



FCC 47 CFR PART 15 SUBPART E

CLASS II PERMISSIVE CHANGE

TEST REPORT

FOR

WIRELESS ACCESSORY RADIO

MODEL NUMBER: 1525

FCC ID: C3K1525

REPORT NUMBER: 15U22480 E2V2

ISSUE DATE: April 7, 2016

Prepared for
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NVLAP LAB CODE 200065-0

Revision History

| <u>Rev.</u> | <u>Issue Date</u> | <u>Revisions</u> | <u>Revised By</u> |
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| V1 | 3/7/16 | Initial Issue | Francisco de Anda |
| V2 | 4/7/16 | Updated 5.1 section | Francisco de Anda |

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: Microsoft Corporation
One Microsoft Way
Redmond, WA 98052, U.S.A.

EUT DESCRIPTION: Wireless Accessory Radio

MODEL: 1525

SERIAL NUMBER: 9CD21E98933D (Conducted), 9CD21E98E05B (Radiated)


DATE TESTED: February 25, 2016 – March 1, 2016

| APPLICABLE STANDARDS | |
|--------------------------|--------------|
| STANDARD | TEST RESULTS |
| CFR 47 Part 15 Subpart E | Pass |

UL Verification Services Inc. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL Verification Services Inc. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

Approved & Released For
UL Verification Services Inc. By:



Francisco de Anda
PROJECT LEAD/ PROGRAM MANAGER
UL Verification Services Inc.

Tested By:



Chirs Xiong
EMC ENGINEER
UL Verification Services Inc.

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 15, ANSI C63.10-2013, KDB 789033 D02 v01r01.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 and 47266 Benicia Street, Fremont, California, USA. Line conducted emissions are measured only at the 47173 address. The following table identifies which facilities were utilized for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

| 47173 Benicia Street | 47266 Benicia Street |
|------------------------------------|---|
| <input type="checkbox"/> Chamber A | <input type="checkbox"/> Chamber D |
| <input type="checkbox"/> Chamber B | <input type="checkbox"/> Chamber E |
| <input type="checkbox"/> Chamber C | <input type="checkbox"/> Chamber F |
| | <input type="checkbox"/> Chamber G |
| | <input checked="" type="checkbox"/> Chamber H |

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at <http://ts.nist.gov/standards/scopes/2000650.htm>.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

$$\begin{aligned} \text{Field Strength (dBuV/m)} &= \text{Measured Voltage (dBuV)} + \text{Antenna Factor (dB/m)} + \\ &\text{Cable Loss (dB)} - \text{Preamp Gain (dB)} \\ 36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} &= 28.9 \text{ dBuV/m} \end{aligned}$$

4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

| PARAMETER | UNCERTAINTY |
|---------------------------------------|---------------|
| Conducted Disturbance, 0.15 to 30 MHz | ± 3.52 dB |
| Radiated Disturbance, 30 to 1000 MHz | ± 4.94 dB |
| Radiated Disturbance, 1 to 6 GHz | ± 3.86 dB |
| Radiated Disturbance, 6 to 18 GHz | ± 4.23 dB |
| Radiated Disturbance, 18 to 26 GHz | ± 5.30 dB |
| Radiated Disturbance, 26 to 40 GHz | ± 5.23 dB |

Uncertainty figures are valid to a confidence level of 95%.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is an 802.11a/b/g/n radio.

5.2. DESCRIPTION OF CLASS II PERMISSIVE CHANGE

The change filed under this application is to meet the new UNII rules per KDB 789033 D02 General UNII Test Procedures New Rules v01r01.pdf.

Unit tested as it was originally certified but under the new UNII rules.

5.3. MAXIMUM OUTPUT POWER

The transmitter has a maximum average conducted output power as follows:

| Frequency Range (MHz) | Mode | Output Power (dBm) | Output Power (mW) |
|-----------------------|--------------|--------------------|-------------------|
| 5745 - 5825 | 802.11a | 8.57 | 7.19 |
| 5745 - 5825 | 802.11n HT20 | 8.65 | 7.33 |

5.4. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes an external patch antenna, with a maximum gain of 3.14 dBi.

5.5. SOFTWARE AND FIRMWARE

The firmware installed in the EUT during testing was 14.2.201.17.

The EUT drive software installed during testing was 2.0.0.11.

The test utility software used during testing was DutApiBRIDGEETH8782.exe.

5.6. WORST-CASE CONFIGURATION AND MODE

Radiated emission and power line conducted emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

The fundamental of the EUT was investigated in three orthogonal orientations X, Y, Z, it was determined that X orientation was worst-case orientation; therefore, all final radiated testing was performed with the EUT in X orientation.

Worst-case data rates as provided by the client were:
Based on the baseline scan, the worst-case data rates were:

802.11a mode: 6 Mbps
802.11n HT20mode: MCS0

Radiated emissions for EUT with antenna was performed and passed; therefore, antenna port spurious was not performed.

5.7. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

| Support Equipment List | | | | |
|------------------------|--------------|-------------|------------------------------|--------------|
| Description | Manufacturer | Model | Serial Number | FCC ID |
| Laptop | Dell | PP20L | CN-0KD882-48643-65H-9213 | QDS-BRCM1020 |
| AC/DC Adapter | Dell | LA65NS2-01 | CN-0928G4-71615-06E-0D24-A00 | N/A |
| Sheeva Plug | GlobalScale | 003-SP1001 | 1035-002460 | N/A |
| AC Adapter | CUI Inc. | EPAS-101W-C | DPS050200UPS-P5P-SZ | N/A |
| AC Adapter | CUI Inc. | KSAFE050040 | DPS050400U-P5P-TK | N/A |

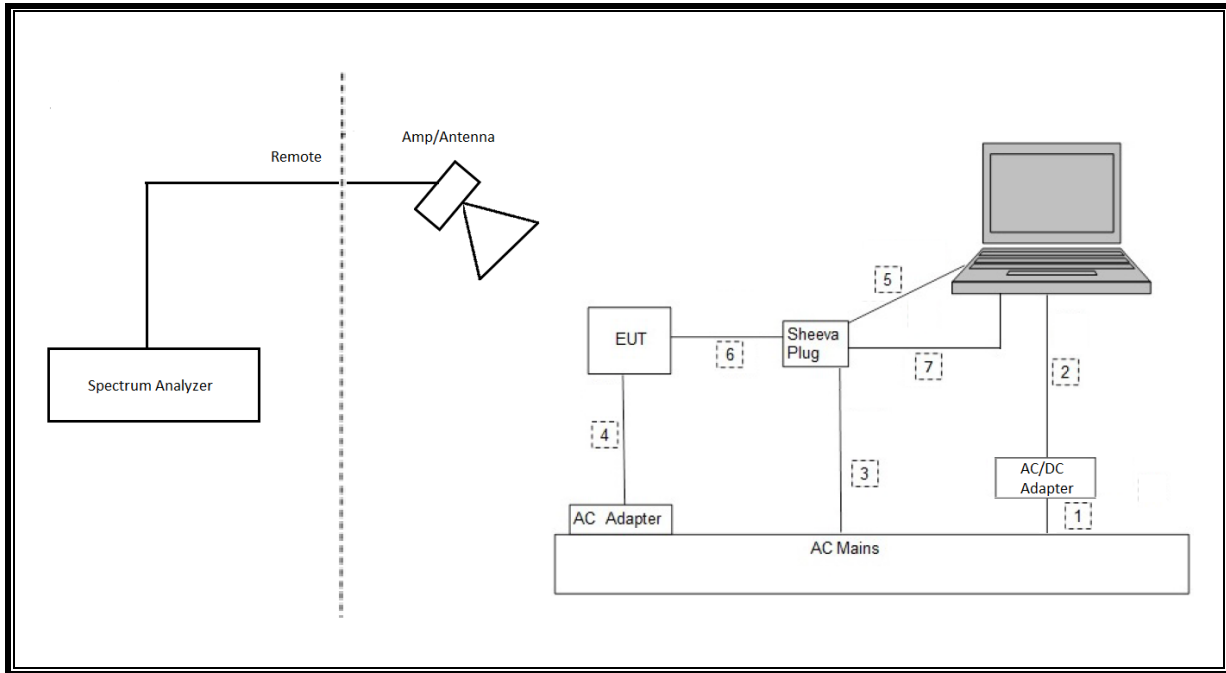
I/O CABLES

| I/O Cable List | | | | | | |
|----------------|---------------|----------------------|----------------|-------------|------------------|---------------------|
| Cable No | Port | # of identical ports | Connector Type | Cable Type | Cable Length (m) | Remarks |
| 1 | AC | 1 | 3-prong | Un-Shielded | 0.90 | |
| 2 | DC | 1 | DC | Un-Shielded | 1.80 | |
| 3 | AC | 1 | 2-prong | Un-Shielded | 1.70 | |
| 4 | AC | 1 | 2-prong | Un-Shielded | 1.40 | |
| 5 | USB/Micro USB | 1 | USB/Micro USB | Shielded | 0.60 | Micro USB to Sheeva |
| 6 | USB | 1 | USB | Shielded | 1.30 | |
| 7 | Ethernet | 1 | RJ45 | Shielded | 1.80 | |
| 8 | Antenna | 2 | SMA | Shielded | 1.00 | |
| 9 | RF input | 1 | SMA | Shielded | 1.00 | |
| 10 | USB | 1 | USB | Shielded | 0.90 | |
| 11 | AC | 1 | 2-prong | Un-Shielded | 1.90 | |

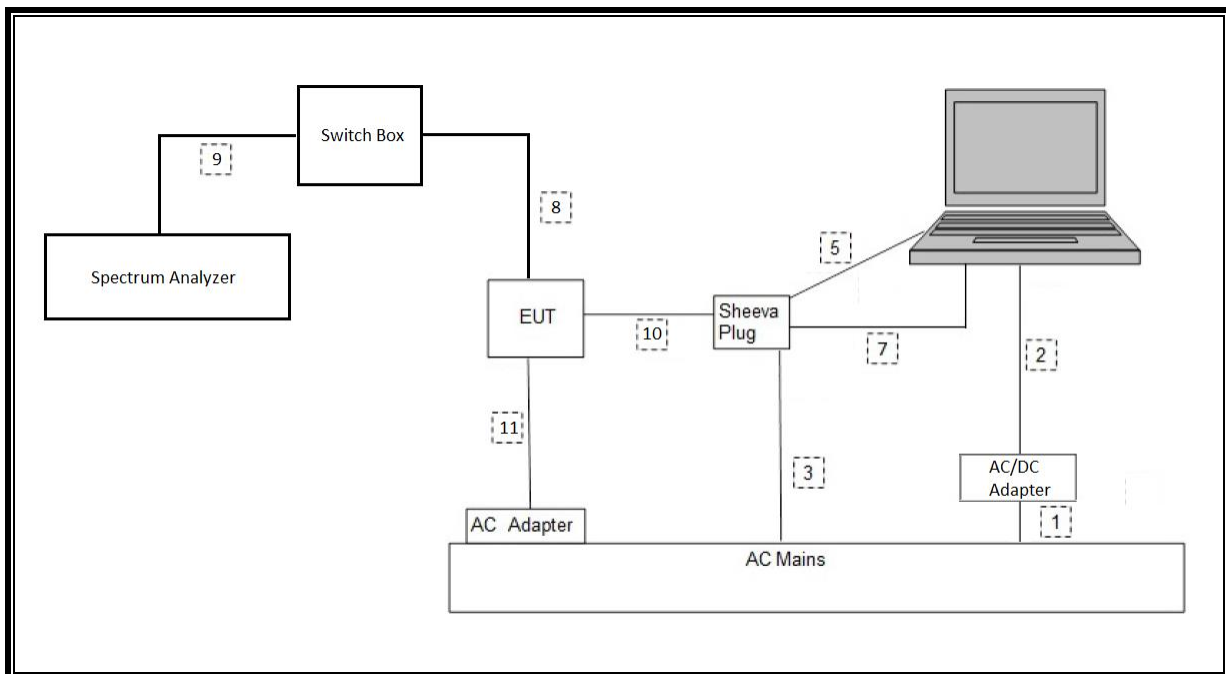
TEST SETUP

Test software exercised the radio card.

SETUP DIAGRAM FOR RADIATED TESTS



SETUP DIAGRAM FOR CONDUCTED TESTS



6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

| Test Equipment List | | | | |
|--|-----------------|------------------------|---------------------------|----------|
| Description | Manufacturer | Model | T No. | Cal Due |
| Radiated Software | UL | UL EMC | Ver 9.5, July 22, 2014 | |
| Conducted Software | UL | UL EMC | Ver 4.2, February 2, 2016 | |
| Spectrum Analyzer 9kHz - 26.5GHz | Keysight | N9030A | PRE0123763 | 12/09/16 |
| Antenna, Horn 1-18GHz | ETS Lindgren | 3117 | 863 | 04/10/16 |
| Antenna, Broadband Hybrid, 30MHz - 2000MHz | Sunol Science | JB3 | 900 | 04/10/16 |
| Amplifier, 1-18GHz | Miteq | ASF42-00101800-25-S-42 | 495 | 10/22/16 |
| Amplifier, 10KHz-1GHz, 32dB | Sonoma | 310N | 835 | 06/06/16 |
| Amplifier, 1-8GHz, 35dB | Miteq | AMF-4D-01000800-30-29P | 782 | 10/22/16 |
| Spectrum Analyzer, 40GHz | Hewlett-Packard | 8564E | 106 | 08/14/16 |
| Antenna, Horn 18-26GHz | ARA | MWH-1826 | 447 | 05/12/16 |
| Antenna, Horn 40GHz | ARA | MWH-2640/B | 90 | 07/28/16 |
| Amplifier, 1-26GHz | Keysight | 8449B | 404 | 06/29/16 |
| Amplifier, 26-40GHz | Miteq | NSP4000-SP2 | 88 | 04/07/16 |
| Switch, SP6T Coaxial Switch | Keysight | 87106C | 836 | 06/26/16 |

7. MEASUREMENT METHODS

26 dB Emission BW: KDB 789033 D02 v01r01, Section C.

99% Occupied BW: KDB 789033 D02 v01r01, Section D.

Conducted Output Power: KDB 789033 D02 v01r01, Section E.2.b (Method SA-1).

Power Spectral Density: KDB 789033 D02 v01r01, Section F.

Unwanted emissions in restricted bands: KDB 789033 D02 v01r01, Sections G.3, G.4, G.5, and G.6.

Unwanted emissions in non-restricted bands: KDB 789033 D02 v01r01, Sections G.3, G.4, and G.5.

8. ANTENNA PORT TEST RESULTS

8.1. ON TIME AND DUTY CYCLE

LIMITS

None; for reporting purposes only.

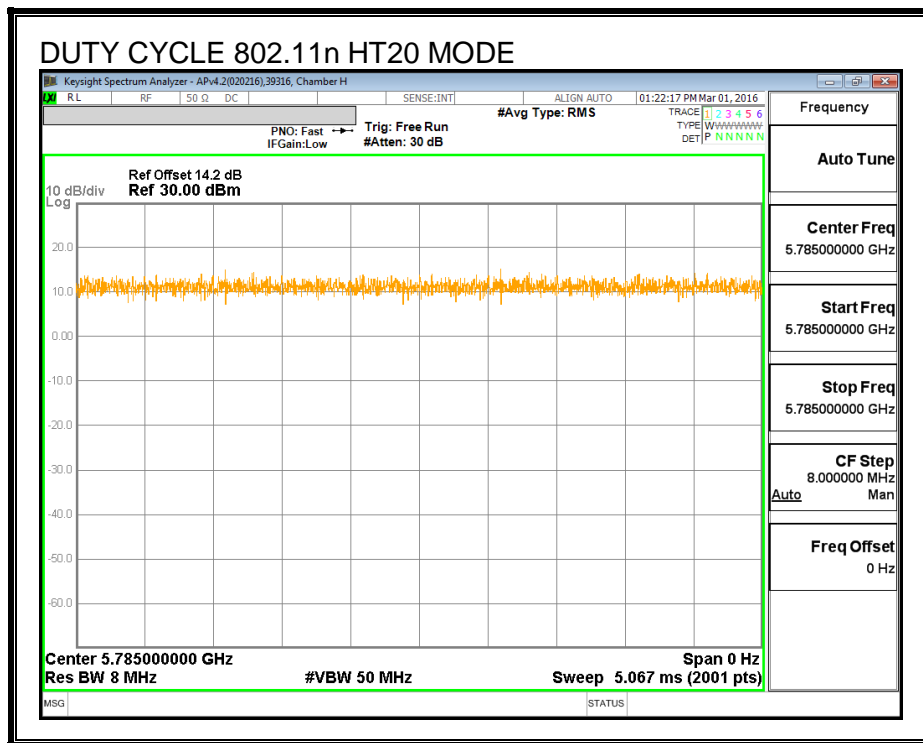
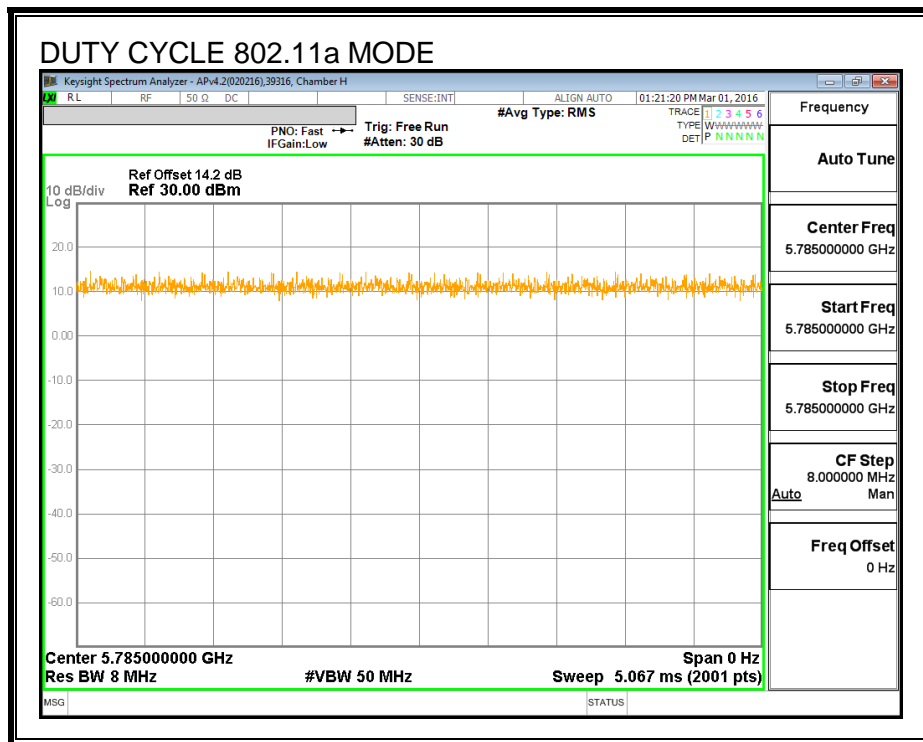
PROCEDURE

KDB 789033 Zero-Span Spectrum Analyzer Method.

ON TIME AND DUTY CYCLE RESULTS

| Mode | ON Time B (msec) | Period (msec) | Duty Cycle x (linear) | Duty Cycle (%) | Duty Cycle Correction Factor (dB) | 1/B Minimum VBW (kHz) |
|--------------|------------------------|------------------|-----------------------------|----------------------|---|-----------------------------|
| 802.11a | 1.000 | 1.000 | 1.000 | 100.00% | 0.00 | 0.010 |
| 802.11n HT20 | 1.000 | 1.000 | 1.000 | 100.00% | 0.00 | 0.010 |

DUTY CYCLE PLOTS



8.2. 802.11a MODE IN THE 5.8 GHZ BAND

8.2.1. 6 dB BANDWIDTH

LIMITS

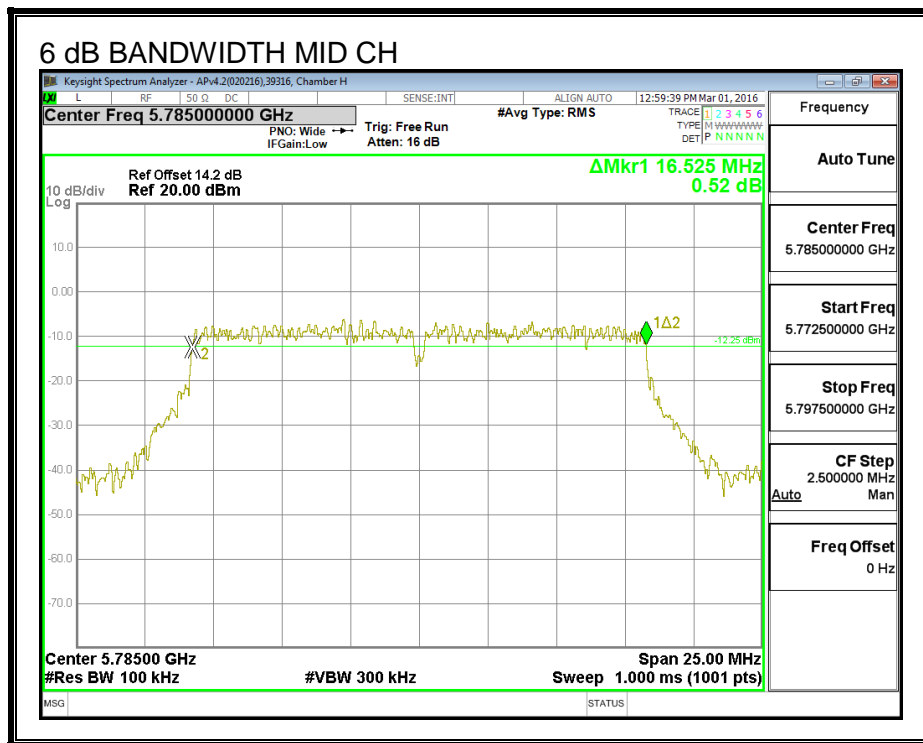
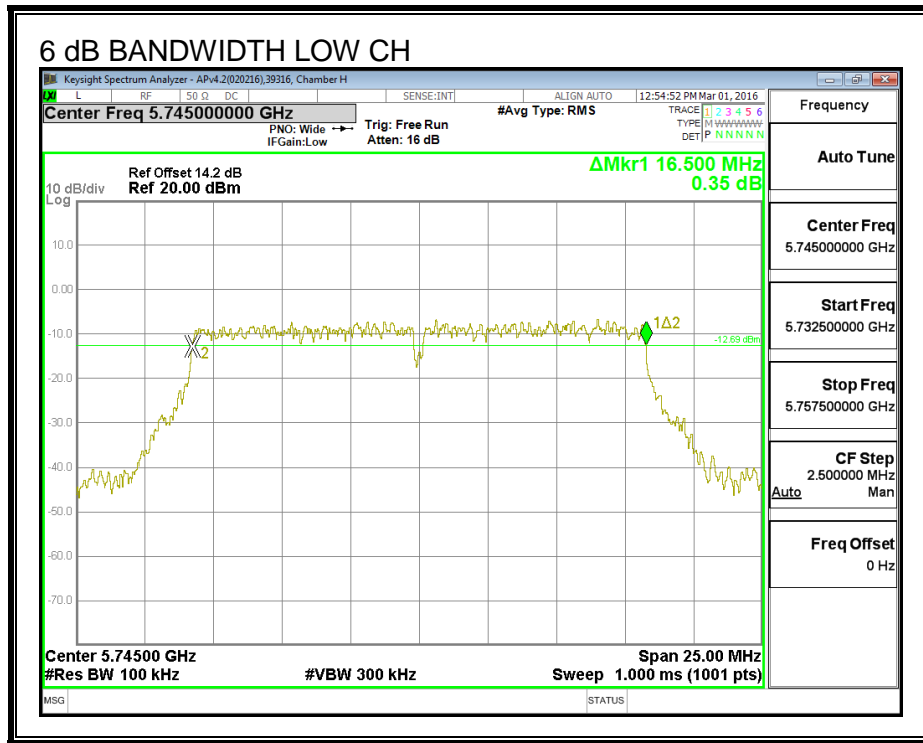
FCC §15.407 (e)

