

# FCC Part 47 §15.247 2400-2483.5 MHz 2015

## DUT Information

### Frequencies

|                     |                     |                     |
|---------------------|---------------------|---------------------|
| BT CH 0 (2402 MHz)  | BT CH 1 (2403 MHz)  | BT CH 2 (2404 MHz)  |
| BT CH 3 (2405 MHz)  | BT CH 4 (2406 MHz)  | BT CH 5 (2407 MHz)  |
| BT CH 6 (2408 MHz)  | BT CH 7 (2409 MHz)  | BT CH 8 (2410 MHz)  |
| BT CH 9 (2411 MHz)  | BT CH 10 (2412 MHz) | BT CH 11 (2413 MHz) |
| BT CH 12 (2414 MHz) | BT CH 13 (2415 MHz) | BT CH 14 (2416 MHz) |
| BT CH 15 (2417 MHz) | BT CH 16 (2418 MHz) | BT CH 17 (2419 MHz) |
| BT CH 18 (2420 MHz) | BT CH 19 (2421 MHz) | BT CH 20 (2422 MHz) |
| BT CH 21 (2423 MHz) | BT CH 22 (2424 MHz) | BT CH 23 (2425 MHz) |
| BT CH 24 (2426 MHz) | BT CH 25 (2427 MHz) | BT CH 26 (2428 MHz) |
| BT CH 27 (2429 MHz) | BT CH 28 (2430 MHz) | BT CH 29 (2431 MHz) |
| BT CH 30 (2432 MHz) | BT CH 31 (2433 MHz) | BT CH 32 (2434 MHz) |
| BT CH 33 (2435 MHz) | BT CH 34 (2436 MHz) | BT CH 35 (2437 MHz) |
| BT CH 36 (2438 MHz) | BT CH 37 (2439 MHz) | BT CH 38 (2440 MHz) |
| BT CH 39 (2441 MHz) | BT CH 40 (2442 MHz) | BT CH 41 (2443 MHz) |
| BT CH 42 (2444 MHz) | BT CH 43 (2445 MHz) | BT CH 44 (2446 MHz) |
| BT CH 45 (2447 MHz) | BT CH 46 (2448 MHz) | BT CH 47 (2449 MHz) |
| BT CH 48 (2450 MHz) | BT CH 49 (2451 MHz) | BT CH 50 (2452 MHz) |
| BT CH 51 (2453 MHz) | BT CH 52 (2454 MHz) | BT CH 53 (2455 MHz) |
| BT CH 54 (2456 MHz) | BT CH 55 (2457 MHz) | BT CH 56 (2458 MHz) |
| BT CH 57 (2459 MHz) | BT CH 58 (2460 MHz) | BT CH 59 (2461 MHz) |
| BT CH 60 (2462 MHz) | BT CH 61 (2463 MHz) | BT CH 62 (2464 MHz) |
| BT CH 63 (2465 MHz) | BT CH 64 (2466 MHz) | BT CH 65 (2467 MHz) |
| BT CH 66 (2468 MHz) | BT CH 67 (2469 MHz) | BT CH 68 (2470 MHz) |
| BT CH 69 (2471 MHz) | BT CH 70 (2472 MHz) | BT CH 71 (2473 MHz) |
| BT CH 72 (2474 MHz) | BT CH 73 (2475 MHz) | BT CH 74 (2476 MHz) |
| BT CH 75 (2477 MHz) | BT CH 76 (2478 MHz) | BT CH 77 (2479 MHz) |
| BT CH 78 (2480 MHz) |                     |                     |

### Bandwidths

|               |               |               |
|---------------|---------------|---------------|
| 1 MHz (1 MHz) | 2 MHz (2 MHz) | 3 MHz (3 MHz) |
|---------------|---------------|---------------|

### Power

20.000 dBm (20 dBm)

### Beamforming Gain

|                        |                              |
|------------------------|------------------------------|
| Powerstep name (value) | Beamforming gain table names |
| 20.000 dBm (20 dBm)    | ---                          |

### Gain Tables

|                        |                  |
|------------------------|------------------|
| Powerstep name (value) | Gain table names |
| 20.000 dBm (20 dBm)    | Port 1: ---;     |

### DUT Settings

|                              |       |
|------------------------------|-------|
| No. of transmission chains   | 1     |
| Equipment Type               | Other |
| Digital Modulation           | No    |
| Frequency Hopping            | Yes   |
| Carrier Frequency Separation | 1 MHz |
| Dwell Time                   | 5 ms  |

## Hardware Setup: WMS Measurements\TS8997

Spectrum Analyzer: SA FSV 40 (SA FSV 40) @ VISA (ADR  
TCPIP::192.168.48.111::INST0::INSTR), SN 1307.9002K40/101076,  
FW 3.40

Vector Generator: VG SMBV100B (VG SMBV100B) @ VISA (ADR  
TCPIP::192.168.48.29::INST0::INSTR), SN 101685, FW 4.70.006.33

Generator: SMB100Aa (1) (SMB100A) @ VISA (ADR  
TCPIP::192.168.48.30::INST0::INSTR), SN 178361, FW 3.20.390.24  
/ Drv:Rev 2.21.0, 07/2016, CVI 2015

OSP: OSP-B157W (OSP-B157W) @ VISA (ADR  
TCPIP::192.168.48.157::INST0::INSTR), SN 1527.1144. /, FW  
1.27.0.0

## Summary

| Test                      | Frequency (MHz)    | Nominal Power (dBm) | Nominal Bandwidth (MHz) | Result |
|---------------------------|--------------------|---------------------|-------------------------|--------|
| Band Edge low             | --- (hopping)      | 20.0                | 2.000000                | PASS   |
| Band Edge high            | --- (hopping)      | 20.0                | 2.000000                | PASS   |
| Time of Channel Occupancy | 2475.000 (hopping) | 20.0                | 2.000000                | PASS   |
| RF output power           | 2405.000 (single)  | 20.0                | 2.000000                | PASS   |
| Emission Bandwidth 20 dB  | 2405.000 (single)  | 20.0                | 2.000000                | PASS   |
| Band Edge low             | 2405.000 (single)  | 20.0                | 2.000000                | PASS   |
| Tx Spurious Emission      | 2405.000 (single)  | 20.0                | 2.000000                | PASS   |
| Emission Bandwidth 20 dB  | 2439.000 (single)  | 20.0                | 2.000000                | PASS   |
| RF output power           | 2439.000 (single)  | 20.0                | 2.000000                | PASS   |
| Tx Spurious Emission      | 2439.000 (single)  | 20.0                | 2.000000                | PASS   |
| Emission Bandwidth 20 dB  | 2475.000 (single)  | 20.0                | 2.000000                | PASS   |
| RF output power           | 2475.000 (single)  | 20.0                | 2.000000                | PASS   |
| Band Edge high            | 2475.000 (single)  | 20.0                | 2.000000                | PASS   |
| Tx Spurious Emission      | 2475.000 (single)  | 20.0                | 2.000000                | PASS   |

## Band Edge low (frequency independent; 20.000 dBm; 2 MHz)

Test according to FCC title 47 part 15 §15.247(d), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10-2013

### Result

| DUT Frequency (MHz) | Result |
|---------------------|--------|
| hopping             | PASS   |

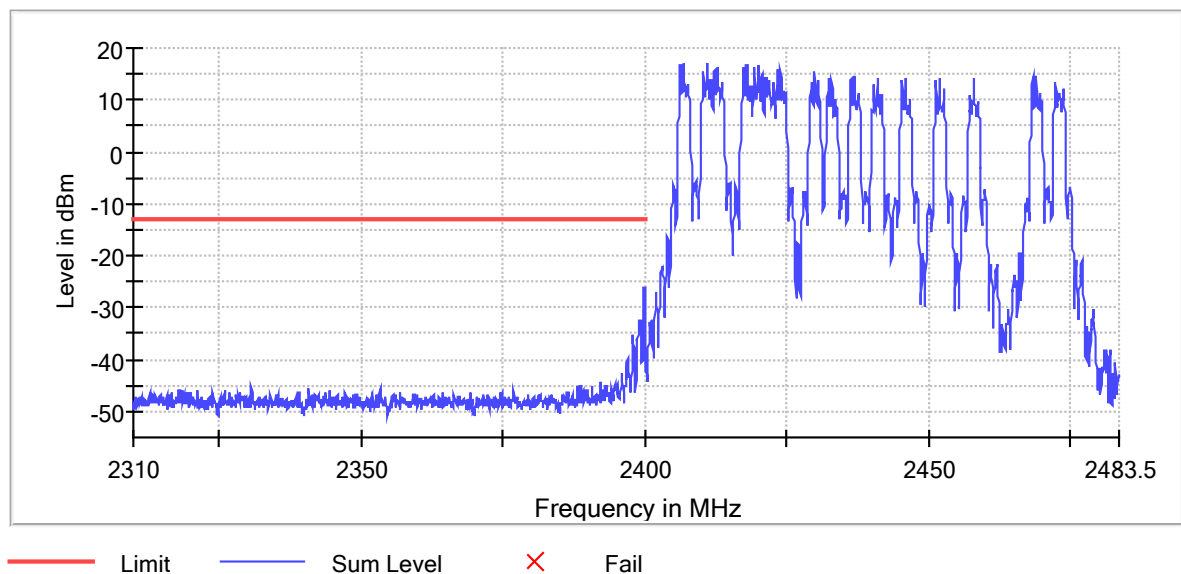
### Inband Peak

| Frequency (MHz) | Level (dBm) |
|-----------------|-------------|
| 2410.925000     | 17.0        |

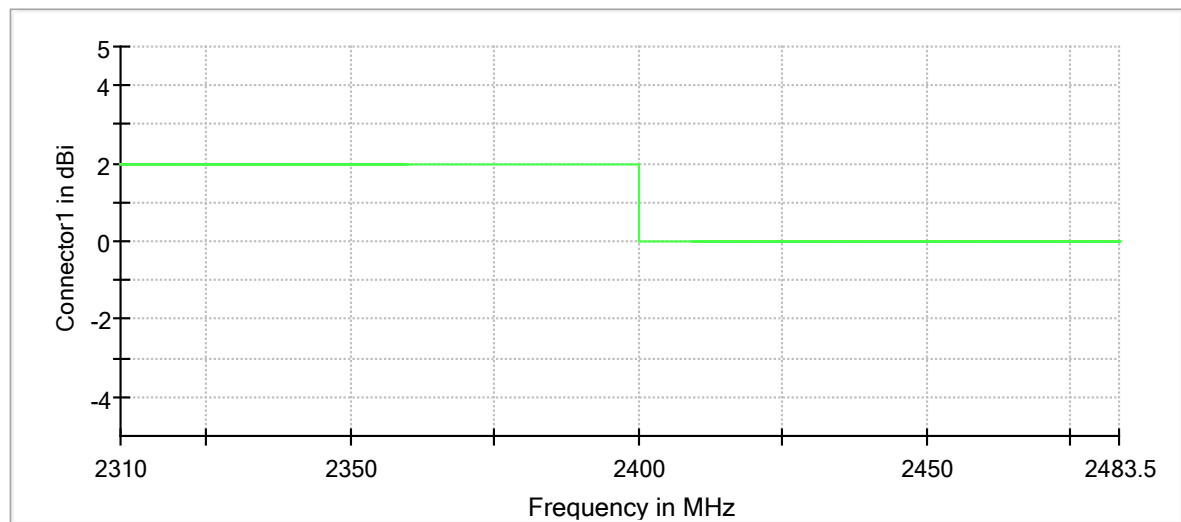
### Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|-----------------|-------------|-------------|-------------|--------|
| 2399.975000     | -26.2       | 13.2        | -13.0       | PASS   |
| 2399.925000     | -26.3       | 13.3        | -13.0       | PASS   |
| 2399.875000     | -28.8       | 15.8        | -13.0       | PASS   |
| 2399.825000     | -29.9       | 16.9        | -13.0       | PASS   |
| 2399.775000     | -31.4       | 18.4        | -13.0       | PASS   |
| 2398.975000     | -32.2       | 19.1        | -13.0       | PASS   |
| 2399.075000     | -32.4       | 19.3        | -13.0       | PASS   |
| 2399.025000     | -32.4       | 19.4        | -13.0       | PASS   |
| 2399.275000     | -32.4       | 19.4        | -13.0       | PASS   |
| 2399.225000     | -32.5       | 19.5        | -13.0       | PASS   |
| 2398.925000     | -32.9       | 19.9        | -13.0       | PASS   |
| 2399.125000     | -33.3       | 20.2        | -13.0       | PASS   |
| 2399.725000     | -33.7       | 20.7        | -13.0       | PASS   |
| 2399.325000     | -34.7       | 21.7        | -13.0       | PASS   |
| 2398.825000     | -35.1       | 22.0        | -13.0       | PASS   |

Band Edge

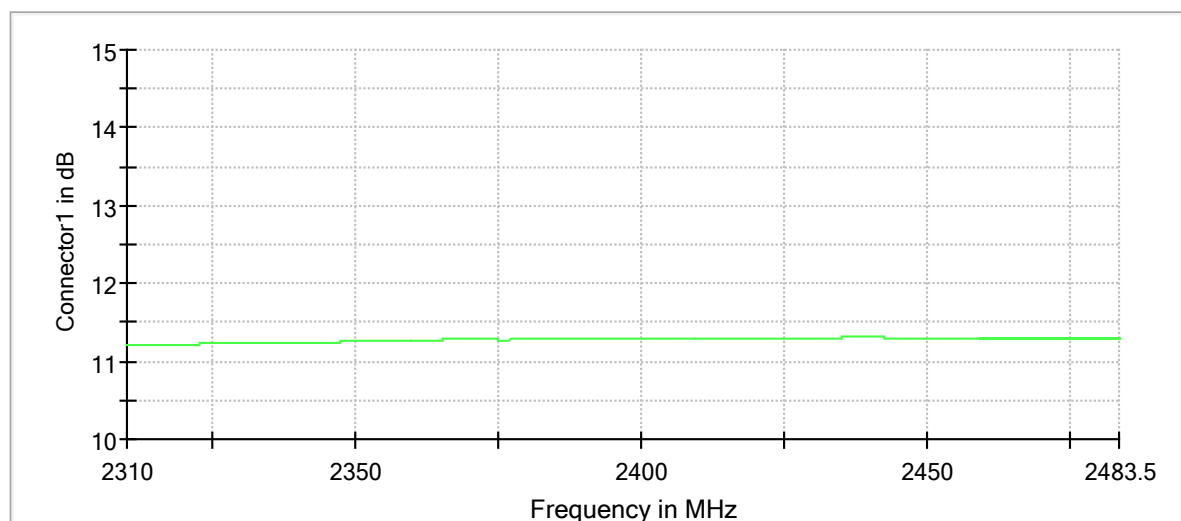


Gain



Connector1

Attenuation



Connector1

## Measurement 1

| Setting         | Instrument Value | Target Value   |
|-----------------|------------------|----------------|
| Start Frequency | 2.31000 GHz      | 2.31000 GHz    |
| Stop Frequency  | 2.40000 GHz      | 2.40000 GHz    |
| Span            | 90.000 MHz       | 90.000 MHz     |
| RBW             | 100.000 kHz      | <= 100.000 kHz |
| VBW             | 300.000 kHz      | >= 300.000 kHz |
| SweepPoints     | 1800             | ~ 1800         |
| SweepTime       | 113.672 $\mu$ s  | AUTO           |
| Reference Level | 10.000 dBm       | 10.000 dBm     |
| Attenuation     | 30.000 dB        | AUTO           |
| Detector        | MaxPeak          | MaxPeak        |
| SweepCount      | 100              | 100            |
| Filter          | 3 dB             | 3 dB           |
| Trace Mode      | Max Hold         | Max Hold       |
| SweepType       | FFT              | AUTO           |
| Preamplifier    | off              | off            |
| Stablemode      | Trace            | Trace          |
| Stablevalue     | 0.50 dB          | 0.50 dB        |

|                       |              |          |
|-----------------------|--------------|----------|
| Run                   | 8 / max. 150 | max. 150 |
| Stable                | 3 / 3        | 3        |
| Max Stable Difference | 0.00 dB      | 0.50 dB  |

## Measurement 2

| Setting               | Instrument Value | Target Value   |
|-----------------------|------------------|----------------|
| Start Frequency       | 2.40000 GHz      | 2.40000 GHz    |
| Stop Frequency        | 2.48350 GHz      | 2.48350 GHz    |
| Span                  | 83.500 MHz       | 83.500 MHz     |
| RBW                   | 100.000 kHz      | <= 100.000 kHz |
| VBW                   | 300.000 kHz      | >= 300.000 kHz |
| SweepPoints           | 1670             | ~ 1670         |
| Sweeptime             | 94.727 $\mu$ s   | AUTO           |
| Reference Level       | 10.000 dBm       | 10.000 dBm     |
| Attenuation           | 30.000 dB        | AUTO           |
| Detector              | MaxPeak          | MaxPeak        |
| SweepCount            | 100              | 100            |
| Filter                | 3 dB             | 3 dB           |
| Trace Mode            | Max Hold         | Max Hold       |
| SweepType             | FFT              | AUTO           |
| Preamplifier          | off              | off            |
| Stablemode            | Trace            | Trace          |
| Stablevalue           | 0.50 dB          | 0.50 dB        |
| Run                   | 83 / max. 150    | max. 150       |
| Stable                | 3 / 3            | 3              |
| Max Stable Difference | 0.14 dB          | 0.50 dB        |

