

# FCC Part 47 §15.247 2400-2483.5 MHz 2015

## DUT Information

### Frequencies

|                       |                       |                       |
|-----------------------|-----------------------|-----------------------|
| 2402 MHz (2402 MHz)   | WLAN CH 3 (2422 MHz)  | WLAN CH 6 (2437 MHz)  |
| WLAN CH 9 (2452 MHz)  | 2440 MHz (2440 MHz)   | 2480 MHz (2480 MHz)   |
| WLAN CH 2 (2417 MHz)  | WLAN CH 4 (2427 MHz)  | WLAN CH 5 (2432 MHz)  |
| WLAN CH 7 (2442 MHz)  | WLAN CH 8 (2447 MHz)  | WLAN CH 10 (2457 MHz) |
| WLAN CH 11 (2462 MHz) | WLAN CH 12 (2467 MHz) | WLAN CH 13 (2472 MHz) |
| WLAN CH 1 (2412 MHz)  |                       |                       |

### Bandwidths

|                 |               |                 |
|-----------------|---------------|-----------------|
| 2 MHz (2 MHz)   | 1 MHz (1 MHz) | 20 MHz (20 MHz) |
| 40 MHz (40 MHz) |               |                 |

### Power

20.000 dBm (20 dBm)

### Beamforming Gain

|                     |      |
|---------------------|------|
| 20.000 dBm (20 dBm) | 0 dB |
|---------------------|------|

### Gain Tables

|                     |              |
|---------------------|--------------|
| 20.000 dBm (20 dBm) | Port 1: ---; |
|---------------------|--------------|

### DUT Settings

|                            |       |
|----------------------------|-------|
| No. of transmission chains | 1     |
| Equipment Type             | Other |
| Digital Modulation         | Yes   |
| Frequency Hopping          | No    |

## Hardware Setup: WMS Measurements\TS8997

|                    |                                                                                                                             |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Spectrum Analyzer: | SA FSV 40 (SA FSV 40) @ VISA (ADR<br>TCPIP::192.168.48.111::INST0::INSTR), SN 1321.3008K39/101229,<br>FW 3.40               |
| Vector Generator:  | VG SMBV100B (VG SMBV100B) @ VISA (ADR<br>TCPIP::192.168.48.29::INST0::INSTR), SN 101685, FW 4.70.006.33                     |
| Generator:         | SMB100Aa (SMB100A) @ VISA (ADR<br>TCPIP::192.168.48.30::INST0::INSTR), SN 177894, FW / Drv:Rev<br>2.21.0, 07/2016, CVI 2015 |
| OSP:               | OSP-B157W (OSP-B157W) @ VISA (ADR<br>TCPIP::192.168.48.157::INST0::INSTR), SN 1527.1144. / , FW<br>1.23.0.2                 |

## Summary

| Test                            | Frequency (MHz) | Nominal Power (dBm) | Nominal Bandwidth (MHz) | Result |
|---------------------------------|-----------------|---------------------|-------------------------|--------|
| Minimum Emission Bandwidth 6 dB | 2422.000        | 20.0                | 20.000000               | PASS   |
| Emission Bandwidth 20 dB        | 2422.000        | 20.0                | 20.000000               | PASS   |
| RF output power                 | 2422.000        | 20.0                | 20.000000               | PASS   |
| Peak Power Spectral Density     | 2422.000        | 20.0                | 20.000000               | PASS   |
| Band Edge low                   | 2422.000        | 20.0                | 20.000000               | PASS   |
| Tx Spurious Emission            | 2422.000        | 20.0                | 20.000000               | PASS   |
| Emission Bandwidth 20 dB        | 2437.000        | 20.0                | 20.000000               | PASS   |
| Minimum Emission Bandwidth 6 dB | 2437.000        | 20.0                | 20.000000               | PASS   |
| RF output power                 | 2437.000        | 20.0                | 20.000000               | PASS   |
| Peak Power Spectral Density     | 2437.000        | 20.0                | 20.000000               | PASS   |
| Tx Spurious Emission            | 2437.000        | 20.0                | 20.000000               | PASS   |
| Emission Bandwidth 20 dB        | 2452.000        | 20.0                | 20.000000               | PASS   |
| Minimum Emission Bandwidth 6 dB | 2452.000        | 20.0                | 20.000000               | PASS   |
| RF output power                 | 2452.000        | 20.0                | 20.000000               | PASS   |
| Peak Power Spectral Density     | 2452.000        | 20.0                | 20.000000               | PASS   |
| Band Edge high                  | 2452.000        | 20.0                | 20.000000               | PASS   |
| Tx Spurious Emission            | 2452.000        | 20.0                | 20.000000               | PASS   |

## Minimum Emission Bandwidth 6 dB (2422 MHz; 20.000 dBm; 20 MHz)

Customized settings.

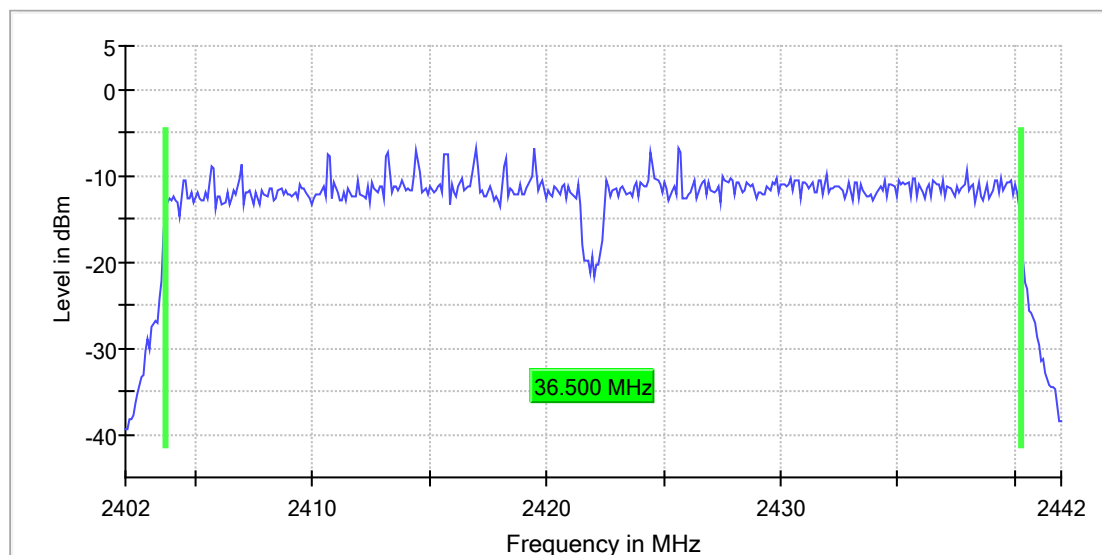
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10

### 6 dB Bandwidth

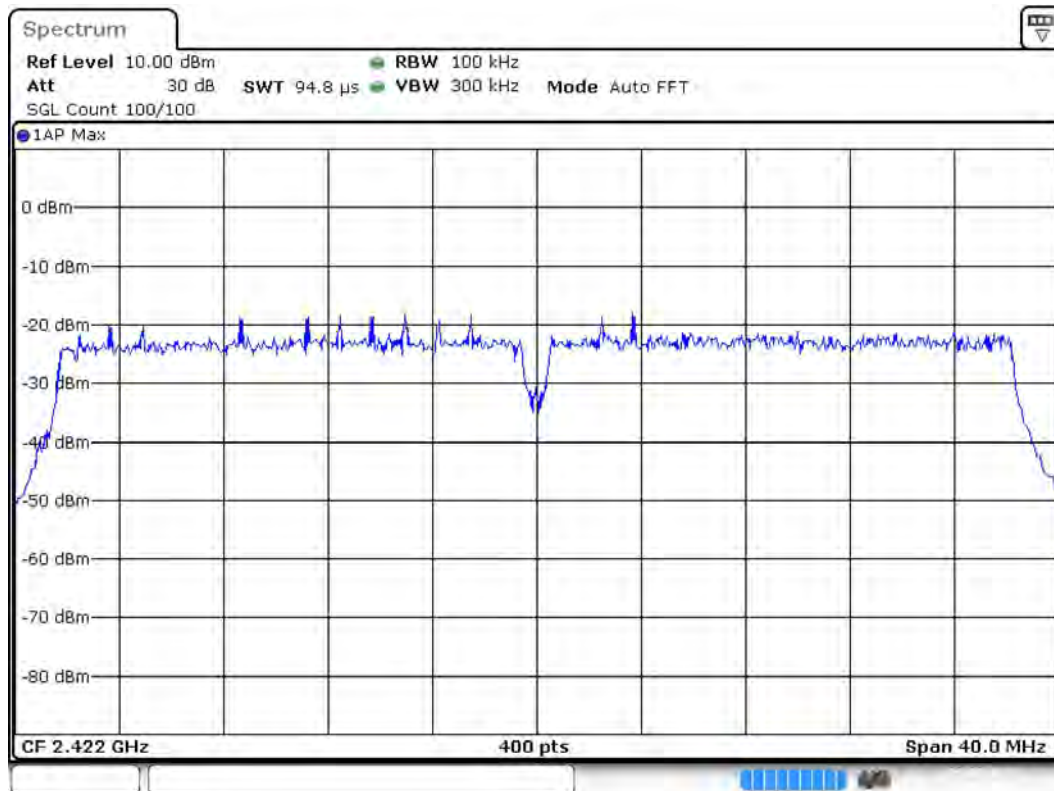
| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---------------------|-----------------|-----------------|-----------------|----------------------|-----------------------|
| 2422.000000         | 36.500000       | 0.500000        | ---             | 2403.750000          | 2440.250000           |

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

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---------------------|-----------------|--------|
| 2422.000000         | -6.8            | PASS   |



Bandwidth



Date: 28.FEB.2023 06:05:20

## Measurement

| Setting               | Instrument Value | Target Value  |
|-----------------------|------------------|---------------|
| Start Frequency       | 2.40200 GHz      | 2.40200 GHz   |
| Stop Frequency        | 2.44200 GHz      | 2.44200 GHz   |
| Span                  | 40.000 MHz       | 40.000 MHz    |
| RBW                   | 100.000 kHz      | ~ 100.000 kHz |
| VBW                   | 300.000 kHz      | ~ 300.000 kHz |
| SweepPoints           | 400              | ~ 400         |
| SweepTime             | 94.810 µs        | AUTO          |
| Reference Level       | 10.000 dBm       | 10.000 dBm    |
| Attenuation           | 30.000 dB        | AUTO          |
| Detector              | Peak             | Peak          |
| 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                   | 1 / max. 1       | max. 1        |
| Stable                | 0 / 1            | 1             |
| Max Stable Difference | 0.00 dB          | 0.50 dB       |

Emission Bandwidth 20 dB (2422 MHz; 20.000 dBm; 20 MHz)

Customized settings.

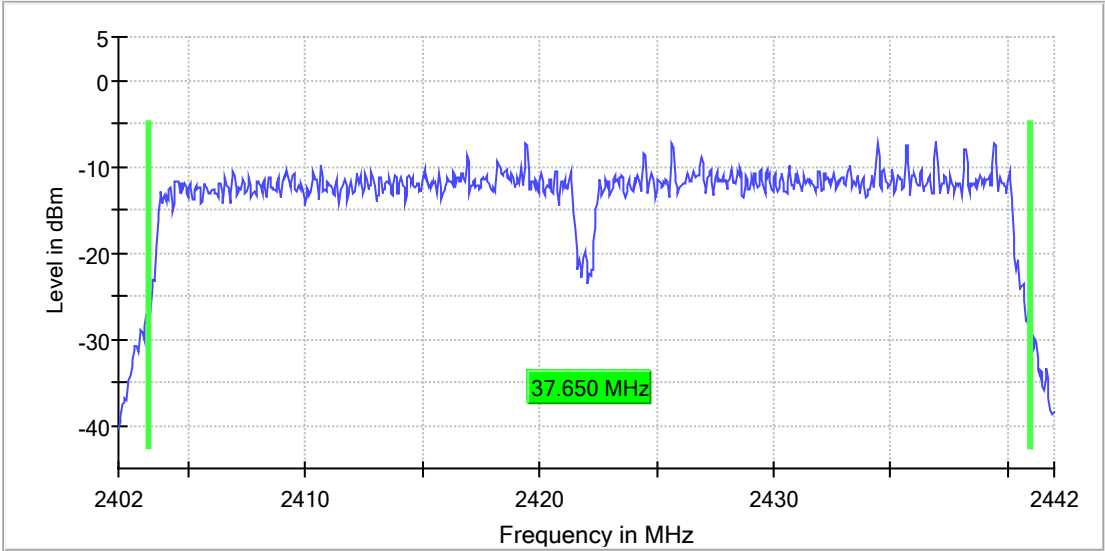
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10

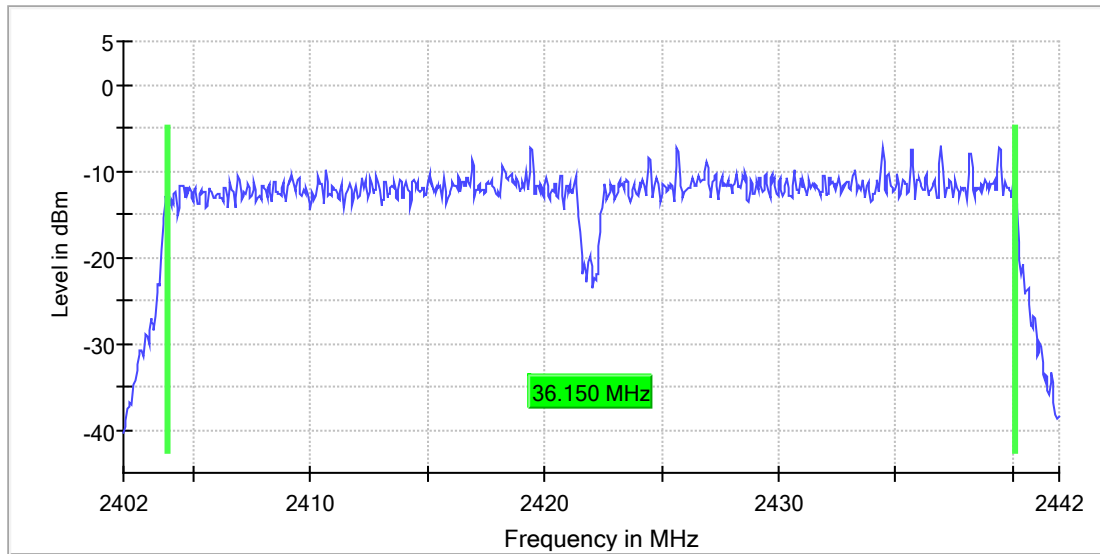
20 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---------------------|-----------------|-----------------|-----------------|----------------------|-----------------------|
| 2422.000000         | 37.650000       | ---             | ---             | 2403.325000          | 2440.975000           |

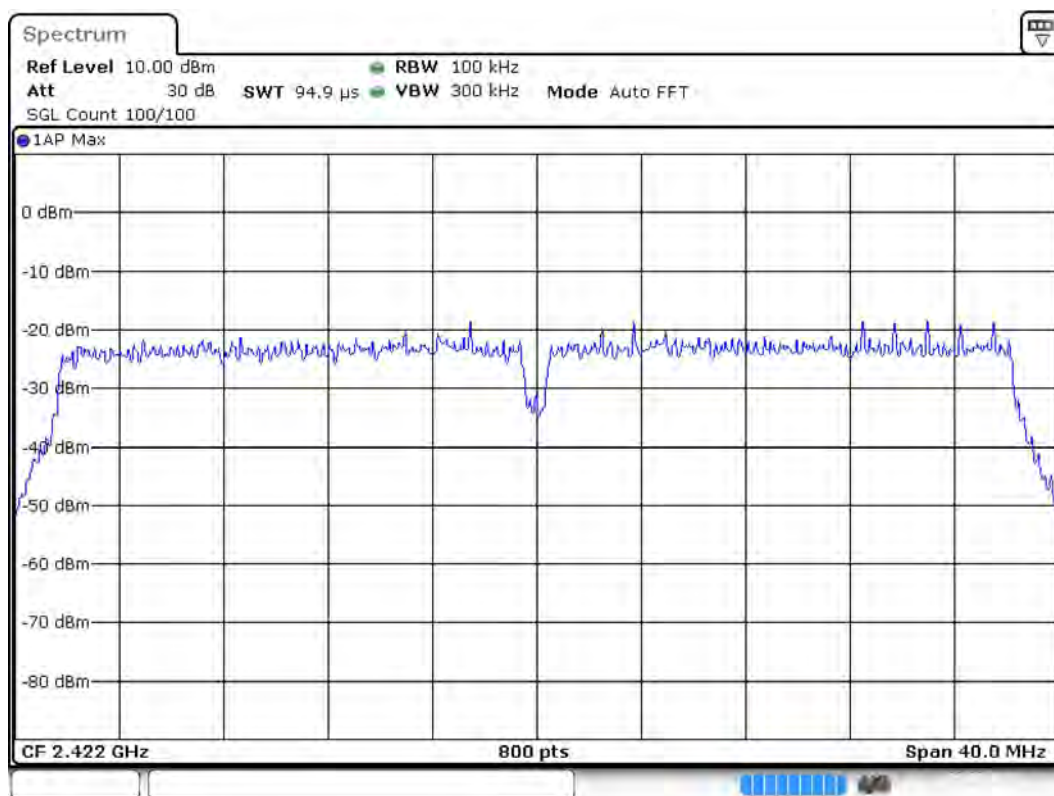
(continuation of the "20 dB Bandwidth" table from column 6 ...)

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---------------------|-----------------|--------|
| 2422.000000         | -7.1            | PASS   |





Bandwidth



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## Measurement

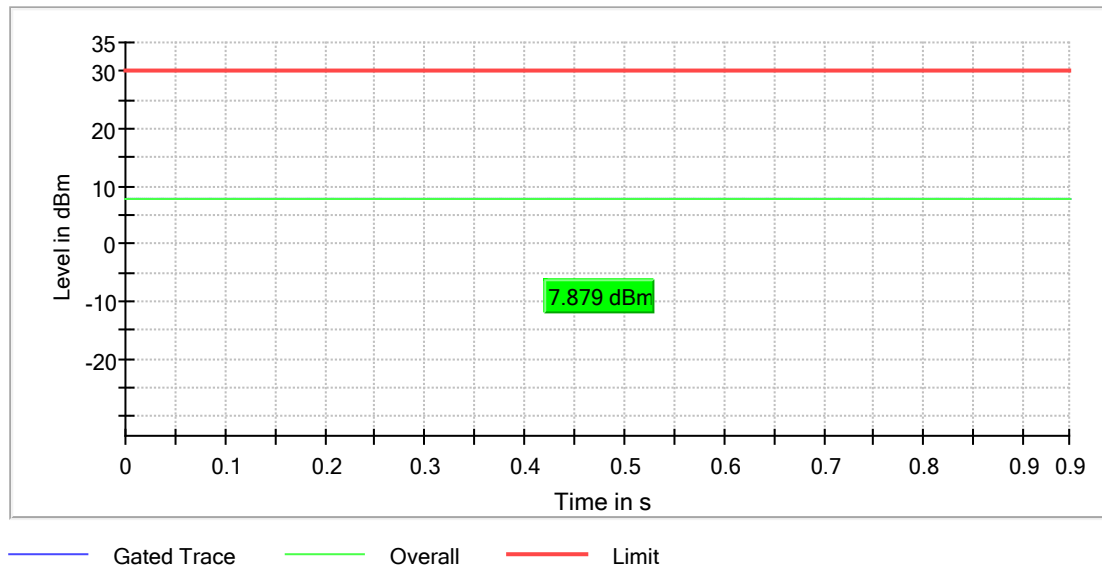
| Setting               | Instrument Value | Target Value   |
|-----------------------|------------------|----------------|
| Start Frequency       | 2.40200 GHz      | 2.40200 GHz    |
| Stop Frequency        | 2.44200 GHz      | 2.44200 GHz    |
| Span                  | 40.000 MHz       | 40.000 MHz     |
| RBW                   | 100.000 kHz      | ~ 100.000 kHz  |
| VBW                   | 300.000 kHz      | >= 300.000 kHz |
| SweepPoints           | 800              | ~ 800          |
| SweepTime             | 94.922 µs        | AUTO           |
| Reference Level       | 10.000 dBm       | 10.000 dBm     |
| Attenuation           | 30.000 dB        | AUTO           |
| Detector              | Peak             | Peak           |
| 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                   | 1 / max. 1       | max. 1         |
| Stable                | 0 / 1            | 1              |
| Max Stable Difference | 0.00 dB          | 0.50 dB        |

**RF output power (2422 MHz; 20.000 dBm; 20 MHz)**

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

**Result**

| DUT Frequency (MHz) | Gated RMS (dBm) | Limit Max (dBm) | Gated EIRP (dBm) | DutyCycle (%) | Result |
|---------------------|-----------------|-----------------|------------------|---------------|--------|
| 2422.000000         | 7.9             | 30.0            | 7.9              | 94.478        | PASS   |



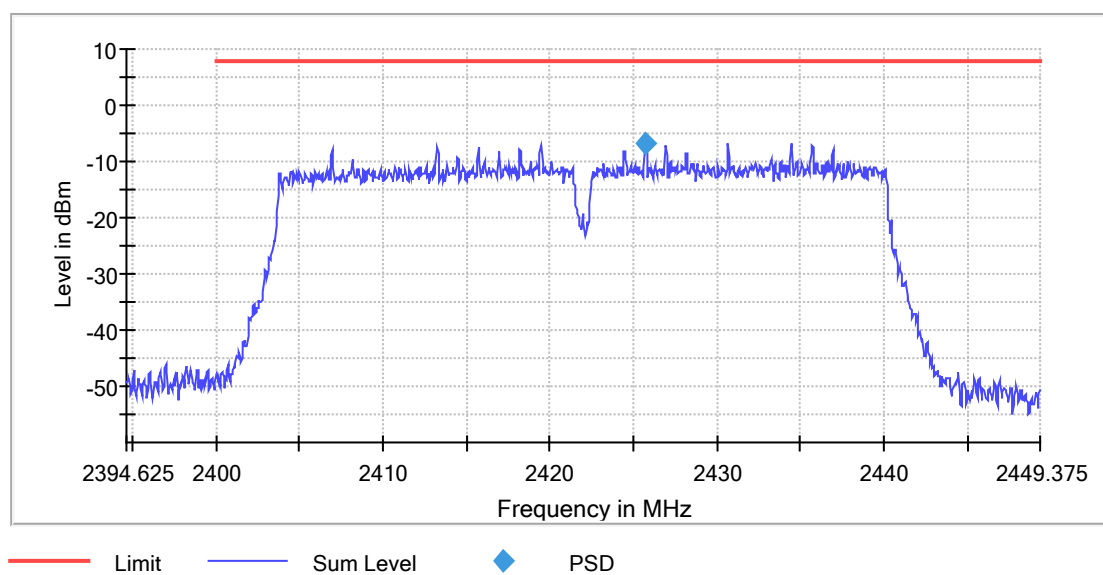
## Peak Power Spectral Density (2422 MHz; 20.000 dBm; 20 MHz)

Customized settings.

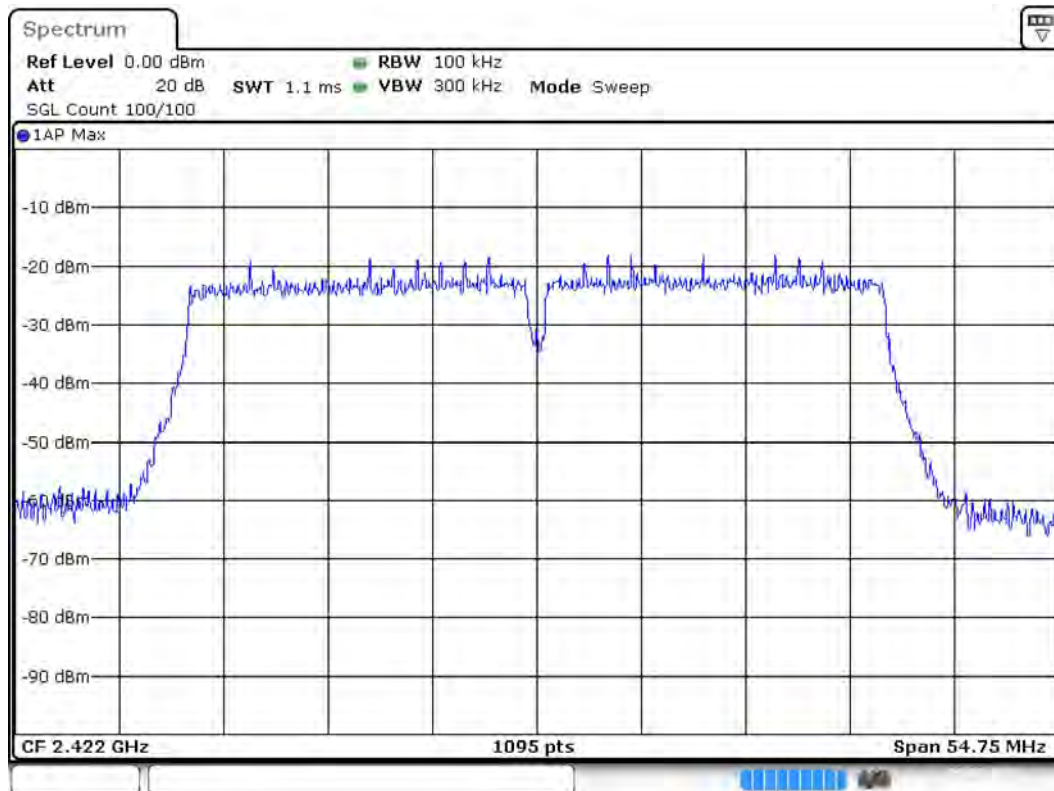
Test according to FCC title 47 part 15 §15.247(a),(e), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10

### Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---------------------|-----------------|-----------|-----------------|--------|
| 2422.000000         | 2425.750000     | -6.758    | 8.0             | PASS   |



PSD Connector 1



Date: 28.FEB.2023 06:06:06

## Measurement

| Setting               | Instrument Value | Target Value   |
|-----------------------|------------------|----------------|
| Start Frequency       | 2.39463 GHz      | 2.39463 GHz    |
| Stop Frequency        | 2.44938 GHz      | 2.44938 GHz    |
| Span                  | 54.750 MHz       | 54.750 MHz     |
| RBW                   | 100.000 kHz      | <= 100.000 kHz |
| VBW                   | 300.000 kHz      | >= 300.000 kHz |
| SweepPoints           | 1095             | ~ 1095         |
| SweepTime             | 1.100 ms         | AUTO           |
| Reference Level       | 0.000 dBm        | 0.000 dBm      |
| Attenuation           | 20.000 dB        | AUTO           |
| Detector              | Peak             | Peak           |
| SweepCount            | 100              | 100            |
| Filter                | 3 dB             | 3 dB           |
| Trace Mode            | Max Hold         | Max Hold       |
| SweepType             | Sweep            | Sweep          |
| Preamp                | off              | off            |
| Stablemode            | Trace            | Trace          |
| Stablevalue           | 0.50 dB          | 0.50 dB        |
| Run                   | 1 / max. 1       | max. 1         |
| Stable                | 0 / 1            | 1              |
| Max Stable Difference | 0.00 dB          | 0.50 dB        |

## Band Edge low (2422 MHz; 20.000 dBm; 20 MHz)

Customized settings.

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

### Result

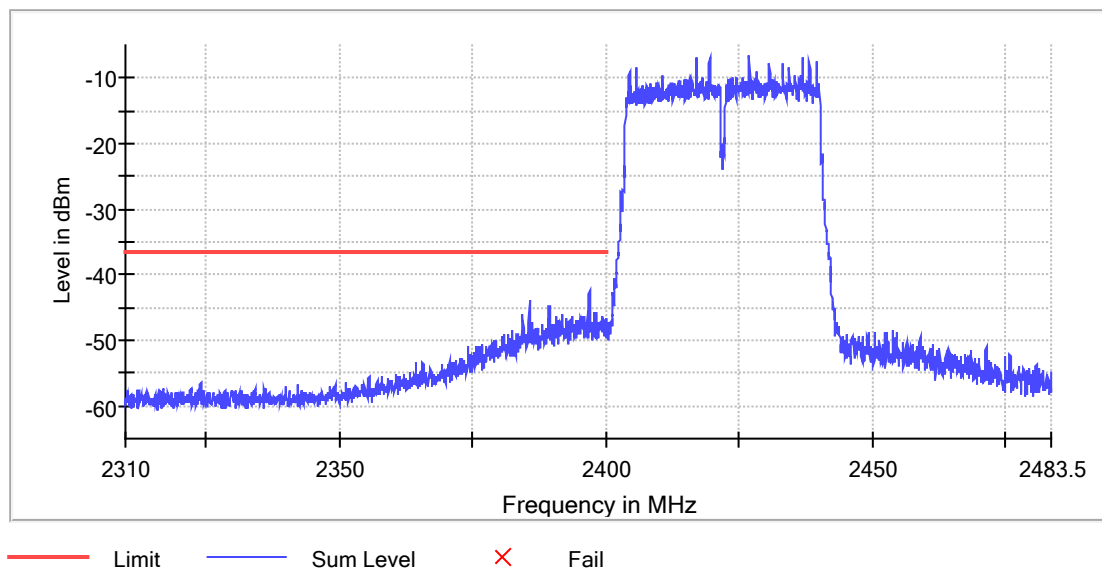
| DUT Frequency (MHz) | Result |
|---------------------|--------|
| 2422.000000         | PASS   |

### Inband Peak

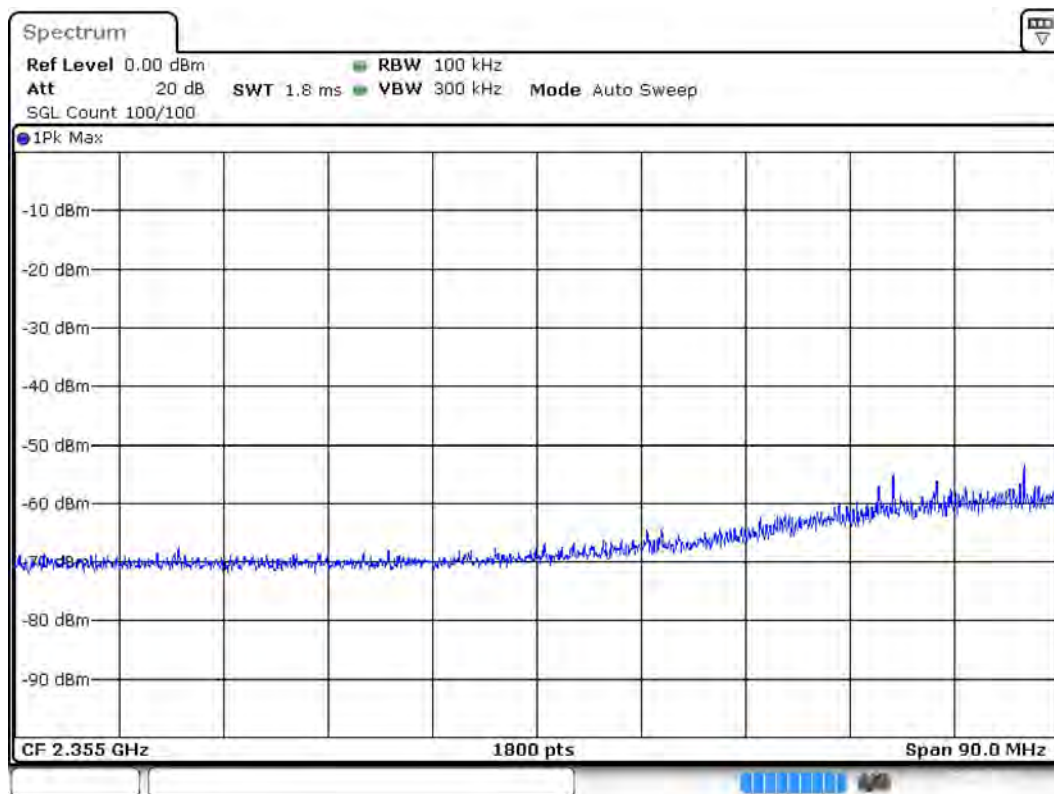
| Frequency (MHz) | Level (dBm) |
|-----------------|-------------|
| 2426.975000     | -6.5        |

### Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|-----------------|-------------|-------------|-------------|--------|
| 2396.975000     | -42.3       | 5.8         | -36.5       | PASS   |
| 2396.925000     | -42.8       | 6.3         | -36.5       | PASS   |
| 2397.025000     | -43.5       | 7.0         | -36.5       | PASS   |
| 2385.725000     | -43.8       | 7.2         | -36.5       | PASS   |
| 2385.675000     | -44.0       | 7.5         | -36.5       | PASS   |
| 2385.775000     | -44.5       | 8.0         | -36.5       | PASS   |
| 2389.475000     | -44.8       | 8.3         | -36.5       | PASS   |
| 2389.425000     | -44.9       | 8.4         | -36.5       | PASS   |
| 2396.575000     | -45.3       | 8.8         | -36.5       | PASS   |
| 2396.625000     | -45.5       | 9.0         | -36.5       | PASS   |
| 2398.225000     | -45.7       | 9.2         | -36.5       | PASS   |
| 2397.875000     | -45.8       | 9.2         | -36.5       | PASS   |
| 2398.275000     | -45.8       | 9.3         | -36.5       | PASS   |
| 2384.475000     | -45.9       | 9.4         | -36.5       | PASS   |
| 2398.175000     | -46.0       | 9.5         | -36.5       | PASS   |

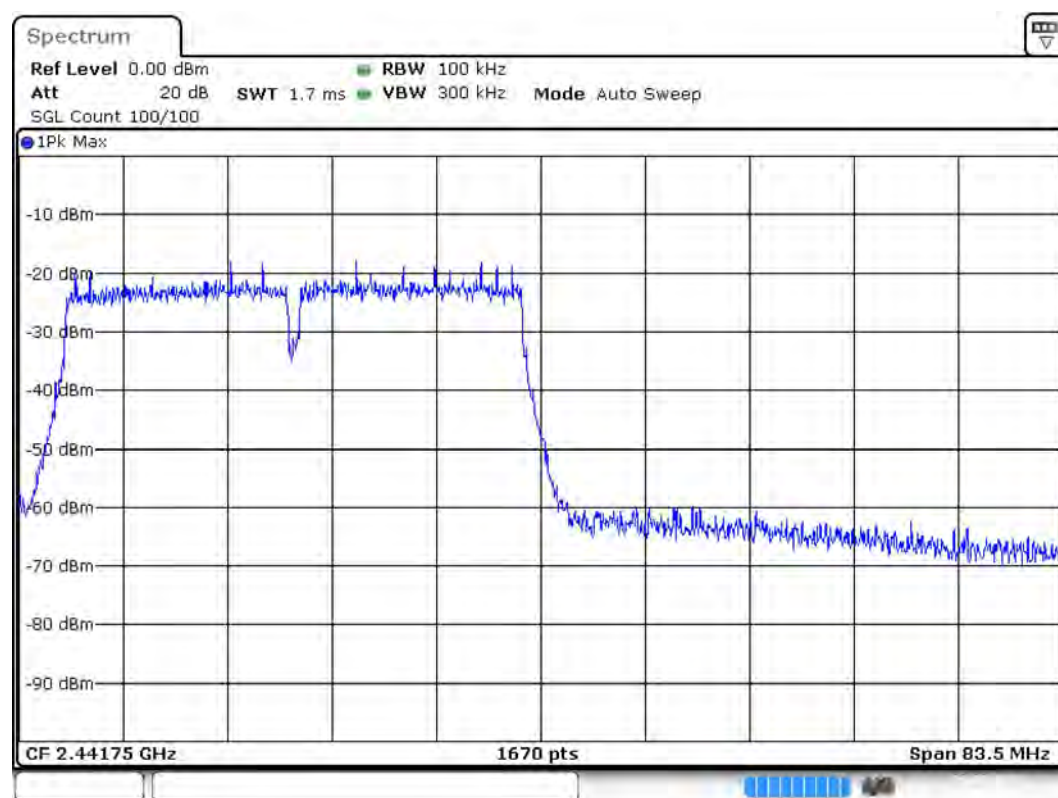


Band Edge Connector 1\_0



Date: 28.FEB.2023 06:06:25

Band Edge Connector 1\_1



Date: 28.FEB.2023 06:06:32

## 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              | 1.800 ms         | AUTO           |
| Reference Level       | 0.000 dBm        | 0.000 dBm      |
| Attenuation           | 20.000 dB        | AUTO           |
| Detector              | MaxPeak          | MaxPeak        |
| SweepCount            | 100              | 100            |
| 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                   | 11 / max. 11     | max. 11        |
| Stable                | 0 / 1            | 1              |
| Max Stable Difference | 2.28 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             | 1.670 ms   | AUTO      |
| Reference Level       | 0.000 dBm  | 0.000 dBm |
| Attenuation           | 20.000 dB  | AUTO      |
| Detector              | MaxPeak    | MaxPeak   |
| SweepCount            | 100        | 100       |
| Filter                | 3 dB       | 3 dB      |
| Trace Mode            | Max Hold   | Max Hold  |
| SweepType             | Sweep      | AUTO      |
| Preamplifier          | off        | off       |
| Stablemode            | Trace      | Trace     |
| Stablevalue           | 0.50 dB    | 0.50 dB   |
| Run                   | 1 / max. 1 | max. 1    |
| Stable                | 0 / 1      | 1         |
| Max Stable Difference | 0.00 dB    | 0.50 dB   |

## Tx Spurious Emission (2422 MHz; 20.000 dBm; 20 MHz)

Customized settings.

