# UNII-1 Ant0 A mode
# Power Spectral Density (5180 MHz; 21.8905 MHz)

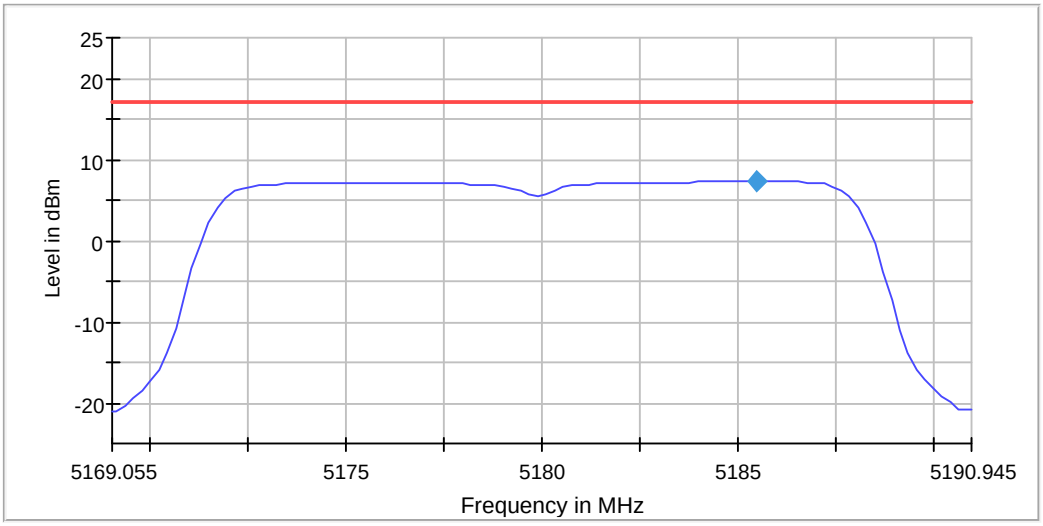
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5180.000000 | 5185.472625 | 7.292 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 96.341 |




## Measurement

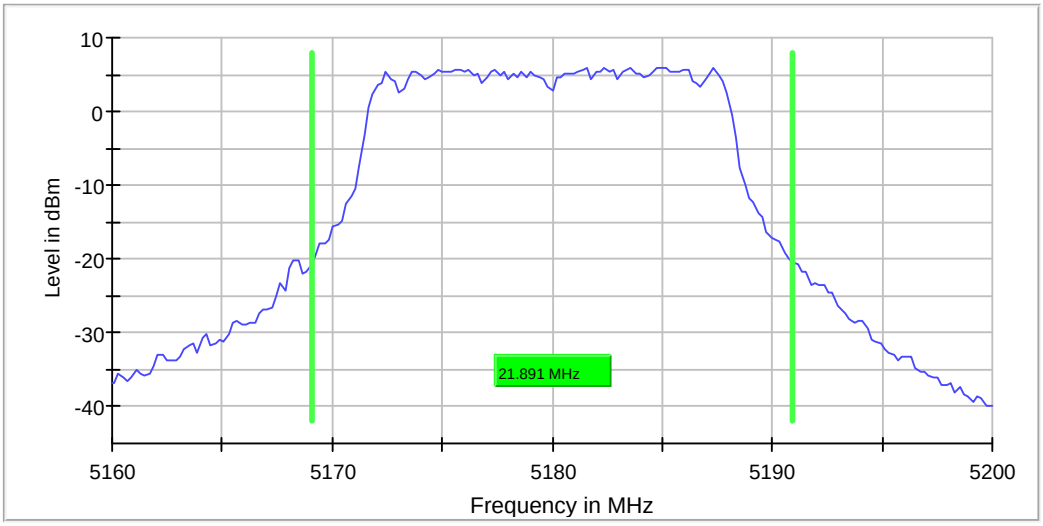
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.16905 GHz | 5.16905 GHz |
| Stop Frequency | 5.19095 GHz | 5.19095 GHz |
| Span | 21.891 MHz | 21.891 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 44 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -10.000 dBm | -20.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5180 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5180.000000 | 21.890548 | --- | --- | 5169.054726 | 5190.945274 | 5.9 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.16000 GHz | 5.16000 GHz |
| Stop Frequency | 5.20000 GHz | 5.20000 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | ~ 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 28.443 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 33 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge low (5180 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

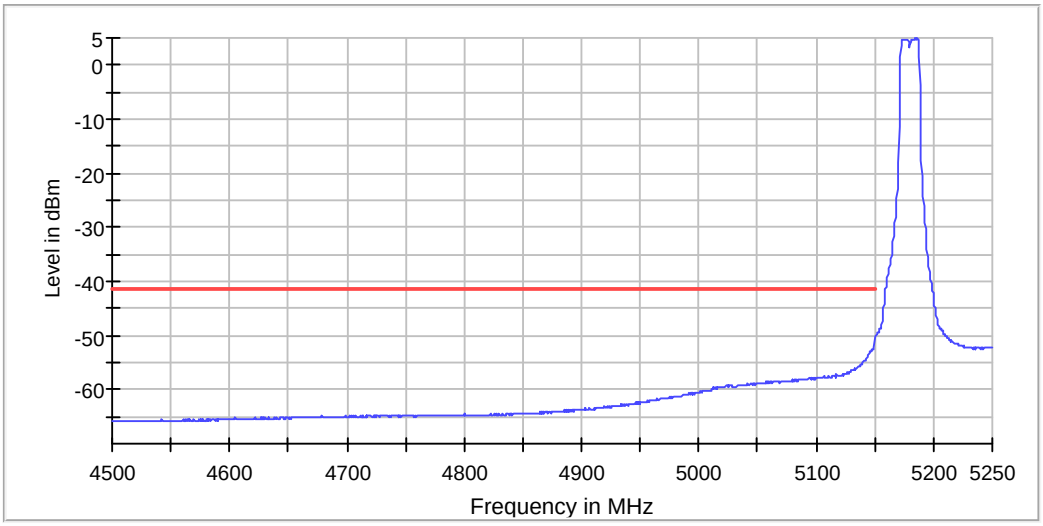
| DUT Frequency (MHz) | Result |
|---|---|
| 5180.000000 | PASS |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5185.572139 | 4.9 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5149.250576 | -52.1 | 10.9 | -41.2 | PASS |
| 5148.750961 | -52.2 | 11.0 | -41.2 | PASS |
| 5148.251345 | -52.4 | 11.2 | -41.2 | PASS |
| 5147.751729 | -52.6 | 11.3 | -41.2 | PASS |
| 5147.252114 | -52.7 | 11.5 | -41.2 | PASS |
| 5146.752498 | -52.9 | 11.7 | -41.2 | PASS |
| 5146.252882 | -53.0 | 11.7 | -41.2 | PASS |
| 5145.753267 | -53.3 | 12.1 | -41.2 | PASS |
| 5145.253651 | -53.4 | 12.2 | -41.2 | PASS |
| 5144.754035 | -53.4 | 12.2 | -41.2 | PASS |
| 5144.254420 | -53.9 | 12.6 | -41.2 | PASS |
| 5143.255188 | -53.9 | 12.7 | -41.2 | PASS |
| 5143.754804 | -53.9 | 12.7 | -41.2 | PASS |
| 5142.755573 | -54.2 | 13.0 | -41.2 | PASS |
| 5142.255957 | -54.3 | 13.1 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 1300 | ~ 1300 |
| Sweeptime | 1.300 s | 1.300 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5180 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5180.000000 | PASS |

## Final measurements

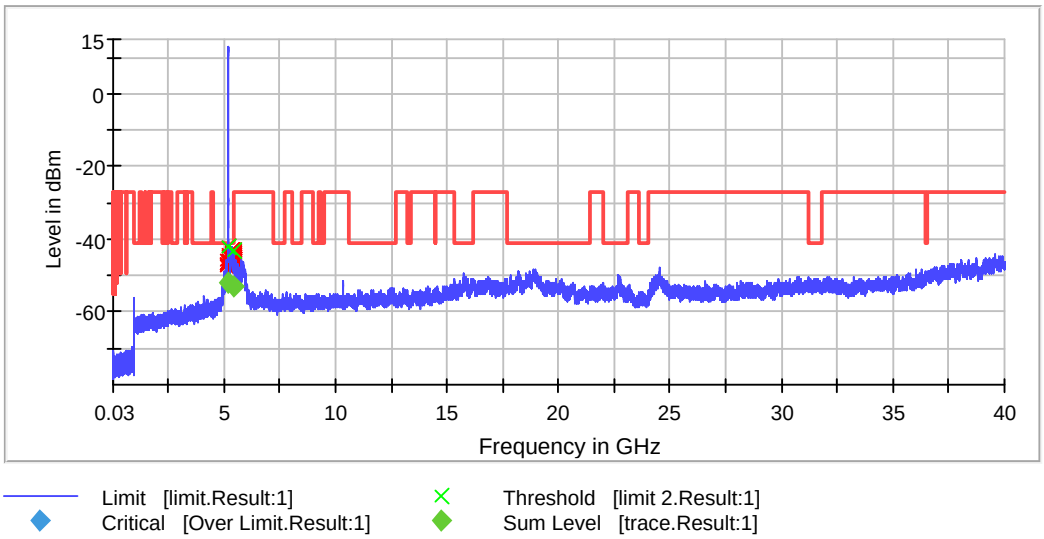
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5148.500361 | -42.0 | -52.2 | -41.2 | 11.0 | PASS |
| 5407.024793 | -43.1 | -53.2 | -41.2 | 12.0 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5148.500361 | -42.0 | 0.8 | -41.2 |
| 5407.024793 | -43.1 | 1.9 | -41.2 |
| 5380.247934 | -43.1 | 1.9 | -41.2 |
| 5351.487603 | -43.1 | 1.9 | -41.2 |
| 5357.438017 | -43.2 | 1.9 | -41.2 |
| 5365.371901 | -43.4 | 2.1 | -41.2 |
| 5366.363636 | -43.4 | 2.2 | -41.2 |
| 5352.479339 | -43.5 | 2.2 | -41.2 |
| 5390.165289 | -43.5 | 2.2 | -41.2 |
| 5381.239669 | -43.5 | 2.3 | -41.2 |
| 5408.016529 | -43.7 | 2.5 | -41.2 |
| 5399.090909 | -43.8 | 2.5 | -41.2 |
| 5369.338843 | -43.8 | 2.6 | -41.2 |
| 5368.347107 | -43.8 | 2.6 | -41.2 |
| 5383.223140 | -43.9 | 2.7 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# Power Spectral Density (5200 MHz; 22.4876 MHz)

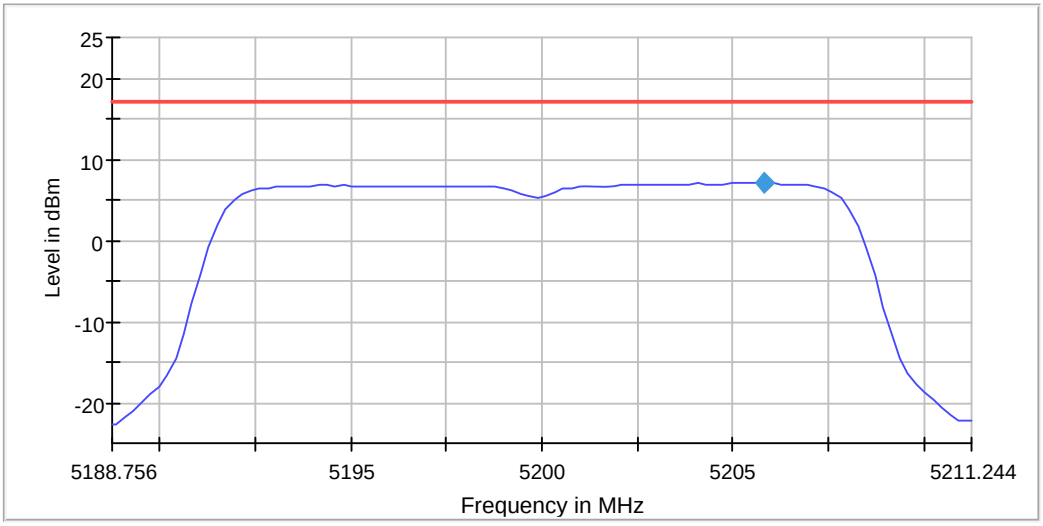
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5200.000000 | 5205.842367 | 7.016 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 96.301 |




## Measurement

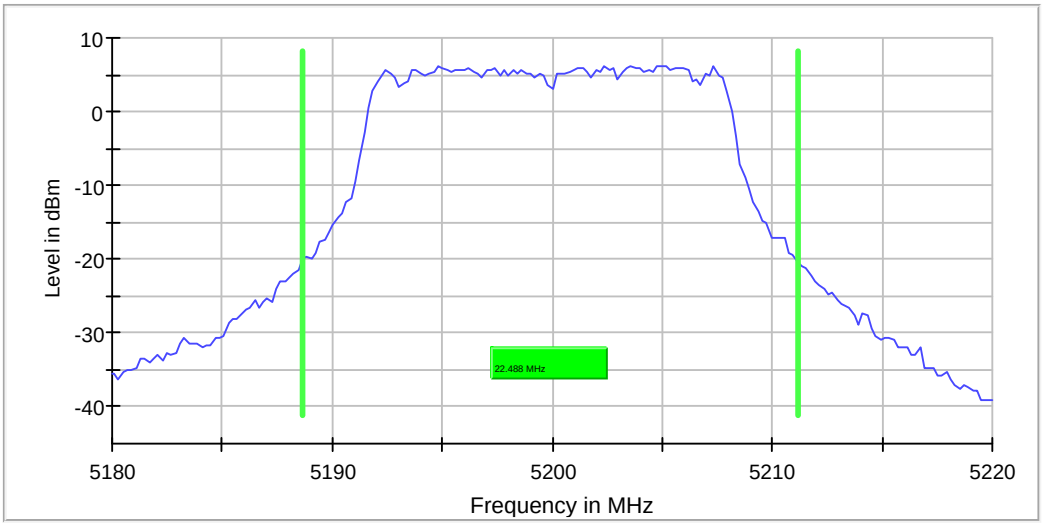
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.18876 GHz | 5.18876 GHz |
| Stop Frequency | 5.21124 GHz | 5.21124 GHz |
| Span | 22.488 MHz | 22.488 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 45 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -10.000 dBm | -20.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5200 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5200.000000 | 22.487563 | --- | --- | 5188.656716 | 5211.144279 | 6.2 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.18000 GHz | 5.18000 GHz |
| Stop Frequency | 5.22000 GHz | 5.22000 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | ~ 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 28.443 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 60 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Tx Spurious Emission (5200 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5200.000000 | PASS |

## Final measurements

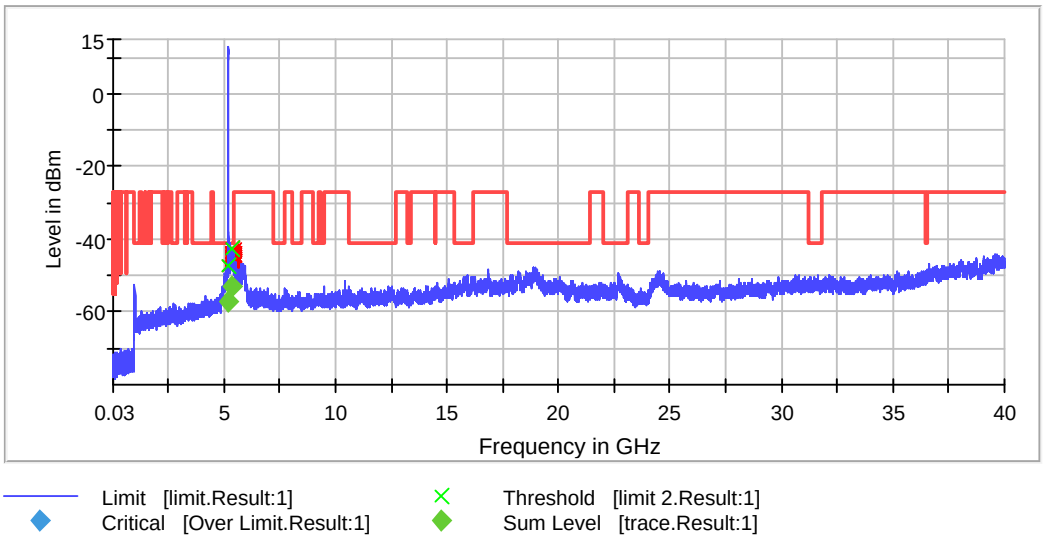
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5147.500602 | -47.2 | -57.0 | -41.2 | 15.7 | PASS |
| 5351.487603 | -42.4 | -52.8 | -41.2 | 11.6 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5351.487603 | -42.4 | 1.2 | -41.2 |
| 5365.371901 | -42.9 | 1.6 | -41.2 |
| 5406.033058 | -43.3 | 2.1 | -41.2 |
| 5370.330579 | -43.5 | 2.3 | -41.2 |
| 5362.396694 | -43.6 | 2.4 | -41.2 |
| 5379.256198 | -43.6 | 2.4 | -41.2 |
| 5388.181818 | -43.6 | 2.4 | -41.2 |
| 5380.247934 | -43.7 | 2.5 | -41.2 |
| 5350.495868 | -43.8 | 2.5 | -41.2 |
| 5350.000000 | -43.8 | 2.5 | -41.2 |
| 5358.429752 | -43.8 | 2.6 | -41.2 |
| 5352.479339 | -43.8 | 2.6 | -41.2 |
| 5399.090909 | -44.0 | 2.8 | -41.2 |
| 5387.190083 | -44.0 | 2.8 | -41.2 |
| 5400.082645 | -44.1 | 2.8 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# Power Spectral Density (5240 MHz; 23.0846 MHz)

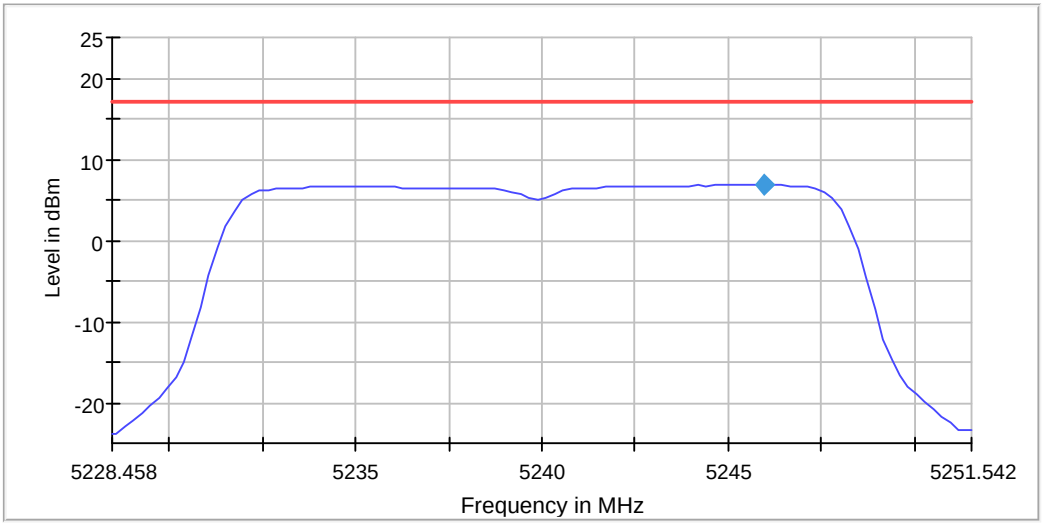
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5240.000000 | 5245.997470 | 6.851 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 95.838 |




## Measurement

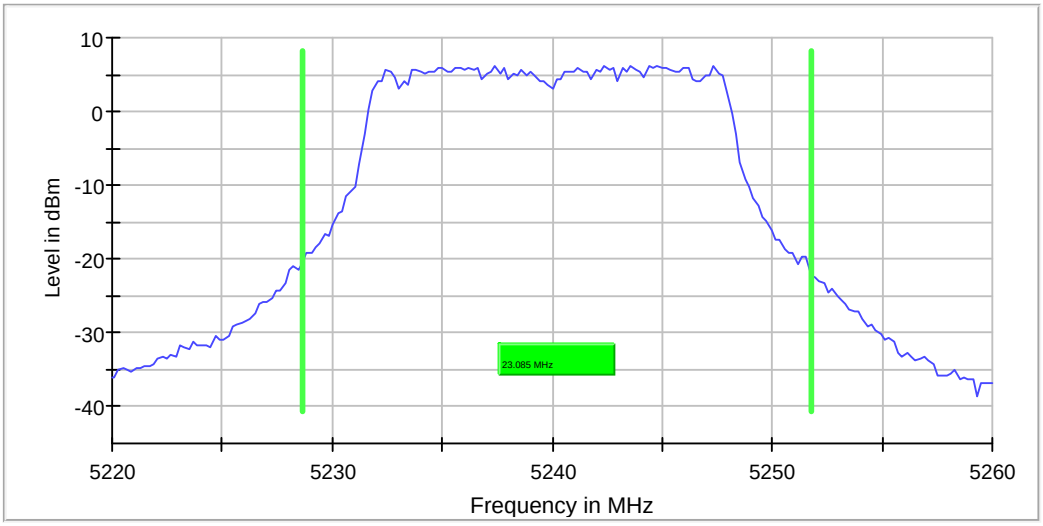
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.22846 GHz | 5.22846 GHz |
| Stop Frequency | 5.25154 GHz | 5.25154 GHz |
| Span | 23.085 MHz | 23.085 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 46 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -10.000 dBm | -20.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5240 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5240.000000 | 23.084578 | --- | --- | 5228.656716 | 5251.741294 | 6.1 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.22000 GHz | 5.22000 GHz |
| Stop Frequency | 5.26000 GHz | 5.26000 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | ~ 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 28.443 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 62 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge high (5240 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

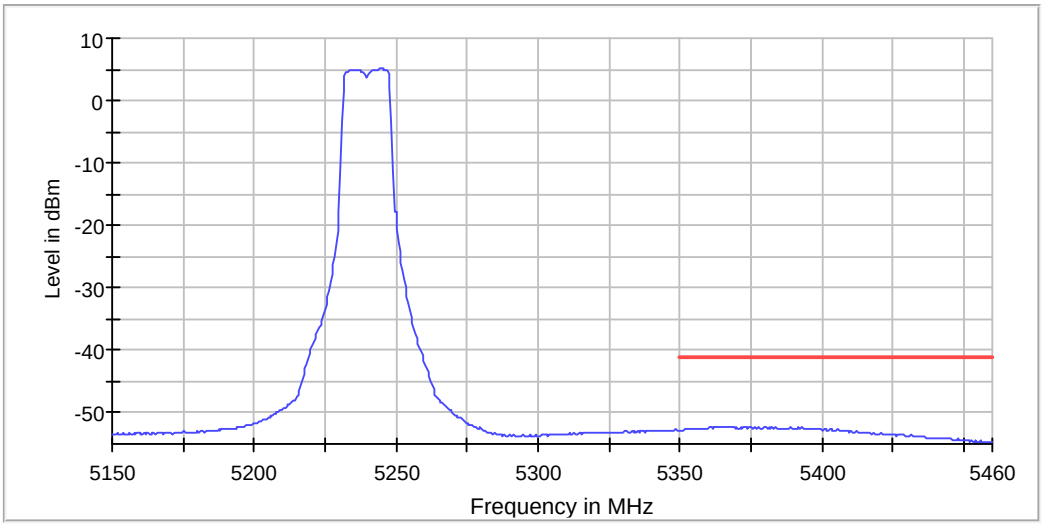
| DUT Frequency (MHz) | Result |
|---|---|
| 5240.000000 | PASS |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5245.273632 | 5.1 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5362.980998 | -52.2 | 10.9 | -41.2 | PASS |
| 5377.945368 | -52.3 | 11.0 | -41.2 | PASS |
| 5364.976247 | -52.3 | 11.1 | -41.2 | PASS |
| 5364.477435 | -52.3 | 11.1 | -41.2 | PASS |
| 5377.446556 | -52.3 | 11.1 | -41.2 | PASS |
| 5365.973872 | -52.3 | 11.1 | -41.2 | PASS |
| 5367.470309 | -52.3 | 11.1 | -41.2 | PASS |
| 5383.432304 | -52.3 | 11.1 | -41.2 | PASS |
| 5366.472684 | -52.3 | 11.1 | -41.2 | PASS |
| 5361.983373 | -52.4 | 11.1 | -41.2 | PASS |
| 5373.456057 | -52.4 | 11.1 | -41.2 | PASS |
| 5383.931116 | -52.4 | 11.1 | -41.2 | PASS |
| 5391.912114 | -52.4 | 11.1 | -41.2 | PASS |
| 5382.434679 | -52.4 | 11.1 | -41.2 | PASS |
| 5374.453682 | -52.4 | 11.2 | -41.2 | PASS |




## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 420 | ~ 420 |
| Sweeptime | 420.000 ms | 420.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5240 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5240.000000 | PASS |

## Final measurements

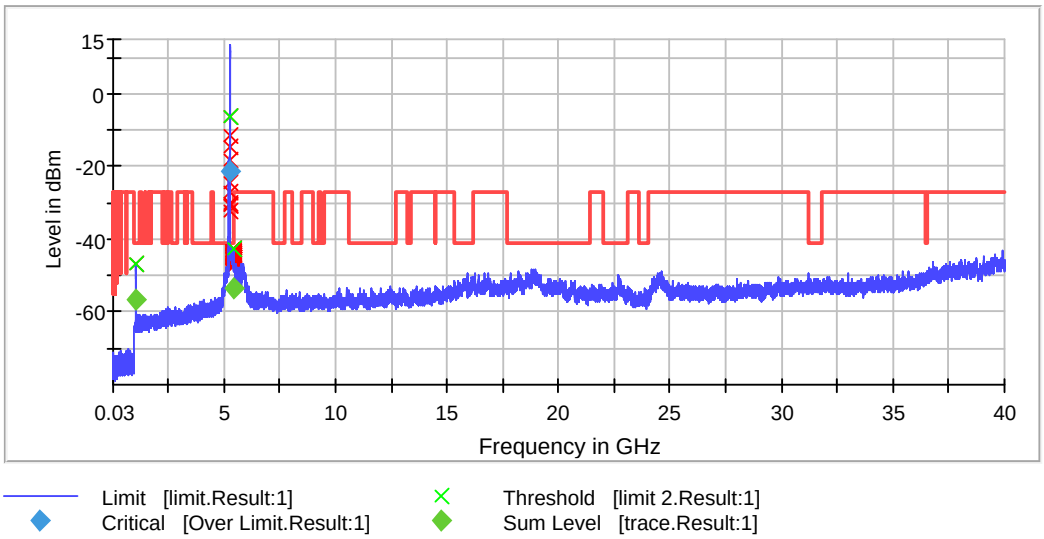
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 1035.491448 | -46.7 | -56.6 | -41.2 | 15.4 | PASS |
| 5425.867769 | -42.8 | -53.4 | -41.2 | 12.2 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5425.867769 | -42.8 | 1.6 | -41.2 |
| 5375.289256 | -42.9 | 1.7 | -41.2 |
| 5384.214876 | -43.1 | 1.9 | -41.2 |
| 5367.355372 | -43.1 | 1.9 | -41.2 |
| 5424.876033 | -43.3 | 2.0 | -41.2 |
| 5385.206612 | -43.3 | 2.0 | -41.2 |
| 5361.404959 | -43.3 | 2.1 | -41.2 |
| 5366.363636 | -43.4 | 2.1 | -41.2 |
| 5365.371901 | -43.4 | 2.2 | -41.2 |
| 5350.000000 | -43.4 | 2.2 | -41.2 |
| 5414.958678 | -43.5 | 2.2 | -41.2 |
| 5388.181818 | -43.6 | 2.4 | -41.2 |
| 5392.148760 | -43.7 | 2.5 | -41.2 |
| 5374.297521 | -43.8 | 2.6 | -41.2 |
| 5399.090909 | -43.9 | 2.7 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# UNII-1 Ant0 AC mode 20
# Power Spectral Density (5180 MHz; 22.8856 MHz)

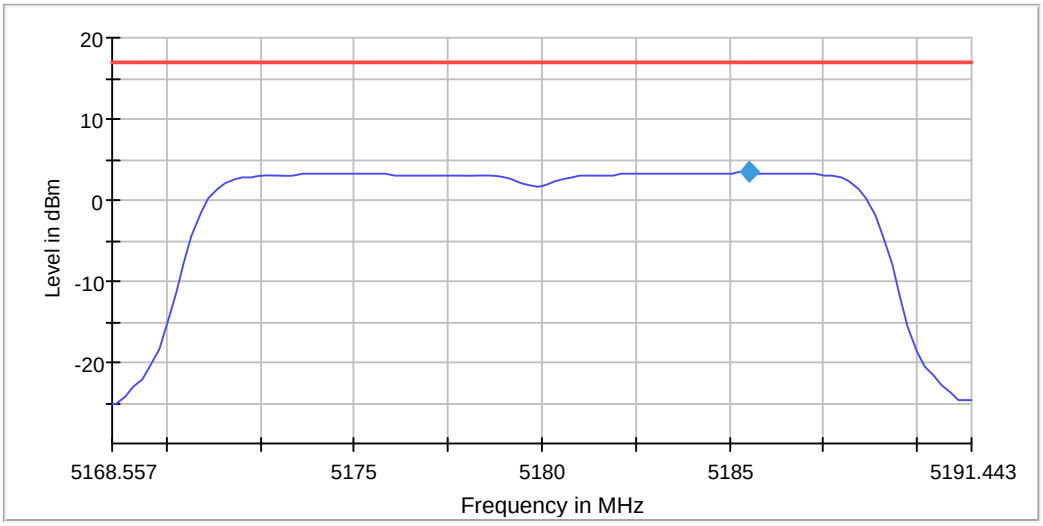
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5180.000000 | 5185.497031 | 3.399 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 95.205 |




## Measurement

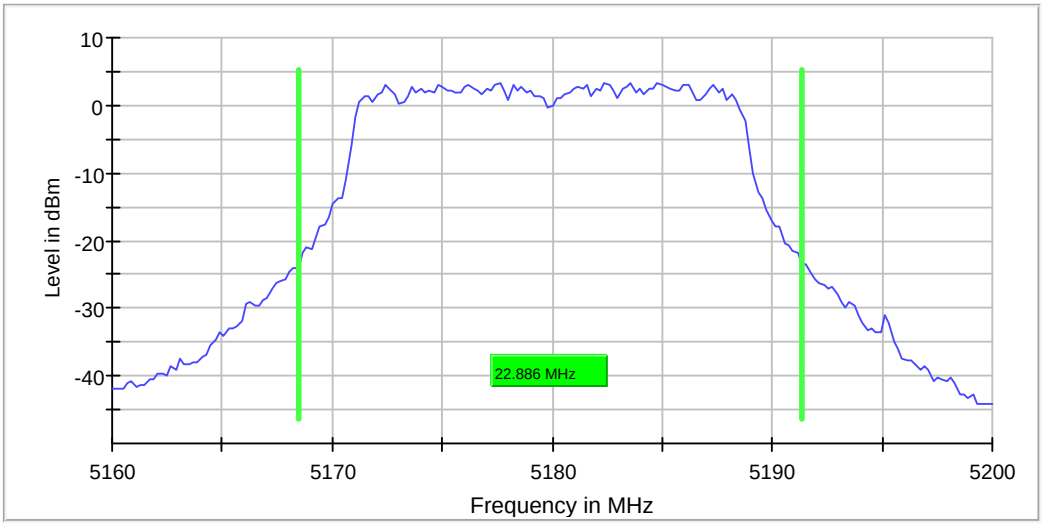
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.16856 GHz | 5.16856 GHz |
| Stop Frequency | 5.19144 GHz | 5.19144 GHz |
| Span | 22.886 MHz | 22.886 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 46 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5180 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5180.000000 | 22.885573 | --- | --- | 5168.457711 | 5191.343284 | 3.3 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.16000 GHz | 5.16000 GHz |
| Stop Frequency | 5.20000 GHz | 5.20000 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | ~ 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 28.443 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 45 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge low (5180 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

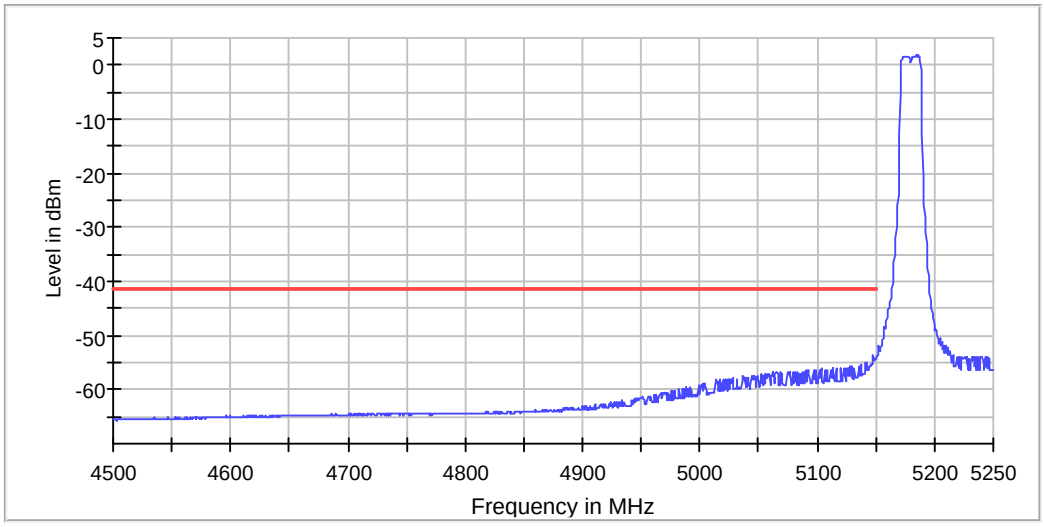
| DUT Frequency (MHz) | Result |
|---|---|
| 5180.000000 | PASS |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5184.577114 | 1.8 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5147.252114 | -53.5 | 12.3 | -41.2 | PASS |
| 5147.751729 | -53.6 | 12.4 | -41.2 | PASS |
| 5149.250576 | -54.4 | 13.2 | -41.2 | PASS |
| 5148.750961 | -54.5 | 13.2 | -41.2 | PASS |
| 5148.251345 | -54.6 | 13.4 | -41.2 | PASS |
| 5141.756341 | -54.8 | 13.6 | -41.2 | PASS |
| 5141.256726 | -54.9 | 13.7 | -41.2 | PASS |
| 5146.752498 | -55.3 | 14.1 | -41.2 | PASS |
| 5137.259800 | -55.4 | 14.2 | -41.2 | PASS |
| 5146.252882 | -55.5 | 14.3 | -41.2 | PASS |
| 5129.265949 | -55.5 | 14.3 | -41.2 | PASS |
| 5135.261337 | -55.6 | 14.3 | -41.2 | PASS |
| 5145.753267 | -55.6 | 14.4 | -41.2 | PASS |
| 5144.754035 | -55.7 | 14.5 | -41.2 | PASS |
| 5135.760953 | -55.7 | 14.5 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 1300 | ~ 1300 |
| Sweeptime | 1.300 s | 1.300 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5180 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5180.000000 | PASS |

## Final measurements

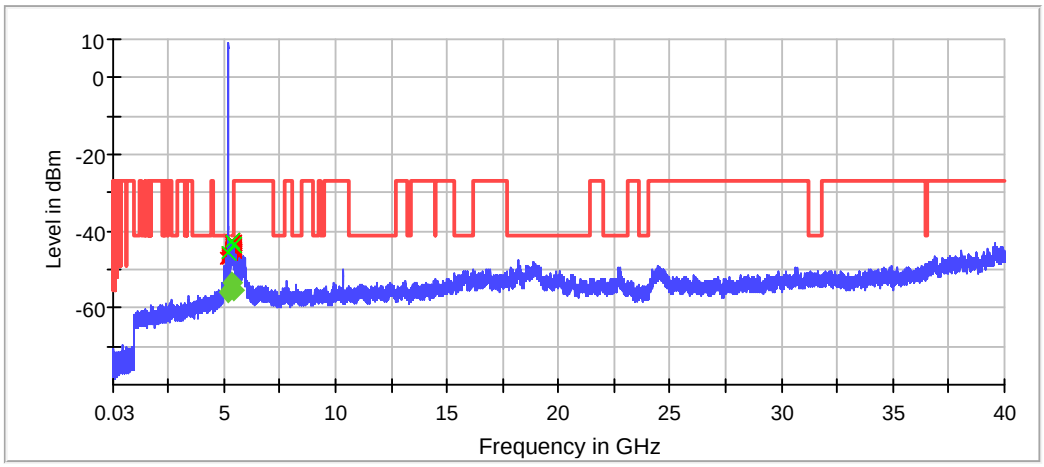
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5146.500843 | -45.6 | -55.7 | -41.2 | 14.4 | PASS |
| 5361.404959 | -42.6 | -53.6 | -41.2 | 12.4 | PASS |
| 5446.694215 | -43.6 | -55.6 | -41.2 | 14.4 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5361.404959 | -42.6 | 1.4 | -41.2 |
| 5362.396694 | -42.7 | 1.5 | -41.2 |
| 5354.462810 | -42.8 | 1.6 | -41.2 |
| 5409.008264 | -43.1 | 1.9 | -41.2 |
| 5410.000000 | -43.1 | 1.9 | -41.2 |
| 5355.454545 | -43.2 | 1.9 | -41.2 |
| 5384.214876 | -43.2 | 2.0 | -41.2 |
| 5383.223140 | -43.6 | 2.4 | -41.2 |
| 5356.446281 | -43.6 | 2.4 | -41.2 |
| 5446.694215 | -43.6 | 2.4 | -41.2 |
| 5399.090909 | -43.9 | 2.7 | -41.2 |
| 5410.991736 | -44.0 | 2.7 | -41.2 |
| 5360.413223 | -44.2 | 2.9 | -41.2 |
| 5396.115702 | -44.2 | 3.0 | -41.2 |
| 5375.289256 | -44.3 | 3.1 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# Power Spectral Density (5200 MHz; 22.6866 MHz)

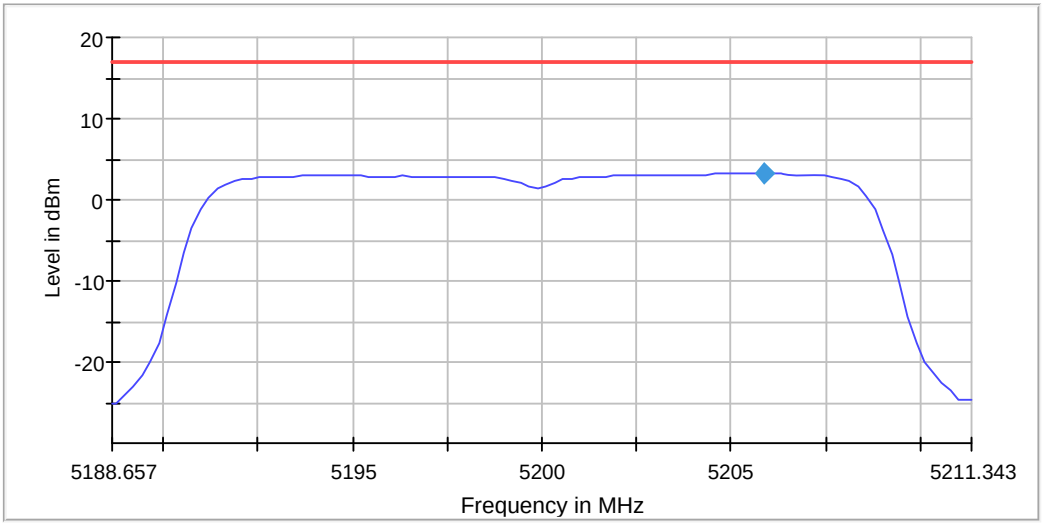
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5200.000000 | 5205.894068 | 3.239 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 95.109 |




## Measurement

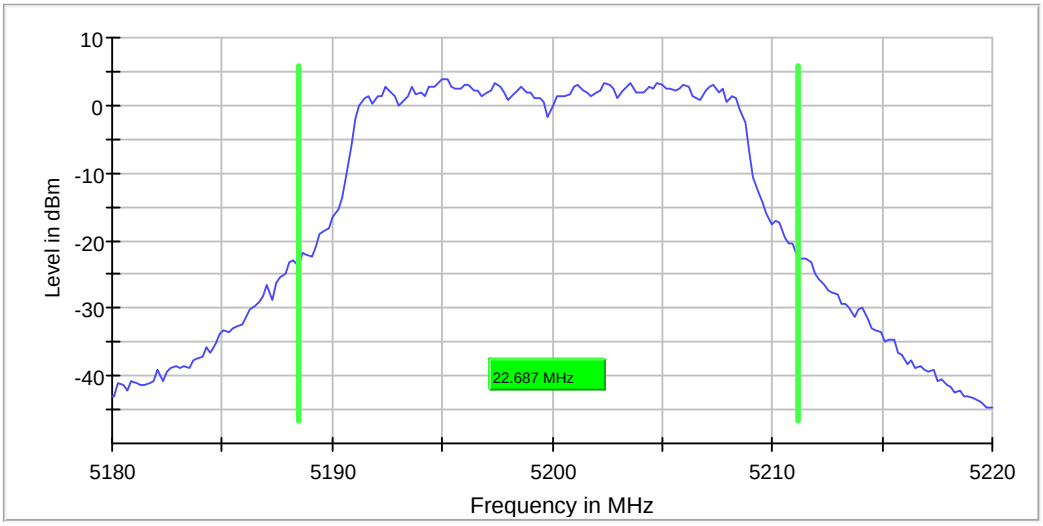
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.18866 GHz | 5.18866 GHz |
| Stop Frequency | 5.21134 GHz | 5.21134 GHz |
| Span | 22.687 MHz | 22.687 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 45 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5200 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5200.000000 | 22.686568 | --- | --- | 5188.457711 | 5211.144279 | 3.8 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.18000 GHz | 5.18000 GHz |
| Stop Frequency | 5.22000 GHz | 5.22000 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | ~ 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 28.443 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 28 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Tx Spurious Emission (5200 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5200.000000 | PASS |

## Final measurements

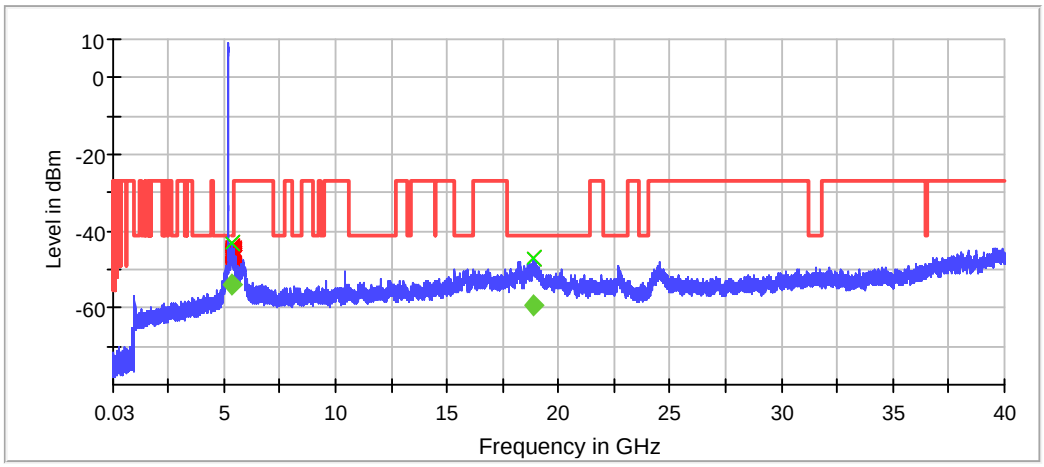
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5384.214876 | -43.3 | -53.8 | -41.2 | 12.6 | PASS |
| 18853.876112 | -47.2 | -59.1 | -41.2 | 17.9 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5384.214876 | -43.3 | 2.1 | -41.2 |
| 5378.264463 | -43.9 | 2.7 | -41.2 |
| 5362.396694 | -44.1 | 2.9 | -41.2 |
| 5374.297521 | -44.4 | 3.2 | -41.2 |
| 5373.305785 | -44.4 | 3.2 | -41.2 |
| 5408.016529 | -44.8 | 3.6 | -41.2 |
| 5377.272727 | -44.8 | 3.6 | -41.2 |
| 5357.438017 | -44.9 | 3.7 | -41.2 |
| 5353.471074 | -44.9 | 3.7 | -41.2 |
| 5390.165289 | -45.0 | 3.8 | -41.2 |
| 5409.008264 | -45.0 | 3.8 | -41.2 |
| 5420.909091 | -45.1 | 3.8 | -41.2 |
| 5393.140496 | -45.1 | 3.9 | -41.2 |
| 5356.446281 | -45.2 | 3.9 | -41.2 |
| 5419.917355 | -45.2 | 4.0 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# Power Spectral Density (5240 MHz; 22.8856 MHz)

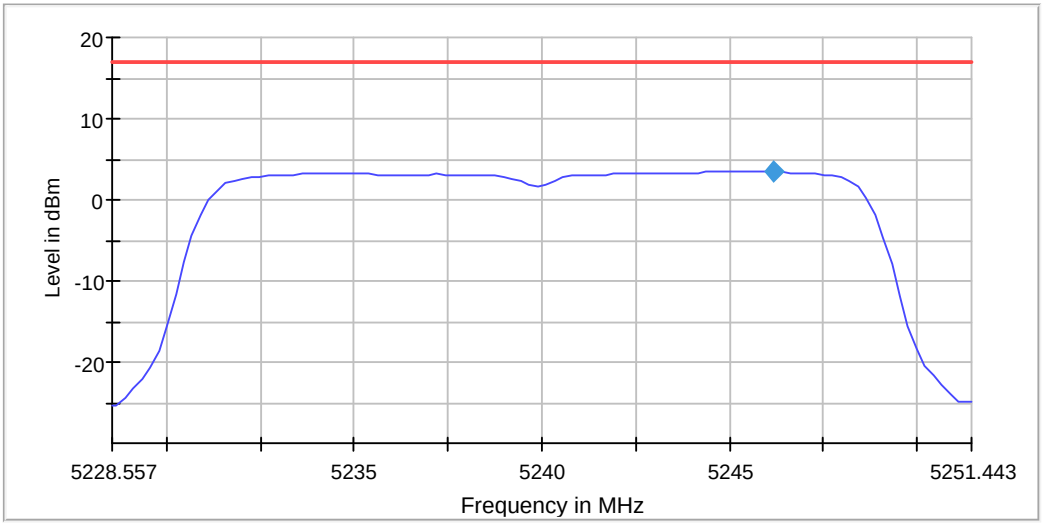
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5240.000000 | 5246.170137 | 3.452 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 95.200 |




## Measurement

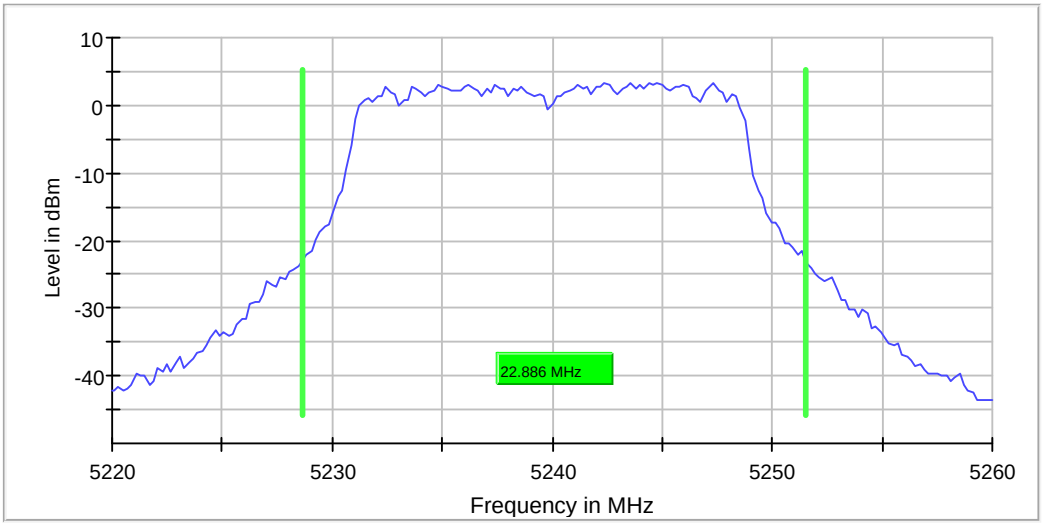
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.22856 GHz | 5.22856 GHz |
| Stop Frequency | 5.25144 GHz | 5.25144 GHz |
| Span | 22.886 MHz | 22.886 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 46 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5240 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5240.000000 | 22.885573 | --- | --- | 5228.656716 | 5251.542289 | 3.3 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.22000 GHz | 5.22000 GHz |
| Stop Frequency | 5.26000 GHz | 5.26000 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | ~ 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 28.443 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 51 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge high (5240 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

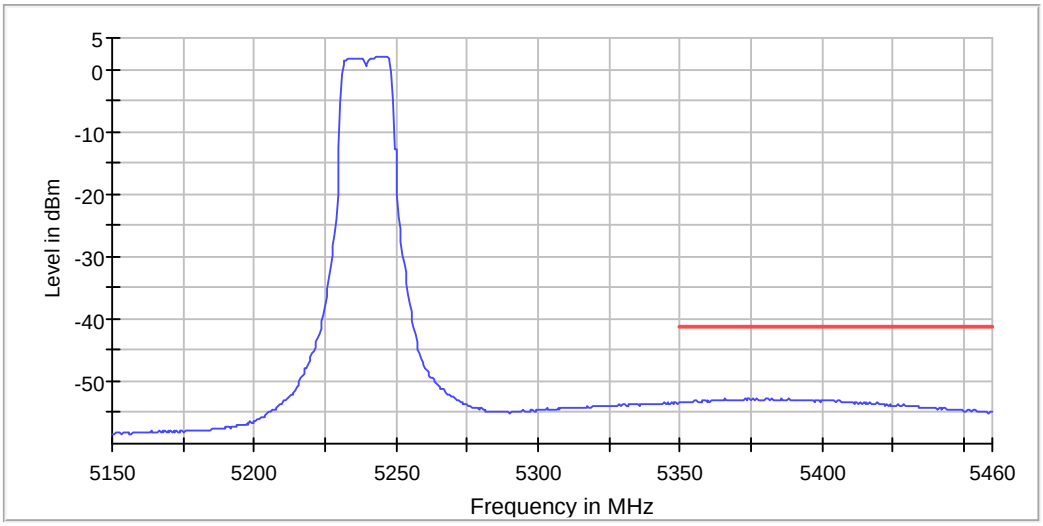
| DUT Frequency (MHz) | Result |
|---|---|
| 5240.000000 | PASS |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5245.273632 | 2.1 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5375.950119 | -52.8 | 11.6 | -41.2 | PASS |
| 5372.957245 | -52.9 | 11.6 | -41.2 | PASS |
| 5376.947743 | -52.9 | 11.6 | -41.2 | PASS |
| 5373.954869 | -52.9 | 11.6 | -41.2 | PASS |
| 5380.439430 | -52.9 | 11.6 | -41.2 | PASS |
| 5380.938242 | -52.9 | 11.6 | -41.2 | PASS |
| 5375.451306 | -52.9 | 11.6 | -41.2 | PASS |
| 5365.973872 | -52.9 | 11.7 | -41.2 | PASS |
| 5385.926366 | -52.9 | 11.7 | -41.2 | PASS |
| 5374.453682 | -52.9 | 11.7 | -41.2 | PASS |
| 5382.434679 | -52.9 | 11.7 | -41.2 | PASS |
| 5388.420428 | -52.9 | 11.7 | -41.2 | PASS |
| 5389.418052 | -52.9 | 11.7 | -41.2 | PASS |
| 5377.945368 | -52.9 | 11.7 | -41.2 | PASS |
| 5369.465558 | -52.9 | 11.7 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 420 | ~ 420 |
| Sweeptime | 420.000 ms | 420.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5240 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5240.000000 | PASS |

