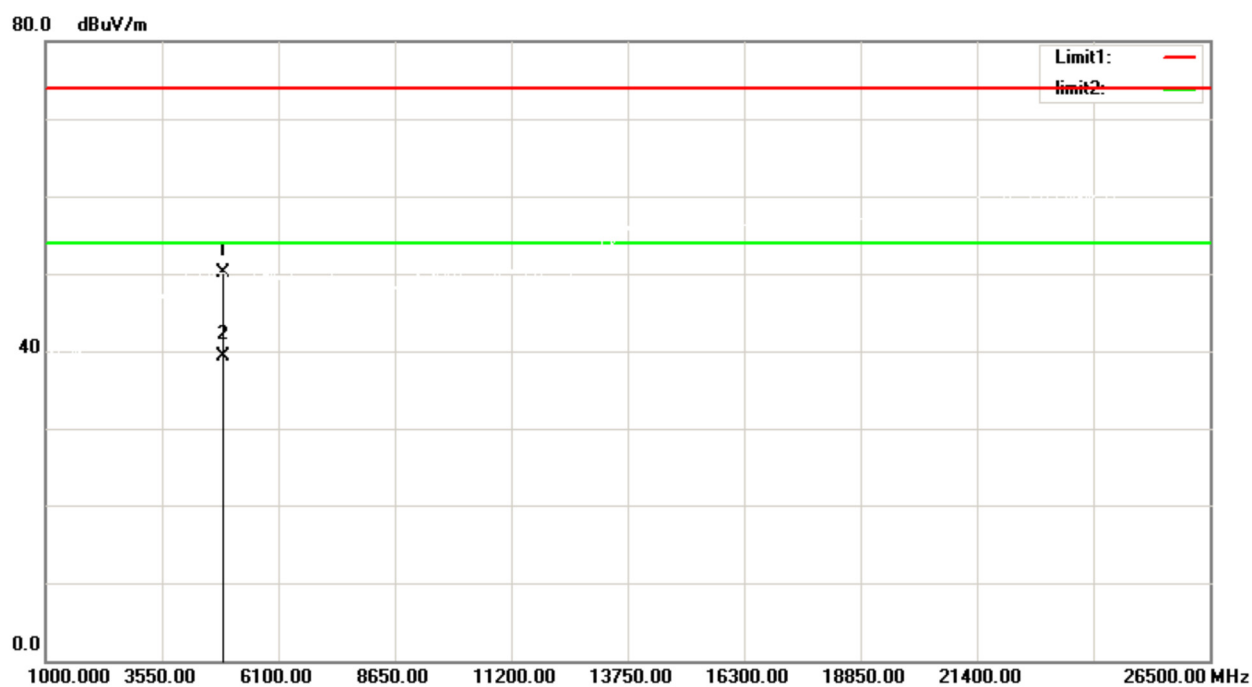
Horizontal



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | Antenna Height | Table Degree | |
|-----|-----|----------|---------------|----------------|--------------|-------|--------|----------------|--------------|--------|
| | | MHz | dBuV | dB | dBuV/m | dB/m | dB | Detector | cm | degree |
| 1 | | 4804.000 | 52.51 | -1.90 | 50.61 | 74.00 | -23.39 | peak | 150 | 3 |
| 2 | * | 4804.000 | 41.02 | -1.90 | 39.12 | 54.00 | -14.88 | AVG | 150 | 3 |

Test Mode: TX 2441 MHz_CH39_3Mbps

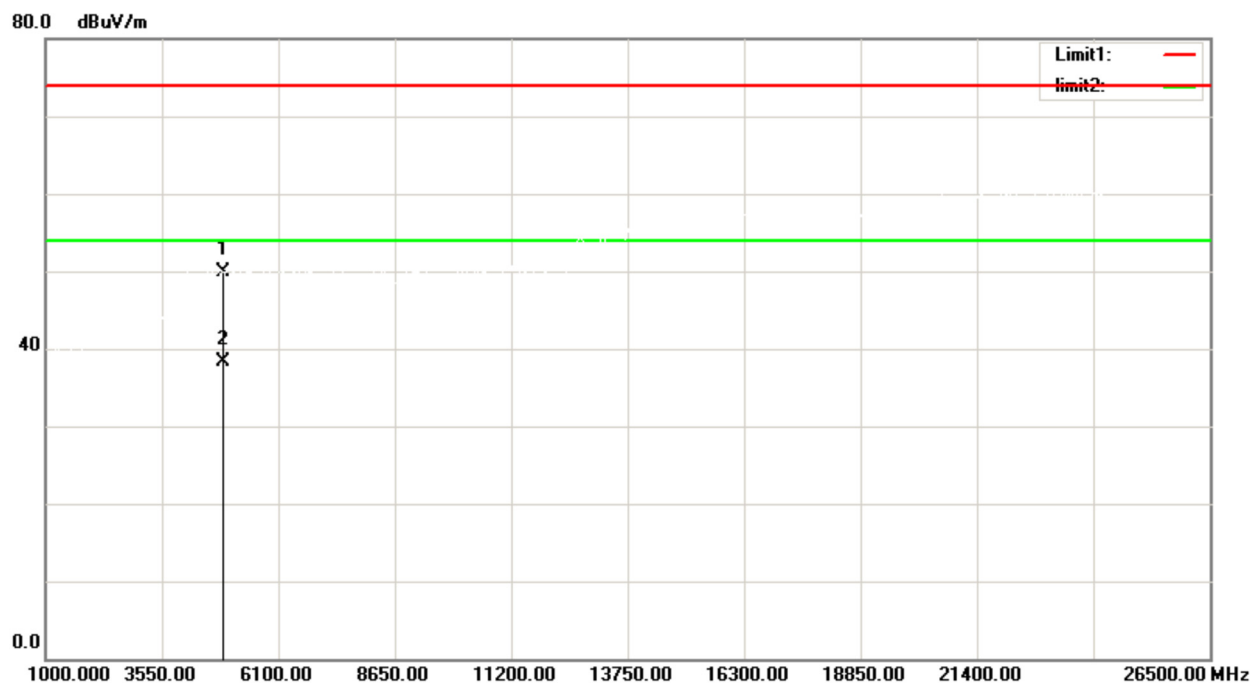
Vertical



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Over | Antenna Height | Table Degree | |
|-----|-----|----------|---------------|----------------|-------------|-------|--------|----------------|--------------|---------|
| | | MHz | dBuV | dB | dBuV/m | dB/m | dB | cm | degree | Comment |
| 1 | | 4882.000 | 52.26 | -2.16 | 50.10 | 74.00 | -23.90 | peak | 150 | 36 |
| 2 | * | 4882.000 | 41.41 | -2.16 | 39.25 | 54.00 | -14.75 | AVG | 150 | 36 |