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

### Result

| DUT Frequency (MHz) | Result |
|---------------------|--------|
| 2422.000000         | PASS   |

### Final measurements

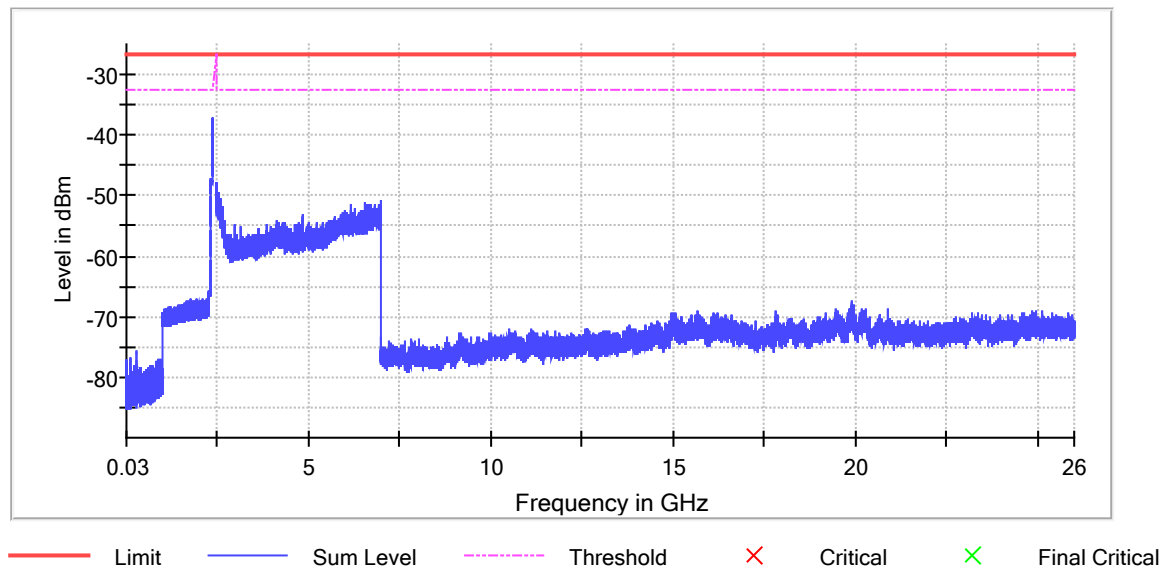
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|-----------------|-----------------------------|-------------|-------------|-------------|--------|
| ---             | ---                         | ---         | ---         | ---         | ---   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

### Pre Measurements

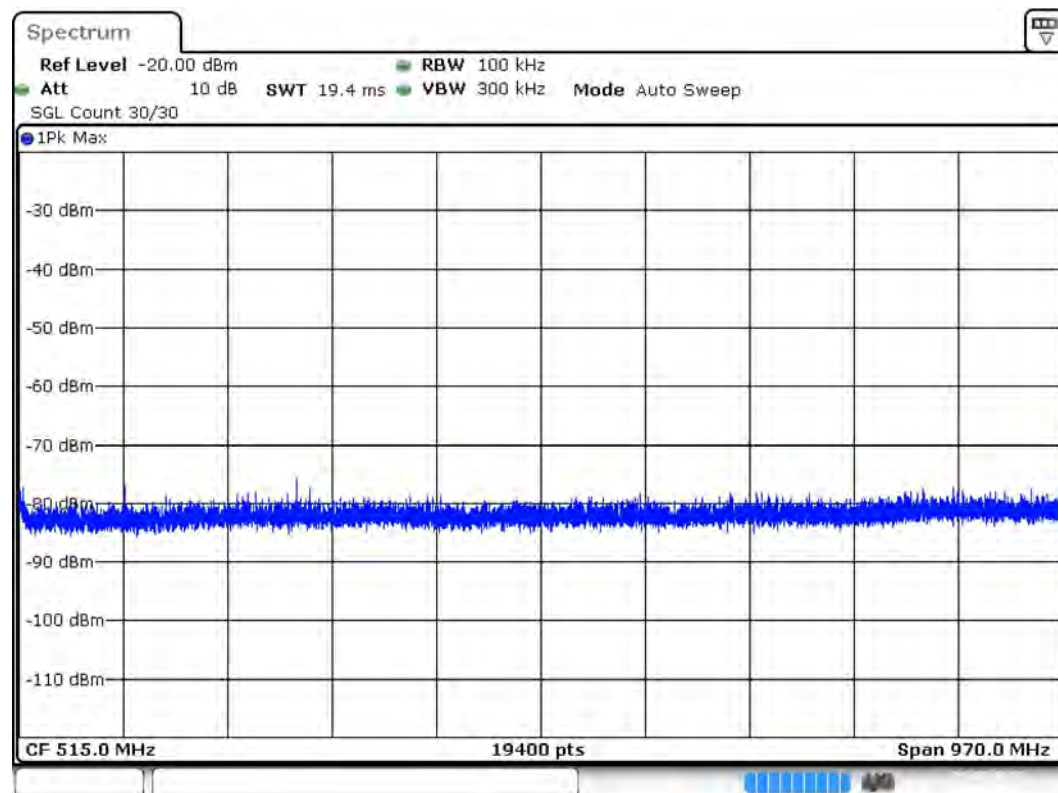
| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|-----------------|-------------|-------------|-------------|
| 2400.000000     | -38.3       | 11.5        | -26.8       |
| 2399.750000     | -38.3       | 11.5        | -26.8       |
| 2398.250000     | -38.5       | 11.7        | -26.8       |
| 2397.750000     | -38.6       | 11.8        | -26.8       |
| 2396.250000     | -38.8       | 12.0        | -26.8       |
| 2397.250000     | -38.8       | 12.0        | -26.8       |
| 2391.250000     | -37.8       | 11.1        | -26.8       |
| 2390.750000     | -37.9       | 11.2        | -26.8       |
| 2393.250000     | -38.0       | 11.3        | -26.8       |
| 2378.750000     | -38.0       | 11.3        | -26.8       |
| 2395.750000     | -38.2       | 11.4        | -26.8       |
| 2398.750000     | -38.2       | 11.5        | -26.8       |
| 2392.750000     | -38.3       | 11.5        | -26.8       |
| 2391.750000     | -38.3       | 11.6        | -26.8       |
| 2395.250000     | -38.5       | 11.7        | -26.8       |

### Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|-----------------------|----------------------|-----------------|-------------------|
| 30.000000             | 1000.000000          | 1               | 1                 |
| 1000.000000           | 2400.000000          | 2               | 2                 |
| 2483.500000           | 7000.000000          | 2               | 2                 |
| 7000.000000           | 18000.000000         | 2               | 2                 |
| 18000.000000          | 26000.000000         | 2               | 2                 |

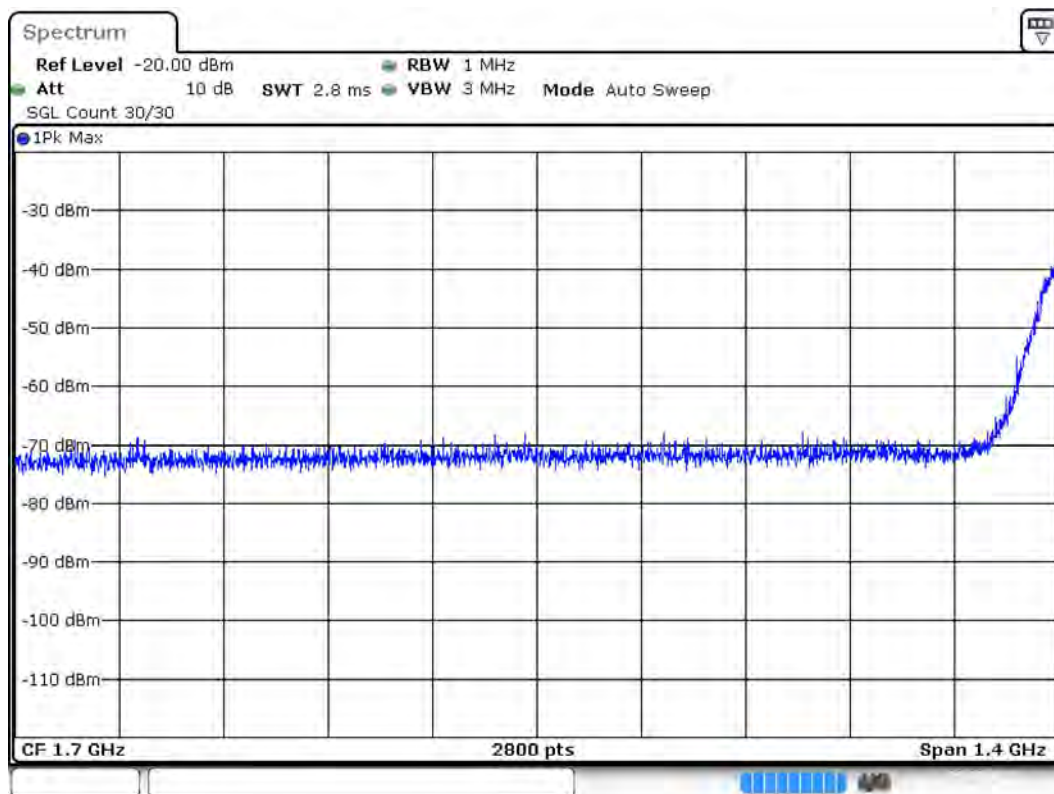


### Spurious Connector 1\_0



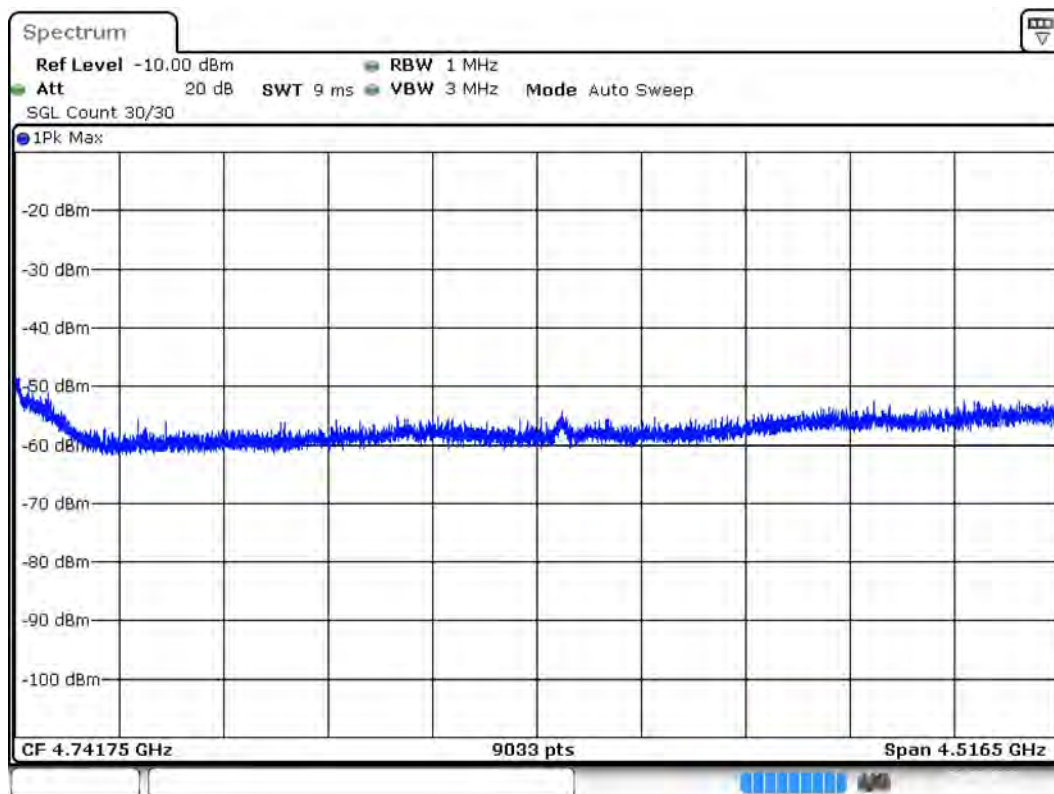
Date: 28.FEB.2023 06:08:08

### Spurious Connector 1\_1



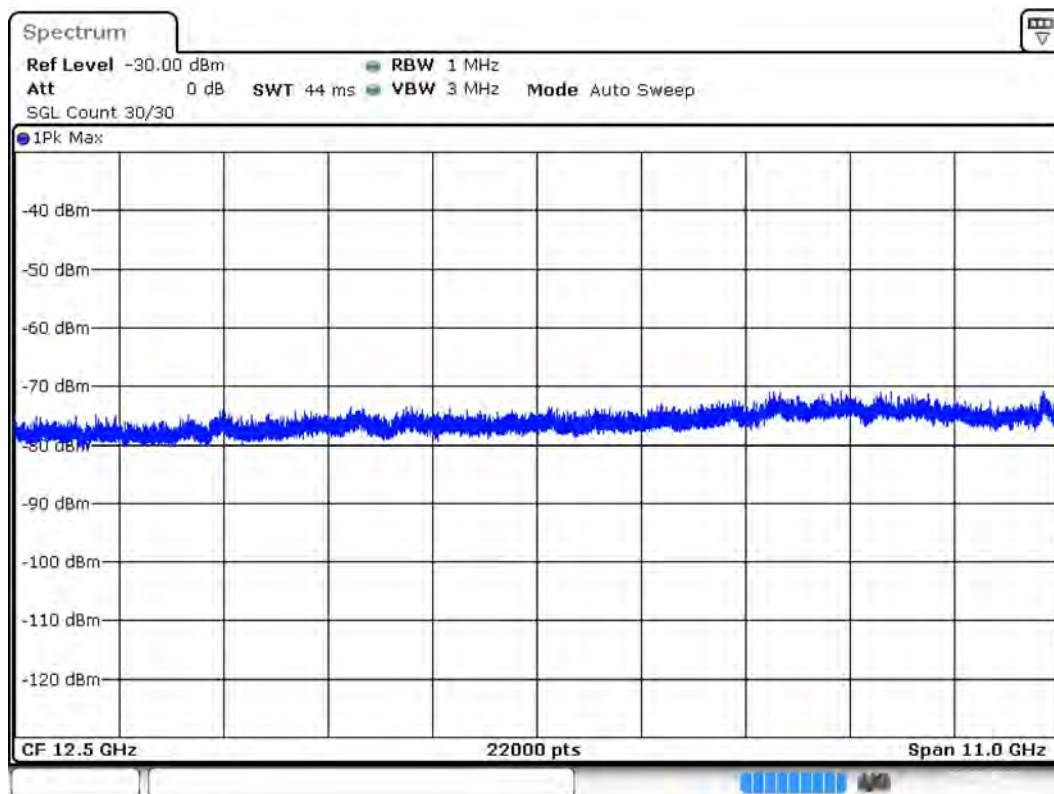
Date: 28.FEB.2023 06:09:31

Spurious Connector 1\_2



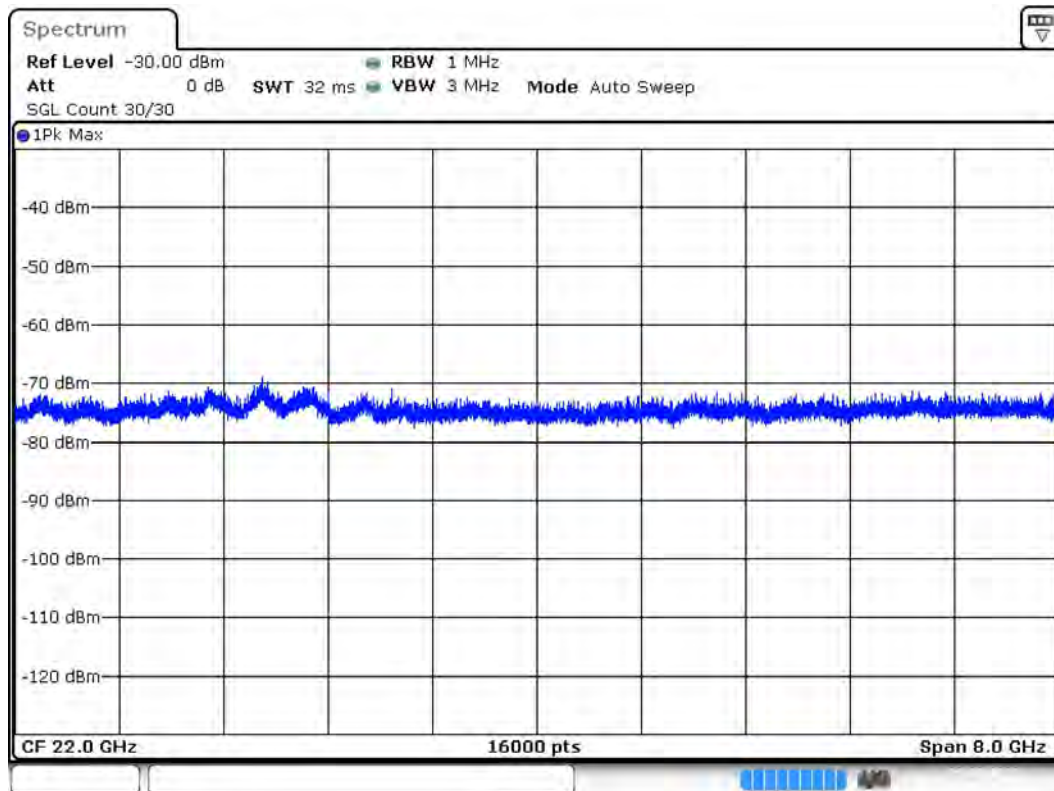
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Spurious Connector 1\_3



Date: 28.FEB.2023 06:10:30

Spurious Connector 1\_4



Date: 28.FEB.2023 06:11:00

## Pre Measurement 1

| Setting               | Instrument Value | Target Value   |
|-----------------------|------------------|----------------|
| RBW                   | 100.000 kHz      | <= 100.000 kHz |
| VBW                   | 300.000 kHz      | >= 300.000 kHz |
| SweepPoints           | 19400            | ~ 19400        |
| SweepTime             | 19.400 ms        | AUTO           |
| Reference Level       | -20.000 dBm      | -30.000 dBm    |
| Attenuation           | 10.000 dB        | AUTO           |
| Detector              | MaxPeak          | MaxPeak        |
| SweepCount            | 30               | 30             |
| 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. 150     | max. 150       |
| Stable                | 3 / 3            | 3              |
| Max Stable Difference | 0.00 dB          | 0.50 dB        |

## Pre Measurement 2

| Setting         | Instrument Value | Target Value |
|-----------------|------------------|--------------|
| RBW             | 1.000 MHz        | <= 1.000 MHz |
| VBW             | 3.000 MHz        | >= 3.000 MHz |
| SweepPoints     | 2800             | ~ 2800       |
| SweepTime       | 2.800 ms         | AUTO         |
| Reference Level | -20.000 dBm      | -30.000 dBm  |
| Attenuation     | 10.000 dB        | AUTO         |
| Detector        | MaxPeak          | MaxPeak      |
| SweepCount      | 30               | 30           |

|                              |                      |                 |
|------------------------------|----------------------|-----------------|
| <b>Filter</b>                | <b>3 dB</b>          | <b>3 dB</b>     |
| <b>Trace Mode</b>            | <b>Max Hold</b>      | <b>Max Hold</b> |
| <b>Sweep type</b>            | <b>Sweep</b>         | <b>AUTO</b>     |
| <b>Preamp</b>                | <b>off</b>           | <b>off</b>      |
| <b>Stable mode</b>           | <b>Trace</b>         | <b>Trace</b>    |
| <b>Stable value</b>          | <b>0.50 dB</b>       | <b>0.50 dB</b>  |
| <b>Run</b>                   | <b>44 / max. 150</b> | <b>max. 150</b> |
| <b>Stable</b>                | <b>3 / 3</b>         | <b>3</b>        |
| <b>Max Stable Difference</b> | <b>0.17 dB</b>       | <b>0.50 dB</b>  |

Emission Bandwidth 20 dB (2437 MHz; 20.000 dBm; 20 MHz)

Customized settings.

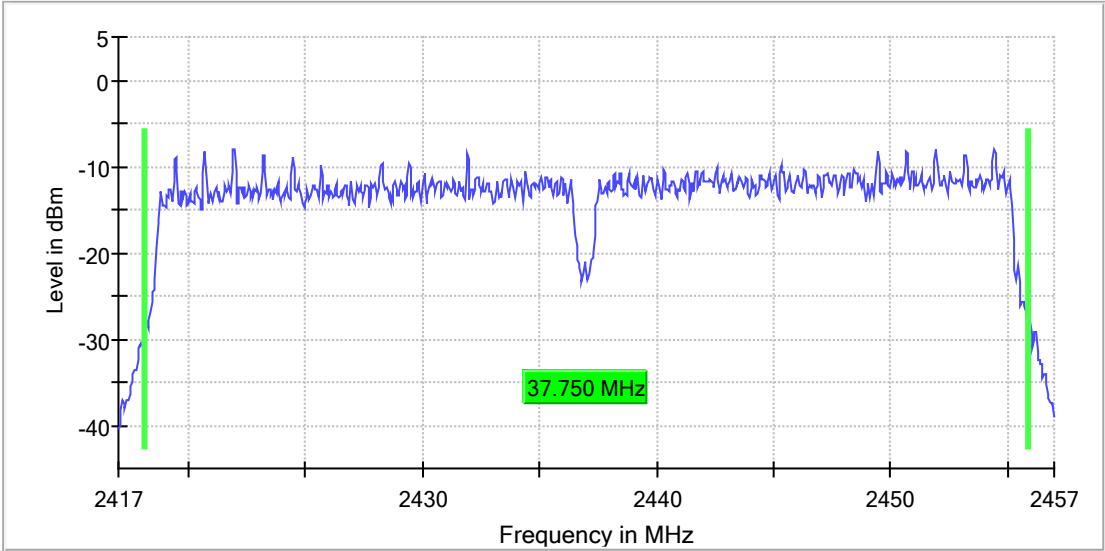
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10

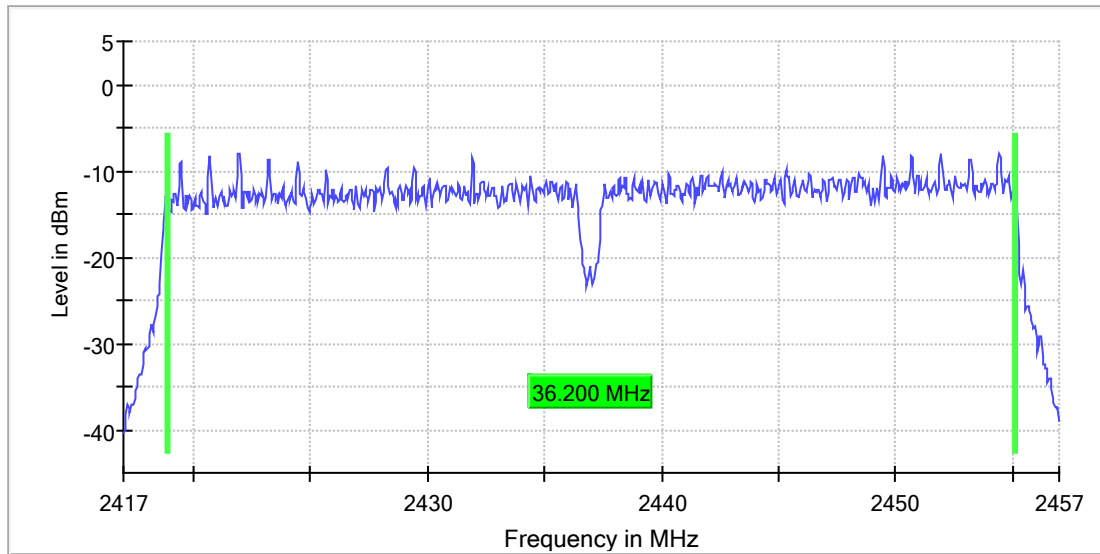
20 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---------------------|-----------------|-----------------|-----------------|----------------------|-----------------------|
| 2437.000000         | 37.750000       | ---             | ---             | 2418.125000          | 2455.875000           |

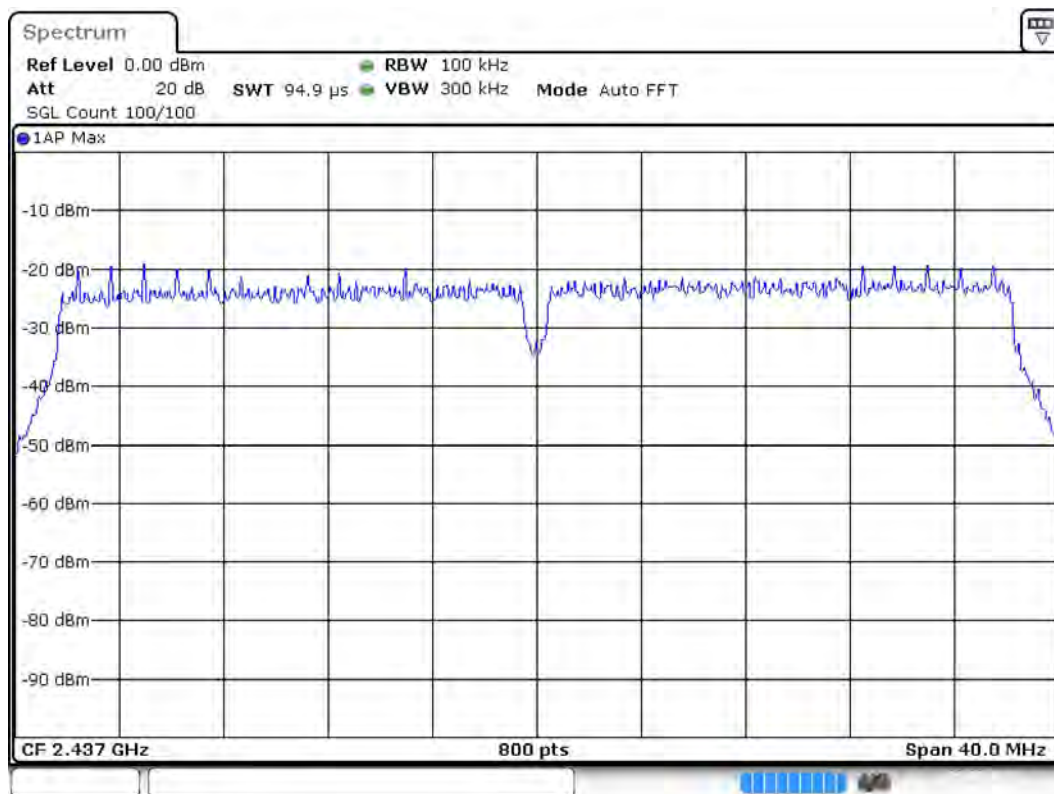
(continuation of the "20 dB Bandwidth" table from column 6 ...)

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---------------------|-----------------|--------|
| 2437.000000         | -8.0            | PASS   |





Bandwidth



Date: 28.FEB.2023 06:13:24

## Measurement

| Setting               | Instrument Value | Target Value   |
|-----------------------|------------------|----------------|
| Start Frequency       | 2.41700 GHz      | 2.41700 GHz    |
| Stop Frequency        | 2.45700 GHz      | 2.45700 GHz    |
| Span                  | 40.000 MHz       | 40.000 MHz     |
| RBW                   | 100.000 kHz      | ~ 100.000 kHz  |
| VBW                   | 300.000 kHz      | >= 300.000 kHz |
| SweepPoints           | 800              | ~ 800          |
| SweepTime             | 94.922 µs        | AUTO           |
| Reference Level       | 0.000 dBm        | 0.000 dBm      |
| Attenuation           | 20.000 dB        | AUTO           |
| Detector              | Peak             | Peak           |
| 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                   | 1 / max. 1       | max. 1         |
| Stable                | 0 / 1            | 1              |
| Max Stable Difference | 0.00 dB          | 0.50 dB        |

## Minimum Emission Bandwidth 6 dB (2437 MHz; 20.000 dBm; 20 MHz)

Customized settings.

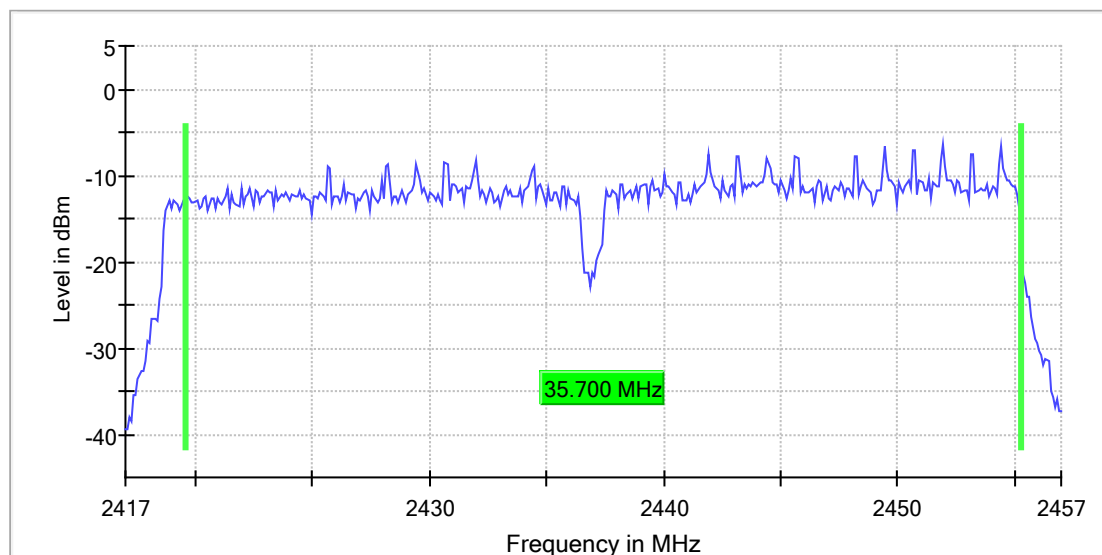
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10

### 6 dB Bandwidth

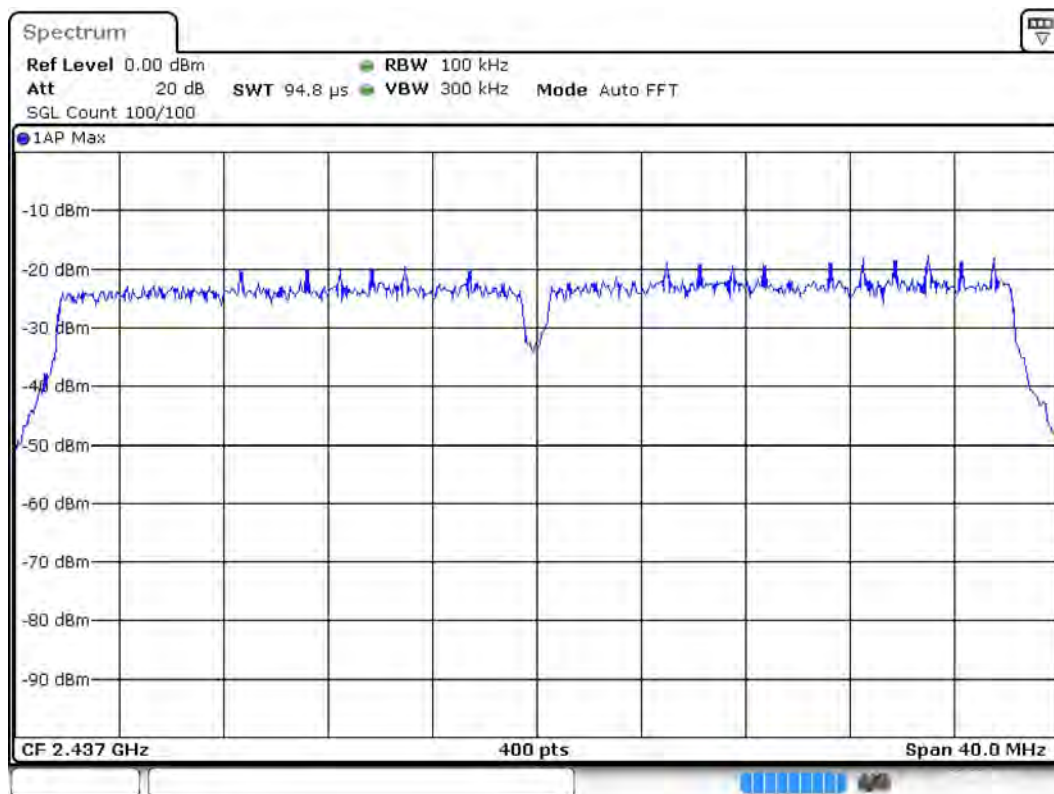
| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---------------------|-----------------|-----------------|-----------------|----------------------|-----------------------|
| 2437.000000         | 35.700000       | 0.500000        | ---             | 2419.550000          | 2455.250000           |

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

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---------------------|-----------------|--------|
| 2437.000000         | -6.4            | PASS   |



Bandwidth



Date: 28.FEB.2023 06:13:38

## Measurement

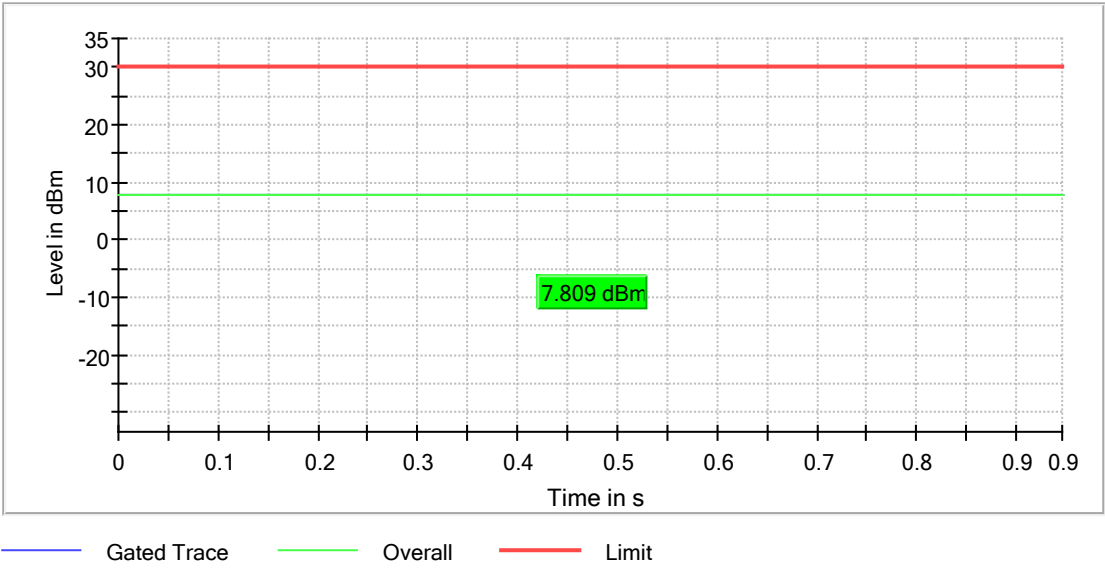
| Setting               | Instrument Value | Target Value  |
|-----------------------|------------------|---------------|
| Start Frequency       | 2.41700 GHz      | 2.41700 GHz   |
| Stop Frequency        | 2.45700 GHz      | 2.45700 GHz   |
| Span                  | 40.000 MHz       | 40.000 MHz    |
| RBW                   | 100.000 kHz      | ~ 100.000 kHz |
| VBW                   | 300.000 kHz      | ~ 300.000 kHz |
| SweepPoints           | 400              | ~ 400         |
| SweepTime             | 94.810 µs        | AUTO          |
| Reference Level       | 0.000 dBm        | 0.000 dBm     |
| Attenuation           | 20.000 dB        | AUTO          |
| Detector              | Peak             | Peak          |
| 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                   | 1 / max. 1       | max. 1        |
| Stable                | 0 / 1            | 1             |
| Max Stable Difference | 0.00 dB          | 0.50 dB       |

RF output power (2437 MHz; 20.000 dBm; 20 MHz)

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

Result

| DUT Frequency (MHz) | Gated RMS (dBm) | Limit Max (dBm) | Gated EIRP (dBm) | DutyCycle (%) | Result |
|---------------------|-----------------|-----------------|------------------|---------------|--------|
| 2437.000000         | 7.8             | 30.0            | 7.8              | 94.480        | PASS   |



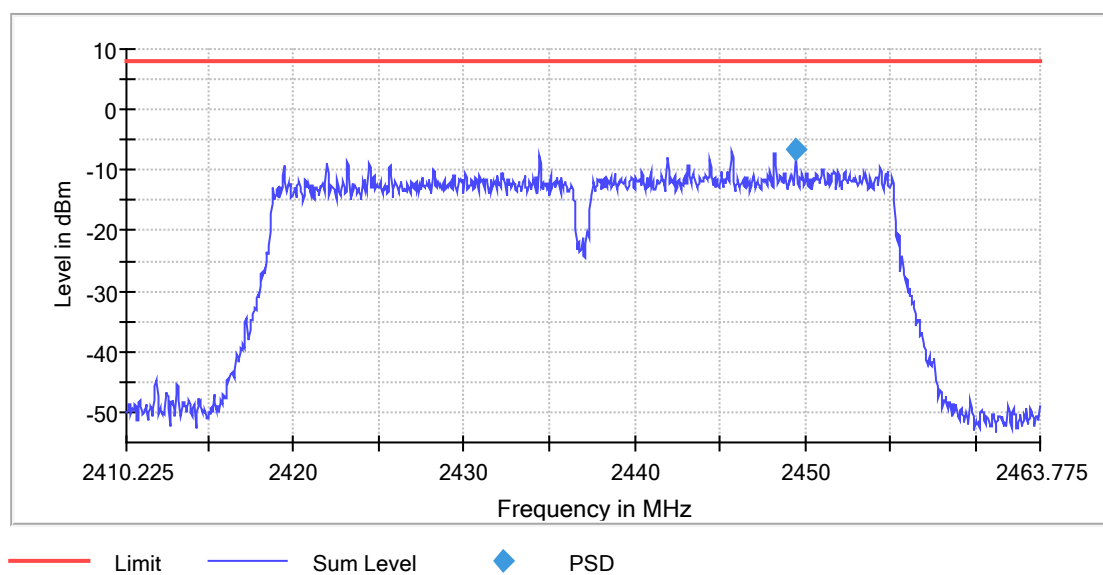
## Peak Power Spectral Density (2437 MHz; 20.000 dBm; 20 MHz)

Customized settings.