## Final measurements

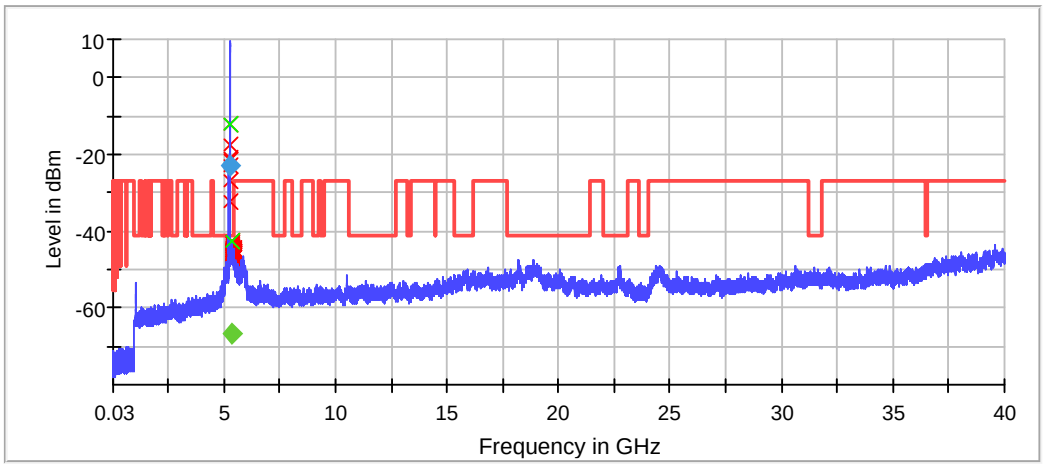
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5359.421488 | -42.4 | -66.5 | -41.2 | 25.3 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5359.421488 | -42.4 | 1.2 | -41.2 |
| 5360.413223 | -42.4 | 1.2 | -41.2 |
| 5377.272727 | -43.0 | 1.7 | -41.2 |
| 5378.264463 | -43.2 | 2.0 | -41.2 |
| 5386.198347 | -43.8 | 2.6 | -41.2 |
| 5351.487603 | -44.1 | 2.9 | -41.2 |
| 5382.231405 | -44.2 | 3.0 | -41.2 |
| 5408.016529 | -44.4 | 3.2 | -41.2 |
| 5350.495868 | -44.5 | 3.3 | -41.2 |
| 5350.000000 | -44.5 | 3.3 | -41.2 |
| 5407.024793 | -44.6 | 3.4 | -41.2 |
| 5409.008264 | -44.7 | 3.4 | -41.2 |
| 5381.239669 | -44.7 | 3.5 | -41.2 |
| 5385.206612 | -44.8 | 3.6 | -41.2 |
| 5388.181818 | -44.8 | 3.6 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# UNII-1 Ant0 AC mode 40
# Power Spectral Density (5190 MHz; 43.8806 MHz)

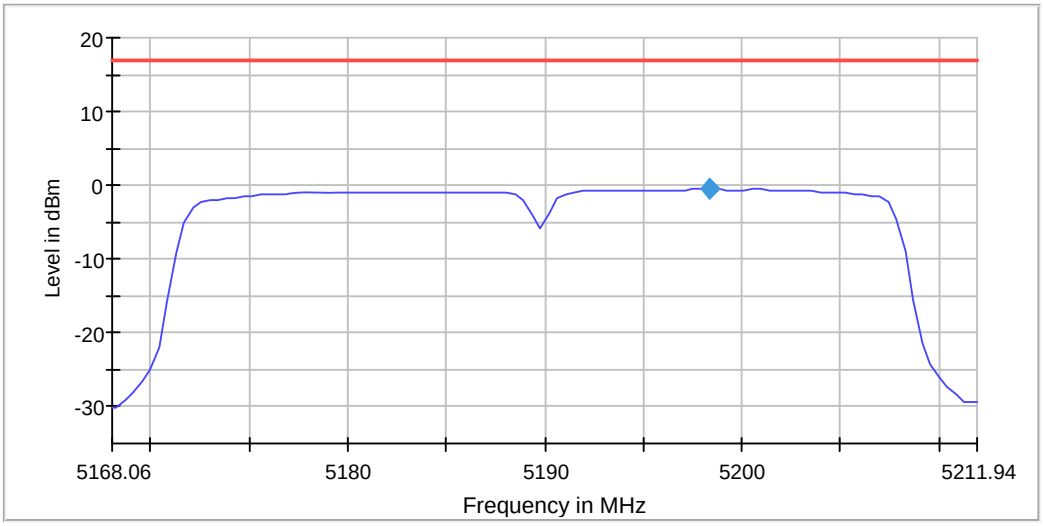
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5190.000000 | 5198.388938 | -0.545 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 92.918 |




## Measurement

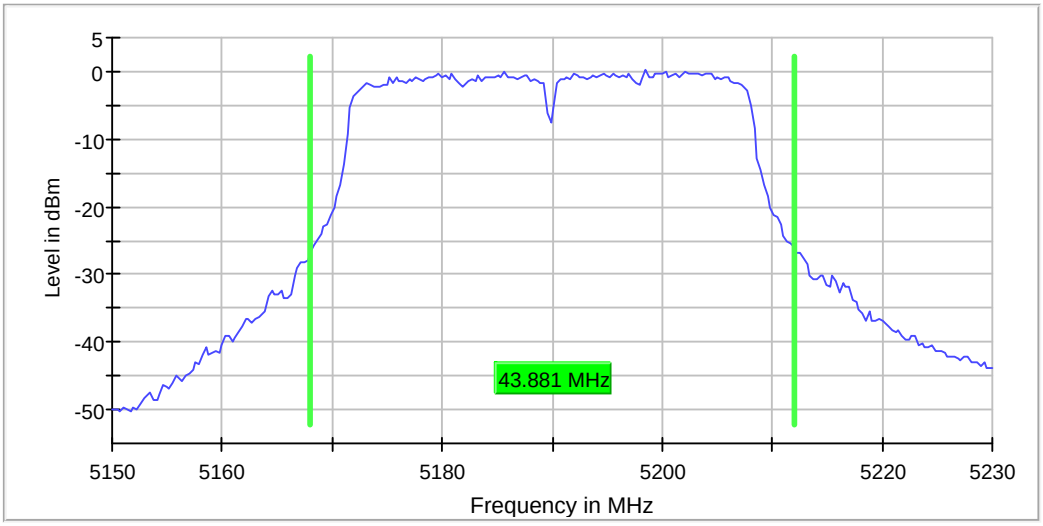
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.16806 GHz | 5.16806 GHz |
| Stop Frequency | 5.21194 GHz | 5.21194 GHz |
| Span | 43.881 MHz | 43.881 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 88 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5190 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5190.000000 | 43.880598 | --- | --- | 5168.059701 | 5211.940299 | 0.2 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.15000 GHz | 5.15000 GHz |
| Stop Frequency | 5.23000 GHz | 5.23000 GHz |
| Span | 80.000 MHz | 80.000 MHz |
| RBW | 300.000 kHz | ~ 400.000 kHz |
| VBW | 1.000 MHz | >= 900.000 kHz |
| SweepPoints | 267 | ~ 267 |
| Sweeptime | 31.603 µs | AUTO |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 70 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge low (5190 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

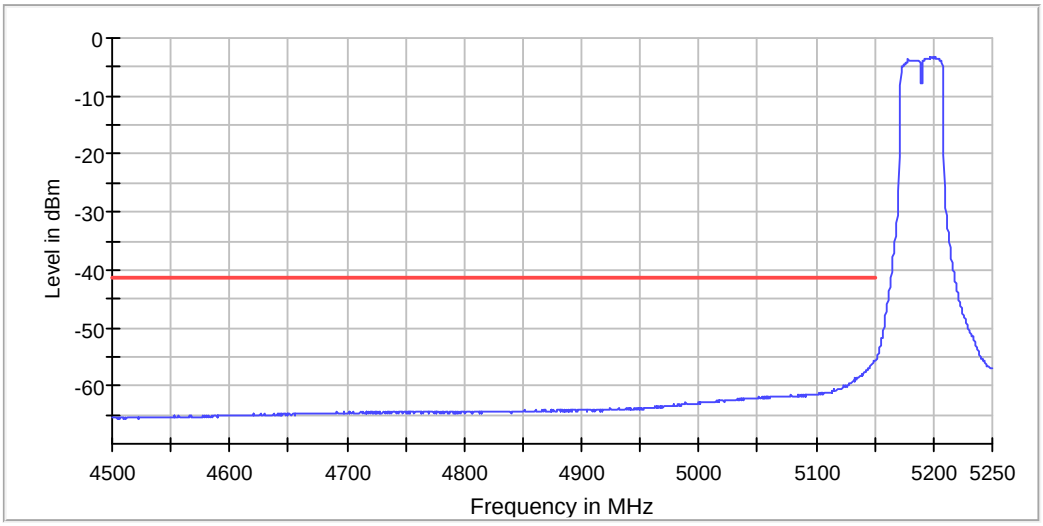
| DUT Frequency (MHz) | Result |
|---|---|
| 5190.000000 | PASS |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5198.009950 | -3.3 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5149.250576 | -55.8 | 14.5 | -41.2 | PASS |
| 5148.750961 | -56.0 | 14.8 | -41.2 | PASS |
| 5148.251345 | -56.0 | 14.8 | -41.2 | PASS |
| 5147.751729 | -56.3 | 15.1 | -41.2 | PASS |
| 5146.752498 | -56.4 | 15.2 | -41.2 | PASS |
| 5147.252114 | -56.5 | 15.2 | -41.2 | PASS |
| 5146.252882 | -56.7 | 15.4 | -41.2 | PASS |
| 5145.753267 | -56.8 | 15.5 | -41.2 | PASS |
| 5144.754035 | -56.9 | 15.7 | -41.2 | PASS |
| 5145.253651 | -56.9 | 15.7 | -41.2 | PASS |
| 5144.254420 | -57.1 | 15.9 | -41.2 | PASS |
| 5143.255188 | -57.2 | 16.0 | -41.2 | PASS |
| 5143.754804 | -57.3 | 16.0 | -41.2 | PASS |
| 5142.255957 | -57.4 | 16.2 | -41.2 | PASS |
| 5142.755573 | -57.4 | 16.2 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 1300 | ~ 1300 |
| Sweeptime | 1.300 s | 1.300 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5190 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5190.000000 | PASS |

## Final measurements

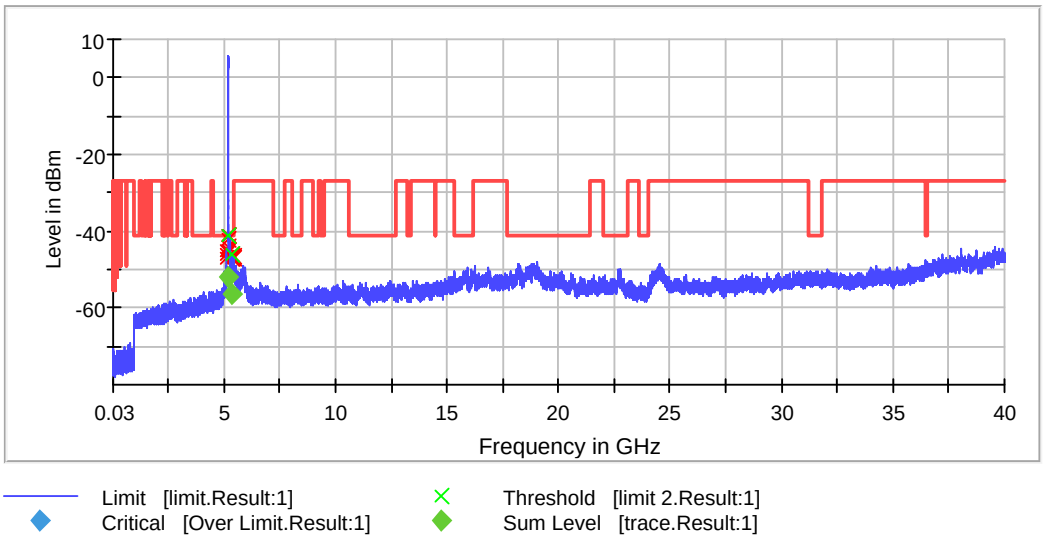
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5146.500843 | -41.2 | -52.0 | -41.2 | 10.8 | PASS |
| 5362.396694 | -46.3 | -56.5 | -41.2 | 15.3 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5146.500843 | -41.2 | 0.0 | -41.2 |
| 5145.501084 | -41.3 | 0.0 | -41.2 |
| 5148.500361 | -41.3 | 0.1 | -41.2 |
| 5147.500602 | -42.0 | 0.8 | -41.2 |
| 5144.501325 | -43.9 | 2.7 | -41.2 |
| 5142.501807 | -44.9 | 3.6 | -41.2 |
| 5143.501566 | -45.1 | 3.9 | -41.2 |
| 5141.502048 | -45.3 | 4.0 | -41.2 |
| 5138.502770 | -46.1 | 4.8 | -41.2 |
| 5362.396694 | -46.3 | 5.1 | -41.2 |
| 5407.024793 | -46.3 | 5.1 | -41.2 |
| 5361.404959 | -46.7 | 5.5 | -41.2 |
| 5140.502289 | -46.9 | 5.7 | -41.2 |
| 5387.190083 | -47.0 | 5.7 | -41.2 |
| 5386.198347 | -47.0 | 5.8 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# Power Spectral Density (5230 MHz; 43.2836 MHz)

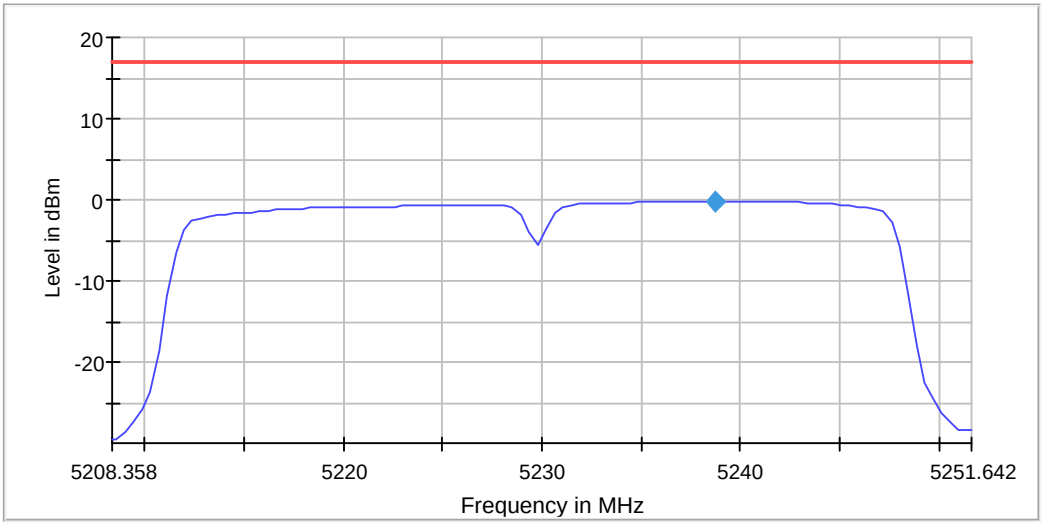
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5230.000000 | 5238.699155 | -0.180 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 92.964 |




## Measurement

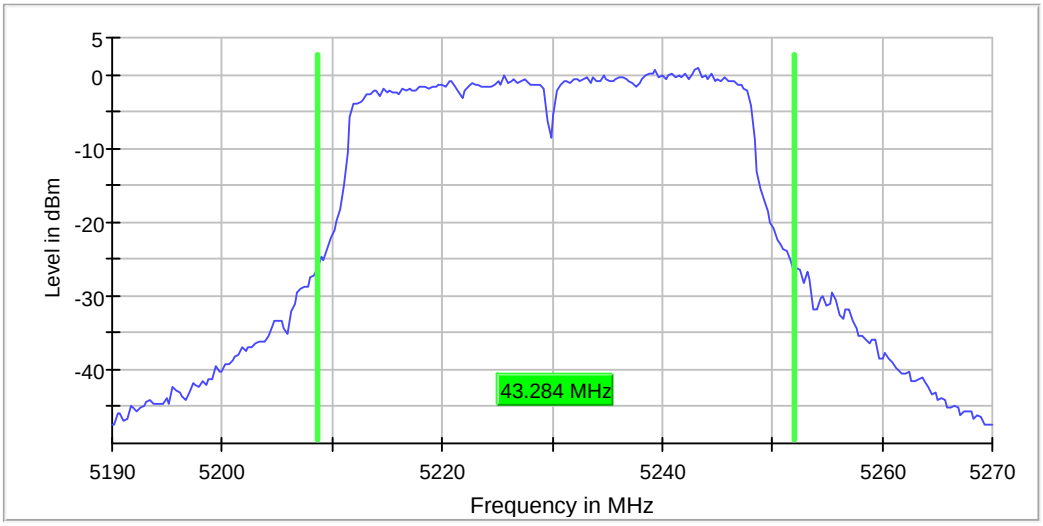
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.20836 GHz | 5.20836 GHz |
| Stop Frequency | 5.25164 GHz | 5.25164 GHz |
| Span | 43.284 MHz | 43.284 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 87 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5230 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5230.000000 | 43.283583 | --- | --- | 5208.656716 | 5251.940299 | 0.8 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.19000 GHz | 5.19000 GHz |
| Stop Frequency | 5.27000 GHz | 5.27000 GHz |
| Span | 80.000 MHz | 80.000 MHz |
| RBW | 300.000 kHz | ~ 400.000 kHz |
| VBW | 1.000 MHz | >= 900.000 kHz |
| SweepPoints | 267 | ~ 267 |
| Sweeptime | 31.603 µs | AUTO |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 51 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge high (5230 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

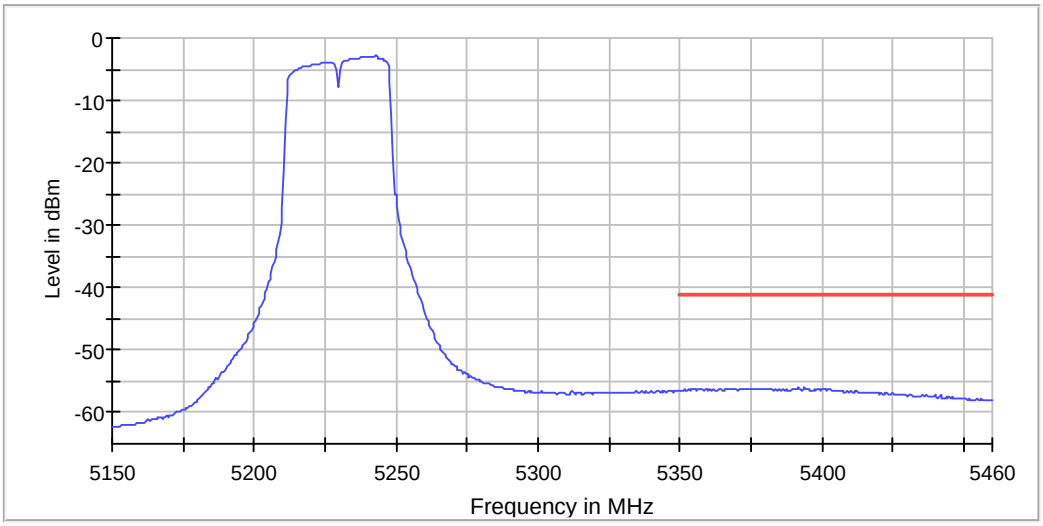
| DUT Frequency (MHz) | Result |
|---|---|
| 5230.000000 | PASS |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5242.786070 | -2.9 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5391.912114 | -55.9 | 14.7 | -41.2 | PASS |
| 5393.907363 | -56.0 | 14.7 | -41.2 | PASS |
| 5389.916865 | -56.1 | 14.9 | -41.2 | PASS |
| 5391.413302 | -56.1 | 14.9 | -41.2 | PASS |
| 5379.441805 | -56.1 | 14.9 | -41.2 | PASS |
| 5390.415677 | -56.1 | 14.9 | -41.2 | PASS |
| 5367.969121 | -56.2 | 14.9 | -41.2 | PASS |
| 5364.477435 | -56.2 | 15.0 | -41.2 | PASS |
| 5401.389549 | -56.2 | 15.0 | -41.2 | PASS |
| 5376.947743 | -56.2 | 15.0 | -41.2 | PASS |
| 5392.410926 | -56.2 | 15.0 | -41.2 | PASS |
| 5395.403800 | -56.2 | 15.0 | -41.2 | PASS |
| 5383.931116 | -56.2 | 15.0 | -41.2 | PASS |
| 5390.914489 | -56.2 | 15.0 | -41.2 | PASS |
| 5366.472684 | -56.2 | 15.0 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 420 | ~ 420 |
| Sweeptime | 420.000 ms | 420.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5230 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5230.000000 | PASS |

## Final measurements

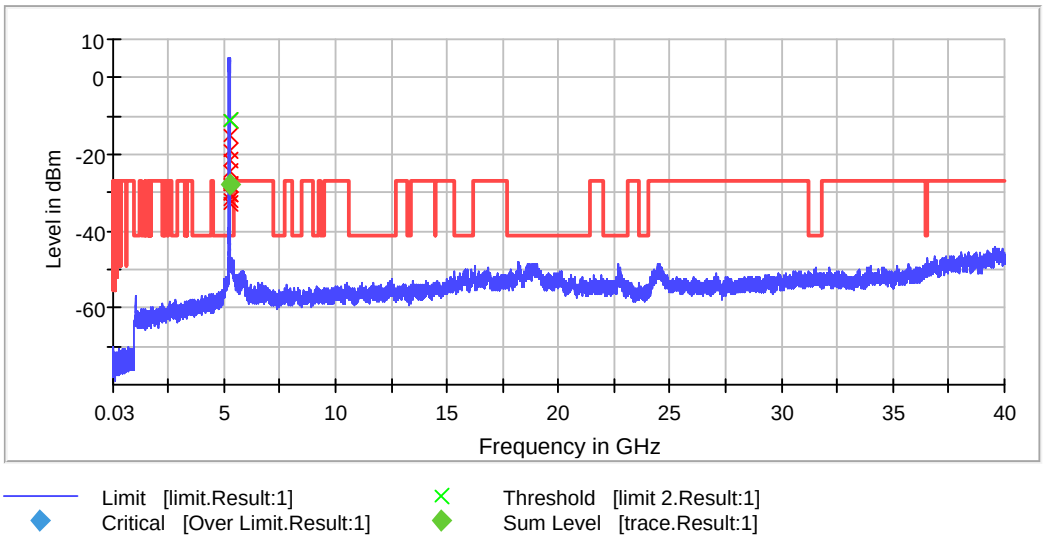
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5250.490196 | -10.9 | -28.1 | --- | --- | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5392.148760 | -47.2 | 6.0 | -41.2 |
| 5365.371901 | -47.6 | 6.3 | -41.2 |
| 5391.157025 | -47.7 | 6.4 | -41.2 |
| 5396.115702 | -47.8 | 6.5 | -41.2 |
| 5368.347107 | -47.8 | 6.6 | -41.2 |
| 5360.413223 | -47.9 | 6.6 | -41.2 |
| 5366.363636 | -47.9 | 6.6 | -41.2 |
| 5405.041322 | -47.9 | 6.7 | -41.2 |
| 18228.909005 | -47.9 | 6.7 | -41.2 |
| 5417.933884 | -48.0 | 6.8 | -41.2 |
| 18220.909426 | -48.0 | 6.8 | -41.2 |
| 5404.049587 | -48.1 | 6.8 | -41.2 |
| 5382.231405 | -48.1 | 6.9 | -41.2 |
| 5383.223140 | -48.1 | 6.9 | -41.2 |
| 5361.404959 | -48.1 | 6.9 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# UNII-1 Ant0 AC mode 80
# Power Spectral Density (5210 MHz; 0.000 dBm; 87.4534 MHz)

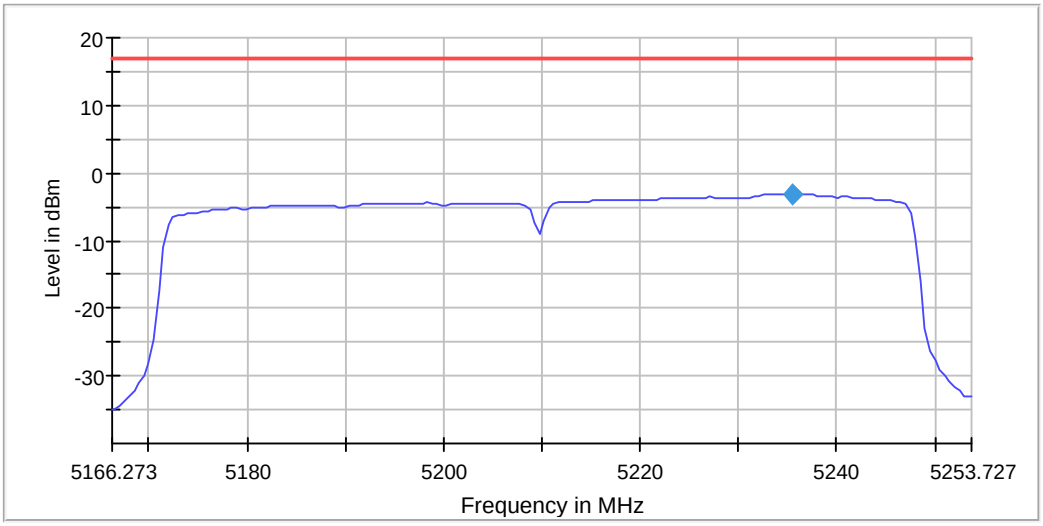
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5210.000000 | 5235.590057 | -3.216 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 86.154 |




## Measurement

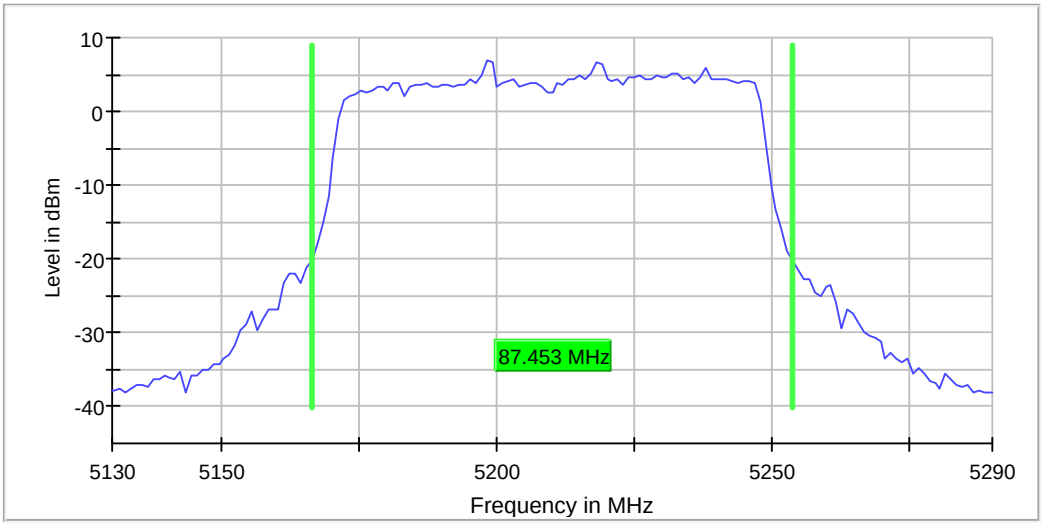
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.16627 GHz | 5.16627 GHz |
| Stop Frequency | 5.25373 GHz | 5.25373 GHz |
| Span | 87.453 MHz | 87.453 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 175 | ~ 175 |
| Sweeptime | 3.500 s | 3.500 s |
| Reference Level | -30.000 dBm | -30.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5210 MHz; 80MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5210.000000 | 87.453416 | --- | --- | 5166.273292 | 5253.726708 | 6.9 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.13000 GHz | 5.13000 GHz |
| Stop Frequency | 5.29000 GHz | 5.29000 GHz |
| Span | 160.000 MHz | 160.000 MHz |
| RBW | 1.000 MHz | ~ 800.000 kHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 160 | ~ 160 |
| Sweeptime | 22.754 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 73 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge low (5210 MHz; 80MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

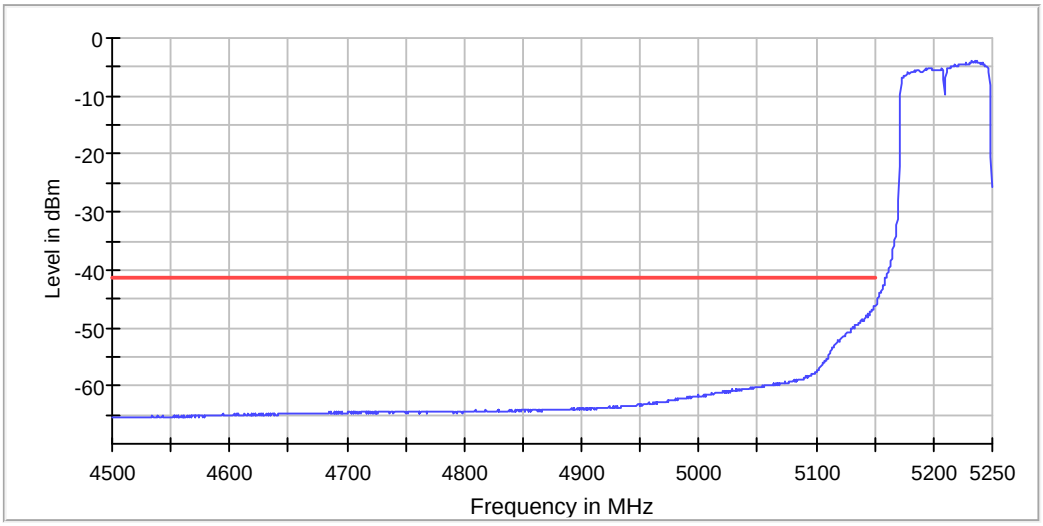
| DUT Frequency (MHz) | Result |
|---|---|
| 5210.000000 | PASS |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5235.323383 | -4.0 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5149.250576 | -46.4 | 5.1 | -41.2 | PASS |
| 5148.750961 | -46.6 | 5.4 | -41.2 | PASS |
| 5148.251345 | -46.8 | 5.5 | -41.2 | PASS |
| 5147.252114 | -46.9 | 5.7 | -41.2 | PASS |
| 5147.751729 | -47.0 | 5.8 | -41.2 | PASS |
| 5146.752498 | -47.1 | 5.8 | -41.2 | PASS |
| 5146.252882 | -47.2 | 6.0 | -41.2 | PASS |
| 5145.753267 | -47.4 | 6.1 | -41.2 | PASS |
| 5144.754035 | -47.7 | 6.5 | -41.2 | PASS |
| 5145.253651 | -47.7 | 6.5 | -41.2 | PASS |
| 5144.254420 | -47.8 | 6.6 | -41.2 | PASS |
| 5142.755573 | -47.9 | 6.6 | -41.2 | PASS |
| 5143.255188 | -47.9 | 6.7 | -41.2 | PASS |
| 5143.754804 | -48.0 | 6.8 | -41.2 | PASS |
| 5142.255957 | -48.3 | 7.1 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 1300 | ~ 1300 |
| Sweeptime | 1.300 s | 1.300 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Band Edge high (5210 MHz; 80MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

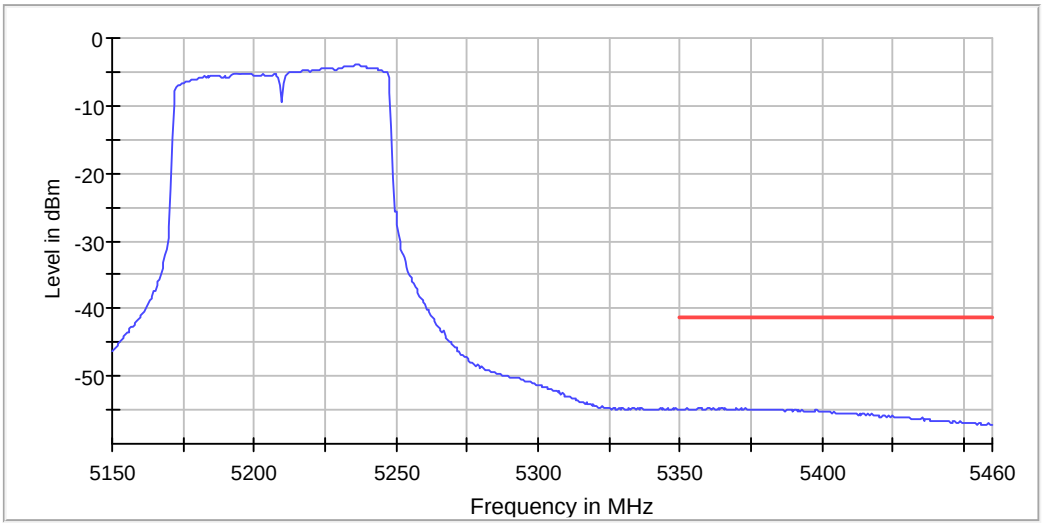
| DUT Frequency (MHz) | Result |
|---|---|
| 5210.000000 | PASS |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5235.820896 | -4.0 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5363.479810 | -54.7 | 13.5 | -41.2 | PASS |
| 5356.995249 | -54.7 | 13.5 | -41.2 | PASS |
| 5357.494062 | -54.8 | 13.5 | -41.2 | PASS |
| 5359.988124 | -54.8 | 13.6 | -41.2 | PASS |
| 5364.976247 | -54.8 | 13.6 | -41.2 | PASS |
| 5359.489311 | -54.8 | 13.6 | -41.2 | PASS |
| 5352.505938 | -54.8 | 13.6 | -41.2 | PASS |
| 5360.486936 | -54.8 | 13.6 | -41.2 | PASS |
| 5356.496437 | -54.8 | 13.6 | -41.2 | PASS |
| 5364.477435 | -54.8 | 13.6 | -41.2 | PASS |
| 5369.964371 | -54.8 | 13.6 | -41.2 | PASS |
| 5361.484561 | -54.8 | 13.6 | -41.2 | PASS |
| 5361.983373 | -54.8 | 13.6 | -41.2 | PASS |
| 5372.957245 | -54.8 | 13.6 | -41.2 | PASS |
| 5365.973872 | -54.8 | 13.6 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 420 | ~ 420 |
| Sweeptime | 420.000 ms | 420.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5210 MHz; 80MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5210.000000 | PASS |

## Final measurements

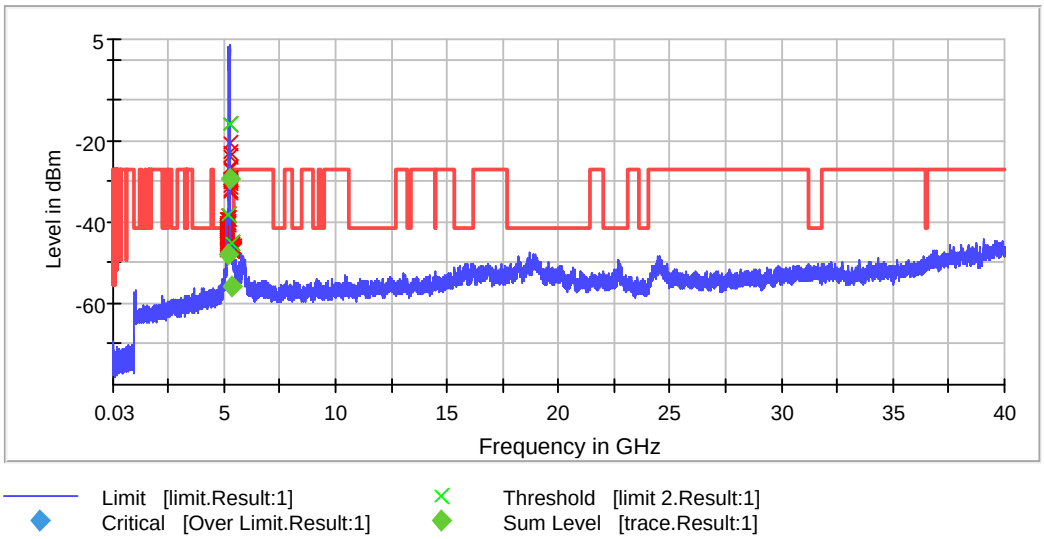
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5147.500602 | -38.1 | -47.9 | -41.2 | 6.7 | PASS |
| 5250.490196 | -15.8 | -29.4 | --- | --- | PASS |
| 5372.314050 | -45.2 | -55.9 | -41.2 | 14.7 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5147.500602 | -38.1 | -3.1 | -41.2 |
| 5143.501566 | -38.1 | -3.1 | -41.2 |
| 5148.500361 | -39.0 | -2.3 | -41.2 |
| 5144.501325 | -39.2 | -2.1 | -41.2 |
| 5141.502048 | -39.2 | -2.0 | -41.2 |
| 5142.501807 | -39.3 | -1.9 | -41.2 |
| 5138.502770 | -39.8 | -1.4 | -41.2 |
| 5145.501084 | -39.9 | -1.4 | -41.2 |
| 5140.502289 | -40.4 | -0.8 | -41.2 |
| 5146.500843 | -40.4 | -0.8 | -41.2 |
| 5132.504216 | -40.6 | -0.6 | -41.2 |
| 5136.503252 | -40.7 | -0.5 | -41.2 |
| 5126.505661 | -41.1 | -0.2 | -41.2 |
| 5134.503734 | -41.2 | 0.0 | -41.2 |
| 5124.506143 | -41.2 | 0.0 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# UNII-1 Ant0 NHT20
# Power Spectral Density (5180 MHz; 22.6866 MHz)

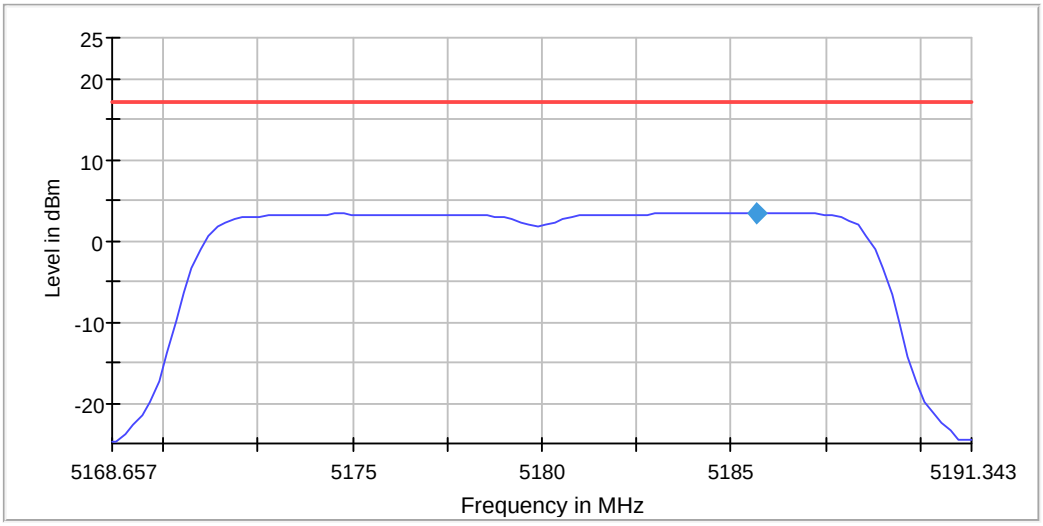
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5180.000000 | 5185.671650 | 3.479 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 95.165 |




## Measurement

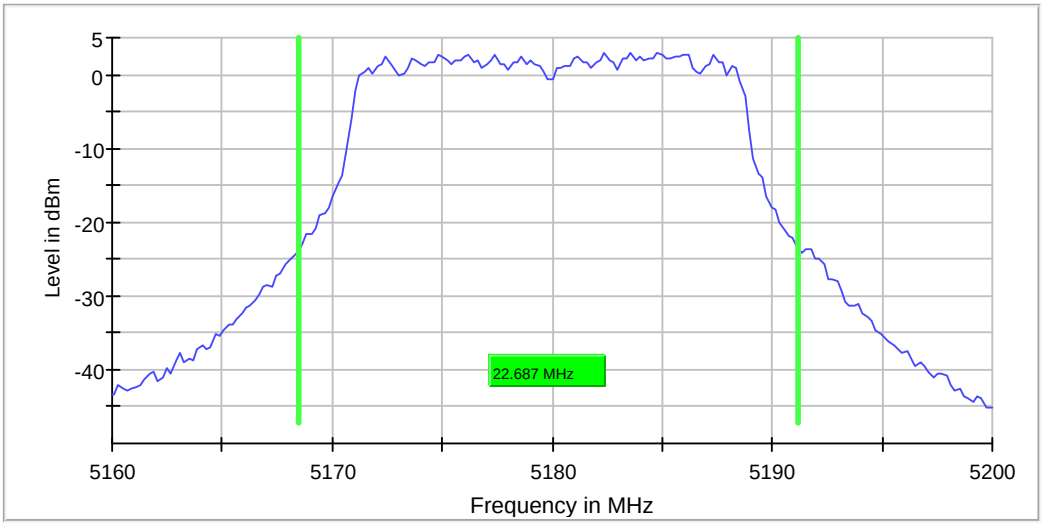
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.16866 GHz | 5.16866 GHz |
| Stop Frequency | 5.19134 GHz | 5.19134 GHz |
| Span | 22.687 MHz | 22.687 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 45 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5180 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5180.000000 | 22.686568 | --- | --- | 5168.457711 | 5191.144279 | 3.0 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.16000 GHz | 5.16000 GHz |
| Stop Frequency | 5.20000 GHz | 5.20000 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | ~ 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 28.443 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 50 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge low (5180 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

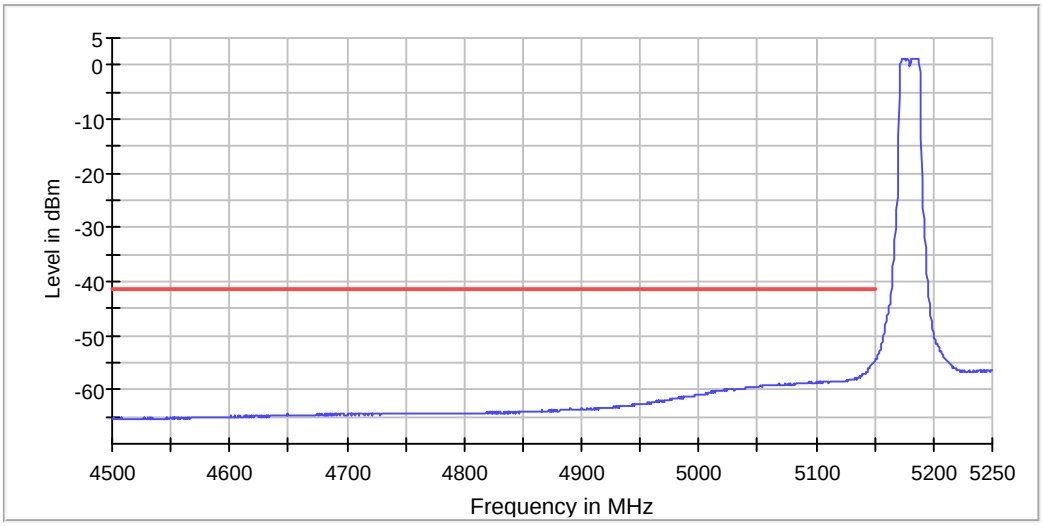
| DUT Frequency (MHz) | Result |
|---|---|
| 5180.000000 | PASS |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5186.069652 | 1.3 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5149.250576 | -54.9 | 13.6 | -41.2 | PASS |
| 5148.750961 | -54.9 | 13.7 | -41.2 | PASS |
| 5148.251345 | -55.0 | 13.8 | -41.2 | PASS |
| 5147.751729 | -55.3 | 14.1 | -41.2 | PASS |
| 5147.252114 | -55.4 | 14.2 | -41.2 | PASS |
| 5146.752498 | -55.5 | 14.3 | -41.2 | PASS |
| 5146.252882 | -55.7 | 14.5 | -41.2 | PASS |
| 5145.753267 | -55.9 | 14.6 | -41.2 | PASS |
| 5145.253651 | -55.9 | 14.7 | -41.2 | PASS |
| 5144.754035 | -56.2 | 14.9 | -41.2 | PASS |
| 5143.754804 | -56.4 | 15.2 | -41.2 | PASS |
| 5144.254420 | -56.4 | 15.2 | -41.2 | PASS |
| 5143.255188 | -56.6 | 15.4 | -41.2 | PASS |
| 5142.755573 | -56.6 | 15.4 | -41.2 | PASS |
| 5142.255957 | -56.7 | 15.5 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 1300 | ~ 1300 |
| Sweeptime | 1.300 s | 1.300 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5180 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5180.000000 | PASS |

## Final measurements

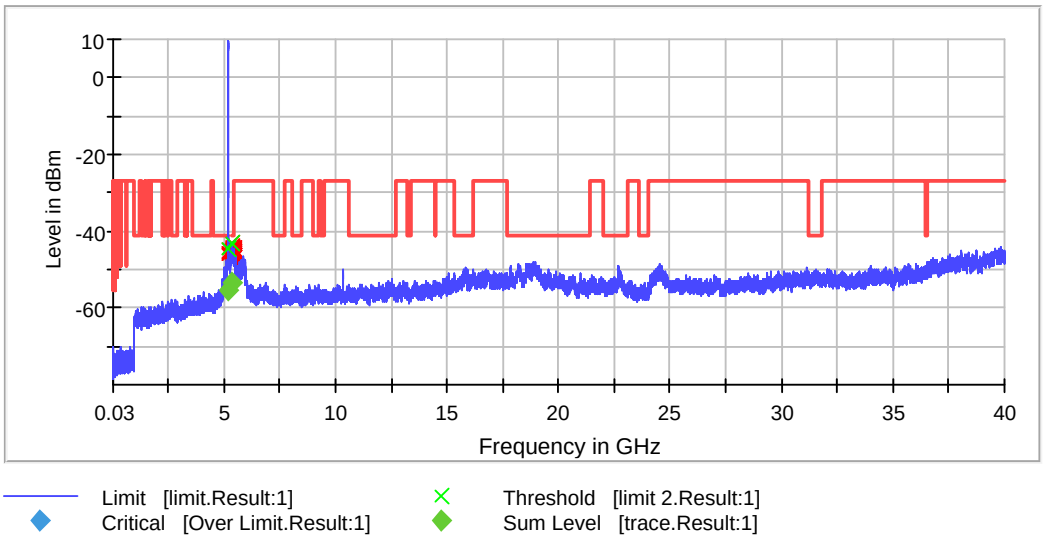
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5147.500602 | -44.4 | -55.5 | -41.2 | 14.3 | PASS |
| 5366.363636 | -43.3 | -53.4 | -41.2 | 12.1 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5366.363636 | -43.3 | 2.1 | -41.2 |
| 5365.371901 | -44.1 | 2.8 | -41.2 |
| 5390.165289 | -44.1 | 2.9 | -41.2 |
| 5147.500602 | -44.4 | 3.1 | -41.2 |
| 5379.256198 | -44.5 | 3.3 | -41.2 |
| 5425.867769 | -44.5 | 3.3 | -41.2 |
| 5426.859504 | -44.5 | 3.3 | -41.2 |
| 5375.289256 | -44.6 | 3.3 | -41.2 |
| 5410.991736 | -44.7 | 3.4 | -41.2 |
| 5368.347107 | -44.7 | 3.4 | -41.2 |
| 5367.355372 | -44.7 | 3.5 | -41.2 |
| 5428.842975 | -44.8 | 3.6 | -41.2 |
| 5364.380165 | -44.9 | 3.6 | -41.2 |
| 5384.214876 | -44.9 | 3.7 | -41.2 |
| 5394.132231 | -44.9 | 3.7 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# Power Spectral Density (5200 MHz; 22.6866 MHz)

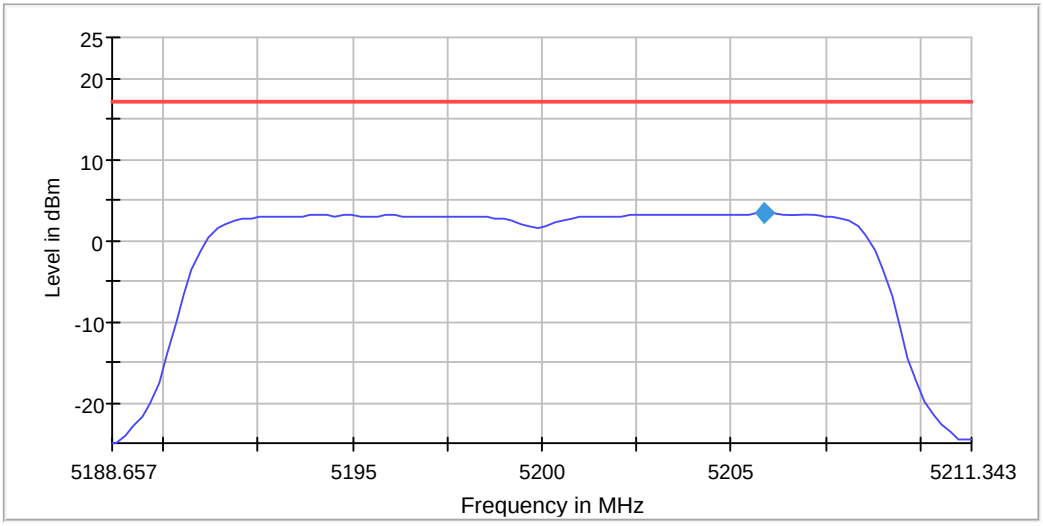
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5200.000000 | 5205.894068 | 3.308 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 95.005 |




## Measurement

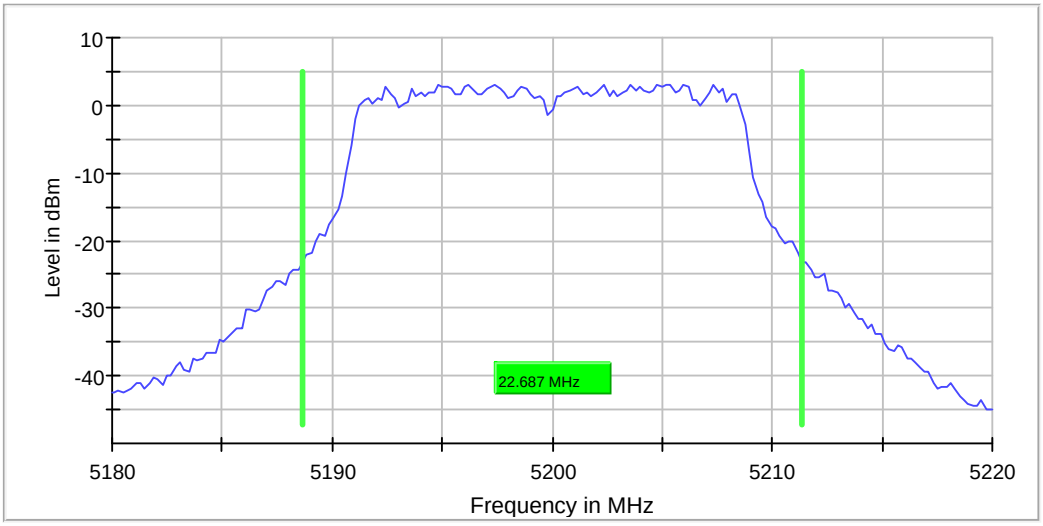
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.18866 GHz | 5.18866 GHz |
| Stop Frequency | 5.21134 GHz | 5.21134 GHz |
| Span | 22.687 MHz | 22.687 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 45 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5200 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5200.000000 | 22.686568 | --- | --- | 5188.656716 | 5211.343284 | 3.1 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.18000 GHz | 5.18000 GHz |
| Stop Frequency | 5.22000 GHz | 5.22000 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | ~ 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 28.443 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 27 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Tx Spurious Emission (5200 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5200.000000 | PASS |