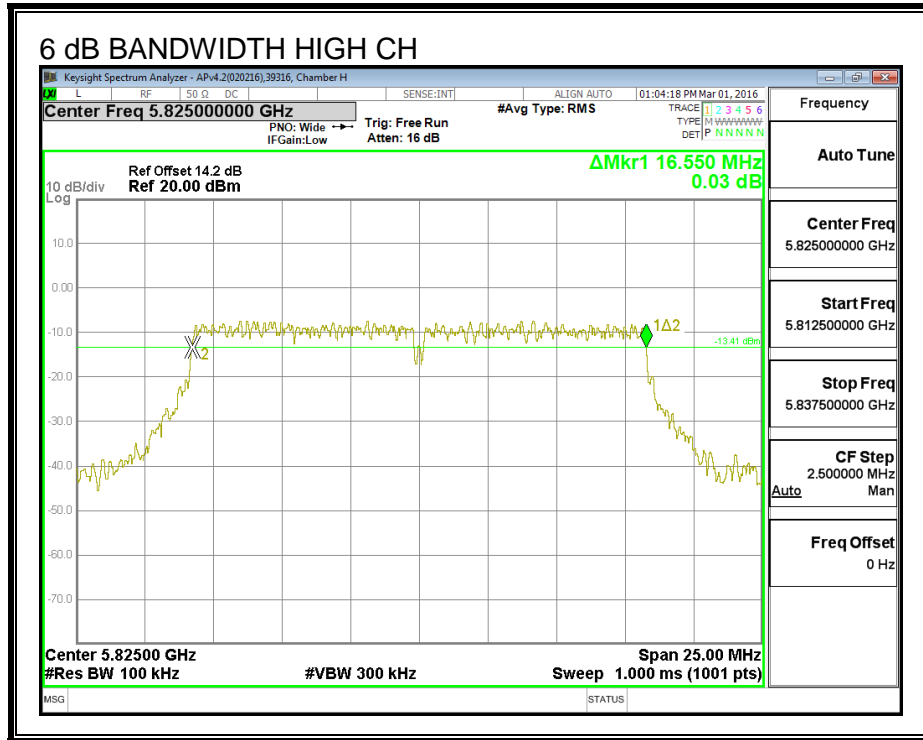
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---------|-----------------|----------------------|---------------------|
| Low | 5745 | 16.5000 | 0.5 |
| Mid | 5785 | 16.5250 | 0.5 |
| High | 5825 | 16.5500 | 0.5 |

6 dB BANDWIDTH





8.2.2. 26 dB BANDWIDTH

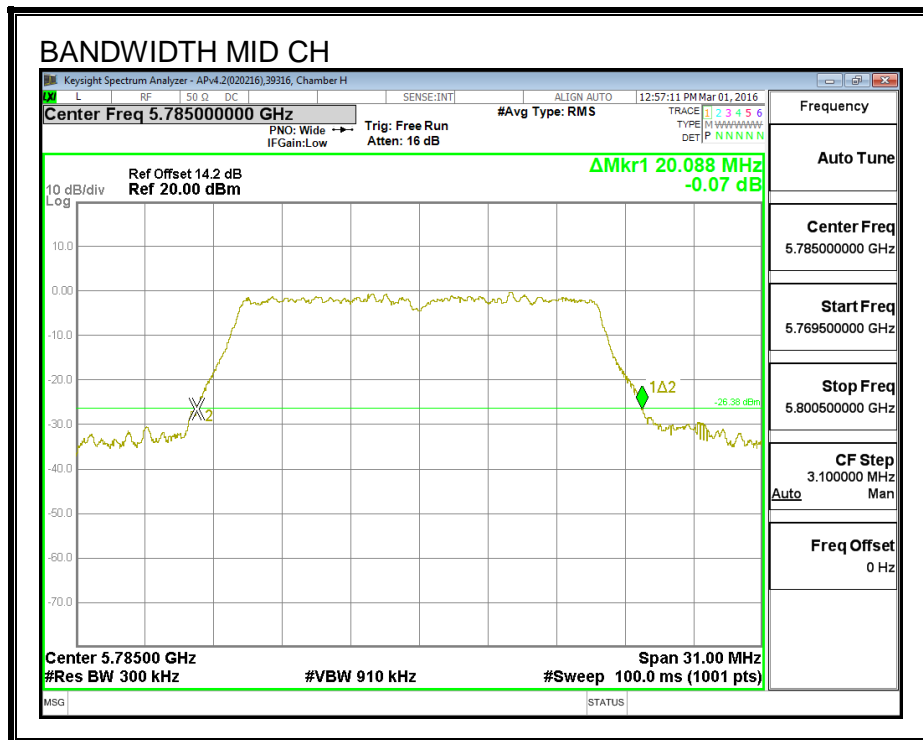
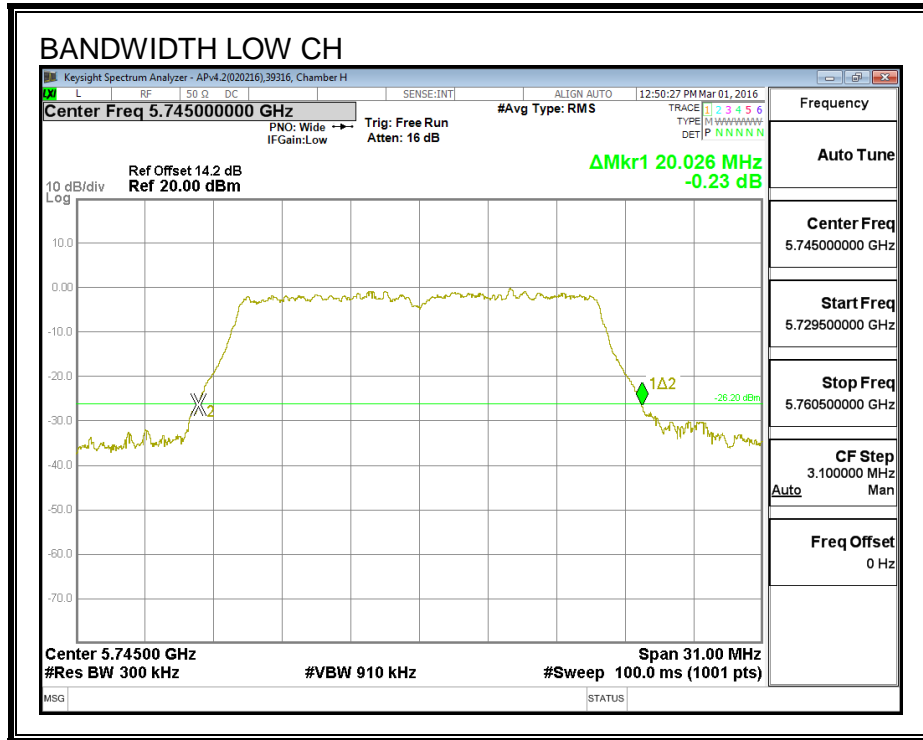
LIMITS

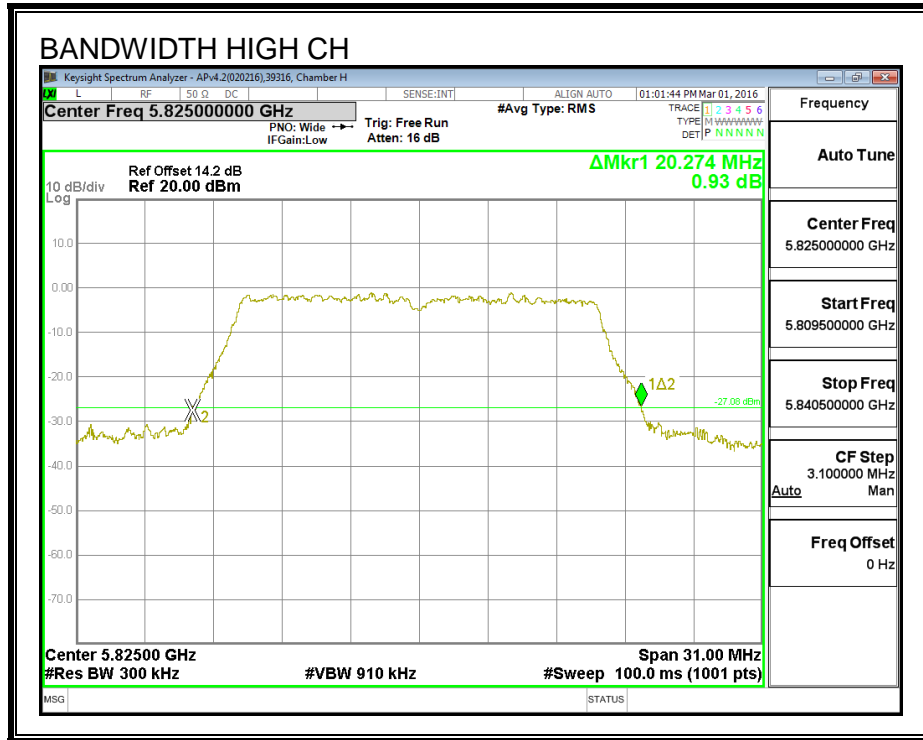
None; for reporting purposes only.

RESULTS

| Channel | Frequency (MHz) | 26 dB Bandwidth (MHz) |
|---------|-----------------|-----------------------|
| Low | 5745 | 20.03 |
| Mid | 5785 | 20.09 |
| High | 5825 | 20.27 |

26 dB BANDWIDTH





8.2.3. 99% BANDWIDTH

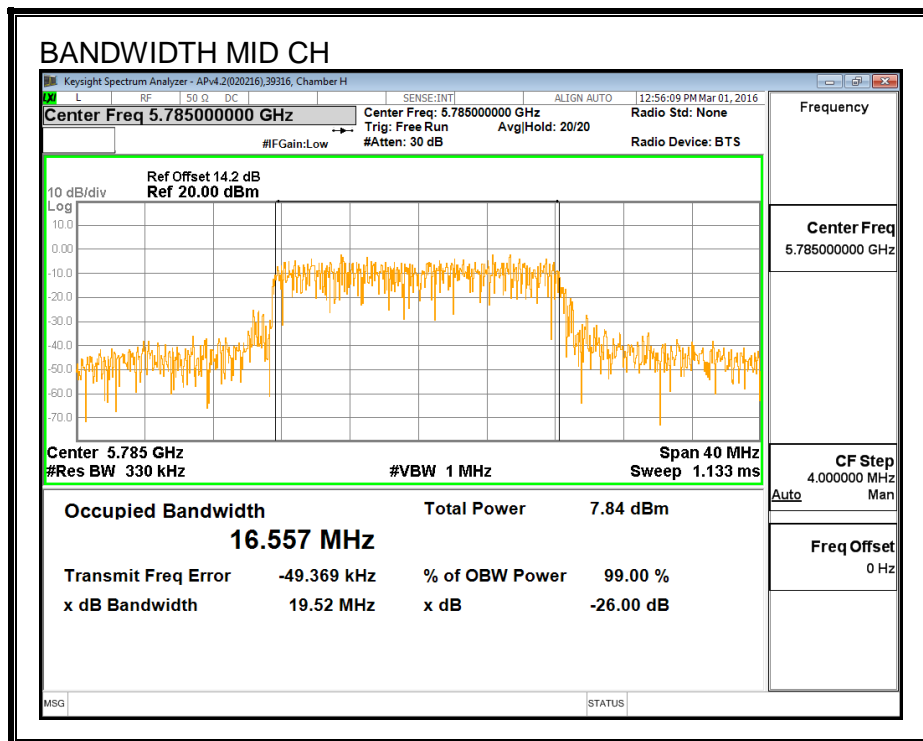
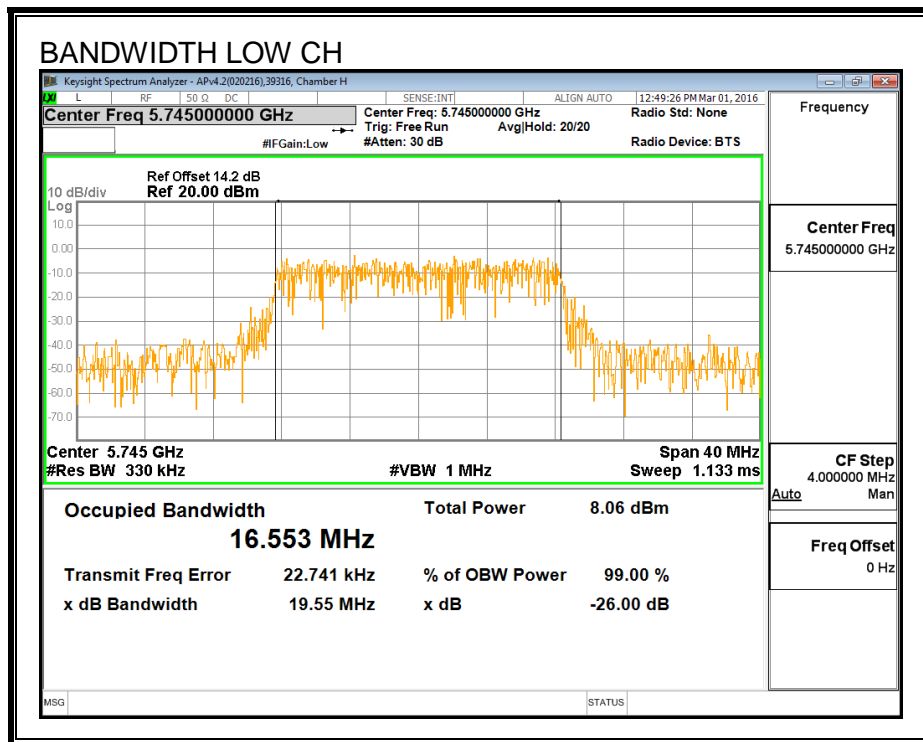
LIMITS

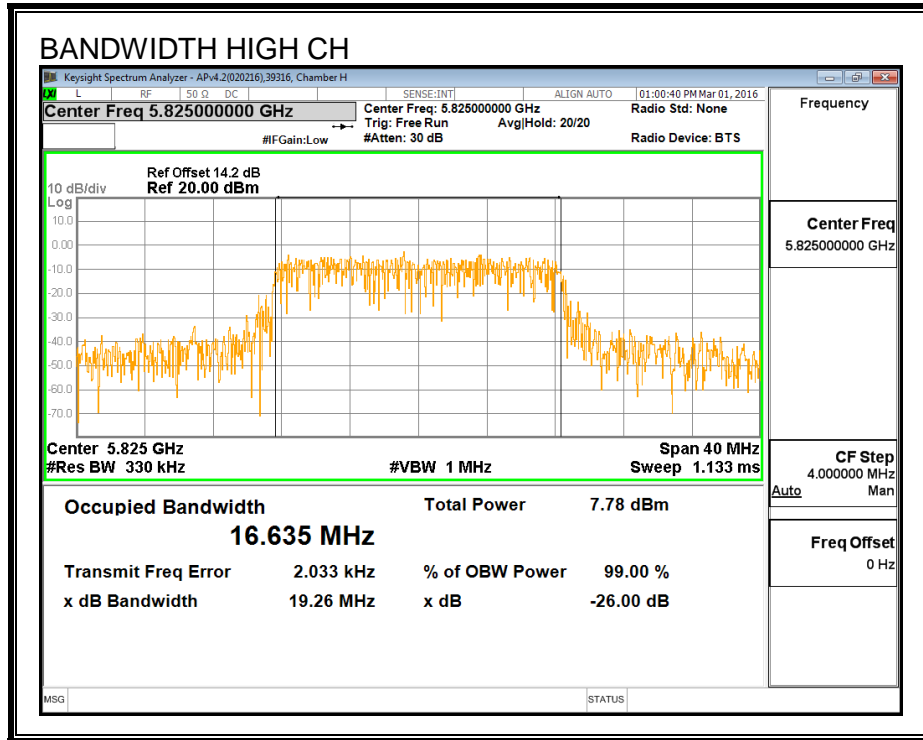
None; for reporting purposes only.

RESULTS

| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---------|-----------------|---------------------|
| Low | 5745 | 16.5530 |
| Mid | 5785 | 16.5570 |
| High | 5825 | 16.6350 |

99% BANDWIDTH





8.2.4. OUTPUT POWER

LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

Antenna Gain and Limit

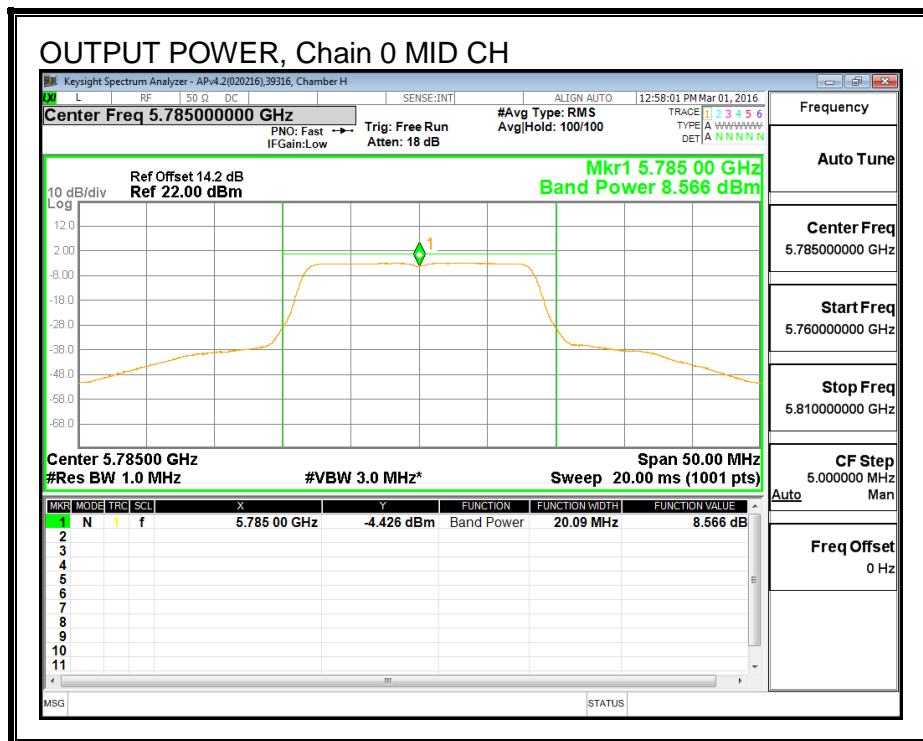
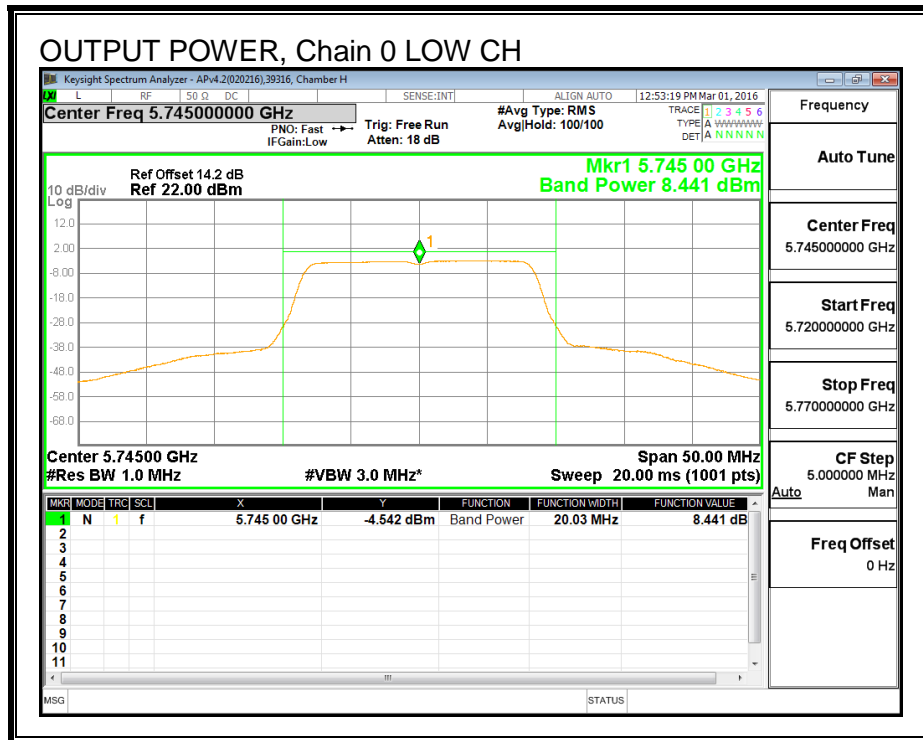
| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Power Limit (dBm) |
|---------|--------------------|---|-------------------------|
| Low | 5745 | 3.14 | 30.00 |
| Mid | 5785 | 3.14 | 30.00 |
| High | 5825 | 3.14 | 30.00 |

