

Report No.: FR362203AN

FCC Test Report

Equipment : 802.11 an PCle Module

Brand Name : FreeWave Model No. : W5800-01

FCC ID : KNYPRW1001EC

Standard : 47 CFR FCC Part 15.407

Operating Band : 5150 MHz - 5250 MHz

FCC Classification: NII

Applicant : FreeWave Technologies Inc.

5395 Pearl Parkway, Suite 100, Boulder, CO 80301,

U.S.A.

The product sample received on Jun. 22, 2013 and completely tested on Aug. 16, 2013. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2009 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Reviewed by:

Gary Chang / Manager

ilac-MRA



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Summary of Test Result

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| | | Conform | nance Test Specifications | | |
|------------------|---------------------|--|--|---|----------|
| Report Clause | Ref. Std. Clause | Description | Measured | Limit | Result |
| 1.1.2 | 15.203 | Antenna Requirement | Antenna connector mechanism complied | FCC 15.203 | Complied |
| 3.1 | 15.207 | AC Power-line Conducted Emissions | [dBuV]: 0489MHz 40.69 (Margin 5.50dB) - AV 43.32 (Margin 12.87dB) - QP | FCC 15.207 | Complied |
| 3.2 | 15.407(a) | Emission Bandwidth | Bandwidth [MHz] 20M: 24.58 / 40M: 50.44 | Information only | Complied |
| 3.3 | 15.407(a) | RF Output Power (Maximum Conducted Output Power) | Power [dBm] 5150-5250MHz: 13.85 | Power[dBm] 5150-5250MHz: 17 | Complied |
| 3.4 | 15.407(a) | Peak Power Spectral Density | PPSD [dBm/MHz] 5150-5250MHz: -1.80 | PPSD [dBm/MHz] 5150-5250MHz: 4 | Complied |
| 3.5 | 15.407(a) | Peak Excursion | 9.57 dB | 13 dB | Complied |
| 3.6 | 15.407(b) | Transmitter Unwanted Emissions and Band Edge | Restricted Bands [dBuV/m at 3m]:5150.00MHz 52.82 (Margin 1.18dB) - AV | Non-Restricted Bands: ≤ -27dBm (68.3dBuV/m@3m) Restricted Bands: FCC 15.209 | Complied |
| 3.7 | 15.407(g) | Frequency Stability | 3.6 ppm | Signal shall remain in-band | Complied |

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Revision History

Report No.: FR362203AN

| Report No. | Version | Description | Issued Date |
|------------|---------|-------------------------|---------------|
| FR362203AN | Rev. 01 | Initial issue of report | Aug. 22, 2013 |
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General Description

Information 1.1

1.1.1 RF General Information

| | RF General Information | | | | | | | | |
|--------------------------|------------------------|--------------------|-------------------|---------------------------------------|--------------------------|-------------|--|--|--|
| Frequency Range (MHz) | IEEE Std. 802.11 | Ch. Freq. (MHz) | Channel Number | Transmit Chains (N _{TX}) | RF Output Power (dBm) | Co-location | | | |
| 5150-5250 | а | 5180-5240 | 36-48 [4] | 1/3 | 10.25 | N/A | | | |
| 5150-5250 | n (HT20) | 5180-5240 | 36-48 [4] | 1/3 | 10.33 | N/A | | | |
| 5150-5250 | n (HT40) | 5190-5230 | 38-46 [2] | 1/3 | 13.85 | N/A | | | |

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Note 1: RF output power specifies that Maximum Conducted Output Power. Note 2: 802.11a/n uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.

1.1.2 Antenna Information

| | | Antenna Category |
|---|------|--|
| | Equ | ipment placed on the market without antennas |
| | Inte | gral antenna (antenna permanently attached) |
| | | Temporary RF connector provided |
| | | No temporary RF connector provided Transmit chains bypass antenna and soldered temporary RF connector provided for connected measurement. In case of conducted measurements the transmitter shall be connected to the measuring equipment via a suitable attenuator and correct for all losses in the RF path. |
| × | Exte | ernal antenna (dedicated antennas) |
| | | Single power level with corresponding antenna(s). |
| | | Multiple power level and corresponding antenna(s). |
| | X | RF connector provided |
| | | ☐ Unique antenna connector. (e.g., MMCX, U.FL, IPX, and RP-SMA, RP-N type) |
| | | Standard antenna connector. (e.g., SMA, N, BNC, and TNC type) |

| | Antenna General Information | | | | | | | | |
|---------|-----------------------------|--------------------------|-----------|-----------------------|-----------------------------------|--|-------------|--|--|
| No. | Ant. Cat. | Model | Ant. Type | Gain _(dBi) | Manufacturer | Transmit Chains (N _{TX}) | Application | | |
| 1 | External | Y5815 | Yagi | 15 | WADE Antenna Inc. | 1 | P to MP | | |
| 2 | External | ZDAQJ5800-12 | Omni | 12 | ZDA Communications US LLC. | 1 | P to MP | | |
| 3 | External | P250-5.8 | Panel | 14.4 | WADE Antenna Inc. | 1 | P to MP | | |
| 4 | External | 98618UNXX000 | Dipole | 7 | Master Wave Technology Co.,Ltd | 3 | P to MP | | |
| Note: T | he antennas | are professionally insta | alled. | | • | | • | | |

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1.1.3 Type of EUT

| | Identify EUT | | | | | |
|-----|---|---------------------------|--|--|--|--|
| EU | T Serial Number | N/A | | | | |
| Pre | sentation of Equipment | ☐ Production; ☐ Prototype | | | | |
| | | Type of EUT | | | | |
| × | ☑ Stand-alone | | | | | |
| | ☐ Combined (EUT where the radio part is fully integrated within another device) | | | | | |
| | Combined Equipment - Brand Name / Model No.: | | | | | |
| | Plug-in radio (EUT intended for a variety of host systems) | | | | | |
| | Host System - Brand Name / Model No.: | | | | | |
| | ☐ Other: | | | | | |

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1.1.4 Test Signal Duty Cycle

| | Operated Mode for Worst Duty Cycle | | | | | | | |
|---|---|--|--|--|--|--|--|--|
| | ☐ Operated normally mode for worst duty cycle | | | | | | | |
| × | ☑ Operated test mode for worst duty cycle | | | | | | | |
| | Test Signal Duty Cycle (x) | Power Duty Factor [dB] – (10 log 1/x) | | | | | | |
| × | 100% - IEEE 802.11a | 0 | | | | | | |
| × | 100% - IEEE 802.11n (HT20) | 0 | | | | | | |
| × | 100% - IEEE 802.11n (HT40) | 0 | | | | | | |

1.1.5 EUT Operational Condition

| Supply Voltage | | AC mains | Ø | DC (5 Vdc) | | |
|-------------------|---|--------------------|---|---------------------|---|---------------|
| Type of DC Source | | Internal DC supply | | External DC adapter | × | From Host |
| Test Voltage | M | Vnom (110 V) | Ø | Vmax (126.5 V) | X | Vmin (93.5 V) |
| Test Climatic | M | Tnom (20°C) | Ø | Tmax (55°C) | × | Tmin (-30°C) |

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1.2 Support Equipment

| | Support Equipment | | | | | | | |
|-----|--|------|-----------|-----|--|--|--|--|
| No. | o. Equipment Brand Name Model Name Remarks | | | | | | | |
| 1 | Notebook | DELL | E6430 | DoC | | | | |
| 2 | Power Supply | GW | GPL-6030D | | | | | |
| 3 | Extender card | N/A | adapter | N/A | | | | |

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1.3 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR FCC Part 15
- ANSI C63.10-2009
- FCC KDB 789033
- FCC KDB 662911
- FCC KDB 412172

1.4 Testing Location Information

| | Testing Location | | | | | | | | |
|-----|--|-----|-----|---------------------------------|---------------|----------------------|-------------------------|--|--|
| Ø | Sporton ADD : No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. | | | | | | | | |
| | Lab | TEL | - : | 886-3-327-345 | 66 FAX : 886 | 6-3-318-0055 | | | |
| × | ICC Lab | ADE |) : | No.3-1, Lane 6 Taiwan (R.O.C | | vei Shan Hsiang,Tao` | Yuan Hsein 333, | | |
| | | TEL | - : | 886-3-271-866 | 66 FAX : 886 | 6-3-318-0155 | | | |
| To | est Conditio | n | 7 | est Site No. | Test Engineer | Test Environment | Test Date | | |
| R | RF Conducte | d | | TH01-HY | Ian Du | 22.1°C / 61% | Jul. 24 ~ Aug. 16, 2013 | | |
| *Д | C Conducti | on | | CO01-WS | Skys Huang | 23°C / 65% | Aug. 13, 2013 | | |
| *Ra | *Radiated Emission 03CH01-WS Mark Liao Anderson Hong 22°C / 65~69% Jul. 23 ~ Aug. 09, 2013 | | | | | | | | |
| | Test site registered number [657002] with FCC. Test site registered number [10807A-1] with IC. | | | | | | | | |

Note: * Sporton Lab subcontracts this test item to ICC lab (TAF: 2732).

ICC lab is a TAF accreditation test firm and also is an approved provider of Sporton lab.

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1.5 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)

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| | Measurement Uncertainty | 1 | |
|-----------------------------------|-------------------------|----------|-----|
| Test Item | Uncertainty | Limit | |
| AC power-line conducted emissions | | ±2.26 dB | N/A |
| Emission bandwidth | | ±1.42 % | N/A |
| RF output power, conducted | ±0.63 dB | N/A | |
| Power density, conducted | ±0.81 dB | N/A | |
| All emissions, radiated | 30 – 1000 MHz | ±3.9 dB | N/A |
| | Above 1GHz | ±4.2 dB | N/A |
| Temperature | • | ±0.8 °C | N/A |
| Humidity | | ±3 % | N/A |
| DC and low frequency voltages | ±3 % | N/A | |
| Time | ±1.42 % | N/A | |
| Duty Cycle | | ±1.42 % | N/A |

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Test Configuration of EUT 2

The Worst Case Modulation Configuration 2.1

| Worst Modulation Used for Conformance Testing | | | | | | | | |
|--|-----|-----------|--------|--|--|--|--|--|
| Modulation Mode Transmit Chains (N _{TX}) Data Rate / MCS Worst Data Rate / MCS | | | | | | | | |
| 11a | 1/3 | 6-54 Mbps | 6 Mbps | | | | | |
| HT20 | 1/3 | M0-23 | MCS 0 | | | | | |
| HT40 | 1/3 | M0-23 | MCS 0 | | | | | |

2.2 **The Worst Case Power Setting Parameter**

| The Worst Case Power Setting Parameter (5150-5250MHz band) | | | | | | | | |
|--|-----------------|--------------------------|------|------|------------|------|---|--|
| Test Software Version | 1 (Ar | 1 (Ant. 1, Yagi antenna) | | | | | | |
| | | Test Frequency (MHz) | | | | | | |
| Modulation Mode | N _{TX} | NCB: 20MHz | | | NCB: 40MHz | | - | |
| | | 5180 | 5200 | 5240 | 5190 | 5230 | - | |
| 11a | 1 | 4.5 | 4.5 | 4 | - | - | - | |
| HT20 | 1 | 4.5 | 4.5 | 4 | - | - | - | |
| HT40 | 1 | - | - | - | 4.5 | 4.5 | - | |

| The Worst Case Power Setting Parameter (5150-5250MHz band) | | | | | | | | |
|--|-----------------|--------------------------|-----------|------|--------|-------|---|--|
| Test Software Version | 2 (Ar | 2 (Ant. 2, Omni antenna) | | | | | | |
| | | Test Frequency (MHz) | | | | | | |
| Modulation Mode | N _{TX} | 1 | NCB: 20MH | z | NCB: 4 | 40MHz | - | |
| | | 5180 | 5200 | 5240 | 5190 | 5230 | - | |
| 11a | 1 | 5.5 | 5.5 | 5.5 | - | - | - | |
| HT20 | 1 | 5.5 | 5.5 | 5.5 | - | - | - | |
| HT40 | 1 | - | - | - | 8 | 9 | - | |

| The Worst Case Power Setting Parameter (5150-5250MHz band) | | | | | | | | |
|--|-----------------|---------------------------|------------|------|------|------------|---|--|
| Test Software Version | 3 (Ar | 3 (Ant. 3, Panel antenna) | | | | | | |
| | | Test Frequency (MHz) | | | | | | |
| Modulation Mode | N _{TX} | 1 | NCB: 20MHz | | | NCB: 40MHz | | |
| | | 5180 | 5200 | 5240 | 5190 | 5230 | - | |
| 11a | 1 | 5 | 5 | 4.5 | - | - | - | |
| HT20 | 1 | 5 | 5 | 4.5 | - | - | - | |
| HT40 | 1 | - | - | - | 5 | 4.5 | - | |

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| The Worst Case Power Setting Parameter (5150-5250MHz band) | | | | | | | | |
|--|-----------------|----------------------------|------|------|------------|------|---|--|
| Test Software Version | 4 (Ar | 4 (Ant. 4, Dipole antenna) | | | | | | |
| | | Test Frequency (MHz) | | | | | | |
| Modulation Mode | N _{TX} | NCB: 20MHz NCB: 4 | | | NCB: 40MHz | | | |
| | | 5180 | 5200 | 5240 | 5190 | 5230 | - | |
| 11a | 3 | 5.5 | 5.5 | 5.5 | - | - | - | |
| HT20 | 3 | 5.5 | 5.5 | 5.5 | - | - | - | |
| HT40 | 3 | - | - | - | 8 | 9 | - | |

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2.3 The Worst Case Measurement Configuration

| The Worst Case Mode for Following Conformance Tests | | | | | |
|---|---|--|--|--|--|
| Tests Item | AC power-line conducted emissions | | | | |
| Condition | AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz | | | | |
| Operating Mode | Operating Mode Description | | | | |
| 1 | Radio link (WLAN) with Ant. 1, Yagi antenna | | | | |
| 2 | Radio link (WLAN) with Ant. 2, Omni antenna | | | | |
| 3 | Radio link (WLAN) with Ant. 3, Panel antenna | | | | |
| 4 | Radio link (WLAN) with Ant. 4, Dipole antenna | | | | |

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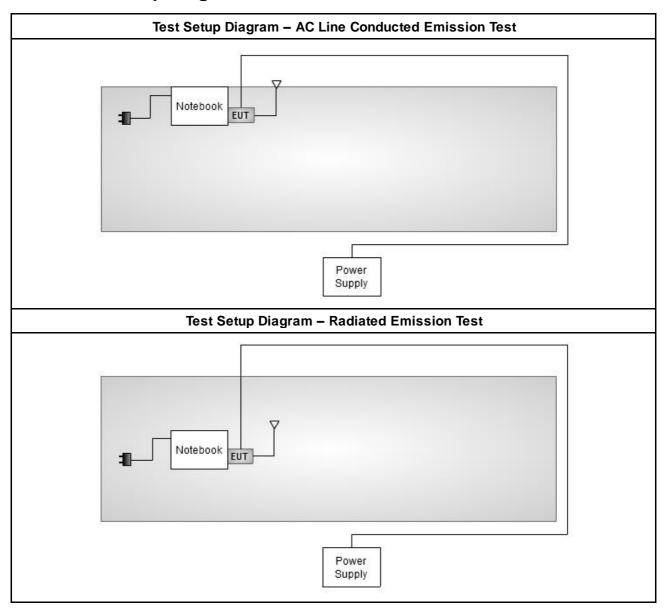
| The Worst Case Mode for Following Conformance Tests | | | | | |
|--|--|--|--|--|--|
| Tests Item RF Output Power, Peak Power Spectral Density, Emission Bandwidth, Peak Excursion | | | | | |
| Test Condition | Conducted measurement at transmit chains | | | | |
| Modulation Mode | 11a, HT20, HT40 | | | | |

| The Worst Case Mode for Following Conformance Tests | | | | | | |
|---|------|---|---------------------------|---------|--|--|
| Tests Item | | Гransmitter Radiated Unwanted Emissions Гransmitter Radiated Bandedge Emissions | | | | |
| Test Condition | If E | Radiated measurement If EUT consist of multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type. | | | | |
| | | EUT will be placed in fixed position. | | | | |
| User Position | M | EUT will be placed in mobile position and operating multiple positions. EUT shall be performed two orthogonal planes. The worst planes is X. | | | | |
| | | EUT will be a hand-held or body-worn battery-powered devices and operating multiple positions. EUT shall be performed two or three orthogonal planes. The worst planes is X. | | | | |
| Operating Mode < 1GHz | M | ☑ Radio link (WLAN) with Ant. 1, Yagi antenna | | | | |
| | M | Radio link (WLAN) wi | th Ant. 2, Omni antenna | | | |
| | × | Radio link (WLAN) wi | th Ant. 3, Panel antenna | | | |
| | × | Radio link (WLAN) wi | th Ant. 4, Dipole antenna | | | |
| Modulation Mode | 11a | 11a, HT20, HT40 | | | | |
| | | X Plane | Y Plane | Z Plane | | |
| Orthogonal Planes of EUT | | | | | | |

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2.4 Test Setup Diagram



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3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

| AC Power-line Conducted Emissions Limit | | | | | | |
|---|------------|-----------|--|--|--|--|
| Frequency Emission (MHz) | Quasi-Peak | Average | | | | |
| 0.15-0.5 | 66 - 56 * | 56 - 46 * | | | | |
| 0.5-5 | 56 | 46 | | | | |
| 5-30 | 60 | 50 | | | | |

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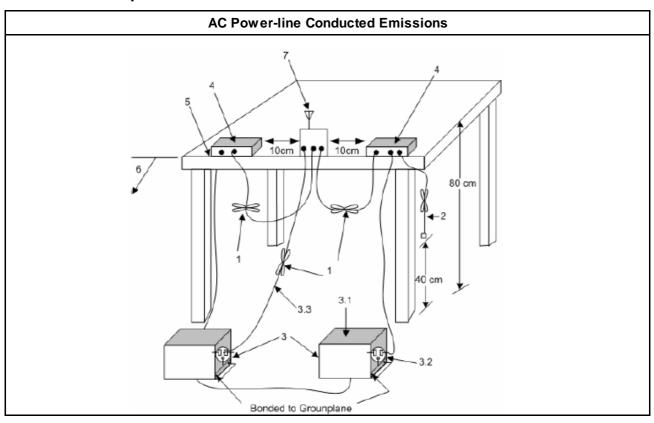
3.1.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

| | Test Method |
|---|--|
| ⋈ | Refer as ANSI C63.10-2009, clause 6.2 for AC power-line conducted emissions. |

3.1.4 Test Setup

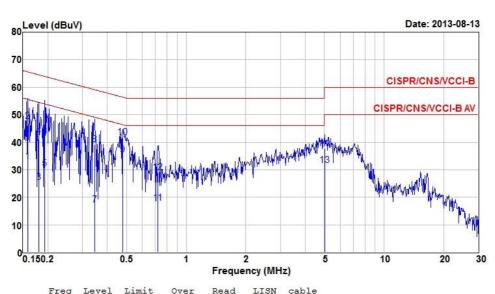


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3.1.5 Test Result of AC Power-line Conducted Emissions

| AC Power-line Conducted Emissions Result | | | | | |
|--|--|--|--|--|--|
| Operating Mode 1 Power Phase Neutral | | | | | |
| Operating Function | Radio link(WLAN) with Ant. 1, Yagi antenna | | | | |

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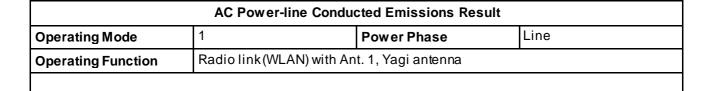
| | rred | телет | TITULL | Over | Read | TITOM | cable | |
|----|-------|-------|--------|--------|-------|--------|-------|---------|
| | | | Line | Limit | Level | factor | loss | Remark |
| | MHz | dBuV | dBuV | dB | dBuV | dB | dB | |
| | | | | | | | | |
| 1 | 0.158 | 33.06 | 55.56 | -22.50 | 32.94 | 0.04 | 0.08 | Average |
| 2 | 0.158 | 47.78 | 65.56 | -17.78 | 47.66 | 0.04 | 0.08 | QP |
| 3 | 0.180 | 25.51 | 54.50 | -28.99 | 25.33 | 0.04 | 0.14 | Average |
| 4 | 0.180 | 42.27 | 64.50 | -22.23 | 42.09 | 0.04 | 0.14 | QP |
| 5 | 0.192 | 30.40 | 53.93 | -23.53 | 30.19 | 0.04 | 0.17 | Average |
| 6 | 0.192 | 41.97 | 63.93 | -21.96 | 41.76 | 0.04 | 0.17 | QP |
| 7 | 0.346 | 17.35 | 49.05 | -31.70 | 17.21 | 0.06 | 0.08 | Average |
| 8 | 0.346 | 39.26 | 59.05 | -19.79 | 39.12 | 0.06 | 0.08 | QP |
| 9 | 0.479 | 35.35 | 46.36 | -11.01 | 35.22 | 0.08 | 0.05 | Average |
| 10 | 0.479 | 41.87 | 56.36 | -14.49 | 41.74 | 0.08 | 0.05 | QP |
| 11 | 0.720 | 17.86 | 46.00 | -28.14 | 17.60 | 0.22 | 0.04 | Average |
| 12 | 0.720 | 28.96 | 56.00 | -27.04 | 28.70 | 0.22 | 0.04 | QP |
| 13 | 5.005 | 31.73 | 50.00 | -18.27 | 31.33 | 0.19 | 0.21 | Average |
| 14 | 5.005 | 37.80 | 60.00 | -22.20 | 37.40 | 0.19 | 0.21 | QP |
| | | | | | | | | |

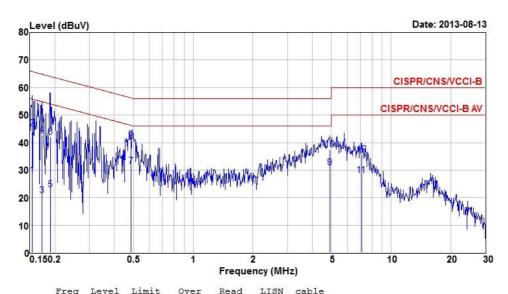
Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

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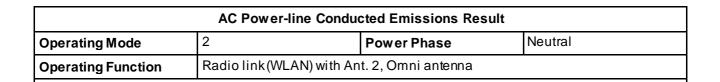
| | rred | TEACT | TITHE | OVET | neau | TITOM | Capie | |
|----|-------|-------|-------|--------|-------|--------|-------|---------|
| | | | Line | Limit | Level | factor | loss | Remark |
| | MHz | dBuV | dBuV | dB | dBu√ | dB | dB | |
| | | | | | | | | |
| 1 | 0.154 | 28.10 | 55.78 | -27.68 | 27.98 | 0.05 | 0.07 | Average |
| 2 | 0.154 | 45.07 | 65.78 | -20.71 | 44.95 | 0.05 | 0.07 | QP |
| 3 | 0.172 | 20.68 | 54.86 | -34.18 | 20.51 | 0.05 | 0.12 | Average |
| 4 | 0.172 | 42.77 | 64.86 | -22.09 | 42.60 | 0.05 | 0.12 | QP |
| 5 | 0.189 | 22.98 | 54.06 | -31.08 | 22.77 | 0.05 | 0.16 | Average |
| 6 | 0.189 | 42.11 | 64.06 | -21.95 | 41.90 | 0.05 | 0.16 | QP |
| 7 | 0.486 | 31.32 | 46.23 | -14.91 | 31.19 | 0.08 | 0.05 | Average |
| 8 | 0.486 | 40.56 | 56.23 | -15.67 | 40.43 | 0.08 | 0.05 | QP |
| 9 | 4.926 | 30.86 | 46.00 | -15.14 | 30.44 | 0.21 | 0.21 | Average |
| 10 | 4.926 | 37.47 | 56.00 | -18.53 | 37.05 | 0.21 | 0.21 | QP |
| 11 | 7.100 | 28.01 | 50.00 | -21.99 | 27.52 | 0.33 | 0.16 | Average |
| 12 | 7.100 | 35.73 | 60.00 | -24.27 | 35.24 | 0.33 | 0.16 | QP |
| | | | | | | | | |

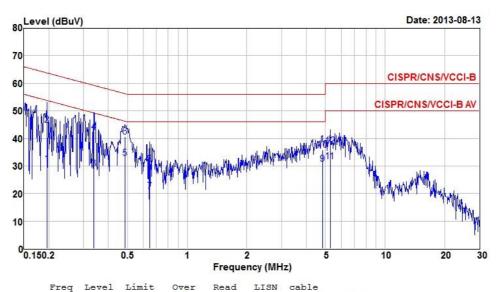
Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

