

# Test report

386816 - 1TRFWL

Date of issue: November 19, 2019

**Applicant:**

Panduit

**Product:**

Pressure Node 3

**Models:**

1532

**Variants:**

N/A

FCC ID: U62-1532

IC ID: 7265A-1532

**Specifications:**

FCC 47 CFR Part 15.249

Operation within the bands 902–928 MHz, 2400–2483.5 MHz, 5725–5875 MHz, and 24.0–24.25 GHz.

RSS-210 Issue 10, December 2019 Annex B.10

License-Exempt Radio Apparatus: Category 1 Equipment

#### Test location

|              |                             |
|--------------|-----------------------------|
| Company name | Nemko USA, Inc.             |
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| City         | Carlsbad                    |
| Province     | California                  |
| Postal code  | 92008                       |
| Country      | USA                         |
| Telephone    | +1 760 444 3500             |
| Website      | www.nemko.com               |

|             |                                                                                    |
|-------------|------------------------------------------------------------------------------------|
| Tested by   | Andre Martinez, Test Engineer.                                                     |
| Reviewed by | Chip Fleury                                                                        |
| Date        | December 9, 2019                                                                   |
| Signature   |  |

#### Limits of responsibility

Note that the results contained in this report relate only to the items tested and were obtained in the period between the date of initial receipt of samples and the date of issue of the report.

This test report has been completed in accordance with the requirements of ISO/IEC 17025. All results contain in this report are within Nemko USA's ISO/IEC 17025 accreditation.

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## Section 1. Report summary

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### 1.1 Applicant and manufacturer

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|                 |                     |
|-----------------|---------------------|
| Company name    | Panduit             |
| Address         | 18900 Panduit Drive |
| City            | Tinley Park         |
| Province/State  | IL                  |
| Postal/Zip code | 60487               |
| Country         | United States       |

### 1.2 Test specifications and Test methods

---

|                                              |                                                                                                |
|----------------------------------------------|------------------------------------------------------------------------------------------------|
| FCC 47 CFR Part 15, Subpart C, Clause 15.249 | Operation within the bands 902–928 MHz, 2400–2483.5 MHz, 5725–5875 MHz, and 24.0–24.25 GHz.    |
| RSS-210 Issue 10, December 2019, Annex B.10  | Devices operating in 902–928, 2400–2483.5 and 5725–5875 MHz                                    |
| ANSI C63.10-2013 Test Methods Clause 6       | American National Standard of Procedures for Compliance Testing of Unlicensed Wireless devices |

### 1.3 Statement of compliance

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In the configuration tested, the EUT was found compliant.

Testing was completed against all relevant requirements of the test standard. Results obtained indicate that the product under test complies in full with the requirements tested. The test results relate only to the items tested.

See “Summary of test results” for full details.

### 1.4 Exclusions

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None

### 1.5 Test report revision history

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| Revision # | Details of changes made to test report |
|------------|----------------------------------------|
| TRF        | Original report issued                 |

## Section 2. Summary of test results

### 2.1 FCC Part 15 Subpart C, general requirements test results

| Part       | Test description          | Verdict                     |
|------------|---------------------------|-----------------------------|
| §15.207(a) | Conducted limits          | Not applicable <sup>1</sup> |
| §15.31(e)  | Variation of power source | Pass                        |
| §15.203    | Antenna requirement       | Not applicable <sup>2</sup> |
| §15.215(c) | 20 dB bandwidth           | Pass                        |

Notes: <sup>1</sup> EUT is battery power only.

<sup>2</sup> The Antennas are located within the enclosure of EUT and not user accessible.

### 2.2 FCC Part 15 Subpart C, intentional radiators test results

| Part       | Test description                                          | Verdict        |
|------------|-----------------------------------------------------------|----------------|
| §15.249(a) | Radiated emissions not in restricted bands                | Pass           |
| §15.249(b) | Fixed Point-to-Point operation in the 24.0–24.25 GHz band | Not applicable |
| §15.249(d) | Spurious emissions (except harmonics)                     | Pass           |

Notes: None

### 2.3 IC RSS-GEN, Issue 5, test results

| Part | Test description                                                         | Verdict        |
|------|--------------------------------------------------------------------------|----------------|
| 6.7  | Occupied bandwidth                                                       | Pass           |
| 7.3  | Receiver radiated emission limits                                        | Pass           |
| 7.4  | Receiver conducted emission limits                                       | Pass           |
| 8.8  | Power Line Conducted Emissions Limits for Licence-Exempt Radio Apparatus | Not applicable |

Notes: None

### 2.4 IC RSS-210, Issue 10, test results

| Part     | Test description                             | Verdict |
|----------|----------------------------------------------|---------|
| §B.10(a) | Field strength: Fundamental and Harmonics    | Pass    |
| §B.10(b) | Radiated emissions except Harmonic emissions | Pass    |

Notes: None

## Section 3. Equipment under test (EUT) details

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### 3.1 Sample information

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|                        |                  |
|------------------------|------------------|
| Receipt date           | October 29, 2019 |
| Nemko sample ID number | 386816           |

### 3.2 EUT information

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|               |                        |
|---------------|------------------------|
| Product name  | Pressure Node 3 Sensor |
| Model         | 1523                   |
| Model Variant | N/A                    |
| Serial number | N/A                    |

### 3.3 Technical information

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|                           |                                                                                                                                              |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Operating band            | 2400-2480MHz (IEEE 802-15.4 Radio)                                                                                                           |
| Operating frequencies     | 2405MHz – 2480MHz.                                                                                                                           |
| Occupied bandwidth (99 %) | 2405MHz: 2.72MHz (20dB)   2.88MHz (99%)                                                                                                      |
|                           | 2445MHz: 2.94MHz (20dB)   2.86MHz (99%)                                                                                                      |
|                           | 2480MHz: 2.74MHz (20dB)   2.83MHz (99%)                                                                                                      |
| Power requirements        | 5V dc, 1.5A (Battery powered)                                                                                                                |
| Antenna information       | PCB Antenna that can be used with all 2.4GHz transceivers and transmitters from Texas Instruments.<br>Maximum gain is measured to be +3.3db. |

### 3.4 Product description and theory of operation

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The PressureNode 3 is a battery powered, wireless differential pressure sensor operating on the SynpaSense 2.4 GHz WSN. Its main purpose is to measure and report the pressure drop across a raised floor within a data center on a periodic basis. This data will be sent via the WSN to the SynapSense software which resides on a server, where it will be processed and stored. Multiple Pressure Node 3 devices can be utilized to provide data that can be visualized in color maps to show high- and low-pressure differentials across the floor to aid the data center operator in floor balancing.

### 3.5 EUT exercise details

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PressureNode3 was set at 100% duty cycle while transmitting in one of the three pre-defined frequencies (2405MHz, 2445MHz or 2480MHz). Customer provided a document with instructions on test procedure.

Software/Firmware version used for testing was 99-1532-001 Radio Test Procedure for Radio CW-MOD

3.6 EUT setup picture

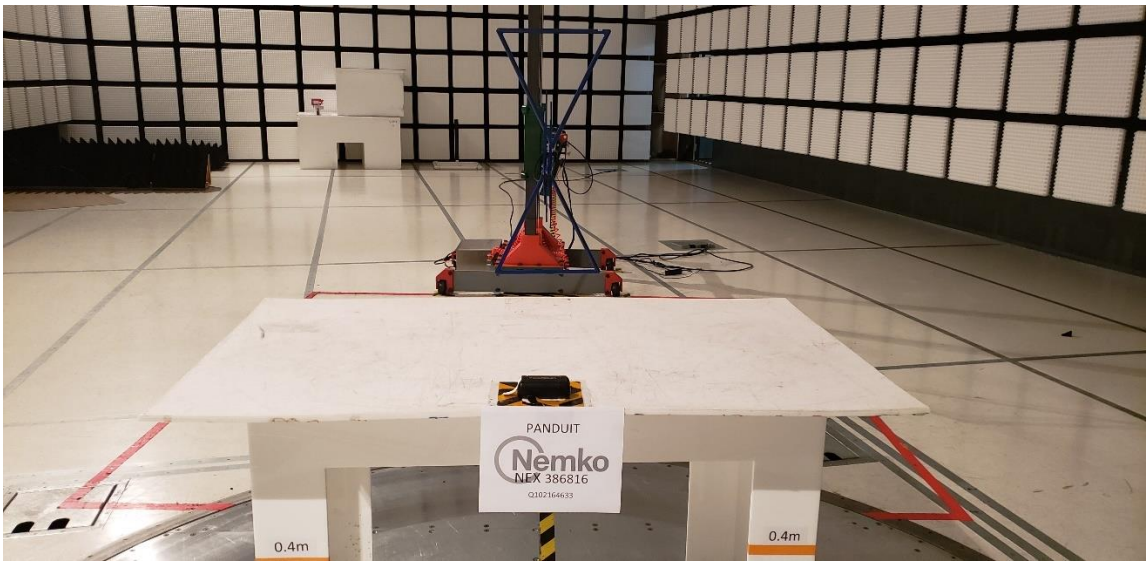


Figure 3.6-1: Setup picture

3.7 EUT Support Equipment

Table 3.7-1: EUT Support Equipment

| Description | Brand name | Model/Part number | Serial number |
|-------------|------------|-------------------|---------------|
| N/A         | N/A        | N/A               | N/A           |

## Section 4. Engineering considerations

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### 4.1 Modifications incorporated in the EUT

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There were no modifications performed to the EUT during this assessment.

### 4.2 Technical judgment

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None

### 4.3 Deviations from laboratory tests procedures

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No deviations were made from laboratory procedures.

## Section 5. Test conditions

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### 5.1 Atmospheric conditions

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|                   |               |
|-------------------|---------------|
| Temperature       | 15–30 °C      |
| Relative humidity | 20–75 %       |
| Air pressure      | 860–1060 mbar |

When it is impracticable to carry out tests under these conditions, a note to this effect stating the ambient temperature and relative humidity during the tests shall be recorded and stated.

### 5.2 Power supply range

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The normal test voltage for equipment to be connected to the mains shall be the nominal mains voltage. For the present document, the nominal voltage shall be the declared voltage, or any of the declared voltages  $\pm 5\%$ , for which the equipment was designed.

## Section 6. Measurement uncertainty

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### 6.1 Uncertainty of measurement

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Measurement uncertainty budgets for the tests are detailed below. Measurement uncertainty calculations assume a coverage factor of  $K = 2$  with 95% certainty.

| Test name                         | Measurement uncertainty, dB |
|-----------------------------------|-----------------------------|
| All antenna port measurements     | 0.55                        |
| Conducted spurious emissions      | 1.13                        |
| Radiated spurious emissions       | 3.78                        |
| AC power line conducted emissions | 1.38                        |

## Section 7. Test equipment

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### 7.1 Test equipment list

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*Table 7.1-1: Equipment list*

| Equipment         | Manufacturer    | Model no. | Asset no. | Cal cycle | Next cal.  |
|-------------------|-----------------|-----------|-----------|-----------|------------|
| EMC Test Receiver | Rohde & Schwarz | ESU 40    | E1121     | 1 yr.     | 5/25/2020  |
| Antenna, Bilog    | Schaffner-Chase | CBL6111C  | 1480      | 1 yr.     | 4/18/2020  |
| Antenna, Horn     | EMCO            | 3115      | 1033      | 1 yr.     | 9/5/2020   |
| Spectrum Analyzer | Rohde & Schwarz | FSV40     | E1120     | 1 yr.     | 8/24/2020  |
| Signal Generator  | Rohde & Schwarz | SMB 100A  | E1128     | 1 yr.     | 12/20/2019 |
| RF Power Sensor   | ETS Lindgren    | 7002-006  | E1061     | 1 yr.     | 05/31/2020 |

Note: None.

