**FCC CFR47 PART 90.103**

**CERTIFICATION TEST REPORT**

**FOR**

**GROUND RADAR**

**MODEL NUMBER: GroundAware 360**
**PART NUMBER: 10037200**

**FCC ID: QFS001-10037200**

**REPORT NUMBER: R11522801-E1**

**ISSUE DATE: 2017-01-23**

*Prepared for*
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*Prepared by*
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NVLAP LAB CODE 200246-0

## Revision History

| Ver. | Issue Date | Revisions | Revised By |
|---|---|---|---|
| 1 | 2017-01-23 | Initial Release. | Mark Nolting |


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# 1. DATA REUSE

## 1.1. INTRODUCTION

The Part 90.213 Frequency Stability results for GroundAware 360 are represented by Dynetics, Inc. Part Number 10024640, test report 10965797A (FCC ID: QFS001-10024640). This report for GroundAware 360 contains RF Output power, Occupied Bandwidth, Band Edge, Out of Band Emissions, and AC Line Conducted measurements.

Dynetics, Inc. takes full responsibility that the data as referenced in report 10965797A (FCC ID: QFS001-10024640) represent compliance for this model.

## 1.2. DIFFERENCES

All clocks that are a part of the system were tested for frequency stability under the previous grant for FCC ID: QFS001-10024640. The exact same PCB that supplies all clocks and waveforms for that product is employed to supply clocks and waveforms for GroundAware 360 without revision; therefore the test data for FCC ID QFS001-10024640 is useable for this report.

## 1.3. TESTING PERFORMED

Testing performed under this Report (R11522801-E1) are RF Output power, Occupied Bandwidth, Band Edge, Out of Band Emissions, and AC Line Conducted measurements. All other data is referenced to R10965797A (FCC ID: QFS001-10024640).

## 1.4. REFERENCE DETAIL SECTION

| Equipment Class | Reference FCC ID | Type Grant | Grant Date | Report Title |
|---|---|---|---|---|
| Ground Radar | FCC ID: QFS001-10024640 | New | 2016-01-31 | R10965797A |


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# 2. ATTESTATION OF TEST RESULTS

**COMPANY NAME:** Dynetics, Inc.
1002 Explorer Boulevard
Huntsville, AL 35806-2806

**EUT DESCRIPTION:** Ground Radar

**MODEL:** GroundAware 360, p/n 10037200

**SERIAL NUMBER:** Non-serialized

**DATE TESTED:** 2016-12-01 to 2016-12-02 and 2016-12-28

| APPLICABLE STANDARDS | |
|---|---|
| **STANDARD** | **TEST RESULTS** |
| 47 CFR Part 90.103 | Pass |

UL LLC 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 LLC 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 LLC and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL LLC 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, and any agency of the U.S. Government.

Approved & Released
For UL LLC By:

Bart Mucha
EMC Staff Engineer
UL – Consumer Technology Division

Prepared By:

Mark Nolting
EMC Engineer
UL – Consumer Technology Division


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# 3. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC CFR 47 Part 2, 47 CFR Part 90.

# 4. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 12 Laboratory Dr., Research Triangle Park, NC 27709, USA and 2800 Suite B, Perimeter Park Drive, Morrisville, NC 27560.

| 12 Laboratory Dr., RTP, NC 27709 |
|---|
| ☐ Chamber A |
| ☐ Chamber C |

| 2800 Suite B Perimeter Park Dr., Morrisville, NC 27560 |
|---|
| ☐ Chamber NORTH |
| ☒ Chamber SOUTH |

The onsite chambers are covered under Industry Canada company address code 2180C with site numbers 2180C -1 through 2180C-4, respectively.

UL LLC (RTP) is accredited by NVLAP, Laboratory Code 200246-0. The full scope of accreditation can be viewed at http://www.nist.gov/nvlap/.

# 5. CALIBRATION AND UNCERTAINTY

## 5.1. 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.

## 5.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)

36.5 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB = 28.9 dBuV/m


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## 5.3. MEASUREMENT UNCERTAINTY

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

| PARAMETER | UNCERTAINTY |
|---|---|
| Total RF power, conducted | ± 0.45 |
| RF power density, conducted | ± 1.50 |
| Spurious emissions, conducted | ± 2.94 |
| All emissions, radiated up to 26 GHz | ± 5.36 |
| Temperature | ± 0.07 |
| Humidity | ± 2.26 |
| DC and low frequency voltages | ± 1.27 |
| Conducted Emissions (0.150-30MHz) | ± 3.65 |

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


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# 6. EQUIPMENT UNDER TEST

## 6.1. DESCRIPTION OF EUT

The EUT is a wide-band ground radar used to monitor a specific area.

## 6.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum peak conducted output powers as follows:

**Mode 1, Mode2, and Mode 3**

| Channel | Mode 1 Peak power (dBm) | Mode 2 Peak Power (dBm) | Mode 3 Peak Power (dBm) |
|---|---|---|---|
| Low Channel | 24.99 | 24.56 | 24.55 |
| Middle Channel | 25.64 | 25.34 | 25.33 |
| High Channel | 25.60 | 25.11 | 25.12 |

## 6.3. DESCRIPTION OF AVAILABLE ANTENNAS

The antenna type is a custom wheel antenna. The maximum antenna gain is 7.07 dBi. The antenna connector type is SMA.


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## 6.4. SOFTWARE AND FIRMWARE

The EUT firmware installed during testing was Revision 327.

The EUT software installed during testing was Revison 309.

## 6.5. WORST-CASE CONFIGURATION AND MODE

The EUT operates in three specific modes. Except for radiated spurious emissions all tests were conducted in all three modes. Radiated-spurious-emissions testing was conducted in two modes (Mode 1 and Mode 2).

| Center Frequencies (GHz) |
|---|
| **3.1484375** |
| 3.15625 |
| 3.1640625 |
| 3.171875 |
| 3.1796875 |
| 3.1875 |
| **3.1953125** |
| 3.203125 |
| 3.2109375 |
| 3.21875 |
| **3.2265625** |

* Frequencies in bold are frequencies that were tested.


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## 6.6. DESCRIPTION OF TEST SETUP

**CONDUCTED and RADIATED TESTS SUPPORT EQUIPMENT**

| Support Equipment List | | | | |
|---|---|---|---|---|
| **Description** | **Manufacturer** | **Model** | **Serial Number** | **FCC ID** |
| Laptop | Dell | M4600 | 26825968441 | DoC |
| Laptop AC/DC adapter | Dell | D846D | K00W06R02MU | DoC |
| PoE Injector | L-Com | BT-CAT6-P1 | Non-serialized | N/A |
| Power Supply | National Instruments | NI PS-17 | Non-serialized | N/A |

**I/O CABLES**

| I/O Cable List | | | | | | |
|---|---|---|---|---|---|---|
| **Cable No** | **Port** | **# of identical ports** | **Connector Type** | **Cable Type** | **Cable Length (m)** | **Remarks** |
| 1 | Transmit Antenna | 1 | SMA | Shielded | - | Connected to spectrum analyzer via coaxial cable and attenuator during conducted testing. Otherwise, terminated with 50-ohm load. |
| 2 | PoE (Ethernet/DC) | 1 | RJ45 | Un-shielded | Various | Connection between power supply and PoE injector. 15.2m during radiated spurious testing. Otherwise, 0.6m. |
| 3 | DC | 1 | - | Un-shielded | 0.3 | 2-wire connection between power supply and PoE injector. |
| 4 | Ethernet | 1 | RJ45 | Un-shielded | 3.1 | Connection between laptop PC and PoE. |
| 5 | AC | 1 | 3-prong | Un-shielded | 3.1 | L/N/PE power connection to power supply. |
| 6 | AC | 1 | 3-prong | Un-shielded | 1.8 | L/N/PE power connection to AC adaper. |


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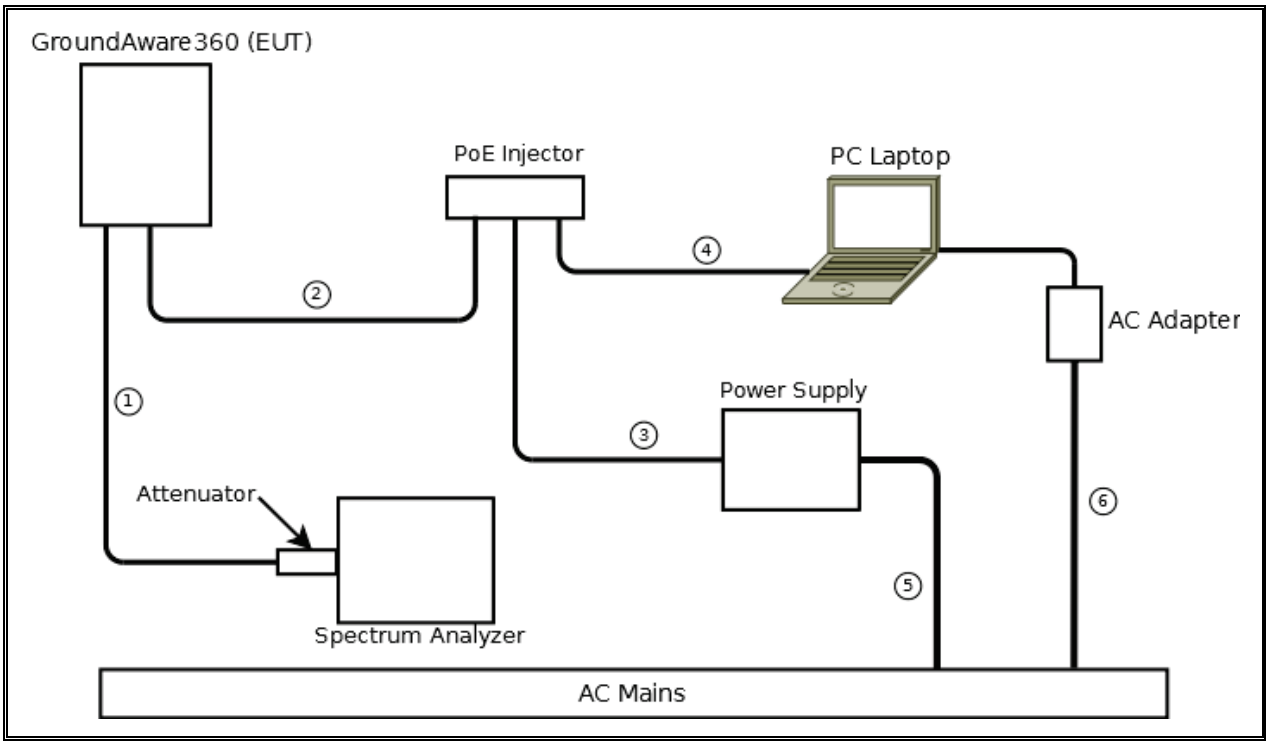
**TEST SETUP- CONDUCTED PORT**

The EUT was connected to a laptop PC and power supply via a PoE injector and its transmit antenna port was connected to a spectrum analyzer via a coaxial cable and attenuator.

**SETUP DIAGRAM**





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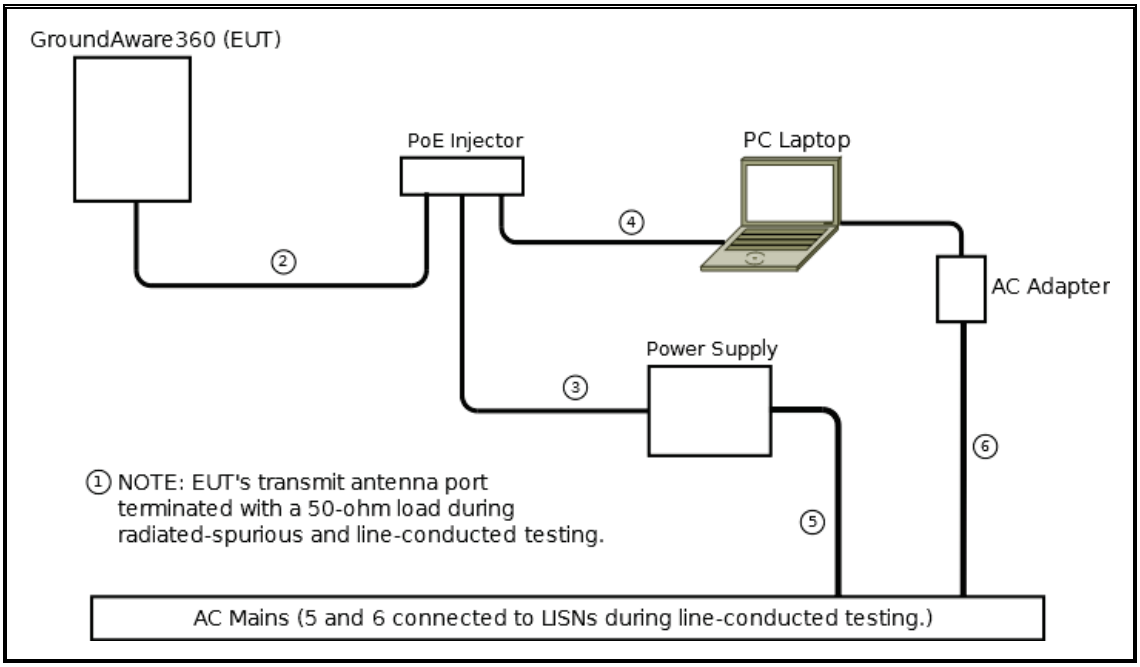
**TEST SETUP- RADIATED SPURIOUS**

The EUT was connected to a laptop PC and power supply via a PoE injector and its transmit antenna port was terminated with a 50-ohm load.

**SETUP DIAGRAM**





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# 7. TEST AND MEASUREMENT EQUIPMENT

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

Test Equipment Used - Radiated Disturbance Emissions Test Equipment (Morrisville - South Chamber)

| Equip. ID | Description | Manufacturer | Model Number | Last Cal. | Next Cal. |
|---|---|---|---|---|---|
| AT0074 | Hybrid Broadband Antenna | Sunol Sciences Corp. | JB3 | 2016-06-07 | 2017-06-30 |
| AT0069 | Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz | ETS Lindgren | 3117 | 2016-03-07 | 2017-03-31 |
| AT0076 | Horn Antenna, 18-26.5GHz | ARA | MWH-1826/B | 2016-09-06 | 2017-09-06 |
| AT0077 | Horn Antenna, 26-40GHz | ARA | MWH-2640/B | 2016-09-06 | 2017-09-06 |
| S-SAC02 | Gain-loss string: 30-1000MHz | Various | Various | 2016-06-26 | 2017-06-30 |
| S-SAC03 | Gain-loss string: 1-18GHz | Various | Various | 2016-08-28 | 2017-08-28 |
| S-SAC04 | Gain-loss string: 18-40GHz | Various | Various | 2016-02-29 | 2017-02-28 |
| SA0025 | Spectrum Analyzer | Agilent | N9030A | 2016-03-17 | 2017-03-31 |
| SA0026 (18-40GHz RSE) | Spectrum Analyzer | Agilent | N9030A | 2016-02-24 | 2017-02-28 |
| 139843 | Temp/Humid/Pressure Meter | Control Co./Fisher | 14-650-118 | 2016-02-19 | 2017-02-19 |
| SOFTEMI | EMI Software | UL | Version 9.5 | NA | NA |

Test Equipment Used - Wireless Conducted Measurement Equipment

| Equipment ID | Description | Manufacturer | Model Number | Last Cal. | Next Cal. |
|---|---|---|---|---|---|
| | **Conducted Room 1** | | | | |
| SA0026 | Spectrum Analyzer | Agilent | N9030A | 2016-02-24 | 2017-02-28 |
| 139843 | Temp/Humid/Pressure Meter | Control Co./Fisher | 14-650-118 | 2016-02-19 | 2017-02-19 |
| SOFTEMI | EMI Software | UL | Version 9.5 | NA | NA |


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# 8. RF POWER OUTPUT

**REQUIREMENT**

**§2.1046 Measurements required: RF power output.**

**§90.205 Output Power.**

**(r) All other frequency bands. Requested transmitter power will be considered and authorized on a case by case basis.**

(a) For transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in §2.1033(c)(8). The electrical characteristics of the radio frequency load attached to the output terminals when this test is made shall be stated.

**TEST PROCEDURE**

The transmitter output was connected to the input of Spectrum Analyzer via calibrated coaxial cable and attenuator.

The output power was measured with the spectrum analyzer at the low, middle and high channel for each mode.

- Set the spectrum analyzer span wide enough or greater than the modulated signal BW.
- Set a spectrum analyzer at peak detection mode with VBW ≥ RBW. The RBW was set to largest available (8MHz). It is less then overall bandwidth of individual channel but is larger then bandwidth of individual pulse within a channel.
- Set a marker to point the corresponding peak value.

**TABULAR RESULTS**

| Channel | Mode 1 Peak power (dBm) | Mode 2 Peak Power (dBm) | Mode 3 Peak Power (dBm) |
|---|---|---|---|
| Low Channel | 24.99 | 24.56 | 24.55 |
| Middle Channel | 25.64 | 25.34 | 25.33 |
| High Channel | 25.60 | 25.11 | 25.12 |

***** The maximum power was derived from exported numeric trace data.


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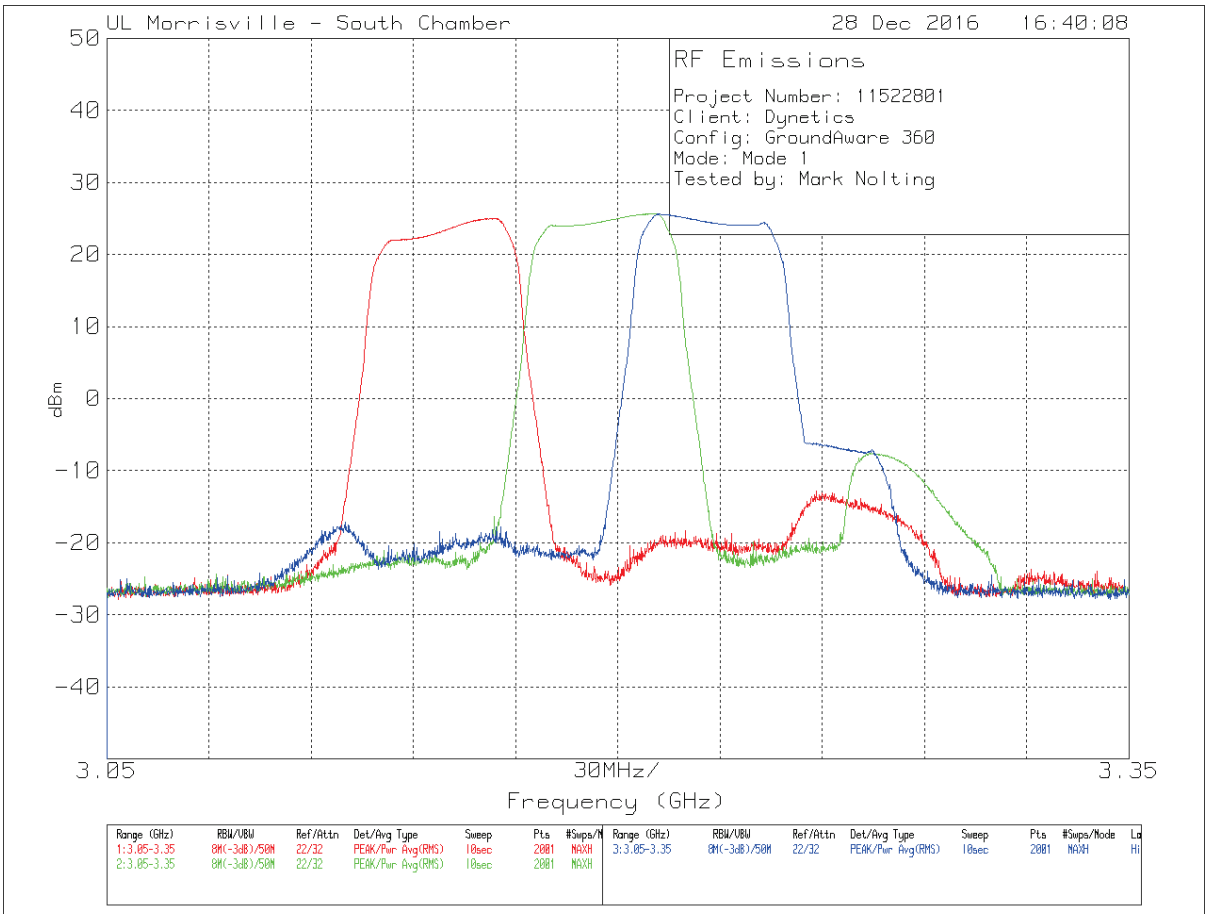
**GRAPHICAL RESULTS**

Mode1





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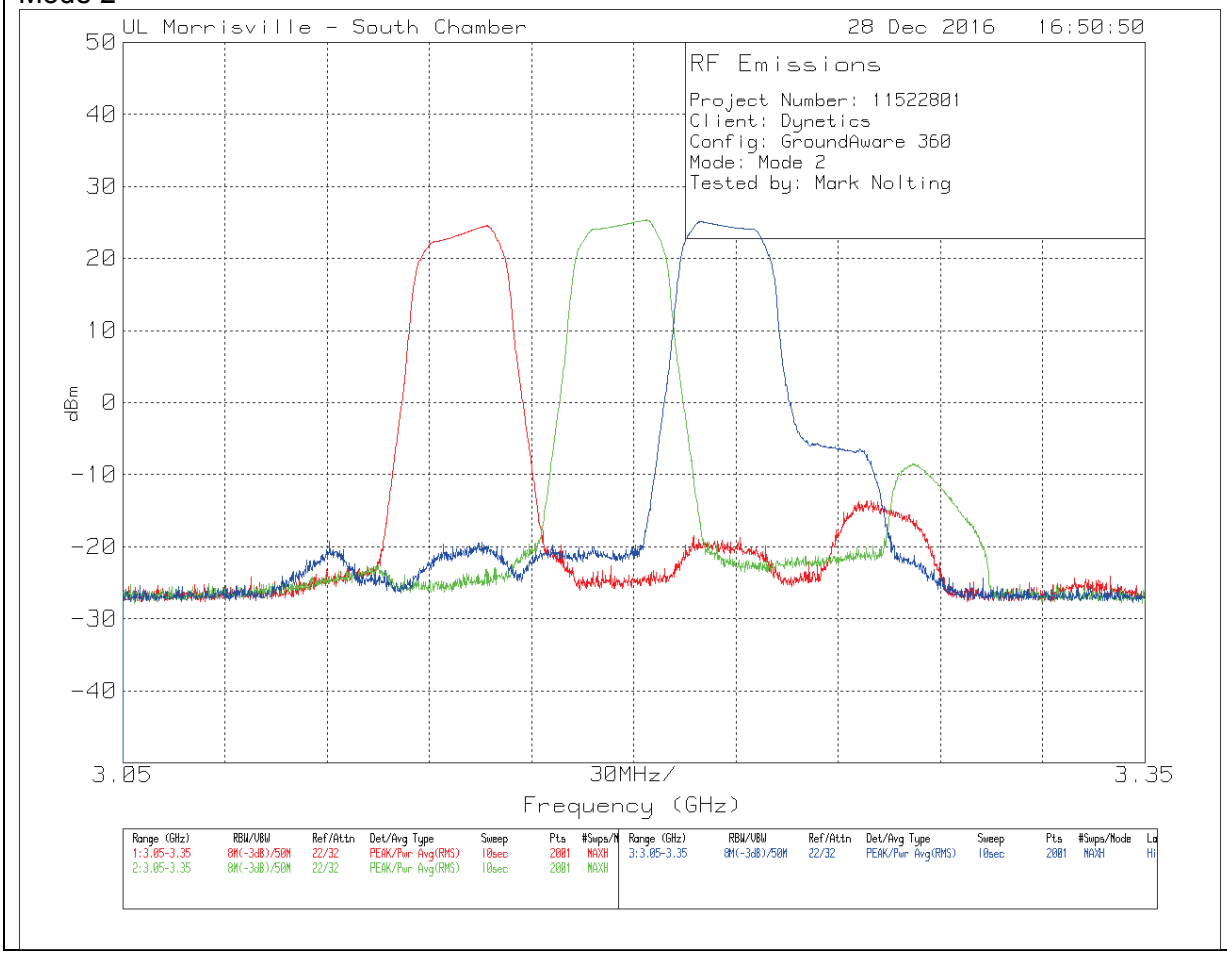
Mode 2





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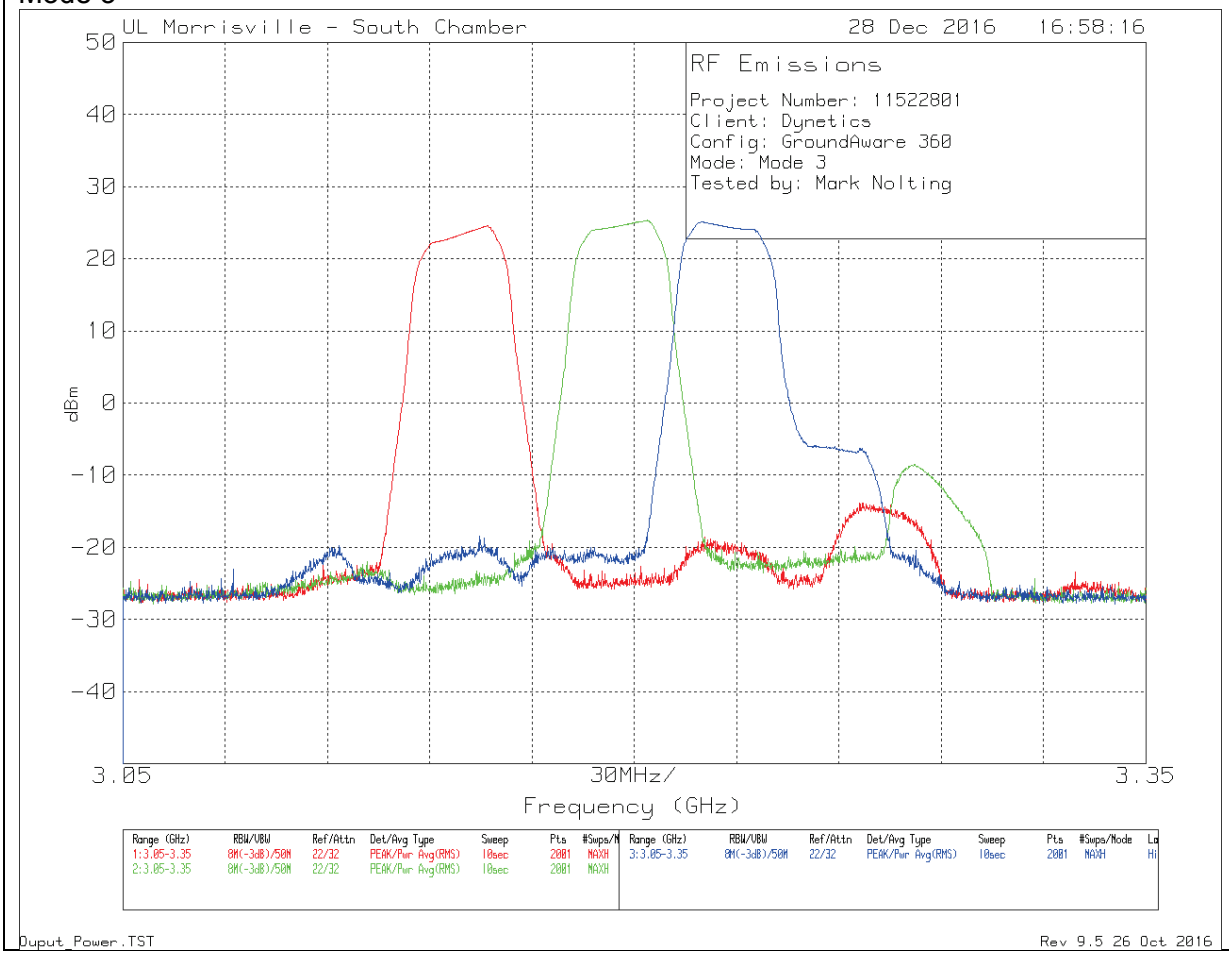
Mode 3





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# 9. CONDUCTED TEST RESULTS

## 9.1. OCCUPIED BANDWIDTH

**RULE PART(S)**

**§2.1049 Measurements required: Occupied bandwidth.**

**§90.207 Types of emissions.**

(k) For radiolocation operations as may be authorized in accordance with subpart F, unless otherwise provided for any type of emission may be authorized upon a satisfactory showing of need.

**§90.209 Bandwidth Limitation.**

Above 2500 MHz:
[2]Bandwidths for radiolocation stations in the 420-450 MHz band and for stations operating in bands subject to this footnote will be reviewed and authorized on a case-by-case basis. So no bandwidth limitation for certification of device, but could be a factor when licensing the device.

The occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission shall be measured under the following conditions as applicable.

**LIMITS**

For reporting purposes only

**TEST PROCEDURE**

The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer. The occupied bandwidth was measured with the spectrum analyzer at the low, middle and high channel in each band.

**MODES TESTED**

**TABULAR RESULTS**

| Channel | Mode 1 99% Bandwidth MHz | Mode 2 99% Bandwidth MHz | Mode 3 99% Bandwidth MHz |
|---|---|---|---|
| Low Channel | 32.588 | 16.938 | 16.849 |
| Middle Channel | 32.659 | 16.949 | 16.852 |
| High Channel | 32.289 | 16.814 | 16.721 |


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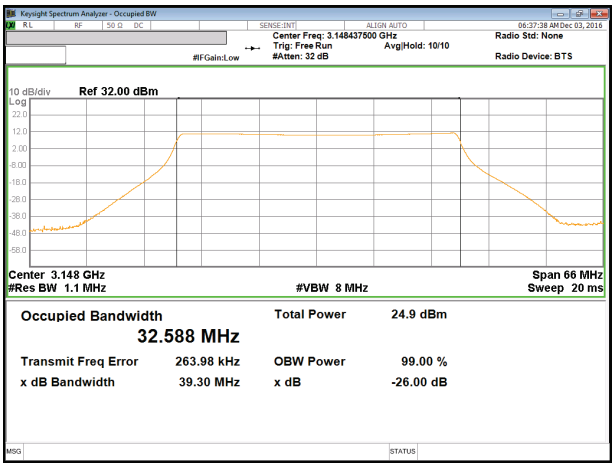
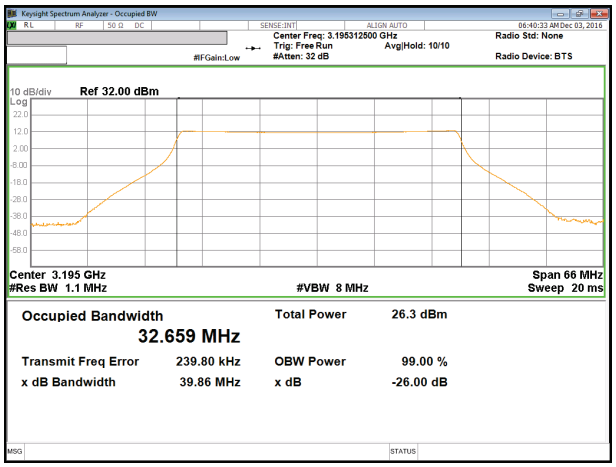
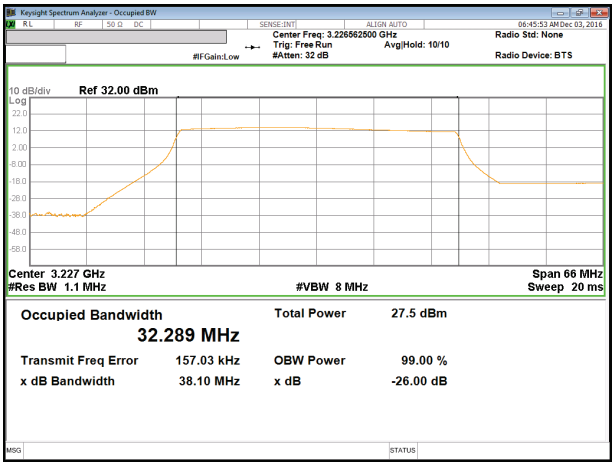
## GRAPHICAL RESULTS

### Mode 1

Test Operator: Mark Nolting Date: 2016-12-02




Detector: Peak
Mode: Max Hold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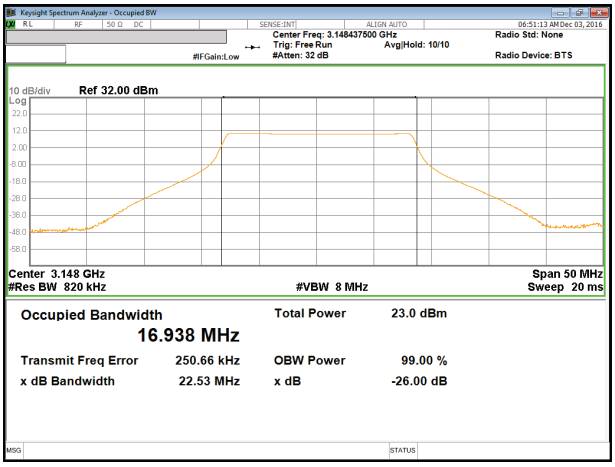
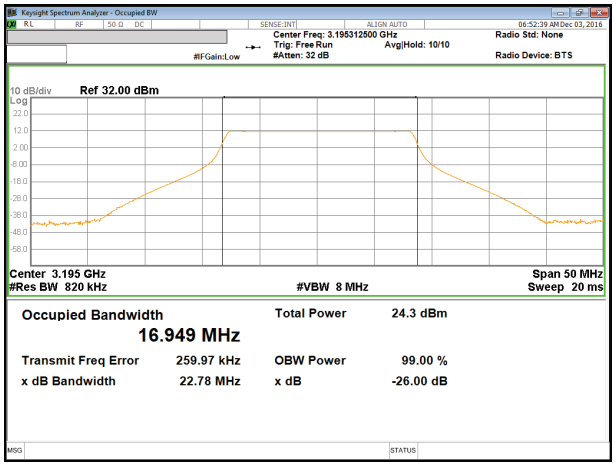
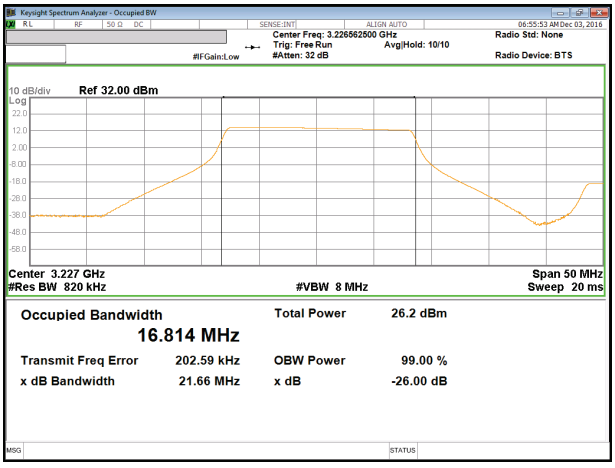
**Mode 2**

Test Operator: Mark Nolting Date: 2016-12-02




Detector: Peak
Mode: Max Hold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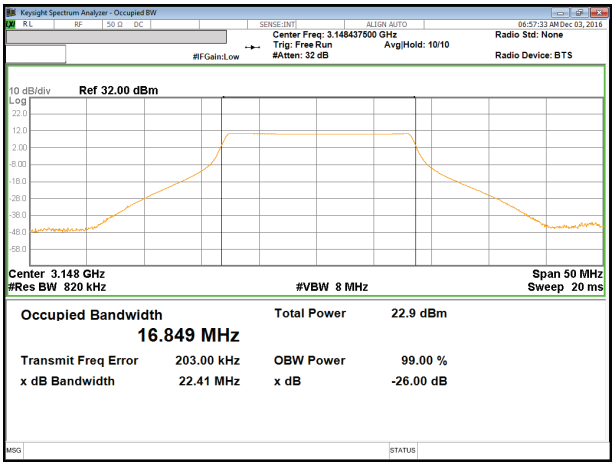
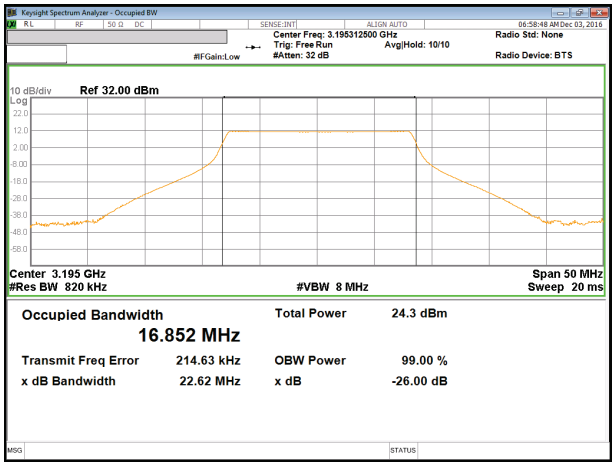
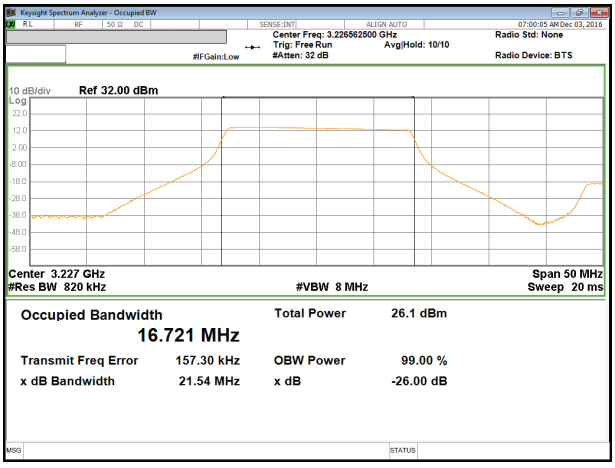
**Mode 3**

Test Operator: Mark Nolting Date: 2016-12-02




Detector: Peak
Mode: Max Hold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## 9.2. BAND EDGE

**RULE PART(S)**

**§2.1051 Measurements required: Spurious emissions at antenna terminals at the band edges.**

**§90.210 Emission Mask**

Since there is no specific mask/bandwidth limitation we apply the standard -13dBm limit outside the allocated band**.**

The radio frequency voltage or powers generated within the equipment and appearing on a spurious frequency shall be checked at the equipment output terminals when properly loaded with a suitable artificial antenna. Curves or equivalent data shall show the magnitude of each harmonic and other spurious emission that can be detected when the equipment is operated under the conditions specified in §2.1049 as appropriate. The magnitude of spurious emissions which are attenuated more than 20 dB below the permissible value need not be specified.