## Band Edge high (frequency independent; 20.000 dBm; 2 MHz)

Test according to FCC title 47 part 15 §15.247(d), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10-2013

### Result

| DUT Frequency (MHz) | Result |
|---------------------|--------|
| hopping             | PASS   |

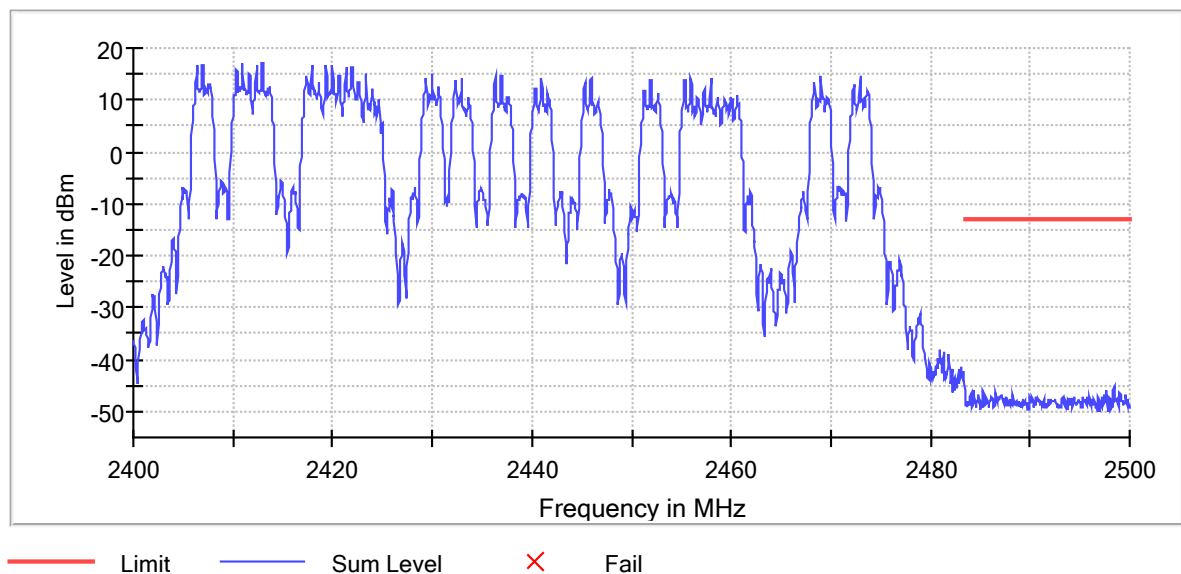
### Inband Peak

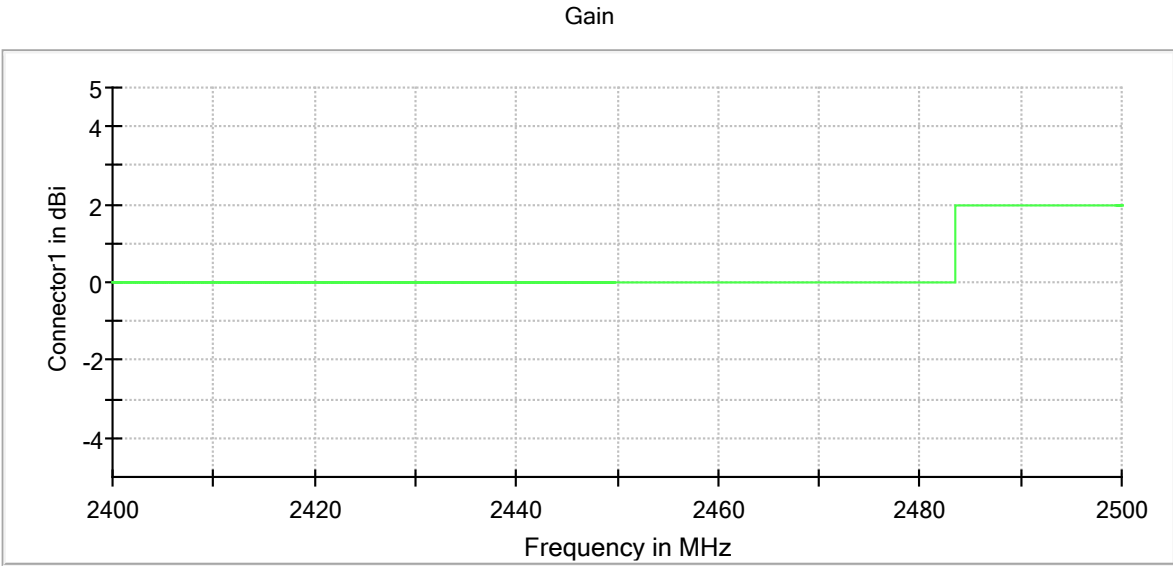
| Frequency (MHz) | Level (dBm) |
|-----------------|-------------|
| 2410.975000     | 17.1        |

### Measurements

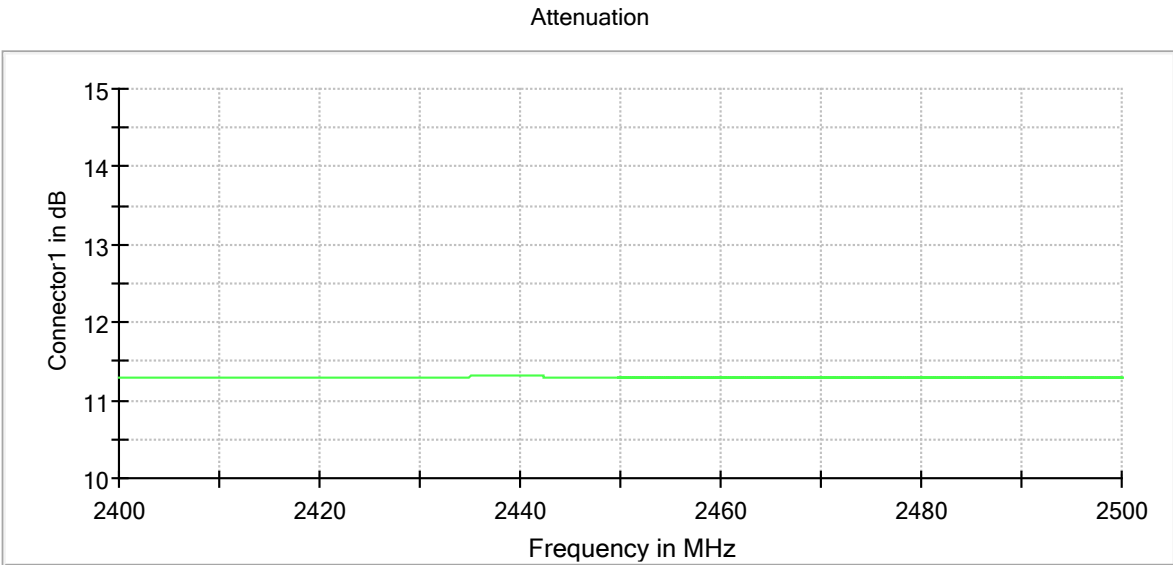
| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|-----------------|-------------|-------------|-------------|--------|
| 2498.425000     | -45.1       | 32.2        | -12.9       | PASS   |
| 2498.475000     | -45.2       | 32.3        | -12.9       | PASS   |
| 2484.425000     | -46.0       | 33.1        | -12.9       | PASS   |
| 2484.375000     | -46.0       | 33.1        | -12.9       | PASS   |
| 2485.325000     | -46.0       | 33.2        | -12.9       | PASS   |
| 2497.625000     | -46.1       | 33.2        | -12.9       | PASS   |
| 2498.375000     | -46.1       | 33.3        | -12.9       | PASS   |
| 2497.675000     | -46.2       | 33.3        | -12.9       | PASS   |
| 2499.025000     | -46.2       | 33.3        | -12.9       | PASS   |
| 2485.275000     | -46.4       | 33.5        | -12.9       | PASS   |
| 2484.075000     | -46.5       | 33.6        | -12.9       | PASS   |
| 2486.575000     | -46.5       | 33.6        | -12.9       | PASS   |
| 2486.525000     | -46.6       | 33.7        | -12.9       | PASS   |
| 2499.075000     | -46.6       | 33.7        | -12.9       | PASS   |
| 2484.775000     | -46.7       | 33.8        | -12.9       | PASS   |

Band Edge





Connector1



Connector1

Measurement 1

| Setting         | Instrument Value | Target Value   |
|-----------------|------------------|----------------|
| Start Frequency | 2.40000 GHz      | 2.40000 GHz    |
| Stop Frequency  | 2.48350 GHz      | 2.48350 GHz    |
| Span            | 83.500 MHz       | 83.500 MHz     |
| RBW             | 100.000 kHz      | <= 100.000 kHz |
| VBW             | 300.000 kHz      | >= 300.000 kHz |
| SweepPoints     | 1670             | ~ 1670         |
| SweepTime       | 94.727 μs        | AUTO           |
| Reference Level | 10.000 dBm       | 10.000 dBm     |
| Attenuation     | 30.000 dB        | AUTO           |
| Detector        | MaxPeak          | MaxPeak        |
| SweepCount      | 100              | 100            |
| Filter          | 3 dB             | 3 dB           |
| Trace Mode      | Max Hold         | Max Hold       |
| SweepType       | FFT              | AUTO           |
| Preamp          | off              | off            |
| Stablemode      | Trace            | Trace          |
| Stablevalue     | 0.50 dB          | 0.50 dB        |

|                       |                |          |
|-----------------------|----------------|----------|
| Run                   | 113 / max. 150 | max. 150 |
| Stable                | 3 / 3          | 3        |
| Max Stable Difference | 0.00 dB        | 0.50 dB  |

## Measurement 2

| Setting               | Instrument Value | Target Value   |
|-----------------------|------------------|----------------|
| Start Frequency       | 2.48350 GHz      | 2.48350 GHz    |
| Stop Frequency        | 2.50000 GHz      | 2.50000 GHz    |
| Span                  | 16.500 MHz       | 16.500 MHz     |
| RBW                   | 100.000 kHz      | <= 100.000 kHz |
| VBW                   | 300.000 kHz      | >= 300.000 kHz |
| SweepPoints           | 330              | ~ 330          |
| Sweeptime             | 18.945 $\mu$ s   | AUTO           |
| Reference Level       | 10.000 dBm       | 10.000 dBm     |
| Attenuation           | 30.000 dB        | AUTO           |
| Detector              | MaxPeak          | MaxPeak        |
| SweepCount            | 100              | 100            |
| Filter                | 3 dB             | 3 dB           |
| Trace Mode            | Max Hold         | Max Hold       |
| SweepType             | FFT              | AUTO           |
| Preamplifier          | off              | off            |
| Stablemode            | Trace            | Trace          |
| Stablevalue           | 0.50 dB          | 0.50 dB        |
| Run                   | 4 / max. 150     | max. 150       |
| Stable                | 3 / 3            | 3              |
| Max Stable Difference | 0.00 dB          | 0.50 dB        |

## Time of Channel Occupancy (2475 MHz; 20.000 dBm; 2 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10-2013

### Result

| DUT Frequency (MHz) | Result | Number of Hops | Average time of occupancy (ms) | Threshold (dBm) |
|---------------------|--------|----------------|--------------------------------|-----------------|
| 2475.000000         | PASS   | 39             | 283.933                        | 0.0             |

### Periode

| Min (ms) | Max (ms) | Mean (ms) |
|----------|----------|-----------|
| 79.876   | 280.013  | 158.422   |

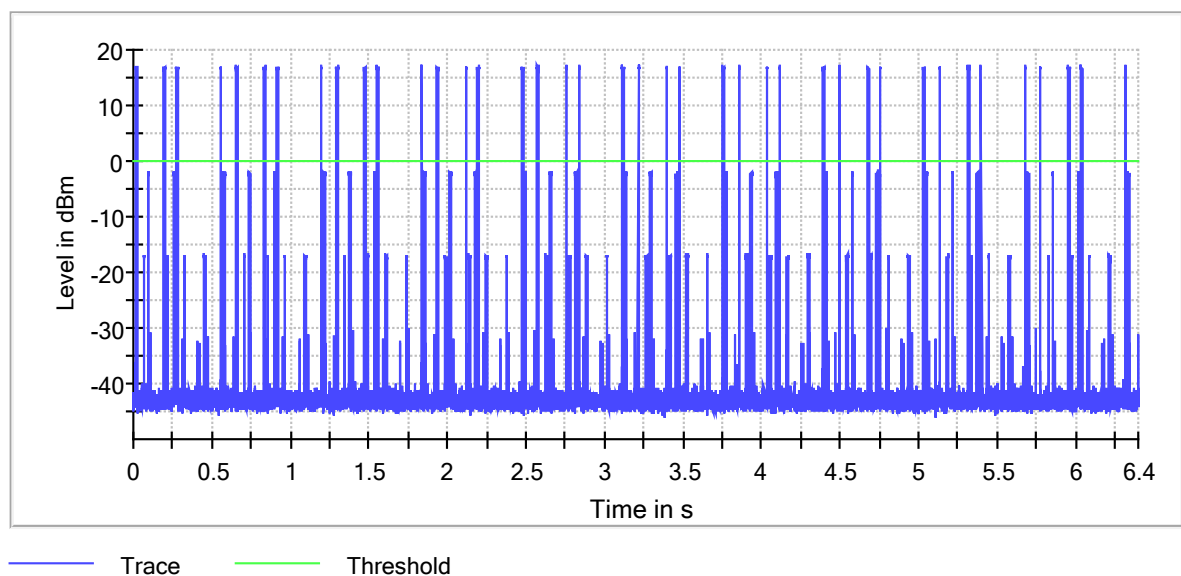
### Transmit Time per Hop

| Min (ms) | Max (ms) | Limit Max for Max (ms) | Limit Min for Max (ms) | Mean (ms) |
|----------|----------|------------------------|------------------------|-----------|
| 6.918    | 7.182    | 400.000                | 0.000                  | 7.097     |

### DwellTime

| Min (ms) | Max (ms) | Mean (ms) |
|----------|----------|-----------|
| 7.524    | 7.530    | 7.527     |

Time of Channel Occupancy



### Measurement

| Setting          | Instrument Value | Target Value |
|------------------|------------------|--------------|
| Center Frequency | 2.47500 GHz      | 2.47500 GHz  |
| Span             | ZeroSpan         | ZeroSpan     |

|                        |                    |                    |
|------------------------|--------------------|--------------------|
| <b>RBW</b>             | <b>1.000 MHz</b>   | <b>~ 1.000 MHz</b> |
| <b>VBW</b>             | <b>3.000 MHz</b>   | <b>~ 3.000 MHz</b> |
| <b>SweepPoints</b>     | <b>30001</b>       | <b>~ 30001</b>     |
| <b>SweepTime</b>       | <b>6.400 s</b>     | <b>6.400 s</b>     |
| <b>Reference Level</b> | <b>-10.000 dBm</b> | <b>-10.000 dBm</b> |
| <b>Attenuation</b>     | <b>0.000 dB</b>    | <b>0.000 dB</b>    |
| <b>Detector</b>        | <b>MaxPeak</b>     | <b>MaxPeak</b>     |
| <b>SweepCount</b>      | <b>1</b>           | <b>1</b>           |
| <b>Filter</b>          | <b>Channel</b>     | <b>Channel</b>     |
| <b>Trace Mode</b>      | <b>Clear Write</b> | <b>Clear Write</b> |
| <b>SweepType</b>       | <b>Sweep</b>       | <b>AUTO</b>        |
| <b>Preamp</b>          | <b>off</b>         | <b>off</b>         |
| <b>Trigger</b>         | <b>External</b>    | <b>External</b>    |
| <b>Trigger Offset</b>  | <b>0.000 s</b>     | <b>0.000 s</b>     |