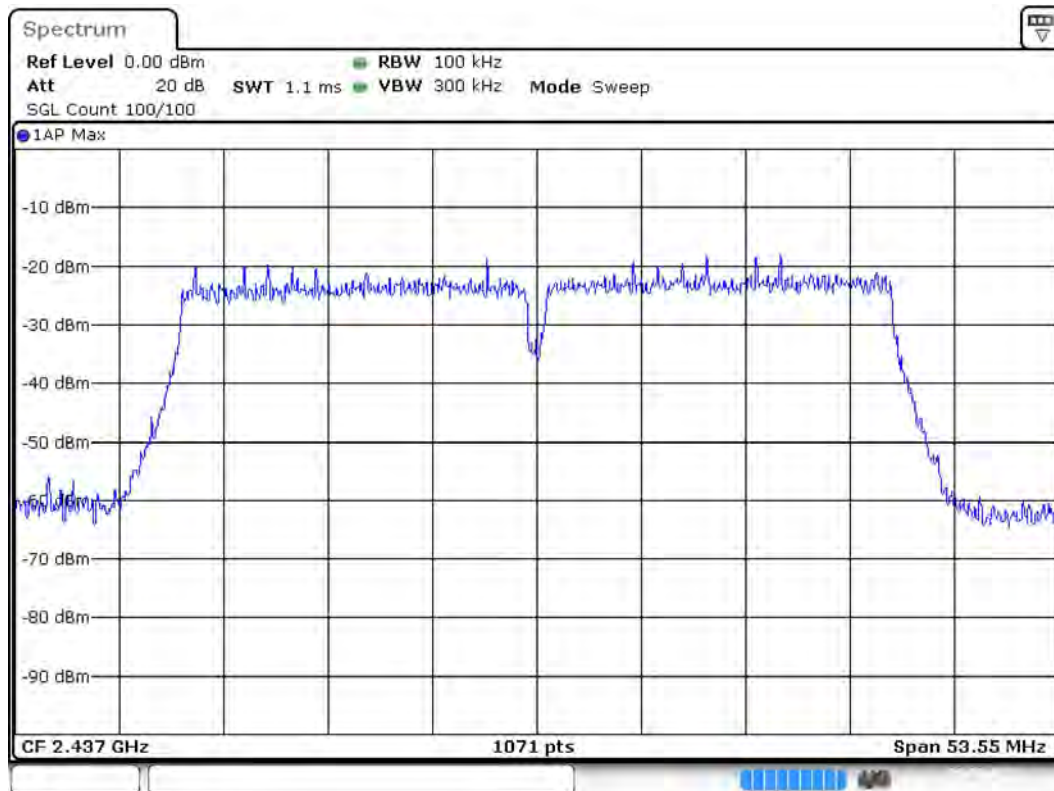
Test according to FCC title 47 part 15 §15.247(a),(e), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10

### Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---------------------|-----------------|-----------|-----------------|--------|
| 2437.000000         | 2449.450000     | -6.745    | 8.0             | PASS   |



PSD Connector 1



Date: 28.FEB.2023 06:14:08

## Measurement

| Setting               | Instrument Value | Target Value   |
|-----------------------|------------------|----------------|
| Start Frequency       | 2.41023 GHz      | 2.41023 GHz    |
| Stop Frequency        | 2.46378 GHz      | 2.46378 GHz    |
| Span                  | 53.550 MHz       | 53.550 MHz     |
| RBW                   | 100.000 kHz      | <= 100.000 kHz |
| VBW                   | 300.000 kHz      | >= 300.000 kHz |
| SweepPoints           | 1071             | ~ 1071         |
| SweepTime             | 1.080 ms         | AUTO           |
| Reference Level       | 0.000 dBm        | 0.000 dBm      |
| Attenuation           | 20.000 dB        | AUTO           |
| Detector              | Peak             | Peak           |
| SweepCount            | 100              | 100            |
| Filter                | 3 dB             | 3 dB           |
| Trace Mode            | Max Hold         | Max Hold       |
| SweepType             | Sweep            | Sweep          |
| Preamp                | off              | off            |
| Stablemode            | Trace            | Trace          |
| Stablevalue           | 0.50 dB          | 0.50 dB        |
| Run                   | 1 / max. 1       | max. 1         |
| Stable                | 0 / 1            | 1              |
| Max Stable Difference | 0.00 dB          | 0.50 dB        |

## Tx Spurious Emission (2437 MHz; 20.000 dBm; 20 MHz)

Customized settings.

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

### Result

| DUT Frequency (MHz) | Result |
|---------------------|--------|
| 2437.000000         | PASS   |

### Final measurements

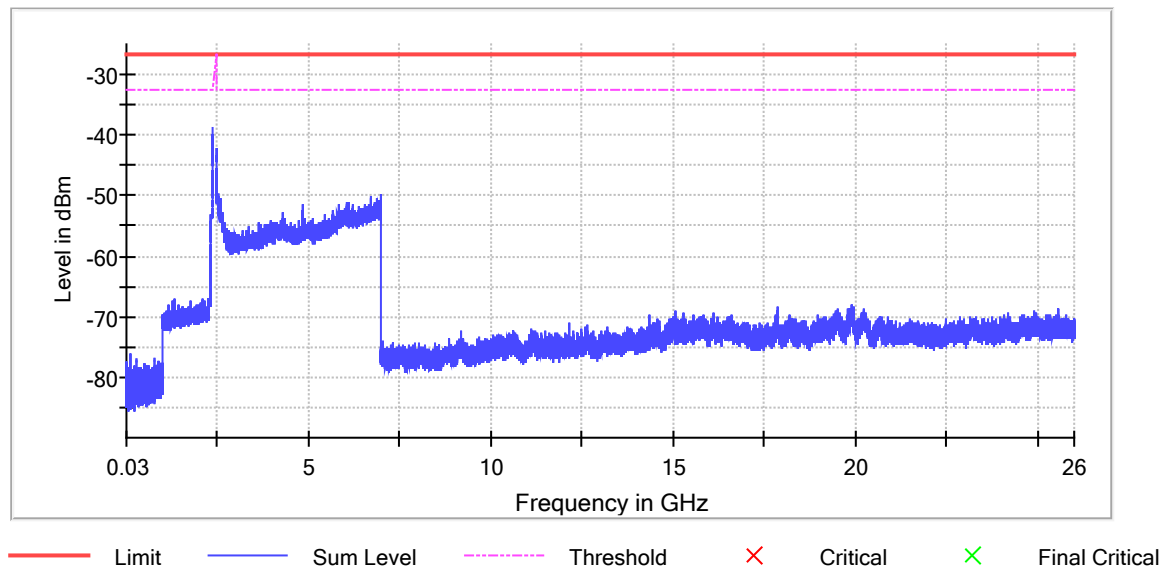
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|-----------------|-----------------------------|-------------|-------------|-------------|--------|
| ---             | ---                         | ---         | ---         | ---         | ---   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

### Pre Measurements

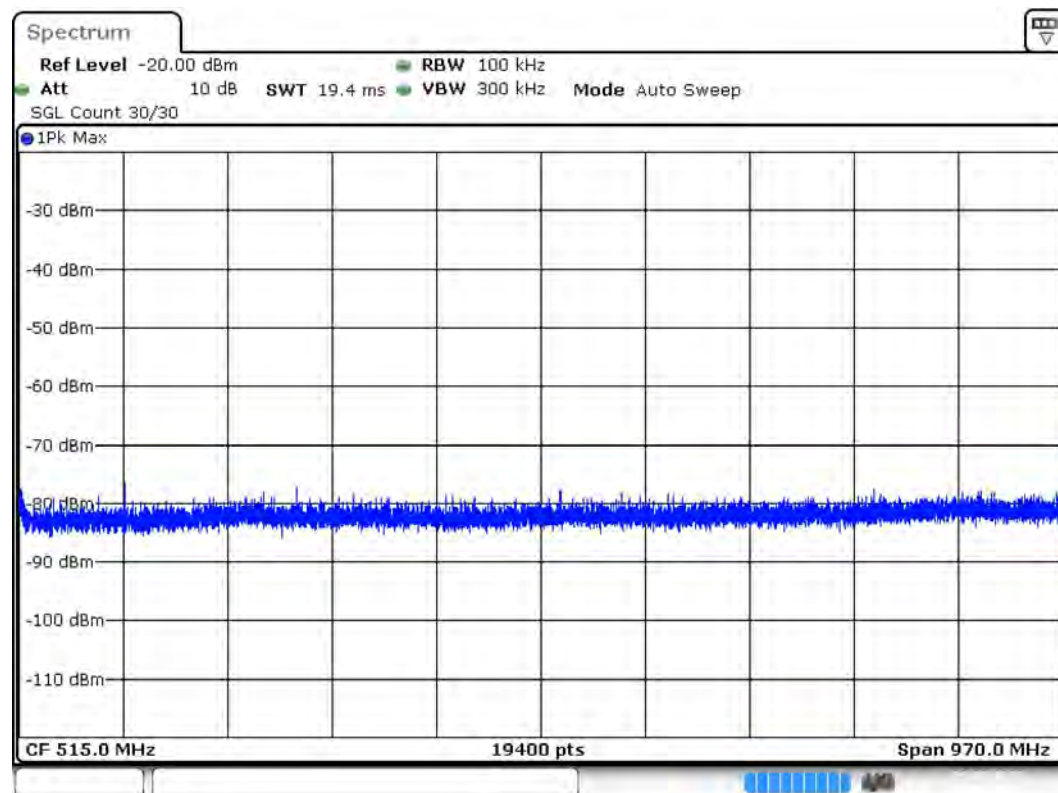
| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|-----------------|-------------|-------------|-------------|
| 2400.000000     | -38.9       | 12.1        | -26.7       |
| 2399.750000     | -38.9       | 12.1        | -26.7       |
| 2397.750000     | -39.8       | 13.1        | -26.7       |
| 2397.250000     | -40.0       | 13.2        | -26.7       |
| 2391.250000     | -40.1       | 13.4        | -26.7       |
| 2398.250000     | -40.1       | 13.4        | -26.7       |
| 2398.750000     | -40.4       | 13.6        | -26.7       |
| 2396.250000     | -40.6       | 13.9        | -26.7       |
| 2399.250000     | -40.9       | 14.2        | -26.7       |
| 2394.250000     | -41.2       | 14.5        | -26.7       |
| 2396.750000     | -41.3       | 14.5        | -26.7       |
| 2392.250000     | -41.6       | 14.9        | -26.7       |
| 2395.250000     | -41.8       | 15.0        | -26.7       |
| 2394.750000     | -41.8       | 15.1        | -26.7       |
| 2389.750000     | -41.9       | 15.1        | -26.7       |

### Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|-----------------------|----------------------|-----------------|-------------------|
| 30.000000             | 1000.000000          | 1               | 1                 |
| 1000.000000           | 2400.000000          | 2               | 2                 |
| 2483.500000           | 7000.000000          | 2               | 2                 |
| 7000.000000           | 18000.000000         | 2               | 2                 |
| 18000.000000          | 26000.000000         | 2               | 2                 |

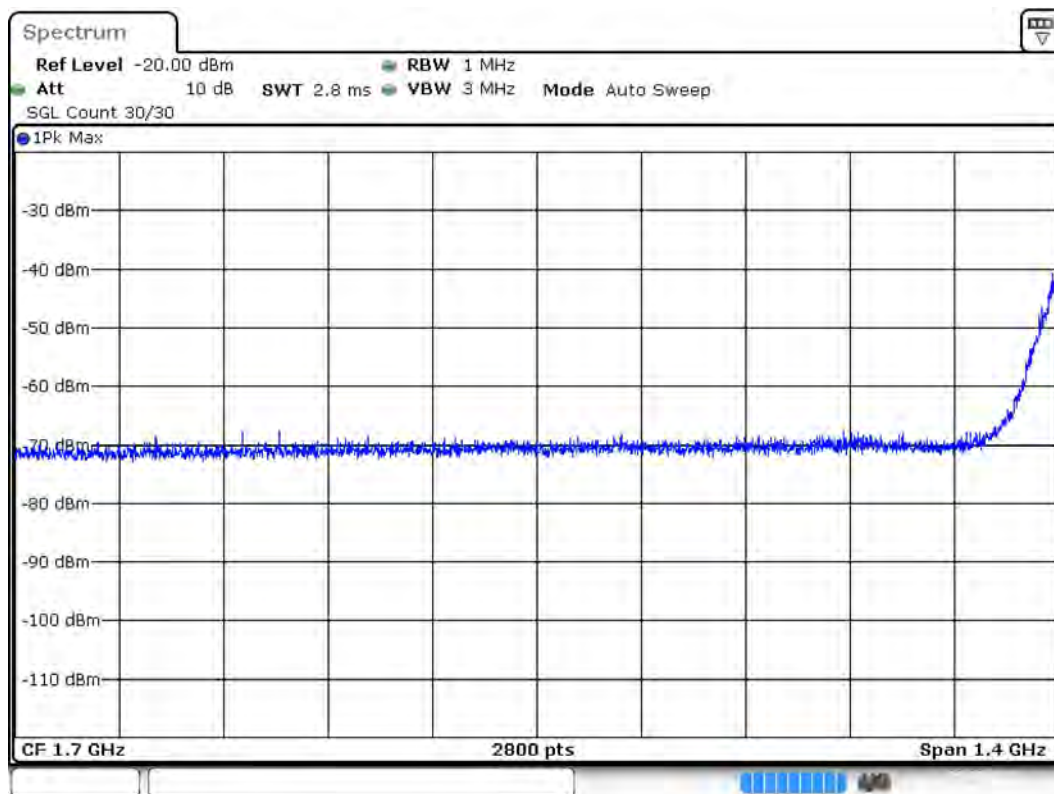


### Spurious Connector 1\_0



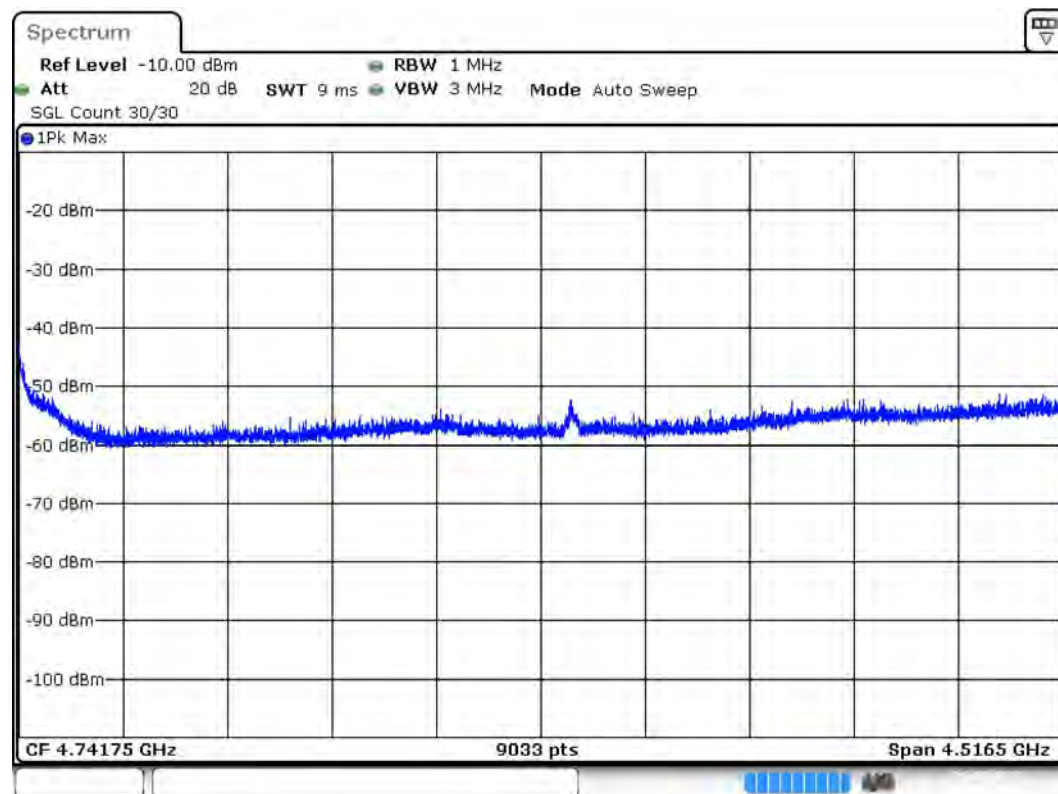
Date: 28.FEB.2023 06:15:43

### Spurious Connector 1\_1



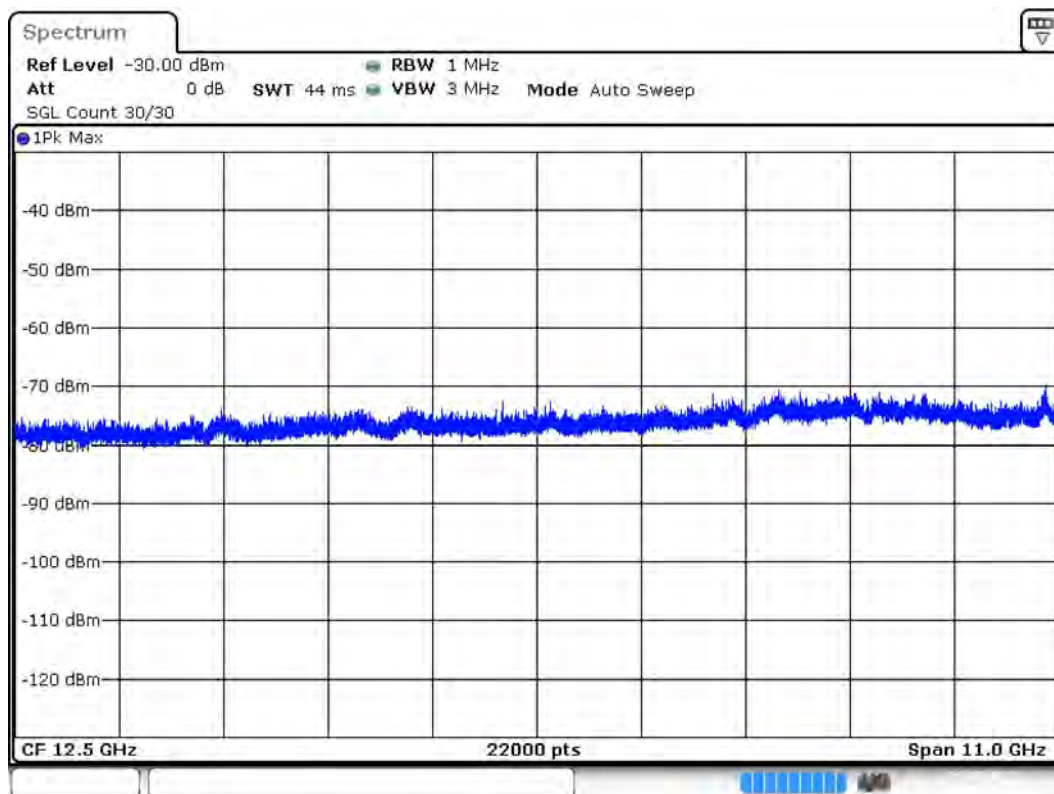
Date: 28.FEB.2023 06:16:13

Spurious Connector 1\_2



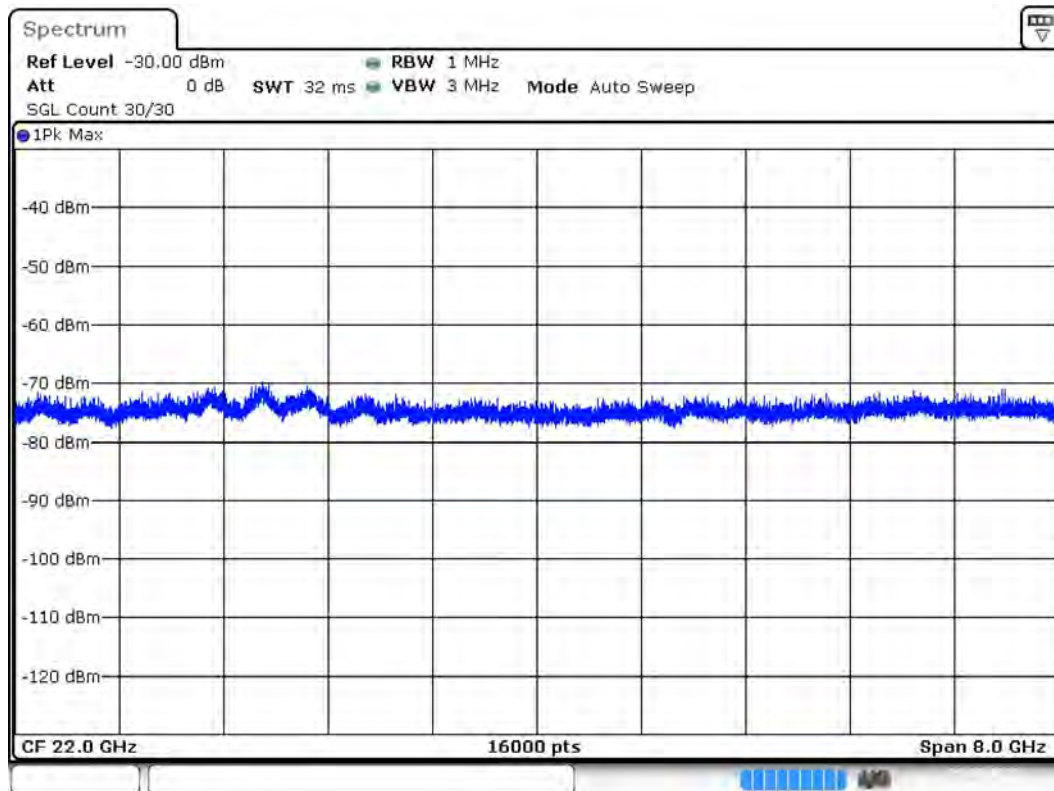
Date: 28.FEB.2023 06:17:21

Spurious Connector 1\_3



Date: 28.FEB.2023 06:17:57

Spurious Connector 1\_4



Date: 28.FEB.2023 06:18:26

## Pre Measurement 1

| Setting               | Instrument Value | Target Value   |
|-----------------------|------------------|----------------|
| RBW                   | 100.000 kHz      | <= 100.000 kHz |
| VBW                   | 300.000 kHz      | >= 300.000 kHz |
| SweepPoints           | 19400            | ~ 19400        |
| SweepTime             | 19.400 ms        | AUTO           |
| Reference Level       | -20.000 dBm      | -30.000 dBm    |
| Attenuation           | 10.000 dB        | AUTO           |
| Detector              | MaxPeak          | MaxPeak        |
| SweepCount            | 30               | 30             |
| 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. 150     | max. 150       |
| Stable                | 3 / 3            | 3              |
| Max Stable Difference | 0.00 dB          | 0.50 dB        |

## Pre Measurement 2

| Setting         | Instrument Value | Target Value |
|-----------------|------------------|--------------|
| RBW             | 1.000 MHz        | <= 1.000 MHz |
| VBW             | 3.000 MHz        | >= 3.000 MHz |
| SweepPoints     | 2800             | ~ 2800       |
| SweepTime       | 2.800 ms         | AUTO         |
| Reference Level | -20.000 dBm      | -30.000 dBm  |
| Attenuation     | 10.000 dB        | AUTO         |
| Detector        | MaxPeak          | MaxPeak      |
| SweepCount      | 30               | 30           |

|                              |                      |                 |
|------------------------------|----------------------|-----------------|
| <b>Filter</b>                | <b>3 dB</b>          | <b>3 dB</b>     |
| <b>Trace Mode</b>            | <b>Max Hold</b>      | <b>Max Hold</b> |
| <b>Sweep type</b>            | <b>Sweep</b>         | <b>AUTO</b>     |
| <b>Preamp</b>                | <b>off</b>           | <b>off</b>      |
| <b>Stable mode</b>           | <b>Trace</b>         | <b>Trace</b>    |
| <b>Stable value</b>          | <b>0.50 dB</b>       | <b>0.50 dB</b>  |
| <b>Run</b>                   | <b>18 / max. 150</b> | <b>max. 150</b> |
| <b>Stable</b>                | <b>3 / 3</b>         | <b>3</b>        |
| <b>Max Stable Difference</b> | <b>0.36 dB</b>       | <b>0.50 dB</b>  |

## Emission Bandwidth 20 dB (2452 MHz; 20.000 dBm; 20 MHz)

Customized settings.

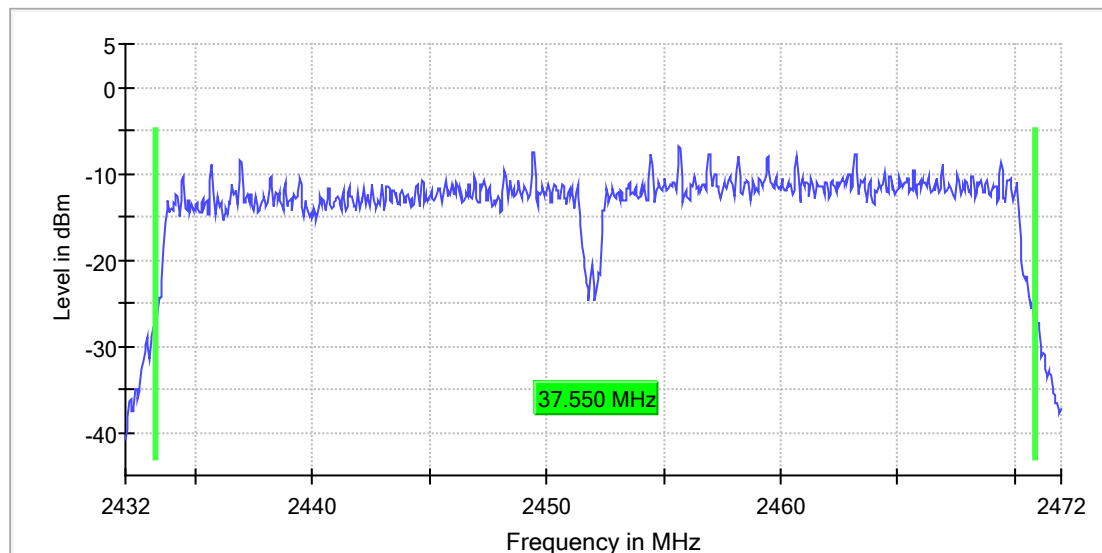
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10

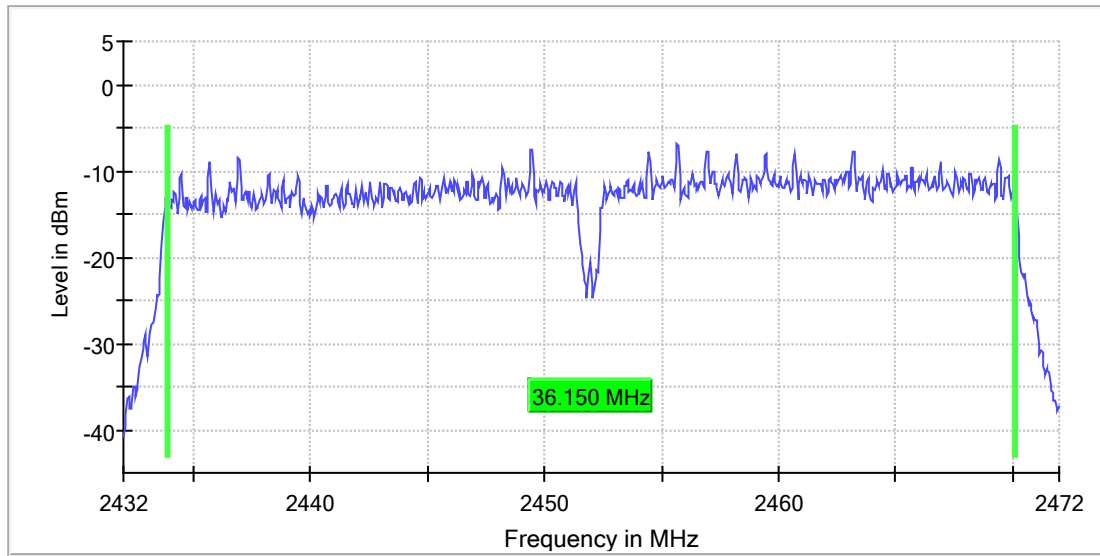
### 20 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---------------------|-----------------|-----------------|-----------------|----------------------|-----------------------|
| 2452.000000         | 37.550000       | ---             | ---             | 2433.325000          | 2470.875000           |

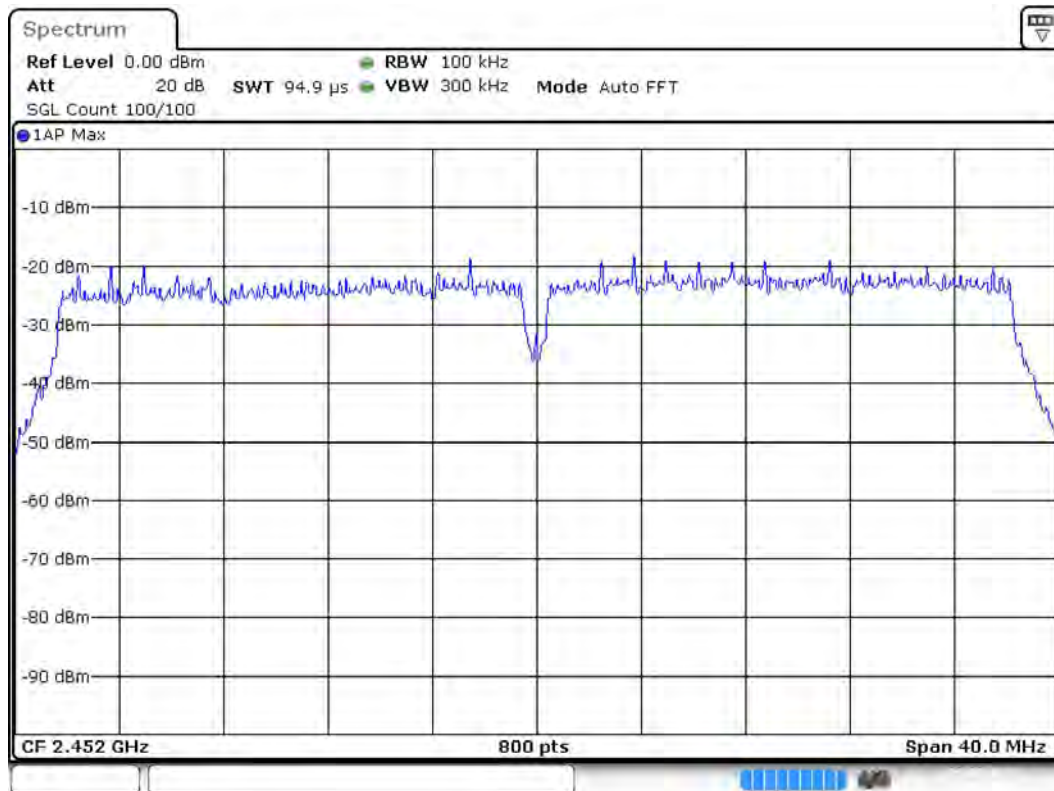
(continuation of the "20 dB Bandwidth" table from column 6 ...)

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---------------------|-----------------|--------|
| 2452.000000         | -6.9            | PASS   |





Bandwidth



Date: 28.FEB.2023 06:20:02

## Measurement

| Setting               | Instrument Value | Target Value   |
|-----------------------|------------------|----------------|
| Start Frequency       | 2.43200 GHz      | 2.43200 GHz    |
| Stop Frequency        | 2.47200 GHz      | 2.47200 GHz    |
| Span                  | 40.000 MHz       | 40.000 MHz     |
| RBW                   | 100.000 kHz      | ~ 100.000 kHz  |
| VBW                   | 300.000 kHz      | >= 300.000 kHz |
| SweepPoints           | 800              | ~ 800          |
| SweepTime             | 94.922 µs        | AUTO           |
| Reference Level       | 0.000 dBm        | 0.000 dBm      |
| Attenuation           | 20.000 dB        | AUTO           |
| Detector              | Peak             | Peak           |
| 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                   | 1 / max. 1       | max. 1         |
| Stable                | 0 / 1            | 1              |
| Max Stable Difference | 0.00 dB          | 0.50 dB        |

## Minimum Emission Bandwidth 6 dB (2452 MHz; 20.000 dBm; 20 MHz)

Customized settings.

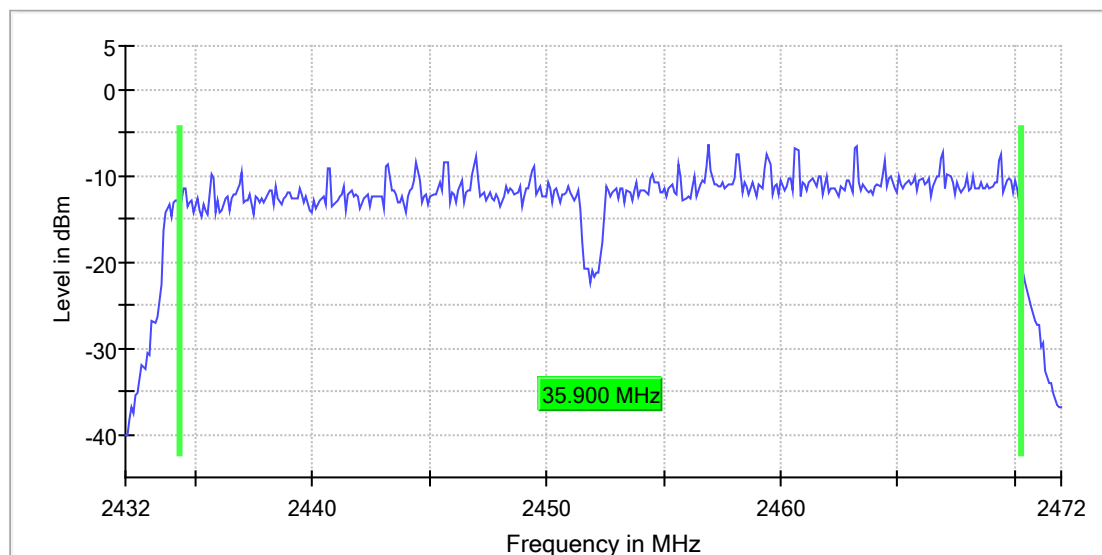
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10

### 6 dB Bandwidth

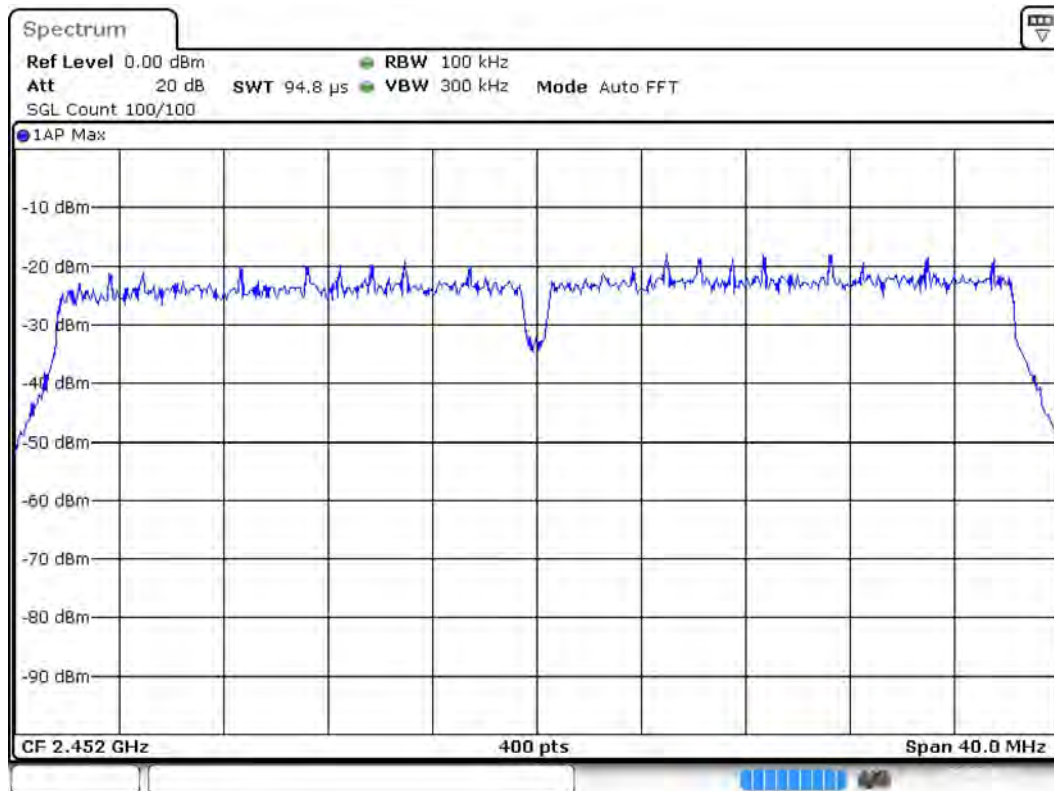
| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---------------------|-----------------|-----------------|-----------------|----------------------|-----------------------|
| 2452.000000         | 35.900000       | 0.500000        | ---             | 2434.350000          | 2470.250000           |

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

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---------------------|-----------------|--------|
| 2452.000000         | -6.5            | PASS   |



Bandwidth



Date: 28.FEB.2023 06:20:15

## Measurement

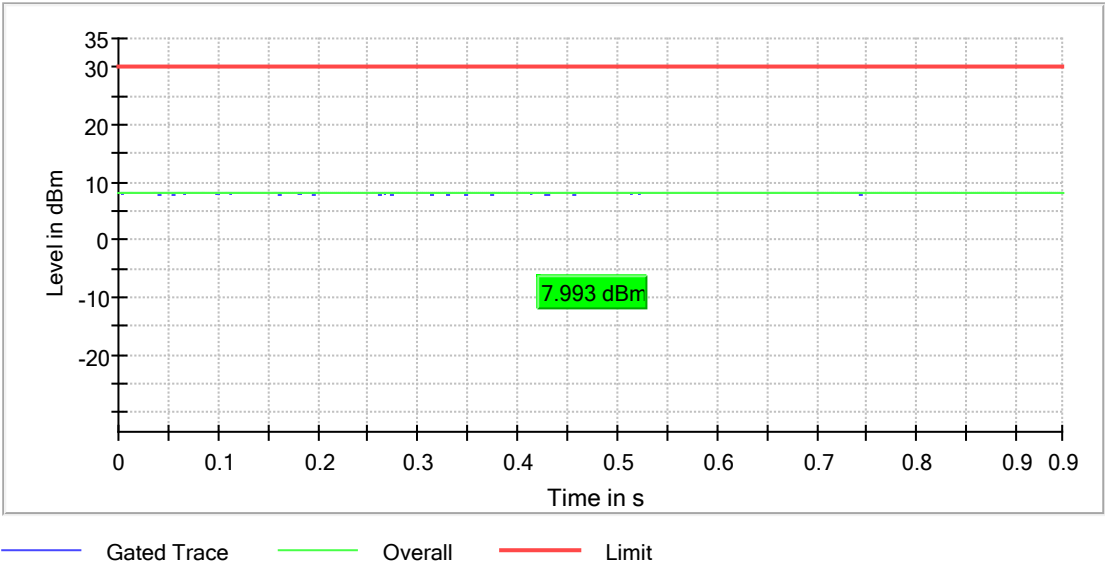
| Setting               | Instrument Value | Target Value  |
|-----------------------|------------------|---------------|
| Start Frequency       | 2.43200 GHz      | 2.43200 GHz   |
| Stop Frequency        | 2.47200 GHz      | 2.47200 GHz   |
| Span                  | 40.000 MHz       | 40.000 MHz    |
| RBW                   | 100.000 kHz      | ~ 100.000 kHz |
| VBW                   | 300.000 kHz      | ~ 300.000 kHz |
| SweepPoints           | 400              | ~ 400         |
| SweepTime             | 94.810 µs        | AUTO          |
| Reference Level       | 0.000 dBm        | 0.000 dBm     |
| Attenuation           | 20.000 dB        | AUTO          |
| Detector              | Peak             | Peak          |
| 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                   | 1 / max. 1       | max. 1        |
| Stable                | 0 / 1            | 1             |
| Max Stable Difference | 0.00 dB          | 0.50 dB       |

RF output power (2452 MHz; 20.000 dBm; 20 MHz)

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

Result

| DUT Frequency (MHz) | Gated RMS (dBm) | Limit Max (dBm) | Gated EIRP (dBm) | DutyCycle (%) | Result |
|---------------------|-----------------|-----------------|------------------|---------------|--------|
| 2452.000000         | 8.0             | 30.0            | 8.0              | 94.479        | PASS   |



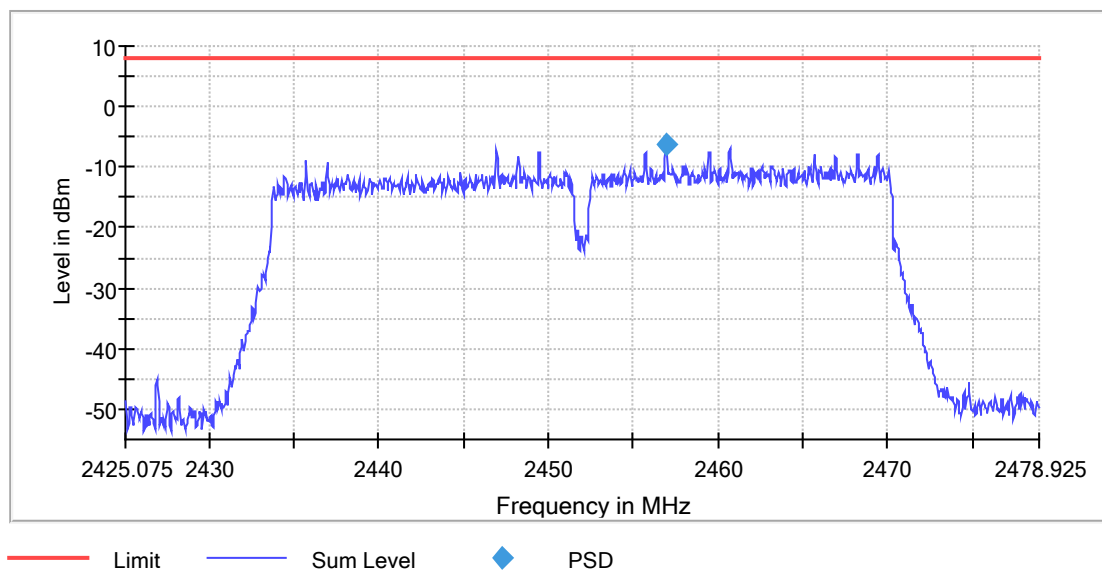
## Peak Power Spectral Density (2452 MHz; 20.000 dBm; 20 MHz)

Customized settings.