## Section 8. Testing data

### 8.1 FCC 15.207(a) and RSS-Gen 8.8 AC power line conducted emissions limits

#### 8.1.1 Definitions and limits

**FCC:**

Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50  $\mu$ H/50  $\Omega$  line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

**ISED:**

A radio apparatus that is designed to be connected to the public utility (AC) power line shall ensure that the radio frequency voltage, which is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz, shall not exceed the limits in table below.

Unless the requirements applicable to a given device state otherwise, for any radio apparatus equipped to operate from the public utility AC power supply either directly or indirectly (such as with a battery charger), the radio frequency voltage of emissions conducted back onto the AC power lines in the frequency range of 0.15 MHz to 30 MHz shall not exceed the limits shown in table below. The more stringent limit applies at the frequency range boundaries.

**Table 8.1-1: Conducted emissions limit**

| Frequency of emission,<br>MHz | Conducted limit, dB $\mu$ V |           |
|-------------------------------|-----------------------------|-----------|
|                               | Quasi-peak                  | Average** |
| 0.15–0.5                      | 66 to 56*                   | 56 to 46* |
| 0.5–5                         | 56                          | 46        |
| 5–30                          | 60                          | 50        |

Note: \* - The level decreases linearly with the logarithm of the frequency.

\*\* - A linear average detector is required.

#### 8.1.2 Test summary

|               |                 |                   |                 |
|---------------|-----------------|-------------------|-----------------|
| Test date     | Not applicable  | Temperature       | Not applicable. |
| Test engineer | Not applicable. | Air pressure      | Not applicable. |
| Verdict       | Not applicable  | Relative humidity | Not applicable. |

#### 8.1.3 Observations, settings and special notes

Not applicable, EUT is battery power only.

Test receiver settings:

|                      |                                                                              |
|----------------------|------------------------------------------------------------------------------|
| Frequency span       | 150 kHz to 30 MHz                                                            |
| Detector mode        | Peak and Average (preview mode); Quasi-Peak and Average (final measurements) |
| Resolution bandwidth | 9 kHz                                                                        |
| Video bandwidth      | 30 kHz                                                                       |
| Trace mode           | Max Hold                                                                     |
| Measurement time     | 1000 ms                                                                      |

## 8.2 FCC 15.215(c) and RSS-Gen 6.7 Occupied (Emission) bandwidth

### 8.2.1 Definitions and limits

#### FCC

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated. The requirement to contain the designated bandwidth of the emission within the specified frequency band includes the effects from frequency sweeping, frequency hopping and other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage. If a frequency stability is not specified in the regulations, it is recommended that the fundamental emission be kept within at least the central 80 % of the permitted band in order to minimize the possibility of out-of-band operation.

#### ISED

The occupied bandwidth or the “99% emission bandwidth” is defined as the frequency range between two points, one above and the other below the carrier frequency, within which 99% of the total transmitted power of the fundamental transmitted emission is contained. The occupied bandwidth shall be reported for all equipment in addition to the specified bandwidth required in the applicable RSSs.

### 8.2.2 Test summary

|               |                                         |                   |           |
|---------------|-----------------------------------------|-------------------|-----------|
| Test date     | November 20, 2019                       | Temperature       | 28 °C     |
| Test engineer | Andres Martinez, Wireless Test Engineer | Air pressure      | 1003 mbar |
| Verdict       | Pass                                    | Relative humidity | 45 %      |

### 8.2.3 Observations, settings and special notes

None.

|                      |                               |
|----------------------|-------------------------------|
| Detector mode        | Peak                          |
| Resolution bandwidth | 1 to 5% of Occupied Bandwidth |
| Video bandwidth      | RBW × 3                       |
| Trace mode           | Max Hold                      |

### 8.2.4 Test data

**Table 8.2-1: 99% dB and 20 dB bandwidth results.**

| Fundamental frequency, MHz | 99% bandwidth | 20 dB bandwidth |
|----------------------------|---------------|-----------------|
| 2405                       | 2.88 MHz      | 2.72 MHz        |
| 2445                       | 2.86 MHz      | 2.94 MHz        |
| 2480                       | 2.83 MHz      | 2.74 MHz        |

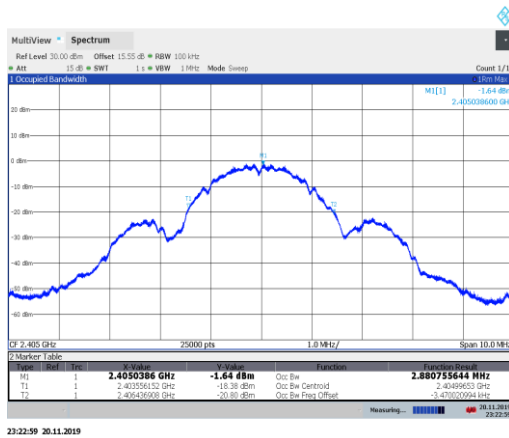


Figure 8.2-1: 99% bandwidth - Low Channel

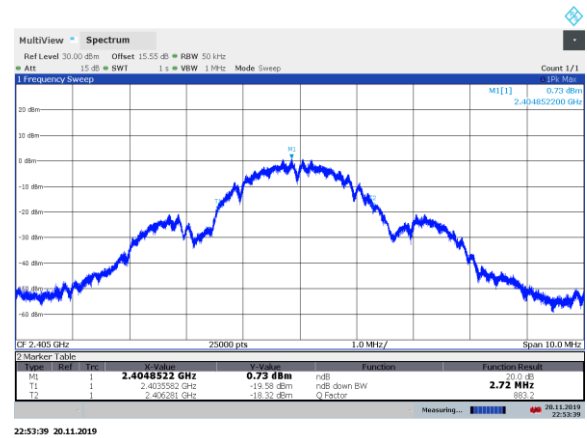


Figure 8.2-2: 20 dB bandwidth - Low Channel

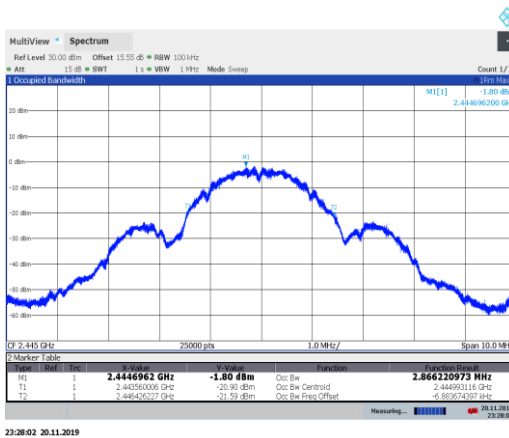


Figure 8.2-3: 99% bandwidth - Mid Channel

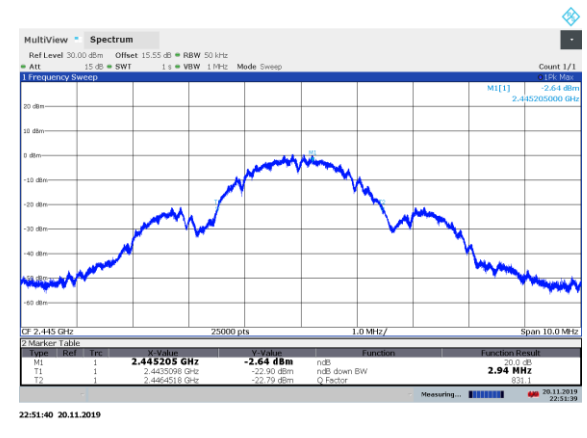


Figure 8.2-4: 20 dB bandwidth - Mid Channel

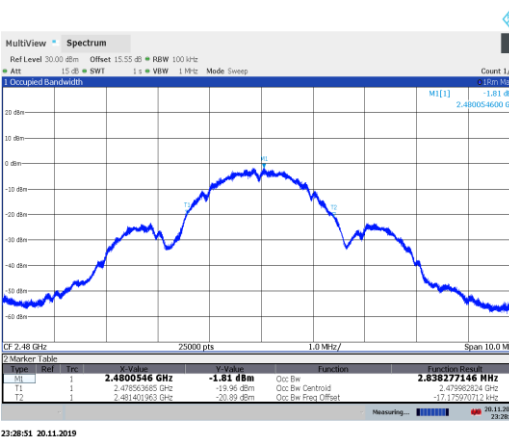


Figure 8.2-5: 99% bandwidth - High Channel

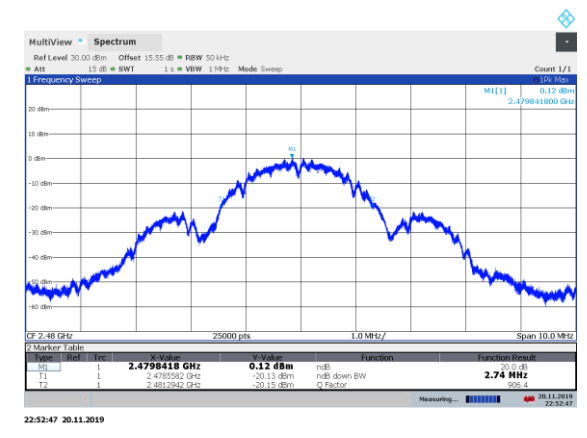


Figure 8.2-6: 20 dB bandwidth - High Channel

## 8.3 FCC 15.249(a) RSS 210 B.10(a) and (b) Field strength of Fundamental, harmonics and spurious emissions

### 8.3.1 Definitions and limits

**FCC:**

The field strength of emissions from intentional radiators shall comply with the following table. Field strength limits are specified at 3 meters.

**ISED:**

The field strength measured at 3 meters shall not exceed the limits in the following table.

**Table 8.3-1: Field strength limits**

| Fundamental frequencies, MHz | Field strength of fundamental |        | Field strength of harmonics |        |
|------------------------------|-------------------------------|--------|-----------------------------|--------|
|                              | mV/m                          | dBμV/m | μV/m                        | dBμV/m |
| 902–928                      | 50                            | 94     | 500                         | 54     |
| 2400–2483.5                  | 50                            | 94     | 500                         | 54     |
| 5725–5875                    | 50                            | 94     | 500                         | 54     |
| 24000–24250                  | 250                           | 108    | 2500                        | 68     |

Notes: In the emission table above, the tighter limit applies at the band edges. For frequencies above 1 GHz the limit on peak RF emissions is 20 dB above the maximum permitted average emission limit applicable to the equipment under test

### 8.3.2 Test summary

|               |                                |                   |           |
|---------------|--------------------------------|-------------------|-----------|
| Test date     | November 18, 2019              | Temperature       | 25 °C     |
| Test engineer | Andres Martinez, Test Engineer | Air pressure      | 1005 mbar |
| Verdict       | Pass                           | Relative humidity | 45 %      |

### 8.3.3 Observations, settings and special notes

The spectrum was searched from 30 MHz to 26GHz. Radiated measurements were performed at 3m.

A 2.4 Notch filter was used on the Spurious emissions scans.