**LIMITS**

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB. (-13dBm)

**TEST PROCEDURE**

The transmitter output was connected to the input of Spectrum Analyzer via calibrated coaxial cable and attenuator.

The output power was measured with the spectrum analyzer at the low, middle and high channel for each mode.

**RESULTS**


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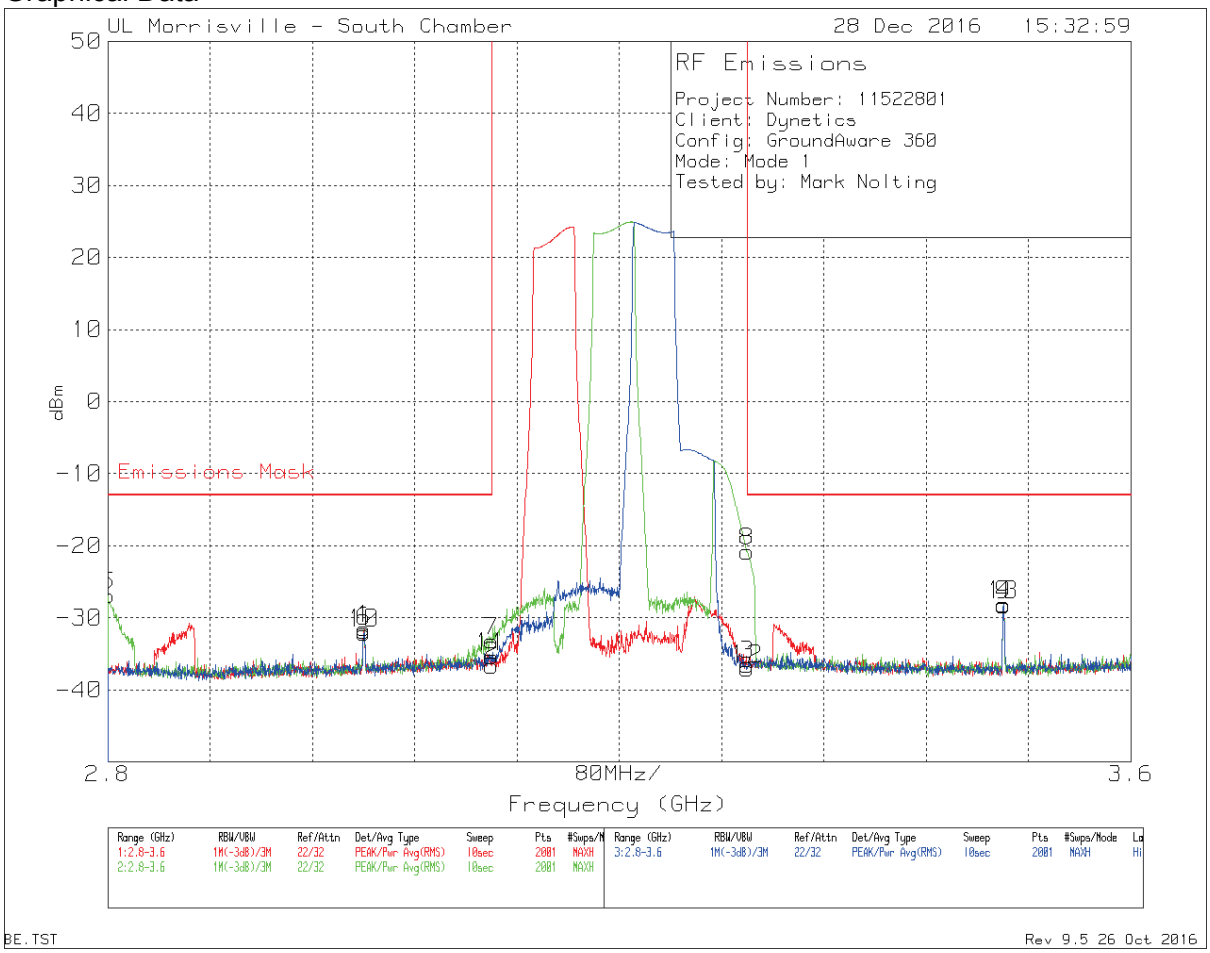
**RESULTS**

**MODE 1**

Graphical Data





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Tabular Data

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | Path Factor (dB) | Corrected Reading dBm | Emissions Mask | PK Margin (dB) |
|---|---|---|---|---|---|---|---|
| **Low-channel Markers** | | | | | | | |
| 1 | 3 | -42.38 | Pk | 10.9 | -31.48 | -13 | -18.48 |
| 2 | 3.1 | -47.51 | Pk | 10.9 | -36.61 | -13 | -23.61 |
| 3 | 3.3 | -47.39 | Pk | 10.9 | -36.49 | -13 | -23.49 |
| 4 | 3.5 | -39.27 | Pk | 11 | -28.27 | -13 | -15.27 |
| **Middle-channel Markers** | | | | | | | |
| 5 | 2.8 | -37.8 | Pk | 10.9 | -26.9 | -13 | -13.9 |
| 6 | 3 | -42.74 | Pk | 10.9 | -31.84 | -13 | -18.84 |
| 7 | 3.1 | -44.08 | Pk | 10.9 | -33.18 | -13 | -20.18 |
| 8 | 3.3 | -31.69 | Pk | 10.9 | -20.79 | -13 | -7.79 |
| 9 | 3.5 | -39.2 | Pk | 11 | -28.2 | -13 | -15.2 |
| **High-channel Markers** | | | | | | | |
| 10 | 3 | -43 | Pk | 10.9 | -32.1 | -13 | -19.1 |
| 11 | 3.1 | -46.29 | Pk | 10.9 | -35.39 | -13 | -22.39 |
| 12 | 3.3 | -47.98 | Pk | 10.9 | -37.08 | -13 | -24.08 |
| 13 | 3.5 | -39.17 | Pk | 11 | -28.17 | -13 | -15.17 |

Pk - Peak detector


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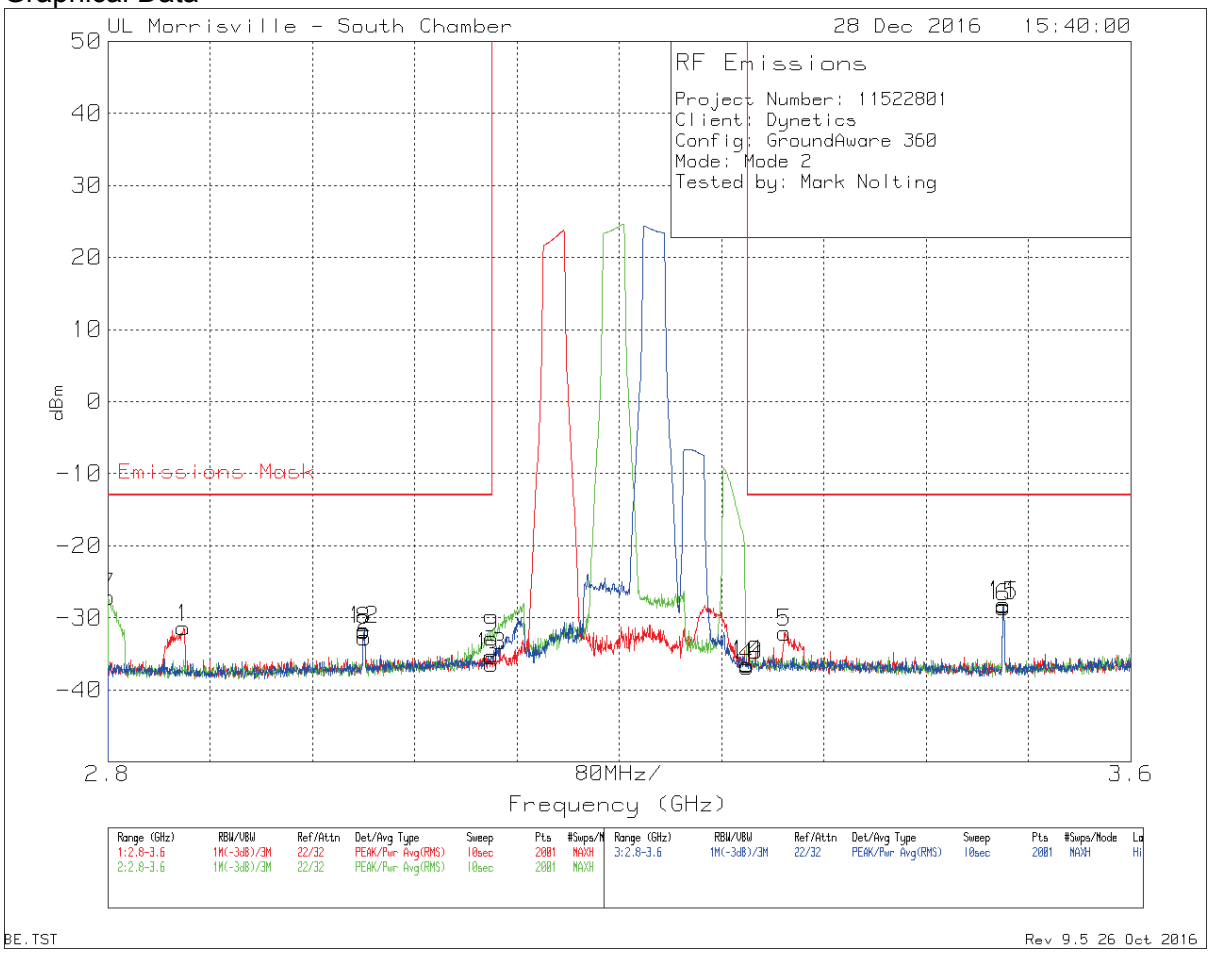
**MODE 2**

Graphical Data





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Tabular Data

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | Path Factor (dB) | Corrected Reading dBm | Emissions Mask | PK Margin (dB) |
|---|---|---|---|---|---|---|---|
| **Low-channel Markers** | | | | | | | |
| 1 | 2.859 | -42.27 | Pk | 10.9 | -31.37 | -13 | -18.37 |
| 2 | 3.001 | -43.65 | Pk | 10.9 | -32.75 | -13 | -19.75 |
| 3 | 3.1 | -47.3 | Pk | 10.9 | -36.4 | -13 | -23.4 |
| 4 | 3.3 | -47.72 | Pk | 10.9 | -36.82 | -13 | -23.82 |
| 5 | 3.329 | -42.97 | Pk | 10.9 | -32.07 | -13 | -19.07 |
| 6 | 3.5 | -39.54 | Pk | 11 | -28.54 | -13 | -15.54 |
| **Middle-channel Markers** | | | | | | | |
| 7 | 2.8 | -37.98 | Pk | 10.9 | -27.08 | -13 | -14.08 |
| 8 | 3 | -42.71 | Pk | 10.9 | -31.81 | -13 | -18.81 |
| 9 | 3.1 | -43.69 | Pk | 10.9 | -32.79 | -13 | -19.79 |
| 10 | 3.3 | -47.44 | Pk | 10.9 | -36.54 | -13 | -23.54 |
| 11 | 3.5 | -39.13 | Pk | 11 | -28.13 | -13 | -15.13 |
| **High-channel Markers** | | | | | | | |
| 12 | 3 | -42.55 | Pk | 10.9 | -31.65 | -13 | -18.65 |
| 13 | 3.1 | -46.22 | Pk | 10.9 | -35.32 | -13 | -22.32 |
| 14 | 3.3 | -47.34 | Pk | 10.9 | -36.44 | -13 | -23.44 |
| 15 | 3.5 | -39.33 | Pk | 11 | -28.33 | -13 | -15.33 |

Pk - Peak detector


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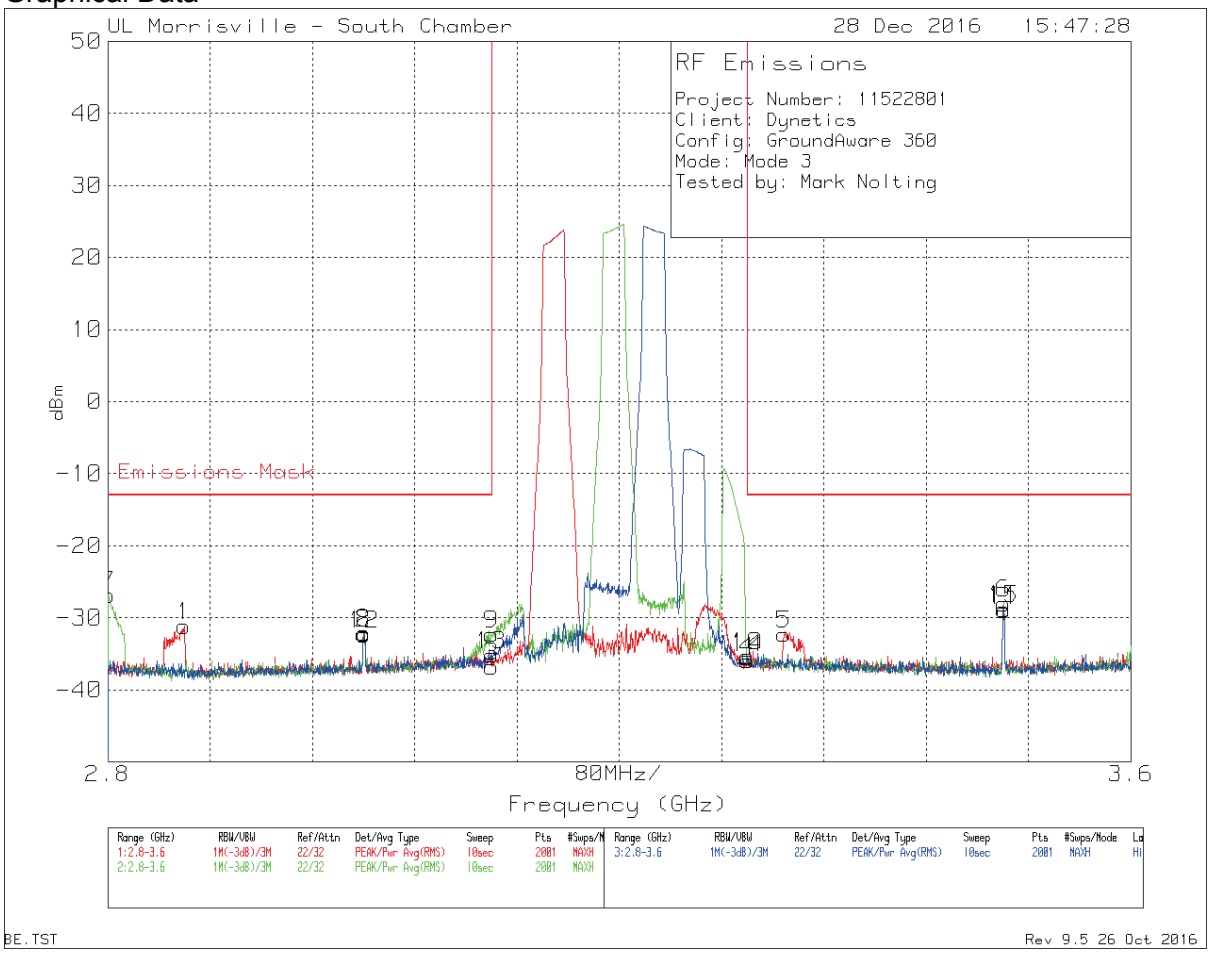
**MODE 3**

Graphical Data





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Tabular Data

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | Path Factor (dB) | Corrected Reading dBm | Emissions Mask | PK Margin (dB) |
|---|---|---|---|---|---|---|---|
| **Low-channel Markers** | | | | | | | |
| 1 | 2.86 | -42.02 | Pk | 10.9 | -31.12 | -13 | -18.12 |
| 2 | 3 | -43.06 | Pk | 10.9 | -32.16 | -13 | -19.16 |
| 3 | 3.1 | -47.67 | Pk | 10.9 | -36.77 | -13 | -23.77 |
| 4 | 3.3 | -46.85 | Pk | 10.9 | -35.95 | -13 | -22.95 |
| 5 | 3.329 | -43.16 | Pk | 10.9 | -32.26 | -13 | -19.26 |
| 6 | 3.5 | -38.98 | Pk | 11 | -27.98 | -13 | -14.98 |
| **Middle-channel Markers** | | | | | | | |
| 7 | 2.8 | -37.75 | Pk | 10.9 | -26.85 | -13 | -13.85 |
| 8 | 3 | -43 | Pk | 10.9 | -32.1 | -13 | -19.1 |
| 9 | 3.1 | -43.19 | Pk | 10.9 | -32.29 | -13 | -19.29 |
| 10 | 3.3 | -46.25 | Pk | 10.9 | -35.35 | -13 | -22.35 |
| 11 | 3.501 | -39.96 | Pk | 11 | -28.96 | -13 | -15.96 |
| **High-channel Markers** | | | | | | | |
| 12 | 3 | -43.2 | Pk | 10.9 | -32.3 | -13 | -19.3 |
| 13 | 3.1 | -46.06 | Pk | 10.9 | -35.16 | -13 | -22.16 |
| 14 | 3.3 | -46.45 | Pk | 10.9 | -35.55 | -13 | -22.55 |
| 15 | 3.5 | -39.78 | Pk | 11 | -28.78 | -13 | -15.78 |

Pk - Peak detector


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## 9.3. OUT OF BAND EMISSIONS (Antenna Port and Radiated)

**RULE PART(S)**

**§2.1051**
**§90.210 Emission Masks**

Since there is no specific mask/bandwidth limitation we apply the standard -13dBm limit outside the allocated band.

**LIMITS**

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

**TEST PROCEDURE**

For antenna port the RF output of the transmitter was connected to a spectrum analyzer through a calibrated coaxial cable. Sufficient scans were taken to show the out-of-band Emissions, if any, up to 10th harmonic. Multiple sweeps were recorded in maximum hold mode using a peak detector to ensure that the worst-case emissions were caught.

For radiated emissions the radio output was terminated with artificial antenna (50Ohm Load). The limit of -13dBm was converted to filed strength limit using equation from FCC KDB publication “971168 D01 Power Meas License Digital System V02r02”.

E(dBuV/m) = EIRP(dBm)-20log(D)+104.8, where D is the measurement distance in meters.

D = 3m for the data presented in this section.


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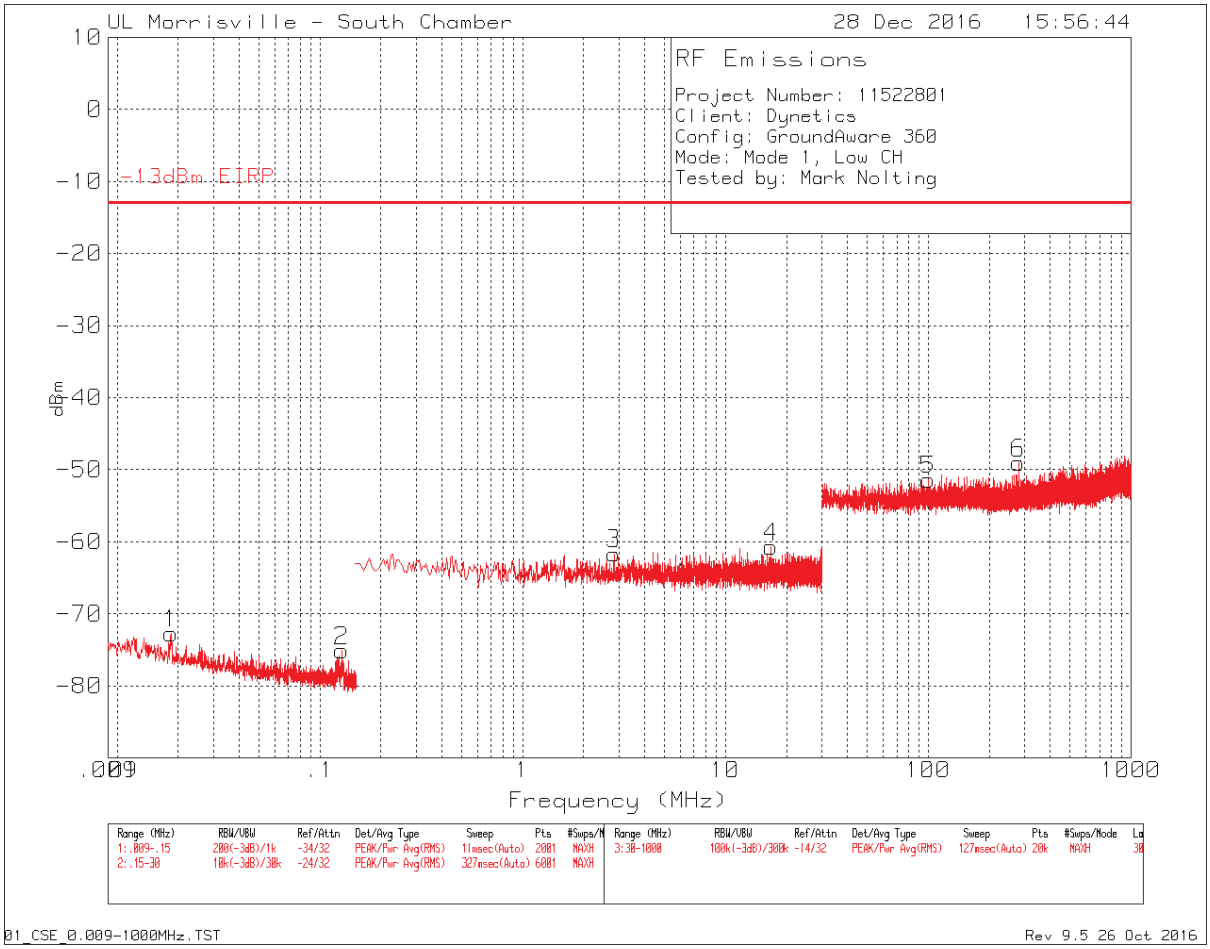
**RESULTS**

### 9.3.1. **Antenna Port Out of Band Emissions**

**Mode 1, Low Channel, Below 1GHz - Data**




| Marker | Frequency (MHz) | Meter Reading (dBm) | Det | Path Factor (dB) | Corrected Reading dBm | -13dBm EIRP | PK Margin (dB) |
|---|---|---|---|---|---|---|---|
| 1 | .01844 | -82.82 | Pk | 10.1 | -72.72 | -13 | -59.72 |
| 2 | .12814 | -85.2 | Pk | 10.1 | -75.1 | -13 | -62.1 |
| 3 | 2.82158 | -71.76 | Pk | 10.1 | -61.66 | -13 | -48.66 |
| 4 | 16.80133 | -70.81 | Pk | 10.1 | -60.71 | -13 | -47.71 |
| 5 | 99.8885 | -61.57 | Pk | 10.2 | -51.37 | -13 | -38.37 |
| 6 | 278.708 | -59.37 | Pk | 10.3 | -49.07 | -13 | -36.07 |

Pk - Peak detector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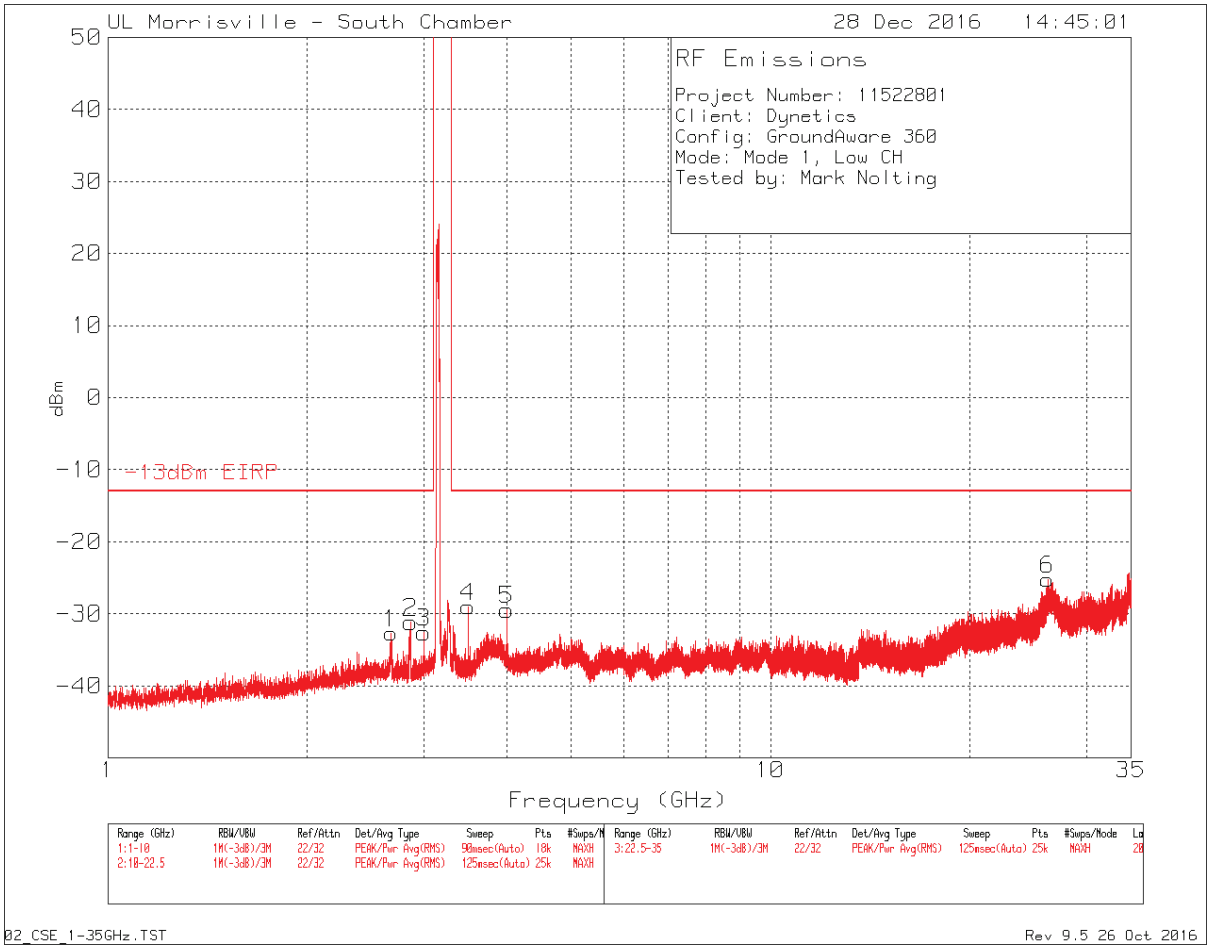
**Mode 1, Low Channel, Above 1GHz - Data**




| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | Path Factor (dB) | Corrected Reading dBm | -13dBm EIRP | PK Margin (dB) |
|---|---|---|---|---|---|---|---|
| 1 | 2.678 | -43.56 | Pk | 10.9 | -32.66 | -13 | -19.66 |
| 2 | 2.866 | -42.08 | Pk | 10.9 | -31.18 | -13 | -18.18 |
| 3 | 3.001 | -43.47 | Pk | 10.9 | -32.57 | -13 | -19.57 |
| 4 | 3.501 | -40 | Pk | 11 | -29 | -13 | -16 |
| 5 | 4.001 | -40.45 | Pk | 11 | -29.45 | -13 | -16.45 |
| 6 | 26.2 | -39.82 | Pk | 14.6 | -25.22 | -13 | -12.22 |

Pk - Peak detector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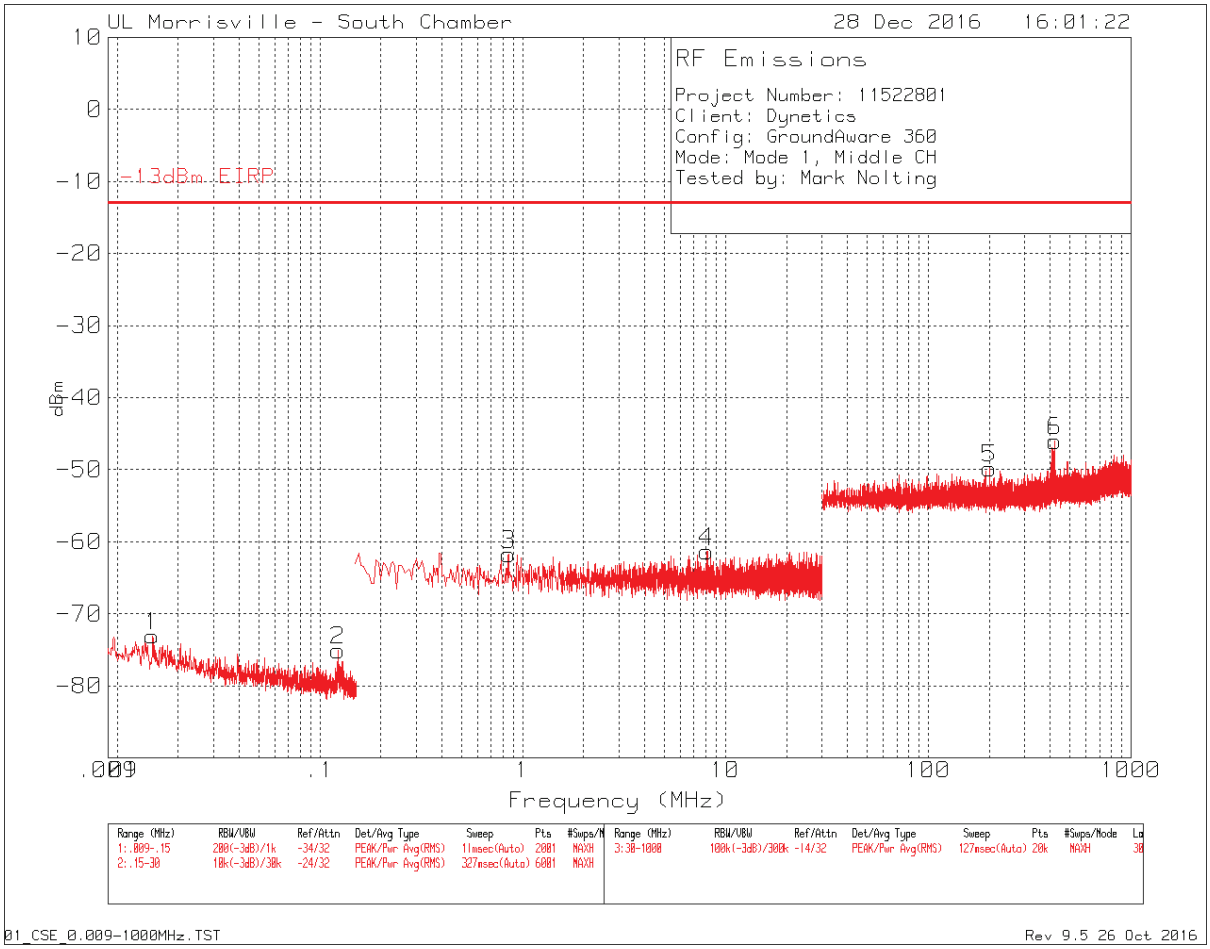
**Mode 1, Middle Channel, Below 1GHz - Data**




| Marker | Frequency (MHz) | Meter Reading (dBm) | Det | Path Factor (dB) | Corrected Reading dBm | -13dBm EIRP | PK Margin (dB) |
|---|---|---|---|---|---|---|---|
| 1 | .01496 | -83.17 | Pk | 10.1 | -73.07 | -13 | -60.07 |
| 2 | .12303 | -85.18 | Pk | 10.1 | -75.08 | -13 | -62.08 |
| 3 | .85148 | -71.85 | Pk | 10.1 | -61.75 | -13 | -48.75 |
| 4 | 8.0901 | -71.46 | Pk | 10.1 | -61.36 | -13 | -48.36 |
| 5 | 200.72 | -60.13 | Pk | 10.3 | -49.83 | -13 | -36.83 |
| 6 | 421.395 | -56.41 | Pk | 10.4 | -46.01 | -13 | -33.01 |