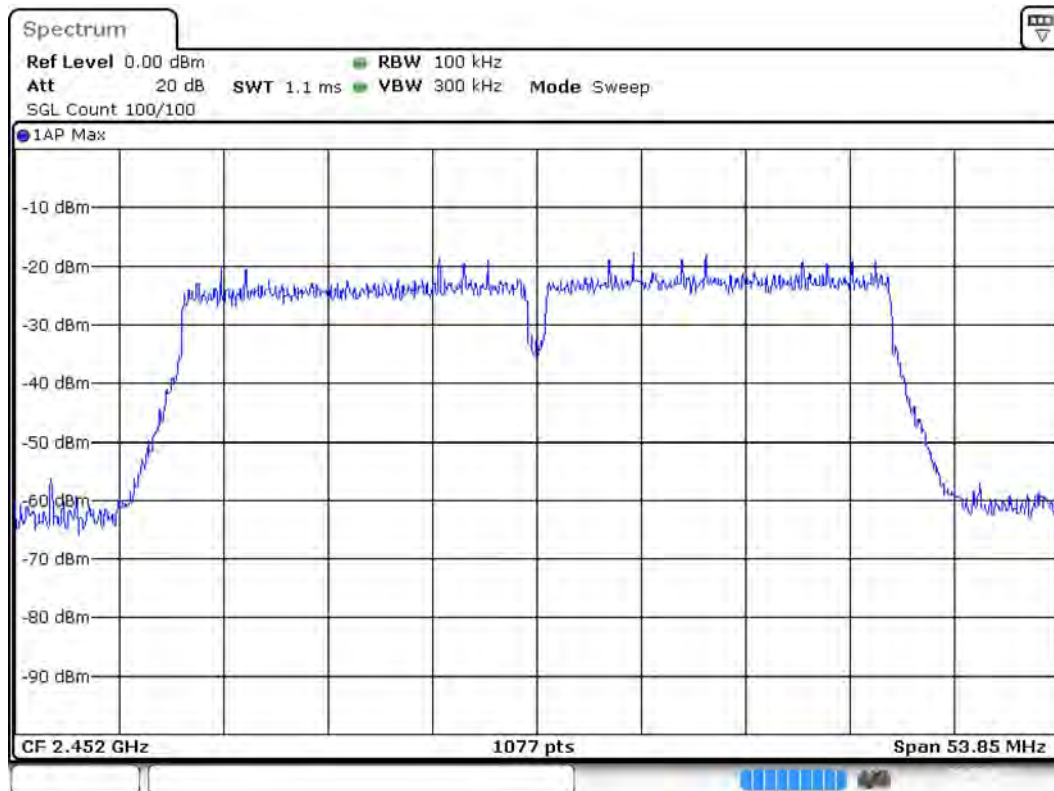
Test according to FCC title 47 part 15 §15.247(a),(e), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10

### Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---------------------|-----------------|-----------|-----------------|--------|
| 2452.000000         | 2456.950000     | -6.391    | 8.0             | PASS   |



PSD Connector 1



Date: 28.FEB.2023 06:20:44

## Measurement

| Setting               | Instrument Value | Target Value   |
|-----------------------|------------------|----------------|
| Start Frequency       | 2.42508 GHz      | 2.42508 GHz    |
| Stop Frequency        | 2.47893 GHz      | 2.47893 GHz    |
| Span                  | 53.850 MHz       | 53.850 MHz     |
| RBW                   | 100.000 kHz      | <= 100.000 kHz |
| VBW                   | 300.000 kHz      | >= 300.000 kHz |
| SweepPoints           | 1077             | ~ 1077         |
| SweepTime             | 1.080 ms         | AUTO           |
| Reference Level       | 0.000 dBm        | 0.000 dBm      |
| Attenuation           | 20.000 dB        | AUTO           |
| Detector              | Peak             | Peak           |
| SweepCount            | 100              | 100            |
| Filter                | 3 dB             | 3 dB           |
| Trace Mode            | Max Hold         | Max Hold       |
| SweepType             | Sweep            | Sweep          |
| Preamp                | off              | off            |
| Stablemode            | Trace            | Trace          |
| Stablevalue           | 0.50 dB          | 0.50 dB        |
| Run                   | 1 / max. 1       | max. 1         |
| Stable                | 0 / 1            | 1              |
| Max Stable Difference | 0.00 dB          | 0.50 dB        |

## Band Edge high (2452 MHz; 20.000 dBm; 20 MHz)

Customized settings.

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

### Result

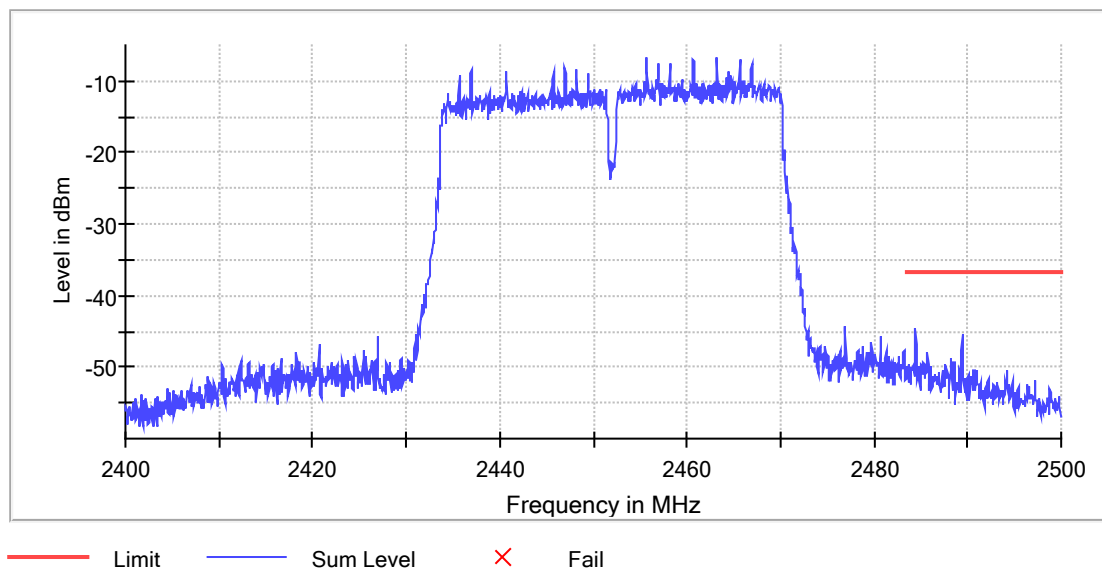
| DUT Frequency (MHz) | Result |
|---------------------|--------|
| 2452.000000         | PASS   |

### Inband Peak

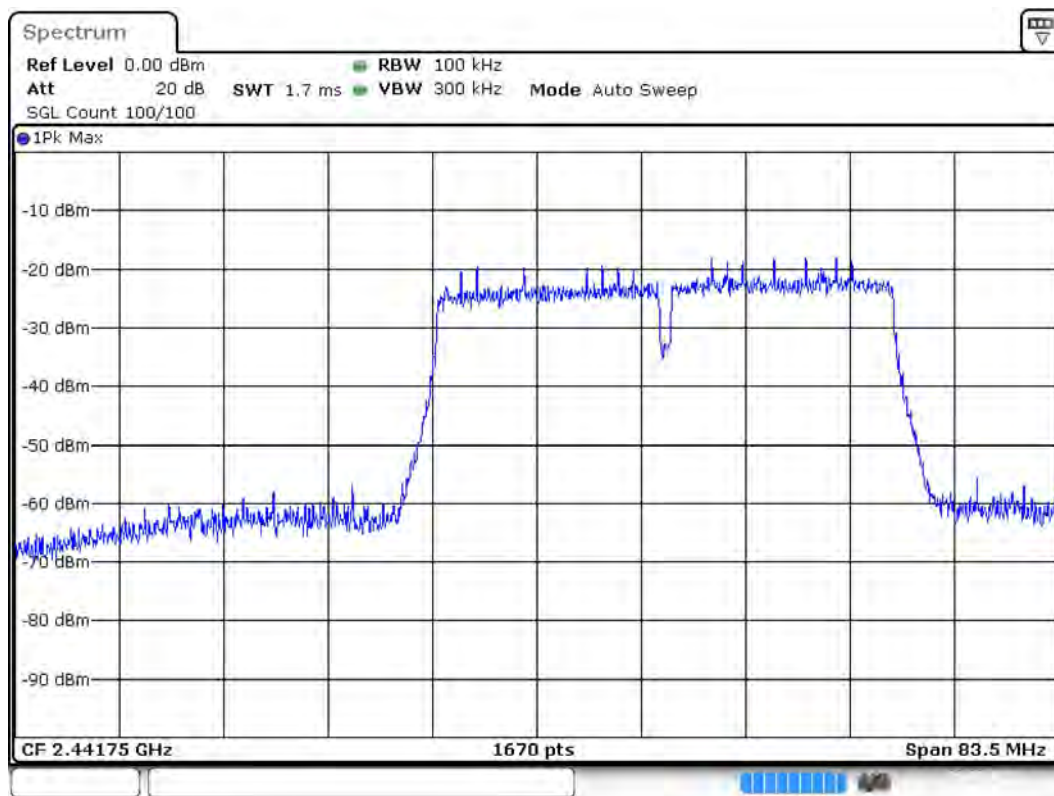
| Frequency (MHz) | Level (dBm) |
|-----------------|-------------|
| 2455.725000     | -6.8        |

### Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|-----------------|-------------|-------------|-------------|--------|
| 2484.425000     | -44.7       | 7.9         | -36.8       | PASS   |
| 2484.475000     | -44.7       | 7.9         | -36.8       | PASS   |
| 2489.425000     | -45.4       | 8.6         | -36.8       | PASS   |
| 2489.475000     | -45.4       | 8.6         | -36.8       | PASS   |
| 2484.525000     | -46.9       | 10.1        | -36.8       | PASS   |
| 2484.375000     | -47.0       | 10.2        | -36.8       | PASS   |
| 2489.375000     | -47.8       | 11.0        | -36.8       | PASS   |
| 2485.675000     | -47.9       | 11.1        | -36.8       | PASS   |
| 2485.725000     | -47.9       | 11.1        | -36.8       | PASS   |
| 2489.525000     | -48.1       | 11.4        | -36.8       | PASS   |
| 2488.275000     | -48.7       | 11.9        | -36.8       | PASS   |
| 2488.225000     | -48.8       | 12.1        | -36.8       | PASS   |
| 2488.175000     | -48.9       | 12.1        | -36.8       | PASS   |
| 2485.625000     | -49.3       | 12.5        | -36.8       | PASS   |
| 2485.325000     | -49.3       | 12.6        | -36.8       | PASS   |

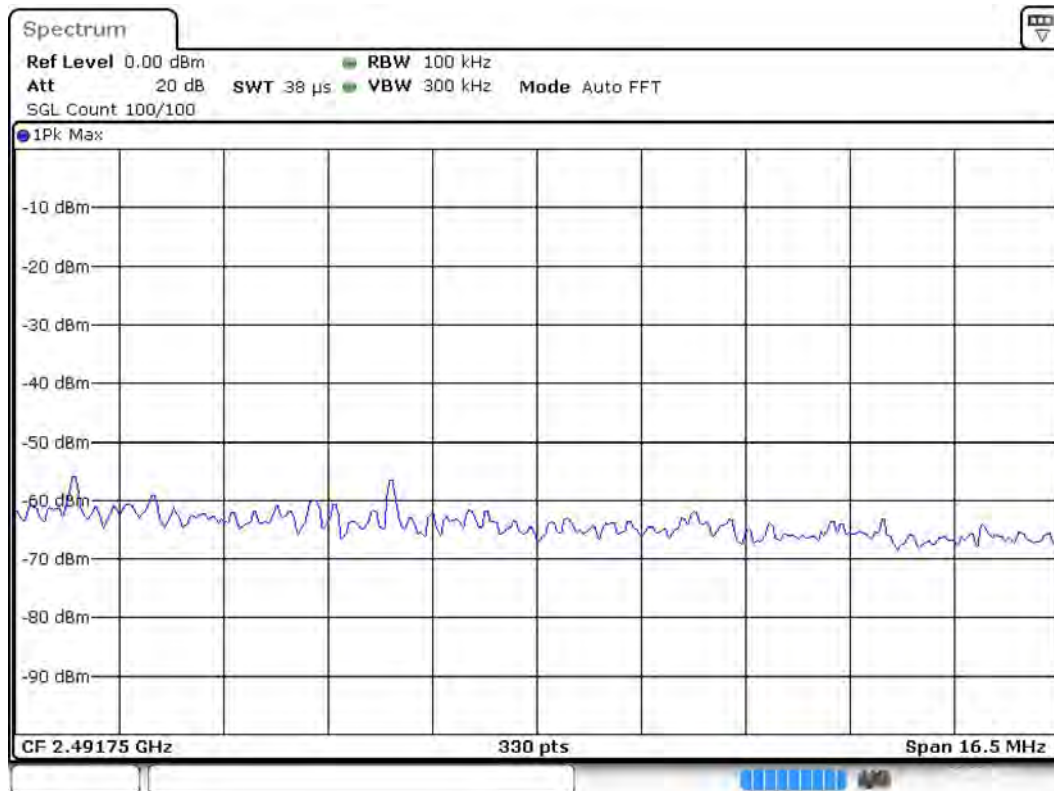


Band Edge Connector 1\_0



Date: 28.FEB.2023 06:20:56

Band Edge Connector 1\_1



Date: 28.FEB.2023 06:21:01

## 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              | 1.670 ms         | AUTO           |
| Reference Level       | 0.000 dBm        | 0.000 dBm      |
| Attenuation           | 20.000 dB        | AUTO           |
| Detector              | MaxPeak          | MaxPeak        |
| SweepCount            | 100              | 100            |
| 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                   | 1 / max. 1       | max. 1         |
| Stable                | 0 / 1            | 1              |
| 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             | 37.969 $\mu$ s | AUTO      |
| Reference Level       | 0.000 dBm      | 0.000 dBm |
| Attenuation           | 20.000 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                   | 1 / max. 1     | max. 1    |
| Stable                | 0 / 1          | 1         |
| Max Stable Difference | 0.00 dB        | 0.50 dB   |

## Tx Spurious Emission (2452 MHz; 20.000 dBm; 20 MHz)

Customized settings.

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

### Result

| DUT Frequency (MHz) | Result |
|---------------------|--------|
| 2452.000000         | PASS   |

### Final measurements

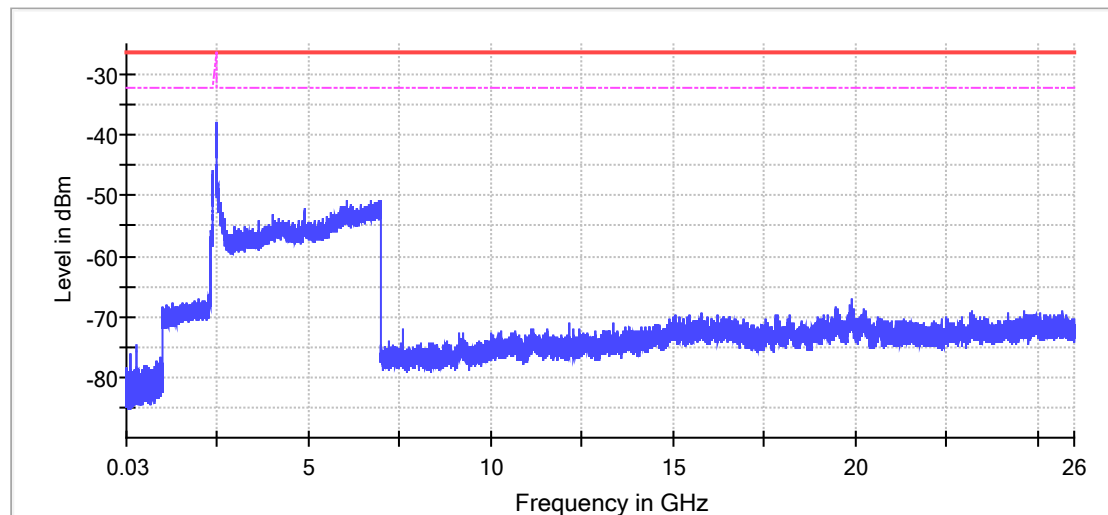
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|-----------------|-----------------------------|-------------|-------------|-------------|--------|
| ---             | ---                         | ---         | ---         | ---         | ---   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

### Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|-----------------|-------------|-------------|-------------|
| 2485.250000     | -37.8       | 11.4        | -26.4       |
| 2484.250000     | -37.9       | 11.5        | -26.4       |
| 2487.250000     | -38.1       | 11.7        | -26.4       |
| 2491.750000     | -38.2       | 11.9        | -26.4       |
| 2484.750000     | -38.3       | 11.9        | -26.4       |
| 2483.750000     | -38.3       | 11.9        | -26.4       |
| 2483.500000     | -38.3       | 11.9        | -26.4       |
| 2486.750000     | -38.5       | 12.1        | -26.4       |
| 2493.750000     | -38.6       | 12.2        | -26.4       |
| 2489.250000     | -38.8       | 12.4        | -26.4       |
| 2491.250000     | -39.0       | 12.7        | -26.4       |
| 2490.750000     | -39.2       | 12.8        | -26.4       |
| 2486.250000     | -39.3       | 12.9        | -26.4       |
| 2485.750000     | -39.4       | 13.0        | -26.4       |
| 2488.750000     | -39.4       | 13.1        | -26.4       |

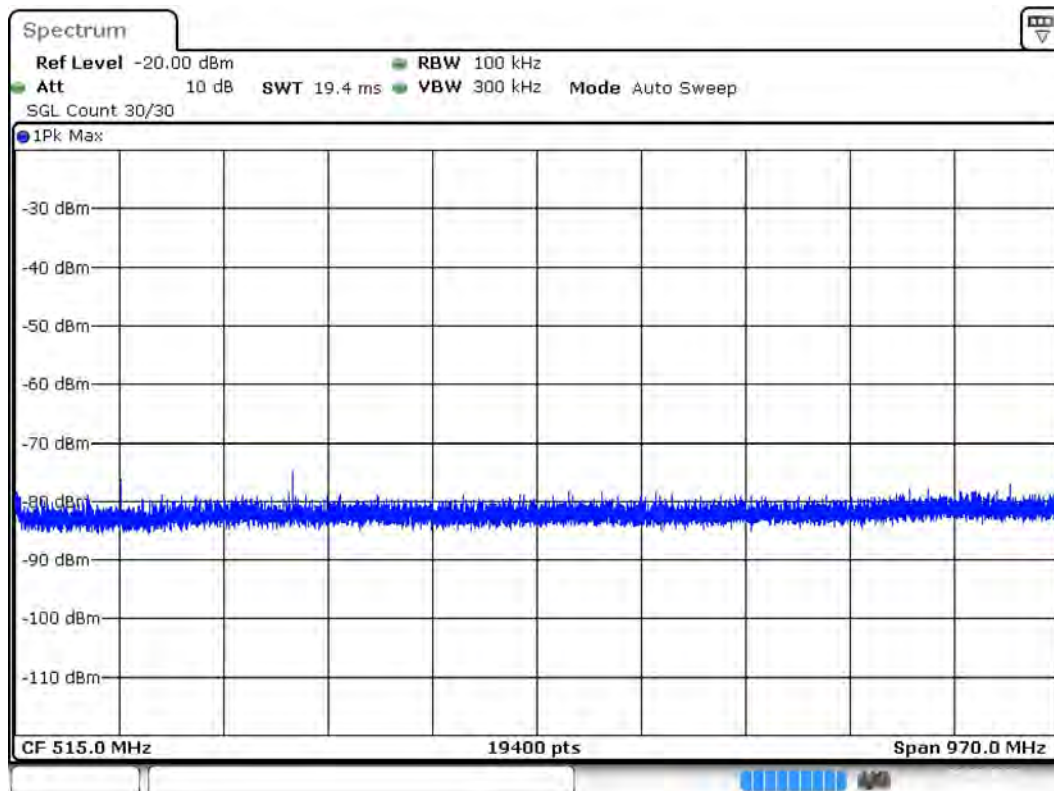
### Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|-----------------------|----------------------|-----------------|-------------------|
| 30.000000             | 1000.000000          | 1               | 1                 |
| 1000.000000           | 2400.000000          | 2               | 2                 |
| 2483.500000           | 7000.000000          | 2               | 2                 |
| 7000.000000           | 18000.000000         | 2               | 2                 |
| 18000.000000          | 26000.000000         | 2               | 2                 |



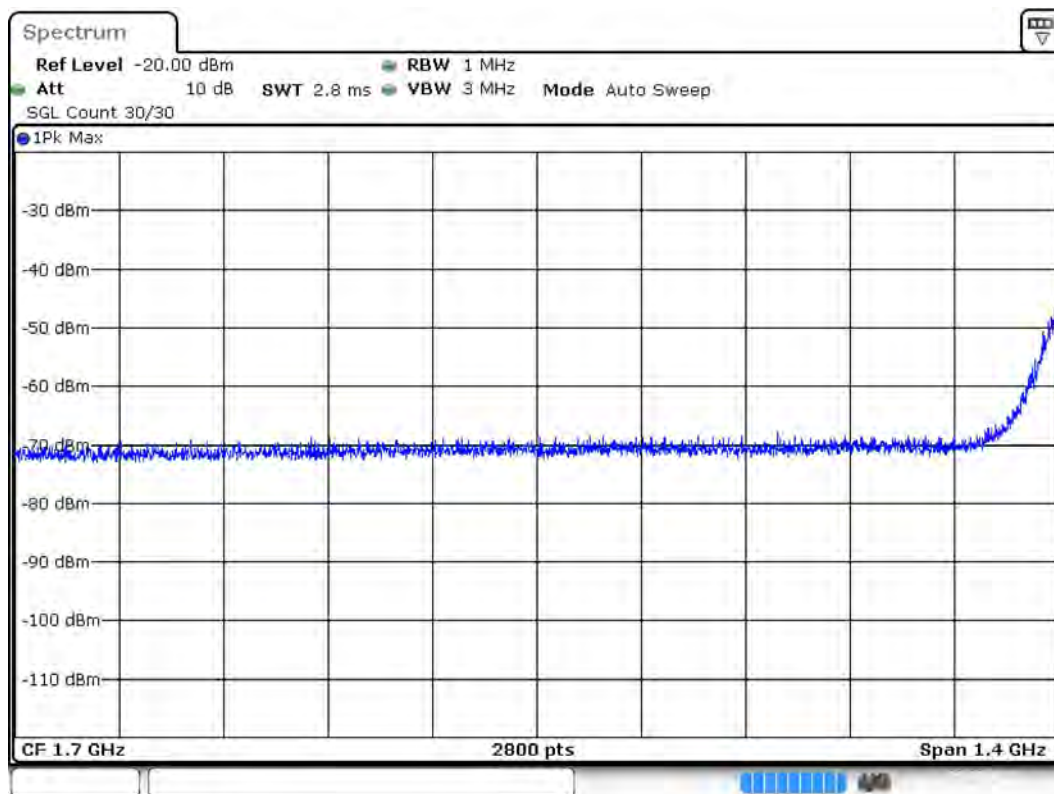
— Limit    — Sum Level    - - - Threshold    × Critical    × Final Critical

### Spurious Connector 1\_0



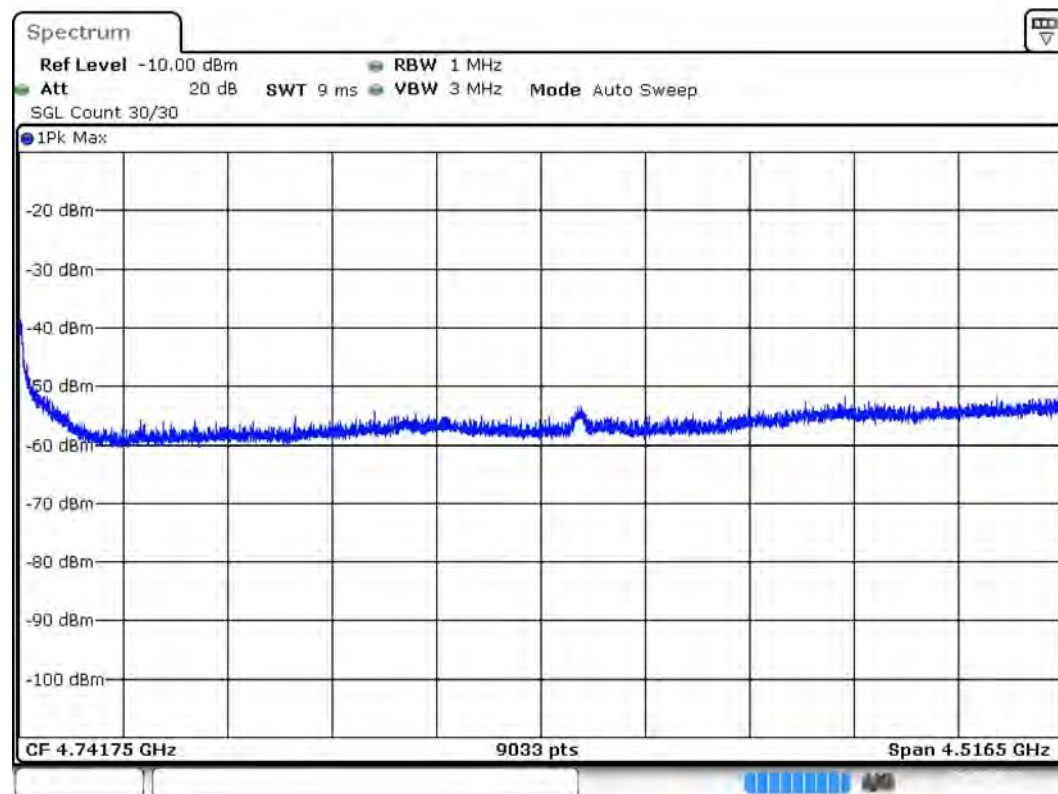
Date: 28.FEB.2023 06:22:27

### Spurious Connector 1\_1



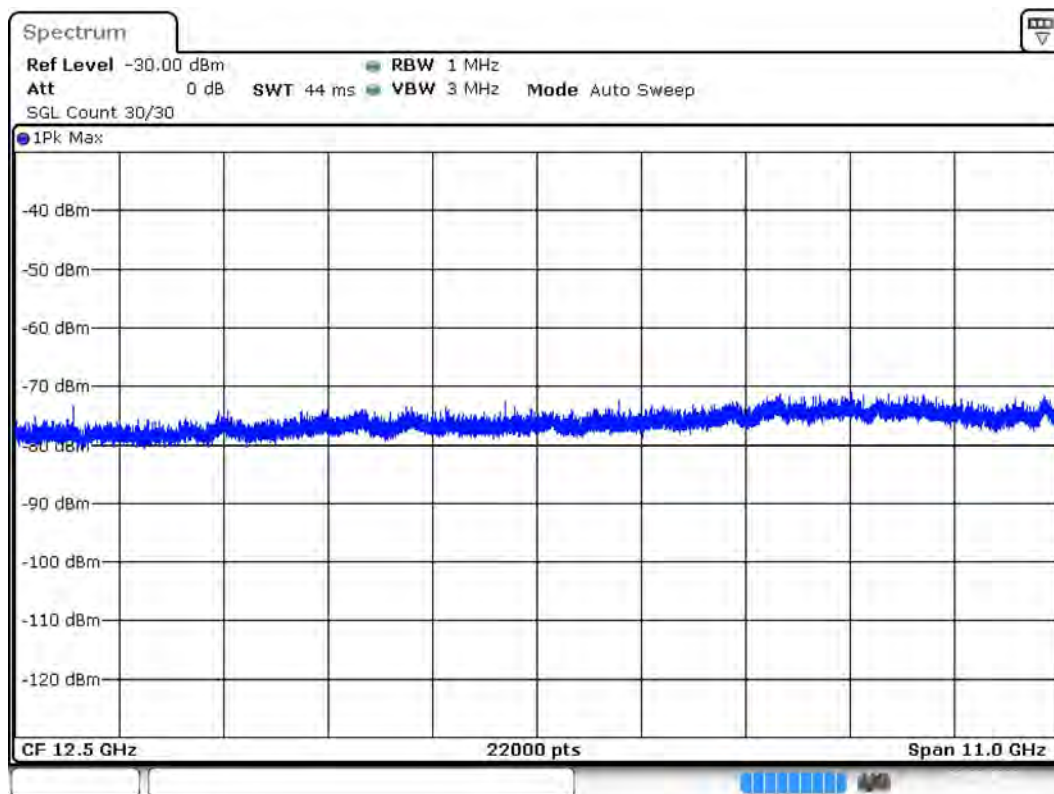
Date: 28.FEB.2023 06:23:26

Spurious Connector 1\_2



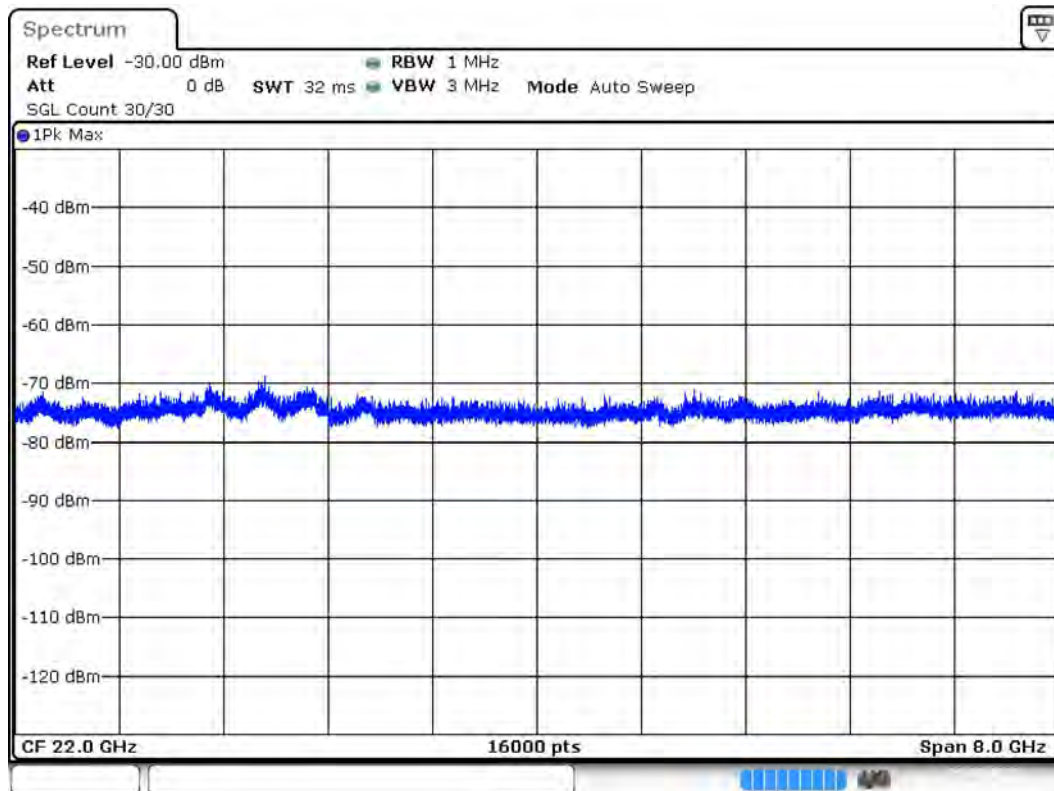
Date: 28.FEB.2023 06:24:47

Spurious Connector 1\_3



Date: 28.FEB.2023 06:25:23

Spurious Connector 1\_4



Date: 28.FEB.2023 06:25:52

## Pre Measurement 1

| Setting               | Instrument Value | Target Value   |
|-----------------------|------------------|----------------|
| RBW                   | 100.000 kHz      | <= 100.000 kHz |
| VBW                   | 300.000 kHz      | >= 300.000 kHz |
| SweepPoints           | 19400            | ~ 19400        |
| SweepTime             | 19.400 ms        | AUTO           |
| Reference Level       | -20.000 dBm      | -30.000 dBm    |
| Attenuation           | 10.000 dB        | AUTO           |
| Detector              | MaxPeak          | MaxPeak        |
| SweepCount            | 30               | 30             |
| 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. 150     | max. 150       |
| Stable                | 3 / 3            | 3              |
| Max Stable Difference | 0.00 dB          | 0.50 dB        |

## Pre Measurement 2

| Setting         | Instrument Value | Target Value |
|-----------------|------------------|--------------|
| RBW             | 1.000 MHz        | <= 1.000 MHz |
| VBW             | 3.000 MHz        | >= 3.000 MHz |
| SweepPoints     | 2800             | ~ 2800       |
| SweepTime       | 2.800 ms         | AUTO         |
| Reference Level | -20.000 dBm      | -30.000 dBm  |
| Attenuation     | 10.000 dB        | AUTO         |
| Detector        | MaxPeak          | MaxPeak      |
| SweepCount      | 30               | 30           |

|                              |                      |                 |
|------------------------------|----------------------|-----------------|
| <b>Filter</b>                | <b>3 dB</b>          | <b>3 dB</b>     |
| <b>Trace Mode</b>            | <b>Max Hold</b>      | <b>Max Hold</b> |
| <b>Sweep type</b>            | <b>Sweep</b>         | <b>AUTO</b>     |
| <b>Preamp</b>                | <b>off</b>           | <b>off</b>      |
| <b>Stable mode</b>           | <b>Trace</b>         | <b>Trace</b>    |
| <b>Stable value</b>          | <b>0.50 dB</b>       | <b>0.50 dB</b>  |
| <b>Run</b>                   | <b>40 / 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>  |

# FCC Part 47 §15.247 2400-2483.5 MHz 2015

## DUT Information

### Frequencies

|                       |                       |                       |
|-----------------------|-----------------------|-----------------------|
| 2402 MHz (2402 MHz)   | WLAN CH 3 (2422 MHz)  | WLAN CH 6 (2437 MHz)  |
| WLAN CH 9 (2452 MHz)  | 2440 MHz (2440 MHz)   | 2480 MHz (2480 MHz)   |
| WLAN CH 2 (2417 MHz)  | WLAN CH 4 (2427 MHz)  | WLAN CH 5 (2432 MHz)  |
| WLAN CH 7 (2442 MHz)  | WLAN CH 8 (2447 MHz)  | WLAN CH 10 (2457 MHz) |
| WLAN CH 11 (2462 MHz) | WLAN CH 12 (2467 MHz) | WLAN CH 13 (2472 MHz) |
| WLAN CH 1 (2412 MHz)  |                       |                       |

### Bandwidths

|                 |               |                 |
|-----------------|---------------|-----------------|
| 2 MHz (2 MHz)   | 1 MHz (1 MHz) | 20 MHz (20 MHz) |
| 40 MHz (40 MHz) |               |                 |

### Power

20.000 dBm (20 dBm)

### Beamforming Gain

|                     |      |
|---------------------|------|
| 20.000 dBm (20 dBm) | 0 dB |
|---------------------|------|

### Gain Tables

|                     |              |
|---------------------|--------------|
| 20.000 dBm (20 dBm) | Port 1: ---; |
|---------------------|--------------|

### DUT Settings

|                            |       |
|----------------------------|-------|
| No. of transmission chains | 1     |
| Equipment Type             | Other |
| Digital Modulation         | Yes   |
| Frequency Hopping          | No    |

## Hardware Setup: WMS Measurements\TS8997

|                    |                                                                                                                             |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Spectrum Analyzer: | SA FSV 40 (SA FSV 40) @ VISA (ADR<br>TCPIP::192.168.48.111::INST0::INSTR), SN 1321.3008K39/101229,<br>FW 3.40               |
| Vector Generator:  | VG SMBV100B (VG SMBV100B) @ VISA (ADR<br>TCPIP::192.168.48.29::INST0::INSTR), SN 101685, FW 4.70.006.33                     |
| Generator:         | SMB100Aa (SMB100A) @ VISA (ADR<br>TCPIP::192.168.48.30::INST0::INSTR), SN 177894, FW / Drv:Rev<br>2.21.0, 07/2016, CVI 2015 |
| OSP:               | OSP-B157W (OSP-B157W) @ VISA (ADR<br>TCPIP::192.168.48.157::INST0::INSTR), SN 1527.1144. / , FW<br>1.23.0.2                 |

## Summary

| Test                            | Frequency (MHz) | Nominal Power (dBm) | Nominal Bandwidth (MHz) | Result |
|---------------------------------|-----------------|---------------------|-------------------------|--------|
| Minimum Emission Bandwidth 6 dB | 2422.000        | 20.0                | 20.000000               | PASS   |
| Emission Bandwidth 20 dB        | 2422.000        | 20.0                | 20.000000               | PASS   |
| RF output power                 | 2422.000        | 20.0                | 20.000000               | PASS   |
| Peak Power Spectral Density     | 2422.000        | 20.0                | 20.000000               | PASS   |
| Band Edge low                   | 2422.000        | 20.0                | 20.000000               | PASS   |
| Tx Spurious Emission            | 2422.000        | 20.0                | 20.000000               | PASS   |
| Emission Bandwidth 20 dB        | 2437.000        | 20.0                | 20.000000               | PASS   |
| Minimum Emission Bandwidth 6 dB | 2437.000        | 20.0                | 20.000000               | PASS   |
| RF output power                 | 2437.000        | 20.0                | 20.000000               | PASS   |
| Peak Power Spectral Density     | 2437.000        | 20.0                | 20.000000               | PASS   |
| Tx Spurious Emission            | 2437.000        | 20.0                | 20.000000               | PASS   |
| Emission Bandwidth 20 dB        | 2452.000        | 20.0                | 20.000000               | PASS   |
| Minimum Emission Bandwidth 6 dB | 2452.000        | 20.0                | 20.000000               | PASS   |
| RF output power                 | 2452.000        | 20.0                | 20.000000               | PASS   |
| Peak Power Spectral Density     | 2452.000        | 20.0                | 20.000000               | PASS   |
| Band Edge high                  | 2452.000        | 20.0                | 20.000000               | PASS   |
| Tx Spurious Emission            | 2452.000        | 20.0                | 20.000000               | PASS   |

## Minimum Emission Bandwidth 6 dB (2422 MHz; 20.000 dBm; 20 MHz)

Customized settings.