Test Mode: TX 2441 MHz_CH39_3Mbps

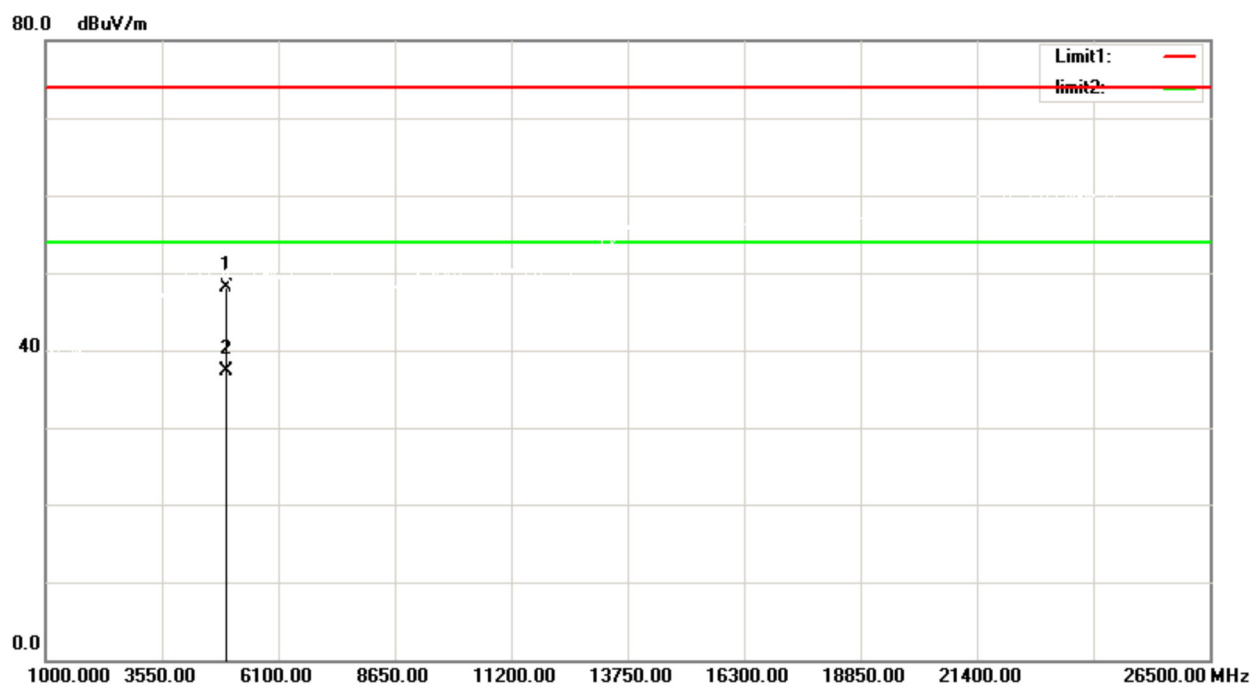
Horizontal



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Over | Antenna Height | Table Degree | |
|-----|-----|----------|---------------|----------------|-------------|-------|--------|----------------|--------------|---------|
| | | MHz | dBuV | dB | dBuV/m | dB/m | dB | cm | degree | Comment |
| 1 | | 4882.000 | 52.05 | -2.16 | 49.89 | 74.00 | -24.11 | peak | 150 | 178 |
| 2 | * | 4882.000 | 40.41 | -2.16 | 38.25 | 54.00 | -15.75 | AVG | 150 | 178 |