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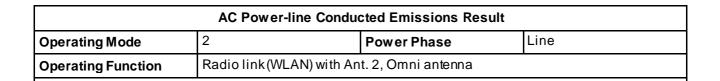
| | MHz | dBu∇ | Line dBuV | Limit dB | Level dBuV | factor dB | loss dB | Remark |
|----|-------|-------|--------------|-------------|---------------|--------------|------------|---------|
| 1 | 0.195 | 30.65 | 53.80 | -23.15 | 30.44 | 0.04 | 0.17 | Average |
| 2 | 0.195 | 44.79 | 63.80 | -19.01 | 44.58 | 0.04 | 0.17 | QP |
| 3 | 0.337 | 29.03 | 49.27 | -20.24 | 28.89 | 0.06 | 0.08 | Average |
| 4 | 0.337 | 42.26 | 59.27 | -17.01 | 42.12 | 0.06 | 0.08 | QP |
| 5 | 0.484 | 32.85 | 46.27 | -13.42 | 32.72 | 0.08 | 0.05 | Average |
| 6 | 0.484 | 40.63 | 56.27 | -15.64 | 40.50 | 0.08 | 0.05 | QP |
| 7 | 0.647 | 20.73 | 46.00 | -25.27 | 20.59 | 0.10 | 0.04 | Average |
| 8 | 0.647 | 30.63 | 56.00 | -25.37 | 30.49 | 0.10 | 0.04 | QP |
| 9 | 4.822 | 30.68 | 46.00 | -15.32 | 30.29 | 0.18 | 0.21 | Average |
| 10 | 4.822 | 35.94 | 56.00 | -20.06 | 35.55 | 0.18 | 0.21 | QP |
| 11 | 5.277 | 31.73 | 50.00 | -18.27 | 31.32 | 0.21 | 0.20 | Average |
| 12 | 5.277 | 37.29 | 60.00 | -22.71 | 36.88 | 0.21 | 0.20 | QP |

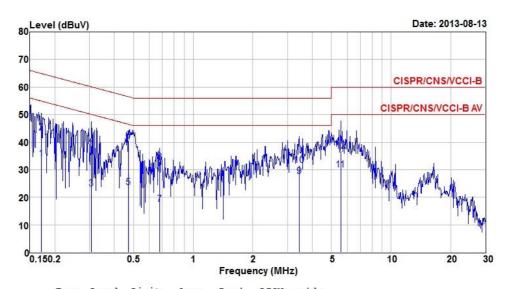
Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

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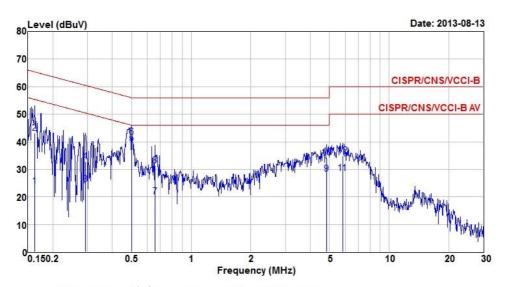
| | Freq | Level | Limit | Over | Read | LISN | cable | |
|----|-------|-------|--------------|-------------|-------|--------|-------|---------|
| | MHz | dBuV | Line dBuV | Limit dB | dBuV | factor | loss | Remark |
| | Mnz | | | | | d.D | | |
| 1 | 0.171 | 33.98 | 54.90 | -20.92 | 33.82 | 0.05 | 0.11 | Average |
| 2 | 0.171 | 43.33 | 64.90 | -21.57 | 43.17 | 0.05 | 0.11 | QP |
| 3 | 0.305 | 23.06 | 50.10 | -27.04 | 22.90 | 0.06 | 0.10 | Average |
| 4 | 0.305 | 38.64 | 60.10 | -21.46 | 38.48 | 0.06 | 0.10 | QP |
| 5 | 0.471 | 23.71 | 46.49 | -22.78 | 23.58 | 0.08 | 0.05 | Average |
| 6 | 0.471 | 40.72 | 56.49 | -15.77 | 40.59 | 0.08 | 0.05 | QP |
| 7 | 0.679 | 17.56 | 46.00 | -28.44 | 17.42 | 0.10 | 0.04 | Average |
| 8 | 0.679 | 32.73 | 56.00 | -23.27 | 32.59 | 0.10 | 0.04 | QP |
| 9 | 3.454 | 27.59 | 46.00 | -18.41 | 27.19 | 0.18 | 0.22 | Average |
| 10 | 3.454 | 31.59 | 56.00 | -24.41 | 31.19 | 0.18 | 0.22 | QP |
| 11 | 5.564 | 30.04 | 50.00 | -19.96 | 29.61 | 0.24 | 0.19 | Average |
| 12 | 5.564 | 36.75 | 60.00 | -23.25 | 36.32 | 0.24 | 0.19 | QP |

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit. Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

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| AC Power-line Conducted Emissions Result | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|
| Operating Mode | 3 Power Phase Neutral | | | | | | | | | |
| Operating Function | rating Function Radio link (WLAN) with Ant. 3, Panel antenna | | | | | | | | | |

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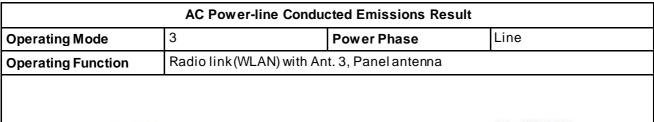


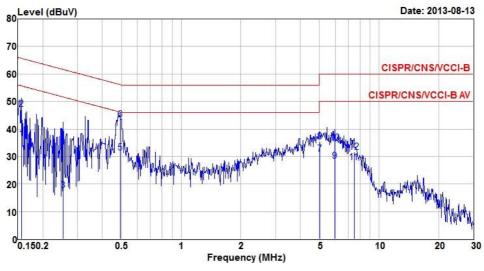
| | Freq | Level | Limit | Over | Read | LISN | cable | 10.00000000000000000000000000000000000 |
|----|-------|-------|-------|--------|-------|--------|-------|--|
| | | | Line | | | factor | loss | Remark |
| | MHz | dBuV | dBuV | dB | dBuV | dB | dB | |
| | | | | | | | | |
| 1 | 0.162 | 23.91 | 55.34 | -31.43 | 23.78 | 0.04 | 0.09 | Average |
| 2 | 0.162 | 43.27 | 65.34 | -22.07 | 43.14 | 0.04 | 0.09 | QP |
| 3 | 0.292 | 24.64 | 50.46 | -25.82 | 24.48 | 0.05 | 0.11 | Average |
| 4 | 0.292 | 32.87 | 60.46 | -27.59 | 32.71 | 0.05 | 0.11 | QP |
| 5 | 0.499 | 39.53 | 46.01 | -6.48 | 39.40 | 0.08 | 0.05 | Average |
| 6 | 0.499 | 41.87 | 56.01 | -14.14 | 41.74 | 0.08 | 0.05 | QP |
| 7 | 0.654 | 19.99 | 46.00 | -26.01 | 19.84 | 0.11 | 0.04 | Average |
| 8 | 0.654 | 31.44 | 56.00 | -24.56 | 31.29 | 0.11 | 0.04 | QP |
| 9 | 4.822 | 28.36 | 46.00 | -17.64 | 27.97 | 0.18 | 0.21 | Average |
| 10 | 4.822 | 34.26 | 56.00 | -21.74 | 33.87 | 0.18 | 0.21 | QP |
| 11 | 5.836 | 28.65 | 50.00 | -21.35 | 28.22 | 0.24 | 0.19 | Average |
| 12 | 5.836 | 35.02 | 60.00 | -24.98 | 34.59 | 0.24 | 0.19 | QP |
| | | | | | | | | |

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit. Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

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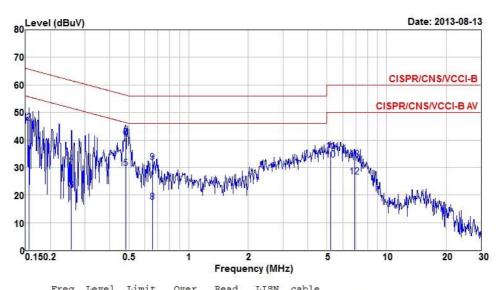
| | Freq | Level | Limit | Over | Read | LISN | cable | |
|----|-------|-------|-------|--------|-------|--------|-------|---------|
| | | | Line | Limit | Level | factor | loss | Remark |
| | MHz | dBuV | dBuV | dB | dBuV | dB | dB | |
| | | | | | | | | |
| 1 | 0.156 | 36.47 | 55.69 | -19.22 | 36.35 | 0.05 | 0.07 | Average |
| 2 | 0.156 | 47.26 | 65.69 | -18.43 | 47.14 | 0.05 | 0.07 | QP |
| 3 | 0.253 | 17.75 | 51.64 | -33.89 | 17.56 | 0.05 | 0.14 | Average |
| 4 | 0.253 | 33.55 | 61.64 | -28.09 | 33.36 | 0.05 | 0.14 | QP |
| 5 | 0.491 | 31.46 | 46.14 | -14.68 | 31.33 | 0.08 | 0.05 | Average |
| 6 | 0.491 | 43.43 | 56.14 | -12.71 | 43.30 | 0.08 | 0.05 | QP |
| 7 | 5.005 | 30.93 | 50.00 | -19.07 | 30.51 | 0.21 | 0.21 | Average |
| 8 | 5.005 | 35.49 | 60.00 | -24.51 | 35.07 | 0.21 | 0.21 | QP |
| 9 | 5.961 | 28.38 | 50.00 | -21.62 | 27.94 | 0.26 | 0.18 | Average |
| 10 | 5.961 | 34.83 | 60.00 | -25.17 | 34.39 | 0.26 | 0.18 | QP |
| 11 | 7.486 | 27.75 | 50.00 | -22.25 | 27.25 | 0.35 | 0.15 | Average |
| 12 | 7.486 | 31.73 | 60.00 | -28.27 | 31.23 | 0.35 | 0.15 | QP |
| | | | | | | | | |

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit. Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

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| AC Power-line Conducted Emissions Result | | | | | | | | | | |
|--|---------------------------|-----------------------|--|--|--|--|--|--|--|--|
| Operating Mode | 4 Power Phase Neutral | | | | | | | | | |
| Operating Function | Radio link (WLAN) with An | nt. 4, Dipole antenna | | | | | | | | |

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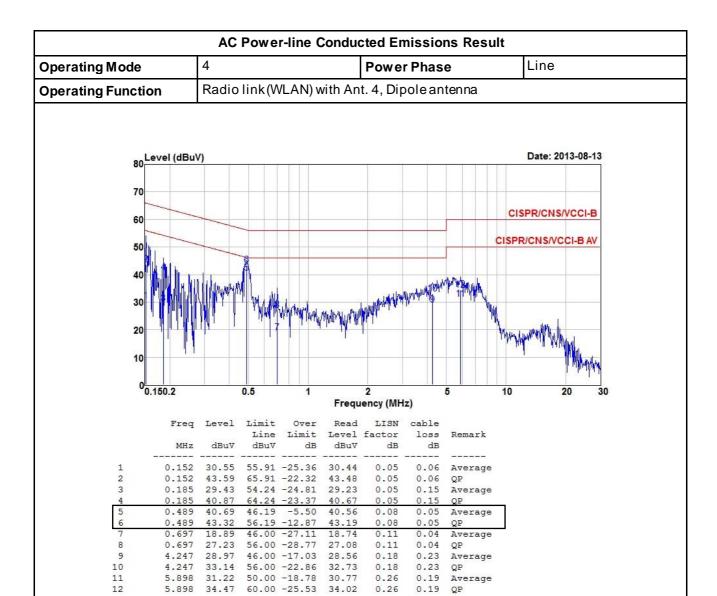


| | rreq | телет | Timit | Over | Read | TION | cable | 42200 (CONTO) (CONTO) |
|----|-------|-------|-------|--------|-------|--------|-------|-----------------------|
| | | | Line | | | factor | loss | Remark |
| | MHz | dBuV | dBuV | dB | dBuV | dB | dB | |
| | | | | | | | | |
| 1 | 0.156 | 32.48 | 55.65 | -23.17 | 32.36 | 0.04 | 0.08 | Average |
| 2 | 0.156 | 46.35 | 65.65 | -19.30 | 46.23 | 0.04 | 0.08 | QP |
| 3 | 0.255 | 21.96 | 51.60 | -29.64 | 21.78 | 0.05 | 0.13 | Average |
| 4 | 0.255 | 31.29 | 61.60 | -30.31 | 31.11 | 0.05 | 0.13 | QP |
| 5 | 0.481 | 29.72 | 46.32 | -16.60 | 29.59 | 0.08 | 0.05 | Average |
| 6 | 0.481 | 40.78 | 56.32 | -15.54 | 40.65 | 0.08 | 0.05 | QP |
| 7 | 0.481 | 40.94 | 56.32 | -15.38 | 40.81 | 0.08 | 0.05 | QP |
| 8 | 0.658 | 17.57 | 46.00 | -28.43 | 17.40 | 0.13 | 0.04 | Average |
| 9 | 0.658 | 31.86 | 56.00 | -24.14 | 31.69 | 0.13 | 0.04 | QP |
| 10 | 5.221 | 32.72 | 50.00 | -17.28 | 32.32 | 0.20 | 0.20 | Average |
| 11 | 5.221 | 35.80 | 60.00 | -24.20 | 35.40 | 0.20 | 0.20 | QP |
| 12 | 6.878 | 26.62 | 50.00 | -23.38 | 26.16 | 0.30 | 0.16 | Average |
| 13 | 6.878 | 33.06 | 60.00 | -26.94 | 32.60 | 0.30 | 0.16 | QP |

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit. Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

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0.26

0.19 OP

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

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FAX: 886-3-3270973

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3.2 Emission Bandwidth

3.2.1 Emission Bandwidth (EBW) Limit

| | Emission Bandwidth (EBW) Limit |
|-----|--|
| UN | II Devices |
| × | For the 5.15-5.25 GHz band, the maximum conducted output power shall not exceed the lesser of 50 mW or 4 dBm + $10 \log B$, where B is the 26 dB emission bandwidth in MHz. |
| | For the 5.25-5.35 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + $10 \log B$, where B is the 26 dB emission bandwidth in MHz. |
| | For the 5.47-5.725 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. |
| | For the 5.725-5.825 GHz band, the maximum conducted output power shall not exceed the lesser of 1 W or 17 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz |
| LE- | LAN Devices |
| X | For the band 5.15-5.25 GHz, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. |
| | For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz |
| | For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or $17+10\log B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz |
| | For the 5.725-5.825 GHz band, the maximum e.i.r.p. shall not exceed 4.0 W or 23 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. |

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3.2.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

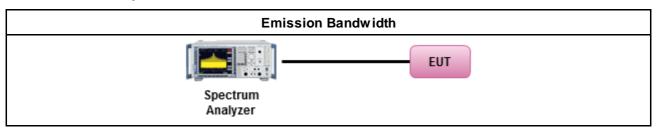
3.2.3 Test Procedures

| | | | Test Method | | | | | | | | | |
|---|-----|--|---|--|--|--|--|--|--|--|--|--|
| M | For | the e | emission bandwidth shall be measured using one of the options below: | | | | | | | | | |
| | M | Ref | er as FCC KDB 789033, clause C for EBW and clause D for OBW measurement. | | | | | | | | | |
| | | Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing. | | | | | | | | | | |
| | × | Refer as IC RSS-Gen, clause 4.6 for bandwidth testing. | | | | | | | | | | |
| M | For | cond | ducted measurement. | | | | | | | | | |
| | M | The | e EUT supports single transmit chain and measurements performed on this transmit chain. | | | | | | | | | |
| | | The | e EUT supports diversity transmitting and the results on transmit chain port 1 is the worst case. | | | | | | | | | |
| | × | The | e EUT supports multiple transmit chains using options given below: | | | | | | | | | |
| | | | Option 1: Multiple transmit chains measurements need to be performed on one of the active transmit chains (antenna outputs). All measurement had be performed on transmit chains 1. | | | | | | | | | |
| | | ⊠ | Option 2: Multiple transmit chains measurements need to be performed on each transmit chains individually (antenna outputs). All measurement had be performed on all transmit chains. | | | | | | | | | |

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3.2.4 Test Setup



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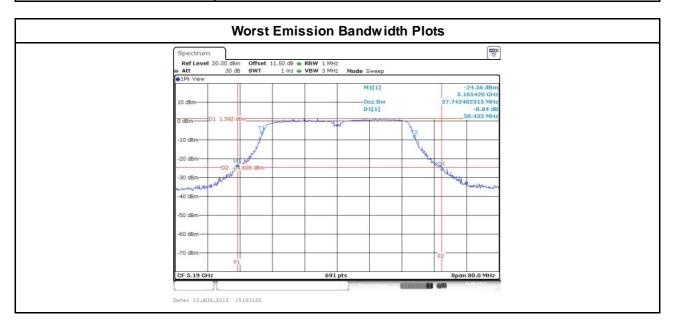
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3.2.5 Test Result of Emission Bandwidth

| | | UNII Em | ission | Bandw | idth Re | sult (5 | 150-525 | 0MHz | band) | | | | |
|-----------------|-----------------|---------|------------------|--------------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|------------|--|
| Operating | g Mod | le | 1 (Ant. | 1 (Ant. 1, Yagi antenna) | | | | | | | | | |
| Condi | Condition | | | | | Emiss | ion Bar | ndw idth | (MHz) | | | | |
| Modulation Free | | Freq. | 9 | 9% Ba | ndw idt | h | 2 | 6dB Ba | ndwidt | th | Powe | r Limit | |
| Mode | N _{TX} | (MHz) | Chain- Port 1 | Chain- Port 2 | Chain- Port 3 | Chain- Port 4 | Chain- Port 1 | Chain- Port 2 | Chain- Port 3 | Chain- Port 4 | 99% BW | 26dB BW | |
| 11a | 1 | 5180 | 16.96 | - | - | - | 22.90 | - | - | - | 16.29 | 17.00 | |
| 11a | 1 | 5200 | 17.02 | - | - | - | 23.25 | - | - | - | 16.31 | 17.00 | |
| 11a | 1 | 5240 | 17.02 | - | - | - | 23.07 | - | - | - | 16.31 | 17.00 | |
| HT20 | 1 | 5180 | 18.06 | - | - | - | 23.54 | - | - | - | 16.57 | 17.00 | |
| HT20 | 1 | 5200 | 18.06 | - | - | - | 23.83 | - | - | - | 16.57 | 17.00 | |
| HT20 | 1 | 5240 | 18.00 | - | - | - | 23.77 | - | - | - | 16.55 | 17.00 | |
| HT40 | 1 | 5190 | 37.74 | - | - | - | 50.44 | - | - | - | 17.00 | 17.00 | |
| HT40 | 1 | 5230 | 37.74 | - | - | - | 50.20 | - | - | - | 17.00 | 17.00 | |
| Res | ult | | | • | | • | Com | plied | • | • | • | | |

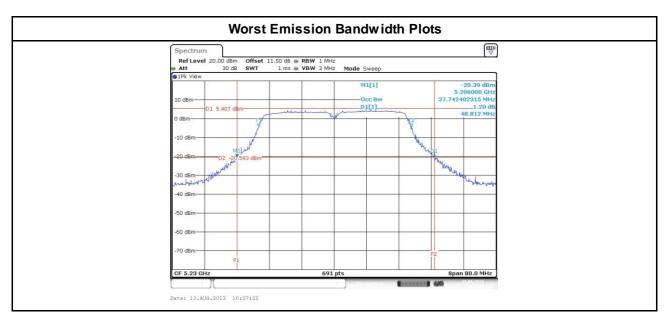


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| | | UNII Em | ission | Bandw | idth Re | sult (5 | 150-525 | 0MHz | band) | | | | |
|-----------------|-----------------|---------|------------------|--------------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|------------|--|
| Operating | g Mod | le | 2 (Ant. | 2 (Ant. 2, Omni antenna) | | | | | | | | | |
| Condi | Condition | | | | | Emiss | ion Bar | ndw idth | (MHz) | | | | |
| Modulation Free | | Freq. | 9 | 9% Ba | ndw idt | h | 2 | 6dB Ba | ndwid | th | Powe | r Limit | |
| Mode | N _{TX} | (MHz) | Chain- Port 1 | Chain- Port 2 | Chain- Port 3 | Chain- Port 4 | Chain- Port 1 | Chain- Port 2 | Chain- Port 3 | Chain- Port 4 | 99% BW | 26dB BW | |
| 11a | 1 | 5180 | 16.96 | - | - | - | 23.25 | - | - | - | 16.29 | 17.00 | |
| 11a | 1 | 5200 | 16.96 | - | - | - | 23.01 | - | - | - | 16.29 | 17.00 | |
| 11a | 1 | 5240 | 16.96 | - | - | - | 23.13 | - | - | - | 16.29 | 17.00 | |
| HT20 | 1 | 5180 | 18.06 | - | - | - | 23.54 | - | - | - | 16.57 | 17.00 | |
| HT20 | 1 | 5200 | 18.00 | - | - | - | 23.94 | - | - | - | 16.55 | 17.00 | |
| HT20 | 1 | 5240 | 18.00 | - | - | - | 23.54 | - | - | - | 16.55 | 17.00 | |
| HT40 | 1 | 5190 | 37.63 | - | - | - | 48.70 | - | - | - | 17.00 | 17.00 | |
| HT40 | 1 | 5230 | 37.74 | - | - | - | 48.81 | - | - | - | 17.00 | 17.00 | |
| Res | ult | | | | | | Com | plied | | | | | |

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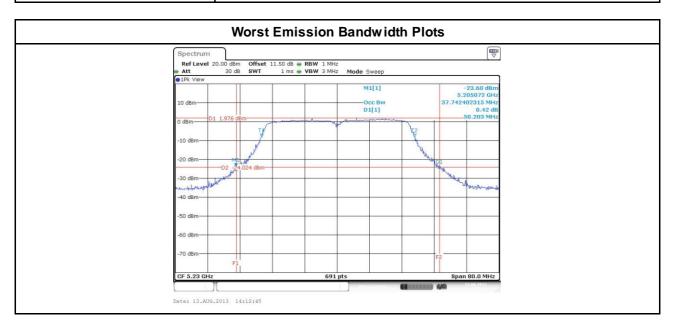


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| | | UNII Em | ission | Bandw | idth Re | sult (5 | 150-525 | 50MHz | band) | | | | | | |
|------------|--------------------|---------|-------------------------|---------------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|------------|--|--|--|
| Operating | g Mod | le | 3 (Ant. | 3 (Ant. 3, Panel antenna) | | | | | | | | | | | |
| Condi | tion | | | | | Emiss | ion Bar | ndw idth | (MHz) | | | | | | |
| Modulation | Modulation N Freq. | | | 9% Ba | ndw idt | h | 2 | 6dB Ba | ndwidt | th | Powe | r Limit | | | |
| Mode | N _{TX} | (MHz) | Chain- Port 1 | Chain- Port 2 | Chain- Port 3 | Chain- Port 4 | Chain- Port 1 | Chain- Port 2 | Chain- Port 3 | Chain- Port 4 | 99% BW | 26dB BW | | | |
| 11a | 1 | 5180 | 16.96 | - | - | - | 23.07 | - | - | - | 16.29 | 17.00 | | | |
| 11a | 1 | 5200 | 16.96 | - | - | - | 23.25 | - | - | - | 16.29 | 17.00 | | | |
| 11a | 1 | 5240 | 16.96 | - | - | - | 23.71 | - | - | - | 16.29 | 17.00 | | | |
| HT20 | 1 | 5180 | 18.06 | - | - | - | 24.58 | - | - | - | 16.57 | 17.00 | | | |
| HT20 | 1 | 5200 | 18.06 | - | - | - | 24.06 | - | - | - | 16.57 | 17.00 | | | |
| HT20 | 1 | 5240 | 18.00 | - | - | - | 23.65 | - | - | - | 16.55 | 17.00 | | | |
| HT40 | 1 | 5190 | 37.74 49.97 17.00 17.00 | | | | | | | 17.00 | | | | | |
| HT40 | 1 | 5230 | 37.74 | - | - | - | 50.20 | - | - | - | 17.00 | 17.00 | | | |
| Resi | Result | | | | • | | Com | plied | | • | • | | | | |

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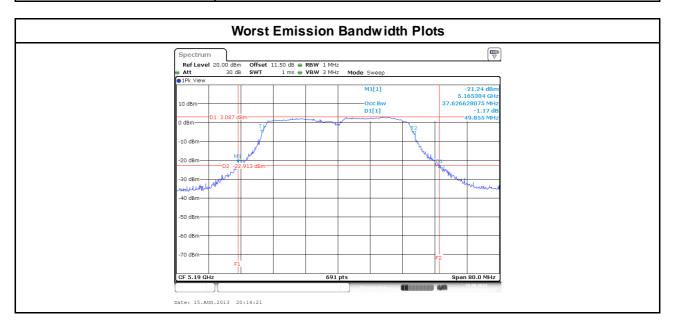


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| | UNII Emission Bandwidth Result (5150-5250MHz band) | | | | | | | | | | | | | |
|------------|--|-------|----------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|------------|--|--|
| Operating | g Mod | le | 4 (Ant. 4, Dipole antenna) | | | | | | | | | | | |
| Condi | tion | | | | | Emiss | ion Bar | ndw idth | n (MHz) | | | | | |
| Modulation | dulation N Freq. | | | 9% Ba | ndw idt | h | 2 | 6dB Ba | ndwidt | :h | Powe | r Limit | | |
| Mode | N _{TX} | (MHz) | Chain- Port 1 | Chain- Port 2 | Chain- Port 3 | Chain- Port 4 | Chain- Port 1 | Chain- Port 2 | Chain- Port 3 | Chain- Port 4 | 99% BW | 26dB BW | | |
| 11a | 3 | 5180 | 16.90 | 16.48 | 16.67 | - | 23.01 | 22.49 | 21.91 | - | 16.17 | 17.00 | | |
| 11a | 3 | 5200 | 16.96 | 16.79 | 16.73 | - | 22.90 | 21.97 | 22.03 | - | 16.23 | 17.00 | | |
| 11a | 3 | 5240 | 16.96 | 16.79 | 16.73 | - | 23.13 | 22.20 | 22.32 | - | 16.23 | 17.00 | | |
| HT20 | 3 | 5180 | 18.06 | 18.00 | 17.95 | - | 23.94 | 22.43 | 23.13 | - | 16.54 | 17.00 | | |
| HT20 | 3 | 5200 | 18.06 | 17.83 | 17.89 | - | 23.94 | 22.96 | 23.48 | - | 16.51 | 17.00 | | |
| HT20 | 3 | 5240 | 18.00 | 18.06 | 17.89 | - | 23.88 | 23.54 | 23.59 | - | 16.53 | 17.00 | | |
| HT40 | 3 | 5190 | 37.63 | 37.63 | 37.40 | - | 49.86 | 46.79 | 47.30 | - | 17.00 | 17.00 | | |
| HT40 | 3 | 5230 | 37.86 | 37.40 | 37.51 | - | 49.28 | 47.07 | 48.70 | - | 17.00 | 17.00 | | |
| Res | | | | | Com | plied | | | | | | | | |