## OSP

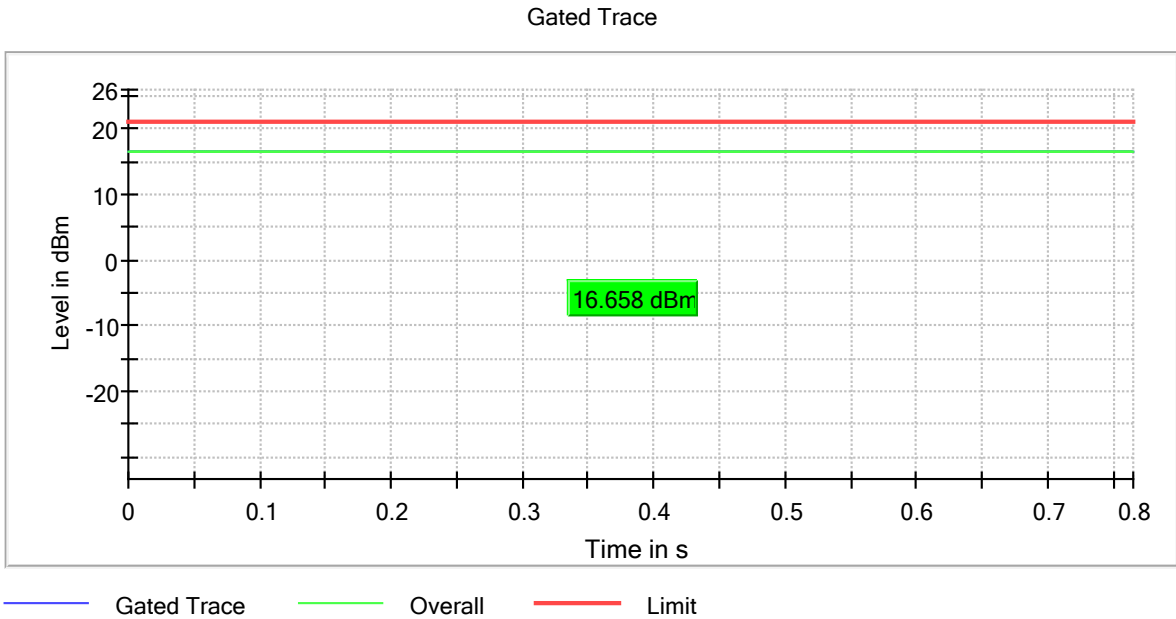
| <b>Setting</b>          | <b>Instrument Value</b> | <b>Target Value</b> |
|-------------------------|-------------------------|---------------------|
| <b>Measurement Time</b> | <b>6.400 s</b>          | <b>6.400 s</b>      |
| <b>Tracepoints</b>      | <b>6400000</b>          | <b>6400000</b>      |
| <b>Time resolution</b>  | <b>1.000 µs</b>         | <b>1.000 µs</b>     |
| <b>Detector</b>         | <b>RMS</b>              | <b>RMS</b>          |

RF output power (2405 MHz; 20.000 dBm; 2 MHz; Test Mode)

Test according to FCC title 47 part 15 §15.247(b), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10-2013

Result

| DUT Frequency (MHz) | Gated RMS (dBm) | Limit Max (dBm) | Gated EIRP (dBm) | DutyCycle (%) | Result |
|---------------------|-----------------|-----------------|------------------|---------------|--------|
| 2405.000000         | 16.7            | 21.0            | 16.7             | 76.763        | PASS   |



OSP PowerMeter settings

| Setting          | Instrument Value | Target Value |
|------------------|------------------|--------------|
| Measurement Time | 1.000 s          | 1.000 s      |
| Points           | 1000000          | 1000000      |
| Time resolution  | 1.000 µs         | 1.000 µs     |

## Emission Bandwidth 20 dB (2405 MHz; 20.000 dBm; 2 MHz; Test Mode)

Customized settings.

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10-2013

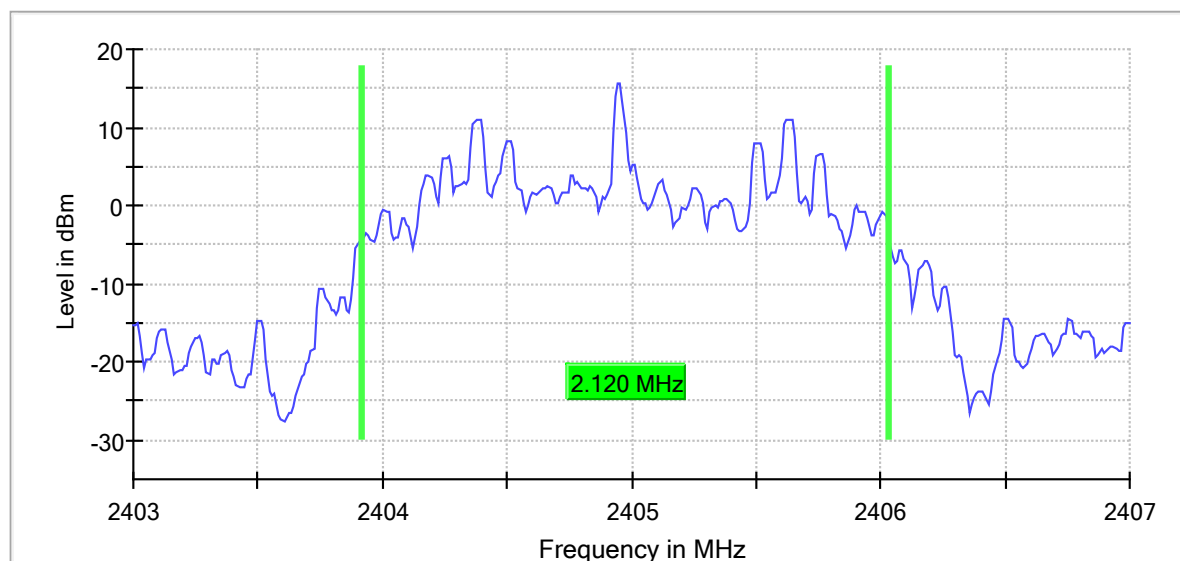
### 20 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---------------------|-----------------|-----------------|-----------------|----------------------|-----------------------|
| 2405.000000         | 2.120000        | ---             | ---             | 2403.915000          | 2406.035000           |

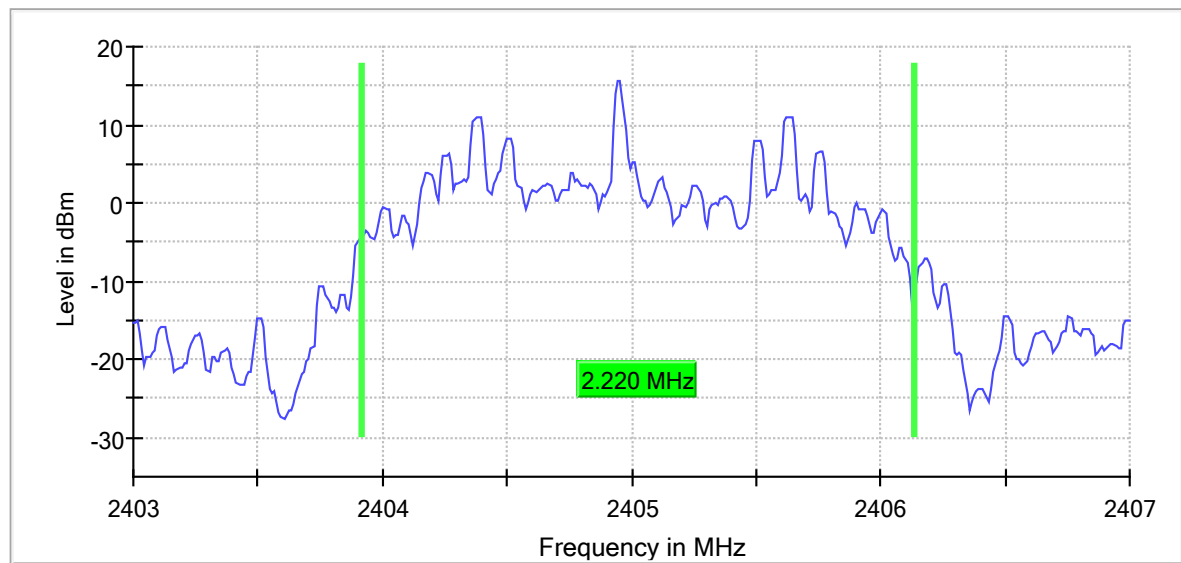
(continuation of the "20 dB Bandwidth" table from column 6 ...)

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---------------------|-----------------|--------|
| 2405.000000         | 15.7            | PASS   |

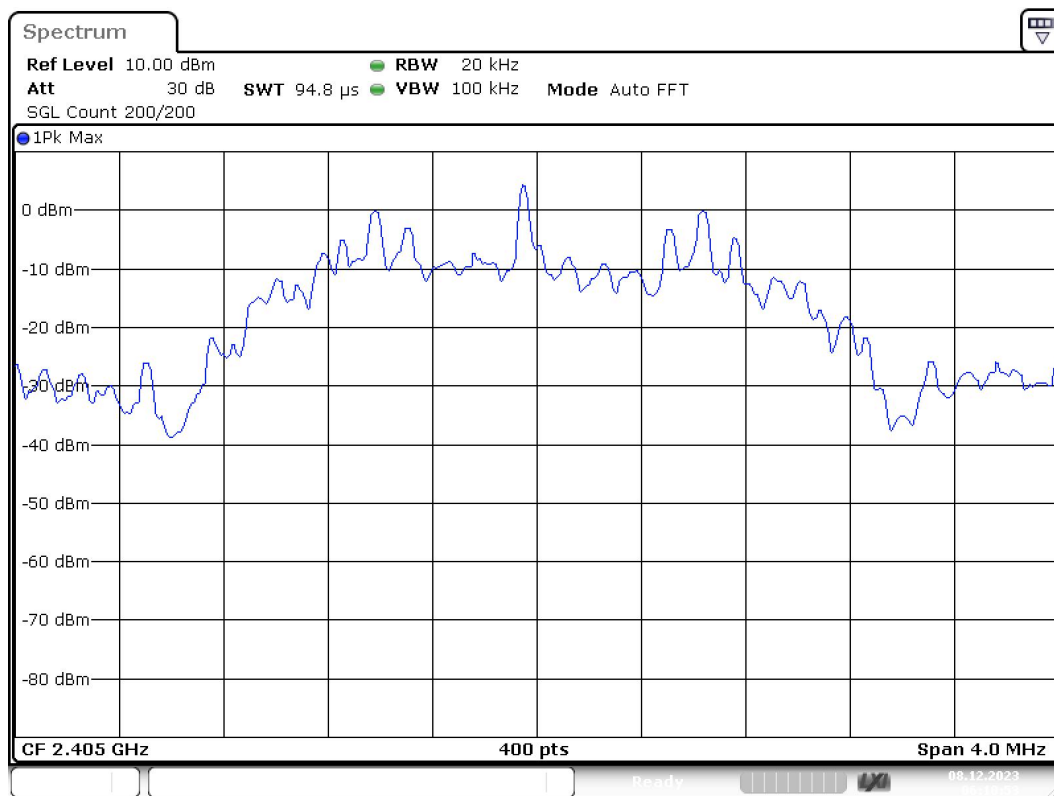
20 dB Bandwidth



99 % Bandwidth



Bandwidth



Date: 8.DEC.2023 06:10:54

## Measurement

| Setting         | Instrument Value | Target Value |
|-----------------|------------------|--------------|
| Start Frequency | 2.40300 GHz      | 2.40300 GHz  |
| Stop Frequency  | 2.40700 GHz      | 2.40700 GHz  |
| Span            | 4.000 MHz        | 4.000 MHz    |

|                              |                    |                         |
|------------------------------|--------------------|-------------------------|
| <b>RBW</b>                   | <b>20.000 kHz</b>  | <b>&gt;= 20.000 kHz</b> |
| <b>VBW</b>                   | <b>100.000 kHz</b> | <b>&gt;= 60.000 kHz</b> |
| <b>SweepPoints</b>           | <b>400</b>         | <b>~ 400</b>            |
| <b>SweepTime</b>             | <b>94.824 µs</b>   | <b>AUTO</b>             |
| <b>Reference Level</b>       | <b>10.000 dBm</b>  | <b>10.000 dBm</b>       |
| <b>Attenuation</b>           | <b>30.000 dB</b>   | <b>AUTO</b>             |
| <b>Detector</b>              | <b>MaxPeak</b>     | <b>MaxPeak</b>          |
| <b>SweepCount</b>            | <b>200</b>         | <b>200</b>              |
| <b>Filter</b>                | <b>3 dB</b>        | <b>3 dB</b>             |
| <b>Trace Mode</b>            | <b>Max Hold</b>    | <b>Max Hold</b>         |
| <b>SweepType</b>             | <b>FFT</b>         | <b>AUTO</b>             |
| <b>Preamp</b>                | <b>off</b>         | <b>off</b>              |
| <b>Stablemode</b>            | <b>Trace</b>       | <b>Trace</b>            |
| <b>Stablevalue</b>           | <b>0.50 dB</b>     | <b>0.50 dB</b>          |
| <b>Run</b>                   | <b>1 / max. 1</b>  | <b>max. 1</b>           |
| <b>Stable</b>                | <b>0 / 1</b>       | <b>1</b>                |
| <b>Max Stable Difference</b> | <b>0.00 dB</b>     | <b>0.50 dB</b>          |

**Band Edge low (2405 MHz; 20.000 dBm; 2 MHz; Test Mode)**

Test according to FCC title 47 part 15 §15.247(d), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10-2013

**Result**

| DUT Frequency (MHz) | Result |
|---------------------|--------|
| 2405.000000         | PASS   |

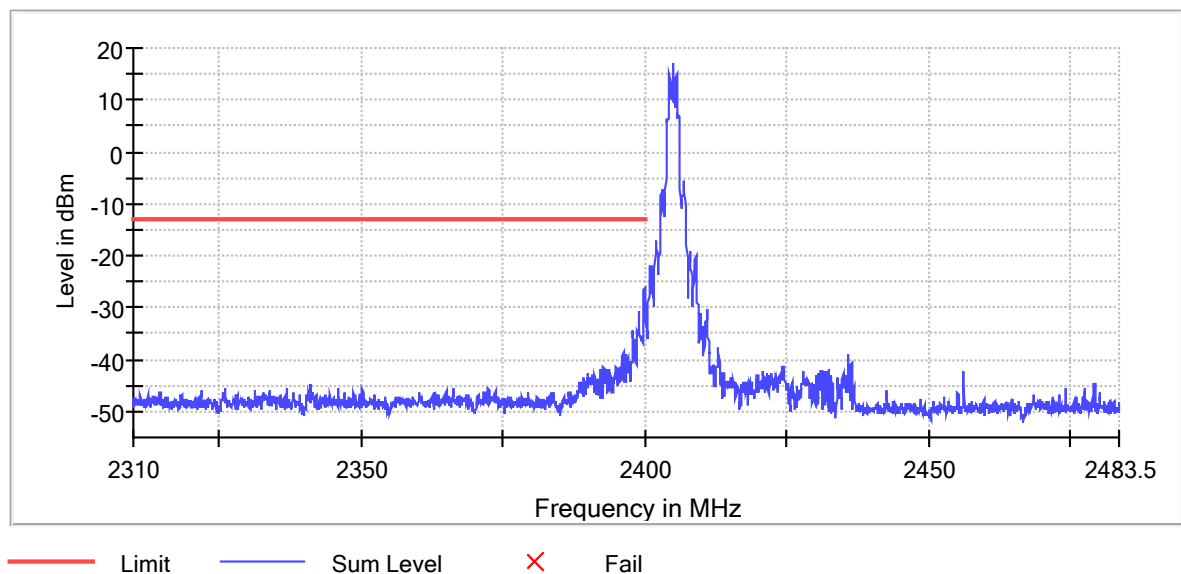
**Inband Peak**

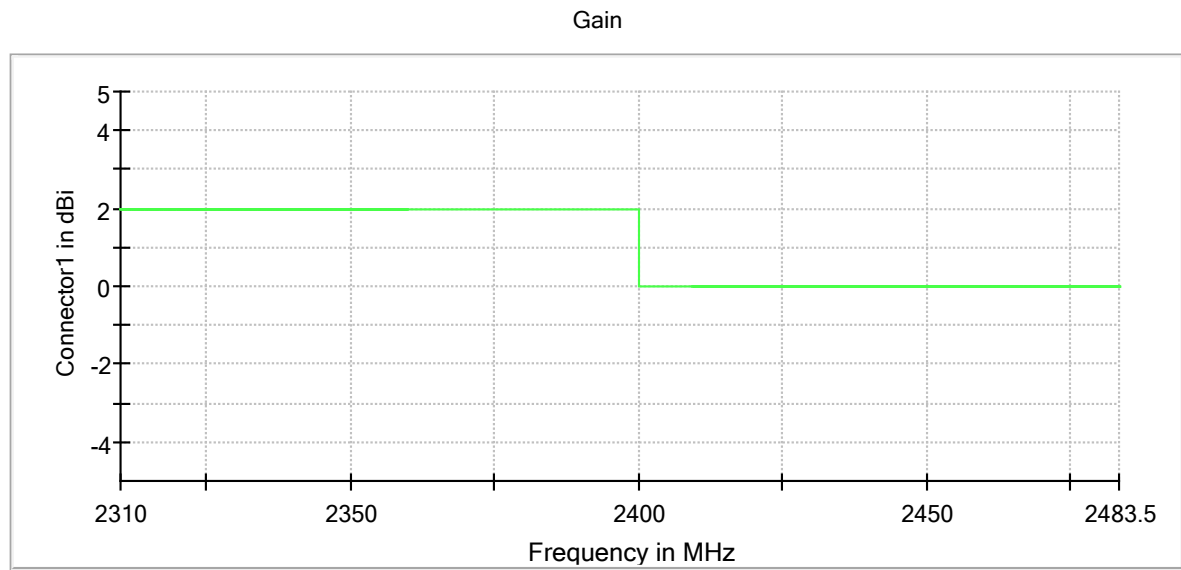
| Frequency (MHz) | Level (dBm) |
|-----------------|-------------|
| 2404.925000     | 17.2        |