Pk - Peak detector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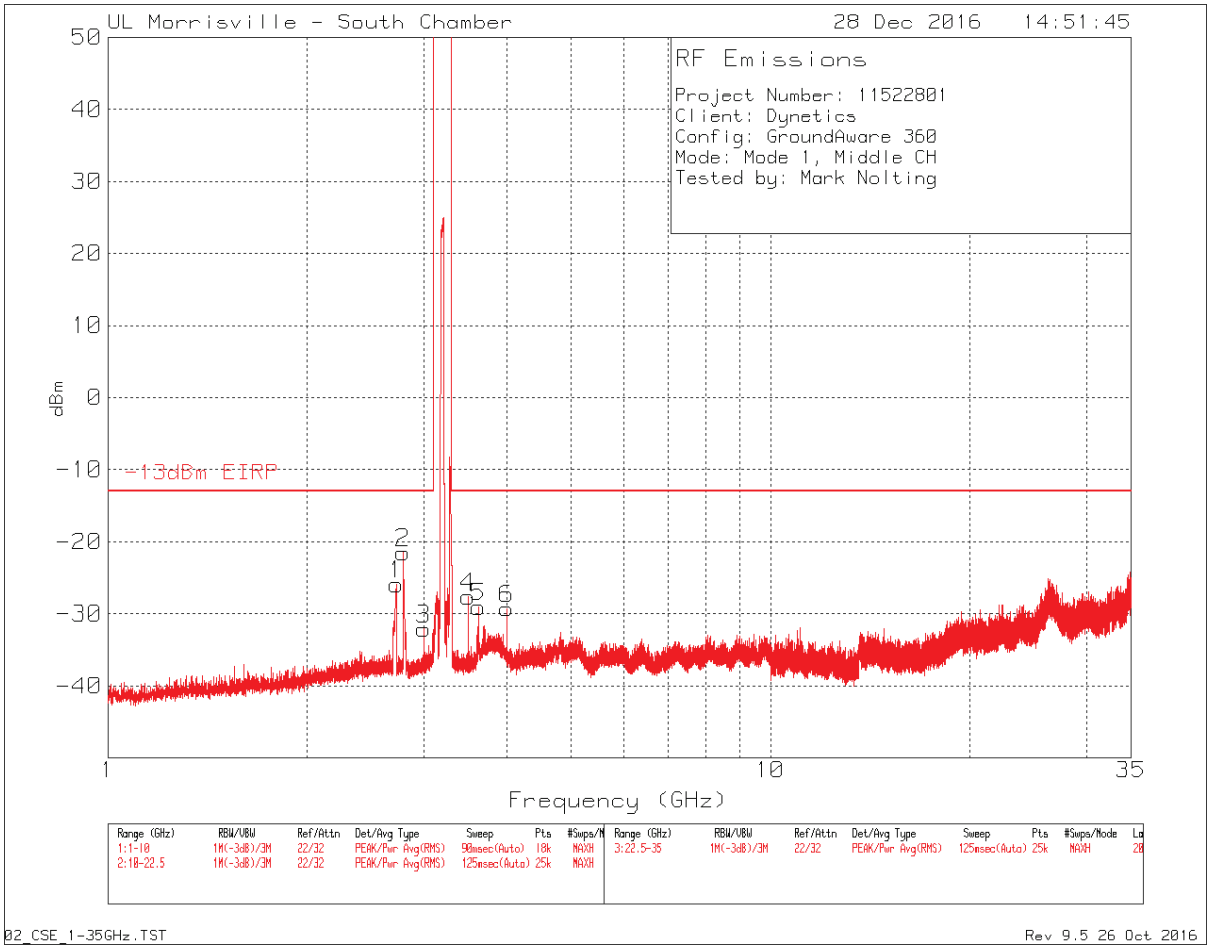
**Mode 1, Middle Channel, Above 1GHz - Data**




| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | Path Factor (dB) | Corrected Reading dBm | -13dBm EIRP | PK Margin (dB) |
|---|---|---|---|---|---|---|---|
| 1 | 2.726 | -36.81 | Pk | 10.9 | -25.91 | -13 | -12.91 |
| 2 | 2.791 | -32.42 | Pk | 10.9 | -21.52 | -13 | -8.52 |
| 3 | 3 | -43.02 | Pk | 10.9 | -32.12 | -13 | -19.12 |
| 4 | 3.501 | -38.66 | Pk | 11 | -27.66 | -13 | -14.66 |
| 5 | 3.63 | -40.04 | Pk | 11 | -29.04 | -13 | -16.04 |
| 6 | 4.001 | -40.26 | Pk | 11 | -29.26 | -13 | -16.26 |

Pk - Peak detector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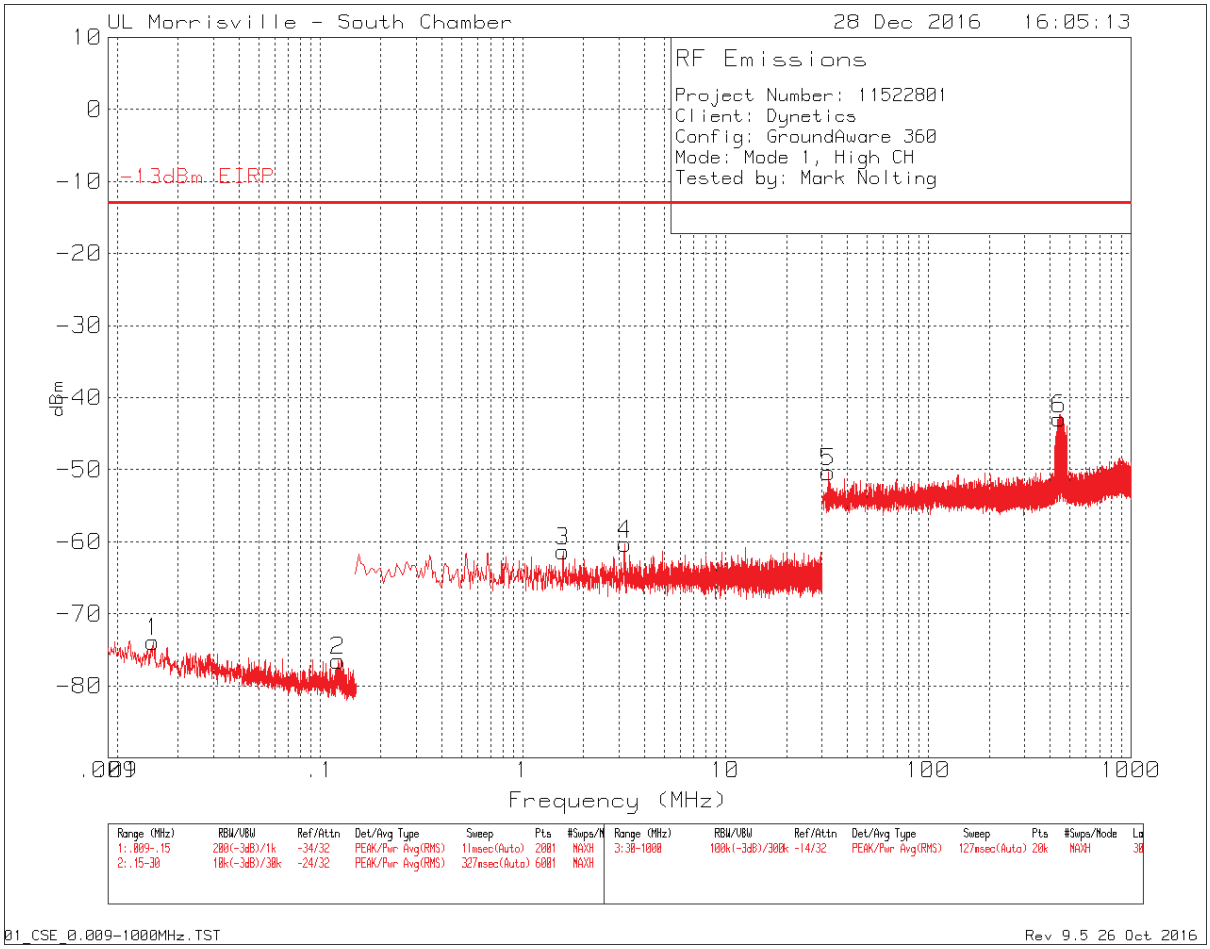
**Mode 1, High Channel, Below 1GHz - Data**




| Marker | Frequency (MHz) | Meter Reading (dBm) | Det | Path Factor (dB) | Corrected Reading dBm | -13dBm EIRP | PK Margin (dB) |
|---|---|---|---|---|---|---|---|
| 1 | .01504 | -83.99 | Pk | 10.1 | -73.89 | -13 | -60.89 |
| 2 | .12296 | -86.59 | Pk | 10.1 | -76.49 | -13 | -63.49 |
| 3 | 1.5828 | -71.44 | Pk | 10.1 | -61.34 | -13 | -48.34 |
| 4 | 3.20465 | -70.42 | Pk | 10.1 | -60.32 | -13 | -47.32 |
| 5 | 32.0855 | -60.46 | Pk | 10.1 | -50.36 | -13 | -37.36 |
| 6 | 443.414 | -53.34 | Pk | 10.4 | -42.94 | -13 | -29.94 |

Pk - Peak detector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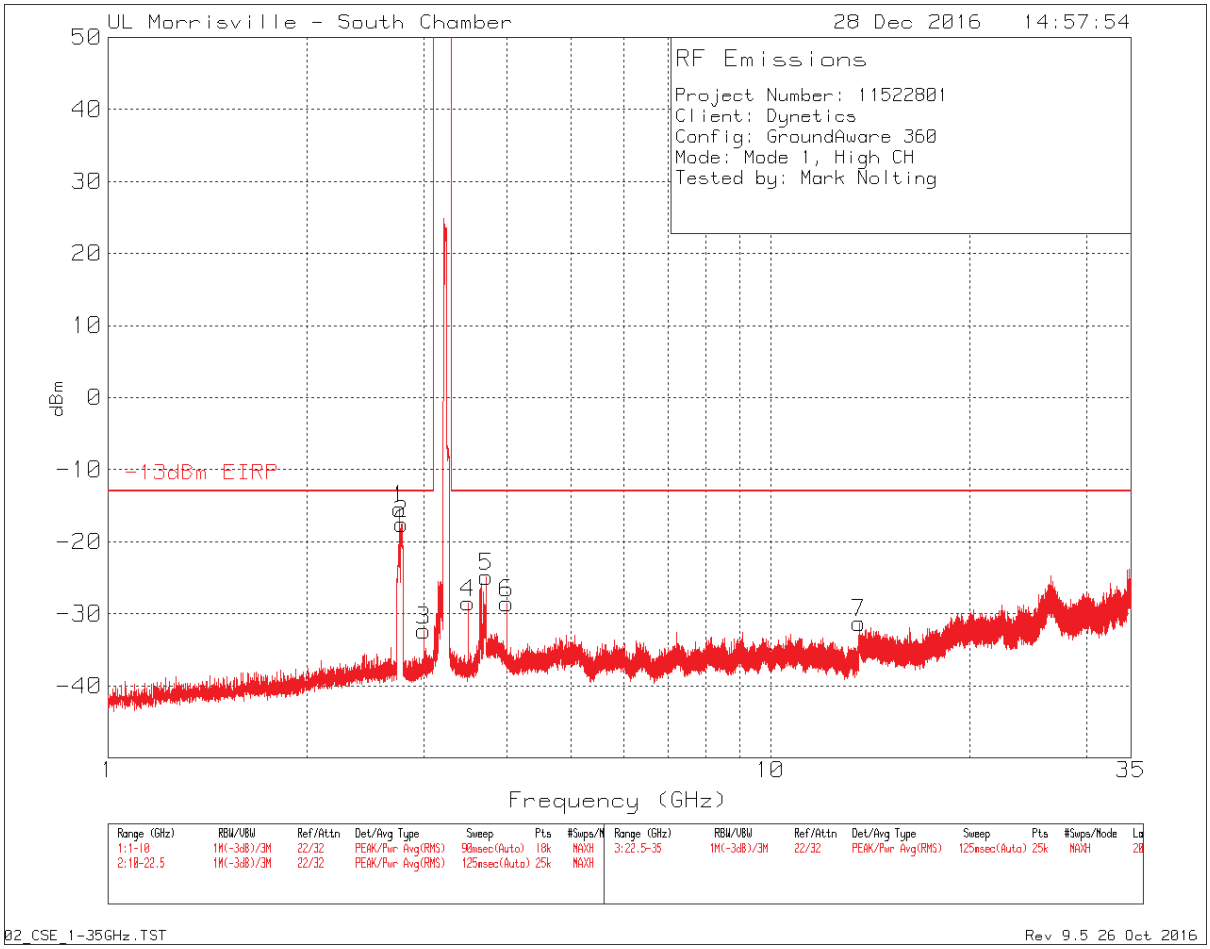
**Mode 1, High Channel, Above 1GHz - Data**




| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | Path Factor (dB) | Corrected Reading dBm | -13dBm EIRP | PK Margin (dB) |
|---|---|---|---|---|---|---|---|
| 1 | 2.758 | -25.39 | Pk | 10.9 | -14.49 | -13 | -1.49 |
| 2 | 2.778 | -28.02 | Pk | 10.9 | -17.12 | -13 | -4.12 |
| 3 | 3.001 | -43.24 | Pk | 10.9 | -32.34 | -13 | -19.34 |
| 4 | 3.501 | -39.48 | Pk | 11 | -28.48 | -13 | -15.48 |
| 5 | 3.727 | -35.87 | Pk | 11 | -24.87 | -13 | -11.87 |
| 6 | 4.001 | -39.54 | Pk | 11 | -28.54 | -13 | -15.54 |
| 7 | 13.608 | -43.19 | Pk | 11.9 | -31.29 | -13 | -18.29 |

Pk - Peak detector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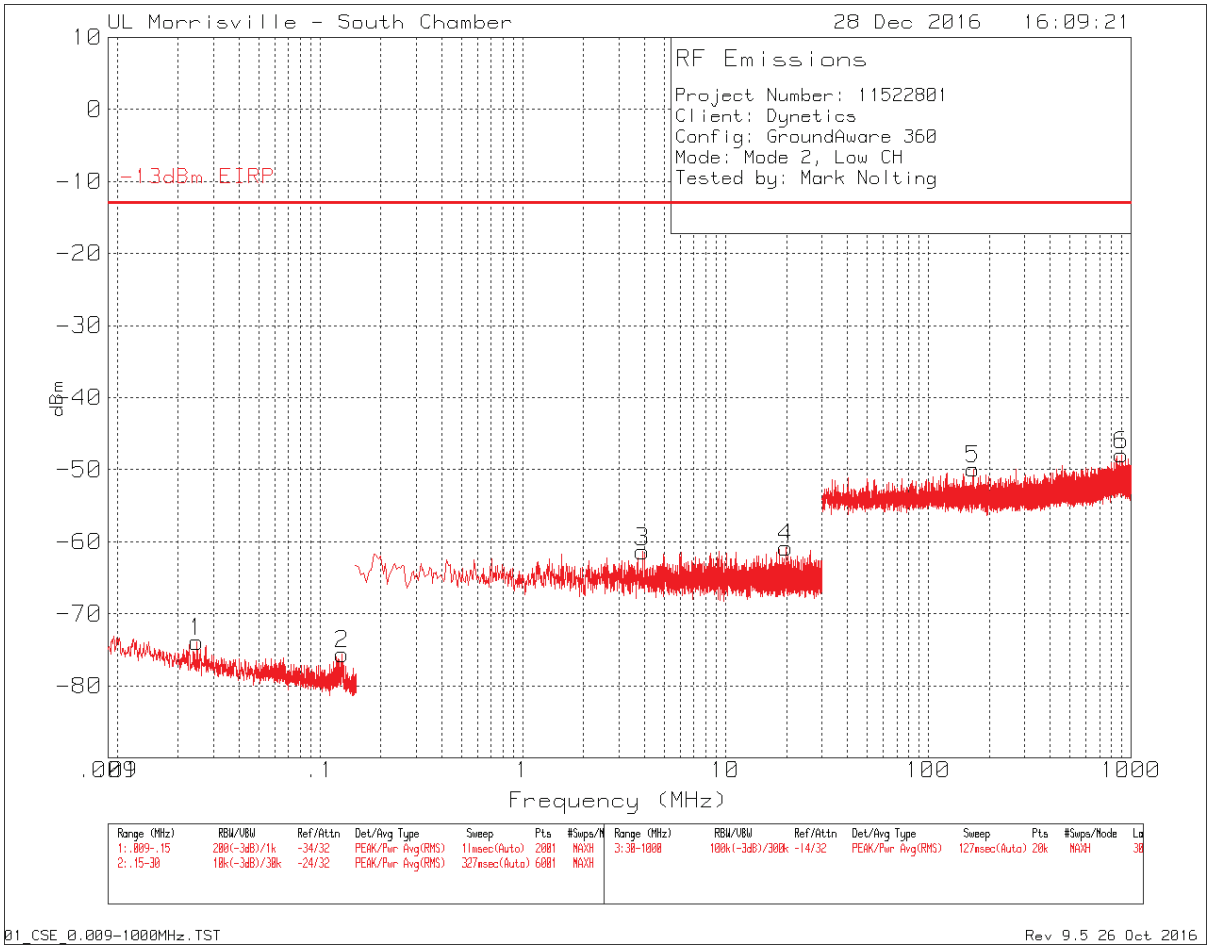
**Mode 2, Low Channel, Below 1GHz Data**




| Marker | Frequency (MHz) | Meter Reading (dBm) | Det | Path Factor (dB) | Corrected Reading dBm | -13dBm EIRP | PK Margin (dB) |
|---|---|---|---|---|---|---|---|
| 1 | .02476 | -83.98 | Pk | 10.1 | -73.88 | -13 | -60.88 |
| 2 | .12885 | -85.71 | Pk | 10.1 | -75.61 | -13 | -62.61 |
| 3 | 3.89618 | -71.46 | Pk | 10.1 | -61.36 | -13 | -48.36 |
| 4 | 19.81618 | -70.93 | Pk | 10.1 | -60.83 | -13 | -47.83 |
| 5 | 166.77 | -60.21 | Pk | 10.3 | -49.91 | -13 | -36.91 |
| 6 | 900.381 | -58.54 | Pk | 10.6 | -47.94 | -13 | -34.94 |

Pk - Peak detector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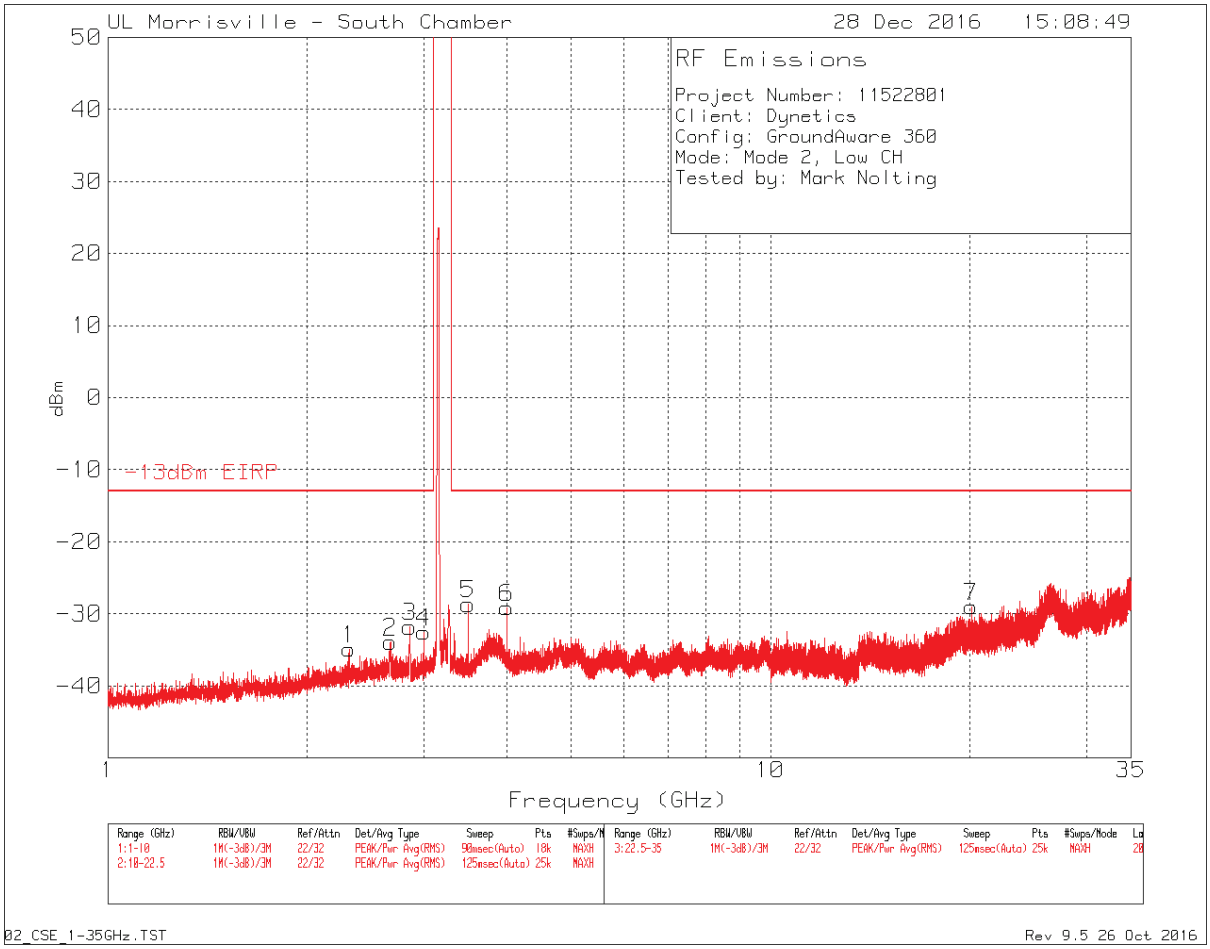
**Mode 2, Low Channel, Above 1GHz – Data**




| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | Path Factor (dB) | Corrected Reading dBm | -13dBm EIRP | PK Margin (dB) |
|---|---|---|---|---|---|---|---|
| 1 | 2.313 | -45.68 | Pk | 10.8 | -34.88 | -13 | -21.88 |
| 2 | 2.671 | -44.84 | Pk | 10.9 | -33.94 | -13 | -20.94 |
| 3 | 2.856 | -42.69 | Pk | 10.9 | -31.79 | -13 | -18.79 |
| 4 | 3.001 | -43.43 | Pk | 10.9 | -32.53 | -13 | -19.53 |
| 5 | 3.5 | -39.64 | Pk | 11 | -28.64 | -13 | -15.64 |
| 6 | 4.001 | -40.12 | Pk | 11 | -29.12 | -13 | -16.12 |
| 7 | 20.097 | -41.7 | Pk | 12.7 | -29 | -13 | -16 |

Pk - Peak detector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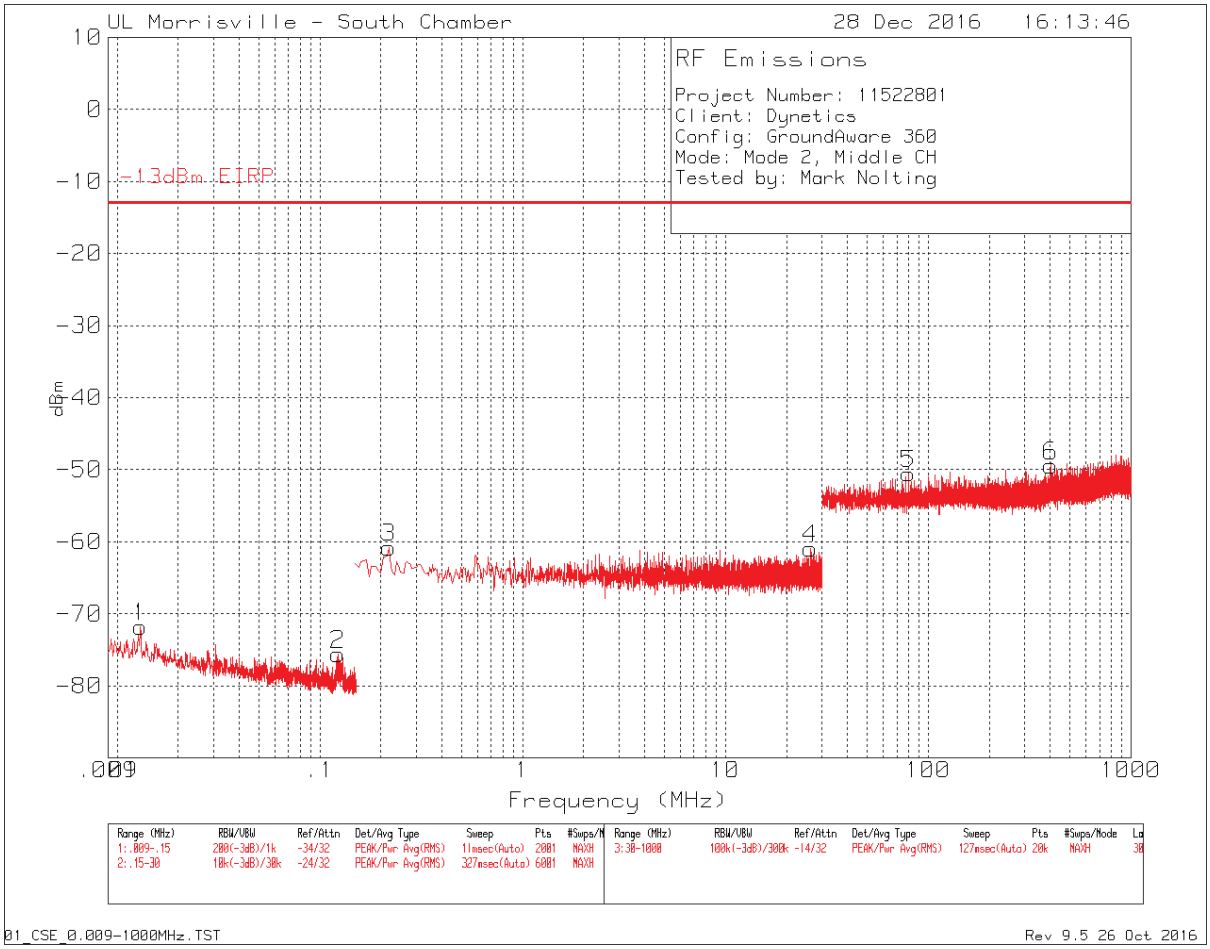
**Mode 2, Middle Channel, Below 1GHz – Data**




| Marker | Frequency (MHz) | Meter Reading (dBm) | Det | Path Factor (dB) | Corrected Reading dBm | -13dBm EIRP | PK Margin (dB) |
|---|---|---|---|---|---|---|---|
| 1 | .01305 | -81.92 | Pk | 10.1 | -71.82 | -13 | -58.82 |
| 2 | .12296 | -85.73 | Pk | 10.1 | -75.63 | -13 | -62.63 |
| 3 | .21965 | -70.91 | Pk | 10.1 | -60.81 | -13 | -47.81 |
| 4 | 26.30855 | -71.04 | Pk | 10.1 | -60.94 | -13 | -47.94 |
| 5 | 79.7125 | -60.75 | Pk | 10.2 | -50.55 | -13 | -37.55 |
| 6 | 403.547 | -59.85 | Pk | 10.4 | -49.45 | -13 | -36.45 |

Pk - Peak detector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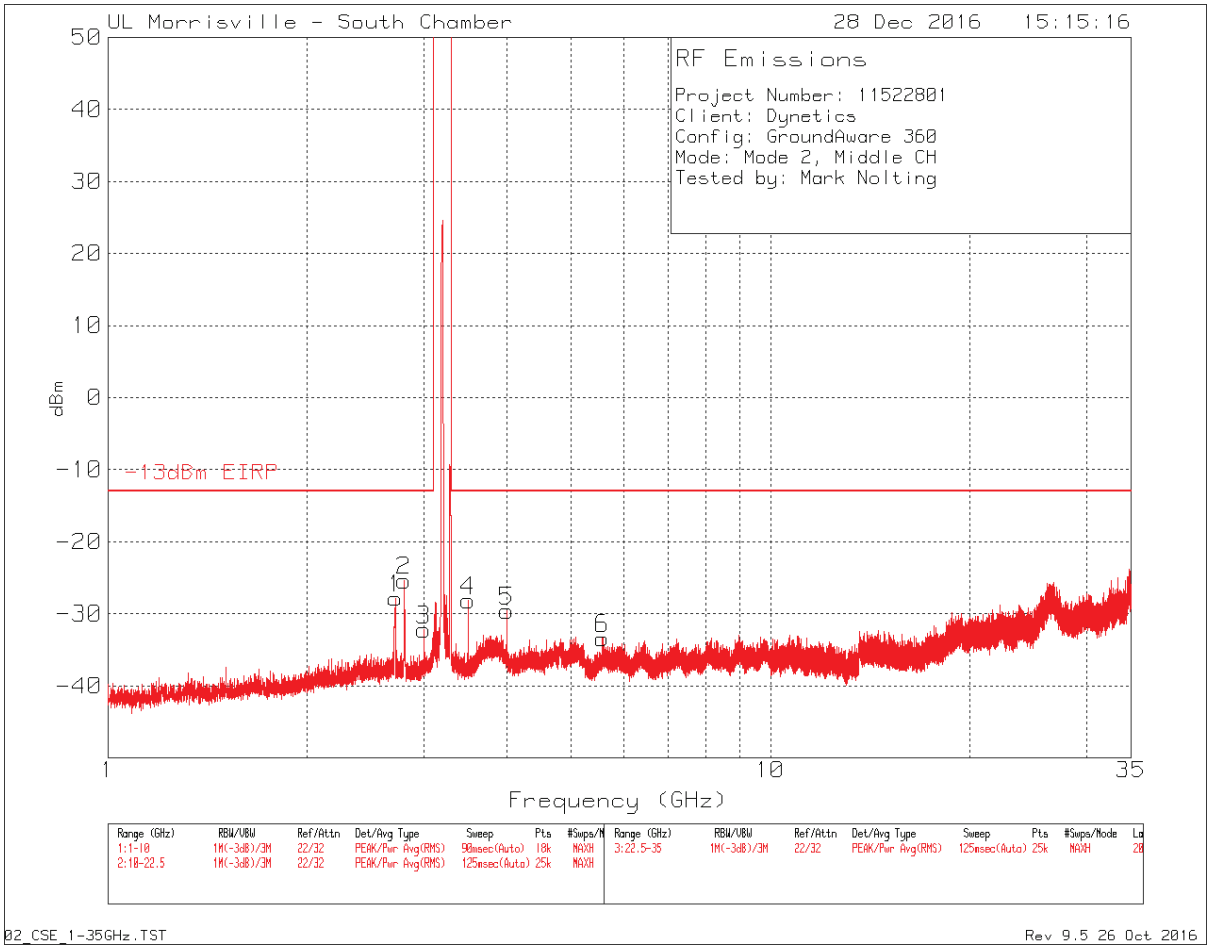
**Mode 2, Middle Channel, Above 1GHz – Data**




| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | Path Factor (dB) | Corrected Reading dBm | -13dBm EIRP | PK Margin (dB) |
|---|---|---|---|---|---|---|---|
| 1 | 2.717 | -38.74 | Pk | 10.9 | -27.84 | -13 | -14.84 |
| 2 | 2.797 | -36.26 | Pk | 10.9 | -25.36 | -13 | -12.36 |
| 3 | 3.001 | -43.14 | Pk | 10.9 | -32.24 | -13 | -19.24 |
| 4 | 3.5 | -39.18 | Pk | 11 | -28.18 | -13 | -15.18 |
| 5 | 4.001 | -40.6 | Pk | 11 | -29.6 | -13 | -16.6 |
| 6 | 5.576 | -44.53 | Pk | 11.1 | -33.43 | -13 | -20.43 |

