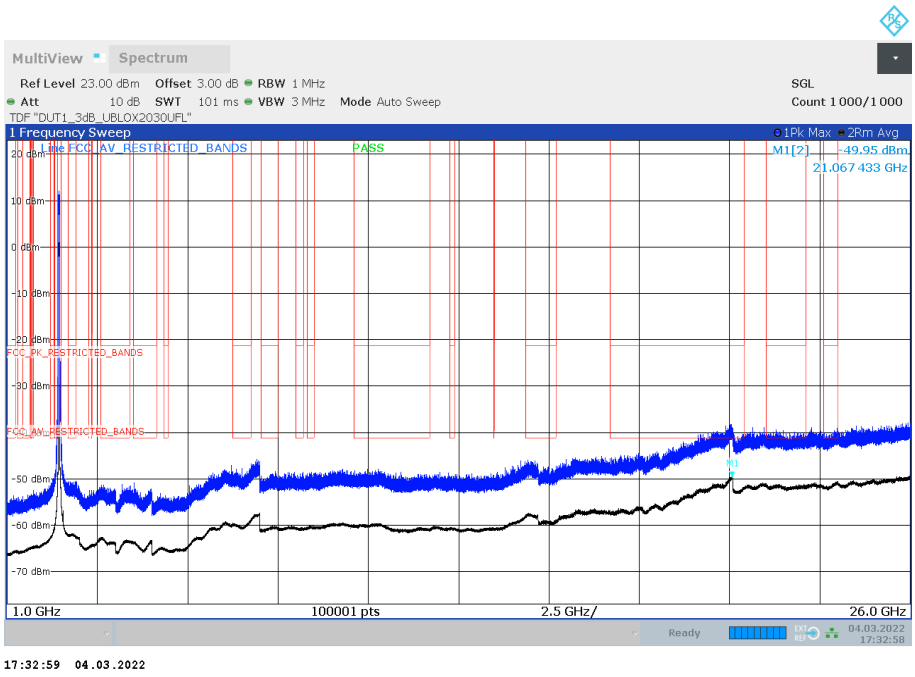
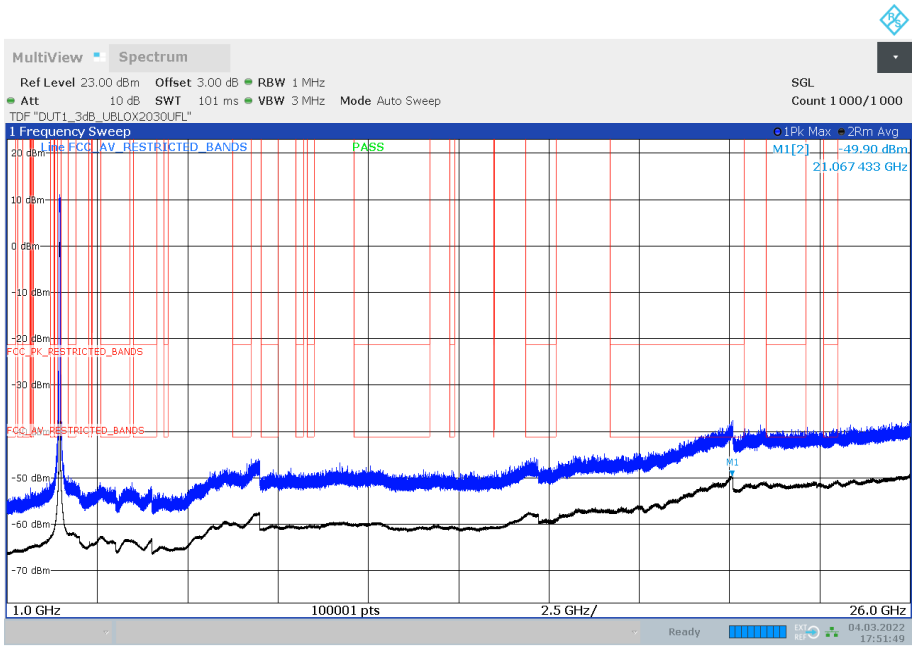



17:32:59 04.03.2022

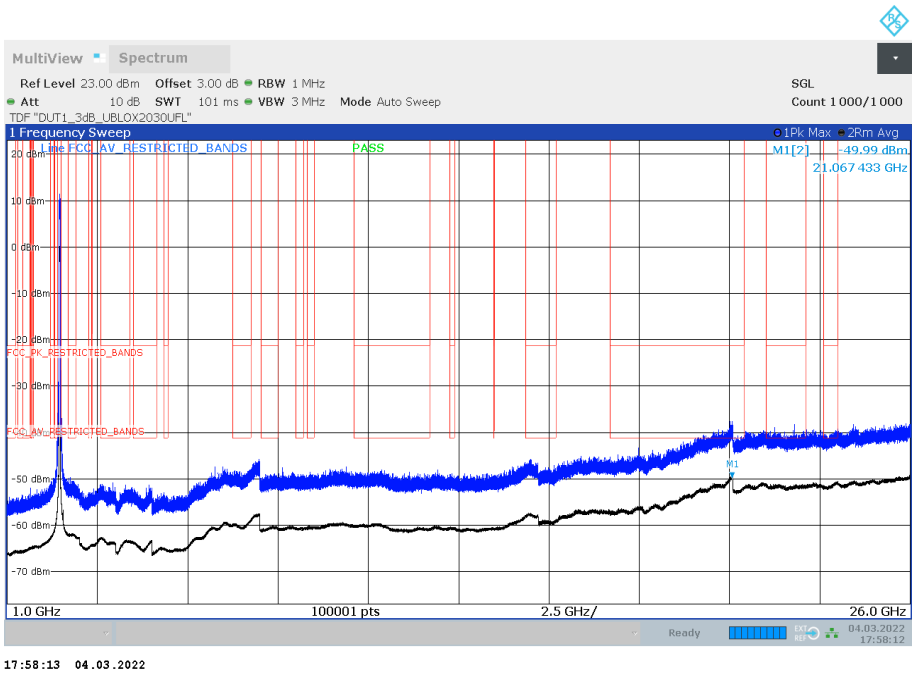
Antenna B

Radio Technology = WLAN ax 40 MHz MIMO, Operating Frequency = high, Measurement range = 1 GHz - 26 GHz
(S01_377_AA01)




17:51:50 04.03.2022

Antenna A




Antenna B

## 5.6.5 TEST EQUIPMENT USED

- Radiated Emissions FAR 2.4 GHz FCC
- Radiated Emissions SAC H-Field
- Radiated Emissions SAC up to 1 GHz
- R&S TS8997

## 5.7 BAND EDGE COMPLIANCE CONDUCTED

Standard **FCC Part 15 Subpart C**

**The test was performed according to:**
ANSI C63.10 11.11

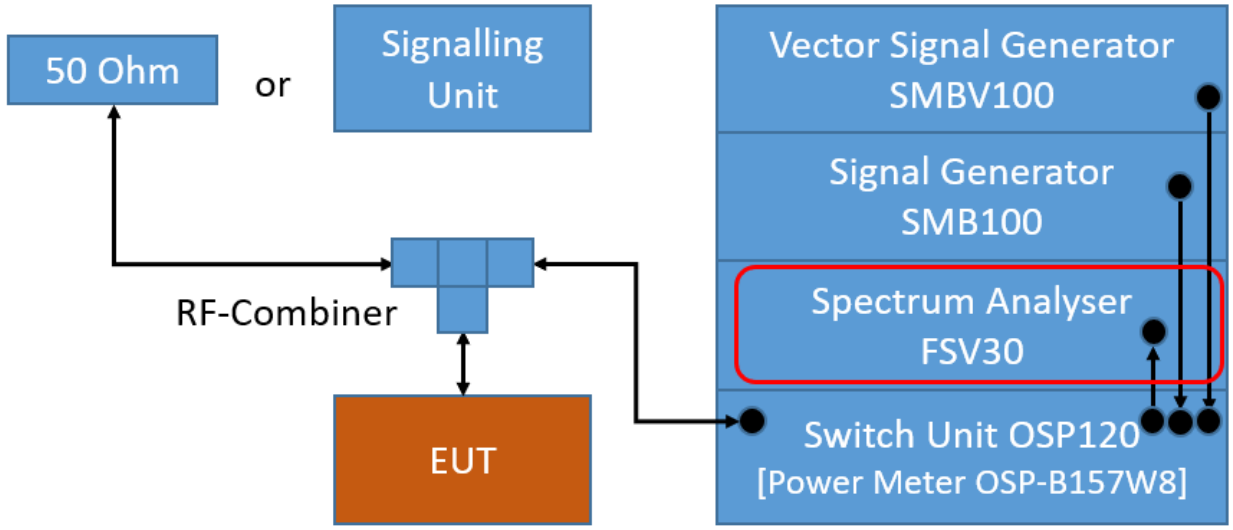
### 5.7.1 TEST DESCRIPTION

For the conducted measurement, the Equipment Under Test (EUT) is placed in a shielded room. The reference power was measured in the test case "Spurious RF Conducted Emissions".

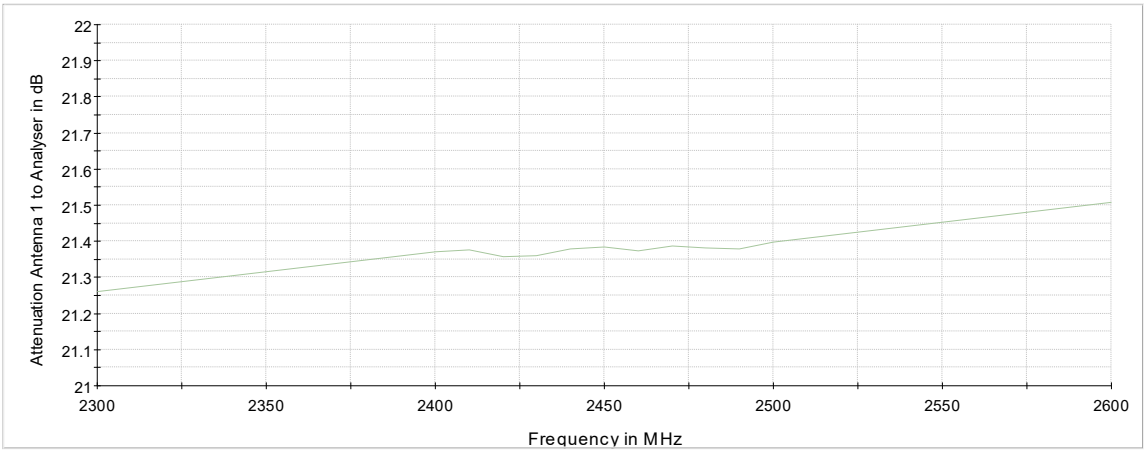
The EUT was connected to the test system as described in the block diagram below. The complete attenuation of the measurement path is known and considered.

Analyser settings:

- Lower Band Edge:
  Measured range: 2310.0 MHz to 2483.5 MHz
  Upper Band Edge
  Measured range: 2400.0 MHz to 2500 MHz
- Detector: Peak
- Resolution Bandwidth (RBW): 100 kHz
- Video Bandwidth (VBW): 300 kHz
- Sweeptime: Auto
- Sweeps: Till stable (min. 300, max. 15000)
- Trace: Maxhold




TS8997; Band Edge Conducted




Attenuation of the measurement path

## 5.7.2 TEST REQUIREMENTS / LIMITS

FCC Part 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 Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c))."

For the conducted measurement the RF power at the band edge 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..."

## 5.7.3 TEST PROTOCOL

Ambient temperature: 25 °C
Air Pressure: 1026 hPa
Humidity: 33 %

BT GFSK (1-DH5)

| Variant | Channel Center Frequency [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBm] | Detector | RBW [kHz] | Ref. Level [dBm] | Limit [dBm] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|---|
| 377 | 2402 | 2400.0 | -45.2 | PEAK | 100 | 10.9 | -9.1 | 36.1 |
| 374 | 2402 | 2400.0 | -45.8 | PEAK | 100 | 11.0 | -9.0 | 36.8 |
| 374 | 2480 | 2483.5 | -50.1 | PEAK | 100 | 10.8 | -9.2 | 40.9 |
| 377 | 2480 | 2483.5 | -49.5 | PEAK | 100 | 11.0 | -9.0 | 40.5 |

BT DQPSK (2-DH5)

| Variant | Channel Center Frequency [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBm] | Detector | RBW [kHz] | Ref. Level [dBm] | Limit [dBm] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|---|
| 374 | 2402 | 2400.0 | -46.3 | PEAK | 100 | 8.1 | -11.9 | 34.4 |
| 377 | 2402 | 2400.0 | -44.8 | PEAK | 100 | 8.1 | -11.9 | 32.9 |
| 377 | 2480 | 2483.5 | -45.6 | PEAK | 100 | 8.0 | -12.0 | 33.6 |
| 374 | 2480 | 2483.5 | -48.2 | PEAK | 100 | 8.0 | -12.0 | 36.2 |

BT 8-DPSK (3-DH5)

| Variant | Channel Center Frequency [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBm] | Detector | RBW [kHz] | Ref. Level [dBm] | Limit [dBm] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|---|
| 374 | 2402 | 2400.0 | -42.0 | PEAK | 100 | 8.1 | -11.9 | 30.1 |
| 377 | 2402 | 2400.0 | -42.1 | PEAK | 100 | 8.1 | -11.9 | 30.2 |
| 374 | 2480 | 2483.5 | -45.5 | PEAK | 100 | 11.0 | -9.0 | 36.5 |
| 377 | 2480 | 2483.5 | -45.4 | PEAK | 100 | 8.0 | -12.0 | 33.4 |

BT LE 1 Mbit/s

| Variant | Channel Center Frequency [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBm] | Detector | RBW [kHz] | Ref. Level [dBm] | Limit [dBm] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|---|
| 377 | 2402 | 2400.0 | -49.1 | PEAK | 100 | 7.8 | -12.2 | 36.9 |
| 374 | 2402 | 2400.0 | -49.0 | PEAK | 100 | 7.4 | -12.6 | 36.4 |
| 374 | 2480 | 2483.5 | -51.0 | PEAK | 100 | 7.2 | -12.8 | 38.2 |
| 377 | 2480 | 2483.5 | -50.3 | PEAK | 100 | 7.7 | -12.3 | 38.0 |

BT LE 2 Mbit/s

| Variant | Channel Center Frequency [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBm] | Detector | RBW [kHz] | Ref. Level [dBm] | Limit [dBm] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|---|
| 377 | 2402 | 2400.0 | -22.7 | PEAK | 100 | 7.9 | -12.1 | 10.6 |
| 374 | 2402 | 2400.0 | -22.4 | PEAK | 100 | 7.6 | -12.4 | 10.0 |
| 377 | 2480 | 2483.5 | -49.0 | PEAK | 100 | 7.4 | -12.6 | 36.4 |
| 374 | 2480 | 2483.5 | -49.7 | PEAK | 100 | 7.4 | -12.6 | 37.1 |

WLAN b-Mode; 20 MHz; 1 Mbit/s

| Variant | Channel Center Frequency [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBm] | Detector | RBW [kHz] | Ref. Level [dBm] | Limit [dBm] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|---|
| 377 | 2412 | 2400.0 | -39.1 | PEAK | 100 | 9.3 | -20.7 | 18.4 |
| 377 | 2462 | 2483.5 | -44.6 | PEAK | 100 | 9.5 | -20.5 | 24.1 |

WLAN g-Mode; 20 MHz; 6 Mbit/s

| Variant | Channel Center Frequency [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBm] | Detector | RBW [kHz] | Ref. Level [dBm] | Limit [dBm] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|---|
| 377 | 2412 | 2400.0 | -35.3 | PEAK | 100 | 3.6 | -26.4 | 8.9 |
| 377 | 2462 | 2483.5 | -45.1 | PEAK | 100 | 2.7 | -27.3 | 17.8 |

WLAN n-Mode; 20 MHz; MCS0

| Variant | Channel Center Frequency [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBm] | Detector | RBW [kHz] | Ref. Level [dBm] | Limit [dBm] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|---|
| 377 | 2412 | 2400.0 | -32.6 | PEAK | 100 | 3.5 | -26.5 | 6.1 |
| 377 | 2462 | 2483.5 | -45.1 | PEAK | 100 | 2.8 | -27.2 | 17.9 |

WLAN n-Mode; 40 MHz; MCS0

| Variant | Channel Center Frequency [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBm] | Detector | RBW [kHz] | Ref. Level [dBm] | Limit [dBm] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|---|
| 377 | 2422 | 2400.0 | -32.1 | PEAK | 100 | -0.4 | -30.4 | 1.7 |
| 377 | 2452 | 2483.5 | -43.8 | PEAK | 100 | -0.9 | -30.9 | 12.9 |

WLAN ax-Mode; 20 MHz; MCS0

| Variant | Channel Center Frequency [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBm] | Detector | RBW [kHz] | Ref. Level [dBm] | Limit [dBm] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|---|
| 377 | 2412 | 2400.0 | -34.2 | PEAK | 100 | 2.5 | -27.5 | 6.7 |
| 377 | 2462 | 2483.5 | -46.3 | PEAK | 100 | 1.5 | -28.5 | 17.8 |

WLAN ax-Mode; 40 MHz; MCS0

| Variant | Channel Center Frequency [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBm] | Detector | RBW [kHz] | Ref. Level [dBm] | Limit [dBm] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|---|
| 377 | 2422 | 2400.0 | -37.1 | PEAK | 100 | -0.4 | -30.4 | 6.7 |
| 377 | 2452 | 2483.5 | -44.4 | PEAK | 100 | -0.9 | -30.9 | 13.5 |

WLAN n-Mode; 20 MHz; MCS0; MIMO

| Variant | Channel Center Frequency [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBm] | Detector | RBW [kHz] | Ref. Level [dBm] | Limit [dBm] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|---|
| 377 | 2412 | 2400.0 | -34.0 | PEAK | 100 | 5.7 | -24.3 | 9.7 |
| 377 | 2462 | 2483.5 | -43.3 | PEAK | 100 | 5.0 | -25.0 | 18.3 |

WLAN n-Mode; 40 MHz; MCS0; MIMO

| Variant | Channel Center Frequency [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBm] | Detector | RBW [kHz] | Ref. Level [dBm] | Limit [dBm] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|---|
| 377 | 2422 | 2400.0 | -36.5 | PEAK | 100 | -1.2 | -31.2 | 5.3 |
| 377 | 2452 | 2483.5 | -44.0 | PEAK | 100 | 1.1 | -28.9 | 15.1 |

WLAN ax-Mode; 20 MHz; MCS0; MIMO

| Variant | Channel Center Frequency [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBm] | Detector | RBW [kHz] | Ref. Level [dBm] | Limit [dBm] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|---|
| 377 | 2412 | 2400.0 | -36.5 | PEAK | 100 | 4.7 | -25.3 | 11.2 |
| 377 | 2462 | 2483.5 | -45.9 | PEAK | 100 | 3.9 | -26.1 | 19.8 |

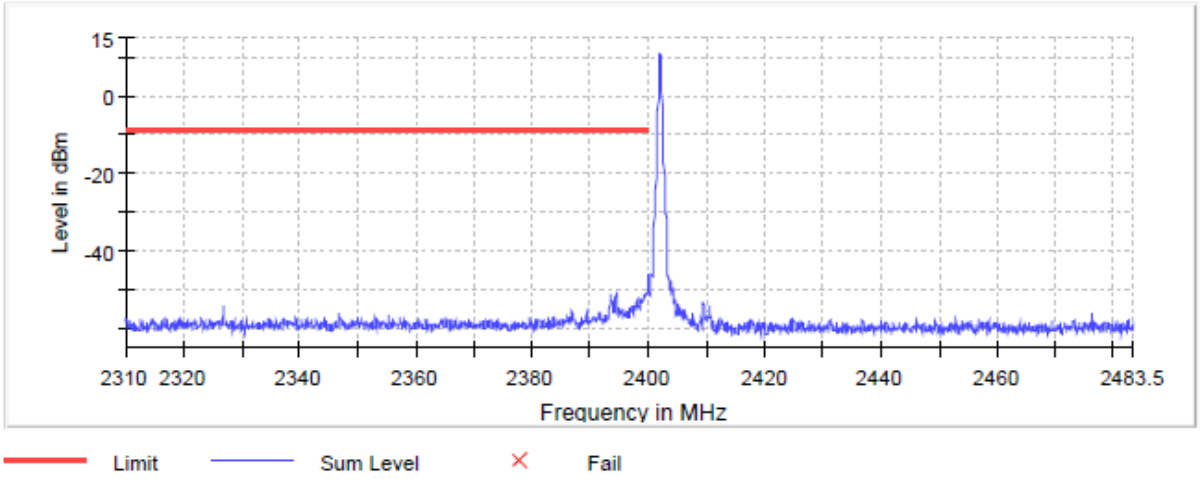
WLAN ax-Mode; 40 MHz; MCS0; MIMO

| Variant | Channel Center Frequency [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBm] | Detector | RBW [kHz] | Ref. Level [dBm] | Limit [dBm] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|---|
| 377 | 2422 | 2400.0 | -36.8 | PEAK | 100 | 2.1 | -27.9 | 8.9 |
| 377 | 2452 | 2483.5 | -42.6 | PEAK | 100 | 1.1 | -28.9 | 13.7 |

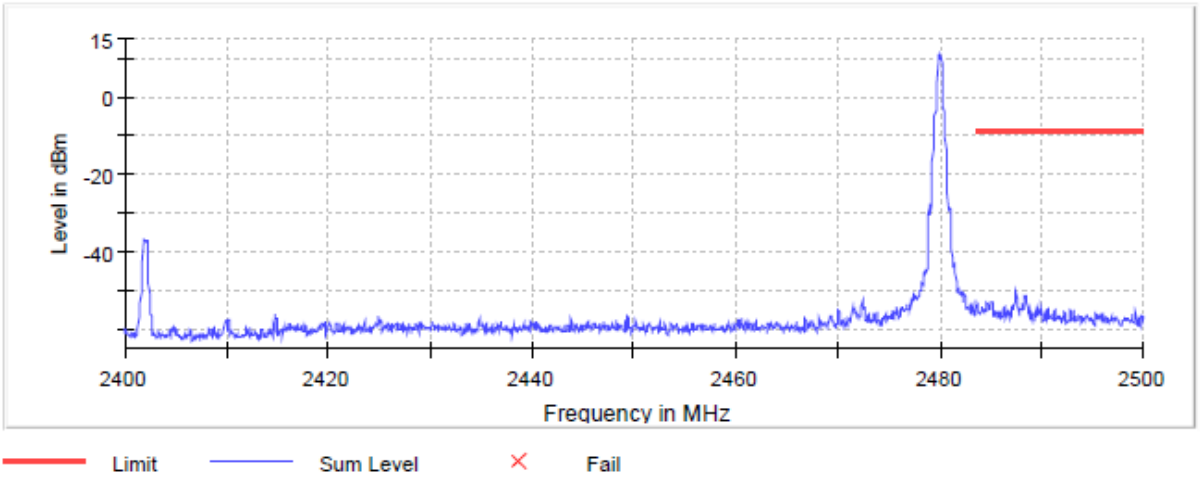
Remark: Please see next sub-clause for the measurement plot.
WLAN SISO results of antenna A given in table above.

## 5.7.4 MEASUREMENT PLOT (EXAMPLE PLOT, SHOWING WORST CASE, IF APPLICABLE)

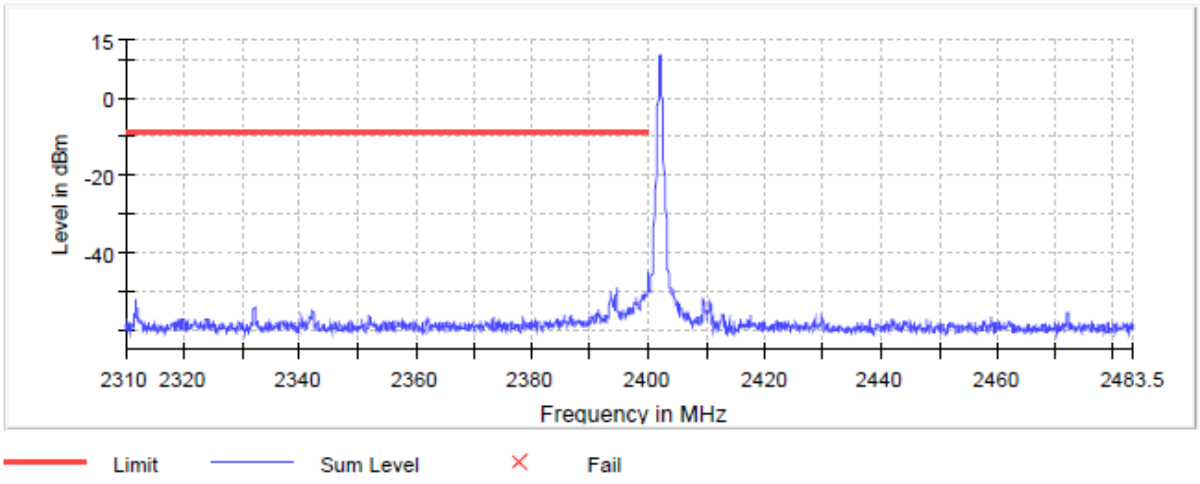
Radio Technology = Bluetooth BDR, Operating Frequency = low, Band Edge = low (S01_374_BA01)



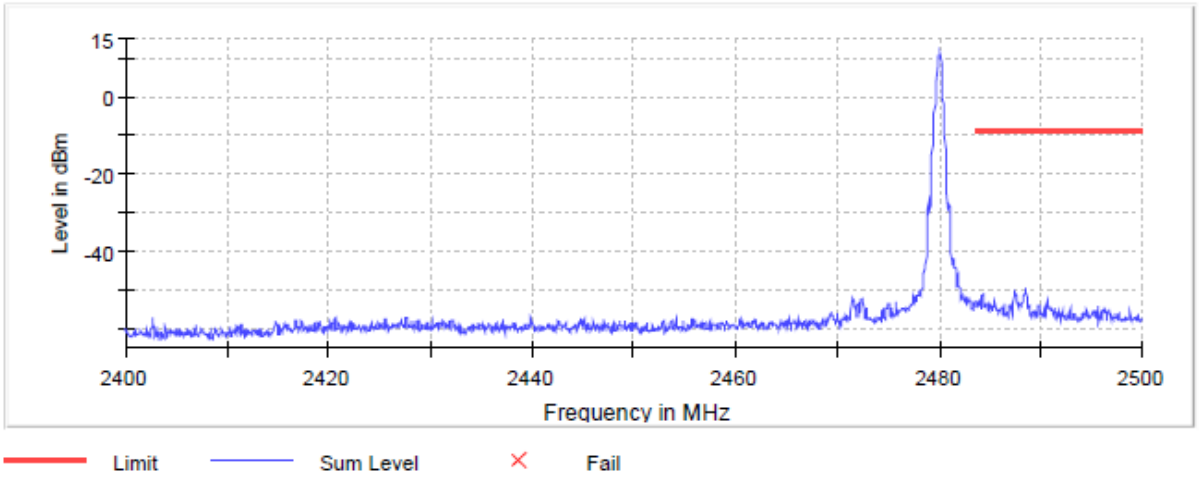
Radio Technology = Bluetooth BDR, Operating Frequency = high, Band Edge = high (S01_374_BA01)



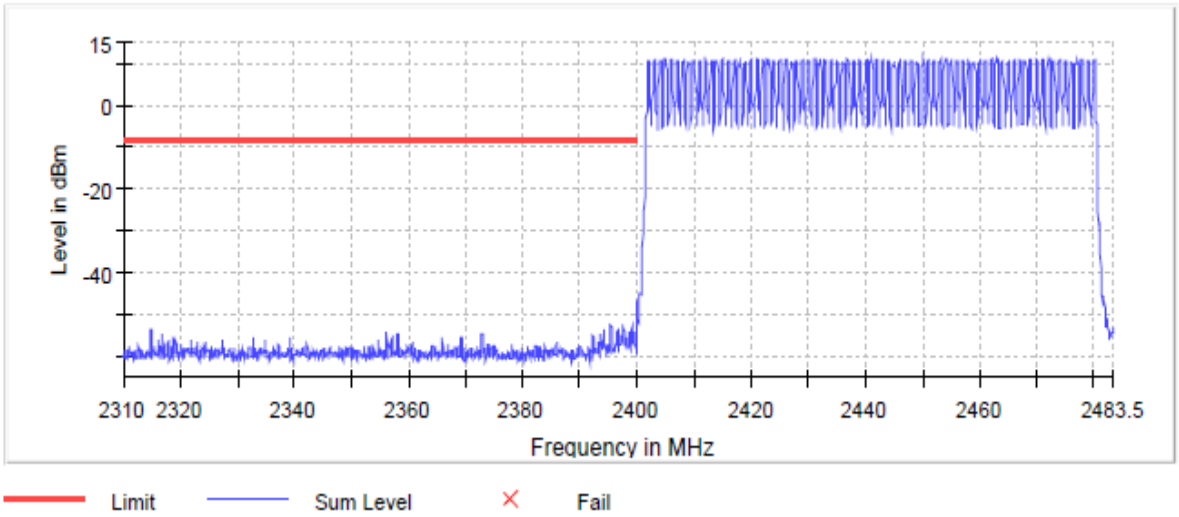

Radio Technology = Bluetooth BDR, Operating Frequency = low, Band Edge = low (S01_377_AA01)



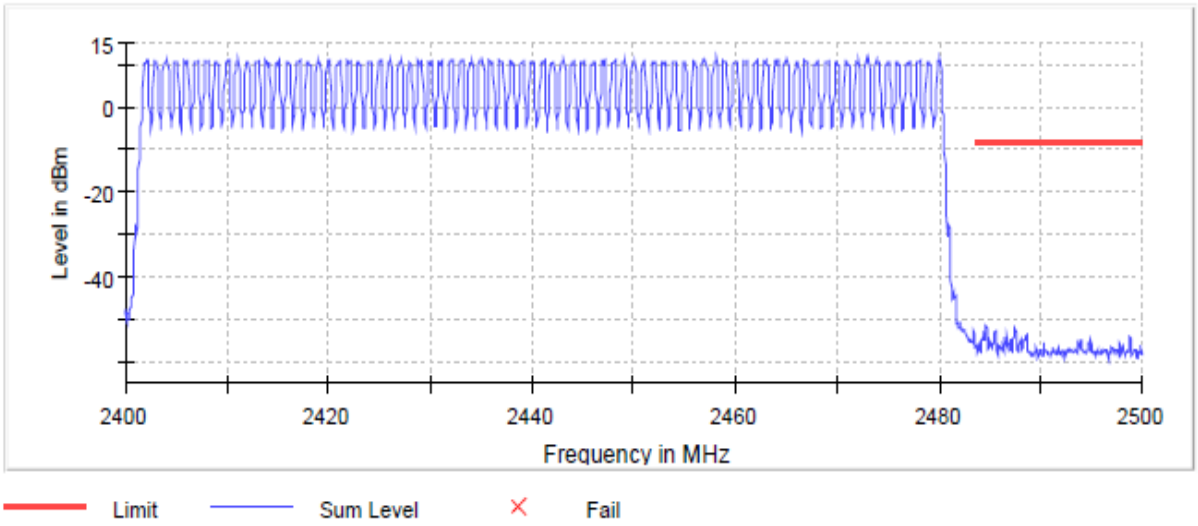
Radio Technology = Bluetooth BDR, Operating Frequency = high, Band Edge = high (S01_377_AA01)



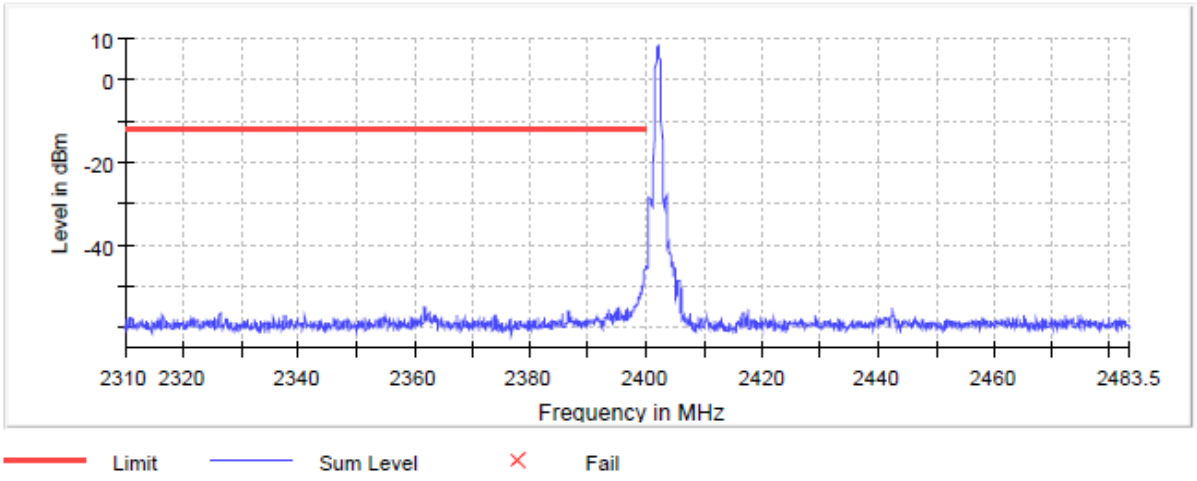

Radio Technology = Bluetooth BDR, Operating Frequency = hopping, Band Edge = low (S01_377_AA01)



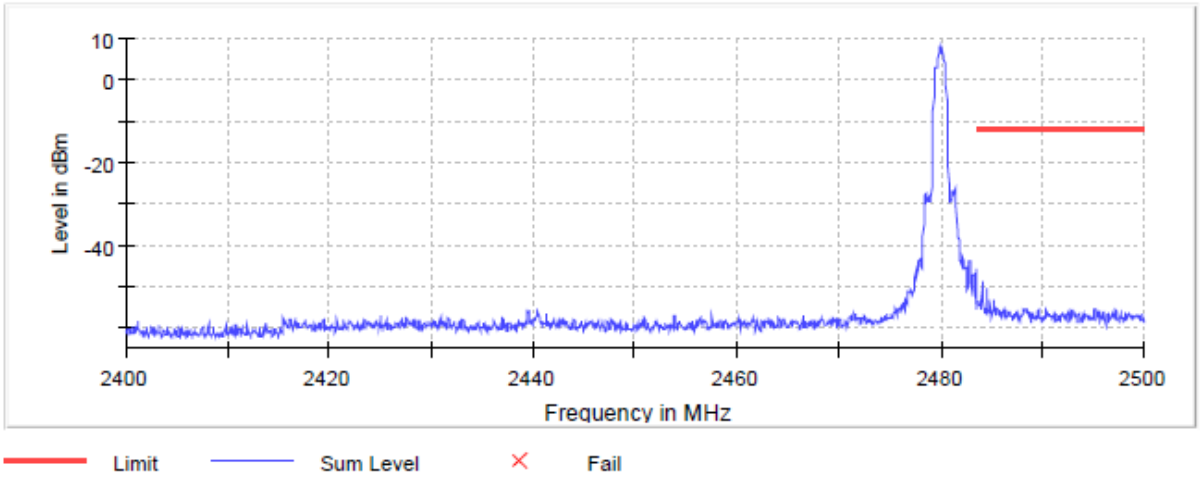
Radio Technology = Bluetooth BDR, Operating Frequency = hopping, Band Edge = high (S01_377_AA01)



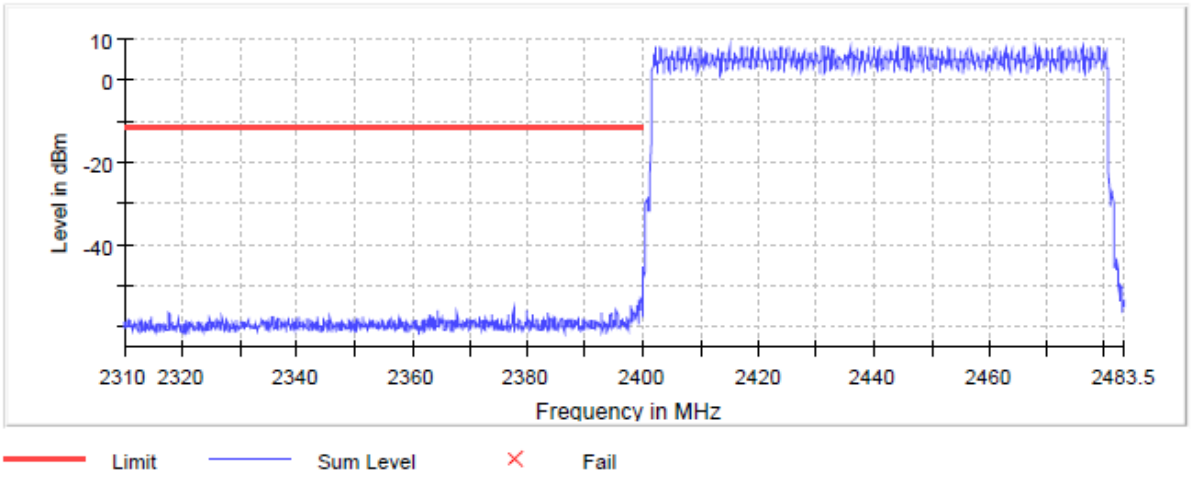

Radio Technology = Bluetooth EDR 2, Operating Frequency = low, Band Edge = low (S01_377_AA01)



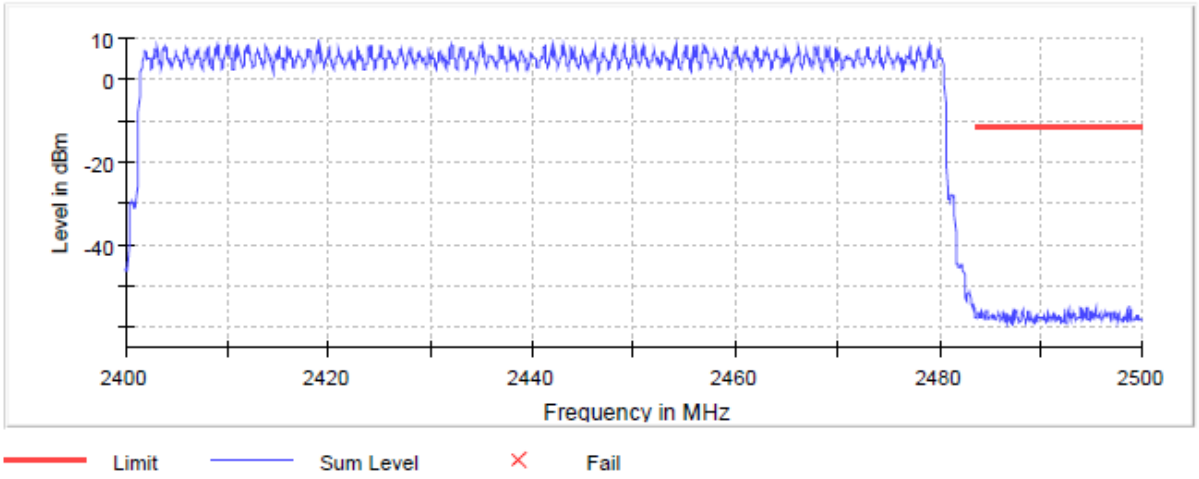
Radio Technology = Bluetooth EDR 2, Operating Frequency = high, Band Edge = high (S01_377_AA01)



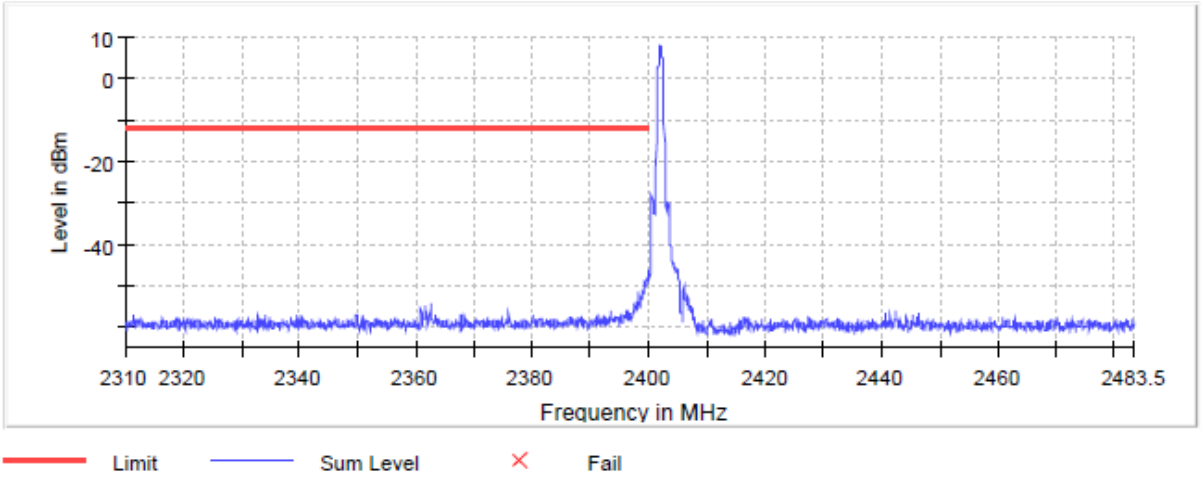

Radio Technology = Bluetooth EDR 2, Operating Frequency = hopping, Band Edge = low (S01_377_AA01)



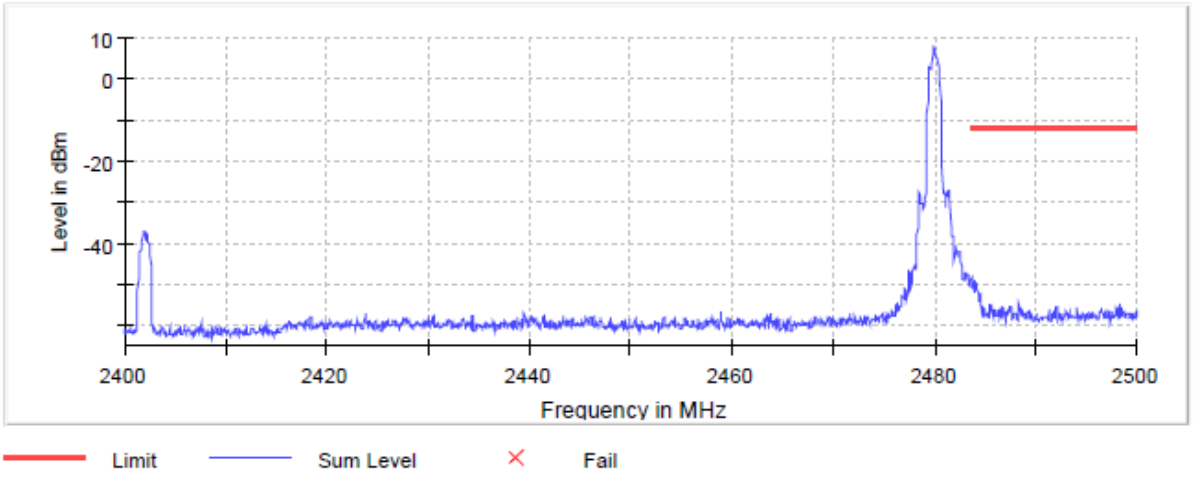
Radio Technology = Bluetooth EDR 2, Operating Frequency = hopping, Band Edge = high (S01_377_AA01)



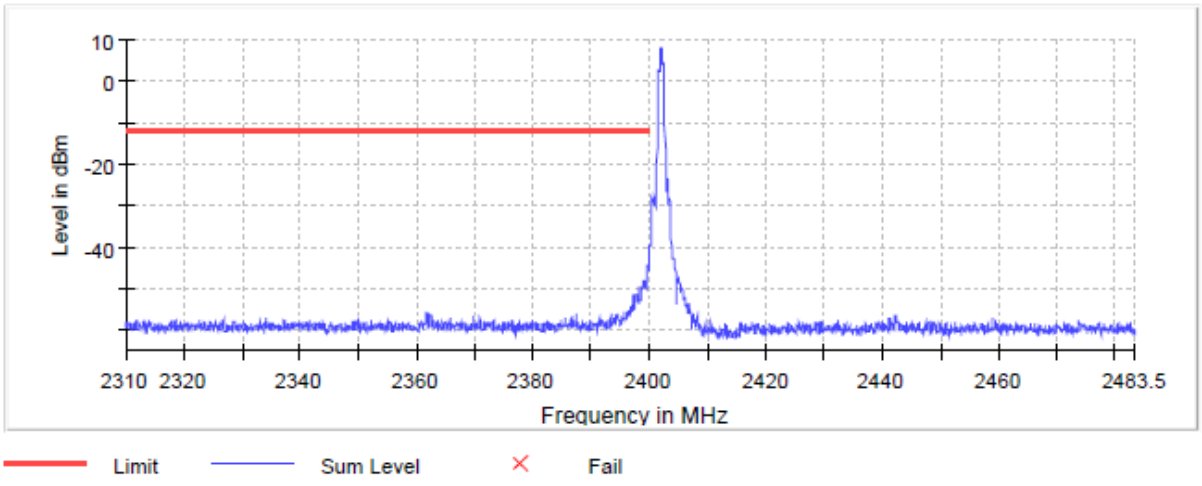

Radio Technology = Bluetooth EDR 2, Operating Frequency = low, Band Edge = low (S01_374_BA01)



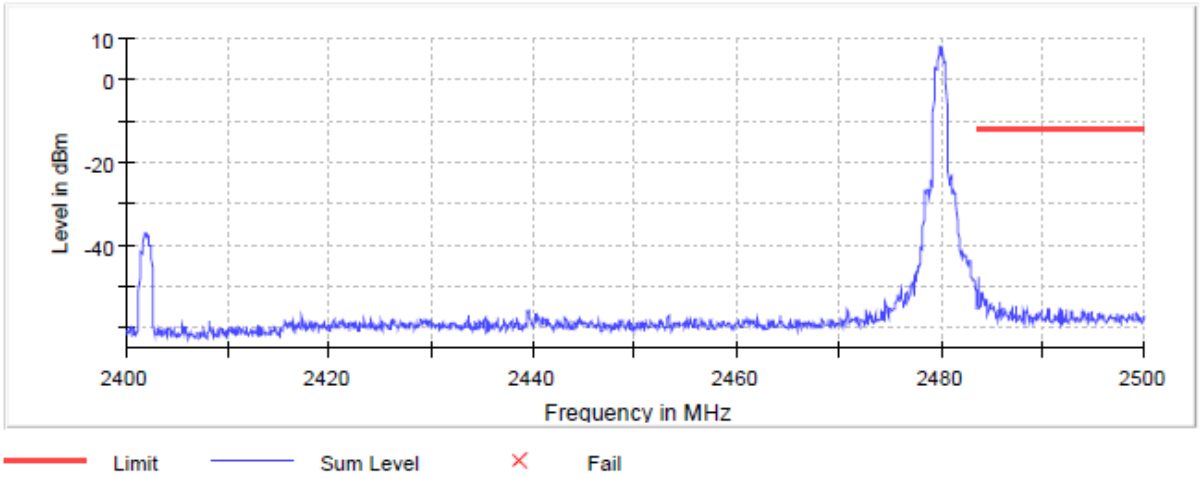
Radio Technology = Bluetooth EDR 2, Operating Frequency = high, Band Edge = high (S01_374_BA01)