EUT was tested on all 3 channels:

Low Channel: 2405 MHz

Mid Channel: 2445 MHz

High Channel: 2480 MHz

Spectrum analyzer settings for frequencies below 1000 MHz:

|                      |            |
|----------------------|------------|
| Detector mode        | Quasi-Peak |
| Resolution bandwidth | 120 kHz    |
| Video bandwidth      | 300 kHz    |
| Trace mode           | Max Hold   |

Spectrum analyzer settings for peak measurements at the frequencies above 1000 MHz:

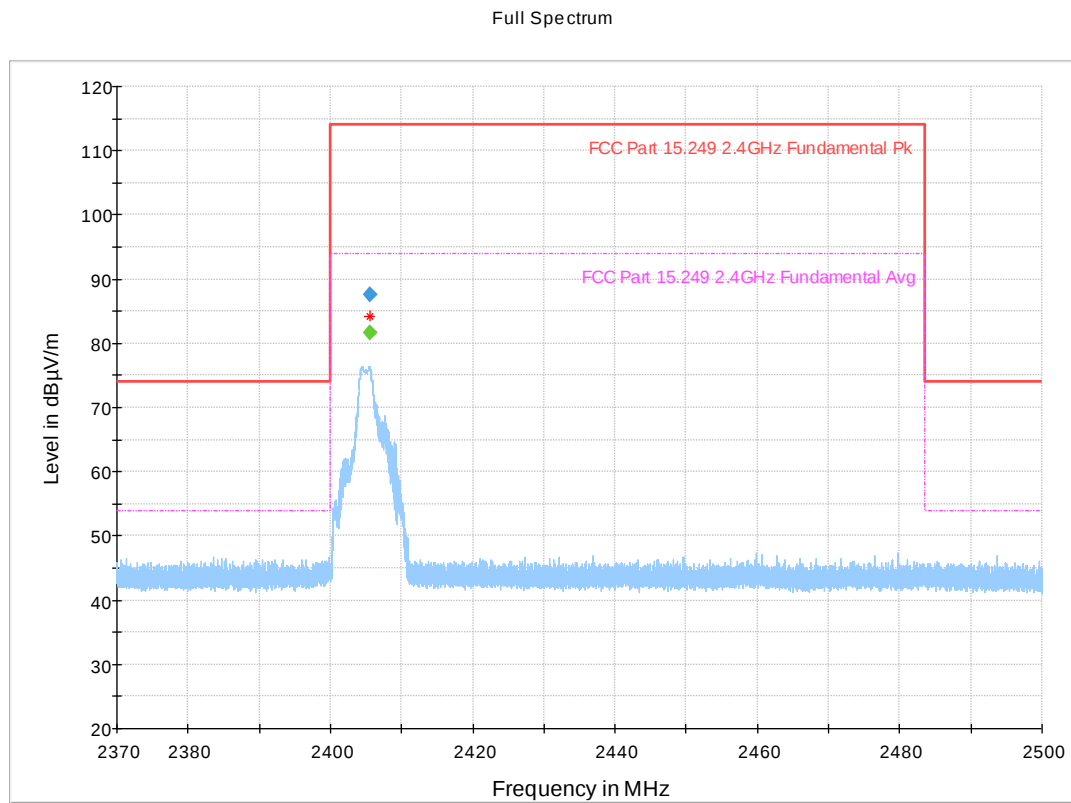
|                      |          |
|----------------------|----------|
| Detector mode        | Peak     |
| Resolution bandwidth | 1 MHz    |
| Video bandwidth      | 3 MHz    |
| Trace mode           | Max Hold |

Spectrum analyzer settings for average measurements at the frequencies above 1000 MHz:

|               |         |
|---------------|---------|
| Detector mode | Average |
|---------------|---------|

|                      |          |
|----------------------|----------|
| Resolution bandwidth | 1 MHz    |
| Video bandwidth      | 3 MHz    |
| Trace mode           | Max Hold |

#### 8.3.4 Test data



**Figure 8.3-1: Field strength of Fundamental output power – 2405MHz.**

| Frequency (MHz) | MaxPeak (dBµV/m) | CAverage (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|-------------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|--------------|
| 2405.486333     | ---              | 81.64             | 93.97          | 12.33       | 5000.0          | 1000.000        | 150.7       | V   | 158.0         | 0.3          |
| 2405.486333     | 87.49            | ---               | 114.00         | 26.51       | 5000.0          | 1000.000        | 150.7       | V   | 158.0         | 0.3          |

**Table 8.3-2: Field strength of Fundamental output power – 2405MHz**

Full Spectrum

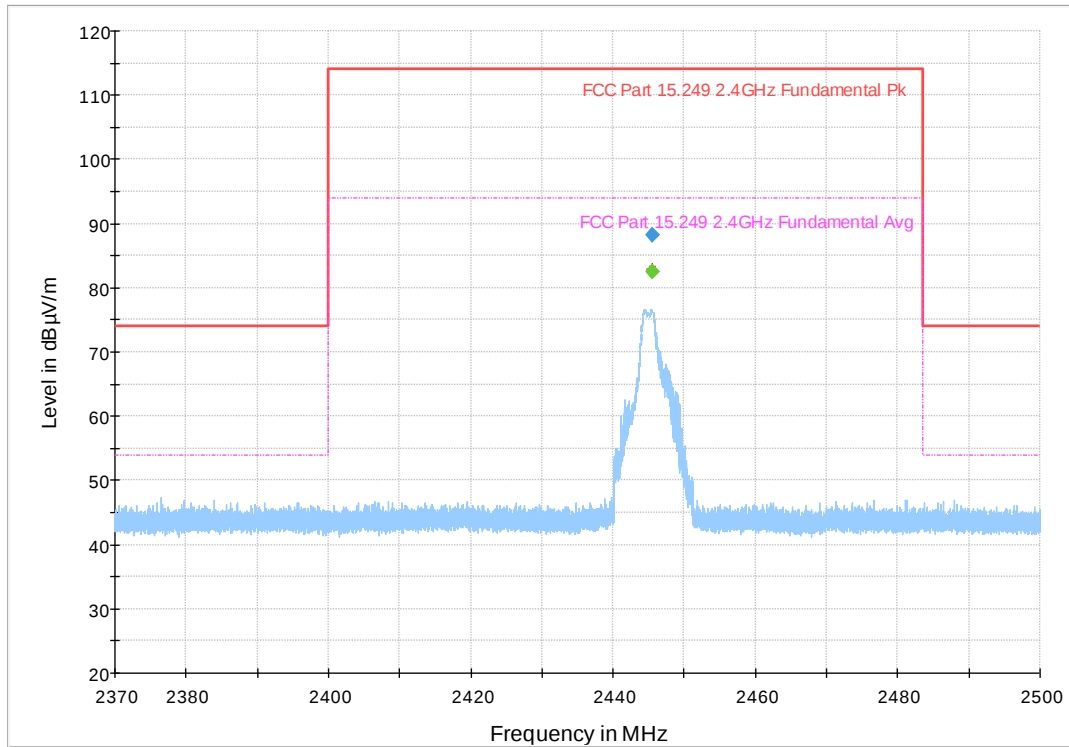


Figure 8.3-2: Field strength of Fundamental output power – 2445MHz.

| Frequency (MHz) | MaxPeak (dBµV/m) | CAverage (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|-------------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|--------------|
| 2445.455333     | ---              | 82.54             | 93.97          | 11.43       | 5000.0          | 1000.000        | 164.5       | V   | 276.0         | 0.5          |
| 2445.455333     | 88.20            | ---               | 114.00         | 25.80       | 5000.0          | 1000.000        | 164.5       | V   | 276.0         | 0.5          |

Table 8.3-3: Field strength of Fundamental output power – 2445MHz

Full Spectrum

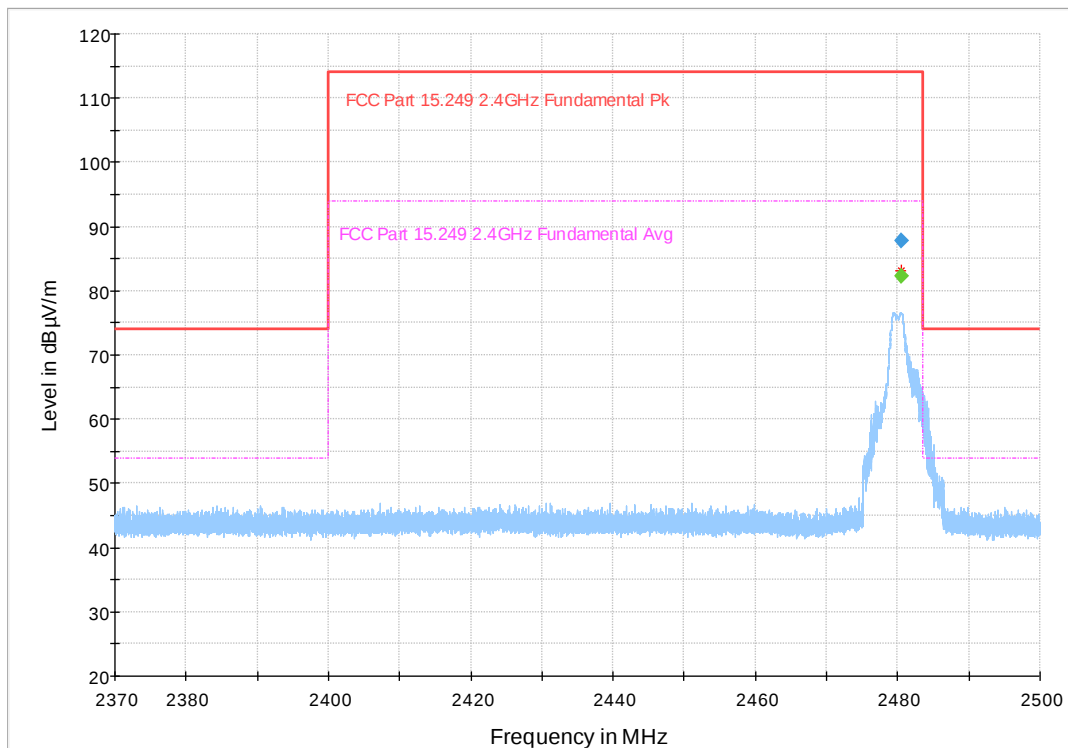


Figure 8.3-3: Field strength of Fundamental output power – 2480MHz

| Frequency (MHz) | MaxPeak (dBµV/m) | CAverage (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|-------------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|--------------|
| 2480.438333     | ---              | 82.21             | 93.97          | 11.76       | 5000.0          | 1000.000        | 157.4       | V   | 280.0         | 0.5          |
| 2480.438333     | 87.76            | ---               | 114.00         | 26.24       | 5000.0          | 1000.000        | 157.4       | V   | 280.0         | 0.5          |