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3.3 RF Output Power

3.3.1 RF Output Power Limit

| | Maximum Conducted Quinut Power Limit |
|-----|--|
| | Maximum Conducted Output Power Limit |
| UN | II Devices |
| | For the 5.15-5.25 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 50 mW or 4 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$. |
| | For the 5.25-5.35 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If G_{TX} > 6 dBi, then P_{Out} = 24 - (G_{TX} - 6). |
| | For the 5.47-5.725 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If G_{TX} > 6 dBi, then P_{Out} = 24 – (G_{TX} – 6). |
| | For the 5.725-5.825 GHz band: |
| | Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W or 17 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. |
| | Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W or 17 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 23$ dBi, then $P_{Out} = 30 - (G_{TX} - 23)$. |
| LE- | LAN Devices |
| ☒ | For the 5.15-5.25 GHz band, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. |
| | For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz |
| | For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz |
| | For the 5.725-5.825 GHz band, the maximum e.i.r.p. shall not exceed 4.0 W or 23 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. |
| | Point-to-multipoint systems (P2M): the maximum e.i.r.p. shall not exceed 4.0 W or 23 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. |
| | Point-to-point systems (P2P): the maximum e.i.r.p. shall not exceed 4.0 W or 23 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. If e.i.r.p. > 36 dBm, G _{TX} ≤P _{Out} |
| | t = maximum conducted output power in dBm, = the maximum transmitting antenna directional gain in dBi. |

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3.3.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

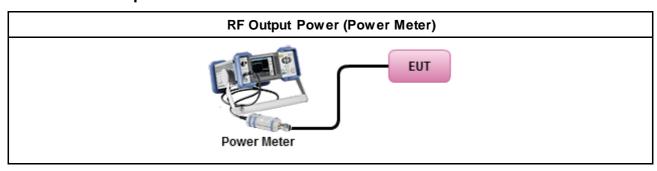
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3.3.3 Test Procedures

| | | Test Method |
|---|------|---|
| X | Max | kimum Conducted Output Power |
| | [dut | y cycle ≥98% or external video / power trigger] |
| | | Refer as FCC KDB 789033, clause E Method SA-1 (spectral trace averaging). |
| | | Refer as FCC KDB 789033, clause E Method SA-1 Alt. (RMS detection with slow sweep speed) |
| | duty | cycle < 98% and average over on/off periods with duty factor |
| | | Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging). |
| | | Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed) |
| | Wid | eband RF power meter and average over on/off periods with duty factor |
| | X | Refer as FCC KDB 789033, clause E Method PM (using an RF average power meter). |
| Ø | For | conducted measurement. |
| | X | The EUT supports single transmit chain and measurements performed on this transmit chain. |
| | | The EUT supports diversity transmitting and the results on transmit chain port 1 is the worst case. |
| | X | The EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them. |
| | × | If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \ldots + P_n \\ \text{(calculated in linear unit [mW] and transfer to log unit [dBm])} \\ \text{EIRP}_{total} = P_{total} + DG$ |

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3.3.4 Test Setup



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3.3.5 **Directional Gain for Power Measurement**

| | Directional Gain (DG) Result | | | | | | | | | | | |
|--------------------------------|------------------------------|-------------------|-----------------|------|--------------------|--|--|--|--|--|--|--|
| Operating Mode | | 1 (Ant. 1, Yagi a | antenna) | | | | | | | | | |
| Transmit Chains No. | | 1 | - | - | - | | | | | | | |
| Maximum G _{ANT} (dBi) | | 15 | 15 | | | | | | | | | |
| Modulation Mode | DG (dBi) | N _{TX} | N _{ss} | STBC | Array Gain (dB) | | | | | | | |
| 11a,6-54Mbps | 15 | 1 | 1 | - | - | | | | | | | |
| HT20,M0-7 | 15 | 1 | 1 | - | - | | | | | | | |
| HT40,M0-7 | 15 | 1 | 1 | - | - | | | | | | | |

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- Note 1: For all transmitter outputs with equal antenna gains, directional gain is to be computed as follows: Any transmit signals are correlated, Directional Gain = G_{ANT} + 10 log(N_{TX})
- Any transmit signals are completely uncorrelated, Directional Gain = G_{ANT}

 Note 2: For all transmitter outputs with unequal antenna gains, directional gain is to be computed as follows:

 Any transmit signals are correlated, Directional Gain = 10 log[(10^{G1/20}+...+10^{GN/20})²/N_{TX}]

 All transmit signals are completely uncorrelated, Directional Gain = 10 log[(10^{G1/10}+...+10^{GN/10)}/N_{TX}]
- Note 3: For Spatial Multiplexing, Directional Gain (DG) = G_{ANT} + 10 log(N_{TX}/N_{SS}), where Nss = the number of independent spatial streams data.
- Note 4: For CDD transmissions, directional gain is calculated as power measurements: Directional Gain (DG) = G_{ANT} + Array Gain, where Array Gain is as follows: Array Gain = 0 dB (i.e., no array gain) for $N_{TX} \le 4$; Array Gain = 0 dB (i.e., no array gain) for channel widths≥40 MHz for any N_{TX};

| | Directional Gain (DG) Result | | | | | | | | | | | |
|--------------------------------|------------------------------|-----------------|------------------------|------|--------------------|--|--|--|--|--|--|--|
| Operating Mode | | 2 (Ant. 2, Omni | (Ant. 2, Omni antenna) | | | | | | | | | |
| Transmit Chains No. | | 1 | - | - | - | | | | | | | |
| Maximum G _{ANT} (dBi) | | 12 | - | - | - | | | | | | | |
| Modulation Mode | DG (dBi) | N _{TX} | N _{ss} | STBC | Array Gain (dB) | | | | | | | |
| 11a,6-54Mbps | 12 | 1 | 1 | - | - | | | | | | | |
| HT20,M0-7 | 12 | 1 | 1 | - | - | | | | | | | |
| HT40,M0-7 | 12 | 1 | 1 | - | - | | | | | | | |

- Note 1: For all transmitter outputs with equal antenna gains, directional gain is to be computed as follows: Any transmit signals are correlated, Directional Gain = G_{ANT} + 10 log(N_{TX}) All transmit signals are completely uncorrelated, Directional Gain = G_{ANT}
- Note 2: For all transmitter outputs with unequal antenna gains, directional gain is to be computed as follows: Any transmit signals are correlated, Directional Gain = $10 \log[(10^{G1/20} + ... + 10^{GN/20})^2/N_{TX}]$ All transmit signals are completely uncorrelated, Directional Gain = $10 \log[(10^{G1/10} + ... + 10^{GN/10})/N_{TX}]$
- Note 3: For Spatial Multiplexing, Directional Gain (DG) = $G_{ANT} + 10 log(N_{TX}/N_{SS})$, where Nss = the number of independent spatial streams data.
- Note 4: For CDD transmissions, directional gain is calculated as power measurements: Directional Gain (DG) = G_{ANT} + Array Gain, where Array Gain is as follows: Array Gain = 0 dB (i.e., no array gain) for $N_{TX} \le 4$;

Array Gain = 0 dB (i.e., no array gain) for channel widths≥40 MHz for any N_{TX};

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| | Directional Gain (DG) Result | | | | | | | | | | | |
|--------------------------------|------------------------------|------------------|-------------------------|------|--------------------|--|--|--|--|--|--|--|
| Operating Mode | | 3 (Ant. 3, Panel | (Ant. 3, Panel antenna) | | | | | | | | | |
| Transmit Chains No. | | 1 | - | - | - | | | | | | | |
| Maximum G _{ANT} (dBi) | | 14.4 | - | - | - | | | | | | | |
| Modulation Mode | DG (dBi) | N _{TX} | N _{SS} | STBC | Array Gain (dB) | | | | | | | |
| 11a,6-54Mbps | 14.4 | 1 | 1 | - | - | | | | | | | |
| HT20,M0-7 | 14.4 | 1 | 1 | - | - | | | | | | | |
| HT40,M0-7 | 14.4 | 1 | 1 | - | - | | | | | | | |

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- Note 1: For all transmitter outputs with equal antenna gains, directional gain is to be computed as follows: Any transmit signals are correlated, Directional Gain = G_{ANT} + 10 log(N_{TX}) All transmit signals are completely uncorrelated, Directional Gain = G_{ANT}
- Note 2: For all transmitter outputs with unequal antenna gains, directional gain is to be computed as follows:

 Any transmit signals are correlated, Directional Gain = 10 log[(10^{G1/20}+... + 10^{GN/20})²/N_{TX}]

 All transmit signals are completely uncorrelated, Directional Gain = 10 log[(10^{G1/10}+... + 10^{GN/10})/N_{TX}]

Note 3: For Spatial Multiplexing, Directional Gain (DG) = G_{ANT} + 10 log(N_{TX}/N_{SS}), where Nss = the number of independent spatial streams data.

Note 4: For CDD transmissions, directional gain is calculated as power measurements: Directional Gain (DG) = G_{ANT} + Array Gain, where Array Gain is as follows: Array Gain = 0 dB (i.e., no array gain) for $N_{TX} \le 4$;

Array Gain = 0 dB (i.e., no array gain) for channel widths≥40 MHz for any N_{TX};

| | Directional Gain (DG) Result | | | | | | | | | | | |
|--------------------------------|------------------------------|------------------|--------------------------|------|--------------------|--|--|--|--|--|--|--|
| Operating Mode | | 4 (Ant. 4, Dipol | (Ant. 4, Dipole antenna) | | | | | | | | | |
| Transmit Chains No. | | 1 | 2 | 3 | - | | | | | | | |
| Maximum G _{ANT} (dBi) | | 7 | 7 | 7 | - | | | | | | | |
| Modulation Mode | DG (dBi) | N _{TX} | N _{SS} | STBC | Array Gain (dB) | | | | | | | |
| 11a,6-54Mbps | 7 | 3 | 1 | - | - | | | | | | | |
| HT20,M0-23 | 7 | 3 | 1 | - | - | | | | | | | |
| HT40,M0-23 | 7 | 3 | 1 | - | - | | | | | | | |

- Note 1: For all transmitter outputs with equal antenna gains, directional gain is to be computed as follows: Any transmit signals are correlated, Directional Gain = G_{ANT} + 10 log(N_{TX}) All transmit signals are completely uncorrelated, Directional Gain = G_{ANT}
- Note 2: For all transmitter outputs with unequal antenna gains, directional gain is to be computed as follows: Any transmit signals are correlated, Directional Gain = $10 \log[(10^{G1/20} + ... + 10^{GN/20})^2/N_{TX}]$ All transmit signals are completely uncorrelated, Directional Gain = $10 \log[(10^{G1/10} + ... + 10^{GN/10})/N_{TX}]$
- Note 3: For Spatial Multiplexing, Directional Gain (DG) = G_{ANT} + 10 log(N_{TX}/N_{SS}), where Nss = the number of independent spatial streams data.
- Note 4: For CDD transmissions, directional gain is calculated as power measurements: Directional Gain (DG) = G_{ANT} + Array Gain, where Array Gain is as follows: Array Gain = 0 dB (i.e., no array gain) for $N_{TX} \le 4$;

Array Gain = 0 dB (i.e., no array gain) for channel widths \geq 40 MHz for any N_{TX};

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3.3.6 Test Result of Maximum Conducted Output Power

| | Ма | ximum (| Conduct | ed Outp | ut Pow | er (5150 |)-5250N | lHz ban | d) | | | | |
|--------------------|-----------------|----------------|--------------------------|-----------------|-----------------|-----------------|--------------|-----------------|-------------|---------------|---------------|--|--|
| Operating | Mod | е | 1 (Ant. 1, Yagi antenna) | | | | | | | | | | |
| Condi | tion | | RF Output Power (dBm) | | | | | | | | | | |
| Modulation Mode | N _{TX} | Freq. (MHz) | Chain Port 1 | Chain Port 2 | Chain Port 3 | Chain Port 4 | Sum Chain | Pow er Limit | DG (dBi) | EIRP Power | EIRP Limit | | |
| 11a | 1 | 5180 | 7.11 | - | - | - | 7.11 | 8.00 | 15.00 | 22.11 | 23.00 | | |
| 11a | 1 | 5200 | 7.16 | - | - | - | 7.16 | 8.00 | 15.00 | 22.16 | 23.00 | | |
| 11a | 1 | 5240 | 7.08 | - | - | - | 7.08 | 8.00 | 15.00 | 22.08 | 23.00 | | |
| HT20 | 1 | 5180 | 7.16 | - | - | - | 7.16 | 8.00 | 15.00 | 22.16 | 23.00 | | |
| HT20 | 1 | 5200 | 7.31 | - | - | - | 7.31 | 8.00 | 15.00 | 22.31 | 23.00 | | |
| HT20 | 1 | 5240 | 7.11 | - | - | - | 7.11 | 8.00 | 15.00 | 22.11 | 23.00 | | |
| HT40 | 1 | 5190 | 7.73 | - | - | - | 7.73 | 8.00 | 15.00 | 22.73 | 23.00 | | |
| HT40 | 1 | 5230 | 7.92 | - | - | - | 7.92 | 8.00 | 15.00 | 22.92 | 23.00 | | |
| Resu | ılt | | | | | C | Complie | d | | | | | |

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| | Ма | ximum (| Conduct | ed Outp | ut Pow | er (5150 |)-5250N | 1Hz ban | d) | | | | |
|--------------------|-----------------|----------------|--------------------------|-----------------|-----------------|-----------------|--------------|-----------------|-------------|---------------|---------------|--|--|
| Operating | g Mode | е | 2 (Ant. 2, Omni antenna) | | | | | | | | | | |
| Condi | tion | | RF Output Power (dBm) | | | | | | | | | | |
| Modulation Mode | N _{TX} | Freq. (MHz) | Chain Port 1 | Chain Port 2 | Chain Port 3 | Chain Port 4 | Sum Chain | Pow er Limit | DG (dBi) | EIRP Power | EIRP Limit | | |
| 11a | 1 | 5180 | 10.18 | - | - | - | 10.18 | 11.00 | 12.00 | 22.18 | 23.00 | | |
| 11a | 1 | 5200 | 10.16 | - | - | - | 10.16 | 11.00 | 12.00 | 22.16 | 23.00 | | |
| 11a | 1 | 5240 | 10.11 | - | - | - | 10.11 | 11.00 | 12.00 | 22.11 | 23.00 | | |
| HT20 | 1 | 5180 | 10.32 | - | - | - | 10.32 | 11.00 | 12.00 | 22.32 | 23.00 | | |
| HT20 | 1 | 5200 | 10.26 | - | - | - | 10.26 | 11.00 | 12.00 | 22.26 | 23.00 | | |
| HT20 | 1 | 5240 | 10.33 | - | - | - | 10.33 | 11.00 | 12.00 | 22.33 | 23.00 | | |
| HT40 | 1 | 5190 | 10.55 | - | - | - | 10.55 | 11.00 | 12.00 | 22.55 | 23.00 | | |
| HT40 | 1 | 5230 | 10.71 | - | - | - | 10.71 | 11.00 | 12.00 | 22.71 | 23.00 | | |
| Resi | Result | | | | | (| Complie | d | | | | | |

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| | Ma | aximum (| Conduct | ed Outp | ut Pow | er (5150 |)-5250N | IHz ban | d) | | | | | |
|--------------------|-----------------|----------------|-----------------------|---------------------------|-----------------|-----------------|--------------|----------------|-------------|---------------|---------------|--|--|--|
| Operating | g Mod | е | 3 (Ant. | 3 (Ant. 3, Panel antenna) | | | | | | | | | | |
| Condi | tion | | RF Output Power (dBm) | | | | | | | | | | | |
| Modulation Mode | N _{TX} | Freq. (MHz) | Chain Port 1 | Chain Port 2 | Chain Port 3 | Chain Port 4 | Sum Chain | Power Limit | DG (dBi) | EIRP Power | EIRP Limit | | | |
| 11a | 1 | 5180 | 7.64 | - | - | - | 7.64 | 8.60 | 14.40 | 22.04 | 23.00 | | | |
| 11a | 1 | 5200 | 7.78 | - | - | - | 7.78 | 8.60 | 14.40 | 22.18 | 23.00 | | | |
| 11a | 1 | 5240 | 7.69 | - | - | - | 7.69 | 8.60 | 14.40 | 22.09 | 23.00 | | | |
| HT20 | 1 | 5180 | 7.78 | - | - | - | 7.78 | 8.60 | 14.40 | 22.18 | 23.00 | | | |
| HT20 | 1 | 5200 | 7.89 | - | - | - | 7.89 | 8.60 | 14.40 | 22.29 | 23.00 | | | |
| HT20 | 1 | 5240 | 7.81 | - | - | - | 7.81 | 8.60 | 14.40 | 22.21 | 23.00 | | | |
| HT40 | 1 | 5190 | 8.21 | - | - | - | 8.21 | 8.60 | 14.40 | 22.61 | 23.00 | | | |
| HT40 | 1 | 5230 | 7.92 | - | - | - | 7.92 | 8.60 | 14.40 | 22.32 | 23.00 | | | |
| Resu | ult | | | | | C | Complie | d | | | | | | |

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| | Ма | aximum (| Conduct | ed Outp | ut Pow | er (5150 |)-5250N | IHz band | d) | | | | |
|--------------------|-----------------|----------------|----------------------------|-----------------|-----------------|-----------------|--------------|-----------------|-------------|---------------|---------------|--|--|
| Operatino | Mode | е | 4 (Ant. 4, Dipole antenna) | | | | | | | | | | |
| Condi | tion | | RF Output Power (dBm) | | | | | | | | | | |
| Modulation Mode | N _{TX} | Freq. (MHz) | Chain Port 1 | Chain Port 2 | Chain Port 3 | Chain Port 4 | Sum Chain | Pow er Limit | DG (dBi) | EIRP Power | EIRP Limit | | |
| 11a | 3 | 5180 | 5.92 | 4.67 | 4.14 | - | 9.75 | 16.00 | 7.00 | 16.75 | 23.00 | | |
| 11a | 3 | 5200 | 6.52 | 5.15 | 4.51 | - | 10.25 | 16.00 | 7.00 | 17.25 | 23.00 | | |
| 11a | 3 | 5240 | 6.60 | 4.20 | 4.06 | - | 9.89 | 16.00 | 7.00 | 16.89 | 23.00 | | |
| HT20 | 3 | 5180 | 6.01 | 4.58 | 4.02 | - | 9.72 | 16.00 | 7.00 | 16.72 | 23.00 | | |
| HT20 | 3 | 5200 | 6.52 | 5.04 | 4.12 | - | 10.11 | 16.00 | 7.00 | 17.11 | 23.00 | | |
| HT20 | 3 | 5240 | 6.38 | 4.36 | 4.11 | - | 9.85 | 16.00 | 7.00 | 16.85 | 23.00 | | |
| HT40 | 3 | 5190 | 8.73 | 8.51 | 6.52 | - | 12.80 | 16.00 | 7.00 | 19.80 | 23.00 | | |
| HT40 | 3 | 5230 | 10.24 | 9.14 | 7.39 | - | 13.85 | 16.00 | 7.00 | 20.85 | 23.00 | | |
| Resu | ılt | | | | | C | Complie | d | | | | | |

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3.4 Peak Power Spectral Density

3.4.1 Peak Power Spectral Density Limit

| Peak Power Spectral Density Limit | | | | | | |
|-----------------------------------|---|--|--|--|--|--|
| UNI | UNII Devices | | | | | |
| Ø | For the 5.15-5.25 GHz band, the peak power spectral density (PPSD) \leq 4 dBm/MHz. If $G_{TX} >$ 6 dBi, then PPSD = 4 – ($G_{TX} -$ 6). | | | | | |
| | For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) \leq 11 dBm/MHz. If $G_{TX} > 6$ dBi, then PPSD= 11 – ($G_{TX} - 6$). | | | | | |
| | For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) \leq 11 dBm/MHz. If $G_{TX} > 6$ dBi, then PPSD= 11 – ($G_{TX} - 6$). | | | | | |
| | For the 5.725-5.825 GHz band: | | | | | |
| | Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 17 dBm/MHz. If G_{TX} > 6 dBi, then PPSD= 17 - (G_{TX} - 6). | | | | | |
| | Point-to-point systems (P2P): the peak power spectral density (PPSD) \leq 17 dBm/MHz. If $G_{TX} > 23$ dBi, then PPSD = 17 – ($G_{TX} - 23$). | | | | | |
| LE- | LAN Devices | | | | | |
| X | For the 5.15-5.25 GHz band, the peak power spectral density (PPSD) \leq 4 dBm/MHz and the e.i.r.p. peakpower spectral density (PPSD) \leq 10 dBm/MHz. | | | | | |
| | For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) \leq 11 dBm/MHz and the e.i.r.p. peakpower spectral density (PPSD) \leq 17 dBm/MHz. | | | | | |
| | For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the peak power spectral density (PPSD) \leq 11 dBm/MHz and the e.i.r.p. peakpower spectral density (PPSD) \leq 17 dBm/MHz. | | | | | |
| | For the 5.725-5.825 GHz band, the peak power spectral density (PPSD) \leq 17 dBm/MHz and the e.i.r.p. peak power spectral density (PPSD) \leq 23 dBm/MHz. | | | | | |
| pov | SD = peak power spectral density that he same method as used to determine the conducted output ver shall be used to determine the power spectral density. And power spectral density in dBm/MHz = the maximum transmitting antenna directional gain in dBi. | | | | | |

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3.4.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

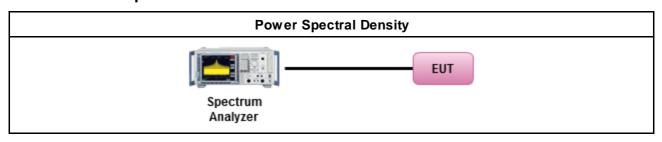
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3.4.3 Test Procedures

| | | Test Method | | | | | |
|---|--------------|---|--|--|--|--|--|
| ⊠ | outp func | k power spectral density procedures that the same method as used to determine the conducted ut power shall be used to determine the peak power spectral density and use the peak search tion on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density libe measured using below options: | | | | | |
| | | Refer as FCC KDB 789033, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth | | | | | |
| [duty cycle ≥98% or external video / power trigger] | | | | | | | |
| | × | Refer as FCC KDB 789033, clause E Method SA-1 (spectral trace averaging). | | | | | |
| | | Refer as FCC KDB 789033, clause E Method SA-1 Alt. (RMS detection with slow sweep speed) | | | | | |
| | duty | cycle < 98% and average over on/off periods with duty factor | | | | | |
| | | Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging). | | | | | |
| | | Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed) | | | | | |
| X | For | or conducted measurement. | | | | | |
| | × | The EUT supports single transmit chain and measurements performed on this transmit chain. | | | | | |
| | | The EUT supports diversity transmitting and the results on transmit chain port 1 is the worst case. | | | | | |
| | X | The EUT supports multiple transmit chains using options given below: | | | | | |
| | | Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them. | | | | | |
| | | Option 2: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit. | | | | | |
| | M | If multiple transmit chains, EIRP PPSD calculation could be following as methods: $ PPSD_{total} = PPSD_1 + PPSD_2 + + PPSD_n \\ (calculated in linear unit [mW] and transfer to log unit [dBm]) \\ EIRP_{total} = PPSD_{total} + DG $ | | | | | |
| | | Each individually PPSD plots refer as test report clause 3.3.5 with each individually PPSD plots. | | | | | |

3.4.4 Test Setup



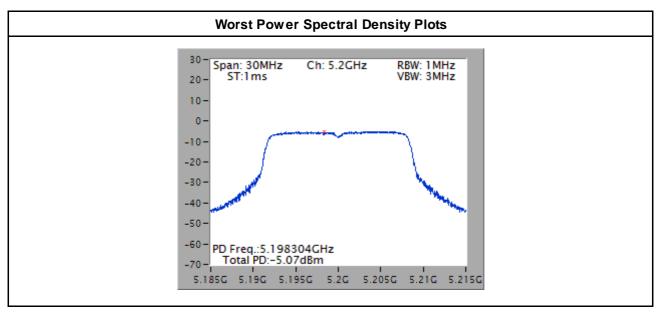
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3.4.5 Test Result of Peak Power Spectral Density

| | | | Power Spectral Density Result | | |
|--------------------|-----------------|----------------|--------------------------------------|---------------------------|--|
| Operating Mode | | е | 1 (Ant. 1, Yagi antenna) | | |
| Condition | | | Peak Power Spectral Density | | |
| Modulation Mode | N _{TX} | Freq. (MHz) | Sum Chain (dBm/1MHz) | Power Limit (dBm/1MHz) | |
| 11a | 1 | 5180 | -5.12 | -5.00 | |
| 11a | 1 | 5200 | -5.07 | -5.00 | |
| 11a | 1 | 5240 | -5.35 | -5.00 | |
| HT20 | 1 | 5180 | -5.17 | -5.00 | |
| HT20 | 1 | 5200 | -5.29 | -5.00 | |
| HT20 | 1 | 5240 | -5.35 | -5.00 | |
| HT40 | 1 | 5190 | -8.39 | -5.00 | |
| HT40 | 1 | 5230 | -8.35 | -5.00 | |
| Result | | | Complied | | |