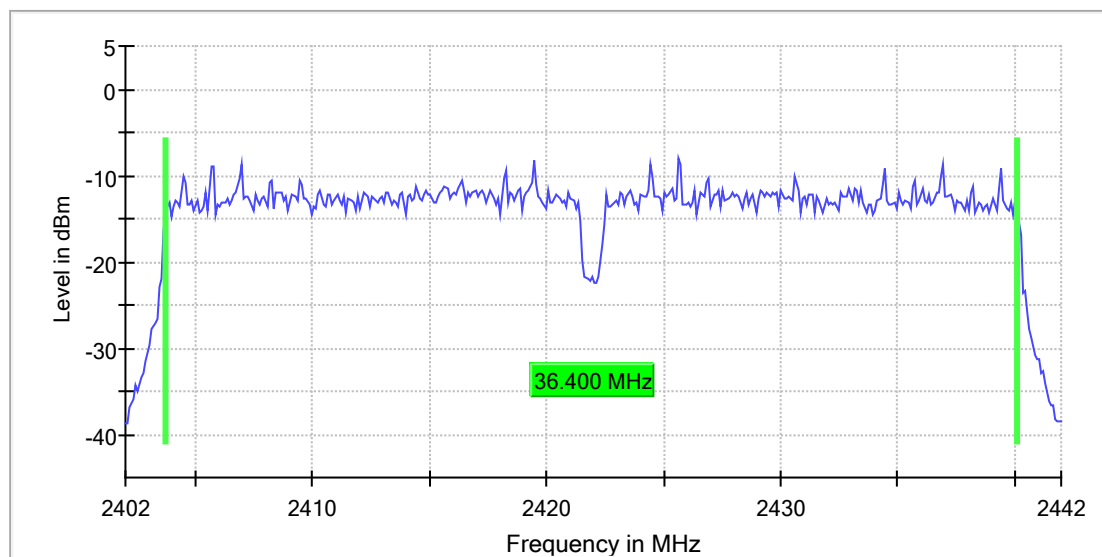
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10

### 6 dB Bandwidth

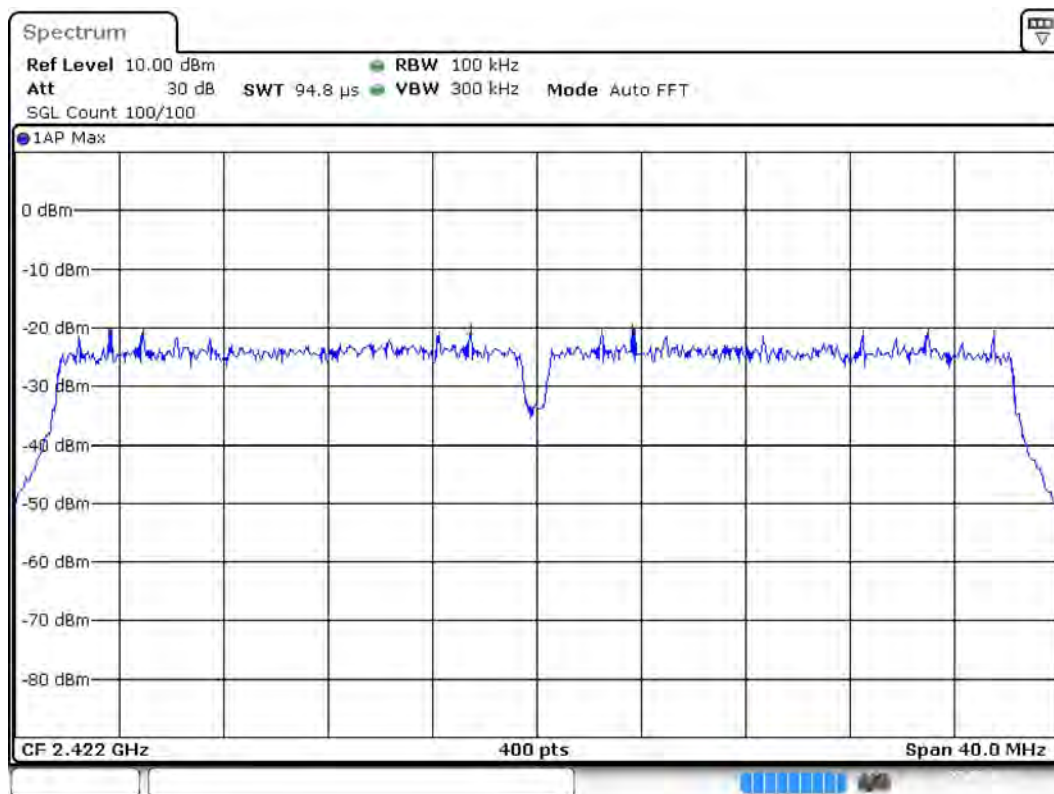
| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---------------------|-----------------|-----------------|-----------------|----------------------|-----------------------|
| 2422.000000         | 36.400000       | 0.500000        | ---             | 2403.750000          | 2440.150000           |

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

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---------------------|-----------------|--------|
| 2422.000000         | -8.0            | PASS   |



Bandwidth



Date: 27.FEB.2023 13:17:37

## Measurement

| Setting               | Instrument Value | Target Value  |
|-----------------------|------------------|---------------|
| Start Frequency       | 2.40200 GHz      | 2.40200 GHz   |
| Stop Frequency        | 2.44200 GHz      | 2.44200 GHz   |
| Span                  | 40.000 MHz       | 40.000 MHz    |
| RBW                   | 100.000 kHz      | ~ 100.000 kHz |
| VBW                   | 300.000 kHz      | ~ 300.000 kHz |
| SweepPoints           | 400              | ~ 400         |
| SweepTime             | 94.810 µs        | AUTO          |
| Reference Level       | 10.000 dBm       | 10.000 dBm    |
| Attenuation           | 30.000 dB        | AUTO          |
| Detector              | Peak             | Peak          |
| 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                   | 1 / max. 1       | max. 1        |
| Stable                | 0 / 1            | 1             |
| Max Stable Difference | 0.00 dB          | 0.50 dB       |

## Emission Bandwidth 20 dB (2422 MHz; 20.000 dBm; 20 MHz)

Customized settings.

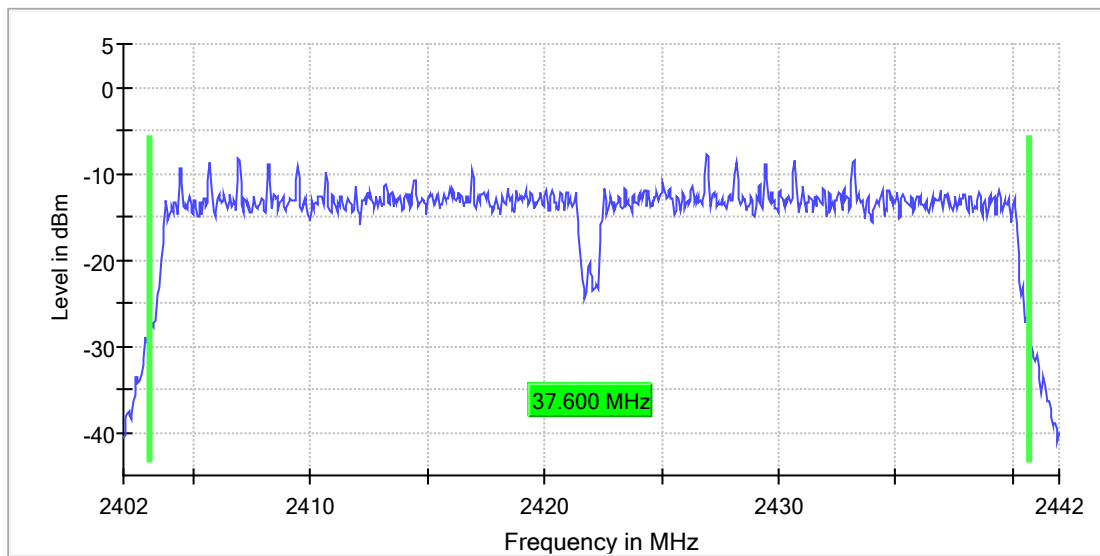
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10

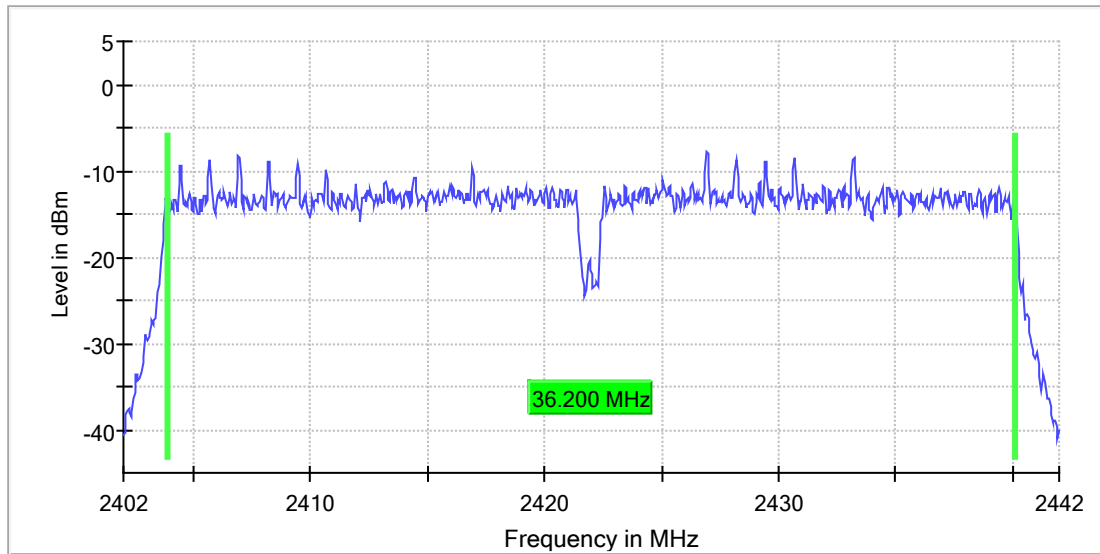
### 20 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---------------------|-----------------|-----------------|-----------------|----------------------|-----------------------|
| 2422.000000         | 37.600000       | ---             | ---             | 2403.125000          | 2440.725000           |

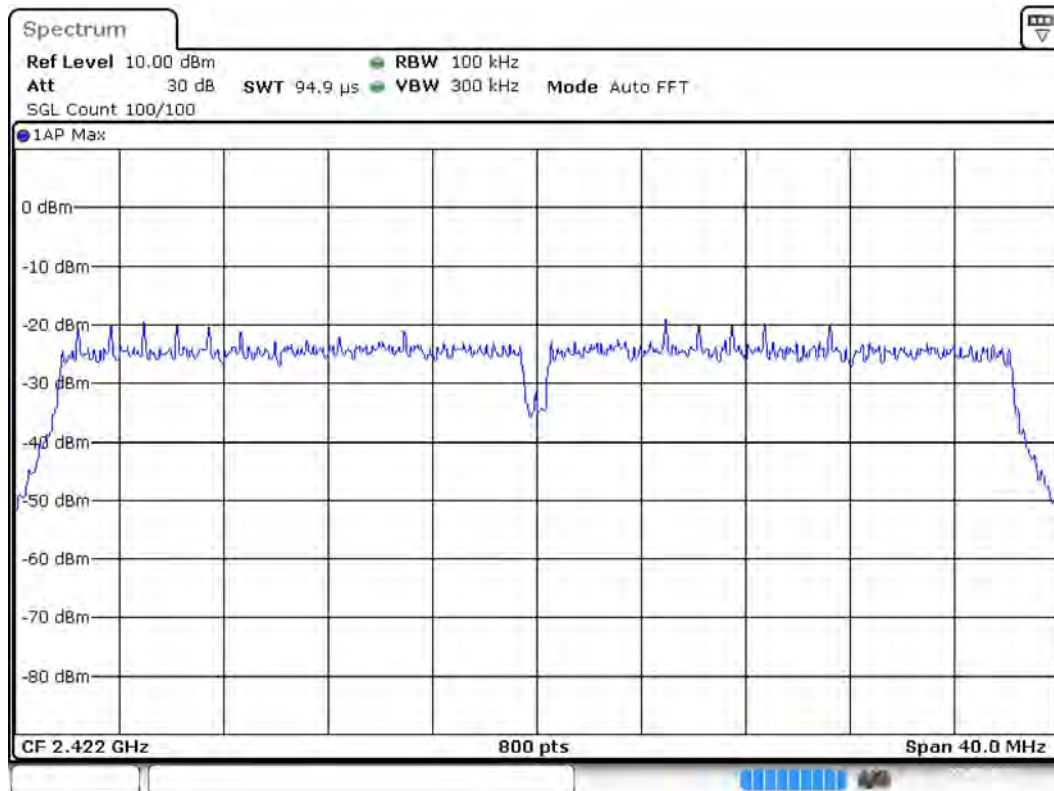
(continuation of the "20 dB Bandwidth" table from column 6 ...)

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---------------------|-----------------|--------|
| 2422.000000         | -7.9            | PASS   |





Bandwidth



Date: 27.FEB.2023 13:17:51

## Measurement

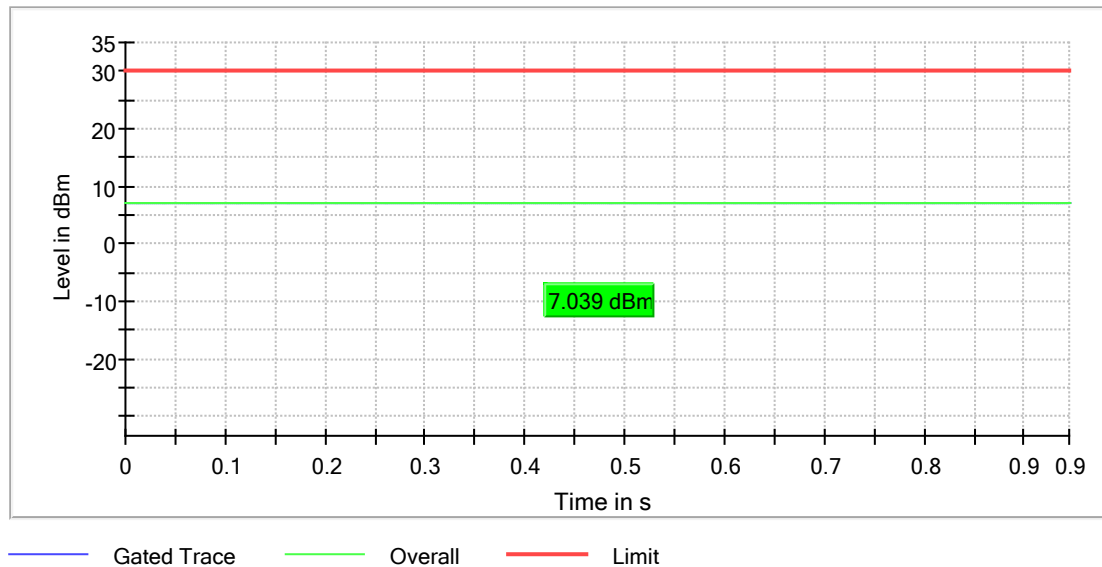
| Setting               | Instrument Value | Target Value   |
|-----------------------|------------------|----------------|
| Start Frequency       | 2.40200 GHz      | 2.40200 GHz    |
| Stop Frequency        | 2.44200 GHz      | 2.44200 GHz    |
| Span                  | 40.000 MHz       | 40.000 MHz     |
| RBW                   | 100.000 kHz      | ~ 100.000 kHz  |
| VBW                   | 300.000 kHz      | >= 300.000 kHz |
| SweepPoints           | 800              | ~ 800          |
| SweepTime             | 94.922 µs        | AUTO           |
| Reference Level       | 10.000 dBm       | 10.000 dBm     |
| Attenuation           | 30.000 dB        | AUTO           |
| Detector              | Peak             | Peak           |
| 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                   | 1 / max. 1       | max. 1         |
| Stable                | 0 / 1            | 1              |
| Max Stable Difference | 0.00 dB          | 0.50 dB        |

**RF output power (2422 MHz; 20.000 dBm; 20 MHz)**

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

**Result**

| DUT Frequency (MHz) | Gated RMS (dBm) | Limit Max (dBm) | Gated EIRP (dBm) | DutyCycle (%) | Result |
|---------------------|-----------------|-----------------|------------------|---------------|--------|
| 2422.000000         | 7.0             | 30.0            | 7.0              | 94.485        | PASS   |



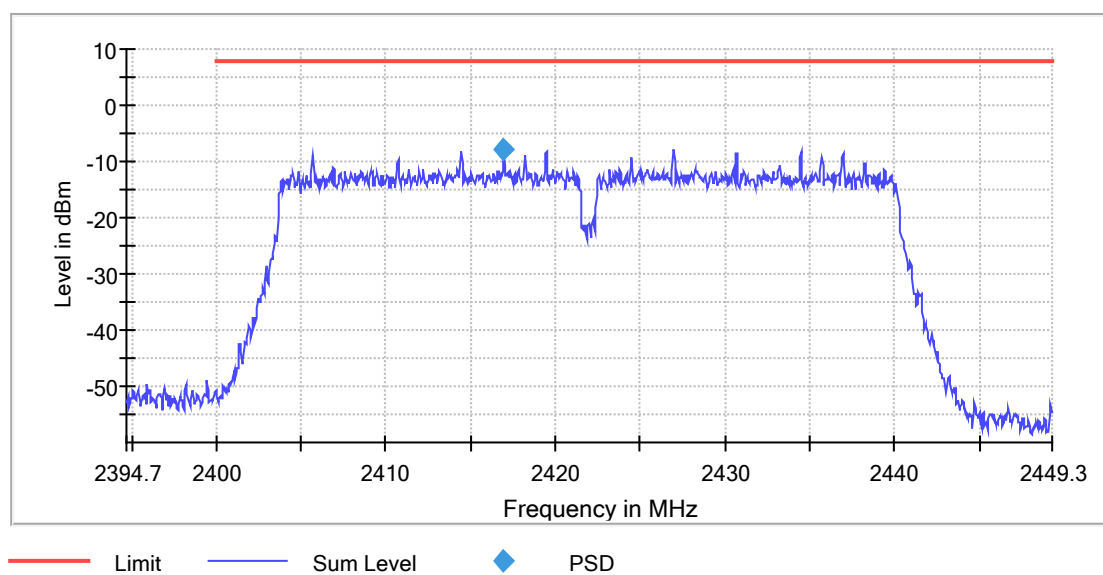
## Peak Power Spectral Density (2422 MHz; 20.000 dBm; 20 MHz)

Customized settings.

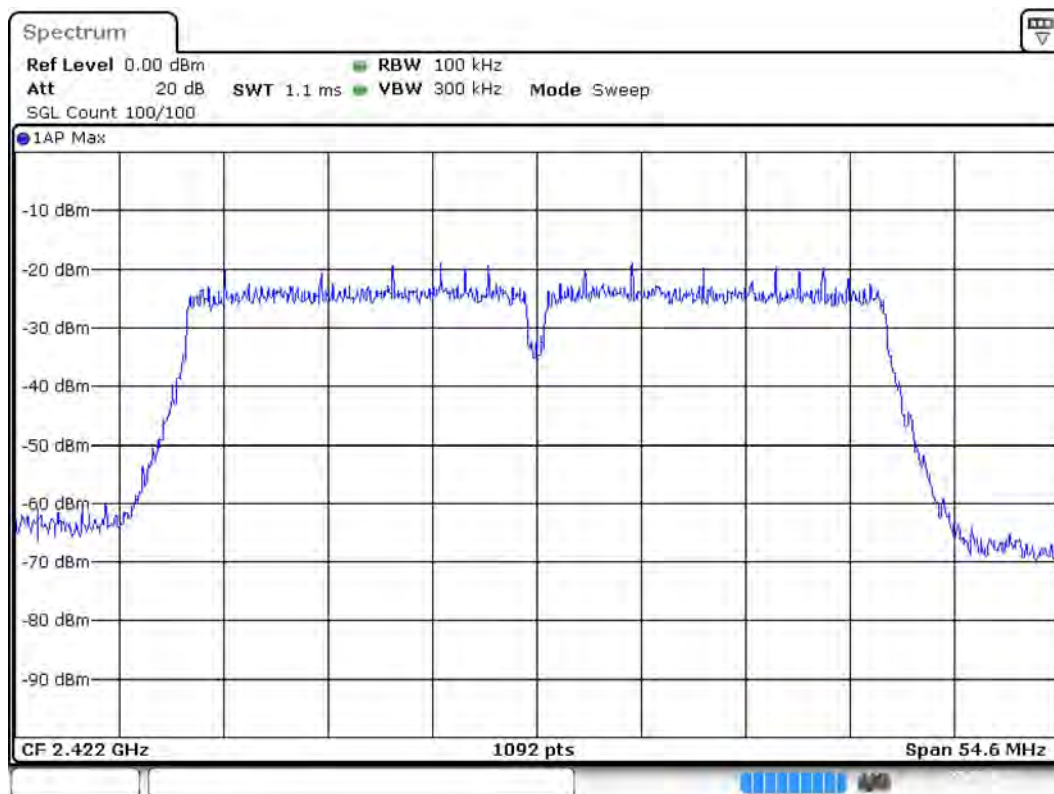
Test according to FCC title 47 part 15 §15.247(a),(e), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10

### Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---------------------|-----------------|-----------|-----------------|--------|
| 2422.000000         | 2416.925000     | -7.710    | 8.0             | PASS   |



PSD Connector 1



Date: 27.FEB.2023 13:18:35

## Measurement

| Setting               | Instrument Value | Target Value   |
|-----------------------|------------------|----------------|
| Start Frequency       | 2.39470 GHz      | 2.39470 GHz    |
| Stop Frequency        | 2.44930 GHz      | 2.44930 GHz    |
| Span                  | 54.600 MHz       | 54.600 MHz     |
| RBW                   | 100.000 kHz      | <= 100.000 kHz |
| VBW                   | 300.000 kHz      | >= 300.000 kHz |
| SweepPoints           | 1092             | ~ 1092         |
| SweepTime             | 1.100 ms         | AUTO           |
| Reference Level       | 0.000 dBm        | 0.000 dBm      |
| Attenuation           | 20.000 dB        | AUTO           |
| Detector              | Peak             | Peak           |
| SweepCount            | 100              | 100            |
| Filter                | 3 dB             | 3 dB           |
| Trace Mode            | Max Hold         | Max Hold       |
| SweepType             | Sweep            | Sweep          |
| Preamp                | off              | off            |
| Stablemode            | Trace            | Trace          |
| Stablevalue           | 0.50 dB          | 0.50 dB        |
| Run                   | 1 / max. 1       | max. 1         |
| Stable                | 0 / 1            | 1              |
| Max Stable Difference | 0.00 dB          | 0.50 dB        |

## Band Edge low (2422 MHz; 20.000 dBm; 20 MHz)

Customized settings.

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

### Result

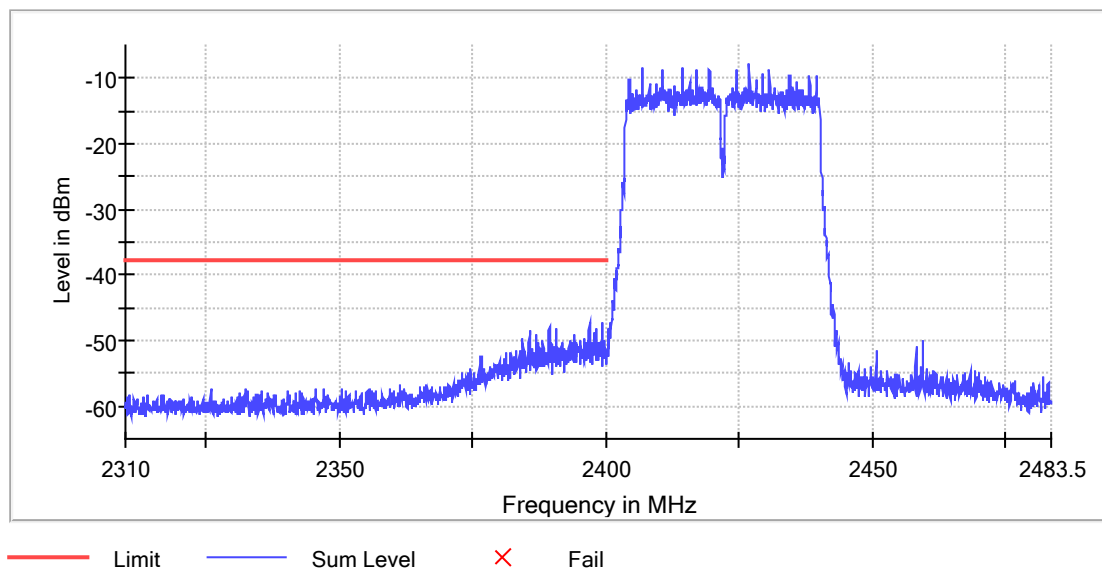
| DUT Frequency (MHz) | Result |
|---------------------|--------|
| 2422.000000         | PASS   |

### Inband Peak

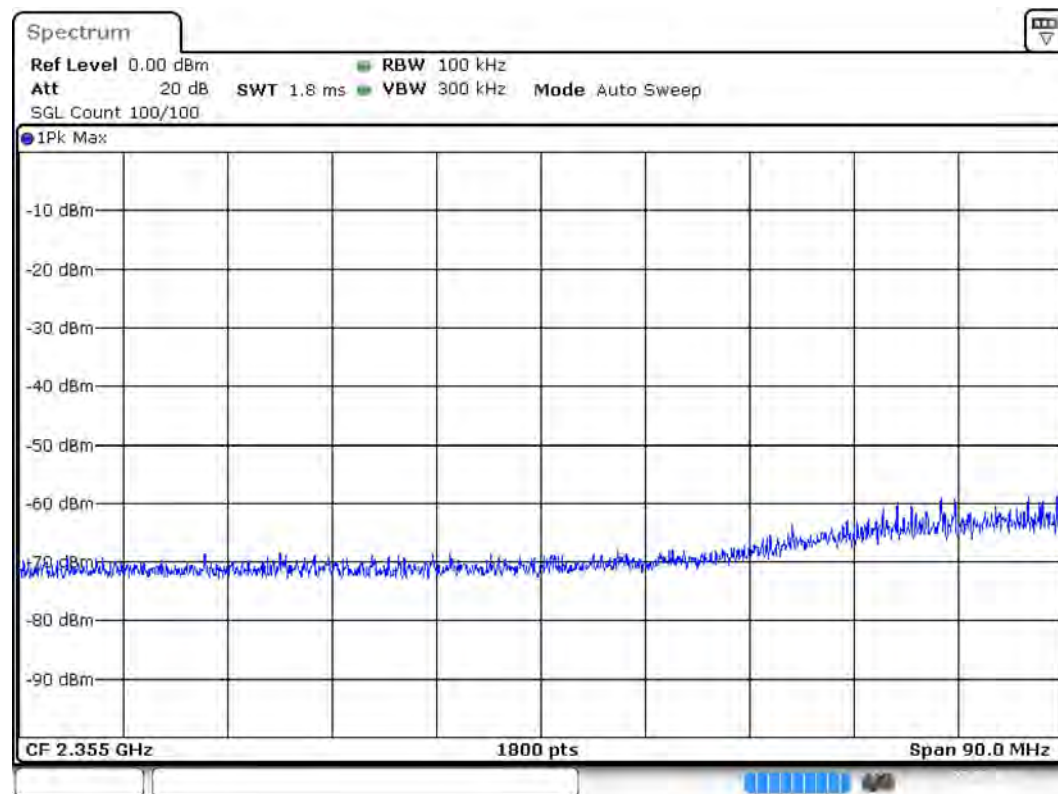
| Frequency (MHz) | Level (dBm) |
|-----------------|-------------|
| 2426.925000     | -7.9        |

### Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|-----------------|-------------|-------------|-------------|--------|
| 2396.975000     | -47.4       | 9.5         | -37.9       | PASS   |
| 2399.475000     | -47.4       | 9.5         | -37.9       | PASS   |
| 2399.425000     | -47.6       | 9.7         | -37.9       | PASS   |
| 2389.475000     | -47.8       | 9.9         | -37.9       | PASS   |
| 2390.675000     | -48.0       | 10.1        | -37.9       | PASS   |
| 2389.525000     | -48.2       | 10.3        | -37.9       | PASS   |
| 2397.025000     | -48.2       | 10.3        | -37.9       | PASS   |
| 2398.225000     | -48.2       | 10.3        | -37.9       | PASS   |
| 2389.425000     | -48.4       | 10.5        | -37.9       | PASS   |
| 2396.925000     | -48.4       | 10.5        | -37.9       | PASS   |
| 2390.725000     | -48.4       | 10.5        | -37.9       | PASS   |
| 2385.725000     | -48.6       | 10.7        | -37.9       | PASS   |
| 2398.275000     | -48.6       | 10.7        | -37.9       | PASS   |
| 2397.975000     | -48.6       | 10.7        | -37.9       | PASS   |
| 2398.175000     | -48.9       | 11.0        | -37.9       | PASS   |

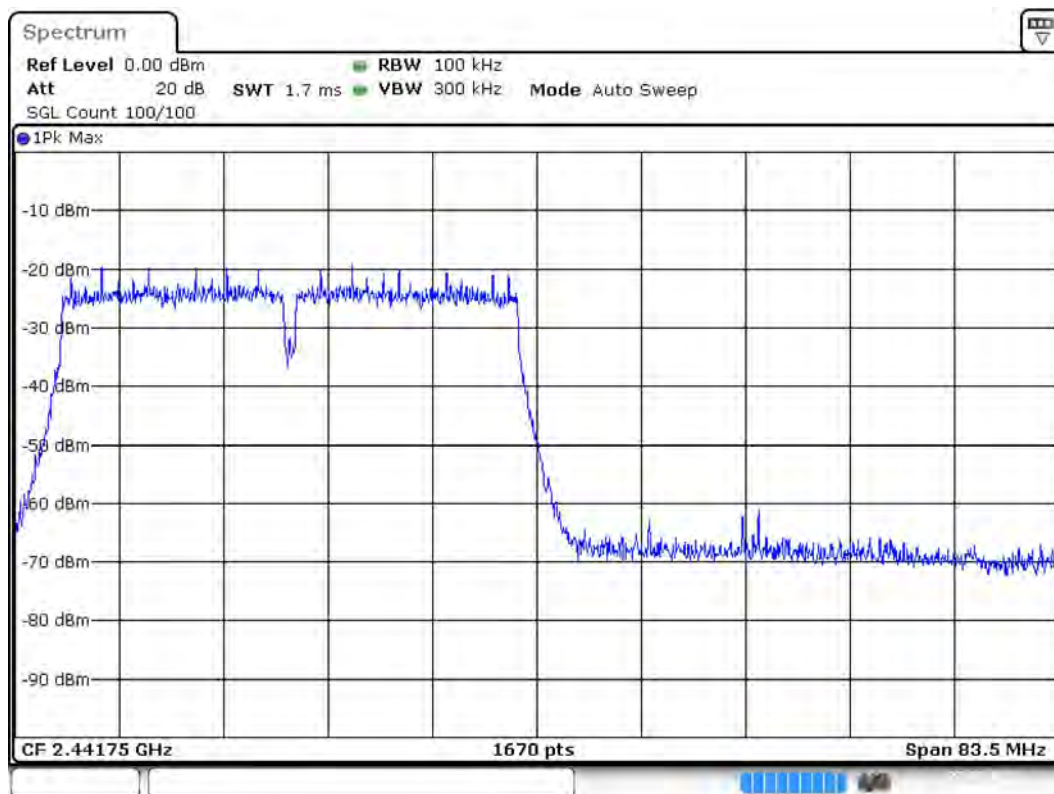


Band Edge Connector 1\_0



Date: 27.FEB.2023 13:18:55

Band Edge Connector 1\_1



Date: 27.FEB.2023 13:19:02

## 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              | 1.800 ms         | AUTO           |
| Reference Level       | 0.000 dBm        | 0.000 dBm      |
| Attenuation           | 20.000 dB        | AUTO           |
| Detector              | MaxPeak          | MaxPeak        |
| SweepCount            | 100              | 100            |
| Filter                | 3 dB             | 3 dB           |
| Trace Mode            | Max Hold         | Max Hold       |
| SweepType             | Sweep            | AUTO           |
| Preamplifier          | off              | off            |
| Stablemode            | Trace            | Trace          |
| Stablevalue           | 0.50 dB          | 0.50 dB        |
| Run                   | 3 / max. 11      | max. 11        |
| Stable                | 1 / 1            | 1              |
| 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 |

|                              |                   |                  |
|------------------------------|-------------------|------------------|
| <b>SweepPoints</b>           | <b>1670</b>       | <b>~ 1670</b>    |
| <b>SweepTime</b>             | <b>1.670 ms</b>   | <b>AUTO</b>      |
| <b>Reference Level</b>       | <b>0.000 dBm</b>  | <b>0.000 dBm</b> |
| <b>Attenuation</b>           | <b>20.000 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>Sweep</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>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>   |

## Tx Spurious Emission (2422 MHz; 20.000 dBm; 20 MHz)

Customized settings.