Test Mode: TX 2480 MHz_CH78_3Mbps

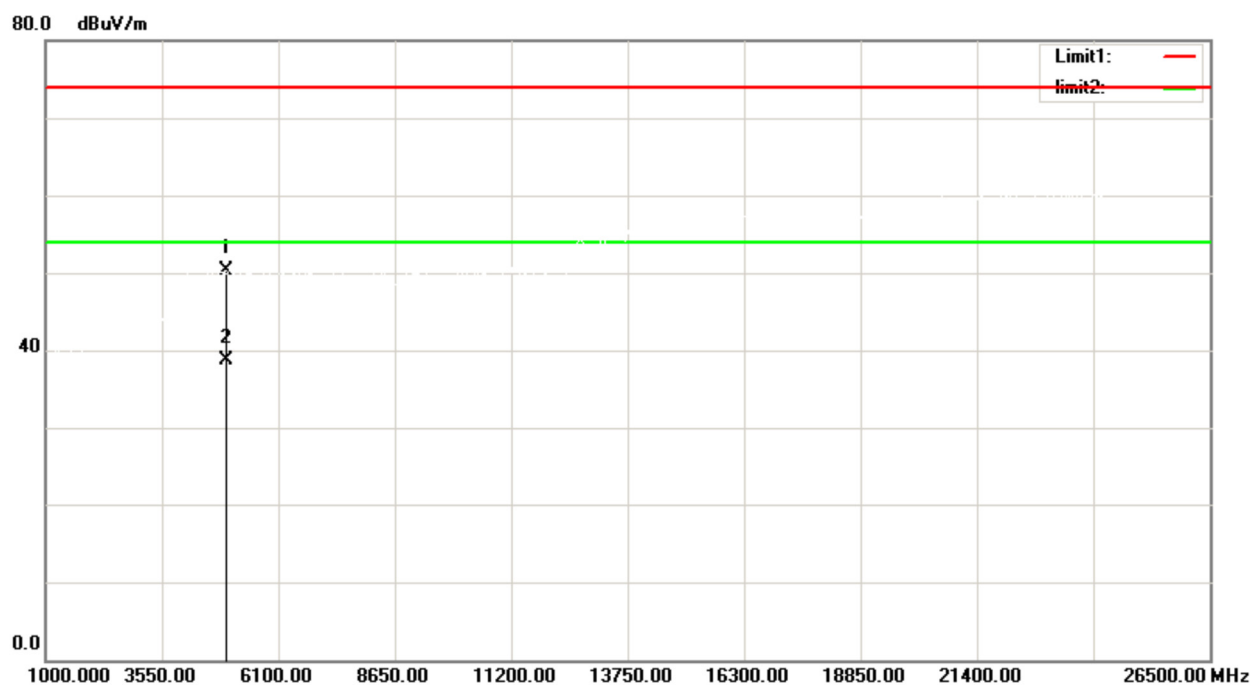
Vertical



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Over | Antenna Height | Table Degree | |
|-----|-----|----------|---------------|----------------|-------------|-------|--------|----------------|--------------|---------|
| | | MHz | dBuV | dB | dBuV/m | dB/m | dB | cm | degree | Comment |
| 1 | | 4960.000 | 49.87 | -1.76 | 48.11 | 74.00 | -25.89 | peak | 150 | 55 |
| 2 | * | 4960.000 | 39.01 | -1.76 | 37.25 | 54.00 | -16.75 | AVG | 150 | 55 |

Test Mode: TX 2480 MHz_CH78_3Mbps

Horizontal



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Over | Antenna Height | Table Degree | |
|-----|-----|----------|---------------|----------------|-------------|-------|--------|----------------|--------------|---------|
| | | MHz | dBuV | dB | dBuV/m | dB/m | dB | cm | degree | Comment |
| 1 | | 4960.000 | 52.03 | -1.76 | 50.27 | 74.00 | -23.73 | peak | 150 | 87 |
| 2 | * | 4960.000 | 40.41 | -1.76 | 38.65 | 54.00 | -15.35 | AVG | 150 | 87 |

6. NUMBER OF HOPPING FREQUENCY

6.1 LIMIT

| FCC Part15, Subpart C (15.247) | |
|--------------------------------|-----------------------------|
| Section | Test Item |
| 15.247(a)(1)(iii) | Number of Hopping Frequency |

6.2 TEST PROCEDURE AND SETTING

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- Spectrum Setting: RBW=100 kHz, VBW=300 kHz, Sweep time = Auto.

| Spectrum Parameters | Setting |
|---------------------|-----------------------------|
| Attenuation | Auto |
| Span Frequency | > Operating Frequency Range |
| RBW | 100kHz |
| VBW | 300kHz |
| Detector | Peak |
| Trace | Max Hold |
| Sweep Time | Auto |

6.3 MEASUREMENT INSTRUMENTS LIST

| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
|------|-------------------|---------------|-------------|------------|------------------|
| 1 | Spectrum analyzer | KEYSIGHT | N9010A | MY55150427 | 2025/05/22 |
| 2 | Attenuator | Mini-Circuits | BW-S10W2 | 101109 | N/A |
| 3 | RF Cable | Mi-cable | C10-01-01-1 | 100309 | N/A |

6.4 TEST SETUP

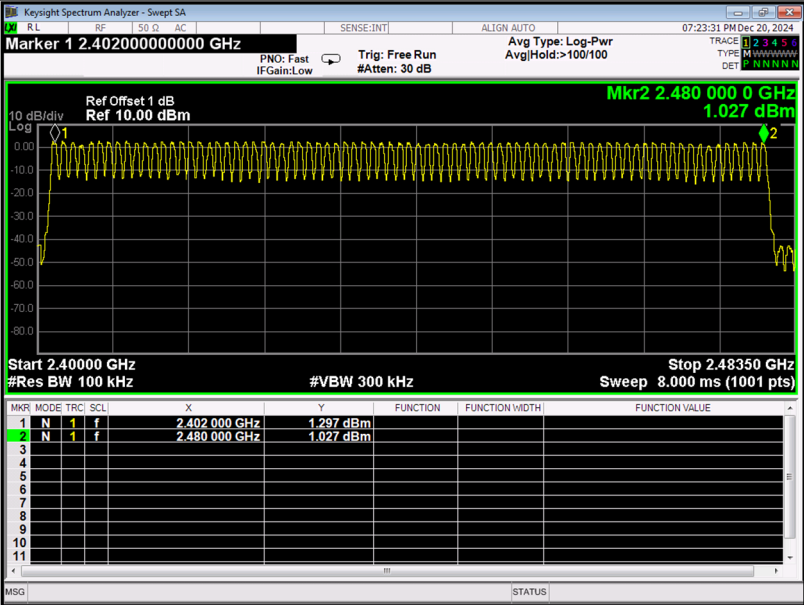


6.5 EUT OPERATION CONDITIONS

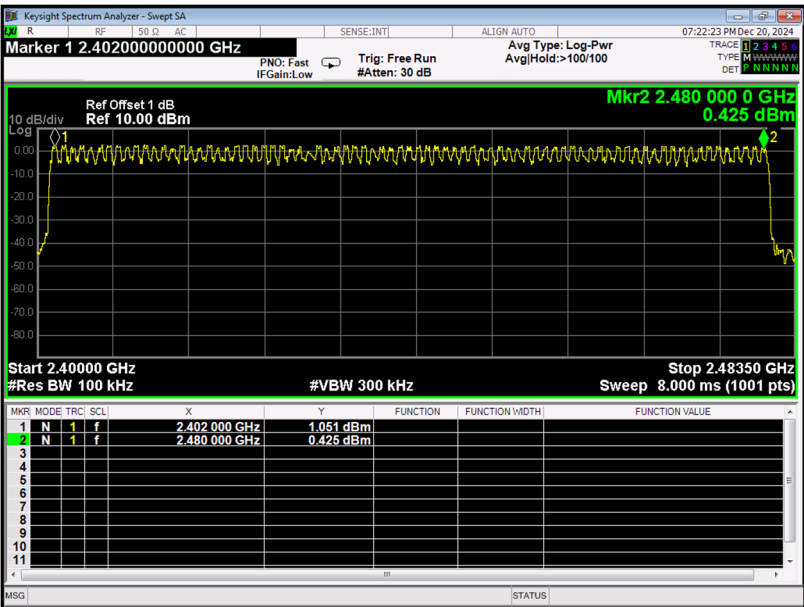
The EUT tested system was configured as the statements of 4.5 unless otherwise a special operating condition is specified in the follows during the testing.