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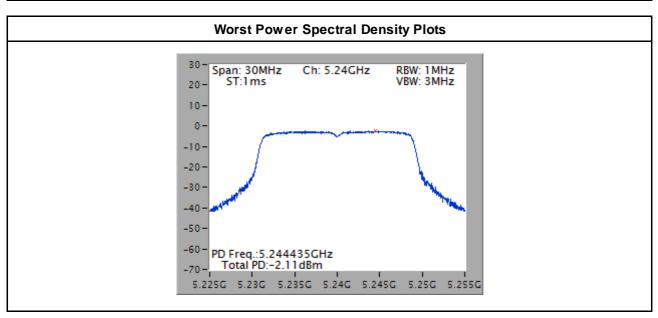


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| | | | Power Spectral Density Result | |
|--|--------|------|--------------------------------------|---------------------------|
| Operatir | ng Mod | е | 2 (Ant. 2, Omni antenna) | |
| Cond | lition | | Peak Power S | pectral Density |
| Modulation N _{TX} Freq. (MHz) | | | Sum Chain (dBm/1MHz) | Power Limit (dBm/1MHz) |
| 11a | 1 | 5180 | -2.37 | -2.00 |
| 11a | 1 | 5200 | -2.54 | -2.00 |
| 11a | 1 | 5240 | -2.16 | -2.00 |
| HT20 | 1 | 5180 | -2.17 | -2.00 |
| HT20 | 1 | 5200 | -2.75 | -2.00 |
| HT20 | 1 | 5240 | -2.11 | -2.00 |
| HT40 | 1 | 5190 | -4.96 | -2.00 |
| HT40 | 1 | 5230 | -4.98 | -2.00 |
| Res | ult | | Com | plied |

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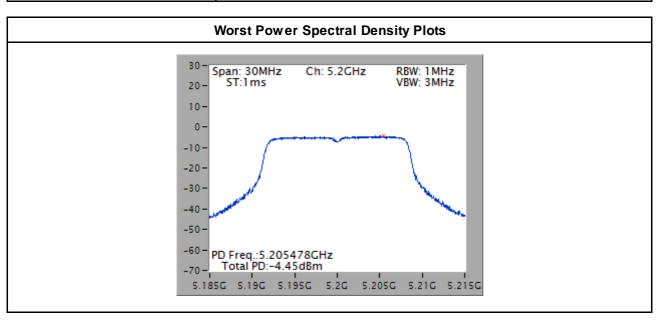


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| | | | Power Spectral Density Result | | | |
|--|--------|------|-------------------------------|---------------------------|--|--|
| Operatir | ng Mod | е | 3 (Ant. 3, Panel antenna) | | | |
| Cond | lition | | Peak Power S | pectral Density | | |
| Modulation N _{TX} Freq. (MHz) | | | Sum Chain (dBm/1MHz) | Power Limit (dBm/1MHz) | | |
| 11a | 1 | 5180 | -4.62 | -4.40 | | |
| 11a | 1 | 5200 | -4.45 | -4.40 | | |
| 11a | 1 | 5240 | -4.86 | -4.40 | | |
| HT20 | 1 | 5180 | -5.05 | -4.40 | | |
| HT20 | 1 | 5200 | -4.66 | -4.40 | | |
| HT20 | 1 | 5240 | -5.06 | -4.40 | | |
| HT40 | 1 | 5190 | -7.84 | -4.40 | | |
| HT40 | 1 | 5230 | -8.35 | -4.40 | | |
| Res | ult | | Com | plied | | |

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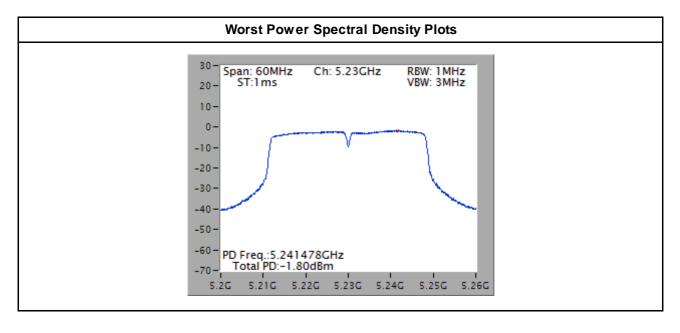


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| | | | Power Spectral Density Result | |
|--------------------|-----------------|----------------|-------------------------------|---------------------------|
| Operatin | g Mod | е | 4 (Ant. 4, Dipole antenna) | |
| Cond | ition | | Peak Power Sp | pectral Density |
| Modulation Mode | N _{TX} | Freq. (MHz) | Sum Chain (dBm/1MHz) | Power Limit (dBm/1MHz) |
| 11a | 3 | 5180 | -1.95 | -1.77 |
| 11a | 3 | 5200 | -1.86 | -1.77 |
| 11a | 3 | 5240 | -2.14 | -1.77 |
| HT20 | 3 | 5180 | -1.88 | -1.77 |
| HT20 | 3 | 5200 | -2.04 | -1.77 |
| HT20 | 3 | 5240 | -2.03 | -1.77 |
| HT40 | 3 | 5190 | -2.79 | -1.77 |
| HT40 | 3 | 5230 | -1.80 | -1.77 |
| Res | ult | | Comp | olied |

Note: Test result is bin-by-bin summing measured value of each TX port



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3.5 Peak Excursion

3.5.1 Peak Excursion Limit

Peak Excursion Limit

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UNII Devices

Peak excursion ≤ 13 dB. The ratio of the maximum of the peak-max-hold spectrum to the maximum of the average spectrum for continuous transmission does not exceed 13 dB. (Earlier proœdures that required computing the ratio of the two spectra at each frequency across the emission bandwidth can lead to unintended failures at band edges and will no longer be required.)

LE-LAN Devices

☑ N/A

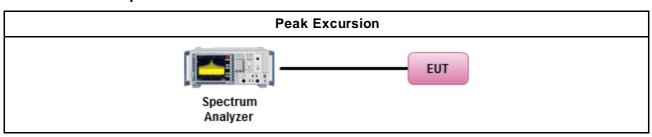
3.5.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method ☐ Refer as FCC KDB 789033, clause G peak excursion method. ☐ Testing each modulation mode on a single channel is sufficient to demonstrate compliance with the peak excursion requirement. ☐ For conducted measurement. ☐ Testing a single output port is sufficient to demonstrate compliance with the peak excursion.

3.5.4 Test Setup

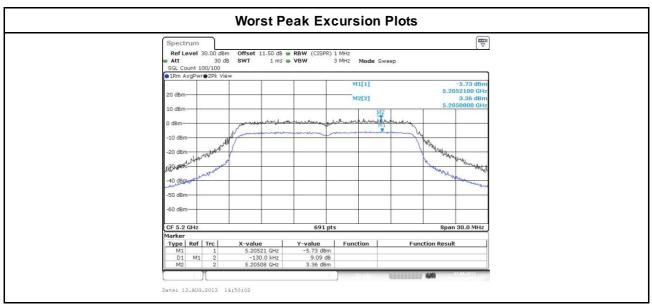


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3.5.5 Test Result of Peak Excursion

| | UNII Peak Excursion Result | | | | | | | | | | | | |
|--------------------|----------------------------|----------------|---------------|--------------------------|-----------|-------------|--------|-------|--|--|--|--|--|
| Operatin | g Mod | le | 1 (Ant. 1, Ya | 1 (Ant. 1, Yagi antenna) | | | | | | | | | |
| Condi | tion | | | | Peak Excu | ırsion (dB) | | | | | | | |
| Modulation Mode | N _{TX} | Freq. (MHz) | BPSK | QPSK | 16QAM | 64QAM | 256QAM | Limit | | | | | |
| 11a | 1 | 5200 | 8.46 | 7.51 | 8.98 | 9.09 | - | 13.0 | | | | | |
| HT20 | HT20 1 5200 | | 8.32 | 8.63 | 8.91 | 8.60 | - | 13.0 | | | | | |
| HT40 | 1 | 5230 | 8.00 | 8.66 | 8.47 | 8.92 | - | 13.0 | | | | | |
| Result | | | | | Com | plied | | | | | | | |



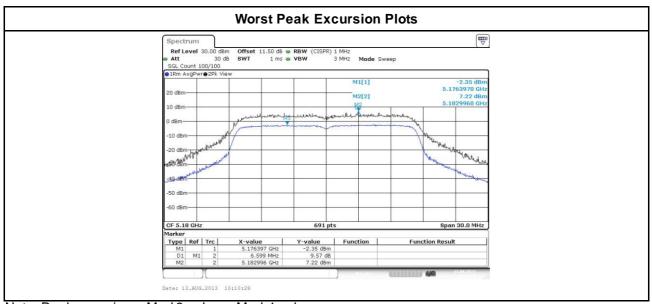
Note: Peak excursion = Mark2 value - Mark1 value

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| | UNII Peak Excursion Result | | | | | | | | | | | | |
|--------------------|----------------------------|----------------|------------------------------|--------------------------|----------|-------------|---|------|--|--|--|--|--|
| Operatin | g Mod | le | 2 (Ant. 2, O | 2 (Ant. 2, Omni antenna) | | | | | | | | | |
| Condi | tion | | | | Peak Exc | ursion (dB) | | | | | | | |
| Modulation Mode | N _{TX} | Freq. (MHz) | BPSK QPSK 16QAM 64QAM 256QAM | | | | | | | | | | |
| 11a | 1 | 5180 | 7.79 | 9.57 | 8.21 | 8.44 | - | 13.0 | | | | | |
| HT20 | HT20 1 5240 | | 7.66 | 8.40 | 8.95 | 8.82 | - | 13.0 | | | | | |
| HT40 | 1 | 5230 | 8.26 | 9.05 | 9.00 | 8.64 | - | 13.0 | | | | | |
| Result | | | | | Com | plied | | | | | | | |

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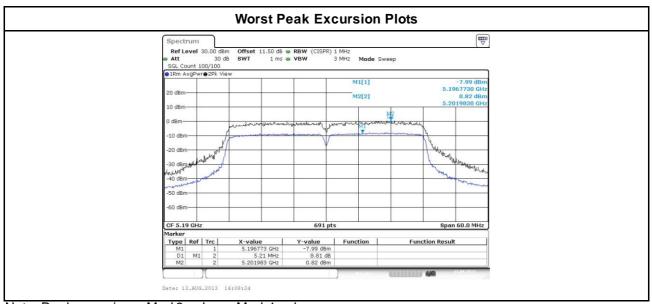
Note: Peak excursion = Mark2 value - Mark1 value

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| | UNII Peak Excursion Result | | | | | | | | | | | | |
|--------------------|----------------------------|----------------|---------------|-------------|----------|-------------|--------|-------|--|--|--|--|--|
| Operatin | g Mod | le | 3 (Ant. 3, Pa | anel antenn | a) | | | | | | | | |
| Condi | tion | | | | Peak Exc | ırsion (dB) | | | | | | | |
| Modulation Mode | N _{TX} | Freq. (MHz) | BPSK | QPSK | 16QAM | 64QAM | 256QAM | Limit | | | | | |
| 11a | 1 | 5200 | 8.50 | 8.51 | 8.29 | 8.54 | - | 13.0 | | | | | |
| HT20 | HT20 1 5200 | | 8.12 | 8.01 | 8.75 | 8.15 | - | 13.0 | | | | | |
| HT40 | 1 | 5190 | 7.74 | 7.93 | 8.26 | 8.81 | - | 13.0 | | | | | |
| Result | | | | | Complied | | | | | | | | |

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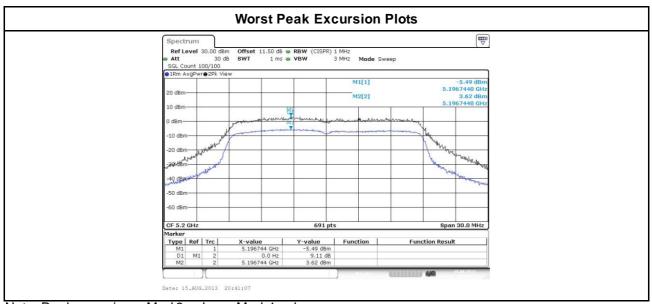
Note: Peak excursion = Mark2 value - Mark1 value

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| | UNII Peak Excursion Result | | | | | | | | | | | | |
|--------------------|----------------------------|----------------|---------------|-------------|----------|-------------|--------|-------|--|--|--|--|--|
| Operatin | g Mod | le | 4 (Ant. 4, Di | pole antenr | na) | | | | | | | | |
| Condi | ition | | | | Peak Exc | ursion (dB) | | | | | | | |
| Modulation Mode | N _{TX} | Freq. (MHz) | BPSK | QPSK | 16QAM | 64QAM | 256QAM | Limit | | | | | |
| 11a | 1 | 5240 | 8.22 | 8.69 | 8.89 | 8.54 | - | 13.0 | | | | | |
| HT20 | HT20 1 5200 | | 7.41 | 8.15 | 8.31 | 9.11 | - | 13.0 | | | | | |
| HT40 | 1 | 5230 | 8.01 | 8.14 | 8.73 | 9.00 | - | 13.0 | | | | | |
| Result | | | | | Com | plied | | | | | | | |

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Note: Peak excursion = Mark2 value - Mark1 value

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3.6 **Transmitter Radiated Unwanted Emissions and Band Edge**

3.6.1 Transmitter Radiated Unwanted Emissions and Band Edge Limit

| Unwanted emissions below 1 GHz and restricted band emissions above 1GHz limit | | | | | | | | | | |
|---|-----------------------|-------------------------|----------------------|--|--|--|--|--|--|--|
| Frequency Range (MHz) | Field Strength (uV/m) | Field Strength (dBuV/m) | Measure Distance (m) | | | | | | | |
| 0.009~0.490 | 2400/F(kHz) | 48.5 - 13.8 | 300 | | | | | | | |
| 0.490~1.705 | 24000/F(kHz) | 33.8 - 23 | 30 | | | | | | | |
| 1.705~30.0 | 30 | 29 | 30 | | | | | | | |
| 30~88 | 100 | 40 | 3 | | | | | | | |
| 88~216 | 150 | 43.5 | 3 | | | | | | | |
| 216~960 | 200 | 46 | 3 | | | | | | | |
| Above 960 | 500 | 54 | 3 | | | | | | | |

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a doser distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

| | Un-restricted band emissions above 1GHz Limit | | | | | | | |
|-------------------|--|--|--|--|--|--|--|--|
| Operating Band | Limit | | | | | | | |
| 5.15 - 5.25 GHz | e.i.r.p27 dBm [68.2 dBuV/m@3m] | | | | | | | |
| 5.25 - 5.35 GHz | e.i.r.p27 dBm [68.2 dBuV/m@3m] | | | | | | | |
| 5.47 - 5.725 GHz | e.i.r.p27 dBm [68.2 dBuV/m@3m] | | | | | | | |
| 5.725 - 5.825 GHz | 5.715 5.725 GHz: e.i.r.p17 dBm [78.2 dBuV/m@3m] 5.825 5.835 GHz: e.i.r.p17 dBm [78.2 dBuV/m@3m] Other un-restricted band: e.i.r.p27 dBm [68.2 dBuV/m@3m] | | | | | | | |

Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

3.6.2 **Measuring Instruments**

Refer a test equipment and calibration data table in this test report.

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3.6.3 Test Procedures

| | | | Test Method | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|
| × | perfo equi abov are i be e dista | Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements). | | | | | | | | | | |
| Ø | The | aver | age emission levels shall be measured in [duty cycle ≥ 98 or duty factor]. | | | | | | | | | |
| X | For | the tr | ansmitter unwanted emissions shall be measured using following options below: | | | | | | | | | |
| | M | Ref | er as FCC KDB 789033, clause H)2) for unwanted emissions into non-restricted bands. | | | | | | | | | |
| | × | Ref | er as FCC KDB 789033, clause H)1) for unwanted emissions into restricted bands. | | | | | | | | | |
| | | | Refer as FCC KDB 789033, H)6) Method AD (Trace Averaging). | | | | | | | | | |
| | | | Refer as FCC KDB 789033, H)6) Method VB (Reduced VBW). | | | | | | | | | |
| | | × | Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time. | | | | | | | | | |
| | | | Refer as ANSI C63.10, clause 4.2.3.2.4 average value of pulsed emissions. | | | | | | | | | |
| | | X | Refer as FCC KDB 789033, clause H)5) measurement procedure peaklimit. | | | | | | | | | |
| | | | Refer as ANSI C63.10, clause 4.2.3.2.2 measurement procedure peaklimit. | | | | | | | | | |
| Ø | For | radia | ated measurement. | | | | | | | | | |
| | M | Ref | er as ANSI C63.10, clause 6.4 for radiated emissions from below 30 MHz. | | | | | | | | | |
| | Ø | Ref | er as ANSI C63.10, clause 6.5 for radiated emissions from 30 MHz to 1000 MHz. | | | | | | | | | |
| | × | Ref | er as ANSI C63.10, clause 6.6 for radiated emissions from above 1 GHz. | | | | | | | | | |
| | For | cond | ucted and cabinet radiation measurement, refer as FCC KDB 789033, clause H)3). | | | | | | | | | |
| | | Dev Refe emi | conducted unwanted emissions into non-restricted bands (relative emission limits). rices with multiple transmit chains: er as FCC KDB 662911, when testing out-of-band and spurious emissions against relative ssion limits, tests may be performed on each output individually without summing or adding 10 (N) if the measurements are made relative to the in-band emissions on the individual outputs. | | | | | | | | | |
| | | Dev (1) I | conducted unwanted emissions into restricted bands (absolute emission limits). ices with multiple transmit chains using options given below: Measure and sum the spectra across the outputs or Measure and add 10 log(N) dB | | | | | | | | | |
| | | resu com | FCC KDB 662911 The methodology described here may overestimate array gain, thereby alting in apparent failures to satisfy the out-of-band limits even if the device is actually apliant. In such cases, compliance may be demonstrated by performing radiated tests around frequencies at which the apparent failures occurred. | | | | | | | | | |

3.6.4 Test Setup

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Radiated Emissions below 1 GHz Semi Anechoic Chamber EUT Radiated Emissions above 1 GHz EUT

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3.6.5 Transmitter Radiated Unwanted Emissions (Below 30MHz)

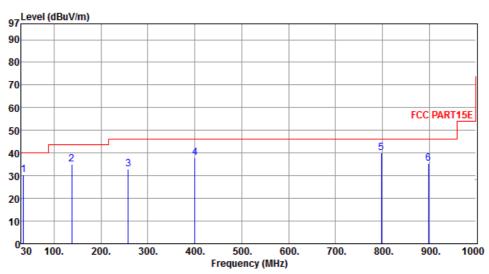
All amplitude of spurious emissions that are attenuated by more than 30 dB below the permissible value has no need to be reported.

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3.6.6 Transmitter Radiated Unwanted Emissions (Below 1GHz)

| Transmitter Radiated Unwanted Emissions (Below 1GHz) | | | | | | | | | |
|--|---|--------------|---|--|--|--|--|--|--|
| Modulation Mode HT 40 Test Freq. (MHz) 5230 | | | | | | | | | |
| Operating Mode | 1 | Polarization | V | | | | | | |

Report No.: FR362203AN



| | Freq. MHz | Emission level dBuV/m | | Ü | SA reading dBuV | | Remark | ANT High cm | Turn Table deg |
|---|--------------|-----------------------------|-------|--------|-----------------------|--------|--------|-------------------|----------------------|
| | | | | | | | | | |
| 1 | 34.85 | 30.30 | 40.00 | -9.70 | 47.06 | -16.76 | Peak | | |
| 2 | 137.67 | 35.03 | 43.50 | -8.47 | 52.00 | -16.97 | Peak | | |
| 3 | 257.95 | 32.92 | 46.00 | -13.08 | 50.00 | -17.08 | Peak | | |
| 4 | 400.54 | 37.95 | 46.00 | -8.05 | 50.98 | -13.03 | Peak | | |
| 5 | 798.24 | 40.18 | 46.00 | -5.82 | 46.28 | -6.10 | Peak | | |
| 6 | 898.15 | 35.48 | 46.00 | -10.52 | 40.42 | -4.94 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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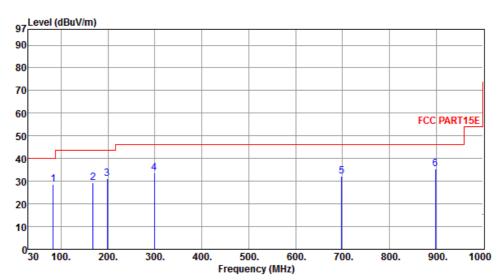


Transmitter Radiated Unwanted Emissions (Below 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 5230

Operating Mode 1 Polarization H

Report No.: FR362203AN



| | | Emission level | | Ŭ | reading | | Remark | ANT High | Turn Table |
|---|--------|----------------|--------|--------|---------|--------|--------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | CM | deg |
| | | | | | | | | | |
| 1 | 83.35 | 28.76 | 40.00 | -11.24 | 50.27 | -21.51 | Peak | | |
| 2 | 167.74 | 29.34 | 43.50 | -14.16 | 46.02 | -16.68 | Peak | | |
| 3 | 198.78 | 31.27 | 43.50 | -12.23 | 50.40 | -19.13 | Peak | | |
| 4 | 298.69 | 33.51 | 46.00 | -12.49 | 49.12 | -15.61 | Peak | | |
| 5 | 698.33 | 32.33 | 46.00 | -13.67 | 39.85 | -7.52 | Peak | | |
| 6 | 898.15 | 35.47 | 46.00 | -10.53 | 40.41 | -4.94 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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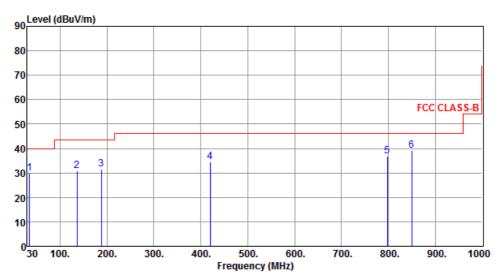


Transmitter Radiated Unwanted Emissions (Below 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 5230

Operating Mode 2 Polarization V

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | | Remark | ANT High | Turn Table |
|---|--------|----------------|--------|--------|---------------|--------|--------|-------------|---------------|
| | MHz | dBuV/m | dBuV/n | n dB | dBuV | dB | | cm | deg |
| | | | | | | | | | |
| 1 | 34.85 | 30.02 | 40.00 | -9.98 | 46.78 | -16.76 | Peak | | |
| 2 | 135.73 | 30.76 | 43.50 | -12.74 | 47.94 | -17.18 | Peak | | |
| 3 | 188.11 | 31.38 | 43.50 | -12.12 | 50.21 | -18.83 | Peak | | |
| 4 | 419.94 | 34.49 | 46.00 | -11.51 | 47.03 | -12.54 | Peak | | |
| 5 | 798.24 | 36.95 | 46.00 | -9.05 | 43.05 | -6.10 | Peak | | |
| 6 | 849.65 | 39.13 | 46.00 | -6.87 | 44.55 | -5.42 | Peak | | |

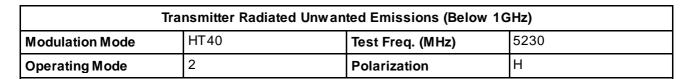
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

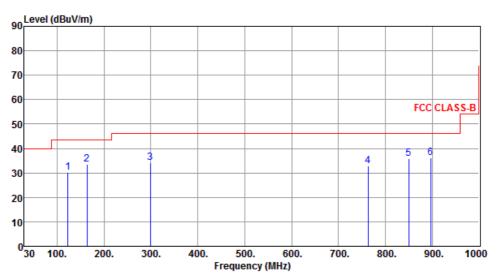
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|--------|-------------------|--------|--------|---------------|--------|--------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 123.12 | 30.30 | 43.50 | -13.20 | 48.74 | -18.44 | Peak | | |
| 2 | 163.76 | 33.48 | 43.50 | -10.02 | 49.99 | -16.51 | Peak | | |
| 3 | 298.69 | 34.35 | 46.00 | -11.65 | 49.96 | -15.61 | Peak | | |
| 4 | 763.32 | 32.99 | 46.00 | -13.01 | 39.47 | -6.48 | Peak | | |
| 5 | 849.65 | 35.78 | 46.00 | -10.22 | 41.20 | -5.42 | Peak | | |
| 6 | 896.21 | 36.17 | 46.00 | -9.83 | 41.12 | -4.95 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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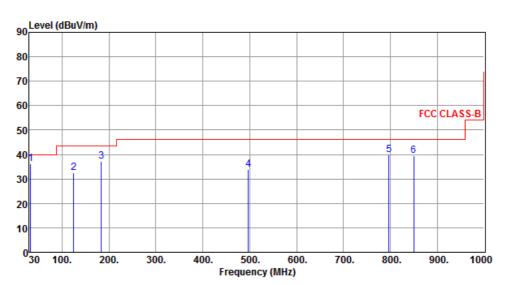