Pk - Peak detector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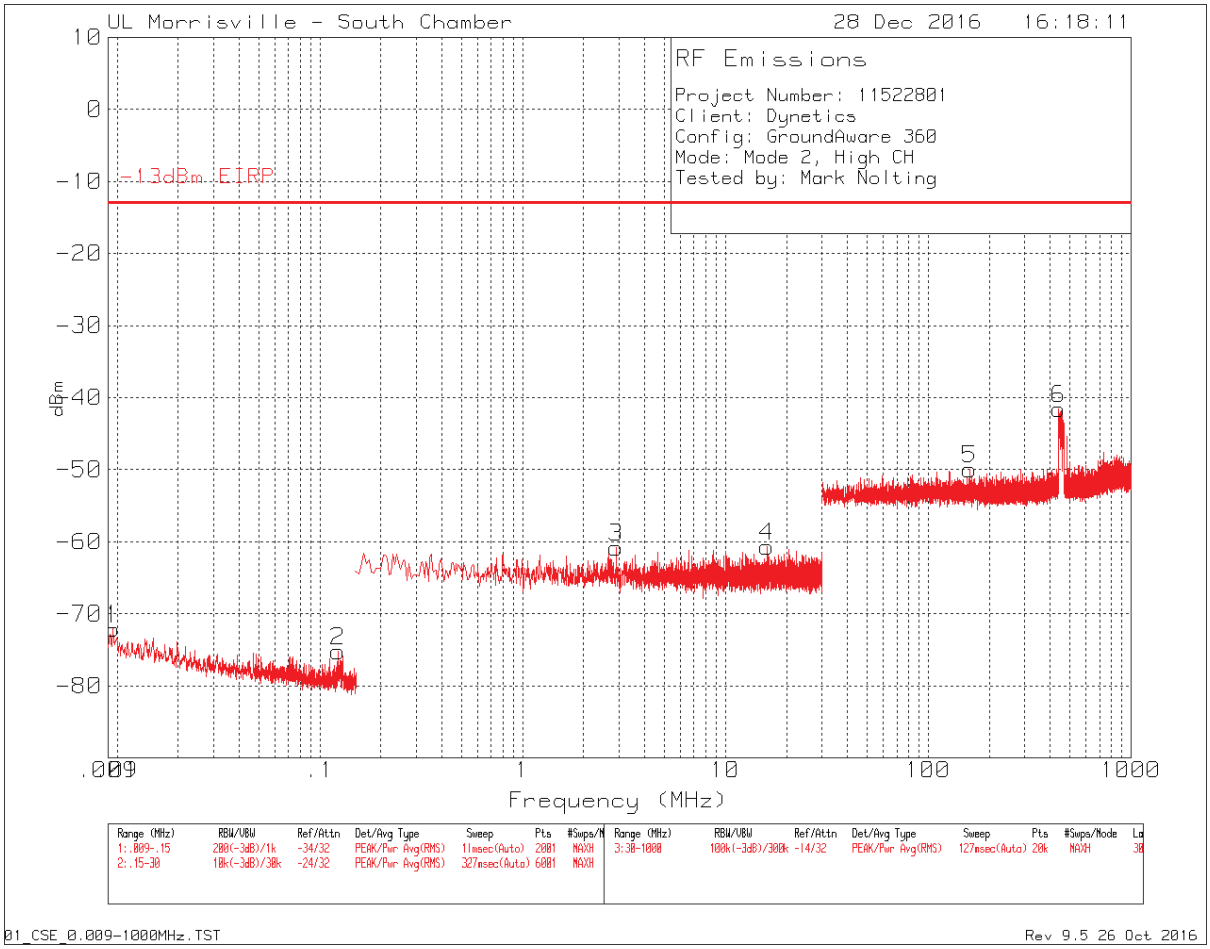
**Mode 2, High Channel, Below 1GHz – Data**




| Marker | Frequency (MHz) | Meter Reading (dBm) | Det | Path Factor (dB) | Corrected Reading dBm | -13dBm EIRP | PK Margin (dB) |
|---|---|---|---|---|---|---|---|
| 1 | .00957 | -82.22 | Pk | 10.1 | -72.12 | -13 | -59.12 |
| 2 | .12296 | -85.3 | Pk | 10.1 | -75.2 | -13 | -62.2 |
| 3 | 2.88625 | -70.89 | Pk | 10.1 | -60.79 | -13 | -47.79 |
| 4 | 16.04015 | -70.77 | Pk | 10.1 | -60.67 | -13 | -47.67 |
| 5 | 160.368 | -60.23 | Pk | 10.3 | -49.93 | -13 | -36.93 |
| 6 | 440.2615 | -51.96 | Pk | 10.4 | -41.56 | -13 | -28.56 |

Pk - Peak detector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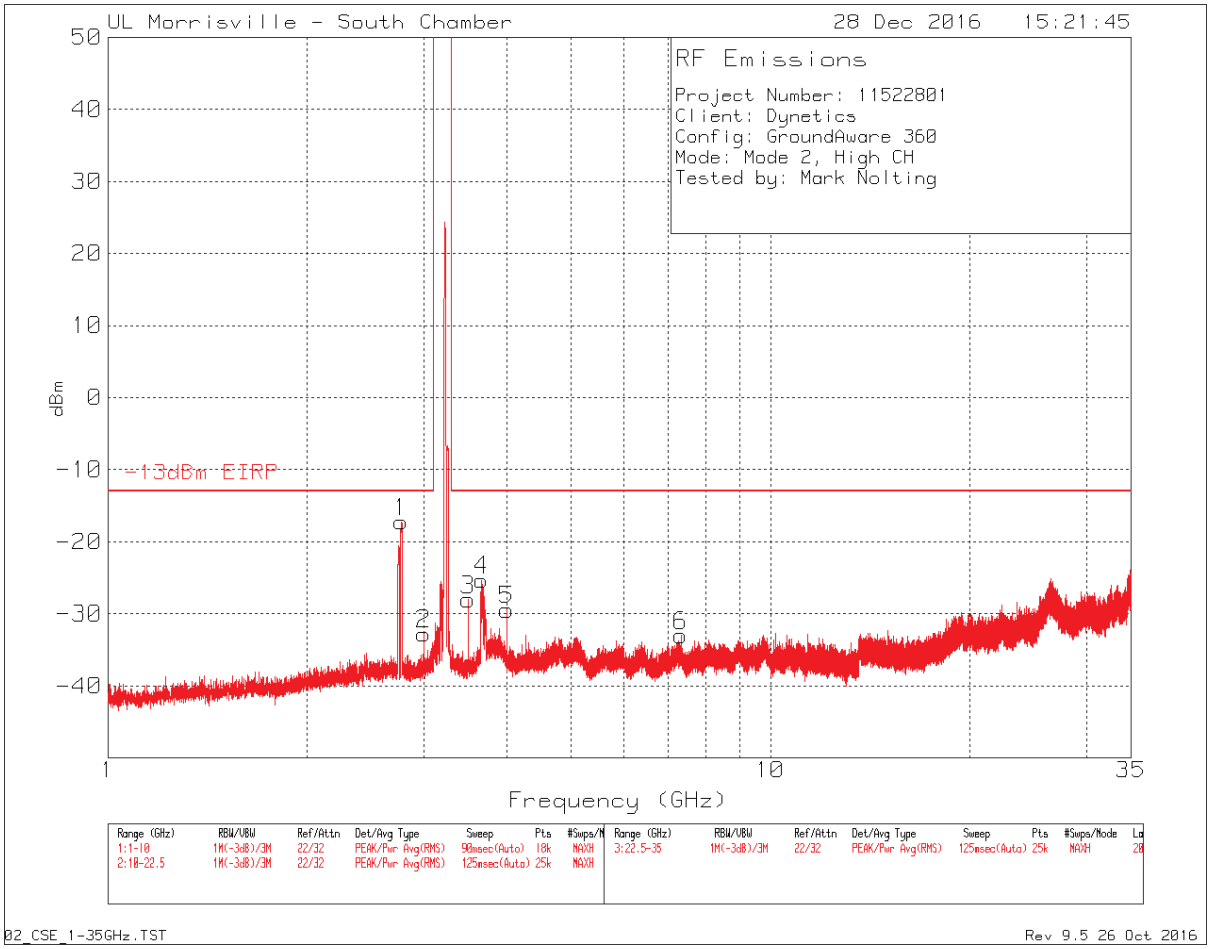
**Mode 2, High Channel, Above 1GHz – Data**




| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | Path Factor (dB) | Corrected Reading dBm | -13dBm EIRP | PK Margin (dB) |
|---|---|---|---|---|---|---|---|
| 1 | 2.773 | -27.86 | Pk | 10.9 | -16.96 | -13 | -3.96 |
| 2 | 3.001 | -43.68 | Pk | 10.9 | -32.78 | -13 | -19.78 |
| 3 | 3.501 | -39.04 | Pk | 11 | -28.04 | -13 | -15.04 |
| 4 | 3.667 | -36.32 | Pk | 11 | -25.32 | -13 | -12.32 |
| 5 | 4 | -40.42 | Pk | 11 | -29.42 | -13 | -16.42 |
| 6 | 7.325 | -44.42 | Pk | 11.4 | -33.02 | -13 | -20.02 |

Pk - Peak detector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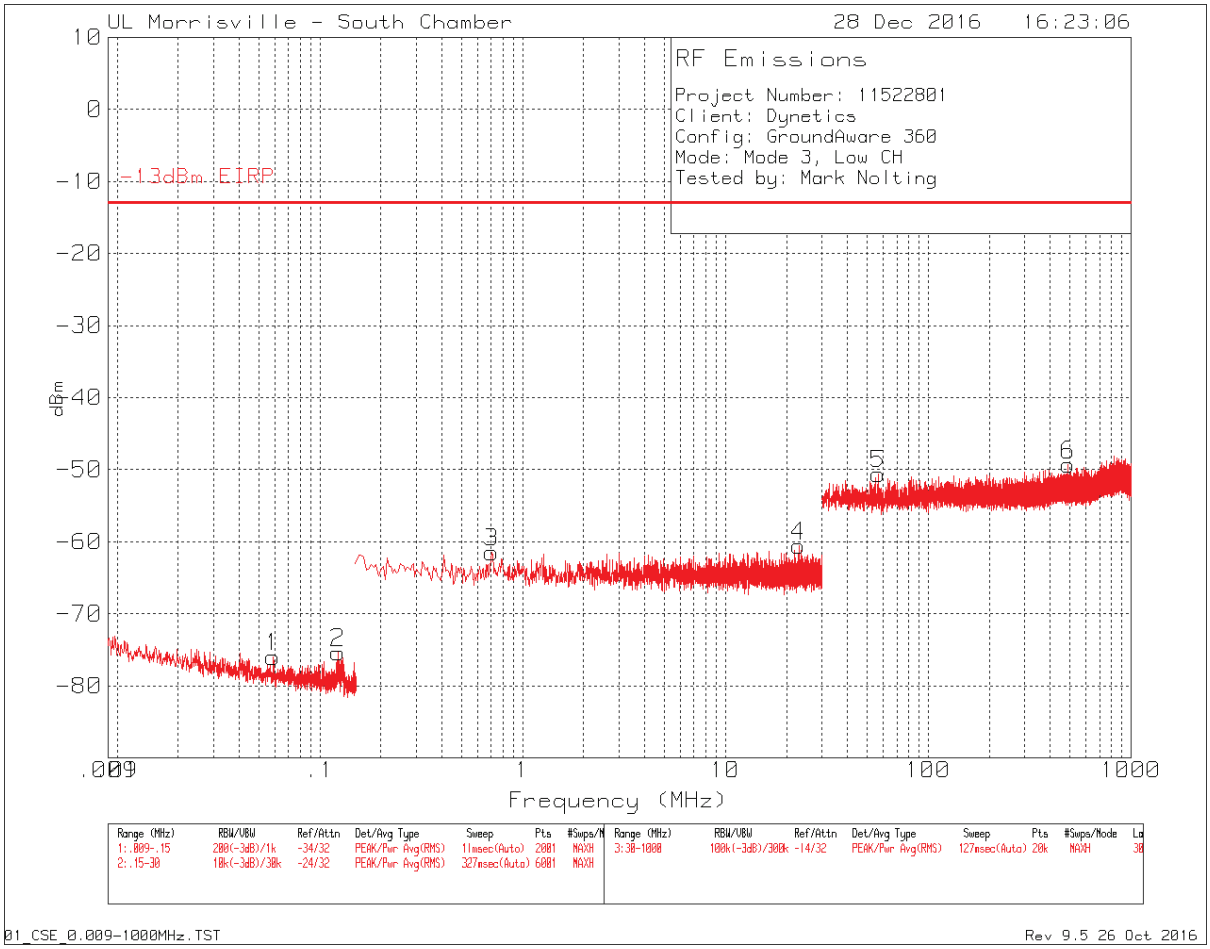
**Mode 3, Low Channel, Below 1GHz – Data**




| Marker | Frequency (MHz) | Meter Reading (dBm) | Det | Path Factor (dB) | Corrected Reading dBm | -13dBm EIRP | PK Margin (dB) |
|---|---|---|---|---|---|---|---|
| 1 | .05884 | -86.06 | Pk | 10.1 | -75.96 | -13 | -62.96 |
| 2 | .1231 | -85.49 | Pk | 10.1 | -75.39 | -13 | -62.39 |
| 3 | .70223 | -71.54 | Pk | 10.1 | -61.44 | -13 | -48.44 |
| 4 | 22.99023 | -70.67 | Pk | 10.1 | -60.57 | -13 | -47.57 |
| 5 | 56.6265 | -60.79 | Pk | 10.2 | -50.59 | -13 | -37.59 |
| 6 | 490.3135 | -59.73 | Pk | 10.4 | -49.33 | -13 | -36.33 |

Pk - Peak detector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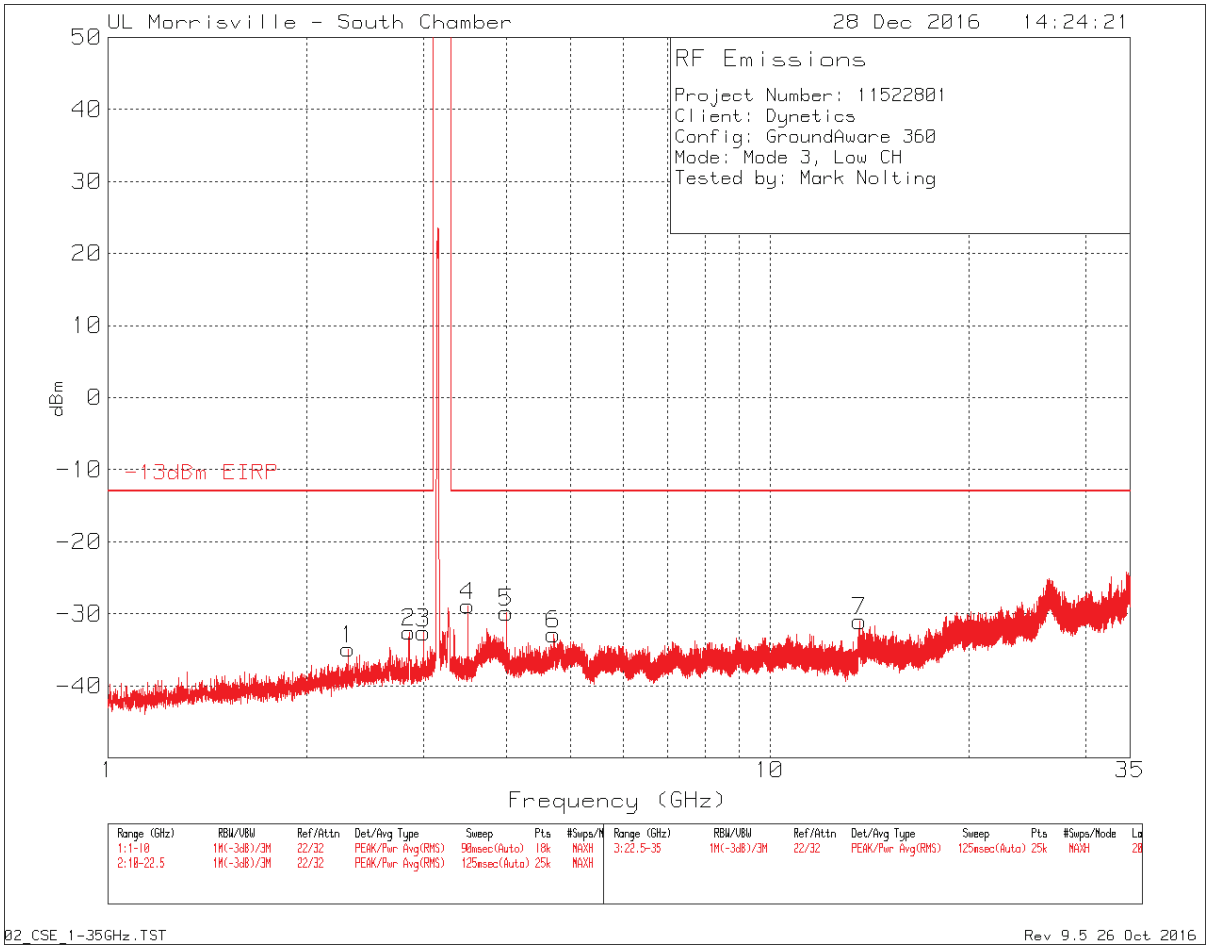
**Mode 3, Low Channel, Above 1GHz – Data**




| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | Path Factor (dB) | Corrected Reading dBm | -13dBm EIRP | PK Margin (dB) |
|---|---|---|---|---|---|---|---|
| 1 | 2.307 | -45.69 | Pk | 10.8 | -34.89 | -13 | -21.89 |
| 2 | 2.852 | -43.45 | Pk | 10.9 | -32.55 | -13 | -19.55 |
| 3 | 3 | -43.53 | Pk | 10.9 | -32.63 | -13 | -19.63 |
| 4 | 3.501 | -39.87 | Pk | 11 | -28.87 | -13 | -15.87 |
| 5 | 4.001 | -40.83 | Pk | 11 | -29.83 | -13 | -16.83 |
| 6 | 4.716 | -43.95 | Pk | 11.1 | -32.85 | -13 | -19.85 |
| 7 | 13.663 | -43.02 | Pk | 12 | -31.02 | -13 | -18.02 |

Pk - Peak detector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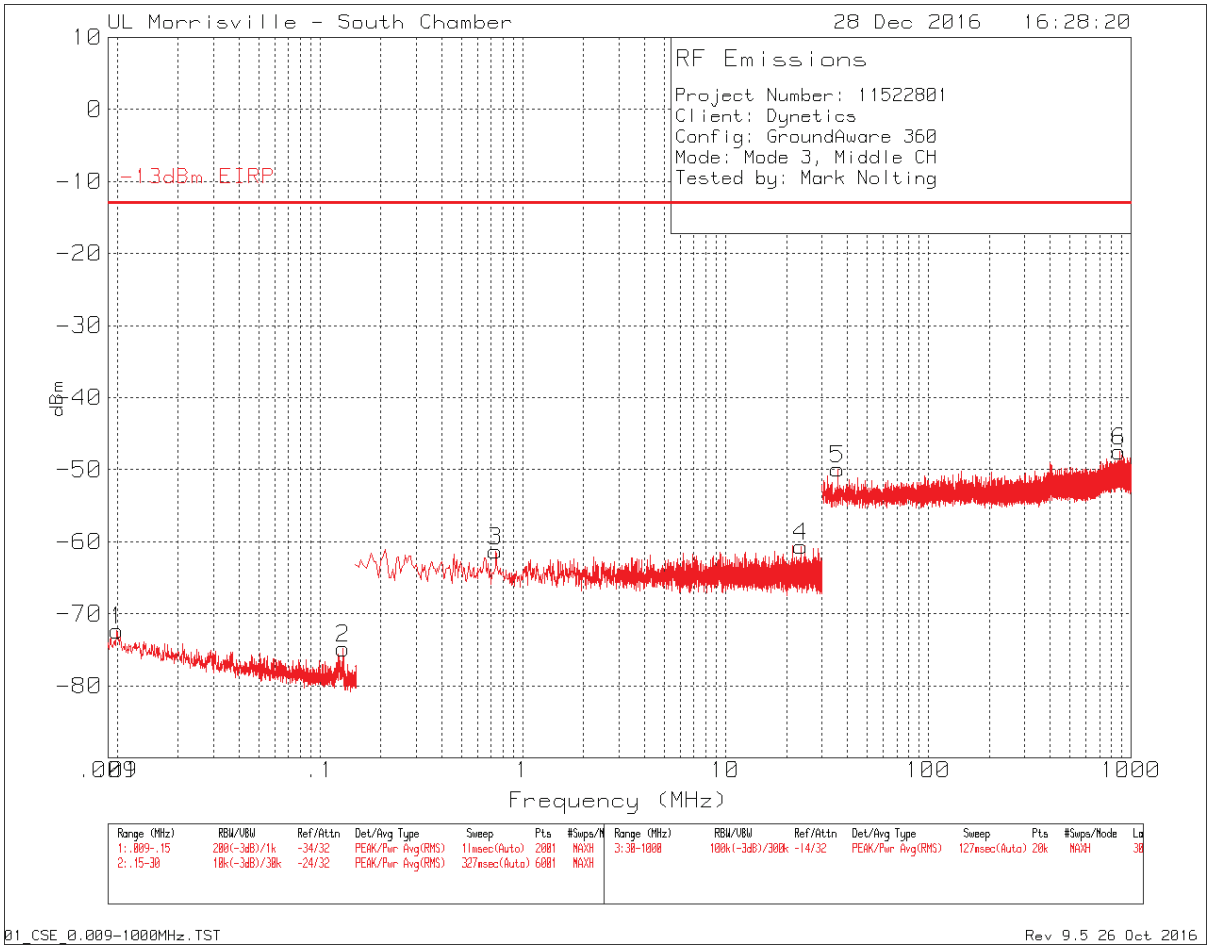
**Mode 3, Middle Channel, Below 1GHz – Data**




| Marker | Frequency (MHz) | Meter Reading (dBm) | Det | Path Factor (dB) | Corrected Reading dBm | -13dBm EIRP | PK Margin (dB) |
|---|---|---|---|---|---|---|---|
| 1 | .00999 | -82.43 | Pk | 10.1 | -72.33 | -13 | -59.33 |
| 2 | .13041 | -84.91 | Pk | 10.1 | -74.81 | -13 | -61.81 |
| 3 | .73705 | -71.39 | Pk | 10.1 | -61.29 | -13 | -48.29 |
| 4 | 23.51758 | -70.74 | Pk | 10.1 | -60.64 | -13 | -47.64 |
| 5 | 35.7715 | -60.01 | Pk | 10.1 | -49.91 | -13 | -36.91 |
| 6 | 875.743 | -57.97 | Pk | 10.5 | -47.47 | -13 | -34.47 |

Pk - Peak detector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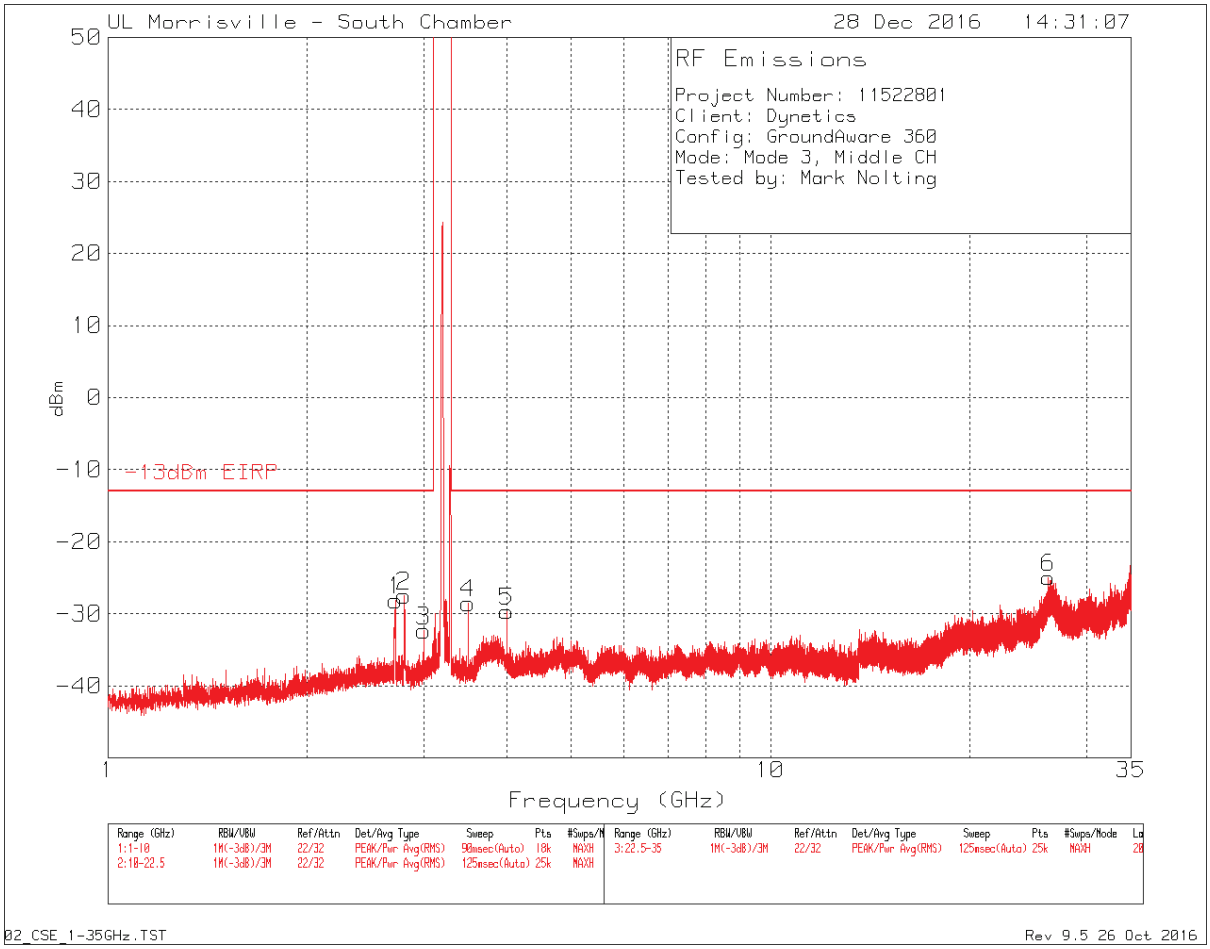
**Mode 3, Middle Channel, Above 1GHz – Data**




| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | Path Factor (dB) | Corrected Reading dBm | -13dBm EIRP | PK Margin (dB) |
|---|---|---|---|---|---|---|---|
| 1 | 2.719 | -39.02 | Pk | 10.9 | -28.12 | -13 | -15.12 |
| 2 | 2.798 | -38.42 | Pk | 10.9 | -27.52 | -13 | -14.52 |
| 3 | 3 | -43.26 | Pk | 10.9 | -32.36 | -13 | -19.36 |
| 4 | 3.501 | -39.51 | Pk | 11 | -28.51 | -13 | -15.51 |
| 5 | 4.001 | -40.67 | Pk | 11 | -29.67 | -13 | -16.67 |
| 6 | 26.273 | -39.76 | Pk | 14.8 | -24.96 | -13 | -11.96 |

Pk - Peak detector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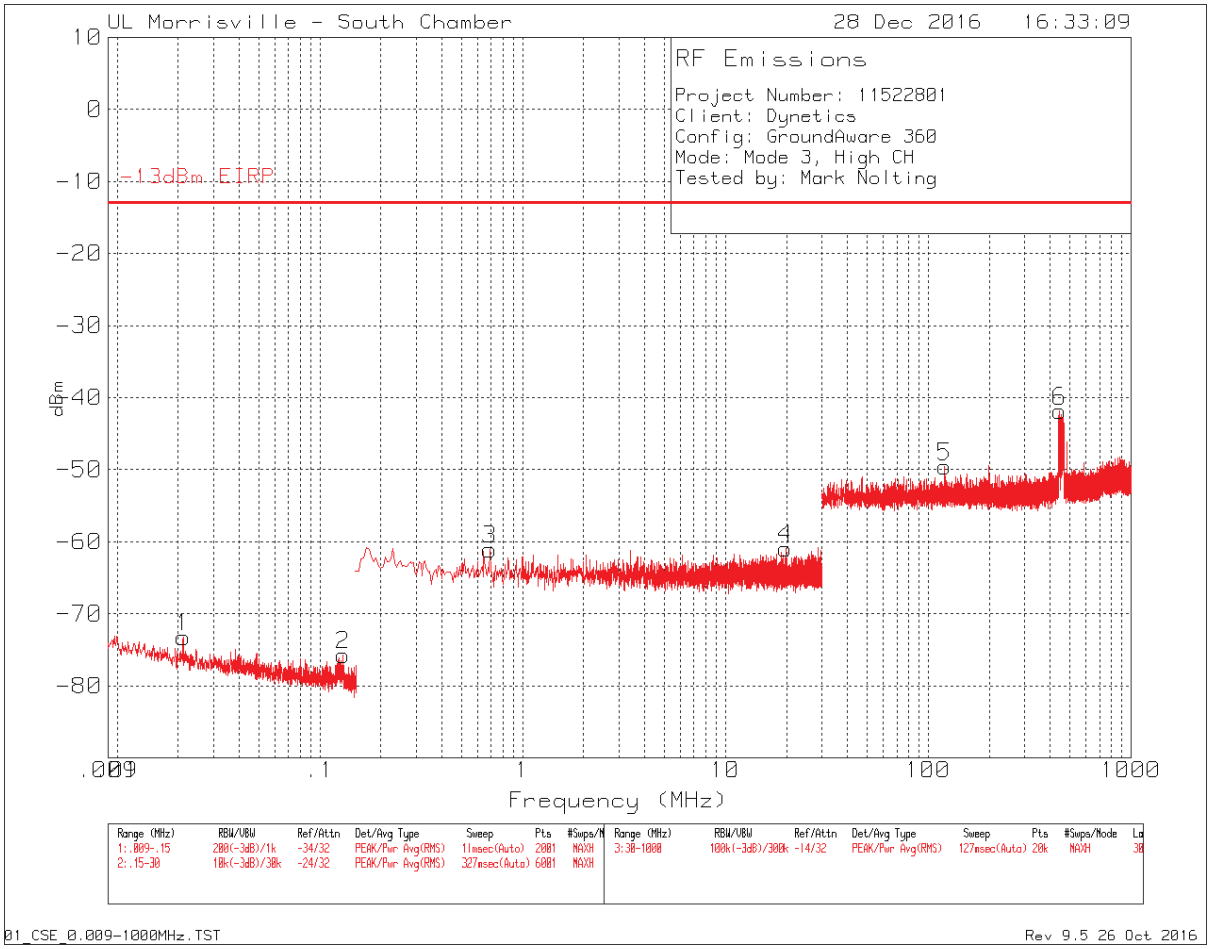
**Mode 3, High Channel, Below 1GHz – Data**




| Marker | Frequency (MHz) | Meter Reading (dBm) | Det | Path Factor (dB) | Corrected Reading dBm | -13dBm EIRP | PK Margin (dB) |
|---|---|---|---|---|---|---|---|
| 1 | .02121 | -83.31 | Pk | 10.1 | -73.21 | -13 | -60.21 |
| 2 | .13034 | -85.84 | Pk | 10.1 | -75.74 | -13 | -62.74 |
| 3 | .6873 | -71.16 | Pk | 10.1 | -61.06 | -13 | -48.06 |
| 4 | 19.80623 | -71.02 | Pk | 10.1 | -60.92 | -13 | -47.92 |
| 5 | 120.5495 | -59.8 | Pk | 10.2 | -49.6 | -13 | -36.6 |
| 6 | 445.451 | -52.26 | Pk | 10.4 | -41.86 | -13 | -28.86 |

Pk - Peak detector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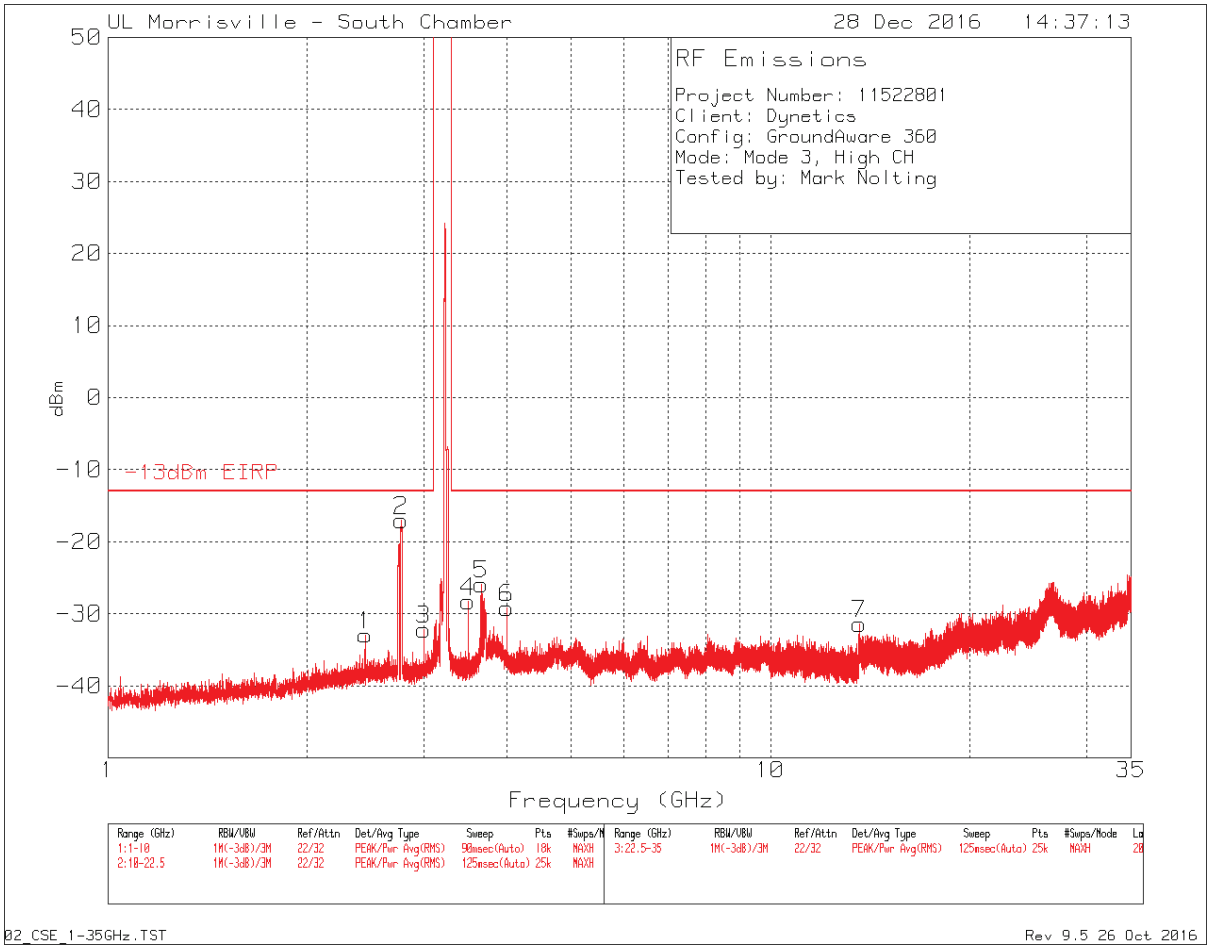
**Mode 3, High Channel, Above 1GHz – Data**




| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | Path Factor (dB) | Corrected Reading dBm | -13dBm EIRP | PK Margin (dB) |
|---|---|---|---|---|---|---|---|
| 1 | 2.446 | -43.74 | Pk | 10.8 | -32.94 | -13 | -19.94 |
| 2 | 2.772 | -27.89 | Pk | 10.9 | -16.99 | -13 | -3.99 |
| 3 | 3 | -43.08 | Pk | 10.9 | -32.18 | -13 | -19.18 |
| 4 | 3.501 | -39.31 | Pk | 11 | -28.31 | -13 | -15.31 |
| 5 | 3.662 | -36.92 | Pk | 11 | -25.92 | -13 | -12.92 |
| 6 | 4.001 | -40.2 | Pk | 11 | -29.2 | -13 | -16.2 |
| 7 | 13.625 | -43.42 | Pk | 12 | -31.42 | -13 | -18.42 |