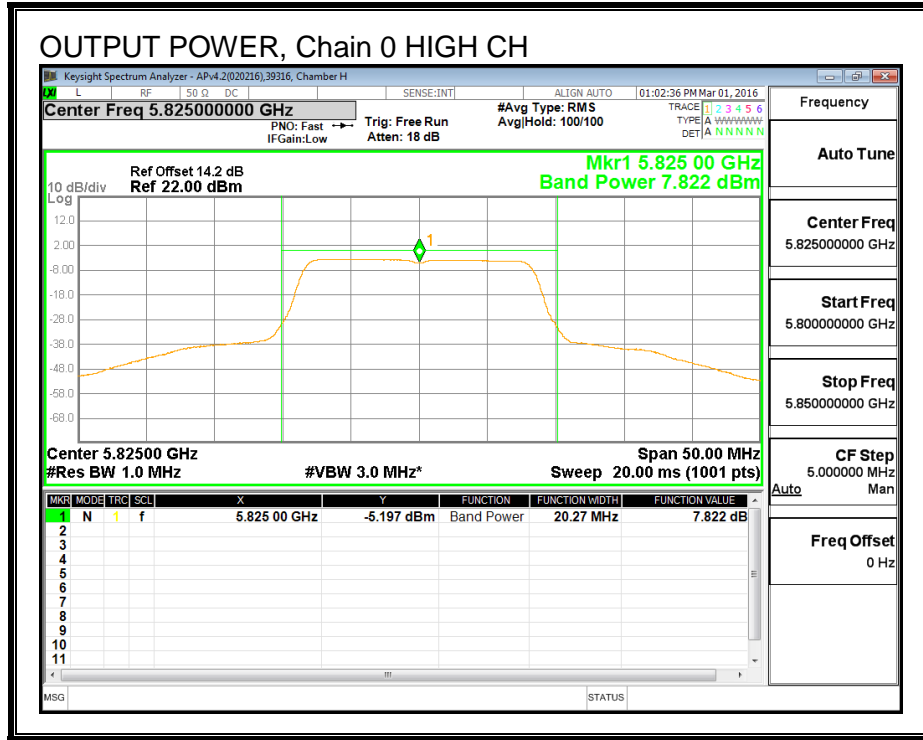
| | | |
|---------------------------|------|---|
| Duty Cycle CF (dB) | 0.00 | Included in Calculations of Corr'd Power |
|---------------------------|------|---|

Output Power Results

| Channel | Frequency (MHz) | Chain 0 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---------|--------------------|-----------------------------------|-----------------------------------|-------------------------|-------------------------|
| Low | 5745 | 8.44 | 8.44 | 30.00 | -21.56 |
| Mid | 5785 | 8.57 | 8.57 | 30.00 | -21.43 |
| High | 5825 | 7.82 | 7.82 | 30.00 | -22.18 |

OUTPUT POWER, Chain 0





8.2.5. Maximum Power Spectral Density (PSD)

LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

Antenna Gain and Limits

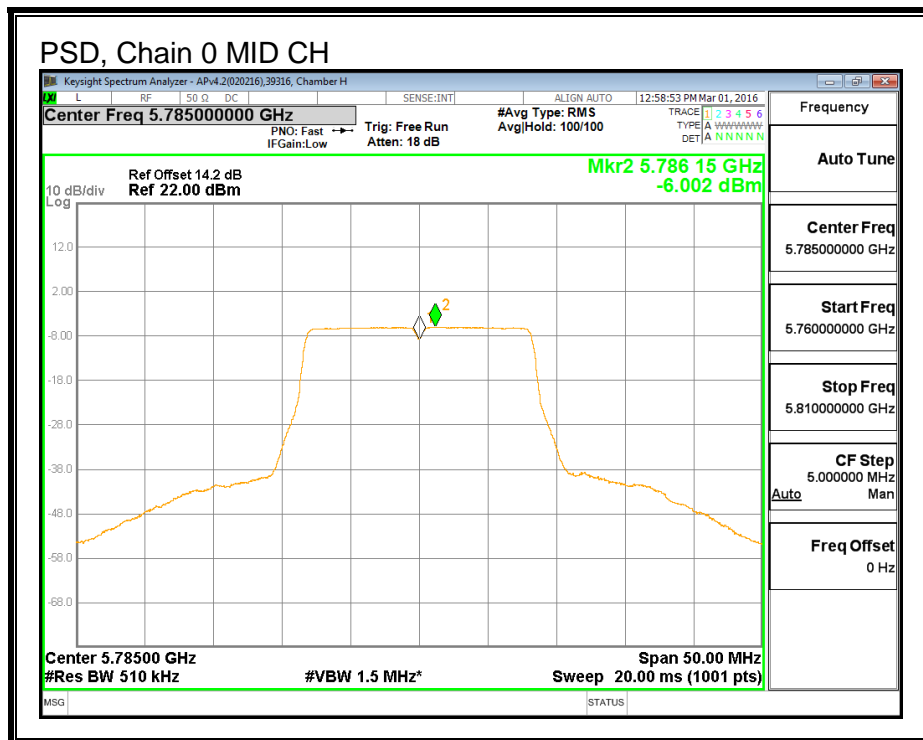
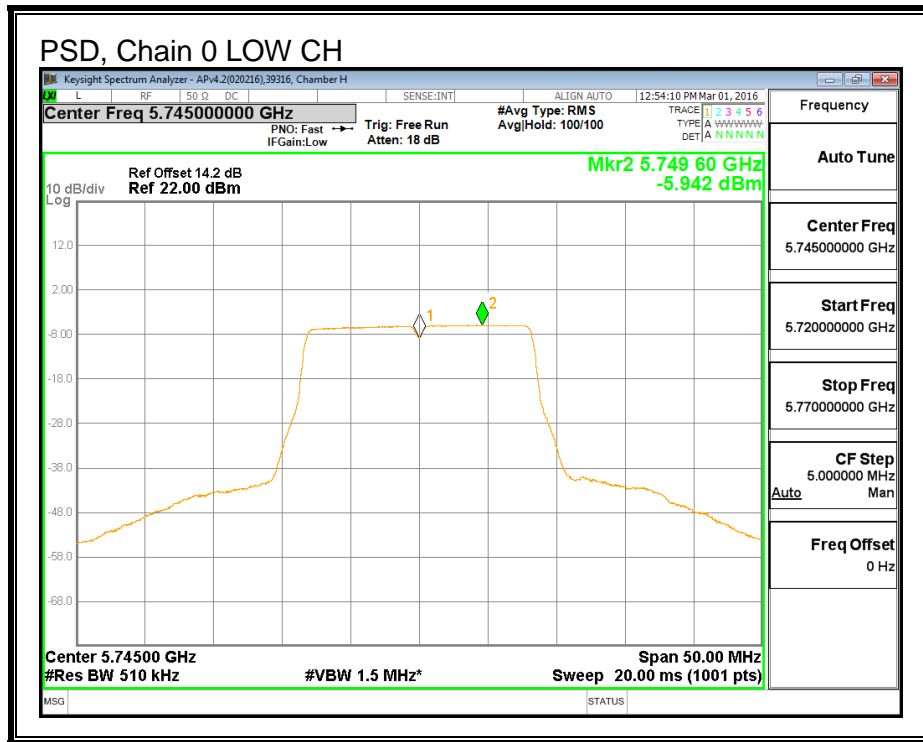
| Channel | Frequency (MHz) | Directional Gain (dBi) | PSD Limit (dBm) |
|---------|-----------------|------------------------|-----------------|
| Low | 5745 | 3.14 | 30.00 |
| Mid | 5785 | 3.14 | 30.00 |
| High | 5825 | 3.14 | 30.00 |

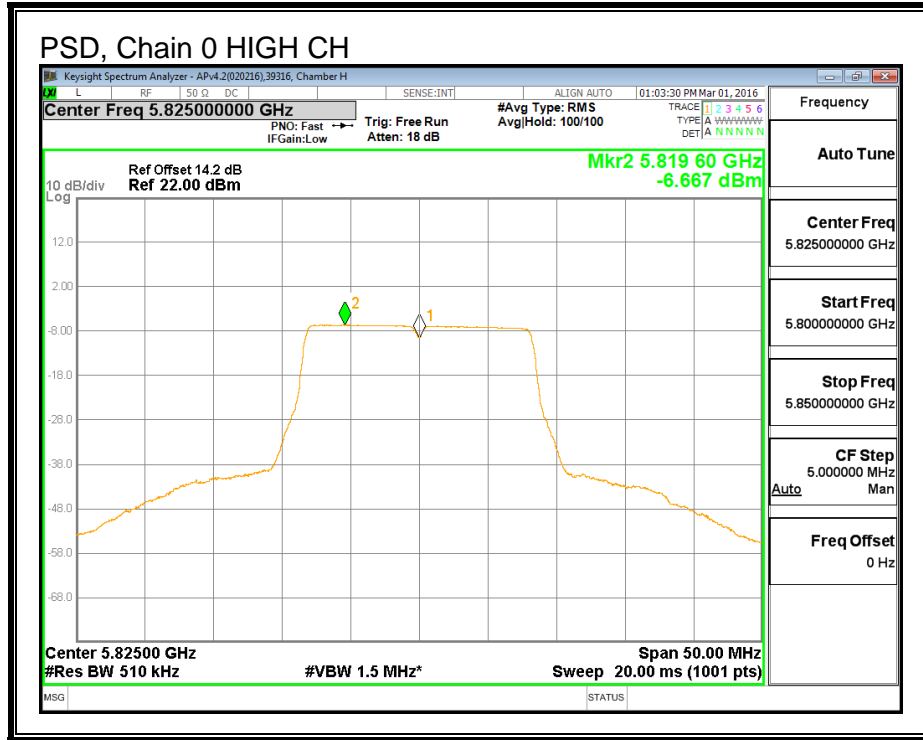
| | | |
|---------------------------|------|---|
| Duty Cycle CF (dB) | 0.00 | Included in Calculations of Corr'd PSD |
|---------------------------|------|---|

PSD Results

| Channel | Frequency (MHz) | Chain 0 Meas PSD (dBm) | Total Corr'd PSD (dBm) | PSD Limit (dBm) | PSD Margin (dB) |
|---------|-----------------|------------------------|------------------------|-----------------|-----------------|
| Low | 5745 | -5.94 | -5.94 | 30.00 | -35.94 |
| Mid | 5785 | -6.00 | -6.00 | 30.00 | -36.00 |
| High | 5825 | -6.67 | -6.67 | 30.00 | -36.67 |

PSD, Chain 0





8.3. 802.11n HT20 MODE IN THE 5.8 GHz BAND

8.3.1. 6 dB BANDWIDTH

LIMITS

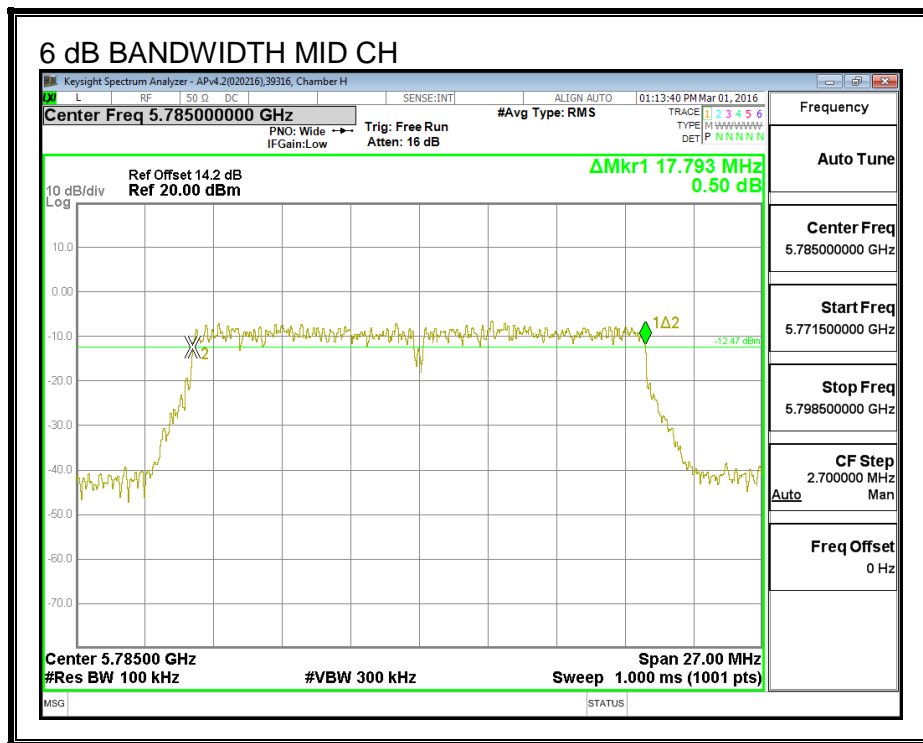
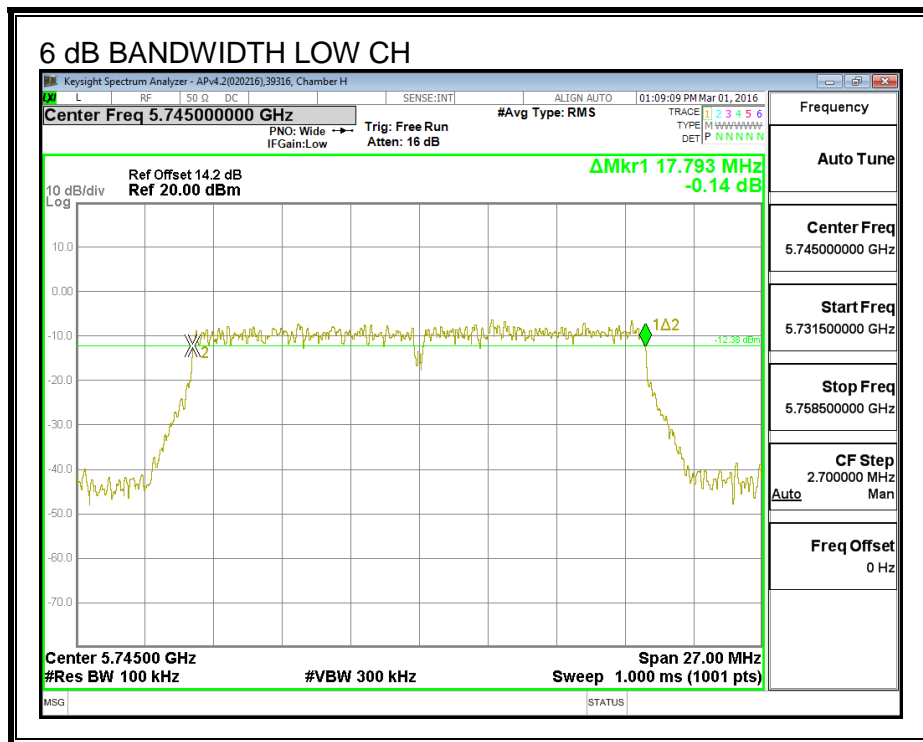
FCC §15.407 (e)

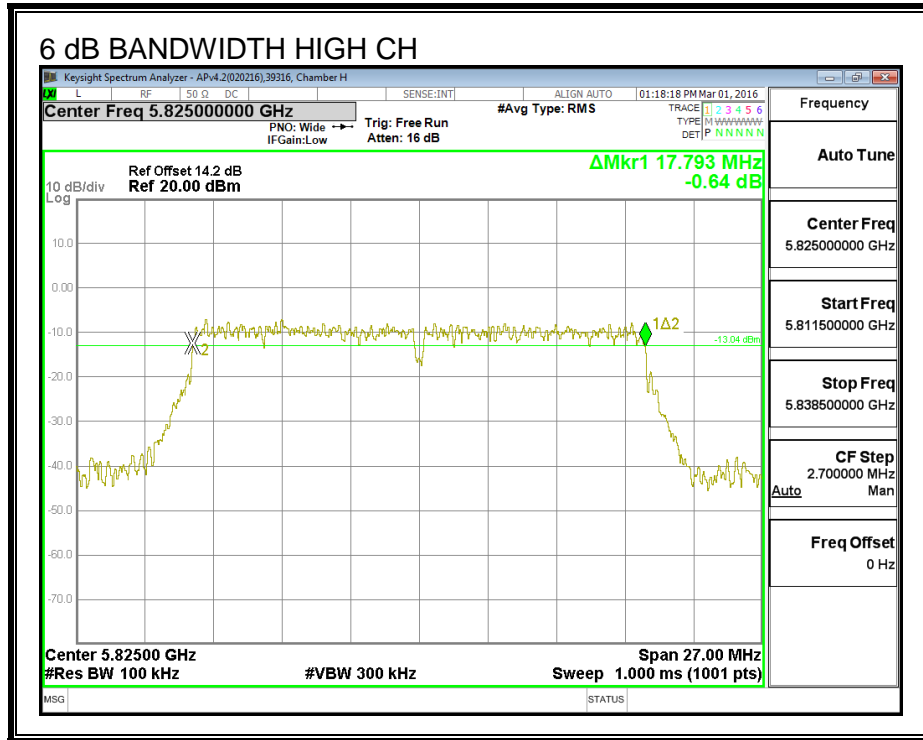
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---------|--------------------|-------------------------|------------------------|
| Low | 5745 | 17.7930 | 0.5 |
| Mid | 5785 | 17.7930 | 0.5 |
| High | 5825 | 17.7930 | 0.5 |

6 dB BANDWIDTH





8.3.2. 26 dB BANDWIDTH

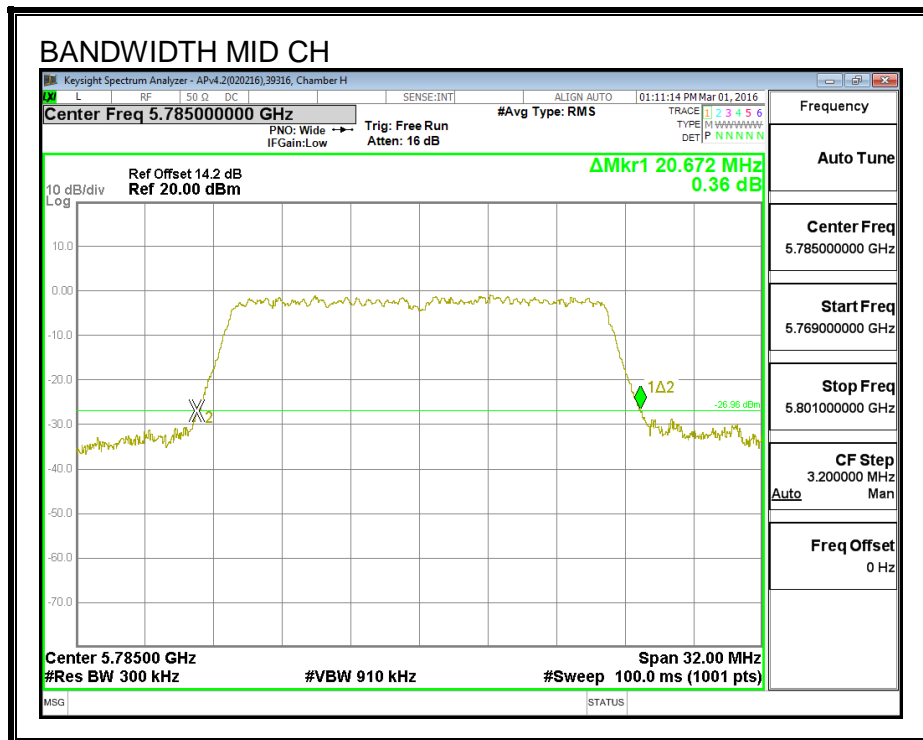
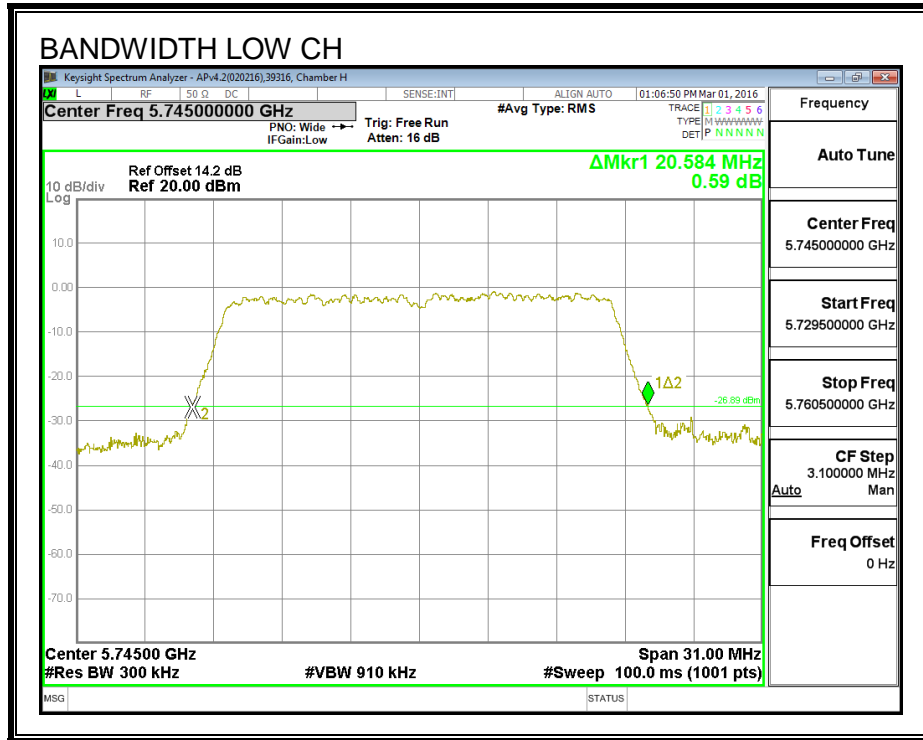
LIMITS

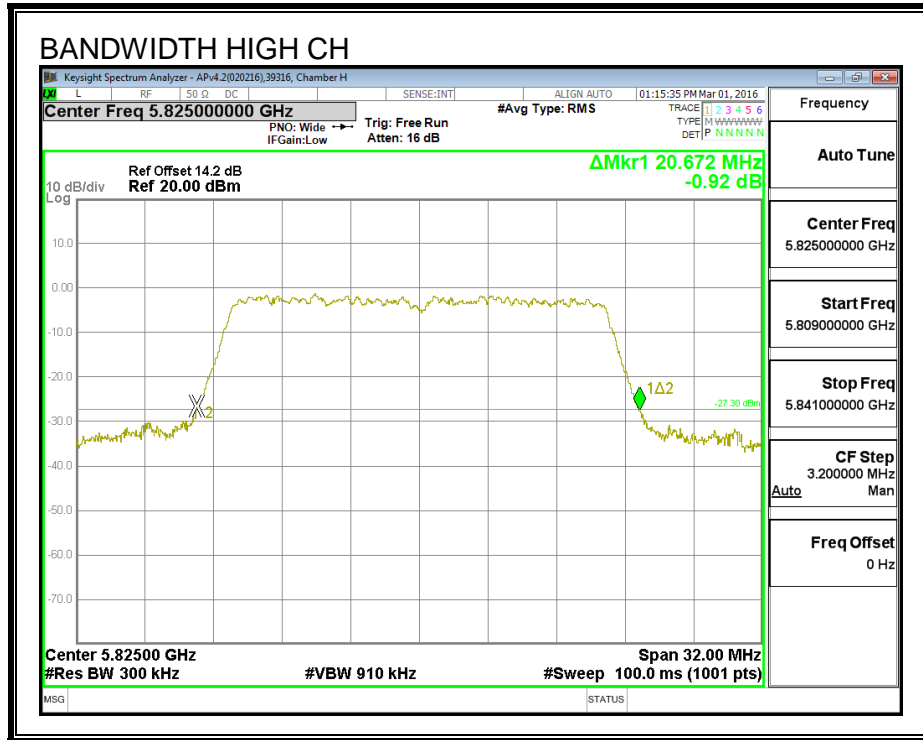
None; for reporting purposes only.