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

### Result

| DUT Frequency (MHz) | Result |
|---------------------|--------|
| 2422.000000         | PASS   |

### Final measurements

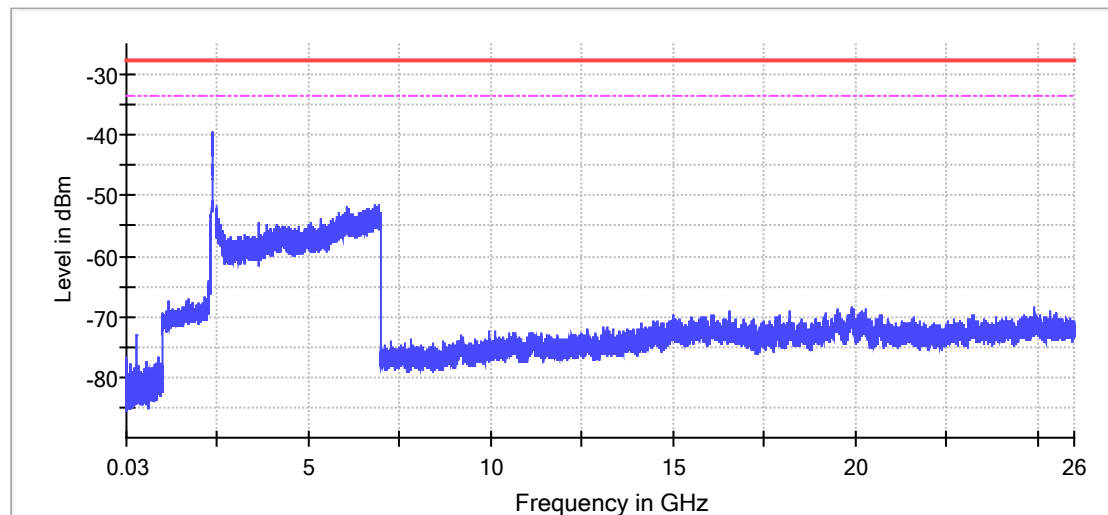
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|-----------------|-----------------------------|-------------|-------------|-------------|--------|
| ---             | ---                         | ---         | ---         | ---         | ---   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

### Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|-----------------|-------------|-------------|-------------|
| 2395.750000     | -39.4       | 11.7        | -27.7       |
| 2396.250000     | -39.4       | 11.7        | -27.7       |
| 2399.750000     | -39.4       | 11.7        | -27.7       |
| 2392.250000     | -39.8       | 12.1        | -27.7       |
| 2391.750000     | -40.1       | 12.4        | -27.7       |
| 2394.750000     | -40.2       | 12.4        | -27.7       |
| 2388.750000     | -40.2       | 12.5        | -27.7       |
| 2397.250000     | -40.3       | 12.6        | -27.7       |
| 2375.750000     | -40.3       | 12.6        | -27.7       |
| 2394.250000     | -40.3       | 12.6        | -27.7       |
| 2397.750000     | -40.4       | 12.7        | -27.7       |
| 2398.250000     | -40.6       | 12.9        | -27.7       |
| 2390.750000     | -40.7       | 13.0        | -27.7       |
| 2393.250000     | -40.7       | 13.0        | -27.7       |
| 2389.250000     | -40.8       | 13.1        | -27.7       |

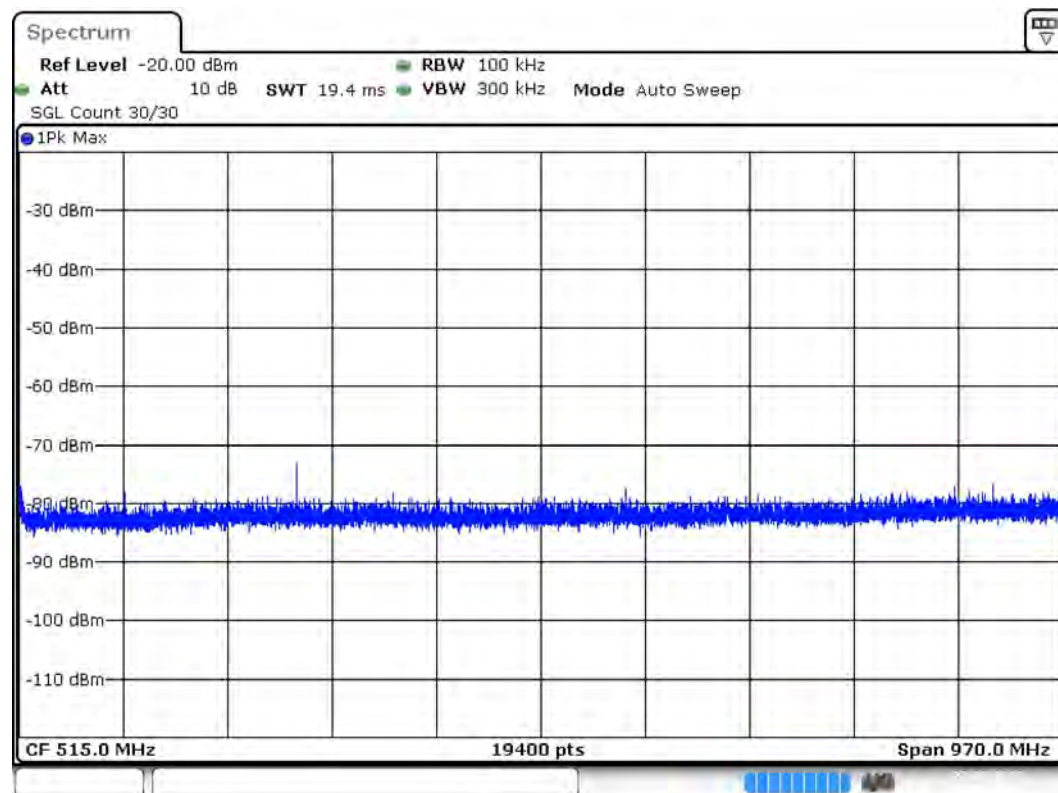
### Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|-----------------------|----------------------|-----------------|-------------------|
| 30.000000             | 1000.000000          | 1               | 1                 |
| 1000.000000           | 2400.000000          | 2               | 2                 |
| 2483.500000           | 7000.000000          | 2               | 2                 |
| 7000.000000           | 18000.000000         | 2               | 2                 |
| 18000.000000          | 26000.000000         | 2               | 2                 |



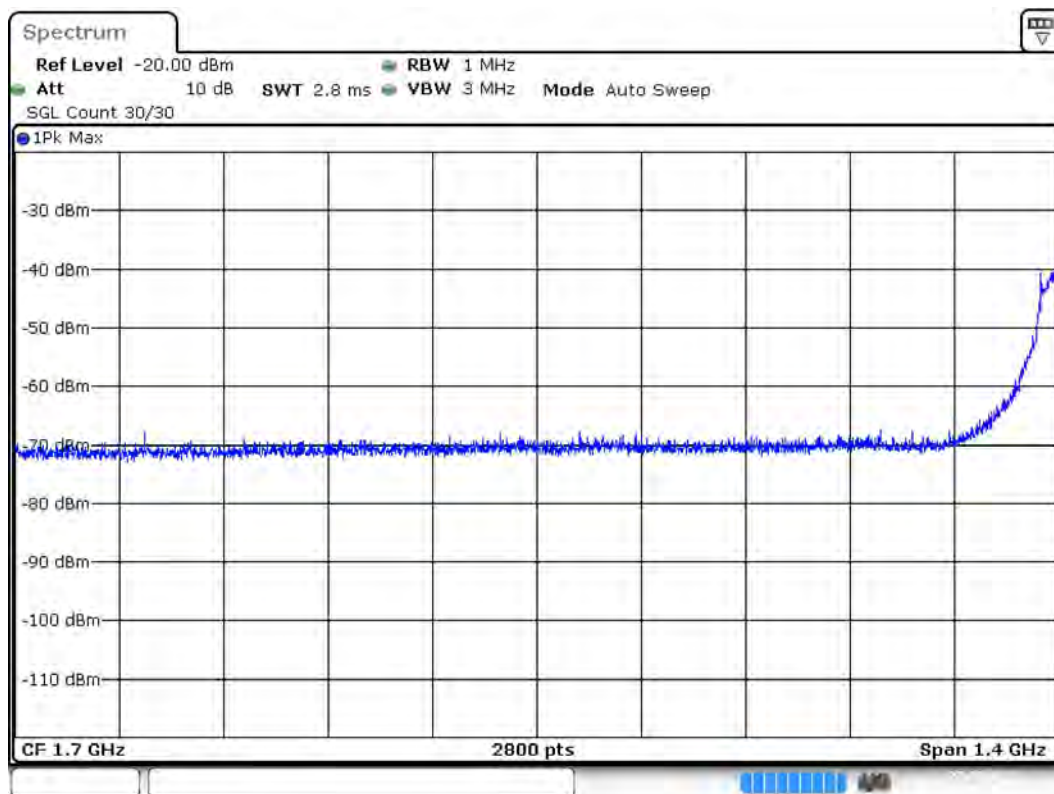
— Limit    — Sum Level    - - - Threshold    × Critical    × Final Critical

### Spurious Connector 1\_0



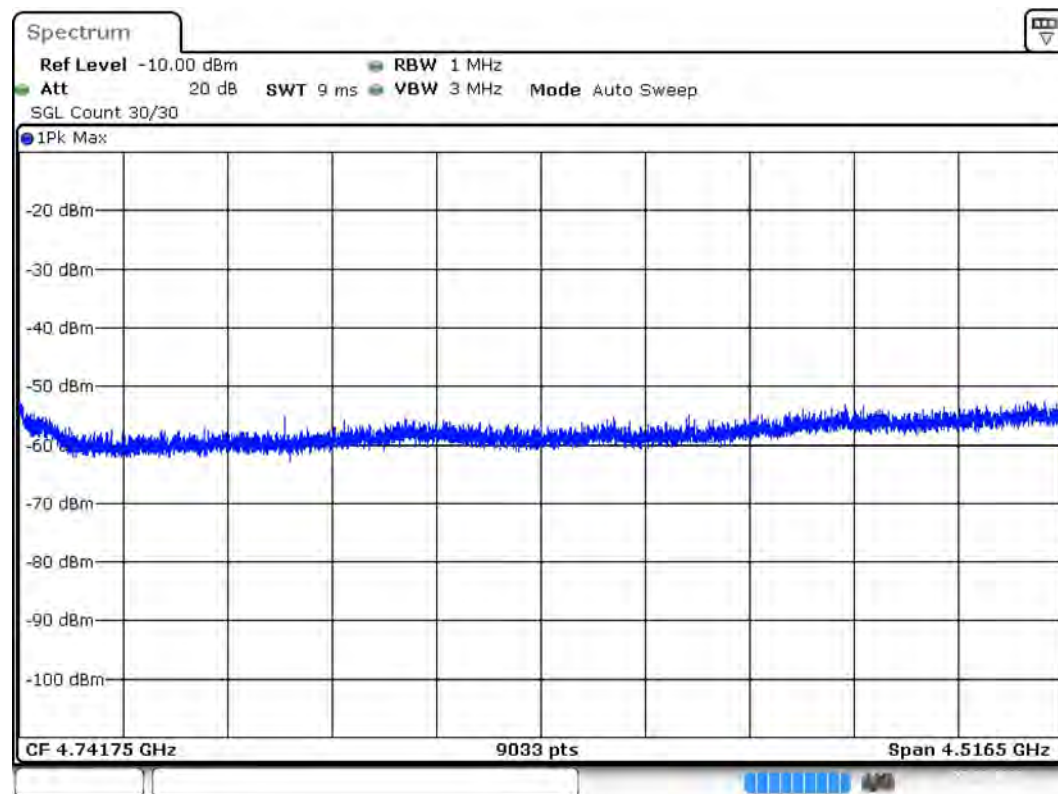
Date: 27.FEB.2023 13:36:32

### Spurious Connector 1\_1



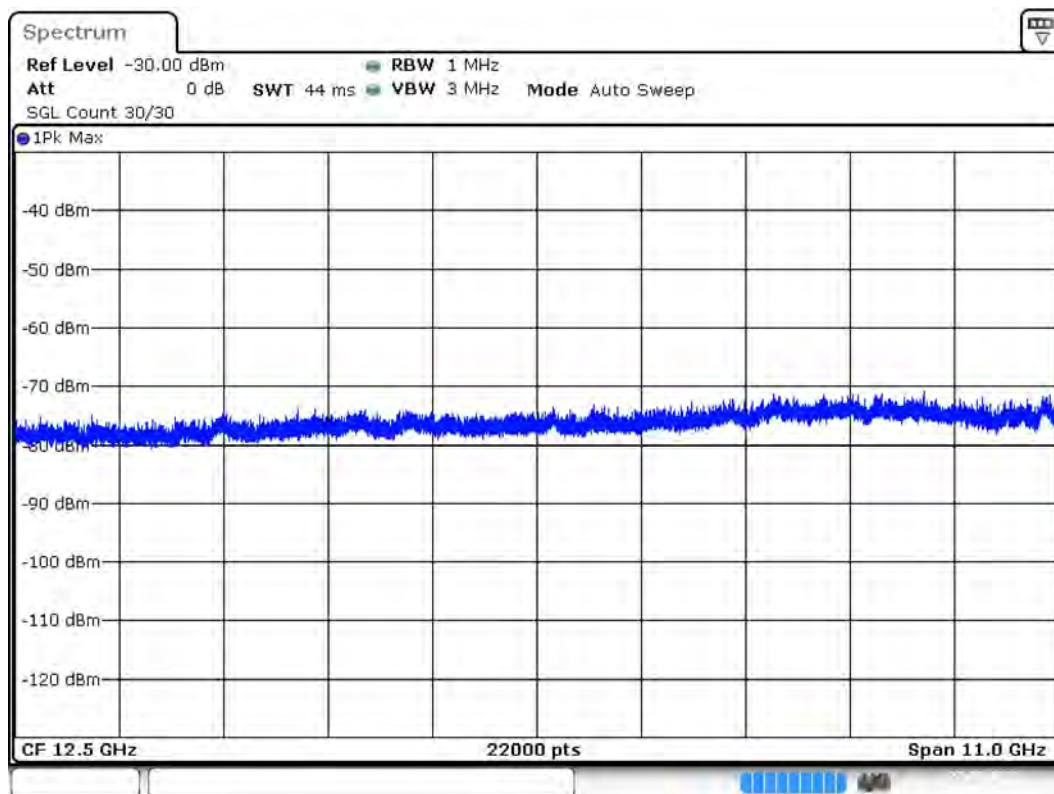
Date: 27.FEB.2023 13:37:19

Spurious Connector 1\_2



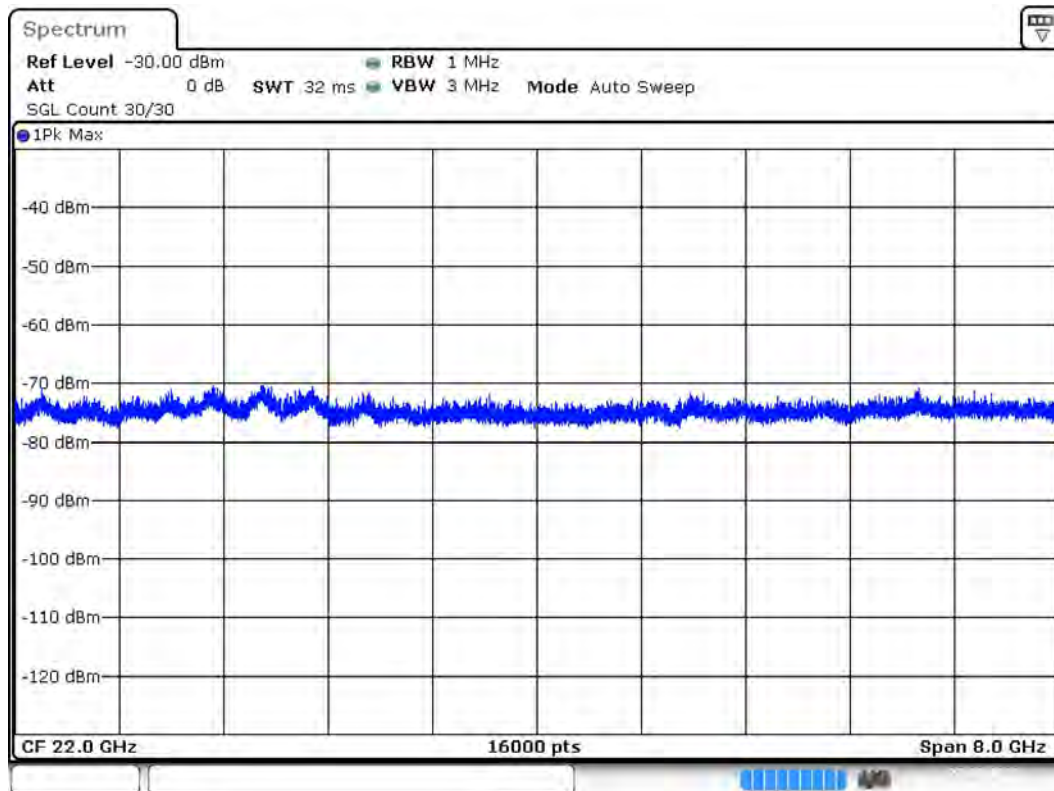
Date: 27.FEB.2023 13:37:42

Spurious Connector 1\_3



Date: 27.FEB.2023 13:38:23

Spurious Connector 1\_4



Date: 27.FEB.2023 13:38:55

## Pre Measurement 1

| Setting               | Instrument Value | Target Value   |
|-----------------------|------------------|----------------|
| RBW                   | 100.000 kHz      | <= 100.000 kHz |
| VBW                   | 300.000 kHz      | >= 300.000 kHz |
| SweepPoints           | 19400            | ~ 19400        |
| SweepTime             | 19.400 ms        | AUTO           |
| Reference Level       | -20.000 dBm      | -30.000 dBm    |
| Attenuation           | 10.000 dB        | AUTO           |
| Detector              | MaxPeak          | MaxPeak        |
| SweepCount            | 30               | 30             |
| 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. 150     | max. 150       |
| Stable                | 3 / 3            | 3              |
| Max Stable Difference | 0.00 dB          | 0.50 dB        |

## Pre Measurement 2

| Setting         | Instrument Value | Target Value |
|-----------------|------------------|--------------|
| RBW             | 1.000 MHz        | <= 1.000 MHz |
| VBW             | 3.000 MHz        | >= 3.000 MHz |
| SweepPoints     | 2800             | ~ 2800       |
| SweepTime       | 2.800 ms         | AUTO         |
| Reference Level | -20.000 dBm      | -30.000 dBm  |
| Attenuation     | 10.000 dB        | AUTO         |
| Detector        | MaxPeak          | MaxPeak      |
| SweepCount      | 30               | 30           |

|                              |                      |                 |
|------------------------------|----------------------|-----------------|
| <b>Filter</b>                | <b>3 dB</b>          | <b>3 dB</b>     |
| <b>Trace Mode</b>            | <b>Max Hold</b>      | <b>Max Hold</b> |
| <b>Sweep type</b>            | <b>Sweep</b>         | <b>AUTO</b>     |
| <b>Preamplifier</b>          | <b>off</b>           | <b>off</b>      |
| <b>Stable mode</b>           | <b>Trace</b>         | <b>Trace</b>    |
| <b>Stable value</b>          | <b>0.50 dB</b>       | <b>0.50 dB</b>  |
| <b>Run</b>                   | <b>25 / 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>  |

## Emission Bandwidth 20 dB (2437 MHz; 20.000 dBm; 20 MHz)

Customized settings.

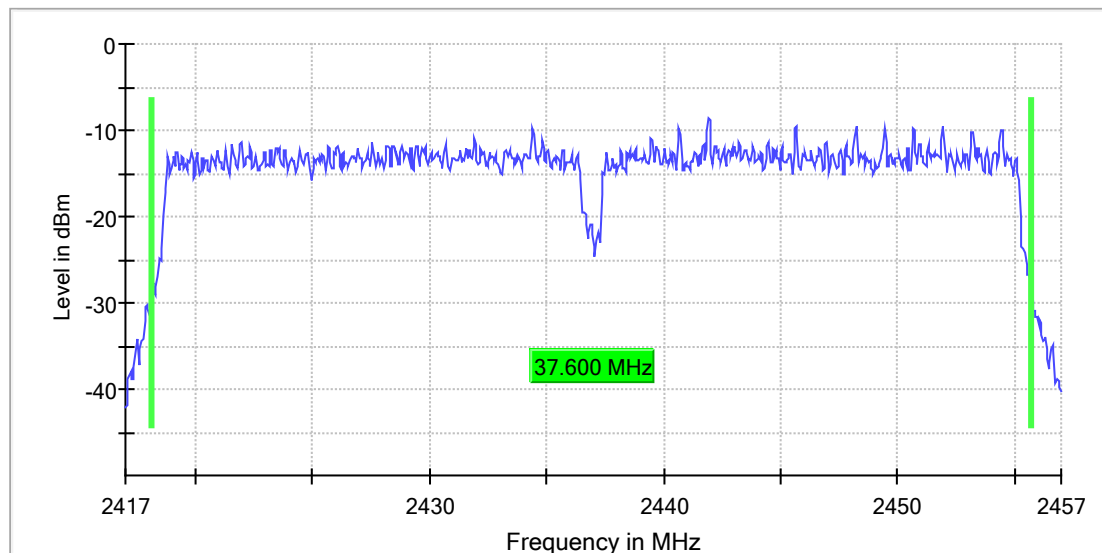
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10

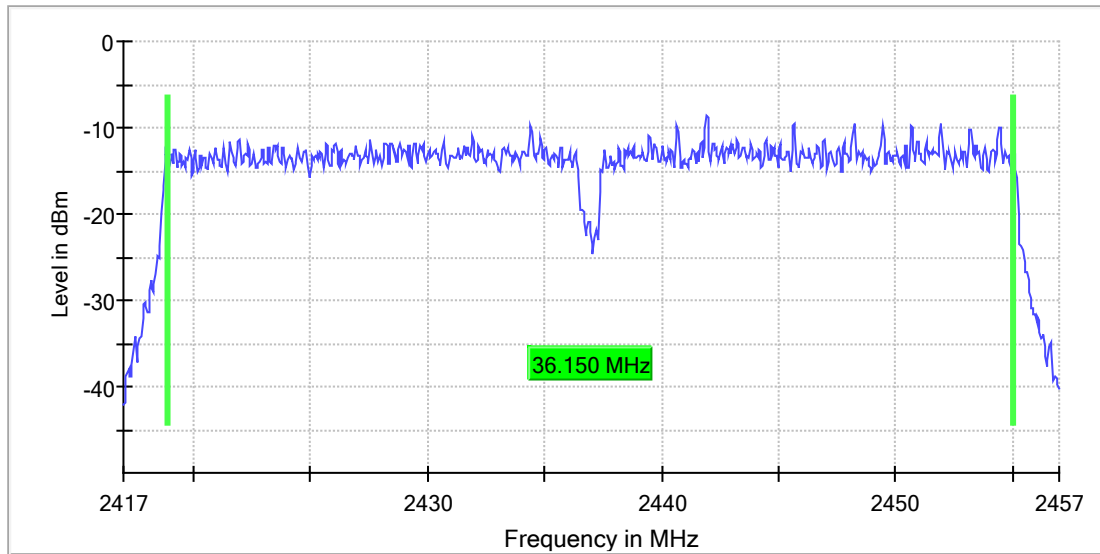
### 20 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---------------------|-----------------|-----------------|-----------------|----------------------|-----------------------|
| 2437.000000         | 37.600000       | ---             | ---             | 2418.125000          | 2455.725000           |

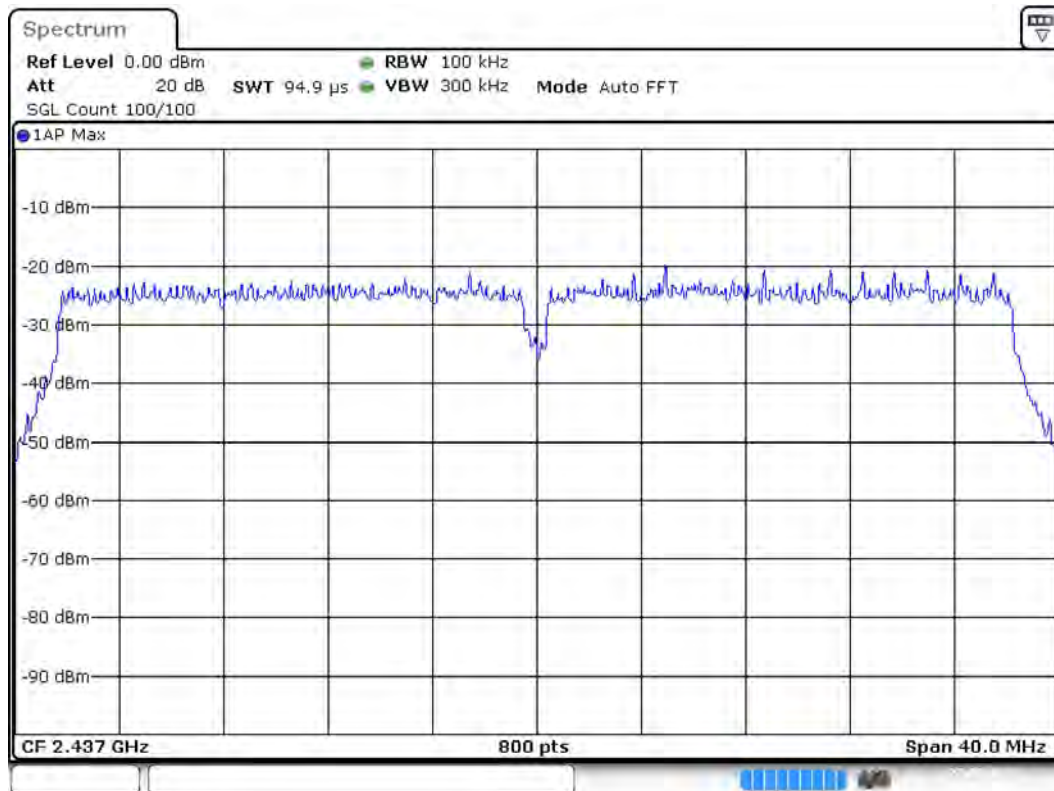
(continuation of the "20 dB Bandwidth" table from column 6 ...)

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---------------------|-----------------|--------|
| 2437.000000         | -8.5            | PASS   |





Bandwidth



Date: 27.FEB.2023 13:44:03

## Measurement

| Setting               | Instrument Value | Target Value   |
|-----------------------|------------------|----------------|
| Start Frequency       | 2.41700 GHz      | 2.41700 GHz    |
| Stop Frequency        | 2.45700 GHz      | 2.45700 GHz    |
| Span                  | 40.000 MHz       | 40.000 MHz     |
| RBW                   | 100.000 kHz      | ~ 100.000 kHz  |
| VBW                   | 300.000 kHz      | >= 300.000 kHz |
| SweepPoints           | 800              | ~ 800          |
| SweepTime             | 94.922 µs        | AUTO           |
| Reference Level       | 0.000 dBm        | 0.000 dBm      |
| Attenuation           | 20.000 dB        | AUTO           |
| Detector              | Peak             | Peak           |
| 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                   | 1 / max. 1       | max. 1         |
| Stable                | 0 / 1            | 1              |
| Max Stable Difference | 0.00 dB          | 0.50 dB        |

## Minimum Emission Bandwidth 6 dB (2437 MHz; 20.000 dBm; 20 MHz)

Customized settings.

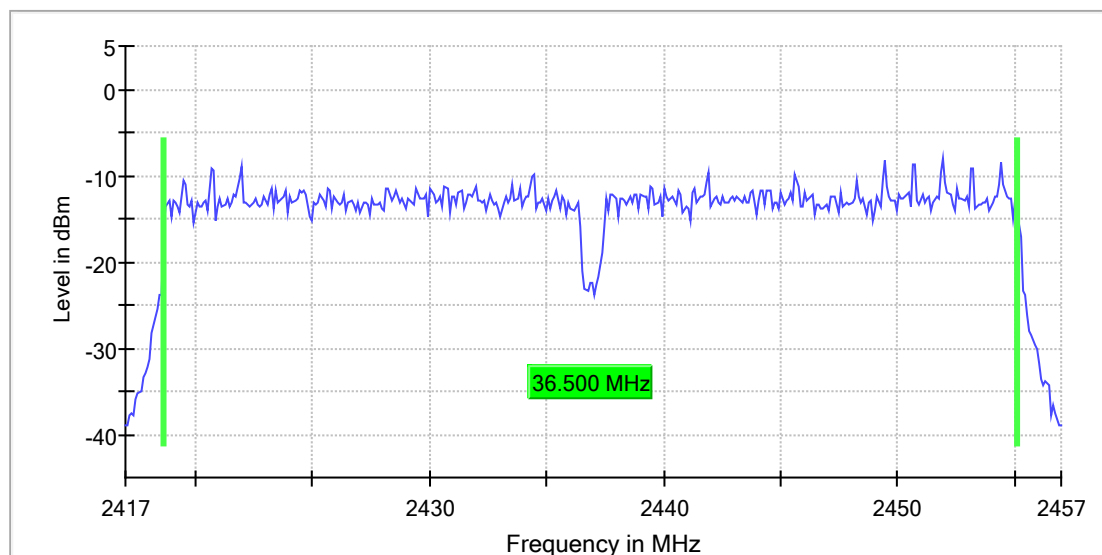
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10

### 6 dB Bandwidth

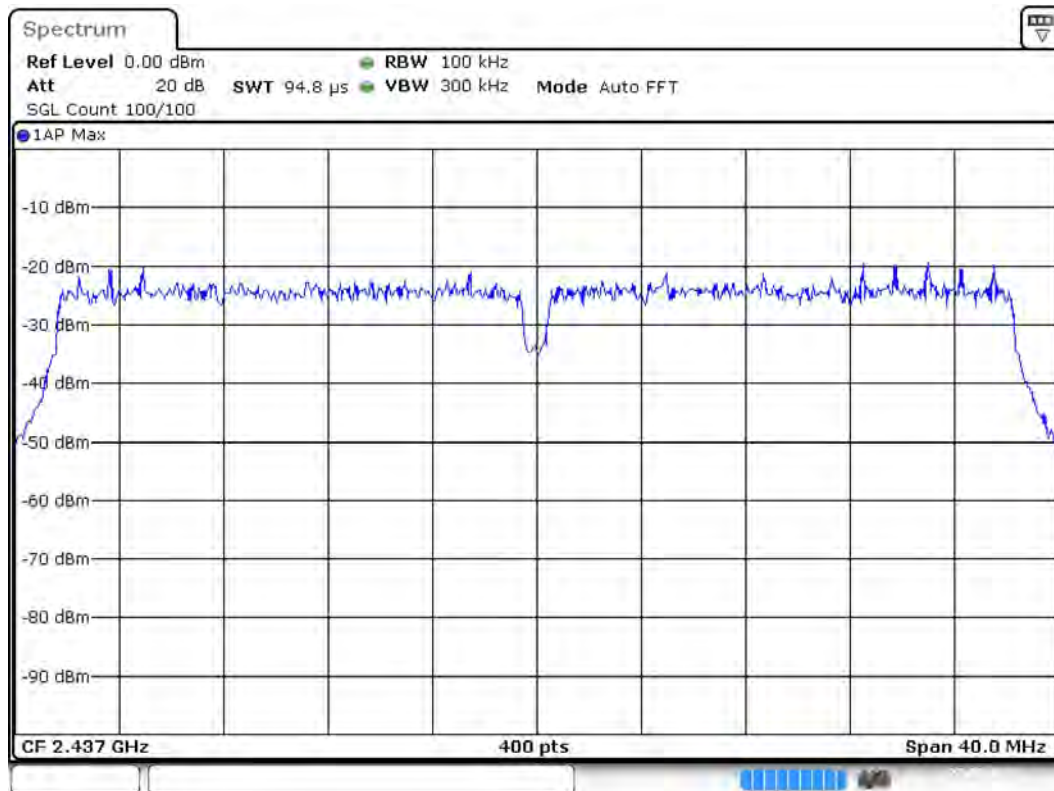
| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---------------------|-----------------|-----------------|-----------------|----------------------|-----------------------|
| 2437.000000         | 36.500000       | 0.500000        | ---             | 2418.650000          | 2455.150000           |

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

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---------------------|-----------------|--------|
| 2437.000000         | -8.0            | PASS   |



Bandwidth



Date: 27.FEB.2023 13:44:23

## Measurement

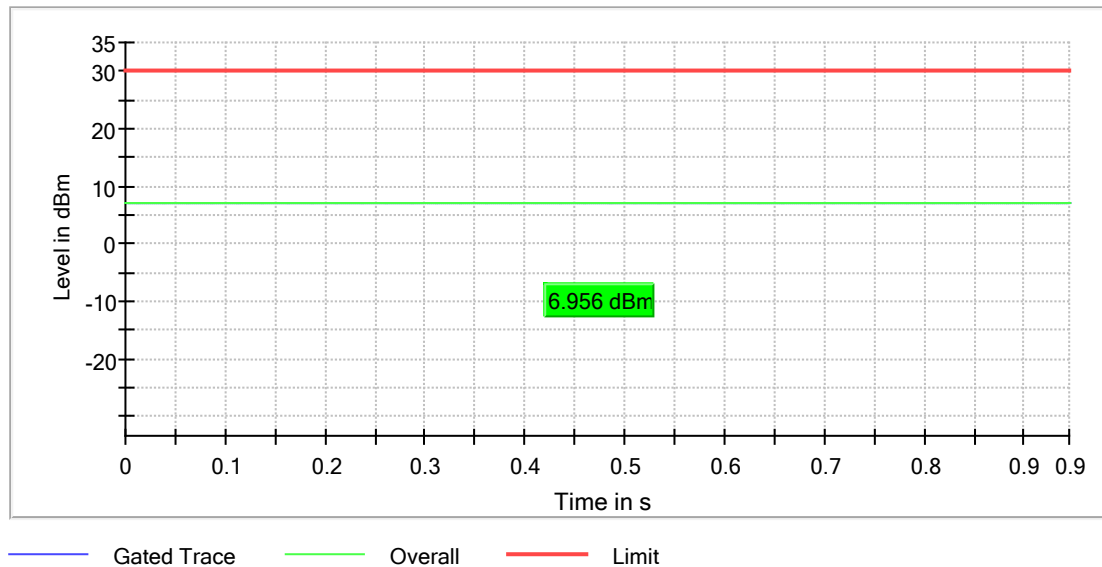
| Setting               | Instrument Value | Target Value  |
|-----------------------|------------------|---------------|
| Start Frequency       | 2.41700 GHz      | 2.41700 GHz   |
| Stop Frequency        | 2.45700 GHz      | 2.45700 GHz   |
| Span                  | 40.000 MHz       | 40.000 MHz    |
| RBW                   | 100.000 kHz      | ~ 100.000 kHz |
| VBW                   | 300.000 kHz      | ~ 300.000 kHz |
| SweepPoints           | 400              | ~ 400         |
| SweepTime             | 94.810 µs        | AUTO          |
| Reference Level       | 0.000 dBm        | 0.000 dBm     |
| Attenuation           | 20.000 dB        | AUTO          |
| Detector              | Peak             | Peak          |
| 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                   | 1 / max. 1       | max. 1        |
| Stable                | 0 / 1            | 1             |
| Max Stable Difference | 0.00 dB          | 0.50 dB       |

**RF output power (2437 MHz; 20.000 dBm; 20 MHz)**

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

**Result**

| DUT Frequency (MHz) | Gated RMS (dBm) | Limit Max (dBm) | Gated EIRP (dBm) | DutyCycle (%) | Result |
|---------------------|-----------------|-----------------|------------------|---------------|--------|
| 2437.000000         | 7.0             | 30.0            | 7.0              | 94.493        | PASS   |



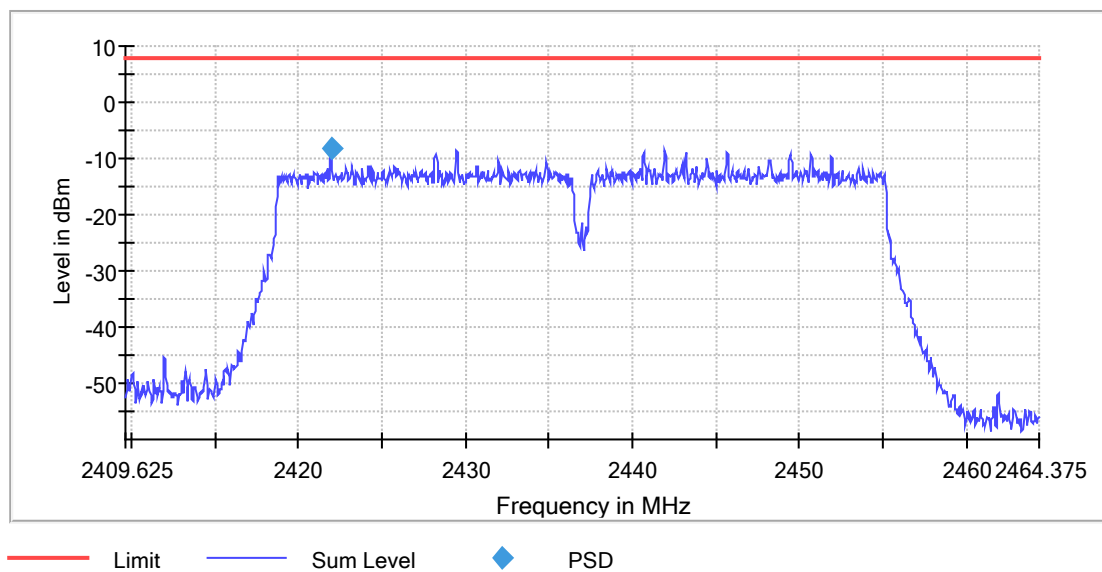
## Peak Power Spectral Density (2437 MHz; 20.000 dBm; 20 MHz)

Customized settings.