**Measurements**

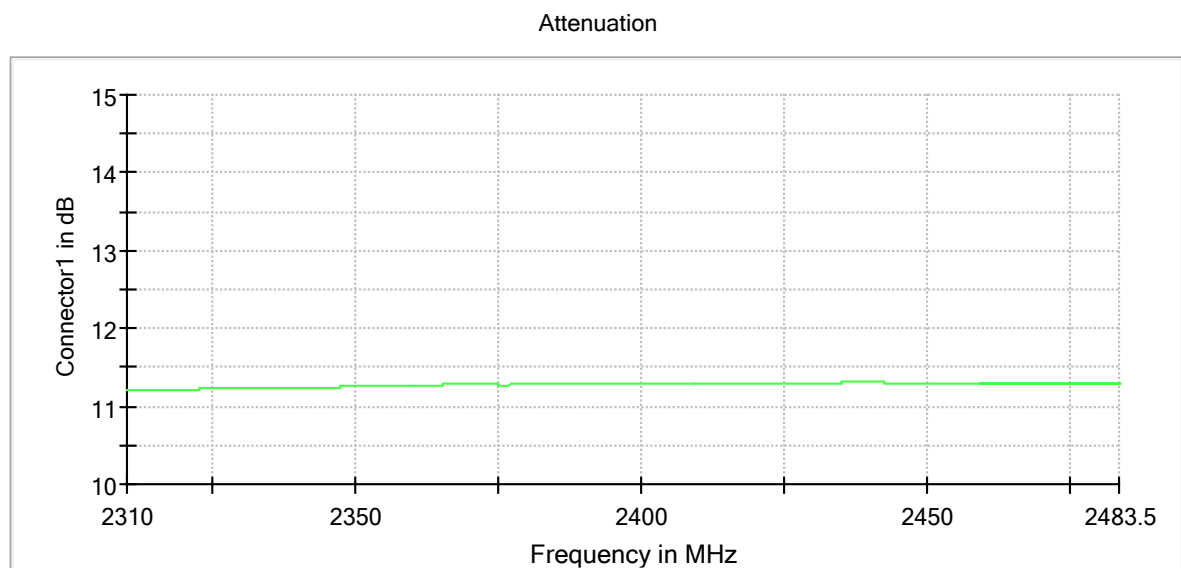
| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|-----------------|-------------|-------------|-------------|--------|
| 2399.975000     | -26.3       | 13.4        | -12.8       | PASS   |
| 2399.925000     | -26.7       | 13.9        | -12.8       | PASS   |
| 2399.875000     | -27.7       | 14.9        | -12.8       | PASS   |
| 2399.825000     | -30.2       | 17.3        | -12.8       | PASS   |
| 2399.025000     | -30.7       | 17.9        | -12.8       | PASS   |
| 2399.075000     | -30.8       | 18.0        | -12.8       | PASS   |
| 2398.975000     | -30.9       | 18.1        | -12.8       | PASS   |
| 2399.775000     | -32.2       | 19.4        | -12.8       | PASS   |
| 2399.125000     | -32.6       | 19.8        | -12.8       | PASS   |
| 2399.725000     | -32.7       | 19.9        | -12.8       | PASS   |
| 2398.925000     | -33.3       | 20.5        | -12.8       | PASS   |
| 2399.675000     | -33.7       | 20.8        | -12.8       | PASS   |
| 2398.875000     | -34.2       | 21.3        | -12.8       | PASS   |
| 2397.975000     | -34.5       | 21.7        | -12.8       | PASS   |
| 2398.775000     | -34.6       | 21.8        | -12.8       | PASS   |

Band Edge



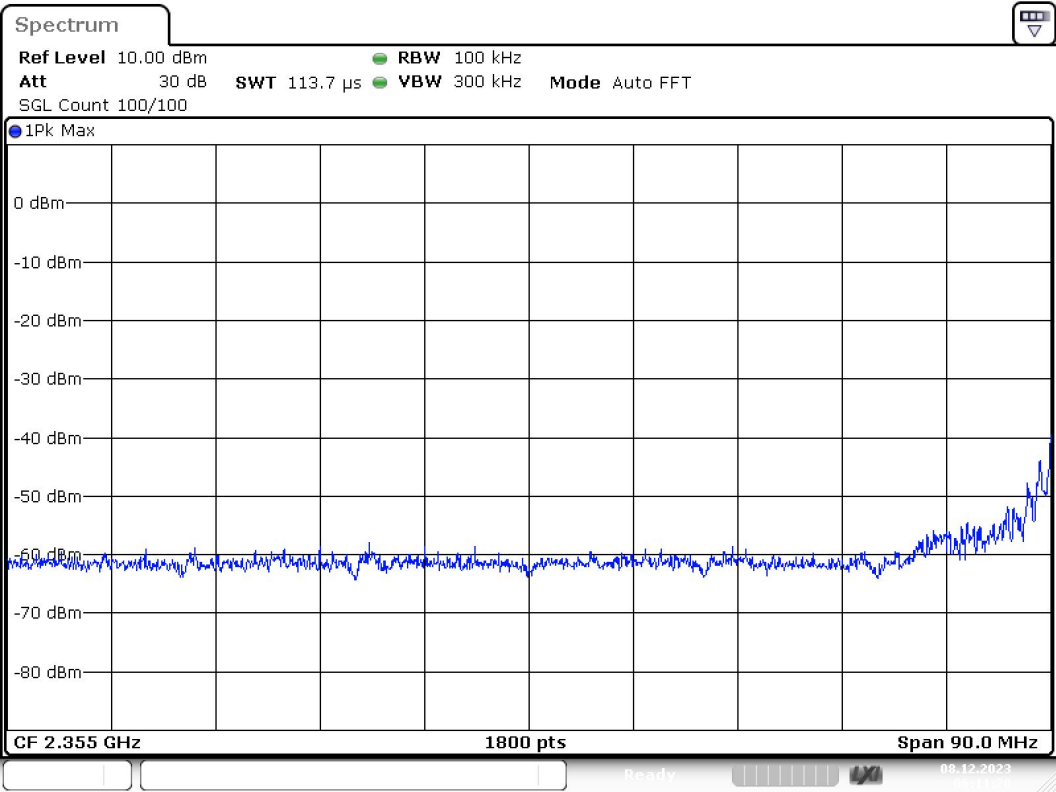


Connector1



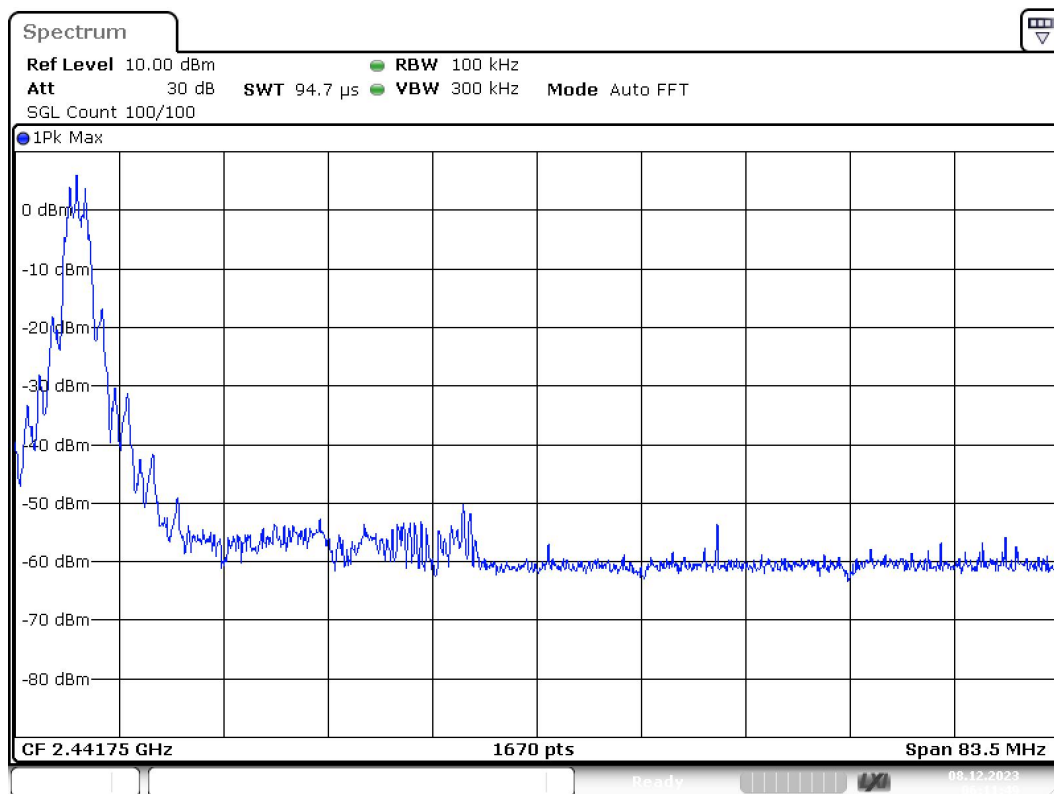
Connector1

Band Edge Connector 1\_0



Date: 8.DECEMBER.2023 06:11:21

Band Edge Connector 1\_1



Date: 8.DEC.2023 06:11:50

## Measurement 1

| Setting               | Instrument Value | Target Value   |
|-----------------------|------------------|----------------|
| Start Frequency       | 2.31000 GHz      | 2.31000 GHz    |
| Stop Frequency        | 2.40000 GHz      | 2.40000 GHz    |
| Span                  | 90.000 MHz       | 90.000 MHz     |
| RBW                   | 100.000 kHz      | <= 100.000 kHz |
| VBW                   | 300.000 kHz      | >= 300.000 kHz |
| SweepPoints           | 1800             | ~ 1800         |
| Sweptime              | 113.672 µs       | AUTO           |
| Reference Level       | 10.000 dBm       | 10.000 dBm     |
| Attenuation           | 30.000 dB        | AUTO           |
| Detector              | MaxPeak          | MaxPeak        |
| SweepCount            | 100              | 100            |
| Filter                | 3 dB             | 3 dB           |
| Trace Mode            | Max Hold         | Max Hold       |
| SweepType             | FFT              | AUTO           |
| Preamp                | off              | off            |
| Stablemode            | Trace            | Trace          |
| Stablevalue           | 0.50 dB          | 0.50 dB        |
| Run                   | 8 / max. 150     | max. 150       |
| Stable                | 3 / 3            | 3              |
| Max Stable Difference | 0.07 dB          | 0.50 dB        |

## Measurement 2

| Setting         | Instrument Value | Target Value   |
|-----------------|------------------|----------------|
| Start Frequency | 2.40000 GHz      | 2.40000 GHz    |
| Stop Frequency  | 2.48350 GHz      | 2.48350 GHz    |
| Span            | 83.500 MHz       | 83.500 MHz     |
| RBW             | 100.000 kHz      | <= 100.000 kHz |
| VBW             | 300.000 kHz      | >= 300.000 kHz |

|                              |                      |                   |
|------------------------------|----------------------|-------------------|
| <b>SweepPoints</b>           | <b>1670</b>          | <b>~ 1670</b>     |
| <b>Sweeptime</b>             | <b>94.727 µs</b>     | <b>AUTO</b>       |
| <b>Reference Level</b>       | <b>10.000 dBm</b>    | <b>10.000 dBm</b> |
| <b>Attenuation</b>           | <b>30.000 dB</b>     | <b>AUTO</b>       |
| <b>Detector</b>              | <b>MaxPeak</b>       | <b>MaxPeak</b>    |
| <b>SweepCount</b>            | <b>100</b>           | <b>100</b>        |
| <b>Filter</b>                | <b>3 dB</b>          | <b>3 dB</b>       |
| <b>Trace Mode</b>            | <b>Max Hold</b>      | <b>Max Hold</b>   |
| <b>SweepType</b>             | <b>FFT</b>           | <b>AUTO</b>       |
| <b>Preamplifier</b>          | <b>off</b>           | <b>off</b>        |
| <b>Stablemode</b>            | <b>Trace</b>         | <b>Trace</b>      |
| <b>Stablevalue</b>           | <b>0.50 dB</b>       | <b>0.50 dB</b>    |
| <b>Run</b>                   | <b>19 / max. 150</b> | <b>max. 150</b>   |
| <b>Stable</b>                | <b>3 / 3</b>         | <b>3</b>          |
| <b>Max Stable Difference</b> | <b>0.10 dB</b>       | <b>0.50 dB</b>    |

**Tx Spurious Emission (2405 MHz; 20.000 dBm; 2 MHz; Test Mode)**

Test according to FCC title 47 part 15 §15.247(d), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10-2013

**Result**

| DUT Frequency (MHz) | Result |
|---------------------|--------|
| 2405.000000         | PASS   |

**Final measurements**

| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|-----------------|-----------------------------|-------------|-------------|-------------|--------|
| ---             | ---                         | ---         | ---         | ---         | ---    |

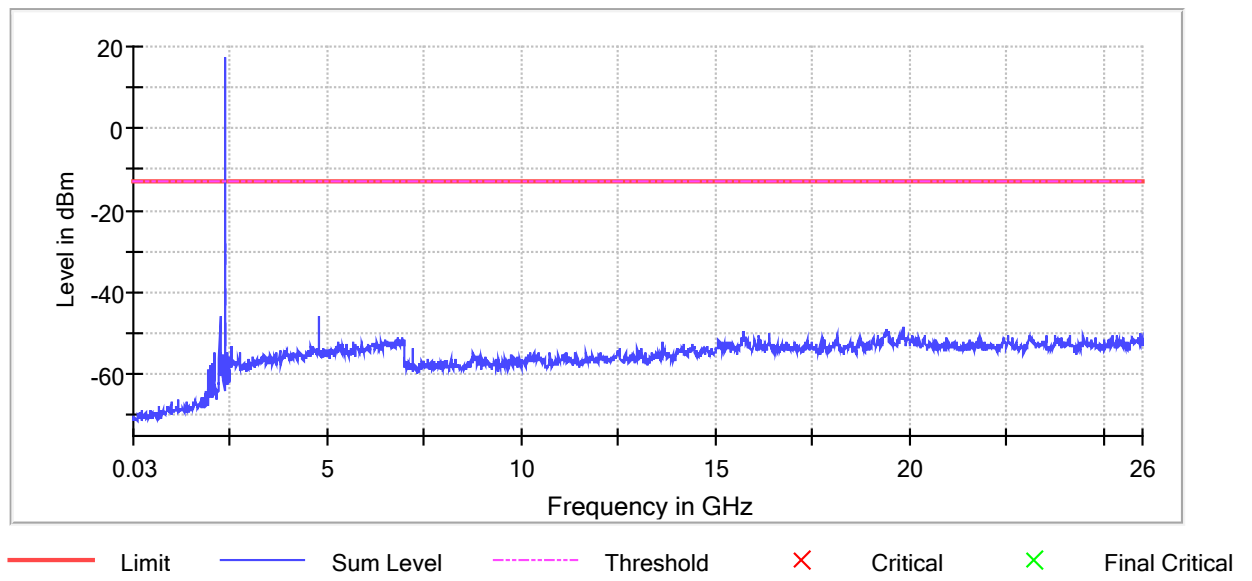
**Pre Measurements**

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|-----------------|-------------|-------------|-------------|
| 2395.021008     | -28.0       | 15.3        | -12.7       |
| 4807.166065     | -45.8       | 33.0        | -12.7       |
| 2255.609244     | -45.8       | 33.0        | -12.7       |
| 19858.525606    | -48.6       | 35.8        | -12.7       |
| 19408.783787    | -48.7       | 36.0        | -12.7       |
| 19428.772312    | -49.2       | 36.5        | -12.7       |
| 15740.889397    | -49.5       | 36.8        | -12.7       |
| 15720.900871    | -49.5       | 36.8        | -12.7       |
| 19388.795261    | -49.6       | 36.9        | -12.7       |
| 19468.749363    | -49.6       | 36.9        | -12.7       |
| 19398.789524    | -49.6       | 36.9        | -12.7       |
| 19418.778049    | -49.7       | 37.0        | -12.7       |
| 19378.800999    | -49.8       | 37.1        | -12.7       |
| 16400.510731    | -49.9       | 37.2        | -12.7       |
| 19768.577242    | -49.9       | 37.2        | -12.7       |