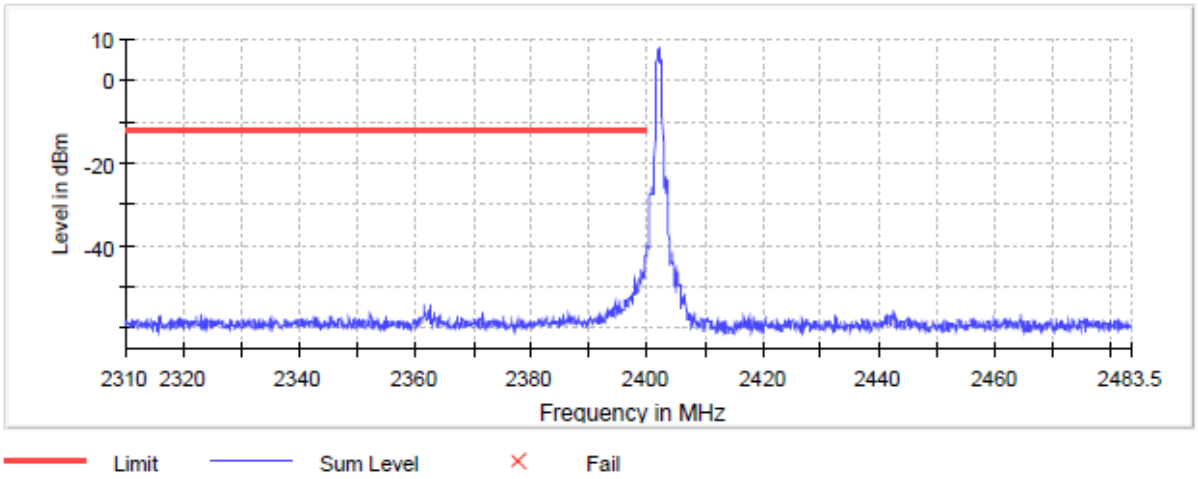

Radio Technology = Bluetooth EDR 3, Operating Frequency = low, Band Edge = low (S01_374_BA01)



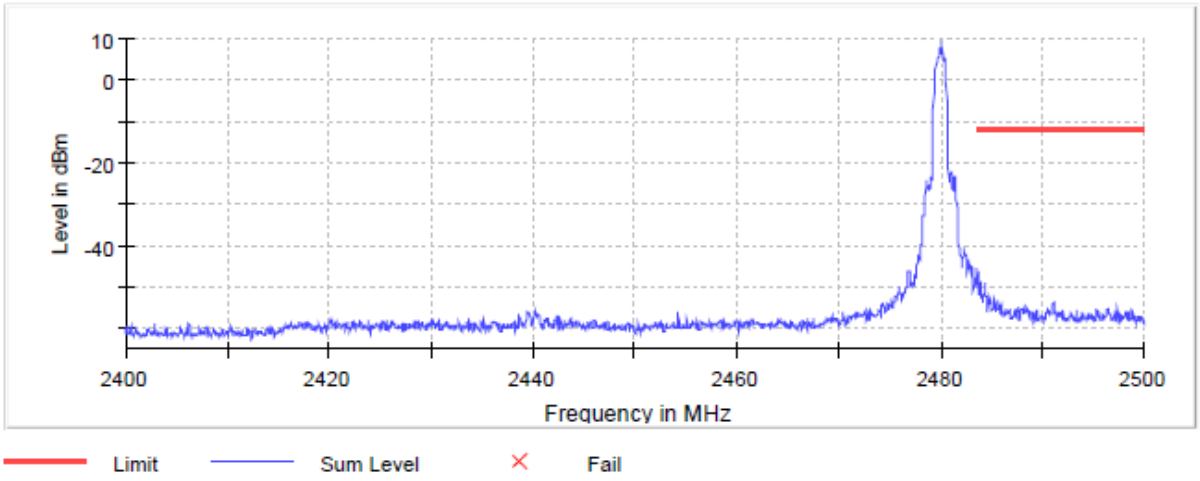
Radio Technology = Bluetooth EDR 3, Operating Frequency = high, Band Edge = high (S01_374_BA01)



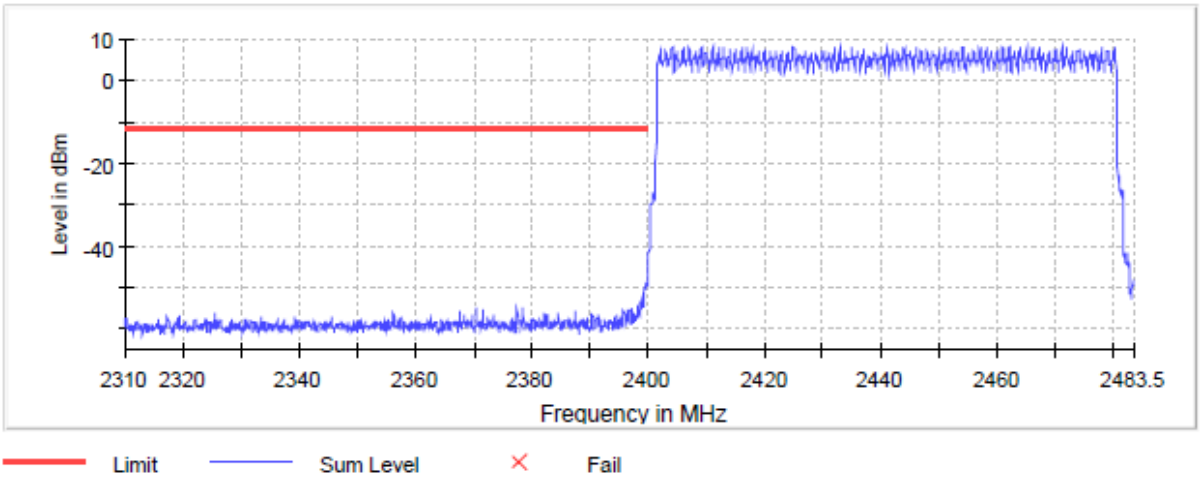

Radio Technology = Bluetooth EDR 3, Operating Frequency = low, Band Edge = low (S01_377_AA01)



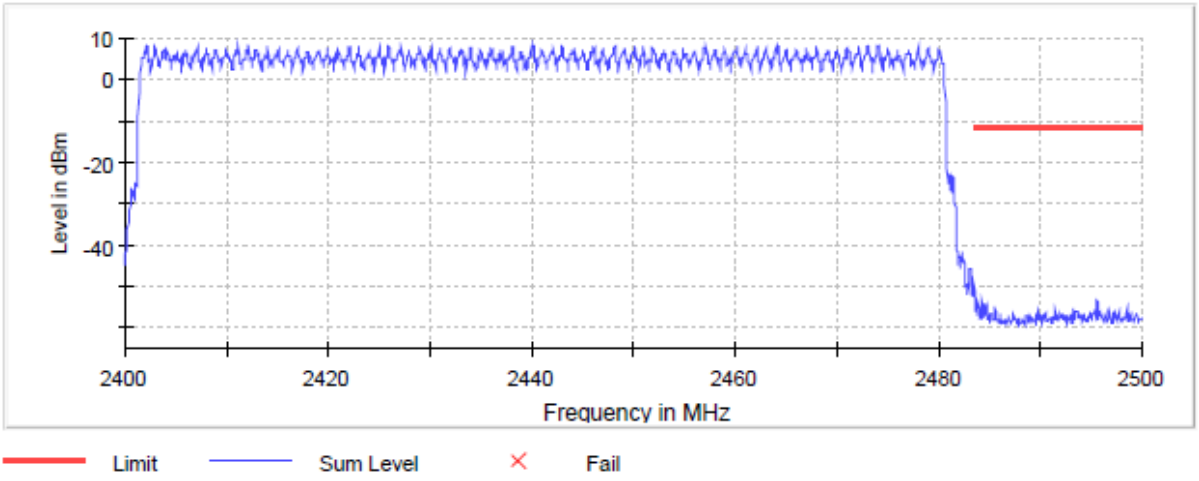
Radio Technology = Bluetooth EDR 3, Operating Frequency = high, Band Edge = high (S01_377_AA01)



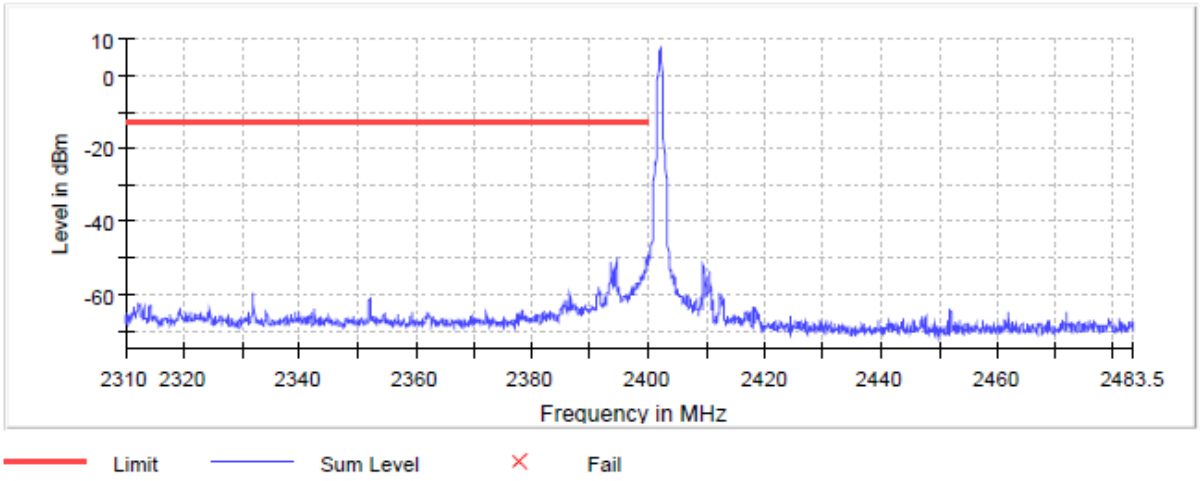

Radio Technology = Bluetooth EDR 3, Operating Frequency = hopping, Band Edge = low (S01_377_AA01)



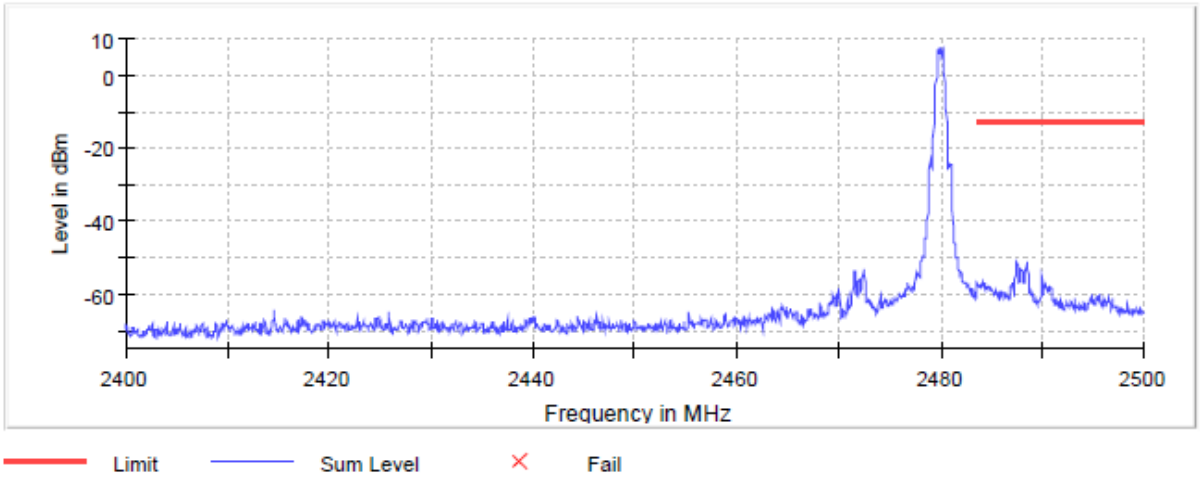
Radio Technology = Bluetooth EDR 3, Operating Frequency = hopping, Band Edge = high (S01_377_AA01)



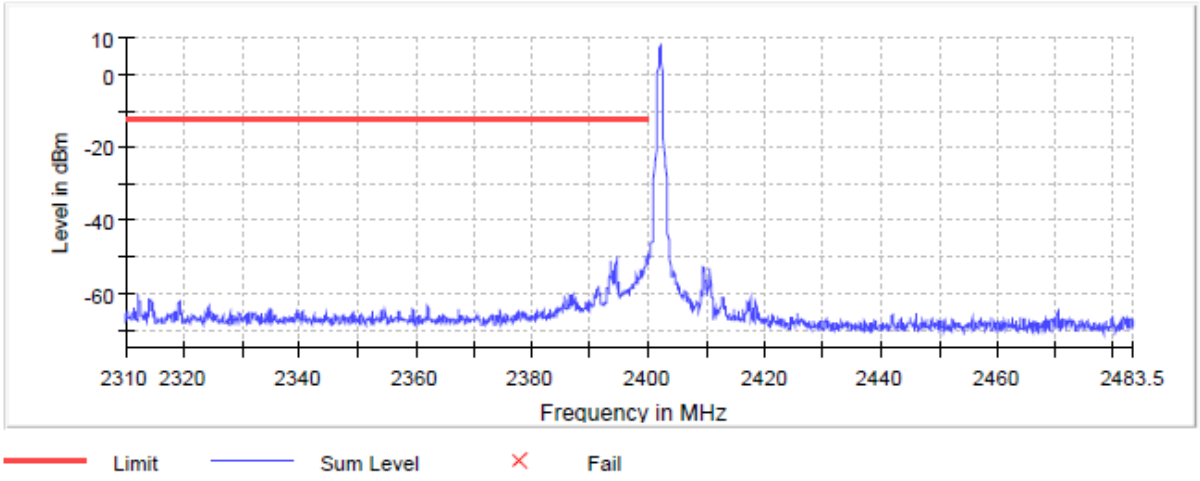

Radio Technology = Bluetooth LE 1 Mbps, Operating Frequency = low, Band Edge = low (S01_374_BA01)



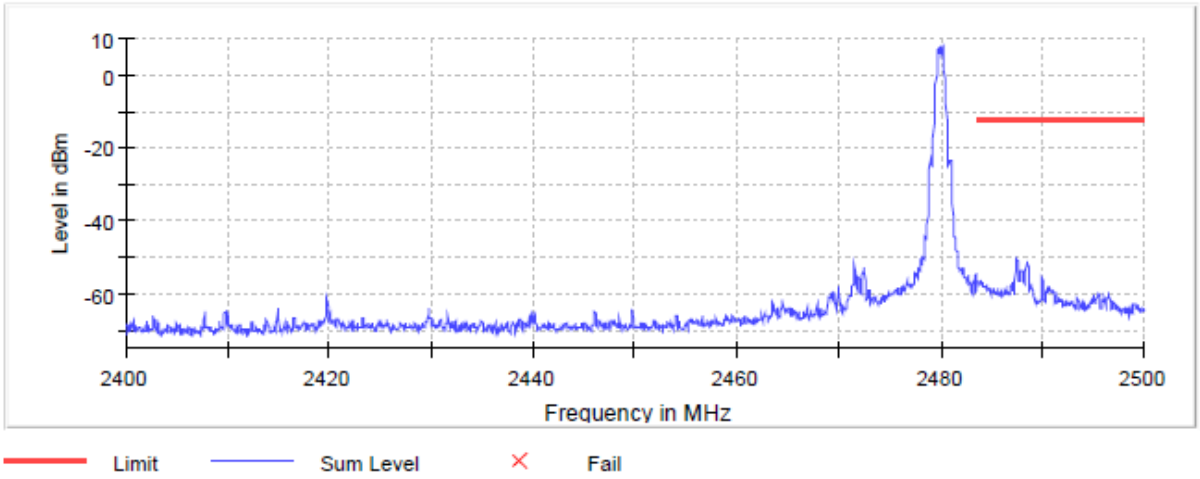
Radio Technology = Bluetooth LE 1 Mbps, Operating Frequency = high, Band Edge = high (S01_374_BA01)



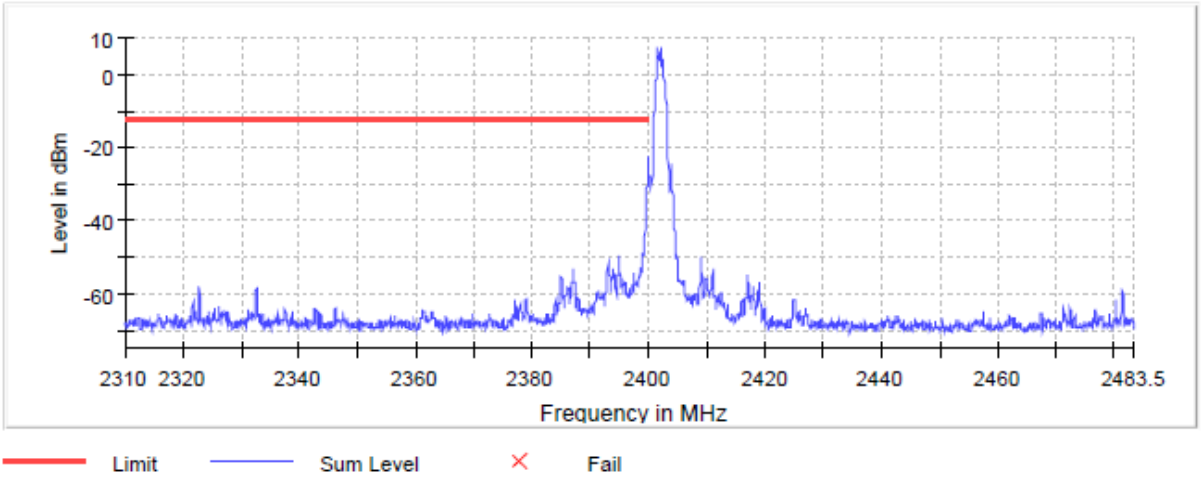

Radio Technology = Bluetooth LE 1 Mbps, Operating Frequency = low, Band Edge = low (S01_377_AA01)



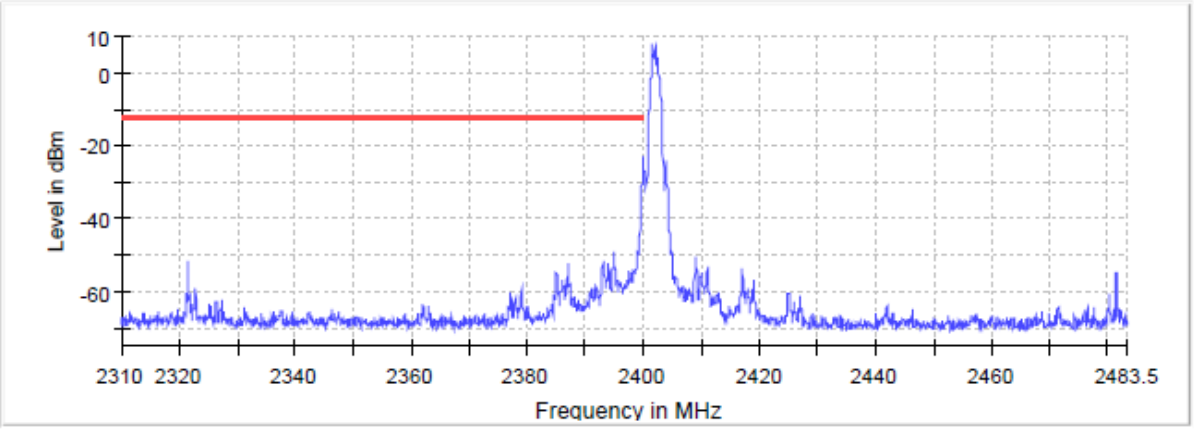
Radio Technology = Bluetooth LE 1 Mbps, Operating Frequency = high, Band Edge = high (S01_377_AA01)



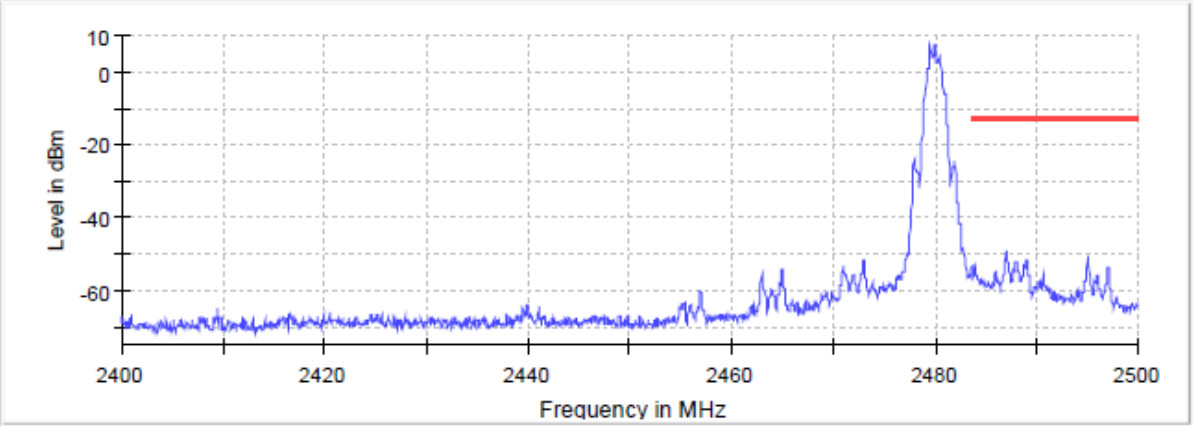

Radio Technology = Bluetooth LE 2 Mbps, Operating Frequency = low, Band Edge = low (S01_374_BA01)



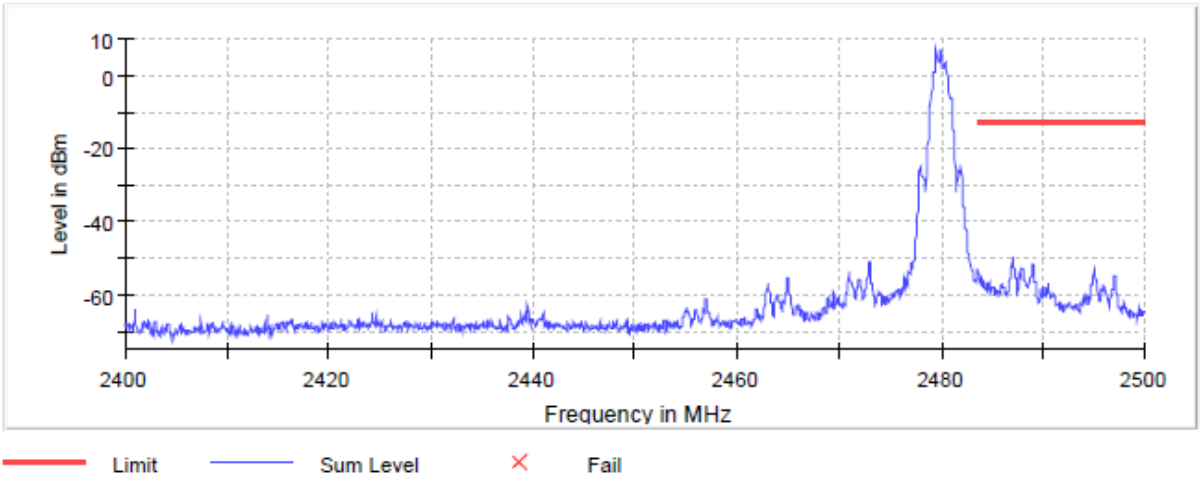
Radio Technology = Bluetooth LE 2 Mbps, Operating Frequency = low, Band Edge = low (S01_377_AA01)



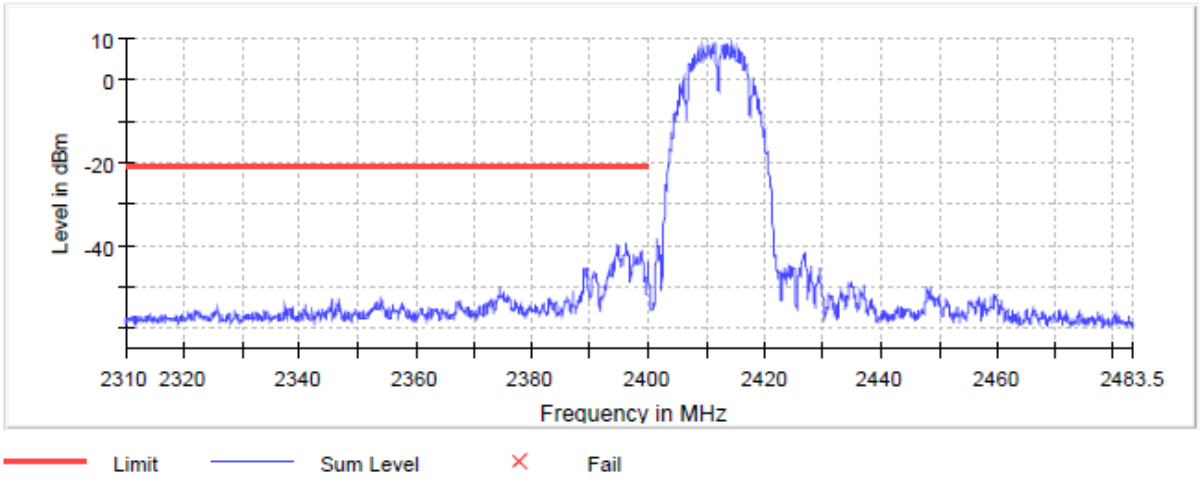

Radio Technology = Bluetooth LE 2 Mbps, Operating Frequency = high, Band Edge = high (S01_377_AA01)



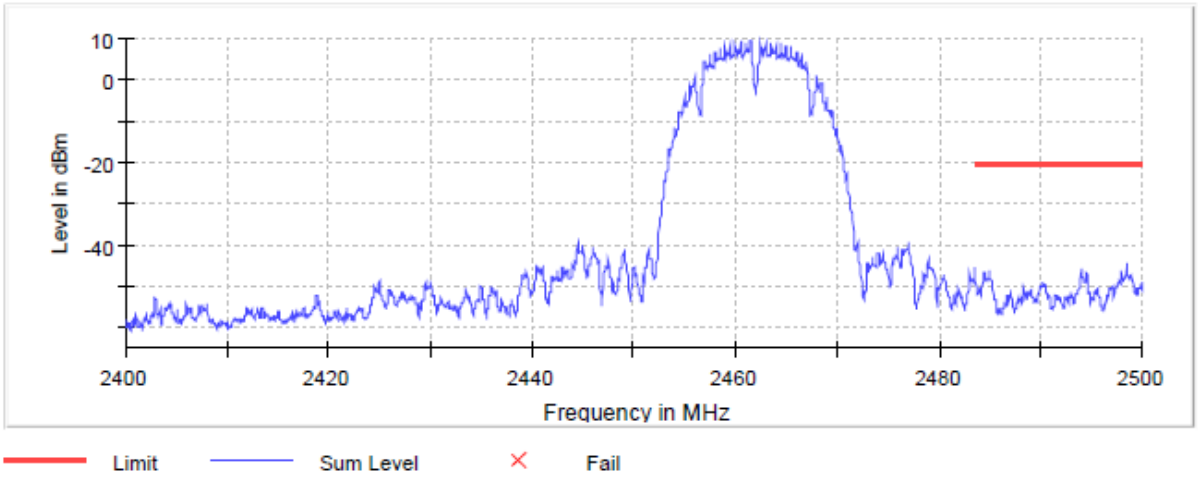
Radio Technology = Bluetooth LE 2 Mbps, Operating Frequency = high, Band Edge = high (S01_374_BA01)



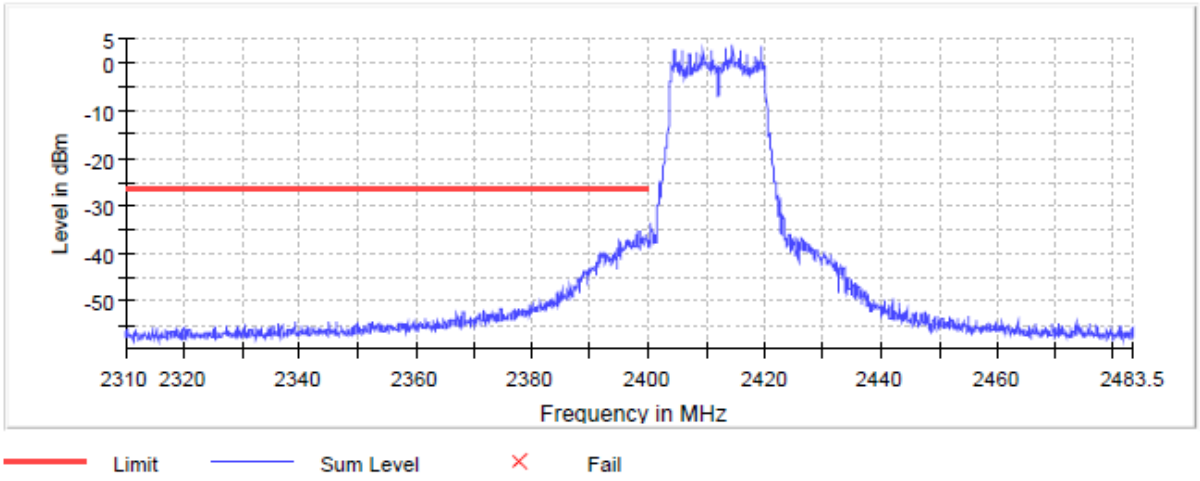

Radio Technology = WLAN b, Operating Frequency = low, Band Edge = low (S01_377_AA01)



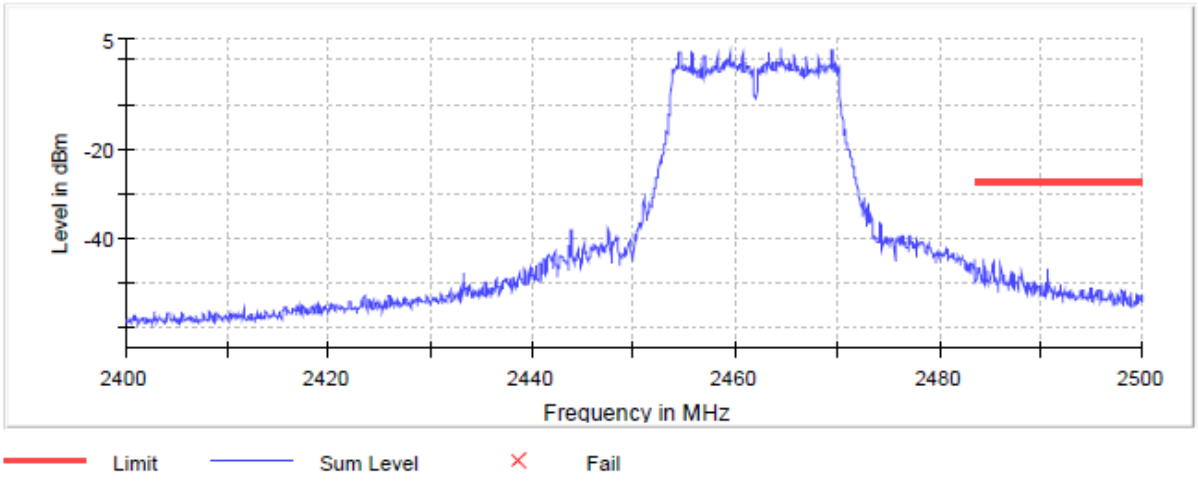
Radio Technology = WLAN b, Operating Frequency = high, Band Edge = high
(S01_377_AA01)



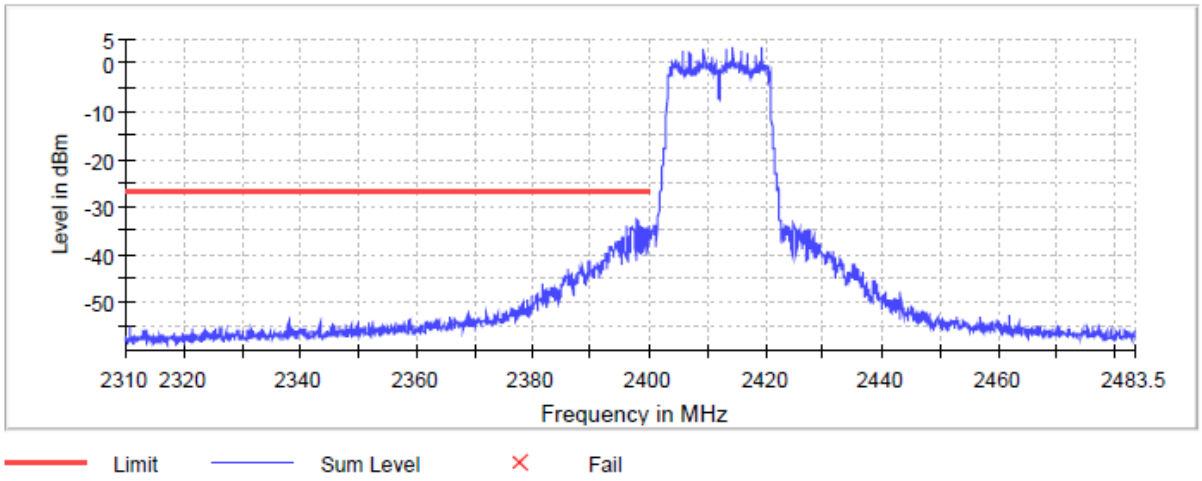

Radio Technology = WLAN g, Operating Frequency = low, Band Edge = low
(S01_377_AA01)



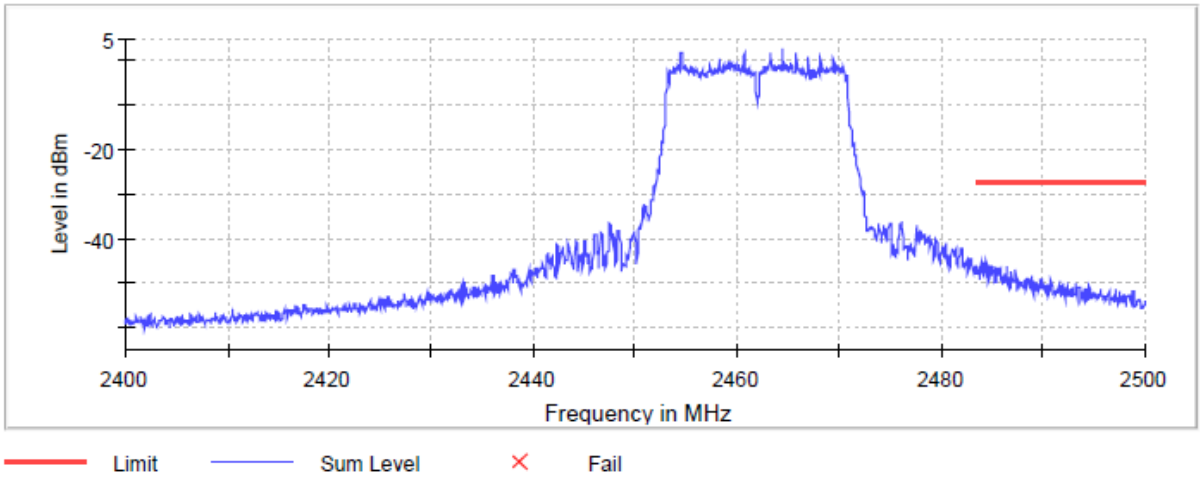
Radio Technology = WLAN g, Operating Frequency = high, Band Edge = high
(S01_377_AA01)



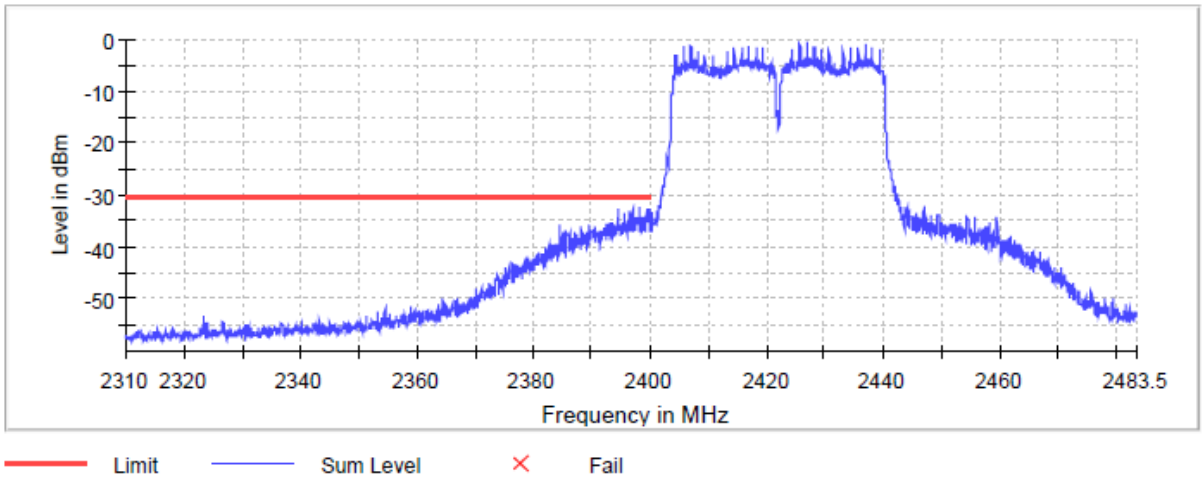

Radio Technology = WLAN n 20 MHz, Operating Frequency = low, Band Edge = low
(S01_377_AA01)



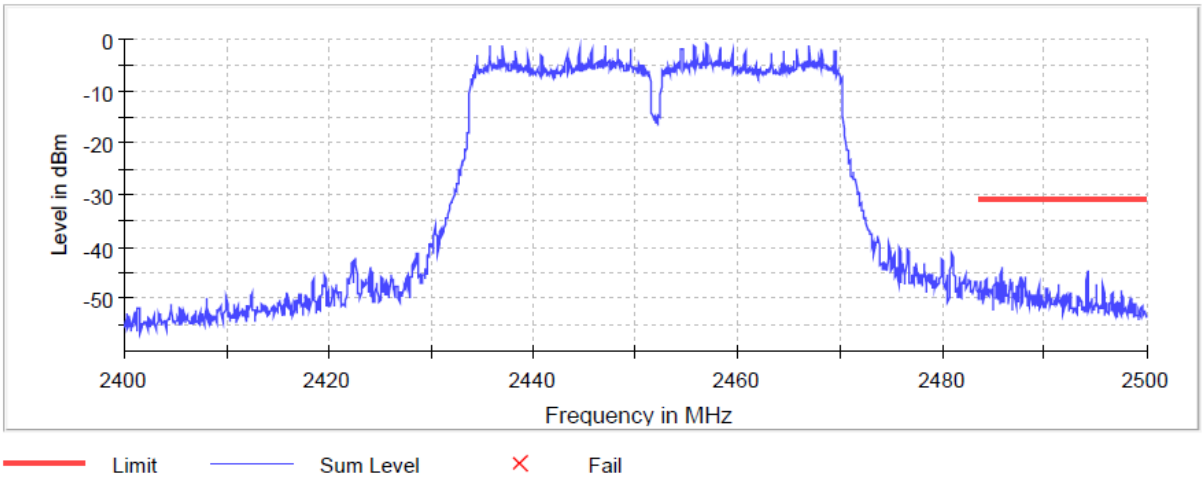
Radio Technology = WLAN n 20 MHz, Operating Frequency = high, Band Edge = high (S01_377_AA01)



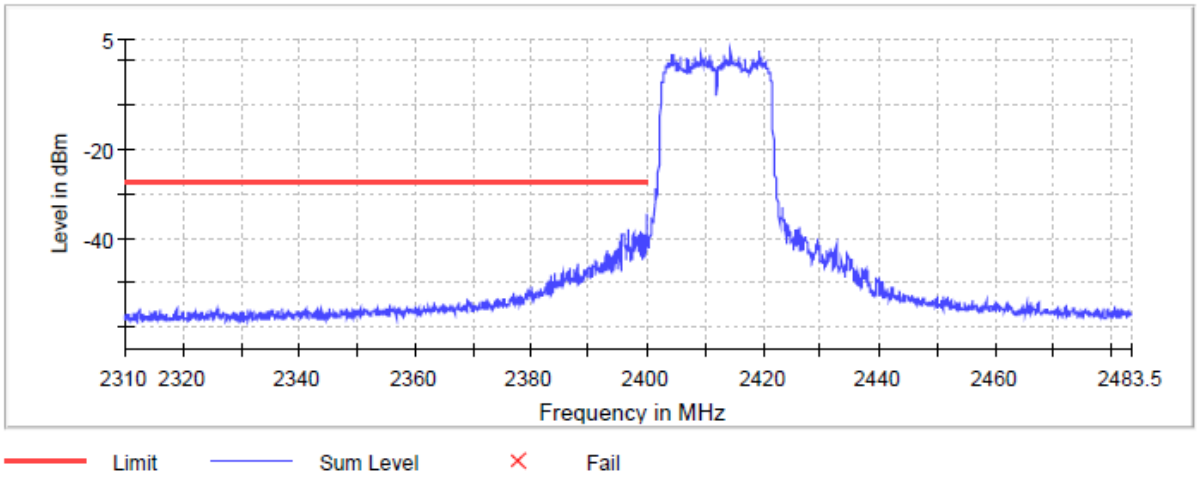

Radio Technology = WLAN n 40 MHz, Operating Frequency = low, Band Edge = low (S01_377_AA01)



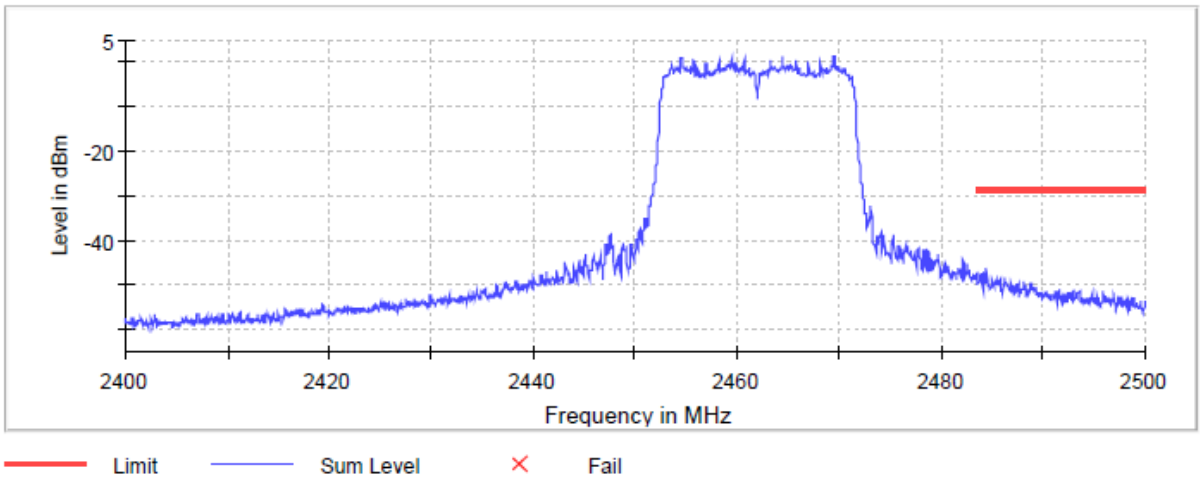
Radio Technology = WLAN n 40 MHz, Operating Frequency = high, Band Edge = high (S01_377_AA01)



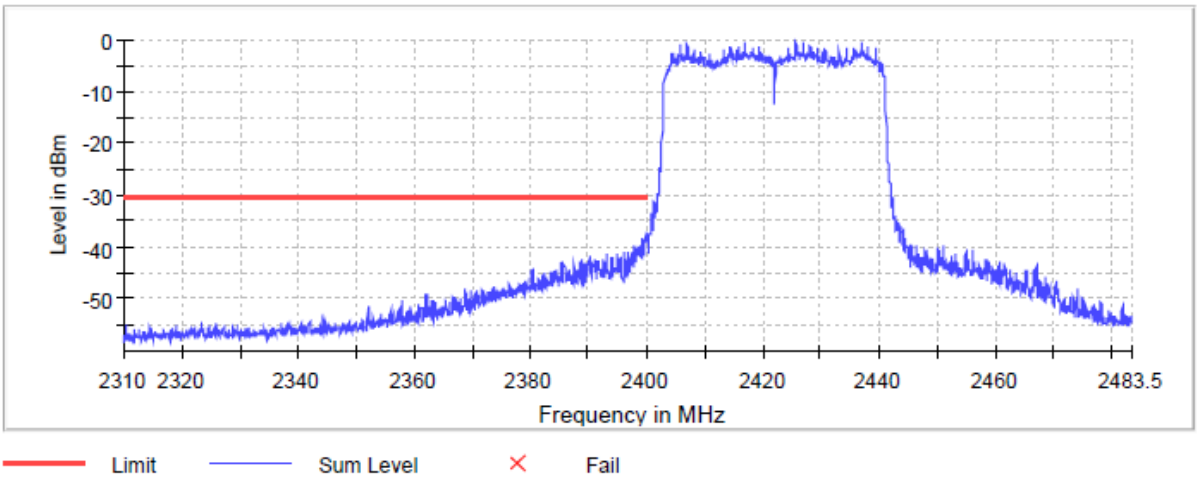

Radio Technology = WLAN ax 20 MHz, Operating Frequency = low, Band Edge = low (S01_377_AA01)



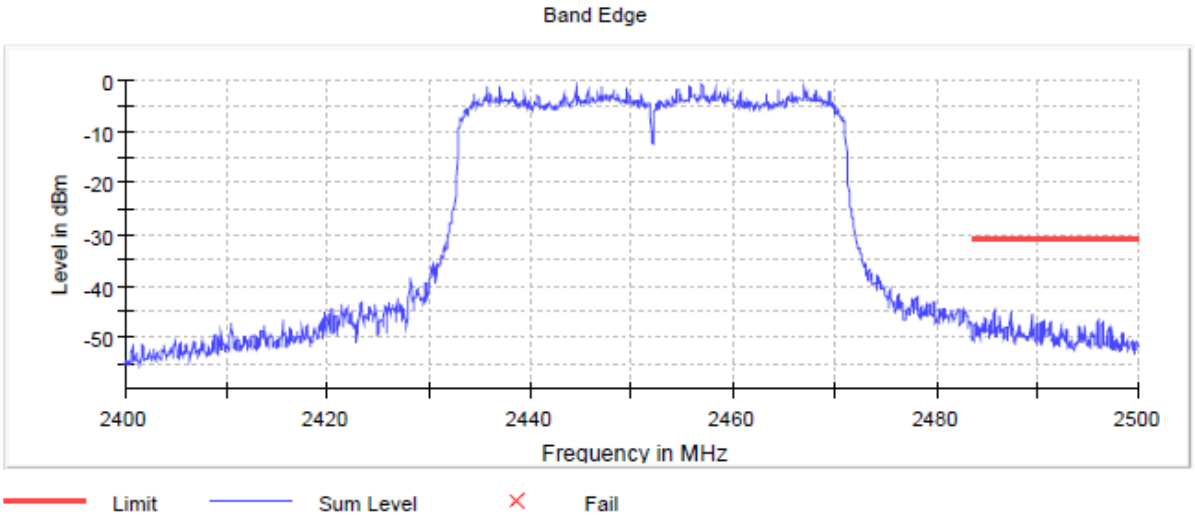
Radio Technology = WLAN ax 20 MHz, Operating Frequency = high, Band Edge = high (S01_377_AA01)