## Final measurements

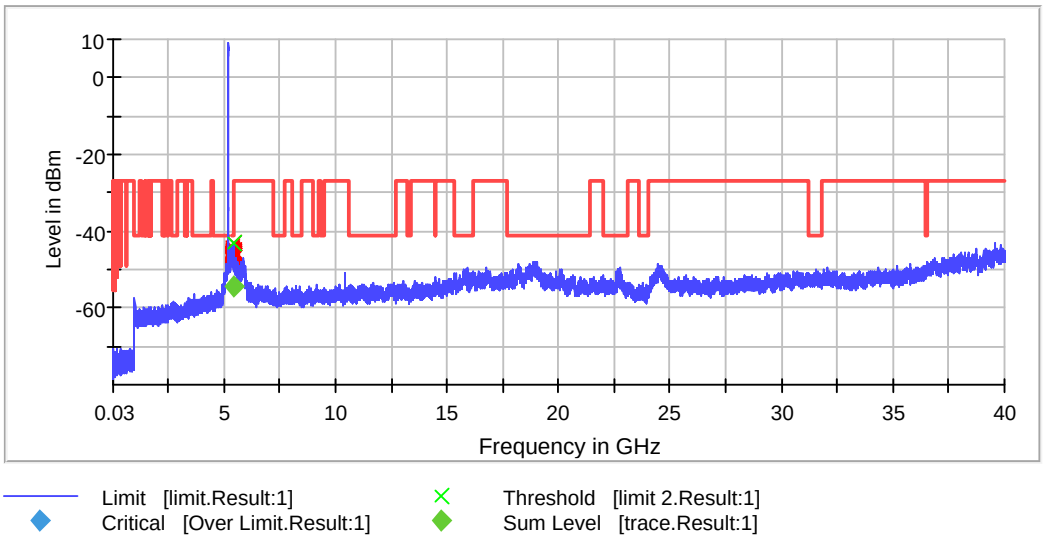
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5416.942149 | -43.0 | -54.3 | -41.2 | 13.1 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5416.942149 | -43.0 | 1.8 | -41.2 |
| 5375.289256 | -44.0 | 2.7 | -41.2 |
| 5393.140496 | -44.8 | 3.6 | -41.2 |
| 5407.024793 | -45.2 | 4.0 | -41.2 |
| 5379.256198 | -45.3 | 4.0 | -41.2 |
| 5427.851240 | -45.3 | 4.1 | -41.2 |
| 5392.148760 | -45.3 | 4.1 | -41.2 |
| 5406.033058 | -45.3 | 4.1 | -41.2 |
| 5365.371901 | -45.3 | 4.1 | -41.2 |
| 5366.363636 | -45.5 | 4.3 | -41.2 |
| 5391.157025 | -45.5 | 4.3 | -41.2 |
| 5355.454545 | -45.5 | 4.3 | -41.2 |
| 5428.842975 | -45.6 | 4.3 | -41.2 |
| 5370.330579 | -45.6 | 4.3 | -41.2 |
| 5356.446281 | -45.6 | 4.3 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# Power Spectral Density (5240 MHz; 23.0846 MHz)

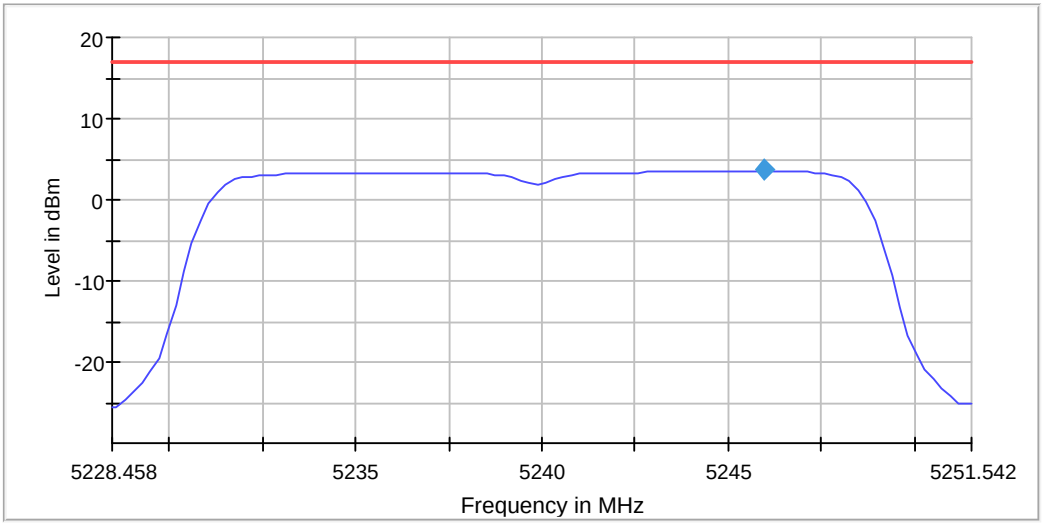
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5240.000000 | 5245.997470 | 3.609 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 94.699 |




## Measurement

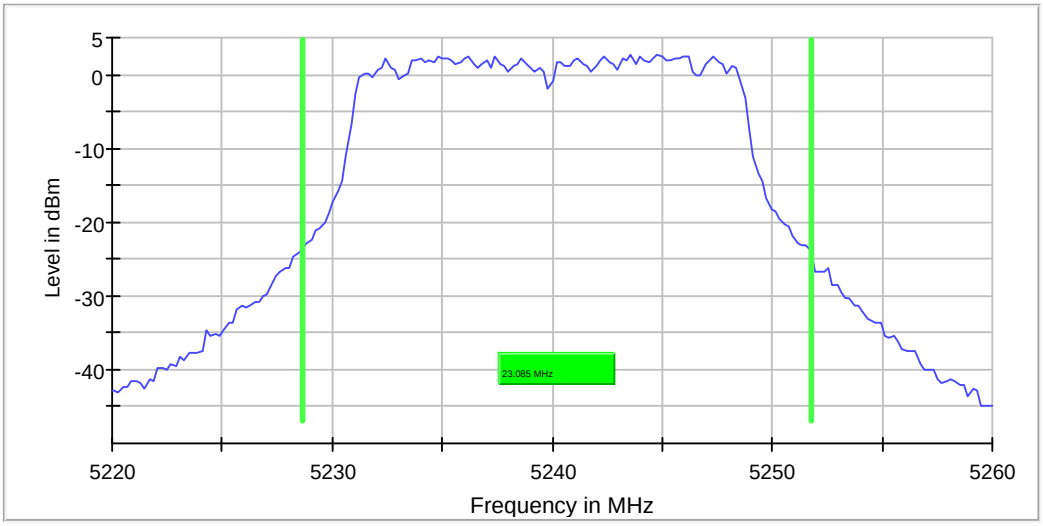
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.22846 GHz | 5.22846 GHz |
| Stop Frequency | 5.25154 GHz | 5.25154 GHz |
| Span | 23.085 MHz | 23.085 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 46 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5240 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5240.000000 | 23.084578 | --- | --- | 5228.656716 | 5251.741294 | 2.6 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.22000 GHz | 5.22000 GHz |
| Stop Frequency | 5.26000 GHz | 5.26000 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | ~ 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 28.443 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 44 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge high (5240 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

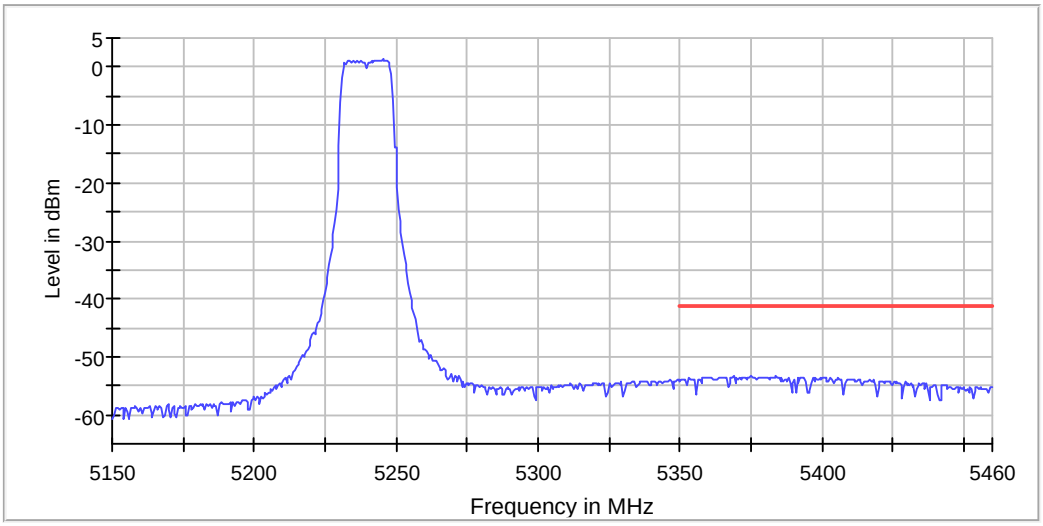
| DUT Frequency (MHz) | Result |
|---|---|
| 5240.000000 | PASS |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5245.273632 | 1.4 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5383.931116 | -53.4 | 12.2 | -41.2 | PASS |
| 5374.952494 | -53.4 | 12.2 | -41.2 | PASS |
| 5368.966746 | -53.4 | 12.2 | -41.2 | PASS |
| 5380.439430 | -53.4 | 12.2 | -41.2 | PASS |
| 5373.954869 | -53.5 | 12.2 | -41.2 | PASS |
| 5392.410926 | -53.5 | 12.3 | -41.2 | PASS |
| 5381.935867 | -53.5 | 12.3 | -41.2 | PASS |
| 5400.391924 | -53.5 | 12.3 | -41.2 | PASS |
| 5375.451306 | -53.5 | 12.3 | -41.2 | PASS |
| 5384.429929 | -53.5 | 12.3 | -41.2 | PASS |
| 5365.475059 | -53.6 | 12.3 | -41.2 | PASS |
| 5379.441805 | -53.6 | 12.3 | -41.2 | PASS |
| 5388.420428 | -53.6 | 12.3 | -41.2 | PASS |
| 5378.444181 | -53.6 | 12.3 | -41.2 | PASS |
| 5401.389549 | -53.6 | 12.3 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 420 | ~ 420 |
| Sweeptime | 420.000 ms | 420.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5240 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5240.000000 | PASS |

## Final measurements

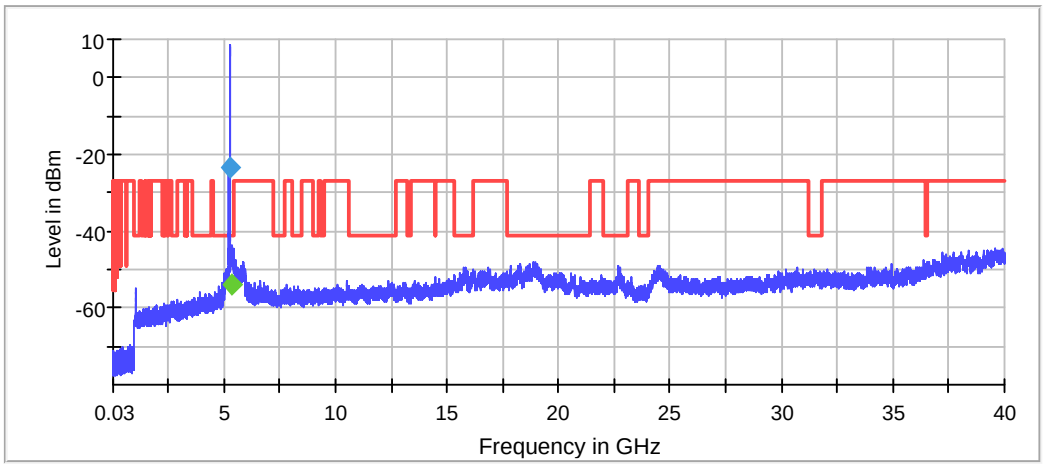
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5395.123967 | -43.8 | -54.2 | -41.2 | 12.9 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5395.123967 | -43.8 | 2.6 | -41.2 |
| 5394.132231 | -44.3 | 3.1 | -41.2 |
| 5401.074380 | -44.7 | 3.4 | -41.2 |
| 5388.181818 | -44.7 | 3.5 | -41.2 |
| 5384.214876 | -45.1 | 3.8 | -41.2 |
| 5350.000000 | -45.3 | 4.1 | -41.2 |
| 5404.049587 | -45.3 | 4.1 | -41.2 |
| 5381.239669 | -45.4 | 4.2 | -41.2 |
| 5383.223140 | -45.5 | 4.3 | -41.2 |
| 5393.140496 | -45.6 | 4.4 | -41.2 |
| 5380.247934 | -45.6 | 4.4 | -41.2 |
| 5405.041322 | -45.6 | 4.4 | -41.2 |
| 5365.371901 | -45.7 | 4.5 | -41.2 |
| 5367.355372 | -45.9 | 4.6 | -41.2 |
| 5362.396694 | -45.9 | 4.7 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# UNII-1 Ant0 NHT40
# Power Spectral Density (5190 MHz; 44.1791 MHz)

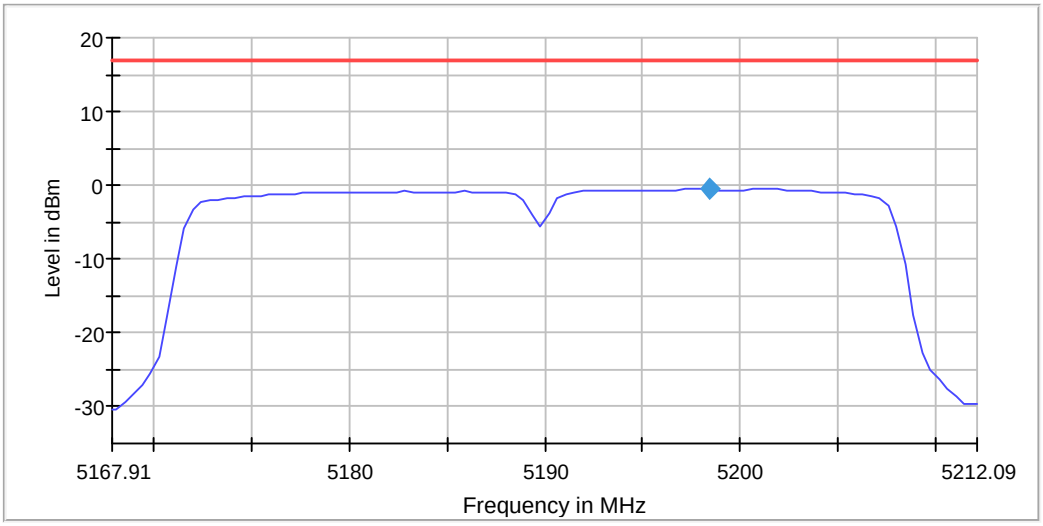
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5190.000000 | 5198.446004 | -0.549 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 93.206 |




## Measurement

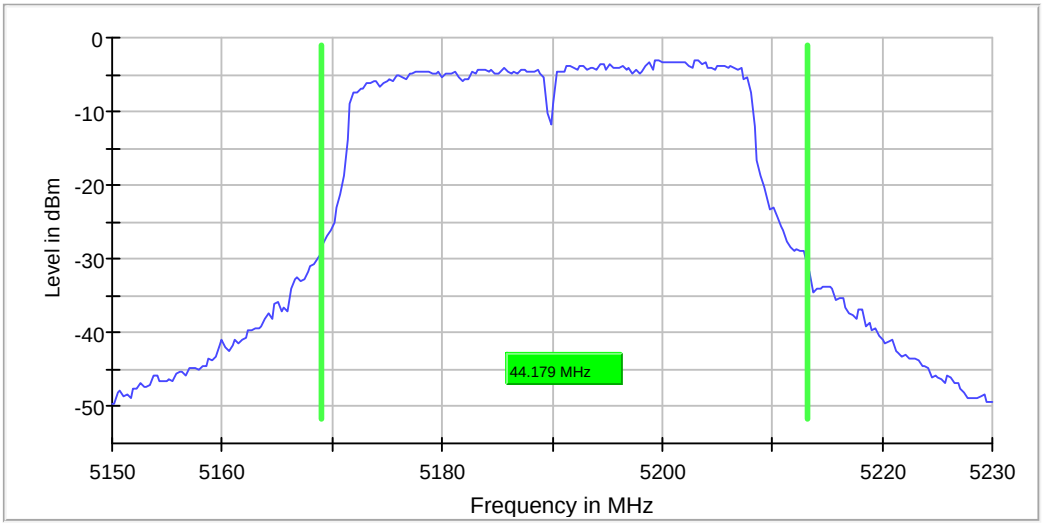
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.16791 GHz | 5.16791 GHz |
| Stop Frequency | 5.21209 GHz | 5.21209 GHz |
| Span | 44.179 MHz | 44.179 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 88 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5190 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5190.000000 | 44.179104 | --- | --- | 5168.955224 | 5213.134328 | -3.1 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.15000 GHz | 5.15000 GHz |
| Stop Frequency | 5.23000 GHz | 5.23000 GHz |
| Span | 80.000 MHz | 80.000 MHz |
| RBW | 300.000 kHz | ~ 400.000 kHz |
| VBW | 1.000 MHz | >= 900.000 kHz |
| SweepPoints | 267 | ~ 267 |
| Sweeptime | 31.603 µs | AUTO |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 63 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge low (5190 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

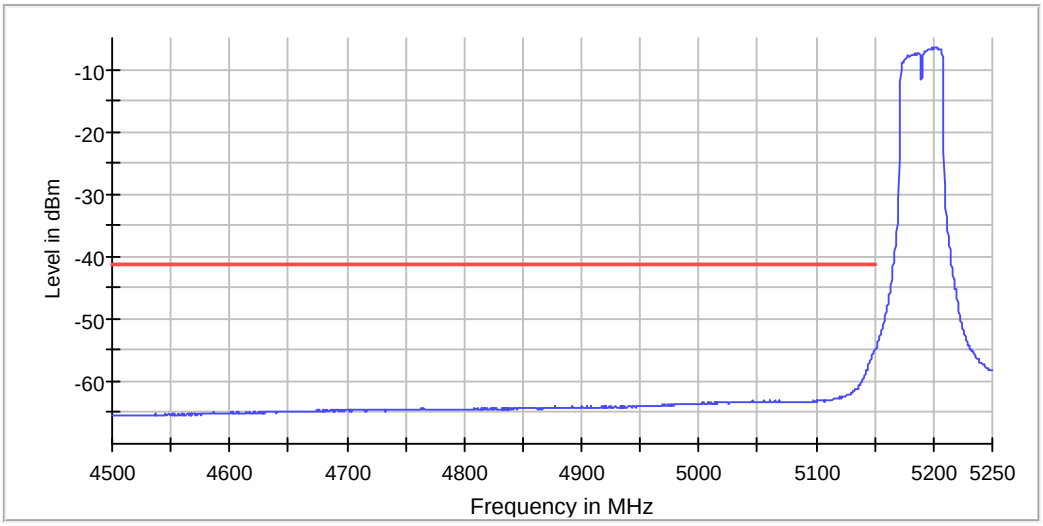
| DUT Frequency (MHz) | Result |
|---|---|
| 5190.000000 | PASS |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5202.985075 | -6.6 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5149.250576 | -55.3 | 14.1 | -41.2 | PASS |
| 5148.750961 | -55.6 | 14.3 | -41.2 | PASS |
| 5148.251345 | -55.6 | 14.4 | -41.2 | PASS |
| 5147.751729 | -55.8 | 14.6 | -41.2 | PASS |
| 5147.252114 | -56.1 | 14.9 | -41.2 | PASS |
| 5146.752498 | -56.4 | 15.2 | -41.2 | PASS |
| 5146.252882 | -56.7 | 15.4 | -41.2 | PASS |
| 5145.753267 | -56.9 | 15.6 | -41.2 | PASS |
| 5145.253651 | -57.1 | 15.9 | -41.2 | PASS |
| 5144.754035 | -57.4 | 16.2 | -41.2 | PASS |
| 5144.254420 | -57.5 | 16.3 | -41.2 | PASS |
| 5143.754804 | -57.8 | 16.6 | -41.2 | PASS |
| 5143.255188 | -58.2 | 16.9 | -41.2 | PASS |
| 5142.755573 | -58.3 | 17.1 | -41.2 | PASS |
| 5142.255957 | -58.6 | 17.3 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 1300 | ~ 1300 |
| Sweeptime | 1.300 s | 1.300 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5190 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5190.000000 | PASS |

## Final measurements

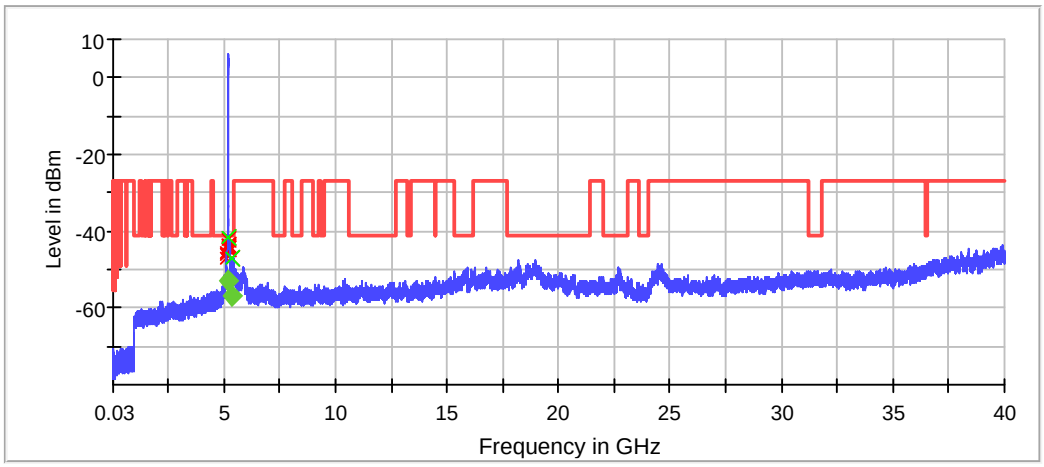
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5145.501084 | -41.4 | -52.8 | -41.2 | 11.6 | PASS |
| 5364.380165 | -47.2 | -56.8 | -41.2 | 15.6 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5145.501084 | -41.4 | 0.2 | -41.2 |
| 5148.500361 | -42.2 | 1.0 | -41.2 |
| 5143.501566 | -43.5 | 2.2 | -41.2 |
| 5147.500602 | -43.5 | 2.3 | -41.2 |
| 5146.500843 | -44.1 | 2.9 | -41.2 |
| 5142.501807 | -44.5 | 3.3 | -41.2 |
| 5144.501325 | -44.7 | 3.5 | -41.2 |
| 5141.502048 | -45.7 | 4.5 | -41.2 |
| 5140.502289 | -46.0 | 4.8 | -41.2 |
| 5139.502530 | -47.1 | 5.9 | -41.2 |
| 5364.380165 | -47.2 | 6.0 | -41.2 |
| 5430.826446 | -47.3 | 6.1 | -41.2 |
| 5137.503011 | -47.3 | 6.1 | -41.2 |
| 5398.099174 | -47.4 | 6.2 | -41.2 |
| 5399.090909 | -47.5 | 6.2 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# Power Spectral Density (5230 MHz; 42.3881 MHz)

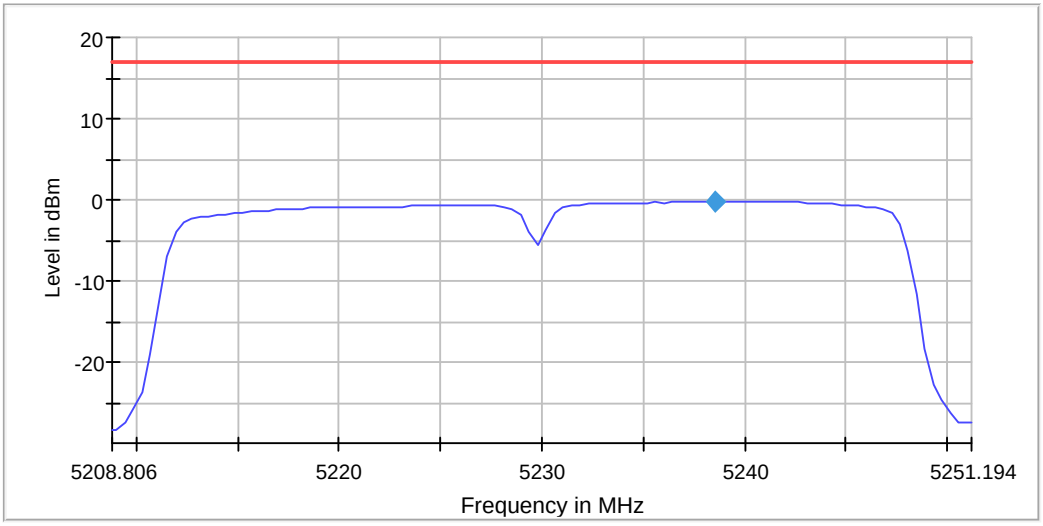
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5230.000000 | 5238.519177 | -0.209 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 93.132 |




## Measurement

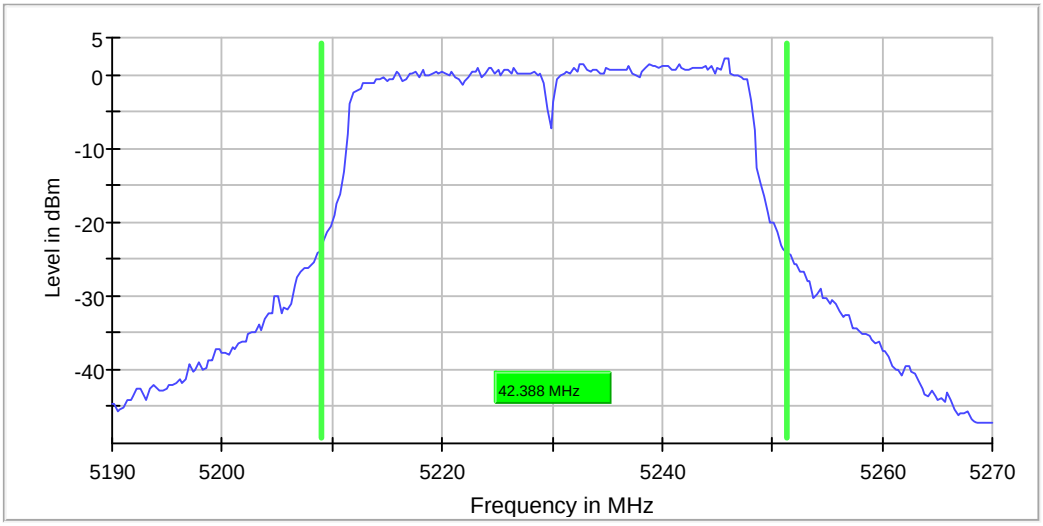
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.20881 GHz | 5.20881 GHz |
| Stop Frequency | 5.25119 GHz | 5.25119 GHz |
| Span | 42.388 MHz | 42.388 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 85 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5230 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5230.000000 | 42.388060 | --- | --- | 5208.955224 | 5251.343284 | 2.2 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.19000 GHz | 5.19000 GHz |
| Stop Frequency | 5.27000 GHz | 5.27000 GHz |
| Span | 80.000 MHz | 80.000 MHz |
| RBW | 300.000 kHz | ~ 400.000 kHz |
| VBW | 1.000 MHz | >= 900.000 kHz |
| SweepPoints | 267 | ~ 267 |
| Sweeptime | 31.603 µs | AUTO |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 50 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge high (5230 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

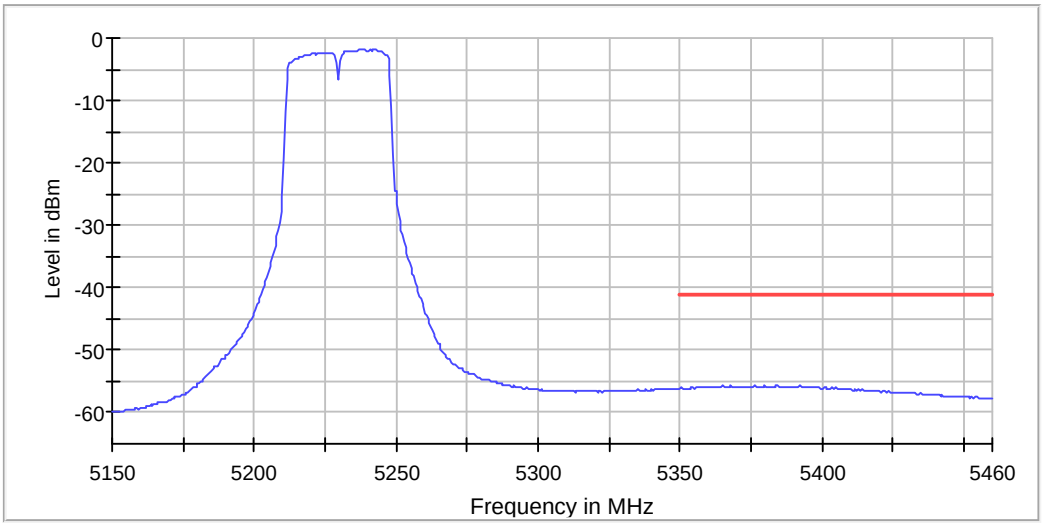
| DUT Frequency (MHz) | Result |
|---|---|
| 5230.000000 | PASSS |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5242.786070 | -1.7 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5376.448931 | -55.6 | 14.4 | -41.2 | PASS |
| 5367.969121 | -55.7 | 14.5 | -41.2 | PASS |
| 5379.940618 | -55.7 | 14.5 | -41.2 | PASS |
| 5383.931116 | -55.7 | 14.5 | -41.2 | PASS |
| 5384.429929 | -55.7 | 14.5 | -41.2 | PASS |
| 5364.976247 | -55.8 | 14.5 | -41.2 | PASS |
| 5392.410926 | -55.8 | 14.6 | -41.2 | PASS |
| 5365.973872 | -55.8 | 14.6 | -41.2 | PASS |
| 5377.446556 | -55.8 | 14.6 | -41.2 | PASS |
| 5379.441805 | -55.8 | 14.6 | -41.2 | PASS |
| 5390.415677 | -55.8 | 14.6 | -41.2 | PASS |
| 5373.954869 | -55.8 | 14.6 | -41.2 | PASS |
| 5373.456057 | -55.8 | 14.6 | -41.2 | PASS |
| 5372.957245 | -55.8 | 14.6 | -41.2 | PASS |
| 5377.945368 | -55.8 | 14.6 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 420 | ~ 420 |
| Sweeptime | 420.000 ms | 420.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5230 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5230.000000 | PASS |

## Final measurements

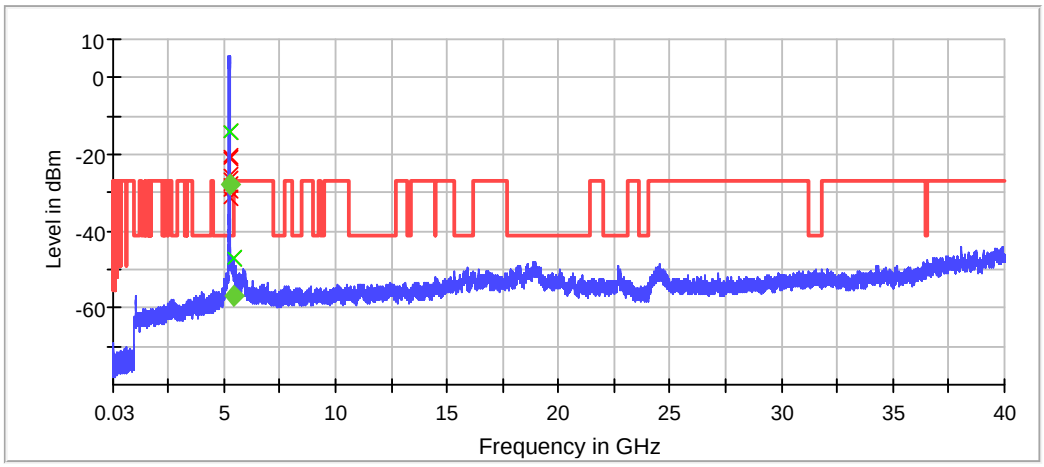
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5404.049587 | -46.9 | -56.9 | -41.2 | 15.6 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5404.049587 | -46.9 | 5.6 | -41.2 |
| 5393.140496 | -47.4 | 6.2 | -41.2 |
| 5400.082645 | -47.5 | 6.3 | -41.2 |
| 5352.479339 | -47.5 | 6.3 | -41.2 |
| 5392.148760 | -47.8 | 6.5 | -41.2 |
| 18884.874480 | -47.8 | 6.6 | -41.2 |
| 5351.487603 | -47.9 | 6.7 | -41.2 |
| 18885.874428 | -48.0 | 6.7 | -41.2 |
| 18929.872112 | -48.0 | 6.8 | -41.2 |
| 5399.090909 | -48.0 | 6.8 | -41.2 |
| 5419.917355 | -48.1 | 6.9 | -41.2 |
| 5401.074380 | -48.1 | 6.9 | -41.2 |
| 5414.958678 | -48.1 | 6.9 | -41.2 |
| 18875.874954 | -48.2 | 7.0 | -41.2 |
| 5412.975207 | -48.4 | 7.1 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# UNII-1 Ant1 A mode
# Power Spectral Density (5180 MHz; 22.8856 MHz)

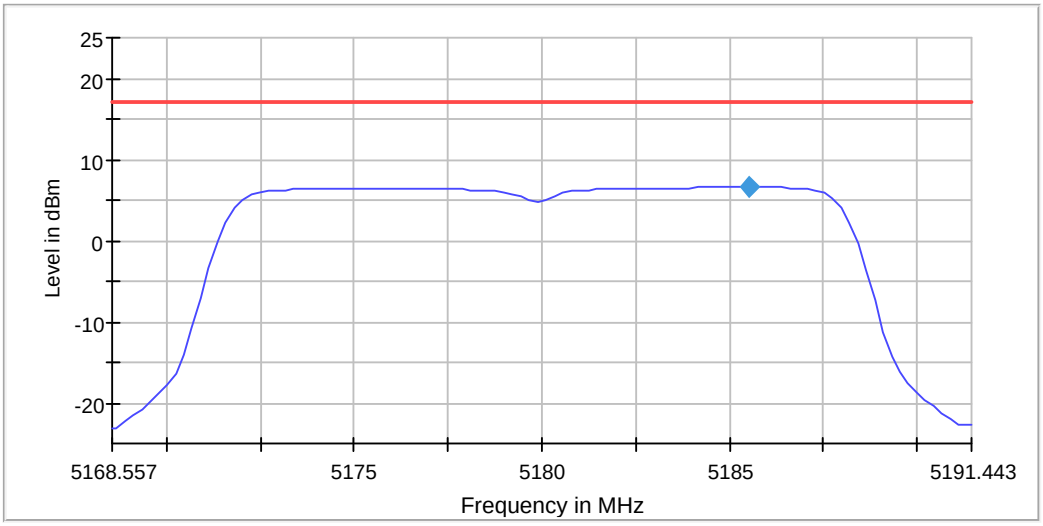
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5180.000000 | 5185.497031 | 6.574 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 96.139 |




## Measurement

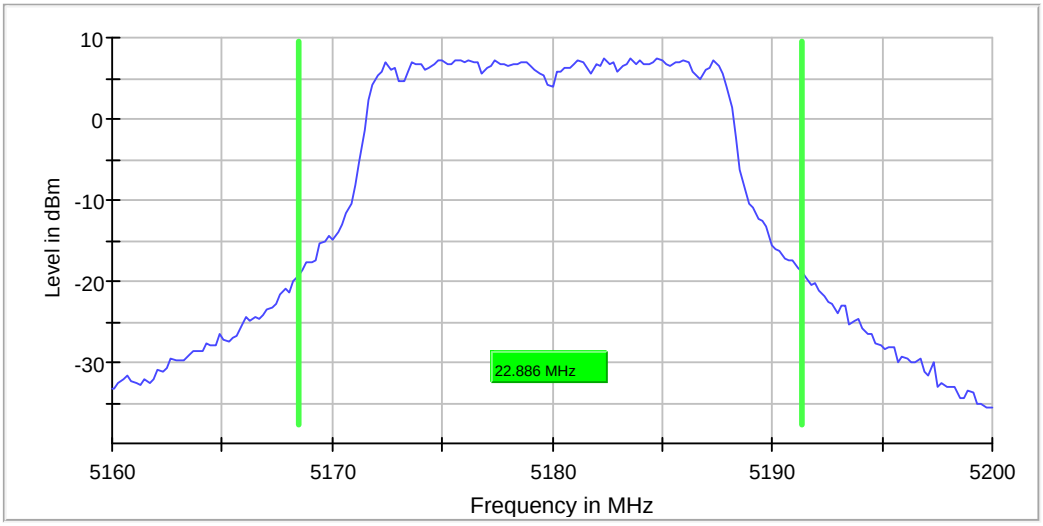
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.16856 GHz | 5.16856 GHz |
| Stop Frequency | 5.19144 GHz | 5.19144 GHz |
| Span | 22.886 MHz | 22.886 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 46 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -10.000 dBm | -20.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5180 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5180.000000 | 22.885573 | --- | --- | 5168.457711 | 5191.343284 | 7.5 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.16000 GHz | 5.16000 GHz |
| Stop Frequency | 5.20000 GHz | 5.20000 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | ~ 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 28.443 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 58 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge low (5180 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

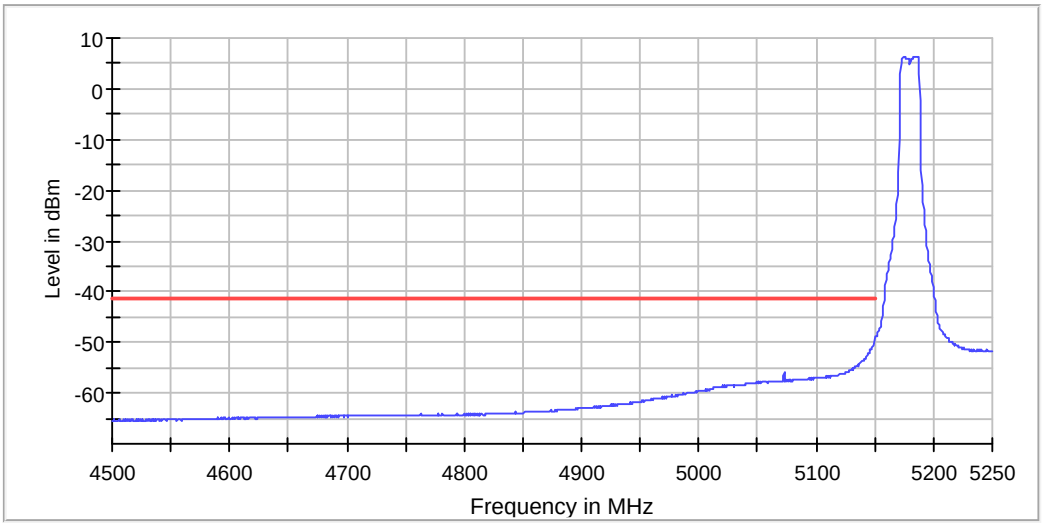
| DUT Frequency (MHz) | Result |
|---|---|
| 5180.000000 | PASS |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5186.069652 | 6.4 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5149.250576 | -50.5 | 9.3 | -41.2 | PASS |
| 5148.750961 | -50.6 | 9.4 | -41.2 | PASS |
| 5148.251345 | -50.7 | 9.5 | -41.2 | PASS |
| 5147.751729 | -51.0 | 9.8 | -41.2 | PASS |
| 5146.752498 | -51.3 | 10.1 | -41.2 | PASS |
| 5147.252114 | -51.4 | 10.2 | -41.2 | PASS |
| 5146.252882 | -51.6 | 10.3 | -41.2 | PASS |
| 5145.753267 | -51.8 | 10.6 | -41.2 | PASS |
| 5145.253651 | -52.0 | 10.7 | -41.2 | PASS |
| 5144.254420 | -52.2 | 11.0 | -41.2 | PASS |
| 5144.754035 | -52.2 | 11.0 | -41.2 | PASS |
| 5143.754804 | -52.5 | 11.2 | -41.2 | PASS |
| 5143.255188 | -52.6 | 11.3 | -41.2 | PASS |
| 5142.755573 | -52.7 | 11.5 | -41.2 | PASS |
| 5142.255957 | -52.8 | 11.6 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 1300 | ~ 1300 |
| Sweeptime | 1.300 s | 1.300 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5180 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5180.000000 | PASS |

## Final measurements

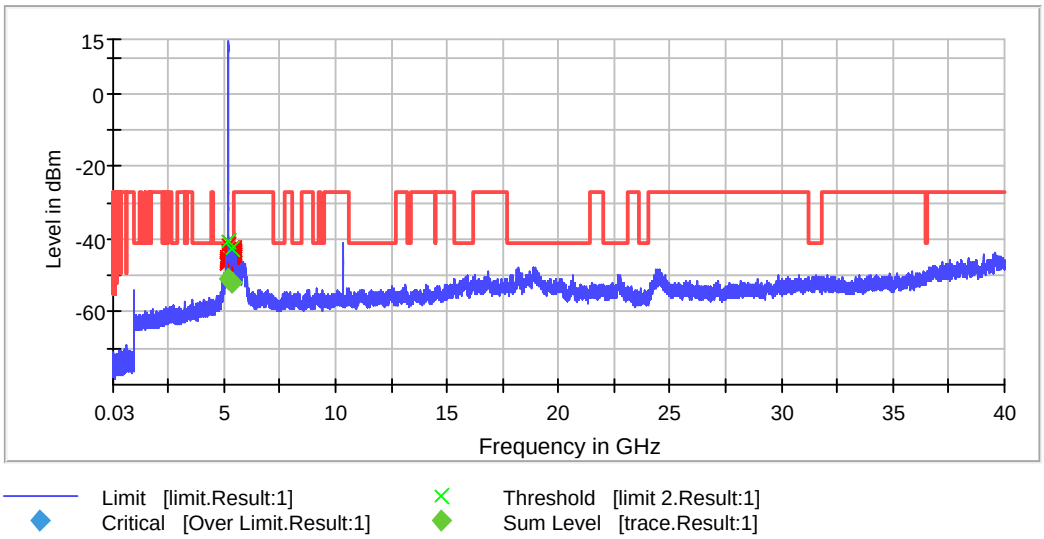
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5148.500361 | -40.3 | -50.9 | -41.2 | 9.6 | PASS |
| 5361.404959 | -42.6 | -52.0 | -41.2 | 10.7 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5148.500361 | -40.3 | -0.9 | -41.2 |
| 5147.500602 | -41.5 | 0.3 | -41.2 |
| 5361.404959 | -42.6 | 1.3 | -41.2 |
| 5362.396694 | -42.6 | 1.4 | -41.2 |
| 5384.214876 | -42.7 | 1.5 | -41.2 |
| 5385.206612 | -42.7 | 1.5 | -41.2 |
| 5416.942149 | -42.8 | 1.6 | -41.2 |
| 5397.107438 | -42.8 | 1.6 | -41.2 |
| 5143.501566 | -42.9 | 1.7 | -41.2 |
| 5144.501325 | -42.9 | 1.7 | -41.2 |
| 5368.347107 | -43.0 | 1.8 | -41.2 |
| 5369.338843 | -43.0 | 1.8 | -41.2 |
| 5419.917355 | -43.1 | 1.8 | -41.2 |
| 5395.123967 | -43.2 | 1.9 | -41.2 |
| 5146.500843 | -43.3 | 2.0 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# Power Spectral Density (5200 MHz; 22.6866 MHz)

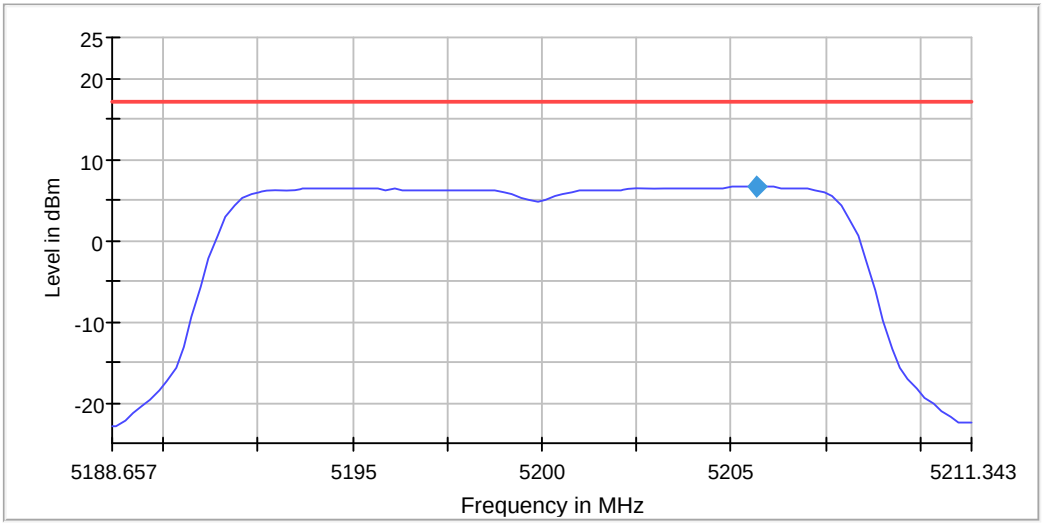
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5200.000000 | 5205.671650 | 6.540 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 96.131 |




## Measurement

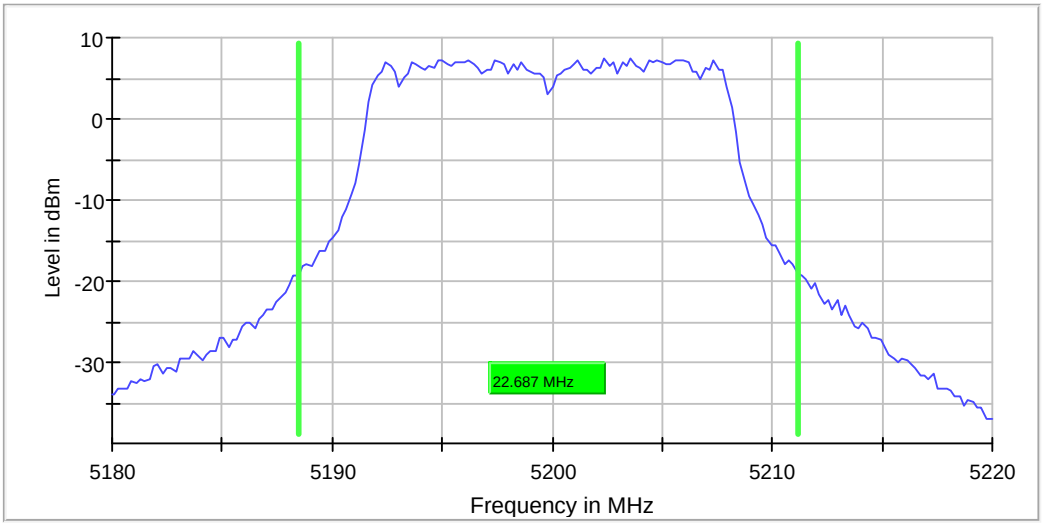
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.18866 GHz | 5.18866 GHz |
| Stop Frequency | 5.21134 GHz | 5.21134 GHz |
| Span | 22.687 MHz | 22.687 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 45 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -10.000 dBm | -20.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5200 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5200.000000 | 22.686568 | --- | --- | 5188.457711 | 5211.144279 | 7.4 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.18000 GHz | 5.18000 GHz |
| Stop Frequency | 5.22000 GHz | 5.22000 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | ~ 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 28.443 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 31 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Tx Spurious Emission (5200 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5200.000000 | PASS |

## Final measurements

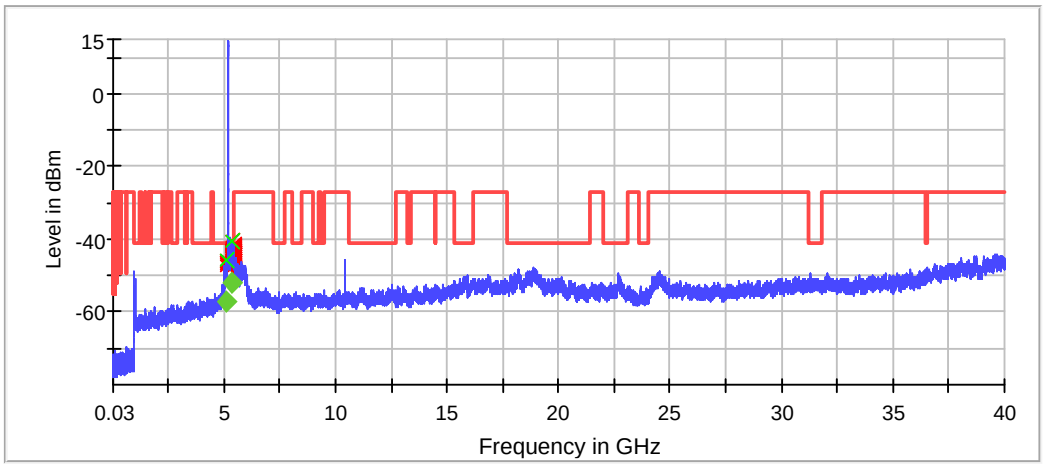
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5119.507348 | -45.8 | -57.0 | -41.2 | 15.7 | PASS |
| 5357.438017 | -40.4 | -51.9 | -41.2 | 10.7 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5357.438017 | -40.4 | -0.8 | -41.2 |
| 5358.429752 | -40.6 | -0.6 | -41.2 |
| 5407.024793 | -41.4 | 0.1 | -41.2 |
| 5410.991736 | -41.9 | 0.7 | -41.2 |
| 5397.107438 | -42.2 | 1.0 | -41.2 |
| 5392.148760 | -42.2 | 1.0 | -41.2 |
| 5433.801653 | -42.2 | 1.0 | -41.2 |
| 5408.016529 | -42.2 | 1.0 | -41.2 |
| 5396.115702 | -42.4 | 1.2 | -41.2 |
| 5391.157025 | -42.4 | 1.2 | -41.2 |
| 5384.214876 | -42.6 | 1.4 | -41.2 |
| 5399.090909 | -42.6 | 1.4 | -41.2 |
| 5410.000000 | -42.6 | 1.4 | -41.2 |
| 5429.834711 | -42.8 | 1.6 | -41.2 |
| 5377.272727 | -42.9 | 1.7 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# Power Spectral Density (5240 MHz; 22.4876 MHz)