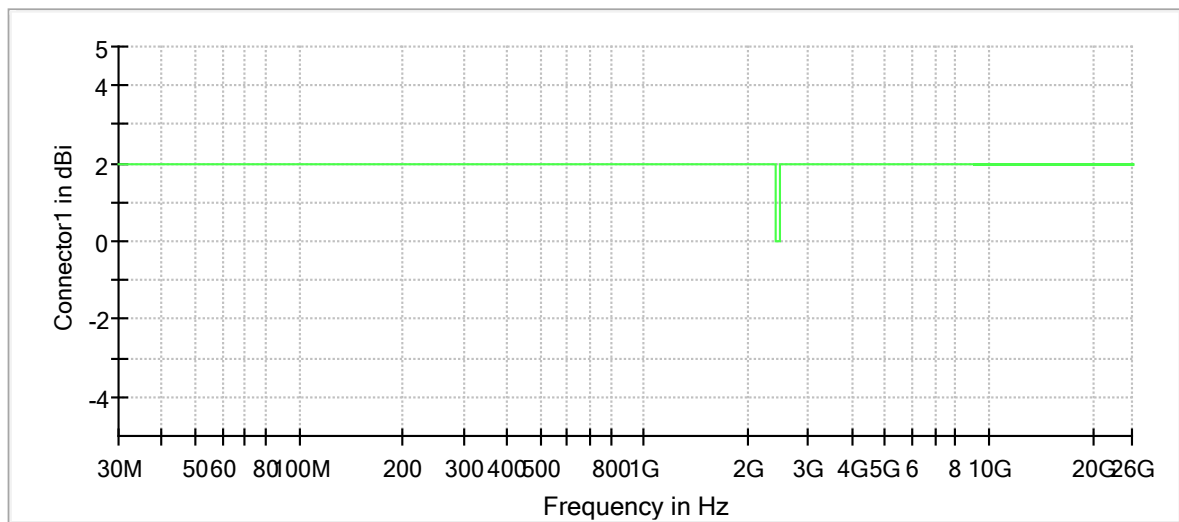
**Measurement Settings**

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|-----------------------|----------------------|-----------------|-------------------|
| 30.000000             | 2400.000000          | 1               | 1                 |
| 2400.000000           | 2483.500000          | 1               | 1                 |
| 2483.500000           | 26000.000000         | 1               | 1                 |

Spurious

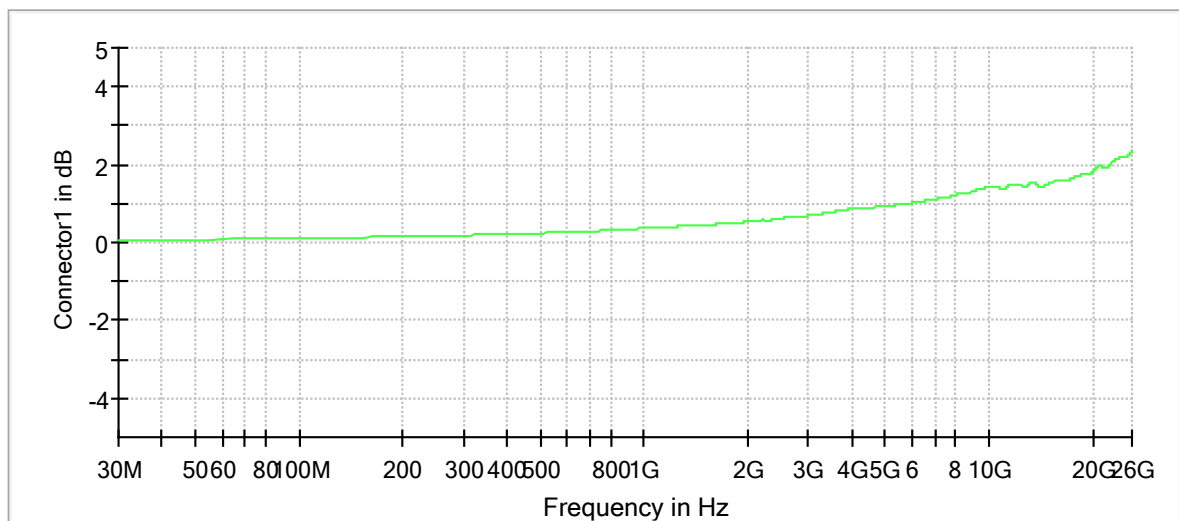


Gain



Connector1

Attenuation



Connector1

## Pre Measurement 1

| Setting               | Instrument Value | Target Value   |
|-----------------------|------------------|----------------|
| RBW                   | 100.000 kHz      | <= 100.000 kHz |
| VBW                   | 300.000 kHz      | >= 300.000 kHz |
| SweepPoints           | 238              | ~ 238          |
| SweepTime             | 23.700 ms        | AUTO           |
| Reference Level       | -10.000 dBm      | -30.000 dBm    |
| Attenuation           | 20.000 dB        | AUTO           |
| Detector              | MaxPeak          | MaxPeak        |
| SweepCount            | 3                | 3              |
| Filter                | 3 dB             | 3 dB           |
| Trace Mode            | Max Hold         | Max Hold       |
| SweepType             | Sweep            | AUTO           |
| Preamp                | off              | off            |
| Stablemode            | Trace            | Trace          |
| Stablevalue           | 0.50 dB          | 0.50 dB        |
| Run                   | 6 / max. 40      | max. 40        |
| Stable                | 3 / 3            | 3              |
| Max Stable Difference | 0.00 dB          | 0.50 dB        |



## Emission Bandwidth 20 dB (2439 MHz; 20.000 dBm; 2 MHz; Test Mode)

Customized settings.

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10-2013

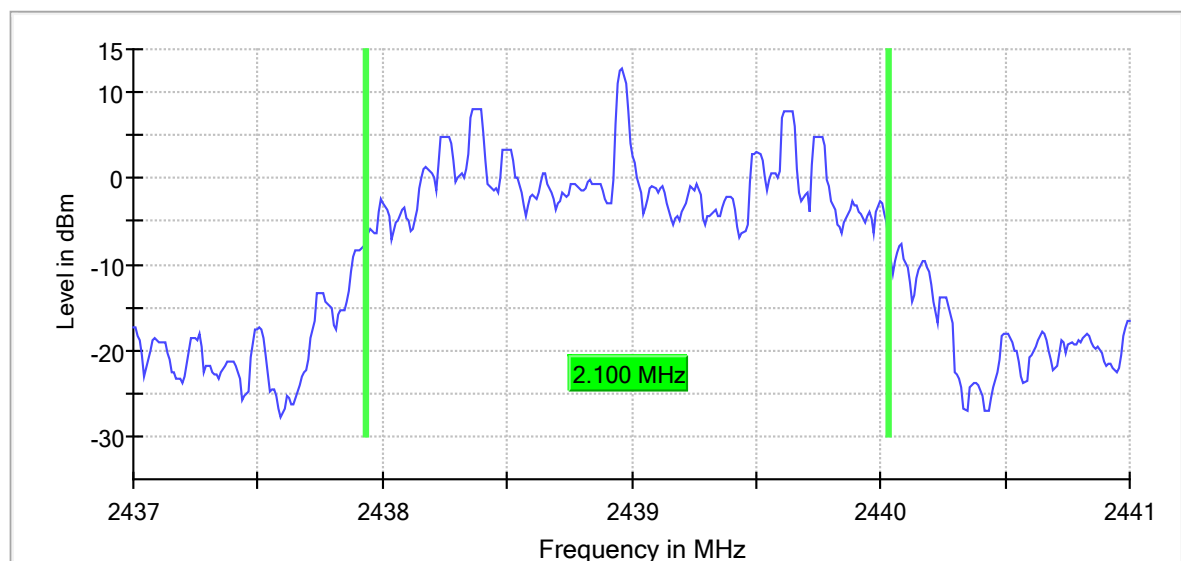
### 20 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---------------------|-----------------|-----------------|-----------------|----------------------|-----------------------|
| 2439.000000         | 2.100000        | ---             | ---             | 2437.935000          | 2440.035000           |

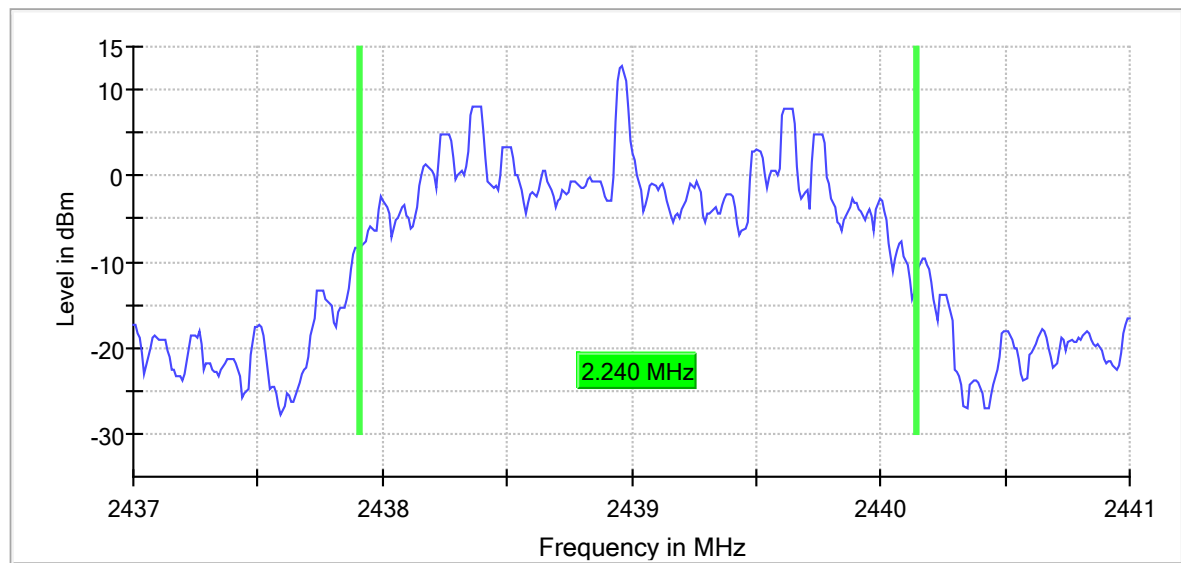
(continuation of the "20 dB Bandwidth" table from column 6 ...)

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---------------------|-----------------|--------|
| 2439.000000         | 12.8            | PASS   |

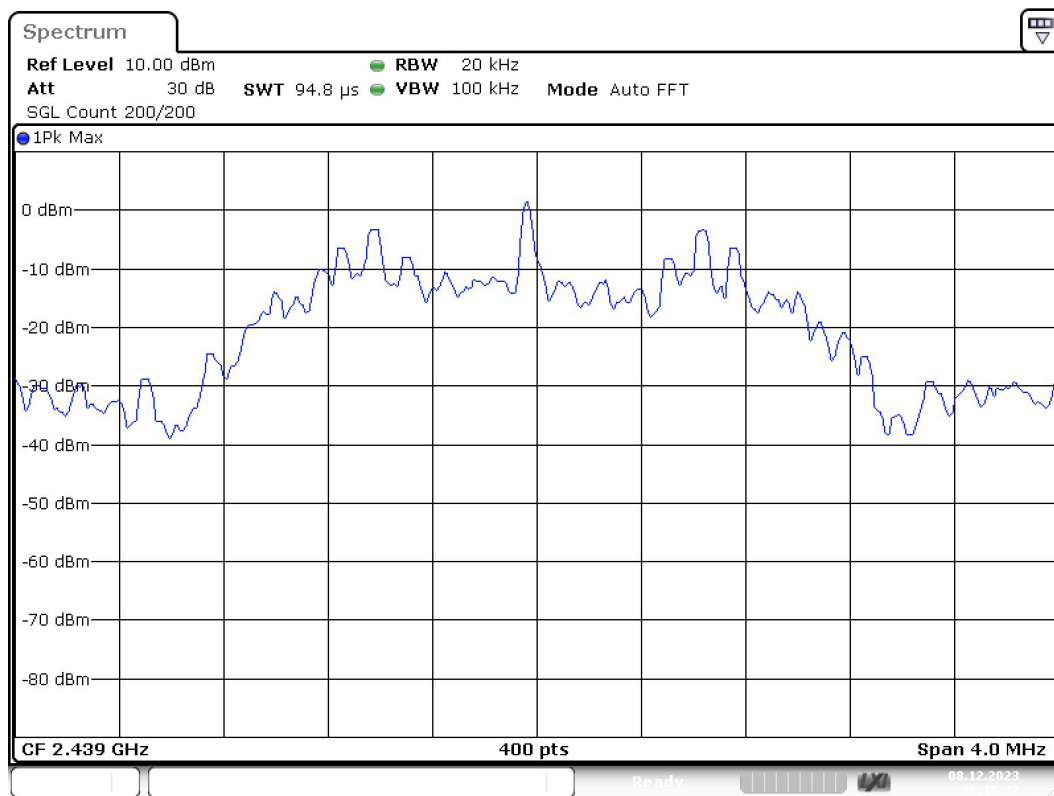
20 dB Bandwidth



99 % Bandwidth



Bandwidth



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## Measurement

| Setting         | Instrument Value | Target Value |
|-----------------|------------------|--------------|
| Start Frequency | 2.43700 GHz      | 2.43700 GHz  |
| Stop Frequency  | 2.44100 GHz      | 2.44100 GHz  |
| Span            | 4.000 MHz        | 4.000 MHz    |

|                              |                    |                         |
|------------------------------|--------------------|-------------------------|
| <b>RBW</b>                   | <b>20.000 kHz</b>  | <b>&gt;= 20.000 kHz</b> |
| <b>VBW</b>                   | <b>100.000 kHz</b> | <b>&gt;= 60.000 kHz</b> |
| <b>SweepPoints</b>           | <b>400</b>         | <b>~ 400</b>            |
| <b>SweepTime</b>             | <b>94.824 µs</b>   | <b>AUTO</b>             |
| <b>Reference Level</b>       | <b>10.000 dBm</b>  | <b>10.000 dBm</b>       |
| <b>Attenuation</b>           | <b>30.000 dB</b>   | <b>AUTO</b>             |
| <b>Detector</b>              | <b>MaxPeak</b>     | <b>MaxPeak</b>          |
| <b>SweepCount</b>            | <b>200</b>         | <b>200</b>              |
| <b>Filter</b>                | <b>3 dB</b>        | <b>3 dB</b>             |
| <b>Trace Mode</b>            | <b>Max Hold</b>    | <b>Max Hold</b>         |
| <b>SweepType</b>             | <b>FFT</b>         | <b>AUTO</b>             |
| <b>Preamp</b>                | <b>off</b>         | <b>off</b>              |
| <b>Stablemode</b>            | <b>Trace</b>       | <b>Trace</b>            |
| <b>Stablevalue</b>           | <b>0.50 dB</b>     | <b>0.50 dB</b>          |
| <b>Run</b>                   | <b>1 / max. 1</b>  | <b>max. 1</b>           |
| <b>Stable</b>                | <b>0 / 1</b>       | <b>1</b>                |
| <b>Max Stable Difference</b> | <b>0.00 dB</b>     | <b>0.50 dB</b>          |

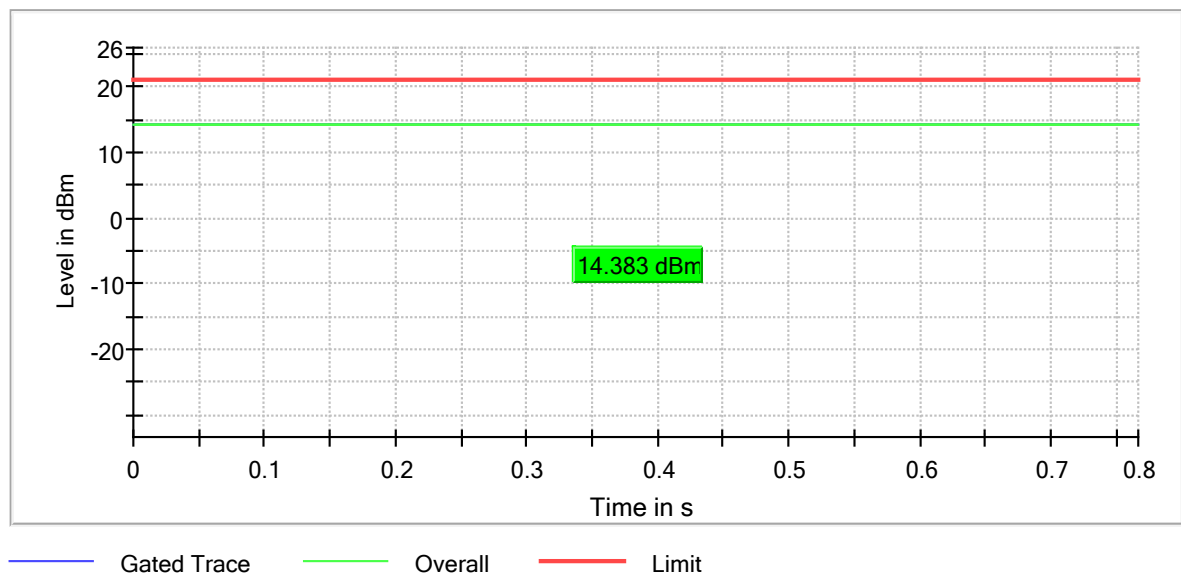
## RF output power (2439 MHz; 20.000 dBm; 2 MHz; Test Mode)