Pk - Peak detector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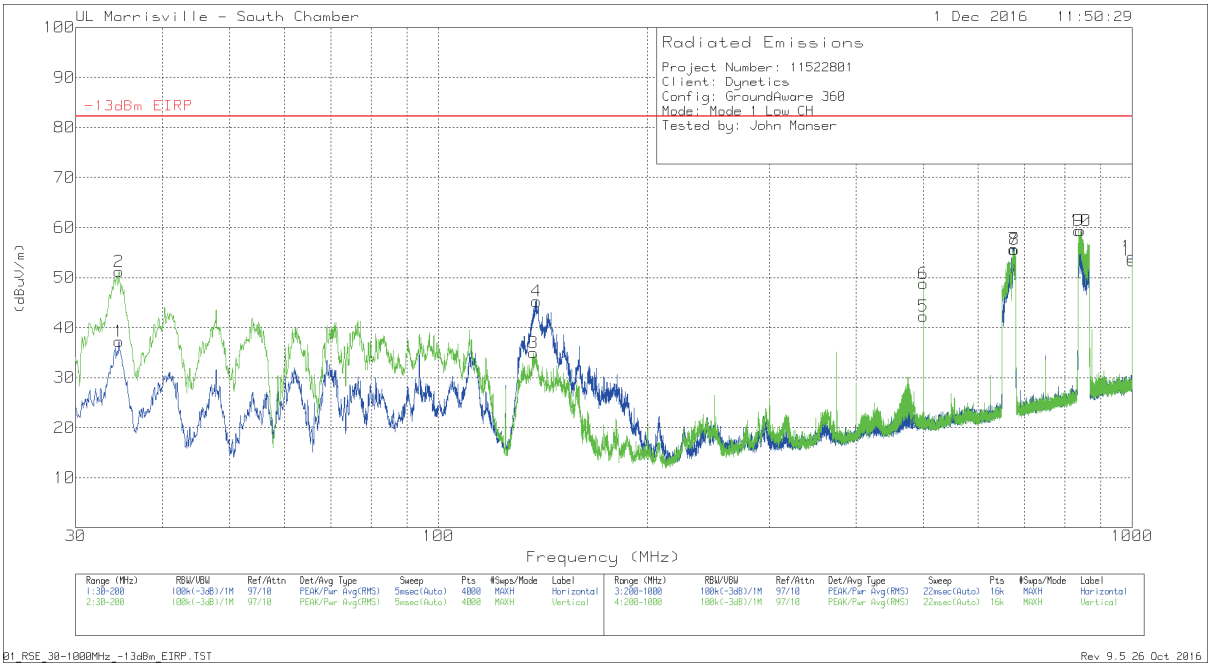
### 9.3.2. **Radiated Enclosure Port Out of Band Emissions**

**Mode 1, Low Channel, Below 1GHz – Plot**




Limit line represents an E-field equivalent of 82.2dBuV/m at a 3m measurement distance.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**Mode 1, Low Channel, Below 1GHz– Tabular Data**

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | AT0074 AF (dB/m) | Amp/Cbl (dB) | Corrected Reading (dBuV/m) | -13dBm EIRP equivalent E-field (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 34.6337 | 46.41 | Pk | 22.5 | -31.7 | 37.21 | 82.2 | -44.99 | 0-360 | 299 | H |
| 2 | 34.6337 | 60.39 | Pk | 22.5 | -31.7 | 51.19 | 82.2 | -31.01 | 0-360 | 101 | V |
| 3 | 137.1702 | 48 | Pk | 17.7 | -30.7 | 35 | 82.2 | -47.2 | 0-360 | 101 | V |
| 4 | 138.4881 | 58.24 | Pk | 17.6 | -30.6 | 45.24 | 82.2 | -36.96 | 0-360 | 199 | H |
| 5 | 500.05 | 48.95 | Pk | 22.1 | -28.8 | 42.25 | 82.2 | -39.95 | 0-360 | 102 | H |
| 6 | 500.05 | 55.48 | Pk | 22.1 | -28.8 | 48.78 | 82.2 | -33.42 | 0-360 | 102 | V |
| 7 | 675.5 | 59.67 | Pk | 24.4 | -28.4 | 55.67 | 82.2 | -26.53 | 0-360 | 102 | H |
| 8 | 676.45 | 59.6 | Pk | 24.4 | -28.4 | 55.6 | 82.2 | -26.6 | 0-360 | 102 | V |
| 9 | 838 | 60.63 | Pk | 26.4 | -27.7 | 59.33 | 82.2 | -22.87 | 0-360 | 102 | H |
| 10 | 842.55 | 60.67 | Pk | 26.3 | -27.6 | 59.37 | 82.2 | -22.83 | 0-360 | 102 | V |
| 12 | 1000 | 51.96 | Pk | 27.9 | -25.7 | 54.16 | 82.2 | -28.04 | 0-360 | 198 | H |
| 11 | 1000 | 51.21 | Pk | 27.9 | -25.7 | 53.41 | 82.2 | -28.79 | 0-360 | 102 | V |

Pk - Peak detector


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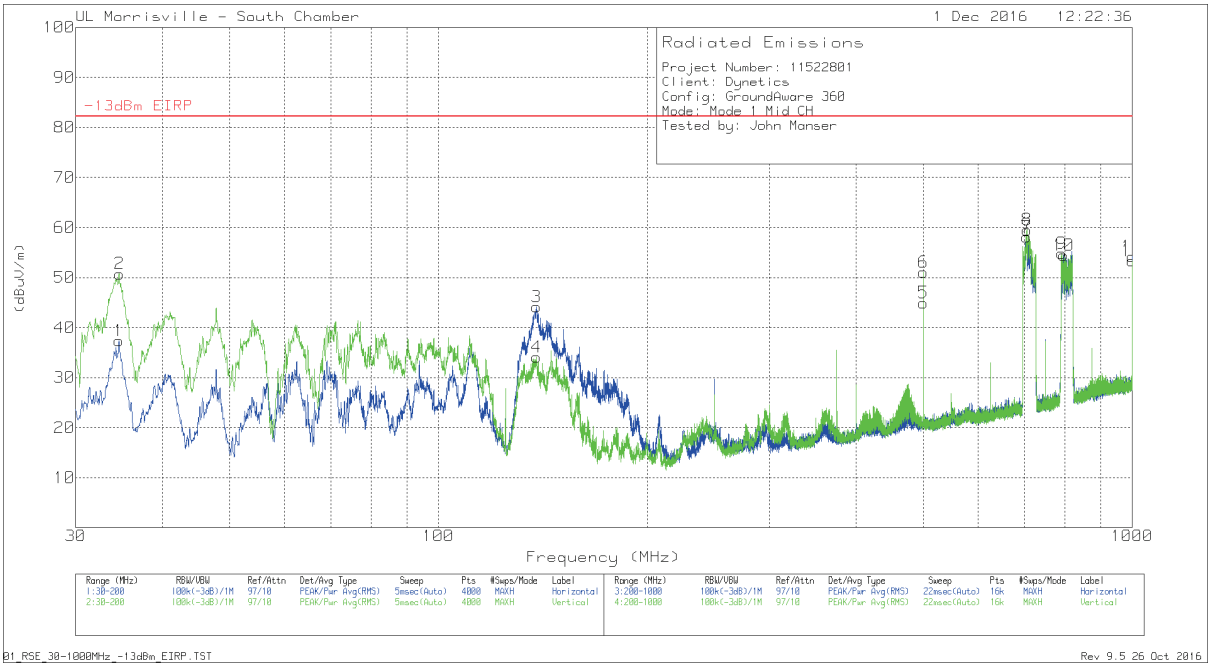
**Mode 1, Middle Channel, Below 1GHz – Plot**




Limit line represents an E-field equivalent of 82.2dBuV/m at a 3m measurement distance.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**Mode 1, Middle Channel, Below 1GHz– Tabular Data**

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | AT0074 AF (dB/m) | Amp/Cbl (dB) | Corrected Reading (dBuV/m) | -13dBm EIRP equivalent E-field (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 34.6337 | 46.57 | Pk | 22.5 | -31.7 | 37.37 | 82.2 | -44.83 | 0-360 | 398 | H |
| 2 | 34.6762 | 59.95 | Pk | 22.5 | -31.7 | 50.75 | 82.2 | -31.45 | 0-360 | 101 | V |
| 3 | 138.4456 | 57.16 | Pk | 17.6 | -30.6 | 44.16 | 82.2 | -38.04 | 0-360 | 198 | H |
| 4 | 138.4456 | 47.07 | Pk | 17.6 | -30.6 | 34.07 | 82.2 | -48.13 | 0-360 | 101 | V |
| 5 | 500.05 | 51.66 | Pk | 22.1 | -28.8 | 44.96 | 82.2 | -37.24 | 0-360 | 102 | H |
| 6 | 500.05 | 57.78 | Pk | 22.1 | -28.8 | 51.08 | 82.2 | -31.12 | 0-360 | 102 | V |
| 7 | 703.6 | 61.79 | Pk | 24.7 | -28.4 | 58.09 | 82.2 | -24.11 | 0-360 | 102 | H |
| 8 | 705 | 63.14 | Pk | 24.7 | -28.3 | 59.54 | 82.2 | -22.66 | 0-360 | 102 | V |
| 9 | 790.85 | 56.94 | Pk | 25.8 | -27.9 | 54.84 | 82.2 | -27.36 | 0-360 | 102 | V |
| 10 | 796 | 56.62 | Pk | 25.8 | -28 | 54.42 | 82.2 | -27.78 | 0-360 | 102 | H |
| 11 | 1000 | 51.97 | Pk | 27.9 | -25.7 | 54.17 | 82.2 | -28.03 | 0-360 | 199 | H |
| 12 | 1000 | 51.17 | Pk | 27.9 | -25.7 | 53.37 | 82.2 | -28.83 | 0-360 | 102 | V |

Pk - Peak detector


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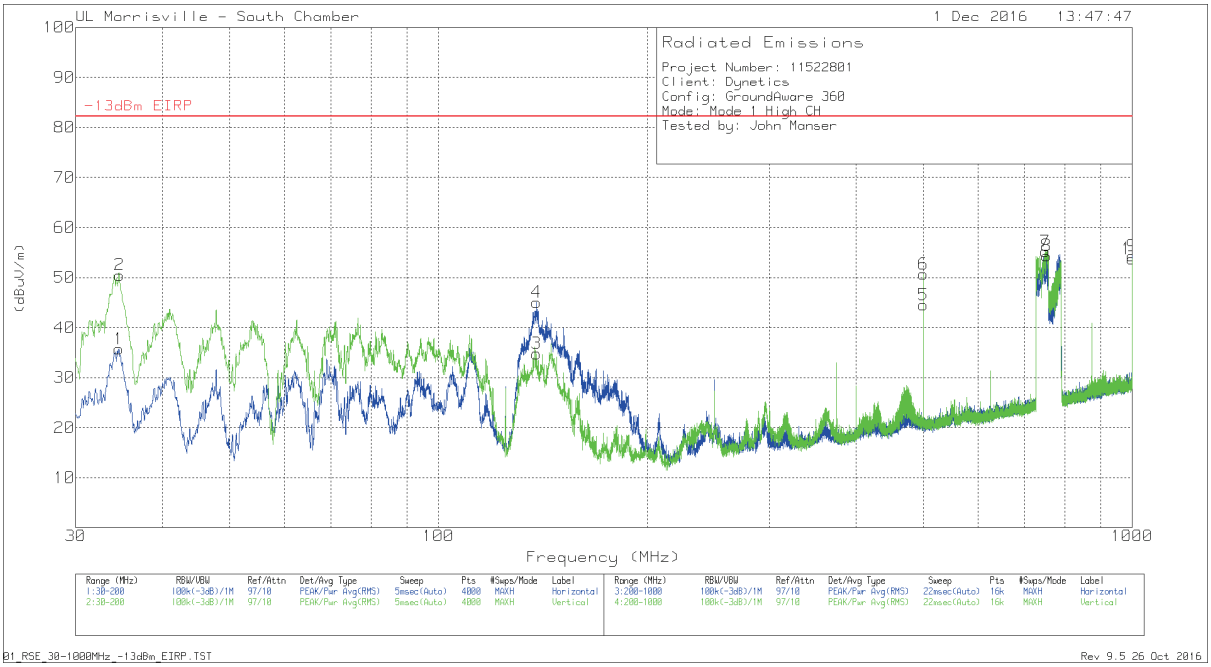
**Mode 1, High Channel, Below 1GHz – Plot**




Limit line represents an E-field equivalent of 82.2dBuV/m at a 3m measurement distance.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**Mode 1, High Channel, Below 1GHz– Tabular Data**

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | AT0074 AF (dB/m) | Amp/Cbl (dB) | Corrected Reading (dBuV/m) | -13dBm EIRP equivalent E-field (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 34.6337 | 44.93 | Pk | 22.5 | -31.7 | 35.73 | 82.2 | -46.47 | 0-360 | 398 | H |
| 2 | 34.6762 | 59.7 | Pk | 22.5 | -31.7 | 50.5 | 82.2 | -31.7 | 0-360 | 101 | V |
| 4 | 138.4456 | 58.07 | Pk | 17.6 | -30.6 | 45.07 | 82.2 | -37.13 | 0-360 | 198 | H |
| 3 | 138.4456 | 47.8 | Pk | 17.6 | -30.6 | 34.8 | 82.2 | -47.4 | 0-360 | 101 | V |
| 5 | 500.05 | 51.25 | Pk | 22.1 | -28.8 | 44.55 | 82.2 | -37.65 | 0-360 | 102 | H |
| 6 | 500.05 | 57.36 | Pk | 22.1 | -28.8 | 50.66 | 82.2 | -31.54 | 0-360 | 102 | V |
| 7 | 749.1 | 58.19 | Pk | 25.2 | -28.2 | 55.19 | 82.2 | -27.01 | 0-360 | 102 | V |
| 8 | 752.35 | 57.37 | Pk | 25.2 | -28.2 | 54.37 | 82.2 | -27.83 | 0-360 | 102 | H |
| 9 | 1000 | 52.15 | Pk | 27.9 | -25.7 | 54.35 | 82.2 | -27.85 | 0-360 | 198 | H |
| 10 | 1000 | 51.54 | Pk | 27.9 | -25.7 | 53.74 | 82.2 | -28.46 | 0-360 | 102 | V |

Pk - Peak detector


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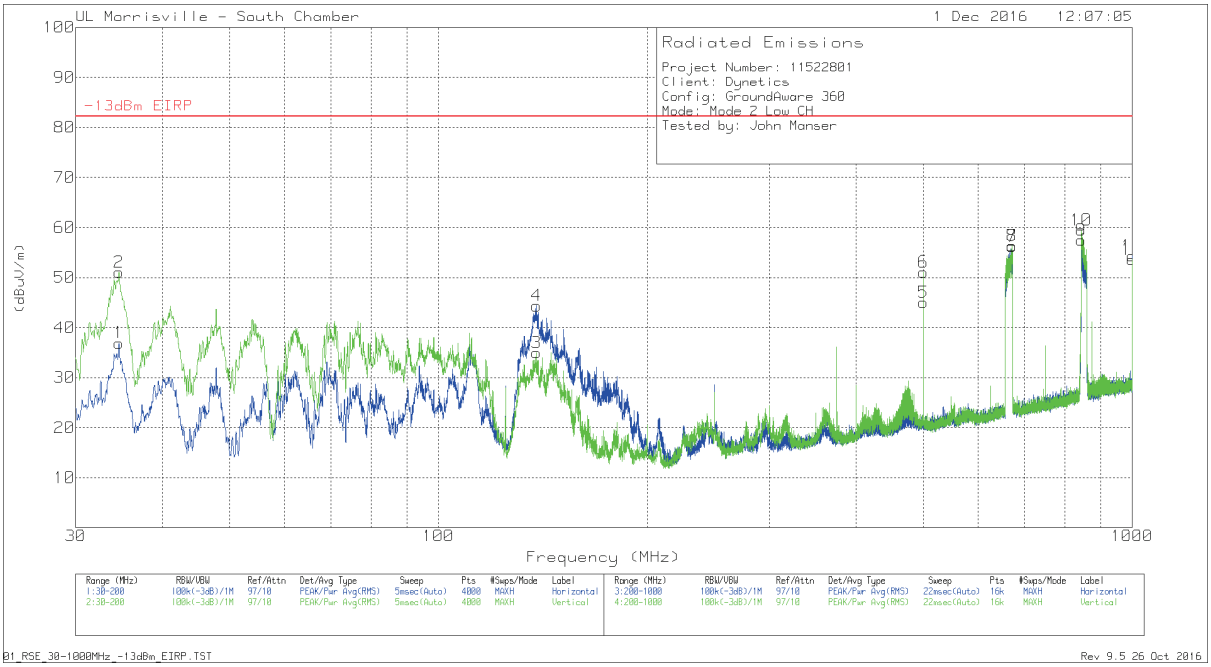
**Mode 2, Low Channel, Below 1GHz – Plot**




Limit line represents an E-field equivalent of 82.2dBuV/m at a 3m measurement distance.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**Mode 2, Low Channel, Below 1GHz– Tabular Data**

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | AT0074 AF (dB/m) | Amp/Cbl (dB) | Corrected Reading (dBuV/m) | -13dBm EIRP equivalent E-field (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 34.6337 | 46.13 | Pk | 22.5 | -31.7 | 36.93 | 82.2 | -45.27 | 0-360 | 298 | H |
| 2 | 34.6337 | 60.27 | Pk | 22.5 | -31.7 | 51.07 | 82.2 | -31.13 | 0-360 | 102 | V |
| 3 | 138.4031 | 47.99 | Pk | 17.6 | -30.6 | 34.99 | 82.2 | -47.21 | 0-360 | 102 | V |
| 4 | 138.4456 | 57.36 | Pk | 17.6 | -30.6 | 44.36 | 82.2 | -37.84 | 0-360 | 198 | H |
| 5 | 500.05 | 51.74 | Pk | 22.1 | -28.8 | 45.04 | 82.2 | -37.16 | 0-360 | 102 | H |
| 6 | 500.05 | 57.81 | Pk | 22.1 | -28.8 | 51.11 | 82.2 | -31.09 | 0-360 | 102 | V |
| 7 | 670.75 | 60.35 | Pk | 24.4 | -28.5 | 56.25 | 82.2 | -25.95 | 0-360 | 102 | V |
| 8 | 671.05 | 60.46 | Pk | 24.4 | -28.5 | 56.36 | 82.2 | -25.84 | 0-360 | 102 | H |
| 9 | 843.9 | 58.75 | Pk | 26.3 | -27.6 | 57.45 | 82.2 | -24.75 | 0-360 | 102 | H |
| 10 | 844.1 | 60.78 | Pk | 26.3 | -27.6 | 59.48 | 82.2 | -22.72 | 0-360 | 102 | V |
| 12 | 1000 | 52.11 | Pk | 27.9 | -25.7 | 54.31 | 82.2 | -27.89 | 0-360 | 198 | H |
| 11 | 1000 | 51.42 | Pk | 27.9 | -25.7 | 53.62 | 82.2 | -28.58 | 0-360 | 102 | V |

Pk - Peak detector


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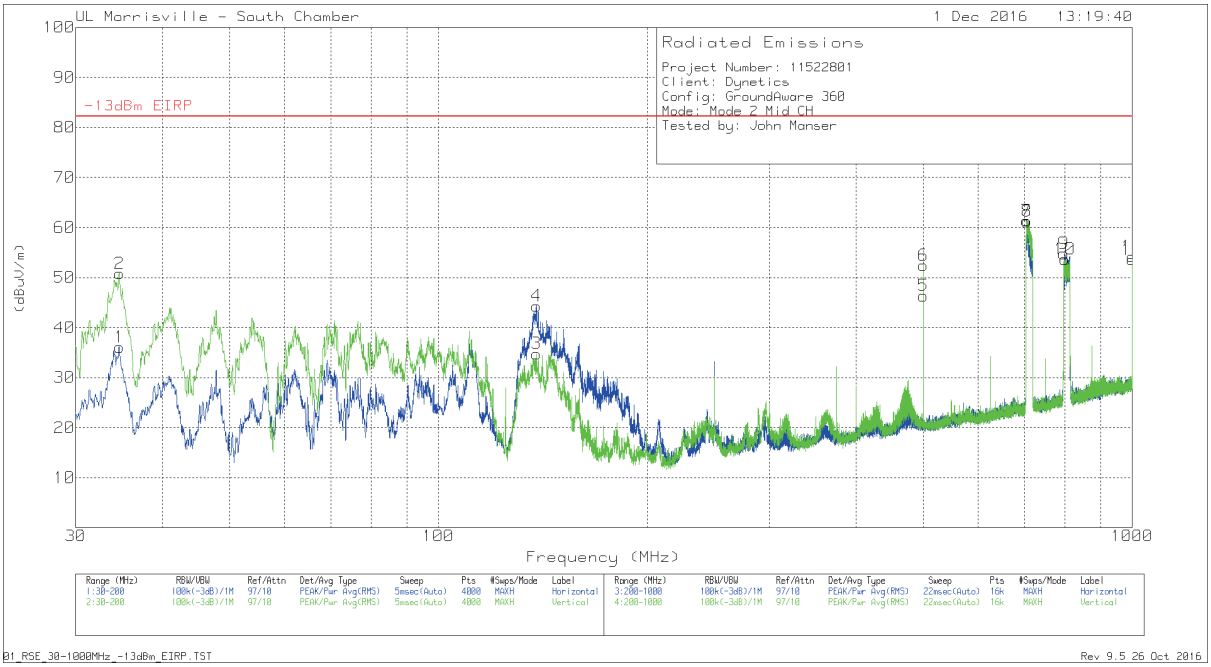
**Mode 2, Middle Channel, Below 1GHz – Plot**




Limit line represents an E-field equivalent of 82.2dBuV/m at a 3m measurement distance.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**Mode 2, Middle Channel, Below 1GHz– Tabular Data**

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | AT0074 AF (dB/m) | Amp/Cbl (dB) | Corrected Reading (dBuV/m) | -13dBm EIRP equivalent E-field (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 34.6762 | 45.27 | Pk | 22.5 | -31.7 | 36.07 | 82.2 | -46.13 | 0-360 | 399 | H |
| 2 | 34.6762 | 60 | Pk | 22.5 | -31.7 | 50.8 | 82.2 | -31.4 | 0-360 | 101 | V |
| 4 | 138.4456 | 57.33 | Pk | 17.6 | -30.6 | 44.33 | 82.2 | -37.87 | 0-360 | 198 | H |
| 3 | 138.4456 | 47.79 | Pk | 17.6 | -30.6 | 34.79 | 82.2 | -47.41 | 0-360 | 101 | V |
| 5 | 500.05 | 53.06 | Pk | 22.1 | -28.8 | 46.36 | 82.2 | -35.84 | 0-360 | 102 | H |
| 6 | 500.05 | 59.17 | Pk | 22.1 | -28.8 | 52.47 | 82.2 | -29.73 | 0-360 | 102 | V |
| 7 | 704.6 | 65 | Pk | 24.7 | -28.3 | 61.4 | 82.2 | -20.8 | 0-360 | 102 | H |
| 8 | 704.95 | 64.8 | Pk | 24.7 | -28.3 | 61.2 | 82.2 | -21 | 0-360 | 102 | V |
| 9 | 797.2 | 56.99 | Pk | 25.8 | -28 | 54.79 | 82.2 | -27.41 | 0-360 | 102 | H |
| 10 | 799.1 | 55.66 | Pk | 25.9 | -27.9 | 53.66 | 82.2 | -28.54 | 0-360 | 102 | V |
| 12 | 1000 | 52 | Pk | 27.9 | -25.7 | 54.2 | 82.2 | -28 | 0-360 | 198 | H |
| 11 | 1000 | 51.38 | Pk | 27.9 | -25.7 | 53.58 | 82.2 | -28.62 | 0-360 | 102 | V |

Pk - Peak detector


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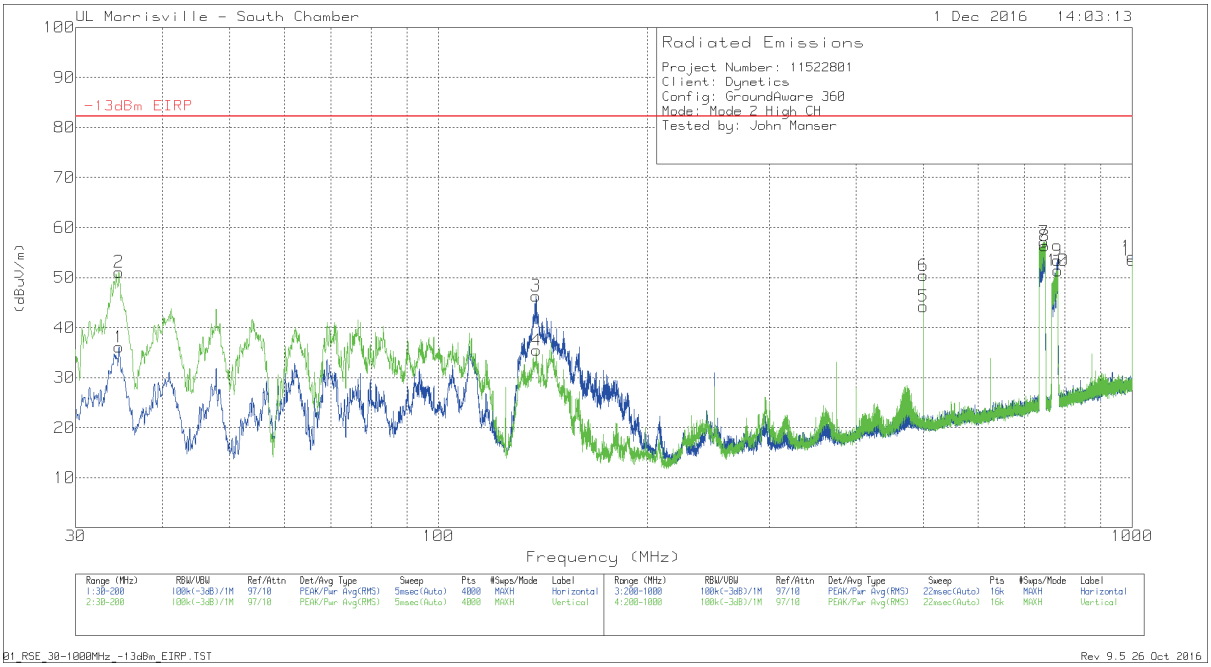
**Mode 2, High Channel, Below 1GHz – Plot**




Limit line represents an E-field equivalent of 82.2dBuV/m at a 3m measurement distance.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**Mode 2, High Channel, Below 1GHz– Tabular Data**

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | AT0074 AF (dB/m) | Amp/Cbl (dB) | Corrected Reading (dBuV/m) | -13dBm EIRP equivalent E-field (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 34.6337 | 45.31 | Pk | 22.5 | -31.7 | 36.11 | 82.2 | -46.09 | 0-360 | 399 | H |
| 2 | 34.6337 | 60.31 | Pk | 22.5 | -31.7 | 51.11 | 82.2 | -31.09 | 0-360 | 101 | V |
| 3 | 138.318 | 59.35 | Pk | 17.6 | -30.6 | 46.35 | 82.2 | -35.85 | 0-360 | 198 | H |
| 4 | 138.4031 | 48.51 | Pk | 17.6 | -30.6 | 35.51 | 82.2 | -46.69 | 0-360 | 101 | V |
| 5 | 500.05 | 50.93 | Pk | 22.1 | -28.8 | 44.23 | 82.2 | -37.97 | 0-360 | 101 | H |
| 6 | 500.05 | 57.16 | Pk | 22.1 | -28.8 | 50.46 | 82.2 | -31.74 | 0-360 | 102 | V |
| 7 | 746.8 | 60.09 | Pk | 25.2 | -28.2 | 57.09 | 82.2 | -25.11 | 0-360 | 102 | V |
| 8 | 747.65 | 59.35 | Pk | 25.2 | -28.2 | 56.35 | 82.2 | -25.85 | 0-360 | 101 | H |
| 9 | 779.9 | 55.67 | Pk | 25.9 | -28.1 | 53.47 | 82.2 | -28.73 | 0-360 | 101 | H |
| 10 | 781.05 | 53.59 | Pk | 25.9 | -28.1 | 51.39 | 82.2 | -30.81 | 0-360 | 102 | V |
| 12 | 1000 | 52.01 | Pk | 27.9 | -25.7 | 54.21 | 82.2 | -27.99 | 0-360 | 199 | H |
| 11 | 1000 | 51.26 | Pk | 27.9 | -25.7 | 53.46 | 82.2 | -28.74 | 0-360 | 102 | V |

Pk - Peak detector


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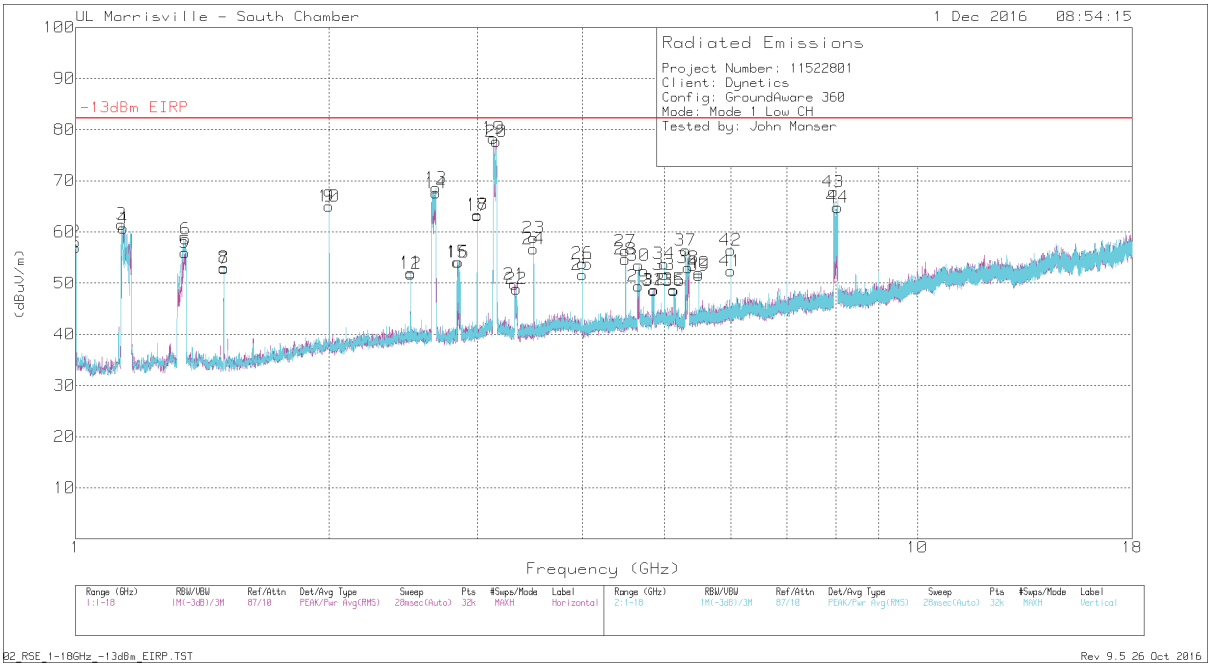
**Mode 1, Low Channel, 1-18GHz – Plot**




Limit line represents an E-field equivalent of 82.2dBuV/m at a 3m measurement distance.