Table 8.3-4: Field strength of Fundamental output power – 2480MHz

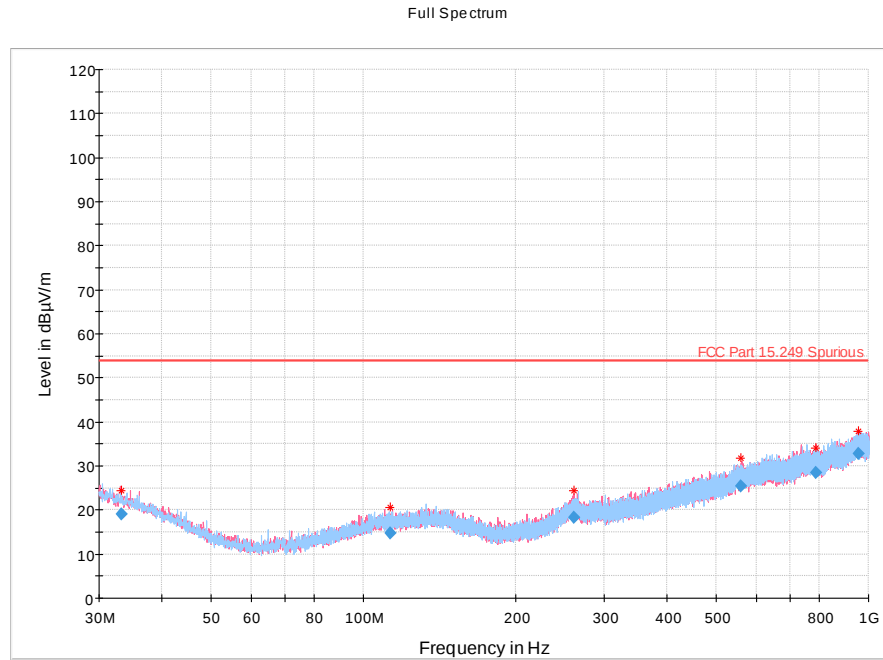


Figure 8.3-4: Field strength of spurious emissions 30MHz to 1GHz – 2405MHz

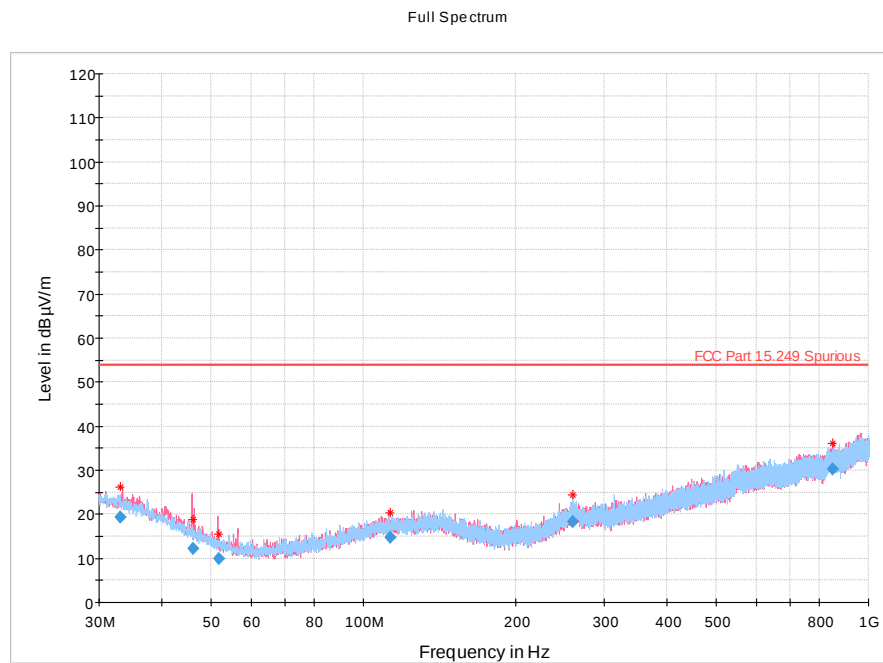
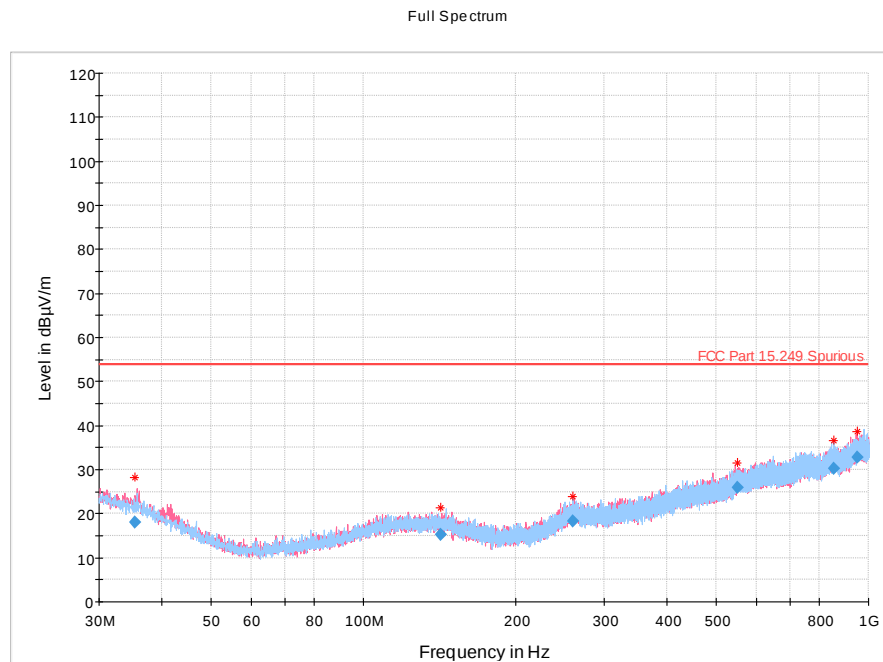
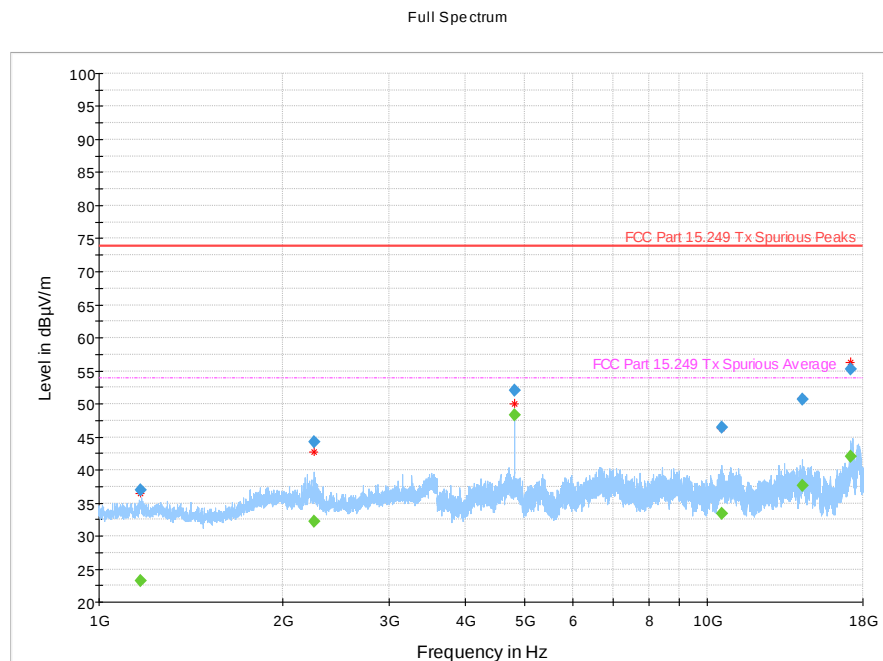