Transmitter Radiated Unwanted Emissions (Below 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 5230

Operating Mode 3 Polarization V

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | | Remark | ANT High | Turn Table |
|---|--------|----------------|--------|--------|---------------|--------|--------|-------------|---------------|
| | MHz | dBuV/m | dBuV/n | n dB | dBuV | dB | | cm | deg |
| 1 | 32.91 | 36.04 | 40.00 | -3.96 | 52.91 | -16.87 | Peak | | |
| 2 | 125.06 | 32.59 | 43.50 | -10.91 | 50.84 | -18.25 | Peak | | |
| 3 | 183.26 | 37.03 | 43.50 | -6.47 | 55.48 | -18.45 | Peak | | |
| 4 | 497.54 | 33.76 | 46.00 | -12.24 | 44.74 | -10.98 | Peak | | |
| 5 | 797.27 | 39.88 | 46.00 | -6.12 | 45.99 | -6.11 | Peak | | |
| 6 | 849.65 | 39.68 | 46.00 | -6.32 | 45.10 | -5.42 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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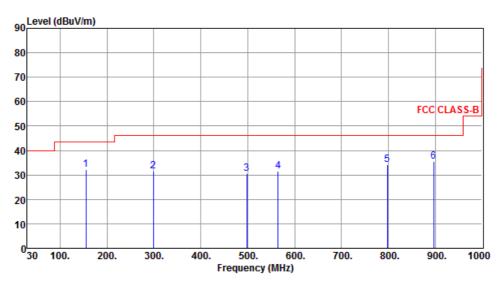


Transmitter Radiated Unwanted Emissions (Below 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 5230

Operating Mode 3 Polarization H

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | | Remark | ANT High | Turn Table |
|---|--------|----------------|--------|--------|---------------|--------|--------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 155.13 | 32.35 | 43.50 | -11.15 | 48.68 | -16.33 | Peak | | |
| 2 | 298.69 | 31.59 | 46.00 | -14.41 | 47.20 | -15.61 | Peak | | |
| 3 | 498.51 | 30.71 | 46.00 | -15.29 | 41.68 | -10.97 | Peak | | |
| 4 | 564.47 | 31.56 | 46.00 | -14.44 | 41.39 | -9.83 | Peak | | |
| 5 | 798.24 | 34.06 | 46.00 | -11.94 | 40.16 | -6.10 | Peak | | |
| 6 | 896.21 | 35.62 | 46.00 | -10.38 | 40.57 | -4.95 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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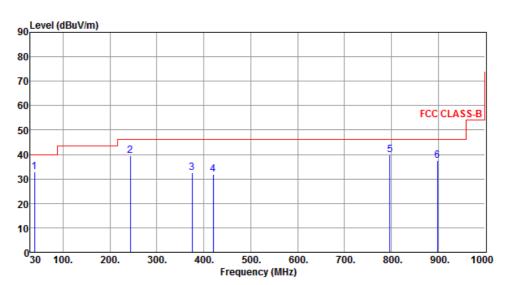


Transmitter Radiated Unwanted Emissions (Below 1GHz)

Modulation Mode HT 40 Test Freq. (MHz) 5230

Operating Mode 4 Polarization V

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | | Remark | ANT High | Turn Table |
|---|--------|----------------|--------|--------|---------------|--------|--------|-------------|---------------|
| | MHz | dBuV/m | dBuV/n | n dB | dBuV | dB | | cm | deg |
| 1 | 38.73 | 33.01 | 40.00 | -6.99 | 49.50 | -16.49 | Peak | | |
| 2 | 243.40 | 39.62 | 46.00 | -6.38 | 57.06 | -17.44 | Peak | | |
| 3 | 375.32 | 32.52 | 46.00 | -13.48 | 46.22 | -13.70 | Peak | | |
| 4 | 419.94 | 31.78 | 46.00 | -14.22 | 44.32 | -12.54 | Peak | | |
| 5 | 797.27 | 39.82 | 46.00 | -6.18 | 45.93 | -6.11 | Peak | | |
| 6 | 898.15 | 37.64 | 46.00 | -8.36 | 42.58 | -4.94 | Peak | | |

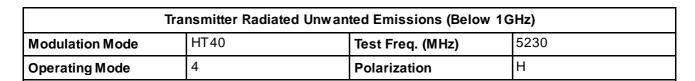
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

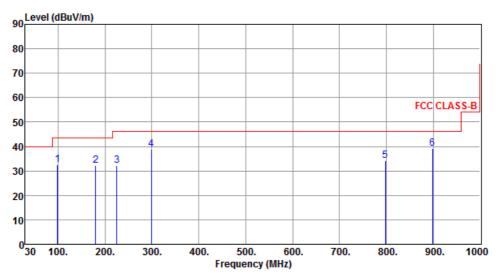
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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Report No.: FR362203AN





| | Freq. MHz | Emission level dBuV/m | | Ū | SA reading dBuV | | Remark | ANT High cm | Turn Table deg |
|---|--------------|-----------------------------|-------|--------|-----------------------|--------|--------|-------------------|----------------------|
| 1 | 98 87 | 32.45 | 13 50 | _11_05 | 53 87 | -21.42 | Peak | | |
| 2 | | 32.43 | | | | -18.23 | Peak | | |
| 2 | 100.55 | 32.09 | 45.50 | -11.41 | 50.52 | -10.23 | reak | | |
| 3 | 224.97 | 32.20 | 46.00 | -13.80 | 50.55 | -18.35 | Peak | | |
| 4 | 298.69 | 38.86 | 46.00 | -7.14 | 54.47 | -15.61 | Peak | | |
| 5 | 798.24 | 34.37 | 46.00 | -11.63 | 40.47 | -6.10 | Peak | | |
| 6 | 898.15 | 39.22 | 46.00 | -6.78 | 44.16 | -4.94 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

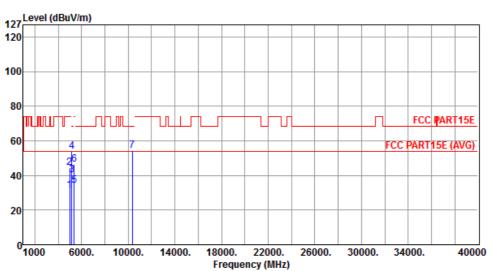
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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FCC Test Report No.: FR362203AN

3.6.7 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 11a

| Transmitter Radiated Unwanted Emissions (Above 1GHz) | | | | | | | | |
|--|--|--|--|--|--|--|--|--|
| Modulation Mode 11a Test Freq. (MHz) 5180 | | | | | | | | |
| Operating Mode 1 Polarization V | | | | | | | | |



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 31.60 | 54.00 | -22.40 | 26.64 | 4.96 | Average | | |
| 2 | 4988.00 | 44.74 | 74.00 | -29.26 | 39.78 | 4.96 | Peak | | |
| 3 | 5150.00 | 40.19 | 54.00 | -13.81 | 34.94 | 5.25 | Average | | |
| 4 | 5150.00 | 53.91 | 74.00 | -20.09 | 48.66 | 5.25 | Peak | | |
| 5 | 5350.00 | 34.07 | 54.00 | -19.93 | 28.66 | 5.41 | Average | | |
| 6 | 5350.00 | 46.26 | 74.00 | -27.74 | 40.85 | 5.41 | Peak | | |
| 7 | 10360.00 | 54.56 | 68.30 | -13.74 | 41.01 | 13.55 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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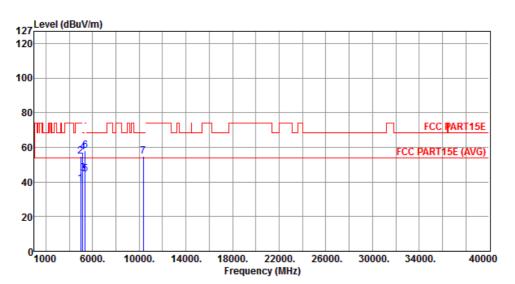


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5180

Operating Mode 1 Polarization H

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|----------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 38.98 | 54.00 | -15.02 | 34.02 | 4.96 | Average | | |
| 2 | 4988.00 | 54.75 | 74.00 | -19.25 | 49.79 | 4.96 | Peak | | |
| 3 | 5150.00 | 44.79 | 54.00 | -9.21 | 39.54 | 5.25 | Average | | |
| 4 | 5150.00 | 57.29 | 74.00 | -16.71 | 52.04 | 5.25 | Peak | | |
| 5 | 5350.00 | 44.60 | 54.00 | -9.40 | 39.19 | 5.41 | Average | | |
| 6 | 5350.00 | 58.12 | 74.00 | -15.88 | 52.71 | 5.41 | Peak | | |
| 7 | 10360.00 | 54.84 | 68.30 | -13.46 | 41.29 | 13.55 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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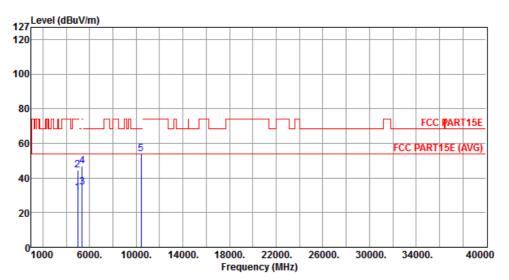


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5200

Operating Mode 1 Polarization V

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|----------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 31.54 | 54.00 | -22.46 | 26.58 | 4.96 | Average | | |
| 2 | 4988.00 | 44.61 | 74.00 | -29.39 | 39.65 | 4.96 | Peak | | |
| 3 | 5350.00 | 34.63 | 54.00 | -19.37 | 29.22 | 5.41 | Average | | |
| 4 | 5350.00 | 46.71 | 74.00 | -27.29 | 41.30 | 5.41 | Peak | | |
| 5 | 10400.00 | 54.12 | 68.30 | -14.18 | 40.49 | 13.63 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peakmeasurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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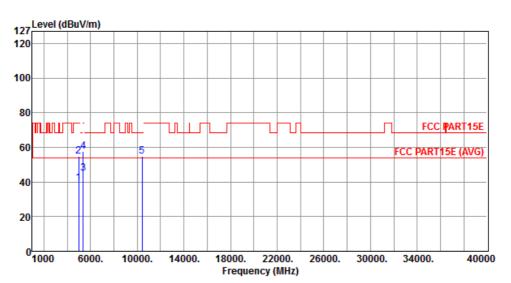


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5200

Operating Mode 1 Polarization H

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 39.18 | 54.00 | -14.82 | 34.22 | 4.96 | Average | | |
| 2 | 4988.00 | 54.89 | 74.00 | -19.11 | 49.93 | 4.96 | Peak | | |
| 3 | 5350.00 | 45.03 | 54.00 | -8.97 | 39.62 | 5.41 | Average | | |
| 4 | 5350.00 | 57.44 | 74.00 | -16.56 | 52.03 | 5.41 | Peak | | |
| 5 | 10/00 00 | 5/1 73 | 68 30 | -13 57 | 41 10 | 13 63 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

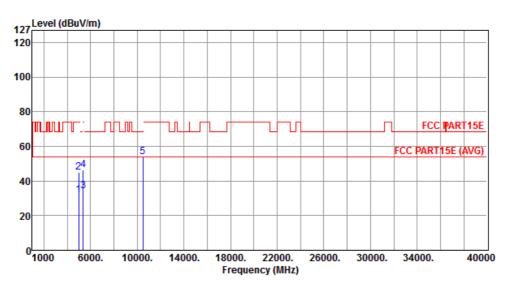
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Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5240

Operating Mode 1 Polarization V

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 31.73 | 54.00 | -22.27 | 26.77 | 4.96 | Average | | |
| 2 | 4988.00 | 44.86 | 74.00 | -29.14 | 39.90 | 4.96 | Peak | | |
| 3 | 5350.00 | 34.27 | 54.00 | -19.73 | 28.86 | 5.41 | Average | | |
| 4 | 5350.00 | 46.33 | 74.00 | -27.67 | 40.92 | 5.41 | Peak | | |
| 5 | 10480 00 | 54 03 | 68 30 | -14 27 | 40 23 | 13 80 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peakmeasurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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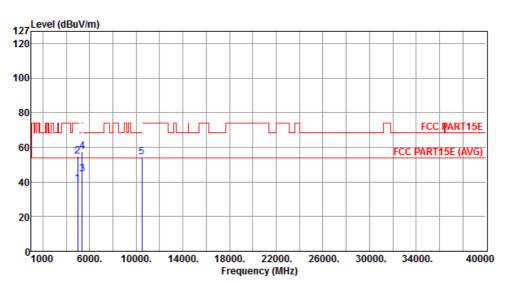


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5240

Operating Mode 1 Polarization H

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|-----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 39.11 | 54.00 | -14.89 | 34.15 | 4.96 | Average | | |
| 2 | 4988.00 | 54.82 | 74.00 | -19.18 | 49.86 | 4.96 | Peak | | |
| 3 | 5350.00 | 44.30 | 54.00 | -9.70 | 38.89 | 5.41 | Average | | |
| 4 | 5350.00 | 57.57 | 74.00 | -16.43 | 52.16 | 5.41 | Peak | | |
| 5 | 10/180 00 | 5/ //1 | 68 30 | -13 89 | 49 61 | 13 80 | Poak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peakmeasurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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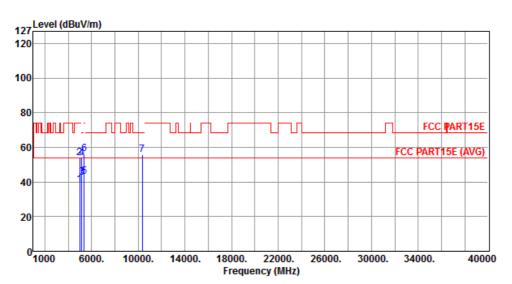


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5180

Operating Mode 2 Polarization V

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|----------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 38.56 | 54.00 | -15.44 | 33.60 | 4.96 | Average | | |
| 2 | 4988.00 | 53.70 | 74.00 | -20.30 | 48.74 | 4.96 | Peak | | |
| 3 | 5150.00 | 42.83 | 54.00 | -11.17 | 37.58 | 5.25 | Average | | |
| 4 | 5150.00 | 53.81 | 74.00 | -20.19 | 48.56 | 5.25 | Peak | | |
| 5 | 5350.00 | 43.00 | 54.00 | -11.00 | 37.59 | 5.41 | Average | | |
| 6 | 5350.00 | 56.05 | 74.00 | -17.95 | 50.64 | 5.41 | Peak | | |
| 7 | 10360.00 | 55.58 | 68.30 | -12.72 | 42.03 | 13.55 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peakmeasurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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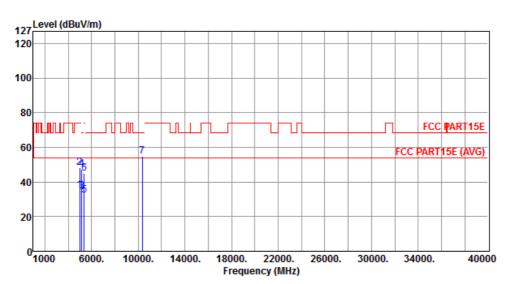


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5180

Operating Mode 2 Polarization H

Report No.: FR362203AN



| | Freq. | Emission | Limit | Margin | SA | Factor | Remark | ANT | Turn |
|---|----------|----------|--------|--------|---------|--------|---------|------|-------|
| | | level | | | reading | | | High | Table |
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| | | | | | | | | | |
| 1 | 4988.00 | 35.02 | 54.00 | -18.98 | 30.06 | 4.96 | Average | | |
| 2 | 4988.00 | 48.30 | 74.00 | -25.70 | 43.34 | 4.96 | Peak | | |
| 3 | 5150.00 | 34.74 | 54.00 | -19.26 | 29.49 | 5.25 | Average | | |
| 4 | 5150.00 | 47.27 | 74.00 | -26.73 | 42.02 | 5.25 | Peak | | |
| 5 | 5350.00 | 32.30 | 54.00 | -21.70 | 26.89 | 5.41 | Average | | |
| 6 | 5350.00 | 44.96 | 74.00 | -29.04 | 39.55 | 5.41 | Peak | | |
| 7 | 10360.00 | 54.65 | 68.30 | -13.65 | 41.10 | 13.55 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peakmeasurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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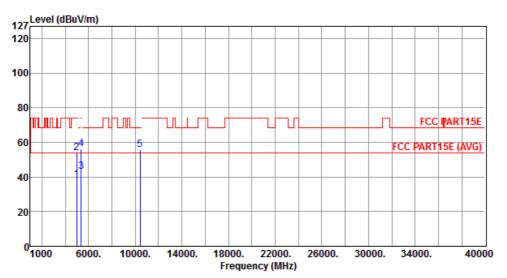


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5200

Operating Mode 2 Polarization V

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|----------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 38.63 | 54.00 | -15.37 | 33.67 | 4.96 | Average | | |
| 2 | 4988.00 | 53.84 | 74.00 | -20.16 | 48.88 | 4.96 | Peak | | |
| 3 | 5350.00 | 43.11 | 54.00 | -10.89 | 37.70 | 5.41 | Average | | |
| 4 | 5350.00 | 56.23 | 74.00 | -17.77 | 50.82 | 5.41 | Peak | | |
| 5 | 10400.00 | 55.63 | 68.30 | -12 - 67 | 42.00 | 13.63 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peakmeasurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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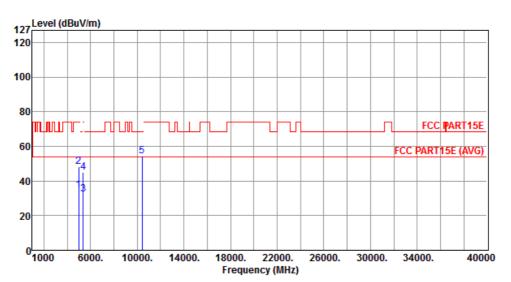


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5200

Operating Mode 2 Polarization H

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 34.86 | 54.00 | -19.14 | 29.90 | 4.96 | Average | | |
| 2 | 4988.00 | 48.22 | 74.00 | -25.78 | 43.26 | 4.96 | Peak | | |
| 3 | 5350.00 | 32.48 | 54.00 | -21.52 | 27.07 | 5.41 | Average | | |
| 4 | 5350.00 | 45.09 | 74.00 | -28.91 | 39.68 | 5.41 | Peak | | |
| 5 | 10400 00 | 54 29 | 68 30 | -14 01 | 40 66 | 13 63 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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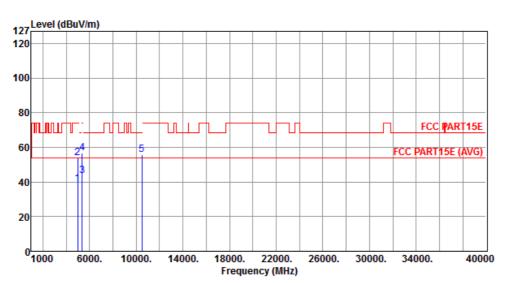


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5240

Operating Mode 2 Polarization V

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|-----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 38.89 | 54.00 | -15.11 | 33.93 | 4.96 | Average | | |
| 2 | 4988.00 | 53.91 | 74.00 | -20.09 | 48.95 | 4.96 | Peak | | |
| 3 | 5350.00 | 43.56 | 54.00 | -10.44 | 38.15 | 5.41 | Average | | |
| 4 | 5350.00 | 56.64 | 74.00 | -17.36 | 51.23 | 5.41 | Peak | | |
| 5 | 10/180 00 | 55 71 | 68 30 | -12 59 | A1 91 | 13 80 | Poak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peakmeasurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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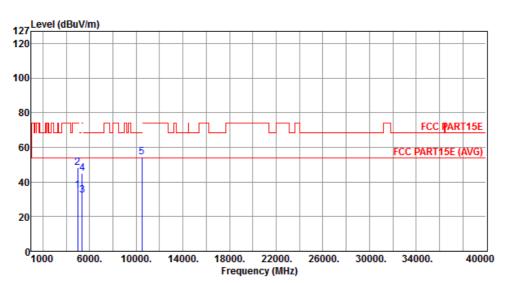


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5240

Operating Mode 2 Polarization H

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 35.19 | 54.00 | -18.81 | 30.23 | 4.96 | Average | | |
| 2 | 4988.00 | 48.41 | 74.00 | -25.59 | 43.45 | 4.96 | Peak | | |
| 3 | 5350.00 | 32.46 | 54.00 | -21.54 | 27.05 | 5.41 | Average | | |
| 4 | 5350.00 | 45.19 | 74.00 | -28.81 | 39.78 | 5.41 | Peak | | |
| 5 | 10480 00 | 54 38 | 68 30 | -13 92 | 40 58 | 13 80 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peakmeasurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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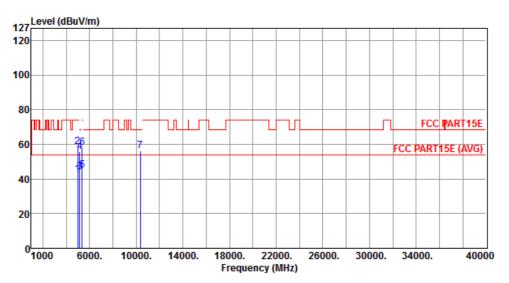


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5180

Operating Mode 3 Polarization V

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|----------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 42.75 | 54.00 | -11.25 | 37.79 | 4.96 | Average | | |
| 2 | 4988.00 | 58.69 | 74.00 | -15.31 | 53.73 | 4.96 | Peak | | |
| 3 | 5150.00 | 44.28 | 54.00 | -9.72 | 39.03 | 5.25 | Average | | |
| 4 | 5150.00 | 55.90 | 74.00 | -18.10 | 50.65 | 5.25 | Peak | | |
| 5 | 5350.00 | 44.88 | 54.00 | -9.12 | 39.47 | 5.41 | Average | | |
| 6 | 5350.00 | 57.96 | 74.00 | -16.04 | 52.55 | 5.41 | Peak | | |
| 7 | 10360.00 | 56.41 | 68.30 | -11.89 | 42.86 | 13.55 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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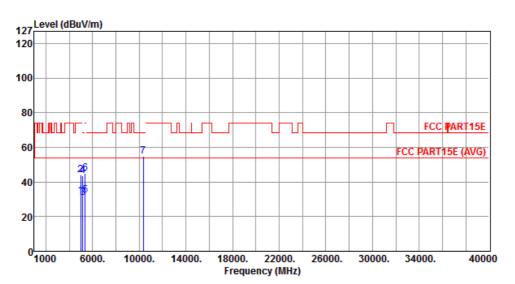


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5180

Operating Mode 3 Polarization H

Report No.: FR362203AN



| | Freq. | Emission | Limit | Margin | SA | Factor | Remark | ANT | Turn |
|---|----------|----------|--------|--------|---------|--------|---------|------|-------|
| | | level | | | reading | | | High | Table |
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 31 7/ | 54.00 | -22 26 | 26.78 | 4.96 | Average | | |
| _ | | | | | | | _ | | |
| 2 | 4988.00 | 43.86 | 74.00 | -30.14 | 38.90 | 4.96 | Peak | | |
| 3 | 5150.00 | 30.99 | 54.00 | -23.01 | 25.74 | 5.25 | Average | | |
| 4 | 5150.00 | 43.74 | 74.00 | -30.26 | 38.49 | 5.25 | Peak | | |
| 5 | 5350.00 | 32.35 | 54.00 | -21.65 | 26.94 | 5.41 | Average | | |
| 6 | 5350.00 | 44.84 | 74.00 | -29.16 | 39.43 | 5.41 | Peak | | |
| 7 | 10360.00 | 54.71 | 68.30 | -13.59 | 41.16 | 13.55 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peakmeasurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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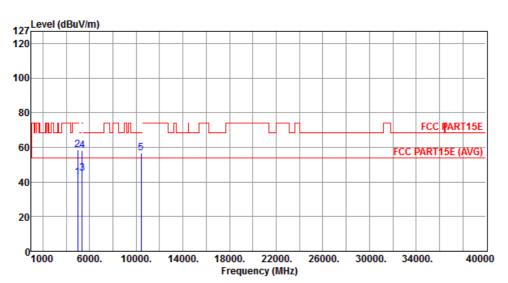


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5200

Operating Mode 3 Polarization V

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 42.81 | 54.00 | -11.19 | 37.85 | 4.96 | Average | | |
| 2 | 4988.00 | 58.75 | 74.00 | -15.25 | 53.79 | 4.96 | Peak | | |
| 3 | 5350.00 | 44.95 | 54.00 | -9.05 | 39.54 | 5.41 | Average | | |
| 4 | 5350.00 | 58.08 | 74.00 | -15.92 | 52.67 | 5.41 | Peak | | |
| 5 | 10400 00 | 56 51 | 68 30 | -11 79 | 42 88 | 13 63 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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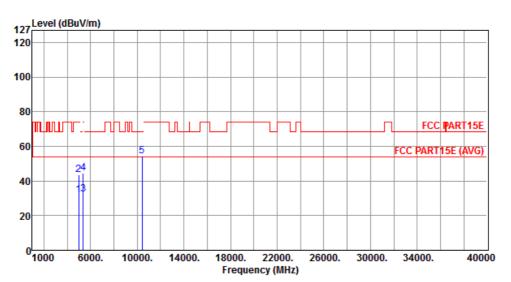