RESULTS

| Channel | Frequency (MHz) | 26 dB Bandwidth (MHz) |
|---------|-----------------|-----------------------|
| Low | 5745 | 20.58 |
| Mid | 5785 | 20.67 |
| High | 5825 | 20.67 |

26 dB BANDWIDTH





8.3.3. 99% BANDWIDTH

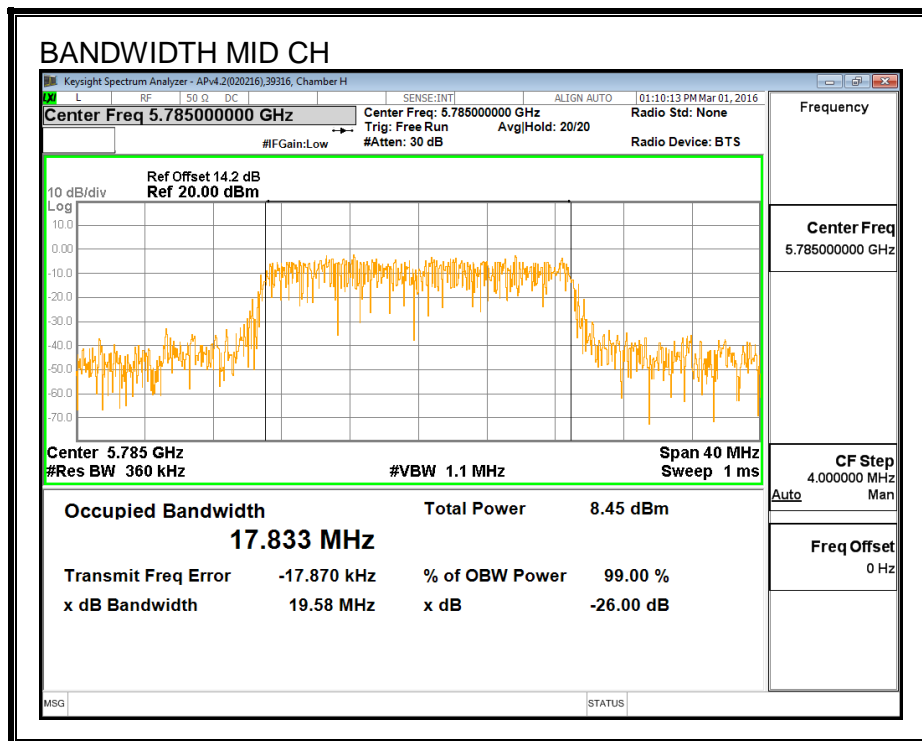
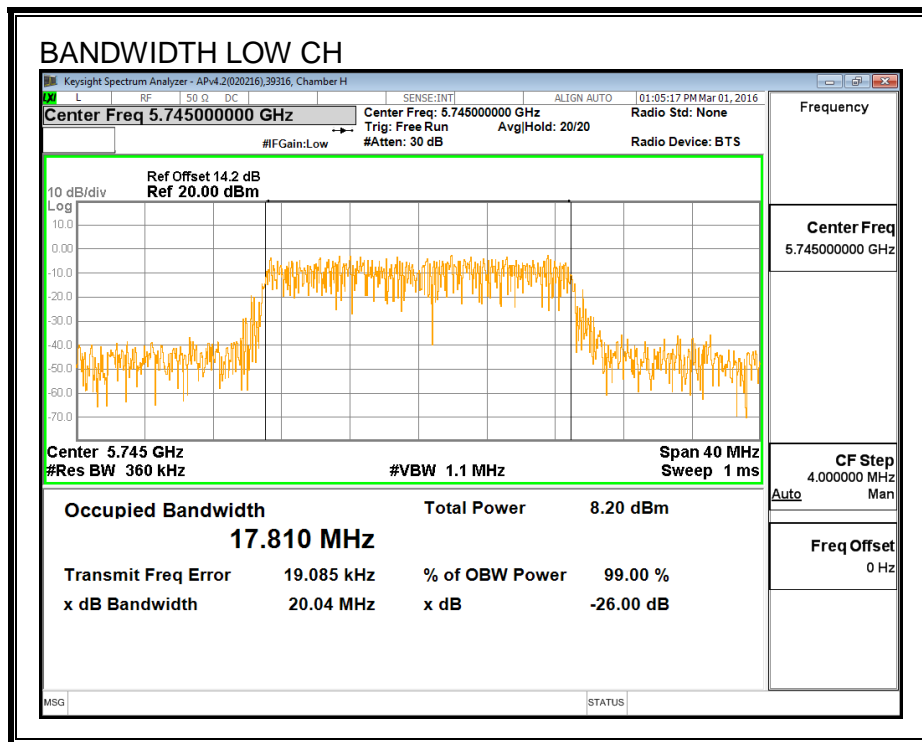
LIMITS

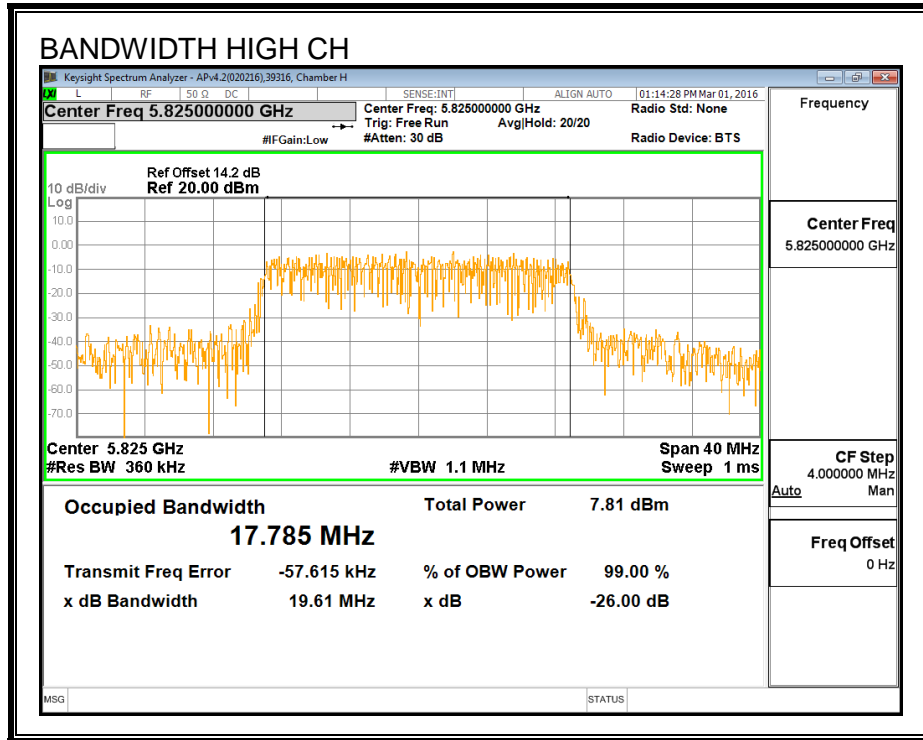
None; for reporting purposes only.

RESULTS

| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---------|-----------------|---------------------|
| Low | 5745 | 17.8100 |
| Mid | 5785 | 17.8330 |
| High | 5825 | 17.7850 |

99% BANDWIDTH





8.3.4. OUTPUT POWER

LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

Antenna Gain and Limit

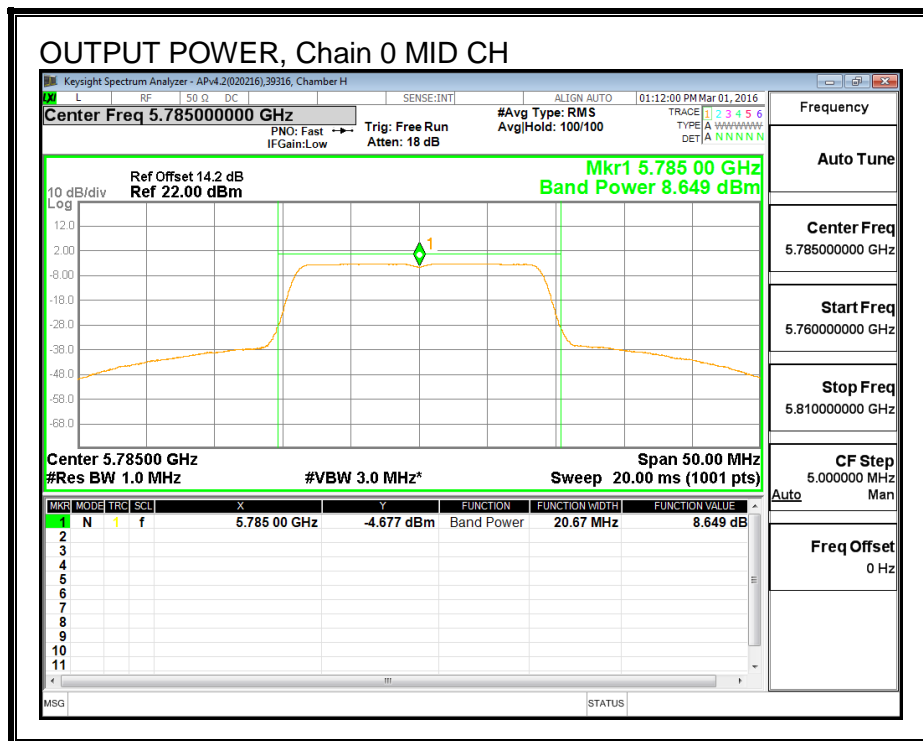
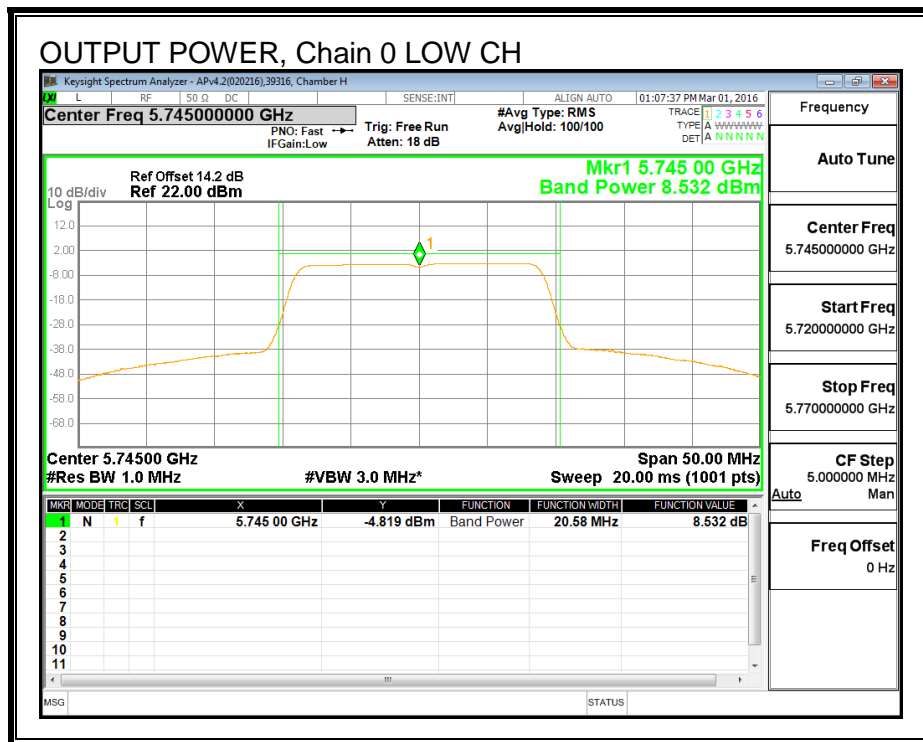
| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Power Limit (dBm) |
|---------|--------------------|---|-------------------------|
| Low | 5745 | 3.14 | 30.00 |
| Mid | 5785 | 3.14 | 30.00 |
| High | 5825 | 3.14 | 30.00 |

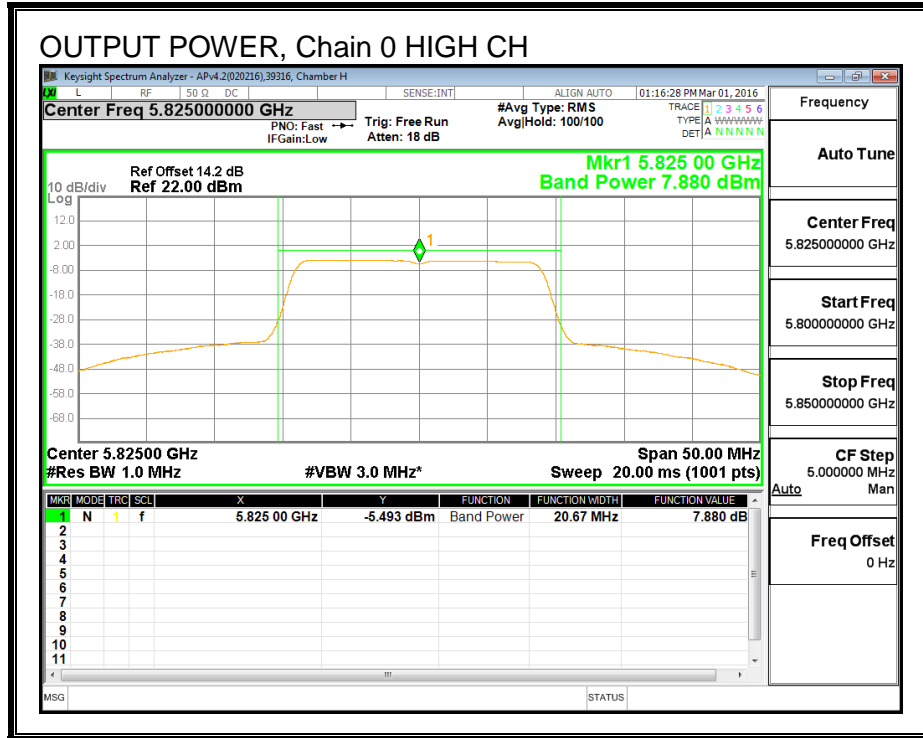
| | | |
|---------------------------|------|---|
| Duty Cycle CF (dB) | 0.00 | Included in Calculations of Corr'd Power |
|---------------------------|------|---|

Output Power Results

| Channel | Frequency (MHz) | Chain 0 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---------|--------------------|-----------------------------------|-----------------------------------|-------------------------|-------------------------|
| Low | 5745 | 8.53 | 8.53 | 30.00 | -21.47 |
| Mid | 5785 | 8.65 | 8.65 | 30.00 | -21.35 |
| High | 5825 | 7.88 | 7.88 | 30.00 | -22.12 |

OUTPUT POWER, Chain 0





8.3.5. Maximum Power Spectral Density (PSD)

LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

Antenna Gain and Limits

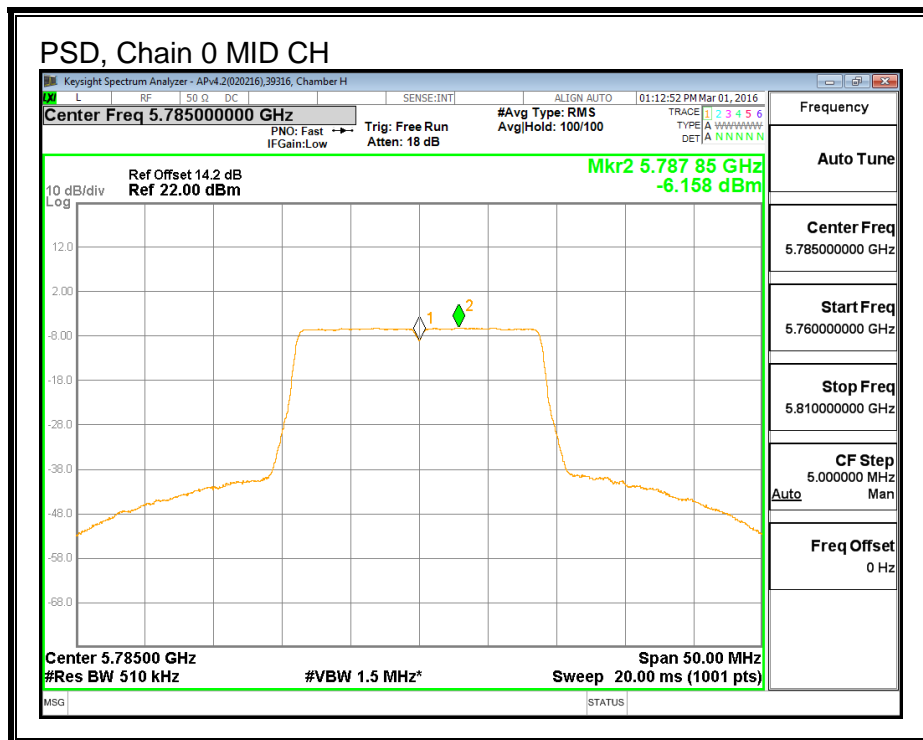
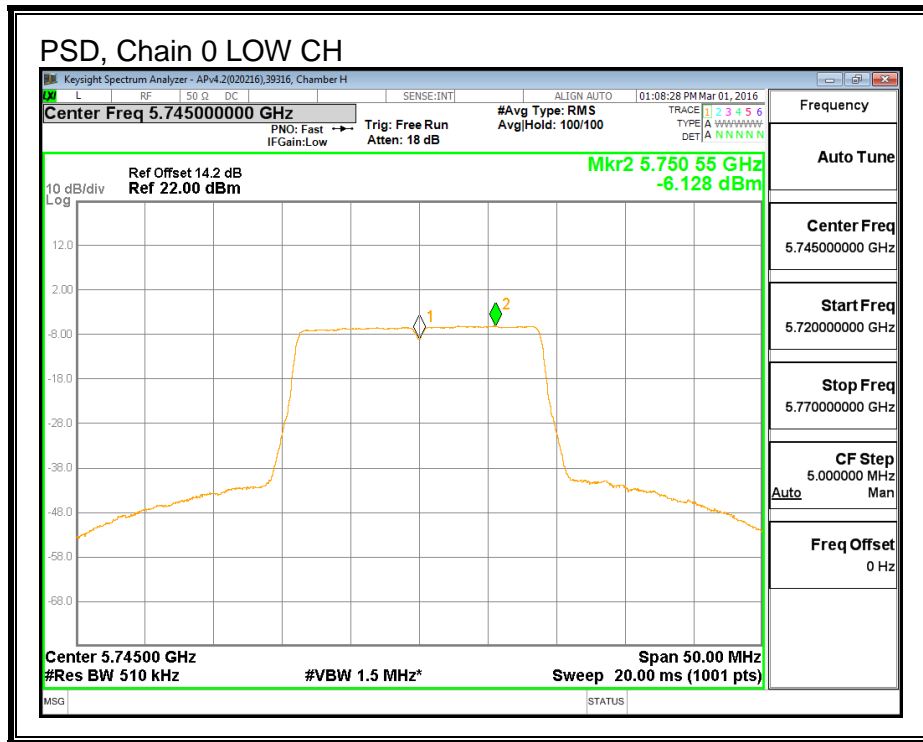
| Channel | Frequency (MHz) | Directional Gain (dBi) | PSD Limit (dBm) |
|---------|--------------------|------------------------------|-----------------------|
| Low | 5745 | 3.14 | 30.00 |
| Mid | 5785 | 3.14 | 30.00 |
| High | 5825 | 3.14 | 30.00 |

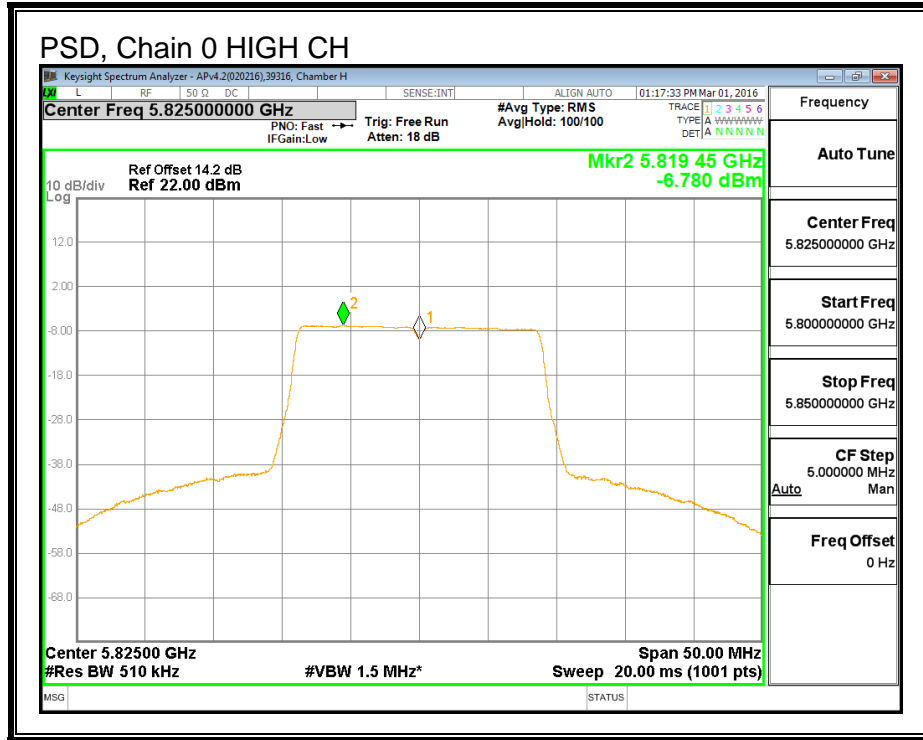
| | | |
|---------------------------|------|---|
| Duty Cycle CF (dB) | 0.00 | Included in Calculations of Corr'd PSD |
|---------------------------|------|---|

PSD Results

| Channel | Frequency (MHz) | Chain 0 Meas PSD (dBm) | Total Corr'd PSD (dBm) | PSD Limit (dBm) | PSD Margin (dB) |
|---------|--------------------|---------------------------------|---------------------------------|-----------------------|-----------------------|
| Low | 5745 | -6.13 | -6.13 | 30.00 | -36.13 |
| Mid | 5785 | -6.16 | -6.16 | 30.00 | -36.16 |
| High | 5825 | -6.78 | -6.78 | 30.00 | -36.78 |

PSD, Chain 0





9. RADIATED TEST RESULTS

9.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

| Frequency Range (MHz) | Field Strength Limit (uV/m) at 3 m | Field Strength Limit (dBuV/m) at 3 m |
|-----------------------|------------------------------------|--------------------------------------|
| 30 - 88 | 100 | 40 |
| 88 - 216 | 150 | 43.5 |
| 216 - 960 | 200 | 46 |
| Above 960 | 500 | 54 |

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for below 1GHz measurements and 1.5 m above the ground plane for above 1GHz measurements. The antenna to EUT distance is 3 meters.