**NOTE:** Markers 19 & 20 are associated with the EUT's fundamental frequency.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**Mode 1, Low Channel, 1-18GHz– Tabular Data**

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF AT0069 (dB/m) | Amp/Cbl/Fltr/Pad (dB) | Corrected Reading (dBuV/m) | -13dBm EIRP equivalent E-field (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 65.08 | Pk | 27.5 | -35.6 | 56.98 | 82.2 | -25.22 | 0-360 | 299 | H |
| 2 | 1 | 66.17 | Pk | 27.5 | -35.6 | 58.07 | 82.2 | -24.13 | 0-360 | 201 | V |
| 3 | 1.133 | 69.42 | Pk | 27.5 | -35.4 | 61.52 | 82.2 | -20.68 | 0-360 | 300 | V |
| 4 | 1.139 | 68.61 | Pk | 27.5 | -35.4 | 60.71 | 82.2 | -21.49 | 0-360 | 299 | H |
| 5 | 1.348 | 62.4 | Pk | 28.8 | -35.2 | 56 | 82.2 | -26.2 | 0-360 | 299 | H |
| 6 | 1.352 | 65.07 | Pk | 28.8 | -35.2 | 58.67 | 82.2 | -23.53 | 0-360 | 300 | V |
| 8 | 1.5 | 60.24 | Pk | 27.9 | -35.1 | 53.04 | 82.2 | -29.16 | 0-360 | 299 | H |
| 7 | 1.5 | 60.07 | Pk | 27.9 | -35.1 | 52.87 | 82.2 | -29.33 | 0-360 | 201 | V |
| 9 | 2 | 68.54 | Pk | 31.2 | -34.7 | 65.04 | 82.2 | -17.16 | 0-360 | 299 | H |
| 10 | 2 | 68.56 | Pk | 31.2 | -34.7 | 65.06 | 82.2 | -17.14 | 0-360 | 300 | V |
| 11 | 2.5 | 53.87 | Pk | 32.5 | -34.3 | 52.07 | 82.2 | -30.13 | 0-360 | 299 | H |
| 12 | 2.5 | 53.63 | Pk | 32.5 | -34.3 | 51.83 | 82.2 | -30.37 | 0-360 | 201 | V |
| 14 | 2.678 | 69.51 | Pk | 32.4 | -34.3 | 67.61 | 82.2 | -14.59 | 0-360 | 299 | H |
| 13 | 2.678 | 70.52 | Pk | 32.4 | -34.3 | 68.62 | 82.2 | -13.58 | 0-360 | 201 | V |
| 15 | 2.84 | 55.34 | Pk | 32.8 | -34 | 54.14 | 82.2 | -28.06 | 0-360 | 299 | H |
| 16 | 2.849 | 55.32 | Pk | 32.8 | -34 | 54.12 | 82.2 | -28.08 | 0-360 | 300 | V |
| 18 | 3 | 64.58 | Pk | 32.8 | -34 | 63.38 | 82.2 | -18.82 | 0-360 | 299 | H |
| 17 | 3 | 64.45 | Pk | 32.8 | -34 | 63.25 | 82.2 | -18.95 | 0-360 | 201 | V |
| 19 | 3.136 | 78.46 | Pk | 33.7 | -33.8 | 78.36 | 82.2 | -3.84 | 0-360 | 201 | V |
| 20 | 3.161 | 78.07 | Pk | 33.5 | -33.9 | 77.67 | 82.2 | -4.53 | 0-360 | 299 | H |
| 21 | 3.324 | 50.9 | Pk | 32.6 | -33.7 | 49.8 | 82.2 | -32.4 | 0-360 | 299 | H |
| 22 | 3.34 | 49.89 | Pk | 32.6 | -33.6 | 48.89 | 82.2 | -33.31 | 0-360 | 300 | V |
| 24 | 3.5 | 57.22 | Pk | 32.9 | -33.4 | 56.72 | 82.2 | -25.48 | 0-360 | 299 | H |
| 23 | 3.5 | 59.37 | Pk | 32.9 | -33.4 | 58.87 | 82.2 | -23.33 | 0-360 | 300 | V |
| 25 | 4 | 51.25 | Pk | 33.3 | -32.9 | 51.65 | 82.2 | -30.55 | 0-360 | 299 | H |
| 26 | 4 | 53.49 | Pk | 33.3 | -32.9 | 53.89 | 82.2 | -28.31 | 0-360 | 300 | V |
| 28 | 4.5 | 53.37 | Pk | 33.9 | -32.6 | 54.67 | 82.2 | -27.53 | 0-360 | 199 | H |
| 27 | 4.5 | 55 | Pk | 33.9 | -32.6 | 56.3 | 82.2 | -25.9 | 0-360 | 300 | V |
| 29 | 4.664 | 47.56 | Pk | 34 | -32.1 | 49.46 | 82.2 | -32.74 | 0-360 | 299 | H |
| 30 | 4.666 | 51.48 | Pk | 34 | -32 | 53.48 | 82.2 | -28.72 | 0-360 | 300 | V |
| 31 | 4.86 | 46.16 | Pk | 34.1 | -31.7 | 48.56 | 82.2 | -33.64 | 0-360 | 300 | V |
| 32 | 4.865 | 46.28 | Pk | 34.1 | -31.7 | 48.68 | 82.2 | -33.52 | 0-360 | 299 | H |
| 33 | 5 | 49.32 | Pk | 34.1 | -31.8 | 51.62 | 82.2 | -30.58 | 0-360 | 299 | H |
| 34 | 5 | 51.5 | Pk | 34.1 | -31.8 | 53.8 | 82.2 | -28.4 | 0-360 | 300 | V |
| 35 | 5.137 | 46.04 | Pk | 34.2 | -31.5 | 48.74 | 82.2 | -33.46 | 0-360 | 300 | V |
| 36 | 5.138 | 45.87 | Pk | 34.2 | -31.5 | 48.57 | 82.2 | -33.63 | 0-360 | 299 | H |
| 37 | 5.302 | 53.36 | Pk | 34.4 | -31.3 | 56.46 | 82.2 | -25.74 | 0-360 | 300 | V |
| 38 | 5.342 | 49.44 | Pk | 34.4 | -30.8 | 53.04 | 82.2 | -29.16 | 0-360 | 101 | H |
| 39 | 5.501 | 48.1 | Pk | 34.6 | -31.2 | 51.5 | 82.2 | -30.7 | 0-360 | 199 | H |
| 40 | 5.501 | 48.63 | Pk | 34.6 | -31.2 | 52.03 | 82.2 | -30.17 | 0-360 | 101 | V |
| 41 | 6 | 47.98 | Pk | 35 | -30.6 | 52.38 | 82.2 | -29.82 | 0-360 | 299 | H |
| 42 | 6.001 | 52.07 | Pk | 35 | -30.6 | 56.47 | 82.2 | -25.73 | 0-360 | 300 | V |
| 43 | 7.951 | 60.04 | Pk | 35.8 | -28 | 67.84 | 82.2 | -14.36 | 0-360 | 300 | V |
| 44 | 8.038 | 57.24 | Pk | 35.7 | -28.1 | 64.84 | 82.2 | -17.36 | 0-360 | 299 | H |

Pk - Peak detector


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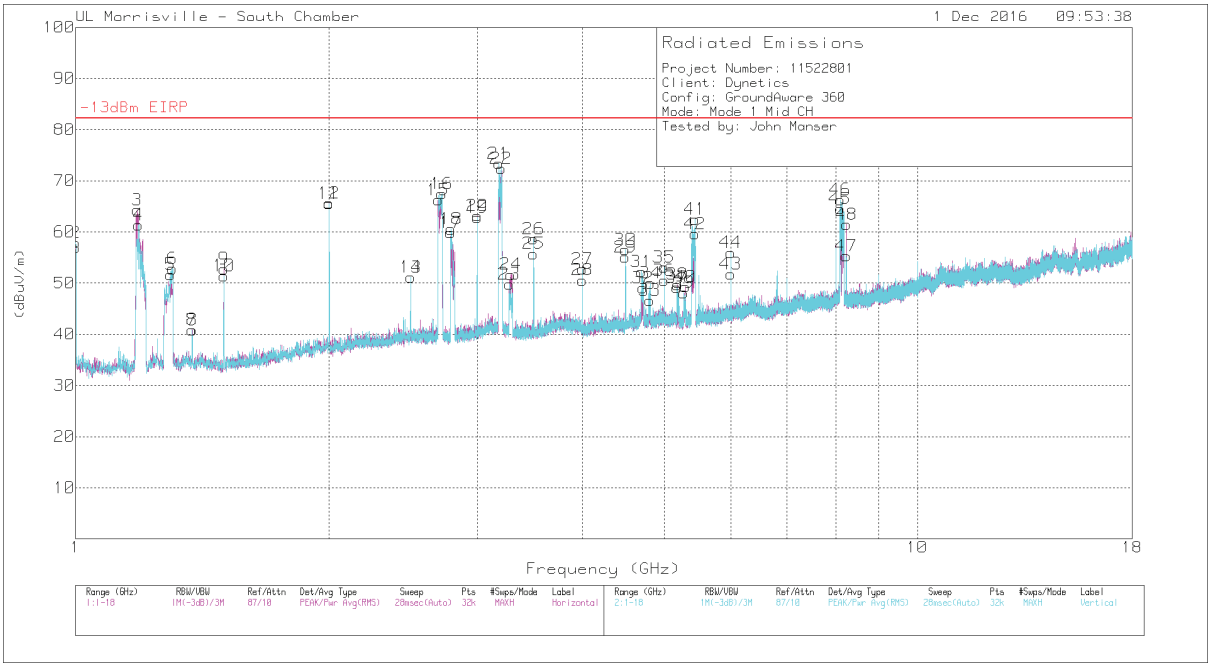
**Mode 1, Middle Channel, 1-18GHz – Plot**




Limit line represents an E-field equivalent of 82.2dBuV/m at a 3m measurement distance.

**NOTE:** Markers 21 & 22 are associated with the EUT's fundamental frequency.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**Mode 1, Middle Channel, 1-18GHz– Tabular Data**

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF AT0069 (dB/m) | Amp/Cbl/Fltr/Pad (dB) | Corrected Reading (dBuV/m) | -13dBm EIRP equivalent E-field (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 65.09 | Pk | 27.5 | -35.6 | 56.99 | 82.2 | -25.21 | 0-360 | 299 | H |
| 2 | 1 | 66.04 | Pk | 27.5 | -35.6 | 57.94 | 82.2 | -24.26 | 0-360 | 201 | V |
| 3 | 1.184 | 71.81 | Pk | 28 | -35.5 | 64.31 | 82.2 | -17.89 | 0-360 | 299 | H |
| 4 | 1.188 | 68.79 | Pk | 28.1 | -35.5 | 61.39 | 82.2 | -20.81 | 0-360 | 201 | V |
| 5 | 1.295 | 58.08 | Pk | 28.8 | -35.2 | 51.68 | 82.2 | -30.52 | 0-360 | 299 | H |
| 6 | 1.304 | 59.23 | Pk | 28.8 | -35.2 | 52.83 | 82.2 | -29.37 | 0-360 | 300 | V |
| 7 | 1.375 | 47.21 | Pk | 28.8 | -35.2 | 40.81 | 82.2 | -41.39 | 0-360 | 300 | V |
| 8 | 1.376 | 47.28 | Pk | 28.8 | -35.2 | 40.88 | 82.2 | -41.32 | 0-360 | 299 | H |
| 9 | 1.5 | 59.99 | Pk | 27.9 | -35.1 | 52.79 | 82.2 | -29.41 | 0-360 | 299 | H |
| 10 | 1.5 | 58.65 | Pk | 27.9 | -35.1 | 51.45 | 82.2 | -30.75 | 0-360 | 201 | V |
| 12 | 2 | 69.14 | Pk | 31.2 | -34.7 | 65.64 | 82.2 | -16.56 | 0-360 | 299 | H |
| 11 | 2 | 69.08 | Pk | 31.2 | -34.7 | 65.58 | 82.2 | -16.62 | 0-360 | 300 | V |
| 13 | 2.5 | 52.96 | Pk | 32.5 | -34.3 | 51.16 | 82.2 | -31.04 | 0-360 | 299 | H |
| 14 | 2.5 | 52.99 | Pk | 32.5 | -34.3 | 51.19 | 82.2 | -31.01 | 0-360 | 201 | V |
| 15 | 2.696 | 68.15 | Pk | 32.3 | -34.2 | 66.25 | 82.2 | -15.95 | 0-360 | 299 | H |
| 16 | 2.723 | 69.3 | Pk | 32.3 | -34.1 | 67.5 | 82.2 | -14.7 | 0-360 | 300 | V |
| 17 | 2.79 | 61.5 | Pk | 32.4 | -34 | 59.9 | 82.2 | -22.3 | 0-360 | 199 | H |
| 18 | 2.794 | 62.07 | Pk | 32.5 | -34 | 60.57 | 82.2 | -21.63 | 0-360 | 300 | V |
| 20 | 3 | 64.36 | Pk | 32.8 | -34 | 63.16 | 82.2 | -19.04 | 0-360 | 299 | H |
| 19 | 3 | 64.07 | Pk | 32.8 | -34 | 62.87 | 82.2 | -19.33 | 0-360 | 201 | V |
| 21 | 3.18 | 73.69 | Pk | 33.5 | -33.8 | 73.39 | 82.2 | -8.81 | 0-360 | 300 | V |
| 22 | 3.202 | 72.7 | Pk | 33.4 | -33.7 | 72.4 | 82.2 | -9.8 | 0-360 | 299 | H |
| 23 | 3.275 | 50.64 | Pk | 32.9 | -33.7 | 49.84 | 82.2 | -32.36 | 0-360 | 201 | V |
| 24 | 3.29 | 52.61 | Pk | 32.8 | -33.7 | 51.71 | 82.2 | -30.49 | 0-360 | 299 | H |
| 25 | 3.5 | 56.26 | Pk | 32.9 | -33.4 | 55.76 | 82.2 | -26.44 | 0-360 | 299 | H |
| 26 | 3.5 | 59.16 | Pk | 32.9 | -33.4 | 58.66 | 82.2 | -23.54 | 0-360 | 300 | V |
| 28 | 4 | 50.2 | Pk | 33.3 | -32.9 | 50.6 | 82.2 | -31.6 | 0-360 | 299 | H |
| 27 | 4 | 52.31 | Pk | 33.3 | -32.9 | 52.71 | 82.2 | -29.49 | 0-360 | 300 | V |
| 29 | 4.5 | 53.79 | Pk | 33.9 | -32.6 | 55.09 | 82.2 | -27.11 | 0-360 | 199 | H |
| 30 | 4.5 | 55.25 | Pk | 33.9 | -32.6 | 56.55 | 82.2 | -25.65 | 0-360 | 300 | V |
| 31 | 4.705 | 50.16 | Pk | 34.1 | -32 | 52.26 | 82.2 | -29.94 | 0-360 | 201 | V |
| 32 | 4.717 | 46.96 | Pk | 34.1 | -32 | 49.06 | 82.2 | -33.14 | 0-360 | 299 | H |
| 33 | 4.811 | 44.56 | Pk | 34 | -31.9 | 46.66 | 82.2 | -35.54 | 0-360 | 299 | H |
| 34 | 4.82 | 47.9 | Pk | 34 | -31.9 | 50 | 82.2 | -32.2 | 0-360 | 300 | V |
| 36 | 5 | 48.26 | Pk | 34.1 | -31.8 | 50.56 | 82.2 | -31.64 | 0-360 | 299 | H |
| 35 | 5 | 50.83 | Pk | 34.1 | -31.8 | 53.13 | 82.2 | -29.07 | 0-360 | 300 | V |
| 37 | 5.182 | 46.47 | Pk | 34.3 | -31.6 | 49.17 | 82.2 | -33.03 | 0-360 | 201 | V |
| 38 | 5.19 | 47.14 | Pk | 34.3 | -31.7 | 49.74 | 82.2 | -32.46 | 0-360 | 299 | H |
| 39 | 5.277 | 45.15 | Pk | 34.4 | -31.4 | 48.15 | 82.2 | -34.05 | 0-360 | 300 | V |
| 40 | 5.303 | 46.2 | Pk | 34.4 | -31.3 | 49.3 | 82.2 | -32.9 | 0-360 | 299 | H |
| 41 | 5.441 | 59.3 | Pk | 34.6 | -31.4 | 62.5 | 82.2 | -19.7 | 0-360 | 300 | V |
| 42 | 5.444 | 56.31 | Pk | 34.6 | -31.3 | 59.61 | 82.2 | -22.59 | 0-360 | 199 | H |
| 43 | 6.001 | 47.41 | Pk | 35 | -30.6 | 51.81 | 82.2 | -30.39 | 0-360 | 299 | H |
| 44 | 6.001 | 51.6 | Pk | 35 | -30.6 | 56 | 82.2 | -26.2 | 0-360 | 300 | V |
| 45 | 8.095 | 56.83 | Pk | 35.7 | -28 | 64.53 | 82.2 | -17.67 | 0-360 | 299 | H |
| 46 | 8.103 | 58.71 | Pk | 35.7 | -28.1 | 66.31 | 82.2 | -15.89 | 0-360 | 201 | V |
| 47 | 8.232 | 47.6 | Pk | 35.7 | -28 | 55.3 | 82.2 | -26.9 | 0-360 | 300 | V |
| 48 | 8.238 | 53.78 | Pk | 35.7 | -28 | 61.48 | 82.2 | -20.72 | 0-360 | 299 | H |

Pk - Peak detector


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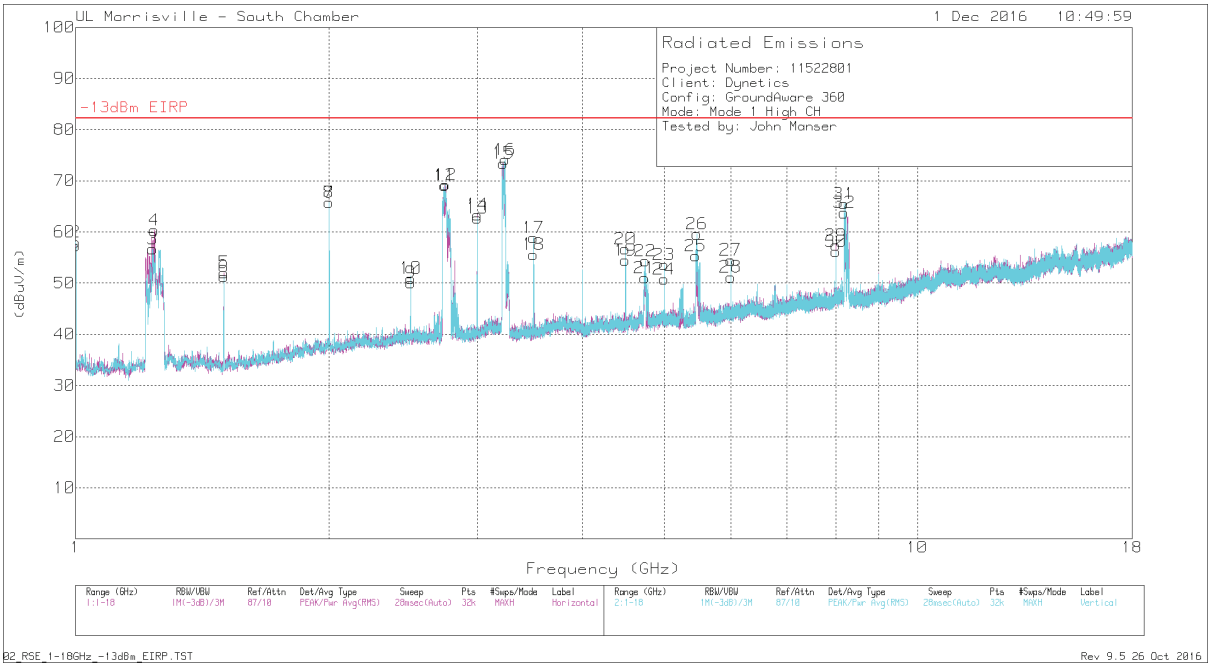
**Mode 1, High Channel, 1-18GHz – Plot**




Limit line represents an E-field equivalent of 82.2dBuV/m at a 3m measurement distance.

**NOTE:** Markers 15 & 16 are associated with the EUT's fundamental frequency.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**Mode 1, High Channel, 1-18GHz– Tabular Data**

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF AT0069 (dB/m) | Amp/Cbl/Fltr/Pad (dB) | Corrected Reading (dBuV/m) | -13dBm EIRP equivalent E-field (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 65.37 | Pk | 27.5 | -35.6 | 57.27 | 82.2 | -24.93 | 0-360 | 299 | H |
| 2 | 1 | 66.16 | Pk | 27.5 | -35.6 | 58.06 | 82.2 | -24.14 | 0-360 | 201 | V |
| 3 | 1.234 | 63.45 | Pk | 28.6 | -35.4 | 56.65 | 82.2 | -25.55 | 0-360 | 201 | V |
| 4 | 1.24 | 67.13 | Pk | 28.6 | -35.4 | 60.33 | 82.2 | -21.87 | 0-360 | 299 | H |
| 5 | 1.5 | 59.26 | Pk | 27.9 | -35.1 | 52.06 | 82.2 | -30.14 | 0-360 | 299 | H |
| 6 | 1.5 | 58.44 | Pk | 27.9 | -35.1 | 51.24 | 82.2 | -30.96 | 0-360 | 201 | V |
| 8 | 2 | 69.29 | Pk | 31.2 | -34.7 | 65.79 | 82.2 | -16.41 | 0-360 | 299 | H |
| 7 | 2 | 69.31 | Pk | 31.2 | -34.7 | 65.81 | 82.2 | -16.39 | 0-360 | 300 | V |
| 9 | 2.5 | 51.88 | Pk | 32.5 | -34.3 | 50.08 | 82.2 | -32.12 | 0-360 | 299 | H |
| 10 | 2.5 | 52.76 | Pk | 32.5 | -34.3 | 50.96 | 82.2 | -31.24 | 0-360 | 201 | V |
| 11 | 2.746 | 70.96 | Pk | 32.2 | -34.1 | 69.06 | 82.2 | -13.14 | 0-360 | 199 | H |
| 12 | 2.751 | 71.24 | Pk | 32.2 | -34.2 | 69.24 | 82.2 | -12.96 | 0-360 | 101 | V |
| 14 | 3 | 64.56 | Pk | 32.8 | -34 | 63.36 | 82.2 | -18.84 | 0-360 | 299 | H |
| 13 | 3 | 63.96 | Pk | 32.8 | -34 | 62.76 | 82.2 | -19.44 | 0-360 | 201 | V |
| 15 | 3.223 | 73.95 | Pk | 33.3 | -33.8 | 73.45 | 82.2 | -8.75 | 0-360 | 299 | H |
| 16 | 3.236 | 74.66 | Pk | 33.2 | -33.7 | 74.16 | 82.2 | -8.04 | 0-360 | 300 | V |
| 18 | 3.5 | 56.12 | Pk | 32.9 | -33.4 | 55.62 | 82.2 | -26.58 | 0-360 | 299 | H |
| 17 | 3.5 | 59.36 | Pk | 32.9 | -33.4 | 58.86 | 82.2 | -23.34 | 0-360 | 300 | V |
| 19 | 4.5 | 53.17 | Pk | 33.9 | -32.6 | 54.47 | 82.2 | -27.73 | 0-360 | 199 | H |
| 20 | 4.5 | 55.39 | Pk | 33.9 | -32.6 | 56.69 | 82.2 | -25.51 | 0-360 | 300 | V |
| 21 | 4.742 | 49.13 | Pk | 34 | -32.1 | 51.03 | 82.2 | -31.17 | 0-360 | 299 | H |
| 22 | 4.75 | 52.46 | Pk | 34 | -32.1 | 54.36 | 82.2 | -27.84 | 0-360 | 300 | V |
| 24 | 5 | 48.51 | Pk | 34.1 | -31.8 | 50.81 | 82.2 | -31.39 | 0-360 | 299 | H |
| 23 | 5 | 51.28 | Pk | 34.1 | -31.8 | 53.58 | 82.2 | -28.62 | 0-360 | 300 | V |
| 25 | 5.454 | 52.06 | Pk | 34.6 | -31.3 | 55.36 | 82.2 | -26.84 | 0-360 | 299 | H |
| 26 | 5.471 | 56.39 | Pk | 34.6 | -31.4 | 59.59 | 82.2 | -22.61 | 0-360 | 300 | V |
| 28 | 6.001 | 46.8 | Pk | 35 | -30.6 | 51.2 | 82.2 | -31 | 0-360 | 299 | H |
| 27 | 6.001 | 50.12 | Pk | 35 | -30.6 | 54.52 | 82.2 | -27.68 | 0-360 | 300 | V |
| 29 | 8.001 | 49.59 | Pk | 35.8 | -28 | 57.39 | 82.2 | -24.81 | 0-360 | 299 | H |
| 30 | 8.001 | 48.4 | Pk | 35.8 | -28 | 56.2 | 82.2 | -26 | 0-360 | 300 | V |
| 31 | 8.181 | 57.9 | Pk | 35.7 | -28.1 | 65.5 | 82.2 | -16.7 | 0-360 | 300 | V |
| 32 | 8.189 | 56.17 | Pk | 35.7 | -28.1 | 63.77 | 82.2 | -18.43 | 0-360 | 299 | H |

Pk - Peak detector


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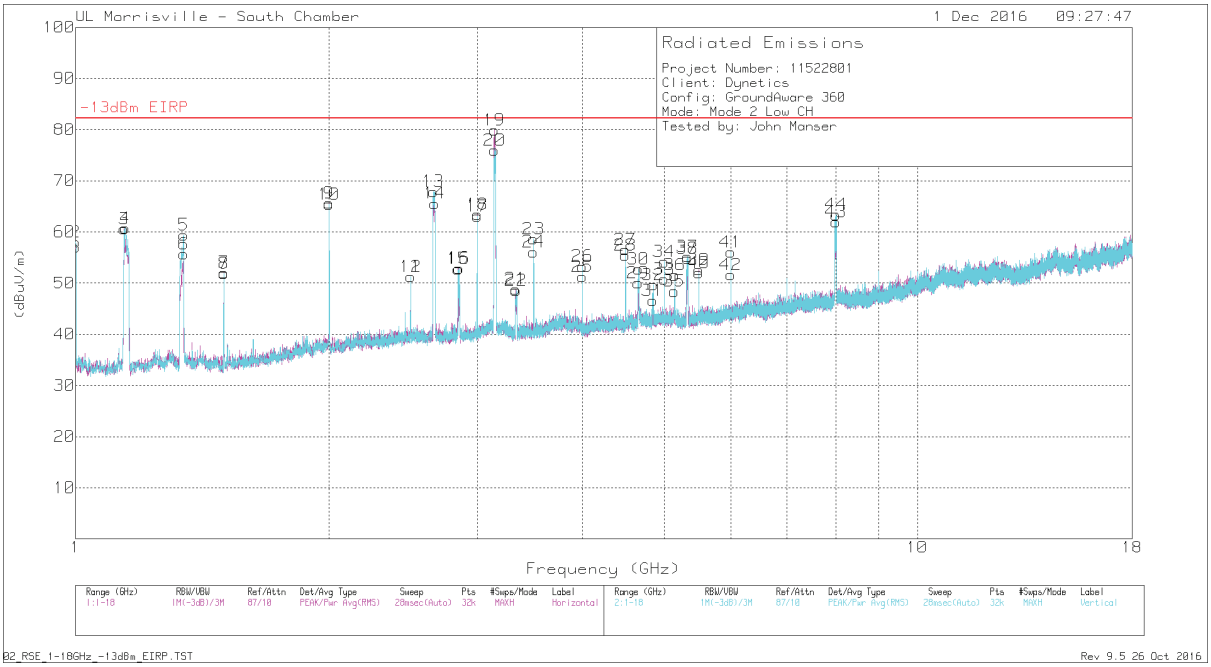
**Mode 2, Low Channel, 1-18GHz – Plot**




Limit line represents an E-field equivalent of 82.2dBuV/m at a 3m measurement distance.

**NOTE:** Markers 19 & 20 are associated with the EUT's fundamental frequency.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**Mode 2, Low Channel, 1-18GHz– Tabular Data**

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF AT0069 (dB/m) | Amp/Cbl/Fltr/Pad (dB) | Corrected Reading (dBuV/m) | -13dBm EIRP equivalent E-field (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 65.19 | Pk | 27.5 | -35.6 | 57.09 | 82.2 | -25.11 | 0-360 | 299 | H |
| 2 | 1 | 66.16 | Pk | 27.5 | -35.6 | 58.06 | 82.2 | -24.14 | 0-360 | 201 | V |
| 3 | 1.142 | 68.52 | Pk | 27.5 | -35.4 | 60.62 | 82.2 | -21.58 | 0-360 | 299 | H |
| 4 | 1.145 | 68.75 | Pk | 27.4 | -35.4 | 60.75 | 82.2 | -21.45 | 0-360 | 201 | V |
| 6 | 1.343 | 62.06 | Pk | 28.8 | -35.2 | 55.66 | 82.2 | -26.54 | 0-360 | 299 | H |
| 5 | 1.343 | 65.82 | Pk | 28.8 | -35.2 | 59.42 | 82.2 | -22.78 | 0-360 | 300 | V |
| 7 | 1.5 | 59.25 | Pk | 27.9 | -35.1 | 52.05 | 82.2 | -30.15 | 0-360 | 299 | H |
| 8 | 1.5 | 59.11 | Pk | 27.9 | -35.1 | 51.91 | 82.2 | -30.29 | 0-360 | 201 | V |
| 9 | 2 | 69.14 | Pk | 31.2 | -34.7 | 65.64 | 82.2 | -16.56 | 0-360 | 299 | H |
| 10 | 2 | 68.9 | Pk | 31.2 | -34.7 | 65.4 | 82.2 | -16.8 | 0-360 | 300 | V |
| 11 | 2.5 | 53.08 | Pk | 32.5 | -34.3 | 51.28 | 82.2 | -30.92 | 0-360 | 299 | H |
| 12 | 2.5 | 53.09 | Pk | 32.5 | -34.3 | 51.29 | 82.2 | -30.91 | 0-360 | 201 | V |
| 13 | 2.659 | 69.71 | Pk | 32.5 | -34.3 | 67.91 | 82.2 | -14.29 | 0-360 | 300 | V |
| 14 | 2.671 | 67.5 | Pk | 32.4 | -34.3 | 65.6 | 82.2 | -16.6 | 0-360 | 299 | H |
| 15 | 2.848 | 54.01 | Pk | 32.8 | -34 | 52.81 | 82.2 | -29.39 | 0-360 | 299 | H |
| 16 | 2.853 | 54.13 | Pk | 32.8 | -34 | 52.93 | 82.2 | -29.27 | 0-360 | 300 | V |
| 18 | 3 | 64.66 | Pk | 32.8 | -34 | 63.46 | 82.2 | -18.74 | 0-360 | 299 | H |
| 17 | 3 | 64.25 | Pk | 32.8 | -34 | 63.05 | 82.2 | -19.15 | 0-360 | 201 | V |
| 19 | 3.144 | 80.12 | Pk | 33.6 | -33.8 | 79.92 | 82.2 | -2.28 | 0-360 | 299 | H |
| 20 | 3.146 | 76.08 | Pk | 33.6 | -33.7 | 75.98 | 82.2 | -6.22 | 0-360 | 201 | V |
| 21 | 3.334 | 49.87 | Pk | 32.6 | -33.6 | 48.87 | 82.2 | -33.33 | 0-360 | 299 | H |
| 22 | 3.337 | 49.58 | Pk | 32.6 | -33.6 | 48.58 | 82.2 | -33.62 | 0-360 | 300 | V |
| 24 | 3.5 | 56.62 | Pk | 32.9 | -33.4 | 56.12 | 82.2 | -26.08 | 0-360 | 299 | H |
| 23 | 3.5 | 59.16 | Pk | 32.9 | -33.4 | 58.66 | 82.2 | -23.54 | 0-360 | 300 | V |
| 25 | 4 | 50.86 | Pk | 33.3 | -32.9 | 51.26 | 82.2 | -30.94 | 0-360 | 299 | H |
| 26 | 4 | 52.9 | Pk | 33.3 | -32.9 | 53.3 | 82.2 | -28.9 | 0-360 | 300 | V |
| 28 | 4.5 | 54.18 | Pk | 33.9 | -32.6 | 55.48 | 82.2 | -26.72 | 0-360 | 199 | H |
| 27 | 4.5 | 55.24 | Pk | 33.9 | -32.6 | 56.54 | 82.2 | -25.66 | 0-360 | 300 | V |
| 29 | 4.658 | 48.13 | Pk | 34 | -32.1 | 50.03 | 82.2 | -32.17 | 0-360 | 299 | H |
| 30 | 4.661 | 50.81 | Pk | 34 | -32.1 | 52.71 | 82.2 | -29.49 | 0-360 | 300 | V |
| 31 | 4.848 | 44.23 | Pk | 34.2 | -31.8 | 46.63 | 82.2 | -35.57 | 0-360 | 299 | H |
| 32 | 4.855 | 47.19 | Pk | 34.2 | -31.7 | 49.69 | 82.2 | -32.51 | 0-360 | 201 | V |
| 33 | 5 | 48.46 | Pk | 34.1 | -31.8 | 50.76 | 82.2 | -31.44 | 0-360 | 299 | H |
| 34 | 5 | 51.88 | Pk | 34.1 | -31.8 | 54.18 | 82.2 | -28.02 | 0-360 | 300 | V |
| 35 | 5.142 | 45.7 | Pk | 34.2 | -31.5 | 48.4 | 82.2 | -33.8 | 0-360 | 299 | H |
| 36 | 5.153 | 48.9 | Pk | 34.2 | -31.5 | 51.6 | 82.2 | -30.6 | 0-360 | 300 | V |
| 38 | 5.334 | 51.24 | Pk | 34.4 | -30.8 | 54.84 | 82.2 | -27.36 | 0-360 | 299 | H |
| 37 | 5.334 | 51.62 | Pk | 34.4 | -30.8 | 55.22 | 82.2 | -26.98 | 0-360 | 300 | V |
| 39 | 5.501 | 49.23 | Pk | 34.6 | -31.2 | 52.63 | 82.2 | -29.57 | 0-360 | 199 | H |
| 40 | 5.501 | 48.62 | Pk | 34.6 | -31.2 | 52.02 | 82.2 | -30.18 | 0-360 | 201 | V |
| 42 | 6.001 | 47.21 | Pk | 35 | -30.6 | 51.61 | 82.2 | -30.59 | 0-360 | 299 | H |
| 41 | 6.001 | 51.66 | Pk | 35 | -30.6 | 56.06 | 82.2 | -26.14 | 0-360 | 300 | V |
| 43 | 7.999 | 54.13 | Pk | 35.8 | -28 | 61.93 | 82.2 | -20.27 | 0-360 | 299 | H |
| 44 | 8.008 | 55.59 | Pk | 35.8 | -28 | 63.39 | 82.2 | -18.81 | 0-360 | 300 | V |

Pk - Peak detector


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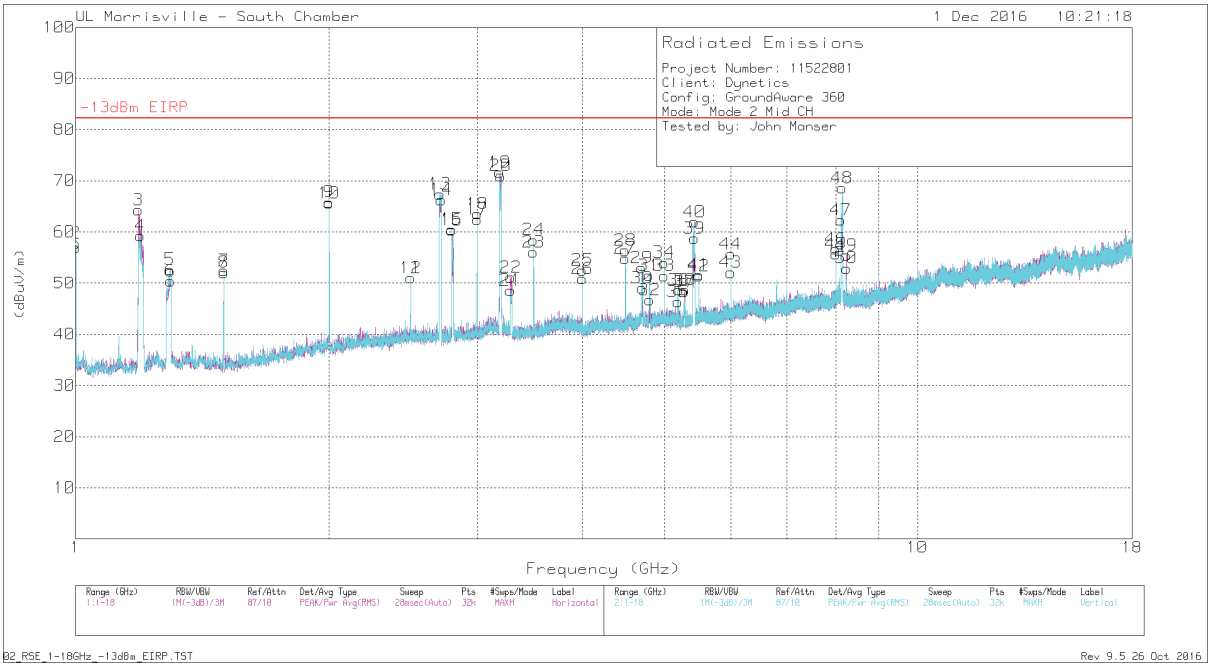
**Mode 2, Middle Channel, 1-18GHz – Plot**




Limit line represents an E-field equivalent of 82.2dBuV/m at a 3m measurement distance.