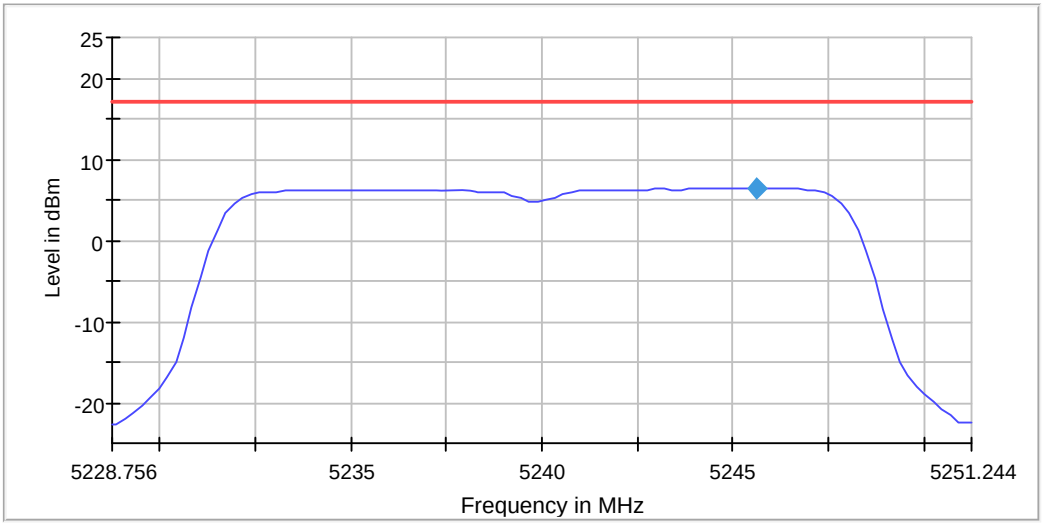
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5240.000000 | 5245.621900 | 6.481 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 95.889 |




## Measurement

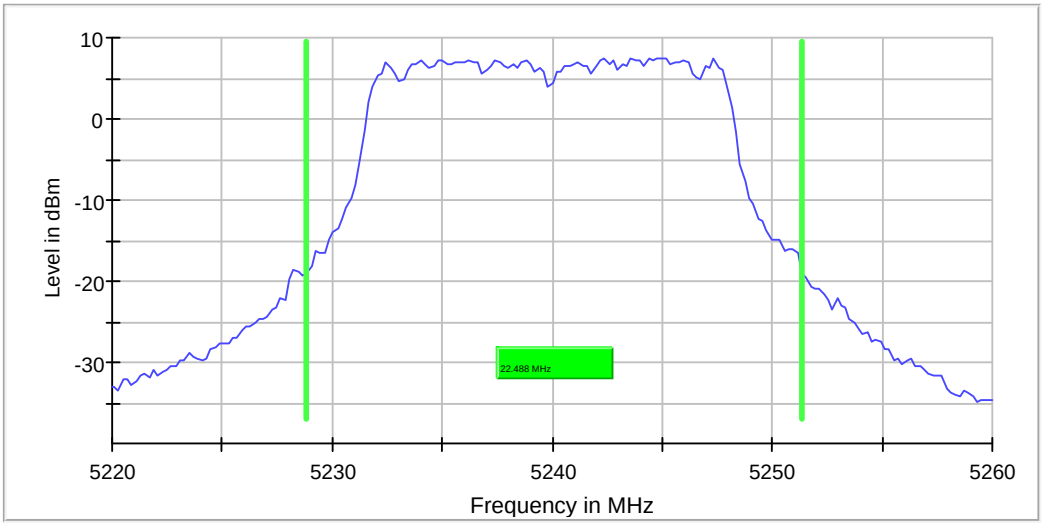
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.22876 GHz | 5.22876 GHz |
| Stop Frequency | 5.25124 GHz | 5.25124 GHz |
| Span | 22.488 MHz | 22.488 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 45 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -10.000 dBm | -20.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5240 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5240.000000 | 22.487563 | --- | --- | 5228.855721 | 5251.343284 | 7.4 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.22000 GHz | 5.22000 GHz |
| Stop Frequency | 5.26000 GHz | 5.26000 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | ~ 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 28.443 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 51 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge high (5240 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

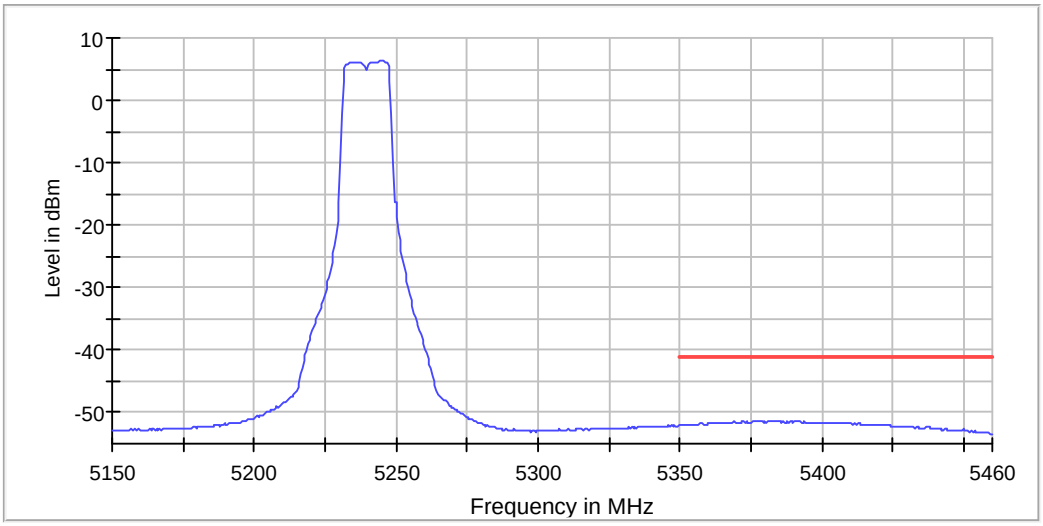
| DUT Frequency (MHz) | Result |
|---|---|
| 5240.000000 | FAIL |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5245.273632 | 6.3 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5375.950119 | -51.4 | 10.1 | -41.2 | PASS |
| 5372.458432 | -51.4 | 10.1 | -41.2 | PASS |
| 5390.914489 | -51.4 | 10.2 | -41.2 | PASS |
| 5381.935867 | -51.4 | 10.2 | -41.2 | PASS |
| 5392.410926 | -51.4 | 10.2 | -41.2 | PASS |
| 5384.928741 | -51.4 | 10.2 | -41.2 | PASS |
| 5380.938242 | -51.4 | 10.2 | -41.2 | PASS |
| 5379.940618 | -51.4 | 10.2 | -41.2 | PASS |
| 5383.931116 | -51.4 | 10.2 | -41.2 | PASS |
| 5378.444181 | -51.4 | 10.2 | -41.2 | PASS |
| 5376.947743 | -51.4 | 10.2 | -41.2 | PASS |
| 5382.933492 | -51.4 | 10.2 | -41.2 | PASS |
| 5388.919240 | -51.4 | 10.2 | -41.2 | PASS |
| 5382.434679 | -51.4 | 10.2 | -41.2 | PASS |
| 5383.432304 | -51.4 | 10.2 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 420 | ~ 420 |
| Sweeptime | 420.000 ms | 420.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5240 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5240.000000 | PASS |

## Final measurements

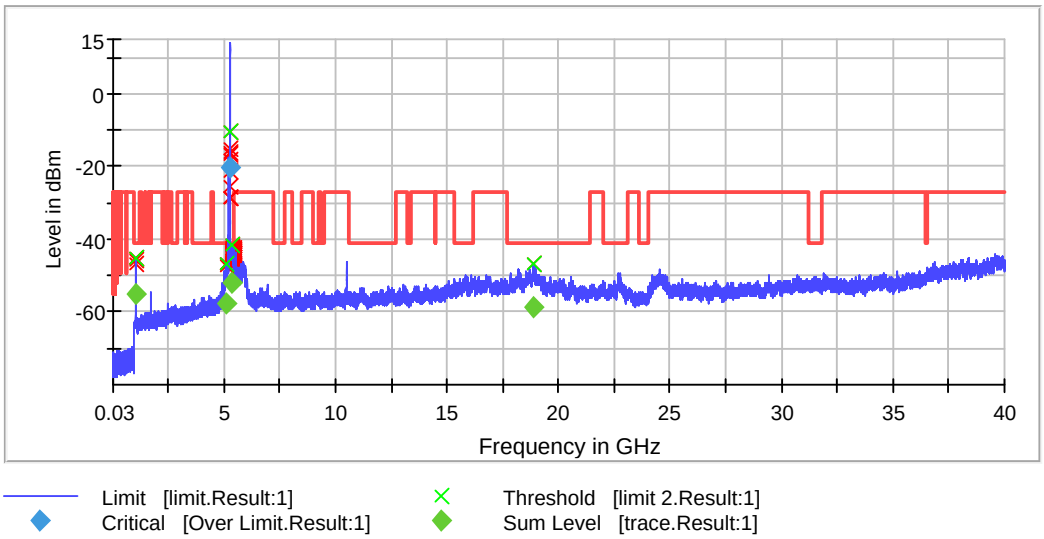
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 1035.491448 | -45.0 | -55.0 | -41.2 | 13.8 | PASS |
| 5107.510238 | -46.8 | -57.5 | -41.2 | 16.3 | PASS |
| 5378.264463 | -41.8 | -51.7 | -41.2 | 10.5 | PASS |
| 18868.875322 | -46.8 | -58.8 | -41.2 | 17.6 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5378.264463 | -41.8 | 0.6 | -41.2 |
| 5379.256198 | -41.9 | 0.7 | -41.2 |
| 5365.371901 | -42.3 | 1.0 | -41.2 |
| 5418.925620 | -42.4 | 1.2 | -41.2 |
| 5375.289256 | -42.5 | 1.3 | -41.2 |
| 5416.942149 | -42.6 | 1.4 | -41.2 |
| 5364.380165 | -42.6 | 1.4 | -41.2 |
| 5414.958678 | -42.9 | 1.6 | -41.2 |
| 5377.272727 | -42.9 | 1.6 | -41.2 |
| 5432.809917 | -43.0 | 1.7 | -41.2 |
| 5402.066116 | -43.0 | 1.8 | -41.2 |
| 5419.917355 | -43.1 | 1.9 | -41.2 |
| 5361.404959 | -43.1 | 1.9 | -41.2 |
| 5381.239669 | -43.2 | 1.9 | -41.2 |
| 5400.082645 | -43.2 | 1.9 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# UNII-1 Ant0 AC mode 20
# Power Spectral Density (5180 MHz; 22.6866 MHz)

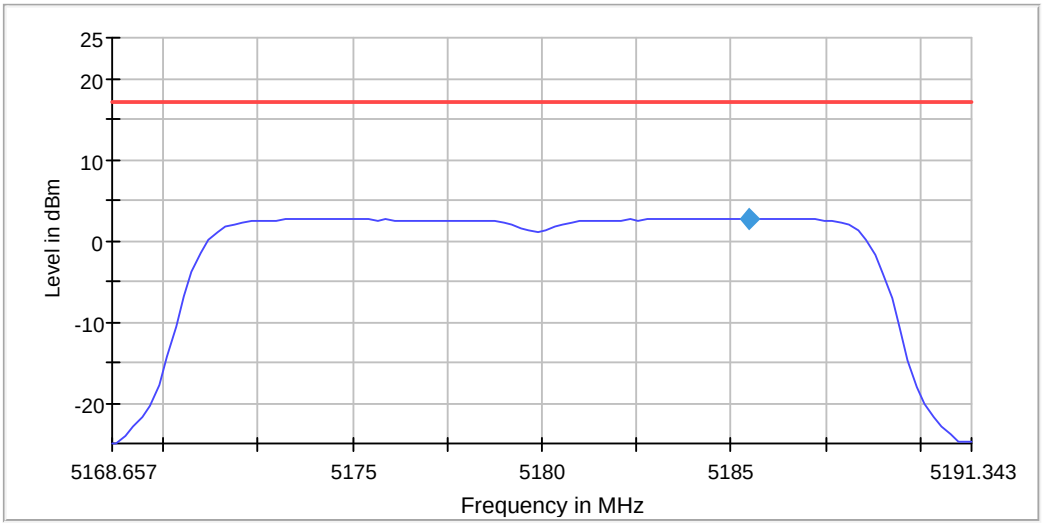
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5180.000000 | 5185.449232 | 2.778 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 95.391 |




## Measurement

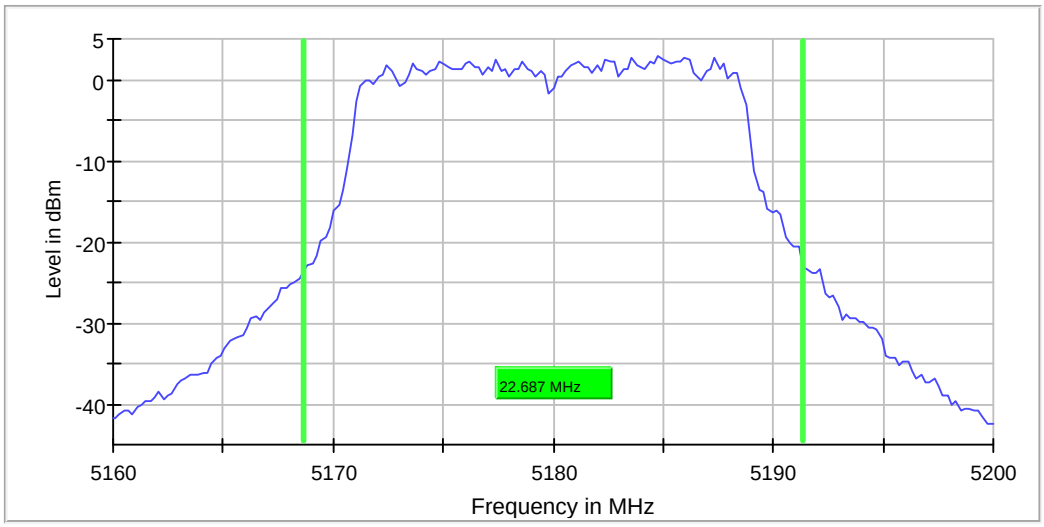
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.16866 GHz | 5.16866 GHz |
| Stop Frequency | 5.19134 GHz | 5.19134 GHz |
| Span | 22.687 MHz | 22.687 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 45 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5180 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5180.000000 | 22.686568 | --- | --- | 5168.656716 | 5191.343284 | 2.8 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.16000 GHz | 5.16000 GHz |
| Stop Frequency | 5.20000 GHz | 5.20000 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | ~ 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 28.443 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 53 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge low (5180 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

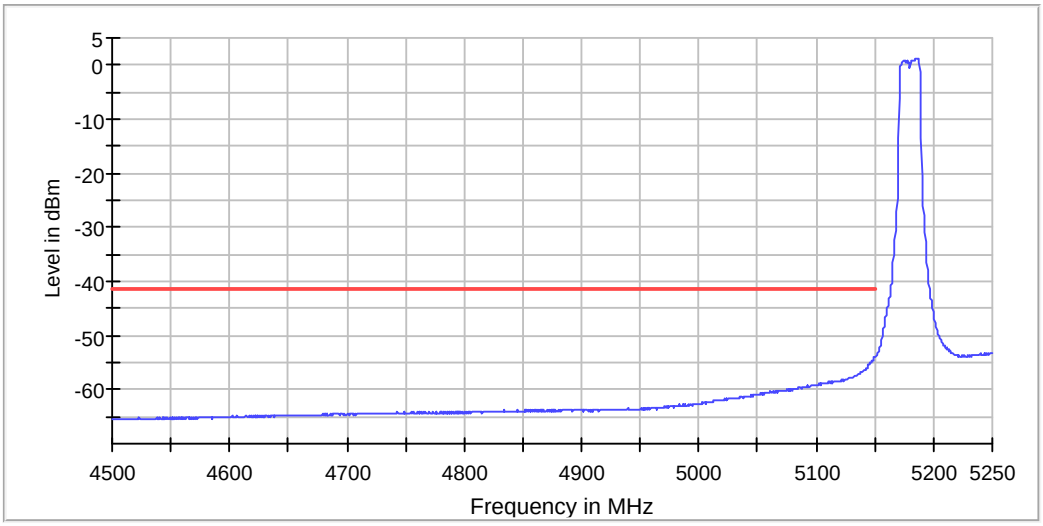
| DUT Frequency (MHz) | Result |
|---|---|
| 5180.000000 | PASS |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5186.069652 | 1.1 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5149.250576 | -54.1 | 12.8 | -41.2 | PASS |
| 5148.750961 | -54.5 | 13.2 | -41.2 | PASS |
| 5148.251345 | -54.5 | 13.3 | -41.2 | PASS |
| 5147.751729 | -54.7 | 13.4 | -41.2 | PASS |
| 5147.252114 | -54.8 | 13.6 | -41.2 | PASS |
| 5146.752498 | -54.9 | 13.7 | -41.2 | PASS |
| 5146.252882 | -55.1 | 13.9 | -41.2 | PASS |
| 5145.753267 | -55.1 | 13.9 | -41.2 | PASS |
| 5144.754035 | -55.4 | 14.2 | -41.2 | PASS |
| 5145.253651 | -55.4 | 14.2 | -41.2 | PASS |
| 5144.254420 | -55.7 | 14.5 | -41.2 | PASS |
| 5143.754804 | -55.9 | 14.6 | -41.2 | PASS |
| 5142.755573 | -56.0 | 14.8 | -41.2 | PASS |
| 5143.255188 | -56.0 | 14.8 | -41.2 | PASS |
| 5142.255957 | -56.2 | 15.0 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 1300 | ~ 1300 |
| Sweeptime | 1.300 s | 1.300 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5180 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5180.000000 | PASS |

## Final measurements

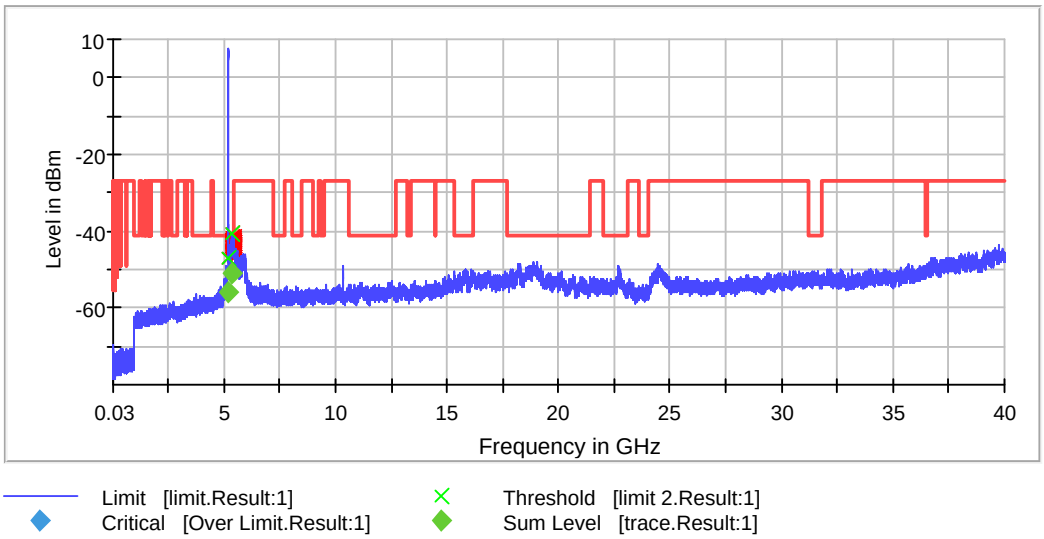
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5148.500361 | -47.2 | -55.9 | -41.2 | 14.6 | PASS |
| 5389.173554 | -40.9 | -51.0 | -41.2 | 9.8 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5389.173554 | -40.9 | -0.3 | -41.2 |
| 5397.107438 | -41.4 | 0.2 | -41.2 |
| 5383.223140 | -41.8 | 0.6 | -41.2 |
| 5388.181818 | -41.9 | 0.7 | -41.2 |
| 5382.231405 | -42.1 | 0.9 | -41.2 |
| 5373.305785 | -42.1 | 0.9 | -41.2 |
| 5359.421488 | -42.2 | 0.9 | -41.2 |
| 5358.429752 | -42.3 | 1.0 | -41.2 |
| 5353.471074 | -42.3 | 1.1 | -41.2 |
| 5402.066116 | -42.3 | 1.1 | -41.2 |
| 5385.206612 | -42.4 | 1.2 | -41.2 |
| 5395.123967 | -42.4 | 1.2 | -41.2 |
| 5400.082645 | -42.5 | 1.2 | -41.2 |
| 5386.198347 | -42.5 | 1.3 | -41.2 |
| 5399.090909 | -42.5 | 1.3 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# Power Spectral Density (5200 MHz; 22.8856 MHz)

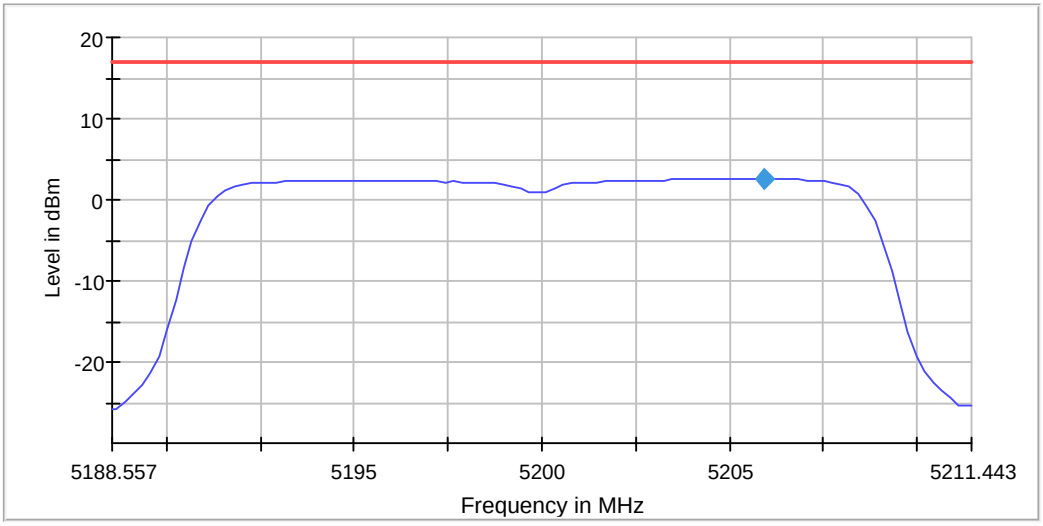
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5200.000000 | 5205.945769 | 2.596 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 95.303 |




## Measurement

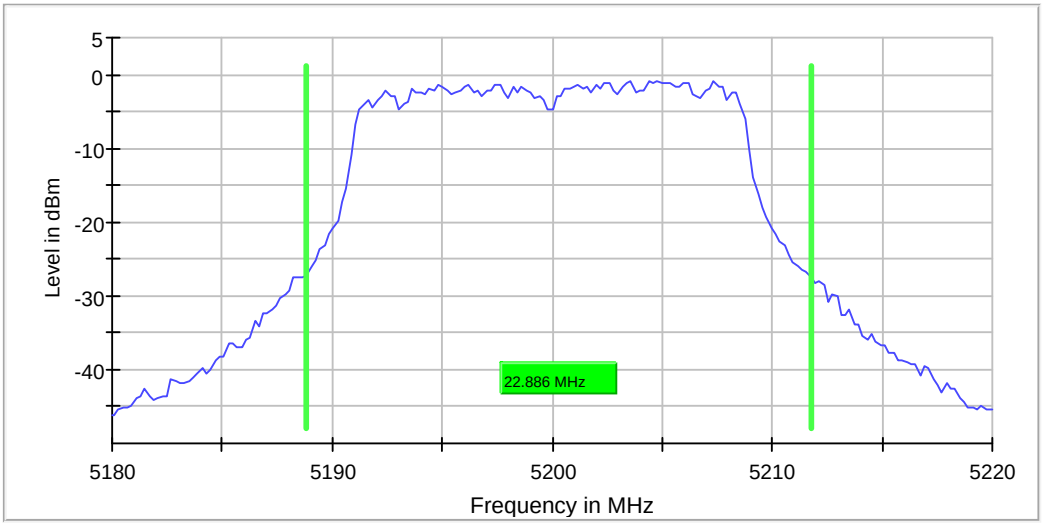
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.18856 GHz | 5.18856 GHz |
| Stop Frequency | 5.21144 GHz | 5.21144 GHz |
| Span | 22.886 MHz | 22.886 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 46 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5200 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5200.000000 | 22.885573 | --- | --- | 5188.855721 | 5211.741294 | -0.8 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.18000 GHz | 5.18000 GHz |
| Stop Frequency | 5.22000 GHz | 5.22000 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | ~ 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 28.443 µs | AUTO |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 48 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Tx Spurious Emission (5200 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5200.000000 | PASS |

## Final measurements

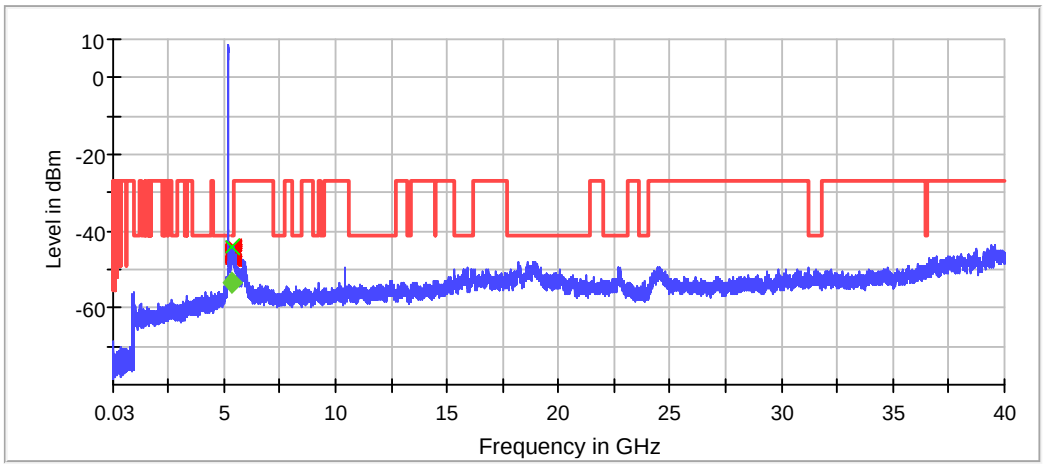
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5387.190083 | -43.9 | -53.3 | -41.2 | 12.1 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5387.190083 | -43.9 | 2.7 | -41.2 |
| 5414.958678 | -44.0 | 2.7 | -41.2 |
| 5417.933884 | -44.4 | 3.2 | -41.2 |
| 5416.942149 | -44.5 | 3.3 | -41.2 |
| 5428.842975 | -44.5 | 3.3 | -41.2 |
| 5439.752066 | -44.5 | 3.3 | -41.2 |
| 5427.851240 | -44.5 | 3.3 | -41.2 |
| 5388.181818 | -44.6 | 3.4 | -41.2 |
| 5440.743802 | -44.7 | 3.5 | -41.2 |
| 5426.859504 | -44.7 | 3.5 | -41.2 |
| 5392.148760 | -44.8 | 3.6 | -41.2 |
| 5393.140496 | -45.0 | 3.8 | -41.2 |
| 5386.198347 | -45.0 | 3.8 | -41.2 |
| 5402.066116 | -45.1 | 3.9 | -41.2 |
| 5361.404959 | -45.1 | 3.9 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# Power Spectral Density (5240 MHz; 22.8856 MHz)

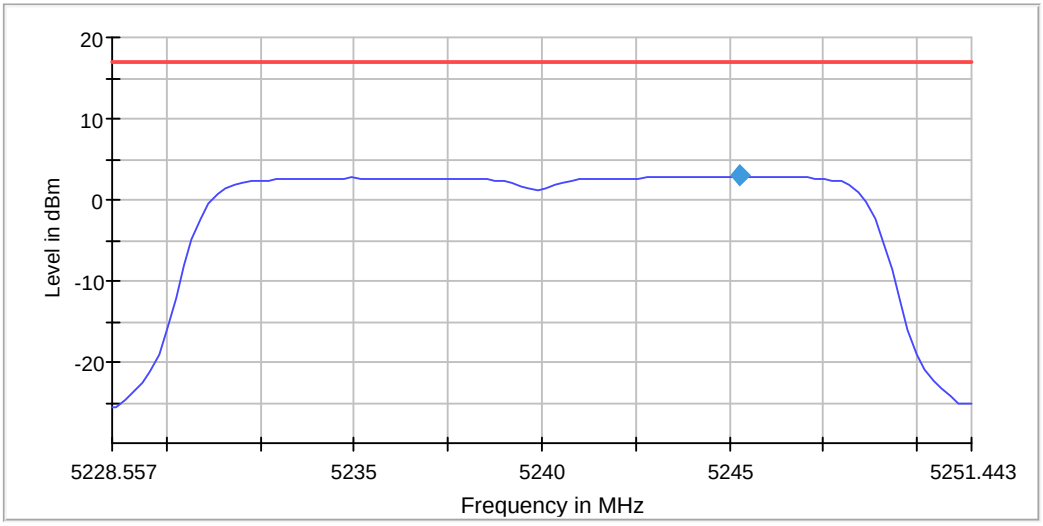
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5240.000000 | 5245.272663 | 2.923 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 95.306 |




## Measurement

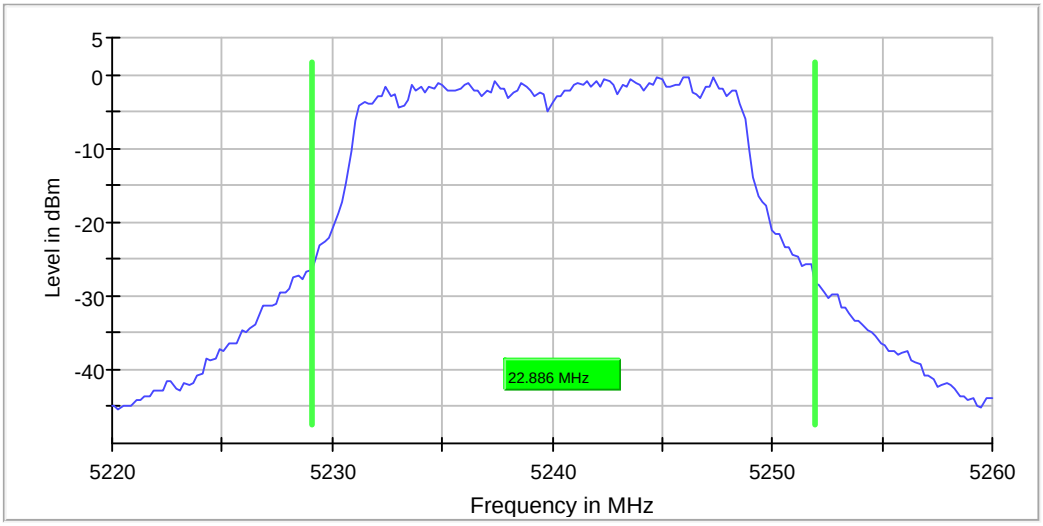
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.22856 GHz | 5.22856 GHz |
| Stop Frequency | 5.25144 GHz | 5.25144 GHz |
| Span | 22.886 MHz | 22.886 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 46 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5240 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5240.000000 | 22.885573 | --- | --- | 5229.054726 | 5251.940299 | -0.3 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.22000 GHz | 5.22000 GHz |
| Stop Frequency | 5.26000 GHz | 5.26000 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | ~ 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 28.443 µs | AUTO |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 39 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge high (5240 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

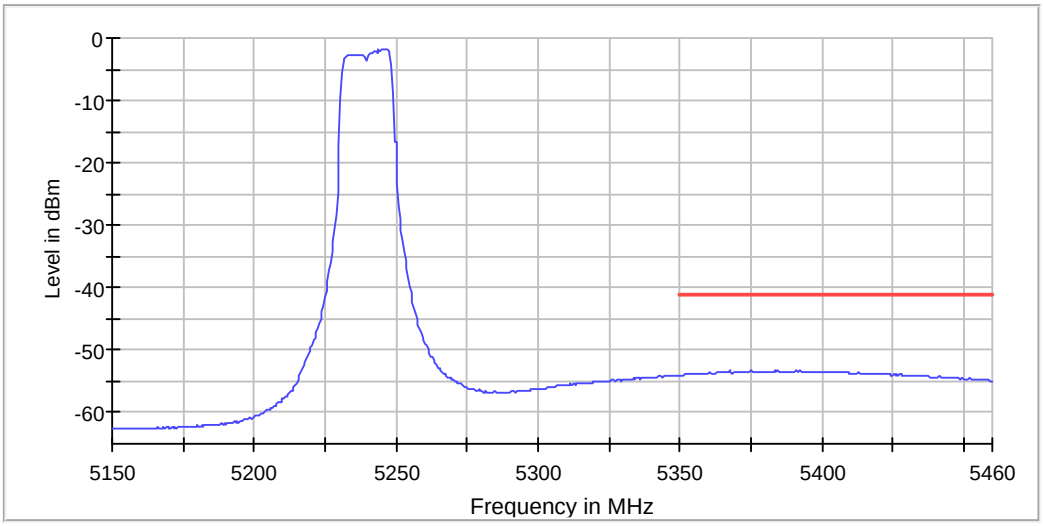
| DUT Frequency (MHz) | Result |
|---|---|
| 5240.000000 | FAIL |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5245.771144 | -1.8 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5383.432304 | -53.3 | 12.1 | -41.2 | PASS |
| 5384.429929 | -53.3 | 12.1 | -41.2 | PASS |
| 5392.410926 | -53.3 | 12.1 | -41.2 | PASS |
| 5374.952494 | -53.3 | 12.1 | -41.2 | PASS |
| 5367.470309 | -53.3 | 12.1 | -41.2 | PASS |
| 5390.914489 | -53.4 | 12.1 | -41.2 | PASS |
| 5373.954869 | -53.4 | 12.1 | -41.2 | PASS |
| 5388.420428 | -53.4 | 12.1 | -41.2 | PASS |
| 5381.437055 | -53.4 | 12.1 | -41.2 | PASS |
| 5384.928741 | -53.4 | 12.2 | -41.2 | PASS |
| 5386.923990 | -53.4 | 12.2 | -41.2 | PASS |
| 5396.401425 | -53.4 | 12.2 | -41.2 | PASS |
| 5380.439430 | -53.4 | 12.2 | -41.2 | PASS |
| 5376.448931 | -53.4 | 12.2 | -41.2 | PASS |
| 5393.408551 | -53.4 | 12.2 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 420 | ~ 420 |
| Sweeptime | 420.000 ms | 420.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5240 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5240.000000 | FAIL |

## Final measurements

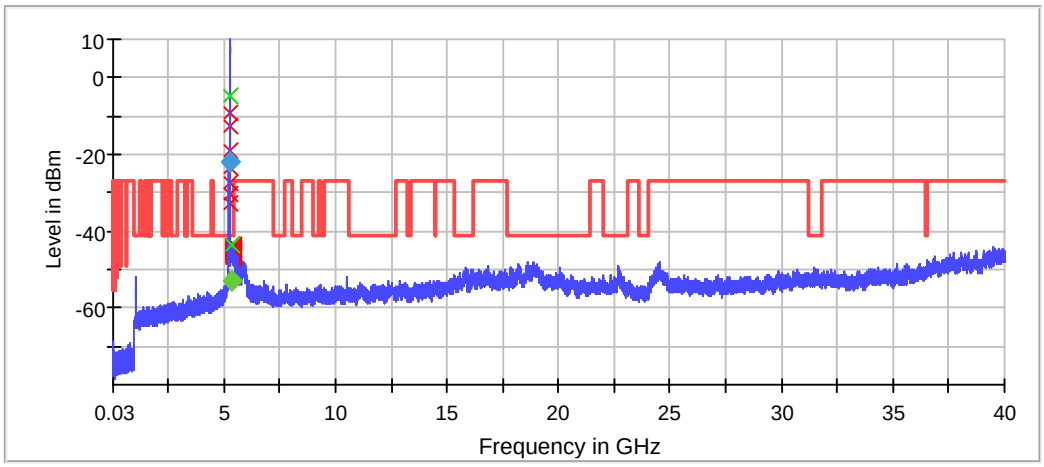
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5250.490196 | -4.8 | -22.1 | --- | --- | FAIL |
| 5379.256198 | -43.4 | -53.1 | -41.2 | 11.9 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5379.256198 | -43.4 | 2.2 | -41.2 |
| 5402.066116 | -43.5 | 2.3 | -41.2 |
| 5414.958678 | -43.5 | 2.3 | -41.2 |
| 5380.247934 | -43.6 | 2.4 | -41.2 |
| 5378.264463 | -43.7 | 2.4 | -41.2 |
| 5424.876033 | -43.8 | 2.5 | -41.2 |
| 5389.173554 | -43.8 | 2.6 | -41.2 |
| 5361.404959 | -43.8 | 2.6 | -41.2 |
| 5362.396694 | -43.8 | 2.6 | -41.2 |
| 5408.016529 | -43.9 | 2.7 | -41.2 |
| 5381.239669 | -44.0 | 2.8 | -41.2 |
| 5377.272727 | -44.1 | 2.8 | -41.2 |
| 5409.008264 | -44.2 | 2.9 | -41.2 |
| 5367.355372 | -44.2 | 2.9 | -41.2 |
| 5374.297521 | -44.3 | 3.0 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# UNII-1 Ant1 AC mode 40
# Power Spectral Density (5190 MHz; 43.2836 MHz)

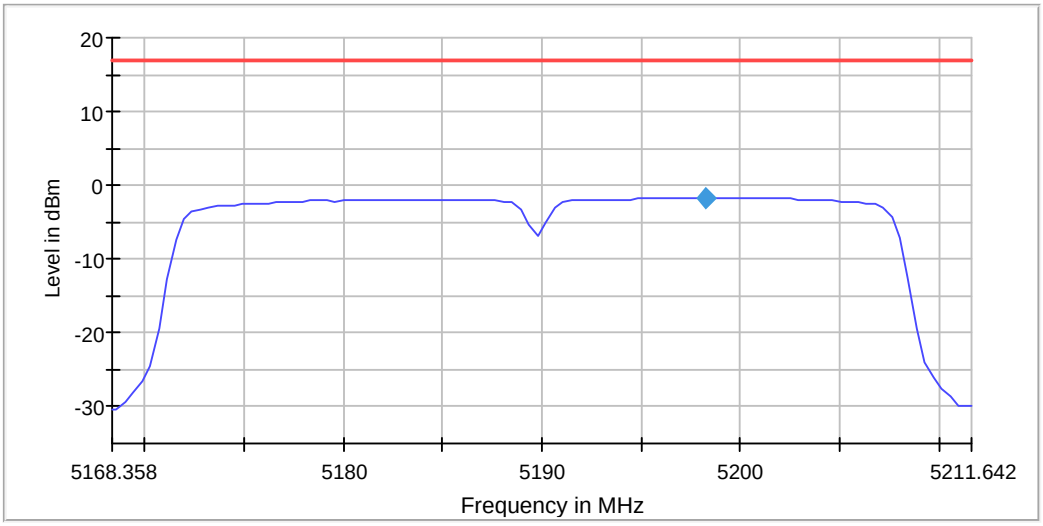
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5190.000000 | 5198.274806 | -1.718 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 92.916 |




## Measurement

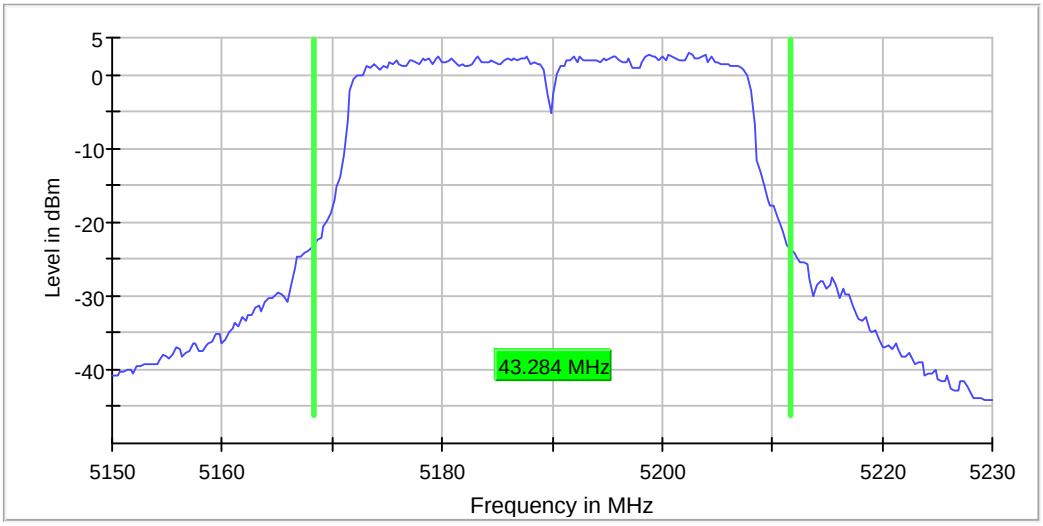
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.16836 GHz | 5.16836 GHz |
| Stop Frequency | 5.21164 GHz | 5.21164 GHz |
| Span | 43.284 MHz | 43.284 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 87 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5190 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5190.000000 | 43.283582 | --- | --- | 5168.358209 | 5211.641791 | 2.8 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.15000 GHz | 5.15000 GHz |
| Stop Frequency | 5.23000 GHz | 5.23000 GHz |
| Span | 80.000 MHz | 80.000 MHz |
| RBW | 300.000 kHz | ~ 400.000 kHz |
| VBW | 1.000 MHz | >= 900.000 kHz |
| SweepPoints | 267 | ~ 267 |
| Sweeptime | 31.603 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 69 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge low (5190 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

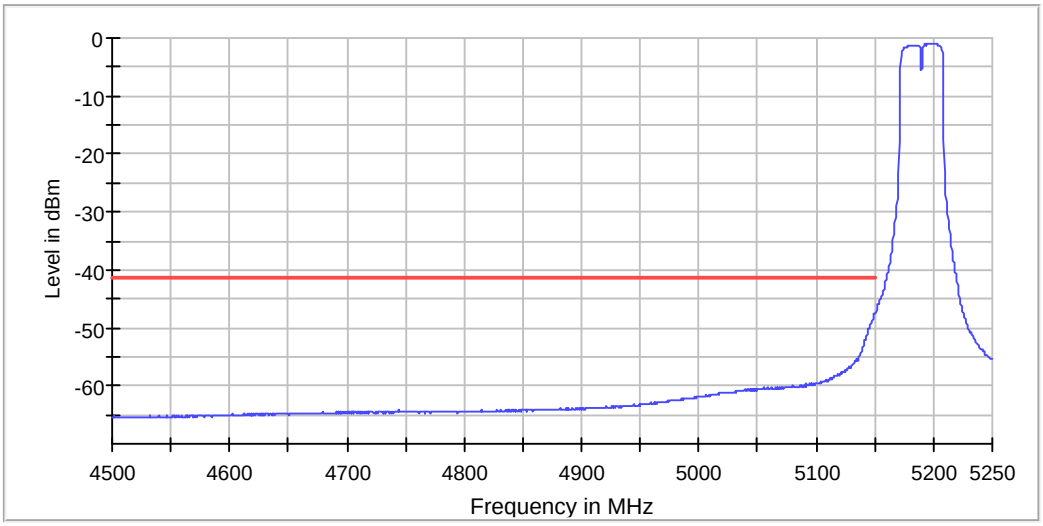
| DUT Frequency (MHz) | Result |
|---|---|
| 5190.000000 | PASS |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5198.009950 | -0.9 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5149.250576 | -47.5 | 6.3 | -41.2 | PASS |
| 5148.750961 | -48.0 | 6.8 | -41.2 | PASS |
| 5148.251345 | -48.4 | 7.2 | -41.2 | PASS |
| 5147.751729 | -48.7 | 7.5 | -41.2 | PASS |
| 5147.252114 | -48.9 | 7.7 | -41.2 | PASS |
| 5146.752498 | -49.2 | 8.0 | -41.2 | PASS |
| 5146.252882 | -49.4 | 8.2 | -41.2 | PASS |
| 5145.753267 | -49.8 | 8.5 | -41.2 | PASS |
| 5145.253651 | -50.1 | 8.8 | -41.2 | PASS |
| 5144.754035 | -50.2 | 9.0 | -41.2 | PASS |
| 5144.254420 | -50.5 | 9.2 | -41.2 | PASS |
| 5143.754804 | -50.9 | 9.7 | -41.2 | PASS |
| 5143.255188 | -51.1 | 9.9 | -41.2 | PASS |
| 5142.755573 | -51.4 | 10.2 | -41.2 | PASS |
| 5142.255957 | -51.8 | 10.6 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 1300 | ~ 1300 |
| Sweeptime | 1.300 s | 1.300 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5190 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5190.000000 | PASS |

## Final measurements

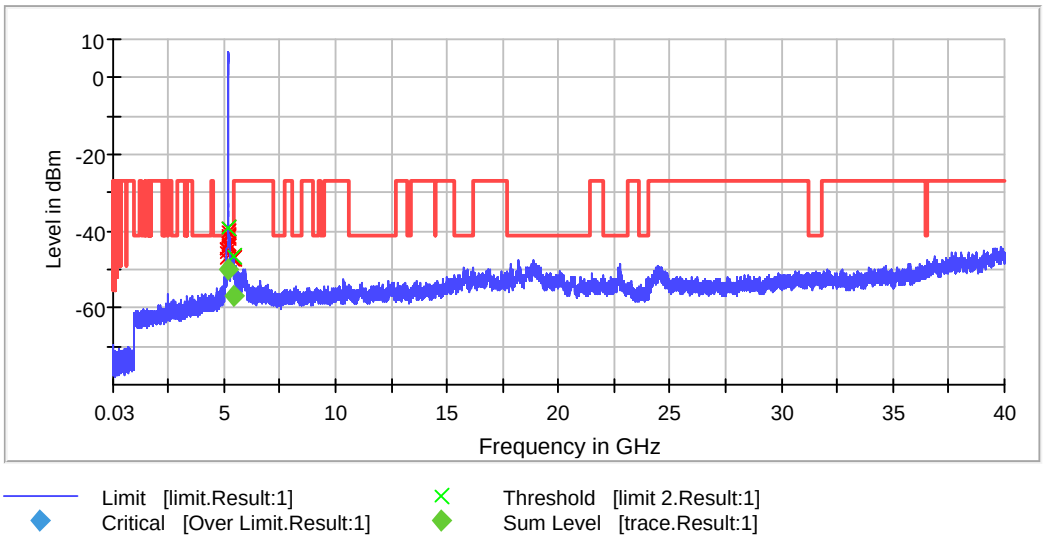
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5147.500602 | -39.0 | -49.9 | -41.2 | 8.6 | PASS |
| 5422.892562 | -46.4 | -57.0 | -41.2 | 15.8 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5147.500602 | -39.0 | -2.2 | -41.2 |
| 5148.500361 | -40.2 | -1.0 | -41.2 |
| 5146.500843 | -41.3 | 0.0 | -41.2 |
| 5145.501084 | -41.7 | 0.5 | -41.2 |
| 5143.501566 | -42.9 | 1.7 | -41.2 |
| 5144.501325 | -43.4 | 2.2 | -41.2 |
| 5142.501807 | -44.3 | 3.1 | -41.2 |
| 5140.502289 | -44.4 | 3.1 | -41.2 |
| 5141.502048 | -44.5 | 3.3 | -41.2 |
| 5139.502530 | -44.8 | 3.6 | -41.2 |
| 5138.502770 | -45.7 | 4.5 | -41.2 |
| 5422.892562 | -46.4 | 5.2 | -41.2 |
| 5410.991736 | -46.9 | 5.7 | -41.2 |
| 5136.503252 | -46.9 | 5.7 | -41.2 |
| 5421.900826 | -47.0 | 5.7 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# Power Spectral Density (5230 MHz; 43.2836 MHz)

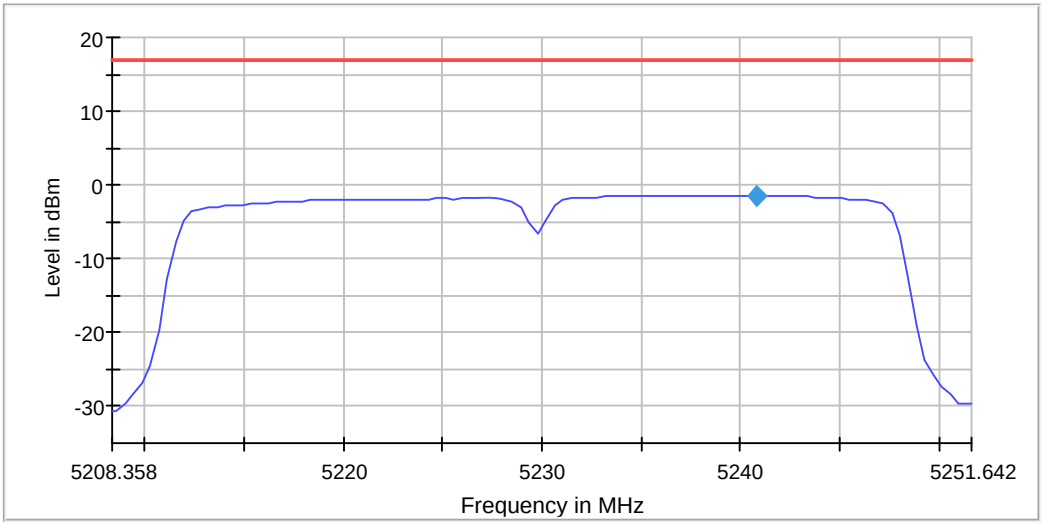
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5230.000000 | 5240.820900 | -1.377 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 93.019 |




## Measurement

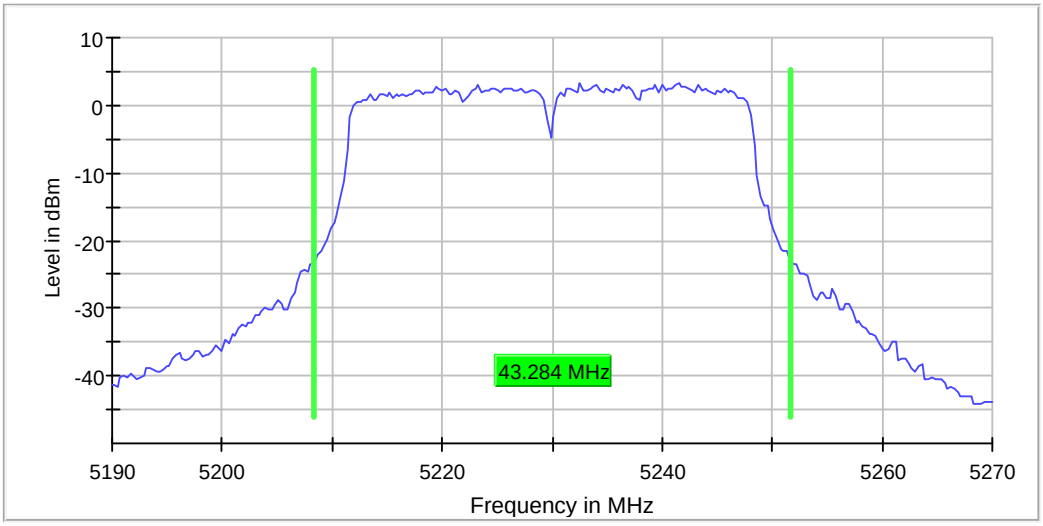
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.20836 GHz | 5.20836 GHz |
| Stop Frequency | 5.25164 GHz | 5.25164 GHz |
| Span | 43.284 MHz | 43.284 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 87 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5230 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5230.000000 | 43.283582 | --- | --- | 5208.358209 | 5251.641791 | 3.2 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.19000 GHz | 5.19000 GHz |
| Stop Frequency | 5.27000 GHz | 5.27000 GHz |
| Span | 80.000 MHz | 80.000 MHz |
| RBW | 300.000 kHz | ~ 400.000 kHz |
| VBW | 1.000 MHz | >= 900.000 kHz |
| SweepPoints | 267 | ~ 267 |
| Sweeptime | 31.603 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 58 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge high (5230 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