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5200

Operating Mode 3 Polarization H

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 31.85 | 54.00 | -22.15 | 26.89 | 4.96 | Average | | |
| 2 | 4988.00 | 43.79 | 74.00 | -30.21 | 38.83 | 4.96 | Peak | | |
| 3 | 5350.00 | 32.44 | 54.00 | -21.56 | 27.03 | 5.41 | Average | | |
| 4 | 5350.00 | 44.64 | 74.00 | -29.36 | 39.23 | 5.41 | Peak | | |
| 5 | 10400 00 | 54 55 | 68 30 | -13 75 | 40 92 | 13 63 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peakmeasurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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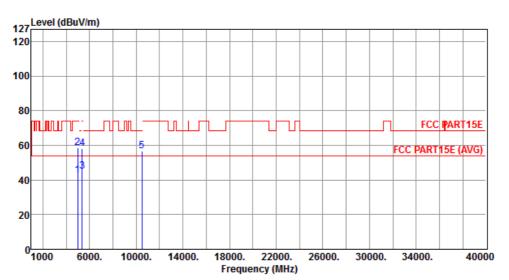


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5240

Operating Mode 3 Polarization V

Report No.: FR362203AN



| | Freq. I | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 42.88 | 54.00 | -11.12 | 37.92 | 4.96 | Average | | |
| 2 | 4988.00 | 58.81 | 74.00 | -15.19 | 53.85 | 4.96 | Peak | | |
| 3 | 5350.00 | 45.21 | 54.00 | -8.79 | 39.80 | 5.41 | Average | | |
| 4 | 5350.00 | 58.17 | 74.00 | -15.83 | 52.76 | 5.41 | Peak | | |
| 5 | 10480.00 | 56.66 | 68.30 | -11.64 | 42.86 | 13.80 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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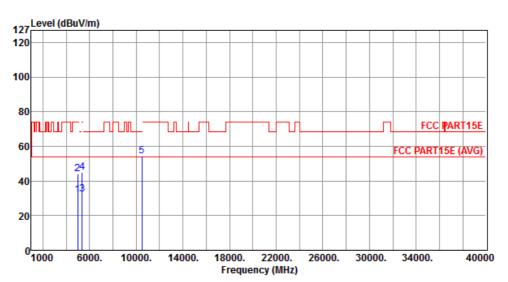


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5240

Operating Mode 3 Polarization H

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 31.86 | 54.00 | -22.14 | 26.90 | 4.96 | Average | | |
| 2 | 4988.00 | 43.95 | 74.00 | -30.05 | 38.99 | 4.96 | Peak | | |
| 3 | 5350.00 | 32.47 | 54.00 | -21.53 | 27.06 | 5.41 | Average | | |
| 4 | 5350.00 | 45.19 | 74.00 | -28.81 | 39.78 | 5.41 | Peak | | |
| 5 | 10480 00 | 54 49 | 68 30 | -13 81 | 40 69 | 13 80 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peakmeasurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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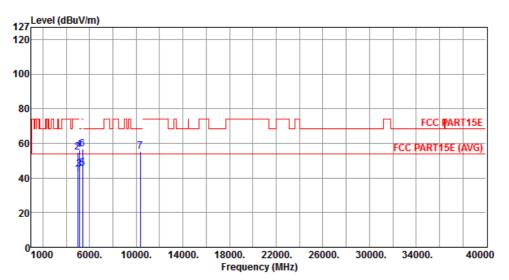


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5180

Operating Mode 4 Polarization V

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|----------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 42.13 | 54.00 | -11.87 | 37.17 | 4.96 | Average | | |
| 2 | 4988.00 | 55.01 | 74.00 | -18.99 | 50.05 | 4.96 | Peak | | |
| 3 | 5120.00 | 45.01 | 54.00 | -8.99 | 39.81 | 5.20 | Average | | |
| 4 | 5120.00 | 56.14 | 74.00 | -17.86 | 50.94 | 5.20 | Peak | | |
| 5 | 5400.00 | 45.34 | 54.00 | -8.66 | 39.92 | 5.42 | Average | | |
| 6 | 5400.00 | 56.83 | 74.00 | -17.17 | 51.41 | 5.42 | Peak | | |
| 7 | 10360.00 | 55.14 | 68.30 | -13.16 | 41.59 | 13.55 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peakmeasurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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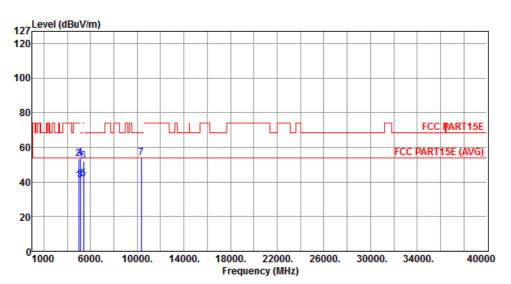


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5180

Operating Mode 4 Polarization H

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|----------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 40.81 | 54.00 | -13.19 | 35.85 | 4.96 | Average | | |
| 2 | 4988.00 | 53.56 | 74.00 | -20.44 | 48.60 | 4.96 | Peak | | |
| 3 | 5120.00 | 41.38 | 54.00 | -12.62 | 36.18 | 5.20 | Average | | |
| 4 | 5120.00 | 54.02 | 74.00 | -19.98 | 48.82 | 5.20 | Peak | | |
| 5 | 5400.00 | 41.79 | 54.00 | -12.21 | 36.37 | 5.42 | Average | | |
| 6 | 5400.00 | 52.12 | 74.00 | -21.88 | 46.70 | 5.42 | Peak | | |
| 7 | 10360.00 | 54.12 | 68.30 | -14.18 | 40.57 | 13.55 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peakmeasurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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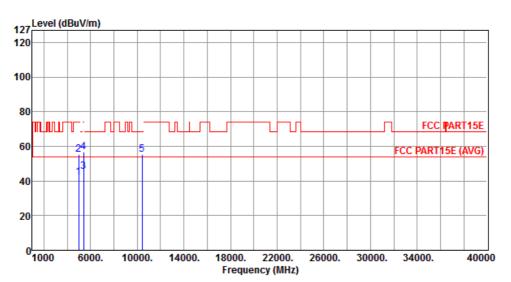


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5200

Operating Mode 4 Polarization V

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 42.01 | 54.00 | -11.99 | 37.05 | 4.96 | Average | | |
| 2 | 4988.00 | 55.12 | 74.00 | -18.88 | 50.16 | 4.96 | Peak | | |
| 3 | 5400.00 | 45.45 | 54.00 | -8.55 | 40.03 | 5.42 | Average | | |
| 4 | 5400.00 | 56.91 | 74.00 | -17.09 | 51.49 | 5.42 | Peak | | |
| 5 | 10400 00 | 55 29 | 68 30 | -13 01 | 41 66 | 13 63 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peakmeasurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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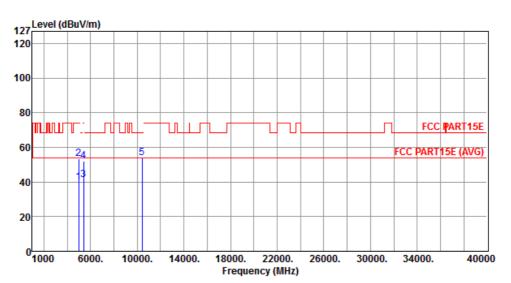


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5200

Operating Mode 4 Polarization H

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|---------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 40.03 | 54.00 | -13.97 | 35.07 | 4.96 | Average | | |
| 2 | 4988.00 | 53.34 | 74.00 | -20.66 | 48.38 | 4.96 | Peak | | |
| 3 | 5400.00 | 41.43 | 54.00 | -12.57 | 36.01 | 5.42 | Average | | |
| 4 | 5400.00 | 51.94 | 74.00 | -22.06 | 46.52 | 5.42 | Peak | | |
| 5 | 10/00 00 | 54 09 | 68 30 | -1/1 21 | 10 16 | 13 63 | Poak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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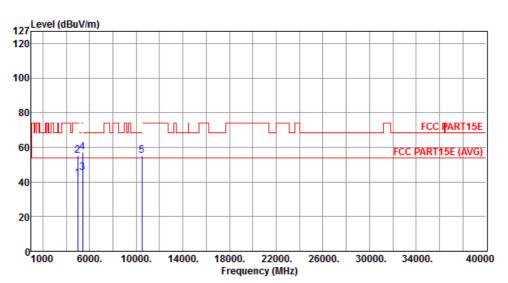


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5240

Operating Mode 4 Polarization V

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|-----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 42.28 | 54.00 | -11.72 | 37.32 | 4.96 | Average | | |
| 2 | 4988.00 | 55.17 | 74.00 | -18.83 | 50.21 | 4.96 | Peak | | |
| 3 | 5400.00 | 45.49 | 54.00 | -8.51 | 40.07 | 5.42 | Average | | |
| 4 | 5400.00 | 56.95 | 74.00 | -17.05 | 51.53 | 5.42 | Peak | | |
| 5 | 10/180 00 | 55 3/1 | 68 30 | -12 96 | 41 54 | 13 80 | Poak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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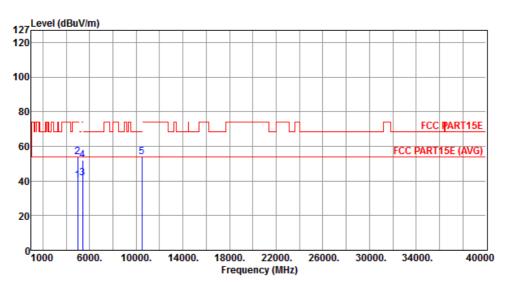


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5240

Operating Mode 4 Polarization H

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 40.21 | 54.00 | -13.79 | 35.25 | 4.96 | Average | | |
| 2 | 4988.00 | 53.69 | 74.00 | -20.31 | 48.73 | 4.96 | Peak | | |
| 3 | 5400.00 | 41.61 | 54.00 | -12.39 | 36.19 | 5.42 | Average | | |
| 4 | 5400.00 | 52.03 | 74.00 | -21.97 | 46.61 | 5.42 | Peak | | |
| 5 | 10480 00 | 53 94 | 68 30 | -14 36 | 40 14 | 13 80 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

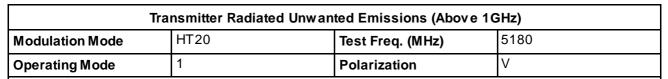
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

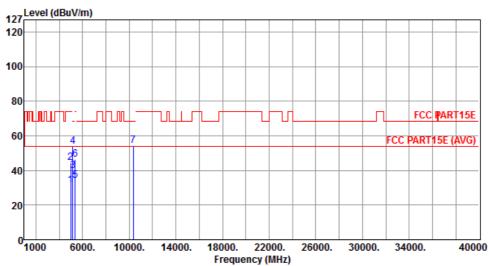
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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FCC Test Report No.: FR362203AN

3.6.8 Transmitter Radiated Unwanted Emissions (Above 1GHz) for HT20





| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|----------------|---------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4000 00 | 31.55 | <u></u> | 22.45 | 26. 50 | 4.00 | A | | |
| 1 | 4988.00 | 31.55 | 54.00 | -22.45 | 26.59 | 4.96 | Average | | |
| 2 | 4988.00 | 44.62 | 74.00 | -29.38 | 39.66 | 4.96 | Peak | | |
| 3 | 5150.00 | 40.02 | 54.00 | -13.98 | 34.77 | 5.25 | Average | | |
| 4 | 5150.00 | 53.75 | 74.00 | -20.25 | 48.50 | 5.25 | Peak | | |
| 5 | 5350.00 | 34.22 | 54.00 | -19.78 | 28.81 | 5.41 | Average | | |
| 6 | 5350.00 | 46.45 | 74.00 | -27.55 | 41.04 | 5.41 | Peak | | |
| 7 | 10360.00 | 54.38 | 68.30 | -13.92 | 40.83 | 13.55 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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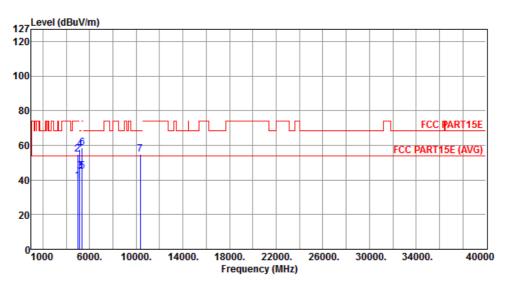


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5180

Operating Mode 1 Polarization H

Report No.: FR362203AN



| | Freq. | Emission | Limit | Margin | SA | Factor | Remark | ANT | Turn |
|---|----------|----------|--------|--------|---------|--------|---------|------|-------|
| | | level | ID 144 | | reading | ID. | | High | Table |
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| | | | | | | | | | |
| 1 | 4988.00 | 39.21 | 54.00 | -14.79 | 34.25 | 4.96 | Average | | |
| 2 | 4988.00 | 54.86 | 74.00 | -19.14 | 49.90 | 4.96 | Peak | | |
| 3 | 5150.00 | 44.86 | 54.00 | -9.14 | 39.61 | 5.25 | Average | | |
| 4 | 5150.00 | 57.46 | 74.00 | -16.54 | 52.21 | 5.25 | Peak | | |
| 5 | 5350.00 | 44.82 | 54.00 | -9.18 | 39.41 | 5.41 | Average | | |
| 6 | 5350.00 | 58.36 | 74.00 | -15.64 | 52.95 | 5.41 | Peak | | |
| 7 | 10360.00 | 54.93 | 68.30 | -13.37 | 41.38 | 13.55 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peakmeasurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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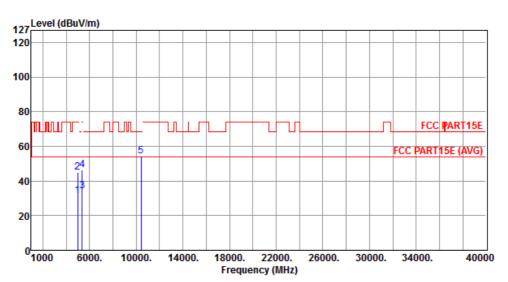


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5200

Operating Mode 1 Polarization V

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 31.61 | 54.00 | -22.39 | 26.65 | 4.96 | Average | | |
| 2 | 4988.00 | 44.80 | 74.00 | -29.20 | 39.84 | 4.96 | Peak | | |
| 3 | 5350.00 | 34.21 | 54.00 | -19.79 | 28.80 | 5.41 | Average | | |
| 4 | 5350.00 | 46.48 | 74.00 | -27.52 | 41.07 | 5.41 | Peak | | |
| 5 | 10400 00 | 54 33 | 68 30 | -13 97 | 40 70 | 13 63 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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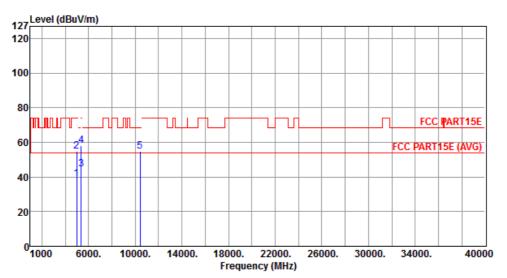


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5200

Operating Mode 1 Polarization H

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 39.12 | 54.00 | -14.88 | 34.16 | 4.96 | Average | | |
| 2 | 4988.00 | 54.88 | 74.00 | -19.12 | 49.92 | 4.96 | Peak | | |
| 3 | 5350.00 | 44.75 | 54.00 | -9.25 | 39.34 | 5.41 | Average | | |
| 4 | 5350.00 | 58.31 | 74.00 | -15.69 | 52.90 | 5.41 | Peak | | |
| 5 | 10/00 00 | 54.96 | 68 30 | 13 3/ | /11 33 | 13 63 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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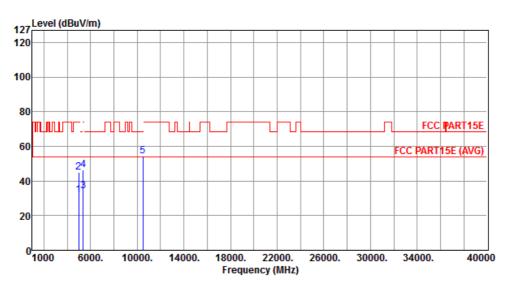


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5240

Operating Mode 1 Polarization V

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|-------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 31.72 | 54.00 | -22.28 | 26.76 | 4.96 | Average | | |
| 2 | 4988.00 | 44.86 | 74.00 | -29.14 | 39.90 | 4.96 | Peak | | |
| 3 | 5350.00 | 34.22 | 54.00 | -19.78 | 28.81 | 5.41 | Average | | |
| 4 | 5350.00 | 46.41 | 74.00 | -27.59 | 41.00 | 5.41 | Peak | | |
| 5 | 10480 00 | 54 29 | 68 30 | -14 01 | 40 49 | 13 80 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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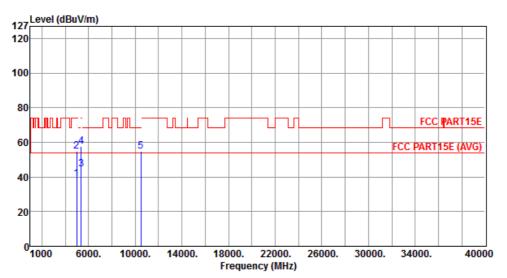


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5240

Operating Mode 1 Polarization H

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 38.85 | 54.00 | -15.15 | 33.89 | 4.96 | Average | | |
| 2 | 4988.00 | 54.62 | 74.00 | -19.38 | 49.66 | 4.96 | Peak | | |
| 3 | 5350.00 | 44.46 | 54.00 | -9.54 | 39.05 | 5.41 | Average | | |
| 4 | 5350.00 | 57.54 | 74.00 | -16.46 | 52.13 | 5.41 | Peak | | |
| 5 | 10480 00 | 54 73 | 68 30 | -13 57 | 40 93 | 13 80 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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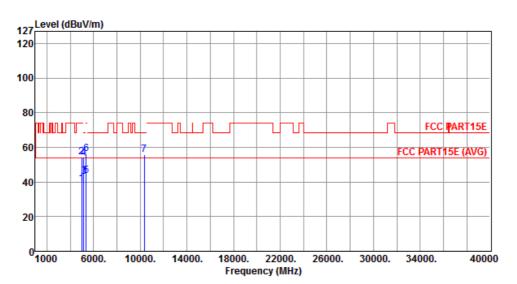


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5180

Operating Mode 2 Polarization V

Report No.: FR362203AN



| | Freq. | Emission | Limit | Margin | SA | Factor | Remark | ANT | Turn |
|---|----------|----------|--------|--------|---------|--------|---------|------|-------|
| | | level | | | reading | | | High | Table |
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| | | | | | | | | | |
| 1 | 4988.00 | 39.12 | 54.00 | -14.88 | 34.16 | 4.96 | Average | | |
| 2 | 4988.00 | 54.25 | 74.00 | -19.75 | 49.29 | 4.96 | Peak | | |
| 3 | 5150.00 | 42.95 | 54.00 | -11.05 | 37.70 | 5.25 | Average | | |
| 4 | 5150.00 | 53.97 | 74.00 | -20.03 | 48.72 | 5.25 | Peak | | |
| 5 | 5350.00 | 43.39 | 54.00 | -10.61 | 37.98 | 5.41 | Average | | |
| 6 | 5350.00 | 56.29 | 74.00 | -17.71 | 50.88 | 5.41 | Peak | | |
| 7 | 10360.00 | 55.71 | 68.30 | -12.59 | 42.16 | 13.55 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peakmeasurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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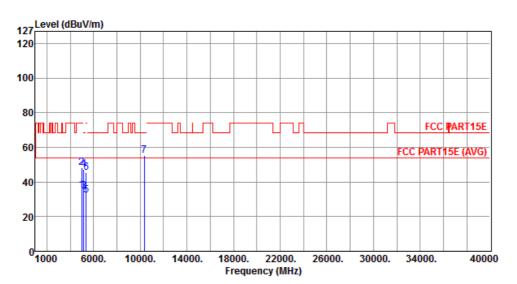


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5180

Operating Mode 2 Polarization H

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|----------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 35.21 | 54.00 | -18.79 | 30.25 | 4.96 | Average | | |
| 2 | 4988.00 | 48.39 | 74.00 | -25.61 | 43.43 | 4.96 | Peak | | |
| 3 | 5150.00 | 34.85 | 54.00 | -19.15 | 29.60 | 5.25 | Average | | |
| 4 | 5150.00 | 47.41 | 74.00 | -26.59 | 42.16 | 5.25 | Peak | | |
| 5 | 5350.00 | 32.49 | 54.00 | -21.51 | 27.08 | 5.41 | Average | | |
| 6 | 5350.00 | 45.36 | 74.00 | -28.64 | 39.95 | 5.41 | Peak | | |
| 7 | 10360.00 | 55.18 | 68.30 | -13.12 | 41.63 | 13.55 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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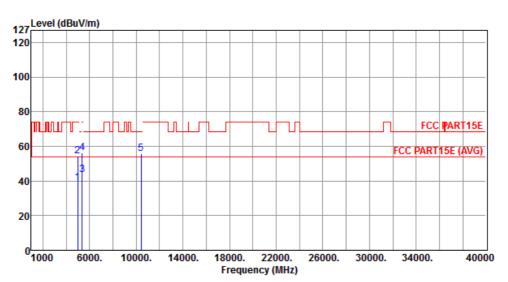


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5200

Operating Mode 2 Polarization V

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 38.71 | 54.00 | -15.29 | 33.75 | 4.96 | Average | | |
| 2 | 4988.00 | 54.49 | 74.00 | -19.51 | 49.53 | 4.96 | Peak | | |
| 3 | 5350.00 | 43.49 | 54.00 | -10.51 | 38.08 | 5.41 | Average | | |
| 4 | 5350.00 | 56.37 | 74.00 | -17.63 | 50.96 | 5.41 | Peak | | |
| 5 | 10400 00 | 55 75 | 68 30 | -12 55 | 42 12 | 13 63 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peakmeasurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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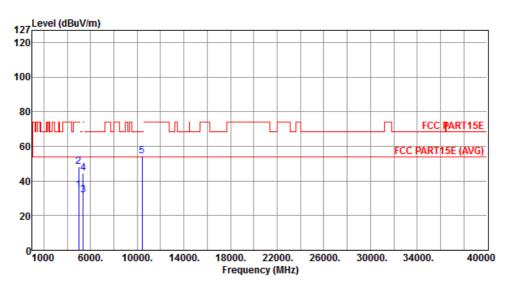


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5200

Operating Mode 2 Polarization H

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 34.84 | 54.00 | -19.16 | 29.88 | 4.96 | Average | | |
| 2 | 4988.00 | 48.12 | 74.00 | -25.88 | 43.16 | 4.96 | Peak | | |
| 3 | 5350.00 | 31.89 | 54.00 | -22.11 | 26.48 | 5.41 | Average | | |
| 4 | 5350.00 | 44.68 | 74.00 | -29.32 | 39.27 | 5.41 | Peak | | |
| 5 | 10400 00 | 54 51 | 68 30 | -13 79 | 40 88 | 13 63 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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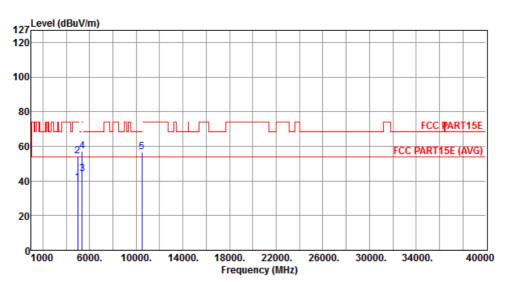


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5240

Operating Mode 2 Polarization V

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 39.12 | 54.00 | -14.88 | 34.16 | 4.96 | Average | | |
| 2 | 4988.00 | 54.43 | 74.00 | -19.57 | 49.47 | 4.96 | Peak | | |
| 3 | 5350.00 | 44.12 | 54.00 | -9.88 | 38.71 | 5.41 | Average | | |
| 4 | 5350.00 | 57.19 | 74.00 | -16.81 | 51.78 | 5.41 | Peak | | |
| 5 | 10480 00 | 56 63 | 68 30 | -11 67 | 42 83 | 13 80 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peakmeasurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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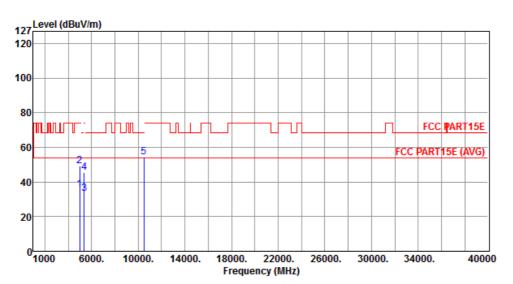


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5240

Operating Mode 2 Polarization H

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | | Remark | ANT High | Turn Table |
|---|----------|----------------|--------|--------|---------------|-------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 35.75 | 54.00 | -18.25 | 30.79 | 4.96 | Average | | |
| 2 | 4988.00 | 49.03 | 74.00 | -24.97 | 44.07 | 4.96 | Peak | | |
| 3 | 5350.00 | 33.12 | 54.00 | -20.88 | 27.71 | 5.41 | Average | | |
| 4 | 5350.00 | 45.61 | 74.00 | -28.39 | 40.20 | 5.41 | Peak | | |
| 5 | 10480.00 | 54.39 | 68.30 | -13.91 | 40.59 | 13.80 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