6.6 TEST RESULTS

| Hopping Mode_1Mbps | | |
|-----------------------------|------------------------|-----------|
| Number of Hopping Frequency | Measurement result(CH) | Limit(CH) |
| | 79 | ≥15 |



| Hopping Mode_3Mbps | | |
|-----------------------------|------------------------|-----------|
| Number of Hopping Frequency | Measurement result(CH) | Limit(CH) |
| | 79 | ≥15 |



7. AVERAGE TIME OF OCCUPANCY

7.1 LIMIT

| FCC Part15, Subpart C (15.247) | | |
|--------------------------------|---------------------------|--------|
| Section | Test Item | Limit |
| 15.247(a)(1)(iii) | Average Time of Occupancy | 0.4sec |

7.2 TEST PROCEDURE AND SETTING

- The transmitter output (antenna port) was connected to the spectrum analyzer
- Set RBW of spectrum analyzer to 1MHz and VBW to 1MHz
- Use a video trigger with the trigger level set to enable triggering only on full pulses
- Sweep Time is more than once pulse time
- Set the center frequency on any frequency would be measure and set the frequency span to zero span
- Measure the maximum time duration of one single pulse
- Set the EUT for DH1, DH3 and DH5 packet transmitting
- Measure the maximum time duration of one single pulse
- DH1 Packet permit maximum $1600 / 79 / 2 = 10.12$ hops per second in each channel (1 time slot TX, 1 time slot RX). So, the dwell time is the time duration of the pulse times $10.12 \times 31.6 = 320$ within 31.6 seconds
- DH3 Packet permit maximum $1600 / 79 / 4 = 5.06$ hops per second in each channel (3 time slots TX, 1 time slot RX). So, the dwell time is the time duration of the pulse times $5.06 \times 31.6 = 160$ within 31.6 seconds
- DH5 Packet permit maximum $1600 / 79 / 6 = 3.37$ hops per second in each channel (5 time slots TX, 1 time slot RX). So, the dwell time is the time duration of the pulse times $3.37 \times 31.6 = 106.6$ within 31.6 seconds

7.3 MEASUREMENT INSTRUMENTS LIST

| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
|------|-------------------|---------------|-------------|------------|------------------|
| 1 | Spectrum analyzer | KEYSIGHT | N9010A | MY55150427 | 2025/05/22 |
| 2 | Attenuator | Mini-Circuits | BW-S10W2 | 101109 | N/A |
| 3 | RF Cable | Mi-cable | C10-01-01-1 | 100309 | N/A |

7.4 TEST SETUP



7.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.5 unless otherwise a special operating condition is specified in the follows during the testing.

7.6 TEST RESULTS

| TX Mode_1Mbps | | | | |
|---------------|-------------------------|-----------------|-----------------|------------|
| Mode | Channel Frequency (MHz) | Pulse Time (ms) | Dwell Time (ms) | Limit (ms) |
| DH1 | 2441 | 0.408 | 130.6 | 400 |
| DH3 | 2441 | 1.680 | 268.8 | 400 |
| DH5 | 2441 | 2.940 | 313.4 | 400 |

DH1



DH3



DH5

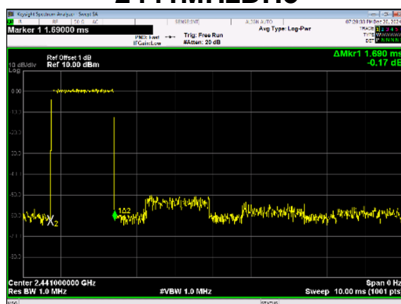


| TX Mode_3Mbps | | | | |
|---------------|-------------------------|-----------------|-----------------|------------|
| Mode | Channel Frequency (MHz) | Pulse Time (ms) | Dwell Time (ms) | Limit (ms) |
| DH1 | 2441 | 0.417 | 133.4 | 400 |
| DH3 | 2441 | 1.690 | 270.4 | 400 |
| DH5 | 2441 | 2.940 | 313.4 | 400 |

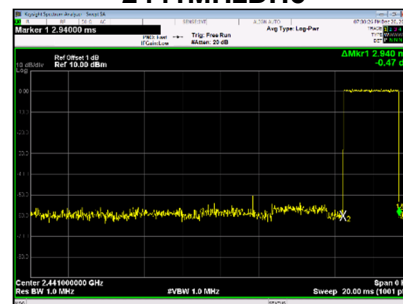
2441MHzDH1



2441MHzDH3



2441MHzDH5



8 HOPPING CHANNEL SEPARATION MEASUREMENT

8.1 LIMIT

Frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

8.2 TEST PROCEDURE AND SETTING

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Span = wide enough to capture the peaks of two adjacent channels
 Resolution (or IF) Bandwidth (RBW) $\geq 1\%$ of the span
 Video (or Average) Bandwidth (VBW) \geq RBW
 Sweep = Auto
 Detector function = Peak
 Trace = Max Hold

| Spectrum Parameter | Setting |
|--------------------|---|
| Attenuation | Auto |
| Span Frequency | > Measurement Bandwidth or Channel Separation |
| RBW | 10 kHz |
| VBW | 30 kHz |
| Detector | Peak |
| Trace | Max Hold |
| Sweep Time | Auto |

8.3 MEASUREMENT INSTRUMENTS LIST

| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
|------|-------------------|---------------|-------------|------------|------------------|
| 1 | Spectrum analyzer | KEYSIGHT | N9010A | MY55150427 | 2025/05/22 |
| 2 | Attenuator | Mini-Circuits | BW-S10W2 | 101109 | N/A |
| 3 | RF Cable | Mi-cable | C10-01-01-1 | 100309 | N/A |

8.4 TEST SETUP



8.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.5 unless otherwise a special operating condition is specified in the follows during the testing.