Test according to FCC title 47 part 15 §15.247(b), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10-2013

### Result

| DUT Frequency (MHz) | Gated RMS (dBm) | Limit Max (dBm) | Gated EIRP (dBm) | DutyCycle (%) | Result |
|---------------------|-----------------|-----------------|------------------|---------------|--------|
| 2439.000000         | 14.4            | 21.0            | 14.4             | 76.761        | PASS   |

Gated Trace



### OSP PowerMeter settings

| Setting          | Instrument Value | Target Value  |
|------------------|------------------|---------------|
| Measurement Time | 1.000 s          | 1.000 s       |
| Points           | 1000000          | 1000000       |
| Time resolution  | 1.000 $\mu$ s    | 1.000 $\mu$ s |

**Tx Spurious Emission (2439 MHz; 20.000 dBm; 2 MHz; Test Mode)**

Test according to FCC title 47 part 15 §15.247(d), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10-2013

**Result**

| DUT Frequency (MHz) | Result |
|---------------------|--------|
| 2439.000000         | PASS   |

**Final measurements**

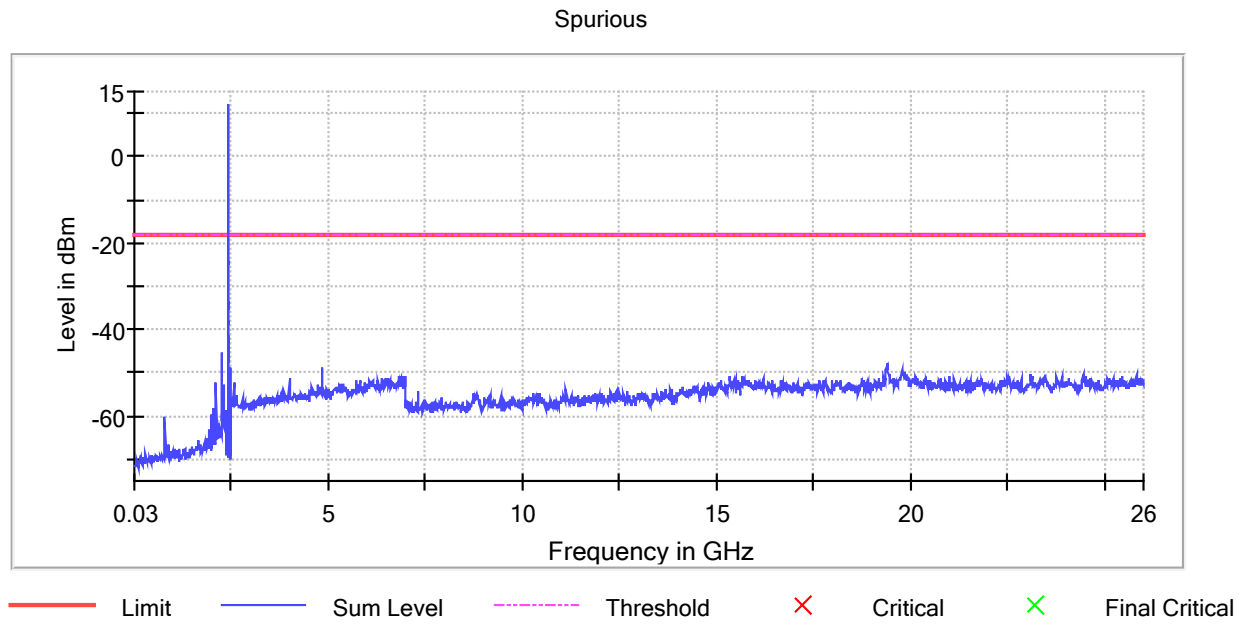
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|-----------------|-----------------------------|-------------|-------------|-------------|--------|
| ---             | ---                         | ---         | ---         | ---         | ---    |

**Pre Measurements**

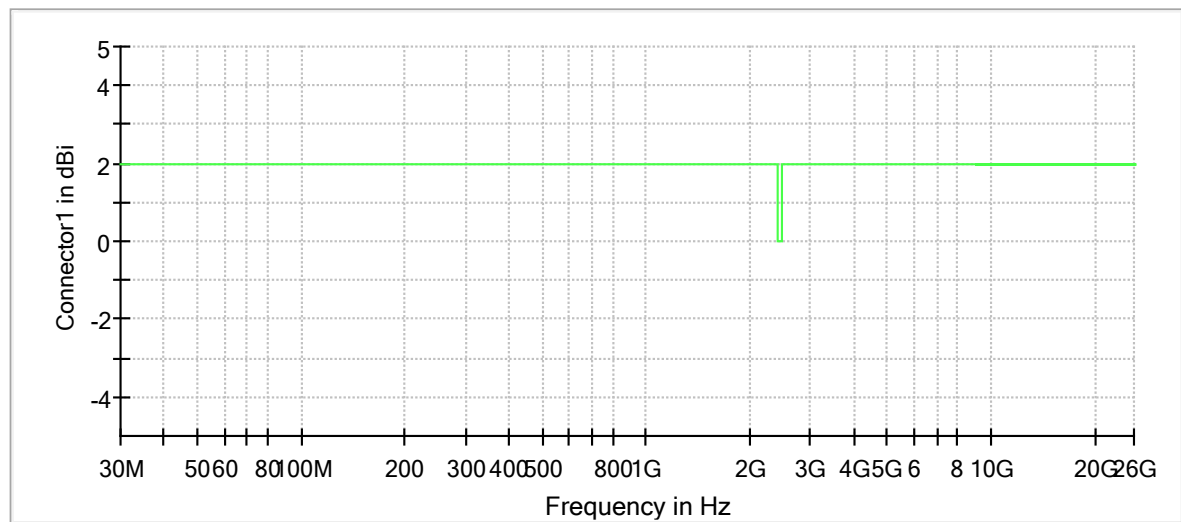
| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|-----------------|-------------|-------------|-------------|
| 2285.483193     | -45.2       | 27.2        | -18.0       |
| 19428.772312    | -47.6       | 29.6        | -18.0       |
| 19388.795261    | -48.1       | 30.0        | -18.0       |
| 4877.125903     | -48.6       | 30.6        | -18.0       |
| 19398.789524    | -49.3       | 31.2        | -18.0       |
| 19408.783787    | -49.3       | 31.3        | -18.0       |
| 19378.800999    | -49.3       | 31.3        | -18.0       |
| 19418.778049    | -49.4       | 31.4        | -18.0       |
| 19768.577242    | -49.5       | 31.5        | -18.0       |
| 19838.537080    | -49.6       | 31.6        | -18.0       |
| 19798.560030    | -49.7       | 31.6        | -18.0       |
| 19438.766575    | -49.7       | 31.7        | -18.0       |
| 19468.749363    | -50.1       | 32.0        | -18.0       |
| 19818.548555    | -50.1       | 32.1        | -18.0       |
| 19788.565767    | -50.1       | 32.1        | -18.0       |

**Measurement Settings**

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|-----------------------|----------------------|-----------------|-------------------|
| 30.000000             | 2400.000000          | 1               | 1                 |
| 2400.000000           | 2483.500000          | 1               | 1                 |
| 2483.500000           | 26000.000000         | 1               | 1                 |

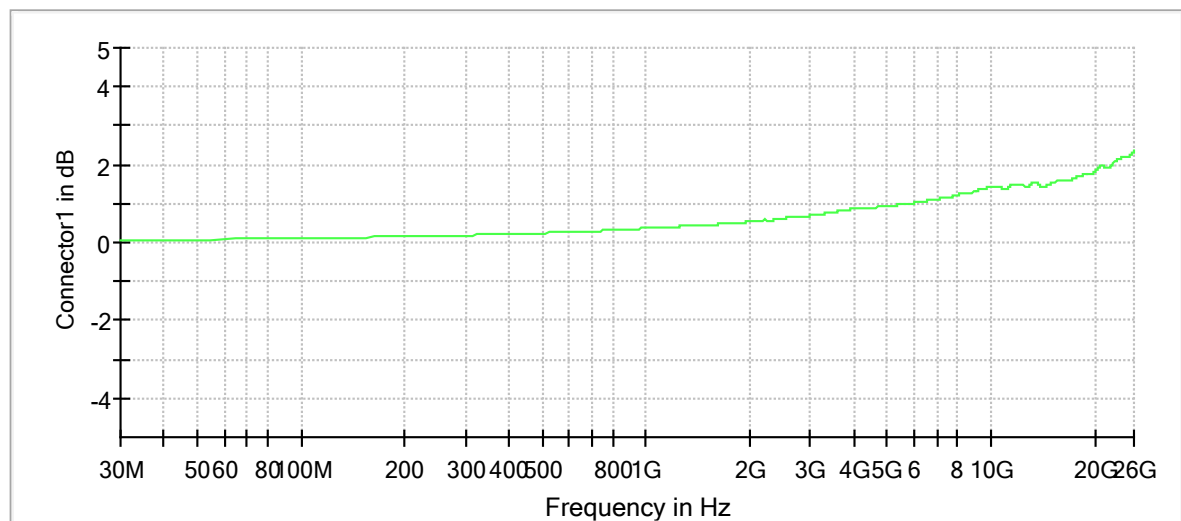


Gain



Connector1

Attenuation



Connector1

## Pre Measurement 1

| Setting               | Instrument Value | Target Value   |
|-----------------------|------------------|----------------|
| RBW                   | 100.000 kHz      | <= 100.000 kHz |
| VBW                   | 300.000 kHz      | >= 300.000 kHz |
| SweepPoints           | 238              | ~ 238          |
| SweepTime             | 23.700 ms        | AUTO           |
| Reference Level       | -10.000 dBm      | -30.000 dBm    |
| Attenuation           | 20.000 dB        | AUTO           |
| Detector              | MaxPeak          | MaxPeak        |
| SweepCount            | 3                | 3              |
| Filter                | 3 dB             | 3 dB           |
| Trace Mode            | Max Hold         | Max Hold       |
| SweepType             | Sweep            | AUTO           |
| Preamp                | off              | off            |
| Stablemode            | Trace            | Trace          |
| Stablevalue           | 0.50 dB          | 0.50 dB        |
| Run                   | 4 / max. 40      | max. 40        |
| Stable                | 3 / 3            | 3              |
| Max Stable Difference | 0.00 dB          | 0.50 dB        |



## Emission Bandwidth 20 dB (2475 MHz; 20.000 dBm; 2 MHz; Test Mode)

Customized settings.

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10-2013

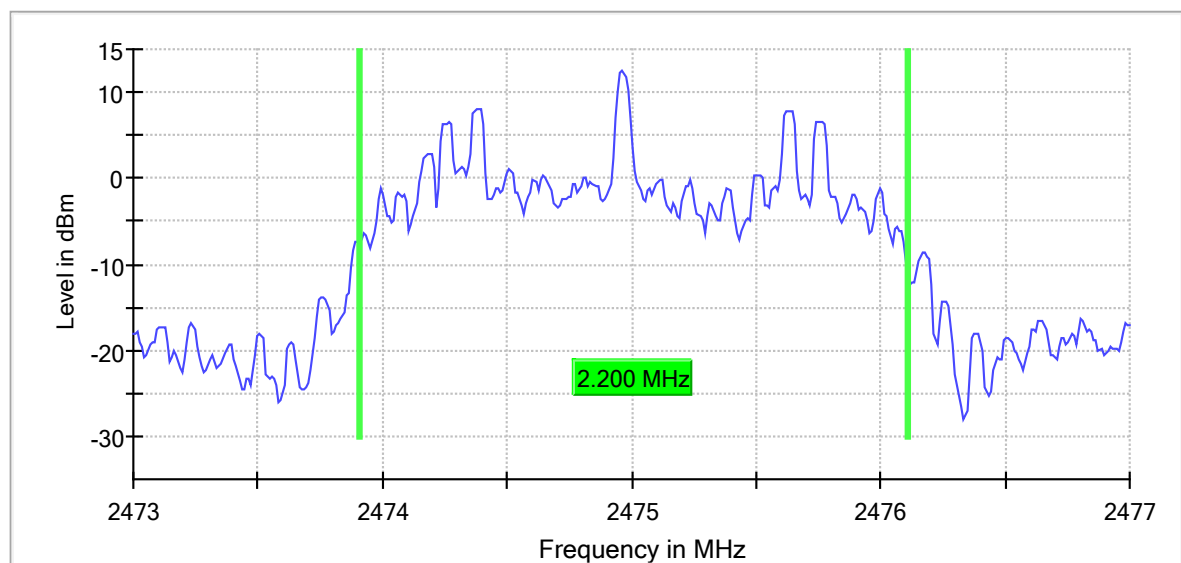
### 20 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---------------------|-----------------|-----------------|-----------------|----------------------|-----------------------|
| 2475.000000         | 2.200000        | ---             | ---             | 2473.905000          | 2476.105000           |

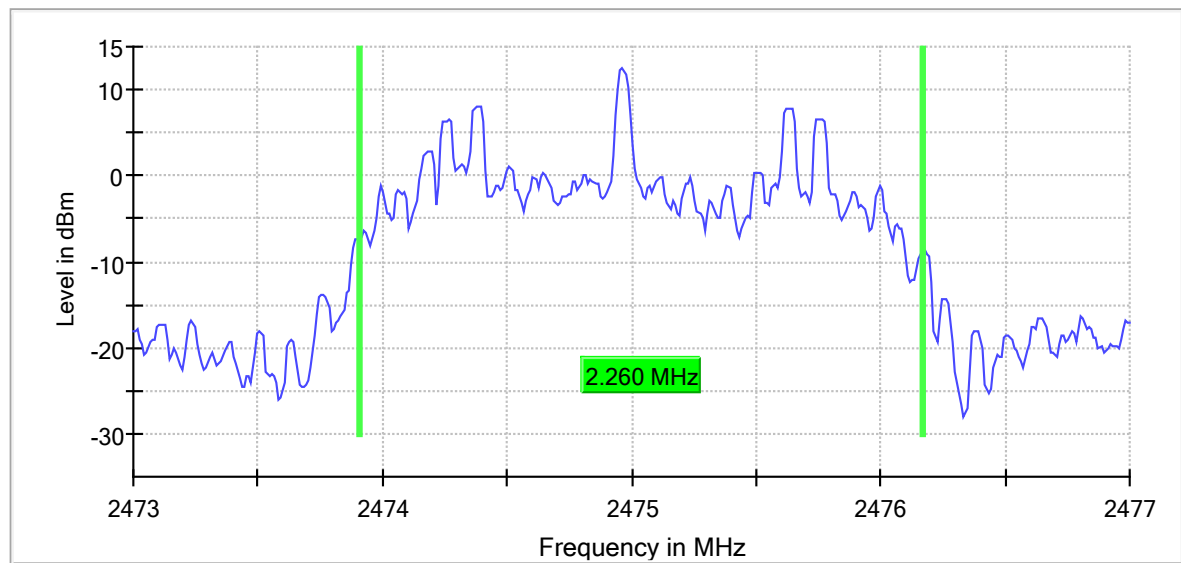
(continuation of the "20 dB Bandwidth" table from column 6 ...)