**NOTE:** Markers 19 & 20 are associated with the EUT's fundamental frequency.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**Mode 2, Middle Channel, 1-18GHz– Tabular Data**

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF AT0069 (dB/m) | Amp/Cbl/Fltr/Pad (dB) | Corrected Reading (dBuV/m) | -13dBm EIRP equivalent E-field (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 65.09 | Pk | 27.5 | -35.6 | 56.99 | 82.2 | -25.21 | 0-360 | 299 | H |
| 2 | 1 | 65.93 | Pk | 27.5 | -35.6 | 57.83 | 82.2 | -24.37 | 0-360 | 201 | V |
| 3 | 1.188 | 71.72 | Pk | 28.1 | -35.5 | 64.32 | 82.2 | -17.88 | 0-360 | 299 | H |
| 4 | 1.193 | 66.67 | Pk | 28.1 | -35.5 | 59.27 | 82.2 | -22.93 | 0-360 | 201 | V |
| 5 | 1.295 | 59.06 | Pk | 28.8 | -35.2 | 52.66 | 82.2 | -29.54 | 0-360 | 101 | V |
| 6 | 1.296 | 56.8 | Pk | 28.8 | -35.2 | 50.4 | 82.2 | -31.8 | 0-360 | 199 | H |
| 7 | 1.5 | 59.72 | Pk | 27.9 | -35.1 | 52.52 | 82.2 | -29.68 | 0-360 | 299 | H |
| 8 | 1.5 | 59.28 | Pk | 27.9 | -35.1 | 52.08 | 82.2 | -30.12 | 0-360 | 201 | V |
| 10 | 2 | 69.13 | Pk | 31.2 | -34.7 | 65.63 | 82.2 | -16.57 | 0-360 | 299 | H |
| 9 | 2 | 69.34 | Pk | 31.2 | -34.7 | 65.84 | 82.2 | -16.36 | 0-360 | 299 | V |
| 11 | 2.5 | 52.8 | Pk | 32.5 | -34.3 | 51 | 82.2 | -31.2 | 0-360 | 299 | H |
| 12 | 2.5 | 52.86 | Pk | 32.5 | -34.3 | 51.06 | 82.2 | -31.14 | 0-360 | 201 | V |
| 13 | 2.709 | 69.33 | Pk | 32.3 | -34.2 | 67.43 | 82.2 | -14.77 | 0-360 | 201 | V |
| 14 | 2.719 | 68.11 | Pk | 32.3 | -34.1 | 66.31 | 82.2 | -15.89 | 0-360 | 299 | H |
| 15 | 2.798 | 62.05 | Pk | 32.5 | -34 | 60.55 | 82.2 | -21.65 | 0-360 | 299 | H |
| 16 | 2.798 | 61.85 | Pk | 32.5 | -34 | 60.35 | 82.2 | -21.85 | 0-360 | 299 | V |
| 18 | 3 | 64.76 | Pk | 32.8 | -34 | 63.56 | 82.2 | -18.64 | 0-360 | 299 | H |
| 17 | 3 | 63.71 | Pk | 32.8 | -34 | 62.51 | 82.2 | -19.69 | 0-360 | 201 | V |
| 19 | 3.19 | 72.04 | Pk | 33.4 | -33.8 | 71.64 | 82.2 | -10.56 | 0-360 | 201 | V |
| 20 | 3.2 | 71.31 | Pk | 33.4 | -33.7 | 71.01 | 82.2 | -11.19 | 0-360 | 299 | H |
| 21 | 3.286 | 49.51 | Pk | 32.8 | -33.7 | 48.61 | 82.2 | -33.59 | 0-360 | 299 | V |
| 22 | 3.287 | 52.08 | Pk | 32.8 | -33.7 | 51.18 | 82.2 | -31.02 | 0-360 | 299 | H |
| 23 | 3.5 | 56.57 | Pk | 32.9 | -33.4 | 56.07 | 82.2 | -26.13 | 0-360 | 299 | H |
| 24 | 3.5 | 58.97 | Pk | 32.9 | -33.4 | 58.47 | 82.2 | -23.73 | 0-360 | 299 | V |
| 26 | 4 | 50.53 | Pk | 33.3 | -32.9 | 50.93 | 82.2 | -31.27 | 0-360 | 299 | H |
| 25 | 4 | 52.16 | Pk | 33.3 | -32.9 | 52.56 | 82.2 | -29.64 | 0-360 | 299 | V |
| 27 | 4.5 | 53.59 | Pk | 33.9 | -32.6 | 54.89 | 82.2 | -27.31 | 0-360 | 199 | H |
| 28 | 4.5 | 55.09 | Pk | 33.9 | -32.6 | 56.39 | 82.2 | -25.81 | 0-360 | 299 | V |
| 29 | 4.706 | 50.88 | Pk | 34.1 | -32 | 52.98 | 82.2 | -29.22 | 0-360 | 201 | V |
| 30 | 4.709 | 46.93 | Pk | 34.1 | -32 | 49.03 | 82.2 | -33.17 | 0-360 | 299 | H |
| 31 | 4.797 | 49.5 | Pk | 34 | -32 | 51.5 | 82.2 | -30.7 | 0-360 | 299 | V |
| 32 | 4.808 | 44.6 | Pk | 34 | -31.9 | 46.7 | 82.2 | -35.5 | 0-360 | 299 | H |
| 33 | 5 | 49.16 | Pk | 34.1 | -31.8 | 51.46 | 82.2 | -30.74 | 0-360 | 199 | H |
| 34 | 5 | 51.73 | Pk | 34.1 | -31.8 | 54.03 | 82.2 | -28.17 | 0-360 | 299 | V |
| 35 | 5.196 | 43.87 | Pk | 34.3 | -31.8 | 46.37 | 82.2 | -35.83 | 0-360 | 299 | H |
| 36 | 5.202 | 46.17 | Pk | 34.3 | -31.8 | 48.67 | 82.2 | -33.53 | 0-360 | 101 | V |
| 37 | 5.288 | 45.1 | Pk | 34.4 | -31.2 | 48.3 | 82.2 | -33.9 | 0-360 | 299 | V |
| 38 | 5.292 | 45.5 | Pk | 34.4 | -31.2 | 48.7 | 82.2 | -33.5 | 0-360 | 299 | H |
| 39 | 5.433 | 55.44 | Pk | 34.6 | -31.3 | 58.74 | 82.2 | -23.46 | 0-360 | 299 | H |
| 40 | 5.437 | 58.66 | Pk | 34.6 | -31.3 | 61.96 | 82.2 | -20.24 | 0-360 | 299 | V |
| 42 | 5.501 | 48.02 | Pk | 34.6 | -31.2 | 51.42 | 82.2 | -30.78 | 0-360 | 199 | H |
| 41 | 5.501 | 48.21 | Pk | 34.6 | -31.2 | 51.61 | 82.2 | -30.59 | 0-360 | 299 | V |
| 43 | 6 | 47.69 | Pk | 35 | -30.6 | 52.09 | 82.2 | -30.11 | 0-360 | 299 | H |
| 44 | 6.001 | 51.3 | Pk | 35 | -30.6 | 55.7 | 82.2 | -26.5 | 0-360 | 299 | V |
| 46 | 8.001 | 48.9 | Pk | 35.8 | -28 | 56.7 | 82.2 | -25.5 | 0-360 | 299 | H |
| 45 | 8.001 | 47.92 | Pk | 35.8 | -28 | 55.72 | 82.2 | -26.48 | 0-360 | 299 | V |
| 47 | 8.112 | 54.72 | Pk | 35.7 | -28.1 | 62.32 | 82.2 | -19.88 | 0-360 | 199 | H |
| 48 | 8.138 | 61.02 | Pk | 35.7 | -28.1 | 68.62 | 82.2 | -13.58 | 0-360 | 299 | V |
| 49 | 8.233 | 47.72 | Pk | 35.7 | -28 | 55.42 | 82.2 | -26.78 | 0-360 | 299 | H |
| 50 | 8.235 | 45.24 | Pk | 35.7 | -28 | 52.94 | 82.2 | -29.26 | 0-360 | 299 | V |

Pk - Peak detector


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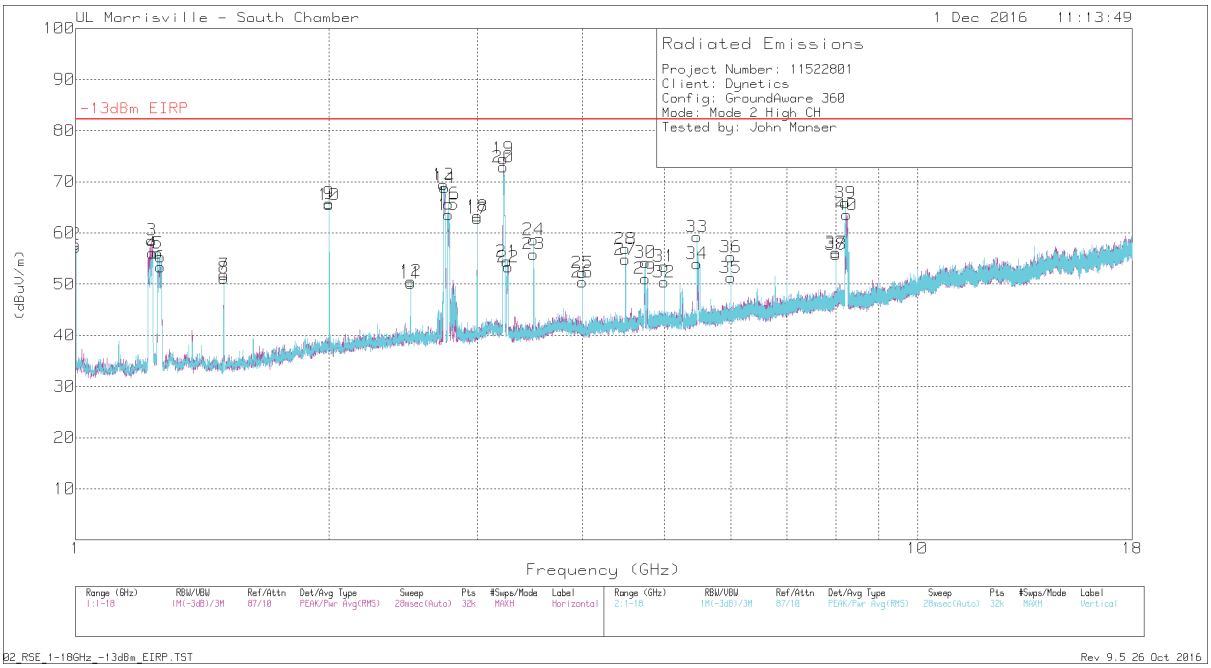
**Mode 2, High Channel, 1-18GHz – Plot**




Limit line represents an E-field equivalent of 82.2dBuV/m at a 3m measurement distance.

**NOTE:** Markers 19 & 20 are associated with the EUT's fundamental frequency.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**Mode 2, High Channel, 1-18GHz– Tabular Data**

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF AT0069 (dB/m) | Amp/Cbl/Fltr/Pad (dB) | Corrected Reading (dBuV/m) | -13dBm EIRP equivalent E-field (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 65.34 | Pk | 27.5 | -35.6 | 57.24 | 82.2 | -24.96 | 0-360 | 299 | H |
| 2 | 1 | 65.93 | Pk | 27.5 | -35.6 | 57.83 | 82.2 | -24.37 | 0-360 | 201 | V |
| 3 | 1.231 | 65.39 | Pk | 28.6 | -35.4 | 58.59 | 82.2 | -23.61 | 0-360 | 299 | H |
| 4 | 1.234 | 62.85 | Pk | 28.6 | -35.4 | 56.05 | 82.2 | -26.15 | 0-360 | 299 | V |
| 5 | 1.251 | 62.77 | Pk | 28.7 | -35.4 | 56.07 | 82.2 | -26.13 | 0-360 | 299 | V |
| 6 | 1.261 | 59.94 | Pk | 28.7 | -35.3 | 53.34 | 82.2 | -28.86 | 0-360 | 100 | H |
| 7 | 1.5 | 59.1 | Pk | 27.9 | -35.1 | 51.9 | 82.2 | -30.3 | 0-360 | 299 | H |
| 8 | 1.5 | 58.41 | Pk | 27.9 | -35.1 | 51.21 | 82.2 | -30.99 | 0-360 | 201 | V |
| 10 | 2 | 69.04 | Pk | 31.2 | -34.7 | 65.54 | 82.2 | -16.66 | 0-360 | 299 | H |
| 9 | 2 | 69.32 | Pk | 31.2 | -34.7 | 65.82 | 82.2 | -16.38 | 0-360 | 299 | V |
| 11 | 2.5 | 52.01 | Pk | 32.5 | -34.3 | 50.21 | 82.2 | -31.99 | 0-360 | 299 | H |
| 12 | 2.5 | 52.4 | Pk | 32.5 | -34.3 | 50.6 | 82.2 | -31.6 | 0-360 | 201 | V |
| 13 | 2.736 | 71.34 | Pk | 32.2 | -34.1 | 69.44 | 82.2 | -12.76 | 0-360 | 299 | V |
| 14 | 2.746 | 70.76 | Pk | 32.2 | -34.1 | 68.86 | 82.2 | -13.34 | 0-360 | 199 | H |
| 15 | 2.773 | 65.27 | Pk | 32.3 | -34 | 63.57 | 82.2 | -18.63 | 0-360 | 199 | H |
| 16 | 2.775 | 67.31 | Pk | 32.4 | -34 | 65.71 | 82.2 | -16.49 | 0-360 | 299 | V |
| 18 | 3 | 64.54 | Pk | 32.8 | -34 | 63.34 | 82.2 | -18.86 | 0-360 | 299 | H |
| 17 | 3 | 64 | Pk | 32.8 | -34 | 62.8 | 82.2 | -19.4 | 0-360 | 201 | V |
| 19 | 3.222 | 75.07 | Pk | 33.3 | -33.8 | 74.57 | 82.2 | -7.63 | 0-360 | 299 | H |
| 20 | 3.222 | 73.41 | Pk | 33.3 | -33.8 | 72.91 | 82.2 | -9.29 | 0-360 | 299 | V |
| 21 | 3.254 | 54.94 | Pk | 33.1 | -33.6 | 54.44 | 82.2 | -27.76 | 0-360 | 201 | V |
| 22 | 3.264 | 53.97 | Pk | 33.1 | -33.7 | 53.37 | 82.2 | -28.83 | 0-360 | 299 | H |
| 23 | 3.5 | 56.39 | Pk | 32.9 | -33.4 | 55.89 | 82.2 | -26.31 | 0-360 | 299 | H |
| 24 | 3.5 | 59.19 | Pk | 32.9 | -33.4 | 58.69 | 82.2 | -23.51 | 0-360 | 299 | V |
| 26 | 4 | 50.05 | Pk | 33.3 | -32.9 | 50.45 | 82.2 | -31.75 | 0-360 | 299 | H |
| 25 | 4 | 51.82 | Pk | 33.3 | -32.9 | 52.22 | 82.2 | -29.98 | 0-360 | 299 | V |
| 27 | 4.5 | 53.51 | Pk | 33.9 | -32.6 | 54.81 | 82.2 | -27.39 | 0-360 | 199 | H |
| 28 | 4.5 | 55.59 | Pk | 33.9 | -32.6 | 56.89 | 82.2 | -25.31 | 0-360 | 299 | V |
| 29 | 4.749 | 49.19 | Pk | 34 | -32.1 | 51.09 | 82.2 | -31.11 | 0-360 | 299 | H |
| 30 | 4.75 | 52.38 | Pk | 34 | -32.1 | 54.28 | 82.2 | -27.92 | 0-360 | 299 | V |
| 32 | 5 | 48.13 | Pk | 34.1 | -31.8 | 50.43 | 82.2 | -31.77 | 0-360 | 199 | H |
| 31 | 5 | 51.22 | Pk | 34.1 | -31.8 | 53.52 | 82.2 | -28.68 | 0-360 | 299 | V |
| 34 | 5.474 | 50.82 | Pk | 34.6 | -31.4 | 54.02 | 82.2 | -28.18 | 0-360 | 199 | H |
| 33 | 5.474 | 56.05 | Pk | 34.6 | -31.4 | 59.25 | 82.2 | -22.95 | 0-360 | 299 | V |
| 35 | 6.001 | 46.85 | Pk | 35 | -30.6 | 51.25 | 82.2 | -30.95 | 0-360 | 299 | H |
| 36 | 6.001 | 50.9 | Pk | 35 | -30.6 | 55.3 | 82.2 | -26.9 | 0-360 | 299 | V |
| 38 | 8.001 | 48 | Pk | 35.8 | -28 | 55.8 | 82.2 | -26.4 | 0-360 | 299 | H |
| 37 | 8.001 | 48.38 | Pk | 35.8 | -28 | 56.18 | 82.2 | -26.02 | 0-360 | 299 | V |
| 39 | 8.216 | 58.32 | Pk | 35.7 | -28.1 | 65.92 | 82.2 | -16.28 | 0-360 | 299 | V |
| 40 | 8.237 | 55.86 | Pk | 35.7 | -28 | 63.56 | 82.2 | -18.64 | 0-360 | 299 | H |

Pk - Peak detector


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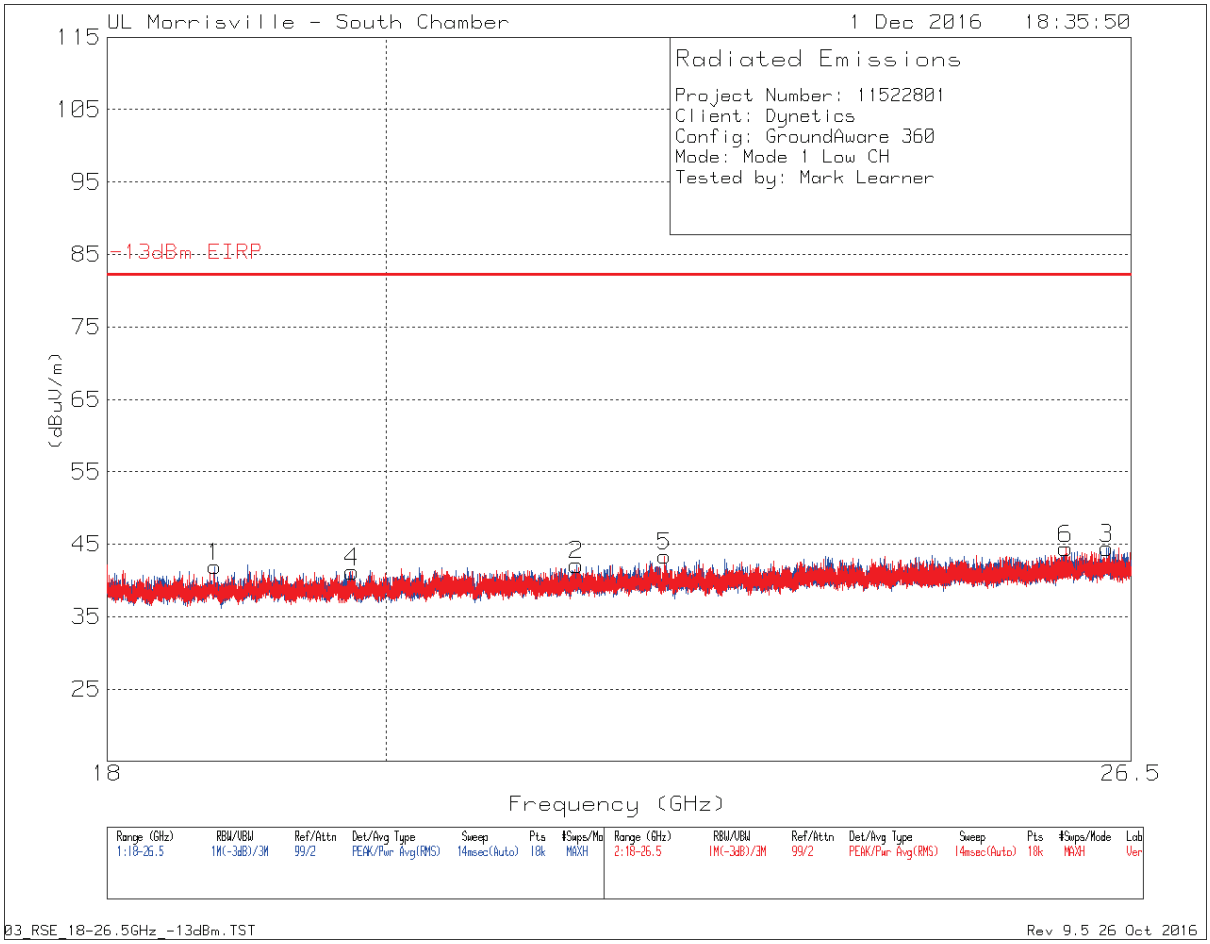
**Mode 1, Low Channel, 18-26.5GHz – Plot**




Limit line represents an E-field equivalent of 82.2dBuV/m at a 3m measurement distance.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**Mode 1, Low Channel, 18-26.5GHz– Tabular Data**

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF AT0076 (dB/m) | Amp/Cbl (dB) | Corrected Reading (dBuV/m) | -13dBm EIRP equivalent E-field (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 18.748 | 50.04 | Pk | 32.7 | -40.8 | 41.94 | 82.2 | -40.26 | 0-360 | 249 | H |
| 4 | 19.746 | 48.9 | Pk | 32.8 | -40.5 | 41.2 | 82.2 | -41 | 0-360 | 101 | V |
| 2 | 21.492 | 49.06 | Pk | 33.2 | -40.1 | 42.16 | 82.2 | -40.04 | 0-360 | 199 | H |
| 5 | 22.219 | 49.49 | Pk | 33.4 | -39.5 | 43.39 | 82.2 | -38.81 | 0-360 | 101 | V |
| 6 | 25.858 | 47.64 | Pk | 34.5 | -37.7 | 44.44 | 82.2 | -37.76 | 0-360 | 201 | V |
| 3 | 26.259 | 47.06 | Pk | 34.8 | -37.4 | 44.46 | 82.2 | -37.74 | 0-360 | 299 | H |

Pk - Peak detector


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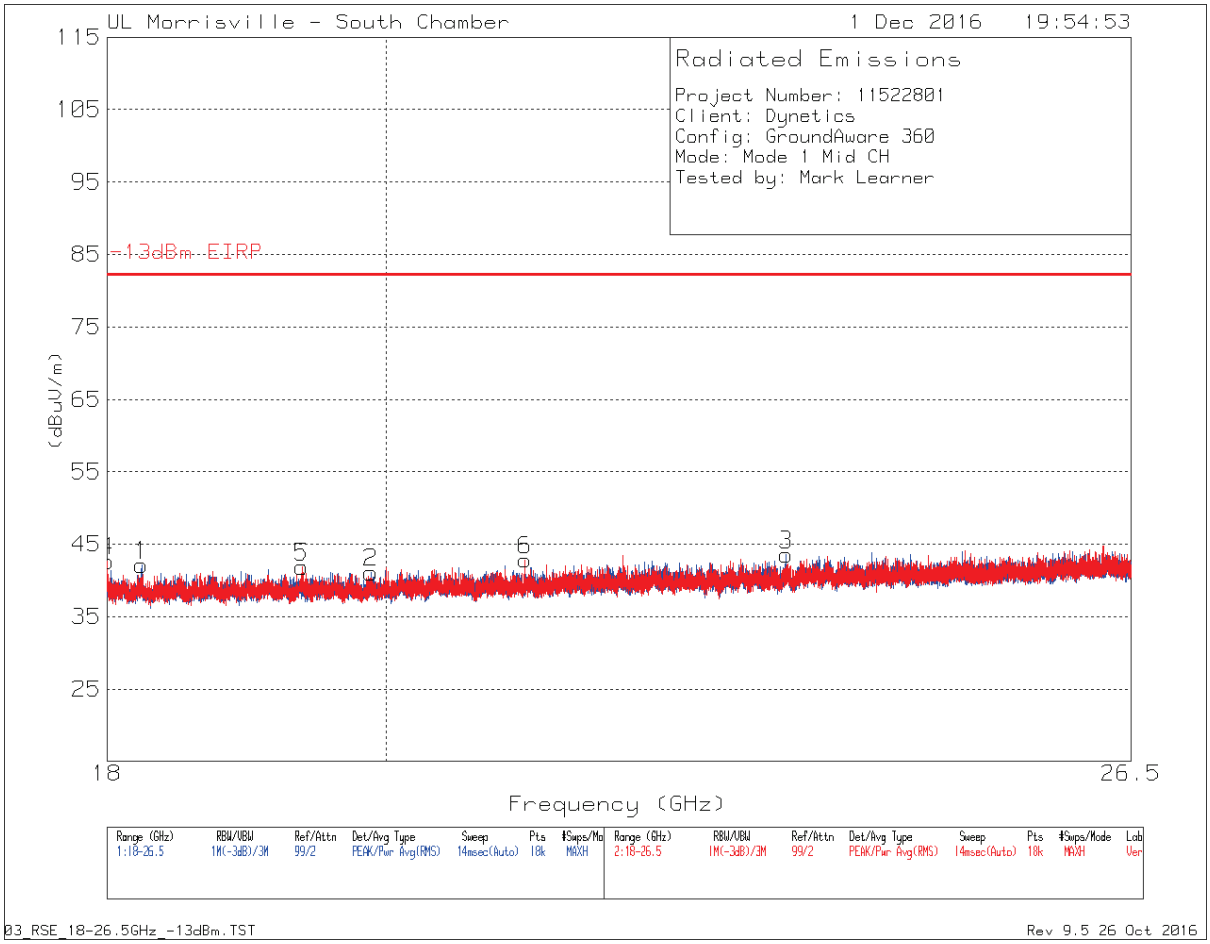
**Mode 1, Middle Channel, 18-26.5GHz – Plot**




Limit line represents an E-field equivalent of 82.2dBuV/m at a 3m measurement distance.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**Mode 1, Middle Channel, 18-26.5GHz– Tabular Data**

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF AT0076 (dB/m) | Amp/Cbl (dB) | Corrected Reading (dBuV/m) | -13dBm EIRP equivalent E-field (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 18.001 | 50.89 | Pk | 33 | -41.2 | 42.69 | 82.2 | -39.51 | 0-360 | 299 | V |
| 1 | 18.236 | 50.42 | Pk | 32.6 | -40.9 | 42.12 | 82.2 | -40.08 | 0-360 | 101 | H |
| 5 | 19.374 | 49.67 | Pk | 32.9 | -40.7 | 41.87 | 82.2 | -40.33 | 0-360 | 151 | V |
| 2 | 19.885 | 48.53 | Pk | 33.1 | -40.5 | 41.13 | 82.2 | -41.07 | 0-360 | 299 | H |
| 6 | 21.078 | 49.67 | Pk | 33.2 | -40 | 42.87 | 82.2 | -39.33 | 0-360 | 251 | V |
| 3 | 23.266 | 48.94 | Pk | 33.8 | -39.2 | 43.54 | 82.2 | -38.66 | 0-360 | 101 | H |

Pk - Peak detector


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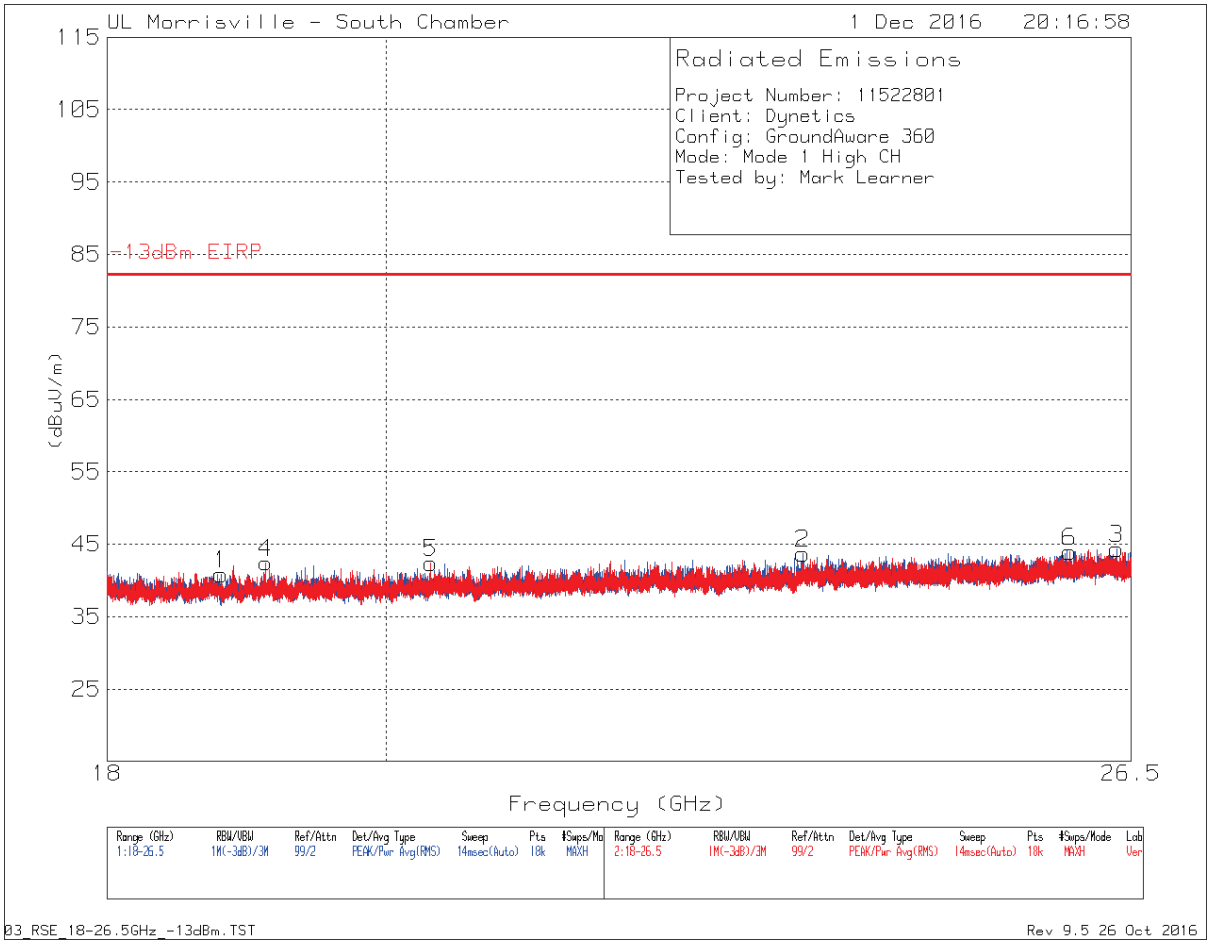
**Mode 1, High Channel, 18-26.5GHz – Plot**




Limit line represents an E-field equivalent of 82.2dBuV/m at a 3m measurement distance.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**Mode 1, High Channel, 18-26.5GHz– Tabular Data**

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF AT0076 (dB/m) | Amp/Cbl (dB) | Corrected Reading (dBuV/m) | -13dBm EIRP equivalent E-field (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 18.791 | 49.06 | Pk | 32.6 | -40.8 | 40.86 | 82.2 | -41.34 | 0-360 | 149 | H |
| 4 | 19.112 | 50.45 | Pk | 32.8 | -40.8 | 42.45 | 82.2 | -39.75 | 0-360 | 299 | V |
| 5 | 20.342 | 49.33 | Pk | 33.2 | -40.1 | 42.43 | 82.2 | -39.77 | 0-360 | 201 | V |
| 2 | 23.411 | 48.82 | Pk | 34.1 | -39.2 | 43.72 | 82.2 | -38.48 | 0-360 | 149 | H |
| 6 | 25.892 | 47.16 | Pk | 34.3 | -37.5 | 43.96 | 82.2 | -38.24 | 0-360 | 151 | V |
| 3 | 26.358 | 47.16 | Pk | 34.6 | -37.4 | 44.36 | 82.2 | -37.84 | 0-360 | 102 | H |