8.6 TEST RESULTS

| TX Mode_1Mbps | | | | |
|---------------|-----------------|-------------------------|--------------------------------|--------|
| Channel | Frequency (MHz) | Channel Separation(MHz) | Limit (MHz) | Result |
| CH00 | 2402 | 0.993 | >(25KHz or 2/3*20dB Bandwidth) | PASS |
| CH39 | 2441 | 1.002 | >(25KHz or 2/3*20dB Bandwidth) | PASS |
| CH78 | 2480 | 0.999 | >(25KHz or 2/3*20dB Bandwidth) | PASS |

2402MHz



2441MHz

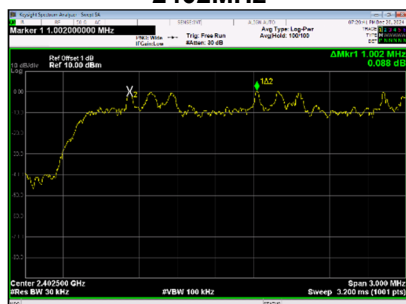


2480MHz

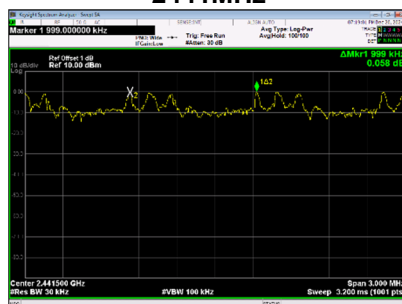


| TX Mode_3Mbps | | | | |
|---------------|-----------------|-------------------------|--------------------------------|--------|
| Channel | Frequency (MHz) | Channel Separation(MHz) | Limit (MHz) | Result |
| CH00 | 2402 | 1.002 | >(25KHz or 2/3*20dB Bandwidth) | PASS |
| CH39 | 2441 | 0.999 | >(25KHz or 2/3*20dB Bandwidth) | PASS |
| CH78 | 2480 | 0.993 | >(25KHz or 2/3*20dB Bandwidth) | PASS |

2402MHz



2441MHz



2480MHz



9BANDWIDTH TEST**9.1LIMIT**

| FCC Part15, Subpart C (15.247) | |
|--------------------------------|-----------|
| Section | Test Item |
| 15.247(a)(1) | Bandwidth |

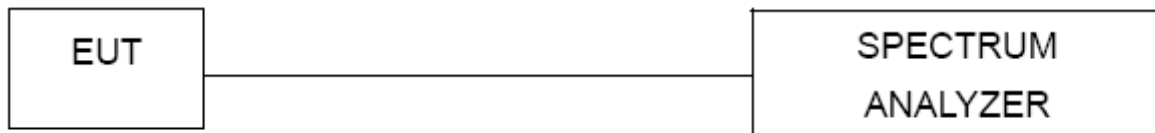
9.2TEST PROCEDURE AND SETTING

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Spectrum Setting: RBW= 30 kHz, VBW=100 kHz, Sweep Time = Auto.

| Spectrum Parameter | Setting |
|--------------------|-------------------------|
| Attenuation | Auto |
| Span Frequency | > Measurement Bandwidth |
| RBW | 30kHz |
| VBW | 100kHz |
| Detector | Peak |
| Trace | Max Hold |
| Sweep Time | Auto |

9.3MEASUREMENT INSTRUMENTS LIST

| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
|------|-------------------|---------------|-------------|------------|------------------|
| 1 | Spectrum analyzer | KEYSIGHT | N9010A | MY55150427 | 2025/05/22 |
| 2 | Attenuator | Mini-Circuits | BW-S10W2 | 101109 | N/A |
| 3 | RF Cable | Mi-cable | C10-01-01-1 | 100309 | N/A |

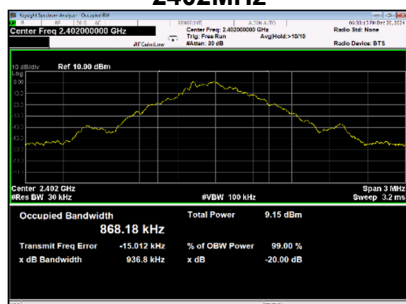
9.4TEST SETUP**9.5EUT OPERATION CONDITIONS**

The EUT tested system was configured as the statements of 4.5 unless otherwise a special operating condition is specified in the follows during the testing.

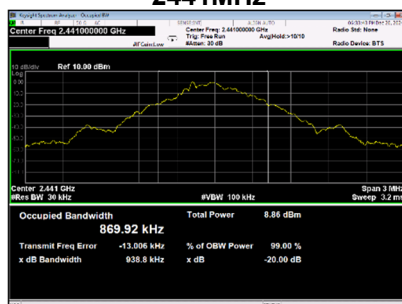
9.6 TEST RESULTS

| TX Mode_1Mbps | | | | |
|---------------|--------------------|-------------------------|-------------------------------------|--------|
| Channel | Frequency (MHz) | 20dB Bandwidth (MHz) | 99 % Emission Bandwidth (MHz) | Result |
| CH00 | 2402 | 0.936 | 0.8681 | PASS |
| CH39 | 2441 | 0.938 | 0.8699 | PASS |
| CH78 | 2480 | 0.935 | 0.8677 | PASS |