Figure 8.3-5: Field strength of spurious emissions 30MHz to 1GHz – 2445MHz



**Figure 8.3-6: Field strength of spurious emissions 30MHz to 1GHz – 2480MHz**



**Figure 8.3-7: Field strength of spurious emissions 1GHz to 18GHz – 2405MHz**

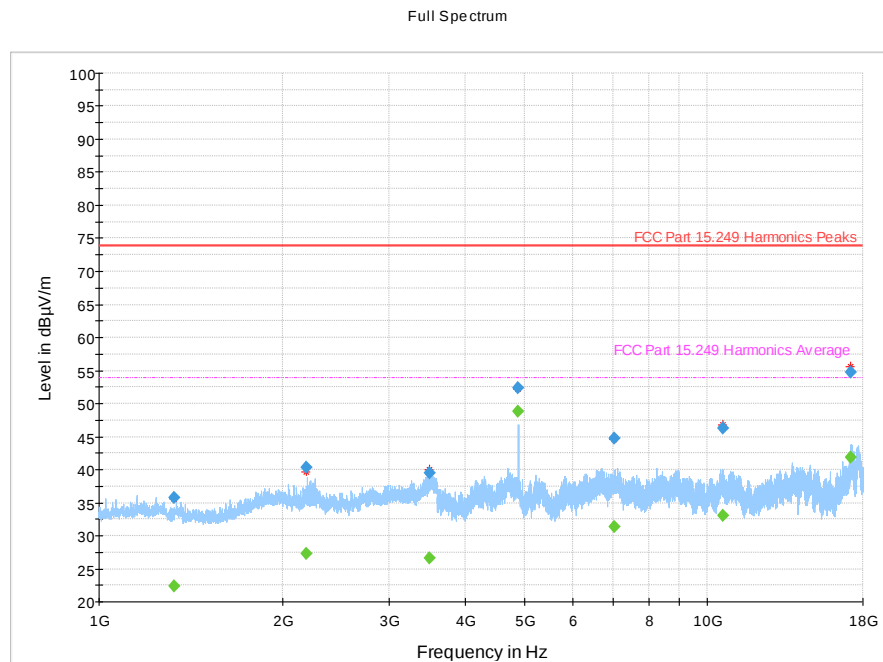


Figure 8.3-8: Field strength of spurious emissions 1GHz to 18GHz – 2445MHz

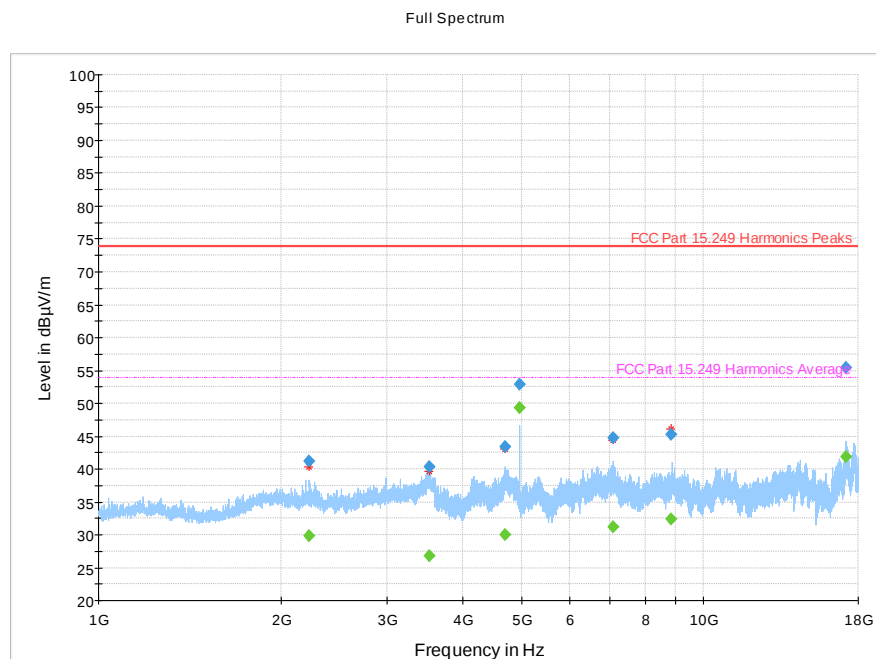
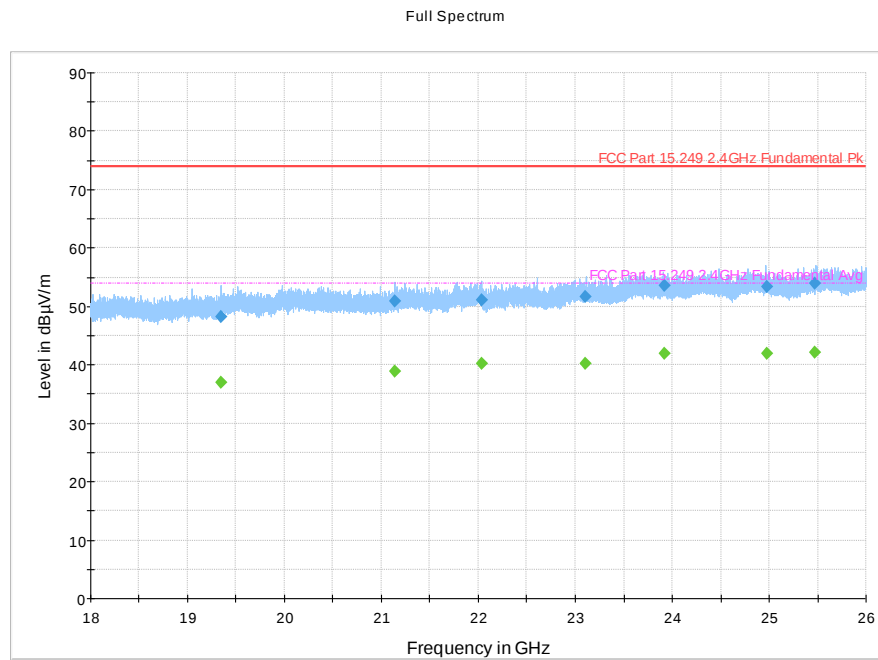
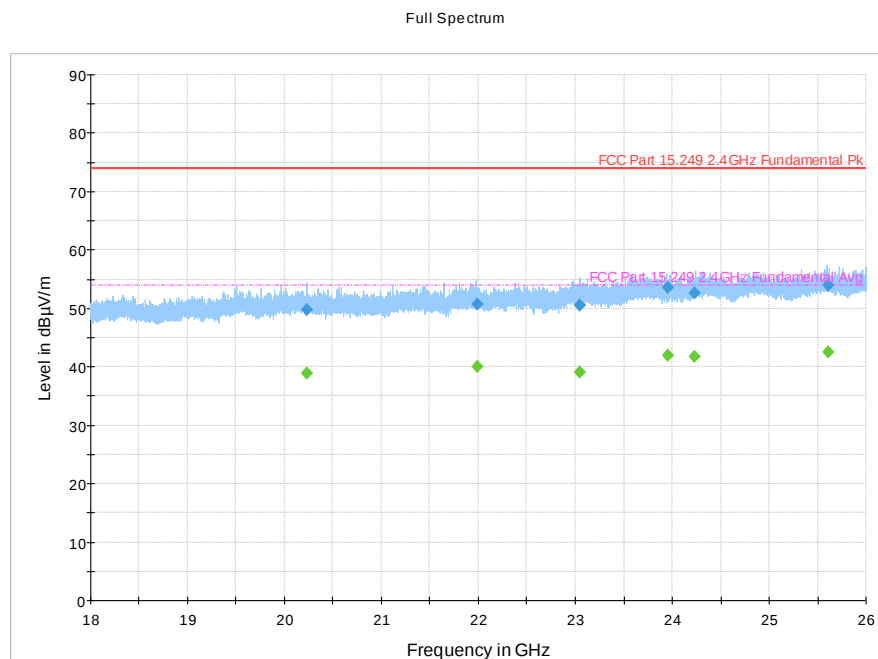


Figure 8.3-9: Field strength of spurious emissions 1GHz to 18GHz – 2480MHz



**Figure 8.3-10: Field strength of spurious emissions 18GHz to 26GHz – 2405MHz**



**Figure 8.3-11: Field strength of spurious emissions 18GHz to 26GHz – 2445MHz**

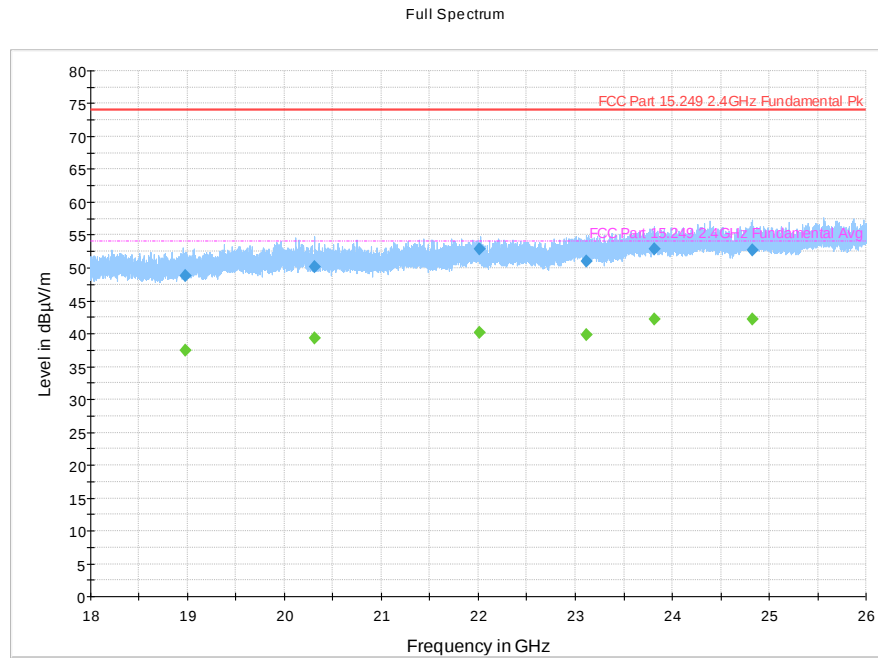


Figure 8.3-12: Field strength of spurious emissions 18GHz to 26GHz – 2480MHz

| Frequency (MHz) | QuasiPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|--------------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|------------|
| 33.224000       | 18.95              | 53.97          | 35.02       | 5000.0          | 120.000         | 349.7       | V   | 56.0          | 23.7       |
| 113.370500      | 14.73              | 53.97          | 39.24       | 5000.0          | 120.000         | 262.7       | V   | 179.0         | 18.4       |
| 260.688000      | 18.31              | 53.97          | 35.66       | 5000.0          | 120.000         | 169.9       | V   | 156.0         | 22.1       |
| 559.141000      | 25.54              | 53.97          | 28.43       | 5000.0          | 120.000         | 117.7       | V   | 132.0         | 28.9       |
| 788.424000      | 28.59              | 53.97          | 25.38       | 5000.0          | 120.000         | 305.5       | V   | 102.0         | 31.9       |
| 953.274000      | 32.79              | 53.97          | 21.18       | 5000.0          | 120.000         | 314.4       | H   | 350.0         | 35.9       |

Table 8.3-5: Field strength of spurious emissions 30MHz to 1GHz – 2405MHz

| Frequency (MHz) | QuasiPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|--------------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|------------|
| 33.135000       | 19.26              | 53.97          | 34.71       | 5000.0          | 120.000         | 147.9       | V   | 298.0         | 23.7       |
| 46.131000       | 12.31              | 53.97          | 41.66       | 5000.0          | 120.000         | 351.1       | V   | 126.0         | 16.7       |
| 51.802500       | 9.88               | 53.97          | 44.09       | 5000.0          | 120.000         | 379.4       | V   | 58.0          | 14.2       |
| 113.052500      | 14.74              | 53.97          | 39.23       | 5000.0          | 120.000         | 156.7       | V   | 207.0         | 18.4       |
| 260.478000      | 18.29              | 53.97          | 35.68       | 5000.0          | 120.000         | 176.7       | H   | 282.0         | 22.1       |
| 851.327000      | 30.24              | 53.97          | 23.73       | 5000.0          | 120.000         | 98.0        | V   | 70.0          | 33.5       |

Table 8.3-6: Field strength of spurious emissions 30MHz to 1GHz – 2445MHz

| Frequency (MHz) | QuasiPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|--------------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|------------|
| 35.294500       | 18.00              | 53.97          | 35.97       | 5000.0          | 120.000         | 379.4       | V   | 272.0         | 22.6       |
| 142.402000      | 15.18              | 53.97          | 38.79       | 5000.0          | 120.000         | 112.8       | V   | 26.0          | 18.8       |
| 259.793500      | 18.20              | 53.97          | 35.77       | 5000.0          | 120.000         | 214.4       | H   | 0.0           | 22.0       |
| 550.343000      | 25.93              | 53.97          | 28.04       | 5000.0          | 120.000         | 344.2       | V   | 1.0           | 29.3       |
| 852.991000      | 30.27              | 53.97          | 23.70       | 5000.0          | 120.000         | 191.3       | H   | 87.0          | 33.5       |
| 950.977000      | 32.75              | 53.97          | 21.22       | 5000.0          | 120.000         | 321.5       | V   | 104.0         | 35.8       |

Table 8.3-7: Field strength of spurious emissions 30MHz to 1GHz – 2480MHz

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|------------------|------------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|------------|
| 1169.766667     | 36.94            | ---              | 73.90          | 36.96       | 5000.0          | 1000.000        | 365.5       | H   | 357.0         | -13.8      |
| 1169.766667     | ---              | 23.22            | 53.97          | 30.75       | 5000.0          | 1000.000        | 365.5       | H   | 357.0         | -13.8      |
| 2252.933333     | 44.27            | ---              | 73.90          | 29.63       | 5000.0          | 1000.000        | 118.5       | H   | 33.0          | -10.5      |
| 2252.933333     | ---              | 32.23            | 53.97          | 21.74       | 5000.0          | 1000.000        | 118.5       | H   | 33.0          | -10.5      |
| 4809.900000     | 51.97            | ---              | 73.90          | 21.93       | 5000.0          | 1000.000        | 132.1       | V   | 337.0         | -2.1       |
| 4809.900000     | ---              | 48.38            | 53.97          | 5.59        | 5000.0          | 1000.000        | 132.1       | V   | 337.0         | -2.1       |
| 10531.933333    | 46.52            | ---              | 73.90          | 27.38       | 5000.0          | 1000.000        | 405.7       | H   | 348.0         | 3.5        |
| 10531.933333    | ---              | 33.31            | 53.97          | 20.66       | 5000.0          | 1000.000        | 405.7       | H   | 348.0         | 3.5        |
| 14299.066667    | 50.75            | ---              | 73.90          | 23.15       | 5000.0          | 1000.000        | 277.4       | H   | 279.0         | 8.4        |
| 14299.066667    | ---              | 37.69            | 53.97          | 16.28       | 5000.0          | 1000.000        | 277.4       | H   | 279.0         | 8.4        |
| 17208.100000    | 55.19            | ---              | 73.90          | 18.71       | 5000.0          | 1000.000        | 210.3       | H   | 25.0          | 12.3       |
| 17208.100000    | ---              | 42.02            | 53.97          | 11.95       | 5000.0          | 1000.000        | 210.3       | H   | 25.0          | 12.3       |