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---------------------|-----------------|--------|
| 2475.000000         | 12.6            | PASS   |

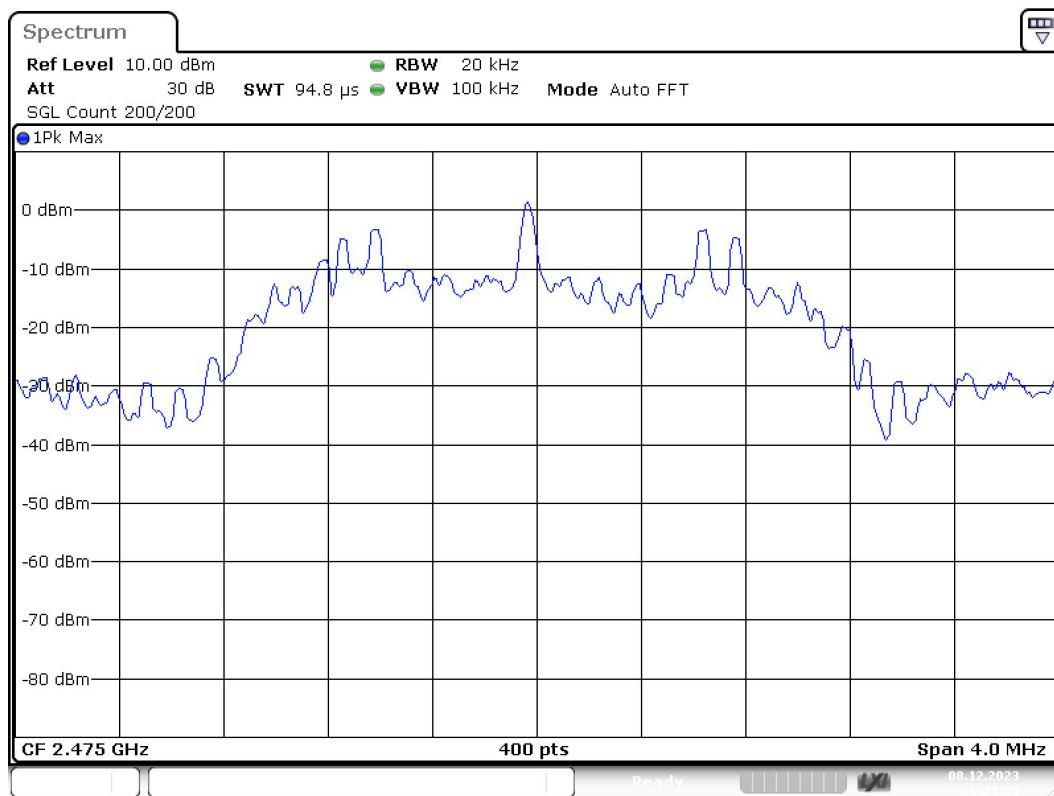
20 dB Bandwidth



99 % Bandwidth



Bandwidth



Date: 8.DEC.2023 06:21:05

## Measurement

| Setting         | Instrument Value | Target Value |
|-----------------|------------------|--------------|
| Start Frequency | 2.47300 GHz      | 2.47300 GHz  |
| Stop Frequency  | 2.47700 GHz      | 2.47700 GHz  |
| Span            | 4.000 MHz        | 4.000 MHz    |

|                              |                    |                         |
|------------------------------|--------------------|-------------------------|
| <b>RBW</b>                   | <b>20.000 kHz</b>  | <b>&gt;= 20.000 kHz</b> |
| <b>VBW</b>                   | <b>100.000 kHz</b> | <b>&gt;= 60.000 kHz</b> |
| <b>SweepPoints</b>           | <b>400</b>         | <b>~ 400</b>            |
| <b>SweepTime</b>             | <b>94.824 µs</b>   | <b>AUTO</b>             |
| <b>Reference Level</b>       | <b>10.000 dBm</b>  | <b>10.000 dBm</b>       |
| <b>Attenuation</b>           | <b>30.000 dB</b>   | <b>AUTO</b>             |
| <b>Detector</b>              | <b>MaxPeak</b>     | <b>MaxPeak</b>          |
| <b>SweepCount</b>            | <b>200</b>         | <b>200</b>              |
| <b>Filter</b>                | <b>3 dB</b>        | <b>3 dB</b>             |
| <b>Trace Mode</b>            | <b>Max Hold</b>    | <b>Max Hold</b>         |
| <b>SweepType</b>             | <b>FFT</b>         | <b>AUTO</b>             |
| <b>Preamp</b>                | <b>off</b>         | <b>off</b>              |
| <b>Stablemode</b>            | <b>Trace</b>       | <b>Trace</b>            |
| <b>Stablevalue</b>           | <b>0.50 dB</b>     | <b>0.50 dB</b>          |
| <b>Run</b>                   | <b>1 / max. 1</b>  | <b>max. 1</b>           |
| <b>Stable</b>                | <b>0 / 1</b>       | <b>1</b>                |
| <b>Max Stable Difference</b> | <b>0.00 dB</b>     | <b>0.50 dB</b>          |

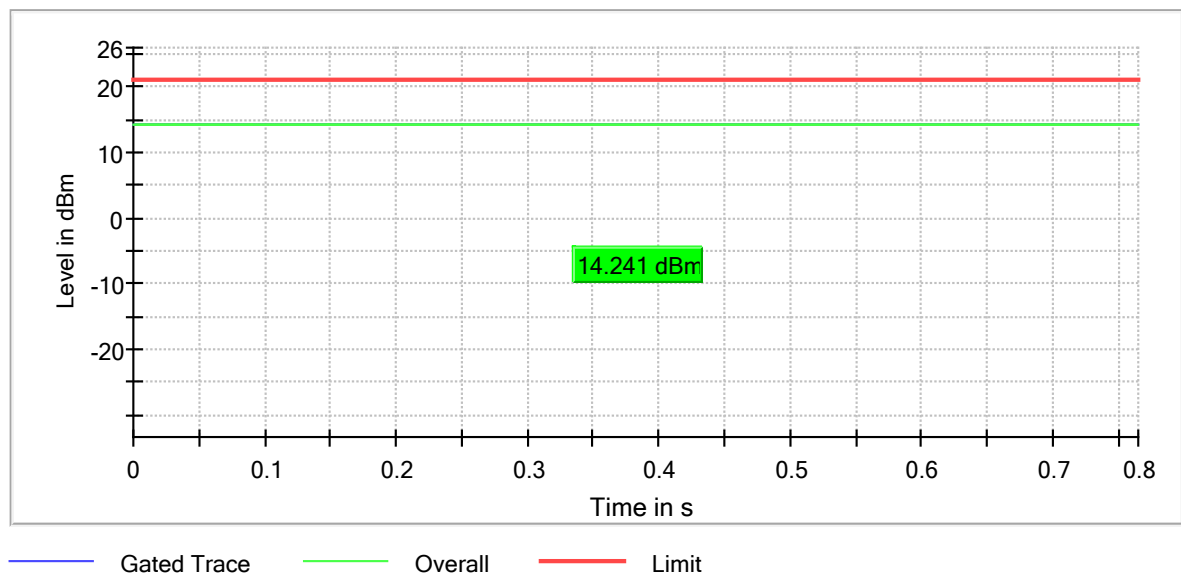
## RF output power (2475 MHz; 20.000 dBm; 2 MHz; Test Mode)

Test according to FCC title 47 part 15 §15.247(b), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10-2013

### Result

| DUT Frequency (MHz) | Gated RMS (dBm) | Limit Max (dBm) | Gated EIRP (dBm) | DutyCycle (%) | Result |
|---------------------|-----------------|-----------------|------------------|---------------|--------|
| 2475.000000         | 14.2            | 21.0            | 14.2             | 76.774        | PASS   |

Gated Trace



### OSP PowerMeter settings

| Setting          | Instrument Value | Target Value  |
|------------------|------------------|---------------|
| Measurement Time | 1.000 s          | 1.000 s       |
| Points           | 1000000          | 1000000       |
| Time resolution  | 1.000 $\mu$ s    | 1.000 $\mu$ s |

## Band Edge high (2475 MHz; 20.000 dBm; 2 MHz; Test Mode)

Test according to FCC title 47 part 15 §15.247(d), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10-2013

### Result

| DUT Frequency (MHz) | Result |
|---------------------|--------|
| 2475.000000         | PASS   |

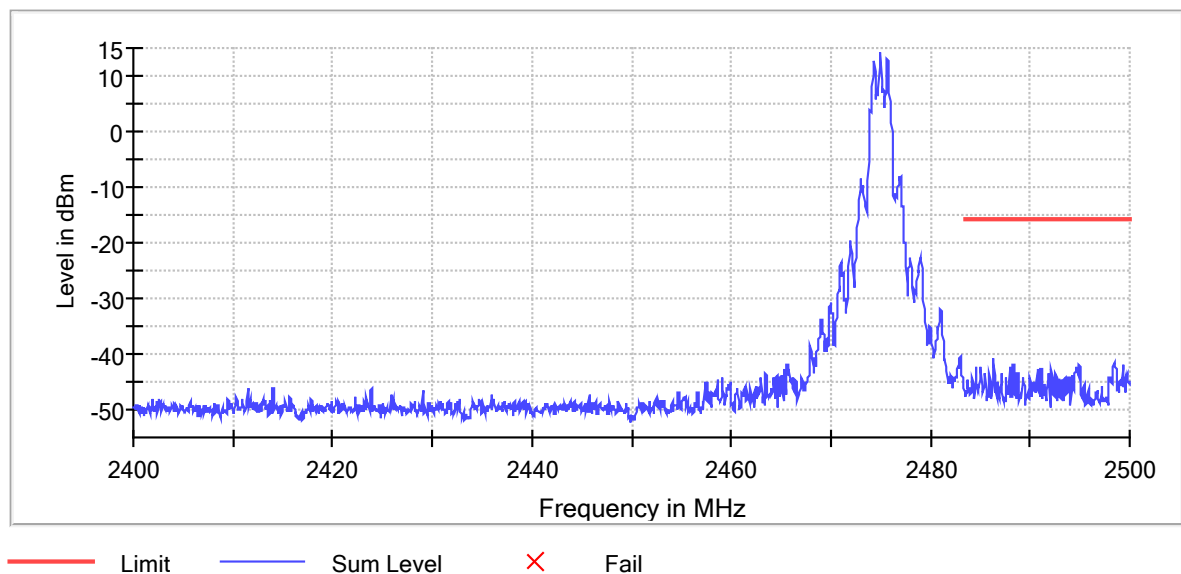
### Inband Peak

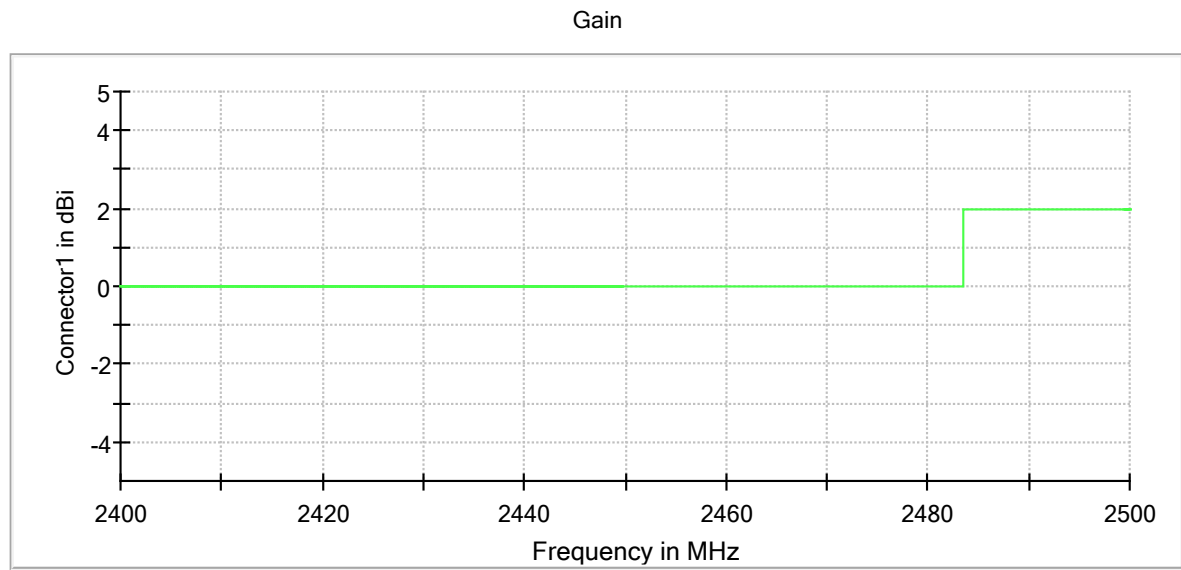
| Frequency (MHz) | Level (dBm) |
|-----------------|-------------|
| 2474.975000     | 14.3        |

### Measurements

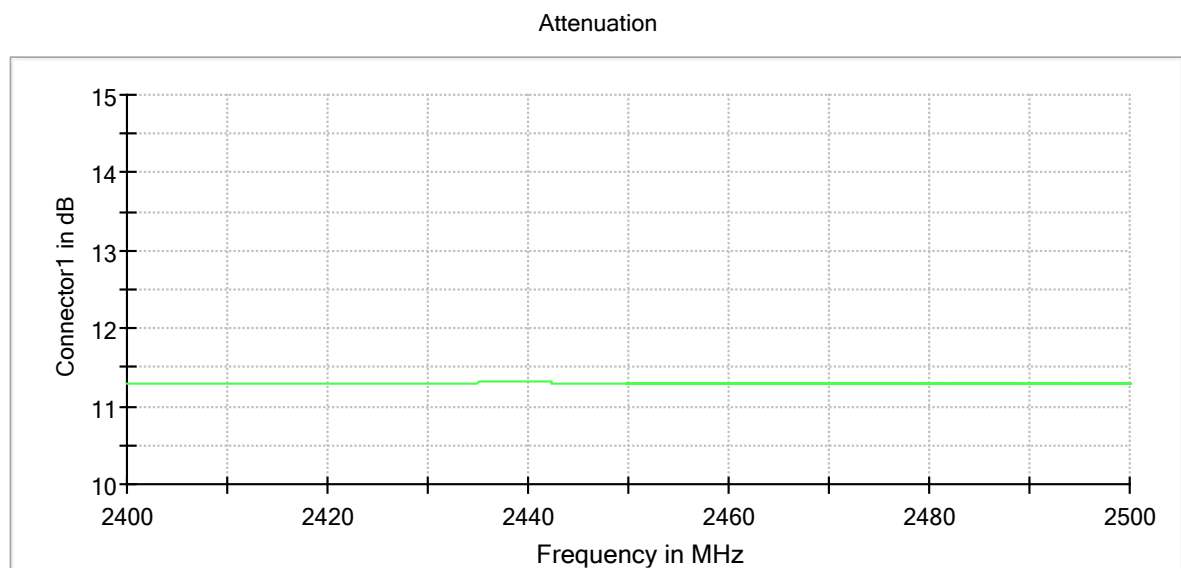
| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|-----------------|-------------|-------------|-------------|--------|
| 2486.325000     | -40.8       | 25.2        | -15.7       | PASS   |
| 2486.275000     | -41.2       | 25.5        | -15.7       | PASS   |
| 2498.425000     | -41.5       | 25.8        | -15.7       | PASS   |
| 2498.475000     | -41.5       | 25.9        | -15.7       | PASS   |
| 2486.375000     | -41.7       | 26.0        | -15.7       | PASS   |
| 2499.325000     | -41.8       | 26.2        | -15.7       | PASS   |
| 2488.375000     | -41.9       | 26.2        | -15.7       | PASS   |
| 2488.325000     | -42.0       | 26.3        | -15.7       | PASS   |
| 2494.925000     | -42.0       | 26.4        | -15.7       | PASS   |
| 2494.875000     | -42.1       | 26.4        | -15.7       | PASS   |
| 2494.975000     | -42.1       | 26.5        | -15.7       | PASS   |
| 2485.025000     | -42.3       | 26.7        | -15.7       | PASS   |
| 2498.375000     | -42.3       | 26.7        | -15.7       | PASS   |
| 2487.975000     | -42.3       | 26.7        | -15.7       | PASS   |
| 2498.525000     | -42.4       | 26.7        | -15.7       | PASS   |