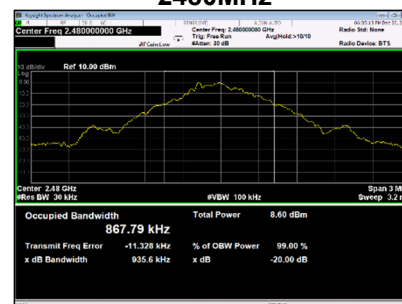
2402MHz



2441MHz

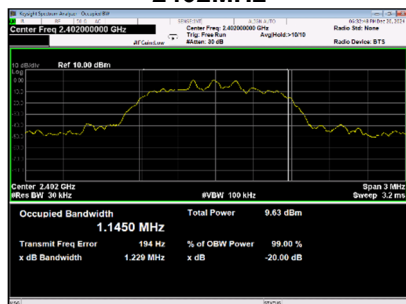


2480MHz

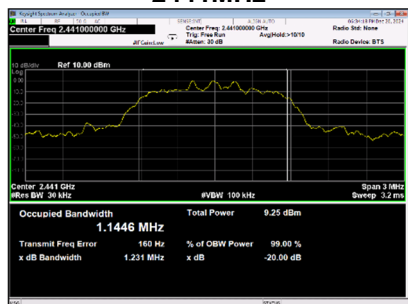


| TX Mode_3Mbps | | | | |
|---------------|--------------------|-------------------------|-------------------------------------|--------|
| Channel | Frequency (MHz) | 20dB Bandwidth (MHz) | 99 % Emission Bandwidth (MHz) | Result |
| CH00 | 2402 | 1.229 | 1.1450 | PASS |
| CH39 | 2441 | 1.231 | 1.1446 | PASS |
| CH78 | 2480 | 1.229 | 1.1439 | PASS |

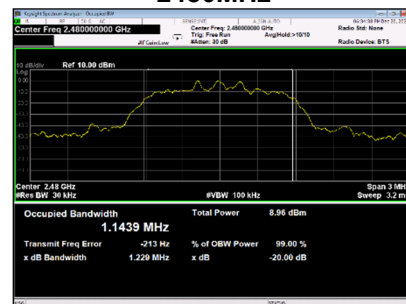
2402MHz



2441MHz



2480MHz



10 MAXIMUM OUTPUT POWER**10.1 LIMIT**

| FCC Part15 , Subpart C (15.247) | | |
|---------------------------------|----------------------|--------------------|
| Section | Test Item | Limit |
| 15.247(a)(1) | Maximum Output Power | 0.125Watt or 21dBm |

Note:

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

10.2 TEST PROCEDURE AND SETTING

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Spectrum Setting: RBW= 1MHz/3MHz, VBW= 1MHz/3MHz, Sweep time = Auto.

10.3 MEASUREMENT INSTRUMENTS LIST

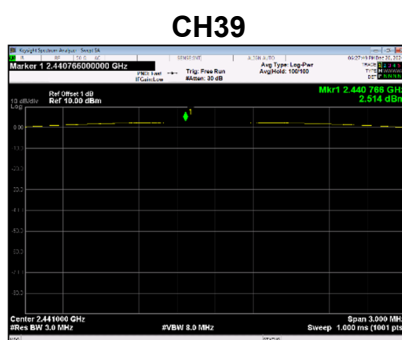
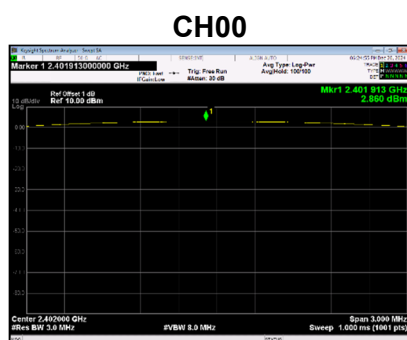
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
|------|-------------------|---------------|-------------|------------|------------------|
| 1 | Spectrum analyzer | KEYSIGHT | N9010A | MY55150427 | 2025/05/22 |
| 2 | Attenuator | Mini-Circuits | BW-S10W2 | 101109 | N/A |
| 3 | RF Cable | Mi-cable | C10-01-01-1 | 100309 | N/A |

10.4 TEST SETUP**10.5 EUT OPERATION CONDITIONS**

The EUT tested system was configured as the statements of 4.5 unless otherwise a special operating condition is specified in the follows during the testing.

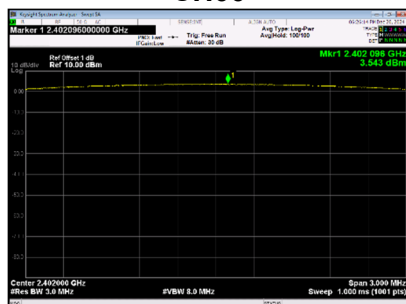
10.6 TEST RESULTS

| TX Mode_1Mbps | | | | |
|---------------|-----------------|--------------------|------------------|--------|
| Channel | Frequency (MHz) | Output Power (dBm) | Output Power (W) | Result |
| CH00 | 2402 | 2.860 | 0.001932 | PASS |
| CH39 | 2441 | 2.514 | 0.001784 | PASS |
| CH78 | 2480 | 2.252 | 0.001680 | PASS |
| Limit | 21dBm /0.125W | | | |

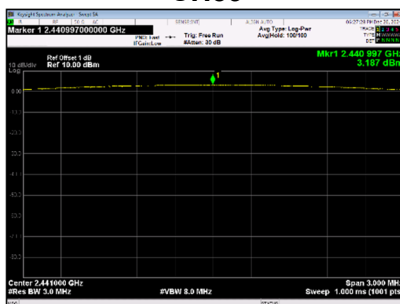


| TX Mode_2Mbps | | | | |
|---------------|-----------------|--------------------|------------------|--------|
| Channel | Frequency (MHz) | Output Power (dBm) | Output Power (W) | Result |
| CH00 | 2402 | 3.543 | 0.002261 | PASS |
| CH39 | 2441 | 3.187 | 0.002083 | PASS |
| CH78 | 2480 | 2.920 | 0.001959 | PASS |
| Limit | 21dBm /0.125W | | | |