Table 8.3-8: Field strength of spurious emissions 1GHz to 18GHz – 2405MHz

| Frequency (MHz) | MaxPeak (dBµV/m) | CAverage (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|-------------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|--------------|
| 1330.033333     | ---              | 22.39             | 53.97          | 31.58       | 5000.0          | 1000.000        | 225.7       | H   | 82.0          | -14.0        |
| 1330.033333     | 35.83            | ---               | 73.90          | 38.07       | 5000.0          | 1000.000        | 225.7       | H   | 82.0          | -14.0        |
| 2194.300000     | 40.31            | ---               | 73.90          | 33.59       | 5000.0          | 1000.000        | 127.3       | H   | 32.0          | -10.7        |
| 2194.300000     | ---              | 27.30             | 53.97          | 26.67       | 5000.0          | 1000.000        | 127.3       | H   | 32.0          | -10.7        |
| 3491.566667     | ---              | 26.64             | 53.97          | 27.33       | 5000.0          | 1000.000        | 363.9       | H   | 165.0         | -6.1         |
| 3491.566667     | 39.51            | ---               | 73.90          | 34.39       | 5000.0          | 1000.000        | 363.9       | H   | 165.0         | -6.1         |
| 4889.800000     | ---              | 48.77             | 53.97          | 5.20        | 5000.0          | 1000.000        | 129.4       | V   | 337.0         | -2.3         |
| 4889.800000     | 52.45            | ---               | 73.90          | 21.45       | 5000.0          | 1000.000        | 129.4       | V   | 337.0         | -2.3         |
| 7028.866667     | ---              | 31.40             | 53.97          | 22.57       | 5000.0          | 1000.000        | 356.0       | H   | 179.0         | 0.2          |
| 7028.866667     | 44.81            | ---               | 73.90          | 29.09       | 5000.0          | 1000.000        | 356.0       | H   | 179.0         | 0.2          |
| 10601.533333    | ---              | 33.05             | 53.97          | 20.92       | 5000.0          | 1000.000        | 146.4       | V   | 65.0          | 3.4          |
| 10601.533333    | 46.31            | ---               | 73.90          | 27.59       | 5000.0          | 1000.000        | 146.4       | V   | 65.0          | 3.4          |
| 17195.333333    | 54.82            | ---               | 73.90          | 19.08       | 5000.0          | 1000.000        | 339.4       | V   | 310.0         | 12.2         |
| 17195.333333    | ---              | 41.79             | 53.97          | 12.18       | 5000.0          | 1000.000        | 339.4       | V   | 310.0         | 12.2         |

Table 8.3-9: Field strength of spurious emissions 1GHz to 18GHz – 2445MHz

| Frequency (MHz) | MaxPeak (dBμV/m) | CAverage (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|-------------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|--------------|
| 2231.966667     | ---              | 29.89             | 53.97          | 24.08       | 5000.0          | 1000.000        | 128.6       | H   | 25.0          | -10.5        |
| 2231.966667     | 41.25            | ---               | 73.90          | 32.65       | 5000.0          | 1000.000        | 128.6       | H   | 25.0          | -10.5        |
| 3513.533333     | 40.36            | ---               | 73.90          | 33.54       | 5000.0          | 1000.000        | 307.3       | V   | -1.0          | -6.0         |
| 3513.533333     | ---              | 26.73             | 53.97          | 27.24       | 5000.0          | 1000.000        | 307.3       | V   | -1.0          | -6.0         |
| 4703.433333     | ---              | 29.94             | 53.97          | 24.03       | 5000.0          | 1000.000        | 402.7       | V   | 56.0          | -2.0         |
| 4703.433333     | 43.33            | ---               | 73.90          | 30.57       | 5000.0          | 1000.000        | 402.7       | V   | 56.0          | -2.0         |
| 4960.066667     | ---              | 49.25             | 53.97          | 4.72        | 5000.0          | 1000.000        | 116.1       | V   | 341.0         | -2.4         |
| 4960.066667     | 52.92            | ---               | 73.90          | 20.98       | 5000.0          | 1000.000        | 116.1       | V   | 341.0         | -2.4         |
| 7097.700000     | ---              | 31.25             | 53.97          | 22.72       | 5000.0          | 1000.000        | 239.0       | V   | 0.0           | 0.1          |
| 7097.700000     | 44.79            | ---               | 73.90          | 29.11       | 5000.0          | 1000.000        | 239.0       | V   | 0.0           | 0.1          |
| 8846.900000     | 45.32            | ---               | 73.90          | 28.58       | 5000.0          | 1000.000        | 154.9       | H   | 331.0         | 2.1          |
| 8846.900000     | ---              | 32.33             | 53.97          | 21.64       | 5000.0          | 1000.000        | 154.9       | H   | 331.0         | 2.1          |
| 17204.833333    | ---              | 41.91             | 53.97          | 12.06       | 5000.0          | 1000.000        | 177.8       | V   | 242.0         | 12.3         |
| 17204.833333    | 55.38            | ---               | 73.90          | 18.52       | 5000.0          | 1000.000        | 177.8       | V   | 242.0         | 12.3         |

Table 8.3-10: Field strength of spurious emissions 1GHz to 18GHz – 2480MHz

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|--------------|
| 19347.283333    | 48.17            | ---              | 74.00          | 25.83       | 10.0            | 1000.000        | 160.3       | V   | 271.0         | 38.5         |
| 19347.283333    | ---              | 37.05            | 54.00          | 16.95       | 10.0            | 1000.000        | 160.3       | V   | 271.0         | 38.5         |
| 21134.550000    | 50.89            | ---              | 74.00          | 23.11       | 10.0            | 1000.000        | 113.0       | V   | 253.0         | 39.2         |
| 21134.550000    | ---              | 38.91            | 54.00          | 15.09       | 10.0            | 1000.000        | 113.0       | V   | 253.0         | 39.2         |
| 22031.216667    | ---              | 40.14            | 54.00          | 13.86       | 10.0            | 1000.000        | 172.7       | V   | 267.0         | 39.5         |
| 22031.216667    | 51.18            | ---              | 74.00          | 22.82       | 10.0            | 1000.000        | 172.7       | V   | 267.0         | 39.5         |
| 23107.466667    | 51.59            | ---              | 74.00          | 22.41       | 10.0            | 1000.000        | 150.3       | V   | 23.0          | 40.0         |
| 23107.466667    | ---              | 40.31            | 54.00          | 13.69       | 10.0            | 1000.000        | 150.3       | V   | 23.0          | 40.0         |
| 23919.550000    | 53.65            | ---              | 74.00          | 20.35       | 10.0            | 1000.000        | 115.5       | H   | 23.0          | 40.3         |
| 23919.550000    | ---              | 41.97            | 54.00          | 12.03       | 10.0            | 1000.000        | 115.5       | H   | 23.0          | 40.3         |
| 24979.416667    | 53.34            | ---              | 74.00          | 20.66       | 10.0            | 1000.000        | 133.0       | H   | 287.0         | 40.6         |
| 24979.416667    | ---              | 41.91            | 54.00          | 12.09       | 10.0            | 1000.000        | 133.0       | H   | 287.0         | 40.6         |
| 25469.833333    | 53.91            | ---              | 74.00          | 20.09       | 10.0            | 1000.000        | 172.5       | V   | 289.0         | 40.7         |
| 25469.833333    | ---              | 42.16            | 54.00          | 11.84       | 10.0            | 1000.000        | 172.5       | V   | 289.0         | 40.7         |

Table 8.3-11: Field strength of spurious emissions 18GHz to 26GHz – 2405MHz

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|--------------|
| 20233.583333    | 49.77            | ---              | 74.00          | 24.23       | 10.0            | 1000.000        | 158.2       | V   | -1.0          | 38.8         |
| 20233.583333    | ---              | 38.90            | 54.00          | 15.10       | 10.0            | 1000.000        | 158.2       | V   | -1.0          | 38.8         |
| 21990.033333    | ---              | 39.97            | 54.00          | 14.03       | 10.0            | 1000.000        | 110.1       | H   | 218.0         | 39.5         |
| 21990.033333    | 50.64            | ---              | 74.00          | 23.36       | 10.0            | 1000.000        | 110.1       | H   | 218.0         | 39.5         |
| 23048.166667    | ---              | 39.09            | 54.00          | 14.91       | 10.0            | 1000.000        | 166.5       | H   | 27.0          | 40.0         |
| 23048.166667    | 50.50            | ---              | 74.00          | 23.50       | 10.0            | 1000.000        | 166.5       | H   | 27.0          | 40.0         |
| 23949.983333    | ---              | 41.91            | 54.00          | 12.09       | 10.0            | 1000.000        | 156.6       | V   | 313.0         | 40.4         |
| 23949.983333    | 53.50            | ---              | 74.00          | 20.50       | 10.0            | 1000.000        | 156.6       | V   | 313.0         | 40.4         |
| 24228.300000    | ---              | 41.68            | 54.00          | 12.32       | 10.0            | 1000.000        | 134.7       | H   | 4.0           | 40.3         |
| 24228.300000    | 52.57            | ---              | 74.00          | 21.43       | 10.0            | 1000.000        | 134.7       | H   | 4.0           | 40.3         |
| 25610.283333    | 53.98            | ---              | 74.00          | 20.02       | 10.0            | 1000.000        | 103.7       | V   | 243.0         | 40.8         |
| 25610.283333    | ---              | 42.61            | 54.00          | 11.39       | 10.0            | 1000.000        | 103.7       | V   | 243.0         | 40.8         |

Table 8.3-12: Field strength of spurious emissions 18GHz to 26GHz – 2445MHz

| Frequency (MHz) | MaxPeak (dBµV/m) | Average (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|--------------|
| 18971.750000    | ---              | 37.52            | 54.00          | 16.48       | 10.0            | 1000.000        | 154.1       | V   | 329.0         | 38.3         |
| 18971.750000    | 48.84            | ---              | 74.00          | 25.16       | 10.0            | 1000.000        | 154.1       | V   | 329.0         | 38.3         |
| 20315.616667    | ---              | 39.35            | 54.00          | 14.65       | 10.0            | 1000.000        | 103.9       | H   | 272.0         | 38.8         |
| 20315.616667    | 50.20            | ---              | 74.00          | 23.80       | 10.0            | 1000.000        | 103.9       | H   | 272.0         | 38.8         |
| 22012.650000    | 52.82            | ---              | 74.00          | 21.18       | 10.0            | 1000.000        | 125.0       | V   | 303.0         | 39.5         |
| 22012.650000    | ---              | 40.24            | 54.00          | 13.76       | 10.0            | 1000.000        | 125.0       | V   | 303.0         | 39.5         |
| 23113.900000    | 50.97            | ---              | 74.00          | 23.03       | 10.0            | 1000.000        | 125.4       | H   | 229.0         | 40.0         |
| 23113.900000    | ---              | 39.87            | 54.00          | 14.13       | 10.0            | 1000.000        | 125.4       | H   | 229.0         | 40.0         |
| 23820.750000    | 52.93            | ---              | 74.00          | 21.07       | 10.0            | 1000.000        | 139.3       | V   | 183.0         | 40.2         |
| 23820.750000    | ---              | 42.21            | 54.00          | 11.79       | 10.0            | 1000.000        | 139.3       | V   | 183.0         | 40.2         |
| 24832.316667    | 52.70            | ---              | 74.00          | 21.30       | 10.0            | 1000.000        | 117.2       | H   | 335.0         | 40.7         |
| 24832.316667    | ---              | 42.24            | 54.00          | 11.76       | 10.0            | 1000.000        | 117.2       | H   | 335.0         | 40.7         |

Table 8.3-13: Field strength of spurious emissions 18GHz to 26GHz – 2480MHz

## 8.4 FCC 15.249(d) and RSS-210 B10 (b) Emissions at the Band Edges

### 8.4.1 Definitions and limits

#### FCC

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

#### ISED

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general field strength limits listed in RSS-Gen, whichever is less stringent.