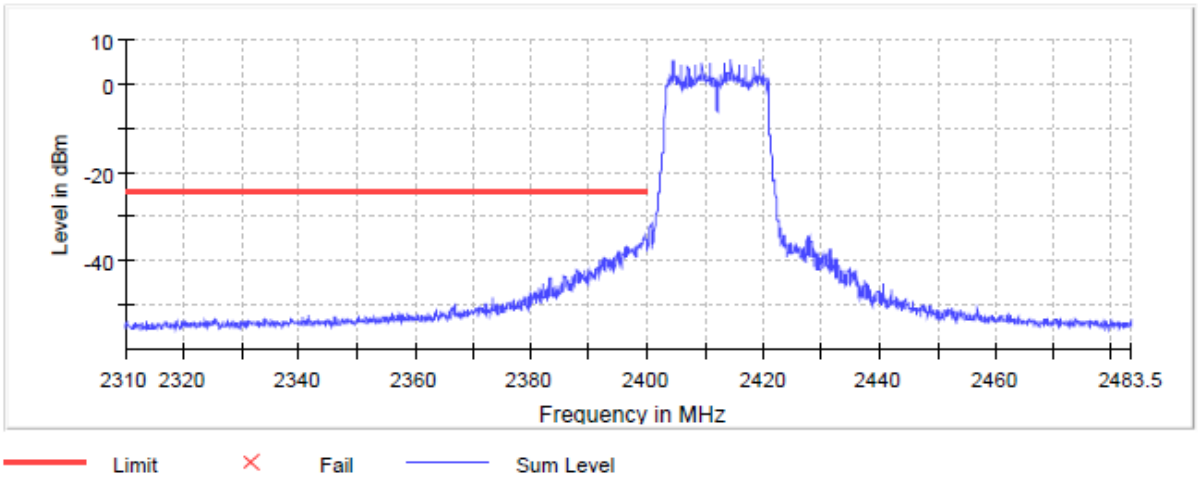

Radio Technology = WLAN ax 40 MHz, Operating Frequency = low, Band Edge = low (S01_377_AA01)



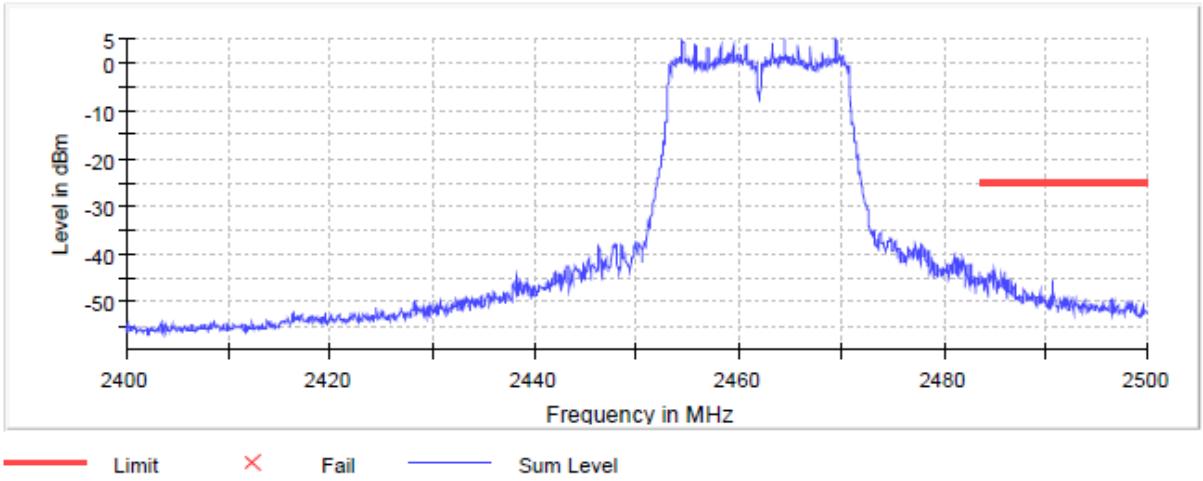
Radio Technology = WLAN ax 40 MHz, Operating Frequency = high, Band Edge = high (S01_377_AA01)



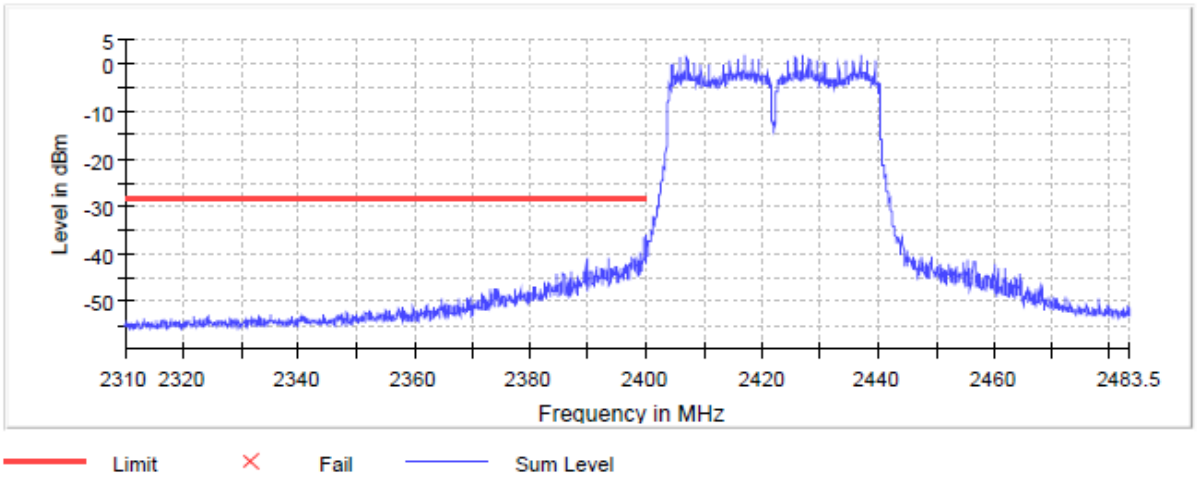

Radio Technology = WLAN n 20 MHz MIMO, Operating Frequency = low, Band Edge = low (S01_377_AA01)



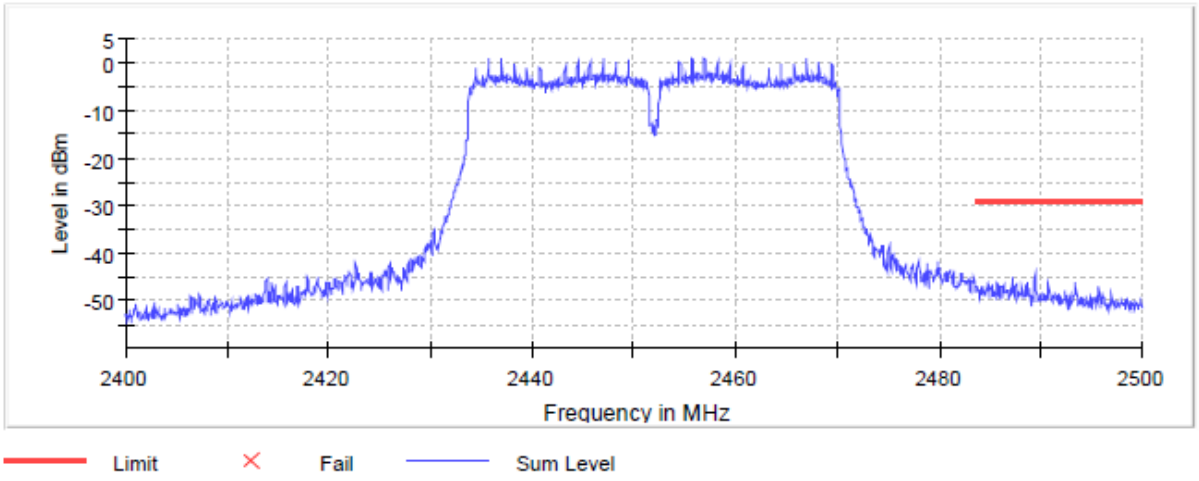
Radio Technology = WLAN n 20 MHz MIMO, Operating Frequency = high, Band Edge = high (S01_377_AA01)



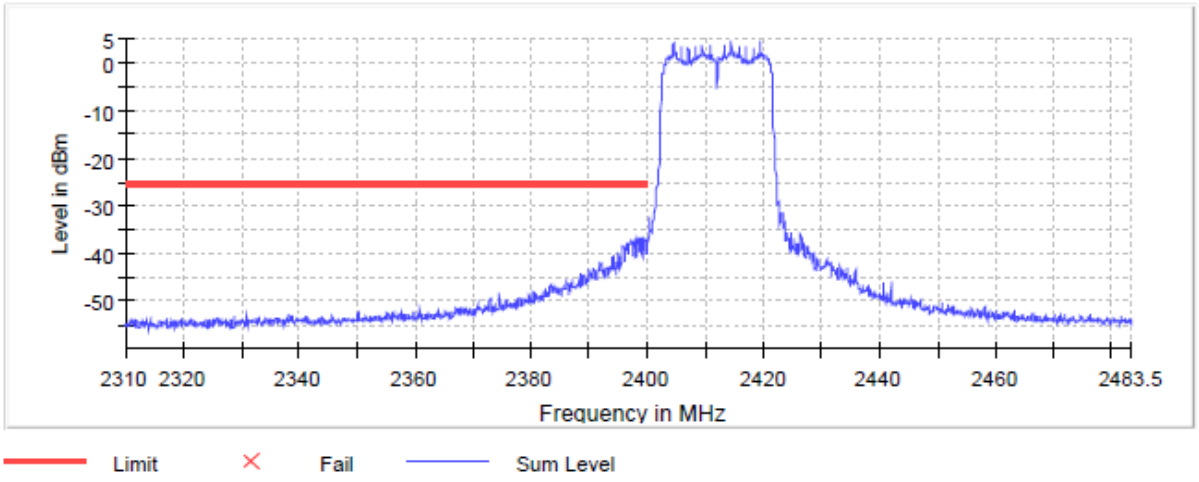

Radio Technology = WLAN n 40 MHz MIMO, Operating Frequency = low, Band Edge = low (S01_377_AA01)



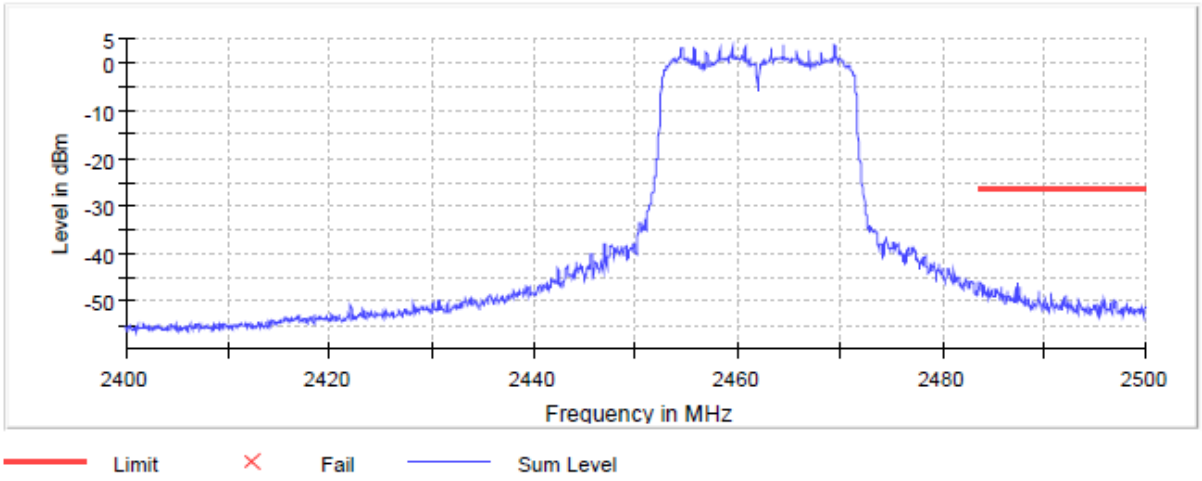
Radio Technology = WLAN n 40 MHz MIMO, Operating Frequency = high, Band Edge = high (S01_377_AA01)



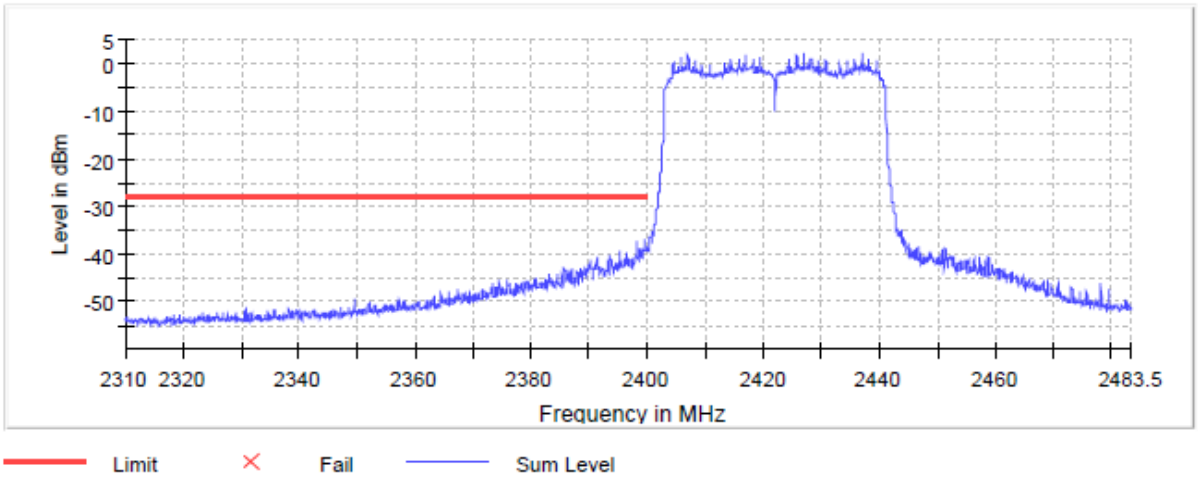

Radio Technology = WLAN ax 20 MHz MIMO, Operating Frequency = low, Band Edge = low (S01_377_AA01)



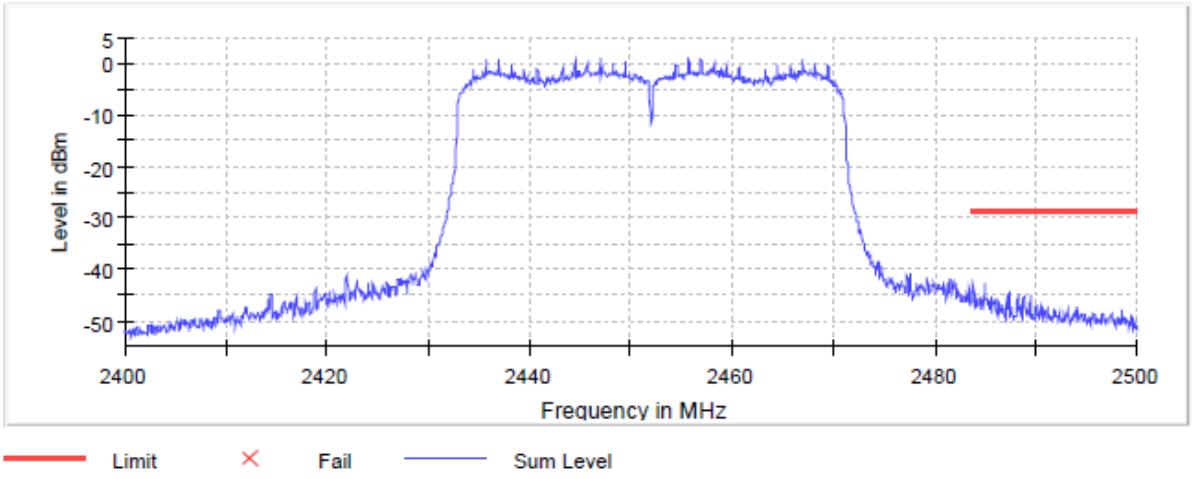
Radio Technology = WLAN ax 20 MHz MIMO, Operating Frequency = high, Band Edge = high (S01_377_AA01)




Radio Technology = WLAN ax 40 MHz MIMO, Operating Frequency = low, Band Edge = low (S01_377_AA01)



Radio Technology = WLAN ax 40 MHz MIMO, Operating Frequency = high, Band Edge = high (S01_377_AA01)




## 5.7.5 TEST EQUIPMENT USED

- R&S TS8997

## 5.8 BAND EDGE COMPLIANCE RADIATED

Standard **FCC Part 15 Subpart C**

**The test was performed according to:**
ANSI C63.10

### 5.8.1 TEST DESCRIPTION

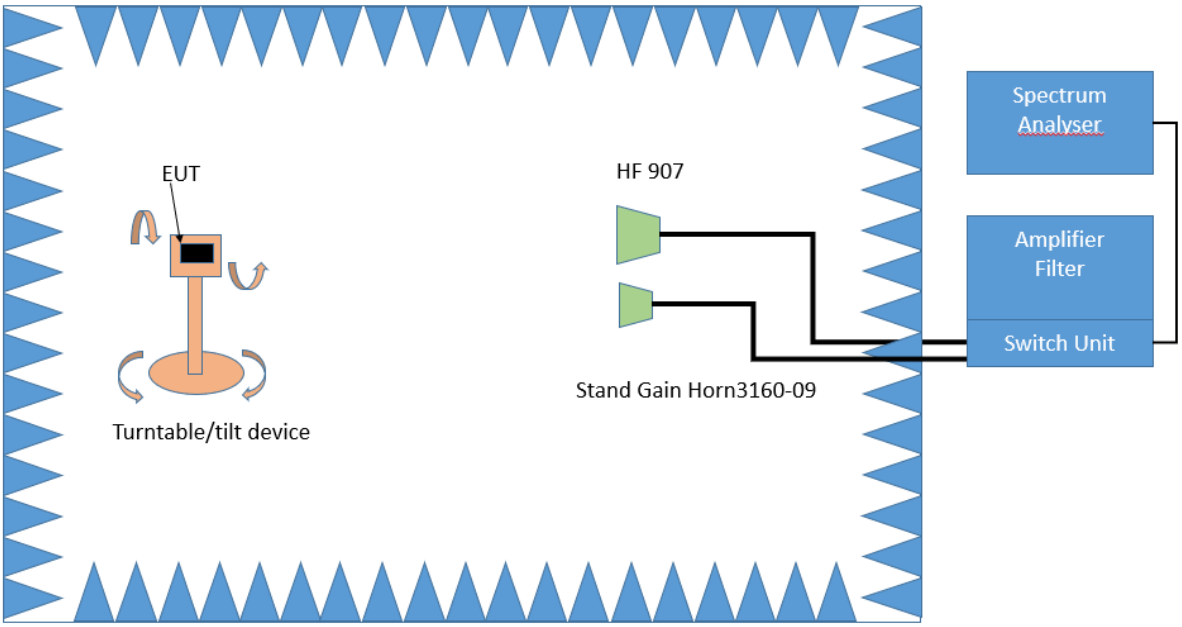
**Radiated Measurement with 50 Ohm termination at antenna ports**

The test set-up was made in accordance to the general provisions of ANSI C63.10 in a typical installation configuration. The measurements were performed according the following sub-chapter of ANSI C63.10:

- Chapter 6.10.5

The Equipment Under Test (EUT) was set up on a non-conductive support (tilt device) at 1.5 m height in the fully-anechoic chamber.
All steps were performed with one height (1.5 m) of the receiving antenna only (procedure according ANSI C63.10, chapter 6.6.5.

**3. Measurement above 1 GHz**




Test Setup; Spurious Emission Radiated (FAC), 1 GHz-26.5 GHz

**Step 1:**
The EUT is turned during the preliminary measurement across the elevation axis, with a step size of 90 °.
The turn table step size (azimuth angle) for the preliminary measurement is 45 °.
Spectrum analyser settings:
- Detector: Peak, Average
- RBW = 1 MHz
- VBW = 3 MHz

**Step 2:**

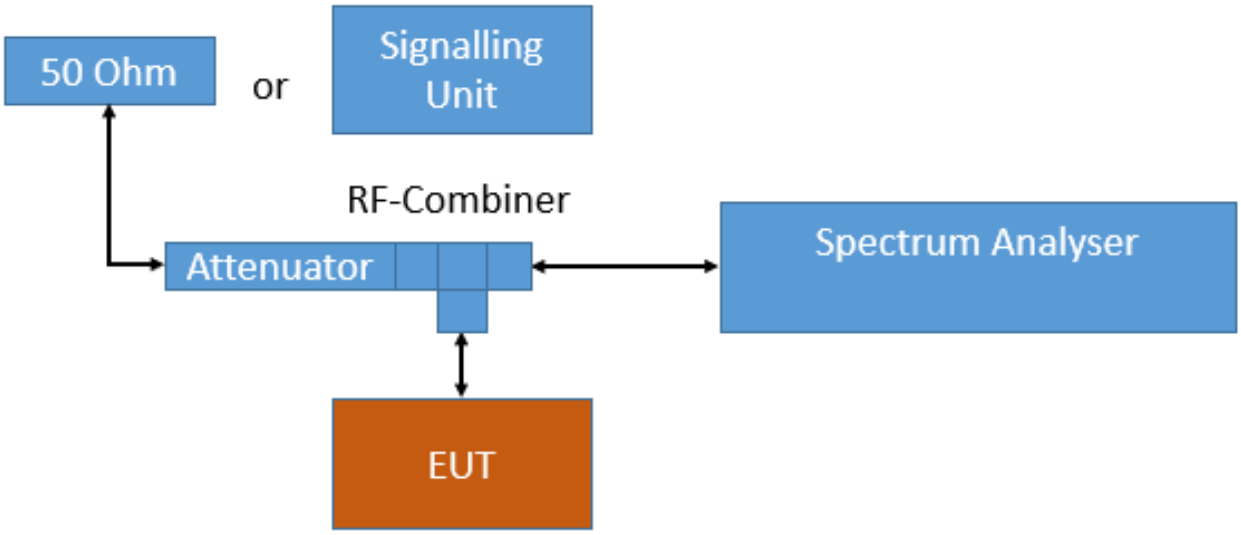
The turn table azimuth will slowly vary by ± 22.5°.
The elevation angle will slowly vary by ± 45°
Spectrum analyser settings:
- Detector: Peak

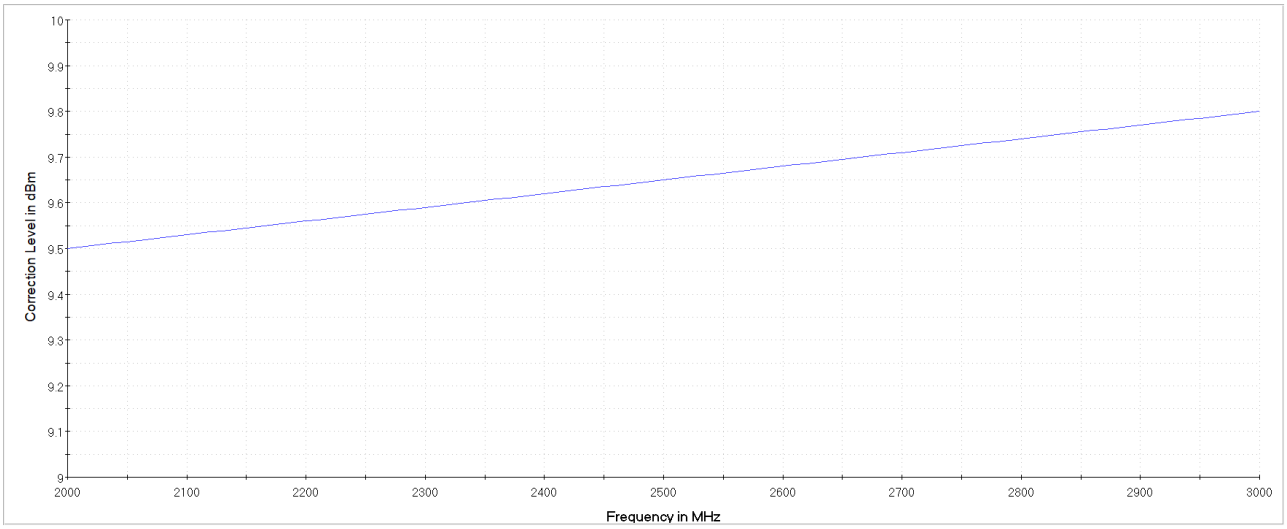
**Step 3:**
Spectrum analyser settings for step 3:
- Detector: Peak / CISPR Average
- Measured frequencies: in step 1 determined frequencies
- RBW = 1 MHz
- VBW = 3 MHz
- Measuring time: 1 s

**Conducted Measurements at antenna ports**

The Equipment Under Test (EUT) was set up to perform the spurious emissions measurements.

The EUT was connected to the test system as described in the block diagram below. The complete attenuation of the measurement path is known and considered.



Analyser settings:

- Frequency range: 2350 – 2500 MHz
- Resolution Bandwidth (RBW): 1000 kHz
- Video Bandwidth (VBW): 3000 kHz
- Trace: Maxhold, Average Power
- Sweeps: 10000
- Sweep Time: coupled
- Detector: Peak, RMS

For the conducted emissions in restricted bands the Value is measured in dBm and then converted to dBµV/m as given in KDB 558074:

1. Measure the conducted output power in dBm.
2. Add the maximum antenna gain in dBi. (Included in measurement result by offset)
3. Add the appropriate ground reflection factor (0 for measured range)
   6 dB for frequencies ≤ 30 MHz;
   4.7 dB for frequencies between 30 MHz and 1000 MHz, inclusive; and
   0 dB for frequencies > 1000 MHz).
4. Convert the resultant EIRP level to an equivalent electric field strength level using the following relationship:
   E = EIRP – 20 log D + 104.8
   Where E is the electric field strength in dBµV/m,
   EIRP is the equivalent isotropically radiated power in dBm
   D is the specified measurement distance in m

Value [dBµV/m] = Measured value [dBm] (including gain and ground reflection factor) – 20 log D + 104.8

### 5.8.2 TEST REQUIREMENTS / LIMITS

For band edges connected to a restricted band, the limits are specified in Section 15.209(a)

FCC Part 15, Subpart C, §15.209, Radiated Emission Limits

| Frequency in MHz | Limit (µV/m) | Measurement distance (m) | Limits (dBµV/m) |
|---|---|---|---|
| 0.009 – 0.49 | 2400/F(kHz)@300m | 3 | (48.5 – 13.8)@300m |
| 0.49 – 1.705 | 24000/F(kHz)@30m | 3 | (33.8 – 23.0)@30m |
| 1.705 – 30 | 30@30m | 3 | 29.5@30m |

The measured values are corrected with an inverse linear distance extrapolation factor (40 dB/decade) according FCC 15.31 (2).

| Frequency in MHz | Limit (µV/m) | Measurement distance (m) | Limits (dBµV/m) |
|---|---|---|---|
| 30 – 88 | 100@3m | 3 | 40.0@3m |
| 88 – 216 | 150@3m | 3 | 43.5@3m |
| 216 – 960 | 200@3m | 3 | 46.0@3m |
| 960 - 26000 | 500@3m | 3 | 54.0@3m |
| 26000 - 40000 | 500@3m | 1 | 54.0@3m |

The measured values above 26 GHz are corrected with an inverse linear distance extrapolation factor (20 dB/decade).

§15.35(b) ..., there is also a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit....

Used conversion factor: Limit (dBµV/m) = 20 log (Limit (µV/m)/1µV/m)

## 5.8.3 TEST PROTOCOL

Ambient temperature: 24 -30 °C
Air Pressure: 990 - 1020 hPa
Humidity: 30 -40 %
BT GFSK (1-DH1)
Applied duty cycle correction (AV): 10.3 dB

| Variant / Test Method | Ch. Center Freq. [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBµV/m] | Detec-tor | RBW [kHz] | Limit [dBµV/m] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|
| 374 / Radiated | 2480 | 2483.5 | 48.5 | PEAK | 1000 | 74.0 | 25.5 |
| 374 / Radiated | 2480 | 2483.5 | 45.2 | AV | 1000 | 54.0 | 8.8 |
| 374 / Conducted | 2480 | 2483.5 | 57.6 | PEAK | 1000 | 74.0 | 16.5 |
| 374 / Conducted | 2480 | 2483.5 | 49.0 | AV | 1000 | 54.0 | 5.0 |
| 377 / Radiated | 2480 | 2483.5 | 48.2 | PEAK | 1000 | 74.0 | 25.8 |
| 377 / Radiated | 2480 | 2483.5 | 37.1 | AV | 1000 | 54.0 | 19.2 |
| 377 / Conducted | 2402 | 2390.0 | 48.9 | PEAK | 1000 | 74.0 | 25.8 |
| 377 / Conducted | 2402 | 2390.0 | 39.2 | AV | 1000 | 54.0 | 19.2 |
| 377 / Conducted | 2480 | 2483.5 | 56.2 | PEAK | 1000 | 74.0 | 25.8 |
| 377 / Conducted | 2480 | 2483.5 | 45.6 | AV | 1000 | 54.0 | 19.2 |

BT π/4 DQPSK (2-DH1)
Applied duty cycle correction (AV): 10.2 dB

| Variant / Test Method | Ch. Center Freq. [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBµV/m] | Detec-tor | RBW [kHz] | Limit [dBµV/m] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|
| 374 / Radiated | 2480 | 2483.5 | 47.7 | PEAK | 1000 | 74.0 | 26.3 |
| 374 / Radiated | 2480 | 2483.5 | 44.9 | AV | 1000 | 54.0 | 9.1 |
| 374 / Conducted | 2480 | 2483.5 | 67.0 | PEAK | 1000 | 74.0 | 7.0 |
| 374 / Conducted | 2480 | 2483.5 | 50.3 | AV | 1000 | 54.0 | 3.7 |
| 377 / Conducted | 2402 | 2390.0 | 51.7 | PEAK | 1000 | 74.0 | 22.3 |
| 377 / Conducted | 2402 | 2390.0 | 38.3 | AV | 1000 | 54.0 | 15.7 |
| 377 / Conducted | 2480 | 2483.5 | 67.9 | PEAK | 1000 | 74.0 | 6.1 |
| 377 / Conducted | 2480 | 2483.5 | 44.7 | AV | 1000 | 54.0 | 9.3 |

BT 8-DPSK (3-DH1)
Applied duty cycle correction (AV): 10.3 dB

| Variant / Test Method | Ch. Center Freq. [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBµV/m] | Detec-tor | RBW [kHz] | Limit [dBµV/m] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|
| 374 / Radiated | 2480 | 2483.5 | 54.0 | PEAK | 1000 | 74.0 | 20.0 |
| 374 / Radiated | 2480 | 2483.5 | 45.0 | AV | 1000 | 54.0 | 9.0 |
| 374 / Conducted | 2480 | 2483.5 | 66.8 | PEAK | 1000 | 74.0 | 7.2 |
| 374 / Conducted | 2480 | 2483.5 | 50.3 | AV | 1000 | 54.0 | 3.7 |
| 377 / Conducted | 2402 | 2390.0 | 51.6 | PEAK | 1000 | 74.0 | 22.4 |
| 377 / Conducted | 2402 | 2390.0 | 38.3 | AV | 1000 | 54.0 | 15.7 |
| 377 / Conducted | 2480 | 2483.5 | 68.3 | PEAK | 1000 | 74.0 | 5.7 |
| 377 / Conducted | 2480 | 2483.5 | 45.8 | AV | 1000 | 54.0 | 8.2 |

BT LE 1 Mbit/s
Applied duty cycle correction (AV): 4.2 dB

| Variant / Test Method | Ch. Center Freq. [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBµV/m] | Detec-tor | RBW [kHz] | Limit [dBµV/m] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|
| 374 / Conducted | 2480 | 2483.5 | 50.6 | PEAK | 1000 | 74.0 | 23.4 |
| 374 / Conducted | 2480 | 2483.5 | 42.2 | AV | 1000 | 54.0 | 11.8 |
| 377 / Radiated | 2480 | 2483.5 | 47.6 | PEAK | 1000 | 74.0 | 26.4 |
| 377 / Radiated | 2480 | 2483.5 | 39.0 | AV | 1000 | 54.0 | 15.0 |
| 377 / Conducted | 2402 | 2390.0 | 50.2 | PEAK | 1000 | 74.0 | 23.8 |
| 377 / Conducted | 2402 | 2390.0 | 36.6 | AV | 1000 | 54.0 | 17.4 |
| 377 / Conducted | 2480 | 2483.5 | 53.9 | PEAK | 1000 | 74.0 | 20.1 |
| 377 / Conducted | 2480 | 2483.5 | 42.3 | AV | 1000 | 54.0 | 11.7 |

BT LE 2 Mbit/s
Applied duty cycle correction (AV): 9.7 dB

| Variant / Test Method | Ch. Center Freq. [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBµV/m] | Detec-tor | RBW [kHz] | Limit [dBµV/m] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|
| 374 / Radiated | 2480 | 2483.5 | 47.7 | PEAK | 1000 | 74.0 | 26.3 |
| 374 / Radiated | 2480 | 2483.5 | 44.4 | AV | 1000 | 54.0 | 9.6 |
| 374 / Conducted | 2480 | 2483.5 | 54.3 | PEAK | 1000 | 74.0 | 19.7 |
| 374 / Conducted | 2480 | 2483.5 | 51.0 | AV | 1000 | 54.0 | 3.0 |
| 377 / Conducted | 2402 | 2390.0 | 50.3 | PEAK | 1000 | 74.0 | 23.7 |
| 377 / Conducted | 2402 | 2390.0 | 41.0 | AV | 1000 | 54.0 | 13.0 |
| 377 / Conducted | 2480 | 2483.5 | 57.9 | PEAK | 1000 | 74.0 | 16.1 |
| 377 / Conducted | 2480 | 2483.5 | 51.9 | AV | 1000 | 54.0 | 2.1 |

Ambient temperature: 23 - 30 °C
Air Pressure: 990 - 1017 hPa
Humidity: 34 - 40%
WLAN b-Mode; 20 MHz; 1 Mbit/s
Applied duty cycle correction (AV): 0 dB

| Variant / Test Method | Ch. Center Freq. [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBµV/m] | Detec-tor | RBW [kHz] | Limit [dBµV/m] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|
| 374 / Radiated | 2462 | 2483.5 | 48.5 | PEAK | 1000 | 74.0 | 25.5 |
| 374 / Radiated | 2462 | 2483.5 | 34.9 | AV | 1000 | 54.0 | 19.1 |
| 374 / Conducted | 2412 | 2390.0 | 52.2 | PEAK | 1000 | 74.0 | 21.8 |
| 374 / Conducted | 2412 | 2390.0 | 44.9 | AV | 1000 | 54.0 | 9.1 |
| 374 / Conducted | 2417 | 2390.0 | 52.2 | PEAK | 1000 | 74.0 | 21.8 |
| 374 / Conducted | 2417 | 2390.0 | 44.9 | AV | 1000 | 54.0 | 9.1 |
| 374 / Conducted | 2457 | 2483.5 | 57.5 | PEAK | 1000 | 74.0 | 16.5 |
| 374 / Conducted | 2457 | 2483.5 | 51.7 | AV | 1000 | 54.0 | 2.3 |
| 374 / Conducted | 2462 | 2483.5 | 53.4 | PEAK | 1000 | 74.0 | 20.6 |
| 374 / Conducted | 2462 | 2483.5 | 46.9 | AV | 1000 | 54.0 | 7.1 |
| 377 / Radiated | 2462 | 2483.5 | 47.6 | PEAK | 1000 | 74.0 | 26.4 |
| 377 / Radiated | 2462 | 2483.5 | 34.8 | AV | 1000 | 54.0 | 19.2 |
| 377 / Conducted | 2412 | 2390.0 | 55.8 | PEAK | 1000 | 74.0 | 18.2 |
| 377 / Conducted | 2412 | 2390.0 | 49.7 | AV | 1000 | 54.0 | 4.3 |
| 377 / Conducted | 2417 | 2390.0 | 57.1 | PEAK | 1000 | 74.0 | 16.9 |
| 377 / Conducted | 2417 | 2390.0 | 50.4 | AV | 1000 | 54.0 | 3.6 |
| 377 / Conducted | 2457 | 2483.5 | 58.2 | PEAK | 1000 | 74.0 | 15.8 |
| 377 / Conducted | 2457 | 2483.5 | 51.7 | AV | 1000 | 54.0 | 2.3 |
| 377 / Conducted | 2462 | 2483.5 | 55.7 | PEAK | 1000 | 74.0 | 18.3 |
| 377 / Conducted | 2462 | 2483.5 | 50.5 | AV | 1000 | 54.0 | 3.5 |

WLAN g-Mode; 20 MHz; 6 Mbit/s
Applied duty cycle correction (AV): 0.1 dB

| Variant / Test Method | Ch. Center Freq. [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBµV/m] | Detec-tor | RBW [kHz] | Limit [dBµV/m] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|
| 377 / Radiated | 2462 | 2483.5 | 47.6 | PEAK | 1000 | 74.0 | 26.4 |
| 377 / Radiated | 2462 | 2483.5 | 34.8 | AV | 1000 | 54.0 | 19.2 |
| 377 / Conducted | 2412 | 2483.5 | 71.1 | PEAK | 1000 | 74.0 | 2.9 |
| 377 / Conducted | 2412 | 2483.5 | 48.0 | AV | 1000 | 54.0 | 6.0 |
| 377 / Conducted | 2417 | 2483.5 | 70.1 | PEAK | 1000 | 74.0 | 3.9 |
| 377 / Conducted | 2417 | 2483.5 | 51.8 | AV | 1000 | 54.0 | 2.2 |
| 377 / Conducted | 2422 | 2483.5 | 71.8 | PEAK | 1000 | 74.0 | 2.2 |
| 377 / Conducted | 2422 | 2483.5 | 51.1 | AV | 1000 | 54.0 | 2.9 |
| 377 / Conducted | 2427 | 2483.5 | 71.2 | PEAK | 1000 | 74.0 | 2.8 |
| 377 / Conducted | 2427 | 2483.5 | 52.2 | AV | 1000 | 54.0 | 1.8 |
| 377 / Conducted | 2447 | 2483.5 | 70.9 | PEAK | 1000 | 74.0 | 3.1 |
| 377 / Conducted | 2447 | 2483.5 | 51.6 | AV | 1000 | 54.0 | 2.4 |
| 377 / Conducted | 2452 | 2483.5 | 71.8 | PEAK | 1000 | 74.0 | 2.2 |
| 377 / Conducted | 2452 | 2483.5 | 51.6 | AV | 1000 | 54.0 | 2.4 |
| 377 / Conducted | 2457 | 2483.5 | 69.7 | PEAK | 1000 | 74.0 | 4.3 |
| 377 / Conducted | 2457 | 2483.5 | 50.2 | AV | 1000 | 54.0 | 3.8 |
| 377 / Conducted | 2462 | 2483.5 | 70.3 | PEAK | 1000 | 74.0 | 3.7 |
| 377 / Conducted | 2462 | 2483.5 | 45.4 | AV | 1000 | 54.0 | 8.6 |

WLAN n-Mode; 20 MHz; MCS0
Applied duty cycle correction (AV): 0 dB

| Variant / Test Method | Ch. Center Freq. [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBµV/m] | Detec-tor | RBW [kHz] | Limit [dBµV/m] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|
| 377 / Radiated | 2462 | 2483.5 | 47.6 | PEAK | 1000 | 74.0 | 26.4 |
| 377 / Radiated | 2462 | 2483.5 | 34.7 | AV | 1000 | 54.0 | 19.3 |
| 377 / Conducted | 2412 | 2483.5 | 71.4 | PEAK | 1000 | 74.0 | 2.6 |
| 377 / Conducted | 2412 | 2483.5 | 48.5 | AV | 1000 | 54.0 | 5.5 |
| 377 / Conducted | 2417 | 2483.5 | 70.7 | PEAK | 1000 | 74.0 | 3.3 |
| 377 / Conducted | 2417 | 2483.5 | 48.9 | AV | 1000 | 54.0 | 5.1 |
| 377 / Conducted | 2422 | 2483.5 | 71.4 | PEAK | 1000 | 74.0 | 2.6 |
| 377 / Conducted | 2422 | 2483.5 | 49.2 | AV | 1000 | 54.0 | 4.8 |
| 377 / Conducted | 2427 | 2483.5 | 73.5 | PEAK | 1000 | 74.0 | 0.5 |
| 377 / Conducted | 2427 | 2483.5 | 49.6 | AV | 1000 | 54.0 | 4.4 |
| 377 / Conducted | 2447 | 2483.5 | 71.9 | PEAK | 1000 | 74.0 | 2.1 |
| 377 / Conducted | 2447 | 2483.5 | 49.9 | AV | 1000 | 54.0 | 4.1 |
| 377 / Conducted | 2452 | 2483.5 | 70.8 | PEAK | 1000 | 74.0 | 3.2 |
| 377 / Conducted | 2452 | 2483.5 | 49.9 | AV | 1000 | 54.0 | 4.1 |
| 377 / Conducted | 2457 | 2483.5 | 71.7 | PEAK | 1000 | 74.0 | 2.3 |
| 377 / Conducted | 2457 | 2483.5 | 47.7 | AV | 1000 | 54.0 | 6.3 |
| 377 / Conducted | 2462 | 2483.5 | 69.9 | PEAK | 1000 | 74.0 | 4.1 |
| 377 / Conducted | 2462 | 2483.5 | 47.5 | AV | 1000 | 54.0 | 6.5 |

WLAN n-Mode; 40 MHz; MCS0
Applied duty cycle correction (AV): 0 dB

| Variant / Test Method | Ch. Center Freq. [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBµV/m] | Detec-tor | RBW [kHz] | Limit [dBµV/m] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|
| 377 / Radiated | 2452 | 2483.5 | 48.0 | PEAK | 1000 | 74.0 | 26.0 |
| 377 / Radiated | 2452 | 2483.5 | 34.7 | AV | 1000 | 54.0 | 19.3 |
| 377 / Conducted | 2422 | 2483.5 | 71.1 | PEAK | 1000 | 74.0 | 2.9 |
| 377 / Conducted | 2422 | 2483.5 | 48.0 | AV | 1000 | 54.0 | 6.0 |
| 377 / Conducted | 2447 | 2483.5 | 72.1 | PEAK | 1000 | 74.0 | 1.9 |
| 377 / Conducted | 2447 | 2483.5 | 48.1 | AV | 1000 | 54.0 | 5.9 |
| 377 / Conducted | 2452 | 2483.5 | 71.2 | PEAK | 1000 | 74.0 | 2.8 |
| 377 / Conducted | 2452 | 2483.5 | 46.5 | AV | 1000 | 54.0 | 7.5 |

WLAN ax-Mode; 20 MHz; MCS0
Applied duty cycle correction (AV): 0.1 dB

| Variant / Test Method | Ch. Center Freq. [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBµV/m] | Detec-tor | RBW [kHz] | Limit [dBµV/m] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|
| 377 / Conducted | 2412 | 2483.5 | 67.7 | PEAK | 1000 | 74.0 | 6.3 |
| 377 / Conducted | 2412 | 2483.5 | 48.3 | AV | 1000 | 54.0 | 5.7 |
| 377 / Conducted | 2417 | 2483.5 | 72.0 | PEAK | 1000 | 74.0 | 2.0 |
| 377 / Conducted | 2417 | 2483.5 | 50.6 | AV | 1000 | 54.0 | 3.4 |
| 377 / Conducted | 2422 | 2483.5 | 69.7 | PEAK | 1000 | 74.0 | 4.3 |
| 377 / Conducted | 2422 | 2483.5 | 47.9 | AV | 1000 | 54.0 | 6.1 |
| 377 / Conducted | 2427 | 2483.5 | 71.2 | PEAK | 1000 | 74.0 | 2.8 |
| 377 / Conducted | 2427 | 2483.5 | 48.8 | AV | 1000 | 54.0 | 5.2 |
| 377 / Conducted | 2432 | 2483.5 | 72.8 | PEAK | 1000 | 74.0 | 1.2 |
| 377 / Conducted | 2432 | 2483.5 | 48.8 | AV | 1000 | 54.0 | 5.2 |
| 377 / Conducted | 2447 | 2483.5 | 72.1 | PEAK | 1000 | 74.0 | 1.9 |
| 377 / Conducted | 2447 | 2483.5 | 51.9 | AV | 1000 | 54.0 | 2.1 |
| 377 / Conducted | 2452 | 2483.5 | 72.7 | PEAK | 1000 | 74.0 | 1.3 |
| 377 / Conducted | 2452 | 2483.5 | 52.0 | AV | 1000 | 54.0 | 2.0 |
| 377 / Conducted | 2457 | 2483.5 | 72.9 | PEAK | 1000 | 74.0 | 1.1 |
| 377 / Conducted | 2457 | 2483.5 | 49.3 | AV | 1000 | 54.0 | 4.7 |
| 377 / Conducted | 2462 | 2483.5 | 68.8 | PEAK | 1000 | 74.0 | 5.2 |
| 377 / Conducted | 2462 | 2483.5 | 46.7 | AV | 1000 | 54.0 | 7.3 |

WLAN ax-Mode; 40 MHz; MCS0
Applied duty cycle correction (AV): 0 dB

| Variant / Test Method | Ch. Center Freq. [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBµV/m] | Detec-tor | RBW [kHz] | Limit [dBµV/m] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|
| 377 / Conducted | 2422 | 2483.5 | -24.3 | PEAK | 1000 | 74.0 | 98.3 |
| 377 / Conducted | 2422 | 2483.5 | -47.6 | AV | 1000 | 54.0 | 101.6 |
| 377 / Conducted | 2437 | 2483.5 | -24.8 | PEAK | 1000 | 74.0 | 98.8 |
| 377 / Conducted | 2437 | 2483.5 | -49.7 | AV | 1000 | 54.0 | 103.7 |
| 377 / Conducted | 2452 | 2483.5 | -26.9 | PEAK | 1000 | 74.0 | 100.9 |
| 377 / Conducted | 2452 | 2483.5 | -49.0 | AV | 1000 | 54.0 | 103.0 |

WLAN n-Mode; 20 MHz; MCS0; MIMO
Applied duty cycle correction (AV): 0 dB

| Variant / Test Method | Ch. Center Freq. [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBµV/m] | Detec-tor | RBW [kHz] | Limit [dBµV/m] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|
| 377 / Radiated | 2462 | 2483.5 | 48.4 | PEAK | 1000 | 74.0 | 25.6 |
| 377 / Radiated | 2462 | 2483.5 | 34.8 | AV | 1000 | 54.0 | 19.2 |
| 377 / Conducted | 2412 | 2483.5 | 70.2 | PEAK | 1000 | 74.0 | 3.8 |
| 377 / Conducted | 2412 | 2483.5 | 48.6 | AV | 1000 | 54.0 | 5.4 |
| 377 / Conducted | 2417 | 2483.5 | 70.8 | PEAK | 1000 | 74.0 | 3.2 |
| 377 / Conducted | 2417 | 2483.5 | 49.3 | AV | 1000 | 54.0 | 4.7 |
| 377 / Conducted | 2422 | 2483.5 | 68.4 | PEAK | 1000 | 74.0 | 5.6 |
| 377 / Conducted | 2422 | 2483.5 | 49.9 | AV | 1000 | 54.0 | 4.1 |
| 377 / Conducted | 2452 | 2483.5 | 71.3 | PEAK | 1000 | 74.0 | 2.7 |
| 377 / Conducted | 2452 | 2483.5 | 49.5 | AV | 1000 | 54.0 | 4.5 |
| 377 / Conducted | 2457 | 2483.5 | 70.6 | PEAK | 1000 | 74.0 | 3.4 |
| 377 / Conducted | 2457 | 2483.5 | 46.8 | AV | 1000 | 54.0 | 7.2 |
| 377 / Conducted | 2462 | 2483.5 | 69.6 | PEAK | 1000 | 74.0 | 4.4 |
| 377 / Conducted | 2462 | 2483.5 | 47.5 | AV | 1000 | 54.0 | 6.5 |

WLAN n-Mode; 40 MHz; MCS0; MIMO
Applied duty cycle correction (AV): 0.1 dB

| Variant / Test Method | Ch. Center Freq. [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBµV/m] | Detec-tor | RBW [kHz] | Limit [dBµV/m] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|
| 377 / Radiated | 2452 | 2483.5 | 47.9 | PEAK | 1000 | 74.0 | 26.1 |
| 377 / Radiated | 2452 | 2483.5 | 34.8 | AV | 1000 | 54.0 | 19.2 |
| 377 / Conducted | 2422 | 2483.5 | 71.5 | PEAK | 1000 | 74.0 | 2.5 |
| 377 / Conducted | 2422 | 2483.5 | 47.8 | AV | 1000 | 54.0 | 6.2 |
| 377 / Conducted | 2447 | 2483.5 | 71.6 | PEAK | 1000 | 74.0 | 2.4 |
| 377 / Conducted | 2447 | 2483.5 | 48.3 | AV | 1000 | 54.0 | 5.7 |
| 377 / Conducted | 2452 | 2483.5 | 72.5 | PEAK | 1000 | 74.0 | 1.5 |
| 377 / Conducted | 2452 | 2483.5 | 47.4 | AV | 1000 | 54.0 | 6.6 |

WLAN ax-Mode; 20 MHz; MCS0; MIMO
Applied duty cycle correction (AV): 0 dB

| Variant / Test Method | Ch. Center Freq. [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBµV/m] | Detec-tor | RBW [kHz] | Limit [dBµV/m] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|
| 377 / Conducted | 2412 | 2483.5 | 69.3 | PEAK | 1000 | 74.0 | 4.7 |
| 377 / Conducted | 2412 | 2483.5 | 47.4 | AV | 1000 | 54.0 | 6.6 |
| 377 / Conducted | 2417 | 2483.5 | 70.3 | PEAK | 1000 | 74.0 | 3.7 |
| 377 / Conducted | 2417 | 2483.5 | 47.7 | AV | 1000 | 54.0 | 6.3 |
| 377 / Conducted | 2422 | 2483.5 | 67.4 | PEAK | 1000 | 74.0 | 6.6 |
| 377 / Conducted | 2422 | 2483.5 | 48.3 | AV | 1000 | 54.0 | 5.7 |
| 377 / Conducted | 2427 | 2483.5 | 69.1 | PEAK | 1000 | 74.0 | 4.9 |
| 377 / Conducted | 2427 | 2483.5 | 48.6 | AV | 1000 | 54.0 | 5.4 |
| 377 / Conducted | 2432 | 2483.5 | 72.3 | PEAK | 1000 | 74.0 | 1.7 |
| 377 / Conducted | 2432 | 2483.5 | 48.8 | AV | 1000 | 54.0 | 5.2 |
| 377 / Conducted | 2447 | 2483.5 | 72.4 | PEAK | 1000 | 74.0 | 1.6 |
| 377 / Conducted | 2447 | 2483.5 | 50.8 | AV | 1000 | 54.0 | 3.2 |
| 377 / Conducted | 2452 | 2483.5 | 69.3 | PEAK | 1000 | 74.0 | 4.7 |
| 377 / Conducted | 2452 | 2483.5 | 48.6 | AV | 1000 | 54.0 | 5.4 |
| 377 / Conducted | 2457 | 2483.5 | 70.7 | PEAK | 1000 | 74.0 | 3.3 |
| 377 / Conducted | 2457 | 2483.5 | 48.1 | AV | 1000 | 54.0 | 5.9 |
| 377 / Conducted | 2462 | 2483.5 | 69.9 | PEAK | 1000 | 74.0 | 4.1 |
| 377 / Conducted | 2462 | 2483.5 | 46.1 | AV | 1000 | 54.0 | 7.9 |

WLAN ax-Mode; 40 MHz; MCS0; MIMO
Applied duty cycle correction (AV): 0.1 dB

| Variant / Test Method | Ch. Center Freq. [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBµV/m] | Detec-tor | RBW [kHz] | Limit [dBµV/m] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|
| 377 / Conducted | 2422 | 2483.5 | 71.9 | PEAK | 1000 | 74.0 | 2.1 |
| 377 / Conducted | 2422 | 2483.5 | 48.4 | AV | 1000 | 54.0 | 5.6 |
| 377 / Conducted | 2437 | 2483.5 | 67.1 | PEAK | 1000 | 74.0 | 6.9 |
| 377 / Conducted | 2437 | 2483.5 | 47.1 | AV | 1000 | 54.0 | 6.9 |
| 377 / Conducted | 2452 | 2483.5 | 71.6 | PEAK | 1000 | 74.0 | 2.4 |
| 377 / Conducted | 2452 | 2483.5 | 48.2 | AV | 1000 | 54.0 | 5.8 |

Remark: Please see next sub-clause for the measurement plot.
For conducted testing, WLAN SISO results in table above are worst case of both antennas. For radiated testing WLAN SISO results are transmission on Antenna A.