For measurements below 1 GHz the resolution bandwidth is set to 120 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 1 MHz for peak measurements and as applicable for average measurements.

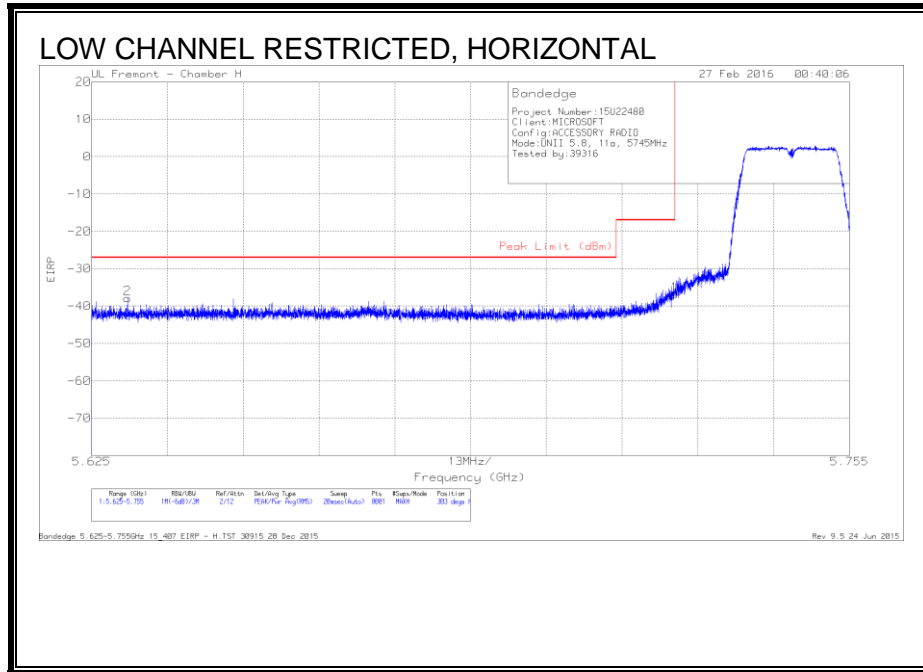
The spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

9.2. TRANSMITTER ABOVE 1 GHz

9.3. TX ABOVE 1 GHz 802.11a MODE IN THE 5.8 GHz BAND

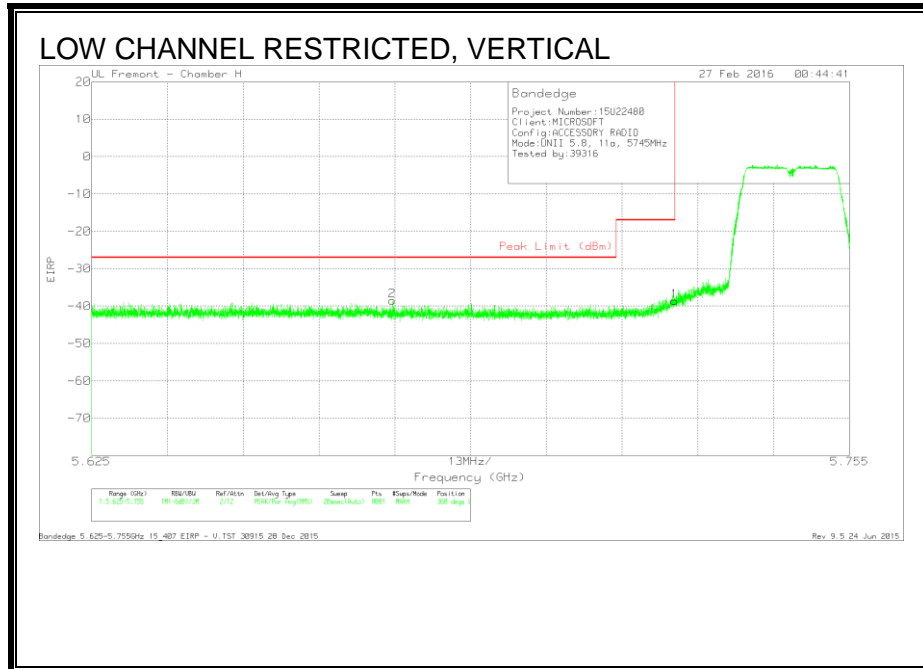
RESTRICTED BANDEDGE (LOW CHANNEL)



DATA

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | AF T863 (dB/m) | Amp/Cbl/F ltr/Pad (dB) | Conversion Factor (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|----------------|------------------------|------------------------|------------------------|------------------|----------------|----------------|-------------|----------|
| 2 | 5.631 | -65.98 | Pk | 34.9 | -18.6 | 11.8 | -37.88 | -27 | -10.88 | 303 | 172 | H |
| 1 | 5.725 | -64.96 | Pk | 34.8 | -18.5 | 11.8 | -36.86 | -17 | -19.86 | 303 | 172 | H |

Pk - Peak detector

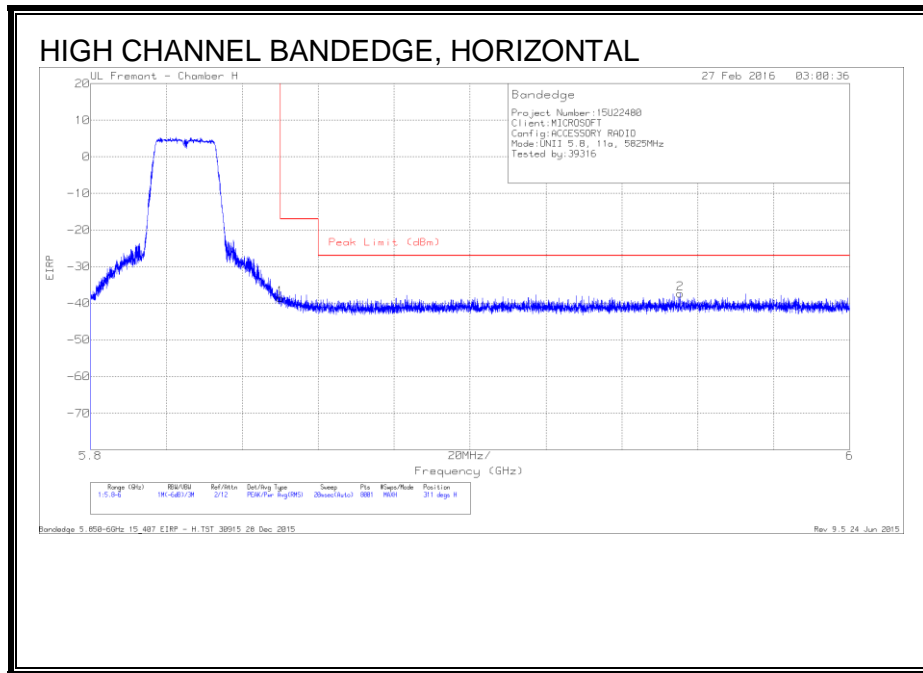


DATA

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | AF T863 (dB/m) | Amp/Cbl/F ltr/Pad (dB) | Conversion Factor (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|----------------|------------------------|------------------------|------------------------|------------------|----------------|----------------|-------------|----------|
| 2 | 5.677 | -66.64 | Pk | 34.8 | -18.5 | 11.8 | -38.54 | -27 | -11.54 | 360 | 237 | V |
| 1 | 5.725 | -66.74 | Pk | 34.8 | -18.5 | 11.8 | -38.64 | -17 | -21.64 | 360 | 237 | V |

Pk - Peak detector

AUTHORIZED BANDEDGE (HIGH CHANNEL)

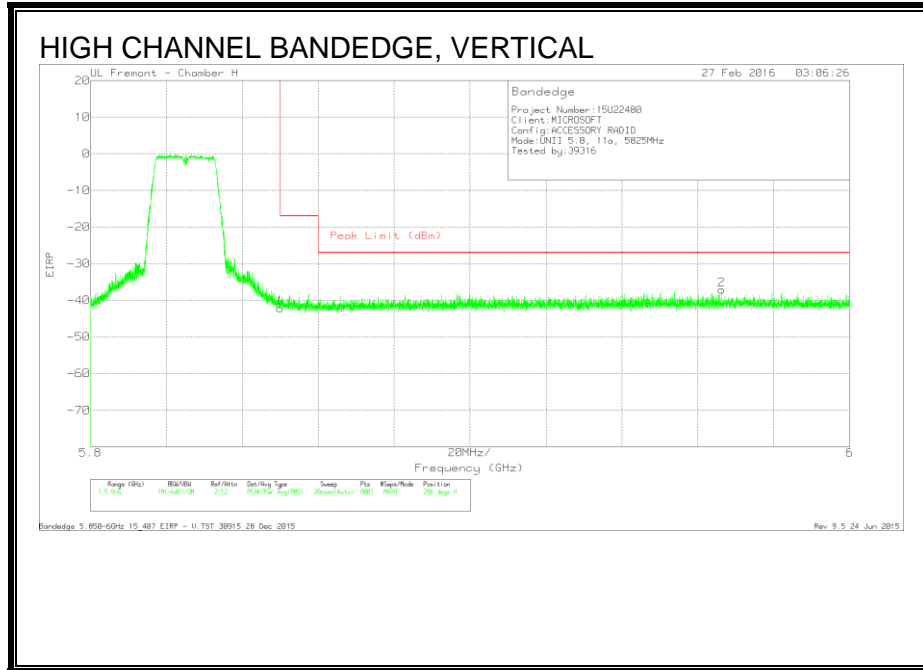


DATA

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | AF T863 (dB/m) | Amp/Cbl/F ltr/Pad (dB) | Conversion Factor (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|----------------|------------------------|------------------------|------------------------|------------------|----------------|----------------|-------------|----------|
| 1 | 5.85 | -66.73 | Pk | 34.9 | -18.5 | 11.8 | -38.53 | -17 | -21.53 | 311 | 149 | H |
| 2 | 5.955 | -66.24 | Pk | 35.1 | -18 | 11.8 | -37.34 | -27 | -10.34 | 311 | 149 | H |

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector



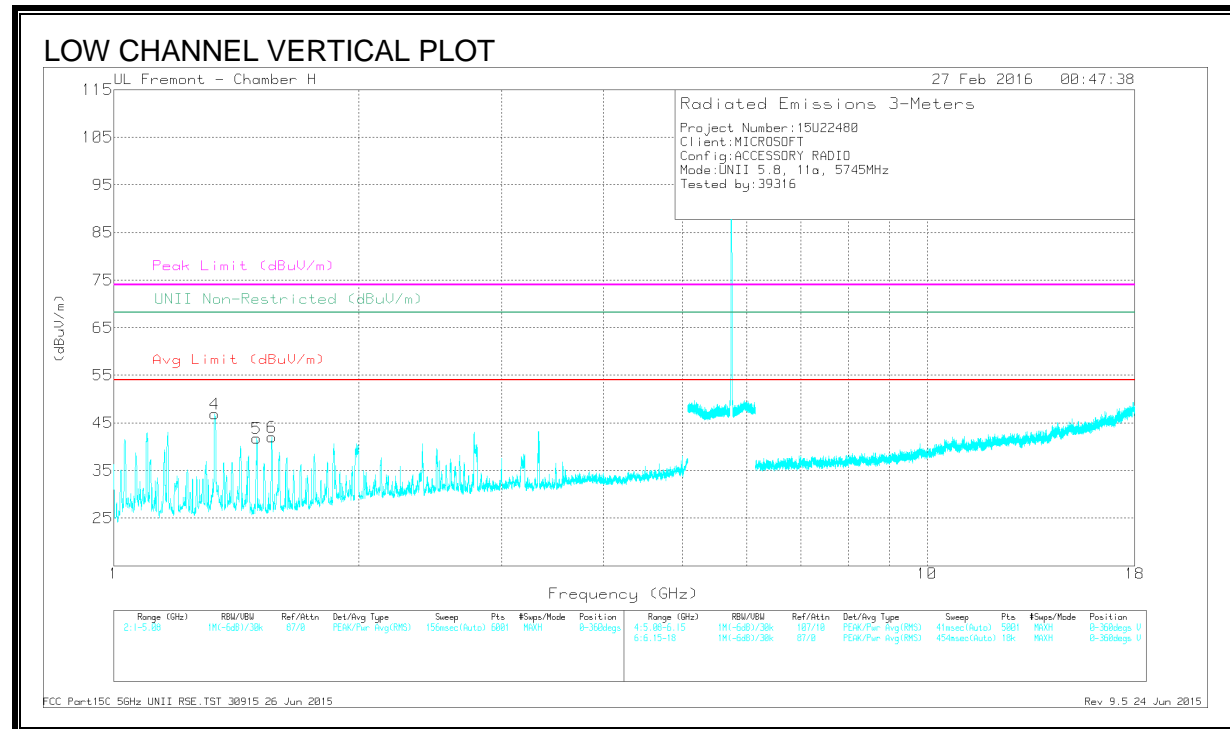
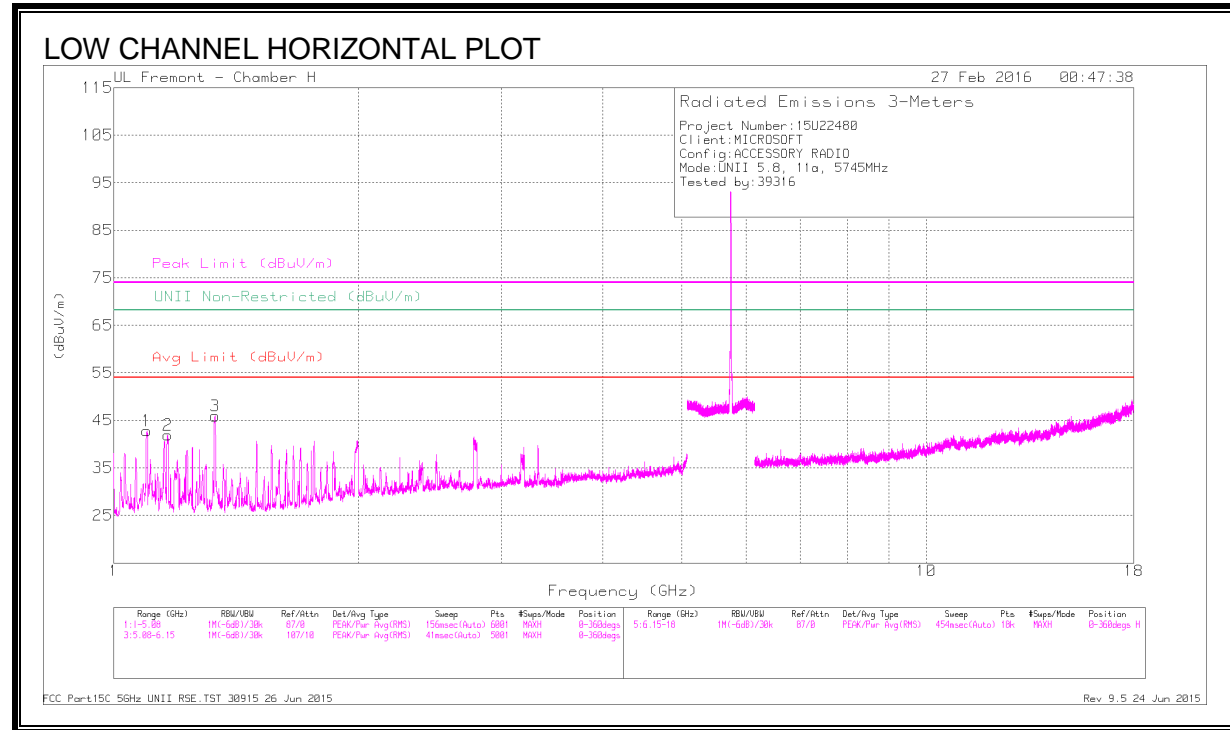
DATA

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | AF T863 (dB/m) | Amp/Cbl/F ltr/Pad (dB) | Conversion Factor (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|----------------|------------------------|------------------------|------------------------|------------------|----------------|----------------|-------------|----------|
| 1 | 5.85 | -70.32 | Pk | 34.9 | -18.5 | 11.8 | -42.12 | -17 | -25.12 | 286 | 177 | V |
| 2 | 5.966 | -66.21 | Pk | 35.2 | -17.9 | 11.8 | -37.11 | -27 | -10.11 | 286 | 177 | V |

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

HARMONICS AND SPURIOUS EMISSIONS



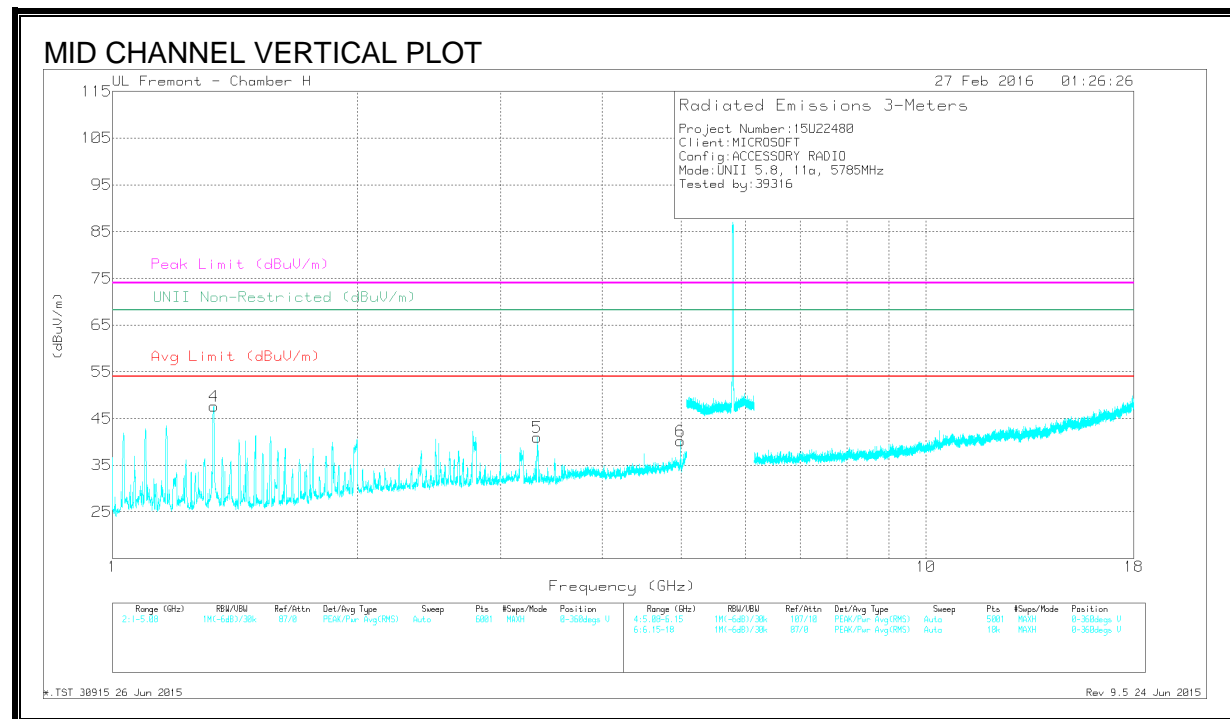
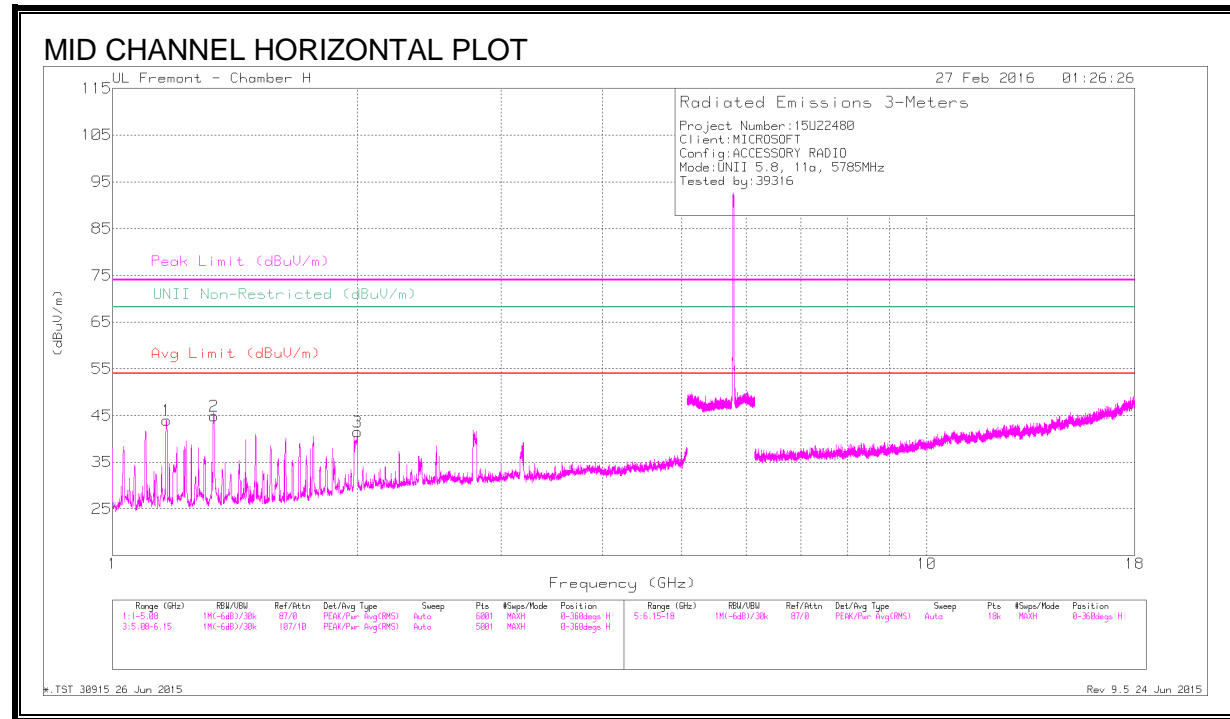
DATA