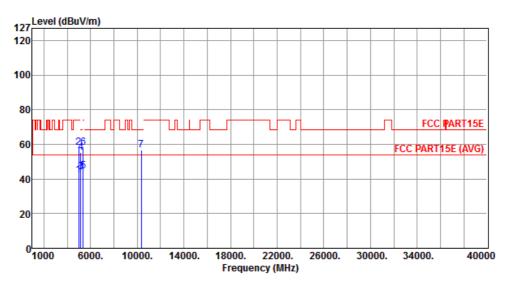
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peakmeasurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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| Transmitter Radiated Unwanted Emissions (Above 1GHz) | | | | | | | | |
|--|------|------------------|------|--|--|--|--|--|
| Modulation Mode | HT20 | Test Freq. (MHz) | 5180 | | | | | |
| Operating Mode | 3 | Polarization | V | | | | | |



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|----------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 42.23 | 54.00 | -11.77 | 37.27 | 4.96 | Average | | |
| 2 | 4988.00 | 58.14 | 74.00 | -15.86 | 53.18 | 4.96 | Peak | | |
| 3 | 5150.00 | 44.03 | 54.00 | -9.97 | 38.78 | 5.25 | Average | | |
| 4 | 5150.00 | 55.34 | 74.00 | -18.66 | 50.09 | 5.25 | Peak | | |
| 5 | 5350.00 | 44.58 | 54.00 | -9.42 | 39.17 | 5.41 | Average | | |
| 6 | 5350.00 | 58.03 | 74.00 | -15.97 | 52.62 | 5.41 | Peak | | |
| 7 | 10360.00 | 56.54 | 68.30 | -11.76 | 42.99 | 13.55 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peakmeasurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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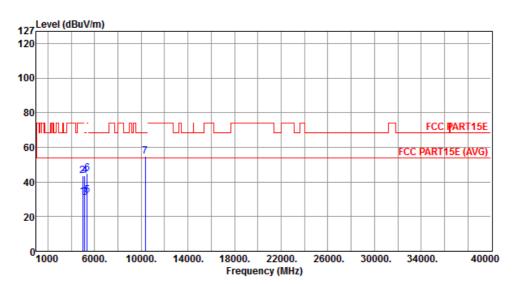


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5180

Operating Mode 3 Polarization H

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 31.37 | 54.00 | -22.63 | 26.41 | 4.96 | Average | | |
| 2 | 4988.00 | 43.42 | 74.00 | -30.58 | 38.46 | 4.96 | Peak | | |
| 3 | 5150.00 | 30.85 | 54.00 | -23.15 | 25.60 | 5.25 | Average | | |
| 4 | 5150.00 | 43.42 | 74.00 | -30.58 | 38.17 | 5.25 | Peak | | |
| 5 | 5350.00 | 32.46 | 54.00 | -21.54 | 27.05 | 5.41 | Average | | |
| 6 | 5350.00 | 44.95 | 74.00 | -29.05 | 39.54 | 5.41 | Peak | | |
| 7 | 10360.00 | 54.99 | 68.30 | -13.31 | 41.44 | 13.55 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peakmeasurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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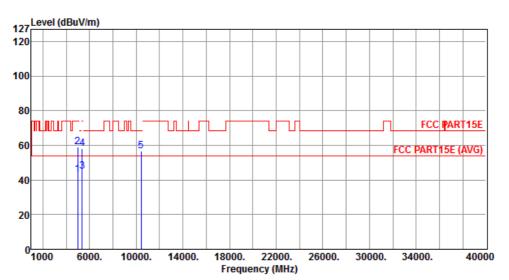


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5200

Operating Mode 3 Polarization V

Report No.: FR362203AN



| | Freq. I | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 42.91 | 54.00 | -11.09 | 37.95 | 4.96 | Average | | |
| 2 | 4988.00 | 59.03 | 74.00 | -14.97 | 54.07 | 4.96 | Peak | | |
| 3 | 5350.00 | 45.12 | 54.00 | -8.88 | 39.71 | 5.41 | Average | | |
| 4 | 5350.00 | 58.21 | 74.00 | -15.79 | 52.80 | 5.41 | Peak | | |
| 5 | 10400.00 | 56.81 | 68.30 | -11.49 | 43.18 | 13.63 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peakmeasurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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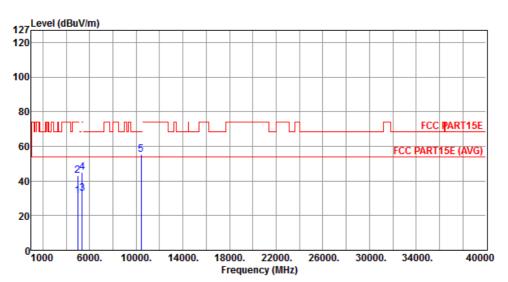


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5200

Operating Mode 3 Polarization H

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 31.51 | 54.00 | -22.49 | 26.55 | 4.96 | Average | | |
| 2 | 4988.00 | 42.99 | 74.00 | -31.01 | 38.03 | 4.96 | Peak | | |
| 3 | 5350.00 | 32.78 | 54.00 | -21.22 | 27.37 | 5.41 | Average | | |
| 4 | 5350.00 | 45.14 | 74.00 | -28.86 | 39.73 | 5.41 | Peak | | |
| 5 | 10400 00 | 55 12 | 68 30 | -13 18 | 41 49 | 13 63 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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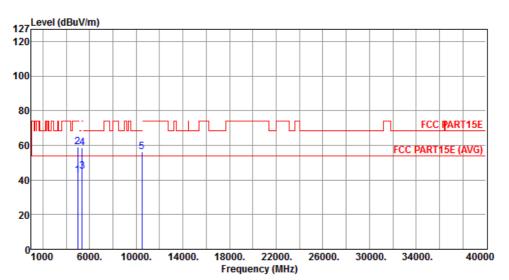


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5240

Operating Mode 3 Polarization V

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 42.88 | 54.00 | -11.12 | 37.92 | 4.96 | Average | | |
| 2 | 4988.00 | 59.17 | 74.00 | -14.83 | 54.21 | 4.96 | Peak | | |
| 3 | 5350.00 | 45.21 | 54.00 | -8.79 | 39.80 | 5.41 | Average | | |
| 4 | 5350.00 | 58.59 | 74.00 | -15.41 | 53.18 | 5.41 | Peak | | |
| 5 | 10480.00 | 56.25 | 68.30 | -12.05 | 42.45 | 13.80 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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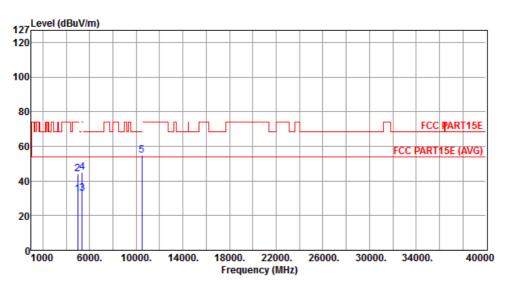


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5240

Operating Mode 3 Polarization H

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 32.11 | 54.00 | -21.89 | 27.15 | 4.96 | Average | | |
| 2 | 4988.00 | 44.10 | 74.00 | -29.90 | 39.14 | 4.96 | Peak | | |
| 3 | 5350.00 | 32.84 | 54.00 | -21.16 | 27.43 | 5.41 | Average | | |
| 4 | 5350.00 | 44.99 | 74.00 | -29.01 | 39.58 | 5.41 | Peak | | |
| 5 | 10480 00 | 54 66 | 68 30 | -13 64 | 40 86 | 13 80 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peakmeasurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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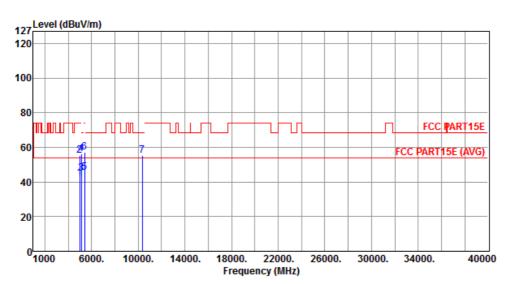


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5180

Operating Mode 4 Polarization V

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|----------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 42.23 | 54.00 | -11.77 | 37.27 | 4.96 | Average | | |
| 2 | 4988.00 | 55.17 | 74.00 | -18.83 | 50.21 | 4.96 | Peak | | |
| 3 | 5120.00 | 44.89 | 54.00 | -9.11 | 39.69 | 5.20 | Average | | |
| 4 | 5120.00 | 56.03 | 74.00 | -17.97 | 50.83 | 5.20 | Peak | | |
| 5 | 5400.00 | 45.45 | 54.00 | -8.55 | 40.03 | 5.42 | Average | | |
| 6 | 5400.00 | 56.99 | 74.00 | -17.01 | 51.57 | 5.42 | Peak | | |
| 7 | 10360.00 | 55.41 | 68.30 | -12.89 | 41.86 | 13.55 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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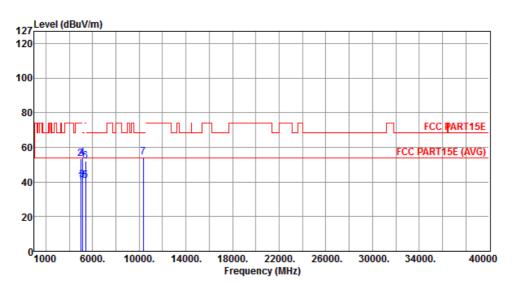


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5180

Operating Mode 4 Polarization H

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 40.22 | 54.00 | -13.78 | 35.26 | 4.96 | Average | | |
| 2 | 4988.00 | 53.48 | 74.00 | -20.52 | 48.52 | 4.96 | Peak | | |
| 3 | 5120.00 | 41.22 | 54.00 | -12.78 | 36.02 | 5.20 | Average | | |
| 4 | 5120.00 | 53.74 | 74.00 | -20.26 | 48.54 | 5.20 | Peak | | |
| 5 | 5400.00 | 40.55 | 54.00 | -13.45 | 35.13 | 5.42 | Average | | |
| 6 | 5400.00 | 51.89 | 74.00 | -22.11 | 46.47 | 5.42 | Peak | | |
| 7 | 10360.00 | 54.16 | 68.30 | -14.14 | 40.61 | 13.55 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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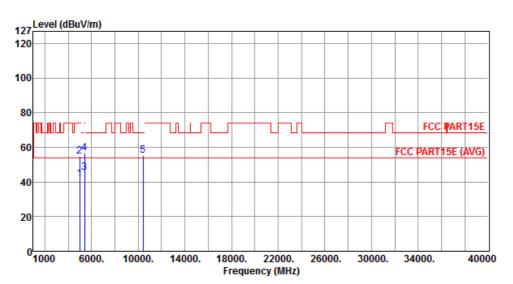


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5200

Operating Mode 4 Polarization V

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | | Remark | ANT High | Turn Table |
|---|----------|----------------|--------|--------|---------------|-------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 41.89 | 54.00 | -12.11 | 36.93 | 4.96 | Average | | |
| 2 | 4988.00 | 54.81 | 74.00 | -19.19 | 49.85 | 4.96 | Peak | | |
| 3 | 5400.00 | 45.47 | 54.00 | -8.53 | 40.05 | 5.42 | Average | | |
| 4 | 5400.00 | 56.75 | 74.00 | -17.25 | 51.33 | 5.42 | Peak | | |
| 5 | 10400.00 | 55.52 | 68.30 | -12.78 | 41.89 | 13.63 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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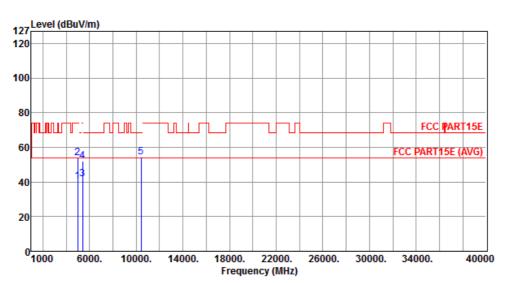


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5200

Operating Mode 4 Polarization H

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 40.36 | 54.00 | -13.64 | 35.40 | 4.96 | Average | | |
| 2 | 4988.00 | 53.81 | 74.00 | -20.19 | 48.85 | 4.96 | Peak | | |
| 3 | 5400.00 | 41.49 | 54.00 | -12.51 | 36.07 | 5.42 | Average | | |
| 4 | 5400.00 | 51.91 | 74.00 | -22.09 | 46.49 | 5.42 | Peak | | |
| 5 | 10400 00 | 54 29 | 68 30 | -14 01 | 40 66 | 13 63 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peakmeasurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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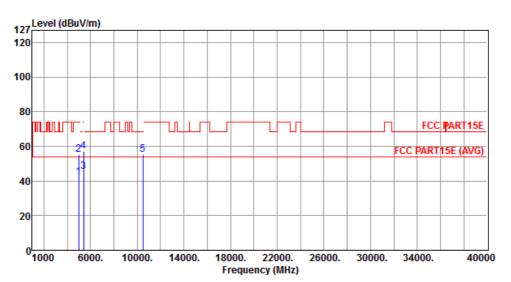


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5240

Operating Mode 4 Polarization V

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 42.28 | 54.00 | -11.72 | 37.32 | 4.96 | Average | | |
| 2 | 4988.00 | 55.41 | 74.00 | -18.59 | 50.45 | 4.96 | Peak | | |
| 3 | 5400.00 | 45.49 | 54.00 | -8.51 | 40.07 | 5.42 | Average | | |
| 4 | 5400.00 | 56.96 | 74.00 | -17.04 | 51.54 | 5.42 | Peak | | |
| 5 | 10480 00 | 55 31 | 68 30 | -12 99 | 41 51 | 13 80 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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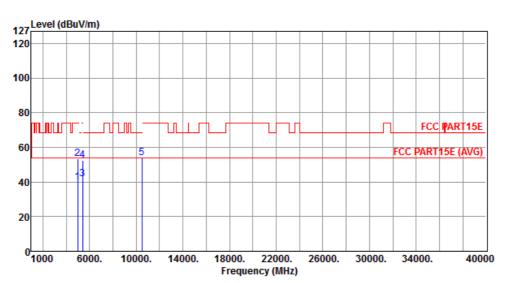


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5240

Operating Mode 4 Polarization H

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|-----------|-------------------|--------|---------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 40.03 | 54.00 | -13.97 | 35.07 | 4.96 | Average | | |
| 2 | 4988.00 | 53.41 | 74.00 | -20.59 | 48.45 | 4.96 | Peak | | |
| 3 | 5400.00 | 41.86 | 54.00 | -12.14 | 36.44 | 5.42 | Average | | |
| 4 | 5400.00 | 52.28 | 74.00 | -21.72 | 46.86 | 5.42 | Peak | | |
| 5 | 10/180 00 | 5/1 /03 | 68 30 | -1/1 27 | 40 23 | 13 80 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

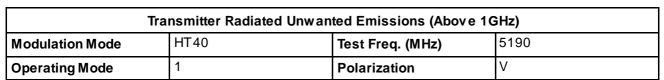
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

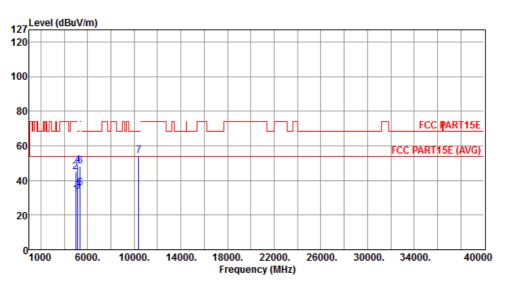
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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FCC Test Report No.: FR362203AN

3.6.9 Transmitter Radiated Unwanted Emissions (Above 1GHz) for HT40





| | Freq. MHz | Emission level dBuV/m | Limit dBuV/m | Ŭ | SA reading dBuV | Factor dB | Remark | ANT High cm | Turn Table deg |
|---|--------------|-----------------------------|-----------------|--------|-----------------------|--------------|---------|-------------------|----------------------|
| | | | | | | | | | |
| 1 | 4988.00 | 31.75 | 54.00 | -22.25 | 26.79 | 4.96 | Average | | |
| 2 | 4988.00 | 44.82 | 74.00 | -29.18 | 39.86 | 4.96 | Peak | | |
| 3 | 5150.00 | 33.90 | 54.00 | -20.10 | 28.65 | 5.25 | Average | | |
| 4 | 5150.00 | 48.56 | 74.00 | -25.44 | 43.31 | 5.25 | Peak | | |
| 5 | 5350.00 | 35.56 | 54.00 | -18.44 | 30.15 | 5.41 | Average | | |
| 6 | 5350.00 | 48.23 | 74.00 | -25.77 | 42.82 | 5.41 | Peak | | |
| 7 | 10380.00 | 54.29 | 68.30 | -14.01 | 40.70 | 13.59 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peakmeasurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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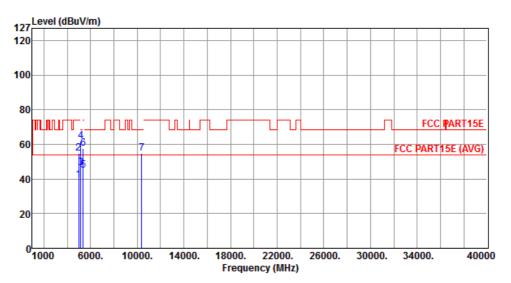


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 5190

Operating Mode 1 Polarization H

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|----------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 39.21 | 54.00 | -14.79 | 34.25 | 4.96 | Average | | |
| 2 | 4988.00 | 54.86 | 74.00 | -19.14 | 49.90 | 4.96 | Peak | | |
| 3 | 5150.00 | 46.21 | 54.00 | -7.79 | 40.96 | 5.25 | Average | | |
| 4 | 5150.00 | 61.91 | 74.00 | -12.09 | 56.66 | 5.25 | Peak | | |
| 5 | 5350.00 | 45.09 | 54.00 | -8.91 | 39.68 | 5.41 | Average | | |
| 6 | 5350.00 | 57.80 | 74.00 | -16.20 | 52.39 | 5.41 | Peak | | |
| 7 | 10380.00 | 54.93 | 68.30 | -13.37 | 41.34 | 13.59 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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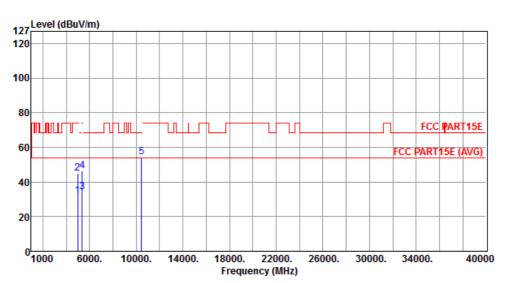


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 5230

Operating Mode 1 Polarization V

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 31.81 | 54.00 | -22.19 | 26.85 | 4.96 | Average | | |
| 2 | 4988.00 | 44.89 | 74.00 | -29.11 | 39.93 | 4.96 | Peak | | |
| 3 | 5350.00 | 34.28 | 54.00 | -19.72 | 28.87 | 5.41 | Average | | |
| 4 | 5350.00 | 46.49 | 74.00 | -27.51 | 41.08 | 5.41 | Peak | | |
| 5 | 10460 00 | 54 37 | 68 30 | -13 93 | 40 62 | 13 75 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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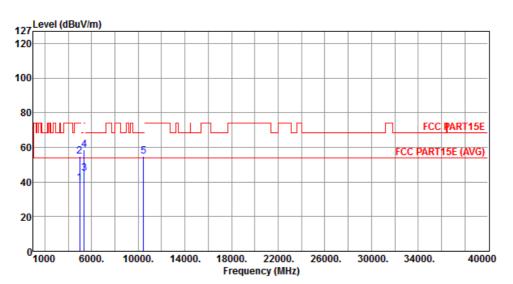


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 5230

Operating Mode 1 Polarization H

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 39.17 | 54.00 | -14.83 | 34.21 | 4.96 | Average | | |
| 2 | 4988.00 | 54.88 | 74.00 | -19.12 | 49.92 | 4.96 | Peak | | |
| 3 | 5350.00 | 45.11 | 54.00 | -8.89 | 39.70 | 5.41 | Average | | |
| 4 | 5350.00 | 58.59 | 74.00 | -15.41 | 53.18 | 5.41 | Peak | | |
| 5 | 10/60 00 | 5/1 9/1 | 68 30 | 13 36 | /1 10 | 13 75 | Dook | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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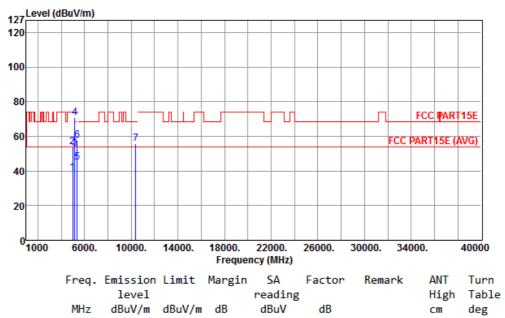


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 5190

Operating Mode 2 Polarization V

Report No.: FR362203AN



| | MHz | dBuV/m | dBuV/m | ı dB | dBuV | dB | | cm | deg | |
|---|----------|--------|--------|--------|-------|-------|---------|----|-----|---|
| 1 | 4988.00 | 38.69 | 54.00 | -15.31 | 33.73 | 4.96 | Average | | | |
| 2 | 4988.00 | 54.12 | 74.00 | -19.88 | 49.16 | 4.96 | Peak | | | |
| 3 | 5150.00 | 52.82 | 54.00 | -1.18 | 47.57 | 5.25 | Average | | | Τ |
| 4 | 5150.00 | 70.66 | 74.00 | -3.34 | 65.41 | 5.25 | Peak | | | Τ |
| 5 | 5350.00 | 45.00 | 54.00 | -9.00 | 39.59 | 5.41 | Average | | | |
| 6 | 5350.00 | 57.64 | 74.00 | -16.36 | 52.23 | 5.41 | Peak | | | |
| 7 | 10380.00 | 55.69 | 68.30 | -12.61 | 42.10 | 13.59 | Peak | | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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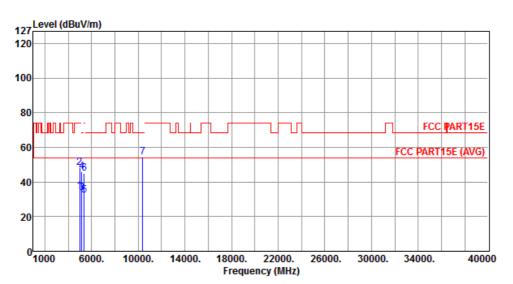


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 5190

Operating Mode 2 Polarization H

Report No.: FR362203AN



| | Freq. | Emission | Limit | Margin | SA | Factor | Remark | ANT | Turn |
|---|----------|----------|--------|--------|---------|--------|---------|------|-------|
| | | level | | | reading | | | High | Table |
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| | | | | | | | | | |
| 1 | 4988.00 | 34.91 | 54.00 | -19.09 | 29.95 | 4.96 | Average | | |
| 2 | 4988.00 | 48.11 | 74.00 | -25.89 | 43.15 | 4.96 | Peak | | |
| 3 | 5150.00 | 33.68 | 54.00 | -20.32 | 28.43 | 5.25 | Average | | |
| 4 | 5150.00 | 46.12 | 74.00 | -27.88 | 40.87 | 5.25 | Peak | | |
| 5 | 5350.00 | 32.12 | 54.00 | -21.88 | 26.71 | 5.41 | Average | | |
| 6 | 5350.00 | 45.19 | 74.00 | -28.81 | 39.78 | 5.41 | Peak | | |
| 7 | 10380.00 | 54.51 | 68.30 | -13.79 | 40.92 | 13.59 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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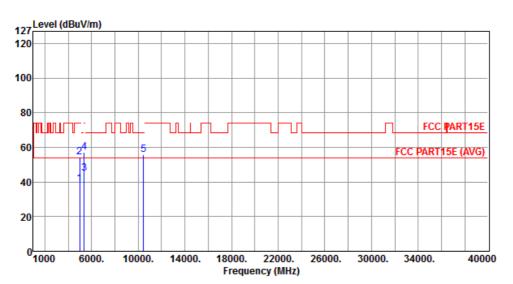


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 5230

Operating Mode 2 Polarization V

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|----------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 38.81 | 54.00 | -15.19 | 33.85 | 4.96 | Average | | |
| 2 | 4988.00 | 54.39 | 74.00 | -19.61 | 49.43 | 4.96 | Peak | | |
| 3 | 5350.00 | 45.13 | 54.00 | -8.87 | 39.72 | 5.41 | Average | | |
| 4 | 5350.00 | 57.29 | 74.00 | -16.71 | 51.88 | 5.41 | Peak | | |
| 5 | 10460.00 | 55.71 | 68.30 | -12.59 | 41.96 | 13.75 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peakmeasurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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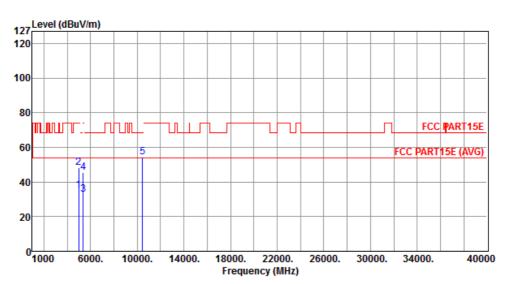