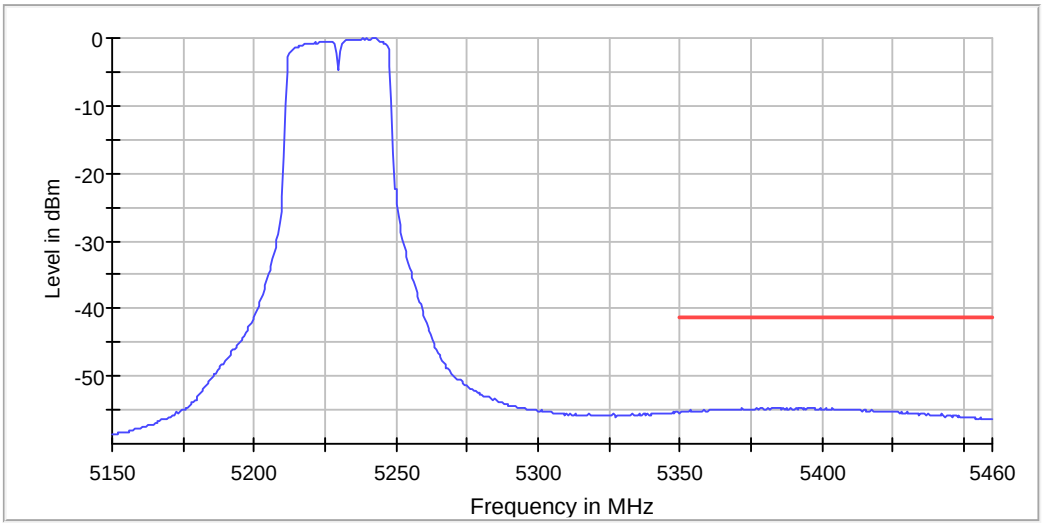
| DUT Frequency (MHz) | Result |
|---|---|
| 5230.000000 | PASS |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5242.786070 | -0.1 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5382.933492 | -54.7 | 13.5 | -41.2 | PASS |
| 5393.907363 | -54.7 | 13.5 | -41.2 | PASS |
| 5403.883610 | -54.7 | 13.5 | -41.2 | PASS |
| 5387.422803 | -54.7 | 13.5 | -41.2 | PASS |
| 5384.429929 | -54.8 | 13.5 | -41.2 | PASS |
| 5397.399050 | -54.8 | 13.5 | -41.2 | PASS |
| 5376.947743 | -54.8 | 13.6 | -41.2 | PASS |
| 5395.902613 | -54.8 | 13.6 | -41.2 | PASS |
| 5378.942993 | -54.8 | 13.6 | -41.2 | PASS |
| 5401.389549 | -54.8 | 13.6 | -41.2 | PASS |
| 5395.403800 | -54.8 | 13.6 | -41.2 | PASS |
| 5386.425178 | -54.8 | 13.6 | -41.2 | PASS |
| 5391.912114 | -54.8 | 13.6 | -41.2 | PASS |
| 5384.928741 | -54.8 | 13.6 | -41.2 | PASS |
| 5396.401425 | -54.8 | 13.6 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 420 | ~ 420 |
| Sweeptime | 420.000 ms | 420.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5230 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5230.000000 | PASS |

## Final measurements

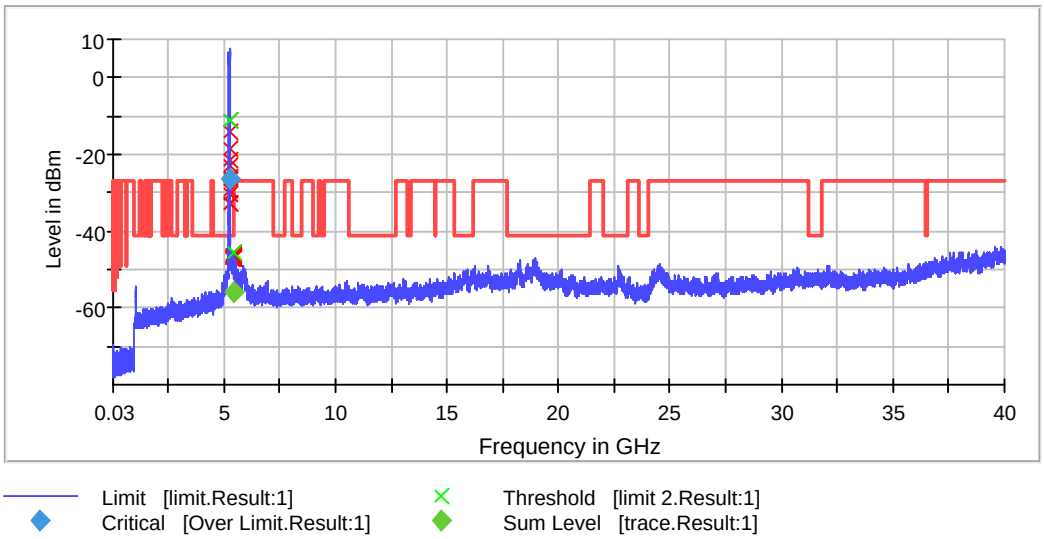
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5404.049587 | -45.7 | -55.7 | -41.2 | 14.5 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5404.049587 | -45.7 | 4.5 | -41.2 |
| 5405.041322 | -46.1 | 4.8 | -41.2 |
| 5409.008264 | -46.2 | 5.0 | -41.2 |
| 5355.454545 | -46.3 | 5.1 | -41.2 |
| 5389.173554 | -46.3 | 5.1 | -41.2 |
| 5411.983471 | -46.3 | 5.1 | -41.2 |
| 5353.471074 | -46.4 | 5.2 | -41.2 |
| 5395.123967 | -46.7 | 5.5 | -41.2 |
| 5366.363636 | -46.7 | 5.5 | -41.2 |
| 5429.834711 | -46.8 | 5.5 | -41.2 |
| 5354.462810 | -46.8 | 5.6 | -41.2 |
| 5364.380165 | -46.8 | 5.6 | -41.2 |
| 5365.371901 | -46.9 | 5.7 | -41.2 |
| 5416.942149 | -47.0 | 5.8 | -41.2 |
| 5432.809917 | -47.0 | 5.8 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# UNII-1 Ant1 AC mode 80
# Power Spectral Density (5210 MHz; 88.4472 MHz)

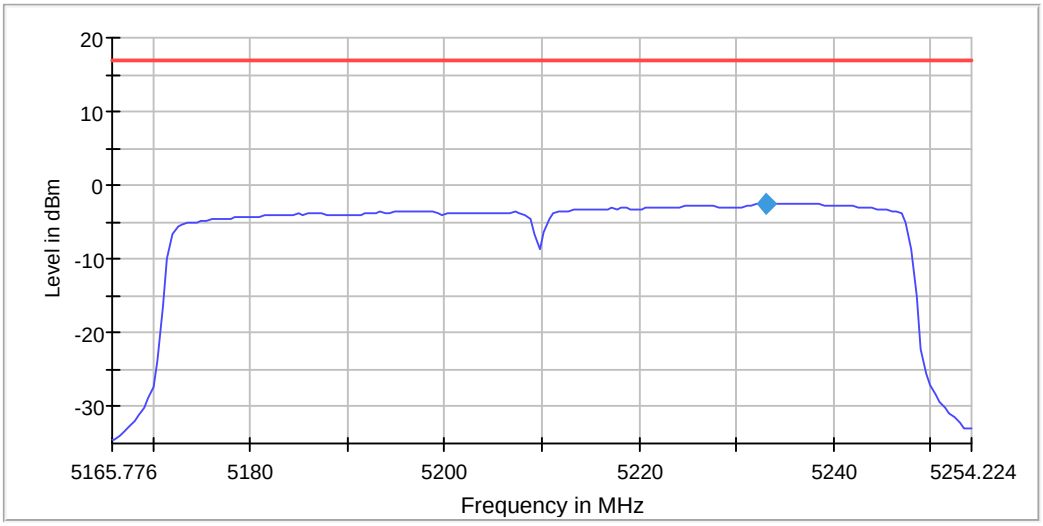
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5210.000000 | 5233.105589 | -2.443 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 86.125 |




## Measurement

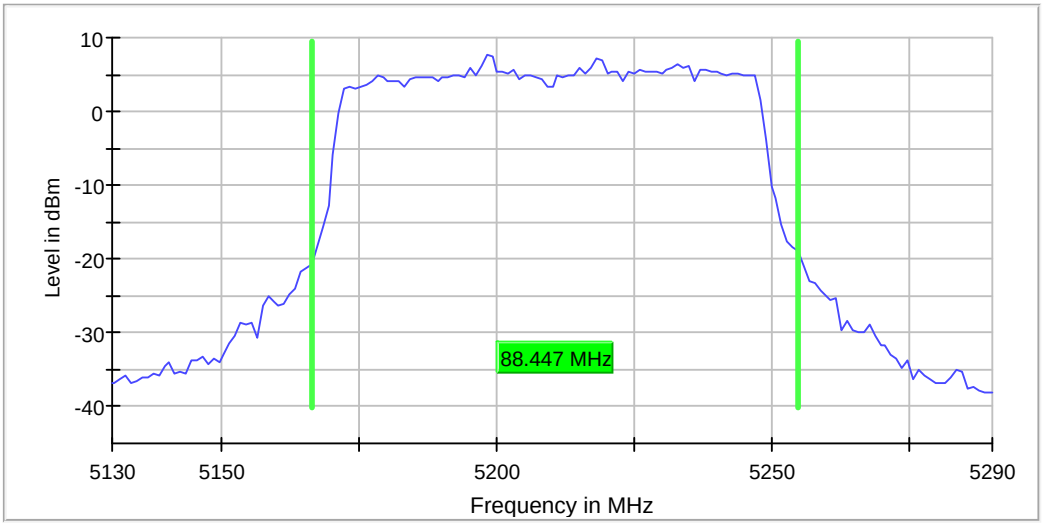
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.16578 GHz | 5.16578 GHz |
| Stop Frequency | 5.25422 GHz | 5.25422 GHz |
| Span | 88.447 MHz | 88.447 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 177 | ~ 177 |
| Sweeptime | 3.540 s | 3.540 s |
| Reference Level | -30.000 dBm | -30.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5210 MHz; 80MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5210.000000 | 88.447205 | --- | --- | 5166.273292 | 5254.720497 | 7.6 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.13000 GHz | 5.13000 GHz |
| Stop Frequency | 5.29000 GHz | 5.29000 GHz |
| Span | 160.000 MHz | 160.000 MHz |
| RBW | 1.000 MHz | ~ 800.000 kHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 160 | ~ 160 |
| Sweeptime | 22.754 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 25 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge low (5210 MHz; 80MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

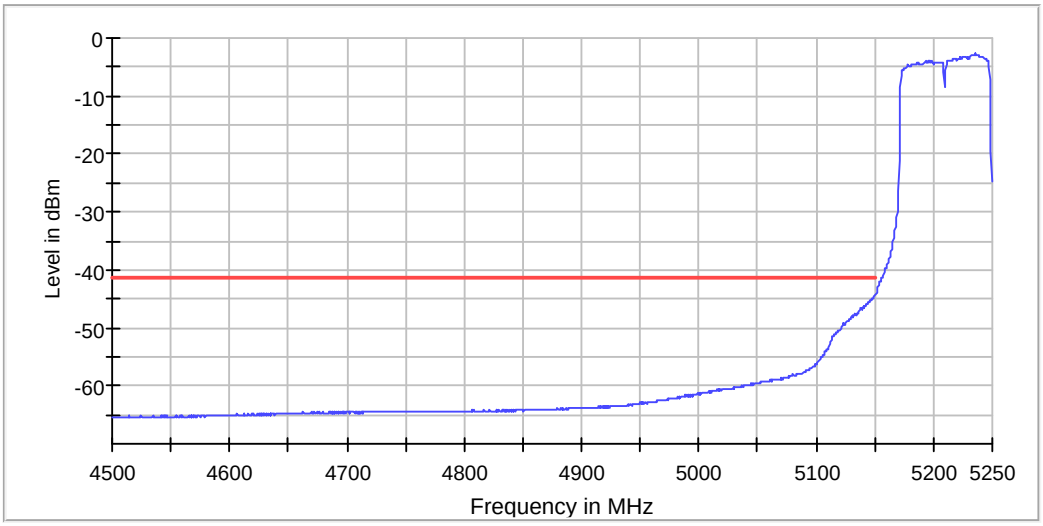
| DUT Frequency (MHz) | Result |
|---|---|
| 5210.000000 | PASS |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5235.820896 | -2.7 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5149.250576 | -44.6 | 3.3 | -41.2 | PASS |
| 5148.750961 | -44.7 | 3.4 | -41.2 | PASS |
| 5148.251345 | -44.8 | 3.6 | -41.2 | PASS |
| 5147.751729 | -45.0 | 3.7 | -41.2 | PASS |
| 5147.252114 | -45.1 | 3.9 | -41.2 | PASS |
| 5146.752498 | -45.2 | 3.9 | -41.2 | PASS |
| 5145.753267 | -45.3 | 4.0 | -41.2 | PASS |
| 5146.252882 | -45.4 | 4.2 | -41.2 | PASS |
| 5144.754035 | -45.6 | 4.4 | -41.2 | PASS |
| 5145.253651 | -45.7 | 4.5 | -41.2 | PASS |
| 5142.755573 | -45.8 | 4.6 | -41.2 | PASS |
| 5144.254420 | -45.8 | 4.6 | -41.2 | PASS |
| 5142.255957 | -46.0 | 4.8 | -41.2 | PASS |
| 5143.255188 | -46.0 | 4.8 | -41.2 | PASS |
| 5143.754804 | -46.0 | 4.8 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 1300 | ~ 1300 |
| Sweeptime | 1.300 s | 1.300 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Band Edge high (5210 MHz; 80MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

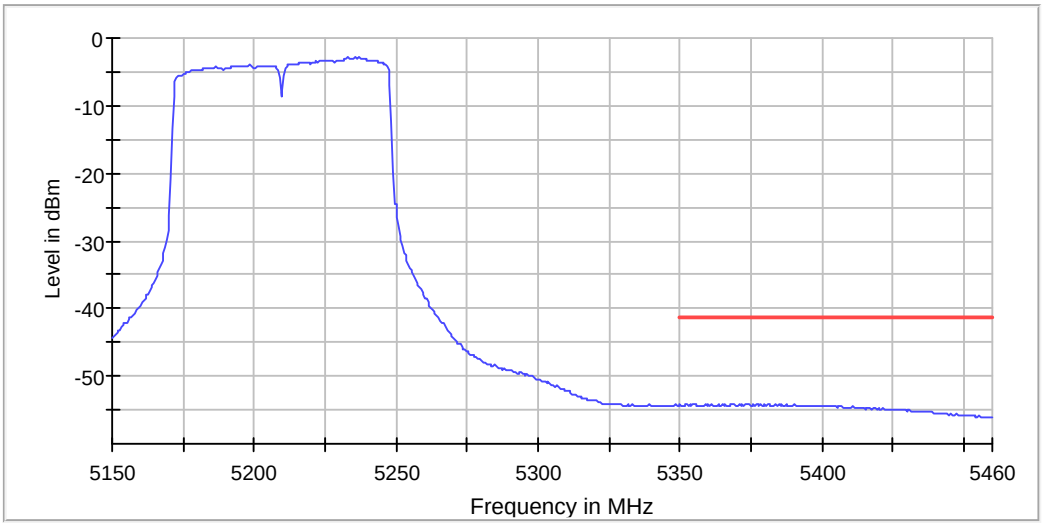
| DUT Frequency (MHz) | Result |
|---|---|
| 5210.000000 | PASS |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5232.835821 | -2.9 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5368.966746 | -54.2 | 12.9 | -41.2 | PASS |
| 5383.931116 | -54.2 | 12.9 | -41.2 | PASS |
| 5384.928741 | -54.2 | 13.0 | -41.2 | PASS |
| 5355.498812 | -54.2 | 13.0 | -41.2 | PASS |
| 5359.988124 | -54.2 | 13.0 | -41.2 | PASS |
| 5350.011876 | -54.2 | 13.0 | -41.2 | PASS |
| 5365.973872 | -54.2 | 13.0 | -41.2 | PASS |
| 5390.415677 | -54.2 | 13.0 | -41.2 | PASS |
| 5358.990499 | -54.2 | 13.0 | -41.2 | PASS |
| 5379.940618 | -54.2 | 13.0 | -41.2 | PASS |
| 5371.959620 | -54.2 | 13.0 | -41.2 | PASS |
| 5367.969121 | -54.2 | 13.0 | -41.2 | PASS |
| 5387.422803 | -54.2 | 13.0 | -41.2 | PASS |
| 5383.432304 | -54.2 | 13.0 | -41.2 | PASS |
| 5373.456057 | -54.2 | 13.0 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 420 | ~ 420 |
| Sweeptime | 420.000 ms | 420.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5210 MHz; 80MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5210.000000 | PASS |

## Final measurements

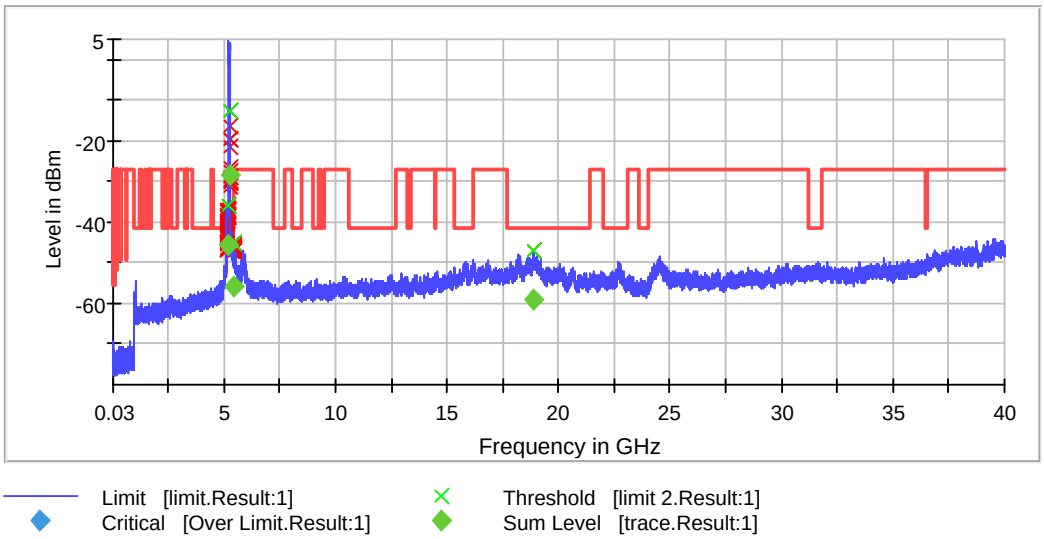
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5148.500361 | -36.1 | -45.5 | -41.2 | 4.2 | PASS |
| 5250.490196 | -12.9 | -28.2 | --- | --- | PASS |
| 5419.917355 | -45.4 | -55.7 | -41.2 | 14.5 | PASS |
| 18905.873375 | -47.2 | -59.1 | -41.2 | 17.9 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5148.500361 | -36.1 | -5.2 | -41.2 |
| 5140.502289 | -36.6 | -4.6 | -41.2 |
| 5143.501566 | -36.9 | -4.3 | -41.2 |
| 5147.500602 | -37.2 | -4.0 | -41.2 |
| 5142.501807 | -37.3 | -4.0 | -41.2 |
| 5135.503493 | -37.4 | -3.8 | -41.2 |
| 5141.502048 | -38.3 | -3.0 | -41.2 |
| 5138.502770 | -38.3 | -2.9 | -41.2 |
| 5145.501084 | -38.3 | -2.9 | -41.2 |
| 5139.502530 | -38.4 | -2.9 | -41.2 |
| 5144.501325 | -38.5 | -2.7 | -41.2 |
| 5122.506625 | -38.6 | -2.6 | -41.2 |
| 5137.503011 | -38.7 | -2.5 | -41.2 |
| 5146.500843 | -38.8 | -2.4 | -41.2 |
| 5134.503734 | -39.4 | -1.9 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# UNII-1 Ant1 NHT20
# Power Spectral Density (5180 MHz; 23.0846 MHz)

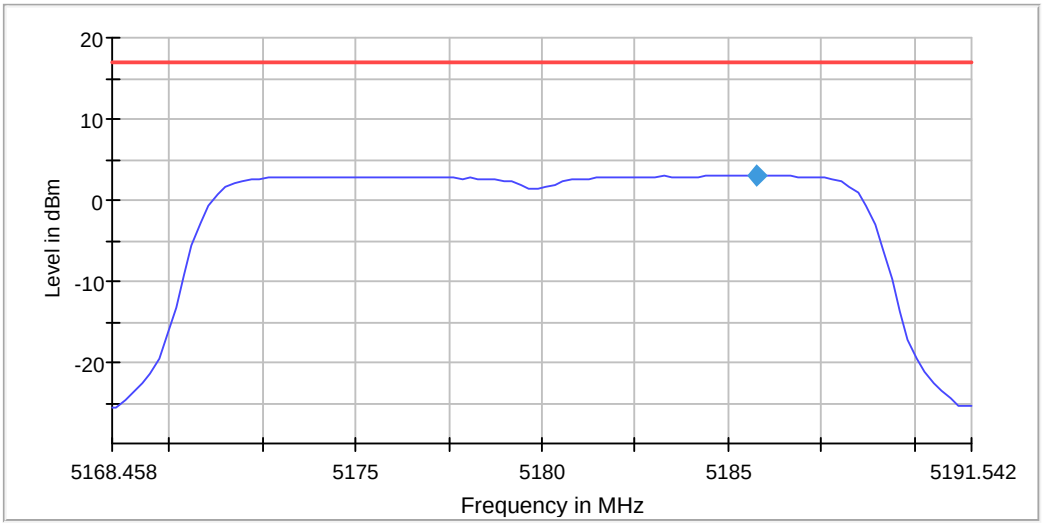
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5180.000000 | 5185.771150 | 3.038 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 94.983 |




## Measurement

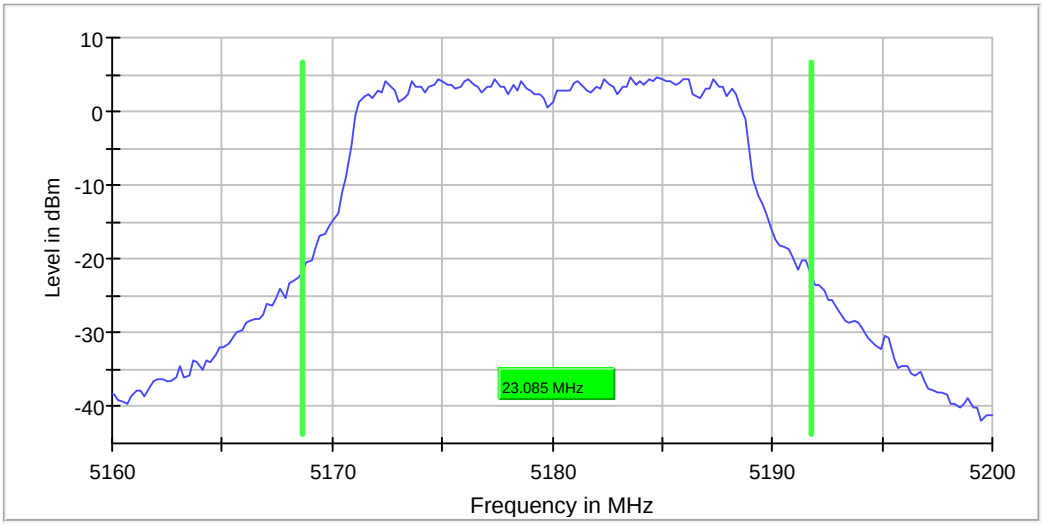
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.16846 GHz | 5.16846 GHz |
| Stop Frequency | 5.19154 GHz | 5.19154 GHz |
| Span | 23.085 MHz | 23.085 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 46 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5180 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5180.000000 | 23.084578 | --- | --- | 5168.656716 | 5191.741294 | 4.6 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.16000 GHz | 5.16000 GHz |
| Stop Frequency | 5.20000 GHz | 5.20000 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | ~ 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 28.443 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 45 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge low (5180 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

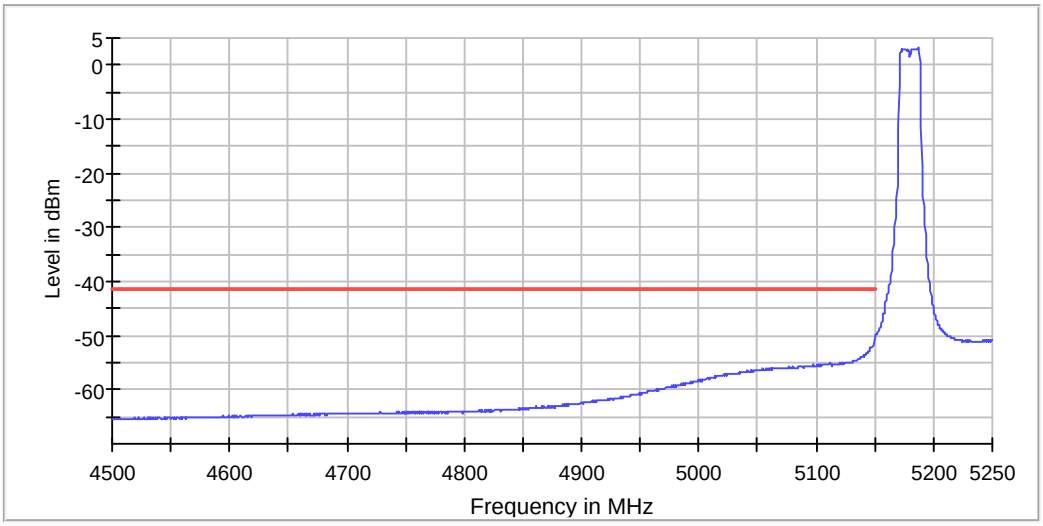
| DUT Frequency (MHz) | Result |
|---|---|
| 5180.000000 | PASS |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5186.567164 | 3.1 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5148.750961 | -51.9 | 10.7 | -41.2 | PASS |
| 5149.250576 | -51.9 | 10.7 | -41.2 | PASS |
| 5148.251345 | -52.0 | 10.7 | -41.2 | PASS |
| 5147.751729 | -52.1 | 10.8 | -41.2 | PASS |
| 5147.252114 | -52.1 | 10.9 | -41.2 | PASS |
| 5146.752498 | -52.3 | 11.1 | -41.2 | PASS |
| 5146.252882 | -52.4 | 11.1 | -41.2 | PASS |
| 5145.753267 | -52.7 | 11.5 | -41.2 | PASS |
| 5144.754035 | -52.9 | 11.6 | -41.2 | PASS |
| 5145.253651 | -52.9 | 11.7 | -41.2 | PASS |
| 5144.254420 | -53.1 | 11.9 | -41.2 | PASS |
| 5143.754804 | -53.1 | 11.9 | -41.2 | PASS |
| 5143.255188 | -53.2 | 12.0 | -41.2 | PASS |
| 5142.755573 | -53.3 | 12.1 | -41.2 | PASS |
| 5142.255957 | -53.5 | 12.3 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 1300 | ~ 1300 |
| Sweeptime | 1.300 s | 1.300 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5180 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5180.000000 | PASS |

## Final measurements

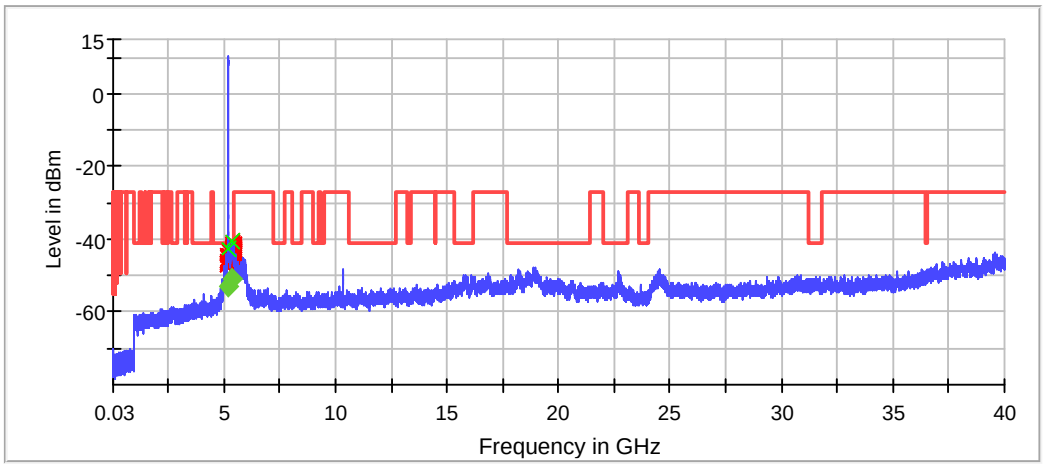
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5147.500602 | -42.7 | -53.0 | -41.2 | 11.7 | PASS |
| 5352.479339 | -40.8 | -50.9 | -41.2 | 9.6 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5352.479339 | -40.8 | -0.4 | -41.2 |
| 5381.239669 | -41.1 | -0.1 | -41.2 |
| 5351.487603 | -41.1 | -0.1 | -41.2 |
| 5395.123967 | -41.2 | -0.1 | -41.2 |
| 5380.247934 | -41.3 | 0.0 | -41.2 |
| 5365.371901 | -41.3 | 0.1 | -41.2 |
| 5414.958678 | -41.4 | 0.1 | -41.2 |
| 5396.115702 | -41.4 | 0.2 | -41.2 |
| 5434.793388 | -41.6 | 0.4 | -41.2 |
| 5413.966942 | -41.7 | 0.4 | -41.2 |
| 5435.785124 | -41.7 | 0.5 | -41.2 |
| 5358.429752 | -41.7 | 0.5 | -41.2 |
| 5362.396694 | -41.8 | 0.6 | -41.2 |
| 5393.140496 | -41.8 | 0.6 | -41.2 |
| 5405.041322 | -41.9 | 0.6 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# Power Spectral Density (5200 MHz; 23.4826 MHz)

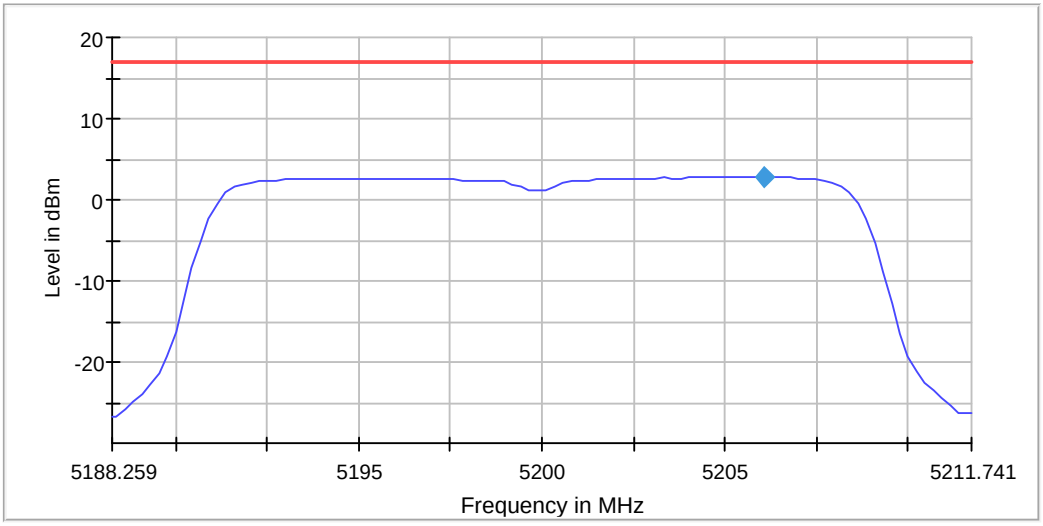
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5200.000000 | 5206.100872 | 2.840 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 94.619 |




## Measurement

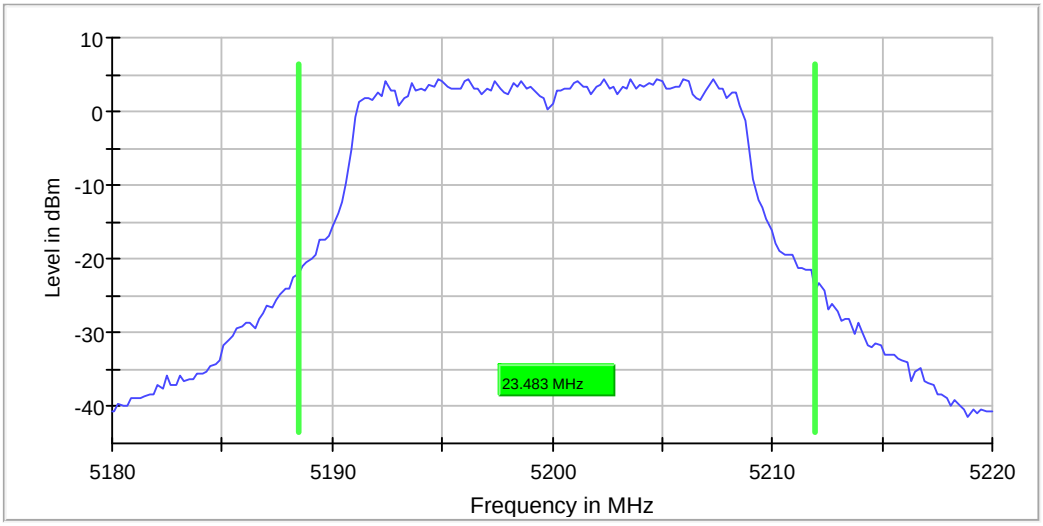
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.18826 GHz | 5.18826 GHz |
| Stop Frequency | 5.21174 GHz | 5.21174 GHz |
| Span | 23.483 MHz | 23.483 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 47 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5200 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5200.000000 | 23.482588 | --- | --- | 5188.457711 | 5211.940299 | 4.5 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.18000 GHz | 5.18000 GHz |
| Stop Frequency | 5.22000 GHz | 5.22000 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | ~ 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 28.443 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 28 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Tx Spurious Emission (5200 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5200.000000 | PASS |

## Final measurements

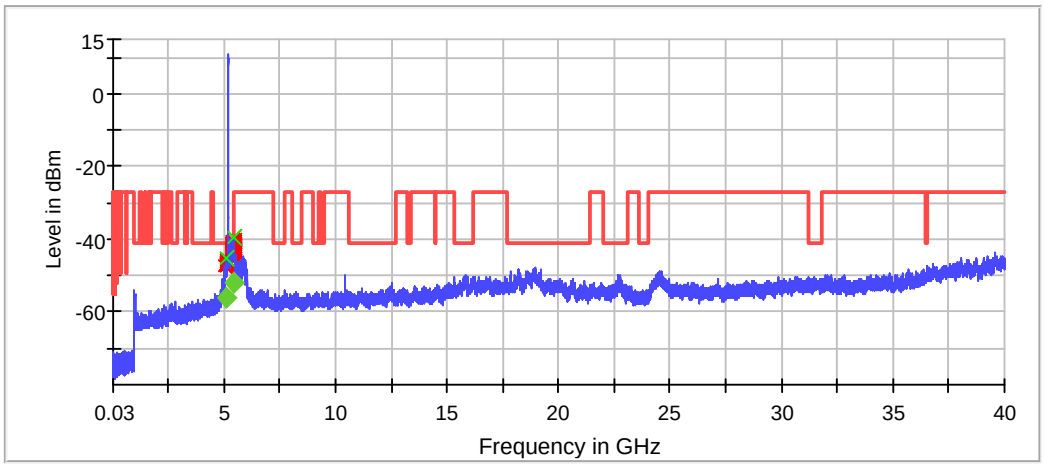
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5136.503252 | -45.3 | -56.3 | -41.2 | 15.1 | PASS |
| 5429.834711 | -39.6 | -51.8 | -41.2 | 10.6 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5429.834711 | -39.6 | -1.6 | -41.2 |
| 5416.942149 | -40.5 | -0.8 | -41.2 |
| 5379.256198 | -40.6 | -0.7 | -41.2 |
| 5399.090909 | -40.8 | -0.4 | -41.2 |
| 5400.082645 | -40.9 | -0.4 | -41.2 |
| 5391.157025 | -41.1 | -0.1 | -41.2 |
| 5392.148760 | -41.2 | -0.1 | -41.2 |
| 5377.272727 | -41.3 | 0.0 | -41.2 |
| 5459.586777 | -41.3 | 0.1 | -41.2 |
| 5383.223140 | -41.3 | 0.1 | -41.2 |
| 5370.330579 | -41.3 | 0.1 | -41.2 |
| 5366.363636 | -41.3 | 0.1 | -41.2 |
| 5436.776860 | -41.4 | 0.2 | -41.2 |
| 5426.859504 | -41.4 | 0.2 | -41.2 |
| 5371.322314 | -41.4 | 0.2 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# Power Spectral Density (5240 MHz; 23.6816 MHz)

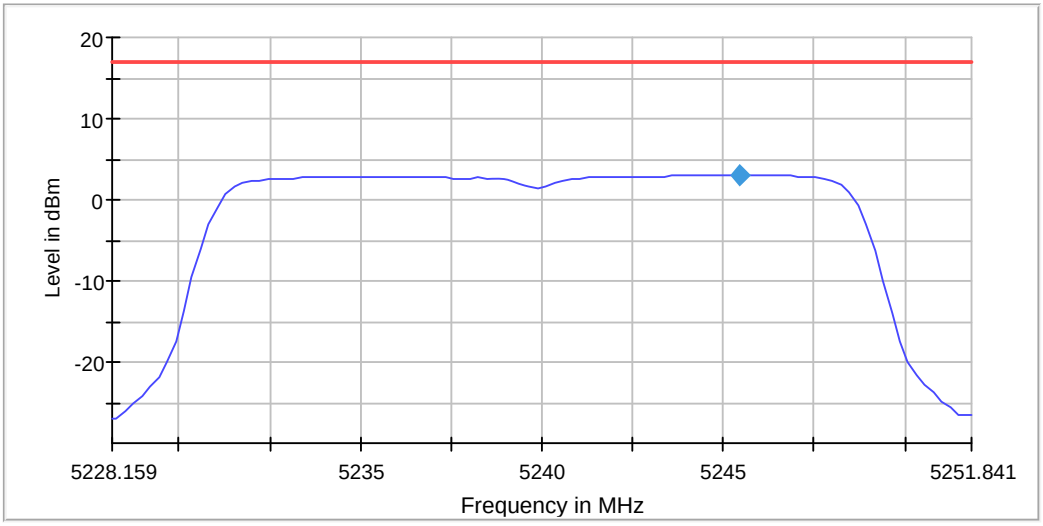
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5240.000000 | 5245.456055 | 3.086 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 95.161 |




## Measurement

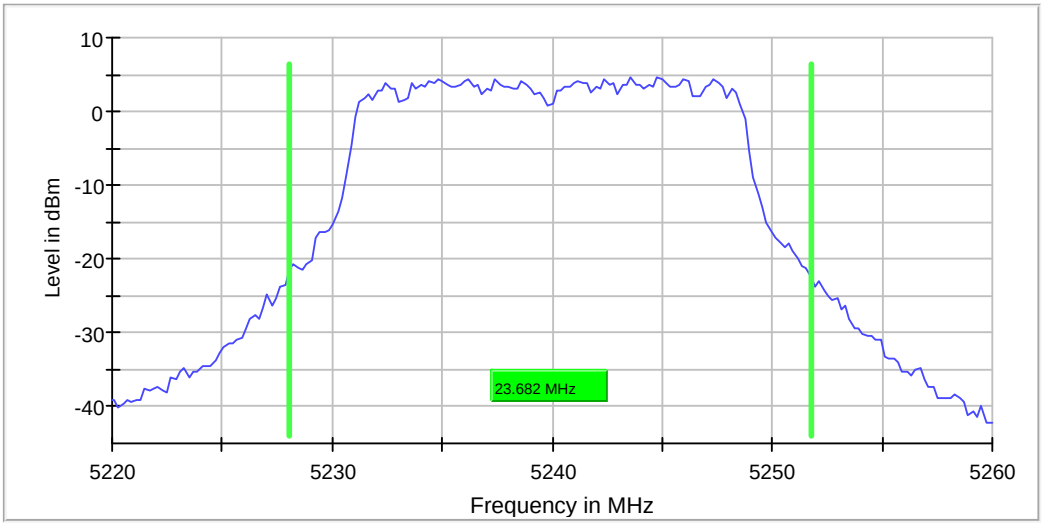
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.22816 GHz | 5.22816 GHz |
| Stop Frequency | 5.25184 GHz | 5.25184 GHz |
| Span | 23.682 MHz | 23.682 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 47 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5240 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5240.000000 | 23.681593 | --- | --- | 5228.059701 | 5251.741294 | 4.5 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.22000 GHz | 5.22000 GHz |
| Stop Frequency | 5.26000 GHz | 5.26000 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | ~ 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 28.443 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 44 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge high (5240 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

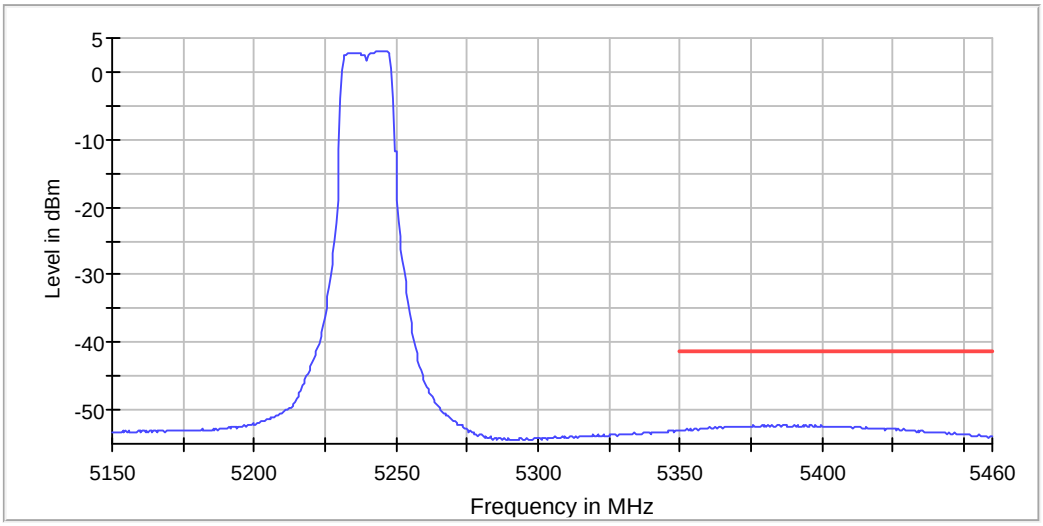
| DUT Frequency (MHz) | Result |
|---|---|
| 5240.000000 | FAIL |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5244.776119 | 3.2 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5396.401425 | -52.2 | 11.0 | -41.2 | PASS |
| 5399.893112 | -52.3 | 11.0 | -41.2 | PASS |
| 5387.422803 | -52.3 | 11.1 | -41.2 | PASS |
| 5384.429929 | -52.3 | 11.1 | -41.2 | PASS |
| 5391.413302 | -52.3 | 11.1 | -41.2 | PASS |
| 5382.434679 | -52.3 | 11.1 | -41.2 | PASS |
| 5386.425178 | -52.3 | 11.1 | -41.2 | PASS |
| 5394.406176 | -52.3 | 11.1 | -41.2 | PASS |
| 5393.408551 | -52.3 | 11.1 | -41.2 | PASS |
| 5395.902613 | -52.3 | 11.1 | -41.2 | PASS |
| 5375.950119 | -52.3 | 11.1 | -41.2 | PASS |
| 5397.897862 | -52.3 | 11.1 | -41.2 | PASS |
| 5380.938242 | -52.3 | 11.1 | -41.2 | PASS |
| 5384.928741 | -52.3 | 11.1 | -41.2 | PASS |
| 5386.923990 | -52.3 | 11.1 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 420 | ~ 420 |
| Sweeptime | 420.000 ms | 420.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5240 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5240.000000 | PASS |

## Final measurements

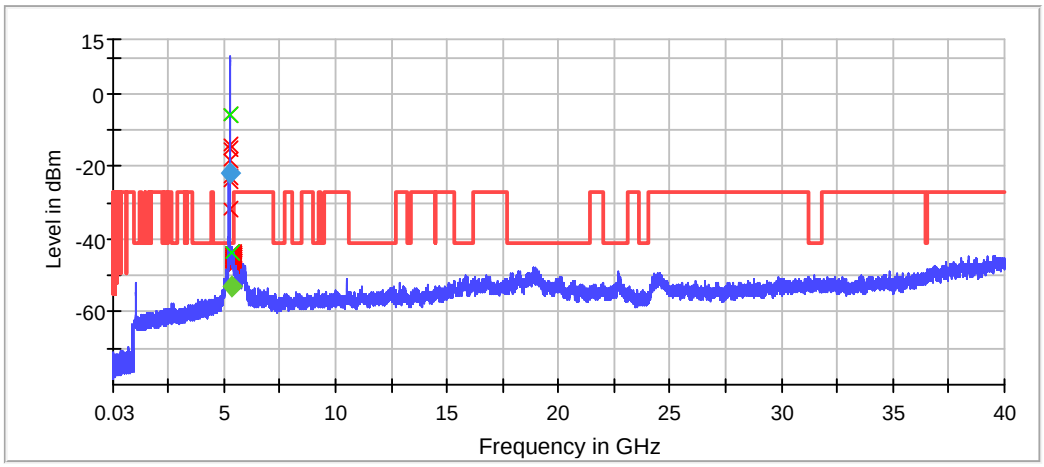
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5373.305785 | -43.6 | -53.2 | -41.2 | 12.0 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5373.305785 | -43.6 | 2.4 | -41.2 |
| 5401.074380 | -43.8 | 2.5 | -41.2 |
| 5374.297521 | -43.8 | 2.6 | -41.2 |
| 5377.272727 | -43.8 | 2.6 | -41.2 |
| 5381.239669 | -43.9 | 2.7 | -41.2 |
| 5410.000000 | -44.0 | 2.7 | -41.2 |
| 5375.289256 | -44.0 | 2.8 | -41.2 |
| 5418.925620 | -44.0 | 2.8 | -41.2 |
| 5419.917355 | -44.1 | 2.9 | -41.2 |
| 5427.851240 | -44.1 | 2.9 | -41.2 |
| 5364.380165 | -44.2 | 3.0 | -41.2 |
| 5387.190083 | -44.2 | 3.0 | -41.2 |
| 5421.900826 | -44.3 | 3.0 | -41.2 |
| 5407.024793 | -44.3 | 3.1 | -41.2 |
| 5379.256198 | -44.4 | 3.2 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# UNII-1 Ant1 NHT40
# Power Spectral Density (5190 MHz; 43.8806 MHz)

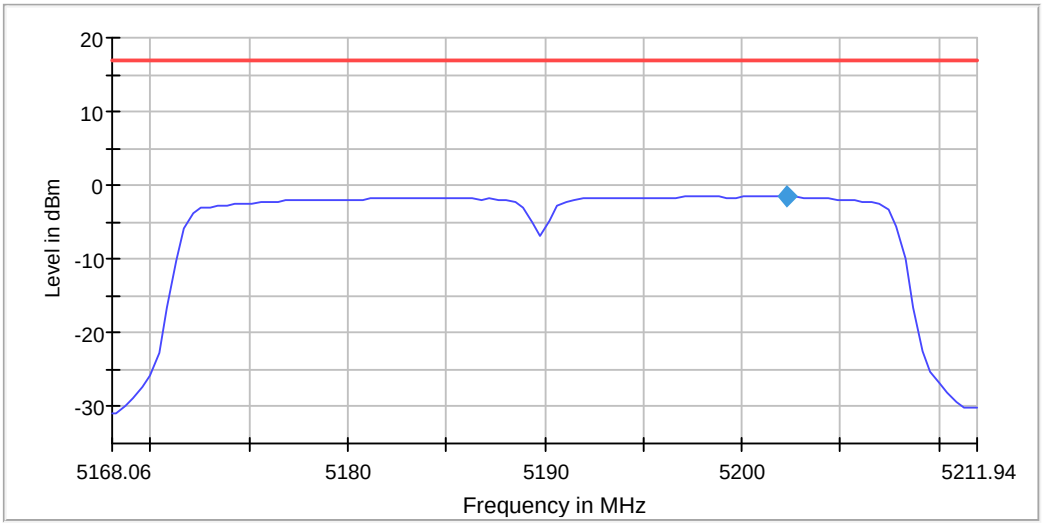
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5190.000000 | 5202.260756 | -1.552 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 93.099 |




## Measurement

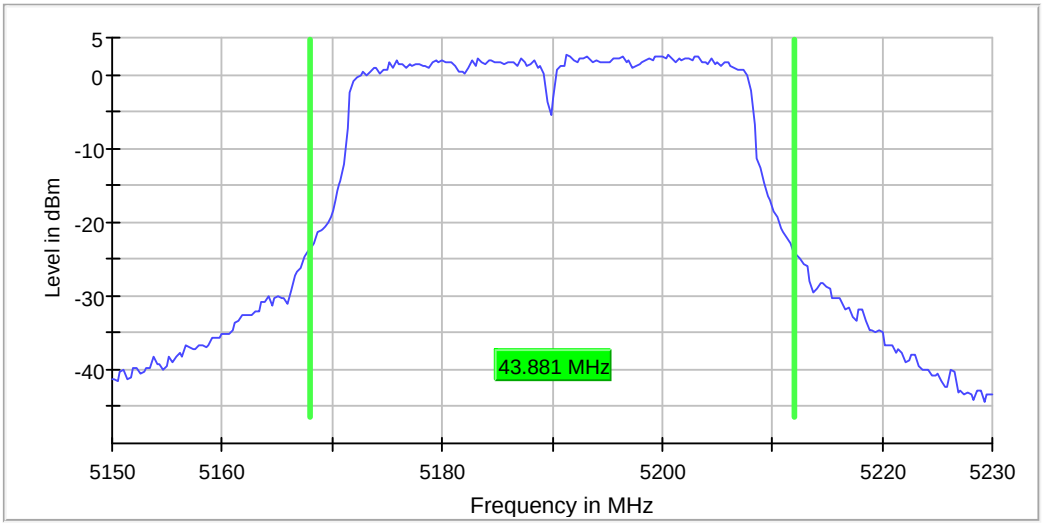
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.16806 GHz | 5.16806 GHz |
| Stop Frequency | 5.21194 GHz | 5.21194 GHz |
| Span | 43.881 MHz | 43.881 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 88 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5190 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5190.000000 | 43.880598 | --- | --- | 5168.059701 | 5211.940299 | 2.6 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.15000 GHz | 5.15000 GHz |
| Stop Frequency | 5.23000 GHz | 5.23000 GHz |
| Span | 80.000 MHz | 80.000 MHz |
| RBW | 300.000 kHz | ~ 400.000 kHz |
| VBW | 1.000 MHz | >= 900.000 kHz |
| SweepPoints | 267 | ~ 267 |
| Sweeptime | 31.603 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 73 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge low (5190 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