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T863 (dB/m) | Amp/Cb/FI tr/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|-----------------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | * 1.1 | 53.76 | PK-U | 27.1 | -34.4 | 46.46 | - | - | 74 | -27.54 | - | - | 219 | 186 | H |
| | * 1.099 | 46.2 | ADR | 27.1 | -34.4 | 38.9 | 54 | -15.1 | - | - | - | - | 219 | 186 | H |
| 2 | * 1.164 | 57.37 | PK-U | 27.7 | -34.5 | 50.57 | - | - | 74 | -23.43 | - | - | 195 | 203 | H |
| | * 1.165 | 48.12 | ADR | 27.8 | -34.5 | 41.42 | 54 | -12.58 | - | - | - | - | 195 | 203 | H |
| 4 | * 1.333 | 57.33 | PK-U | 28.8 | -34.6 | 51.53 | - | - | 74 | -22.47 | - | - | 228 | 201 | H |
| | * 1.332 | 48.99 | ADR | 28.8 | -34.6 | 43.19 | 54 | -10.81 | - | - | - | - | 228 | 201 | H |
| 3 | * 1.334 | 57.87 | PK-U | 28.8 | -34.6 | 52.07 | - | - | 74 | -21.93 | - | - | 304 | 121 | V |
| | * 1.331 | 49.77 | ADR | 28.8 | -34.6 | 43.97 | 54 | -10.03 | - | - | - | - | 304 | 121 | V |
| 5 | * 1.5 | 54.63 | PK-U | 28.1 | -34.3 | 48.43 | - | - | 74 | -25.57 | - | - | 39 | 341 | V |
| | * 1.5 | 47 | ADR | 28.1 | -34.3 | 40.8 | 54 | -13.2 | - | - | - | - | 39 | 341 | V |
| 6 | * 1.564 | 55.22 | PK-U | 28.3 | -34.4 | 49.12 | - | - | 74 | -24.88 | - | - | 64 | 350 | V |
| | * 1.565 | 48.04 | ADR | 28.3 | -34.4 | 41.94 | 54 | -12.06 | - | - | - | - | 64 | 350 | V |

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



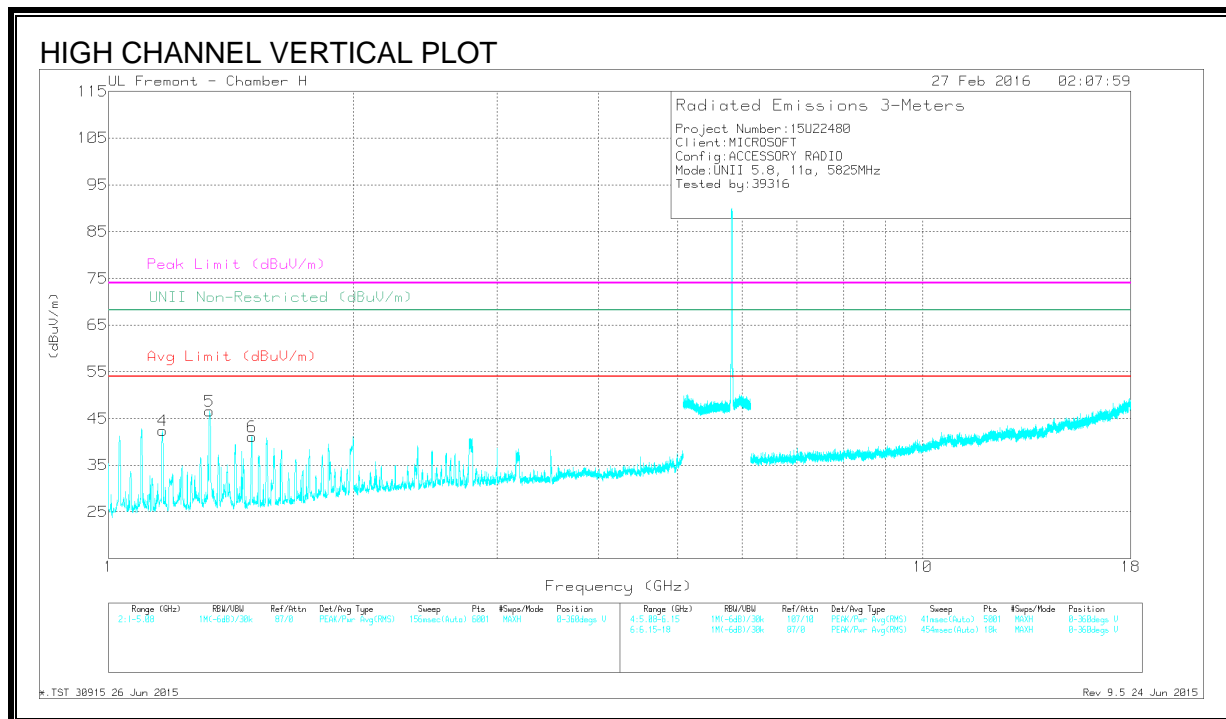
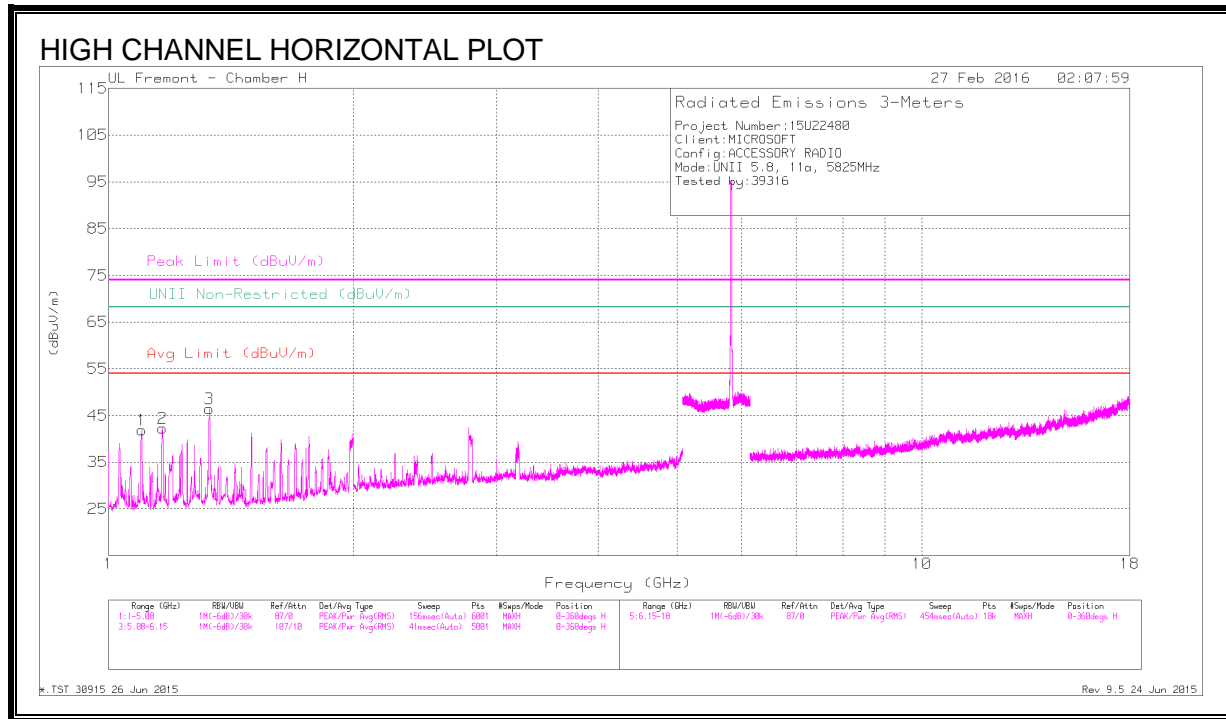
DATA

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T863 (dB/m) | Amp/Cb/FI tr/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|-----------------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | * 1.165 | 58.51 | PK-U | 27.7 | -34.5 | 51.71 | - | - | 74 | -22.29 | - | - | 186 | 196 | H |
| | * 1.165 | 46.78 | ADR | 27.8 | -34.5 | 40.08 | 54 | -13.92 | - | - | - | - | 186 | 196 | H |
| 2 | * 1.334 | 57.92 | PK-U | 28.8 | -34.6 | 52.12 | - | - | 74 | -21.88 | - | - | 231 | 200 | H |
| | * 1.331 | 49.18 | ADR | 28.8 | -34.6 | 43.38 | 54 | -10.62 | - | - | - | - | 231 | 200 | H |
| 4 | * 1.333 | 57.91 | PK-U | 28.8 | -34.6 | 52.11 | - | - | 74 | -21.89 | - | - | 302 | 120 | V |
| | * 1.332 | 49.86 | ADR | 28.8 | -34.6 | 44.06 | 54 | -9.94 | - | - | - | - | 302 | 120 | V |
| 6 | * 4.99 | 44.64 | PK-U | 34.3 | -29.1 | 49.84 | - | - | 74 | -24.16 | - | - | 218 | 202 | V |
| | * 4.99 | 29.51 | ADR | 34.3 | -29.1 | 34.71 | 54 | -19.29 | - | - | - | - | 218 | 202 | V |
| 3 | 2 | 48.64 | PK-U | 31.2 | -33.8 | 46.04 | - | - | - | - | 68.2 | -22.16 | 113 | 209 | H |
| 5 | 3.329 | 49.75 | PK-U | 32.8 | -31 | 51.55 | - | - | - | - | 68.2 | -16.65 | 65 | 164 | V |

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



DATA

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T863 (dB/m) | Amp/Cb/FI tr/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|-----------------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | * 1.1 | 54.52 | PK-U | 27.1 | -34.4 | 47.22 | - | - | 74 | -26.78 | - | - | 219 | 184 | H |
| | * 1.098 | 47.24 | ADR | 27.1 | -34.4 | 39.94 | 54 | -14.06 | - | - | - | - | 219 | 184 | H |
| 2 | * 1.164 | 56.93 | PK-U | 27.7 | -34.5 | 50.13 | - | - | 74 | -23.87 | - | - | 193 | 218 | H |
| | * 1.165 | 47.94 | ADR | 27.8 | -34.5 | 41.24 | 54 | -12.76 | - | - | - | - | 193 | 218 | H |
| 3 | * 1.331 | 57.93 | PK-U | 28.8 | -34.6 | 52.13 | - | - | 74 | -21.87 | - | - | 228 | 199 | H |
| | * 1.332 | 49.58 | ADR | 28.8 | -34.6 | 43.78 | 54 | -10.22 | - | - | - | - | 228 | 199 | H |
| 4 | * 1.164 | 56.89 | PK-U | 27.7 | -34.5 | 50.09 | - | - | 74 | -23.91 | - | - | 15 | 197 | V |
| | * 1.165 | 46.92 | ADR | 27.8 | -34.5 | 40.22 | 54 | -13.78 | - | - | - | - | 15 | 197 | V |
| 5 | * 1.332 | 58.49 | PK-U | 28.8 | -34.6 | 52.69 | - | - | 74 | -21.31 | - | - | 307 | 115 | V |
| | * 1.331 | 49.84 | ADR | 28.8 | -34.6 | 44.04 | 54 | -9.96 | - | - | - | - | 307 | 115 | V |
| 6 | * 1.5 | 55 | PK-U | 28.1 | -34.3 | 48.8 | - | - | 74 | -25.2 | - | - | 39 | 176 | V |
| | * 1.5 | 47.85 | ADR | 28.1 | -34.3 | 41.65 | 54 | -12.35 | - | - | - | - | 39 | 176 | V |

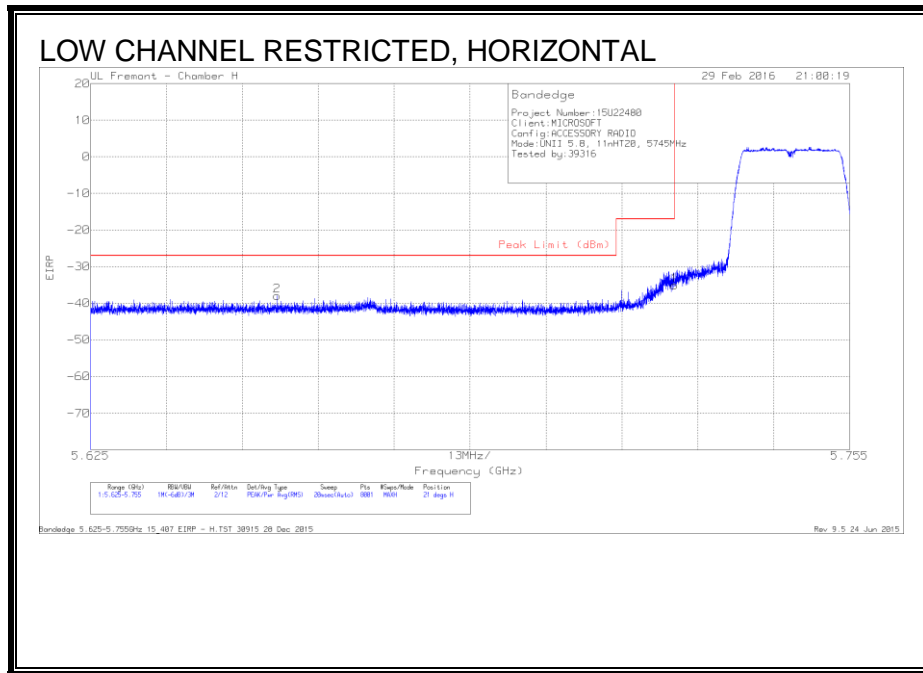
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

9.4. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.8 GHz BAND

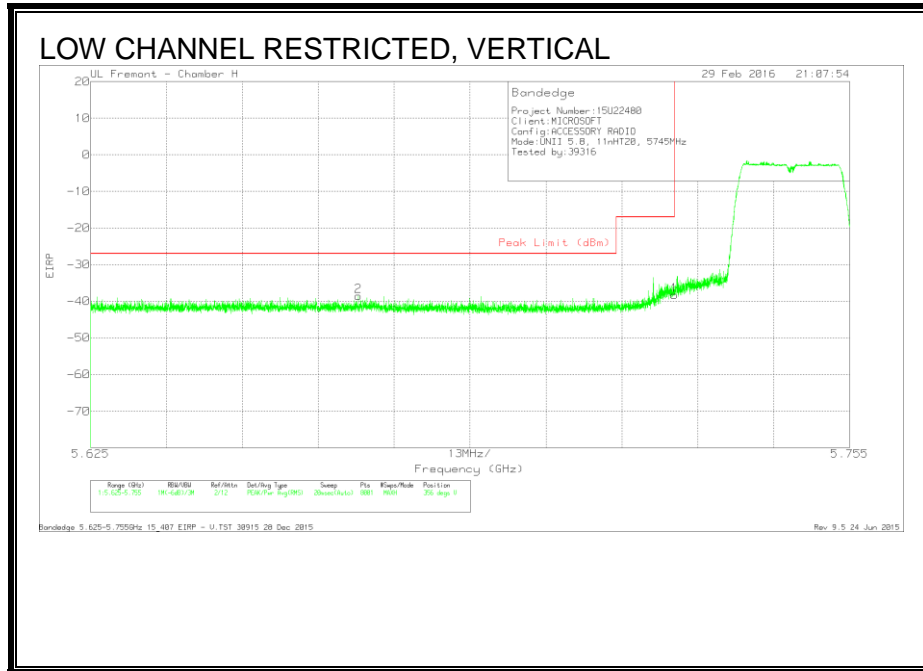
RESTRICTED BANDEDGE (LOW CHANNEL)



DATA

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | AF T863 (dB/m) | Amp/Cbl/F ltr/Pad (dB) | Conversion Factor (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|----------------|------------------------|------------------------|------------------------|------------------|----------------|----------------|-------------|----------|
| 2 | 5.657 | -66.18 | Pk | 34.9 | -18.4 | 11.8 | -37.88 | -27 | -10.88 | 21 | 181 | H |
| 1 | 5.725 | -63.17 | Pk | 34.8 | -18.5 | 11.8 | -35.07 | -17 | -18.07 | 21 | 181 | H |

Pk - Peak detector

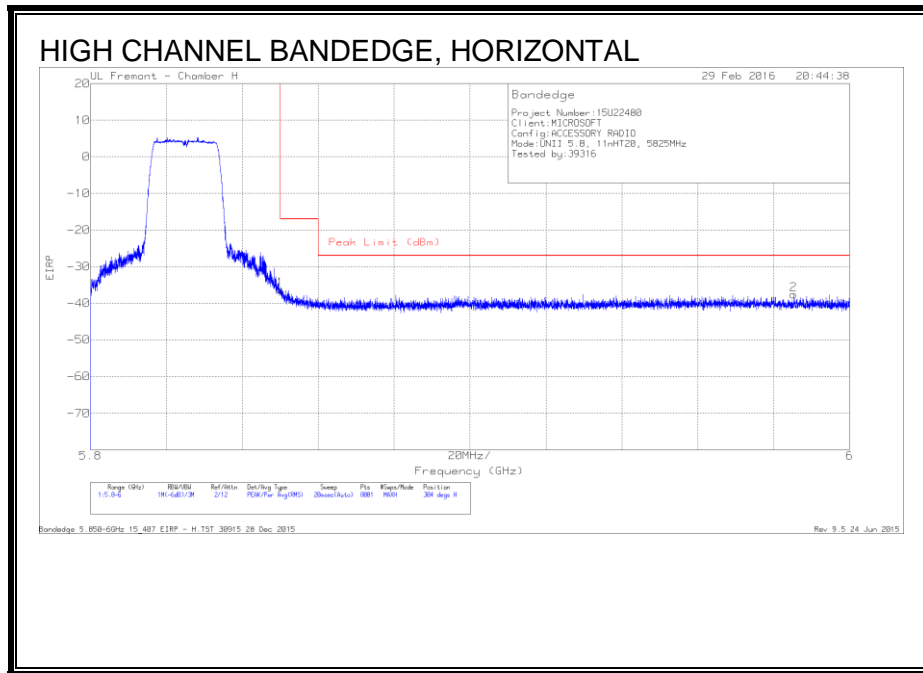


DATA

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | AF T863 (dB/m) | Amp/Cbl/F ltr/Pad (dB) | Conversion Factor (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|----------------|------------------------|------------------------|------------------------|------------------|----------------|----------------|-------------|----------|
| 2 | 5.671 | -66.71 | Pk | 34.8 | -18.4 | 11.8 | -38.51 | -27 | -11.51 | 356 | 256 | V |
| 1 | 5.725 | -66.38 | Pk | 34.8 | -18.5 | 11.8 | -38.28 | -17 | -21.28 | 356 | 256 | V |

Pk - Peak detector

AUTHORIZED BANDEDGE (HIGH CHANNEL)

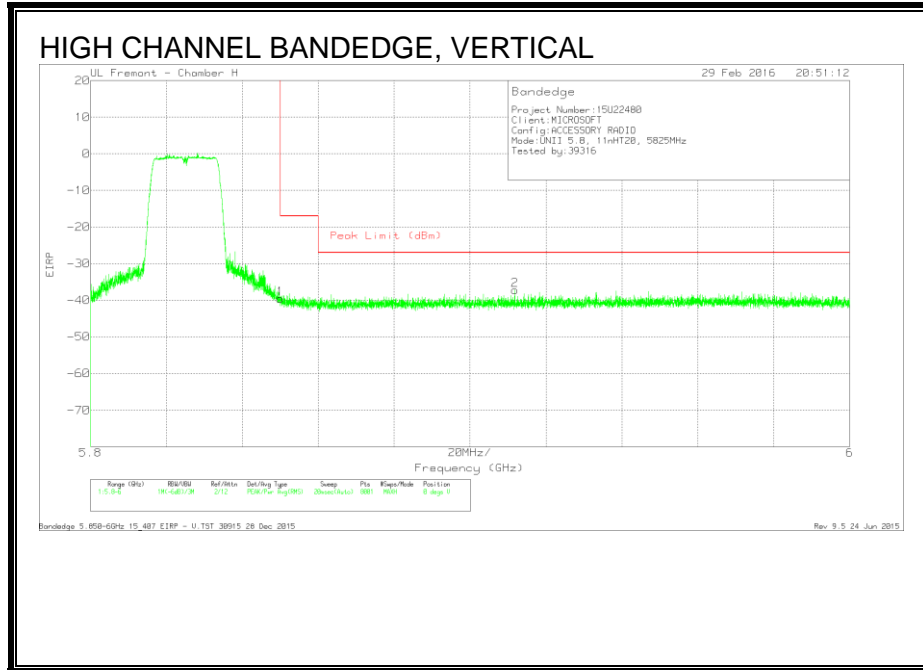


DATA

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | AF T863 (dB/m) | Amp/Cbl/F ltr/Pad (dB) | Conversion Factor (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|----------------|------------------------|------------------------|------------------------|------------------|----------------|----------------|-------------|----------|
| 1 | 5.85 | -64.44 | Pk | 34.9 | -18.5 | 11.8 | -36.24 | -17 | -19.24 | 304 | 161 | H |
| 2 | 5.985 | -66.52 | Pk | 35.2 | -18 | 11.8 | -37.52 | -27 | -10.52 | 304 | 161 | H |