**OFDMA with one active Resource Unit (worst case OFDMA):**

WLAN ax-Mode; 20 MHz; MCS0; MIMO
Applied duty cycle correction (AV): 0 dB

| Variant / Test Method | Ch. Center Freq. [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBµV/m] | Detec-tor | RBW [kHz] | Limit [dBµV/m] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|
| 377 / Conducted | 2412 | 2483.5 | 71.5 | PEAK | 1000 | 74.0 | 2.5 |
| 377 / Conducted | 2412 | 2483.5 | 42.7 | AV | 1000 | 54.0 | 11.3 |
| 377 / Conducted | 2462 | 2483.5 | 71.8 | PEAK | 1000 | 74.0 | 2.2 |
| 377 / Conducted | 2462 | 2483.5 | 43.7 | AV | 1000 | 54.0 | 10.3 |

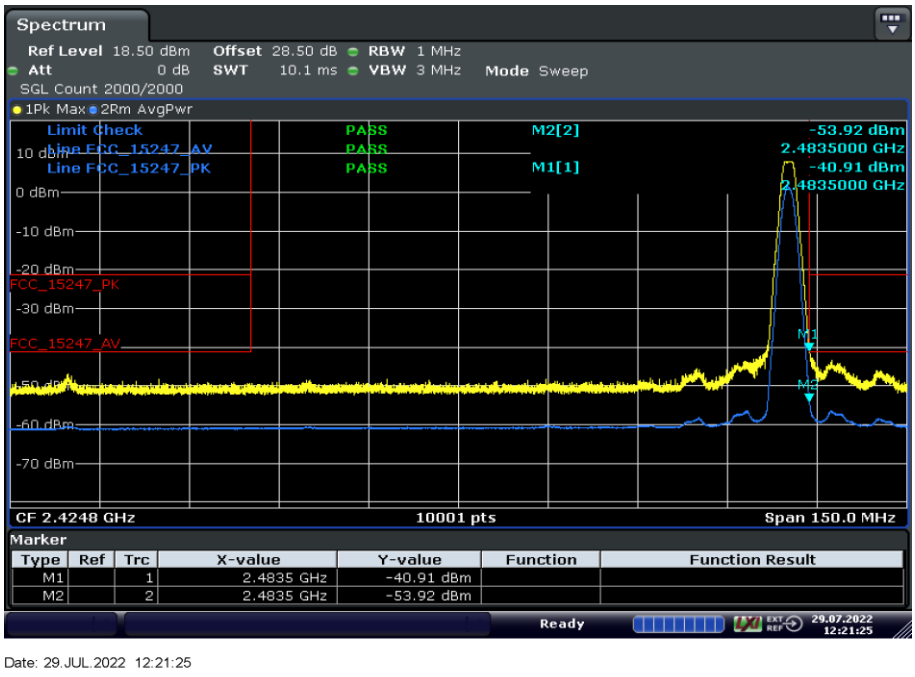
WLAN ax-Mode; 40 MHz; MCS0; MIMO
Applied duty cycle correction (AV): 0.1 dB

| Variant / Test Method | Ch. Center Freq. [MHz] | Band Edge Freq. [MHz] | Spurious Level [dBµV/m] | Detec-tor | RBW [kHz] | Limit [dBµV/m] | Margin to Limit [dB] |
|---|---|---|---|---|---|---|---|
| 377 / Conducted | 2422 | 2483.5 | 71.7 | PEAK | 1000 | 74.0 | 2.3 |
| 377 / Conducted | 2422 | 2483.5 | 41.1 | AV | 1000 | 54.0 | 12.9 |
| 377 / Conducted | 2452 | 2483.5 | 73.6 | PEAK | 1000 | 74.0 | 0.4 |
| 377 / Conducted | 2452 | 2483.5 | 41.6 | AV | 1000 | 54.0 | 12.4 |

Remark: Please see next sub-clause for the measurement plot.

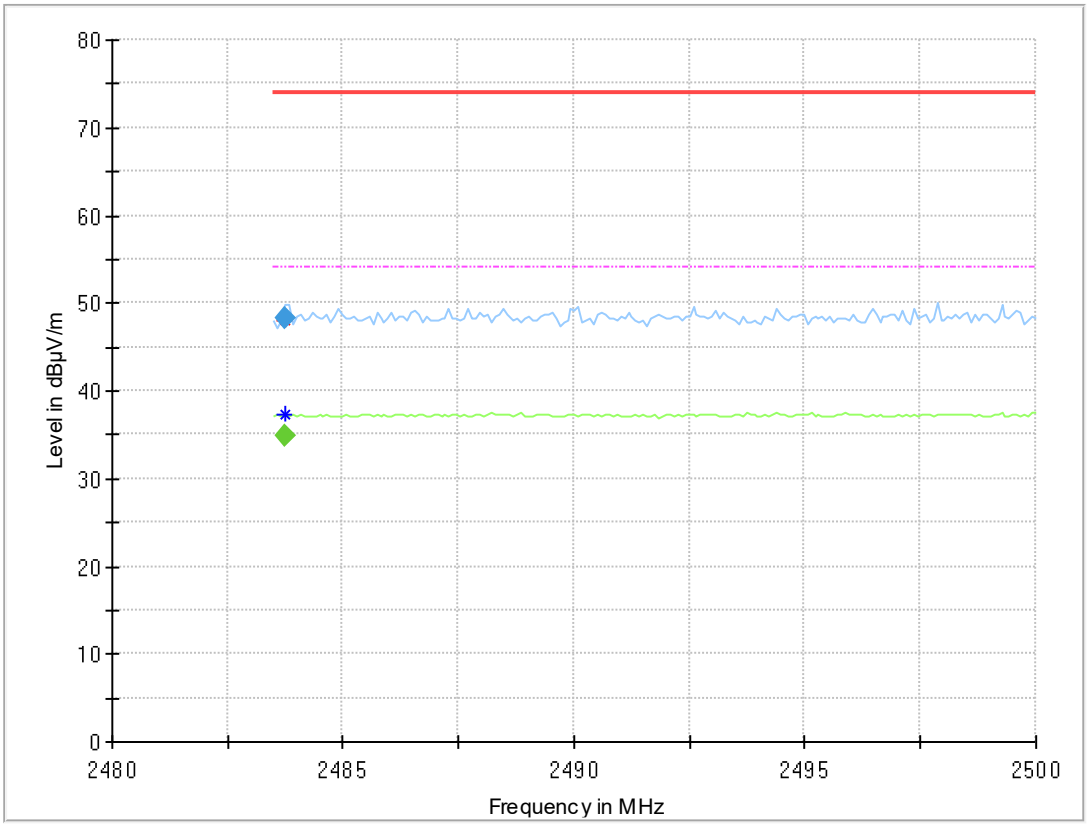
## 5.8.4 MEASUREMENT PLOTS

Radio Technology = Bluetooth LE 2 Mbps, Operating Frequency = high, Band Edge = high (S01_374_BA01)




Date: 29.JUL.2022 12:21:25

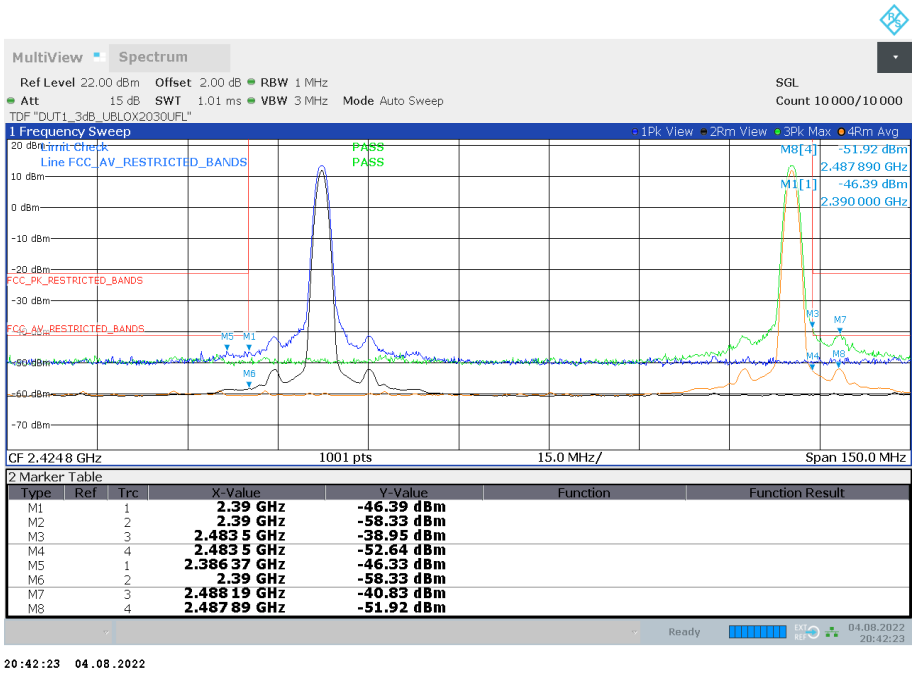
Radio Technology = Bluetooth BDR, Operating Frequency = high, Band Edge = high (S02_377_AB01)



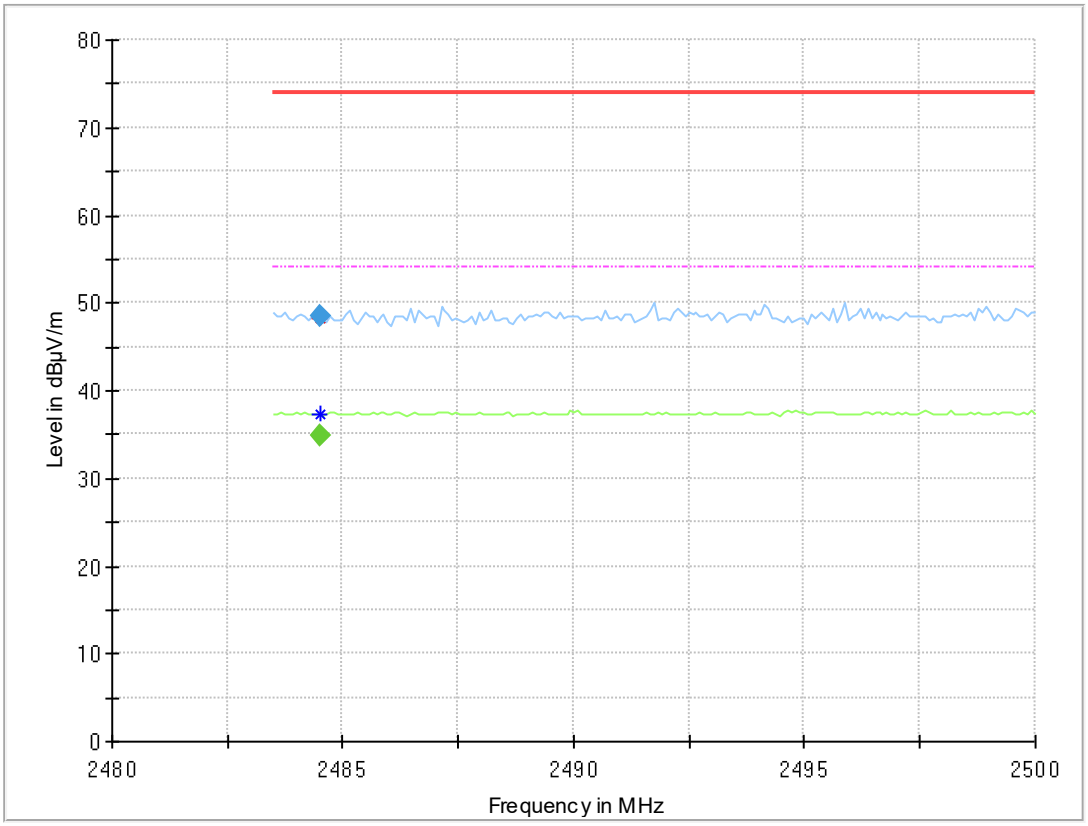

## Final_Result

| Frequency (MHz) | MaxPeak (dBµV/m) | CAverage (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2483.748 | --- | 34.8 | 54.00 | 19.18 | 1000.0 | 1000.000 | 150.0 | H | -19.0 | 105.0 | 5.3 |
| 2483.748 | 48.2 | --- | 74.00 | 25.83 | 1000.0 | 1000.000 | 150.0 | H | -19.0 | 105.0 | 5.3 |

Radio Technology = Bluetooth BDR, Operating Frequency = low + high, Band Edge = low + high
(S01_377_AE01)



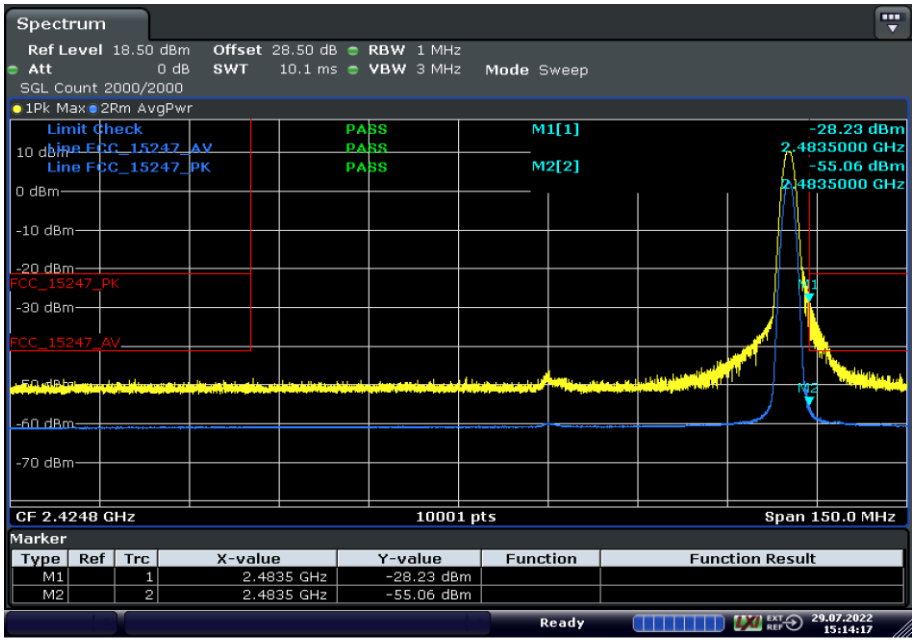
Radio Technology = Bluetooth BDR, Operating Frequency = high, Band Edge = high (S02_374_BB01)




## Final_Result

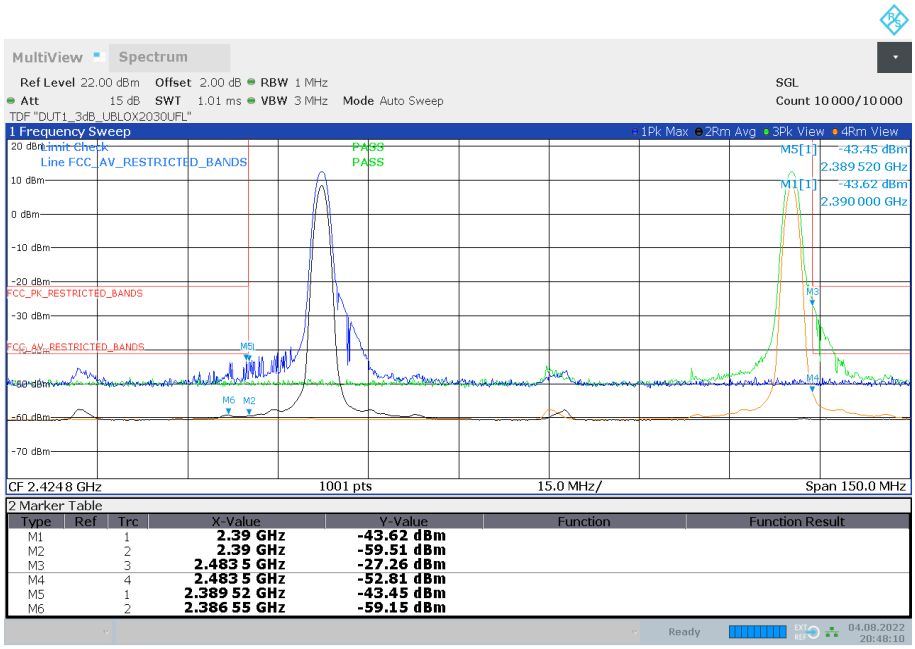
| Frequency (MHz) | MaxPeak (dBµV/m) | CAverage (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2484.490 | --- | 34.9 | 54.00 | 19.07 | 1000.0 | 1000.000 | 150.0 | V | 77.0 | -11.0 | 5.3 |
| 2484.490 | 48.5 | --- | 74.00 | 25.49 | 1000.0 | 1000.000 | 150.0 | V | 77.0 | -11.0 | 5.3 |

Radio Technology = Bluetooth BDR, Operating Frequency = high, Band Edge = high
(S01_374_BA01)



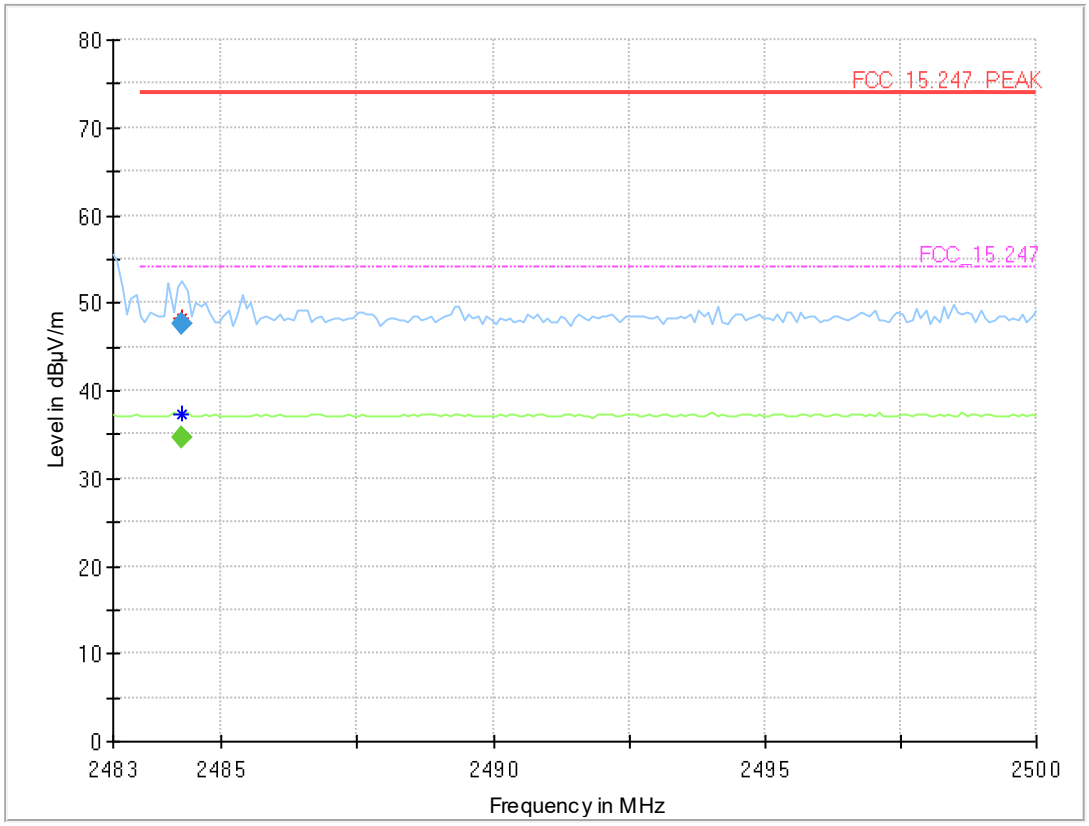

Date: 29.JUL.2022 15:14:17

Radio Technology = Bluetooth EDR 2, Operating Frequency = low + high, Band Edge = low + high
(S01_377_AE01)




20:48:11 04.08.2022

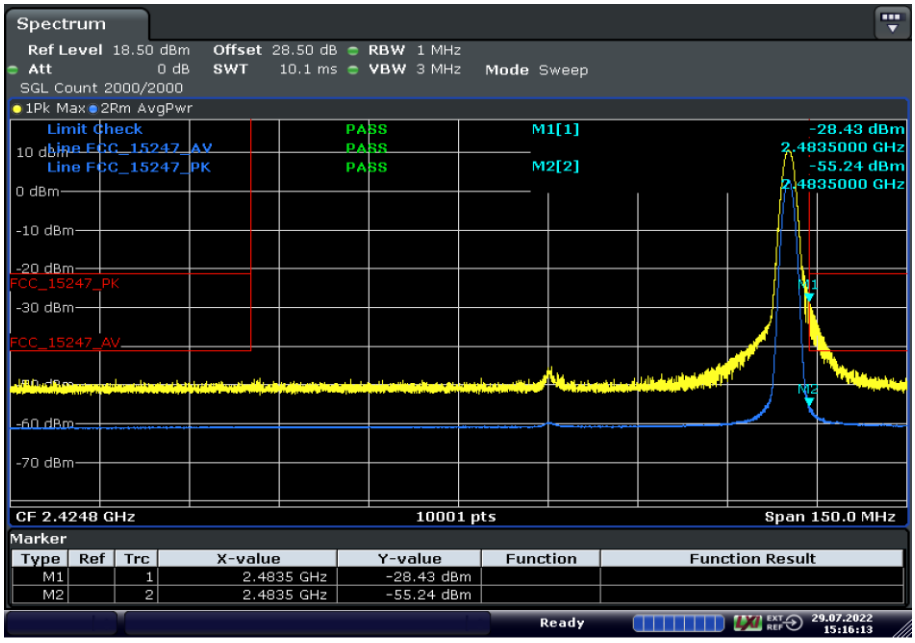
Radio Technology = Bluetooth EDR 2, Operating Frequency = high, Band Edge = high (S02_374_BB01)




## Final_Result

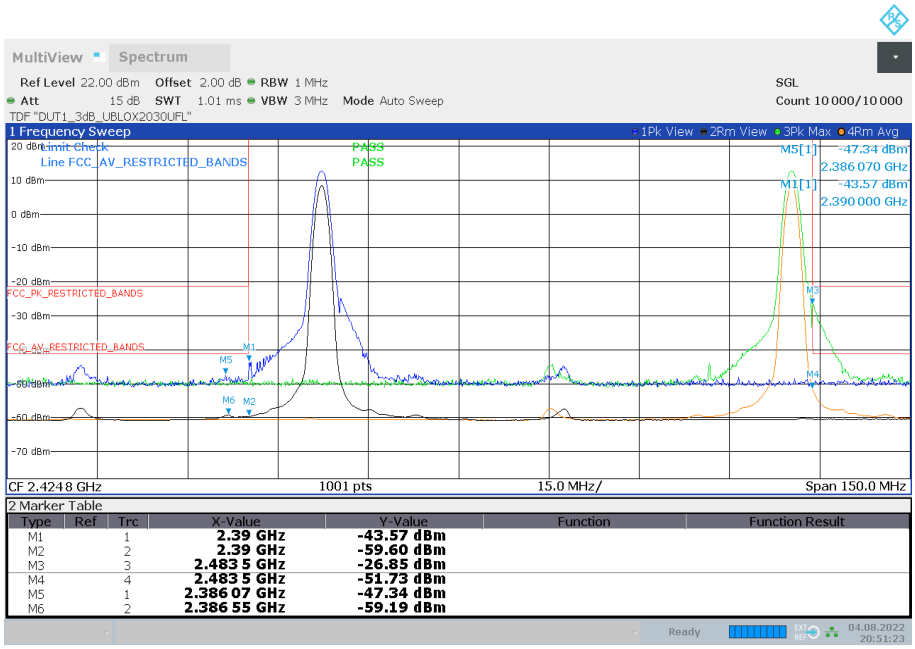
| Frequency (MHz) | MaxPeak (dBµV/m) | CAverage (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2484.275 | --- | 34.7 | 54.00 | 19.33 | 1000.0 | 1000.000 | 150.0 | H | -124.0 | 15.0 | 5.3 |
| 2484.275 | 47.7 | --- | 74.00 | 26.35 | 1000.0 | 1000.000 | 150.0 | H | -124.0 | 15.0 | 5.3 |

Radio Technology = Bluetooth EDR 2, Operating Frequency = high, Band Edge = high
(S01_374_BA01)



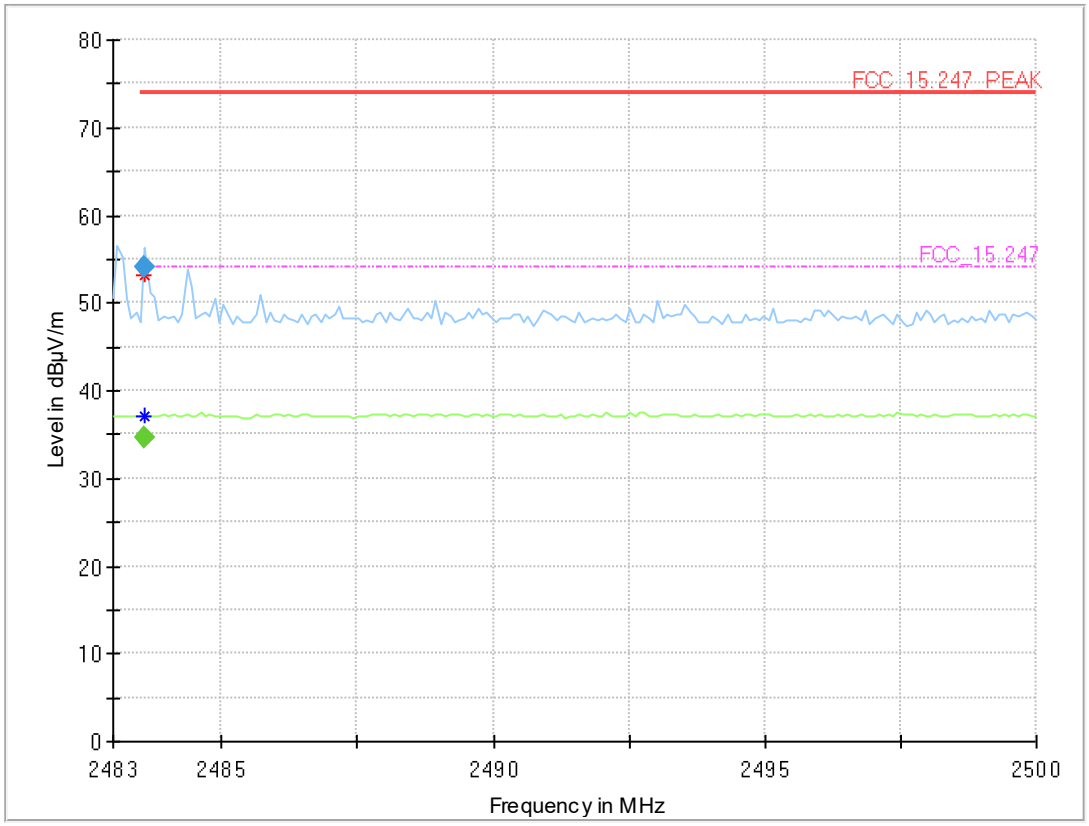

Date: 29.JUL.2022 15:16:13

Radio Technology = Bluetooth EDR 3, Operating Frequency = low + high, Band Edge = low + high
(S01_377_AE01)




20:51:24 04.08.2022

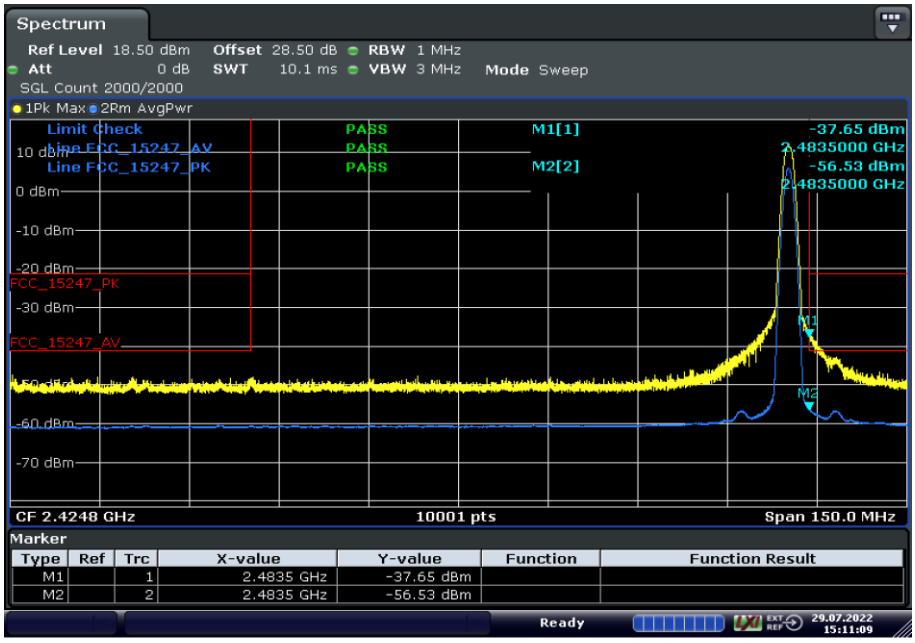
Radio Technology = Bluetooth EDR 3, Operating Frequency = high, Band Edge = high (S02_374_BB01)




## Final_Result

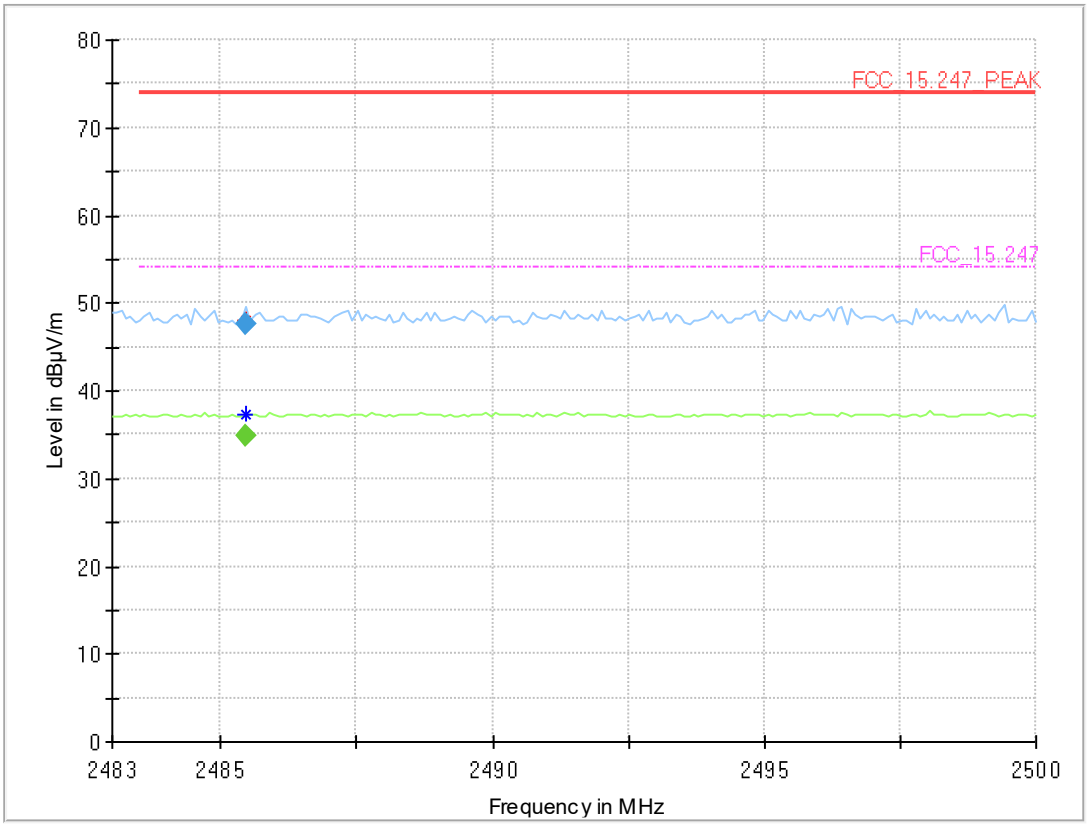
| Frequency (MHz) | MaxPeak (dBµV/m) | CAverage (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2483.595 | --- | 34.7 | 54.00 | 19.29 | 1000.0 | 1000.000 | 150.0 | V | -130.0 | -8.0 | 5.3 |
| 2483.595 | 54.0 | --- | 74.00 | 20.00 | 1000.0 | 1000.000 | 150.0 | V | -130.0 | -8.0 | 5.3 |

Radio Technology = Bluetooth EDR 3, Operating Frequency = high, Band Edge = high (S01_374_BA01)




Date: 29.JUL.2022 15:11:09

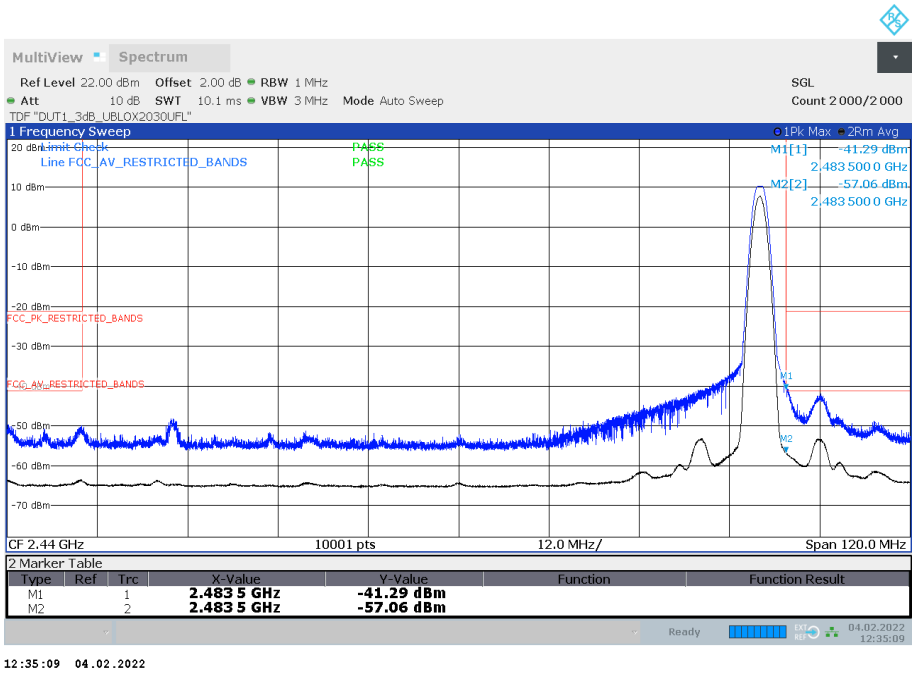
Radio Technology = Bluetooth LE 1 Mbps, Operating Frequency = high, Band Edge = high (S02_377_AD01)




## Final_Result

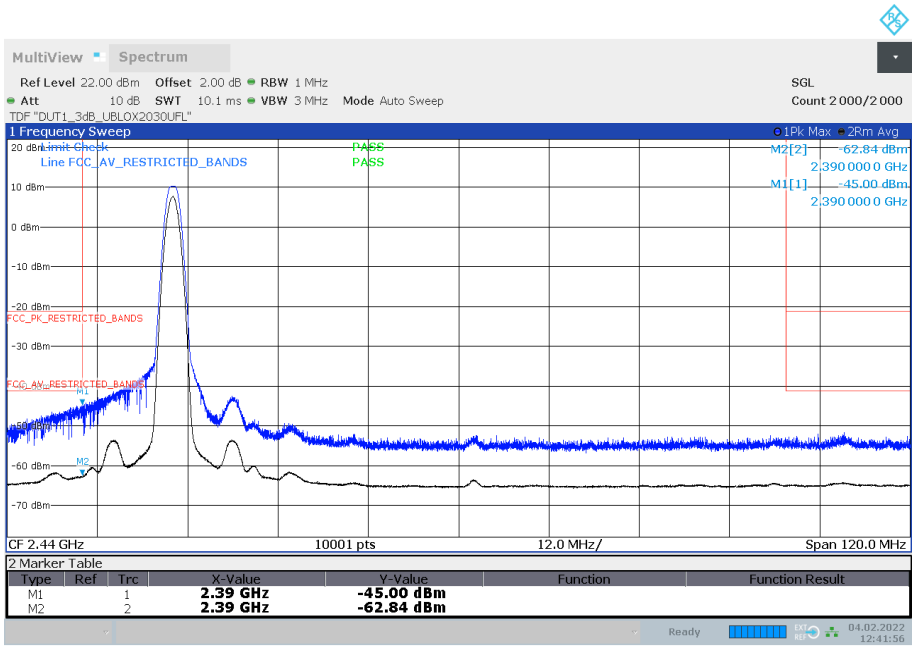
| Frequency (MHz) | MaxPeak (dBµV/m) | CAverage (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2485.465 | --- | 34.8 | 54.00 | 19.23 | 1000.0 | 1000.000 | 150.0 | H | 117.0 | 15.0 | 5.3 |
| 2485.465 | 47.6 | --- | 74.00 | 26.45 | 1000.0 | 1000.000 | 150.0 | H | 117.0 | 15.0 | 5.3 |

Radio Technology = Bluetooth LE 1 Mbps, Operating Frequency = low + high, Band Edge = low + high
(S01_377_AA01)




12:35:09 04.02.2022

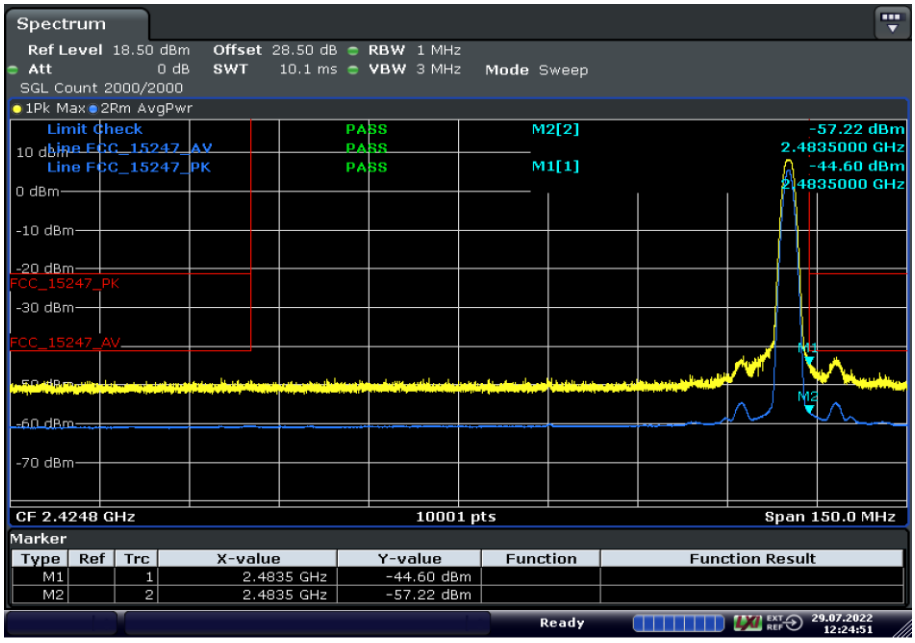
High Channel, high BE




12:41:57 04.02.2022

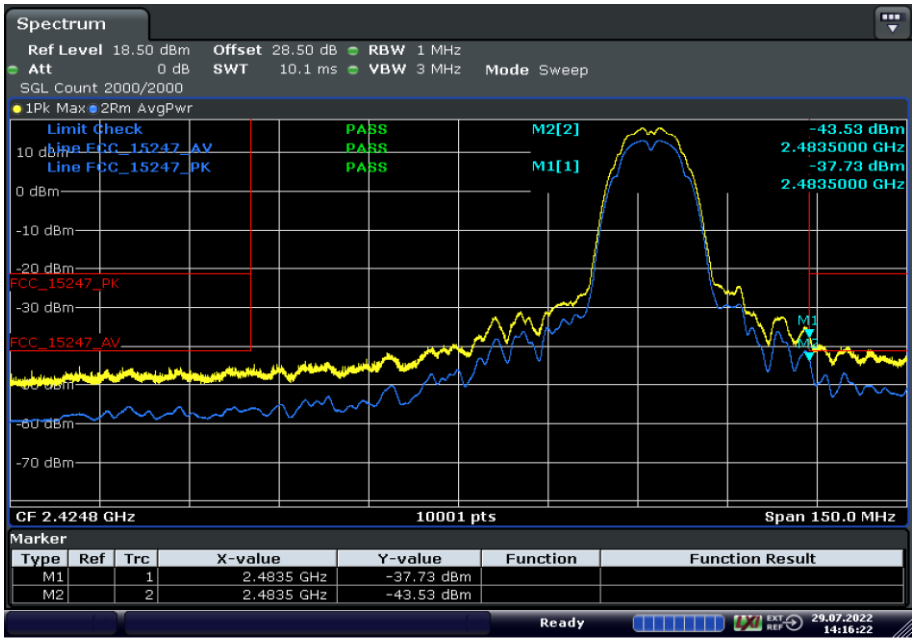
Low Channel, low BE

Radio Technology = Bluetooth LE 1 Mbps, Operating Frequency = high, Band Edge = high (S01_374_BA01)