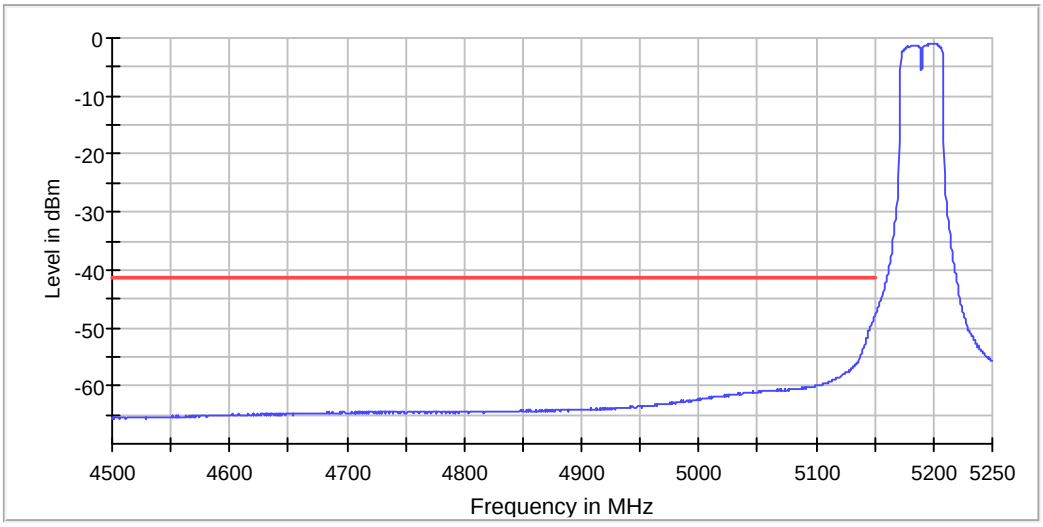
| DUT Frequency (MHz) | Result |
|---|---|
| 5190.000000 | PASS |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5198.507463 | -1.0 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5149.250576 | -48.3 | 7.1 | -41.2 | PASS |
| 5148.750961 | -48.6 | 7.4 | -41.2 | PASS |
| 5148.251345 | -48.8 | 7.6 | -41.2 | PASS |
| 5147.751729 | -49.1 | 7.8 | -41.2 | PASS |
| 5147.252114 | -49.2 | 8.0 | -41.2 | PASS |
| 5146.752498 | -49.6 | 8.3 | -41.2 | PASS |
| 5146.252882 | -49.9 | 8.7 | -41.2 | PASS |
| 5145.753267 | -50.2 | 8.9 | -41.2 | PASS |
| 5145.253651 | -50.4 | 9.1 | -41.2 | PASS |
| 5144.754035 | -50.6 | 9.4 | -41.2 | PASS |
| 5144.254420 | -51.0 | 9.7 | -41.2 | PASS |
| 5143.754804 | -51.2 | 10.0 | -41.2 | PASS |
| 5143.255188 | -51.7 | 10.4 | -41.2 | PASS |
| 5142.755573 | -51.9 | 10.6 | -41.2 | PASS |
| 5142.255957 | -52.3 | 11.1 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 1300 | ~ 1300 |
| Sweeptime | 1.300 s | 1.300 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5190 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5190.000000 | PASS |

## Final measurements

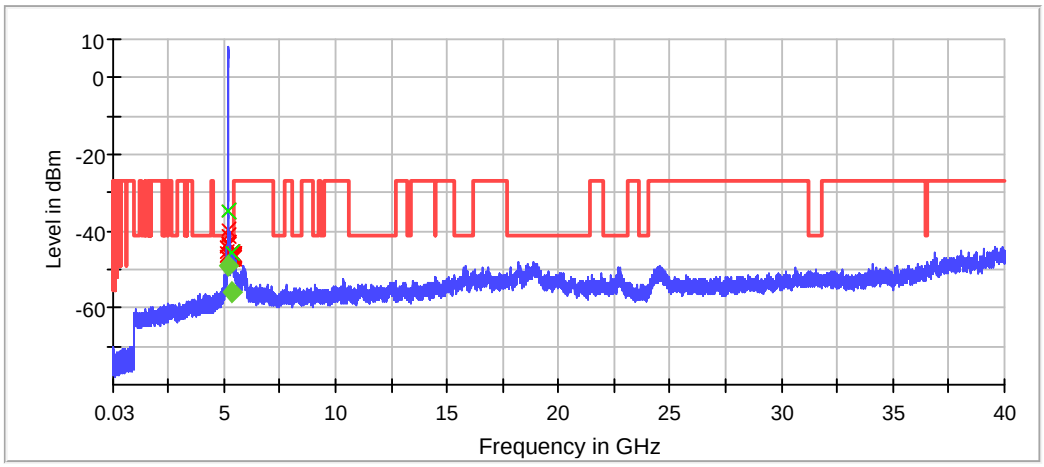
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5148.500361 | -34.6 | -49.0 | -41.2 | 7.7 | PASS |
| 5385.206612 | -45.4 | -55.7 | -41.2 | 14.5 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5148.500361 | -34.6 | -6.6 | -41.2 |
| 5147.500602 | -39.4 | -1.8 | -41.2 |
| 5144.501325 | -41.1 | -0.1 | -41.2 |
| 5142.501807 | -43.0 | 1.8 | -41.2 |
| 5145.501084 | -43.1 | 1.9 | -41.2 |
| 5143.501566 | -43.2 | 1.9 | -41.2 |
| 5146.500843 | -43.4 | 2.2 | -41.2 |
| 5141.502048 | -44.3 | 3.0 | -41.2 |
| 5140.502289 | -44.3 | 3.1 | -41.2 |
| 5385.206612 | -45.4 | 4.2 | -41.2 |
| 5386.198347 | -45.5 | 4.3 | -41.2 |
| 5370.330579 | -45.6 | 4.3 | -41.2 |
| 5139.502530 | -45.6 | 4.4 | -41.2 |
| 5360.413223 | -45.7 | 4.5 | -41.2 |
| 5369.338843 | -46.0 | 4.7 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# Power Spectral Density (5230 MHz; 42.9851 MHz)

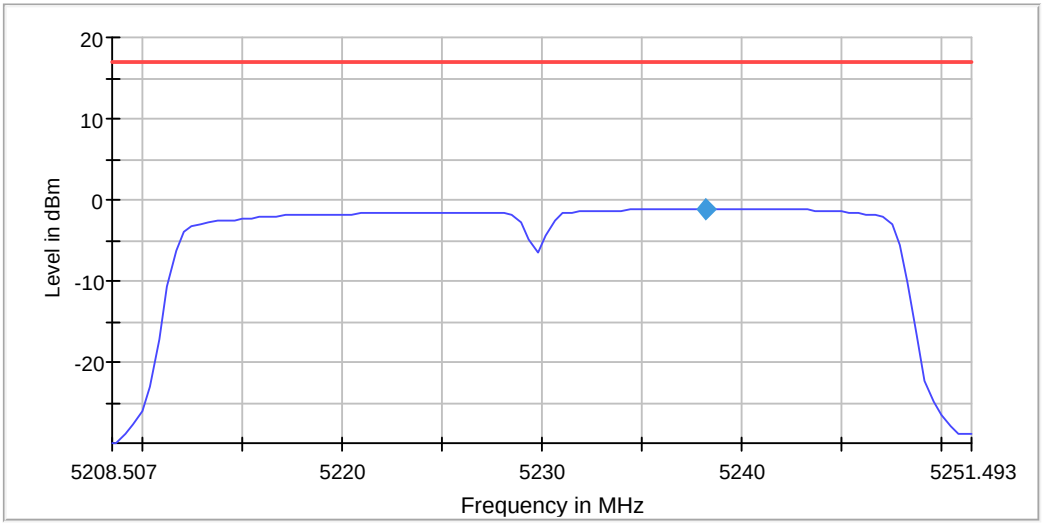
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5230.000000 | 5238.217740 | -1.084 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 93.075 |




## Measurement

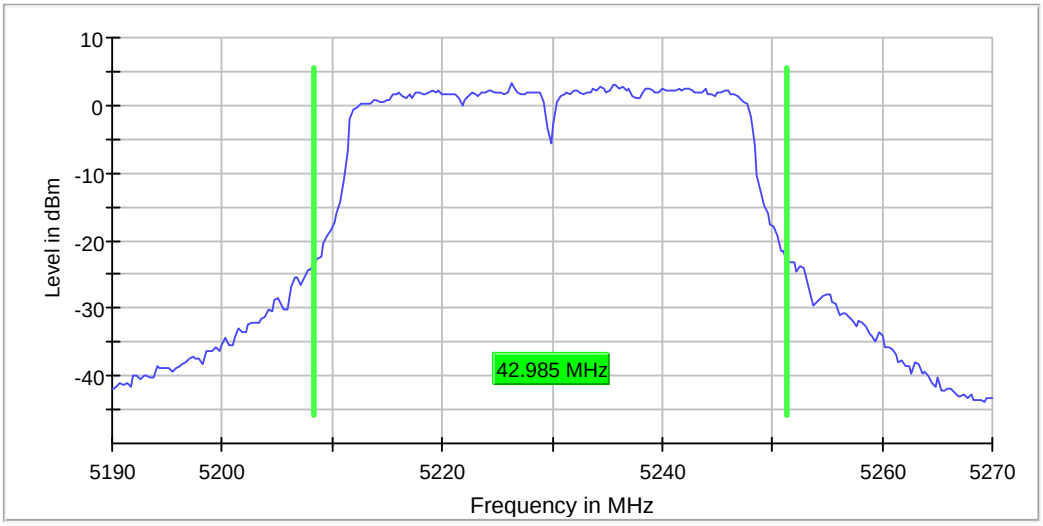
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.20851 GHz | 5.20851 GHz |
| Stop Frequency | 5.25149 GHz | 5.25149 GHz |
| Span | 42.985 MHz | 42.985 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 86 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5230 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5230.000000 | 42.985075 | --- | --- | 5208.358209 | 5251.343284 | 3.4 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.19000 GHz | 5.19000 GHz |
| Stop Frequency | 5.27000 GHz | 5.27000 GHz |
| Span | 80.000 MHz | 80.000 MHz |
| RBW | 300.000 kHz | ~ 400.000 kHz |
| VBW | 1.000 MHz | >= 900.000 kHz |
| SweepPoints | 267 | ~ 267 |
| Sweeptime | 31.603 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 44 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge high (5230 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

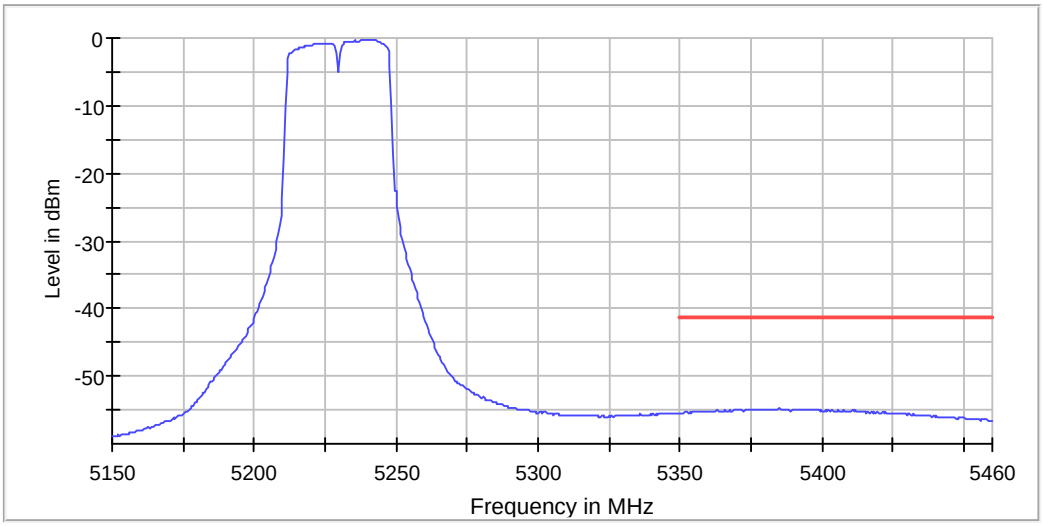
| DUT Frequency (MHz) | Result |
|---|---|
| 5230.000000 | FAIL |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5242.786070 | -0.2 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5384.928741 | -54.8 | 13.6 | -41.2 | PASS |
| 5379.441805 | -54.9 | 13.6 | -41.2 | PASS |
| 5391.912114 | -54.9 | 13.6 | -41.2 | PASS |
| 5371.460808 | -54.9 | 13.7 | -41.2 | PASS |
| 5380.439430 | -54.9 | 13.7 | -41.2 | PASS |
| 5395.902613 | -54.9 | 13.7 | -41.2 | PASS |
| 5375.950119 | -54.9 | 13.7 | -41.2 | PASS |
| 5387.422803 | -54.9 | 13.7 | -41.2 | PASS |
| 5377.945368 | -54.9 | 13.7 | -41.2 | PASS |
| 5381.437055 | -54.9 | 13.7 | -41.2 | PASS |
| 5378.444181 | -54.9 | 13.7 | -41.2 | PASS |
| 5390.415677 | -54.9 | 13.7 | -41.2 | PASS |
| 5391.413302 | -55.0 | 13.7 | -41.2 | PASS |
| 5389.418052 | -55.0 | 13.7 | -41.2 | PASS |
| 5386.923990 | -55.0 | 13.7 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 420 | ~ 420 |
| Sweeptime | 420.000 ms | 420.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5230 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5230.000000 | PASS |

## Final measurements

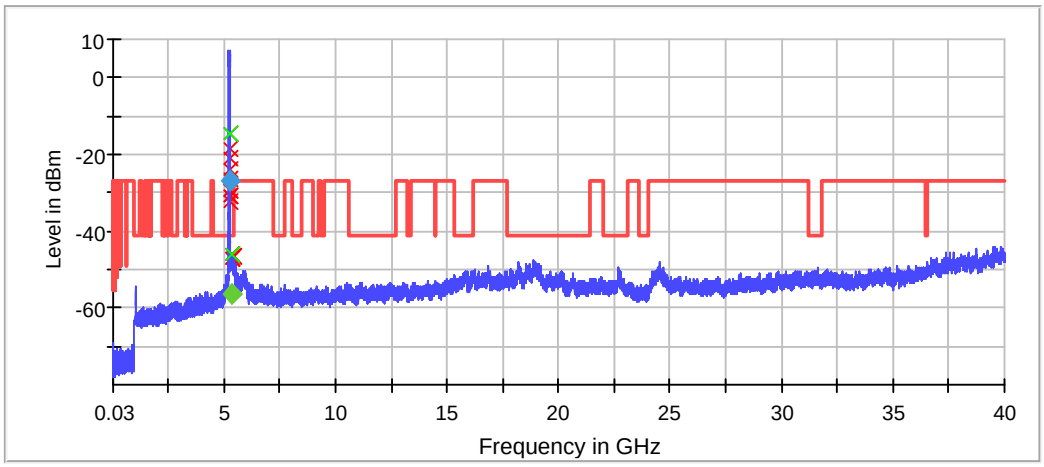
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5250.490196 | -14.4 | -26.7 | --- | --- | PASS |
| 5394.132231 | -46.2 | -56.2 | -41.2 | 14.9 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5394.132231 | -46.2 | 4.9 | -41.2 |
| 5377.272727 | -46.3 | 5.1 | -41.2 |
| 5401.074380 | -46.5 | 5.3 | -41.2 |
| 5400.082645 | -46.6 | 5.3 | -41.2 |
| 5364.380165 | -46.9 | 5.7 | -41.2 |
| 5391.157025 | -47.0 | 5.7 | -41.2 |
| 5392.148760 | -47.1 | 5.8 | -41.2 |
| 5379.256198 | -47.1 | 5.9 | -41.2 |
| 5393.140496 | -47.2 | 6.0 | -41.2 |
| 5440.743802 | -47.2 | 6.0 | -41.2 |
| 5380.247934 | -47.4 | 6.1 | -41.2 |
| 18886.874375 | -47.5 | 6.3 | -41.2 |
| 5412.975207 | -47.7 | 6.4 | -41.2 |
| 5389.173554 | -47.7 | 6.5 | -41.2 |
| 5390.165289 | -47.7 | 6.5 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# UNII-1 Ant2 A mode
# Power Spectral Density (5180 MHz; 20 MHz)

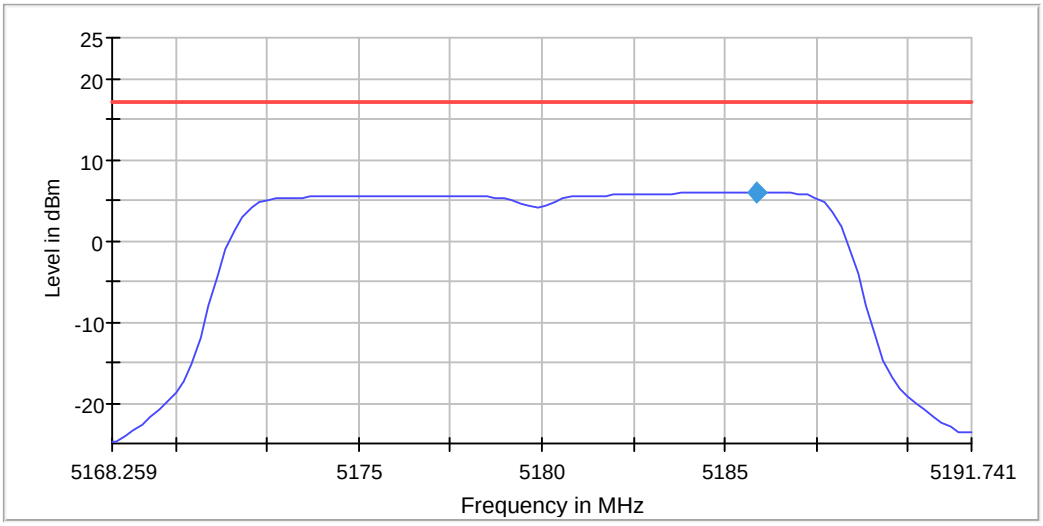
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5180.000000 | 5185.870650 | 5.976 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 96.227 |




## Measurement

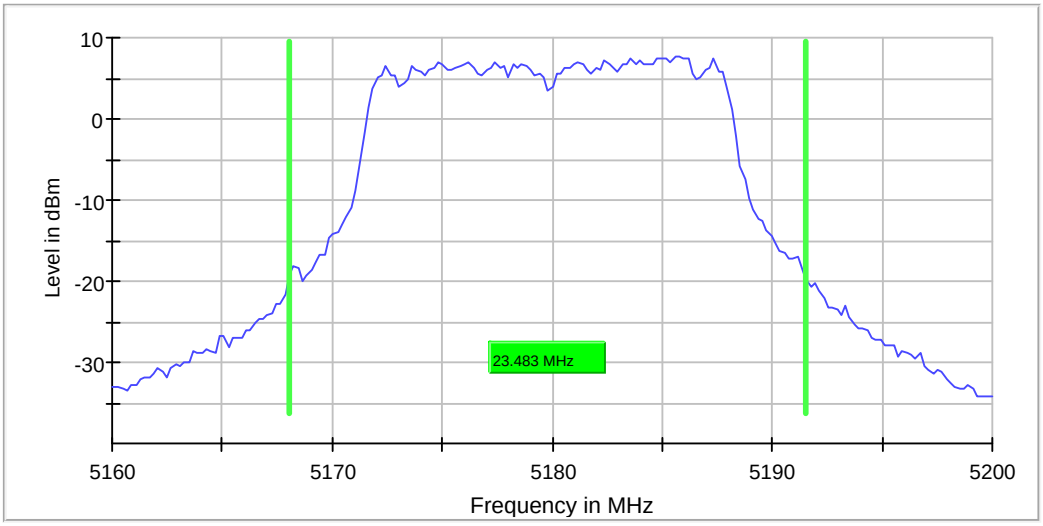
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.16826 GHz | 5.16826 GHz |
| Stop Frequency | 5.19174 GHz | 5.19174 GHz |
| Span | 23.483 MHz | 23.483 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 47 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5180 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5180.000000 | 23.482588 | --- | --- | 5168.059701 | 5191.542289 | 7.6 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.16000 GHz | 5.16000 GHz |
| Stop Frequency | 5.20000 GHz | 5.20000 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | ~ 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 28.443 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 28 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge low (5180 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

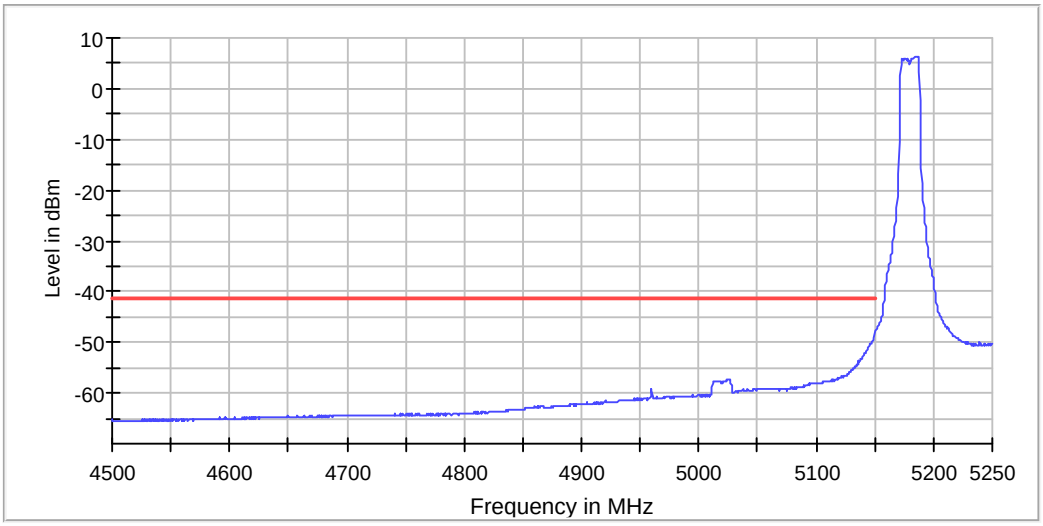
| DUT Frequency (MHz) | Result |
|---|---|
| 5180.000000 | PASS |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5184.577114 | 6.4 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5149.250576 | -49.1 | 7.9 | -41.2 | PASS |
| 5148.750961 | -49.2 | 8.0 | -41.2 | PASS |
| 5148.251345 | -49.6 | 8.3 | -41.2 | PASS |
| 5147.751729 | -49.8 | 8.6 | -41.2 | PASS |
| 5147.252114 | -50.1 | 8.9 | -41.2 | PASS |
| 5146.752498 | -50.2 | 8.9 | -41.2 | PASS |
| 5146.252882 | -50.3 | 9.1 | -41.2 | PASS |
| 5145.753267 | -50.6 | 9.4 | -41.2 | PASS |
| 5145.253651 | -50.8 | 9.5 | -41.2 | PASS |
| 5144.754035 | -51.0 | 9.8 | -41.2 | PASS |
| 5144.254420 | -51.2 | 10.0 | -41.2 | PASS |
| 5143.754804 | -51.2 | 10.0 | -41.2 | PASS |
| 5143.255188 | -51.5 | 10.3 | -41.2 | PASS |
| 5142.255957 | -51.8 | 10.5 | -41.2 | PASS |
| 5142.755573 | -51.8 | 10.6 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 1300 | ~ 1300 |
| Sweeptime | 1.300 s | 1.300 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5180 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5180.000000 | PASS |

## Final measurements

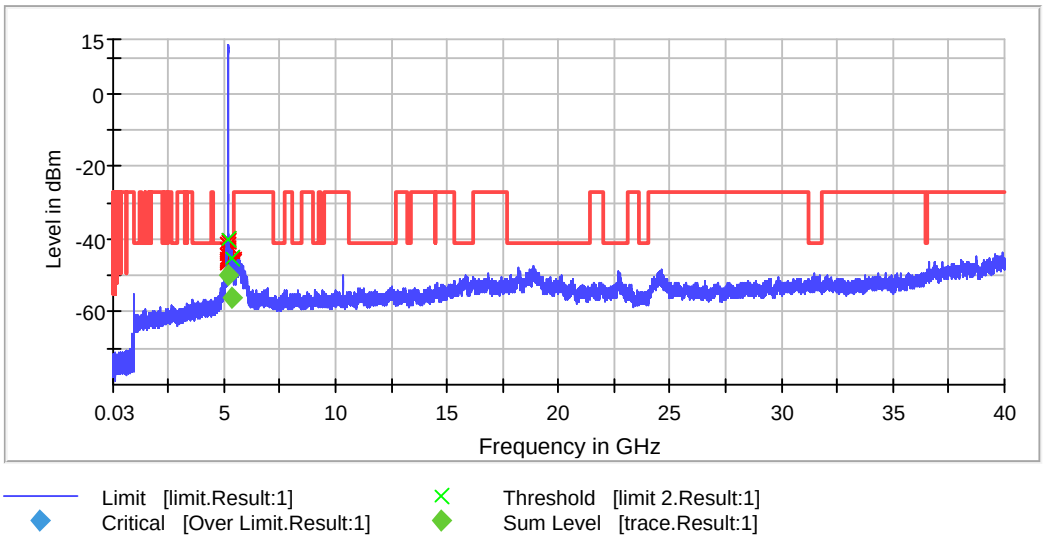
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5148.500361 | -40.2 | -50.1 | -41.2 | 8.8 | PASS |
| 5382.231405 | -45.3 | -56.2 | -41.2 | 15.0 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5148.500361 | -40.2 | -1.0 | -41.2 |
| 5145.501084 | -40.3 | -0.9 | -41.2 |
| 5144.501325 | -40.5 | -0.7 | -41.2 |
| 5140.502289 | -41.0 | -0.2 | -41.2 |
| 5141.502048 | -41.3 | 0.0 | -41.2 |
| 5147.500602 | -41.7 | 0.5 | -41.2 |
| 5138.502770 | -42.7 | 1.5 | -41.2 |
| 5146.500843 | -42.7 | 1.5 | -41.2 |
| 5142.501807 | -43.3 | 2.1 | -41.2 |
| 5143.501566 | -43.4 | 2.2 | -41.2 |
| 5136.503252 | -44.3 | 3.0 | -41.2 |
| 5135.503493 | -44.3 | 3.0 | -41.2 |
| 5137.503011 | -45.3 | 4.1 | -41.2 |
| 5382.231405 | -45.3 | 4.1 | -41.2 |
| 5133.503975 | -45.8 | 4.5 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# Power Spectral Density (5200 MHz; 22.6866 MHz)

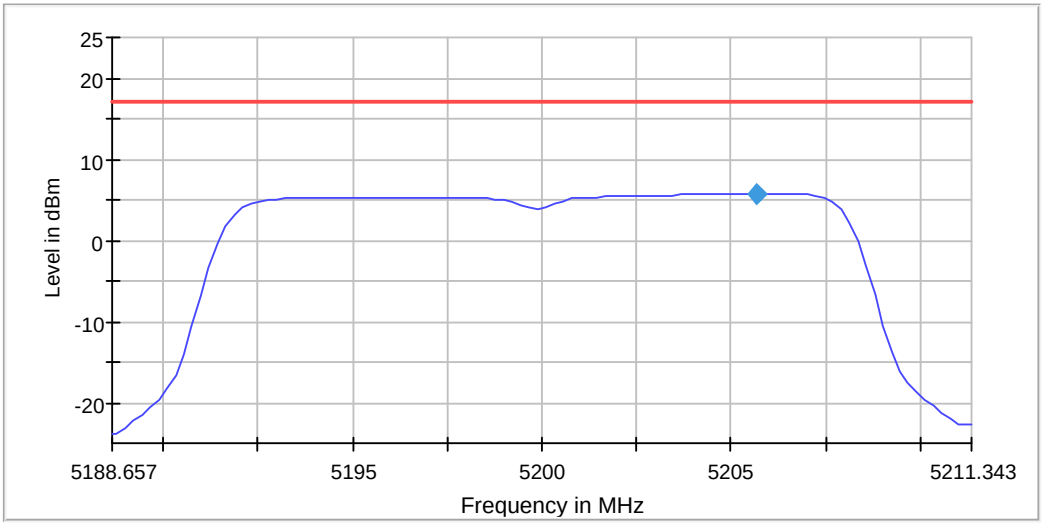
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5200.000000 | 5205.671675 | 5.808 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 96.238 |




## Measurement

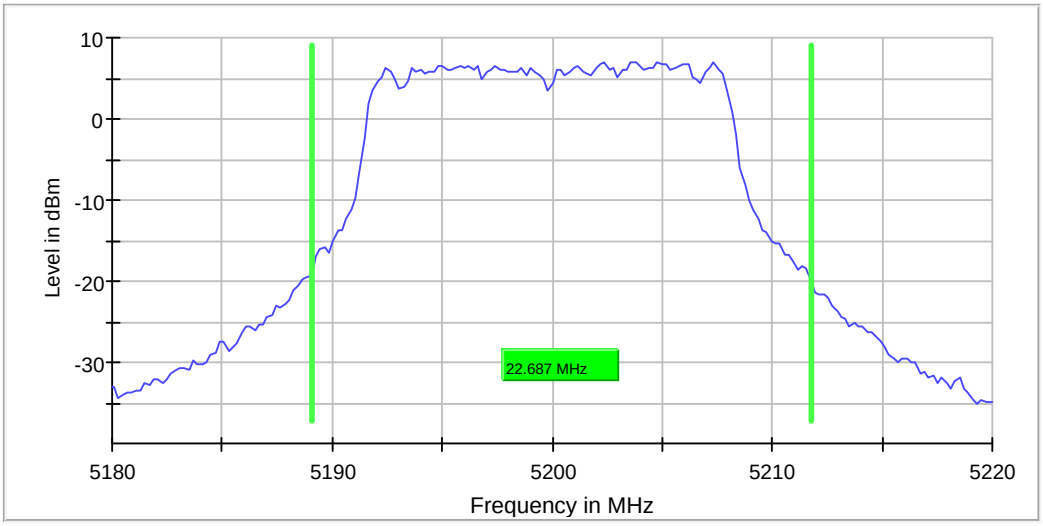
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.18866 GHz | 5.18866 GHz |
| Stop Frequency | 5.21134 GHz | 5.21134 GHz |
| Span | 22.687 MHz | 22.687 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 45 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5200 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5200.000000 | 22.686568 | --- | --- | 5189.054726 | 5211.741294 | 7.1 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.18000 GHz | 5.18000 GHz |
| Stop Frequency | 5.22000 GHz | 5.22000 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | ~ 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 28.443 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 33 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Tx Spurious Emission (5200 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5200.000000 | PASS |

## Final measurements

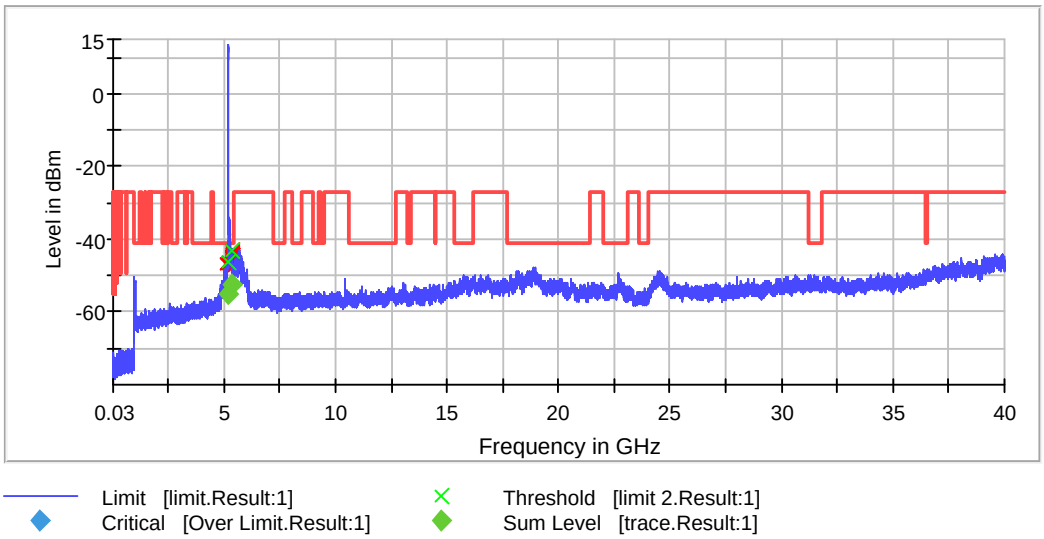
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5148.500361 | -46.0 | -55.1 | -41.2 | 13.9 | PASS |
| 5364.380165 | -43.0 | -52.5 | -41.2 | 11.3 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5364.380165 | -43.0 | 1.7 | -41.2 |
| 5354.462810 | -43.4 | 2.2 | -41.2 |
| 5363.388430 | -44.0 | 2.8 | -41.2 |
| 5365.371901 | -44.4 | 3.2 | -41.2 |
| 5362.396694 | -44.5 | 3.3 | -41.2 |
| 5355.454545 | -44.5 | 3.3 | -41.2 |
| 5356.446281 | -44.6 | 3.4 | -41.2 |
| 5353.471074 | -44.7 | 3.4 | -41.2 |
| 5357.438017 | -44.7 | 3.4 | -41.2 |
| 5350.495868 | -44.7 | 3.5 | -41.2 |
| 5350.000000 | -44.7 | 3.5 | -41.2 |
| 5361.404959 | -44.8 | 3.5 | -41.2 |
| 5377.272727 | -44.9 | 3.6 | -41.2 |
| 5367.355372 | -44.9 | 3.7 | -41.2 |
| 5358.429752 | -45.1 | 3.9 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# Power Spectral Density (5200 MHz; 22.6866 MHz)

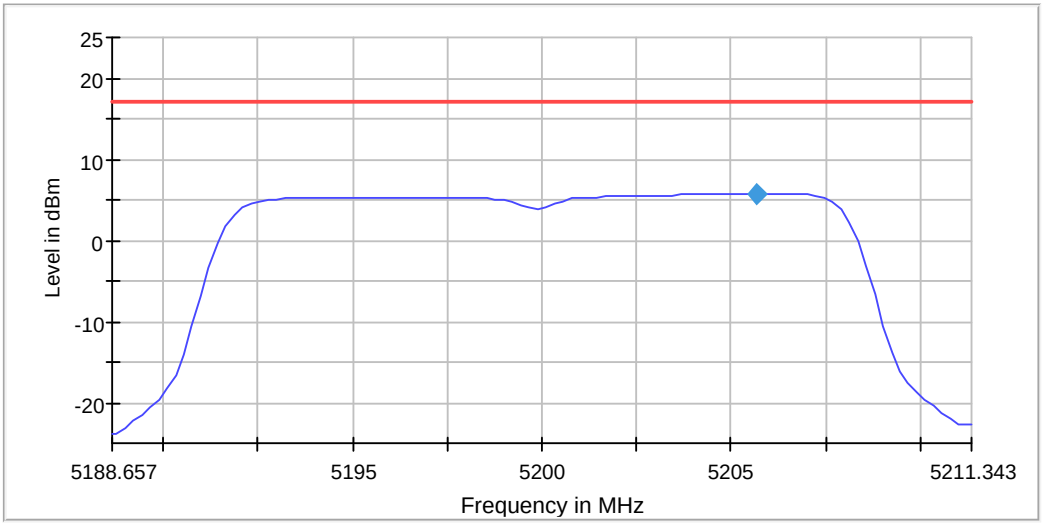
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5200.000000 | 5205.671675 | 5.808 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 96.238 |




## Measurement

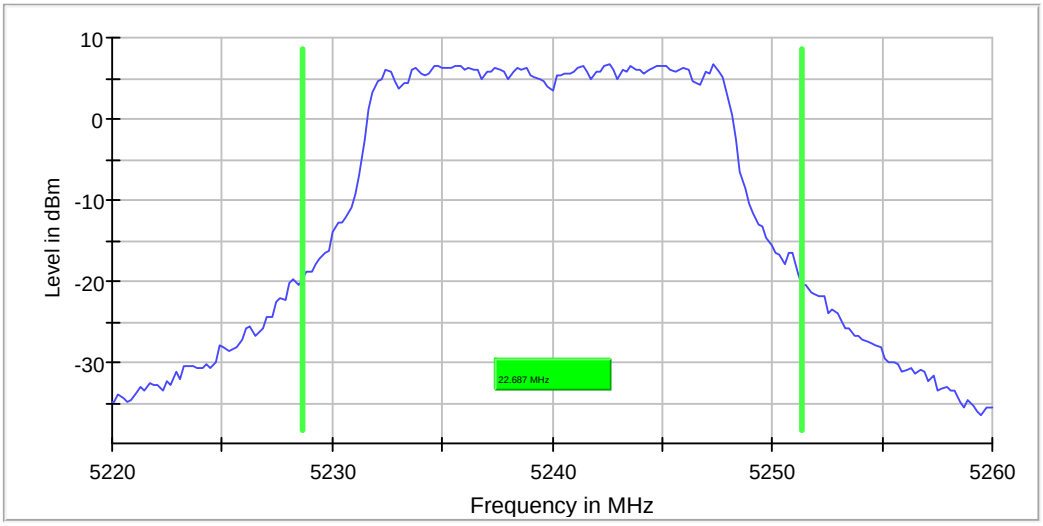
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.18866 GHz | 5.18866 GHz |
| Stop Frequency | 5.21134 GHz | 5.21134 GHz |
| Span | 22.687 MHz | 22.687 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 45 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5240 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5240.000000 | 22.686568 | --- | --- | 5228.656716 | 5251.343284 | 6.6 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.22000 GHz | 5.22000 GHz |
| Stop Frequency | 5.26000 GHz | 5.26000 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | ~ 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 28.443 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 51 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge high (5240 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

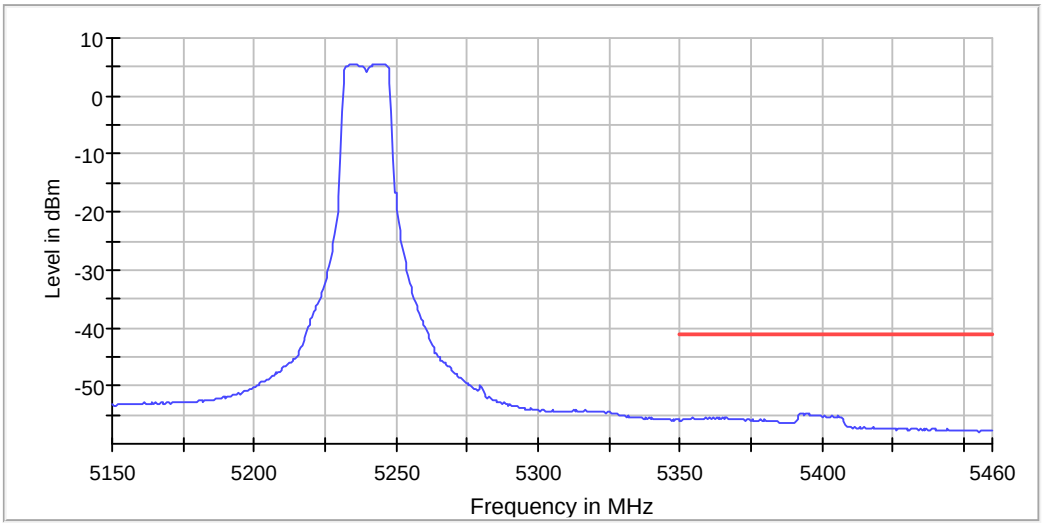
| DUT Frequency (MHz) | Result |
|---|---|
| 5240.000000 | FAIL |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5245.273632 | 5.6 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5393.408551 | -54.7 | 13.5 | -41.2 | PASS |
| 5392.909739 | -54.9 | 13.6 | -41.2 | PASS |
| 5392.410926 | -54.9 | 13.7 | -41.2 | PASS |
| 5394.406176 | -54.9 | 13.7 | -41.2 | PASS |
| 5394.904988 | -54.9 | 13.7 | -41.2 | PASS |
| 5395.403800 | -54.9 | 13.7 | -41.2 | PASS |
| 5395.902613 | -55.0 | 13.7 | -41.2 | PASS |
| 5393.907363 | -55.0 | 13.7 | -41.2 | PASS |
| 5398.895487 | -55.1 | 13.9 | -41.2 | PASS |
| 5398.396675 | -55.1 | 13.9 | -41.2 | PASS |
| 5396.401425 | -55.1 | 13.9 | -41.2 | PASS |
| 5397.897862 | -55.1 | 13.9 | -41.2 | PASS |
| 5391.912114 | -55.1 | 13.9 | -41.2 | PASS |
| 5396.900238 | -55.2 | 13.9 | -41.2 | PASS |
| 5399.893112 | -55.2 | 14.0 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 420 | ~ 420 |
| Sweeptime | 420.000 ms | 420.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5240 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5240.000000 | FAIL |

## Final measurements

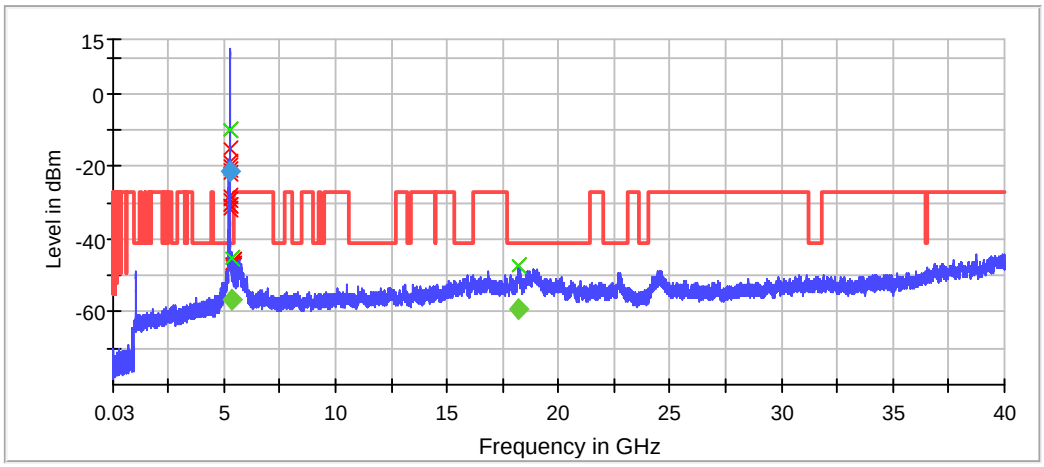
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5250.490196 | -9.7 | -21.3 | --- | --- | FAIL |
| 5350.000000 | -45.5 | -56.6 | -41.2 | 15.4 | PASS |
| 18204.910268 | -47.2 | -59.3 | -41.2 | 18.1 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5350.000000 | -45.5 | 4.2 | -41.2 |
| 5399.090909 | -45.7 | 4.5 | -41.2 |
| 5400.082645 | -45.8 | 4.6 | -41.2 |
| 5397.107438 | -46.9 | 5.6 | -41.2 |
| 5371.322314 | -47.0 | 5.8 | -41.2 |
| 5370.330579 | -47.0 | 5.8 | -41.2 |
| 5375.289256 | -47.1 | 5.9 | -41.2 |
| 18204.910268 | -47.2 | 6.0 | -41.2 |
| 5402.066116 | -47.2 | 6.0 | -41.2 |
| 5396.115702 | -47.3 | 6.1 | -41.2 |
| 5373.305785 | -47.4 | 6.1 | -41.2 |
| 5394.132231 | -47.4 | 6.1 | -41.2 |
| 5392.148760 | -47.5 | 6.2 | -41.2 |
| 5393.140496 | -47.5 | 6.3 | -41.2 |
| 5379.256198 | -47.5 | 6.3 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# UNII-1 Ant2 AC mode 20
# Power Spectral Density (5180 MHz; 23.4826 MHz)

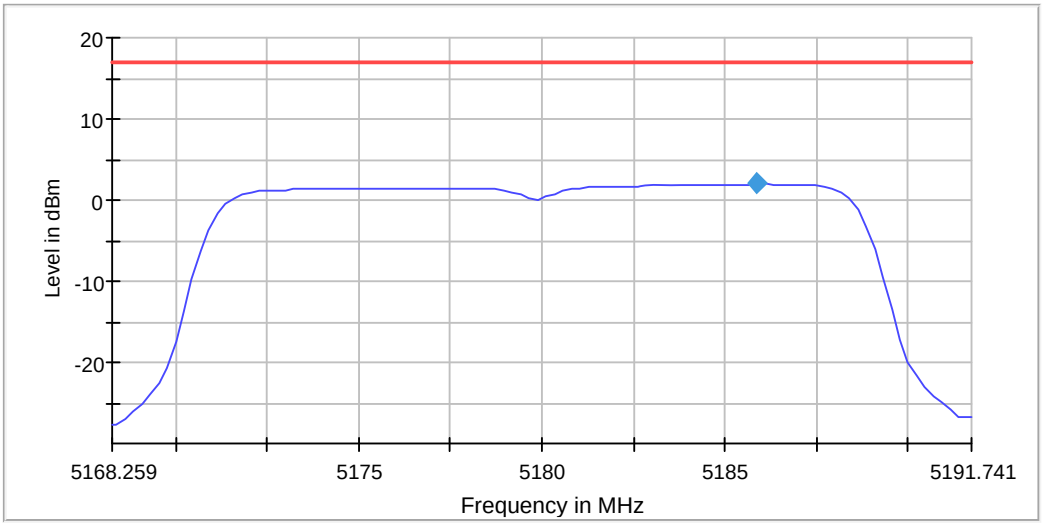
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5180.000000 | 5185.870650 | 2.029 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 95.318 |




## Measurement

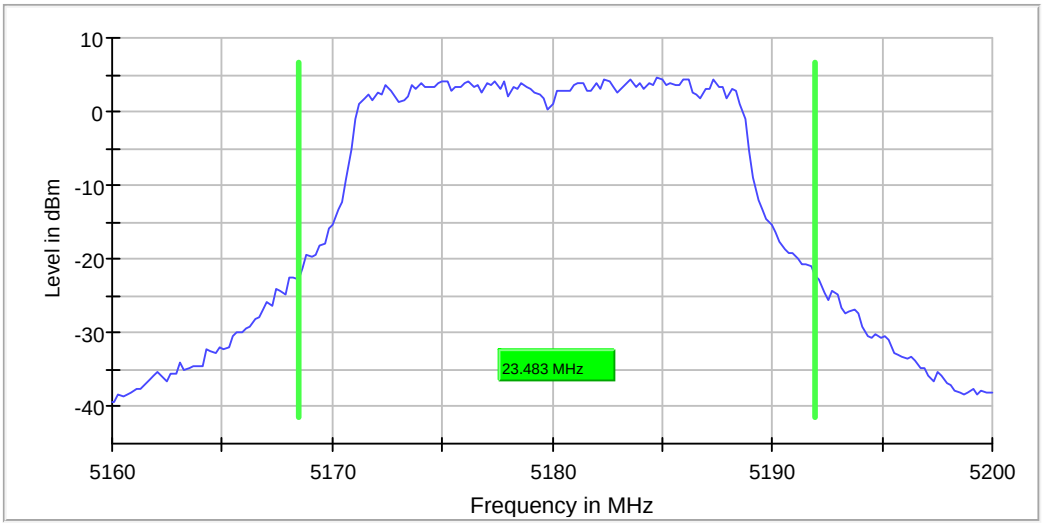
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.16826 GHz | 5.16826 GHz |
| Stop Frequency | 5.19174 GHz | 5.19174 GHz |
| Span | 23.483 MHz | 23.483 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 47 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5180 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5180.000000 | 23.482588 | --- | --- | 5168.457711 | 5191.940299 | 4.6 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.16000 GHz | 5.16000 GHz |
| Stop Frequency | 5.20000 GHz | 5.20000 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | ~ 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 28.443 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 39 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge low (5180 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

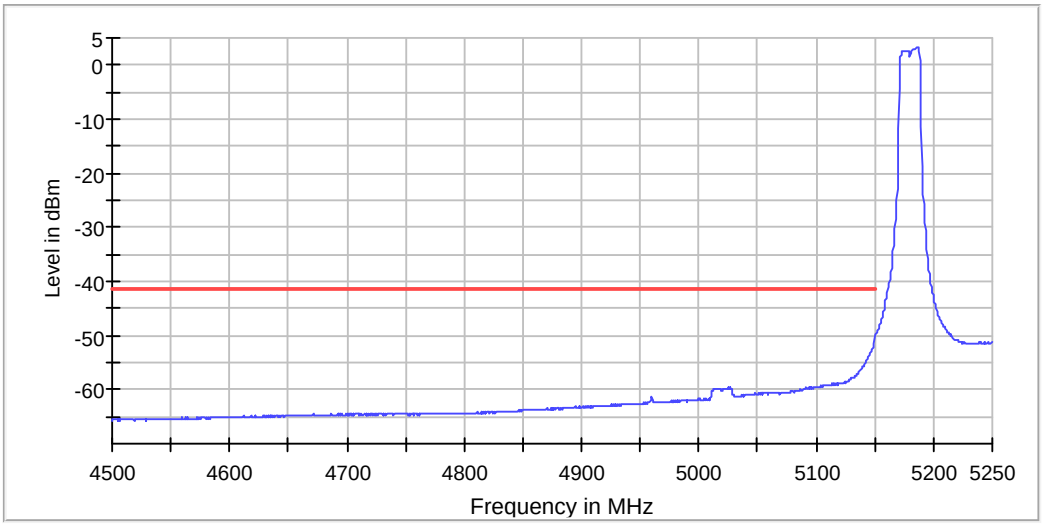
| DUT Frequency (MHz) | Result |
|---|---|
| 5180.000000 | PASS |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5186.069652 | 3.2 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5149.250576 | -51.5 | 10.2 | -41.2 | PASS |
| 5148.251345 | -52.1 | 10.9 | -41.2 | PASS |
| 5148.750961 | -52.2 | 10.9 | -41.2 | PASS |
| 5147.252114 | -52.5 | 11.2 | -41.2 | PASS |
| 5147.751729 | -52.5 | 11.3 | -41.2 | PASS |
| 5146.752498 | -52.8 | 11.6 | -41.2 | PASS |
| 5146.252882 | -53.3 | 12.0 | -41.2 | PASS |
| 5145.753267 | -53.4 | 12.2 | -41.2 | PASS |
| 5145.253651 | -53.8 | 12.5 | -41.2 | PASS |
| 5144.754035 | -53.8 | 12.6 | -41.2 | PASS |
| 5144.254420 | -54.1 | 12.9 | -41.2 | PASS |
| 5143.754804 | -54.3 | 13.1 | -41.2 | PASS |
| 5143.255188 | -54.4 | 13.2 | -41.2 | PASS |
| 5142.755573 | -54.7 | 13.5 | -41.2 | PASS |
| 5141.756341 | -55.0 | 13.8 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 1300 | ~ 1300 |
| Sweeptime | 1.300 s | 1.300 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5180 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5180.000000 | PASS |