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

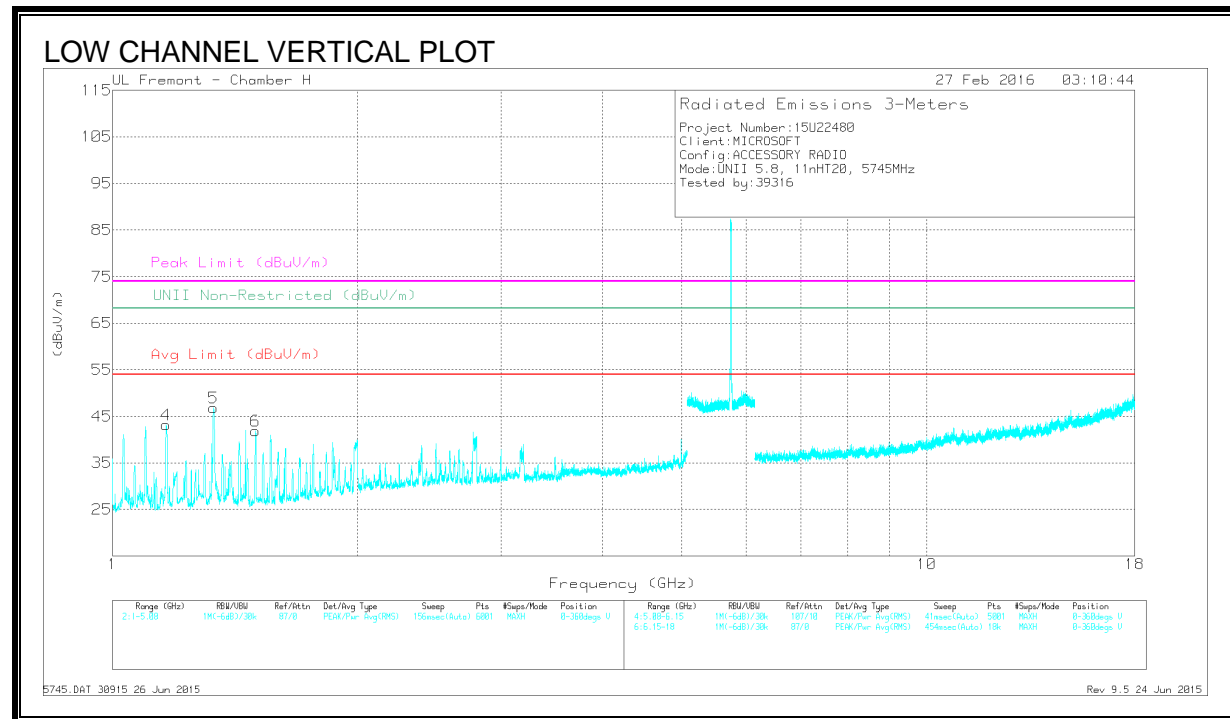
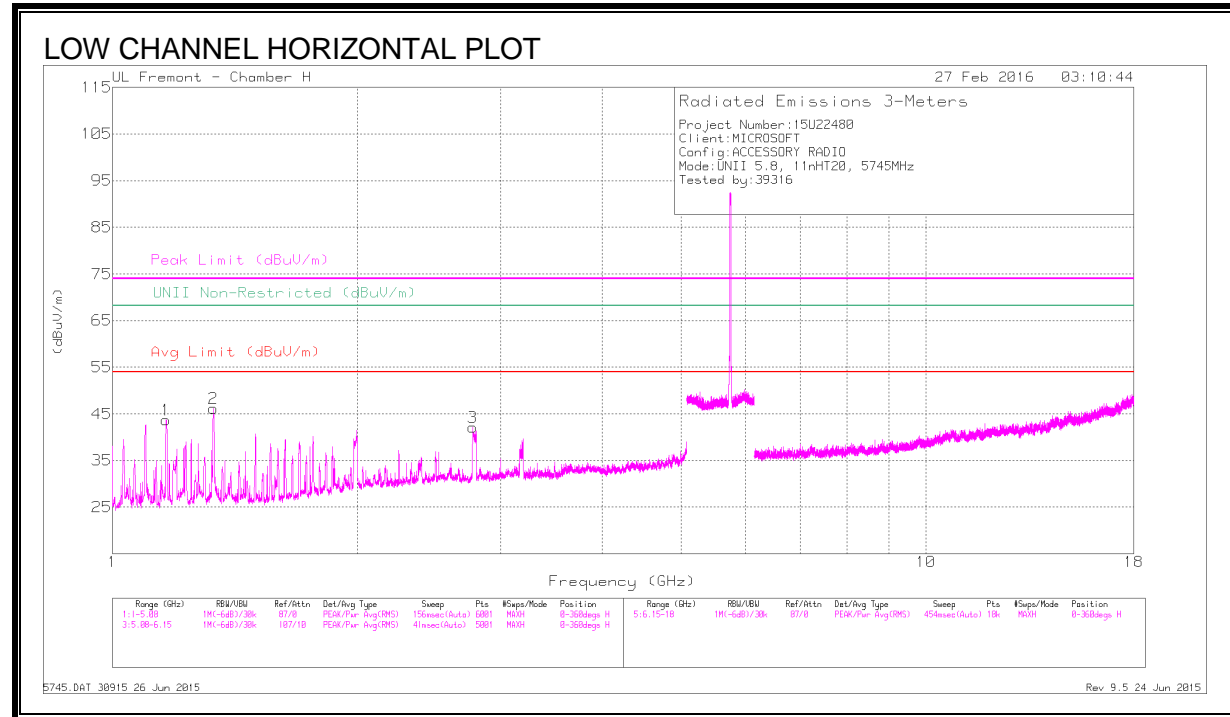


DATA

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | AF T863 (dB/m) | Amp/Cbl/F ltr/Pad (dB) | Conversion Factor (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|----------------|------------------------|------------------------|------------------------|------------------|----------------|----------------|-------------|----------|
| 1 | 5.85 | -67.76 | Pk | 34.9 | -18.5 | 11.8 | -39.56 | -17 | -22.56 | 0 | 159 | V |
| 2 | 5.912 | -65.94 | Pk | 35 | -18.1 | 11.8 | -37.24 | -27 | -10.24 | 0 | 159 | V |

Pk - Peak detector

HARMONICS AND SPURIOUS EMISSIONS



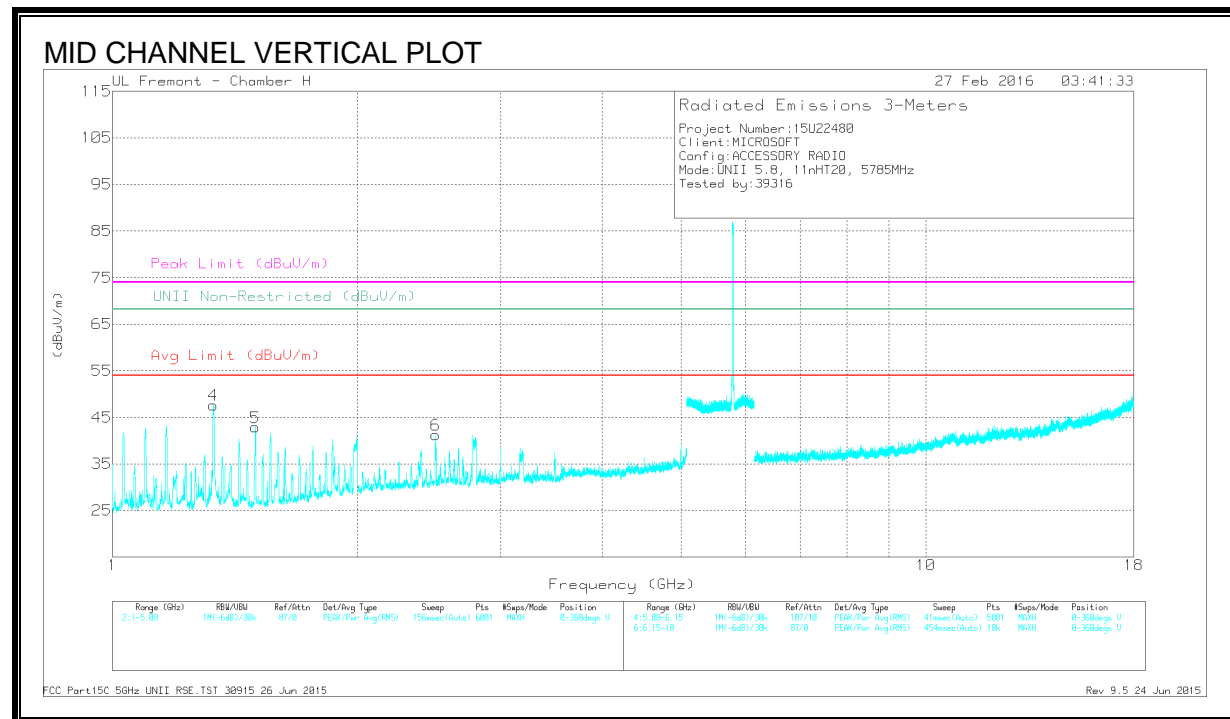
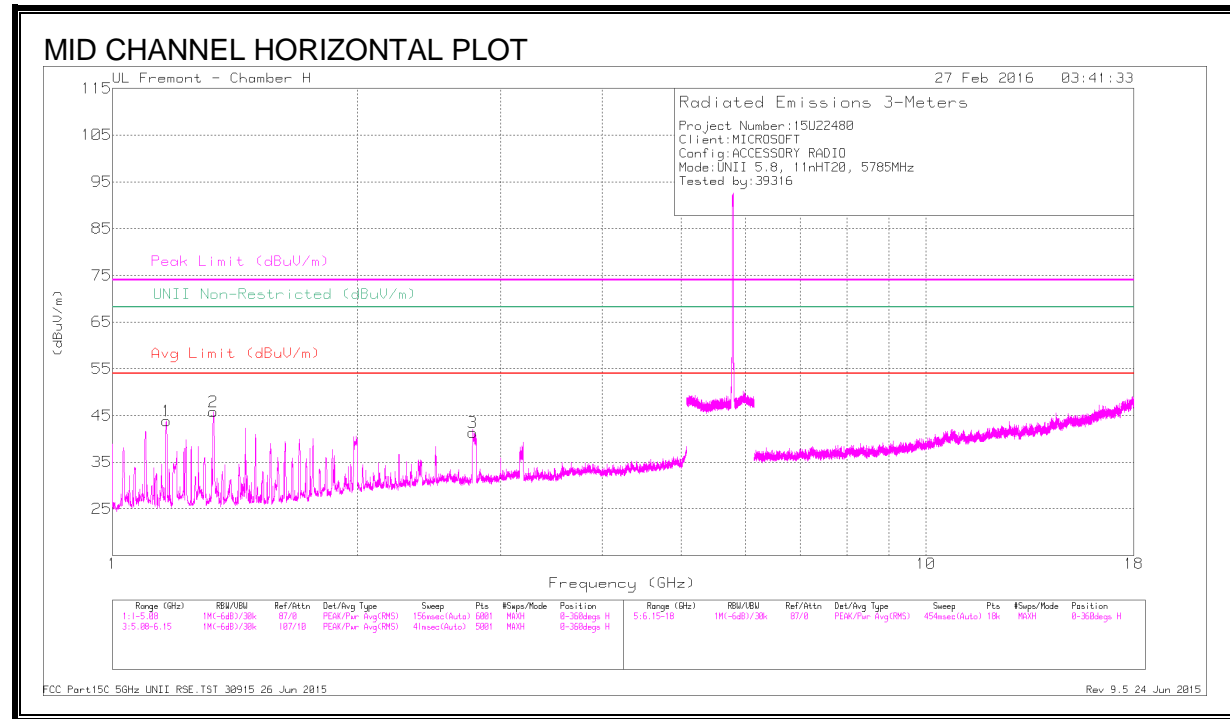
DATA

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T863 (dB/m) | Amp/Cb/FI tr/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|-----------------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | * 1.164 | 58.46 | PK-U | 27.7 | -34.5 | 51.66 | - | - | 74 | -22.34 | - | - | 195 | 217 | H |
| | * 1.165 | 48.64 | ADR | 27.8 | -34.5 | 41.94 | 54 | -12.06 | - | - | - | - | 195 | 217 | H |
| 2 | * 1.332 | 58.56 | PK-U | 28.8 | -34.6 | 52.76 | - | - | 74 | -21.24 | - | - | 229 | 203 | H |
| | * 1.332 | 49.98 | ADR | 28.8 | -34.6 | 44.18 | 54 | -9.82 | - | - | - | - | 229 | 203 | H |
| 3 | * 2.773 | 42.95 | PK-U | 32.4 | -32.4 | 42.95 | - | - | 74 | -31.05 | - | - | 149 | 186 | H |
| | * 2.773 | 30.01 | ADR | 32.4 | -32.4 | 30.01 | 54 | -23.99 | - | - | - | - | 149 | 186 | H |
| 4 | * 1.164 | 57.97 | PK-U | 27.7 | -34.5 | 51.17 | - | - | 74 | -22.83 | - | - | 20 | 197 | V |
| | * 1.165 | 47.09 | ADR | 27.8 | -34.5 | 40.39 | 54 | -13.61 | - | - | - | - | 20 | 197 | V |
| 5 | * 1.331 | 58.44 | PK-U | 28.8 | -34.6 | 52.64 | - | - | 74 | -21.36 | - | - | 303 | 121 | V |
| | * 1.331 | 51.57 | ADR | 28.8 | -34.6 | 45.77 | 54 | -8.23 | - | - | - | - | 303 | 121 | V |
| 6 | * 1.5 | 55.22 | PK-U | 28.1 | -34.3 | 49.02 | - | - | 74 | -24.98 | - | - | 41 | 179 | V |
| | * 1.5 | 48.12 | ADR | 28.1 | -34.3 | 41.92 | 54 | -12.08 | - | - | - | - | 41 | 179 | V |

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



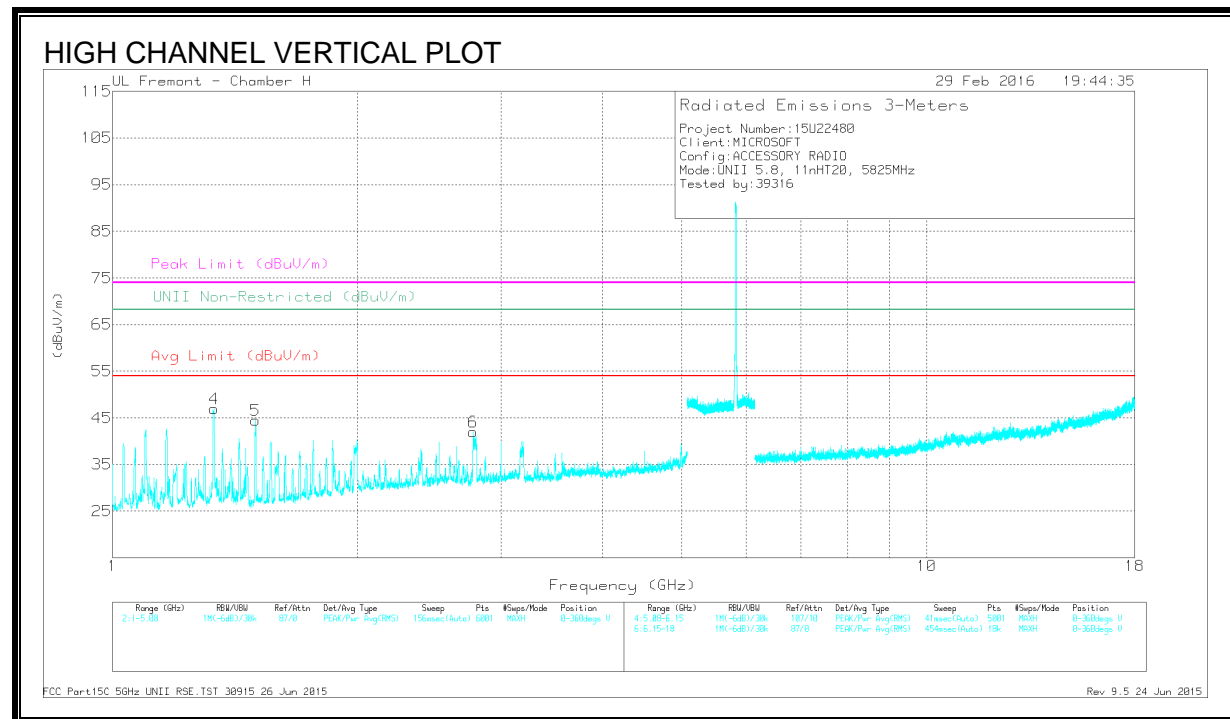
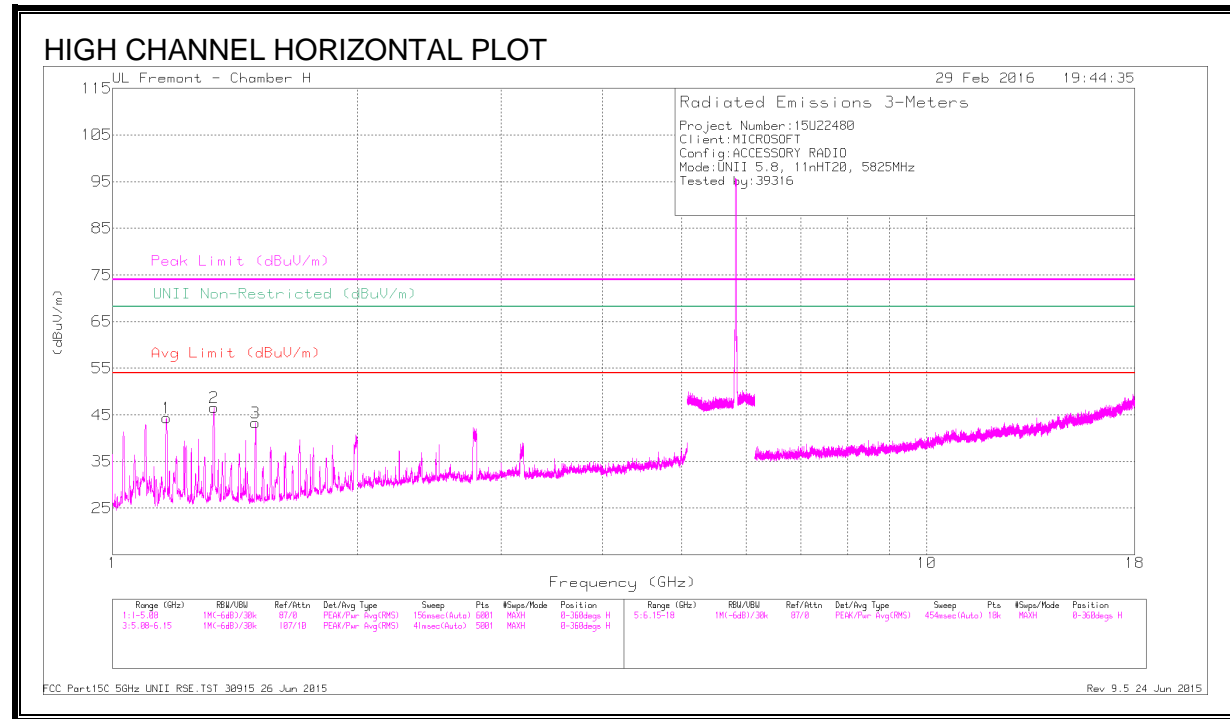
DATA

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T863 (dB/m) | Amp/Cb/FI tr/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|-----------------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | * 1.165 | 58.29 | PK-U | 27.8 | -34.5 | 51.59 | - | - | 74 | -22.41 | - | - | 184 | 216 | H |
| | * 1.165 | 46.6 | ADR | 27.8 | -34.5 | 39.9 | 54 | -14.1 | - | - | - | - | 184 | 216 | H |
| 2 | * 1.332 | 57.76 | PK-U | 28.8 | -34.6 | 51.96 | - | - | 74 | -22.04 | - | - | 230 | 201 | H |
| | * 1.332 | 50.11 | ADR | 28.8 | -34.6 | 44.31 | 54 | -9.69 | - | - | - | - | 230 | 201 | H |
| 3 | * 2.775 | 43.08 | PK-U | 32.4 | -32.4 | 43.08 | - | - | 74 | -30.92 | - | - | 149 | 186 | H |
| | * 2.773 | 30.01 | ADR | 32.4 | -32.4 | 30.01 | 54 | -23.99 | - | - | - | - | 149 | 186 | H |
| 4 | * 1.333 | 59.01 | PK-U | 28.8 | -34.6 | 53.21 | - | - | 74 | -20.79 | - | - | 304 | 113 | V |
| | * 1.332 | 50.46 | ADR | 28.8 | -34.6 | 44.66 | 54 | -9.34 | - | - | - | - | 304 | 113 | V |
| 5 | * 1.5 | 54.49 | PK-U | 28.1 | -34.3 | 48.29 | - | - | 74 | -25.71 | - | - | 42 | 175 | V |
| | * 1.5 | 47.88 | ADR | 28.1 | -34.3 | 41.68 | 54 | -12.32 | - | - | - | - | 42 | 175 | V |
| 6 | * 2.498 | 48.93 | PK-U | 32.5 | -33.3 | 48.13 | - | - | 74 | -25.87 | - | - | 7 | 240 | V |
| | * 2.496 | 34.55 | ADR | 32.4 | -33.3 | 33.65 | 54 | -20.35 | - | - | - | - | 7 | 240 | V |

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



DATA

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T863 (dB/m) | Amp/Cb/Fltr/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|----------------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | * 1.164 | 58.98 | PK-U | 27.7 | -34.5 | 52.18 | - | - | 74 | -21.82 | - | - | 188 | 196 | H |
| | * 1.165 | 48.59 | ADR | 27.8 | -34.5 | 41.89 | 54 | -12.11 | - | - | - | - | 188 | 196 | H |
| 2 | * 1.333 | 57.17 | PK-U | 28.8 | -34.6 | 51.37 | - | - | 74 | -22.63 | - | - | 177 | 206 | H |
| | * 1.331 | 49.71 | ADR | 28.8 | -34.6 | 43.91 | 54 | -10.09 | - | - | - | - | 177 | 206 | H |
| 3 | * 1.5 | 59.34 | PK-U | 28.1 | -34.3 | 53.14 | - | - | 74 | -20.86 | - | - | 113 | 100 | H |
| | * 1.5 | 47.38 | ADR | 28.1 | -34.3 | 41.18 | 54 | -12.82 | - | - | - | - | 113 | 100 | H |
| 4 | * 1.334 | 59.78 | PK-U | 28.8 | -34.6 | 53.98 | - | - | 74 | -20.02 | - | - | 91 | 102 | V |
| | * 1.331 | 52.86 | ADR | 28.8 | -34.6 | 47.06 | 54 | -6.94 | - | - | - | - | 91 | 102 | V |
| 5 | * 1.5 | 56.84 | PK-U | 28.1 | -34.3 | 50.64 | - | - | 74 | -23.36 | - | - | 31 | 277 | V |
| | * 1.5 | 48.03 | ADR | 28.1 | -34.3 | 41.83 | 54 | -12.17 | - | - | - | - | 31 | 277 | V |
| 6 | * 2.775 | 50.35 | PK-U | 32.4 | -32.4 | 50.35 | - | - | 74 | -23.65 | - | - | 80 | 223 | V |
| | * 2.775 | 35.5 | ADR | 32.4 | -32.4 | 35.5 | 54 | -18.5 | - | - | - | - | 80 | 223 | V |