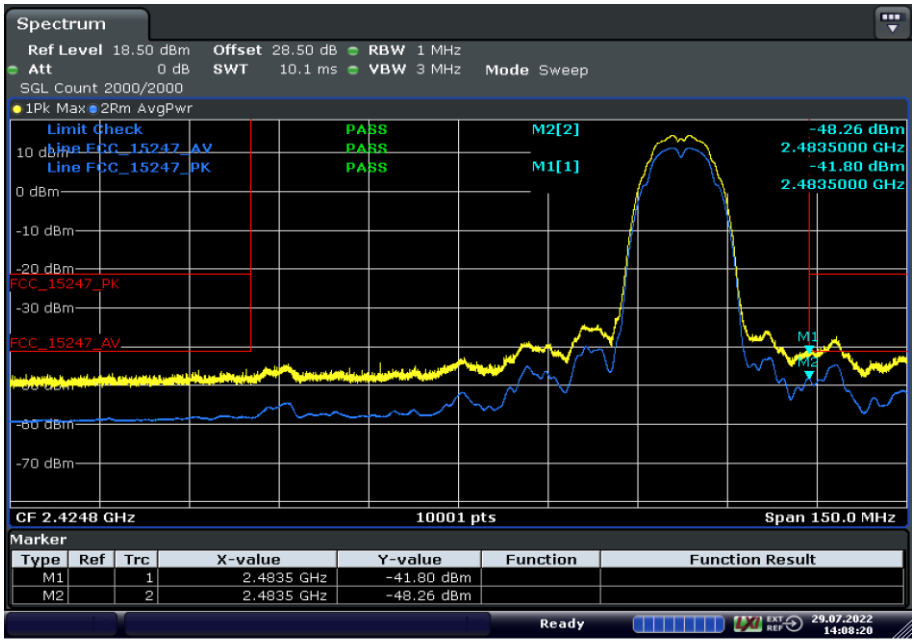

Date: 29.JUL.2022 12:24:51

Radio Technology = WLAN b, Operating Frequency = low + high, Band Edge = low + high (S01_374_BA01)



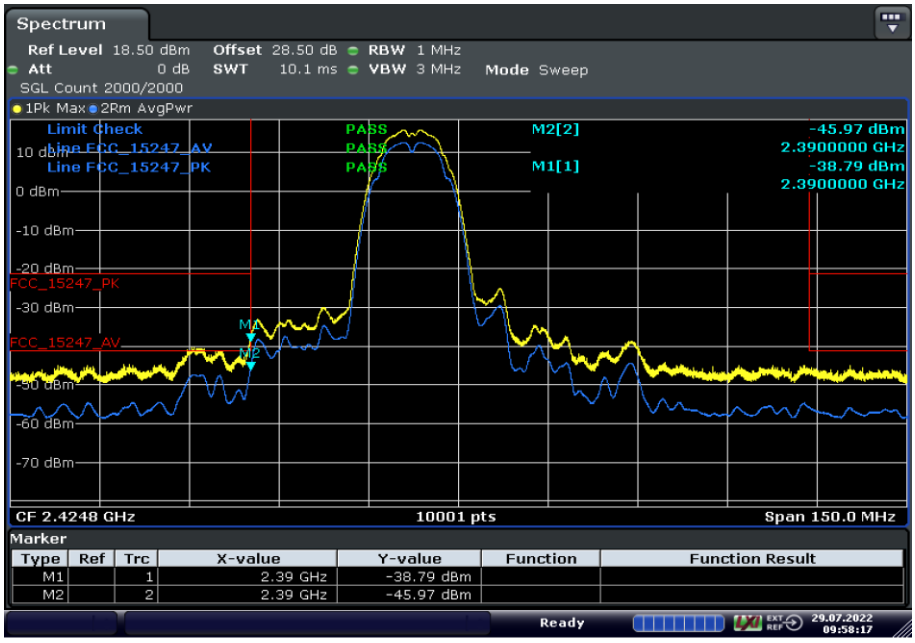

Date: 29.JUL.2022 14:16:23

2nd highest Channel, high BE



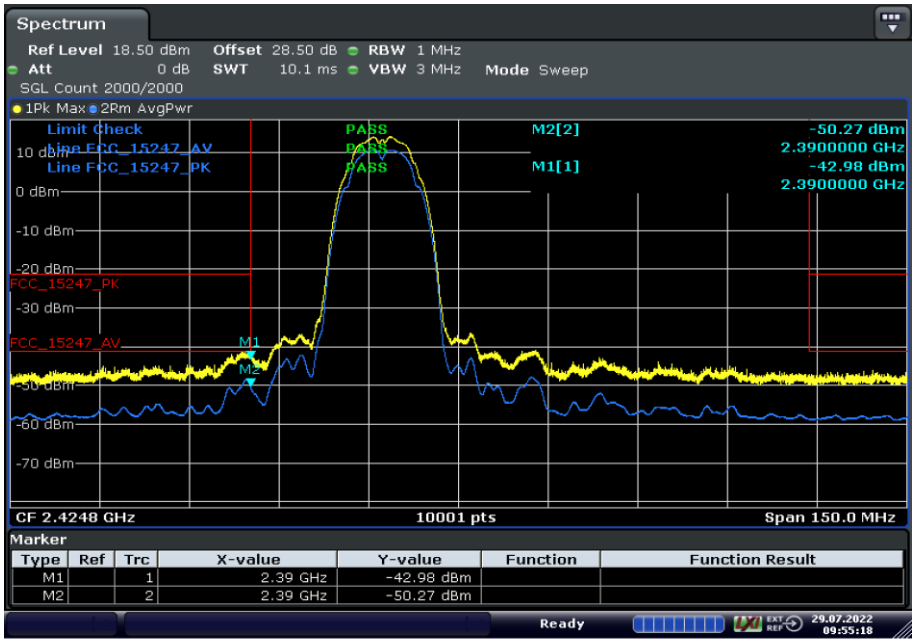

Date: 29.JUL.2022 14:08:21

Highest Channel, high BE




Date: 29.JUL.2022 09:58:17

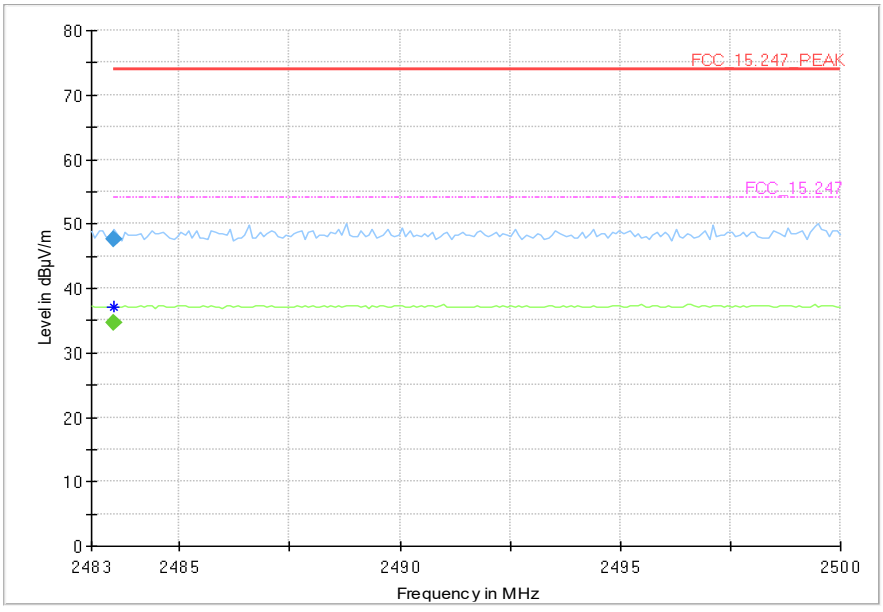
2nd lowest Channel, low BE




Date: 29.JUL.2022 09:55:18

Lowest Channel, low BE

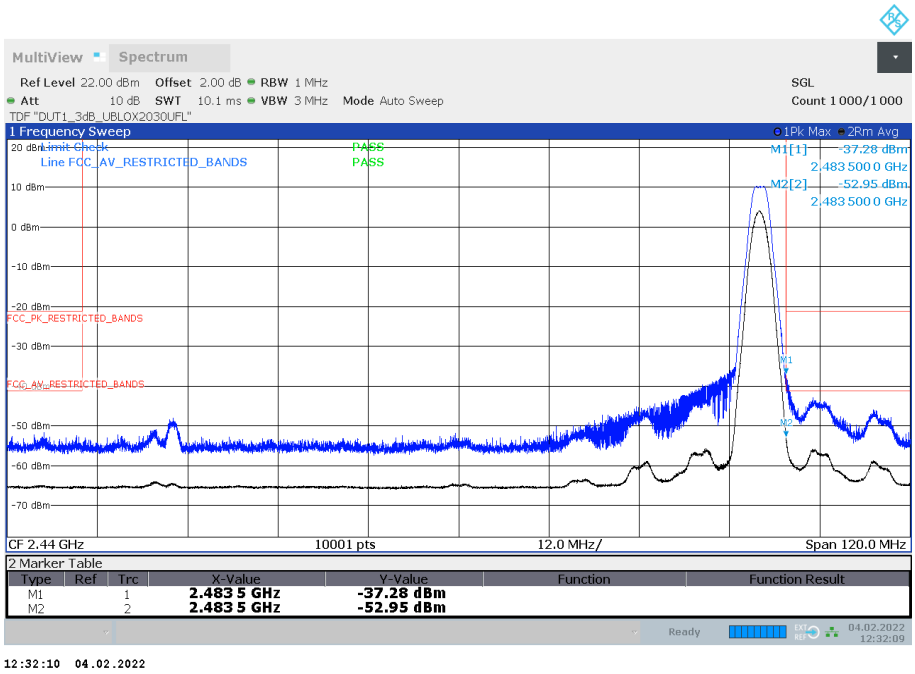
Radio Technology = Bluetooth LE 2 Mbps, Operating Frequency = high, Band Edge = high (S02_374_BB01)




## Final_Result

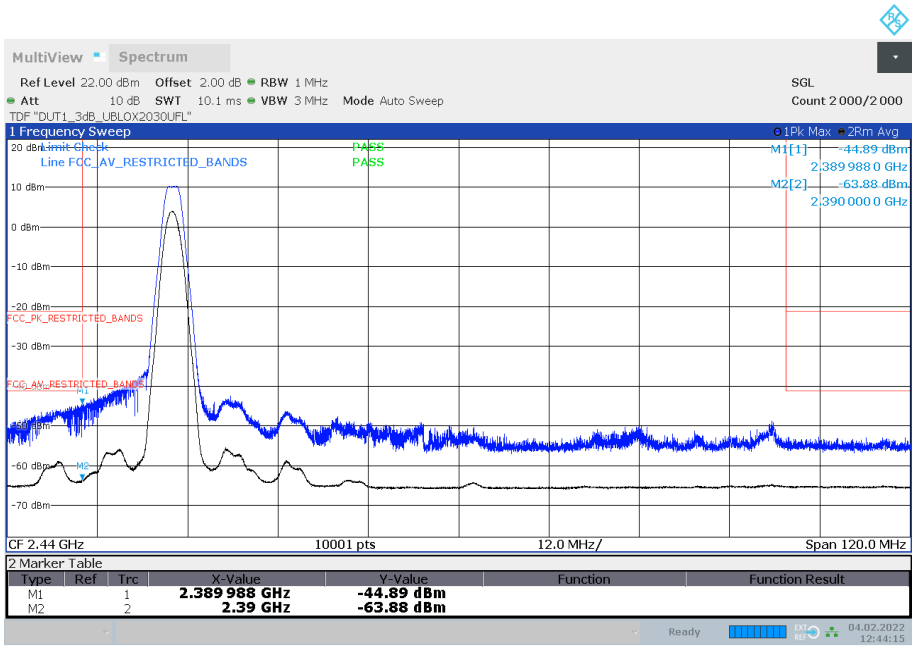
| Frequency (MHz) | MaxPeak (dBµV/m) | CAverage (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2483.510 | --- | 34.7 | 54.00 | 19.33 | 1000.0 | 1000.000 | 150.0 | H | -69.0 | 81.0 | 5.3 |
| 2483.510 | 47.7 | --- | 74.00 | 26.33 | 1000.0 | 1000.000 | 150.0 | H | -69.0 | 81.0 | 5.3 |

Radio Technology = Bluetooth LE 2 Mbps, Operating Frequency = low + high, Band Edge = low + high
(S01_377_AA01)




12:32:10 04.02.2022

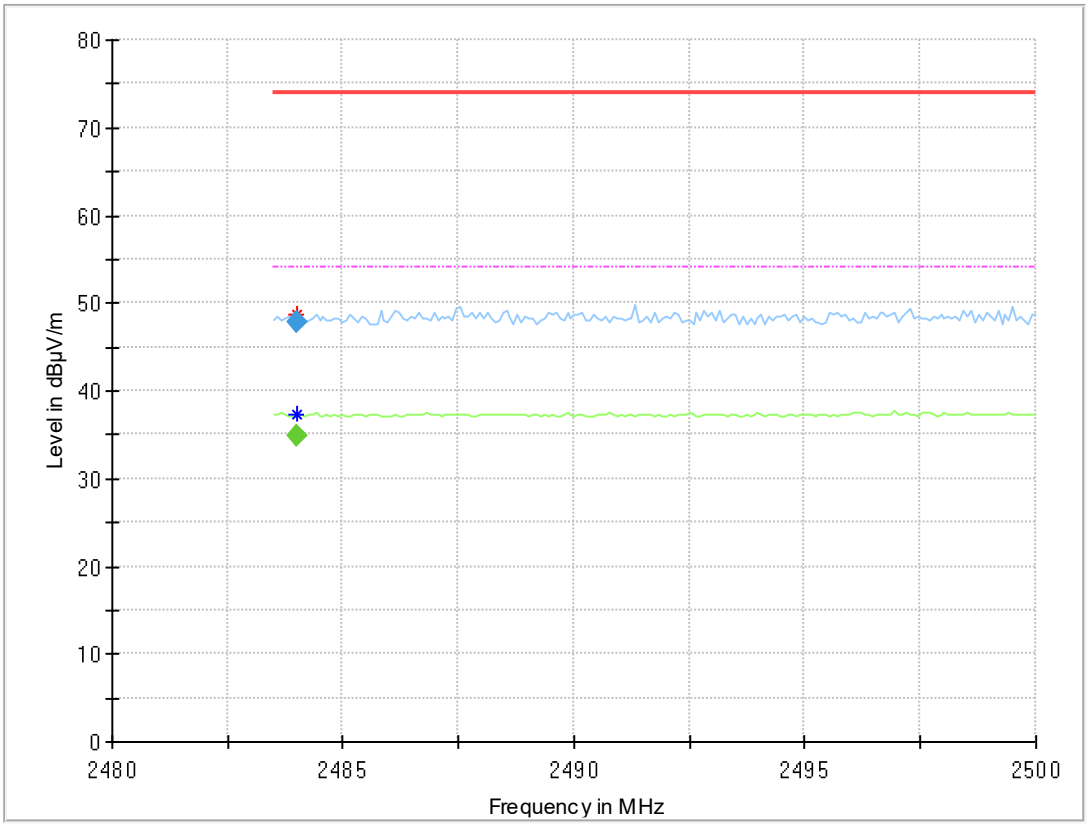
High Channel, high BE




12:44:16 04.02.2022

Low Channel, low BE

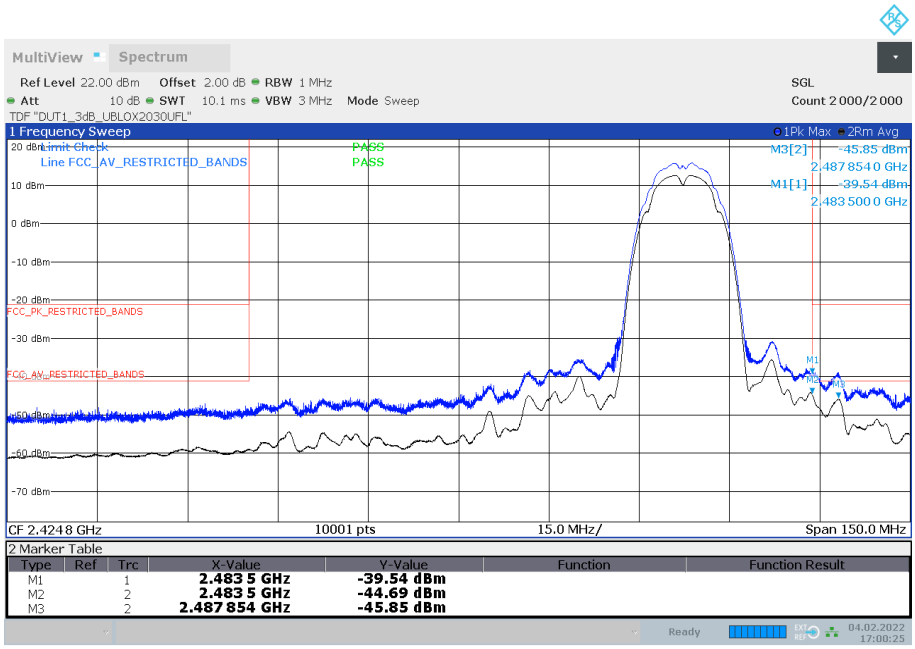
Radio Technology = WLAN b, Operating Frequency = high, Band Edge = high
(S02_377_AD01)




## Final_Result

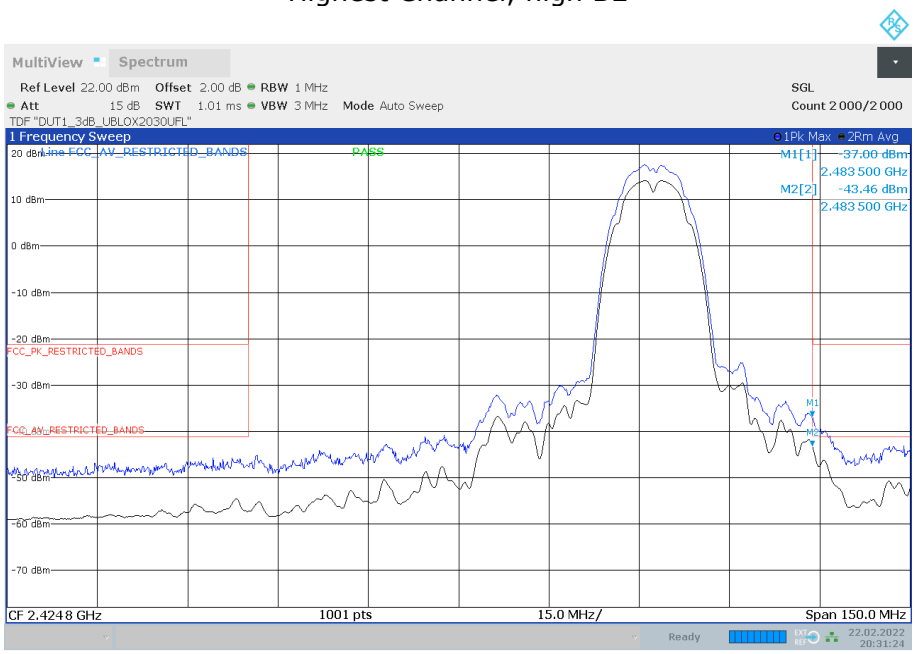
| Frequency (MHz) | MaxPeak (dBµV/m) | CAverage (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2483.995 | --- | 34.8 | 54.00 | 19.21 | 1000.0 | 1000.000 | 150.0 | V | -171.0 | 5.0 | 5.3 |
| 2483.995 | 47.7 | --- | 74.00 | 26.27 | 1000.0 | 1000.000 | 150.0 | V | -171.0 | 5.0 | 5.3 |

Radio Technology = WLAN b, Operating Frequency = low + high, Band Edge = low + high (S01_377_AA01)



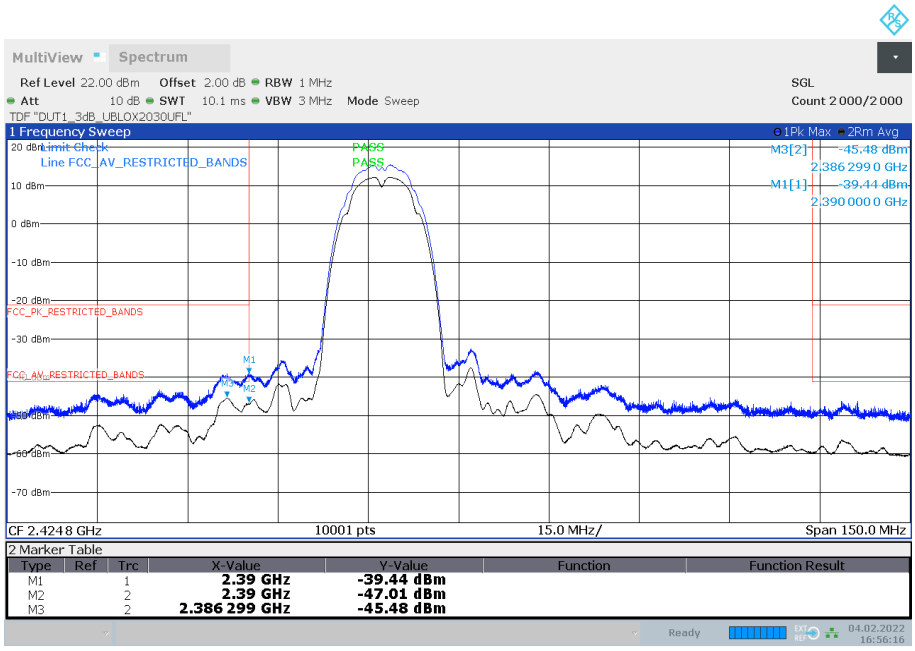

17:00:25 04.02.2022

Highest Channel, high BE



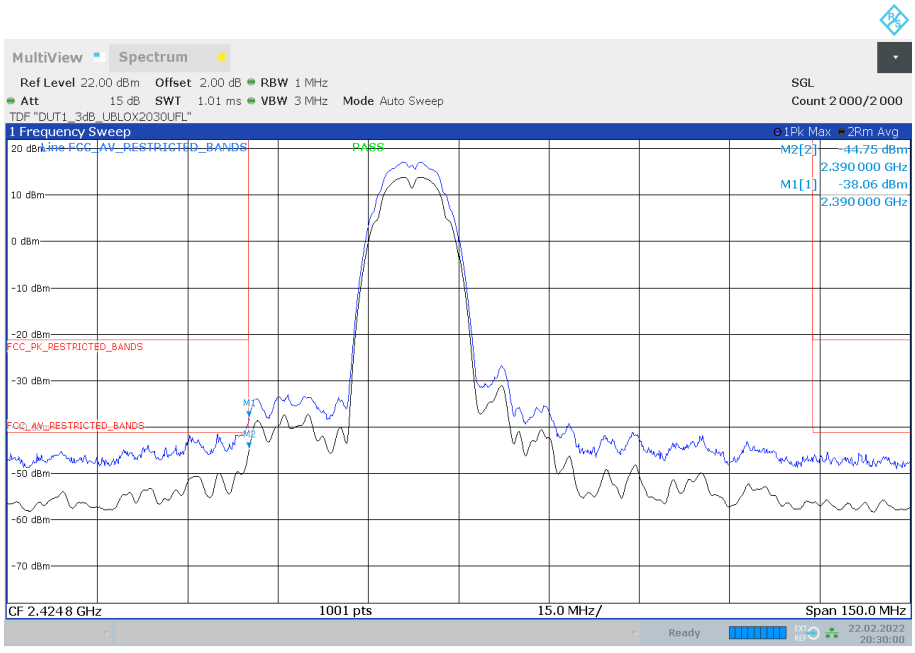

20:31:24 22.02.2022

2nd highest Channel, high BE




16:56:16 04.02.2022

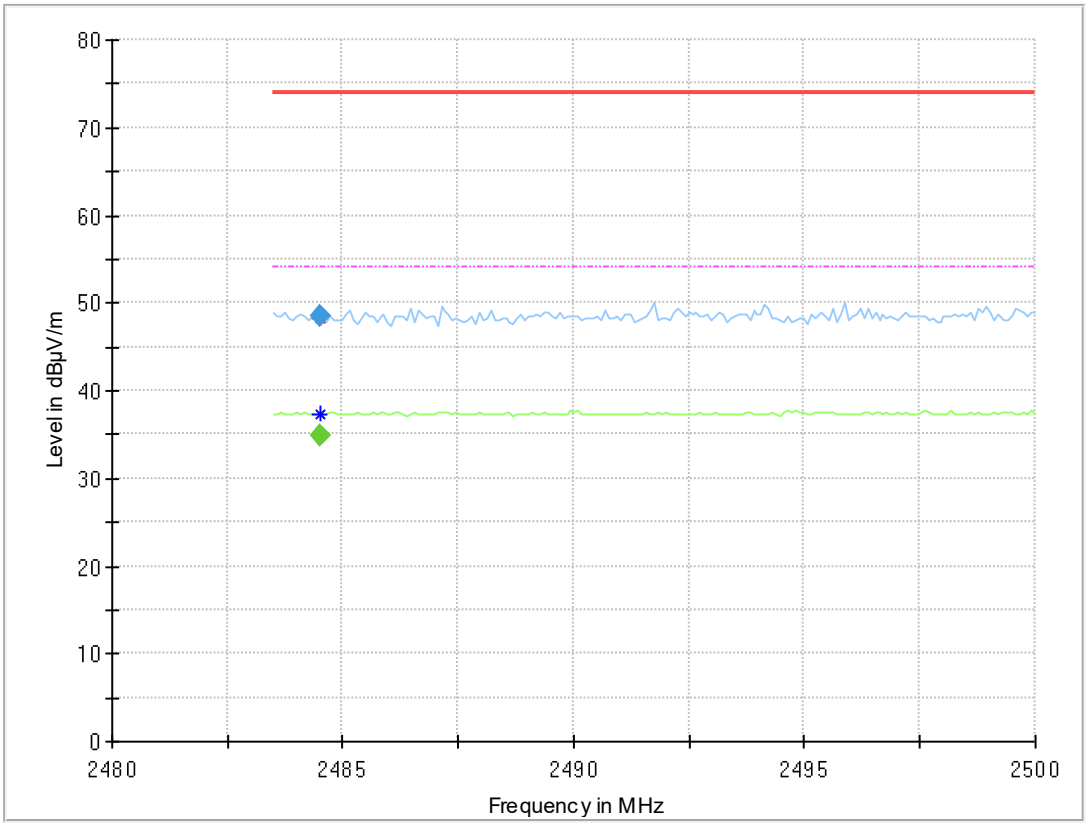
Lowest Channel, low BE




20:30:00 22.02.2022

2nd lowest Channel, low BE

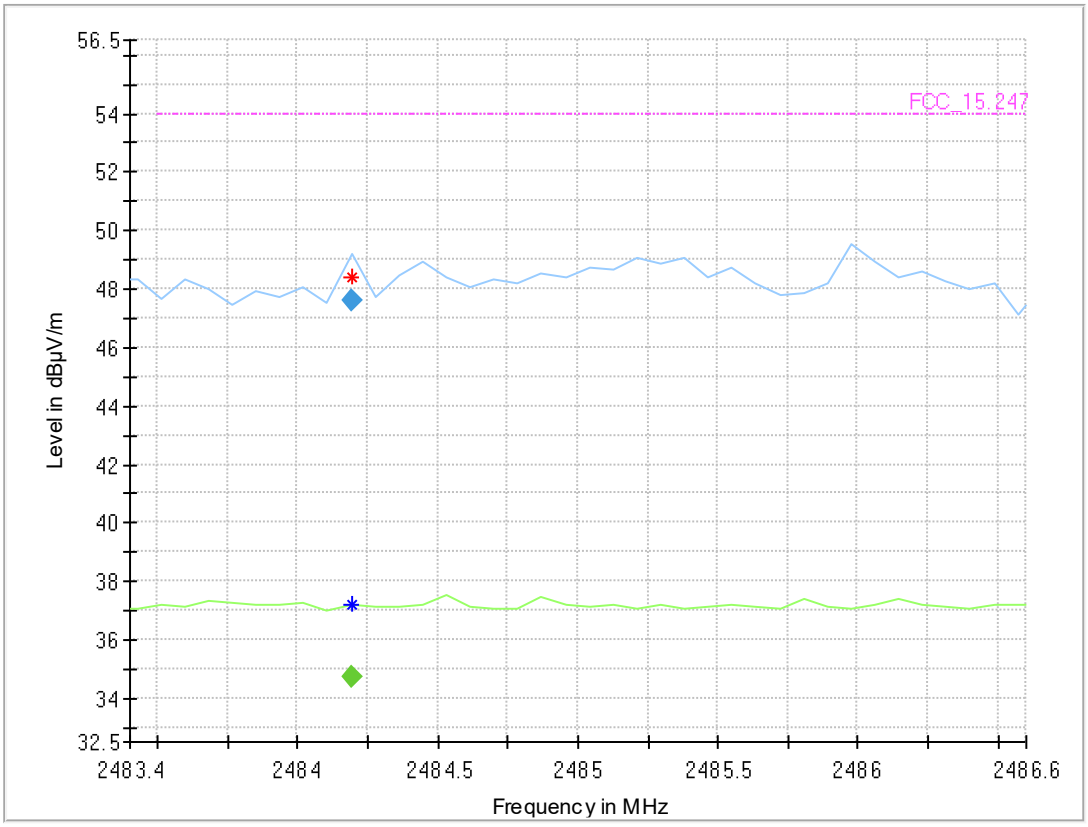
Radio Technology = WLAN b, Operating Frequency = high, Band Edge = high
(S02_374_BB01)




## Final_Result

| Frequency (MHz) | MaxPeak (dBµV/m) | CAverage (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2484.490 | --- | 34.9 | 54.00 | 19.07 | 1000.0 | 1000.000 | 150.0 | V | 77.0 | -11.0 | 5.3 |
| 2484.490 | 48.5 | --- | 74.00 | 25.49 | 1000.0 | 1000.000 | 150.0 | V | 77.0 | -11.0 | 5.3 |

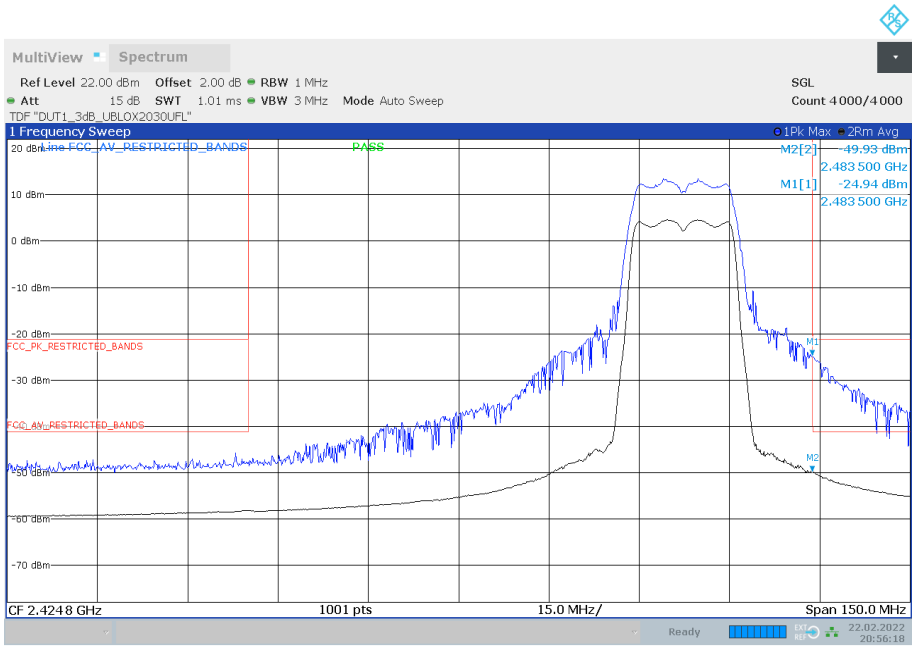
Radio Technology = WLAN g, Operating Frequency = high, Band Edge = high
(S02_377_AD01)




## Final_Result

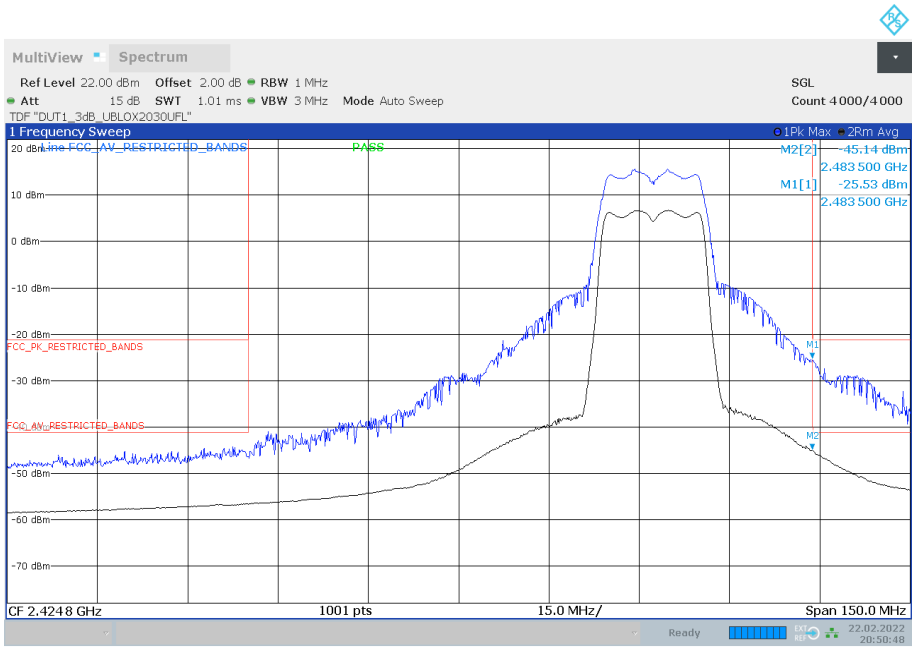
| Frequency (MHz) | MaxPeak (dBµV/m) | CAverage (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2484.190 | --- | 34.7 | 54.00 | 19.29 | 1000.0 | 1000.000 | 150.0 | V | -4.0 | 12.0 | 5.3 |
| 2484.190 | 47.6 | --- | 74.00 | 26.42 | 1000.0 | 1000.000 | 150.0 | V | -4.0 | 12.0 | 5.3 |

Radio Technology = WLAN g, Operating Frequency = low + high, Band Edge = low + high (S01_377_AA01)



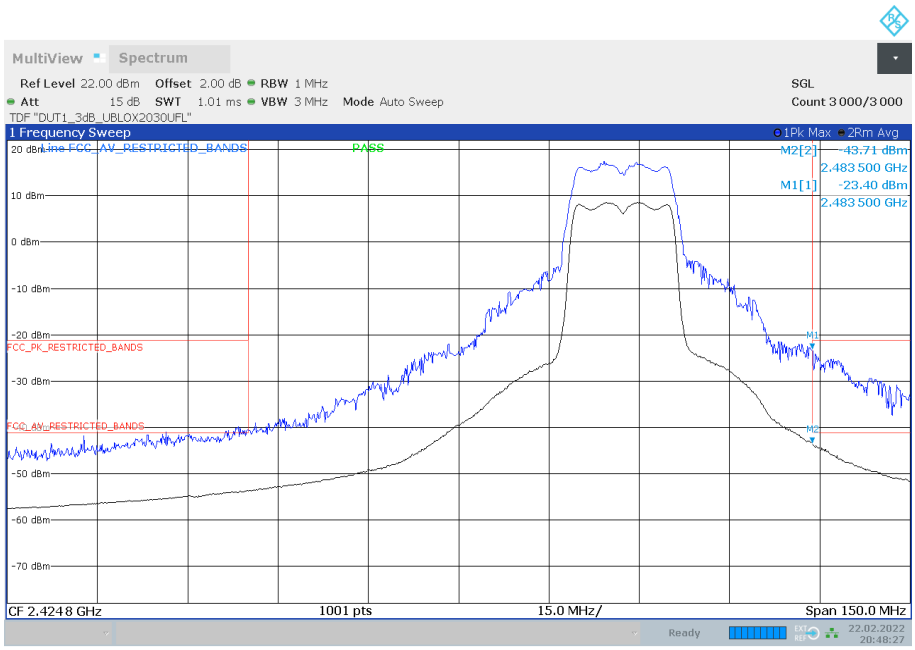

20:56:18 22.02.2022

Highest Channel, high BE



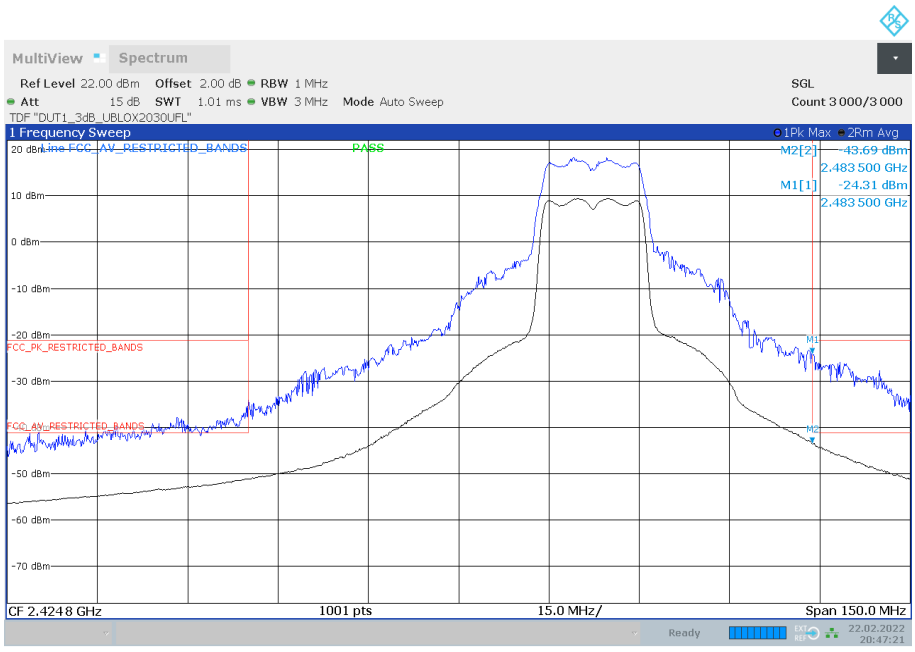

20:50:49 22.02.2022

2nd highest Channel, high BE



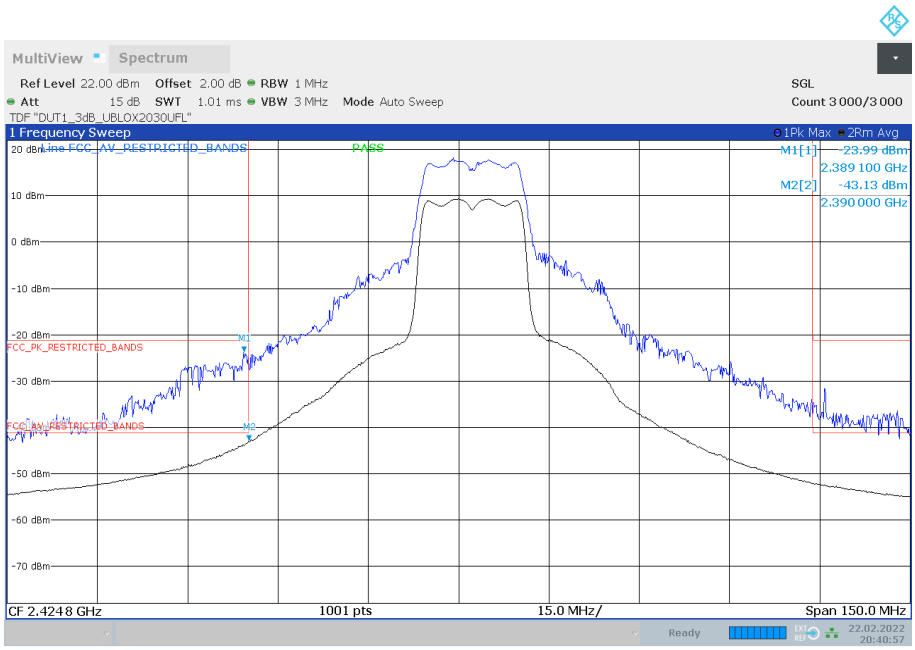

20:48:27 22.02.2022

3rd highest Channel, high BE



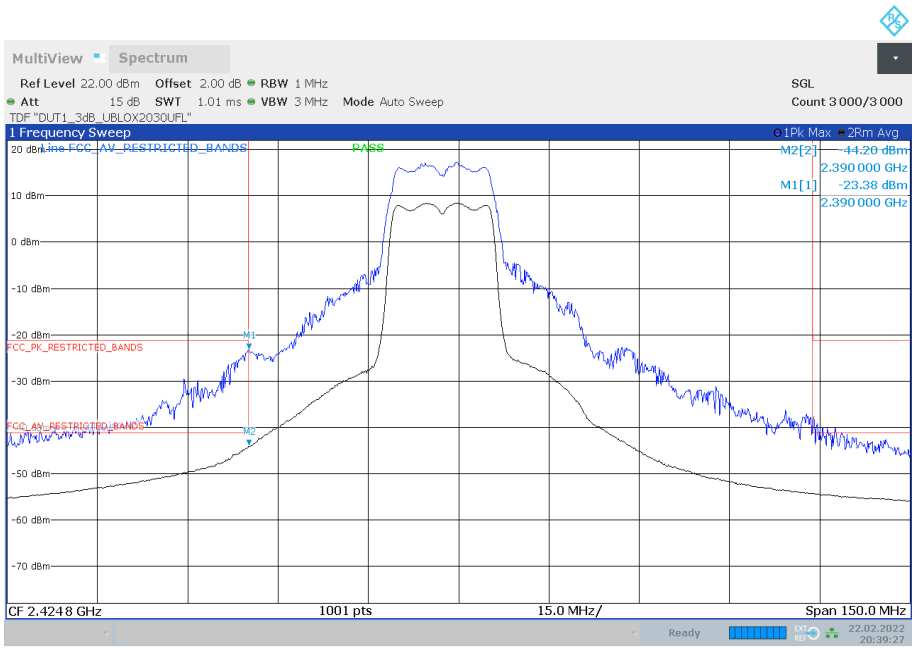

20:47:21 22.02.2022

4th highest Channel, high BE



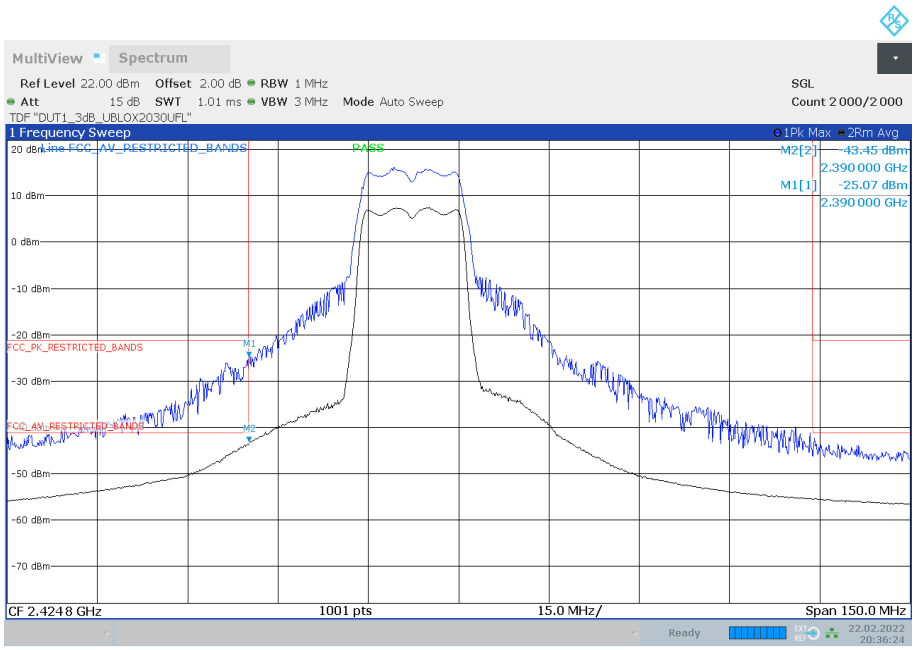

20:40:57 22.02.2022

4th lowest Channel, low BE



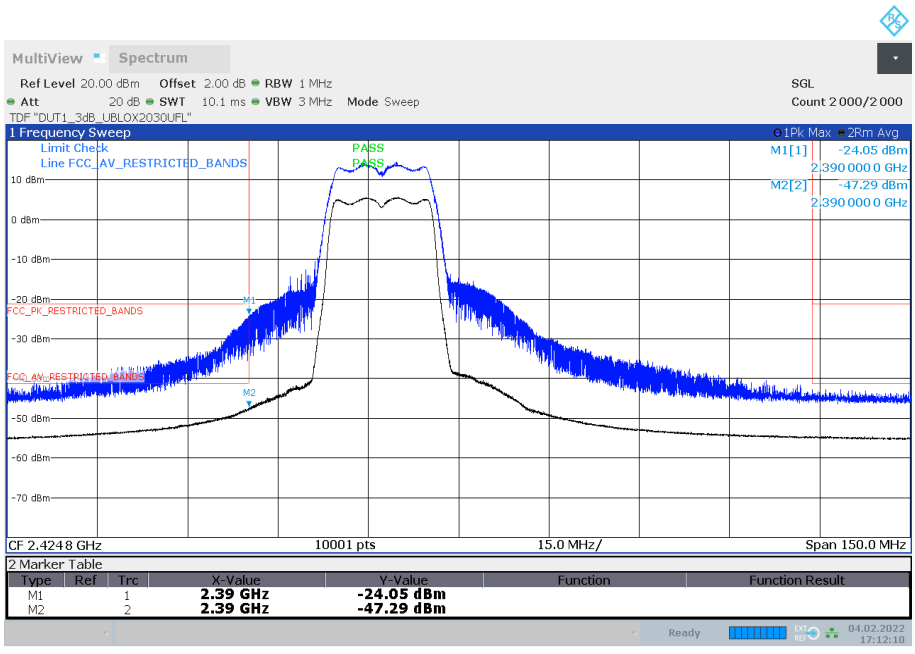

20:39:27 22.02.2022

3rd lowest Channel, low BE




20:36:24 22.02.2022

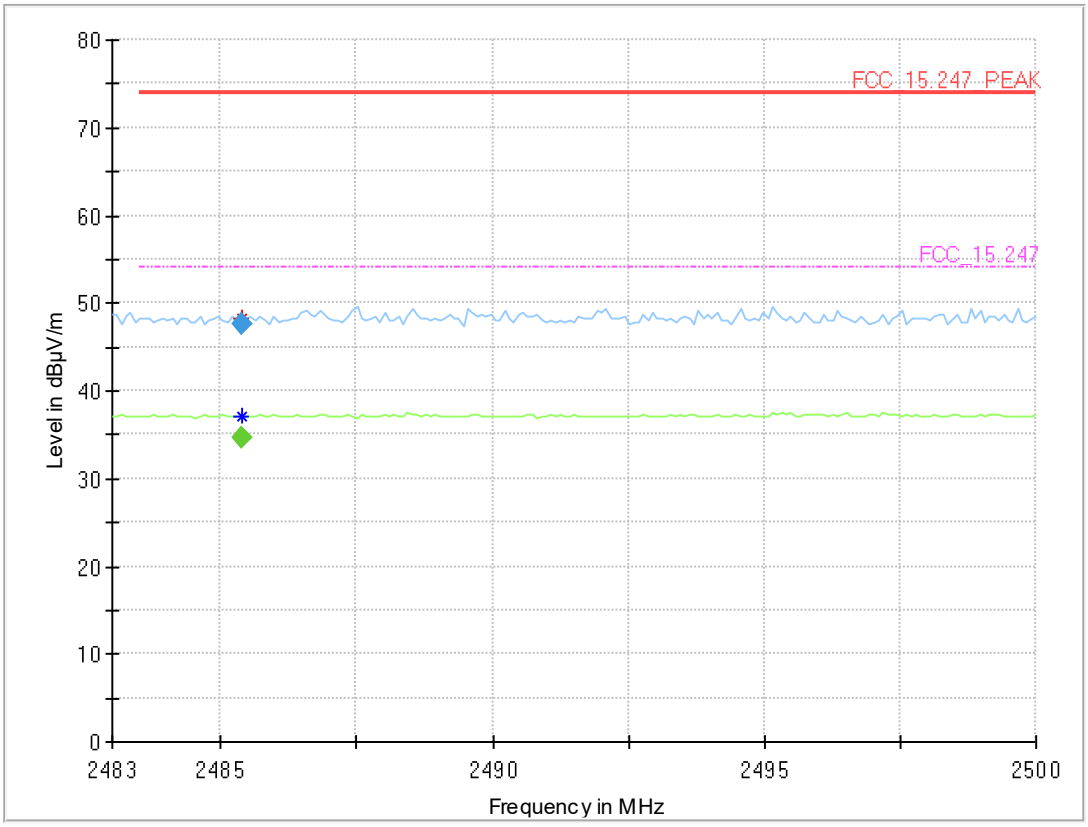
2nd lowest Channel, low BE




17:12:10 04.02.2022

Lowest Channel, low BE

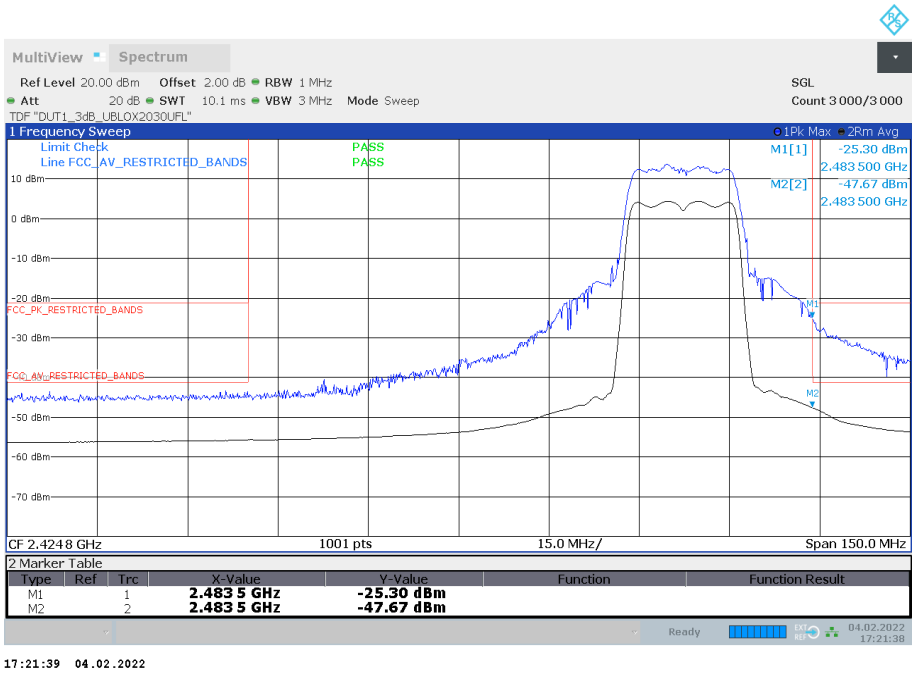
Radio Technology = WLAN n 20 MHz, Operating Frequency = high, Band Edge = high (S02_377_AD01)