## Final measurements

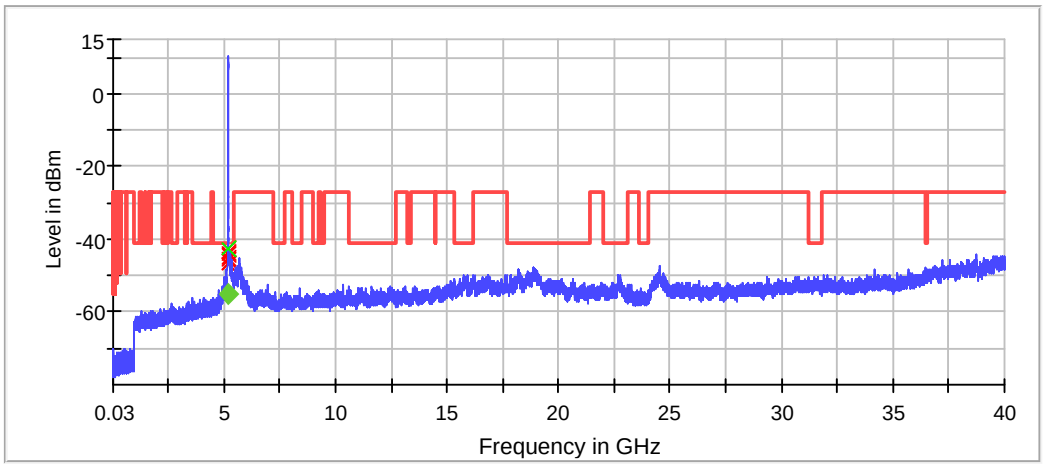
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5144.501325 | -42.7 | -55.2 | -41.2 | 13.9 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5144.501325 | -42.7 | 1.5 | -41.2 |
| 5147.500602 | -43.6 | 2.4 | -41.2 |
| 5148.500361 | -44.4 | 3.1 | -41.2 |
| 5145.501084 | -45.3 | 4.1 | -41.2 |
| 5146.500843 | -45.6 | 4.4 | -41.2 |
| 5142.501807 | -46.7 | 5.5 | -41.2 |
| 5143.501566 | -46.9 | 5.7 | -41.2 |
| 18837.876954 | -47.8 | 6.6 | -41.2 |
| 5388.181818 | -47.8 | 6.6 | -41.2 |
| 18885.874428 | -47.9 | 6.7 | -41.2 |
| 36461.752732 | -48.0 | 6.8 | -41.2 |
| 18177.911689 | -48.3 | 7.1 | -41.2 |
| 18884.874480 | -48.4 | 7.1 | -41.2 |
| 5384.214876 | -48.4 | 7.2 | -41.2 |
| 18222.909321 | -48.4 | 7.2 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# Power Spectral Density (5200 MHz; 23.0846 MHz)

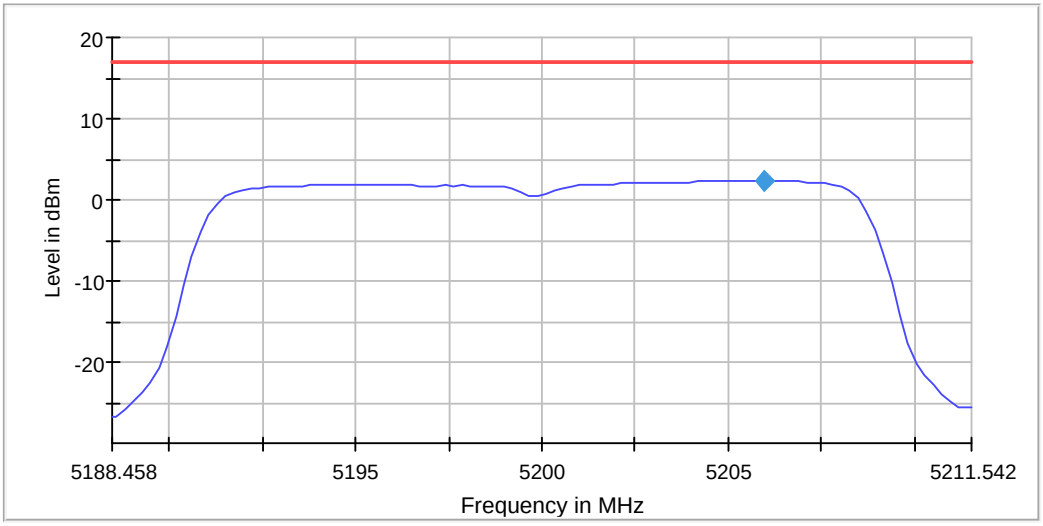
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5200.000000 | 5205.997444 | 2.349 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 95.303 |




## Measurement

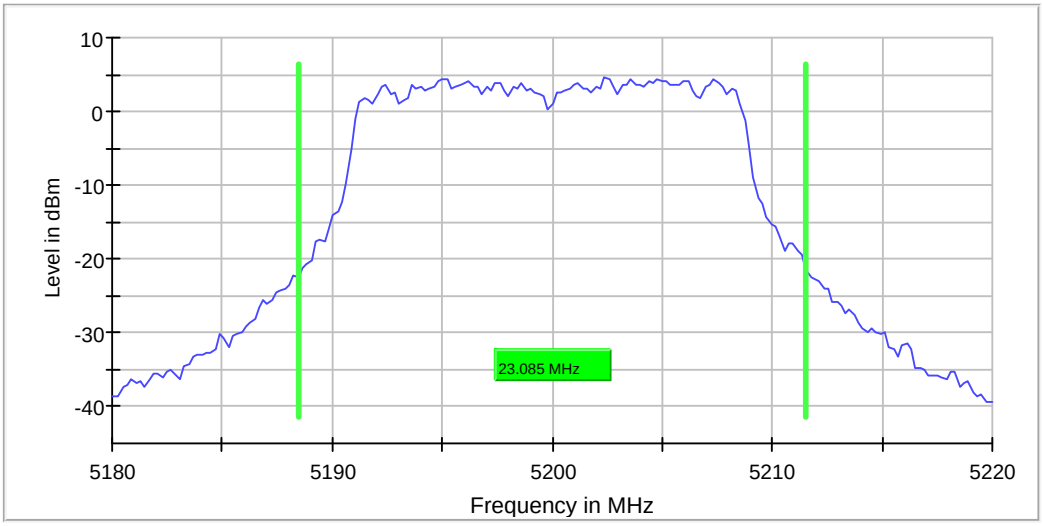
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.18846 GHz | 5.18846 GHz |
| Stop Frequency | 5.21154 GHz | 5.21154 GHz |
| Span | 23.085 MHz | 23.085 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 46 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5200 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5200.000000 | 23.084578 | --- | --- | 5188.457711 | 5211.542289 | 4.5 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.18000 GHz | 5.18000 GHz |
| Stop Frequency | 5.22000 GHz | 5.22000 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | ~ 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 28.443 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 49 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Tx Spurious Emission (5200 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5200.000000 | PASS |

## Final measurements

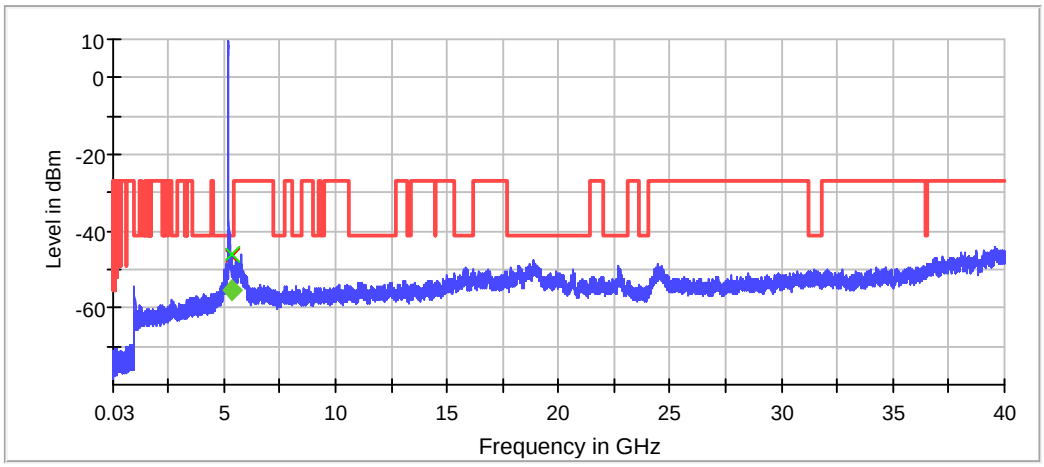
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5353.471074 | -46.1 | -55.5 | -41.2 | 14.3 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5353.471074 | -46.1 | 4.8 | -41.2 |
| 5352.479339 | -46.6 | 5.4 | -41.2 |
| 5368.347107 | -47.3 | 6.0 | -41.2 |
| 5369.338843 | -47.5 | 6.3 | -41.2 |
| 18839.876849 | -47.6 | 6.4 | -41.2 |
| 5365.371901 | -47.8 | 6.6 | -41.2 |
| 5367.355372 | -47.9 | 6.7 | -41.2 |
| 5378.264463 | -48.0 | 6.7 | -41.2 |
| 5366.363636 | -48.0 | 6.8 | -41.2 |
| 18890.874165 | -48.1 | 6.9 | -41.2 |
| 5361.404959 | -48.1 | 6.9 | -41.2 |
| 18867.875375 | -48.1 | 6.9 | -41.2 |
| 18911.873059 | -48.3 | 7.0 | -41.2 |
| 18907.873270 | -48.3 | 7.1 | -41.2 |
| 18852.876164 | -48.4 | 7.1 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# Power Spectral Density (5240 MHz; 23.0846 MHz)

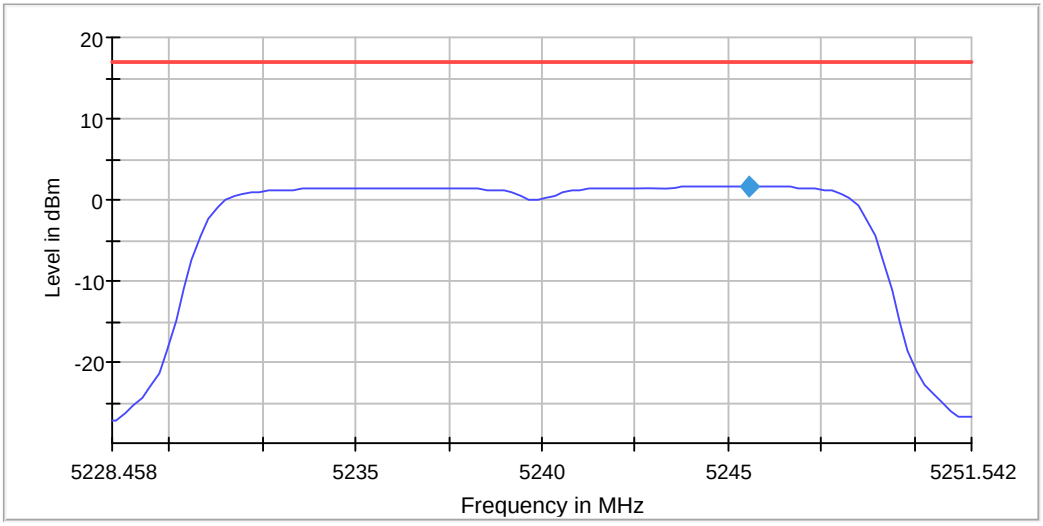
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5240.000000 | 5245.544806 | 1.640 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 95.297 |




## Measurement

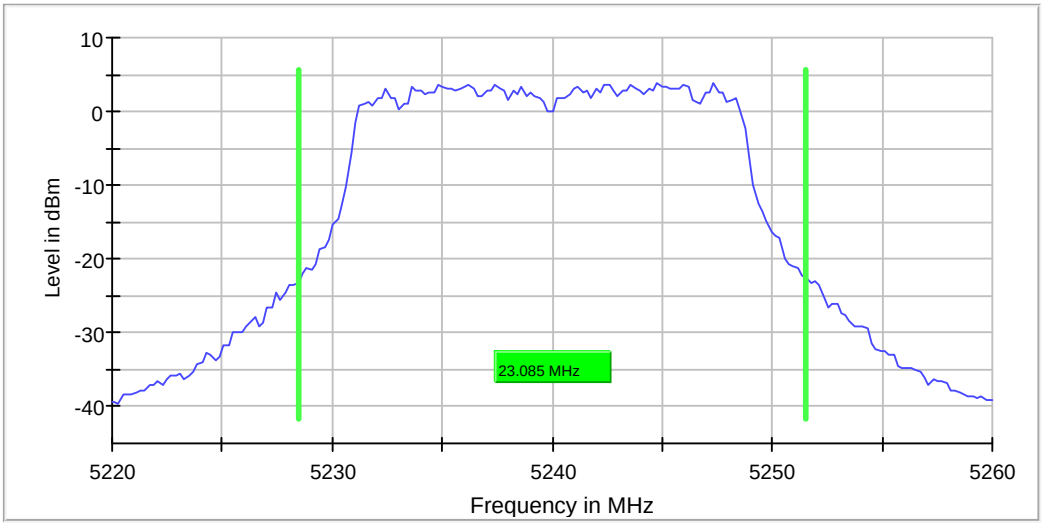
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.22846 GHz | 5.22846 GHz |
| Stop Frequency | 5.25154 GHz | 5.25154 GHz |
| Span | 23.085 MHz | 23.085 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 46 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5240 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5240.000000 | 23.084578 | --- | --- | 5228.457711 | 5251.542289 | 3.8 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.22000 GHz | 5.22000 GHz |
| Stop Frequency | 5.26000 GHz | 5.26000 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | ~ 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 28.443 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 38 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge high (5240 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

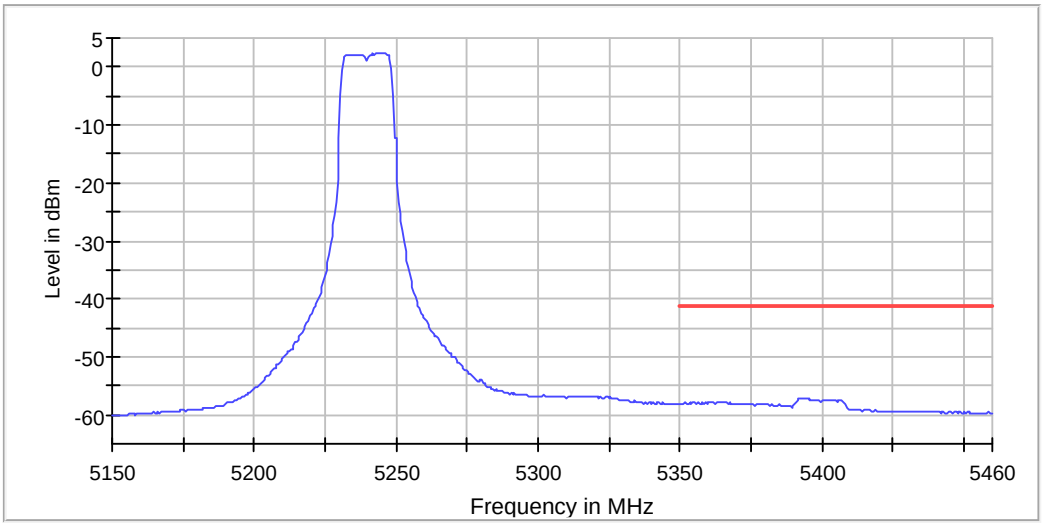
| DUT Frequency (MHz) | Result |
|---|---|
| 5240.000000 | PASS |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5245.273632 | 2.5 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5392.909739 | -57.2 | 16.0 | -41.2 | PASS |
| 5392.410926 | -57.3 | 16.0 | -41.2 | PASS |
| 5393.907363 | -57.3 | 16.0 | -41.2 | PASS |
| 5394.406176 | -57.3 | 16.1 | -41.2 | PASS |
| 5391.912114 | -57.3 | 16.1 | -41.2 | PASS |
| 5394.904988 | -57.3 | 16.1 | -41.2 | PASS |
| 5395.403800 | -57.3 | 16.1 | -41.2 | PASS |
| 5393.408551 | -57.3 | 16.1 | -41.2 | PASS |
| 5396.401425 | -57.4 | 16.2 | -41.2 | PASS |
| 5395.902613 | -57.4 | 16.2 | -41.2 | PASS |
| 5397.399050 | -57.4 | 16.2 | -41.2 | PASS |
| 5404.881235 | -57.5 | 16.2 | -41.2 | PASS |
| 5396.900238 | -57.5 | 16.2 | -41.2 | PASS |
| 5400.890736 | -57.5 | 16.2 | -41.2 | PASS |
| 5398.396675 | -57.5 | 16.2 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 420 | ~ 420 |
| Sweeptime | 420.000 ms | 420.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5240 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

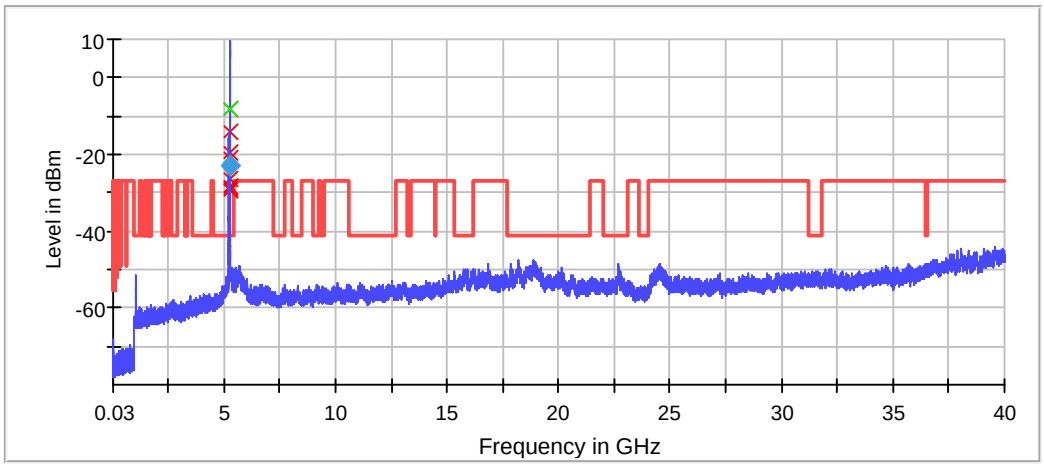
| DUT Frequency (MHz) | Result |
|---|---|
| 5240.000000 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 18886.874375 | -47.7 | 6.5 | -41.2 |
| 18227.909057 | -47.7 | 6.5 | -41.2 |
| 18875.874954 | -47.8 | 6.6 | -41.2 |
| 18878.874796 | -47.8 | 6.6 | -41.2 |
| 18877.874849 | -47.9 | 6.6 | -41.2 |
| 18939.871586 | -48.0 | 6.8 | -41.2 |
| 22697.673807 | -48.3 | 7.1 | -41.2 |
| 18201.910426 | -48.4 | 7.2 | -41.2 |
| 18922.872480 | -48.5 | 7.3 | -41.2 |
| 36462.752661 | -48.6 | 7.3 | -41.2 |
| 17858.928477 | -48.6 | 7.3 | -41.2 |
| 18915.872849 | -48.6 | 7.4 | -41.2 |
| 18842.876691 | -48.7 | 7.5 | -41.2 |
| 18864.875533 | -48.8 | 7.6 | -41.2 |
| 18176.911741 | -48.8 | 7.6 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# UNII-1 Ant2 AC mode 40
# Power Spectral Density (5190 MHz; 43.5821 MHz)

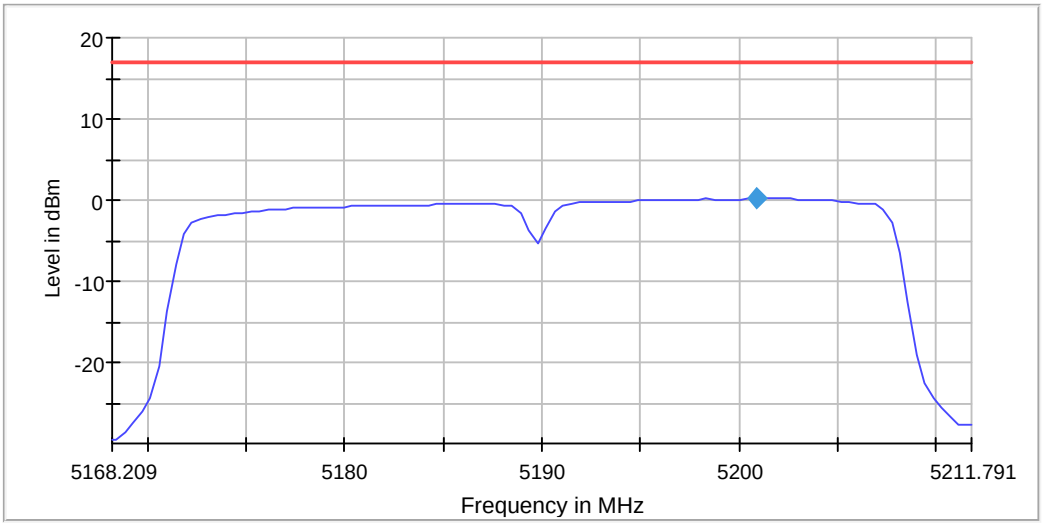
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5190.000000 | 5200.895525 | 0.170 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 92.909 |




## Measurement

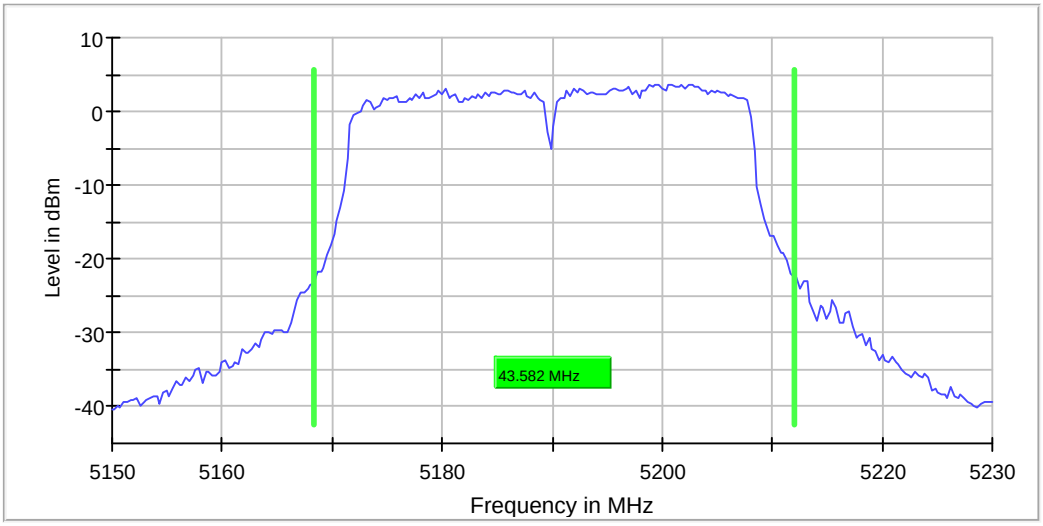
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.16821 GHz | 5.16821 GHz |
| Stop Frequency | 5.21179 GHz | 5.21179 GHz |
| Span | 43.582 MHz | 43.582 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 87 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5190 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5190.000000 | 43.582090 | --- | --- | 5168.358209 | 5211.940299 | 3.7 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.15000 GHz | 5.15000 GHz |
| Stop Frequency | 5.23000 GHz | 5.23000 GHz |
| Span | 80.000 MHz | 80.000 MHz |
| RBW | 300.000 kHz | ~ 400.000 kHz |
| VBW | 1.000 MHz | >= 900.000 kHz |
| SweepPoints | 267 | ~ 267 |
| Sweeptime | 31.603 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 54 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge low (5190 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

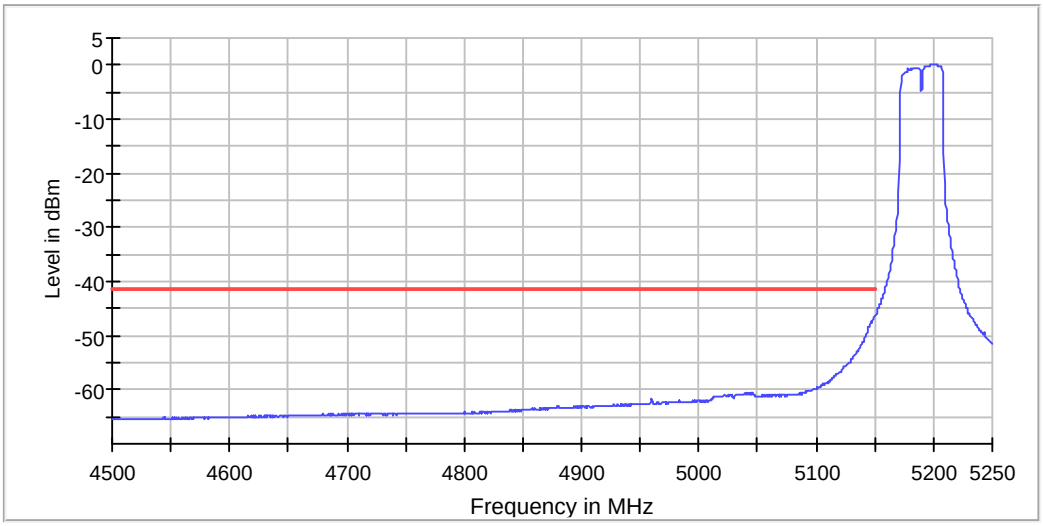
| DUT Frequency (MHz) | Result |
|---|---|
| 5190.000000 | PASS |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5201.990050 | 0.2 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5149.250576 | -46.6 | 5.4 | -41.2 | PASS |
| 5148.750961 | -46.8 | 5.6 | -41.2 | PASS |
| 5148.251345 | -47.1 | 5.9 | -41.2 | PASS |
| 5147.751729 | -47.3 | 6.1 | -41.2 | PASS |
| 5146.752498 | -47.5 | 6.2 | -41.2 | PASS |
| 5147.252114 | -47.5 | 6.3 | -41.2 | PASS |
| 5146.252882 | -48.0 | 6.8 | -41.2 | PASS |
| 5145.753267 | -48.1 | 6.9 | -41.2 | PASS |
| 5145.253651 | -48.5 | 7.2 | -41.2 | PASS |
| 5144.754035 | -48.5 | 7.3 | -41.2 | PASS |
| 5144.254420 | -48.8 | 7.6 | -41.2 | PASS |
| 5143.754804 | -49.2 | 8.0 | -41.2 | PASS |
| 5143.255188 | -49.5 | 8.2 | -41.2 | PASS |
| 5142.755573 | -49.7 | 8.5 | -41.2 | PASS |
| 5142.255957 | -49.9 | 8.7 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 1300 | ~ 1300 |
| Sweeptime | 1.300 s | 1.300 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5190 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5190.000000 | PASS |

## Final measurements

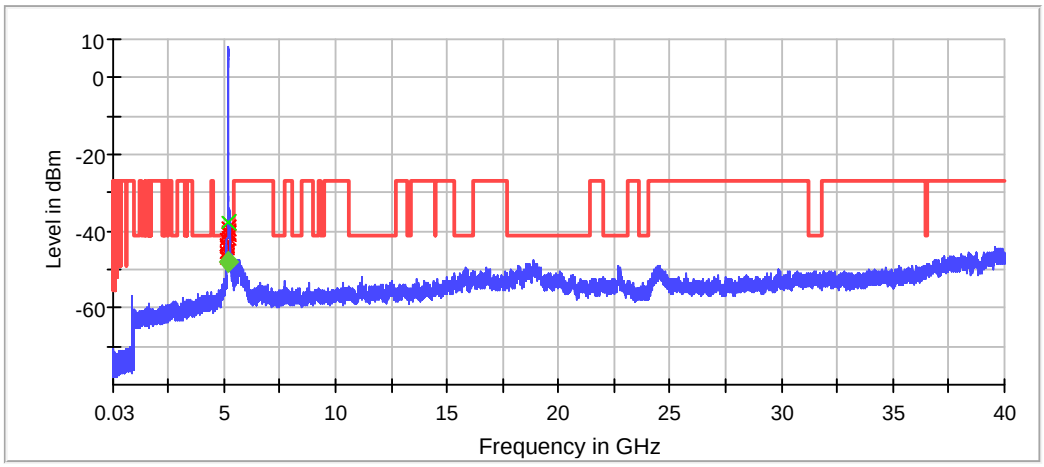
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5148.500361 | -37.7 | -47.9 | -41.2 | 6.6 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5148.500361 | -37.7 | -3.6 | -41.2 |
| 5147.500602 | -39.0 | -2.2 | -41.2 |
| 5146.500843 | -39.1 | -2.1 | -41.2 |
| 5145.501084 | -40.1 | -1.1 | -41.2 |
| 5143.501566 | -40.6 | -0.7 | -41.2 |
| 5144.501325 | -40.6 | -0.6 | -41.2 |
| 5142.501807 | -41.8 | 0.5 | -41.2 |
| 5141.502048 | -41.9 | 0.7 | -41.2 |
| 5140.502289 | -42.0 | 0.8 | -41.2 |
| 5133.503975 | -43.4 | 2.2 | -41.2 |
| 5132.504216 | -43.5 | 2.2 | -41.2 |
| 5139.502530 | -43.6 | 2.3 | -41.2 |
| 5138.502770 | -43.7 | 2.5 | -41.2 |
| 5136.503252 | -44.2 | 2.9 | -41.2 |
| 5137.503011 | -44.2 | 3.0 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# Power Spectral Density (5230 MHz; 44.4776 MHz)

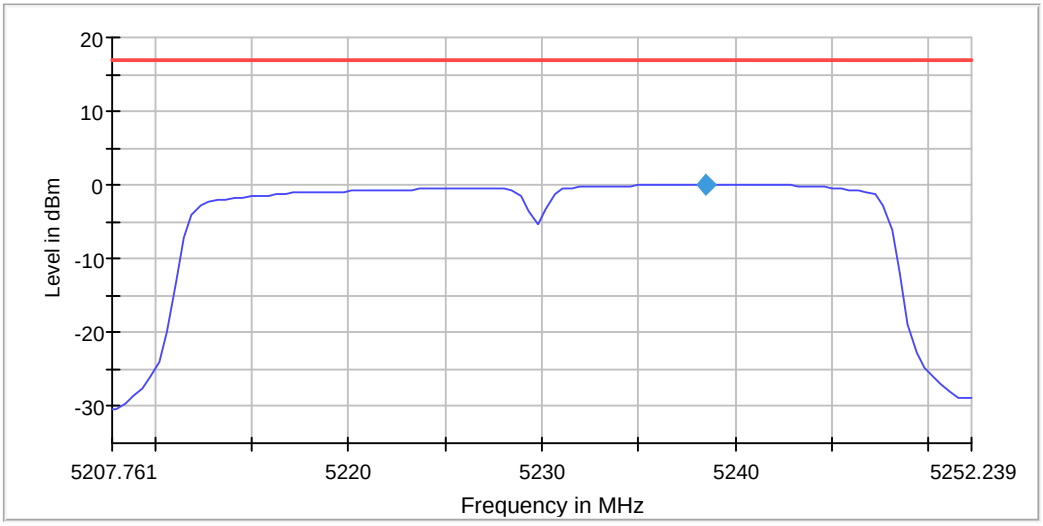
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5230.000000 | 5238.503071 | 0.086 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 92.862 |




## Measurement

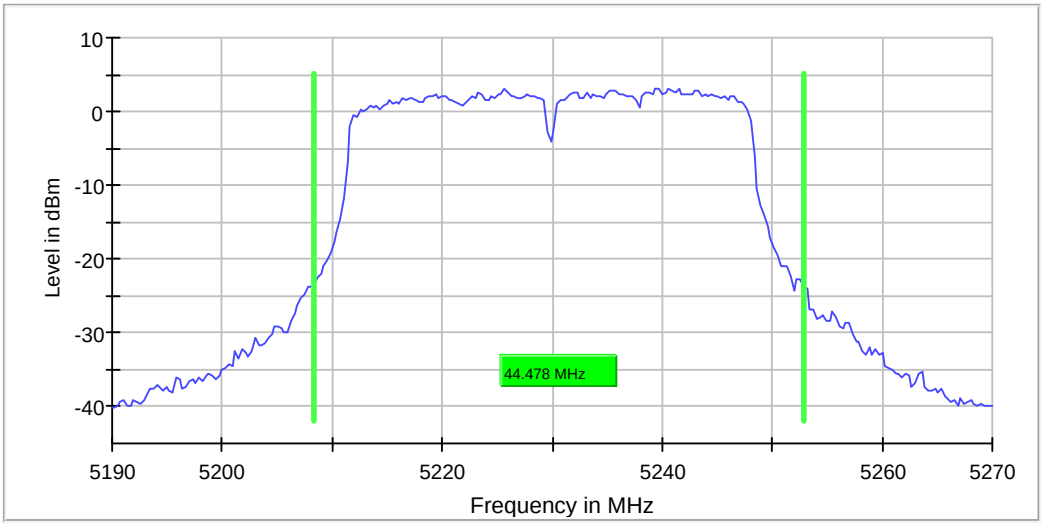
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.20776 GHz | 5.20776 GHz |
| Stop Frequency | 5.25224 GHz | 5.25224 GHz |
| Span | 44.478 MHz | 44.478 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 89 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5230 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5230.000000 | 44.477612 | --- | --- | 5208.358209 | 5252.835821 | 3.1 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.19000 GHz | 5.19000 GHz |
| Stop Frequency | 5.27000 GHz | 5.27000 GHz |
| Span | 80.000 MHz | 80.000 MHz |
| RBW | 300.000 kHz | ~ 400.000 kHz |
| VBW | 1.000 MHz | >= 900.000 kHz |
| SweepPoints | 267 | ~ 267 |
| Sweeptime | 31.603 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 47 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge high (5230 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

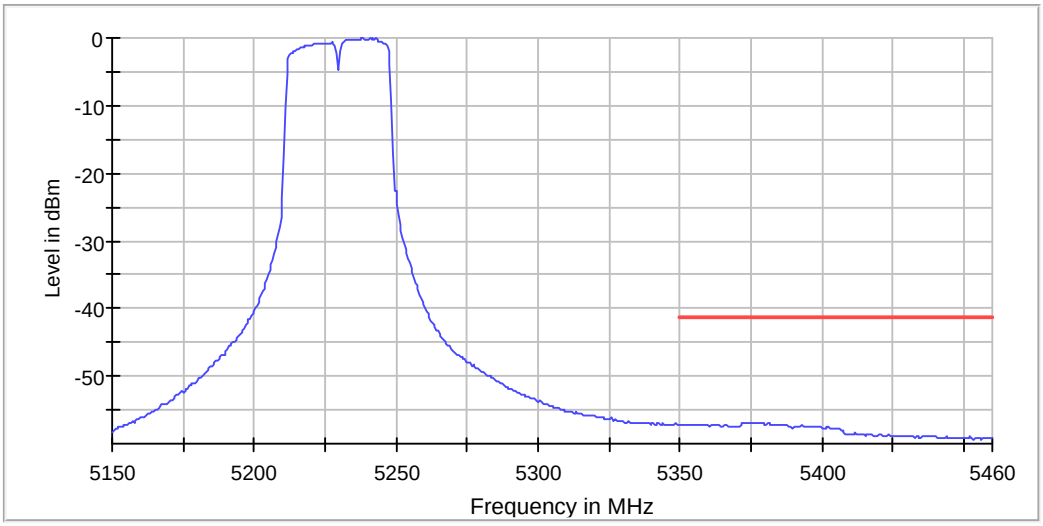
| DUT Frequency (MHz) | Result |
|---|---|
| 5230.000000 | FAIL |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5238.308458 | 0.0 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5373.954869 | -56.9 | 15.6 | -41.2 | PASS |
| 5374.453682 | -56.9 | 15.7 | -41.2 | PASS |
| 5375.950119 | -56.9 | 15.7 | -41.2 | PASS |
| 5371.959620 | -56.9 | 15.7 | -41.2 | PASS |
| 5372.957245 | -56.9 | 15.7 | -41.2 | PASS |
| 5374.952494 | -56.9 | 15.7 | -41.2 | PASS |
| 5372.458432 | -56.9 | 15.7 | -41.2 | PASS |
| 5379.441805 | -57.0 | 15.7 | -41.2 | PASS |
| 5373.456057 | -57.0 | 15.7 | -41.2 | PASS |
| 5376.947743 | -57.0 | 15.7 | -41.2 | PASS |
| 5375.451306 | -57.0 | 15.7 | -41.2 | PASS |
| 5378.444181 | -57.0 | 15.7 | -41.2 | PASS |
| 5376.448931 | -57.0 | 15.7 | -41.2 | PASS |
| 5377.945368 | -57.0 | 15.8 | -41.2 | PASS |
| 5381.437055 | -57.0 | 15.8 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 420 | ~ 420 |
| Sweeptime | 420.000 ms | 420.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5230 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

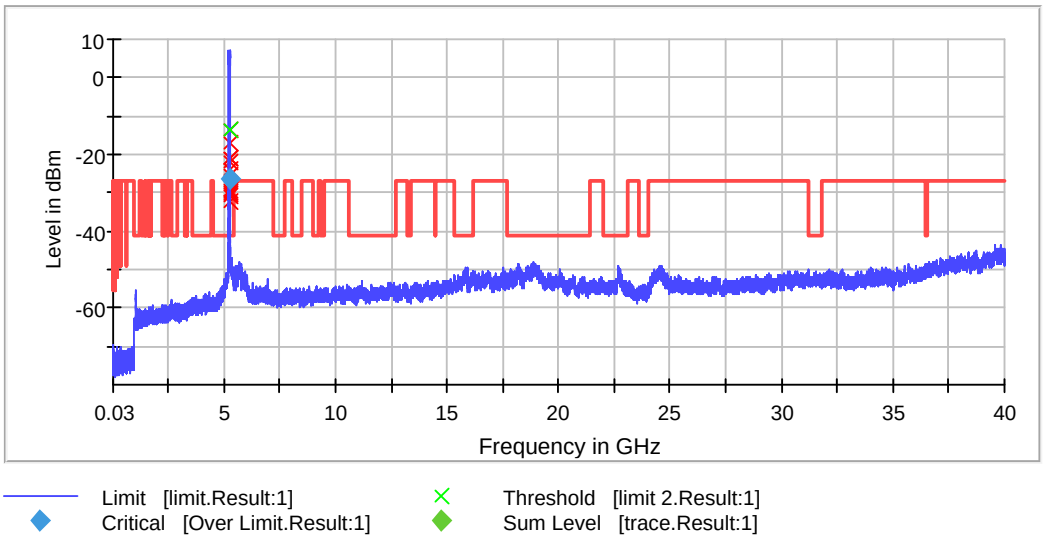
| DUT Frequency (MHz) | Result |
|---|---|
| 5230.000000 | FAIL |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 18888.874270 | -48.1 | 6.9 | -41.2 |
| 5378.264463 | -48.4 | 7.1 | -41.2 |
| 18915.872849 | -48.4 | 7.1 | -41.2 |
| 18882.874586 | -48.5 | 7.3 | -41.2 |
| 18932.871954 | -48.5 | 7.3 | -41.2 |
| 18839.876849 | -48.5 | 7.3 | -41.2 |
| 18793.879270 | -48.6 | 7.3 | -41.2 |
| 18166.912268 | -48.6 | 7.4 | -41.2 |
| 18176.911741 | -48.7 | 7.4 | -41.2 |
| 5373.305785 | -48.7 | 7.5 | -41.2 |
| 36442.754089 | -48.7 | 7.5 | -41.2 |
| 18914.872901 | -48.7 | 7.5 | -41.2 |
| 5374.297521 | -48.8 | 7.5 | -41.2 |
| 18237.908531 | -48.8 | 7.6 | -41.2 |
| 18885.874428 | -48.8 | 7.6 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# UNII-1 Ant2 AC mode 80
# Power Spectral Density (5210 MHz; 86.4596 MHz)

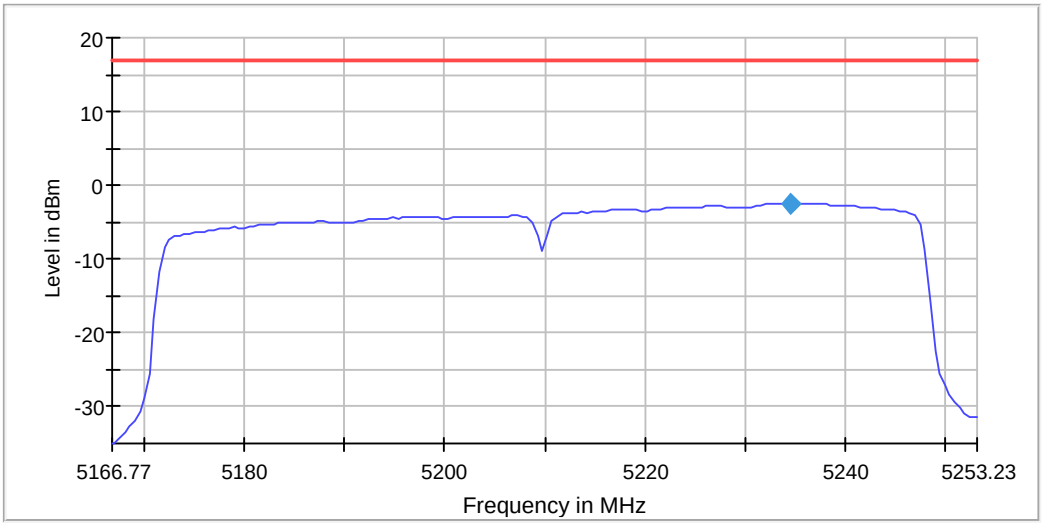
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5210.000000 | 5234.596266 | -2.471 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 86.014 |




## Measurement

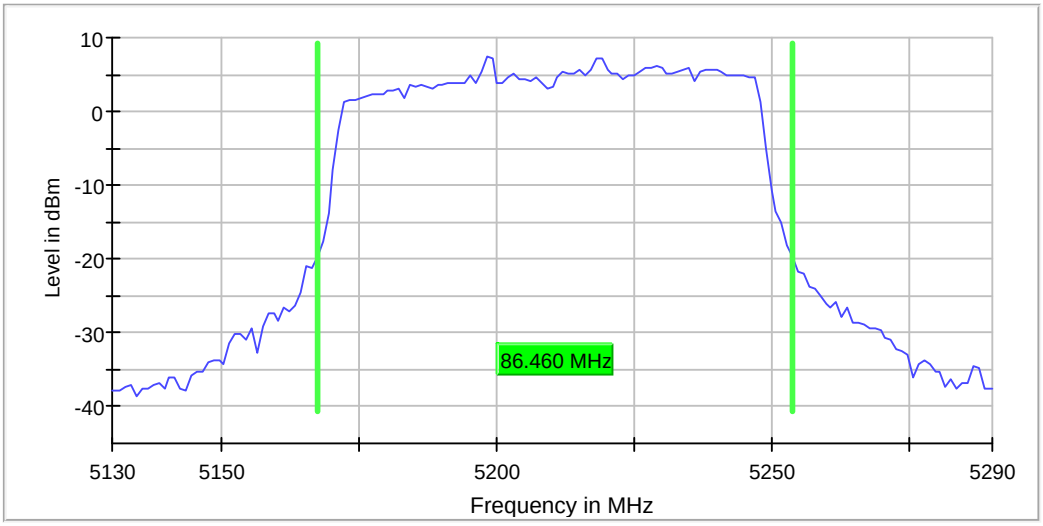
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.16677 GHz | 5.16677 GHz |
| Stop Frequency | 5.25323 GHz | 5.25323 GHz |
| Span | 86.460 MHz | 86.460 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 173 | ~ 173 |
| Sweeptime | 3.460 s | 3.460 s |
| Reference Level | -30.000 dBm | -30.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5210 MHz; 80MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5210.000000 | 86.459627 | --- | --- | 5167.267081 | 5253.726708 | 7.3 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.13000 GHz | 5.13000 GHz |
| Stop Frequency | 5.29000 GHz | 5.29000 GHz |
| Span | 160.000 MHz | 160.000 MHz |
| RBW | 1.000 MHz | ~ 800.000 kHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 160 | ~ 160 |
| Sweeptime | 22.754 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 27 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge low (5210 MHz; 80MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

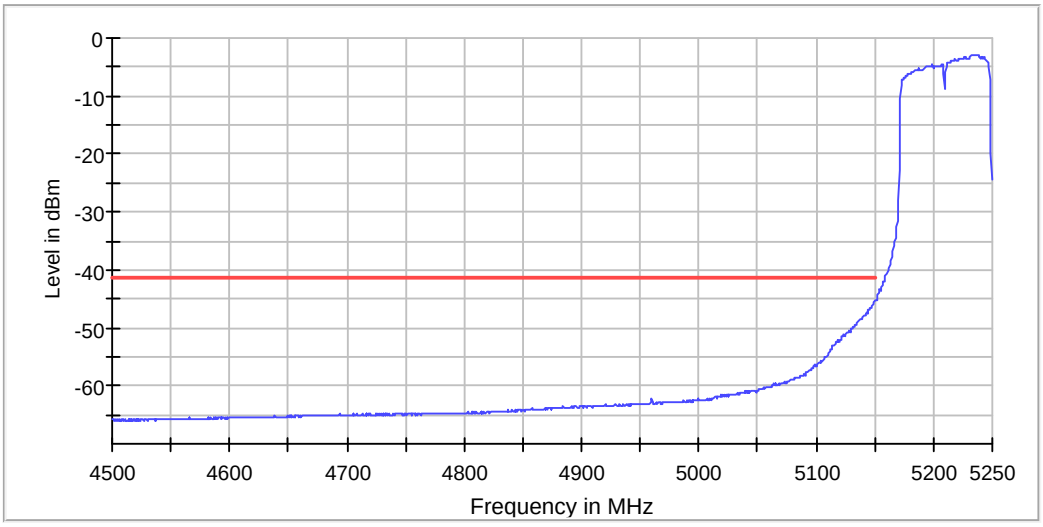
| DUT Frequency (MHz) | Result |
|---|---|
| 5210.000000 | PASS |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5234.825871 | -3.0 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5149.250576 | -45.6 | 4.4 | -41.2 | PASS |
| 5148.750961 | -45.9 | 4.7 | -41.2 | PASS |
| 5148.251345 | -45.9 | 4.7 | -41.2 | PASS |
| 5147.751729 | -46.1 | 4.9 | -41.2 | PASS |
| 5147.252114 | -46.2 | 5.0 | -41.2 | PASS |
| 5146.752498 | -46.5 | 5.2 | -41.2 | PASS |
| 5146.252882 | -46.5 | 5.3 | -41.2 | PASS |
| 5145.753267 | -46.7 | 5.5 | -41.2 | PASS |
| 5145.253651 | -46.9 | 5.6 | -41.2 | PASS |
| 5144.754035 | -47.0 | 5.8 | -41.2 | PASS |
| 5144.254420 | -47.2 | 6.0 | -41.2 | PASS |
| 5143.255188 | -47.3 | 6.0 | -41.2 | PASS |
| 5143.754804 | -47.4 | 6.2 | -41.2 | PASS |
| 5142.755573 | -47.6 | 6.3 | -41.2 | PASS |
| 5142.255957 | -47.6 | 6.4 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 1300 | ~ 1300 |
| Sweeptime | 1.300 s | 1.300 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Band Edge high (5210 MHz; 80MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

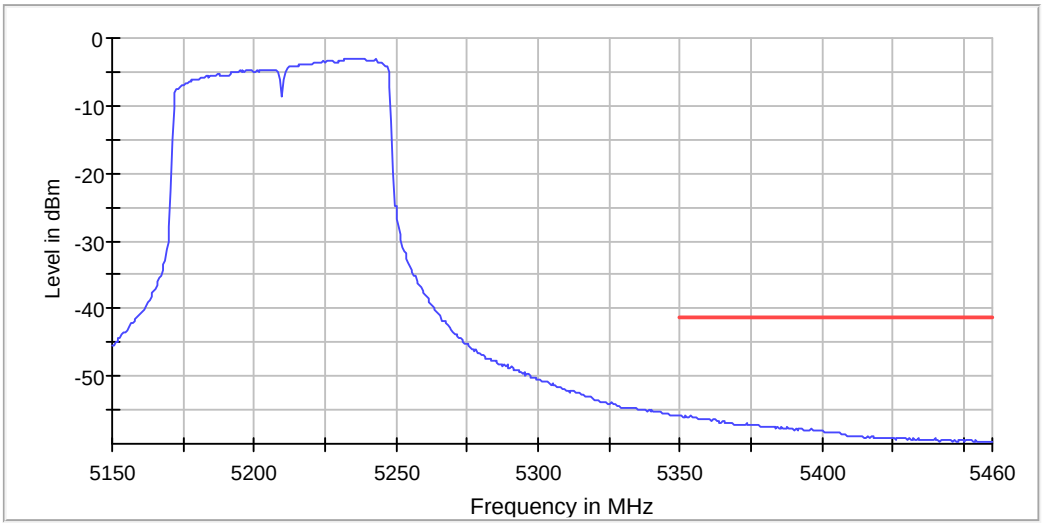
| DUT Frequency (MHz) | Result |
|---|---|
| 5210.000000 | PASS |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5234.825871 | -3.0 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5350.011876 | -55.8 | 14.6 | -41.2 | PASS |
| 5352.007126 | -55.9 | 14.6 | -41.2 | PASS |
| 5350.510689 | -55.9 | 14.6 | -41.2 | PASS |
| 5354.002375 | -55.9 | 14.7 | -41.2 | PASS |
| 5353.503563 | -55.9 | 14.7 | -41.2 | PASS |
| 5352.505938 | -56.0 | 14.7 | -41.2 | PASS |
| 5351.009501 | -56.1 | 14.8 | -41.2 | PASS |
| 5353.004751 | -56.1 | 14.8 | -41.2 | PASS |
| 5351.508314 | -56.1 | 14.9 | -41.2 | PASS |
| 5355.000000 | -56.2 | 15.0 | -41.2 | PASS |
| 5355.498812 | -56.2 | 15.0 | -41.2 | PASS |
| 5355.997625 | -56.2 | 15.0 | -41.2 | PASS |
| 5354.501188 | -56.2 | 15.0 | -41.2 | PASS |
| 5356.496437 | -56.3 | 15.0 | -41.2 | PASS |
| 5356.995249 | -56.3 | 15.1 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 420 | ~ 420 |
| Sweeptime | 420.000 ms | 420.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5210 MHz; 80MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5210.000000 | PASS |

## Final measurements

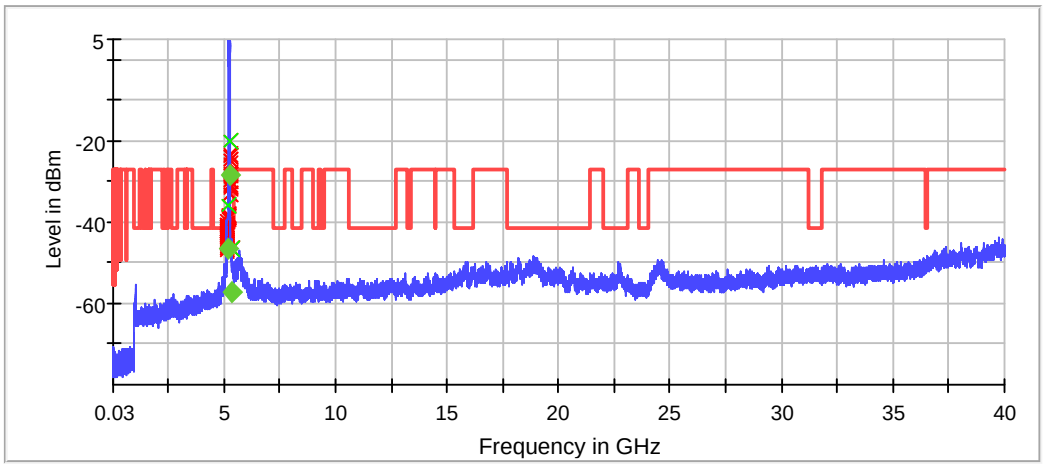
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5148.500361 | -35.9 | -46.8 | -41.2 | 5.6 | PASS |
| 5250.490196 | -20.1 | -28.4 | --- | --- | PASS |
| 5355.454545 | -46.4 | -57.2 | -41.2 | 16.0 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5148.500361 | -35.9 | -5.3 | -41.2 |
| 5142.501807 | -38.2 | -3.0 | -41.2 |
| 5143.501566 | -38.3 | -2.9 | -41.2 |
| 5145.501084 | -38.7 | -2.6 | -41.2 |
| 5147.500602 | -38.8 | -2.4 | -41.2 |
| 5144.501325 | -38.9 | -2.4 | -41.2 |
| 5146.500843 | -39.3 | -1.9 | -41.2 |
| 5138.502770 | -39.7 | -1.5 | -41.2 |
| 5141.502048 | -40.4 | -0.8 | -41.2 |
| 5127.505420 | -40.5 | -0.8 | -41.2 |
| 5139.502530 | -40.7 | -0.5 | -41.2 |
| 5140.502289 | -40.7 | -0.5 | -41.2 |
| 5136.503252 | -40.8 | -0.5 | -41.2 |
| 5129.504939 | -41.0 | -0.3 | -41.2 |
| 5134.503734 | -41.1 | -0.2 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# UNII-1 Ant2 NHT20
# Power Spectral Density (5180 MHz; 22.6866 MHz)