**Table 8.4-1: 15.209 and RSS-Gen emissions field strength limits**

| Frequency,<br>MHz | Field strength of emissions |                                 | Measurement distance, m |
|-------------------|-----------------------------|---------------------------------|-------------------------|
|                   | $\mu\text{V/m}$             | $\text{dB}\mu\text{V/m}$        |                         |
| 0.009–0.490       | 2400/F                      | $67.6 - 20 \times \log_{10}(F)$ | 300                     |
| 0.490–1.705       | 24000/F                     | $87.6 - 20 \times \log_{10}(F)$ | 30                      |
| 1.705–30.0        | 30                          | 29.5                            | 30                      |
| 30–88             | 100                         | 40.0                            | 3                       |
| 88–216            | 150                         | 43.5                            | 3                       |
| 216–960           | 200                         | 46.0                            | 3                       |
| above 960         | 500                         | 54.0                            | 3                       |

Notes: In the emission table above, the tighter limit applies at the band edges. For frequencies above 1 GHz the limit on peak RF emissions is 20 dB above the maximum permitted average emission limit applicable to the equipment under test

**Table 8.4-2: ISED restricted frequency bands**

| MHz             | MHz                 | MHz           | GHz         |
|-----------------|---------------------|---------------|-------------|
| 0.090–0.110     | 12.51975–12.52025   | 399.9–410     | 5.35–5.46   |
| 2.1735–2.1905   | 12.57675–12.57725   | 608–614       | 7.25–7.75   |
| 3.020–3.026     | 13.36–13.41         | 960–1427      | 8.025–8.5   |
| 4.125–4.128     | 16.42–16.423        | 1435–1626.5   | 9.0–9.2     |
| 4.17725–4.17775 | 16.69475–16.69525   | 1645.5–1646.5 | 9.3–9.5     |
| 4.20725–4.20775 | 16.80425–16.80475   | 1660–1710     | 10.6–12.7   |
| 5.677–5.683     | 25.5–25.67          | 1718.8–1722.2 | 13.25–13.4  |
| 6.215–6.218     | 37.5–38.25          | 2200–2300     | 14.47–14.5  |
| 6.26775–6.26825 | 73–74.6             | 2310–2390     | 15.35–16.2  |
| 6.31175–6.31225 | 74.8–75.2           | 2655–2900     | 17.7–21.4   |
| 8.291–8.294     | 108–138             | 3260–3267     | 22.01–23.12 |
| 8.362–8.366     | 156.52475–156.52525 | 3332–3339     | 23.6–24.0   |
| 8.37625–8.38675 | 156.7–156.9         | 3345.8–3358   | 31.2–31.8   |
| 8.41425–8.41475 | 240–285             | 3500–4400     | 36.43–36.5  |
| 12.29–12.293    | 322–335.4           | 4500–5150     | Above 38.6  |

Note: Certain frequency bands listed in table above and above 38.6 GHz are designated for low-power license-exempt applications. These frequency bands and the requirements that apply to the devices are set out in this Standard

Table 8.4-3: FCC restricted frequency bands

| MHz               | MHz                 | MHz           | GHz         |
|-------------------|---------------------|---------------|-------------|
| 0.090–0.110       | 16.42–16.423        | 399.9–410     | 4.5–5.15    |
| 0.495–0.505       | 16.69475–16.69525   | 608–614       | 5.35–5.46   |
| 2.1735–2.1905     | 16.80425–16.80475   | 960–1240      | 7.25–7.75   |
| 4.125–4.128       | 25.5–25.67          | 1300–1427     | 8.025–8.5   |
| 4.17725–4.17775   | 37.5–38.25          | 1435–1626.5   | 9.0–9.2     |
| 4.20725–4.20775   | 73–74.6             | 1645.5–1646.5 | 9.3–9.5     |
| 6.215–6.218       | 74.8–75.2           | 1660–1710     | 10.6–12.7   |
| 6.26775–6.26825   | 108–121.94          | 1718.8–1722.2 | 13.25–13.4  |
| 6.31175–6.31225   | 123–138             | 2200–2300     | 14.47–14.5  |
| 8.291–8.294       | 149.9–150.05        | 2310–2390     | 15.35–16.2  |
| 8.362–8.366       | 156.52475–156.52525 | 2483.5–2500   | 17.7–21.4   |
| 8.37625–8.38675   | 156.7–156.9         | 2690–2900     | 22.01–23.12 |
| 8.41425–8.41475   | 162.0125–167.17     | 3260–3267     | 23.6–24.0   |
| 12.29–12.293      | 167.72–173.2        | 3332–3339     | 31.2–31.8   |
| 12.51975–12.52025 | 240–285             | 3345.8–3358   | 36.43–36.5  |
| 12.57675–12.57725 | 322–335.4           | 3600–4400     | Above 38.6  |
| 13.36–13.41       |                     |               |             |

#### 8.4.2 Test summary

|               |                                |                   |           |
|---------------|--------------------------------|-------------------|-----------|
| Test date     | November 19, 2019              | Temperature       | 25 °C     |
| Test engineer | Andres Martinez, Test Engineer | Air pressure      | 1005 mbar |
| Verdict       | Pass                           | Relative humidity | 45 %      |

#### 8.4.3 Observations, settings and special notes

None.

Spectrum analyzer settings for frequencies below 1000 MHz:

|                      |                    |
|----------------------|--------------------|
| Detector mode        | Peak or Quasi-Peak |
| Resolution bandwidth | 100 kHz            |
| Video bandwidth      | 300 kHz            |
| Trace mode           | Max Hold           |

Spectrum analyzer settings for peak measurements at the frequencies above 1000 MHz:

|                      |          |
|----------------------|----------|
| Detector mode        | Peak     |
| Resolution bandwidth | 1 MHz    |
| Video bandwidth      | 3 MHz    |
| Trace mode           | Max Hold |

Spectrum analyzer settings for average measurements at the frequencies above 1000 MHz:

|                      |          |
|----------------------|----------|
| Detector mode        | Average  |
| Resolution bandwidth | 1 MHz    |
| Video bandwidth      | 3 MHz    |
| Trace mode           | Max Hold |

8.4.4 Test data

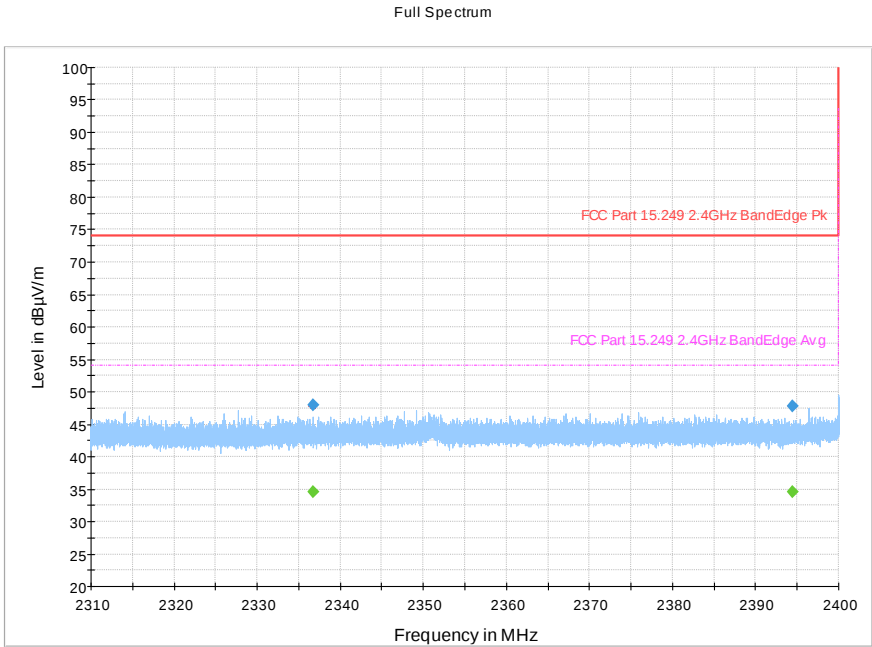


Figure 8.4-1: Field strength of emissions near band edges – Low Channel.

| Frequency (MHz) | MaxPeak (dBµV/m) | CAverage (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|-------------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|--------------|
| 2394.496000     | 47.75            | ---               | 74.00          | 26.25       | 5000.0          | 1000.000        | 307.7       | V   | 34.0          | 0.2          |
| 2394.496000     | ---              | 34.60             | 54.00          | 19.40       | 5000.0          | 1000.000        | 307.7       | V   | 34.0          | 0.2          |

Table 8.4-4: Field strength of emissions near band edges – Low Channel

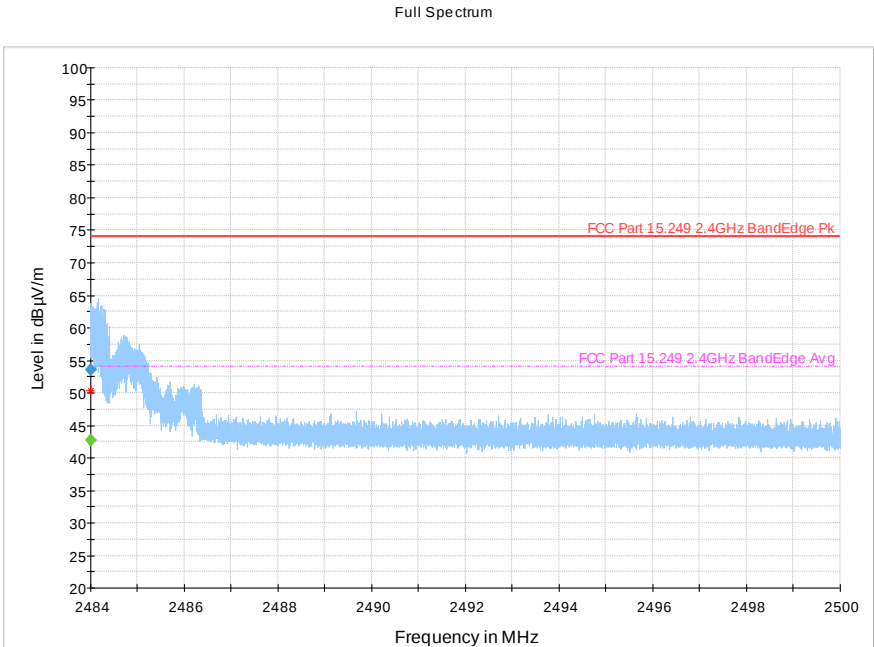


Figure 8.4-2: Field strength of emissions near band edges – High Channel.