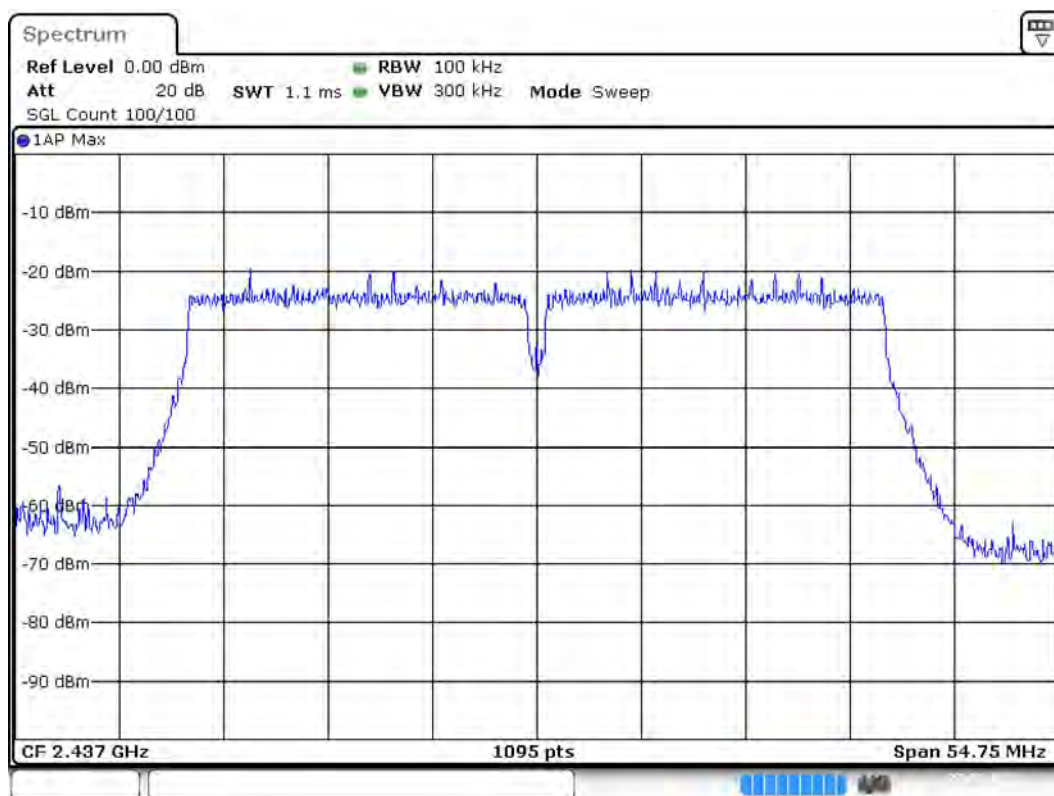
Test according to FCC title 47 part 15 §15.247(a),(e), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10

### Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---------------------|-----------------|-----------|-----------------|--------|
| 2437.000000         | 2421.950000     | -8.305    | 8.0             | PASS   |



PSD Connector 1



Date: 27.FEB.2023 13:45:03

## Measurement

| Setting               | Instrument Value | Target Value   |
|-----------------------|------------------|----------------|
| Start Frequency       | 2.40963 GHz      | 2.40963 GHz    |
| Stop Frequency        | 2.46438 GHz      | 2.46438 GHz    |
| Span                  | 54.750 MHz       | 54.750 MHz     |
| RBW                   | 100.000 kHz      | <= 100.000 kHz |
| VBW                   | 300.000 kHz      | >= 300.000 kHz |
| SweepPoints           | 1095             | ~ 1095         |
| SweepTime             | 1.100 ms         | AUTO           |
| Reference Level       | 0.000 dBm        | 0.000 dBm      |
| Attenuation           | 20.000 dB        | AUTO           |
| Detector              | Peak             | Peak           |
| SweepCount            | 100              | 100            |
| Filter                | 3 dB             | 3 dB           |
| Trace Mode            | Max Hold         | Max Hold       |
| SweepType             | Sweep            | Sweep          |
| Preamp                | off              | off            |
| Stablemode            | Trace            | Trace          |
| Stablevalue           | 0.50 dB          | 0.50 dB        |
| Run                   | 1 / max. 1       | max. 1         |
| Stable                | 0 / 1            | 1              |
| Max Stable Difference | 0.00 dB          | 0.50 dB        |

## Tx Spurious Emission (2437 MHz; 20.000 dBm; 20 MHz)

Customized settings.

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

### Result

| DUT Frequency (MHz) | Result |
|---------------------|--------|
| 2437.000000         | PASS   |

### Final measurements

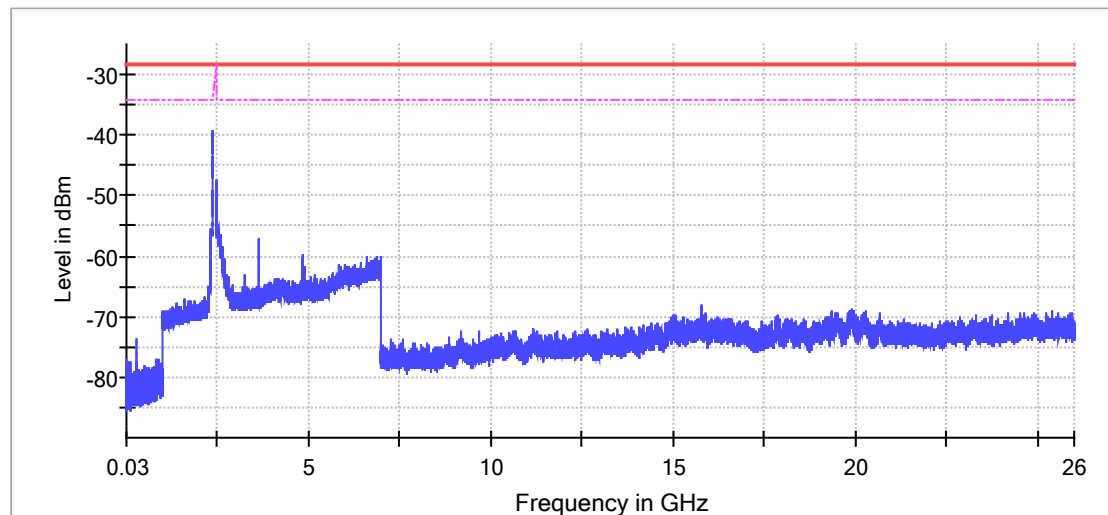
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|-----------------|-----------------------------|-------------|-------------|-------------|--------|
| ---             | ---                         | ---         | ---         | ---         | ---   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

### Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|-----------------|-------------|-------------|-------------|
| 2397.250000     | -39.4       | 11.1        | -28.3       |
| 2400.000000     | -40.3       | 12.0        | -28.3       |
| 2399.750000     | -40.3       | 12.0        | -28.3       |
| 2398.750000     | -40.7       | 12.4        | -28.3       |
| 2399.250000     | -40.9       | 12.6        | -28.3       |
| 2394.250000     | -40.9       | 12.6        | -28.3       |
| 2395.250000     | -41.4       | 13.1        | -28.3       |
| 2390.250000     | -41.4       | 13.1        | -28.3       |
| 2398.250000     | -41.4       | 13.1        | -28.3       |
| 2397.750000     | -41.5       | 13.2        | -28.3       |
| 2395.750000     | -41.6       | 13.3        | -28.3       |
| 2390.750000     | -41.7       | 13.4        | -28.3       |
| 2396.250000     | -41.9       | 13.6        | -28.3       |
| 2392.750000     | -41.9       | 13.6        | -28.3       |
| 2393.250000     | -42.0       | 13.7        | -28.3       |

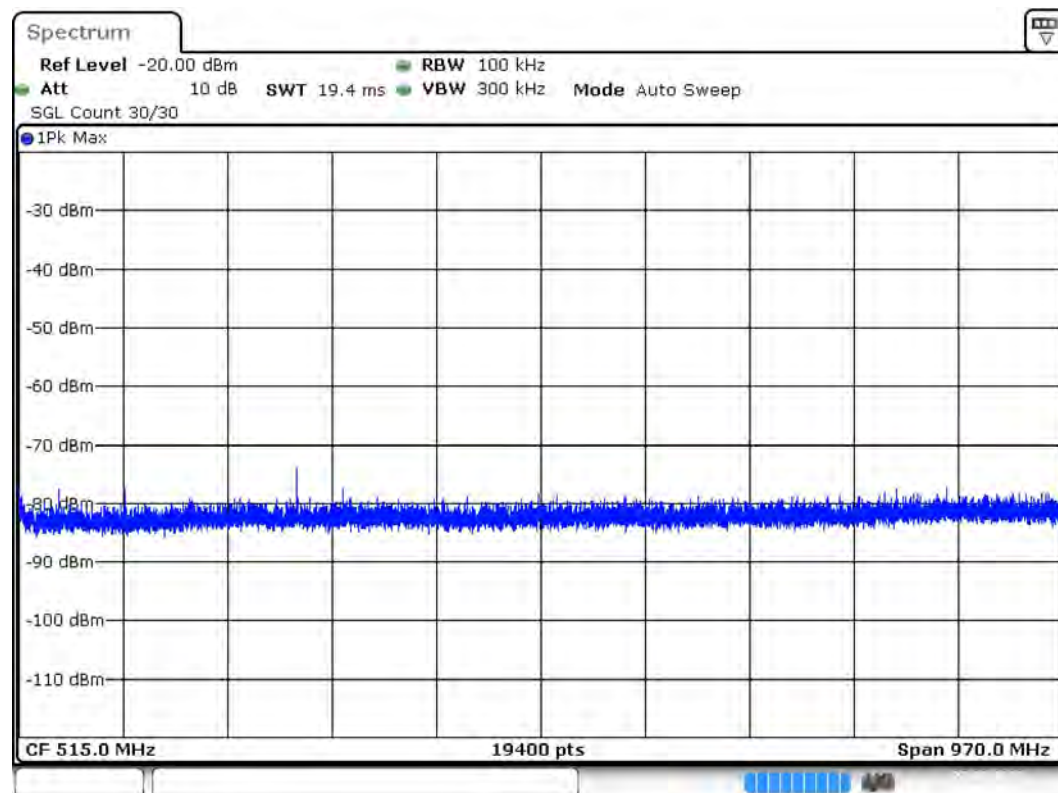
### Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|-----------------------|----------------------|-----------------|-------------------|
| 30.000000             | 1000.000000          | 1               | 1                 |
| 1000.000000           | 2400.000000          | 2               | 2                 |
| 2483.500000           | 7000.000000          | 2               | 2                 |
| 7000.000000           | 18000.000000         | 2               | 2                 |
| 18000.000000          | 26000.000000         | 2               | 2                 |



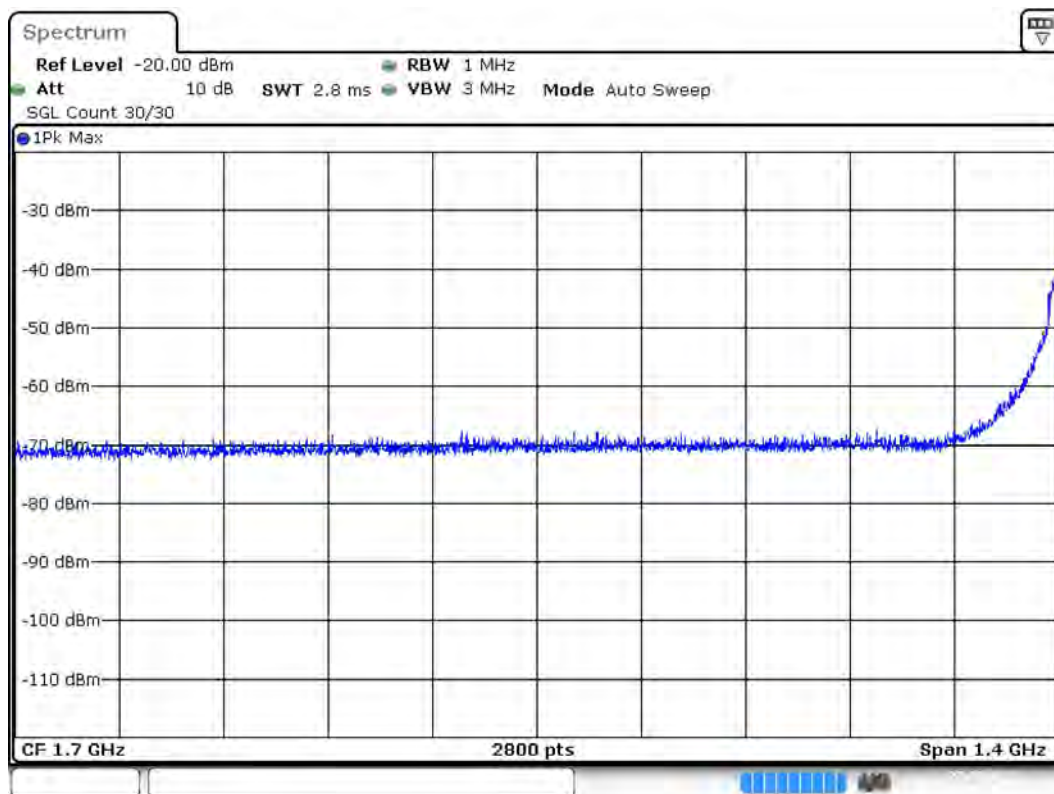
— Limit    — Sum Level    - - - Threshold    × Critical    × Final Critical

### Spurious Connector 1\_0



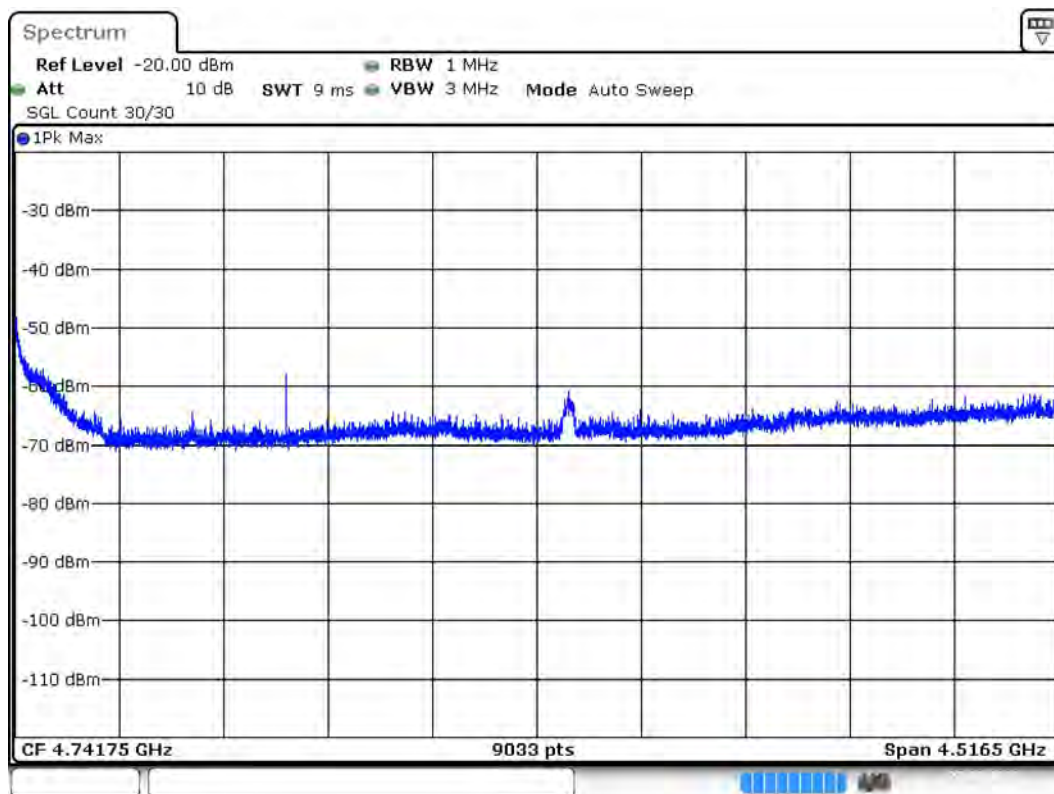
Date: 27.FEB.2023 13:46:46

### Spurious Connector 1\_1



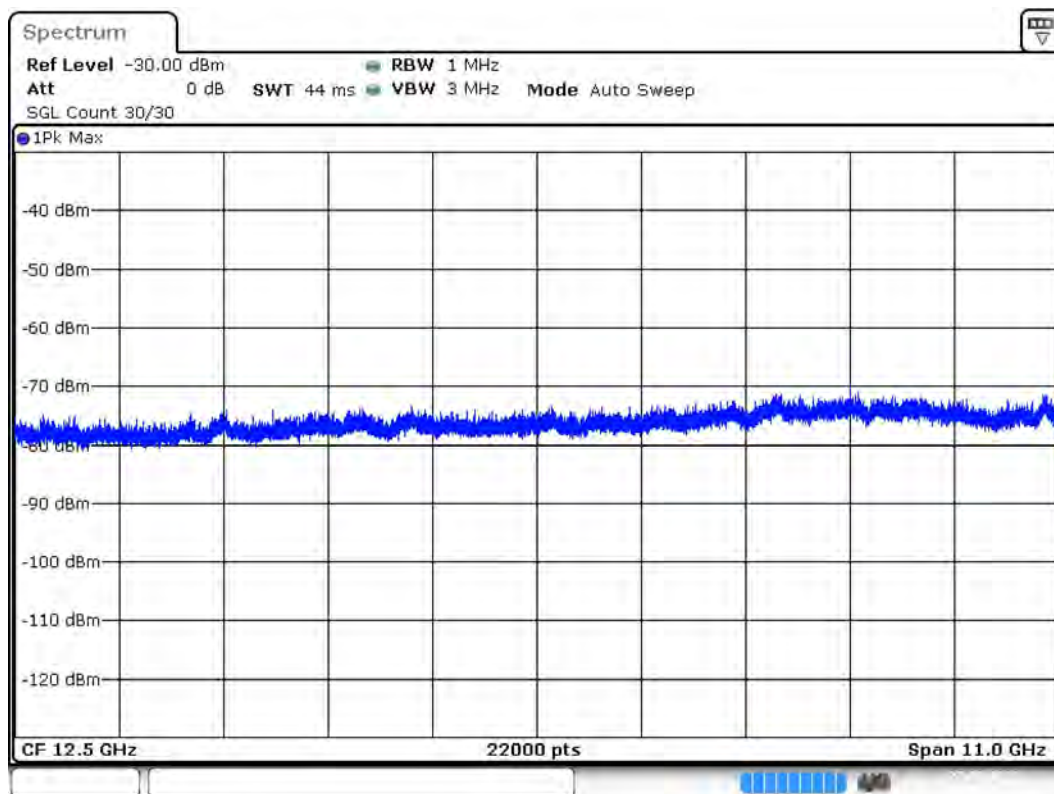
Date: 27.FEB.2023 13:47:53

Spurious Connector 1\_2



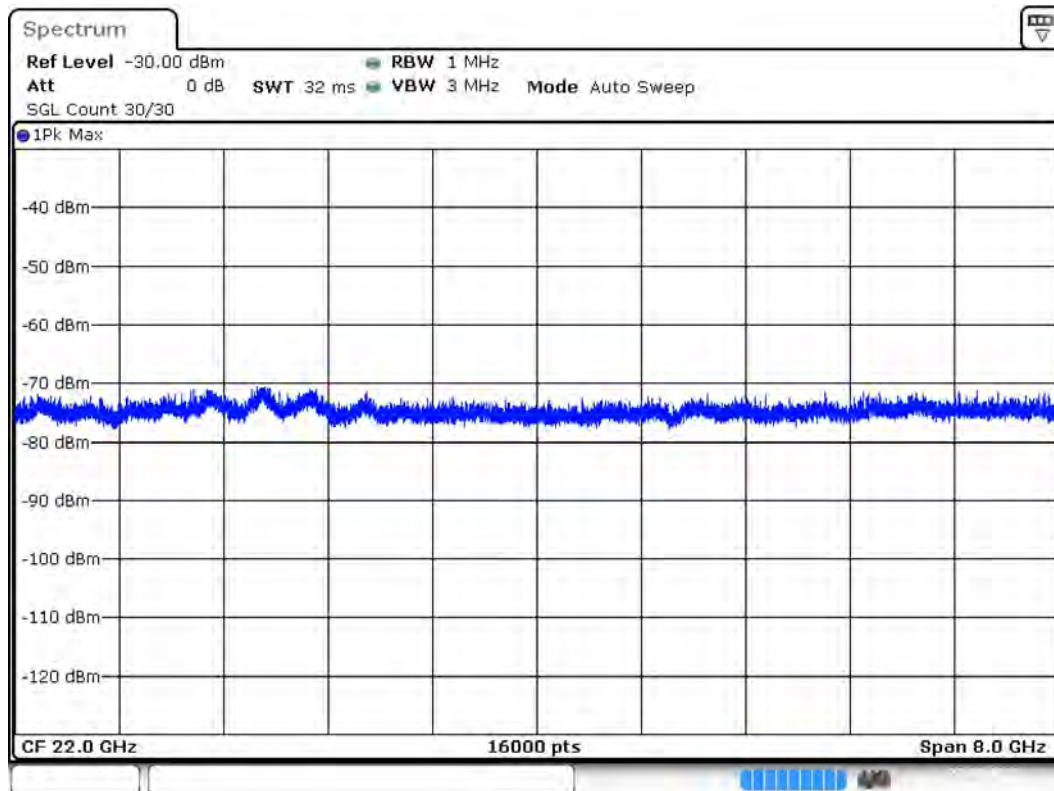
Date: 27.FEB.2023 13:49:32

Spurious Connector 1\_3



Date: 27.FEB.2023 13:50:13

Spurious Connector 1\_4



Date: 27.FEB.2023 13:50:47

## Pre Measurement 1

| Setting               | Instrument Value | Target Value   |
|-----------------------|------------------|----------------|
| RBW                   | 100.000 kHz      | <= 100.000 kHz |
| VBW                   | 300.000 kHz      | >= 300.000 kHz |
| SweepPoints           | 19400            | ~ 19400        |
| SweepTime             | 19.400 ms        | AUTO           |
| Reference Level       | -20.000 dBm      | -30.000 dBm    |
| Attenuation           | 10.000 dB        | AUTO           |
| Detector              | MaxPeak          | MaxPeak        |
| SweepCount            | 30               | 30             |
| 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. 150     | max. 150       |
| Stable                | 3 / 3            | 3              |
| Max Stable Difference | 0.00 dB          | 0.50 dB        |

## Pre Measurement 2

| Setting         | Instrument Value | Target Value |
|-----------------|------------------|--------------|
| RBW             | 1.000 MHz        | <= 1.000 MHz |
| VBW             | 3.000 MHz        | >= 3.000 MHz |
| SweepPoints     | 2800             | ~ 2800       |
| SweepTime       | 2.800 ms         | AUTO         |
| Reference Level | -20.000 dBm      | -30.000 dBm  |
| Attenuation     | 10.000 dB        | AUTO         |
| Detector        | MaxPeak          | MaxPeak      |
| SweepCount      | 30               | 30           |

|                              |                      |                 |
|------------------------------|----------------------|-----------------|
| <b>Filter</b>                | <b>3 dB</b>          | <b>3 dB</b>     |
| <b>Trace Mode</b>            | <b>Max Hold</b>      | <b>Max Hold</b> |
| <b>Sweep type</b>            | <b>Sweep</b>         | <b>AUTO</b>     |
| <b>Preamp</b>                | <b>off</b>           | <b>off</b>      |
| <b>Stable mode</b>           | <b>Trace</b>         | <b>Trace</b>    |
| <b>Stable value</b>          | <b>0.50 dB</b>       | <b>0.50 dB</b>  |
| <b>Run</b>                   | <b>38 / 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>  |

## Emission Bandwidth 20 dB (2452 MHz; 20.000 dBm; 20 MHz)

Customized settings.

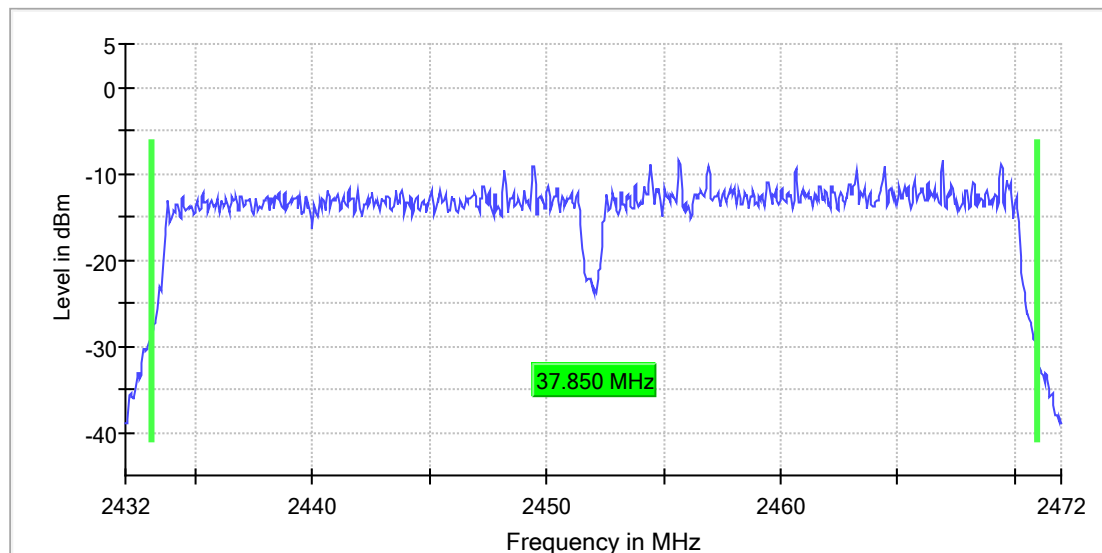
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10

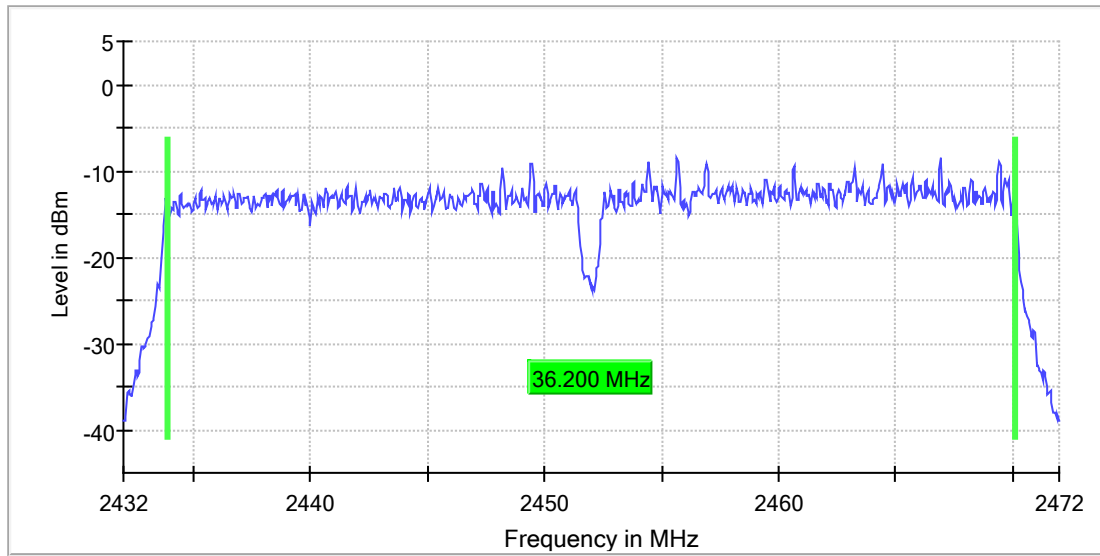
### 20 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---------------------|-----------------|-----------------|-----------------|----------------------|-----------------------|
| 2452.000000         | 37.850000       | ---             | ---             | 2433.125000          | 2470.975000           |

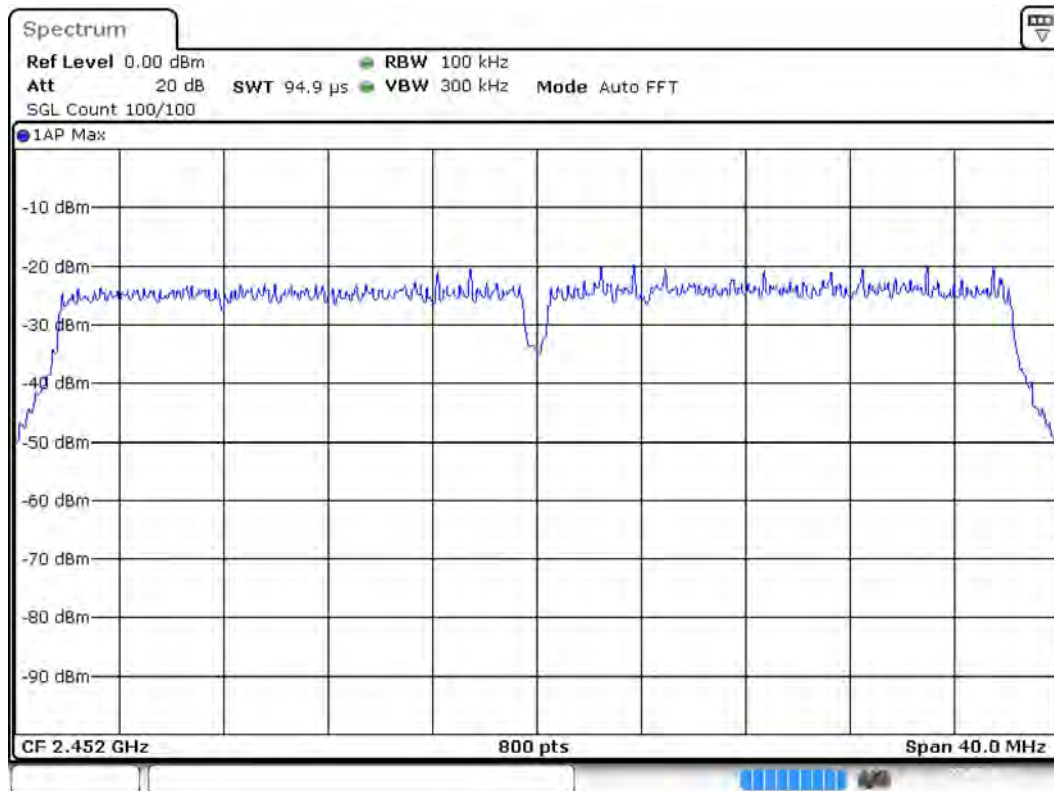
(continuation of the "20 dB Bandwidth" table from column 6 ...)

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---------------------|-----------------|--------|
| 2452.000000         | -8.5            | PASS   |





Bandwidth



Date: 27.FEB.2023 13:54:04

## Measurement

| Setting               | Instrument Value | Target Value   |
|-----------------------|------------------|----------------|
| Start Frequency       | 2.43200 GHz      | 2.43200 GHz    |
| Stop Frequency        | 2.47200 GHz      | 2.47200 GHz    |
| Span                  | 40.000 MHz       | 40.000 MHz     |
| RBW                   | 100.000 kHz      | ~ 100.000 kHz  |
| VBW                   | 300.000 kHz      | >= 300.000 kHz |
| SweepPoints           | 800              | ~ 800          |
| SweepTime             | 94.922 µs        | AUTO           |
| Reference Level       | 0.000 dBm        | 0.000 dBm      |
| Attenuation           | 20.000 dB        | AUTO           |
| Detector              | Peak             | Peak           |
| 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                   | 1 / max. 1       | max. 1         |
| Stable                | 0 / 1            | 1              |
| Max Stable Difference | 0.00 dB          | 0.50 dB        |

## Minimum Emission Bandwidth 6 dB (2452 MHz; 20.000 dBm; 20 MHz)

Customized settings.

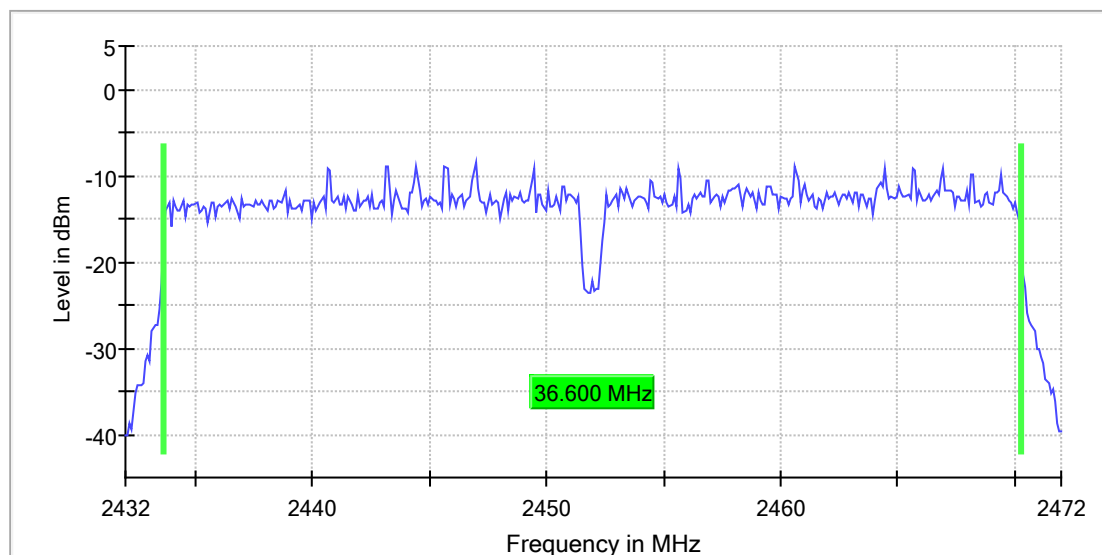
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10

### 6 dB Bandwidth

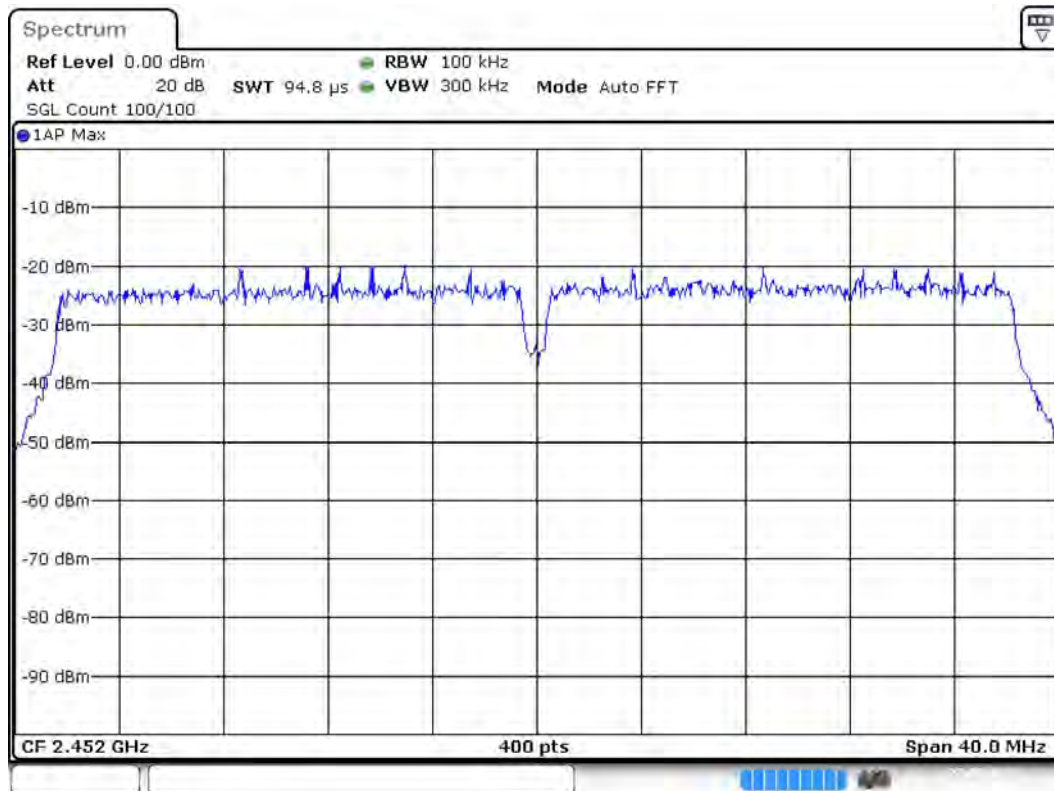
| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---------------------|-----------------|-----------------|-----------------|----------------------|-----------------------|
| 2452.000000         | 36.600000       | 0.500000        | ---             | 2433.650000          | 2470.250000           |

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

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---------------------|-----------------|--------|
| 2452.000000         | -8.6            | PASS   |



Bandwidth



Date: 27.FEB.2023 13:54:20

## Measurement

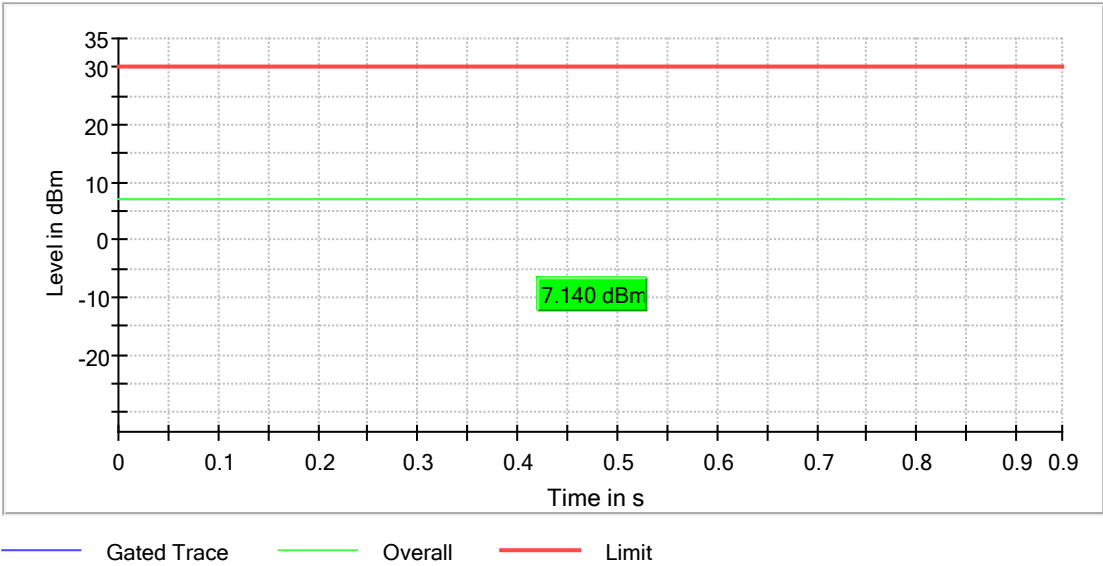
| Setting               | Instrument Value | Target Value  |
|-----------------------|------------------|---------------|
| Start Frequency       | 2.43200 GHz      | 2.43200 GHz   |
| Stop Frequency        | 2.47200 GHz      | 2.47200 GHz   |
| Span                  | 40.000 MHz       | 40.000 MHz    |
| RBW                   | 100.000 kHz      | ~ 100.000 kHz |
| VBW                   | 300.000 kHz      | ~ 300.000 kHz |
| SweepPoints           | 400              | ~ 400         |
| SweepTime             | 94.810 µs        | AUTO          |
| Reference Level       | 0.000 dBm        | 0.000 dBm     |
| Attenuation           | 20.000 dB        | AUTO          |
| Detector              | Peak             | Peak          |
| 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                   | 1 / max. 1       | max. 1        |
| Stable                | 0 / 1            | 1             |
| Max Stable Difference | 0.00 dB          | 0.50 dB       |

RF output power (2452 MHz; 20.000 dBm; 20 MHz)

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

Result

| DUT Frequency (MHz) | Gated RMS (dBm) | Limit Max (dBm) | Gated EIRP (dBm) | DutyCycle (%) | Result |
|---------------------|-----------------|-----------------|------------------|---------------|--------|
| 2452.000000         | 7.1             | 30.0            | 7.1              | 94.485        | PASS   |



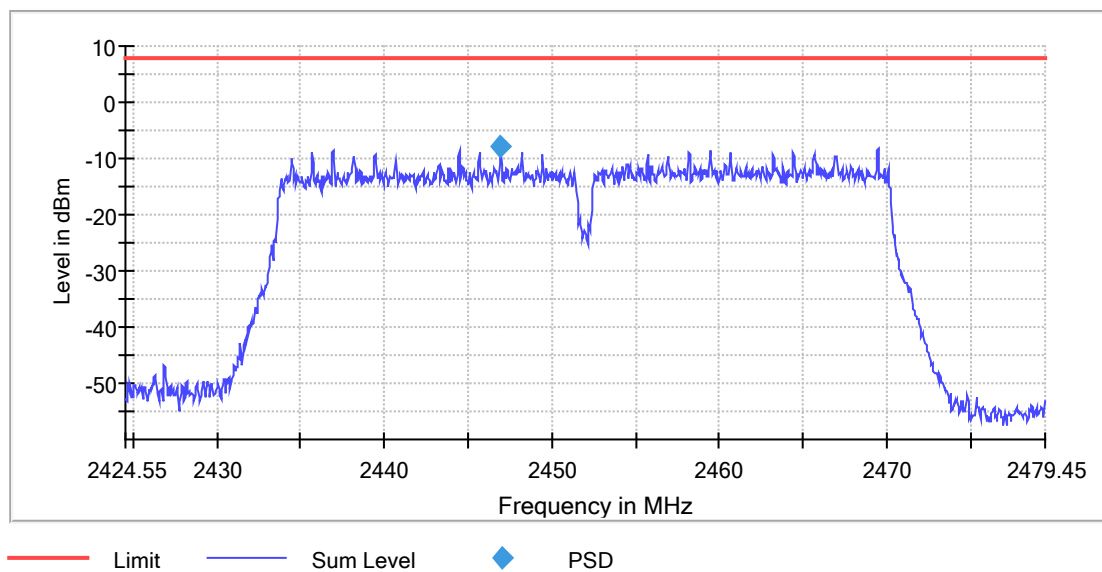
## Peak Power Spectral Density (2452 MHz; 20.000 dBm; 20 MHz)

Customized settings.