## Final_Result

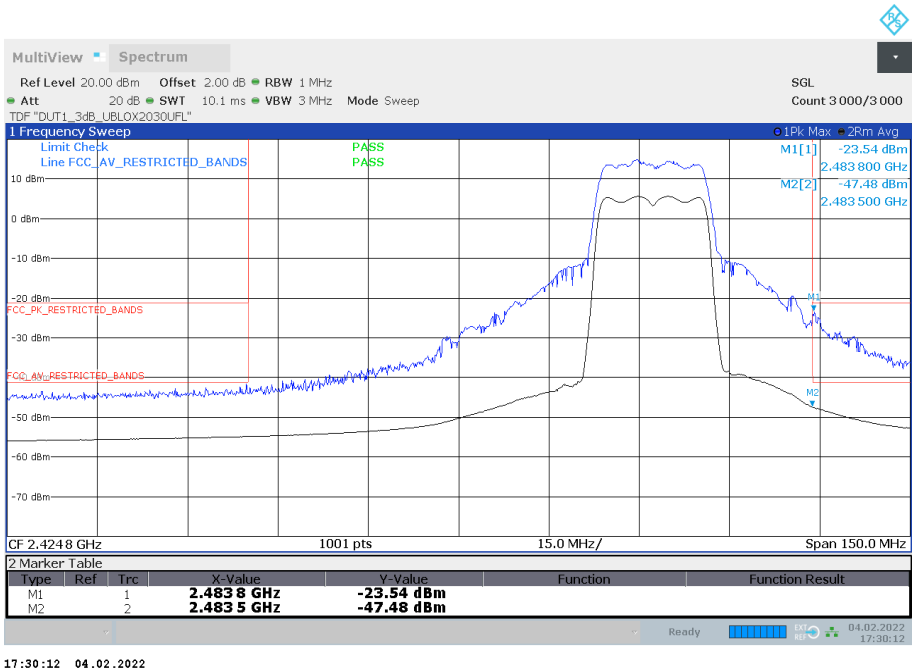
| Frequency (MHz) | MaxPeak (dBµV/m) | CAverage (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2485.380 | --- | 34.7 | 54.00 | 19.29 | 1000.0 | 1000.000 | 150.0 | V | -120.0 | 82.0 | 5.3 |
| 2485.380 | 47.6 | --- | 74.00 | 26.37 | 1000.0 | 1000.000 | 150.0 | V | -120.0 | 82.0 | 5.3 |

Radio Technology = WLAN n 20 MHz, Operating Frequency = low + high, Band Edge = low + high
(S01_377_AA01)



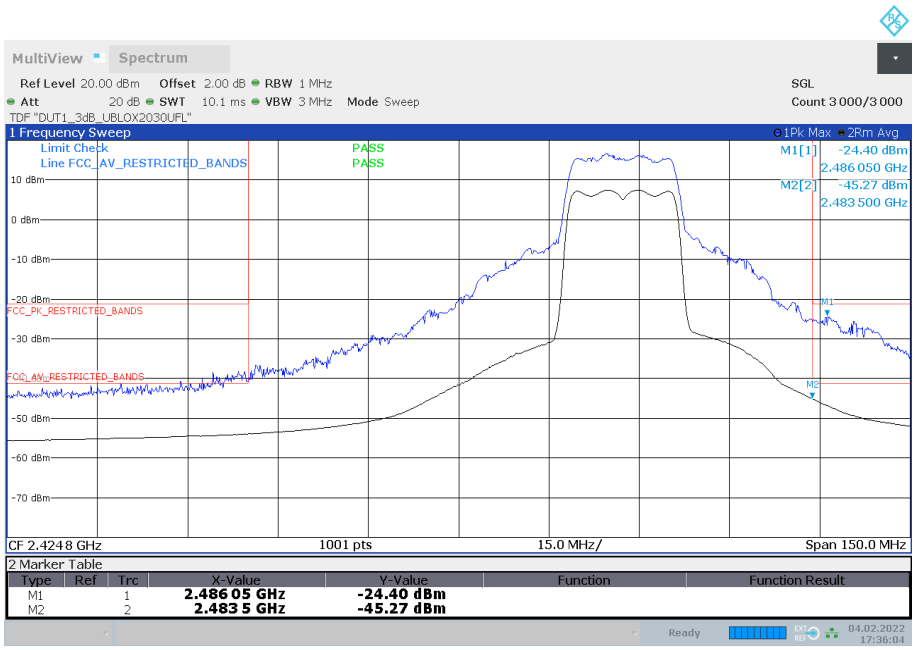

17:21:39 04.02.2022

Highest Channel, high BE



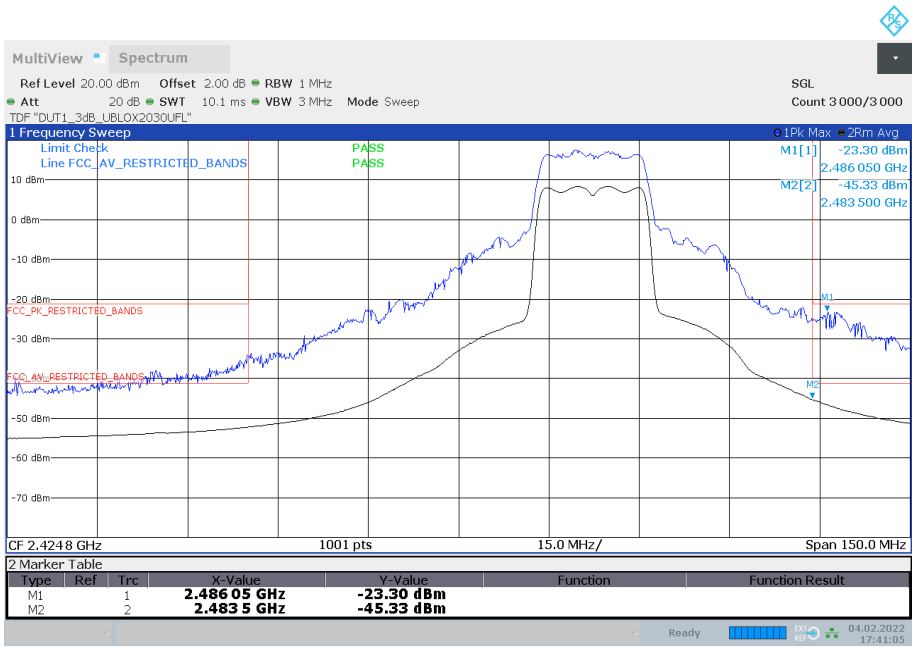

17:30:12 04.02.2022

2nd highest Channel, high BE



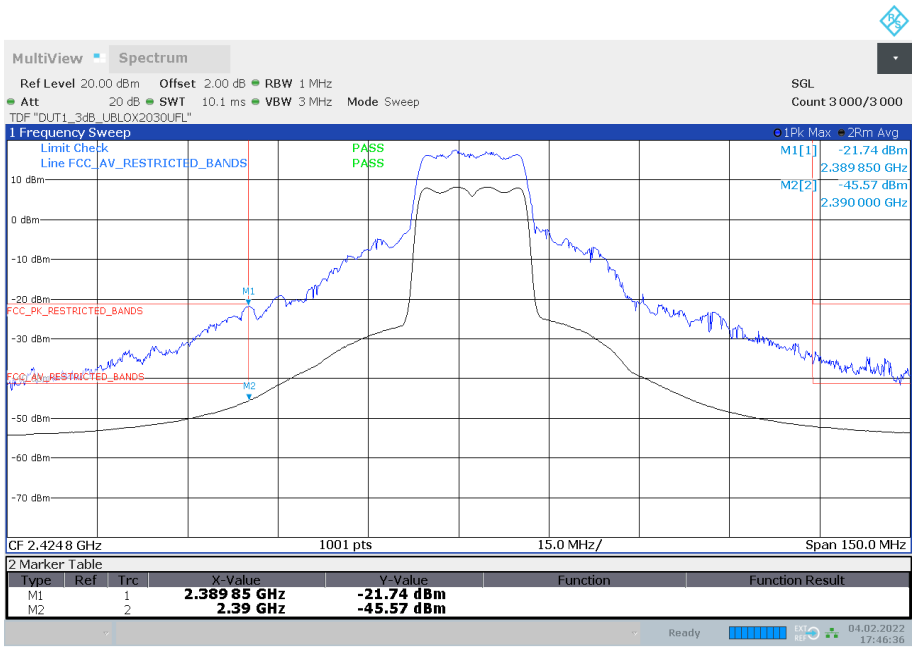

17:36:05 04.02.2022

3rd highest Channel, high BE



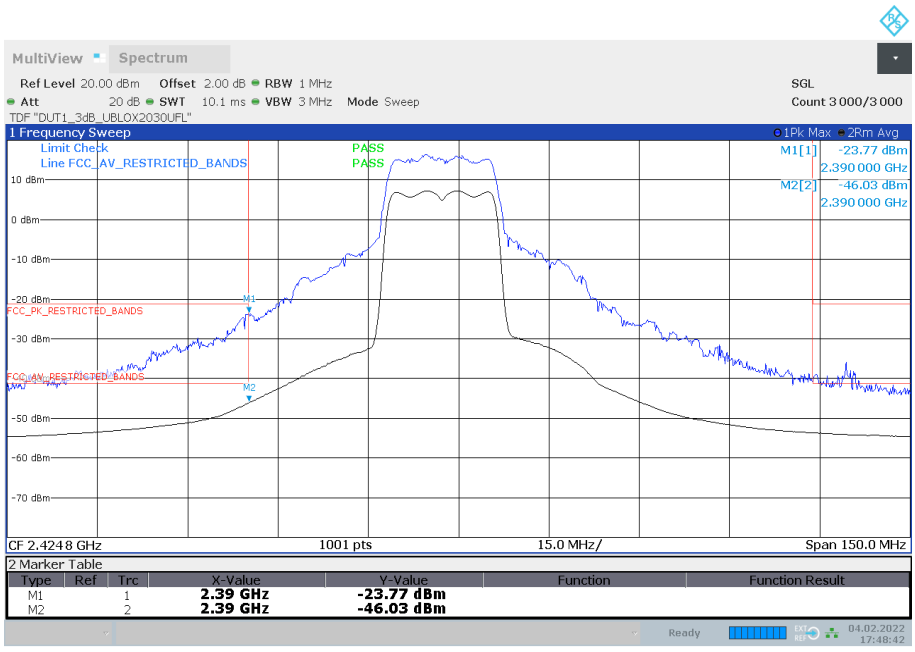

17:41:05 04.02.2022

4th highest Channel, high BE



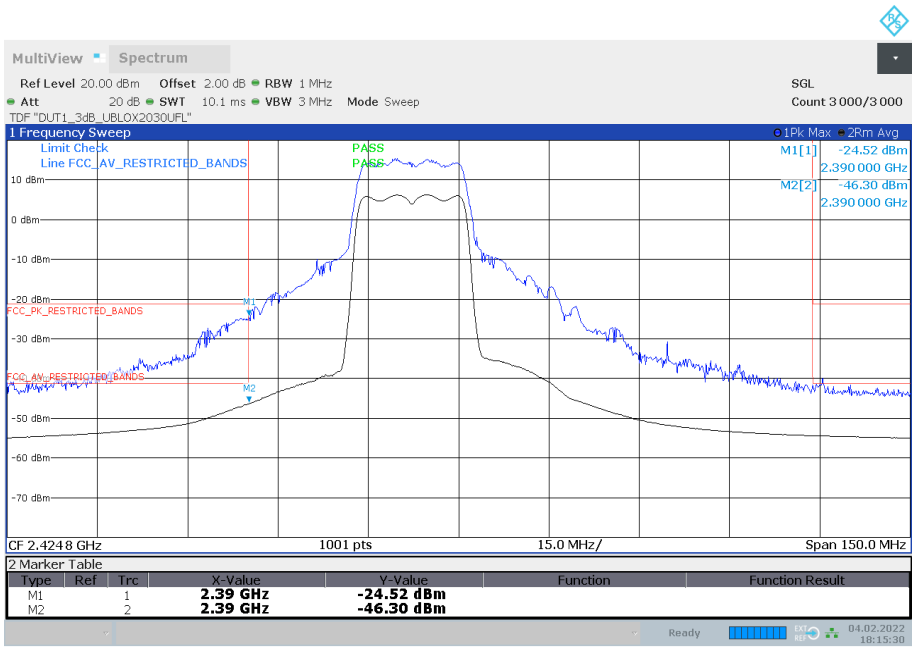

17:46:36 04.02.2022

4th lowest Channel, low BE



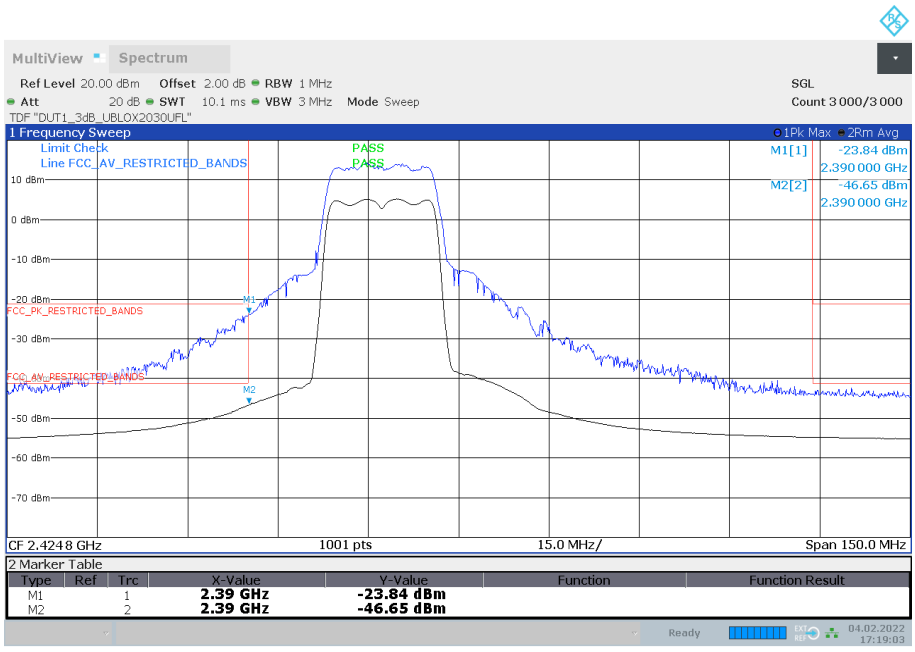

17:48:42 04.02.2022

3rd lowest Channel, low BE




18:15:31 04.02.2022

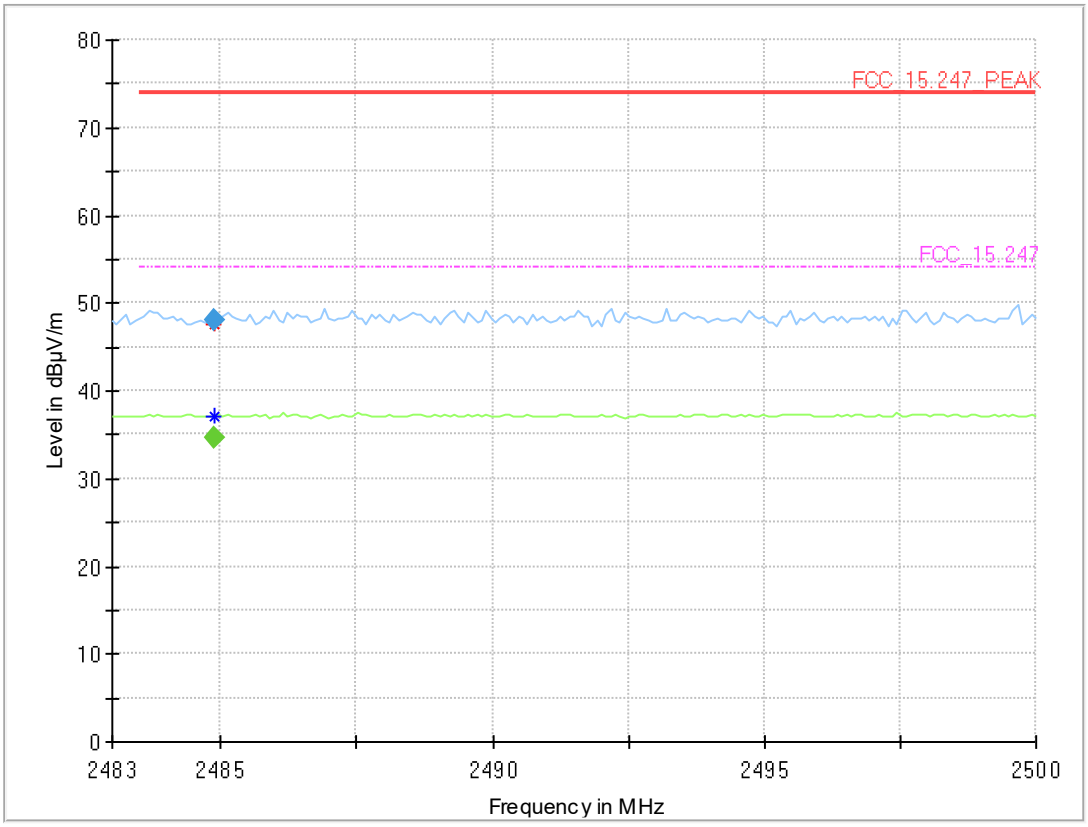
2nd lowest Channel, low BE




17:19:03 04.02.2022

Lowest Channel, low BE

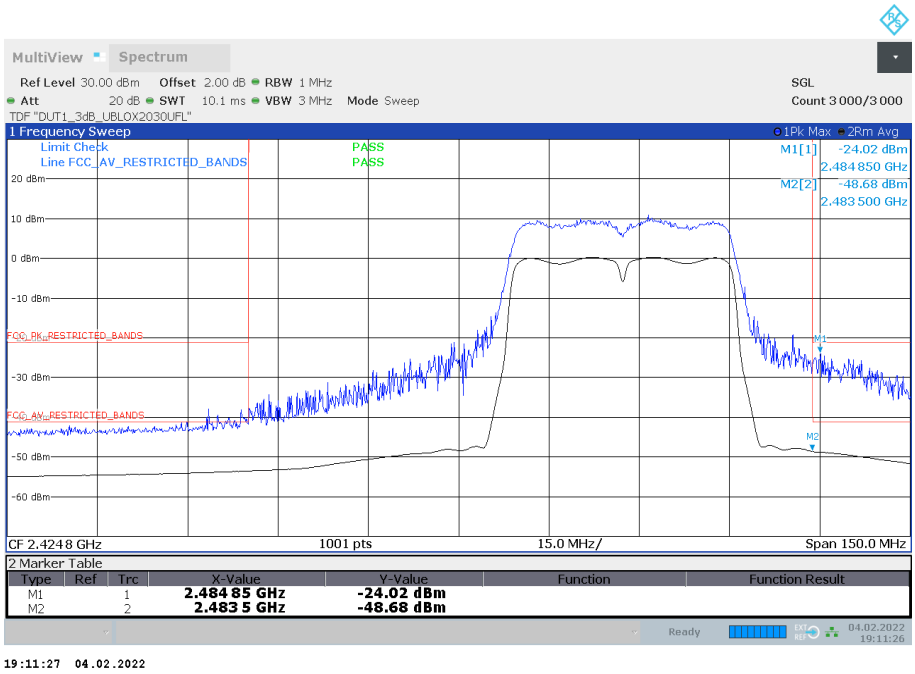
Radio Technology = WLAN n 40 MHz, Operating Frequency = high, Band Edge = high (S02_377_AD01)



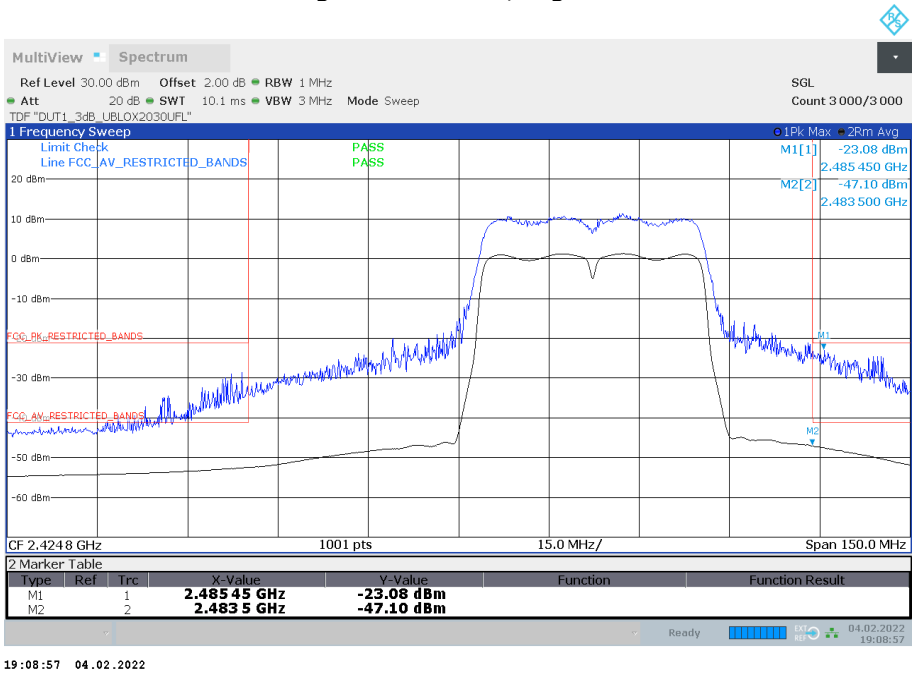

## Final_Result

| Frequency (MHz) | MaxPeak (dBµV/m) | CAverage (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2484.870 | --- | 34.7 | 54.00 | 19.29 | 1000.0 | 1000.000 | 150.0 | H | -25.0 | 15.0 | 5.3 |
| 2484.870 | 48.0 | --- | 74.00 | 26.05 | 1000.0 | 1000.000 | 150.0 | H | -25.0 | 15.0 | 5.3 |

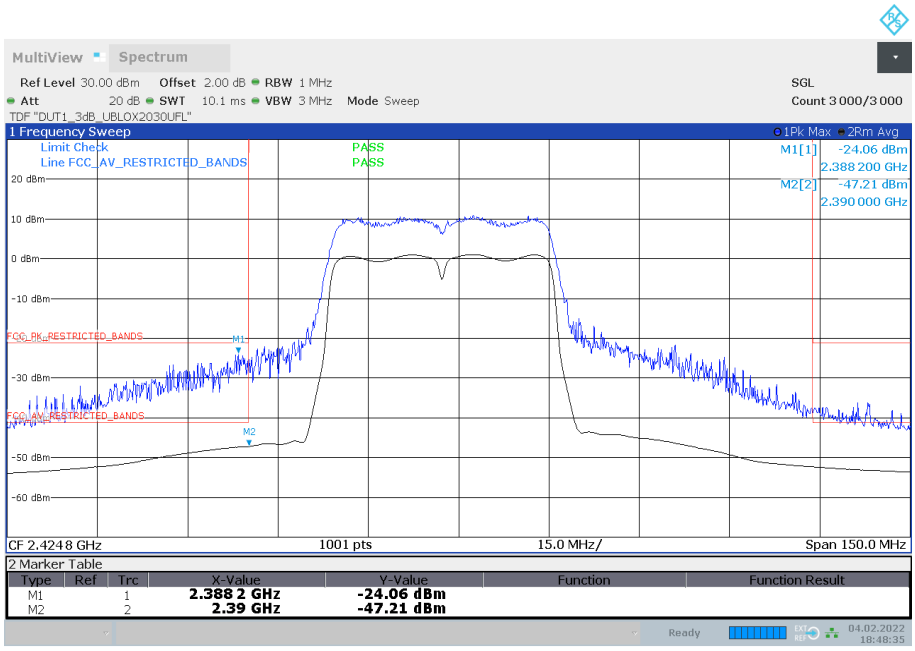
Radio Technology = WLAN n 40 MHz, Operating Frequency = low + high, Band Edge = low + high
(S01_377_AA01)




Highest Channel, high BE

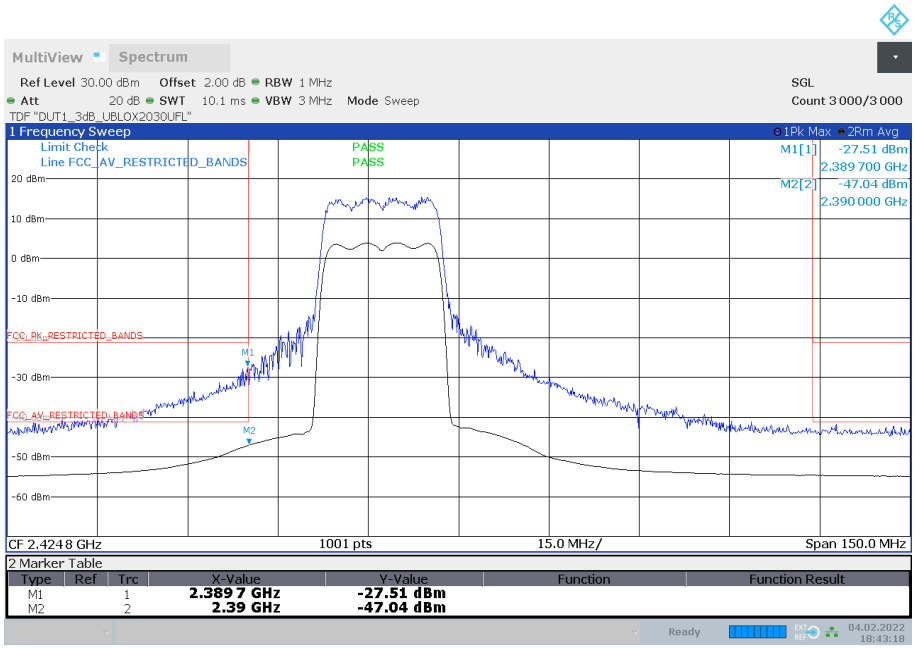



2nd highest Channel, high BE

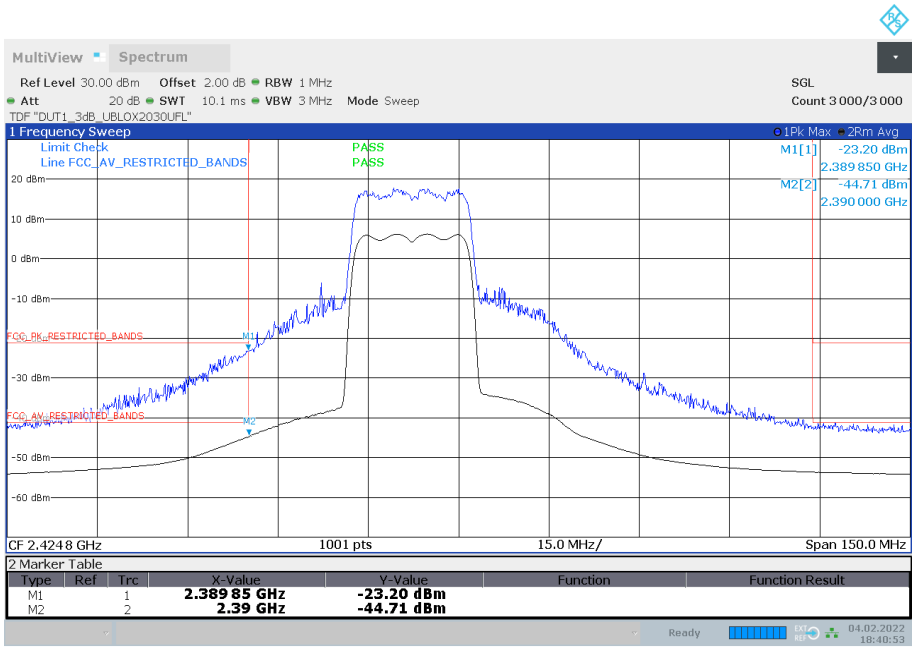



Lowest Channel, low BE

Radio Technology = WLAN ax 20 MHz, Operating Frequency = low + high, Band Edge = low + high
(S01_377_AA01)

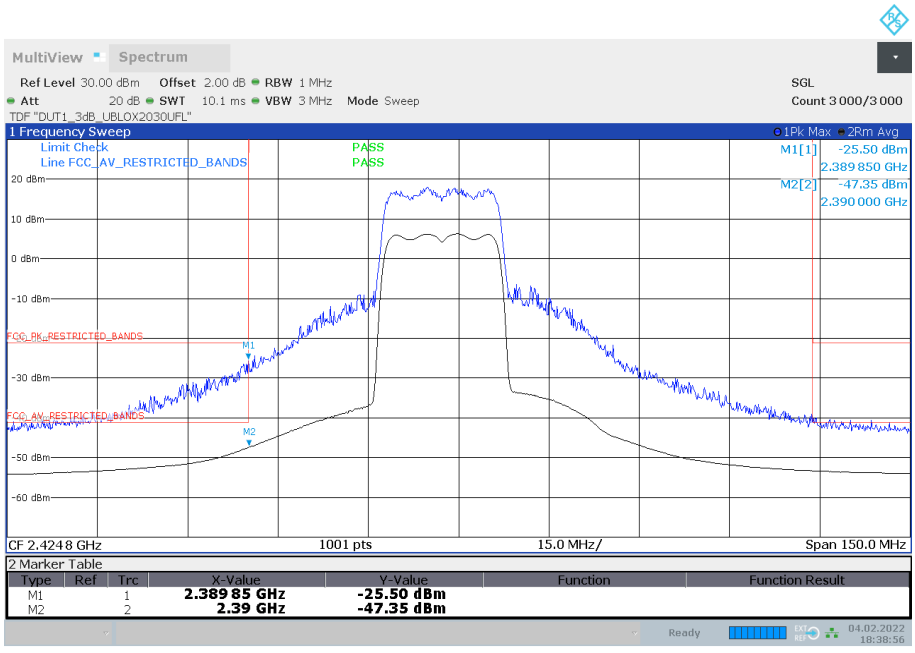



Lowest Channel, low BE



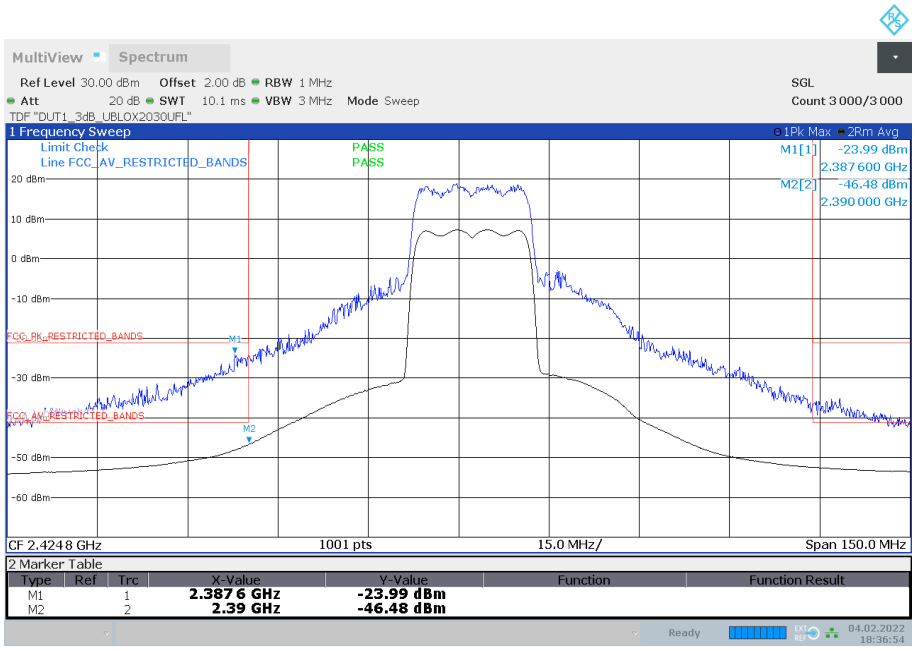

18:40:53 04.02.2022

2nd lowest Channel, low BE



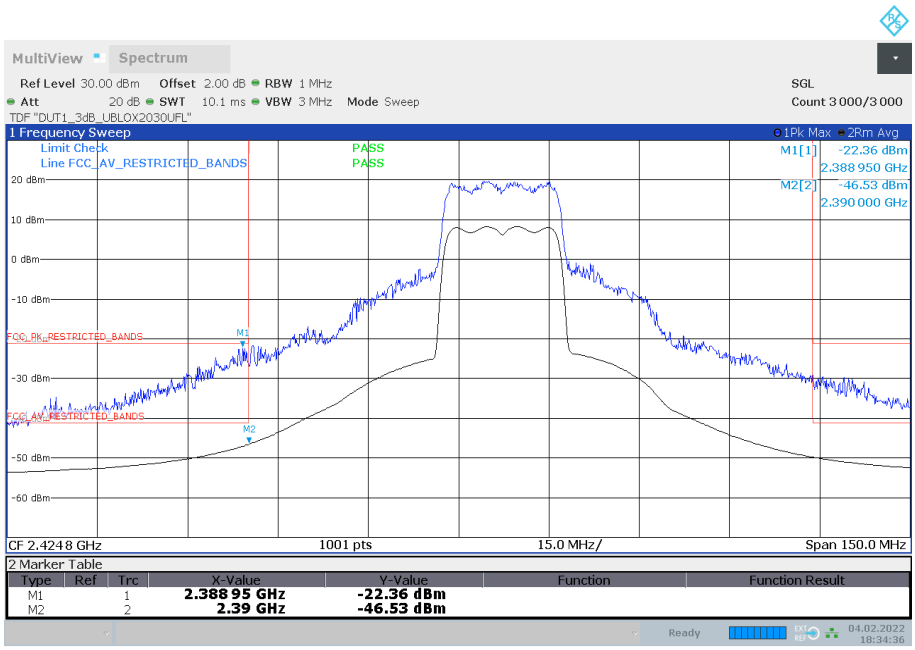

18:38:57 04.02.2022

3rd lowest Channel, low BE



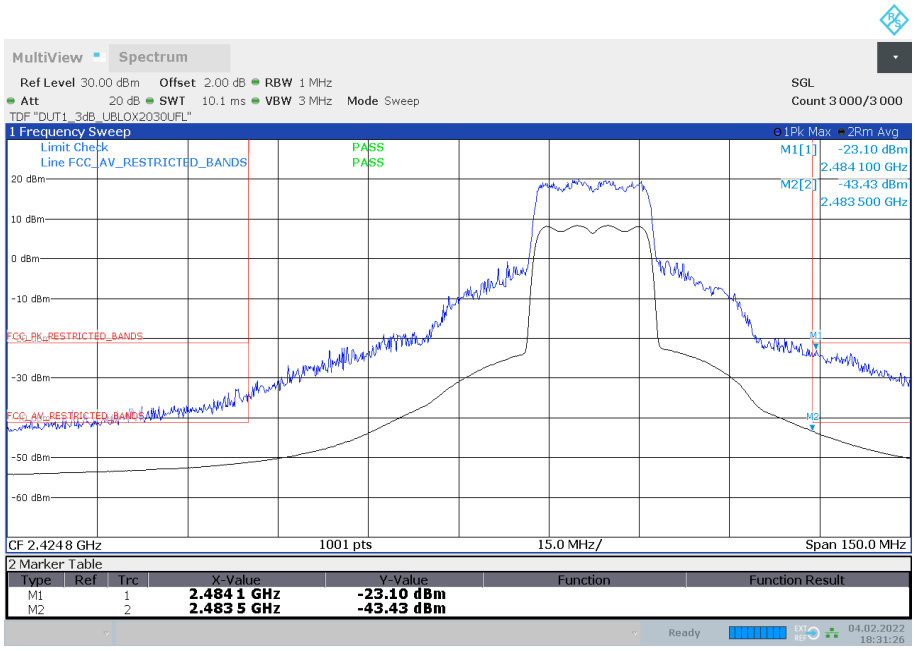

18:36:54 04.02.2022

4th lowest Channel, low BE



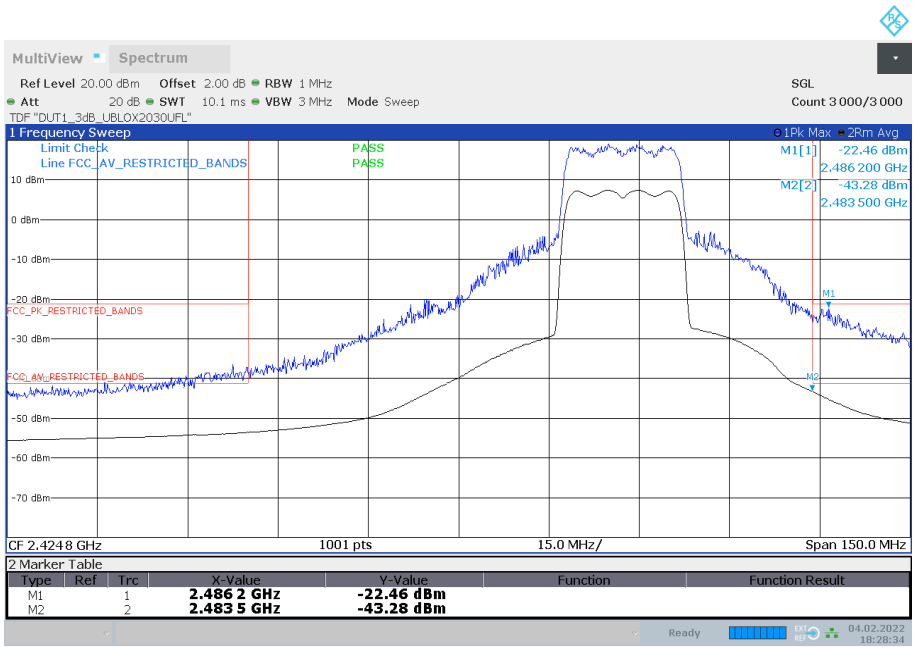

18:34:37 04.02.2022

5th lowest Channel, low BE



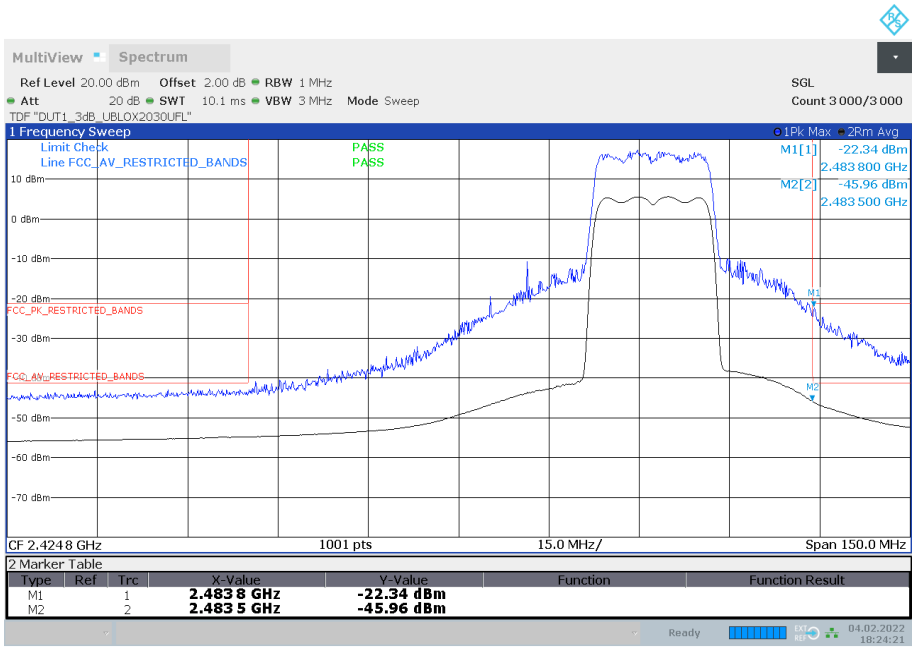

18:31:26 04.02.2022

4th highest Channel, high BE



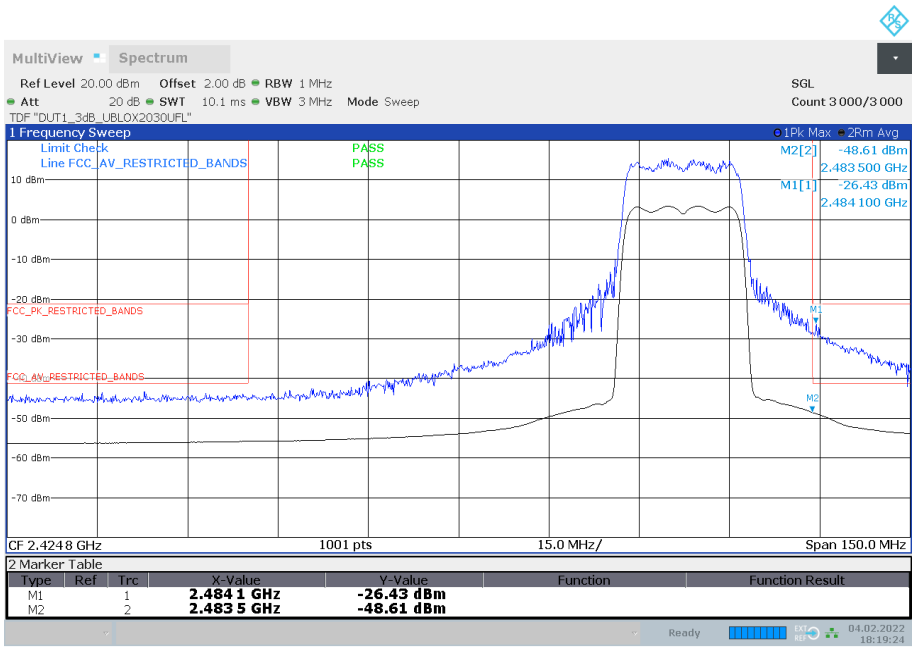

18:28:34 04.02.2022

3rd highest Channel, high BE




18:24:21 04.02.2022

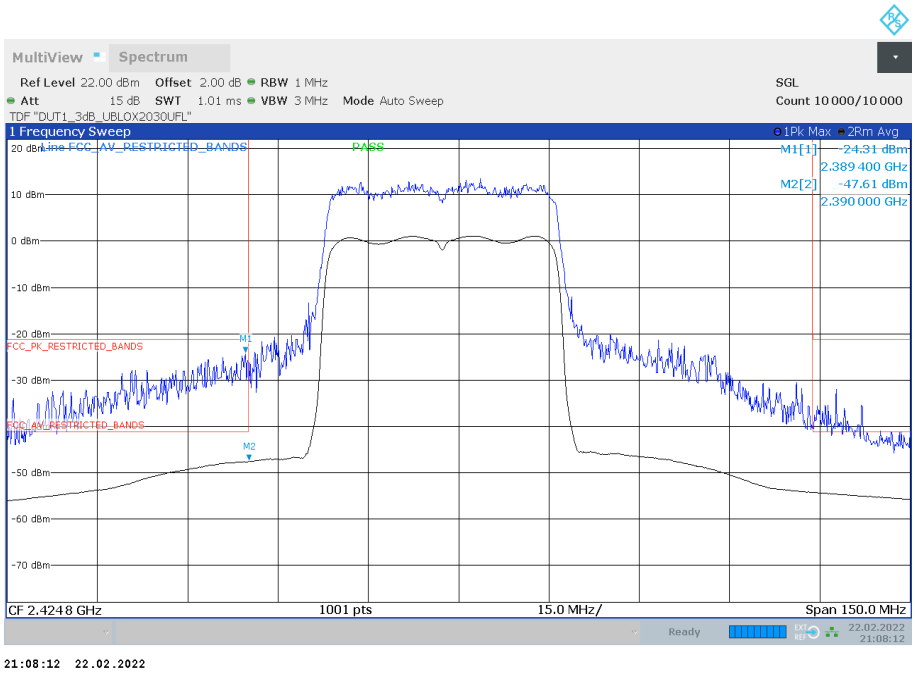
2nd highest Channel, high BE




18:19:25 04.02.2022

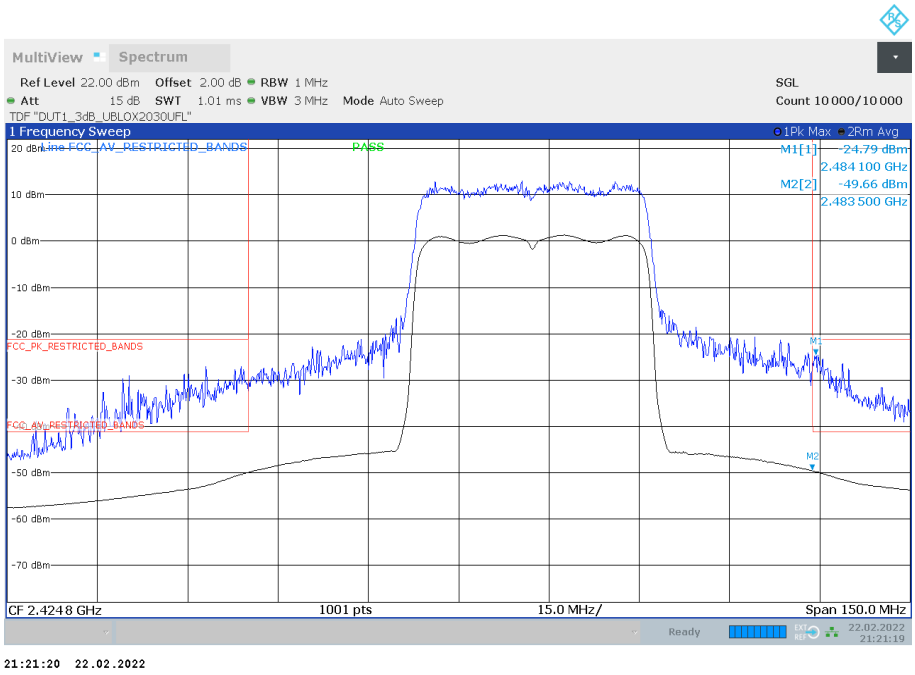
Highest Channel, high BE

Radio Technology = WLAN ax 40 MHz, Operating Frequency = low + high, Band Edge = low + high
(S01_377_AA01)