Band Edge



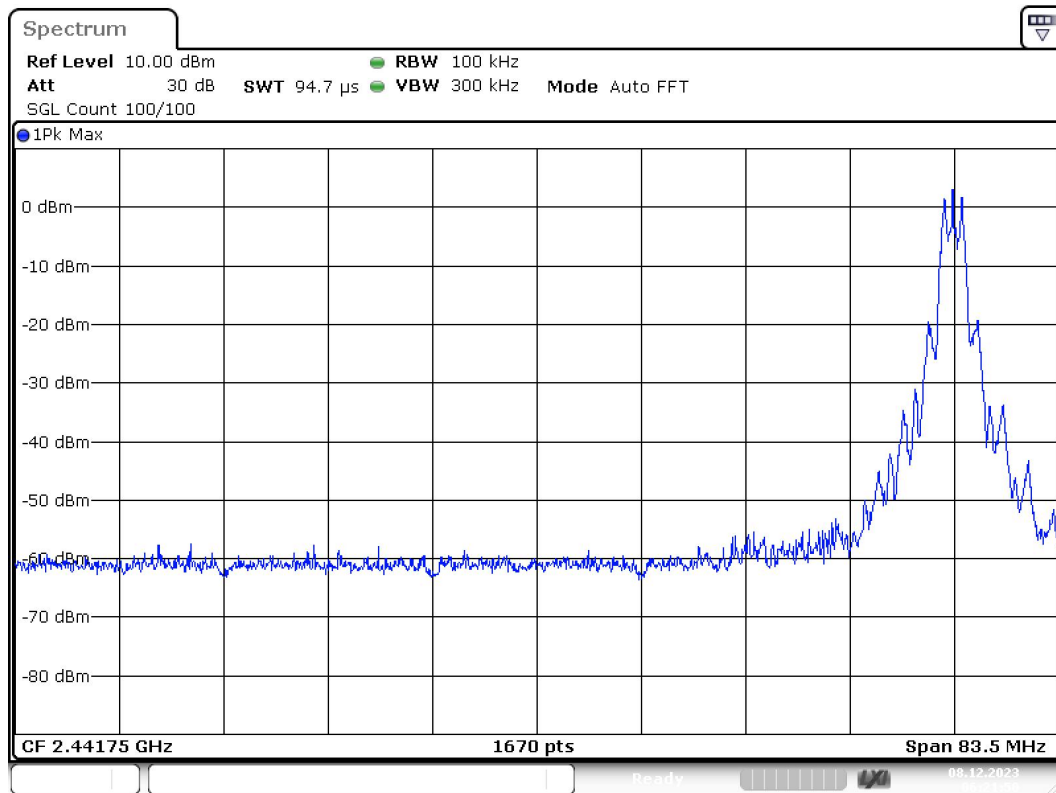


Connector1



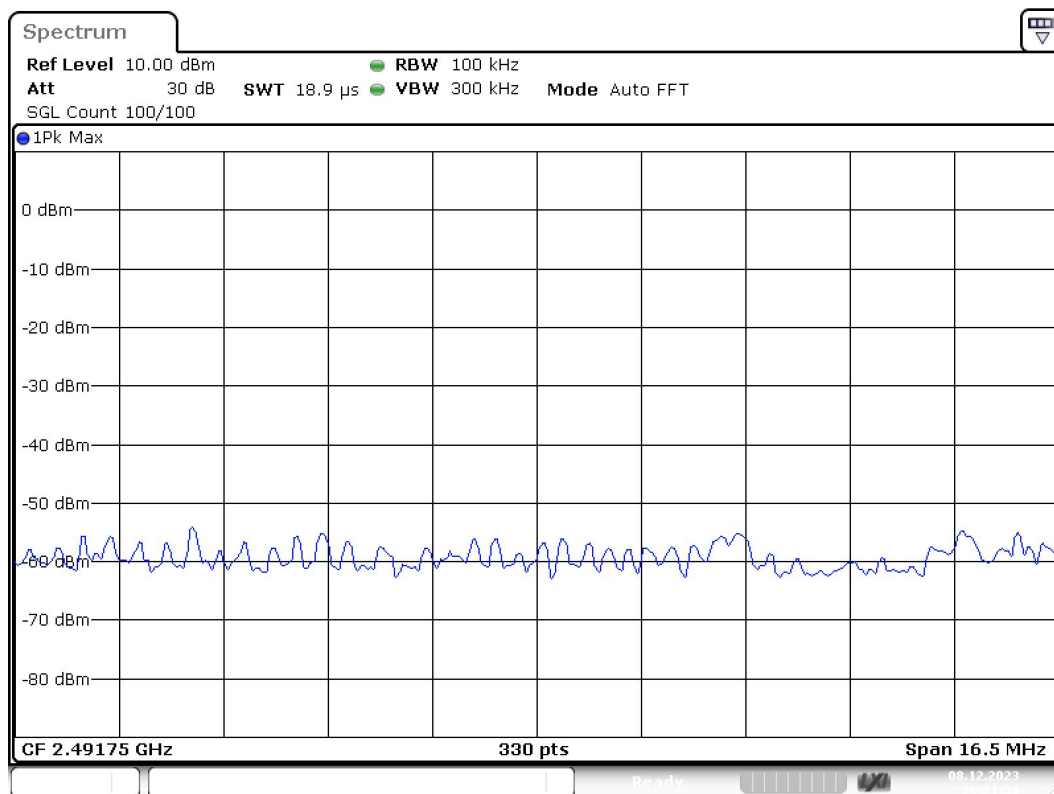
Connector1

Band Edge Connector 1\_0



Date: 8.DEC.2023 06:21:50

Band Edge Connector 1\_1



Date: 8.DEC.2023 06:21:59

## Measurement 1

| Setting               | Instrument Value | Target Value   |
|-----------------------|------------------|----------------|
| Start Frequency       | 2.40000 GHz      | 2.40000 GHz    |
| Stop Frequency        | 2.48350 GHz      | 2.48350 GHz    |
| Span                  | 83.500 MHz       | 83.500 MHz     |
| RBW                   | 100.000 kHz      | <= 100.000 kHz |
| VBW                   | 300.000 kHz      | >= 300.000 kHz |
| SweepPoints           | 1670             | ~ 1670         |
| Sweptime              | 94.727 µs        | AUTO           |
| Reference Level       | 10.000 dBm       | 10.000 dBm     |
| Attenuation           | 30.000 dB        | AUTO           |
| Detector              | MaxPeak          | MaxPeak        |
| SweepCount            | 100              | 100            |
| Filter                | 3 dB             | 3 dB           |
| Trace Mode            | Max Hold         | Max Hold       |
| SweepType             | FFT              | AUTO           |
| Preamp                | off              | off            |
| Stablemode            | Trace            | Trace          |
| Stablevalue           | 0.50 dB          | 0.50 dB        |
| Run                   | 11 / max. 150    | max. 150       |
| Stable                | 3 / 3            | 3              |
| Max Stable Difference | 0.50 dB          | 0.50 dB        |

## Measurement 2

| Setting         | Instrument Value | Target Value   |
|-----------------|------------------|----------------|
| Start Frequency | 2.48350 GHz      | 2.48350 GHz    |
| Stop Frequency  | 2.50000 GHz      | 2.50000 GHz    |
| Span            | 16.500 MHz       | 16.500 MHz     |
| RBW             | 100.000 kHz      | <= 100.000 kHz |
| VBW             | 300.000 kHz      | >= 300.000 kHz |

|                              |                     |                   |
|------------------------------|---------------------|-------------------|
| <b>SweepPoints</b>           | <b>330</b>          | <b>~ 330</b>      |
| <b>SweepTime</b>             | <b>18.945 µs</b>    | <b>AUTO</b>       |
| <b>Reference Level</b>       | <b>10.000 dBm</b>   | <b>10.000 dBm</b> |
| <b>Attenuation</b>           | <b>30.000 dB</b>    | <b>AUTO</b>       |
| <b>Detector</b>              | <b>MaxPeak</b>      | <b>MaxPeak</b>    |
| <b>SweepCount</b>            | <b>100</b>          | <b>100</b>        |
| <b>Filter</b>                | <b>3 dB</b>         | <b>3 dB</b>       |
| <b>Trace Mode</b>            | <b>Max Hold</b>     | <b>Max Hold</b>   |
| <b>SweepType</b>             | <b>FFT</b>          | <b>AUTO</b>       |
| <b>Preamp</b>                | <b>off</b>          | <b>off</b>        |
| <b>Stablemode</b>            | <b>Trace</b>        | <b>Trace</b>      |
| <b>Stablevalue</b>           | <b>0.50 dB</b>      | <b>0.50 dB</b>    |
| <b>Run</b>                   | <b>4 / max. 150</b> | <b>max. 150</b>   |
| <b>Stable</b>                | <b>3 / 3</b>        | <b>3</b>          |
| <b>Max Stable Difference</b> | <b>0.00 dB</b>      | <b>0.50 dB</b>    |

**Tx Spurious Emission (2475 MHz; 20.000 dBm; 2 MHz; Test Mode)**

Test according to FCC title 47 part 15 §15.247(d), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10-2013

**Result**

| DUT Frequency (MHz) | Result |
|---------------------|--------|
| 2475.000000         | PASS   |

**Final measurements**

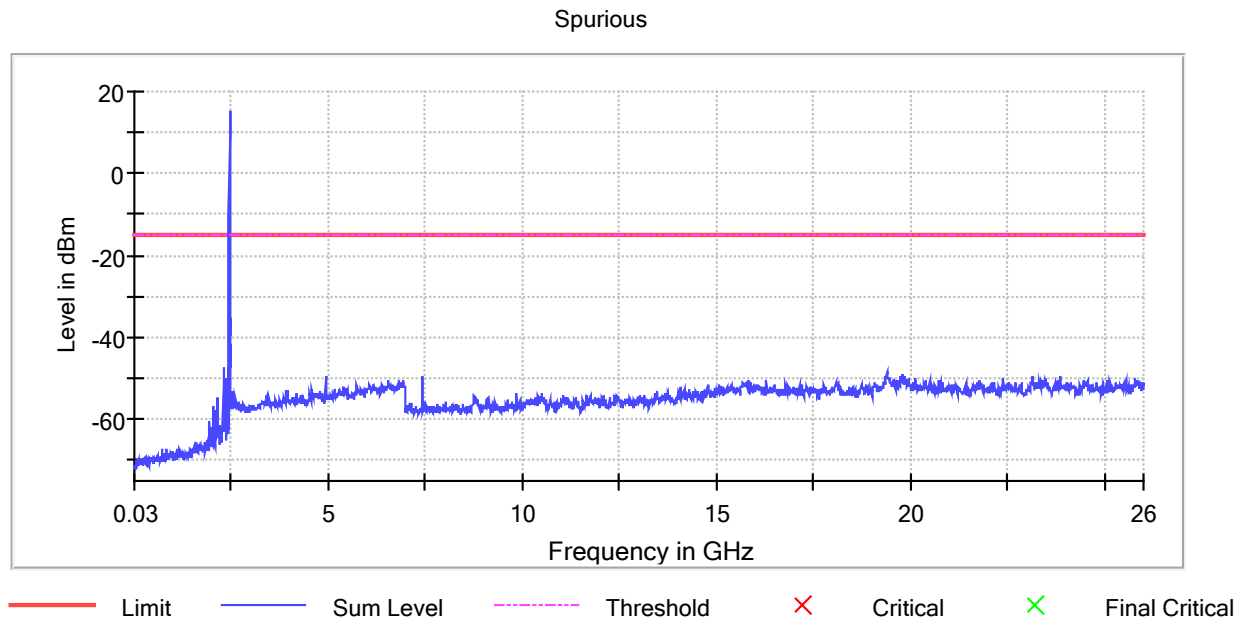
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|-----------------|-----------------------------|-------------|-------------|-------------|--------|
| ---             | ---                         | ---         | ---         | ---         | ---    |

**Pre Measurements**

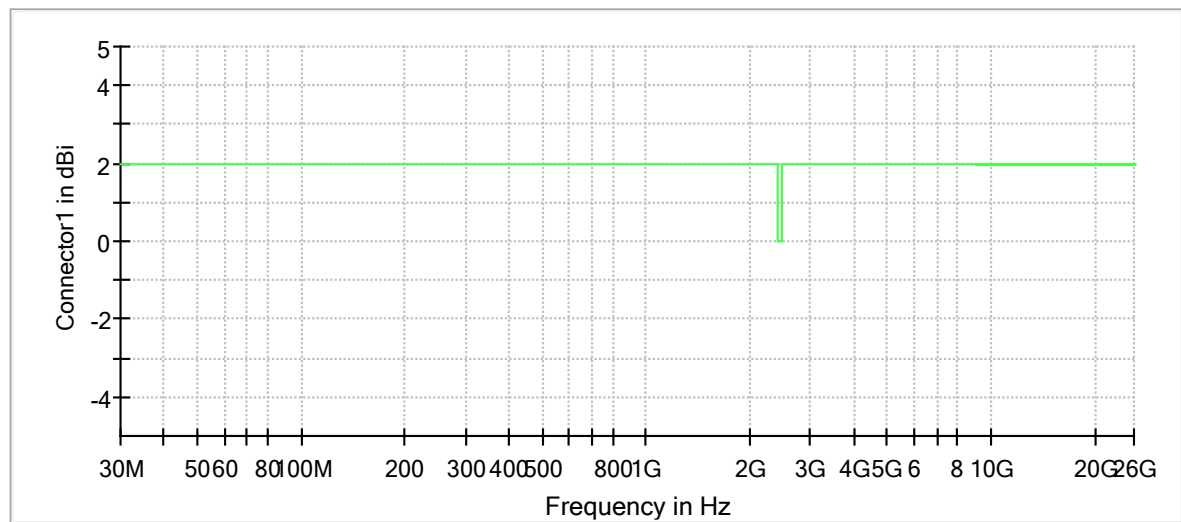
| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|-----------------|-------------|-------------|-------------|
| 2498.491394     | -41.7       | 27.0        | -14.7       |
| 2508.485657     | -42.6       | 27.9        | -14.7       |
| 2488.497131     | -45.6       | 30.8        | -14.7       |
| 2325.315126     | -47.1       | 32.4        | -14.7       |
| 19418.778049    | -48.2       | 33.5        | -14.7       |
| 19388.795261    | -48.6       | 33.9        | -14.7       |
| 19408.783787    | -48.6       | 33.9        | -14.7       |
| 19798.560030    | -48.8       | 34.1        | -14.7       |
| 19398.789524    | -49.0       | 34.3        | -14.7       |
| 19838.537080    | -49.2       | 34.5        | -14.7       |
| 19368.806736    | -49.2       | 34.5        | -14.7       |
| 19818.548555    | -49.3       | 34.6        | -14.7       |
| 19738.594454    | -49.5       | 34.7        | -14.7       |
| 4947.085742     | -49.5       | 34.8        | -14.7       |
| 7425.662877     | -49.5       | 34.8        | -14.7       |

**Measurement Settings**

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|-----------------------|----------------------|-----------------|-------------------|
| 30.000000             | 2400.000000          | 1               | 1                 |
| 2400.000000           | 2483.500000          | 1               | 1                 |
| 2483.500000           | 26000.000000         | 1               | 1                 |

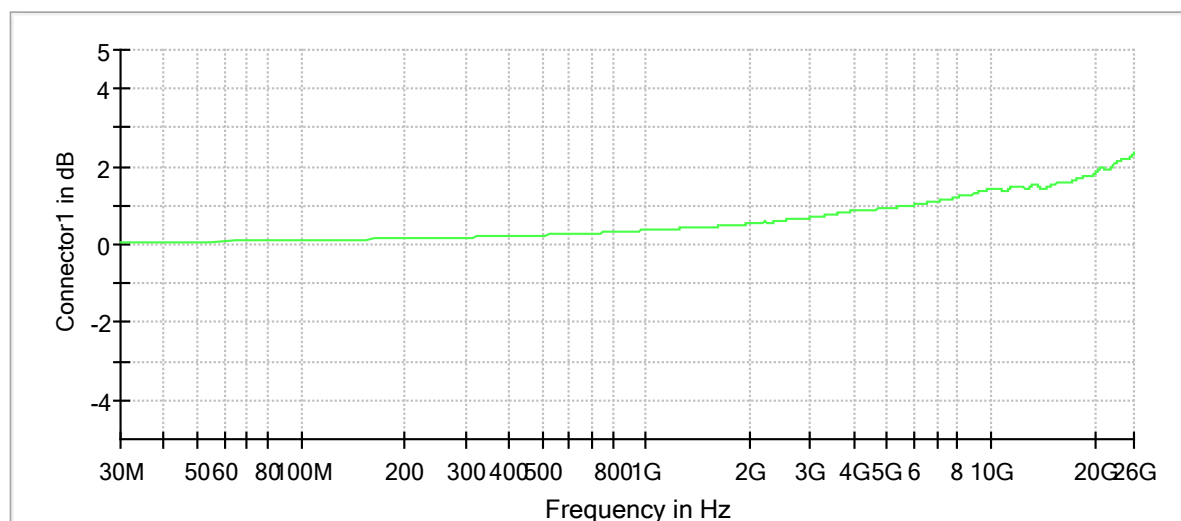


Gain



Connector1

Attenuation



Connector1

## Pre Measurement 1

| Setting               | Instrument Value | Target Value   |
|-----------------------|------------------|----------------|
| RBW                   | 100.000 kHz      | <= 100.000 kHz |
| VBW                   | 300.000 kHz      | >= 300.000 kHz |
| SweepPoints           | 238              | ~ 238          |
| SweepTime             | 23.700 ms        | AUTO           |
| Reference Level       | -10.000 dBm      | -30.000 dBm    |
| Attenuation           | 20.000 dB        | AUTO           |
| Detector              | MaxPeak          | MaxPeak        |
| SweepCount            | 3                | 3              |
| Filter                | 3 dB             | 3 dB           |
| Trace Mode            | Max Hold         | Max Hold       |
| SweepType             | Sweep            | AUTO           |
| Preamp                | off              | off            |
| Stablemode            | Trace            | Trace          |
| Stablevalue           | 0.50 dB          | 0.50 dB        |
| Run                   | 5 / max. 40      | max. 40        |
| Stable                | 3 / 3            | 3              |
| Max Stable Difference | 0.00 dB          | 0.50 dB        |