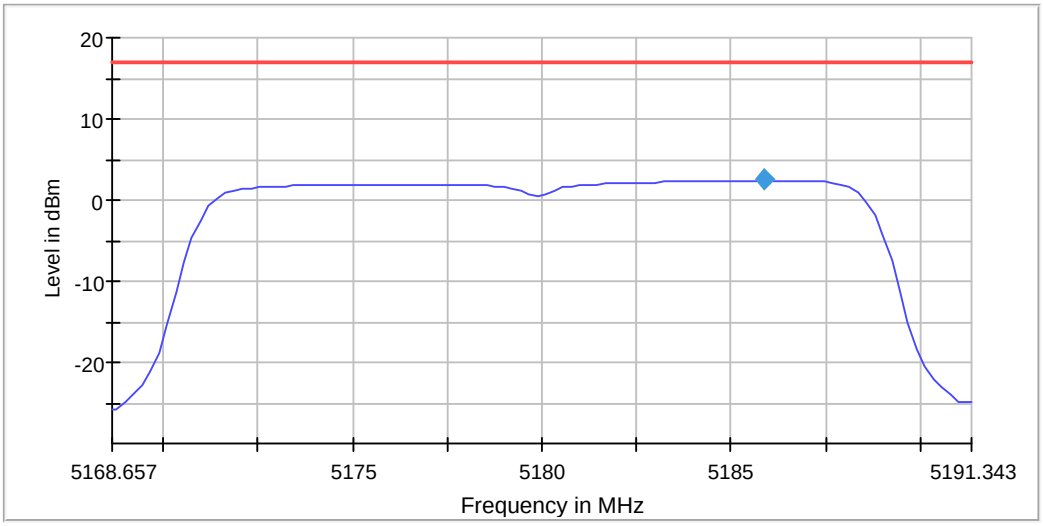
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5180.000000 | 5185.894094 | 2.448 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 94.792 |




## Measurement

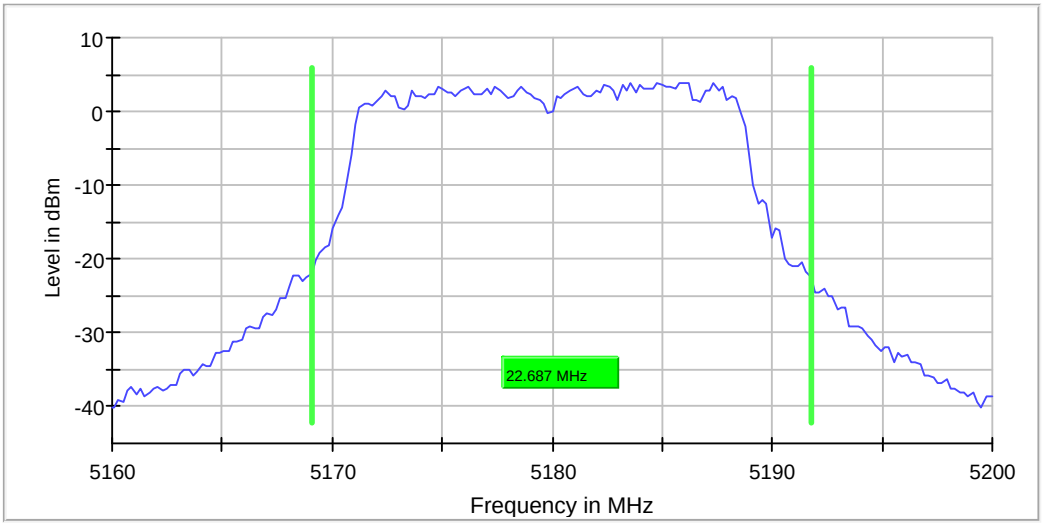
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.16866 GHz | 5.16866 GHz |
| Stop Frequency | 5.19134 GHz | 5.19134 GHz |
| Span | 22.687 MHz | 22.687 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 45 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5180 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5180.000000 | 22.686568 | --- | --- | 5169.054726 | 5191.741294 | 4.0 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.16000 GHz | 5.16000 GHz |
| Stop Frequency | 5.20000 GHz | 5.20000 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | ~ 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 28.443 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 32 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge low (5180 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

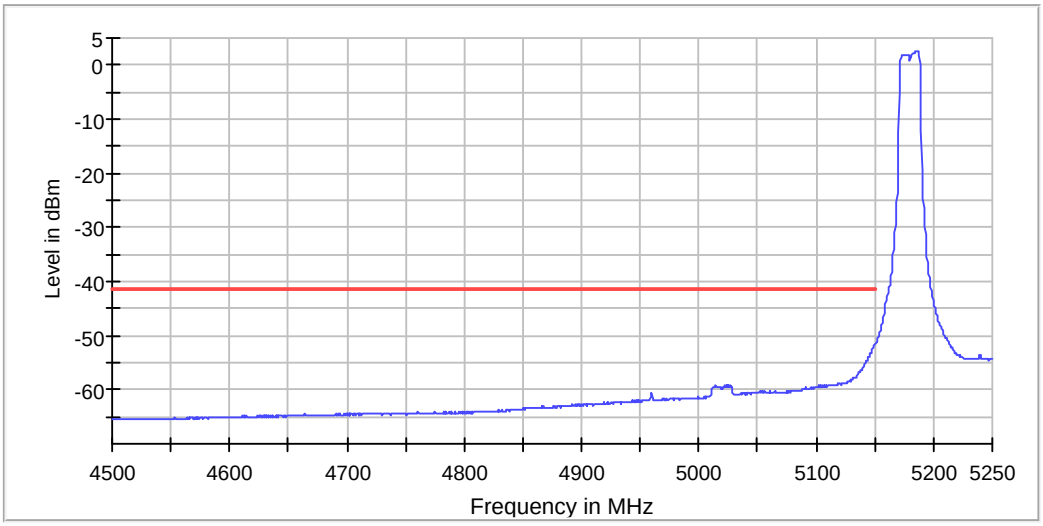
| DUT Frequency (MHz) | Result |
|---|---|
| 5180.000000 | PASS |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5186.567164 | 2.5 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5149.250576 | -51.8 | 10.6 | -41.2 | PASS |
| 5148.750961 | -51.9 | 10.6 | -41.2 | PASS |
| 5148.251345 | -52.3 | 11.1 | -41.2 | PASS |
| 5147.751729 | -52.5 | 11.2 | -41.2 | PASS |
| 5147.252114 | -52.8 | 11.6 | -41.2 | PASS |
| 5146.752498 | -53.1 | 11.9 | -41.2 | PASS |
| 5146.252882 | -53.3 | 12.1 | -41.2 | PASS |
| 5145.753267 | -53.7 | 12.4 | -41.2 | PASS |
| 5145.253651 | -53.8 | 12.6 | -41.2 | PASS |
| 5144.754035 | -54.0 | 12.8 | -41.2 | PASS |
| 5144.254420 | -54.1 | 12.9 | -41.2 | PASS |
| 5143.754804 | -54.4 | 13.2 | -41.2 | PASS |
| 5142.755573 | -54.5 | 13.3 | -41.2 | PASS |
| 5143.255188 | -54.6 | 13.3 | -41.2 | PASS |
| 5141.756341 | -55.1 | 13.8 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 1300 | ~ 1300 |
| Sweeptime | 1.300 s | 1.300 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5180 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5180.000000 | PASS |

## Final measurements

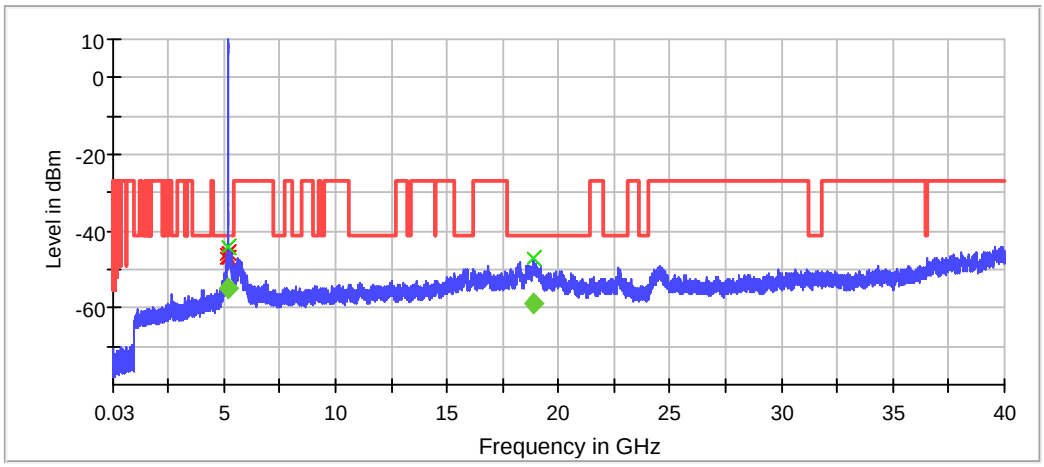
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5148.500361 | -43.9 | -54.9 | -41.2 | 13.7 | PASS |
| 18891.874112 | -47.1 | -58.8 | -41.2 | 17.6 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5148.500361 | -43.9 | 2.7 | -41.2 |
| 5143.501566 | -45.4 | 4.2 | -41.2 |
| 5142.501807 | -45.8 | 4.5 | -41.2 |
| 5141.502048 | -46.1 | 4.9 | -41.2 |
| 5145.501084 | -46.8 | 5.6 | -41.2 |
| 5147.500602 | -46.9 | 5.6 | -41.2 |
| 18891.874112 | -47.1 | 5.9 | -41.2 |
| 5140.502289 | -47.2 | 6.0 | -41.2 |
| 5146.500843 | -47.7 | 6.4 | -41.2 |
| 5144.501325 | -47.7 | 6.5 | -41.2 |
| 18841.876743 | -47.8 | 6.6 | -41.2 |
| 5367.355372 | -48.0 | 6.8 | -41.2 |
| 18864.875533 | -48.1 | 6.9 | -41.2 |
| 18288.905847 | -48.3 | 7.0 | -41.2 |
| 18187.911163 | -48.3 | 7.1 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# Power Spectral Density (5200 MHz; 23.4826 MHz)

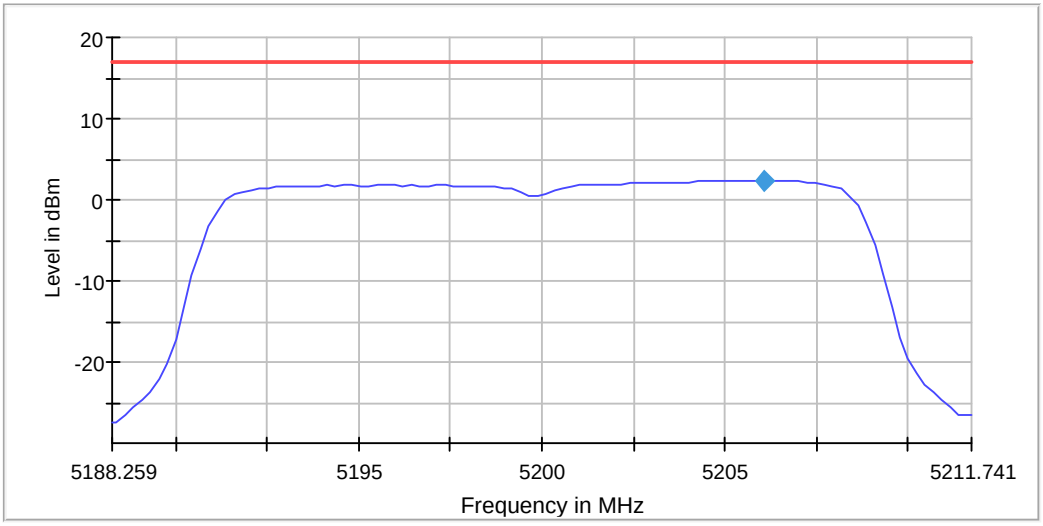
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5200.000000 | 5206.100872 | 2.353 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 95.078 |




## Measurement

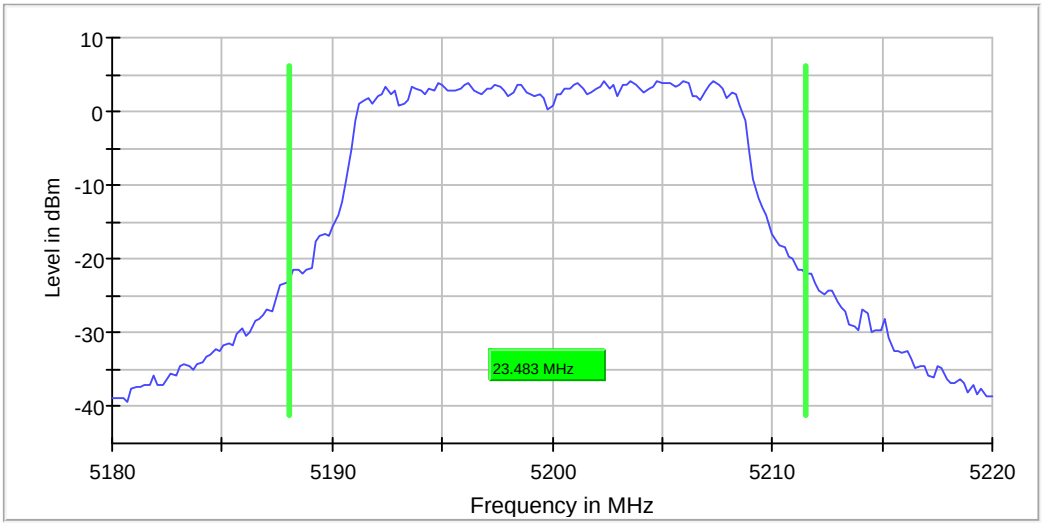
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.18826 GHz | 5.18826 GHz |
| Stop Frequency | 5.21174 GHz | 5.21174 GHz |
| Span | 23.483 MHz | 23.483 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 47 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5200 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5200.000000 | 23.482588 | --- | --- | 5188.059701 | 5211.542289 | 4.2 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.18000 GHz | 5.18000 GHz |
| Stop Frequency | 5.22000 GHz | 5.22000 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | ~ 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 28.443 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 43 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Tx Spurious Emission (5200 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5200.000000 | PASS |

## Final measurements

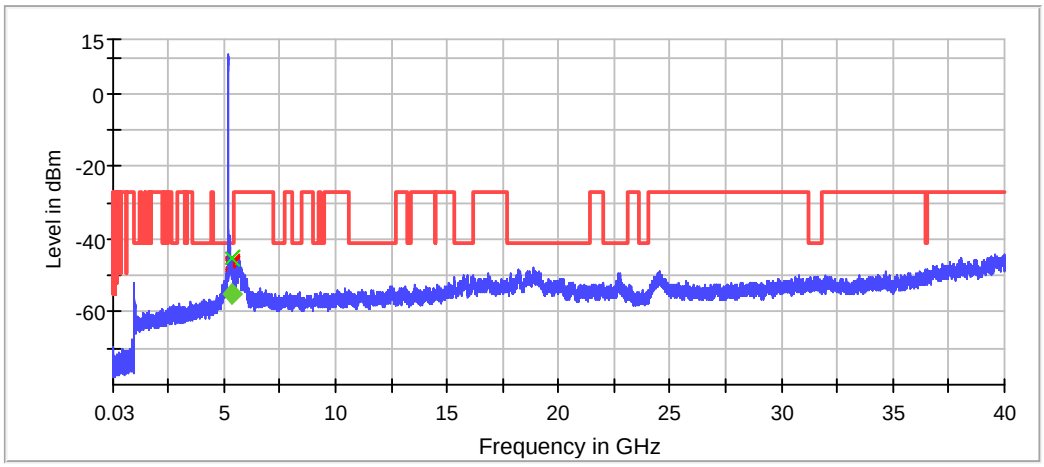
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5358.429752 | -45.1 | -55.3 | -41.2 | 14.0 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5358.429752 | -45.1 | 3.9 | -41.2 |
| 5359.421488 | -45.2 | 4.0 | -41.2 |
| 5364.380165 | -46.5 | 5.3 | -41.2 |
| 5362.396694 | -46.8 | 5.6 | -41.2 |
| 5360.413223 | -46.9 | 5.7 | -41.2 |
| 5353.471074 | -46.9 | 5.7 | -41.2 |
| 5352.479339 | -47.1 | 5.9 | -41.2 |
| 5351.487603 | -47.2 | 6.0 | -41.2 |
| 5371.322314 | -47.6 | 6.3 | -41.2 |
| 5355.454545 | -47.6 | 6.4 | -41.2 |
| 5356.446281 | -47.7 | 6.4 | -41.2 |
| 18878.874796 | -47.7 | 6.5 | -41.2 |
| 5367.355372 | -47.8 | 6.6 | -41.2 |
| 5361.404959 | -47.9 | 6.7 | -41.2 |
| 5369.338843 | -47.9 | 6.7 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# Power Spectral Density (5240 MHz; 23.2836 MHz)

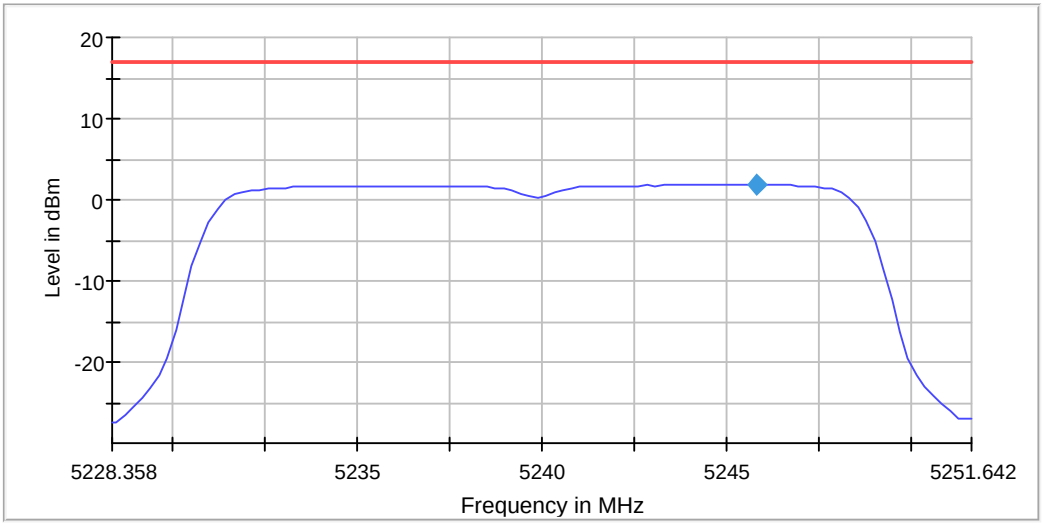
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5240.000000 | 5245.820900 | 1.938 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 95.309 |




## Measurement

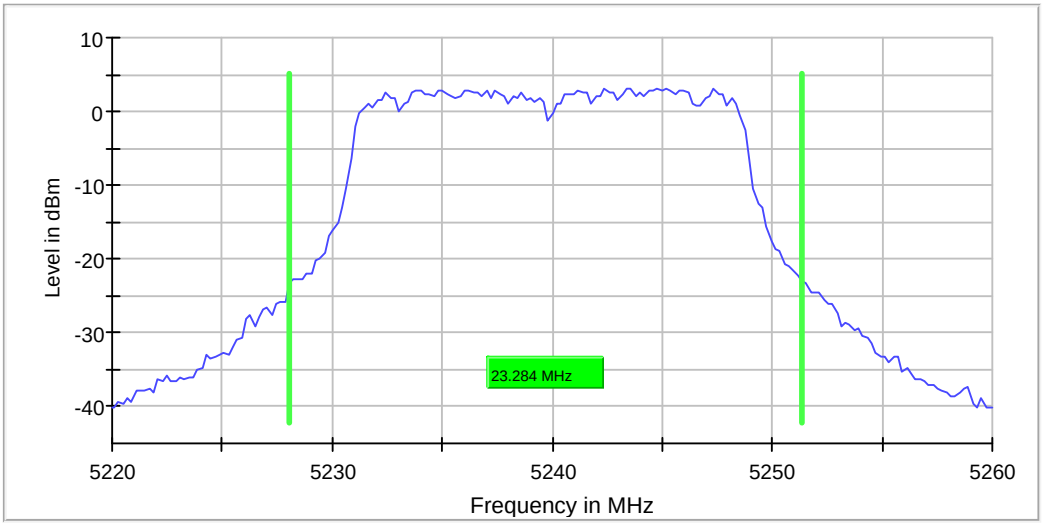
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.22836 GHz | 5.22836 GHz |
| Stop Frequency | 5.25164 GHz | 5.25164 GHz |
| Span | 23.284 MHz | 23.284 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 47 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5240 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5240.000000 | 23.283583 | --- | --- | 5228.059701 | 5251.343284 | 3.2 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.22000 GHz | 5.22000 GHz |
| Stop Frequency | 5.26000 GHz | 5.26000 GHz |
| Span | 40.000 MHz | 40.000 MHz |
| RBW | 200.000 kHz | ~ 200.000 kHz |
| VBW | 1.000 MHz | >= 600.000 kHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 28.443 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 40 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge high (5240 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

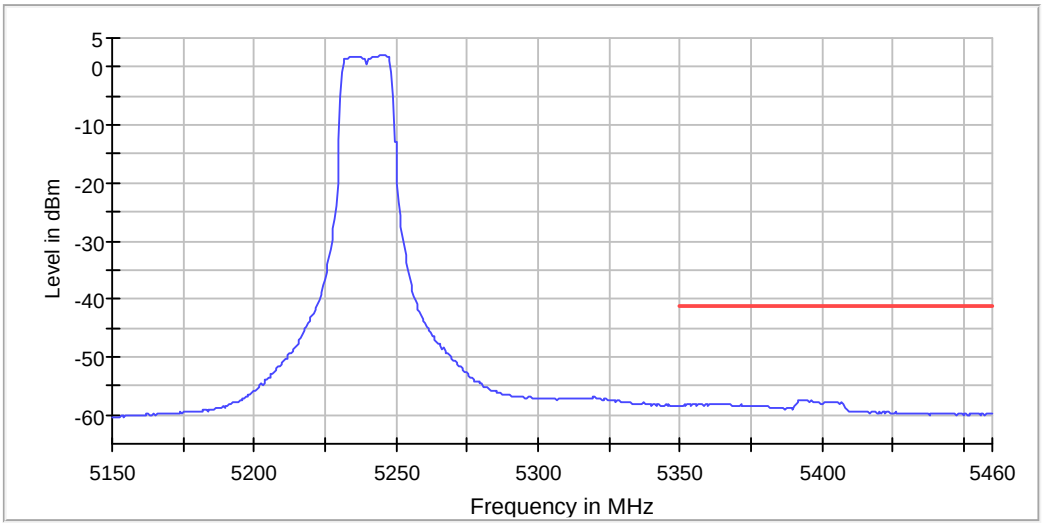
| DUT Frequency (MHz) | Result |
|---|---|
| 5240.000000 | FAIL |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5244.776119 | 2.0 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5392.410926 | -57.5 | 16.3 | -41.2 | PASS |
| 5393.408551 | -57.6 | 16.3 | -41.2 | PASS |
| 5394.406176 | -57.6 | 16.3 | -41.2 | PASS |
| 5392.909739 | -57.7 | 16.4 | -41.2 | PASS |
| 5391.912114 | -57.7 | 16.4 | -41.2 | PASS |
| 5393.907363 | -57.7 | 16.4 | -41.2 | PASS |
| 5396.401425 | -57.7 | 16.4 | -41.2 | PASS |
| 5394.904988 | -57.7 | 16.4 | -41.2 | PASS |
| 5397.399050 | -57.7 | 16.5 | -41.2 | PASS |
| 5395.902613 | -57.7 | 16.5 | -41.2 | PASS |
| 5396.900238 | -57.7 | 16.5 | -41.2 | PASS |
| 5398.396675 | -57.7 | 16.5 | -41.2 | PASS |
| 5395.403800 | -57.7 | 16.5 | -41.2 | PASS |
| 5403.384798 | -57.8 | 16.5 | -41.2 | PASS |
| 5401.389549 | -57.8 | 16.5 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 420 | ~ 420 |
| Sweeptime | 420.000 ms | 420.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5240 MHz; 20 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5240.000000 | PASS |

## Final measurements

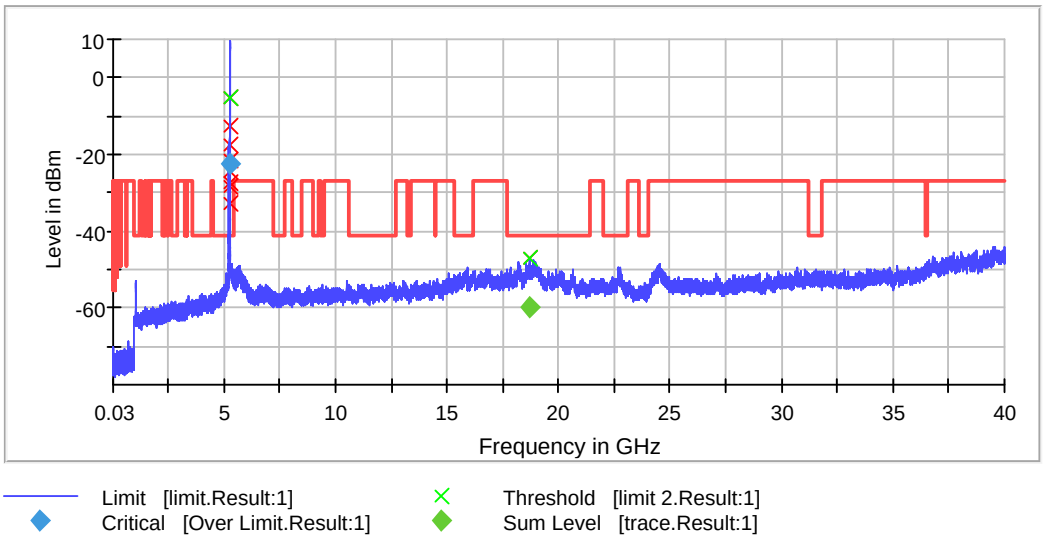
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 18683.885059 | -47.0 | -60.0 | -41.2 | 18.8 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 18683.885059 | -47.0 | 5.8 | -41.2 |
| 18887.874322 | -47.8 | 6.6 | -41.2 |
| 18962.870375 | -48.2 | 6.9 | -41.2 |
| 36498.750089 | -48.2 | 7.0 | -41.2 |
| 18225.909163 | -48.3 | 7.0 | -41.2 |
| 18544.892374 | -48.3 | 7.1 | -41.2 |
| 18897.873796 | -48.3 | 7.1 | -41.2 |
| 18890.874165 | -48.3 | 7.1 | -41.2 |
| 18923.872428 | -48.4 | 7.2 | -41.2 |
| 18898.873743 | -48.4 | 7.2 | -41.2 |
| 18894.873954 | -48.6 | 7.3 | -41.2 |
| 18846.876480 | -48.6 | 7.4 | -41.2 |
| 18949.871059 | -48.6 | 7.4 | -41.2 |
| 18845.876533 | -48.7 | 7.4 | -41.2 |
| 18210.909952 | -48.7 | 7.4 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# UNII-1 Ant2 NHT40
# Power Spectral Density (5190 MHz; 43.2836 MHz)

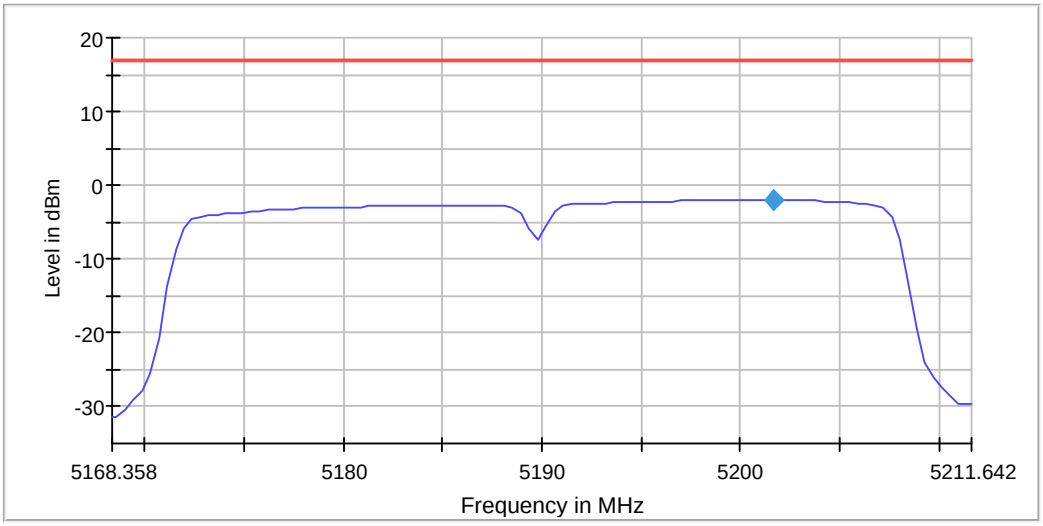
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5190.000000 | 5201.669598 | -1.946 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 92.562 |




## Measurement

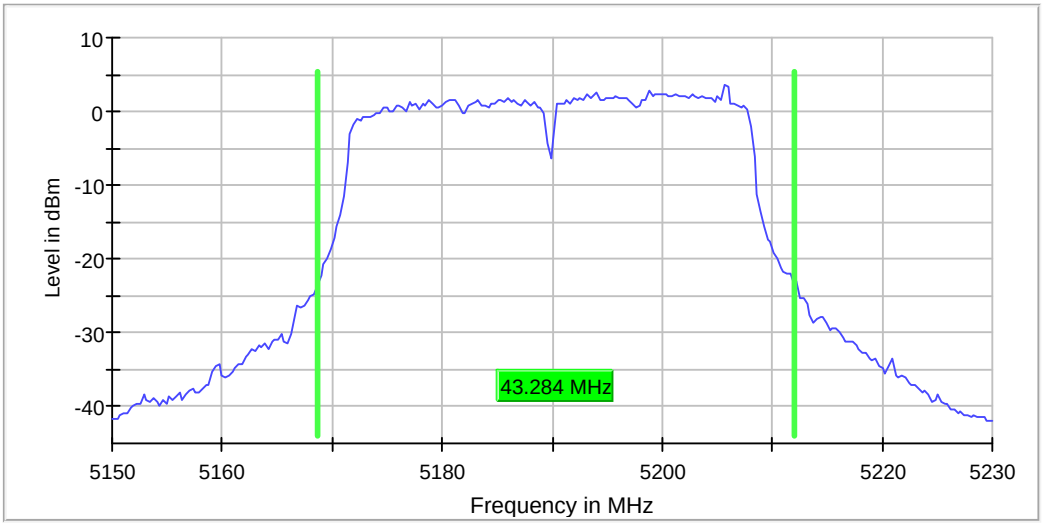
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.16836 GHz | 5.16836 GHz |
| Stop Frequency | 5.21164 GHz | 5.21164 GHz |
| Span | 43.284 MHz | 43.284 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 87 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5190 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5190.000000 | 43.283583 | --- | --- | 5168.656716 | 5211.940299 | 3.5 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.15000 GHz | 5.15000 GHz |
| Stop Frequency | 5.23000 GHz | 5.23000 GHz |
| Span | 80.000 MHz | 80.000 MHz |
| RBW | 300.000 kHz | ~ 400.000 kHz |
| VBW | 1.000 MHz | >= 900.000 kHz |
| SweepPoints | 267 | ~ 267 |
| Sweeptime | 31.603 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 45 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge low (5190 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

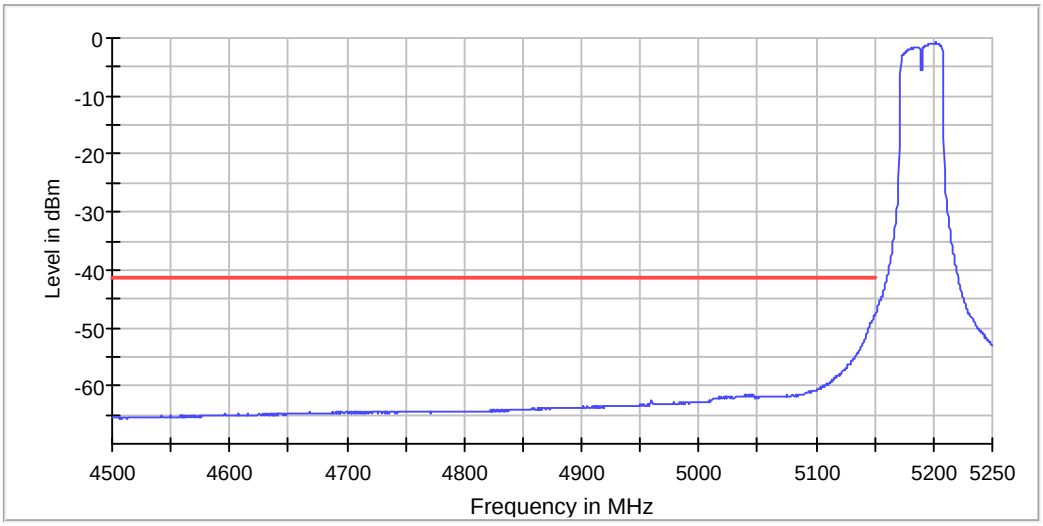
| DUT Frequency (MHz) | Result |
|---|---|
| 5190.000000 | PASS |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5201.990050 | -0.8 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5149.250576 | -47.8 | 6.6 | -41.2 | PASS |
| 5148.750961 | -48.3 | 7.0 | -41.2 | PASS |
| 5148.251345 | -48.5 | 7.2 | -41.2 | PASS |
| 5147.751729 | -48.7 | 7.5 | -41.2 | PASS |
| 5147.252114 | -48.8 | 7.6 | -41.2 | PASS |
| 5146.752498 | -49.2 | 8.0 | -41.2 | PASS |
| 5146.252882 | -49.2 | 8.0 | -41.2 | PASS |
| 5145.753267 | -49.8 | 8.5 | -41.2 | PASS |
| 5145.253651 | -49.9 | 8.6 | -41.2 | PASS |
| 5144.754035 | -50.0 | 8.8 | -41.2 | PASS |
| 5144.254420 | -50.3 | 9.1 | -41.2 | PASS |
| 5143.754804 | -50.7 | 9.5 | -41.2 | PASS |
| 5143.255188 | -50.9 | 9.6 | -41.2 | PASS |
| 5142.755573 | -51.0 | 9.8 | -41.2 | PASS |
| 5142.255957 | -51.4 | 10.1 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 1300 | ~ 1300 |
| Sweeptime | 1.300 s | 1.300 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5190 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5190.000000 | PASS |

## Final measurements

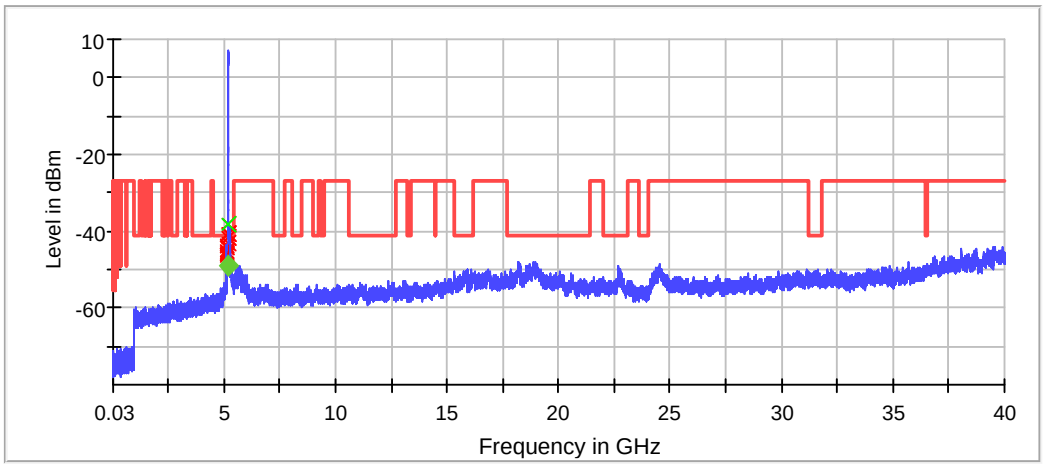
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5148.500361 | -38.3 | -48.9 | -41.2 | 7.7 | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 5148.500361 | -38.3 | -3.0 | -41.2 |
| 5146.500843 | -40.6 | -0.7 | -41.2 |
| 5144.501325 | -40.7 | -0.5 | -41.2 |
| 5143.501566 | -40.8 | -0.5 | -41.2 |
| 5147.500602 | -41.5 | 0.2 | -41.2 |
| 5145.501084 | -41.8 | 0.6 | -41.2 |
| 5142.501807 | -42.9 | 1.6 | -41.2 |
| 5137.503011 | -43.6 | 2.4 | -41.2 |
| 5141.502048 | -43.9 | 2.6 | -41.2 |
| 5139.502530 | -44.2 | 3.0 | -41.2 |
| 5138.502770 | -45.3 | 4.0 | -41.2 |
| 5140.502289 | -45.5 | 4.3 | -41.2 |
| 5136.503252 | -45.9 | 4.7 | -41.2 |
| 5134.503734 | -46.0 | 4.8 | -41.2 |
| 5133.503975 | -46.0 | 4.8 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |

# Power Spectral Density (5230 MHz; 43.8806 MHz)

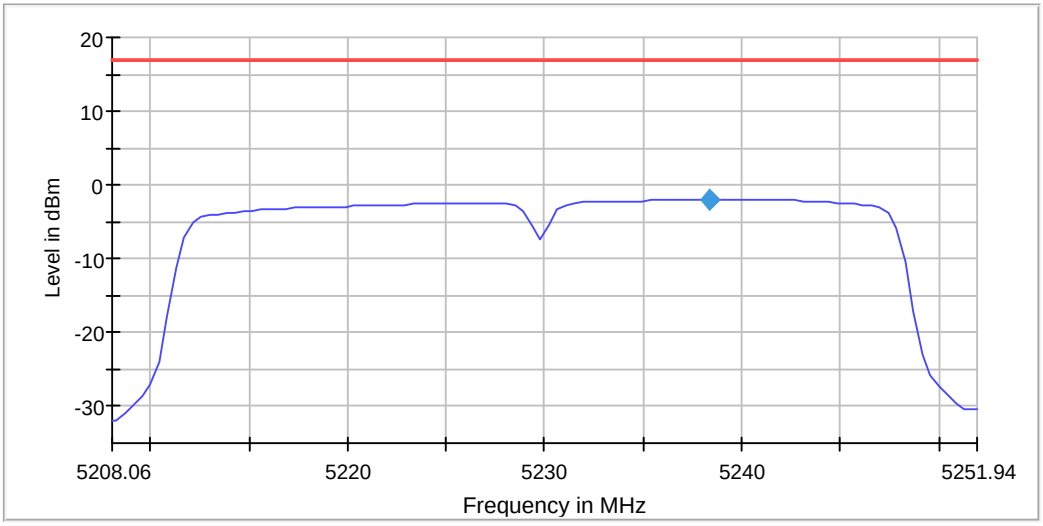
Test according to FCC title 47 part 15 §15.407(a), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---|---|---|---|---|
| 5230.000000 | 5238.388938 | -1.975 | 17.0 | PASS |

## Ports

| Port | Duty Cycle (%) |
|---|---|
| 1 | 92.924 |




## Measurement

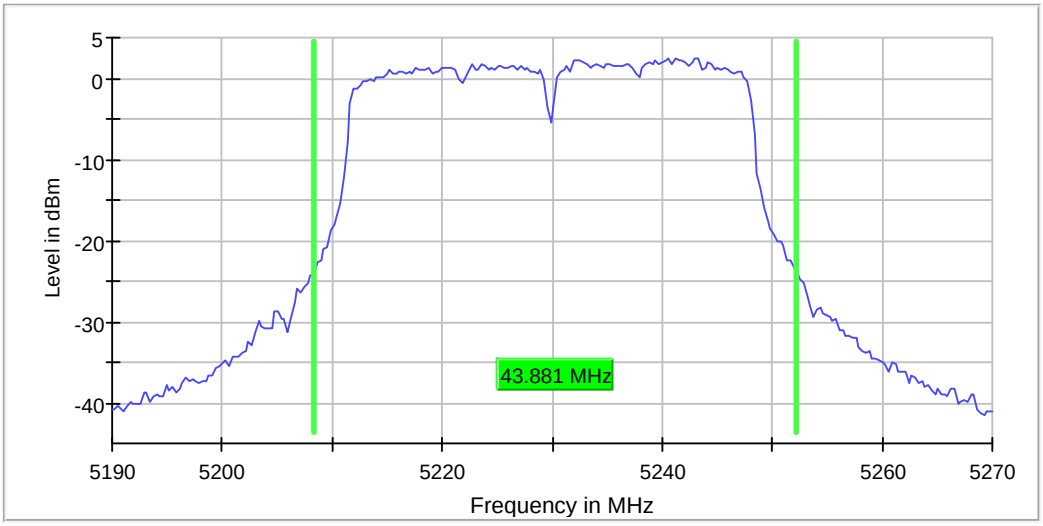
| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.20806 GHz | 5.20806 GHz |
| Stop Frequency | 5.25194 GHz | 5.25194 GHz |
| Span | 43.881 MHz | 43.881 MHz |
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 101 | ~ 88 |
| Sweeptime | 2.020 s | 2.020 s |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 3 | 3 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Emission Bandwidth 26 dB (5230 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(a),(e), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## 26 dB Bandwidth

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) | Max Level (dBm) | Result |
|---|---|---|---|---|---|---|---|
| 5230.000000 | 43.880597 | --- | --- | 5208.358209 | 5252.238806 | 2.4 | PASS |




## Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Start Frequency | 5.19000 GHz | 5.19000 GHz |
| Stop Frequency | 5.27000 GHz | 5.27000 GHz |
| Span | 80.000 MHz | 80.000 MHz |
| RBW | 300.000 kHz | ~ 400.000 kHz |
| VBW | 1.000 MHz | >= 900.000 kHz |
| SweepPoints | 267 | ~ 267 |
| Sweeptime | 31.603 µs | AUTO |
| Reference Level | -10.000 dBm | -10.000 dBm |
| Attenuation | 10.000 dB | AUTO |
| Detector | MaxPeak | MaxPeak |
| SweepCount | 200 | 200 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | FFT | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 78 / max. 150 | max. 150 |
| Stable | 5 / 5 | 5 |

# Band Edge high (5230 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

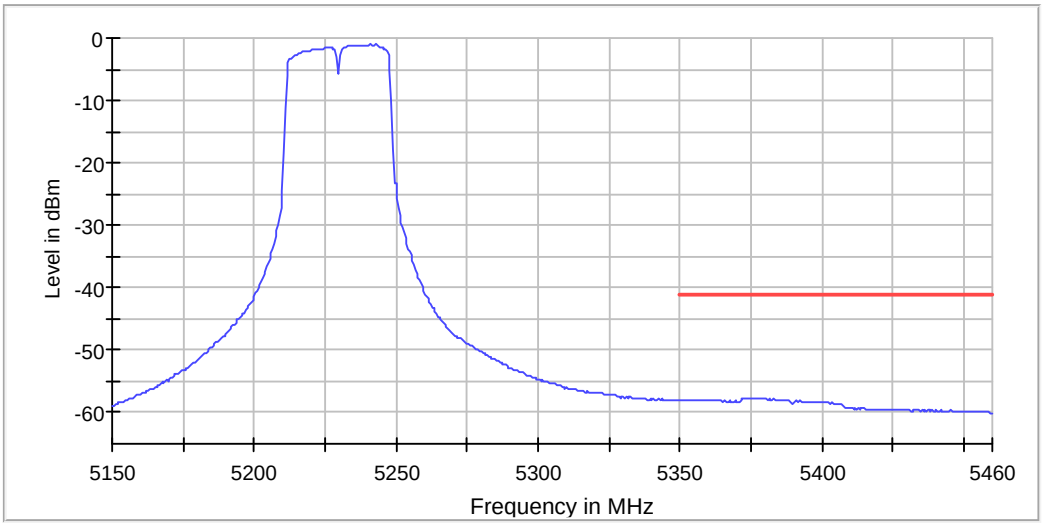
| DUT Frequency (MHz) | Result |
|---|---|
| 5230.000000 | PASS |

## Inband Peak

| Frequency (MHz) | Level (dBm) |
|---|---|
| 5242.786070 | -0.9 |

## Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) | Result |
|---|---|---|---|---|
| 5373.456057 | -57.7 | 16.5 | -41.2 | PASS |
| 5372.957245 | -57.7 | 16.5 | -41.2 | PASS |
| 5374.453682 | -57.7 | 16.5 | -41.2 | PASS |
| 5379.441805 | -57.7 | 16.5 | -41.2 | PASS |
| 5374.952494 | -57.8 | 16.5 | -41.2 | PASS |
| 5373.954869 | -57.8 | 16.6 | -41.2 | PASS |
| 5375.451306 | -57.8 | 16.6 | -41.2 | PASS |
| 5382.933492 | -57.8 | 16.6 | -41.2 | PASS |
| 5371.959620 | -57.8 | 16.6 | -41.2 | PASS |
| 5375.950119 | -57.8 | 16.6 | -41.2 | PASS |
| 5377.446556 | -57.8 | 16.6 | -41.2 | PASS |
| 5378.444181 | -57.8 | 16.6 | -41.2 | PASS |
| 5376.448931 | -57.8 | 16.6 | -41.2 | PASS |
| 5378.942993 | -57.8 | 16.6 | -41.2 | PASS |
| 5376.947743 | -57.8 | 16.6 | -41.2 | PASS |



## Measurement 1

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 200 | ~ 200 |
| Sweeptime | 200.000 ms | 200.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

## Measurement 2

| Setting | Instrument Value | Target Value |
|---|---|---|
| RBW | 1.000 MHz | <= 1.000 MHz |
| VBW | 3.000 MHz | >= 3.000 MHz |
| SweepPoints | 420 | ~ 420 |
| Sweeptime | 420.000 ms | 420.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | AUTO |
| Detector | RMS | RMS |
| SweepCount | 5 | 5 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Max Hold | Max Hold |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |
| Stablemode | Trace | Trace |
| Stablevalue | 0.30 | 0.30 |
| Run | 3 / max. 15 | max. 15 |
| Stable | 3 / 3 | 3 |

# Tx Spurious Emission (5230 MHz; 40 MHz)

Test according to FCC title 47 part 15 §15.407(b), KDB 789033 D02 General U-NII Test Procedures New Rules v01r02 and ANSI C63.10

## Result

| DUT Frequency (MHz) | Result |
|---|---|
| 5230.000000 | PASS |

## Final measurements

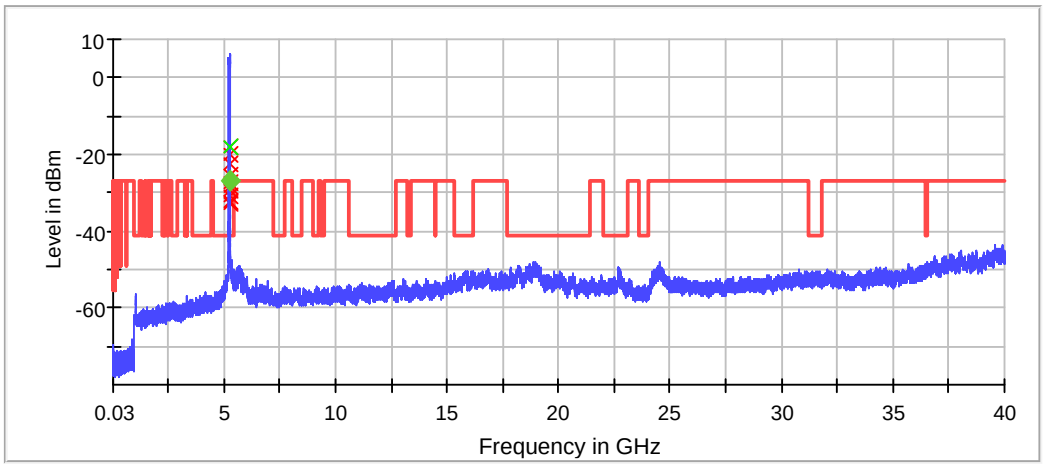
| Frequency (MHz) | Level Pre Measurement (dBm) | level (dBm) | Limit (dBm) | Margin (dB) | Result |
|---|---|---|---|---|---|
| 5250.490196 | -18.0 | -27.1 | --- | --- | PASS |

## Pre Measurements

| Frequency (MHz) | Level (dBm) | Margin (dB) | Limit (dBm) |
|---|---|---|---|
| 18875.874954 | -48.0 | 6.7 | -41.2 |
| 18932.871954 | -48.1 | 6.9 | -41.2 |
| 36477.751589 | -48.6 | 7.4 | -41.2 |
| 18895.873901 | -48.7 | 7.4 | -41.2 |
| 18695.884427 | -48.7 | 7.5 | -41.2 |
| 19001.868323 | -48.7 | 7.5 | -41.2 |
| 18889.874217 | -48.7 | 7.5 | -41.2 |
| 18953.870849 | -48.7 | 7.5 | -41.2 |
| 18894.873954 | -48.8 | 7.6 | -41.2 |
| 18869.875270 | -48.8 | 7.6 | -41.2 |
| 18884.874480 | -48.9 | 7.6 | -41.2 |
| 19040.866270 | -48.9 | 7.7 | -41.2 |
| 18691.884638 | -48.9 | 7.7 | -41.2 |
| 36475.751732 | -49.0 | 7.7 | -41.2 |
| 18902.873533 | -49.0 | 7.7 | -41.2 |

## Measurement Settings

| Start Frequency (MHz) | Stop Frequency (MHz) | Pre Measurement | Final Measurement |
|---|---|---|---|
| 30.000000 | 1000.000000 | 1 | 1 |
| 1000.000000 | 5150.000000 | 2 | 2 |
| 5150.000000 | 5250.000000 | 2 | 2 |
| 5250.000000 | 5350.000000 | 2 | 2 |
| 5350.000000 | 5470.000000 | 2 | 2 |
| 5470.000000 | 5725.000000 | 2 | 2 |
| 5725.000000 | 5850.000000 | 2 | 2 |
| 5850.000000 | 7000.000000 | 2 | 2 |
| 7000.000000 | 26000.000000 | 2 | 2 |
| 26000.000000 | 40000.000000 | 2 | 2 |




## Final Measurement

| Setting | Instrument Value | Target Value |
|---|---|---|
| Span | ZeroSpan | ZeroSpan |
| RBW | 1.000 MHz | ~ 1.000 MHz |
| VBW | 3.000 MHz | ~ 3.000 MHz |
| SweepPoints | 10001 | ~ 10001 |
| Sweeptime | 50.000 ms | 50.000 ms |
| Reference Level | -20.000 dBm | -20.000 dBm |
| Attenuation | 0.000 dB | 0.000 dB |
| Detector | RMS | RMS |
| SweepCount | 1 | 1 |
| Filter | 3 dB | 3 dB |
| Trace Mode | Clear Write | Clear Write |
| Sweeptype | Sweep | AUTO |
| Preamp | off | off |