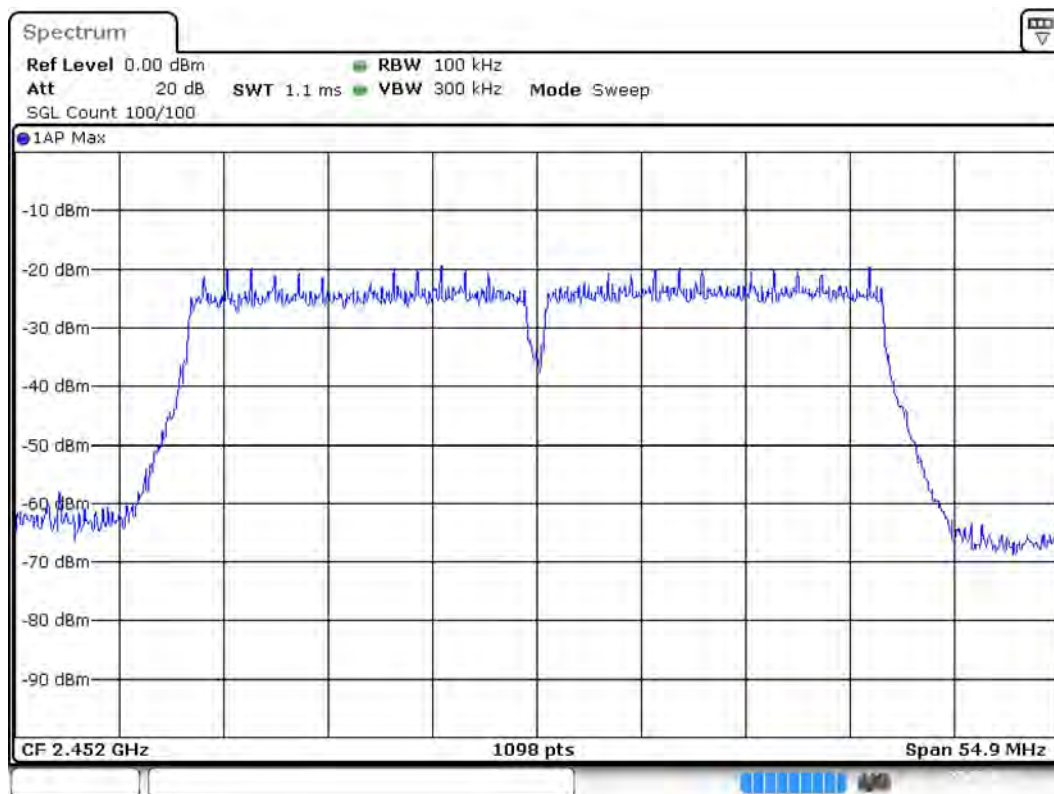
Test according to FCC title 47 part 15 §15.247(a),(e), KDB 558074 D01 DTS Meas Guidance v03r05 and ANSI C63.10

### Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---------------------|-----------------|-----------|-----------------|--------|
| 2452.000000         | 2446.975000     | -8.026    | 8.0             | PASS   |



PSD Connector 1



Date: 27.FEB.2023 13:55:00

## Measurement

| Setting               | Instrument Value | Target Value   |
|-----------------------|------------------|----------------|
| Start Frequency       | 2.42455 GHz      | 2.42455 GHz    |
| Stop Frequency        | 2.47945 GHz      | 2.47945 GHz    |
| Span                  | 54.900 MHz       | 54.900 MHz     |
| RBW                   | 100.000 kHz      | <= 100.000 kHz |
| VBW                   | 300.000 kHz      | >= 300.000 kHz |
| SweepPoints           | 1098             | ~ 1098         |
| SweepTime             | 1.100 ms         | AUTO           |
| Reference Level       | 0.000 dBm        | 0.000 dBm      |
| Attenuation           | 20.000 dB        | AUTO           |
| Detector              | Peak             | Peak           |
| SweepCount            | 100              | 100            |
| Filter                | 3 dB             | 3 dB           |
| Trace Mode            | Max Hold         | Max Hold       |
| SweepType             | Sweep            | Sweep          |
| Preamp                | off              | off            |
| Stablemode            | Trace            | Trace          |
| Stablevalue           | 0.50 dB          | 0.50 dB        |
| Run                   | 1 / max. 1       | max. 1         |
| Stable                | 0 / 1            | 1              |
| Max Stable Difference | 0.00 dB          | 0.50 dB        |

## Band Edge high (2452 MHz; 20.000 dBm; 20 MHz)

Customized settings.

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

### Result

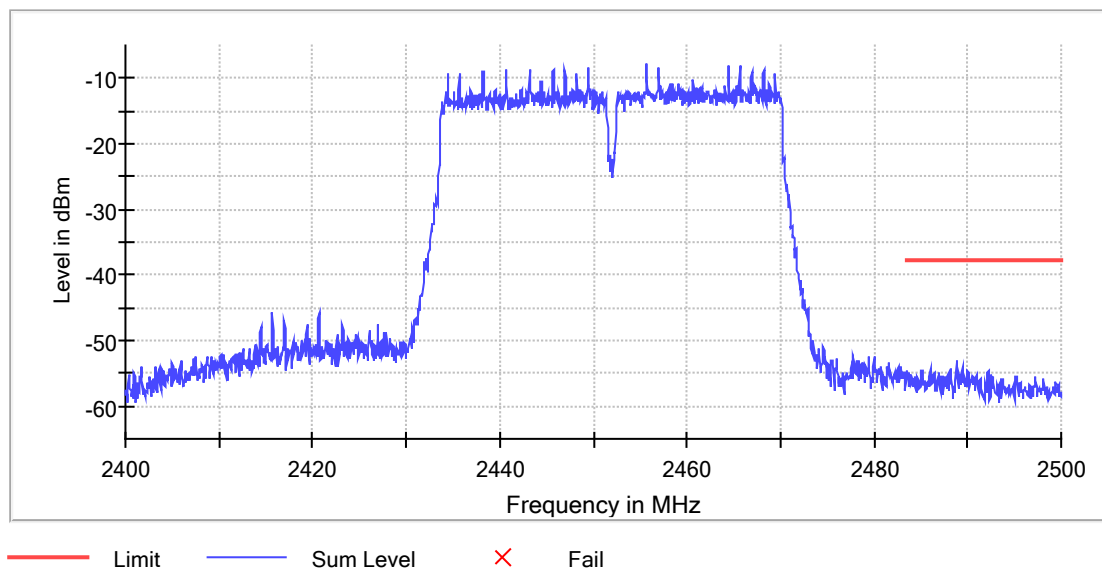
| DUT Frequency (MHz) | Result |
|---------------------|--------|
| 2452.000000         | PASS   |

### Inband Peak

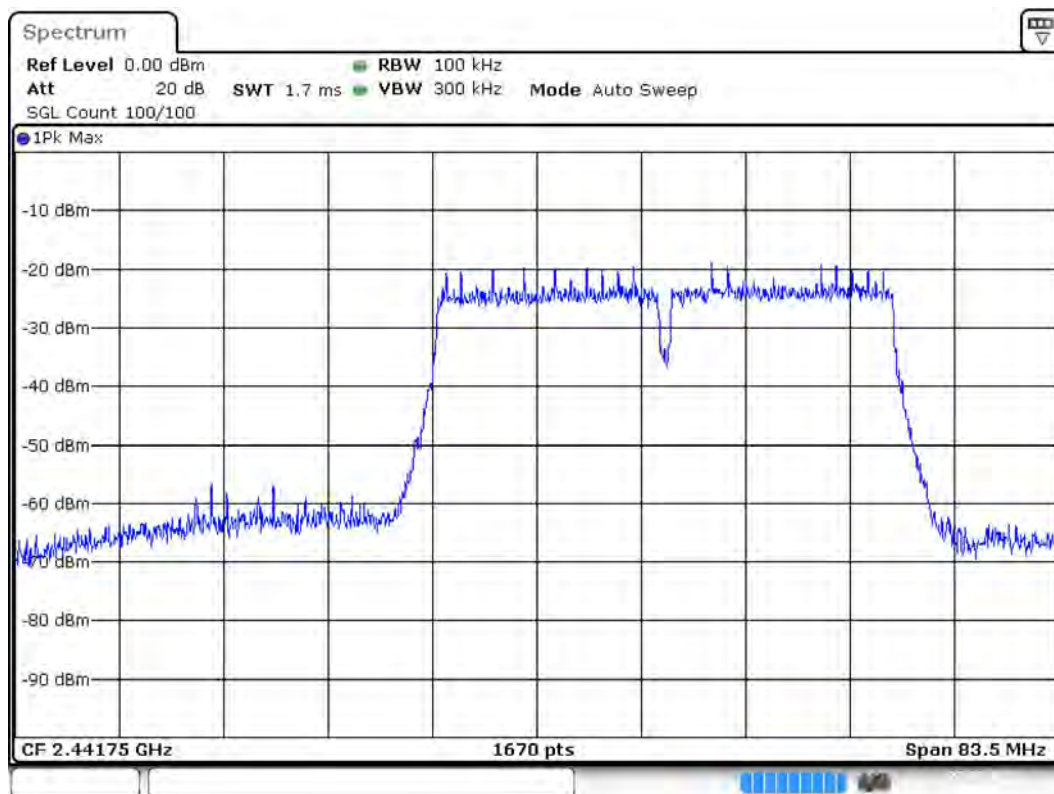
| Frequency (MHz) | Level (dBm) |
|-----------------|-------------|
| 2455.725000     | -7.7        |

### Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|-----------------|-------------|-------------|-------------|--------|
| 2488.825000     | -52.9       | 15.2        | -37.7       | PASS   |
| 2488.775000     | -53.4       | 15.7        | -37.7       | PASS   |
| 2489.425000     | -53.8       | 16.1        | -37.7       | PASS   |
| 2489.475000     | -54.0       | 16.3        | -37.7       | PASS   |
| 2488.875000     | -54.1       | 16.4        | -37.7       | PASS   |
| 2488.275000     | -54.2       | 16.5        | -37.7       | PASS   |
| 2486.025000     | -54.2       | 16.5        | -37.7       | PASS   |
| 2485.975000     | -54.2       | 16.5        | -37.7       | PASS   |
| 2488.225000     | -54.4       | 16.7        | -37.7       | PASS   |
| 2485.125000     | -54.5       | 16.8        | -37.7       | PASS   |
| 2485.075000     | -54.5       | 16.8        | -37.7       | PASS   |
| 2490.025000     | -54.6       | 16.9        | -37.7       | PASS   |
| 2492.225000     | -54.6       | 16.9        | -37.7       | PASS   |
| 2483.775000     | -54.8       | 17.1        | -37.7       | PASS   |
| 2492.175000     | -54.9       | 17.2        | -37.7       | PASS   |

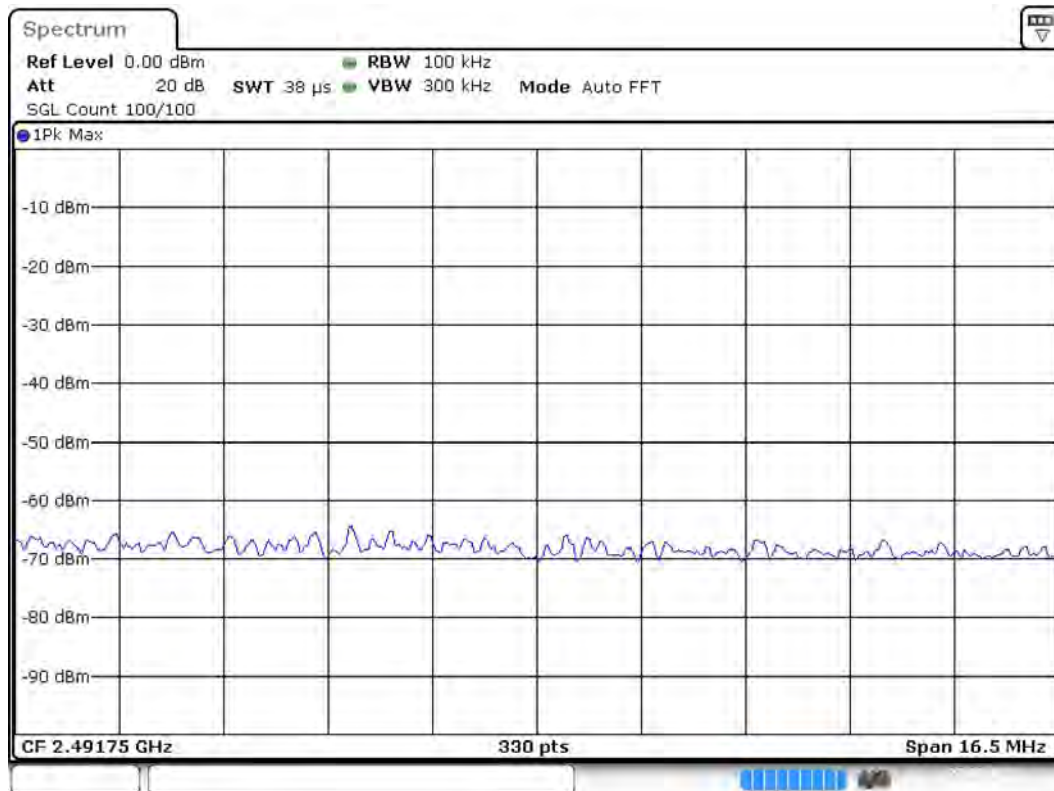


Band Edge Connector 1\_0



Date: 27.FEB.2023 13:55:17

Band Edge Connector 1\_1



Date: 27.FEB.2023 13:55:22

## 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      | $\leq 100.000$ kHz |
| VBW                   | 300.000 kHz      | $\geq 300.000$ kHz |
| SweepPoints           | 1670             | ~ 1670             |
| Sweptime              | 1.670 ms         | AUTO               |
| Reference Level       | 0.000 dBm        | 0.000 dBm          |
| Attenuation           | 20.000 dB        | AUTO               |
| Detector              | MaxPeak          | MaxPeak            |
| SweepCount            | 100              | 100                |
| 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                   | 1 / max. 1       | max. 1             |
| Stable                | 0 / 1            | 1                  |
| 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      | $\leq 100.000$ kHz |
| VBW             | 300.000 kHz      | $\geq 300.000$ kHz |

|                       |                |           |
|-----------------------|----------------|-----------|
| SweepPoints           | 330            | ~ 330     |
| SweepTime             | 37.969 $\mu$ s | AUTO      |
| Reference Level       | 0.000 dBm      | 0.000 dBm |
| Attenuation           | 20.000 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                   | 1 / max. 1     | max. 1    |
| Stable                | 0 / 1          | 1         |
| Max Stable Difference | 0.00 dB        | 0.50 dB   |

## Tx Spurious Emission (2452 MHz; 20.000 dBm; 20 MHz)

Customized settings.

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

### Result

| DUT Frequency (MHz) | Result |
|---------------------|--------|
| 2452.000000         | PASS   |

### Final measurements

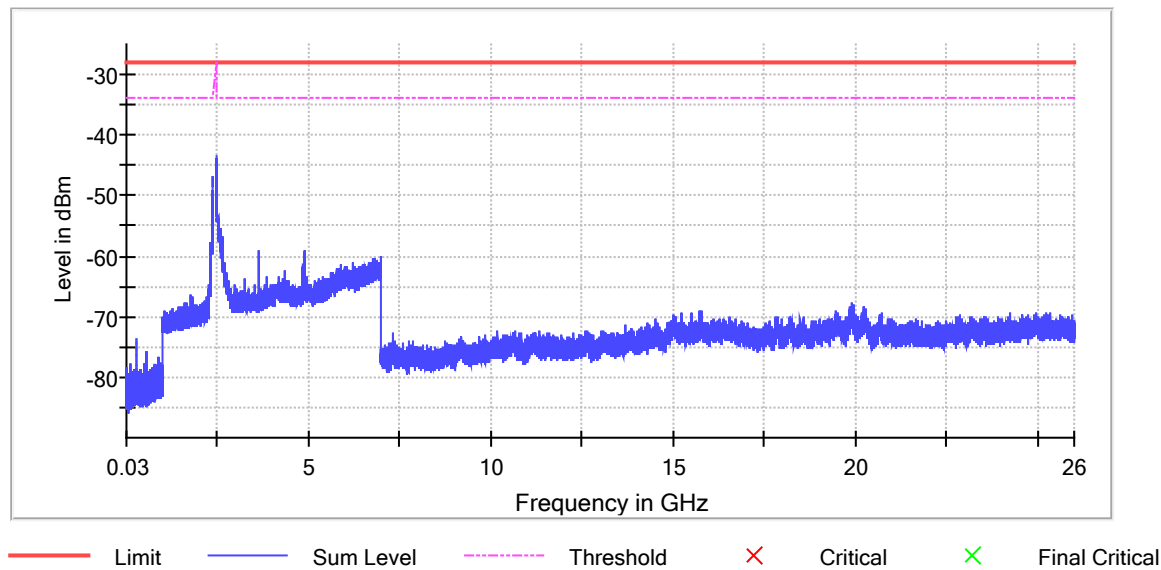
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|-----------------|-----------------------------|-------------|-------------|-------------|--------|
| ---             | ---                         | ---         | ---         | ---         | ---   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

### Pre Measurements

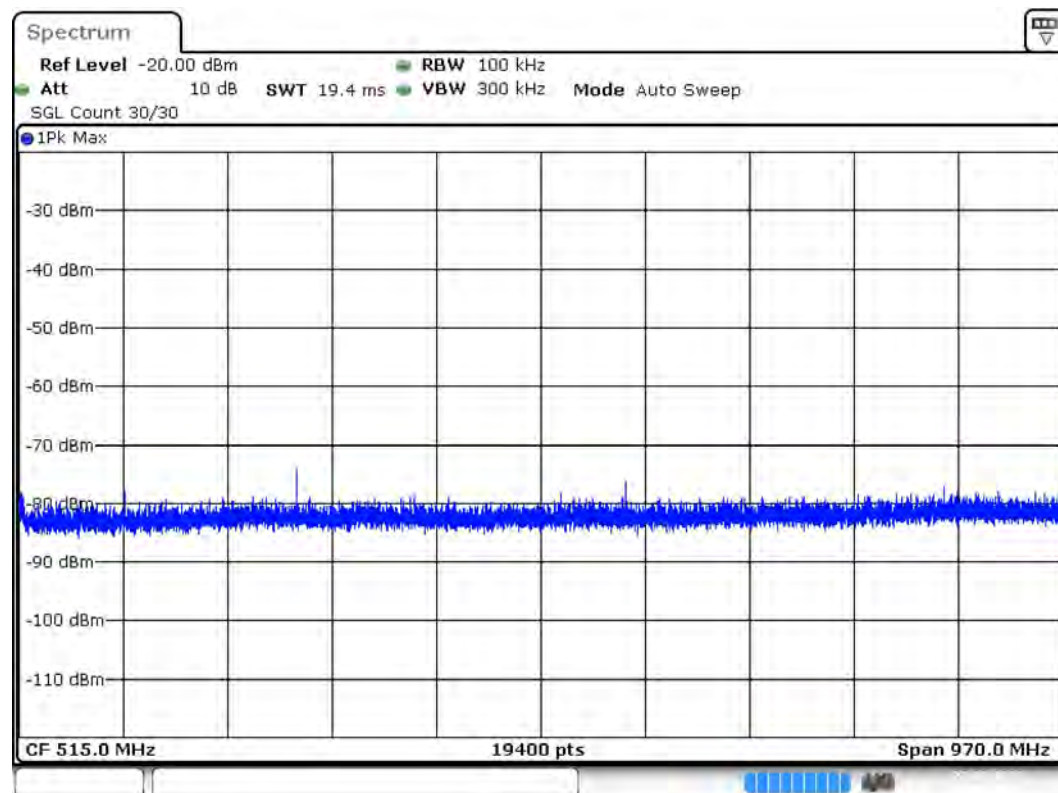
| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|-----------------|-------------|-------------|-------------|
| 2483.750000     | -43.7       | 15.6        | -28.0       |
| 2483.500000     | -43.7       | 15.6        | -28.0       |
| 2490.750000     | -43.8       | 15.7        | -28.0       |
| 2485.250000     | -44.5       | 16.4        | -28.0       |
| 2484.750000     | -44.7       | 16.7        | -28.0       |
| 2485.750000     | -44.9       | 16.9        | -28.0       |
| 2493.750000     | -44.9       | 16.9        | -28.0       |
| 2488.250000     | -45.0       | 17.0        | -28.0       |
| 2484.250000     | -45.0       | 17.0        | -28.0       |
| 2492.750000     | -45.1       | 17.1        | -28.0       |
| 2488.750000     | -45.2       | 17.2        | -28.0       |
| 2492.250000     | -45.2       | 17.2        | -28.0       |
| 2487.250000     | -45.3       | 17.2        | -28.0       |
| 2489.250000     | -45.3       | 17.3        | -28.0       |
| 2498.750000     | -45.3       | 17.3        | -28.0       |

### Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|-----------------------|----------------------|-----------------|-------------------|
| 30.000000             | 1000.000000          | 1               | 1                 |
| 1000.000000           | 2400.000000          | 2               | 2                 |
| 2483.500000           | 7000.000000          | 2               | 2                 |
| 7000.000000           | 18000.000000         | 2               | 2                 |
| 18000.000000          | 26000.000000         | 2               | 2                 |

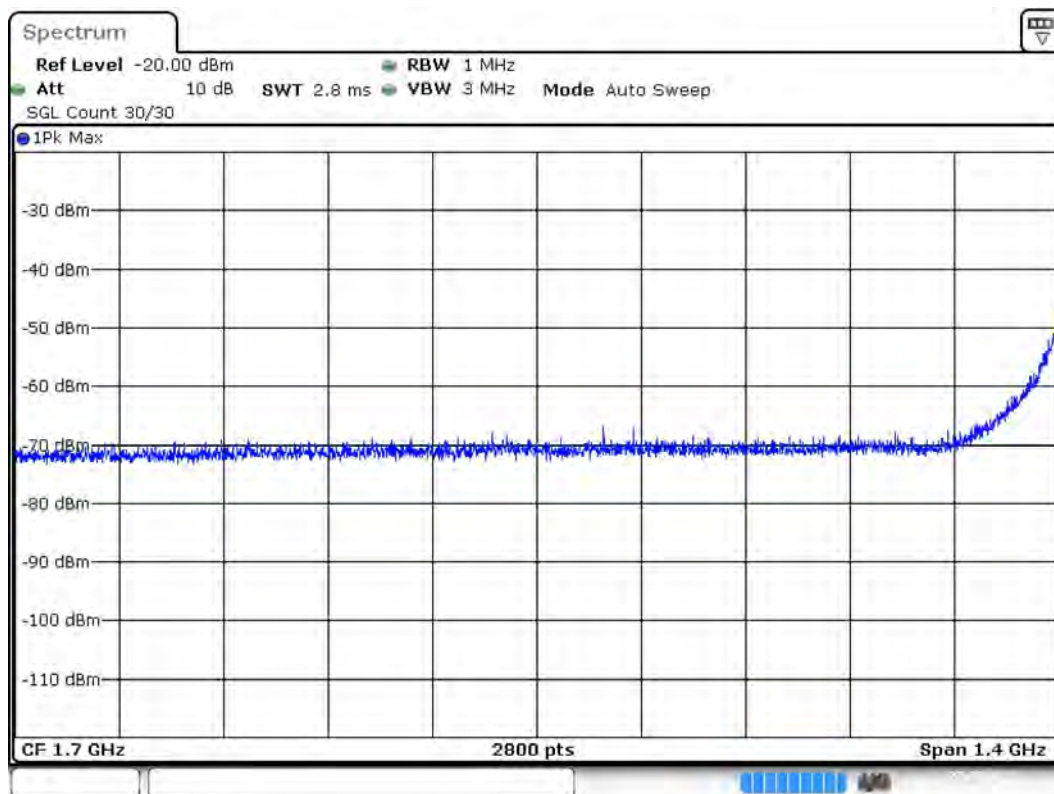


### Spurious Connector 1\_0



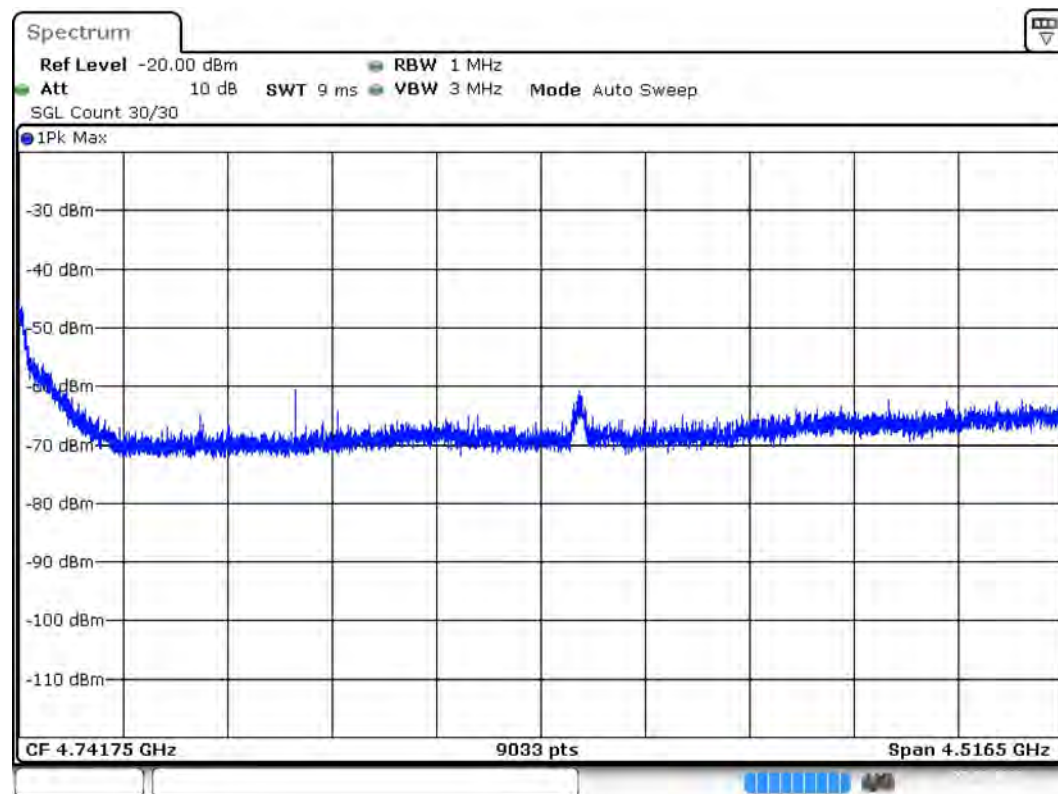
Date: 27.FEB.2023 13:57:48

### Spurious Connector 1\_1



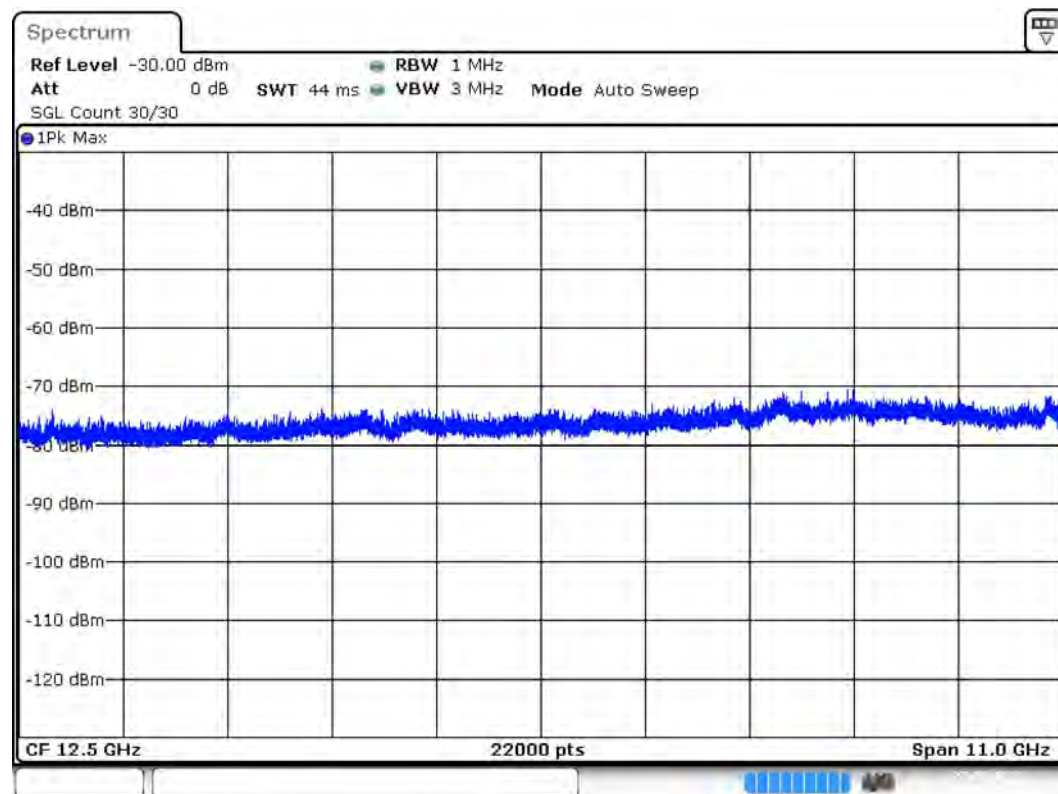
Date: 27.FEB.2023 13:58:16

Spurious Connector 1\_2



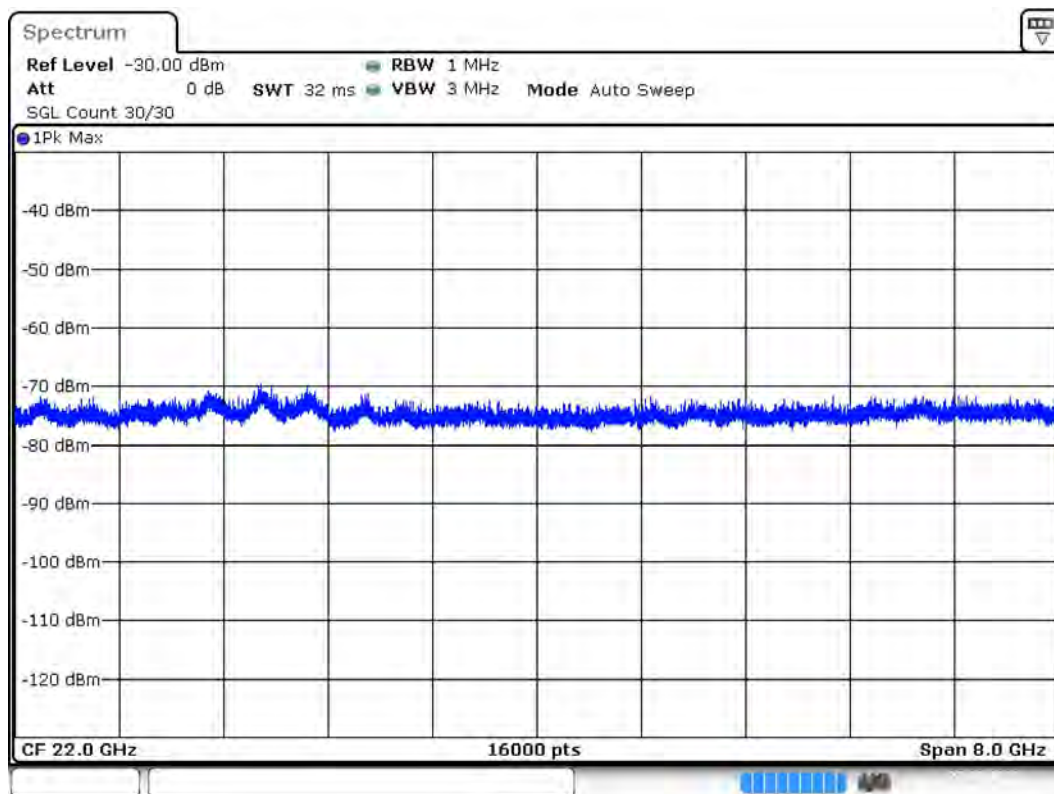
Date: 27.FEB.2023 13:59:16

Spurious Connector 1\_3



Date: 27.FEB.2023 14:00:08

Spurious Connector 1\_4



Date: 27.FEB.2023 14:00:41

## Pre Measurement 1

| Setting               | Instrument Value | Target Value   |
|-----------------------|------------------|----------------|
| RBW                   | 100.000 kHz      | <= 100.000 kHz |
| VBW                   | 300.000 kHz      | >= 300.000 kHz |
| SweepPoints           | 19400            | ~ 19400        |
| SweepTime             | 19.400 ms        | AUTO           |
| Reference Level       | -20.000 dBm      | -30.000 dBm    |
| Attenuation           | 10.000 dB        | AUTO           |
| Detector              | MaxPeak          | MaxPeak        |
| SweepCount            | 30               | 30             |
| 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. 150     | max. 150       |
| Stable                | 3 / 3            | 3              |
| Max Stable Difference | 0.00 dB          | 0.50 dB        |

## Pre Measurement 2

| Setting         | Instrument Value | Target Value |
|-----------------|------------------|--------------|
| RBW             | 1.000 MHz        | <= 1.000 MHz |
| VBW             | 3.000 MHz        | >= 3.000 MHz |
| SweepPoints     | 2800             | ~ 2800       |
| SweepTime       | 2.800 ms         | AUTO         |
| Reference Level | -20.000 dBm      | -30.000 dBm  |
| Attenuation     | 10.000 dB        | AUTO         |
| Detector        | MaxPeak          | MaxPeak      |
| SweepCount      | 30               | 30           |

|                              |                      |                 |
|------------------------------|----------------------|-----------------|
| <b>Filter</b>                | <b>3 dB</b>          | <b>3 dB</b>     |
| <b>Trace Mode</b>            | <b>Max Hold</b>      | <b>Max Hold</b> |
| <b>Sweep type</b>            | <b>Sweep</b>         | <b>AUTO</b>     |
| <b>Preamp</b>                | <b>off</b>           | <b>off</b>      |
| <b>Stable mode</b>           | <b>Trace</b>         | <b>Trace</b>    |
| <b>Stable value</b>          | <b>0.50 dB</b>       | <b>0.50 dB</b>  |
| <b>Run</b>                   | <b>13 / max. 150</b> | <b>max. 150</b> |
| <b>Stable</b>                | <b>3 / 3</b>         | <b>3</b>        |
| <b>Max Stable Difference</b> | <b>0.22 dB</b>       | <b>0.50 dB</b>  |