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 5230

Operating Mode 2 Polarization H

Report No.: FR362203AN



| | Freq. I | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 35.29 | 54.00 | -18.71 | 30.33 | 4.96 | Average | | |
| 2 | 4988.00 | 48.47 | 74.00 | -25.53 | 43.51 | 4.96 | Peak | | |
| 3 | 5350.00 | 32.75 | 54.00 | -21.25 | 27.34 | 5.41 | Average | | |
| 4 | 5350.00 | 45.31 | 74.00 | -28.69 | 39.90 | 5.41 | Peak | | |
| 5 | 10/60 00 | 5/1 51 | 68 30 | 13 79 | 10 76 | 13 75 | Poak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peakmeasurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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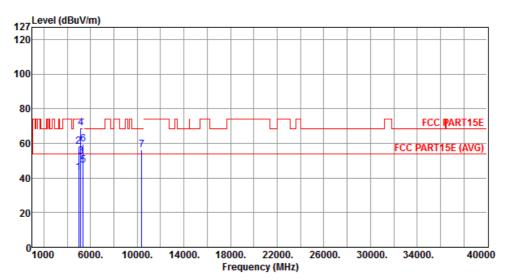


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 5190

Operating Mode 3 Polarization V

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|----------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 43.31 | 54.00 | -10.69 | 38.35 | 4.96 | Average | | |
| 2 | 4988.00 | 58.20 | 74.00 | -15.80 | 53.24 | 4.96 | Peak | | |
| 3 | 5150.00 | 52.69 | 54.00 | -1.31 | 47.44 | 5.25 | Average | | |
| 4 | 5150.00 | 68.68 | 74.00 | -5.32 | 63.43 | 5.25 | Peak | | |
| 5 | 5350.00 | 47.38 | 54.00 | -6.62 | 41.97 | 5.41 | Average | | |
| 6 | 5350.00 | 59.62 | 74.00 | -14.38 | 54.21 | 5.41 | Peak | | |
| 7 | 10380.00 | 56.11 | 68.30 | -12.19 | 42.52 | 13.59 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peakmeasurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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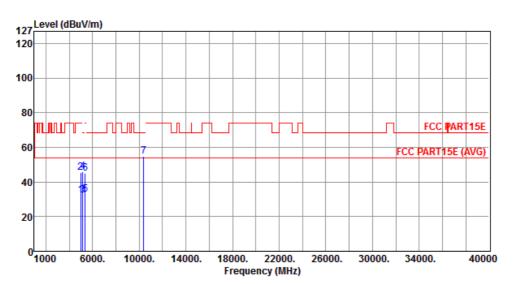


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 5190

Operating Mode 3 Polarization H

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 32.27 | 54.00 | -21.73 | 27.31 | 4.96 | Average | | |
| 2 | 4988.00 | 45.53 | 74.00 | -28.47 | 40.57 | 4.96 | Peak | | |
| 3 | 5150.00 | 32.47 | 54.00 | -21.53 | 27.22 | 5.25 | Average | | |
| 4 | 5150.00 | 45.89 | 74.00 | -28.11 | 40.64 | 5.25 | Peak | | |
| 5 | 5350.00 | 32.88 | 54.00 | -21.12 | 27.47 | 5.41 | Average | | |
| 6 | 5350.00 | 44.94 | 74.00 | -29.06 | 39.53 | 5.41 | Peak | | |
| 7 | 10380.00 | 54.62 | 68.30 | -13.68 | 41.03 | 13.59 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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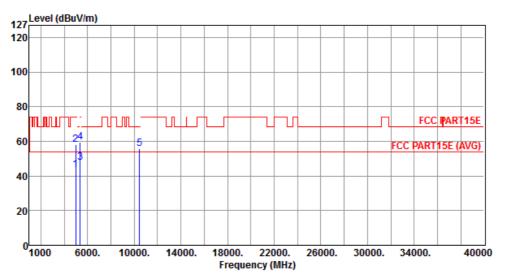


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 5230

Operating Mode 3 Polarization V

Report No.: FR362203AN



| | Freq. 1 | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 43.56 | 54.00 | -10.44 | 38.60 | 4.96 | Average | | |
| 2 | 4988.00 | 58.23 | 74.00 | -15.77 | 53.27 | 4.96 | Peak | | |
| 3 | 5350.00 | 47.68 | 54.00 | -6.32 | 42.27 | 5.41 | Average | | |
| 4 | 5350.00 | 59.71 | 74.00 | -14.29 | 54.30 | 5.41 | Peak | | |
| 5 | 10460.00 | 55.91 | 68.30 | -12.39 | 42.16 | 13.75 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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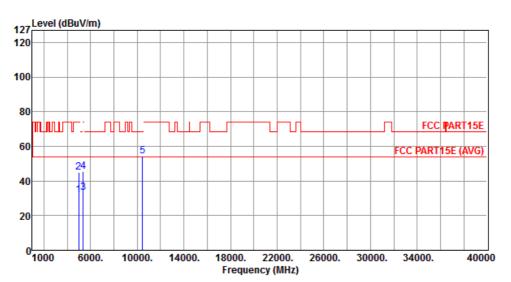


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 5230

Operating Mode 3 Polarization H

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 32.02 | 54.00 | -21.98 | 27.06 | 4.96 | Average | | |
| 2 | 4988.00 | 45.22 | 74.00 | -28.78 | 40.26 | 4.96 | Peak | | |
| 3 | 5350.00 | 33.12 | 54.00 | -20.88 | 27.71 | 5.41 | Average | | |
| 4 | 5350.00 | 45.28 | 74.00 | -28.72 | 39.87 | 5.41 | Peak | | |
| 5 | 10460 00 | 54 41 | 68 30 | -13 89 | 40 66 | 13 75 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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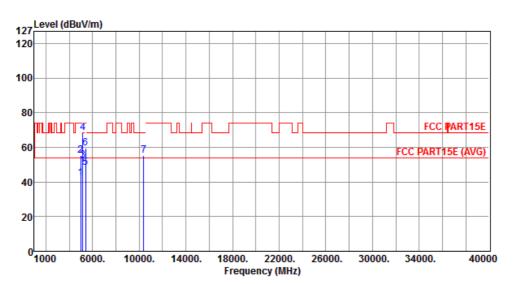


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT 40 Test Freq. (MHz) 5190

Operating Mode 4 Polarization V

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|----------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 42.32 | 54.00 | -11.68 | 37.36 | 4.96 | Average | | |
| 2 | 4988.00 | 55.14 | 74.00 | -18.86 | 50.18 | 4.96 | Peak | | |
| 3 | 5150.00 | 52.52 | 54.00 | -1.48 | 47.27 | 5.25 | Average | | |
| 4 | 5150.00 | 68.48 | 74.00 | -5.52 | 63.23 | 5.25 | Peak | | |
| 5 | 5400.00 | 48.46 | 54.00 | -5.54 | 43.04 | 5.42 | Average | | |
| 6 | 5400.00 | 59.45 | 74.00 | -14.55 | 54.03 | 5.42 | Peak | | |
| 7 | 10380.00 | 55.41 | 68.30 | -12.89 | 41.82 | 13.59 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peakmeasurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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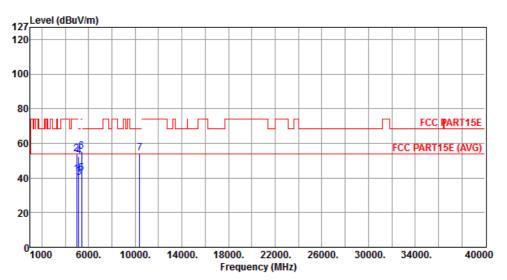


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 5190

Operating Mode 4 Polarization H

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|----------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 42.15 | 54.00 | -11.85 | 37.19 | 4.96 | Average | | |
| 2 | 4988.00 | 53.67 | 74.00 | -20.33 | 48.71 | 4.96 | Peak | | |
| 3 | 5150.00 | 40.52 | 54.00 | -13.48 | 35.27 | 5.25 | Average | | |
| 4 | 5150.00 | 52.40 | 74.00 | -21.60 | 47.15 | 5.25 | Peak | | |
| 5 | 5400.00 | 42.50 | 54.00 | -11.50 | 37.08 | 5.42 | Average | | |
| 6 | 5400.00 | 55.44 | 74.00 | -18.56 | 50.02 | 5.42 | Peak | | |
| 7 | 10380.00 | 54.22 | 68.30 | -14.08 | 40.63 | 13.59 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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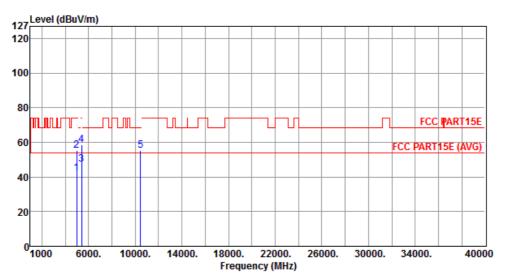


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 5230

Operating Mode 4 Polarization V

Report No.: FR362203AN



| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
|---|----------|-------------------|--------|--------|---------------|--------|---------|-------------|---------------|
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| 1 | 4988.00 | 42.27 | 54.00 | -11.73 | 37.31 | 4.96 | Average | | |
| 2 | 4988.00 | 55.12 | 74.00 | -18.88 | 50.16 | 4.96 | Peak | | |
| 3 | 5400.00 | 47.23 | 54.00 | -6.77 | 41.81 | 5.42 | Average | | |
| 4 | 5400.00 | 58.66 | 74.00 | -15.34 | 53.24 | 5.42 | Peak | | |
| 5 | 10460 00 | 55 33 | 68 30 | -12 97 | 41 58 | 13 75 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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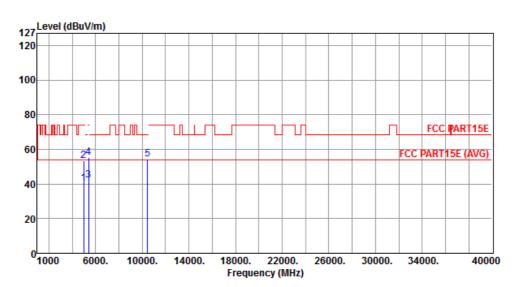


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 5230

Operating Mode 4 Polarization H

Report No.: FR362203AN



| | Freq. | Emission | Limit | Margin | SA | Factor | Kemark | ANI | lurn |
|---|----------|----------|--------|--------|---------|--------|---------|------|-------|
| | | level | | | reading | | | High | Table |
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB | | cm | deg |
| | | | | | | | | | |
| 1 | 4988.00 | 40.29 | 54.00 | -13.71 | 35.33 | 4.96 | Average | | |
| 2 | 4988.00 | 53.63 | 74.00 | -20.37 | 48.67 | 4.96 | Peak | | |
| 3 | 5400.00 | 42.12 | 54.00 | -11.88 | 36.70 | 5.42 | Average | | |
| 4 | 5400.00 | 55.29 | 74.00 | -18.71 | 49.87 | 5.42 | Peak | | |
| 5 | 10460.00 | 54.30 | 68.30 | -14.00 | 40.55 | 13.75 | Peak | | |

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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3.7 Frequency Stability

3.7.1 Frequency Stability Limit

| | Frequency Stability Limit | | | | | | | | | |
|-----|--|--|--|--|--|--|--|--|--|--|
| UN | II Devices | | | | | | | | | |
| × | In-band emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual. | | | | | | | | | |
| LE. | -LAN Devices | | | | | | | | | |
| × | N/A | | | | | | | | | |
| IEE | EE Std. 802.11n-2009 | | | | | | | | | |
| × | The transmitter center frequency tolerance shall be ±20 ppm maximum for the 5 GHz band and ±25 ppm maximum for the 2.4 GHz band. | | | | | | | | | |

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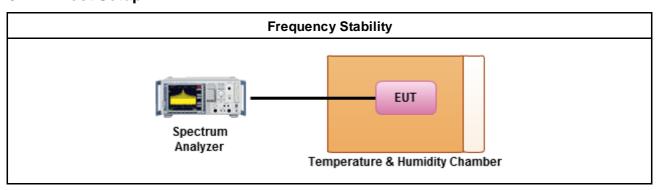
3.7.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.7.3 Test Procedures

| | | Test Method |
|---|-----|---|
| × | Ref | er as ANSI C63.10, clause 6.8 for frequency stability tests |
| | M | Frequency stability with respect to ambient temperature |
| | M | Frequency stability when varying supply voltage |
| × | For | conducted measurement. |
| | × | For conducted measurements on devices with multiple transmit chains: Measurements need only to be performed on one of the active transmit chains (antenna outputs) |
| | | radiated measurement. The equipment to be measured and the test antenna shall be oriented to ain the maximum emitted power level. |

3.7.4 Test Setup



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3.7.5 Test Result of Frequency Stability

| Frequency Stability Result | | | | | |
|----------------------------|-------------|---------------------------|---------------------------|--|--|
| Operatin | g Mode | 1 (Ant. 1, Yagi antenna) | | | |
| Мо | de | Frequency Stability (ppm) | | | |
| Condition | Freq. (MHz) | Test Frequency (MHz) | Frequency Stability (ppm) | | |
| T _{20°C} Vmax | 5200 | 5200.01484 | 2.8538 | | |
| T _{20°C} Vmin | 5200 | 5200.01659 | 3.1904 | | |
| T _{55°C} Vnom | 5200 | 5200.01563 | 3.0058 | | |
| T _{50°C} Vnom | 5200 | 5200.01480 | 2.8462 | | |
| T _{40°C} Vnom | 5200 | 5200.00824 | 1.5846 | | |
| T _{30°C} Vnom | 5200 | 5200.01872 | 3.6000 | | |
| T _{20°C} Vnom | 5200 | 5200.01037 | 1.9942 | | |
| T _{10°C} Vnom | 5200 | 5200.01576 | 3.0308 | | |
| $T_{0^{\circ}C}Vnom$ | 5200 | 5200.01789 | 3.4404 | | |
| T _{-10°C} Vnom | 5200 | 5200.01819 | 3.4981 | | |
| T _{-20°C} Vnom | 5200 | 5200.01139 | 2.1904 | | |
| T _{-30°C} Vnom | 5200 | 5200.01854 | 3.5654 | | |
| Limit (| ppm) | | 20 | | |
| Res | ult | Con | nplied | | |

Report No.: FR362203AN

Note 1: Measure at 85 % [Vmin] and 115 % [Vmax] of the nominal voltage [Vnom].

Note 2: The nominal voltage refer test report clause 1.1.5 for EUT operational condition.

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| | Frequency Stability Result | | | | | |
|-------------------------|----------------------------|---------------------------|---------------------------|--|--|--|
| Operatin | g Mode | 2 (Ant. 2, Omni antenna) | | | | |
| Мо | de | Frequency Stability (ppm) | | | | |
| Condition | Freq. (MHz) | Test Frequency (MHz) | Frequency Stability (ppm) | | | |
| T _{20°C} Vmax | 5200 | 5200.01484 | 2.8538 | | | |
| T _{20°C} Vmin | 5200 | 5200.01659 | 3.1904 | | | |
| T _{55°C} Vnom | 5200 | 5200.01563 | 3.0058 | | | |
| T _{50°C} Vnom | 5200 | 5200.01480 | 2.8462 | | | |
| T _{40°C} Vnom | 5200 | 5200.00824 | 1.5846 | | | |
| T _{30°C} Vnom | 5200 | 5200.01872 | 3.6000 | | | |
| T _{20°C} Vnom | 5200 | 5200.01037 | 1.9942 | | | |
| T _{10°C} Vnom | 5200 | 5200.01576 | 3.0308 | | | |
| T _{0°C} Vnom | 5200 | 5200.01789 | 3.4404 | | | |
| T _{-10°C} Vnom | 5200 | 5200.01819 | 3.4981 | | | |
| T _{-20°C} Vnom | 5200 | 5200.01139 | 2.1904 | | | |
| T _{-30°C} Vnom | 5200 | 5200.01854 | 3.5654 | | | |
| Limit (| ppm) | | 20 | | | |
| Res | ult | Con | nplied | | | |

Report No.: FR362203AN

Note 1: Measure at 85 % [Vmin] and 115 % [Vmax] of the nominal voltage [Vnom]. Note 2: The nominal voltage refer test report clause 1.1.5 for EUT operational condition.

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| Frequency Stability Result | | | | | |
|----------------------------|-------------|---------------------------|---------------------------|--|--|
| Operatin | g Mode | 3 (Ant. 3, Panel antenna) | | | |
| Мо | de | Frequency Stability (ppm) | | | |
| Condition | Freq. (MHz) | Test Frequency (MHz) | Frequency Stability (ppm) | | |
| T _{20°C} Vmax | 5200 | 5200.01484 | 2.8538 | | |
| T _{20°C} Vmin | 5200 | 5200.01659 | 3.1904 | | |
| T _{55°C} Vnom | 5200 | 5200.01563 | 3.0058 | | |
| T _{50°C} Vnom | 5200 | 5200.01480 | 2.8462 | | |
| T _{40°C} Vnom | 5200 | 5200.00824 | 1.5846 | | |
| T _{30°C} Vnom | 5200 | 5200.01872 | 3.6000 | | |
| T _{20°C} Vnom | 5200 | 5200.01037 | 1.9942 | | |
| T _{10°C} Vnom | 5200 | 5200.01576 | 3.0308 | | |
| T _{0°C} Vnom | 5200 | 5200.01789 | 3.4404 | | |
| T _{-10°C} Vnom | 5200 | 5200.01819 | 3.4981 | | |
| T _{-20°C} Vnom | 5200 | 5200.01139 | 2.1904 | | |
| T _{-30°C} Vnom | 5200 | 5200.01854 | 3.5654 | | |
| Limit (| ppm) | : | 20 | | |
| Res | ult | Con | nplied | | |

Report No.: FR362203AN

Note 1: Measure at 85 % [Vmin] and 115 % [Vmax] of the nominal voltage [Vnom]. Note 2: The nominal voltage refer test report clause 1.1.5 for EUT operational condition.

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| Frequency Stability Result | | | | | |
|----------------------------|-------------|----------------------------|---------------------------|--|--|
| Operatin | g Mode | 4 (Ant. 4, Dipole antenna) | | | |
| Мо | de | Frequency Stability (ppm) | | | |
| Condition | Freq. (MHz) | Test Frequency (MHz) | Frequency Stability (ppm) | | |
| T _{20°C} Vmax | 5200 | 5200.01484 | 2.8538 | | |
| T _{20°C} Vmin | 5200 | 5200.01659 | 3.1904 | | |
| T _{55°C} Vnom | 5200 | 5200.01563 | 3.0058 | | |
| T _{50°C} Vnom | 5200 | 5200.01480 | 2.8462 | | |
| T _{40°C} Vnom | 5200 | 5200.00824 | 1.5846 | | |
| T _{30°C} Vnom | 5200 | 5200.01872 | 3.6000 | | |
| T _{20°C} Vnom | 5200 | 5200.01037 | 1.9942 | | |
| T _{10°C} Vnom | 5200 | 5200.01576 | 3.0308 | | |
| T _{0°C} Vnom | 5200 | 5200.01789 | 3.4404 | | |
| T _{-10°C} Vnom | 5200 | 5200.01819 | 3.4981 | | |
| T _{-20°C} Vnom | 5200 | 5200.01139 | 2.1904 | | |
| T _{-30°C} Vnom | 5200 | 5200.01854 | 3.5654 | | |
| Limit (ppm) | | : | 20 | | |
| Res | ult | Con | nplied | | |

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Note 1: Measure at 85 % [Vmin] and 115 % [Vmax] of the nominal voltage [Vnom]. Note 2: The nominal voltage refer test report clause 1.1.5 for EUT operational condition.

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4 Test Equipment and Calibration Data

| Test Item | Conducted Emission | | | | | |
|-----------------------------------|--------------------------------|------------------|---------------|------------------|-------------------|--|
| Test Site | Conduction room 1 / (CO01-WS) | | | | | |
| Instrument | Manufacturer | Model No. | Serial No. | Calibration Date | Calibration Until | |
| EMC Receiver | R&S | ESCS 30 | 100169 | Oct. 02, 2012 | Oct. 01, 2013 | |
| LISN | SCHWARZBECK MESS-ELEKTRONIK | Schwarzbeck 8127 | 8127-667 | Dec. 04, 2012 | Dec. 03, 2013 | |
| LISN (Support Unit) | SCHWARZBECK MESS-ELEKTRONIK | Schwarzbeck 8127 | 8127-666 | Dec. 04, 2012 | Dec. 03, 2013 | |
| RF Cable-CON | Woken | CFD200-NL | CFD200-NL-001 | Dec. 25, 2012 | Dec. 24, 2013 | |
| 50 ohm terminal | NA | 50 | 01 | Apr. 22, 2013 | Apr. 21, 2014 | |
| 50 ohm terminal | NA | 50 | 02 | Apr. 22, 2013 | Apr. 21, 2014 | |
| 50 ohm terminal | NA | 50 | 03 | Apr. 22, 2013 | Apr. 21, 2014 | |
| 50 ohm terminal (Support Unit) | NA | 50 | 04 | Apr. 22, 2013 | Apr. 21, 2014 | |

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| Test Item | Radiated Emission ab | ove 1GHz | | | | |
|--------------------------|----------------------------|-------------|------------------|------------------|-------------------|--|
| Test Site | 966 chamber1 / (03CH01-WS) | | | | | |
| Instrument | Manufacturer | Model No. | Serial No. | Calibration Date | Calibration Until | |
| 3m semi-anechoic chamber | CHAMPRO | SAC-03 | 03CH01-WS | Jan. 04, 2013 | Jan. 03, 2014 | |
| Spectrum Analyzer | R&S | FSV40 | 101498 | Jan. 24, 2013 | Jan. 23, 2014 | |
| Receiver | R&S | ESR3 | 101658 | Jan. 28, 2013 | Jan. 27, 2014 | |
| Bilog Antenna | SCHWARZBECK | VULB9168 | VULB9168-522 | Jan. 11, 2013 | Jan. 10, 2014 | |
| Horn Antenna 1G-18G | SCHWARZBECK | BBHA 9120 D | BBHA 9120 D 1096 | Feb. 18, 2013 | Feb. 17, 2014 | |
| Horn Antenna 18G-40G | SCHWARZBECK | BBHA 9170 | BBHA 9170517 | Jan. 14, 2013 | Jan. 13, 2014 | |
| Amplifier | Burgeon | BPA-530 | 100219 | Nov 28, 2012 | Nov. 27, 2013 | |
| Amplifier | Agilent | 83017A | MY39501308 | Dec. 18, 2012 | Dec. 17, 2013 | |
| RF Cable | HUBER+SUHNER | SUCOFLEX104 | MY16014/4 | Dec. 25, 2012 | Dec. 24, 2013 | |
| RF Cable | HUBER+SUHNER | SUCOFLEX104 | MY16019/4 | Dec. 25, 2012 | Dec. 24, 2013 | |
| RF Cable | HUBER+SUHNER | SUCOFLEX104 | MY16139/4 | Dec. 25, 2012 | Dec. 24, 2013 | |
| RF Cable-R03m | Woken | CFD400NL-LW | CFD400NL-001 | Dec. 25, 2012 | Dec. 24, 2013 | |
| RF Cable-R10m | Woken | CFD400NL-LW | CFD400NL-002 | Dec. 25, 2012 | Dec. 24, 2013 | |
| control | EM Electronics | EM1000 | 60612 | N/A | N/A | |

| Loop Antenna | R&S | HFH2-Z2 | 100330 | Nov 15, 2012 | Nov. 14, 2014 | | | |
|---|-------|---------------|---------|---------------|---------------|--|--|--|
| Amplifier | MITEQ | AMF-6F-260400 | 9121372 | Apr. 19, 2013 | Apr. 18, 2015 | | | |
| Note: Calibration Interval of instruments listed above is two year. | | | | | | | | |

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| TH01-HY | | | | | | |
|--------------|--|--|--|--|--|--|
| Manufacturer | Model No. | Serial No. | Calibration Date | Calibration Until | | |
| R&S | FSV 40 | 101063 | Feb. 18, 2013 | Feb. 17, 2014 | | |
| R&S | FSP 40 | 100305 | Mar. 20, 2013 | Mar. 19, 2014 | | |
| Giant Force | GTH-225-20-SP-SD | MAA1112-007 | Nov. 21, 2012 | Nov. 20, 2013 | | |
| R&S | SMB100A | 175727 | Jan. 14, 2013 | Jan. 13, 2014 | | |
| Anritsu | MA2411B | 0917017 | Feb. 02, 2013 | Feb. 01, 2014 | | |
| Anritsu | ML2495A | 0949003 | Feb. 02, 2013 | Feb. 01, 2014 | | |
| G.W. | GPC-6030D | C671845 | Jun. 21, 2013 | Jun. 20, 2014 | | |
| GW | APS-9102 | EL920581 | Jul. 16, 2013 | Jul. 15, 2014 | | |
| | Manufacturer R&S R&S Giant Force R&S Anritsu Anritsu GW. | Manufacturer Model No. R&S FSV 40 R&S FSP 40 Giant Force GTH-225-20-SP-SD R&S SMB100A Anritsu MA2411B Anritsu ML2495A G.W. GPC-6030D | Manufacturer Model No. Serial No. R&S FSV 40 101063 R&S FSP 40 100305 Giant Force GTH-225-20-SP-SD MAA1112-007 R&S SMB100A 175727 Anritsu MA2411B 0917017 Anritsu ML2495A 0949003 G.W. GPC-6030D C671845 | Manufacturer Model No. Serial No. Calibration Date R&S FSV 40 101063 Feb. 18, 2013 R&S FSP 40 100305 Mar. 20, 2013 Giant Force GTH-225-20-SP-SD MAA1112-007 Nov. 21, 2012 R&S SMB100A 175727 Jan. 14, 2013 Anritsu MA2411B 0917017 Feb. 02, 2013 Anritsu ML2495A 0949003 Feb. 02, 2013 GW. GPC-6030D C671845 Jun. 21, 2013 | | |

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