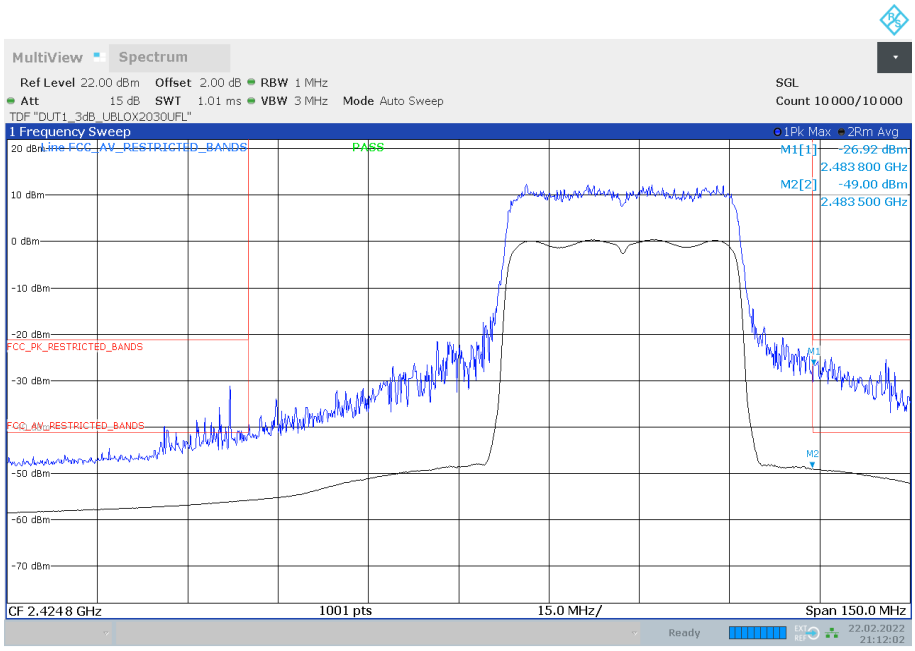

21:08:12 22.02.2022

Lowest Channel, low BE




21:21:20 22.02.2022

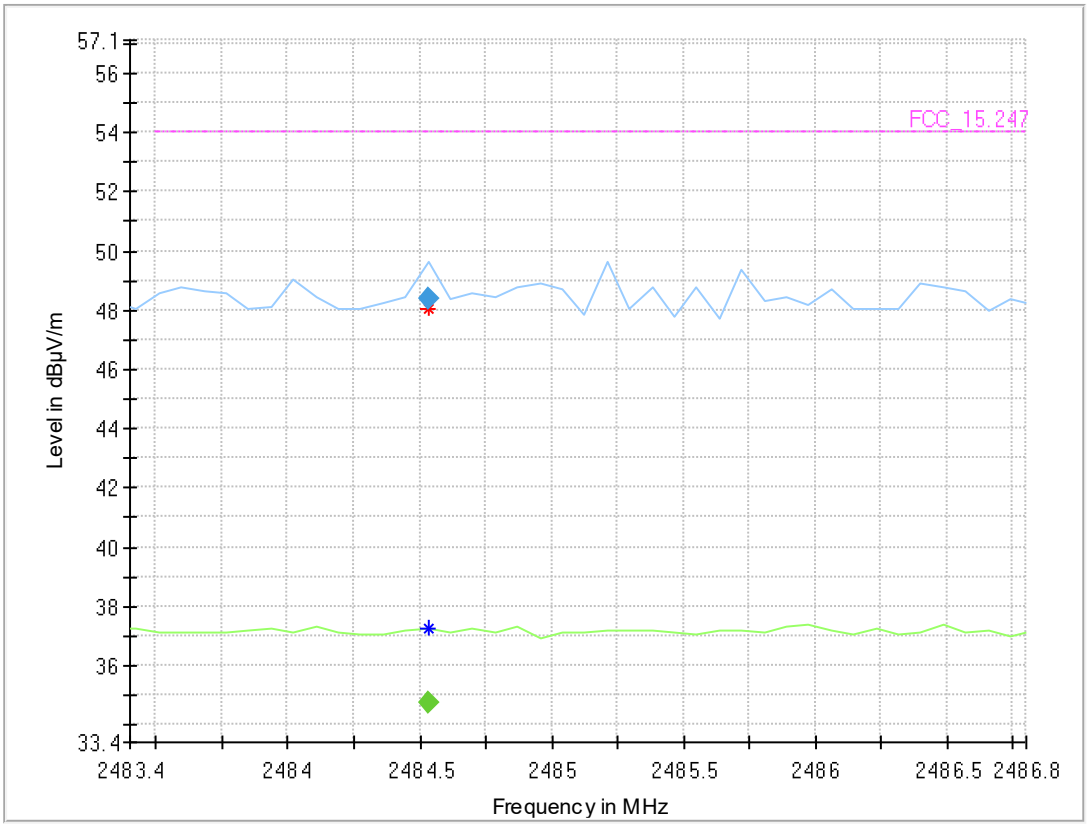
Mid Channel, high BE




21:12:02 22.02.2022

Highest Channel, high BE

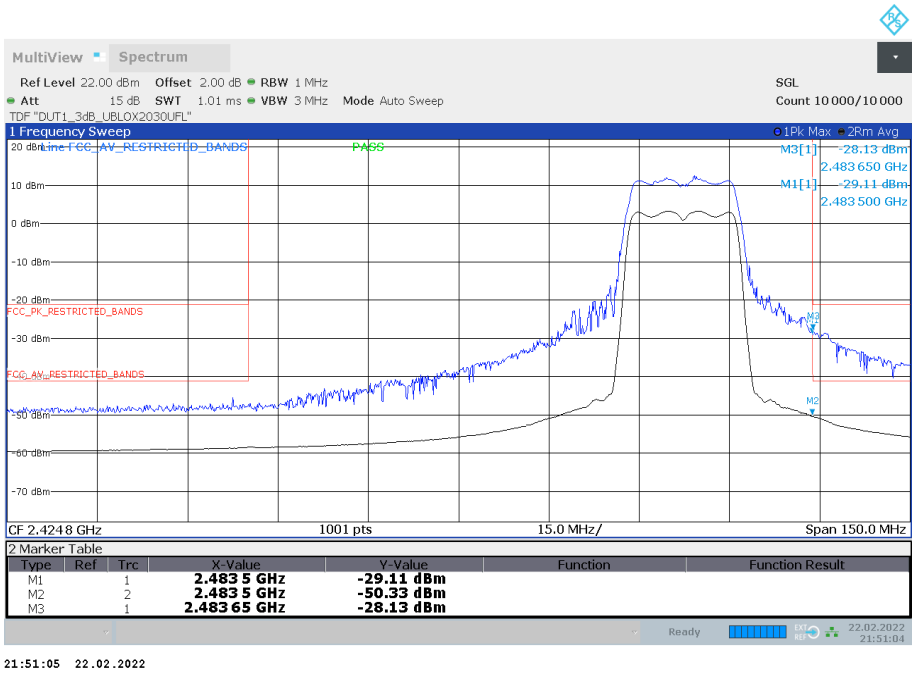
Radio Technology = WLAN n 20 MHz MIMO, Operating Frequency = high, Band Edge = high (S02_377_AD01)



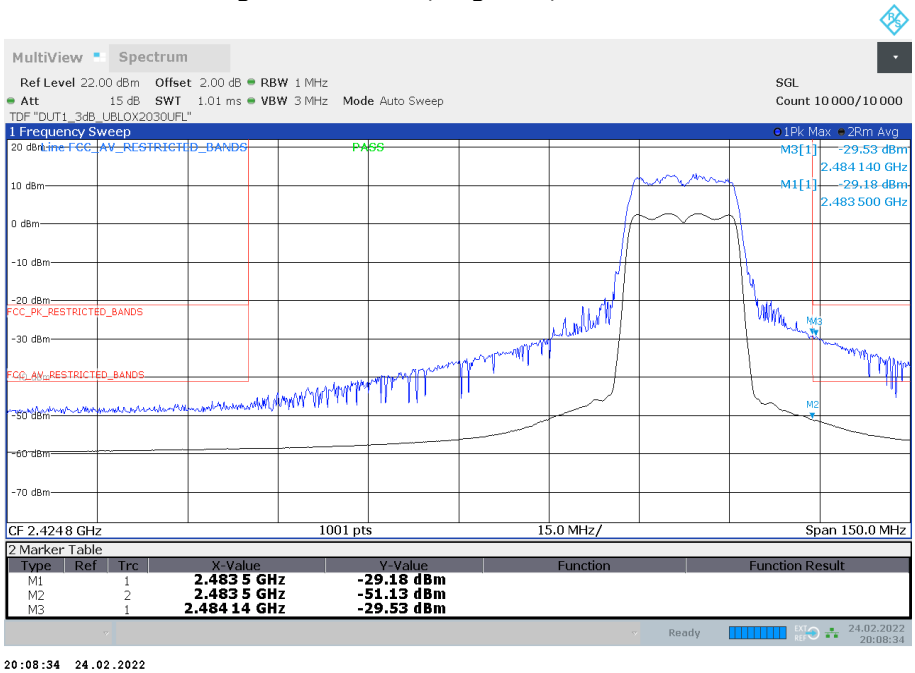

## Final_Result

| Frequency (MHz) | MaxPeak (dBµV/m) | CAverage (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2484.530 | --- | 34.8 | 54.00 | 19.24 | 1000.0 | 1000.000 | 150.0 | V | -187.0 | 15.0 | 5.3 |
| 2484.530 | 48.4 | --- | 74.00 | 25.61 | 1000.0 | 1000.000 | 150.0 | V | -187.0 | 15.0 | 5.3 |

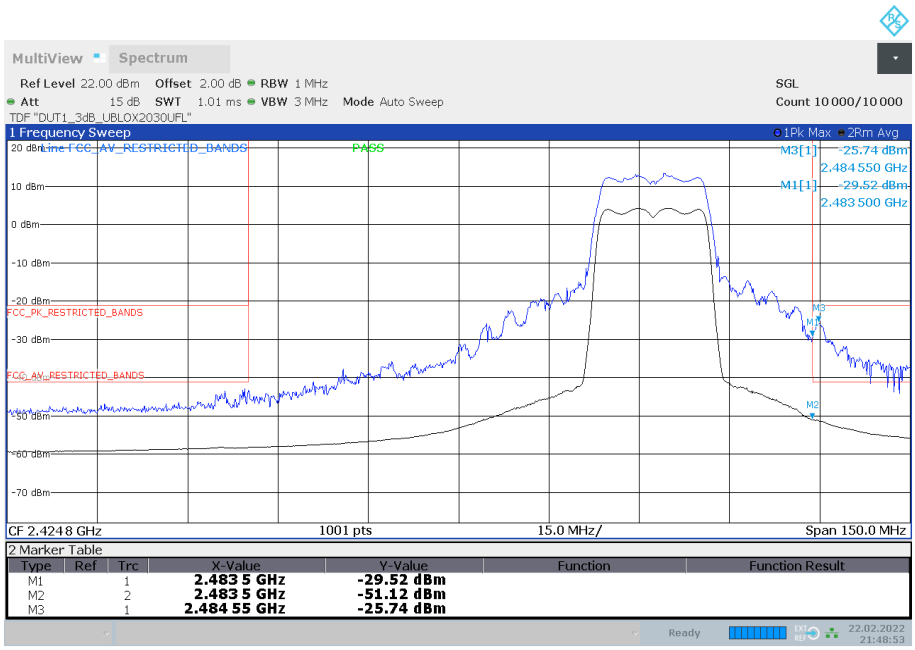
Radio Technology = WLAN n 20 MHz MIMO, Operating Frequency = low + high, Band Edge = low + high
(S01_377_AA01)




Highest Channel, high BE, Antenna A

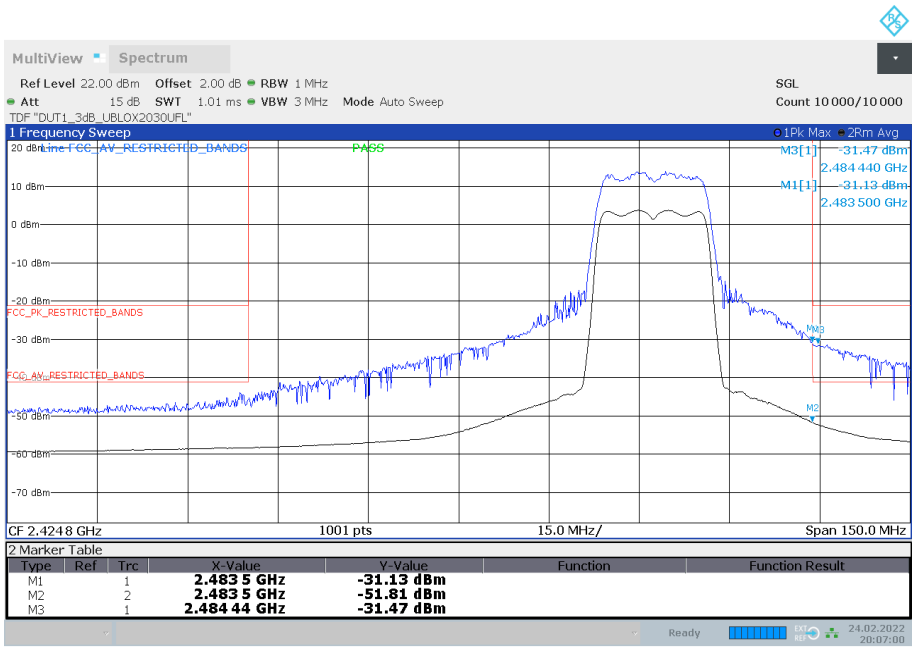



Highest Channel, high BE, Antenna B



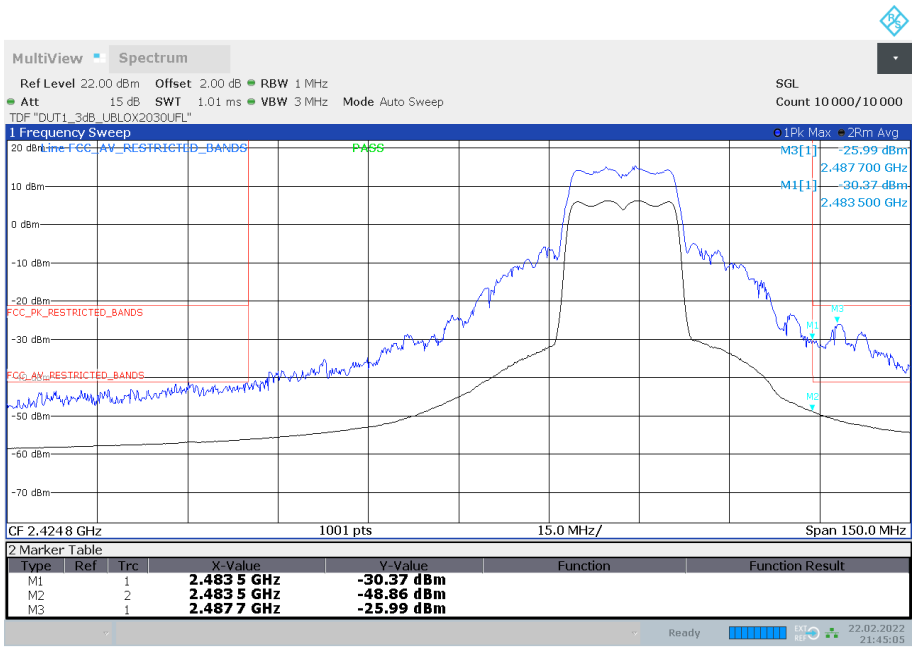

21:48:54 22.02.2022

2nd highest Channel, high BE, Antenna A



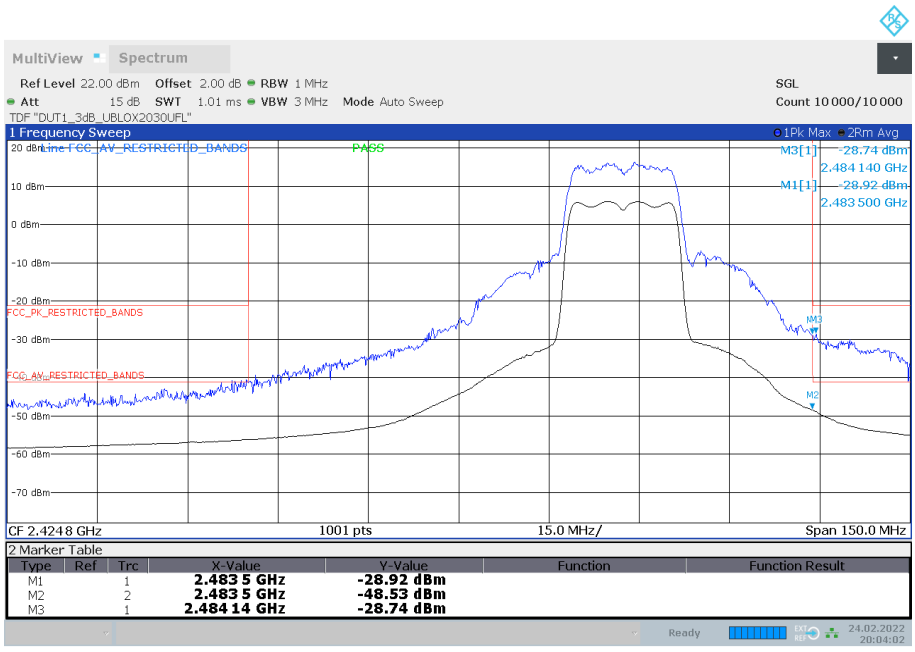

20:07:00 24.02.2022

2nd highest Channel, high BE, Antenna B



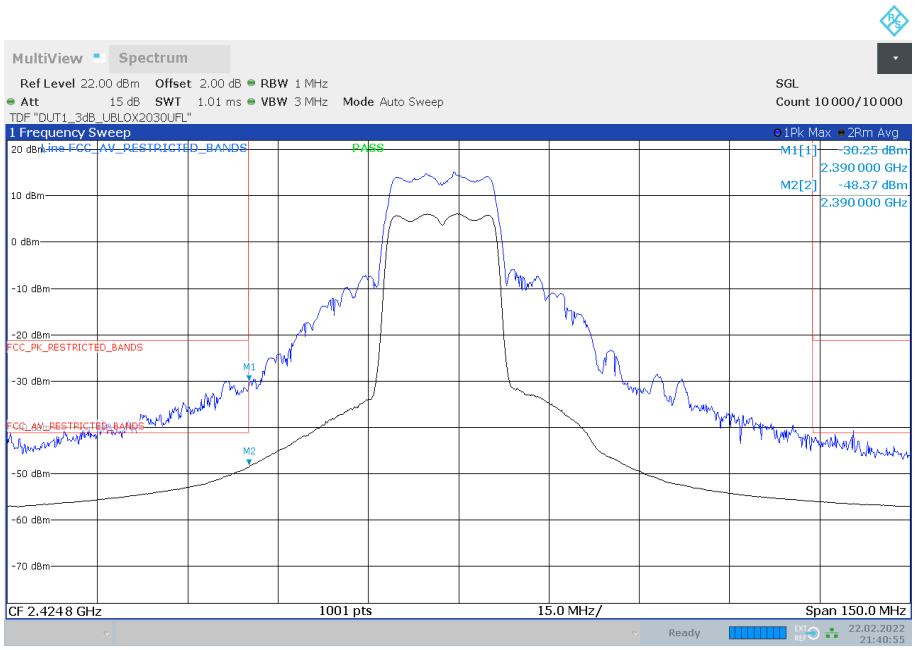

21:45:05 22.02.2022

3rd highest Channel, high BE, Antenna A



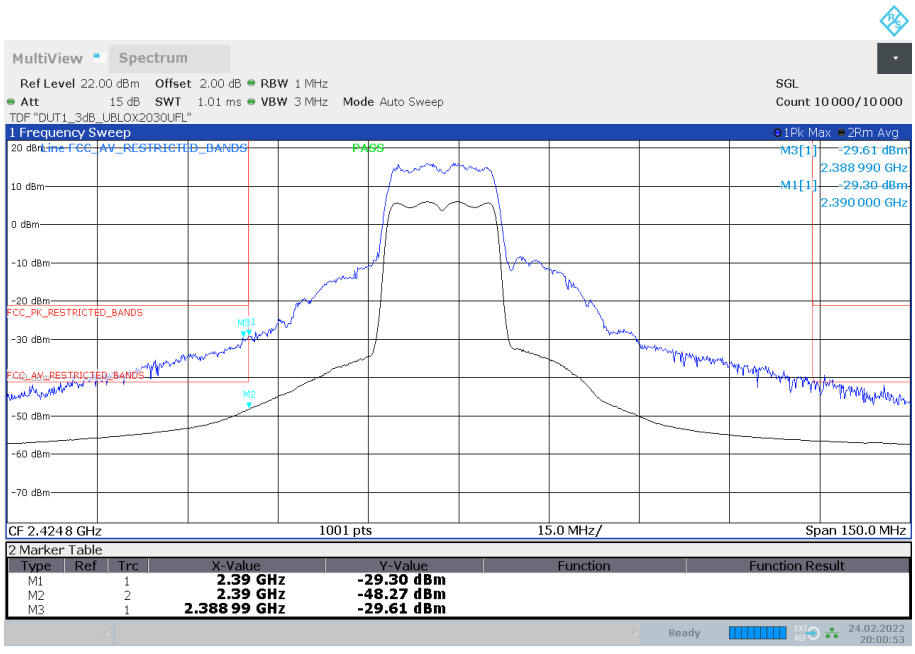

20:04:03 24.02.2022

3rd highest Channel, high BE, Antenna B



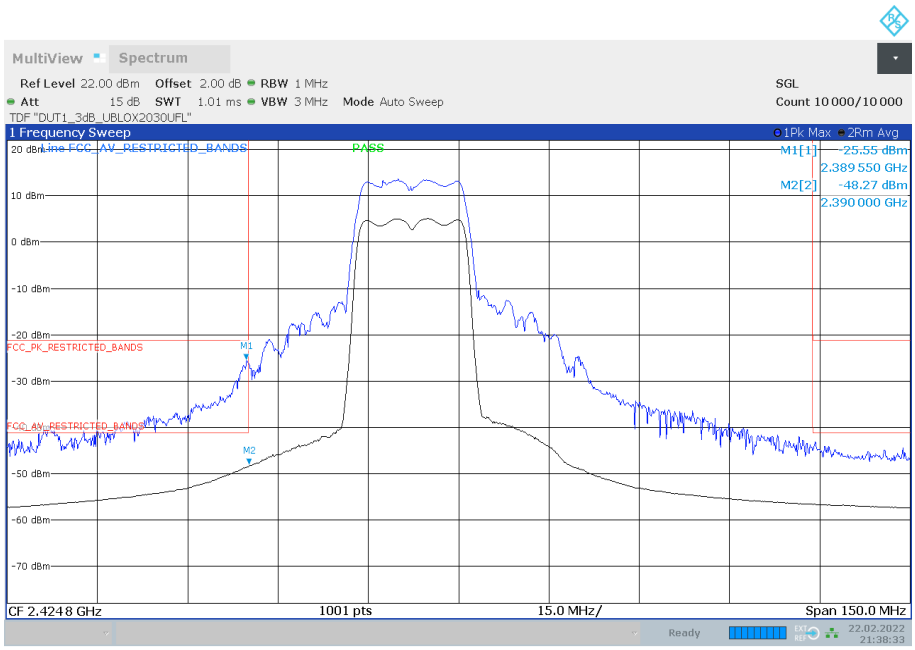

21:40:56 22.02.2022

3rd lowest Channel, low BE, Antenna A



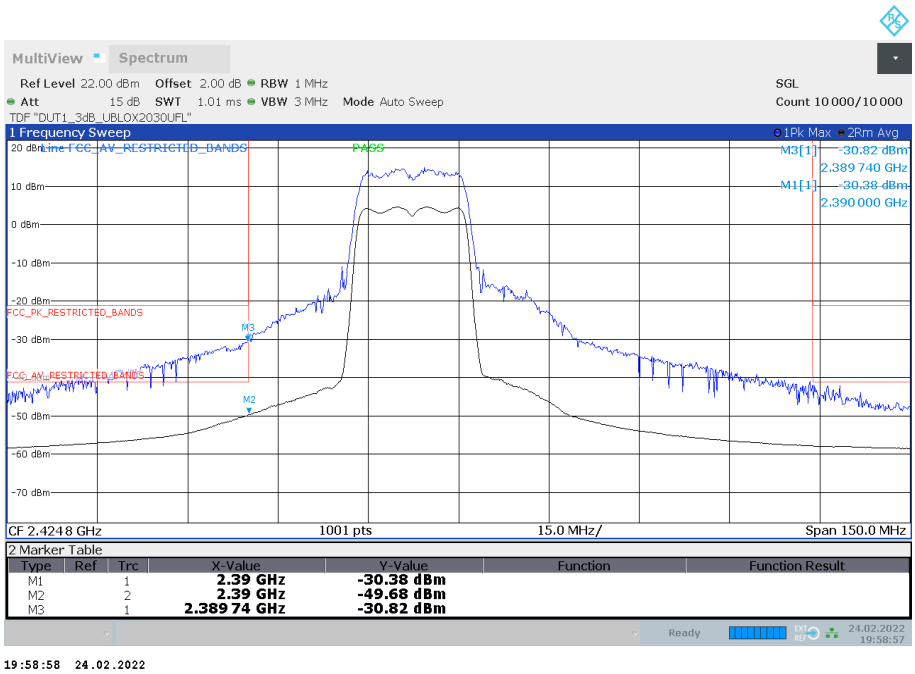

20:00:54 24.02.2022

3rd lowest Channel, low BE, Antenna B



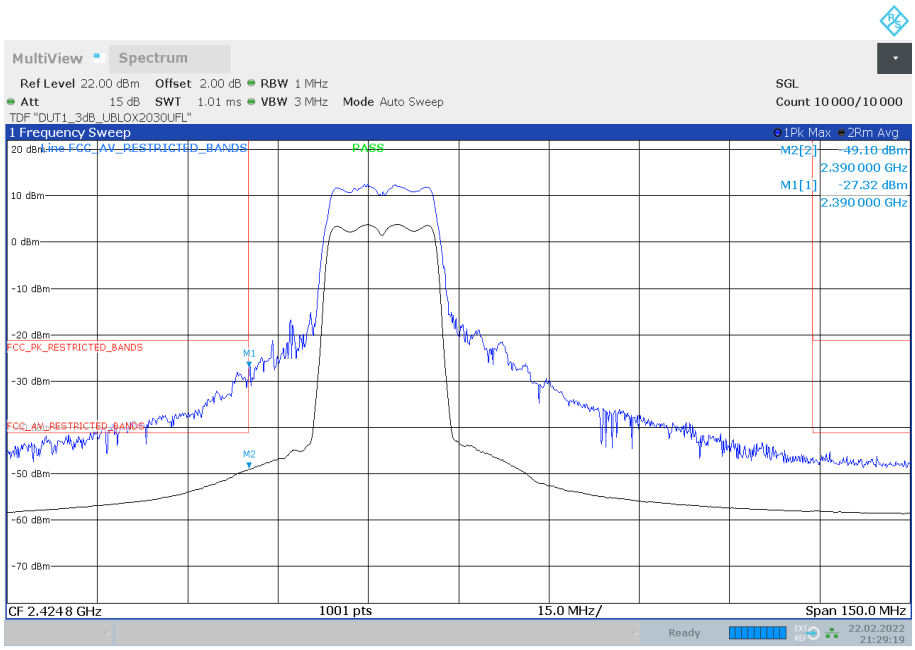

21:38:33 22.02.2022

2nd lowest Channel, low BE, Antenna A



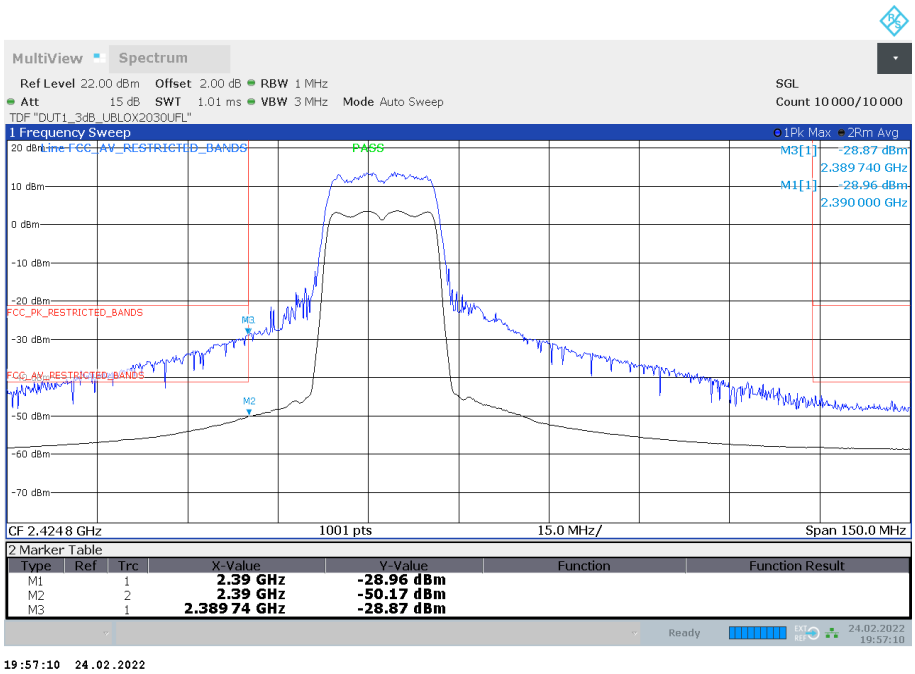

19:58:58 24.02.2022

2nd lowest Channel, low BE, Antenna B




21:29:19 22.02.2022

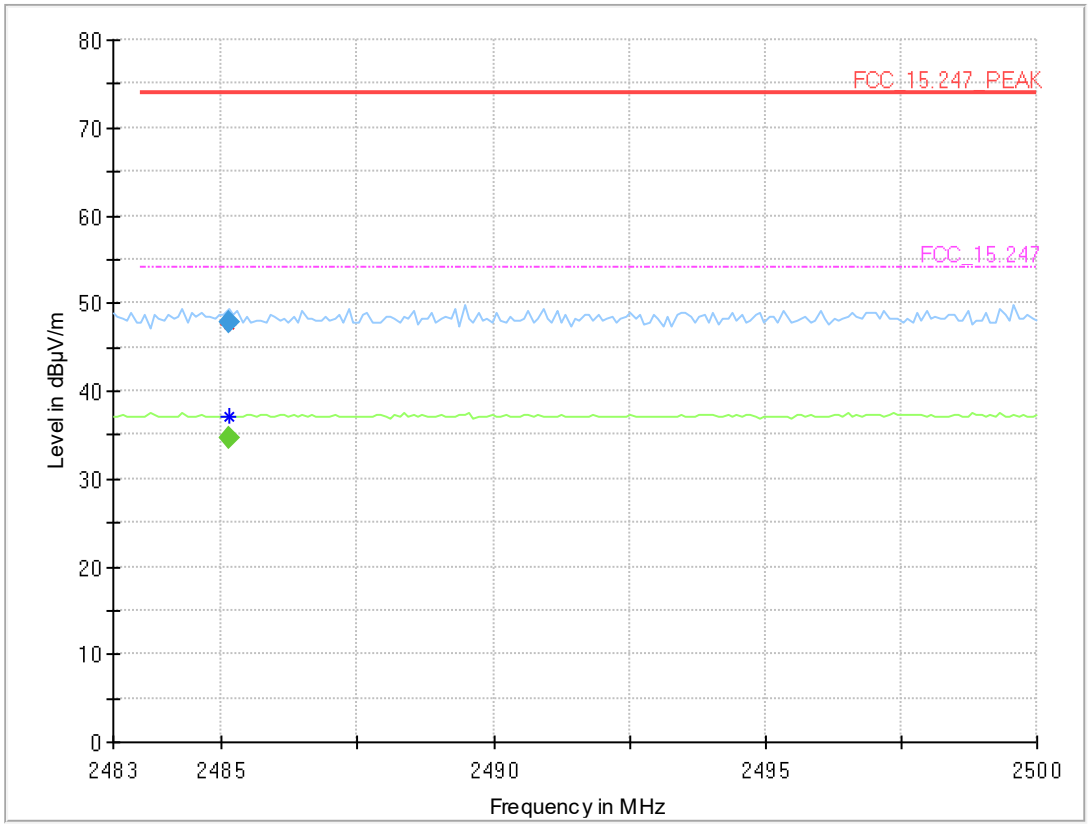
Lowest Channel, low BE, Antenna A




19:57:10 24.02.2022

Lowest Channel, low BE, Antenna B

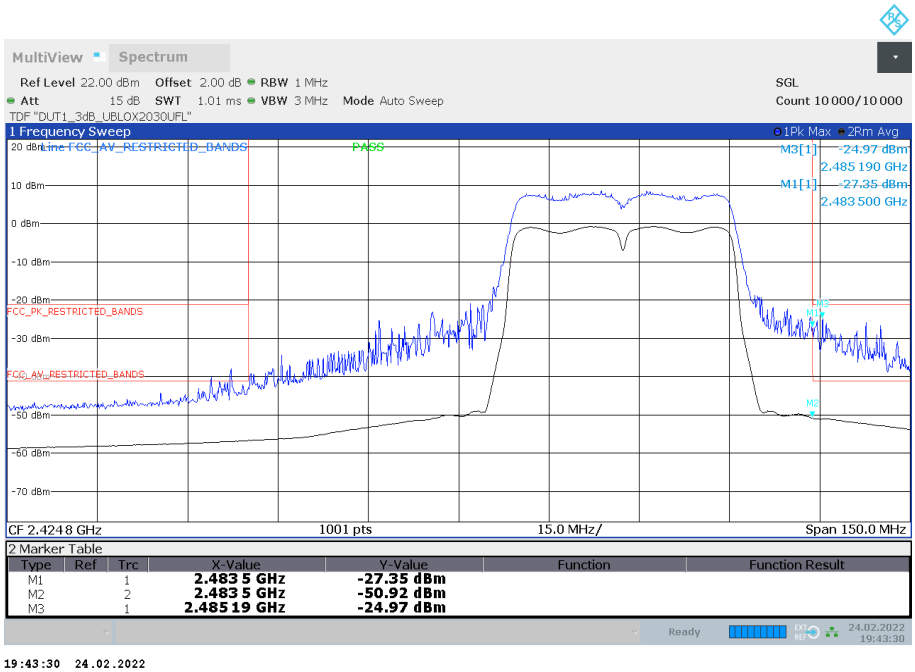
Radio Technology = WLAN n 40 MHz MIMO, Operating Frequency = high, Band Edge = high (S02_377_AD01)



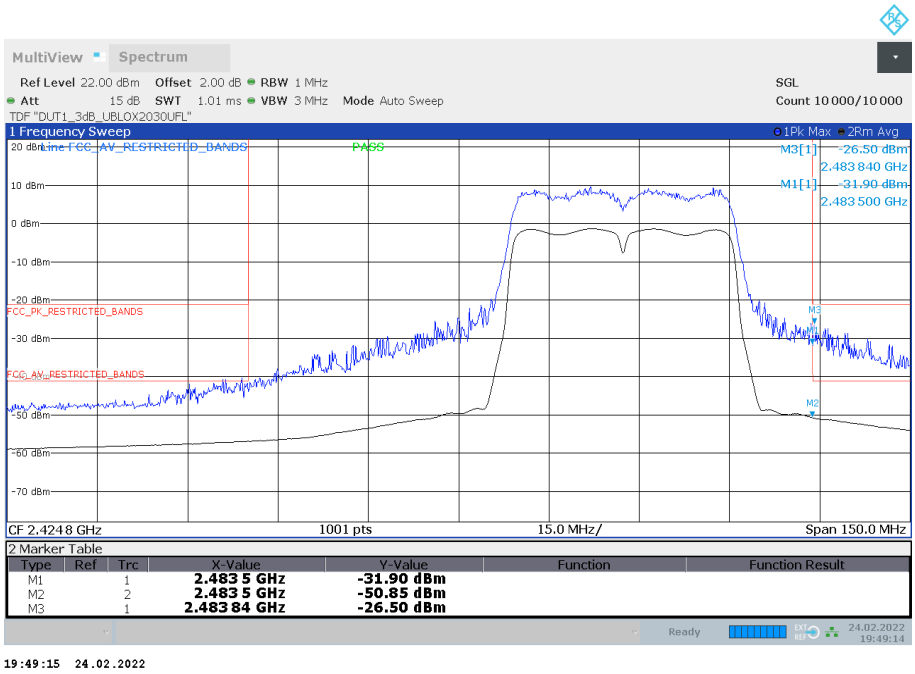

## Final_Result

| Frequency (MHz) | MaxPeak (dBµV/m) | CAverage (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB/m) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2485.125 | --- | 34.7 | 54.00 | 19.27 | 1000.0 | 1000.000 | 150.0 | V | 21.0 | 2.0 | 5.3 |
| 2485.125 | 47.9 | --- | 74.00 | 26.07 | 1000.0 | 1000.000 | 150.0 | V | 21.0 | 2.0 | 5.3 |

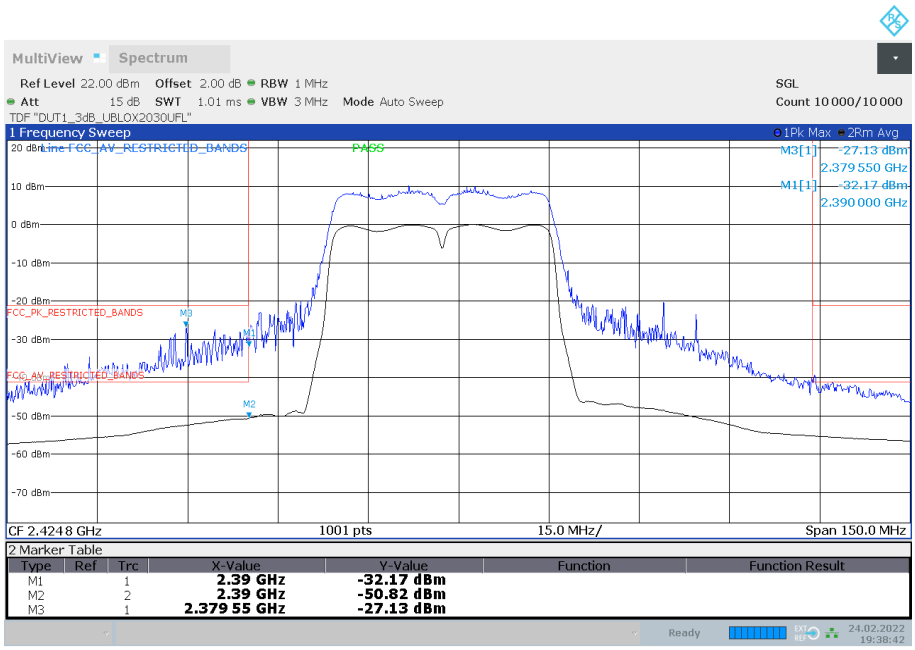
Radio Technology = WLAN n 40 MHz MIMO, Operating Frequency = low + high, Band Edge = low + high
(S01_377_AA01)



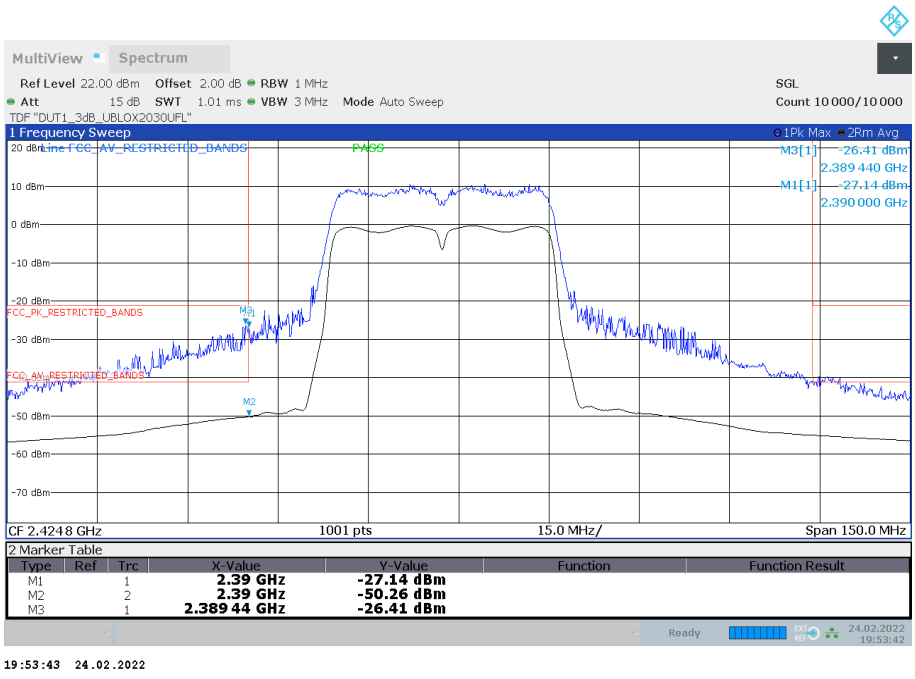

Highest Channel, high BE, Antenna A




Highest Channel, high BE, Antenna B

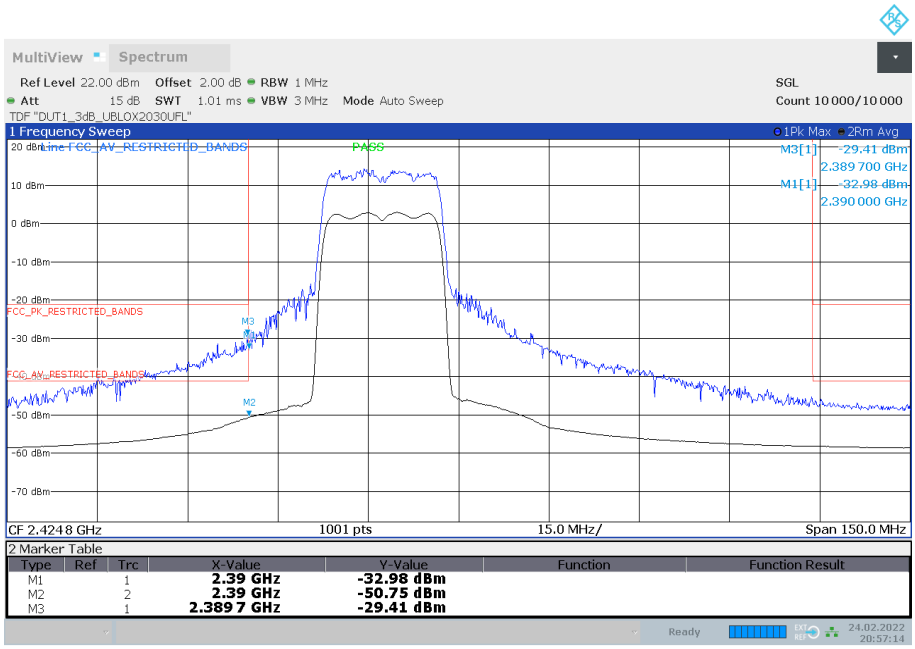



Lowest Channel, low BE, Antenna A



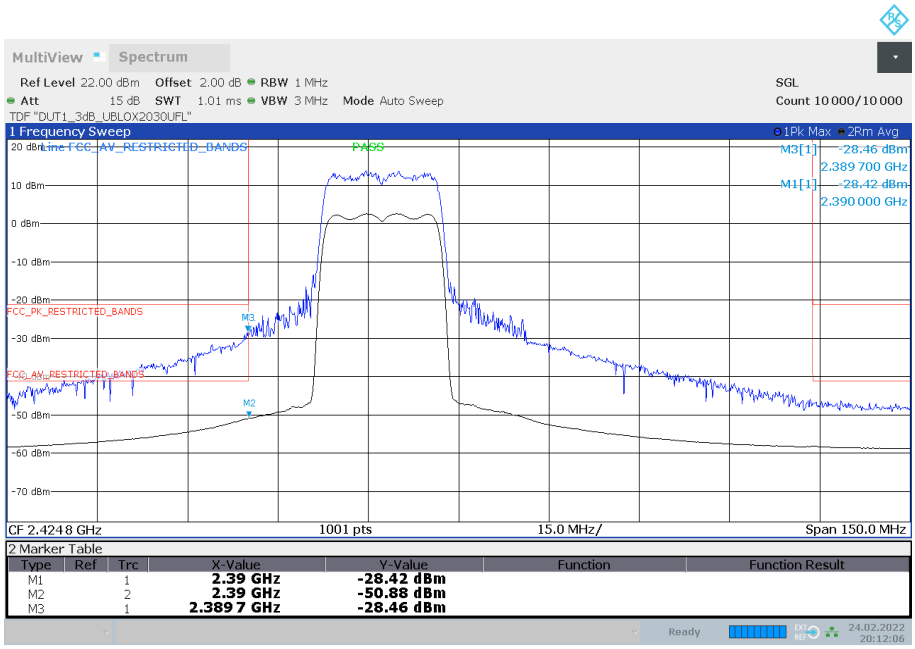

Lowest Channel, low BE, Antenna B

Radio Technology = WLAN ax 20 MHz MIMO, Operating Frequency = high, Band Edge = high (S01_377_AA01)