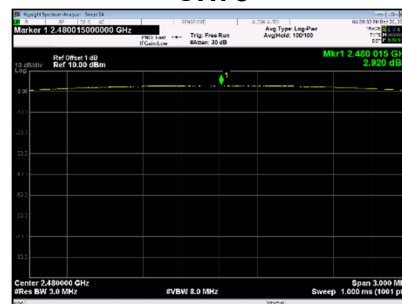
CH00



CH39

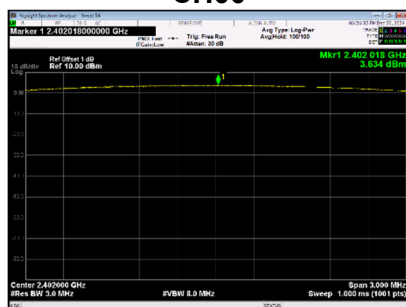


CH78

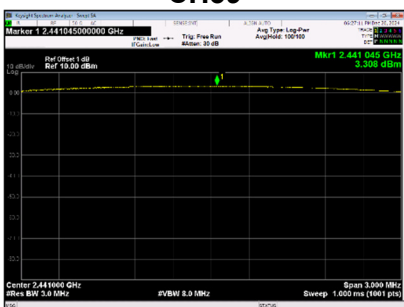


| TX Mode_3Mbps | | | | |
|---------------|-----------------|--------------------|------------------|--------|
| Channel | Frequency (MHz) | Output Power (dBm) | Output Power (W) | Result |
| CH00 | 2402 | 3.634 | 0.002309 | PASS |
| CH39 | 2441 | 3.308 | 0.002142 | PASS |
| CH78 | 2480 | 3.076 | 0.002030 | PASS |
| Limit | 21dBm /0.125W | | | |

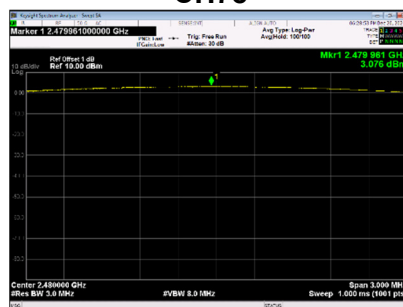
CH00



CH39



CH78



11 CONDUCTED SPURIOUS EMISSION

11.1 LIMIT

For FCC

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 Output Power limits. If the transmitter complies with the Output 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 Section 15.209(a) is not required.

11.2 TEST PROCEDURE AND SETTING

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Spectrum Setting: RBW= 100 kHz, VBW=300 kHz, Sweep time = Auto.

11.3 MEASUREMENT INSTRUMENTS LIST

| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
|------|-------------------|---------------|-------------|------------|------------------|
| 1 | Spectrum analyzer | KEYSIGHT | N9010A | MY55150427 | 2025/05/22 |
| 2 | Attenuator | Mini-Circuits | BW-S10W2 | 101109 | N/A |
| 3 | RF Cable | Mi-cable | C10-01-01-1 | 100309 | N/A |

11.4 TEST SETUP



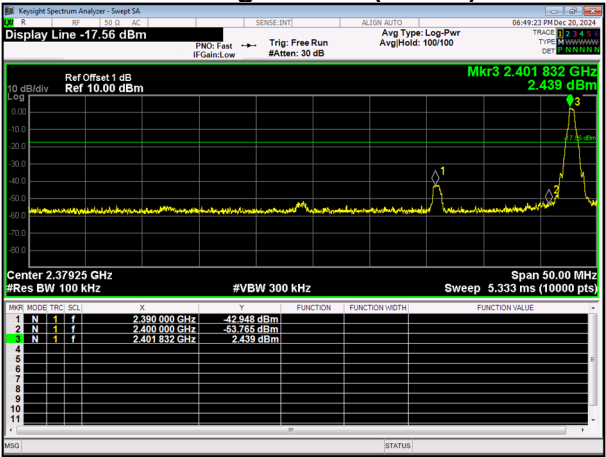
11.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.5 unless otherwise a special operating condition is specified in the follows during the testing.

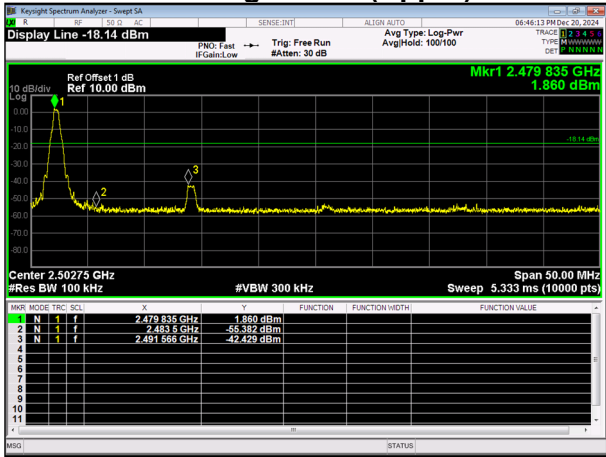
11.6 TEST RESULTS

TX Mode_1Mbps

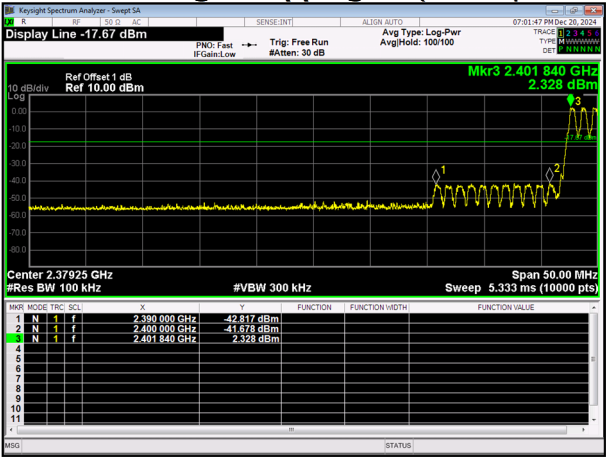
Bandedge- CH00 (Lower)