| Frequency (MHz) | MaxPeak (dBµV/m) | CAverage (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|-------------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|--------------|
| 2484.000000     | ---              | 42.66             | 54.00          | 11.34       | 5000.0          | 1000.000        | 115.5       | H   | 42.0          | 0.5          |
| 2484.000000     | 53.53            | ---               | 74.00          | 20.47       | 5000.0          | 1000.000        | 115.5       | H   | 42.0          | 0.5          |

Table 8.4-5: Field strength of emissions near band edges and restricted bands – Low Channel

Full Spectrum

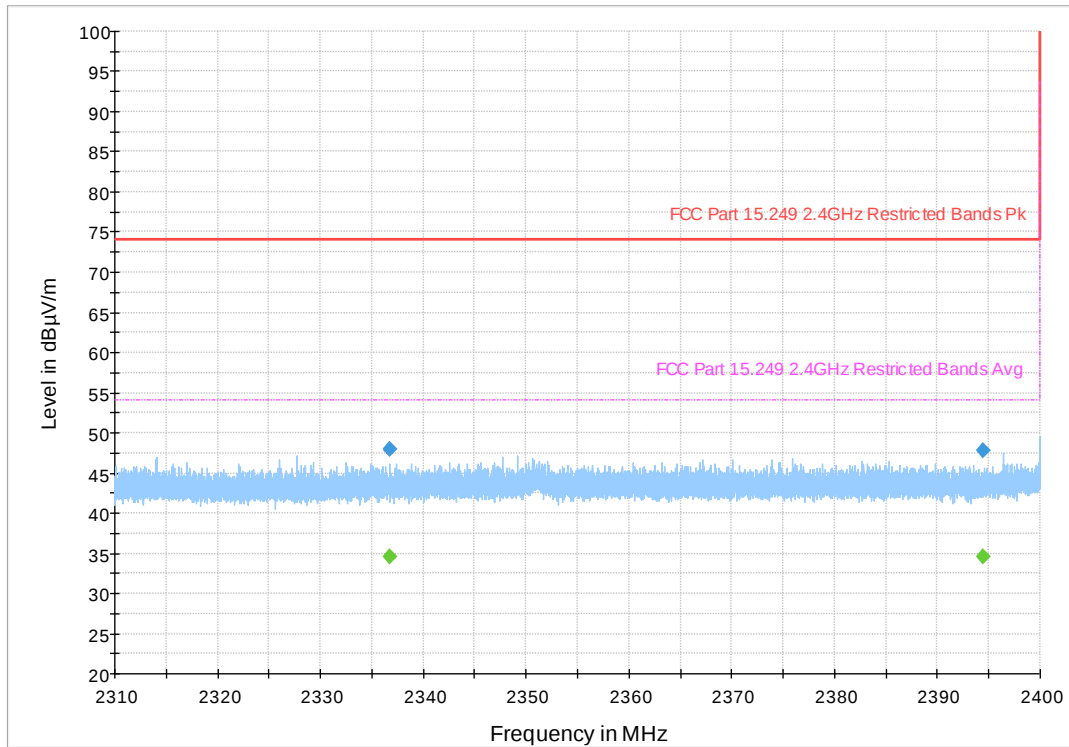


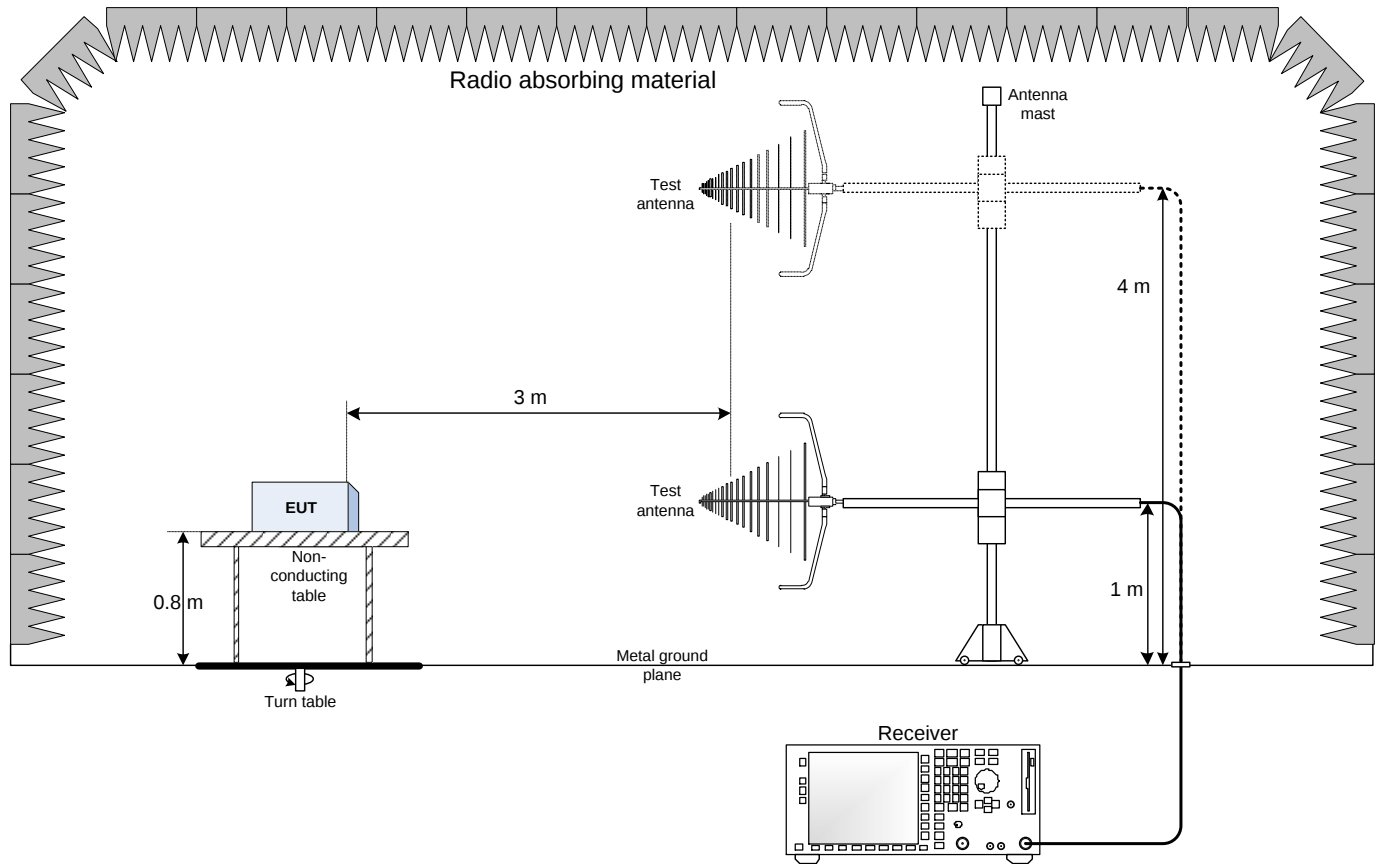
Figure 8.4-3: Field strength of emissions restricted bands – Low Channel

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|--------------|
| 2336.787000     | 47.89            | ---              | 74.00          | 26.11       | 5000.0          | 1000.000        | 278.1       | V   | 165.0         | 0.0          |
| 2336.787000     | ---              | 34.60            | 54.00          | 19.40       | 5000.0          | 1000.000        | 278.1       | V   | 165.0         | 0.0          |

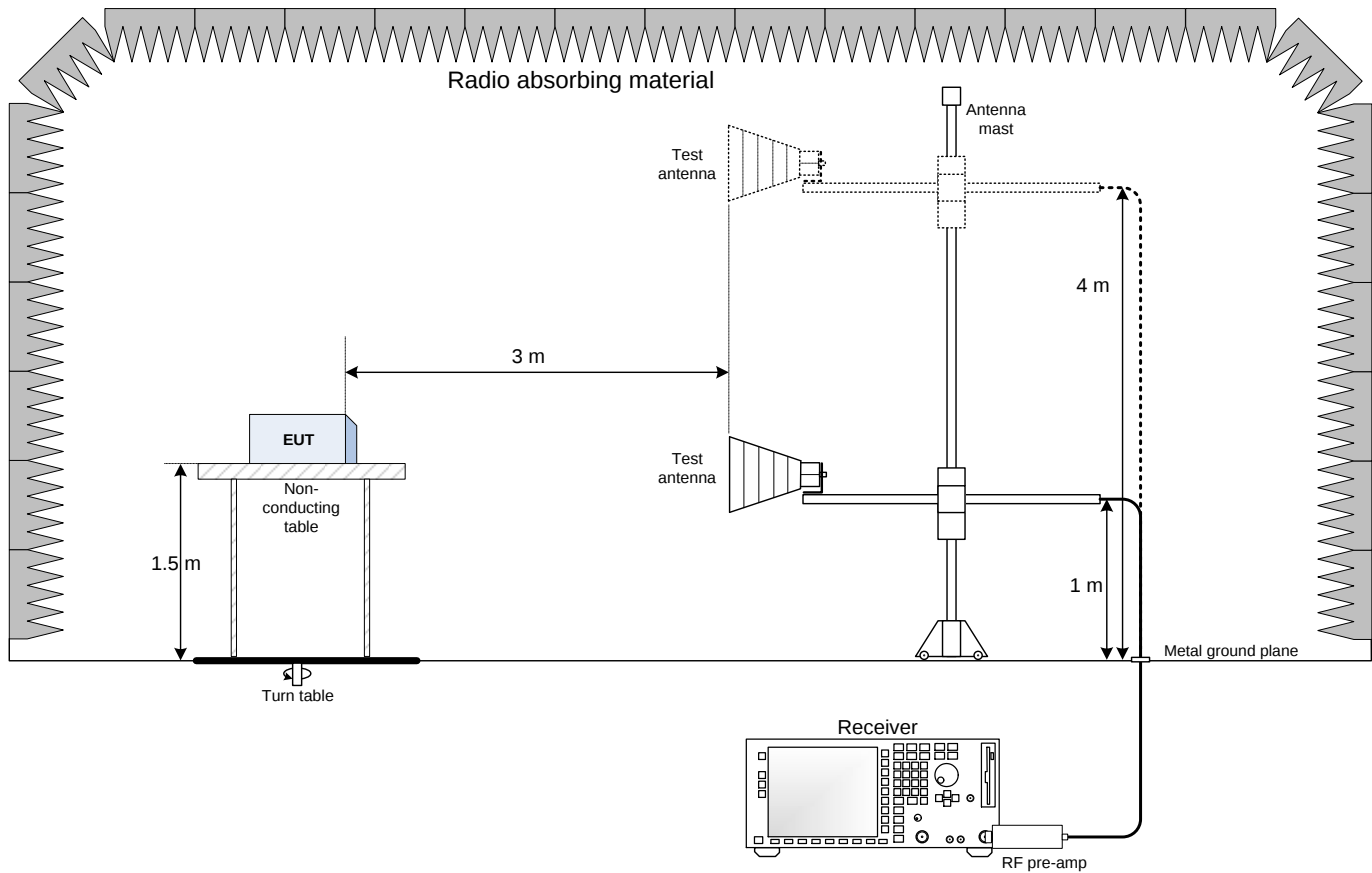
Table 8.4-6: Field strength of emissions near band edges and restricted bands – Low Channel

## Section 9. Block diagrams of test set-ups

### 9.1 Radiated emissions set-up for frequencies below 1 GHz



## 9.2 Radiated emissions set-up for frequencies above 1 GHz



## 9.3 Conducted emissions set-up