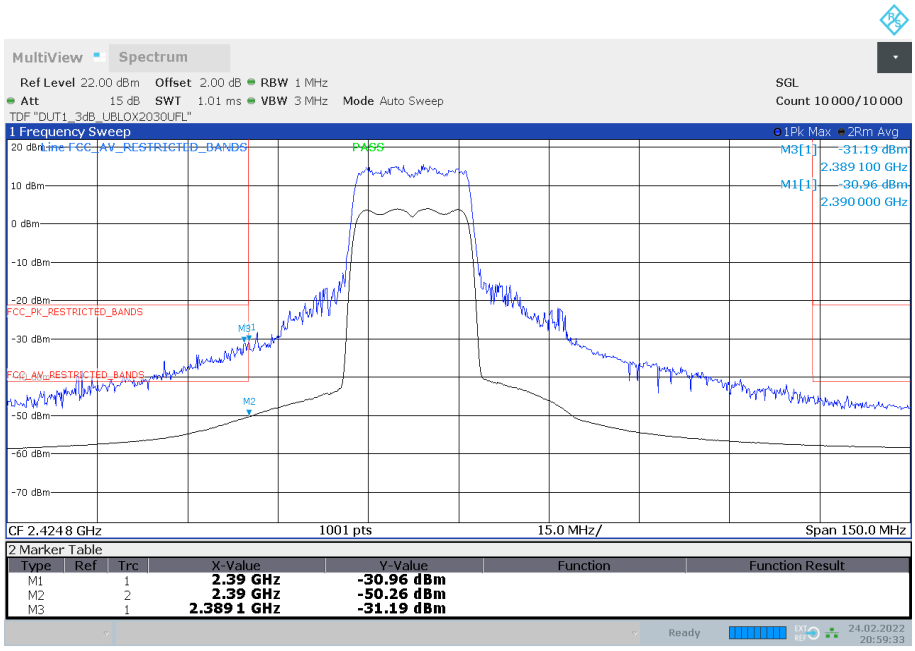

20:57:15 24.02.2022

Lowest Channel, low BE, Antenna A



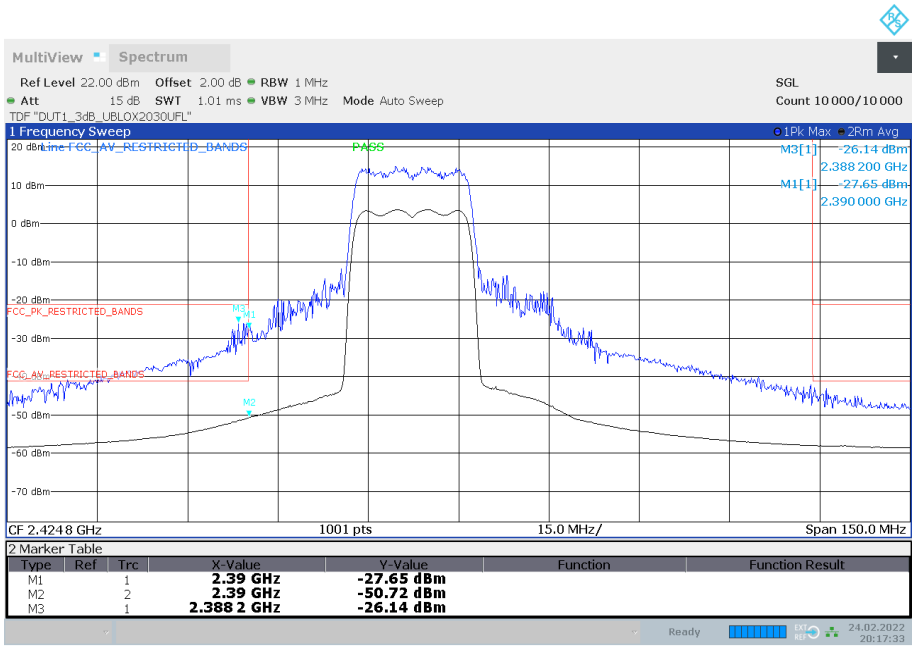

20:12:06 24.02.2022

Lowest Channel, low BE, Antenna B



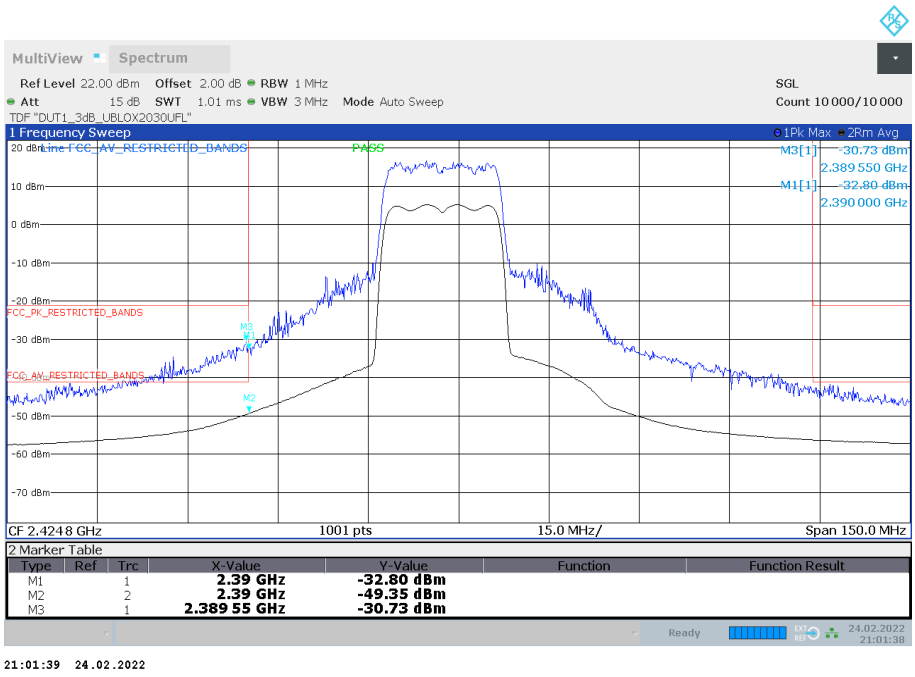

20:59:34 24.02.2022

2nd lowest Channel, low BE, Antenna A



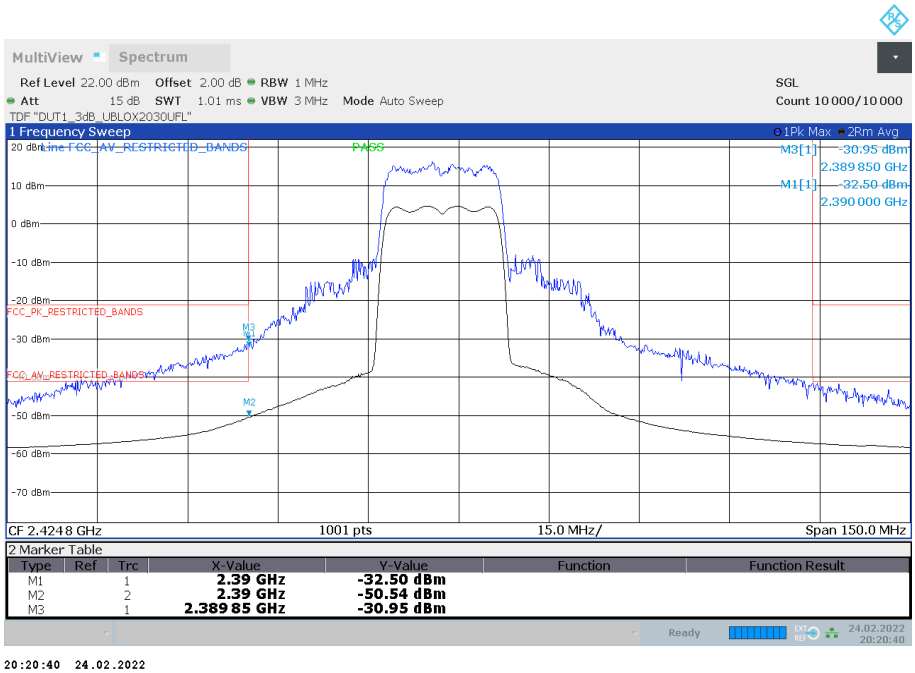

20:17:33 24.02.2022

2nd lowest Channel, low BE, Antenna B



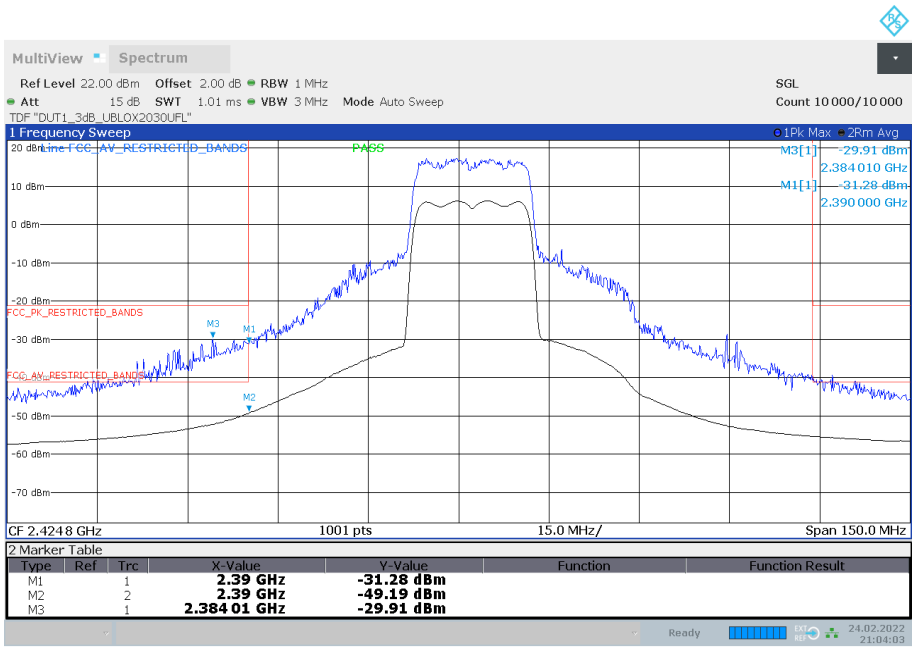

21:01:39 24.02.2022

3rd lowest Channel, low BE, Antenna A



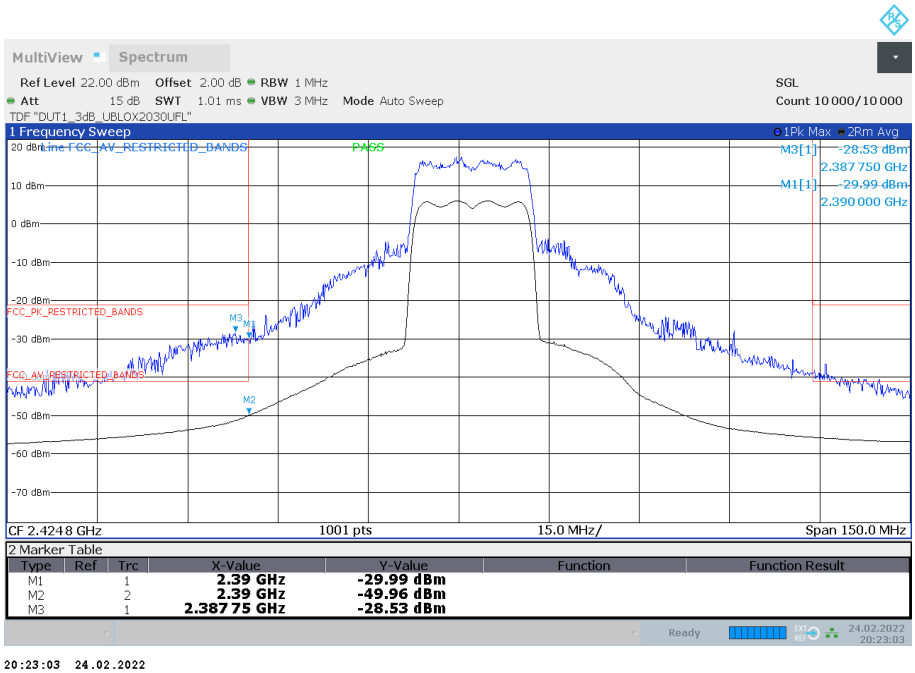

20:20:40 24.02.2022

3rd lowest Channel, low BE, Antenna B



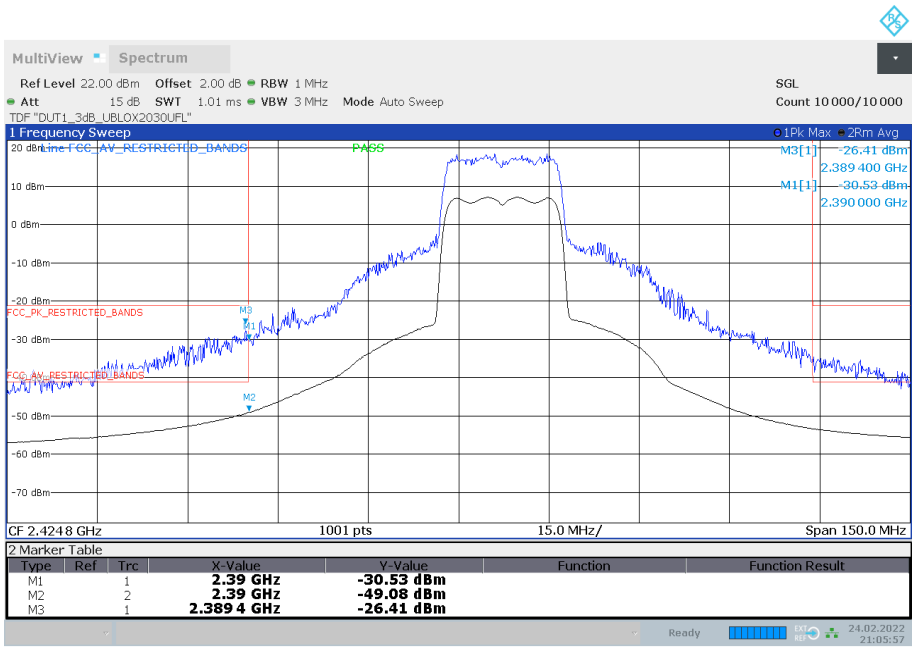

21:04:04 24.02.2022

4th lowest Channel, low BE, Antenna A



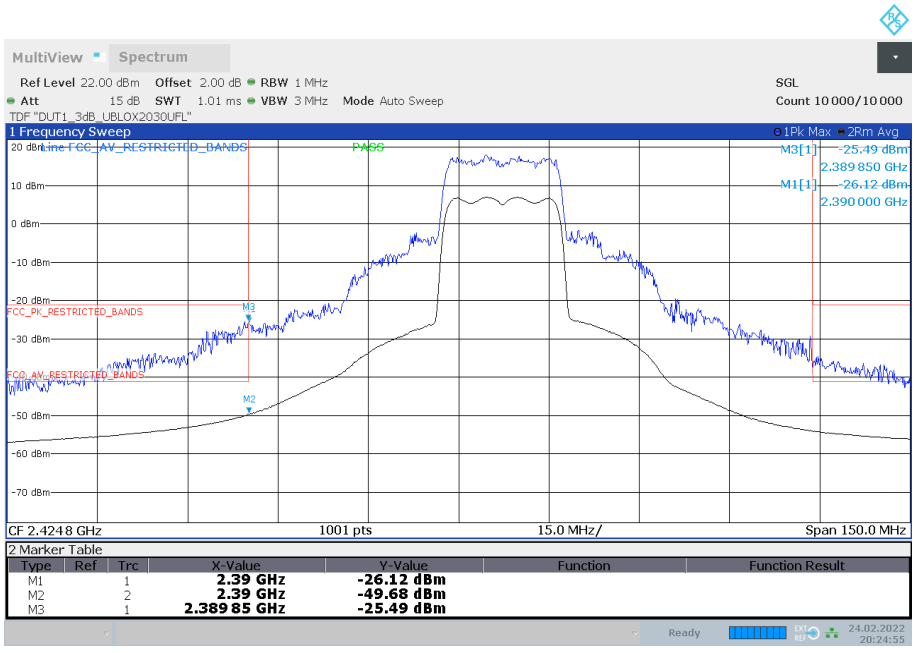

20:23:03 24.02.2022

4th lowest Channel, low BE, Antenna B



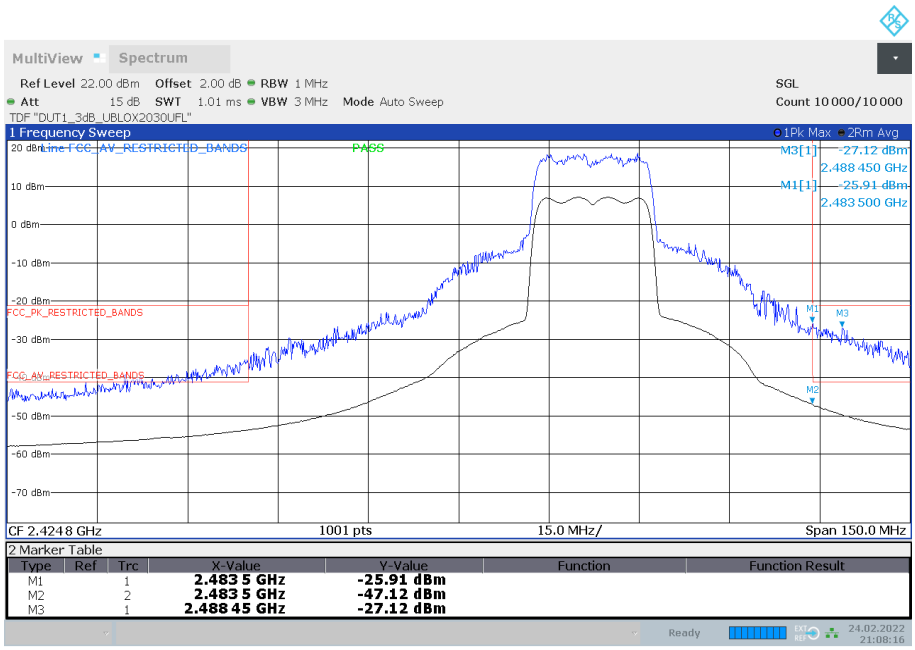

21:05:58 24.02.2022

5th lowest Channel, low BE, Antenna A



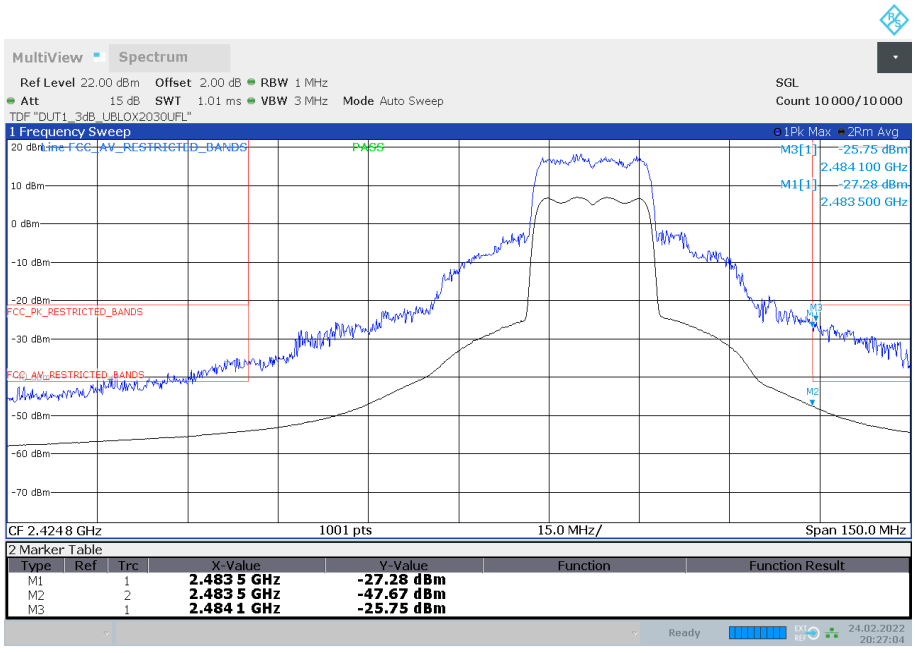

20:24:56 24.02.2022

5th lowest Channel, low BE, Antenna B



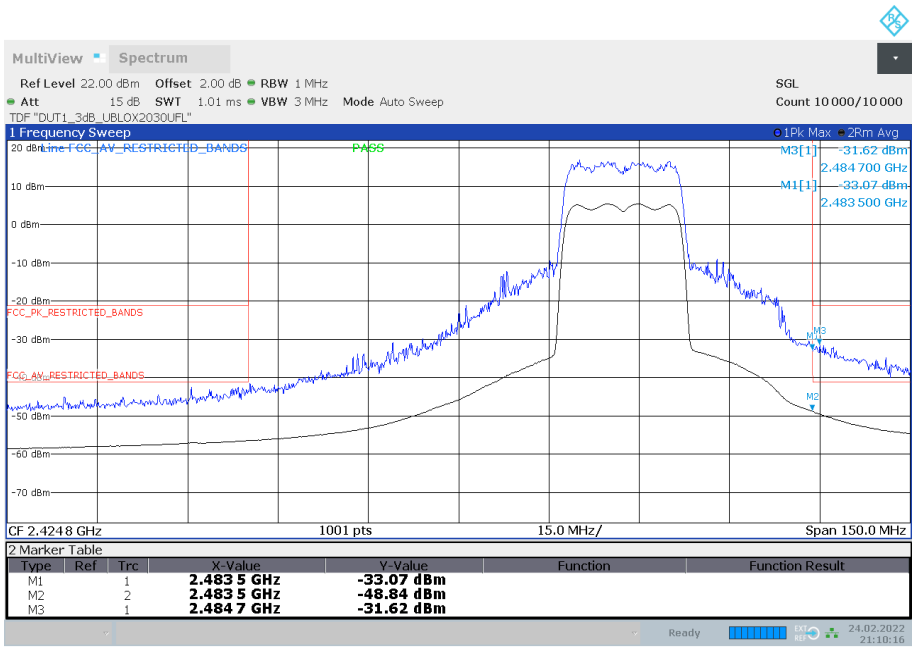

21:08:16 24.02.2022

4th highest Channel, high BE, Antenna A



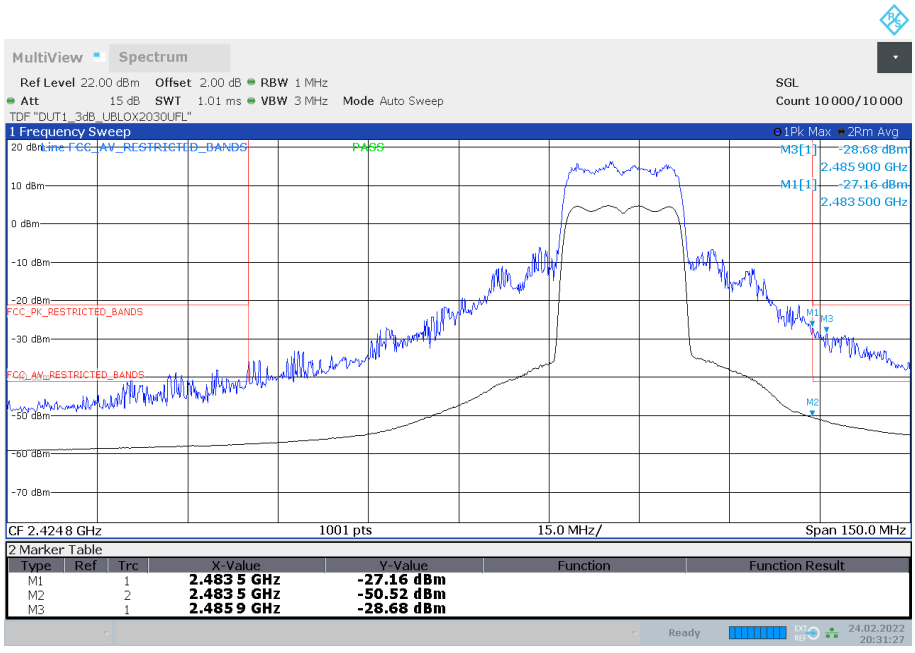

20:27:05 24.02.2022

4th highest Channel, high BE, Antenna B



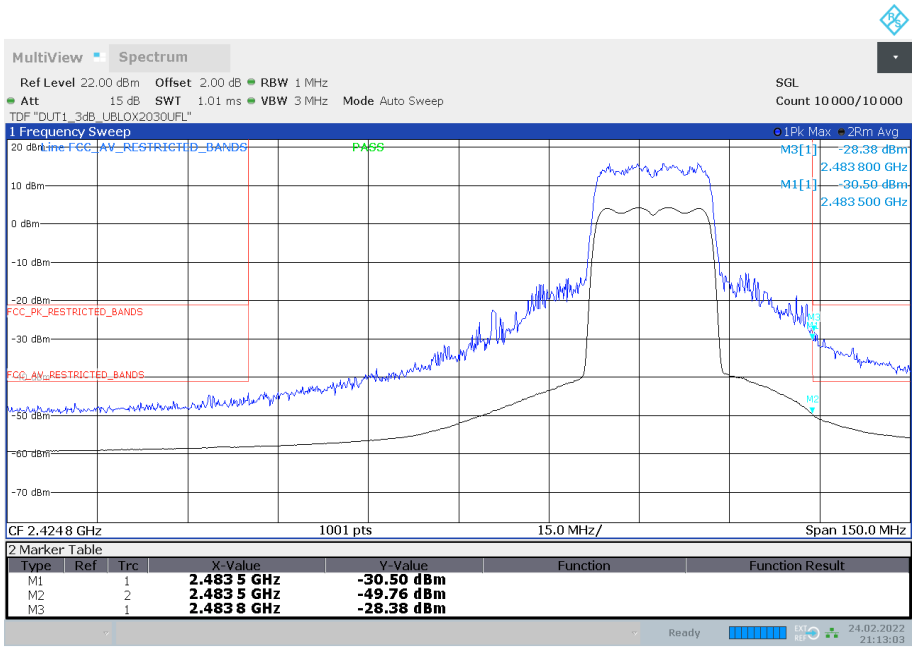

21:10:17 24.02.2022

3rd highest Channel, high BE, Antenna A



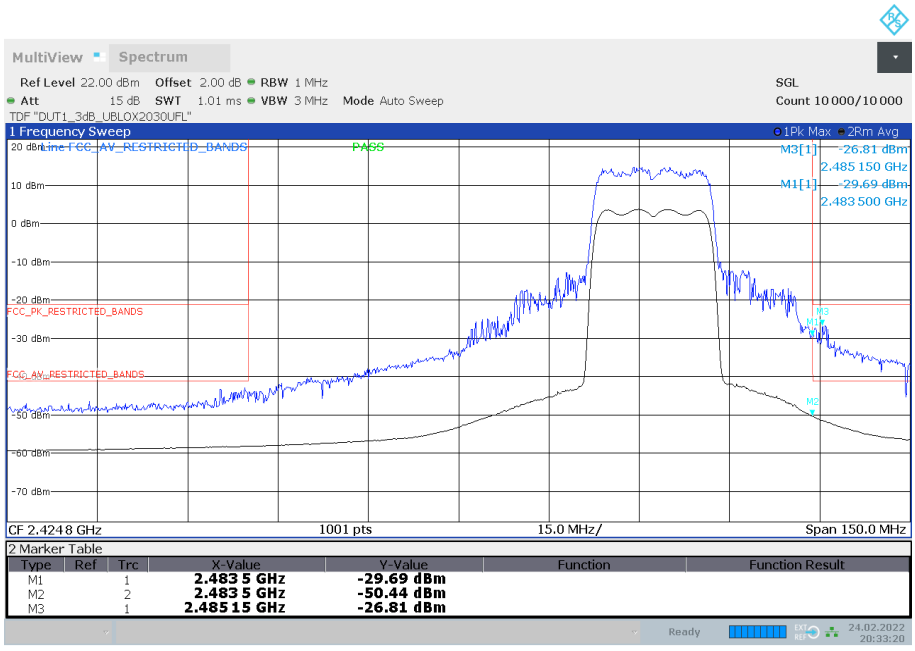

20:31:28 24.02.2022

3rd highest Channel, high BE, Antenna B



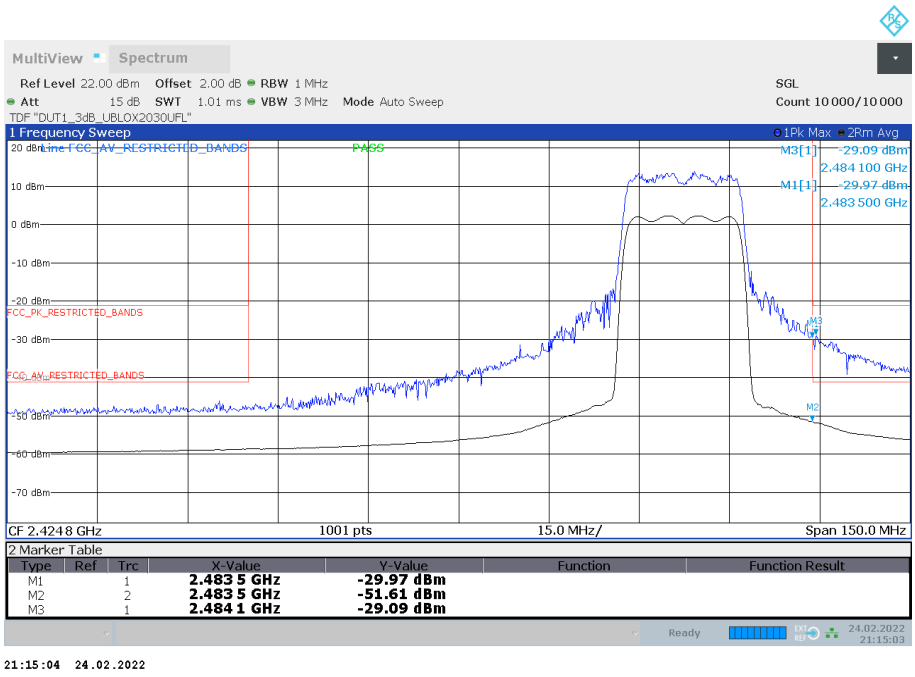

21:13:04 24.02.2022

2nd highest Channel, high BE, Antenna A



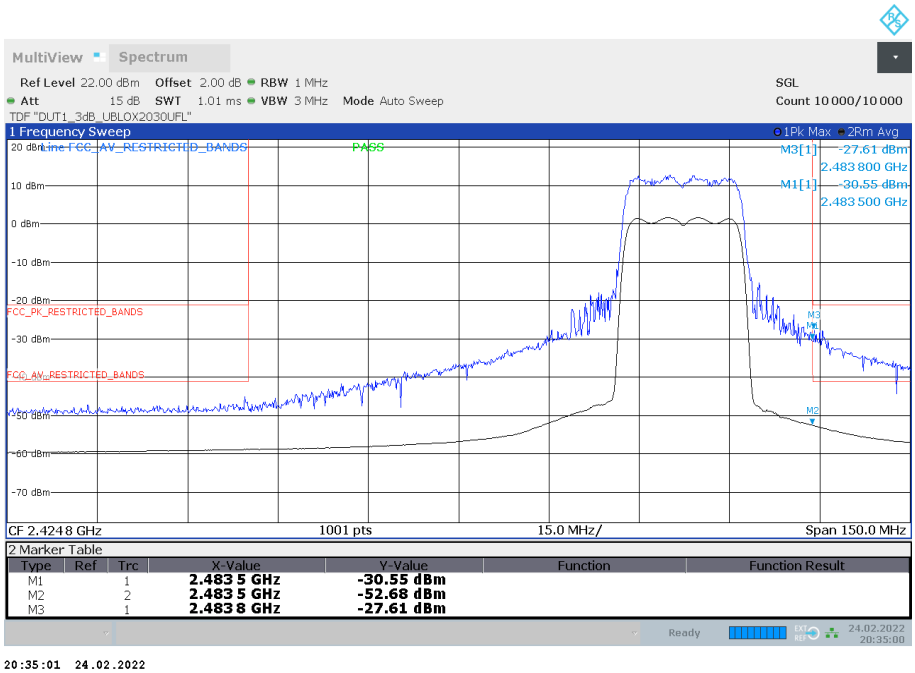

20:33:20 24.02.2022

2nd highest Channel, high BE, Antenna B




21:15:04 24.02.2022

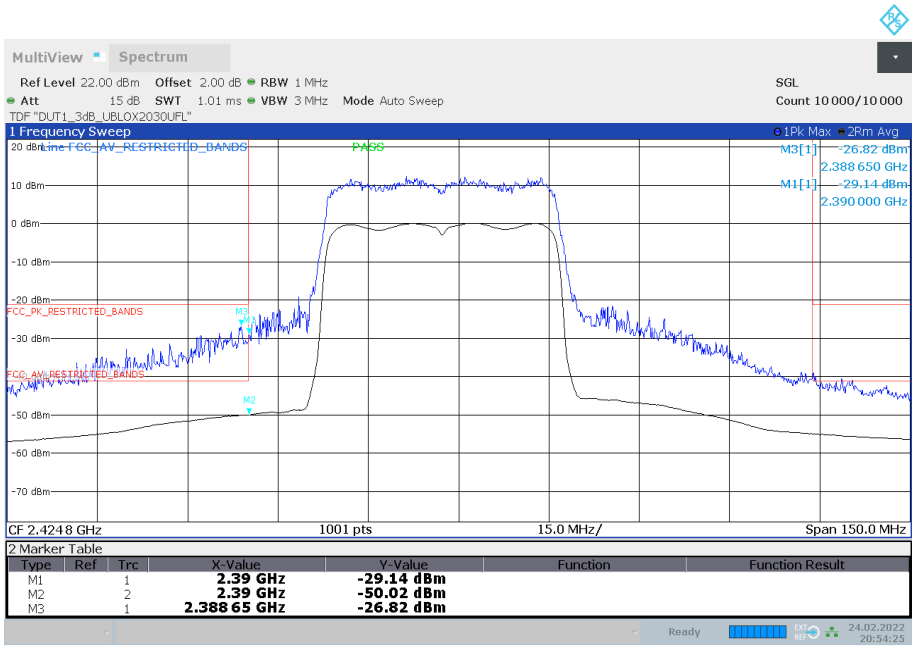
Highest Channel, high BE, Antenna A




20:35:01 24.02.2022

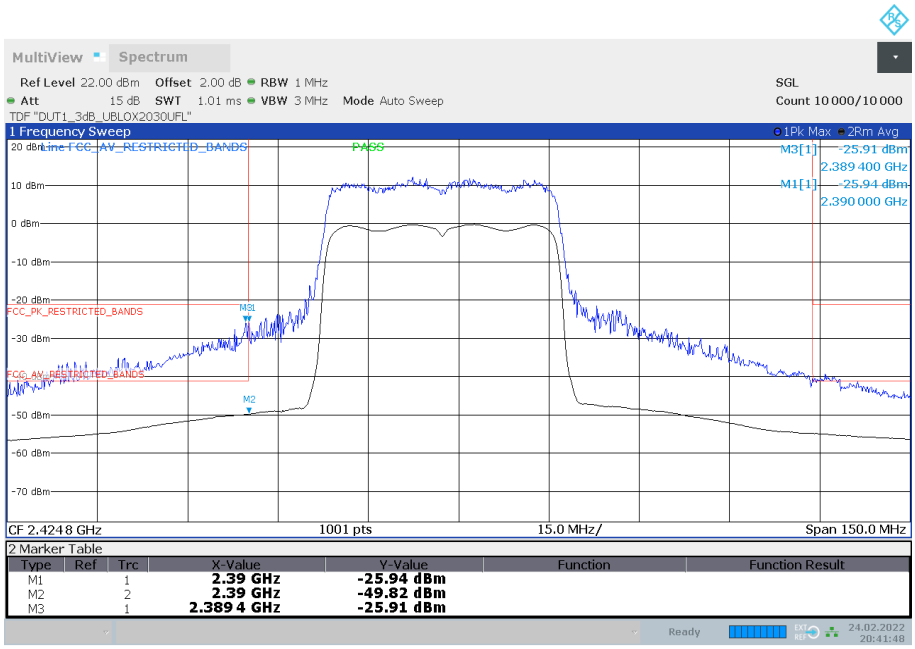
Highest Channel, high BE, Antenna B

Radio Technology = WLAN ax 40 MHz MIMO, Operating Frequency = high, Band Edge = high (S01_377_AA01)



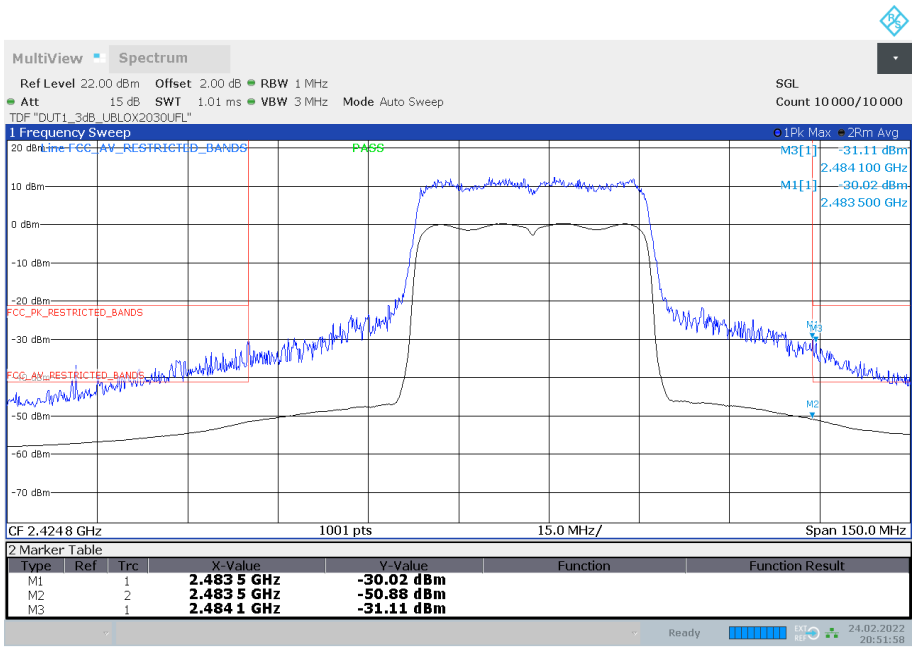

20:54:26 24.02.2022

Lowest Channel, low BE, Antenna A



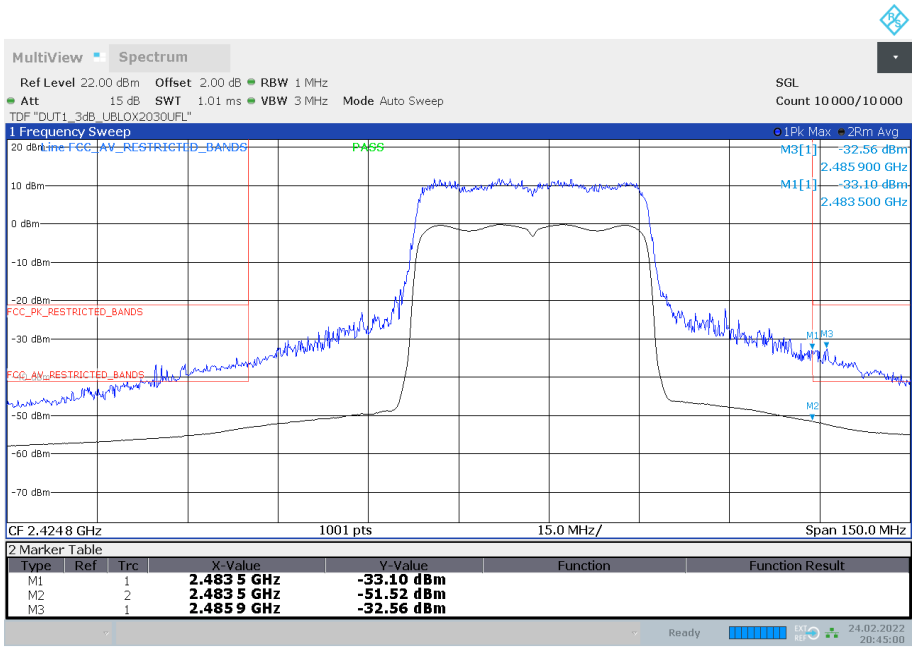

20:41:49 24.02.2022

Lowest Channel, low BE, Antenna B



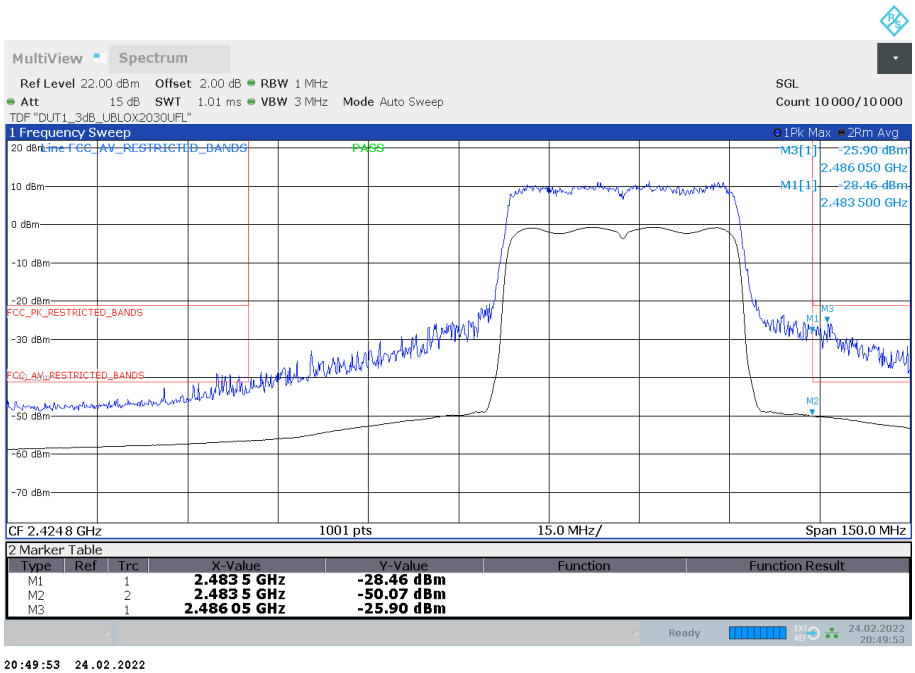

20:51:59 24.02.2022

Mid Channel, low BE, Antenna A



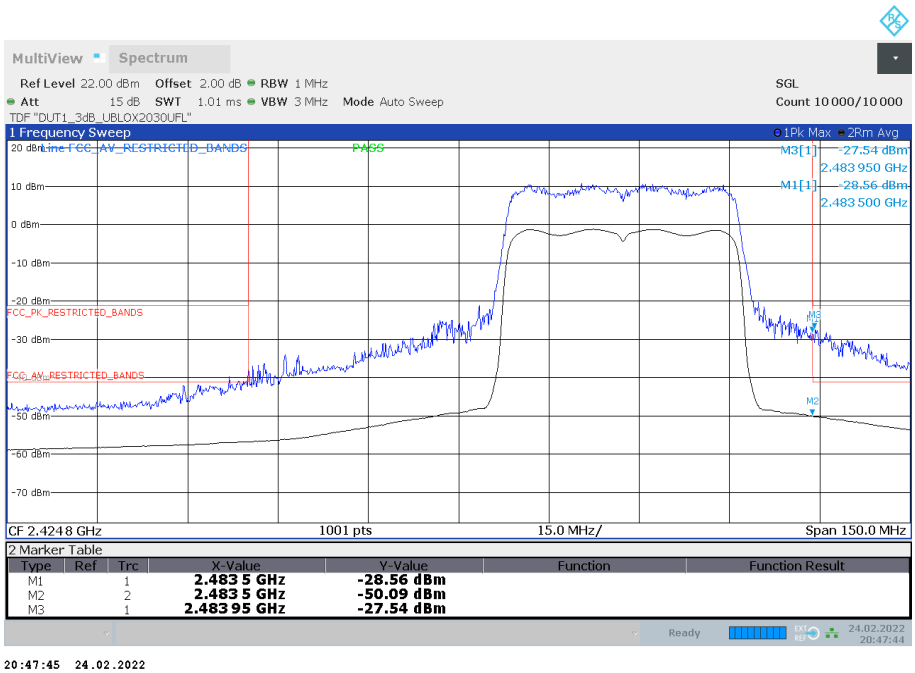

20:45:01 24.02.2022

Mid Channel, low BE, Antenna B




20:49:53 24.02.2022

Highest Channel, high BE, Antenna A




20:47:45 24.02.2022

Highest Channel, high BE, Antenna B