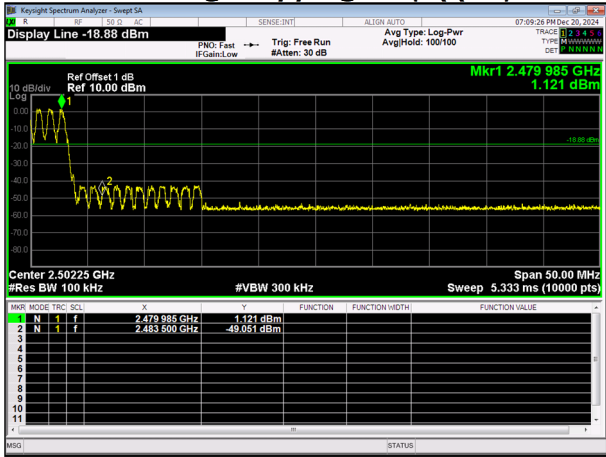
Bandedge CH78 (Upper)



Bandedge- Hopping on (Lower)

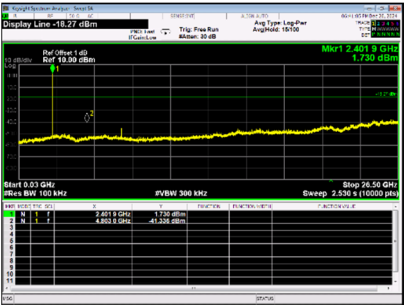


BandedgeHopping on (Upper)

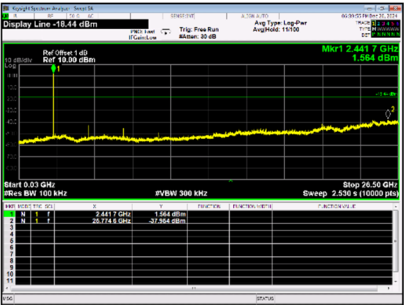


10th Harmonic of the fundamental frequency

CH00



CH39

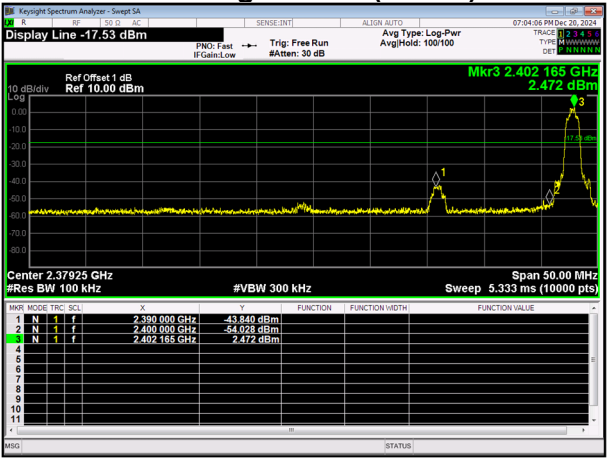


CH78

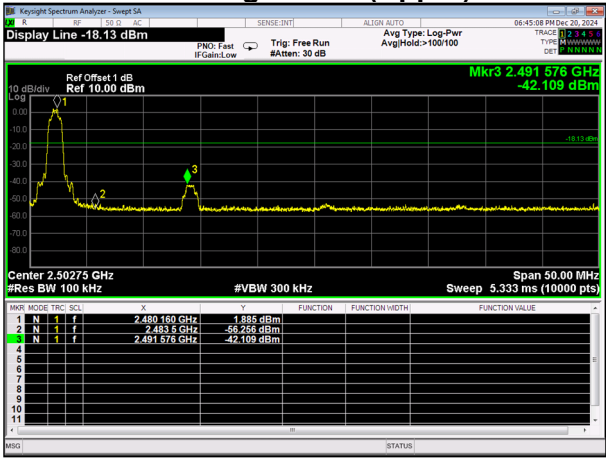


TX Mode_3Mbps

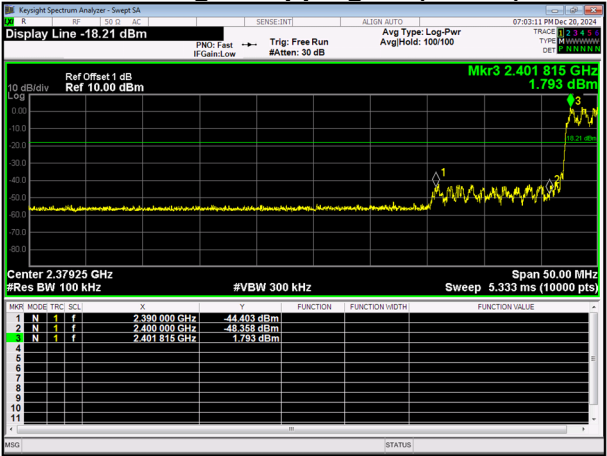
Bandedge- CH00 (Lower)



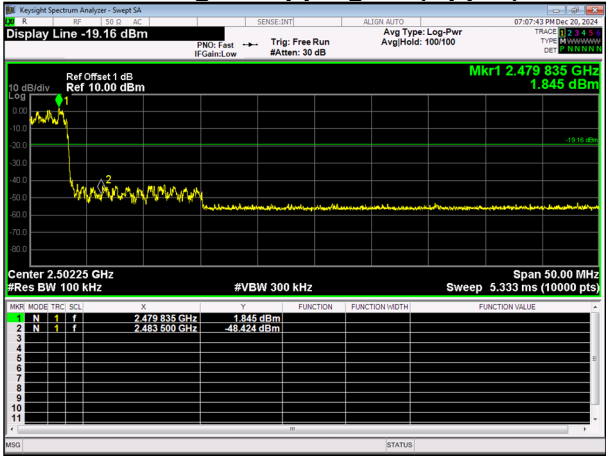
Bandedge CH78 (Upper)



Bandedge- Hopping on (Lower)

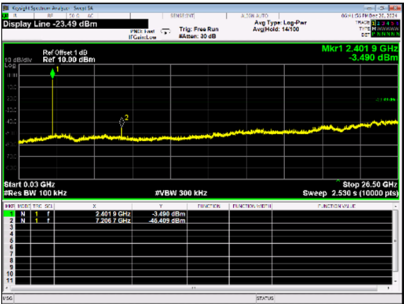


Bandedge- Hopping on (Upper)



10th Harmonic of the fundamental frequency

CH00



CH39



CH78



END OF TEST REPORT