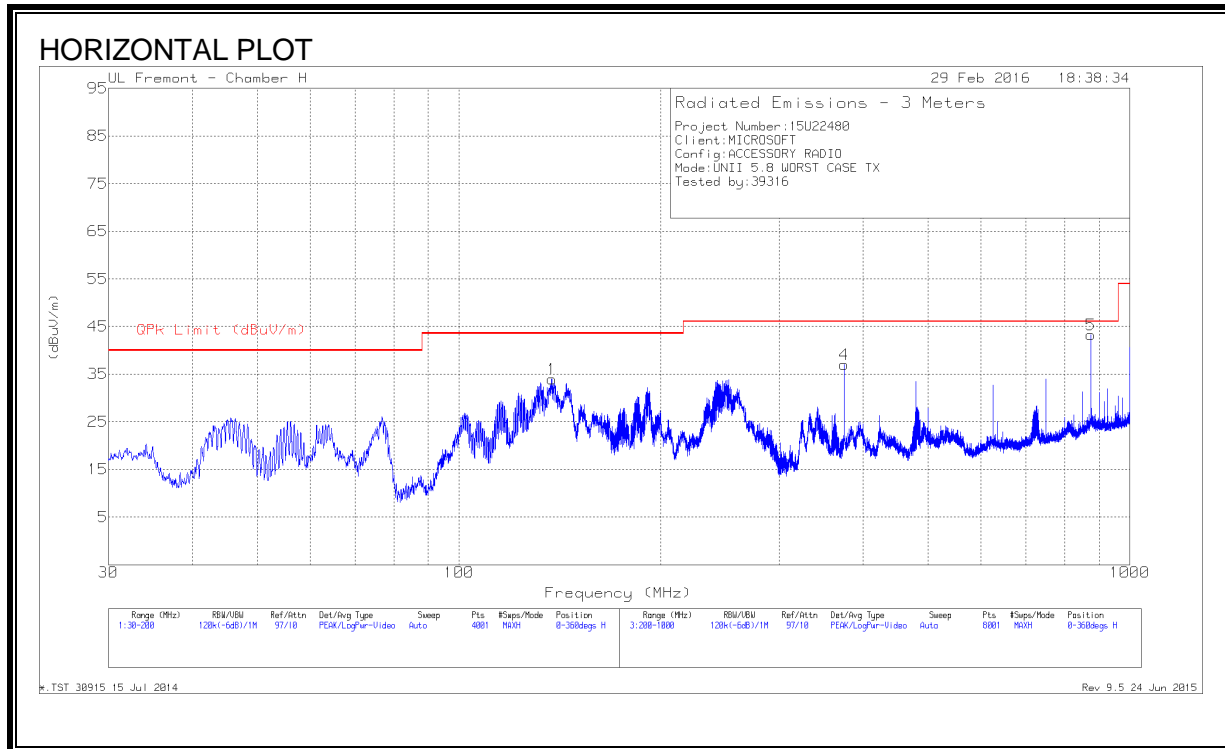
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

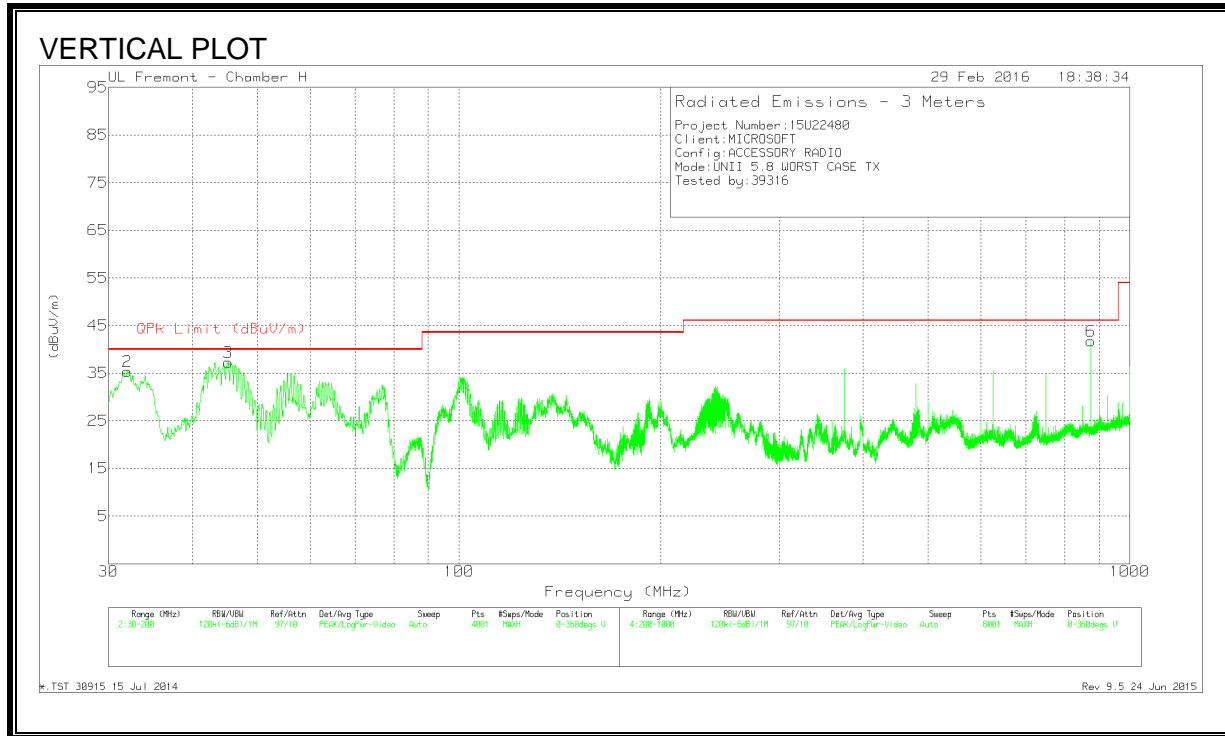
ADR - U-NII AD primary method, RMS average

9.5. WORST-CASE BELOW 1 GHz

SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)



SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)



DATA

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | AF T900 (dB/m) | Amp/Cbl (dB) | Corrected Reading (dBuV/m) | QPk Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|--------------|----------------------------|--------------------|-------------|----------------|-------------|----------|
| 1 | * 137.61 | 50.68 | Pk | 13.4 | -30.1 | 33.98 | 43.52 | -9.54 | 0-360 | 201 | H |
| 2 | 31.9975 | 45.96 | Pk | 20.7 | -31.3 | 35.36 | 40 | -4.64 | 0-360 | 100 | V |
| | 34.2097 | 41.53 | Qp | 18.8 | -31.2 | 29.13 | 40 | -10.87 | 210 | 106 | V |
| 3 | 45.3 | 57.53 | Pk | 10.7 | -31 | 37.23 | 40 | -2.77 | 0-360 | 100 | V |
| | 47.02 | 43.57 | Qp | 9.5 | -31 | 22.07 | 40 | -17.93 | 247 | 373 | V |
| 6 | 875.1 | 47.17 | Pk | 21.3 | -26.7 | 41.77 | 46.02 | -4.25 | 0-360 | 100 | V |
| | 875.0587 | 47.21 | Qp | 21.3 | -26.7 | 41.81 | 46.02 | -4.21 | 103 | 108 | V |
| 5 | 875.1 | 48.64 | Pk | 21.3 | -26.7 | 43.24 | 46.02 | -2.78 | 0-360 | 100 | H |
| | 875.0645 | 50.1 | Qp | 21.3 | -26.7 | 44.7 | 46.02 | -1.32 | 354 | 170 | H |

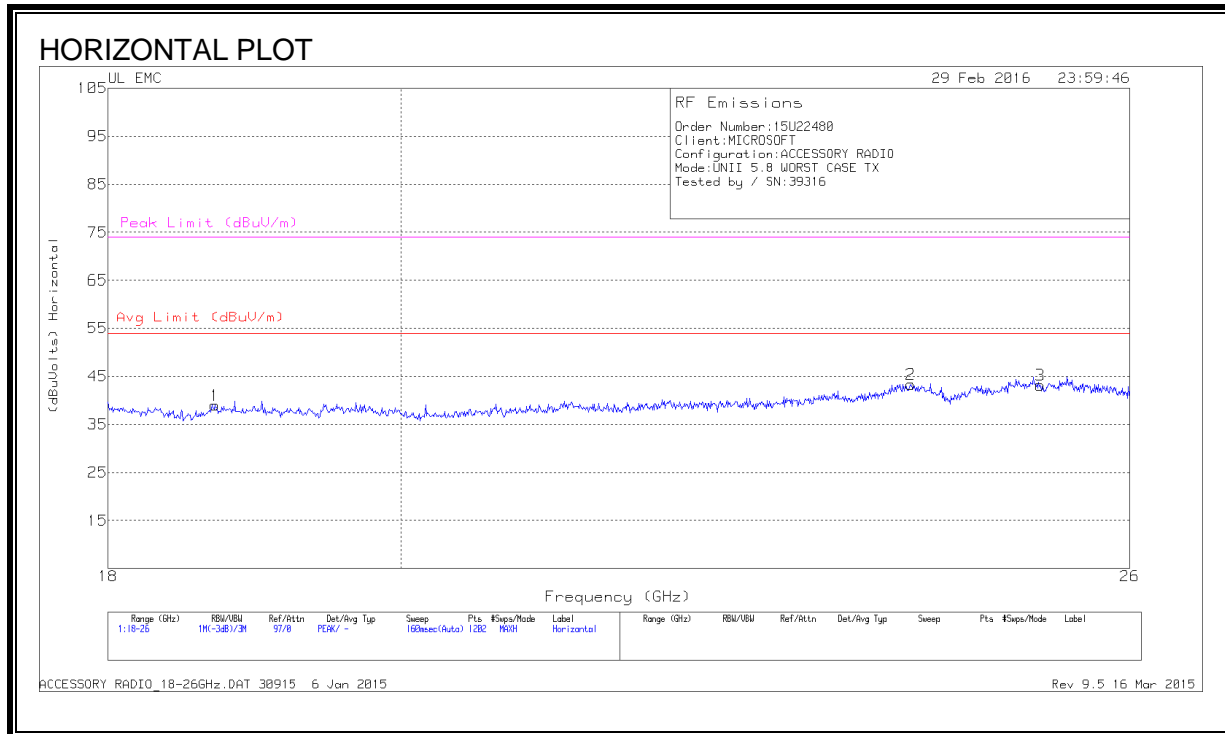
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

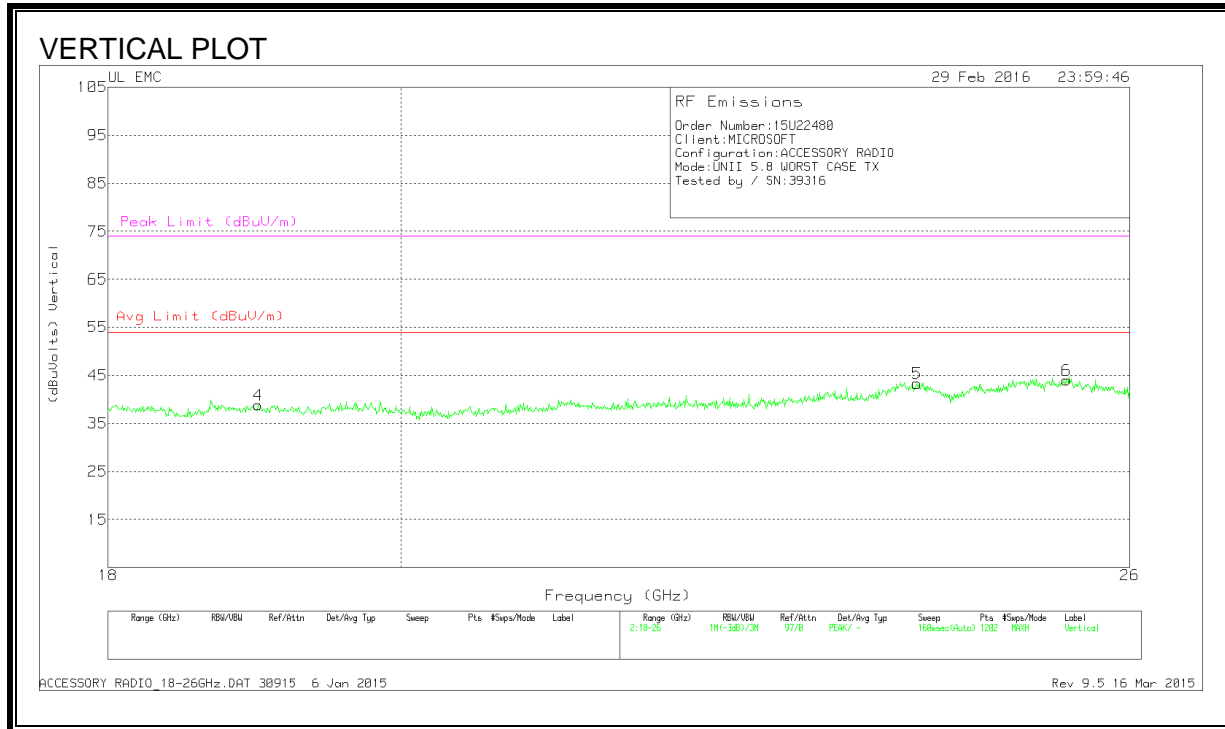
Qp - Quasi-Peak detector

9.6. WORST-CASE 18-26 GHz

SPURIOUS EMISSIONS 18 TO 26 GHz (WORST-CASE CONFIGURATION, HORIZONTAL)



SPURIOUS EMISSIONS 18 TO 26 GHz (WORST-CASE CONFIGURATION, VERTICAL)



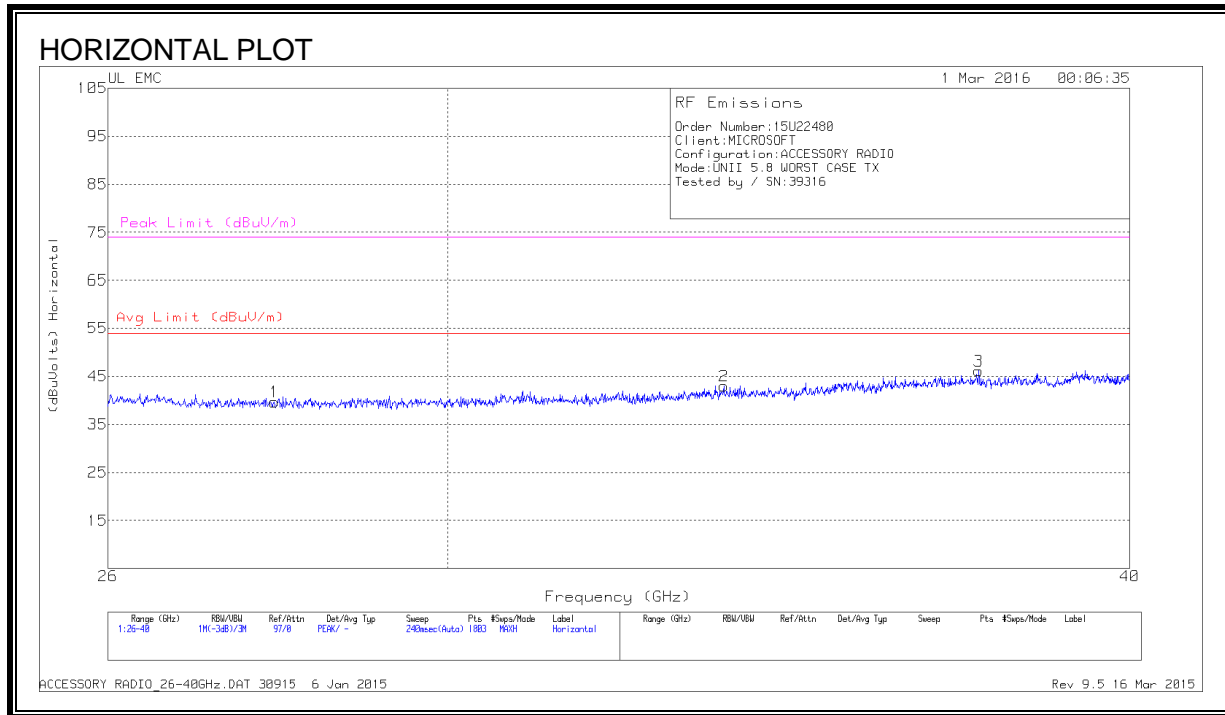
DATA

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | T477 AF (dB/m) | Amp/Cbl (dB) | Dist Corr (dB) | Corrected Reading (dBuVolts) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) |
|--------|-----------------|----------------------|-----|----------------|--------------|----------------|------------------------------|--------------------|-------------|---------------------|----------------|
| 1 | 18.706 | 40.6 | Pk | 32.3 | -24.4 | -9.5 | 39 | 54 | -15 | 74 | -35 |
| 2 | 24.028 | 43.33 | Pk | 33.6 | -24.1 | -9.5 | 43.33 | 54 | -10.66 | 74 | -30.66 |
| 3 | 25.174 | 43.27 | Pk | 34.2 | -24.8 | -9.5 | 43.16 | 54 | -10.83 | 74 | -30.83 |
| 4 | 18.999 | 40.63 | Pk | 32.5 | -24.8 | -9.5 | 38.83 | 54 | -15.16 | 74 | -35.16 |
| 5 | 24.082 | 43.43 | Pk | 33.7 | -24.3 | -9.5 | 43.33 | 54 | -10.66 | 74 | -30.66 |
| 6 | 25.414 | 43.6 | Pk | 34.2 | -24.3 | -9.5 | 44 | 54 | -10 | 74 | -30 |

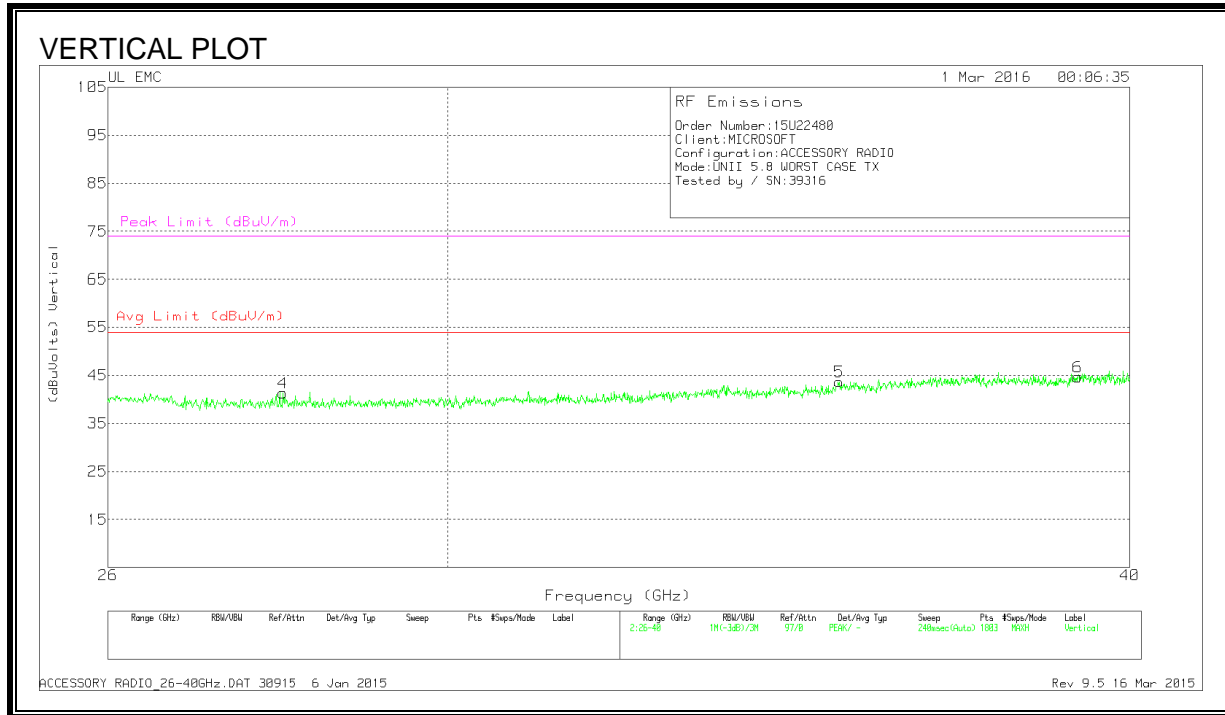
Pk - Peak detector

9.7. WORST-CASE 26-40 GHz

SPURIOUS EMISSIONS 26 TO 40 GHz (WORST-CASE CONFIGURATION, HORIZONTAL)



SPURIOUS EMISSIONS 26 TO 40 GHz (WORST-CASE CONFIGURATION, VERTICAL)



DATA

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | T90 AF (dB/m) | Amp/Cbl (dB) | Dist Corr (dB) | Corrected Reading (dBuVolts) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) |
|--------|-----------------|----------------------|-----|---------------|--------------|----------------|------------------------------|--------------------|-------------|---------------------|----------------|
| 1 | 27.888 | 44.77 | Pk | 35.8 | -31.4 | -9.5 | 39.66 | 54 | -14.33 | 74 | -34.33 |
| 2 | 33.707 | 48.4 | Pk | 36.9 | -32.8 | -9.5 | 43 | 54 | -11 | 74 | -31 |
| 3 | 37.529 | 51.47 | Pk | 37.2 | -33 | -9.5 | 46.16 | 54 | -7.83 | 74 | -27.83 |
| 4 | 27.989 | 46.83 | Pk | 35.8 | -31.8 | -9.5 | 41.33 | 54 | -12.66 | 74 | -32.66 |
| 5 | 35.385 | 48.67 | Pk | 37.8 | -33.3 | -9.5 | 43.66 | 54 | -10.33 | 74 | -30.33 |
| 6 | 39.134 | 48.17 | Pk | 38 | -32 | -9.5 | 44.66 | 54 | -9.33 | 74 | -29.33 |

Pk - Peak detector

10. AC POWER LINE CONDUCTED EMISSIONS

Please refer to Report Number 13U14860-1, Revision B, FCC ID: C3K1525, pages 169 – 172.