Pk - Peak detector


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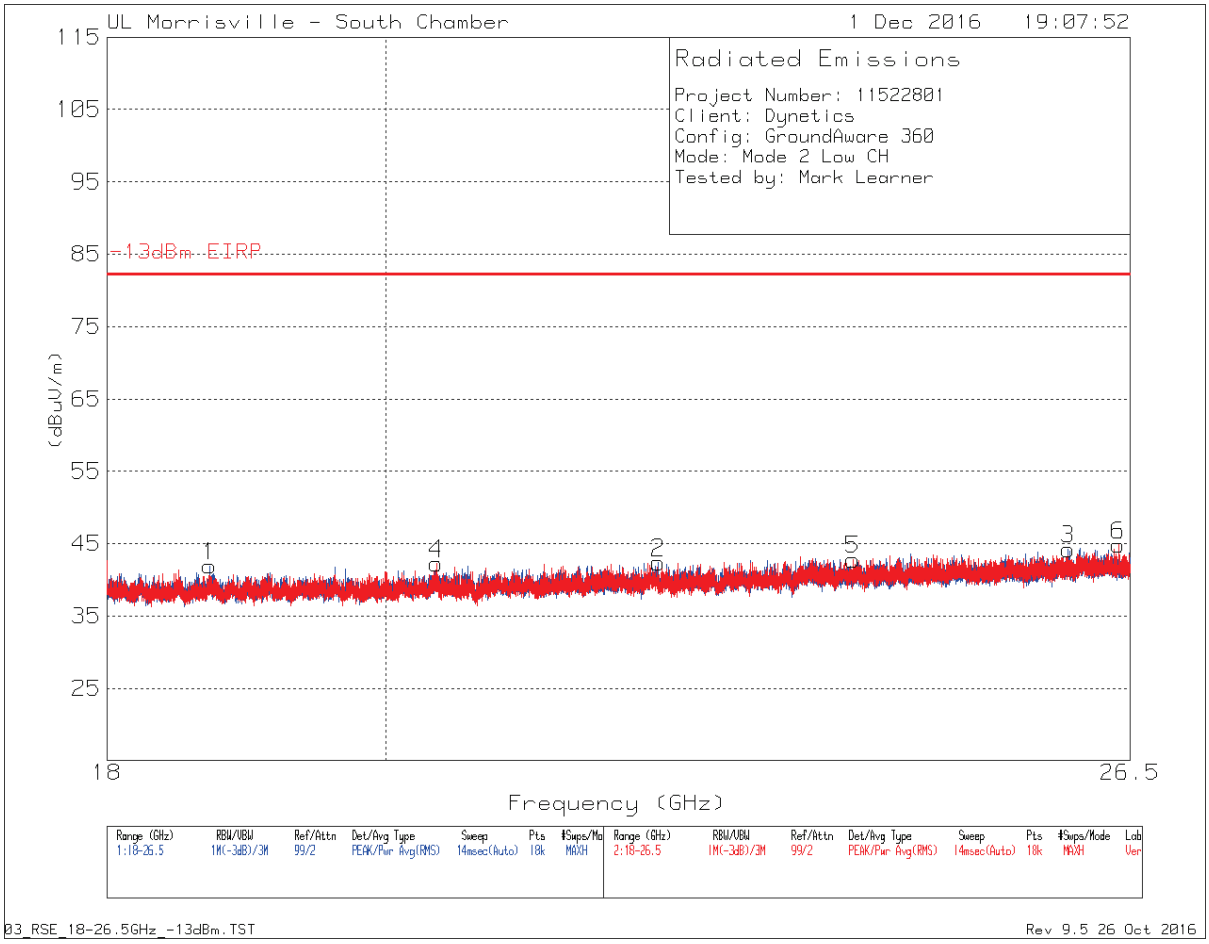
**Mode 2, Low Channel, 18-26.5GHz – Plot**




Limit line represents an E-field equivalent of 82.2dBuV/m at a 3m measurement distance.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**Mode 2, Low Channel, 18-26.5GHz– Tabular Data**

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF AT0076 (dB/m) | Amp/Cbl (dB) | Corrected Reading (dBuV/m) | -13dBm EIRP equivalent E-field (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 18.711 | 49.73 | Pk | 32.7 | -40.5 | 41.93 | 82.2 | -40.27 | 0-360 | 149 | H |
| 4 | 20.387 | 48.94 | Pk | 33.3 | -40 | 42.24 | 82.2 | -39.96 | 0-360 | 251 | V |
| 2 | 22.171 | 48.77 | Pk | 33.4 | -39.8 | 42.37 | 82.2 | -39.83 | 0-360 | 102 | H |
| 5 | 23.866 | 47.91 | Pk | 34 | -39.1 | 42.81 | 82.2 | -39.39 | 0-360 | 101 | V |
| 3 | 25.888 | 47.45 | Pk | 34.4 | -37.6 | 44.25 | 82.2 | -37.95 | 0-360 | 299 | H |
| 6 | 26.384 | 47.53 | Pk | 34.6 | -37.3 | 44.83 | 82.2 | -37.37 | 0-360 | 251 | V |

Pk - Peak detector


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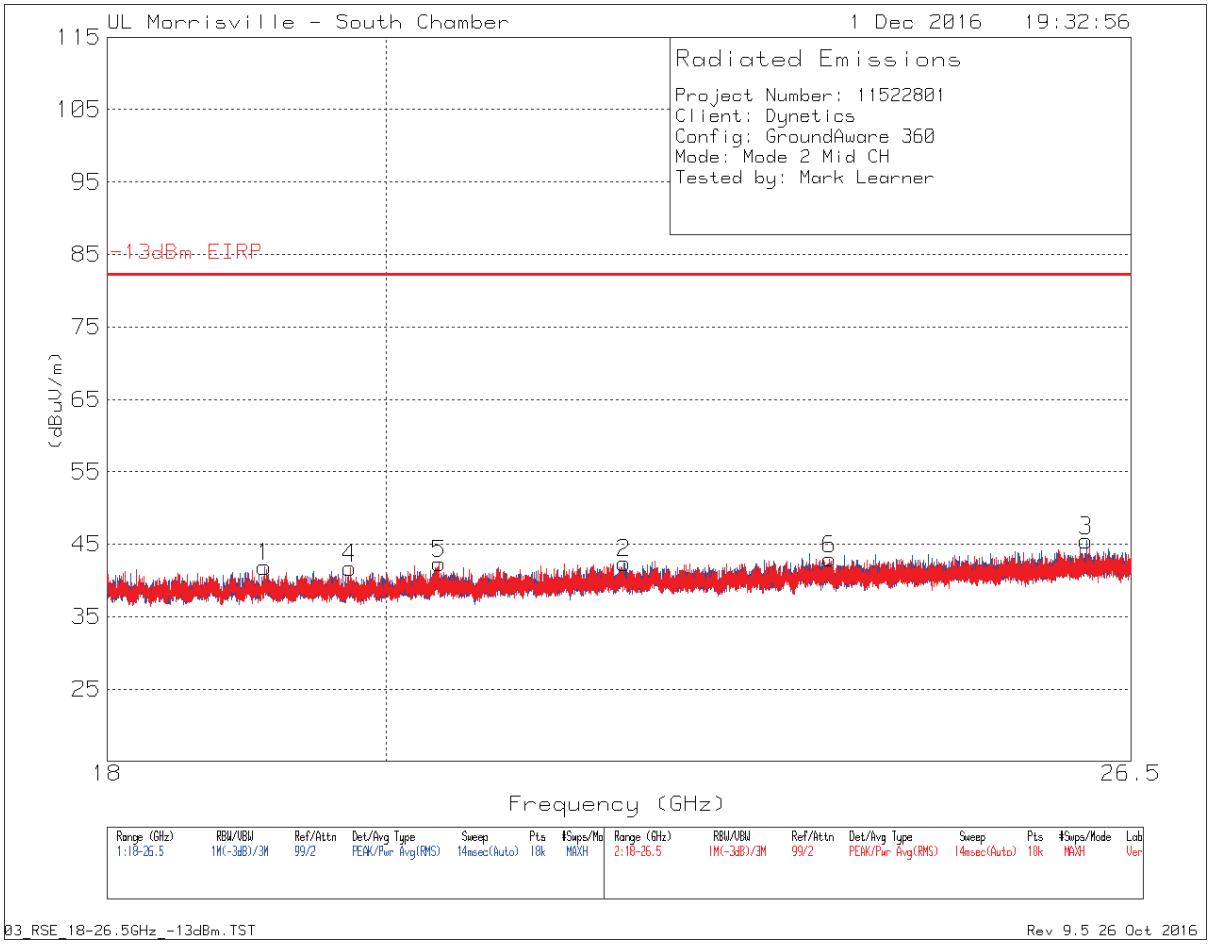
**Mode 2, Middle Channel, 18-26.5GHz – Plot**




Limit line represents an E-field equivalent of 82.2dBuV/m at a 3m measurement distance.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**Mode 2, Middle Channel, 18-26.5GHz– Tabular Data**

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF AT0076 (dB/m) | Amp/Cbl (dB) | Corrected Reading (dBuV/m) | -13dBm EIRP equivalent E-field (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 19.101 | 49.9 | Pk | 32.7 | -40.7 | 41.9 | 82.2 | -40.3 | 0-360 | 199 | H |
| 4 | 19.729 | 49.32 | Pk | 32.8 | -40.4 | 41.72 | 82.2 | -40.48 | 0-360 | 201 | V |
| 5 | 20.406 | 49.36 | Pk | 33.3 | -40.3 | 42.36 | 82.2 | -39.84 | 0-360 | 201 | V |
| 2 | 21.883 | 48.92 | Pk | 33.4 | -39.9 | 42.42 | 82.2 | -39.78 | 0-360 | 149 | H |
| 6 | 23.649 | 48.18 | Pk | 33.9 | -39.1 | 42.98 | 82.2 | -39.22 | 0-360 | 300 | V |
| 3 | 26.057 | 48.51 | Pk | 34.6 | -37.6 | 45.51 | 82.2 | -36.69 | 0-360 | 249 | H |

Pk - Peak detector


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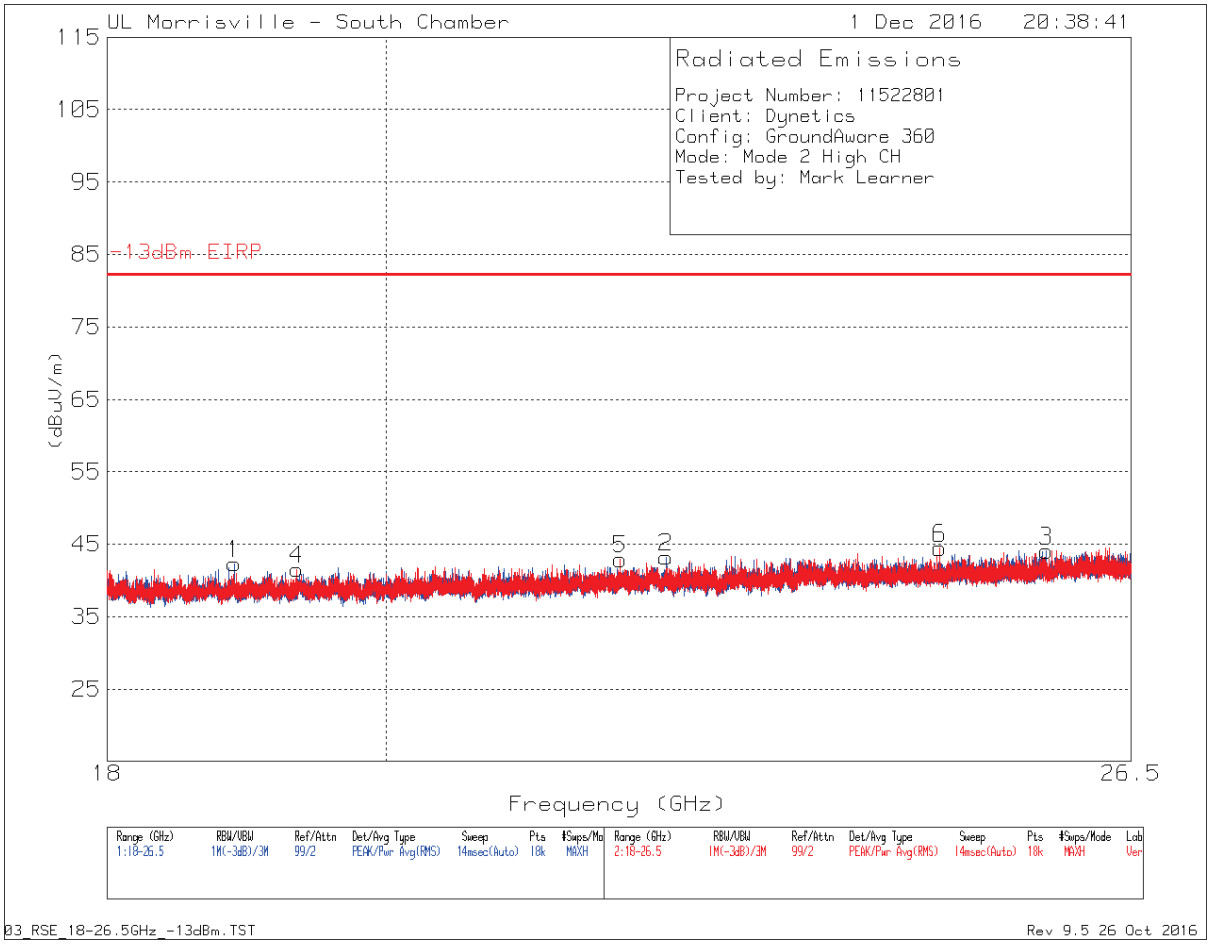
**Mode 2, High Channel, 18-26.5GHz – Plot**




Limit line represents an E-field equivalent of 82.2dBuV/m at a 3m measurement distance.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**Mode 2, High Channel, 18-26.5GHz– Tabular Data**

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF AT0076 (dB/m) | Amp/Cbl (dB) | Corrected Reading (dBuV/m) | -13dBm EIRP equivalent E-field (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 18.885 | 50.23 | Pk | 32.8 | -40.7 | 42.33 | 82.2 | -39.87 | 0-360 | 149 | H |
| 4 | 19.337 | 49.36 | Pk | 32.8 | -40.6 | 41.56 | 82.2 | -40.64 | 0-360 | 201 | V |
| 5 | 21.85 | 49.24 | Pk | 33.4 | -39.7 | 42.94 | 82.2 | -39.26 | 0-360 | 251 | V |
| 2 | 22.233 | 49.42 | Pk | 33.4 | -39.6 | 43.22 | 82.2 | -38.98 | 0-360 | 102 | H |
| 6 | 24.654 | 48.75 | Pk | 34.2 | -38.5 | 44.45 | 82.2 | -37.75 | 0-360 | 151 | V |
| 3 | 25.667 | 47.67 | Pk | 34.3 | -37.9 | 44.07 | 82.2 | -38.13 | 0-360 | 102 | H |

Pk - Peak detector


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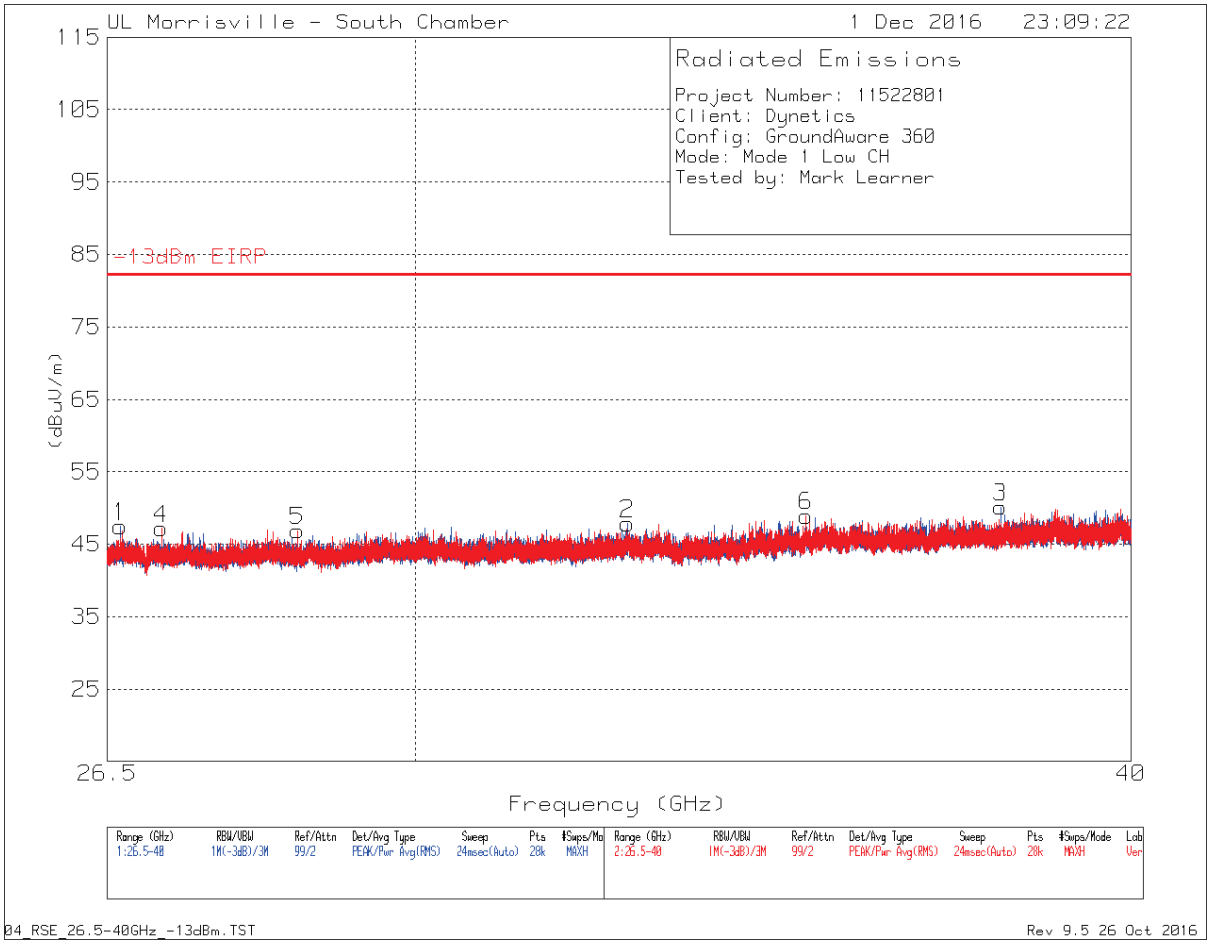
**Mode 1, Low Channel, Above 26.5GHz – Plot**




Limit line represents an E-field equivalent of 82.2dBuV/m at a 3m measurement distance.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**Mode 1, Low Channel, Above 26.5GHz– Tabular Data**

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF AT0077 (dB/m) | Amp/Cbl (dB) | Corrected Reading (dBuV/m) | -13dBm EIRP equivalent E-field (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 26.641 | 48.56 | Pk | 36 | -37.1 | 47.46 | 82.2 | -34.74 | 0-360 | 199 | H |
| 4 | 27.084 | 48.08 | Pk | 36 | -36.9 | 47.18 | 82.2 | -35.02 | 0-360 | 201 | V |
| 5 | 28.609 | 46.58 | Pk | 36.5 | -36.2 | 46.88 | 82.2 | -35.32 | 0-360 | 151 | V |
| 2 | 32.67 | 46.34 | Pk | 37.2 | -35.7 | 47.84 | 82.2 | -34.36 | 0-360 | 249 | H |
| 6 | 35.1 | 47.72 | Pk | 37.8 | -36.6 | 48.92 | 82.2 | -33.28 | 0-360 | 201 | V |
| 3 | 37.956 | 48.84 | Pk | 38.2 | -36.9 | 50.14 | 82.2 | -32.06 | 0-360 | 299 | H |

Pk - Peak detector


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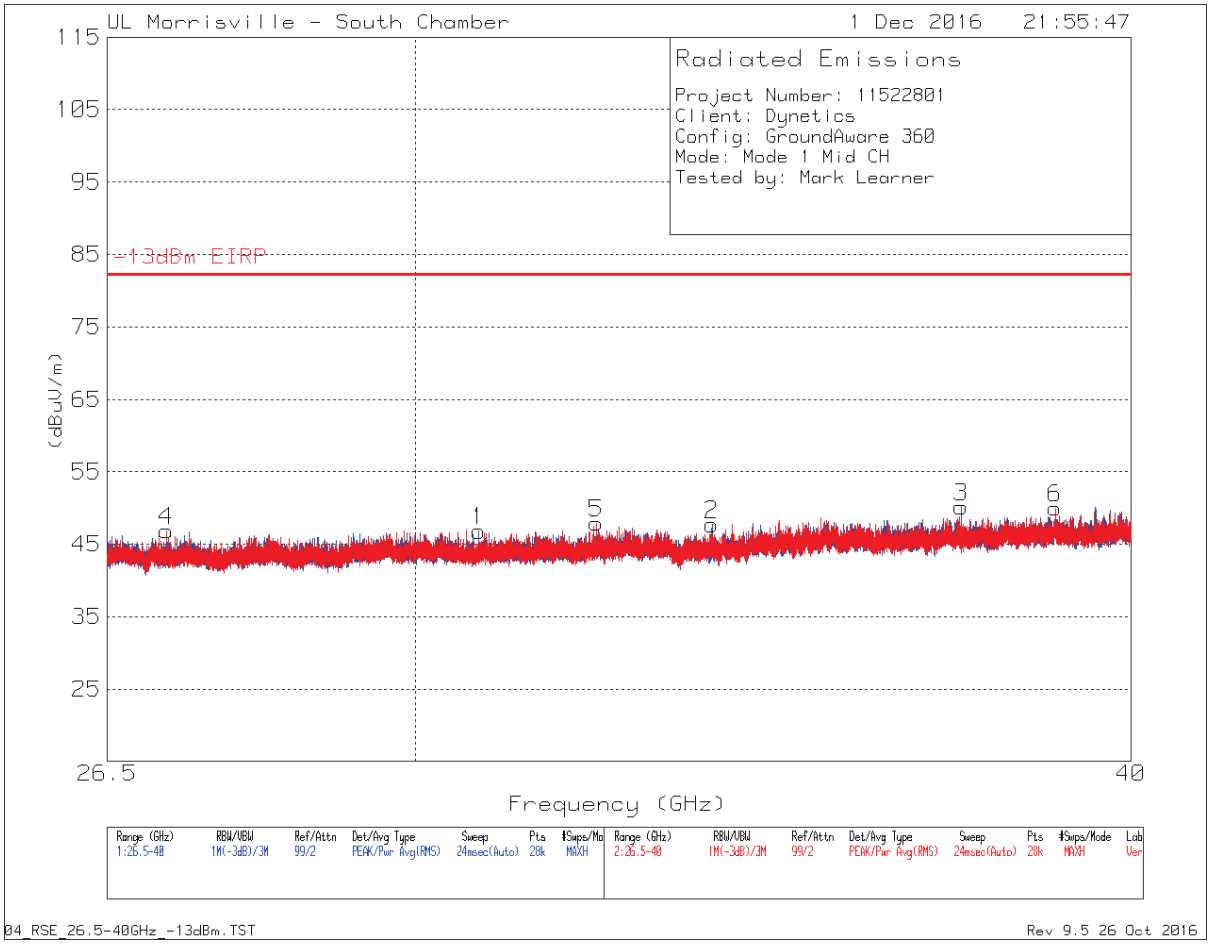
**Mode 1, Middle Channel, Above 26.5GHz – Plot**




Limit line represents an E-field equivalent of 82.2dBuV/m at a 3m measurement distance.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**Mode 1, Middle Channel, Above 26.5GHz– Tabular Data**

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF AT0077 (dB/m) | Amp/Cbl (dB) | Corrected Reading (dBuV/m) | -13dBm EIRP equivalent E-field (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 27.138 | 47.77 | Pk | 36 | -36.9 | 46.87 | 82.2 | -35.33 | 0-360 | 151 | V |
| 1 | 30.773 | 45.66 | Pk | 36.7 | -35.5 | 46.86 | 82.2 | -35.34 | 0-360 | 149 | H |
| 5 | 32.259 | 46.32 | Pk | 36.9 | -35.3 | 47.92 | 82.2 | -34.28 | 0-360 | 101 | V |
| 2 | 33.797 | 46.63 | Pk | 37.4 | -36.3 | 47.73 | 82.2 | -34.47 | 0-360 | 149 | H |
| 3 | 37.36 | 49.27 | Pk | 38.3 | -37.4 | 50.17 | 82.2 | -32.03 | 0-360 | 149 | H |
| 6 | 38.799 | 47.41 | Pk | 38.9 | -36.3 | 50.01 | 82.2 | -32.19 | 0-360 | 251 | V |

Pk - Peak detector


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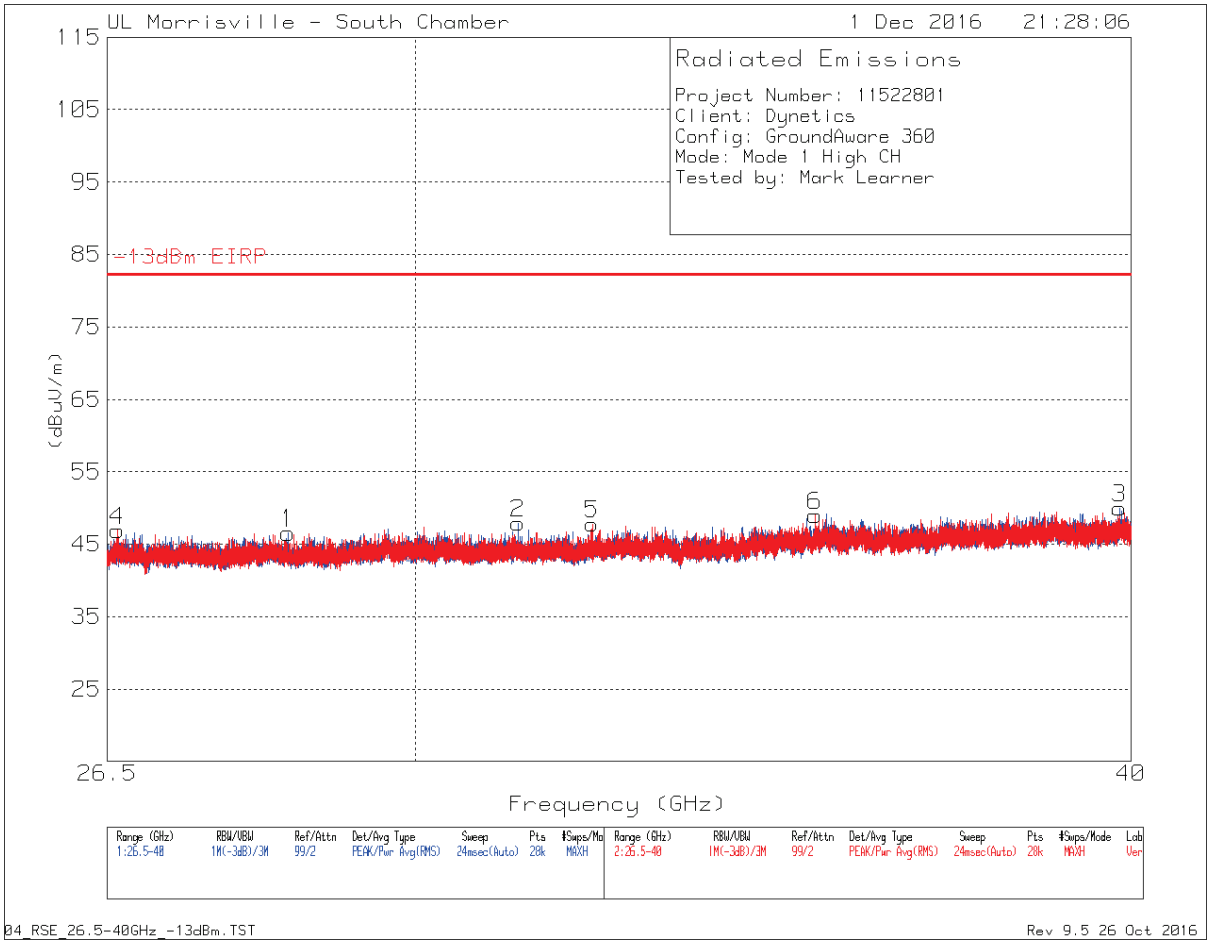
**Mode 1, High Channel, Above 26.5GHz – Plot**




Limit line represents an E-field equivalent of 82.2dBuV/m at a 3m measurement distance.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**Mode 1, High Channel, Above 26.5GHz– Tabular Data**

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF AT0077 (dB/m) | Amp/Cbl (dB) | Corrected Reading (dBuV/m) | -13dBm EIRP equivalent E-field (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 26.608 | 48.11 | Pk | 36 | -37.2 | 46.91 | 82.2 | -35.29 | 0-360 | 151 | V |
| 1 | 28.501 | 46.13 | Pk | 36.5 | -36.1 | 46.53 | 82.2 | -35.67 | 0-360 | 299 | H |
| 2 | 31.263 | 46.34 | Pk | 36.9 | -35.3 | 47.94 | 82.2 | -34.26 | 0-360 | 299 | H |
| 5 | 32.208 | 46.41 | Pk | 36.8 | -35.4 | 47.81 | 82.2 | -34.39 | 0-360 | 151 | V |
| 6 | 35.228 | 47.9 | Pk | 37.8 | -36.7 | 49 | 82.2 | -33.2 | 0-360 | 101 | V |
| 3 | 39.814 | 46.39 | Pk | 39 | -35.4 | 49.99 | 82.2 | -32.21 | 0-360 | 249 | H |

Pk - Peak detector


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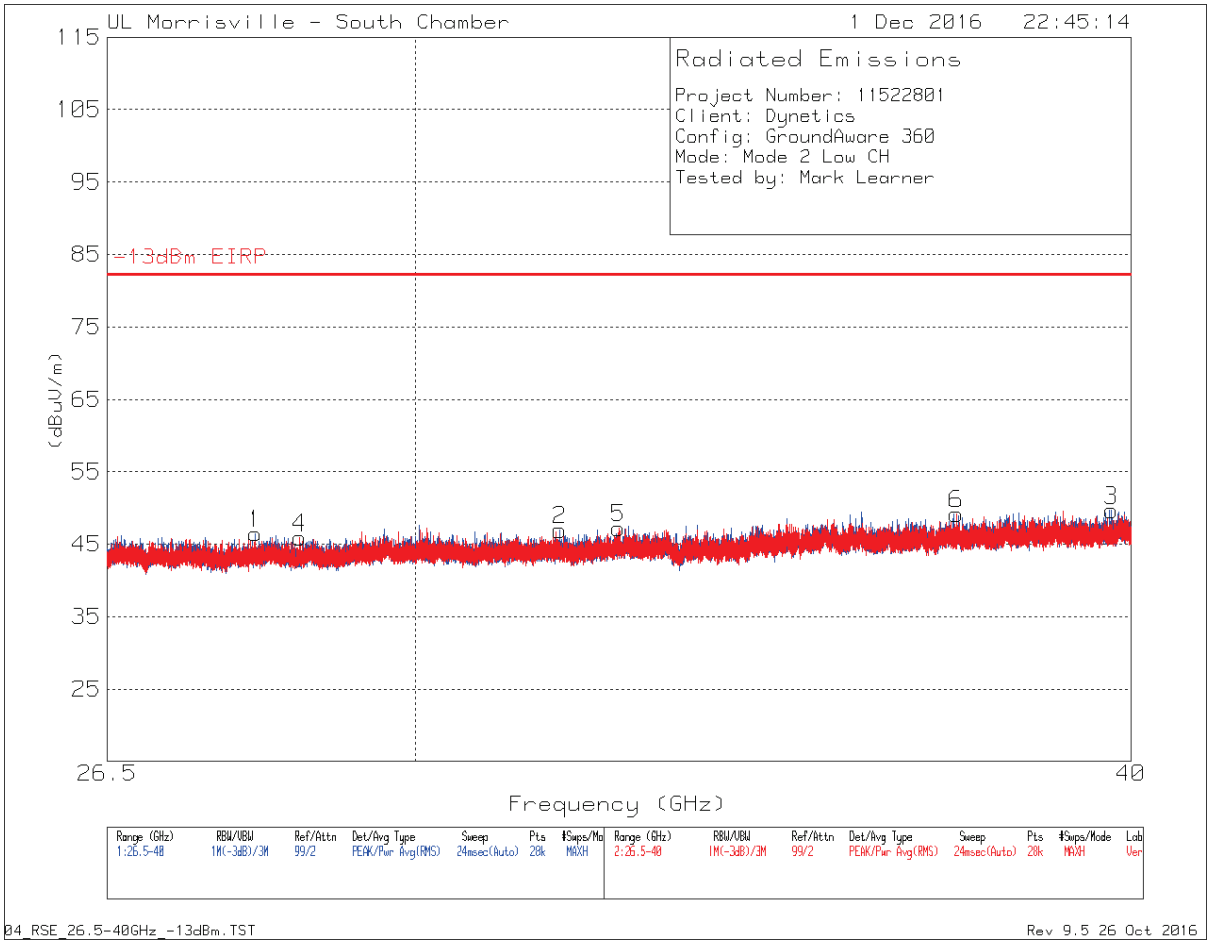
**Mode 2, Low Channel, Above 26.5GHz – Plot**




Limit line represents an E-field equivalent of 82.2dBuV/m at a 3m measurement distance.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**Mode 2, Low Channel, Above 26.5GHz– Tabular Data**

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF AT0077 (dB/m) | Amp/Cbl (dB) | Corrected Reading (dBuV/m) | -13dBm EIRP equivalent E-field (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 28.129 | 46.58 | Pk | 36.3 | -36.4 | 46.48 | 82.2 | -35.72 | 0-360 | 101 | H |
| 4 | 28.634 | 45.7 | Pk | 36.4 | -36.2 | 45.9 | 82.2 | -36.3 | 0-360 | 201 | V |
| 2 | 31.791 | 45.17 | Pk | 36.9 | -35.1 | 46.97 | 82.2 | -35.23 | 0-360 | 249 | H |
| 5 | 32.552 | 45.93 | Pk | 37.1 | -35.8 | 47.23 | 82.2 | -34.97 | 0-360 | 101 | V |
| 6 | 37.293 | 48.17 | Pk | 38.2 | -37.2 | 49.17 | 82.2 | -33.03 | 0-360 | 251 | V |
| 3 | 39.688 | 46.66 | Pk | 38.9 | -35.9 | 49.66 | 82.2 | -32.54 | 0-360 | 101 | H |

Pk - Peak detector


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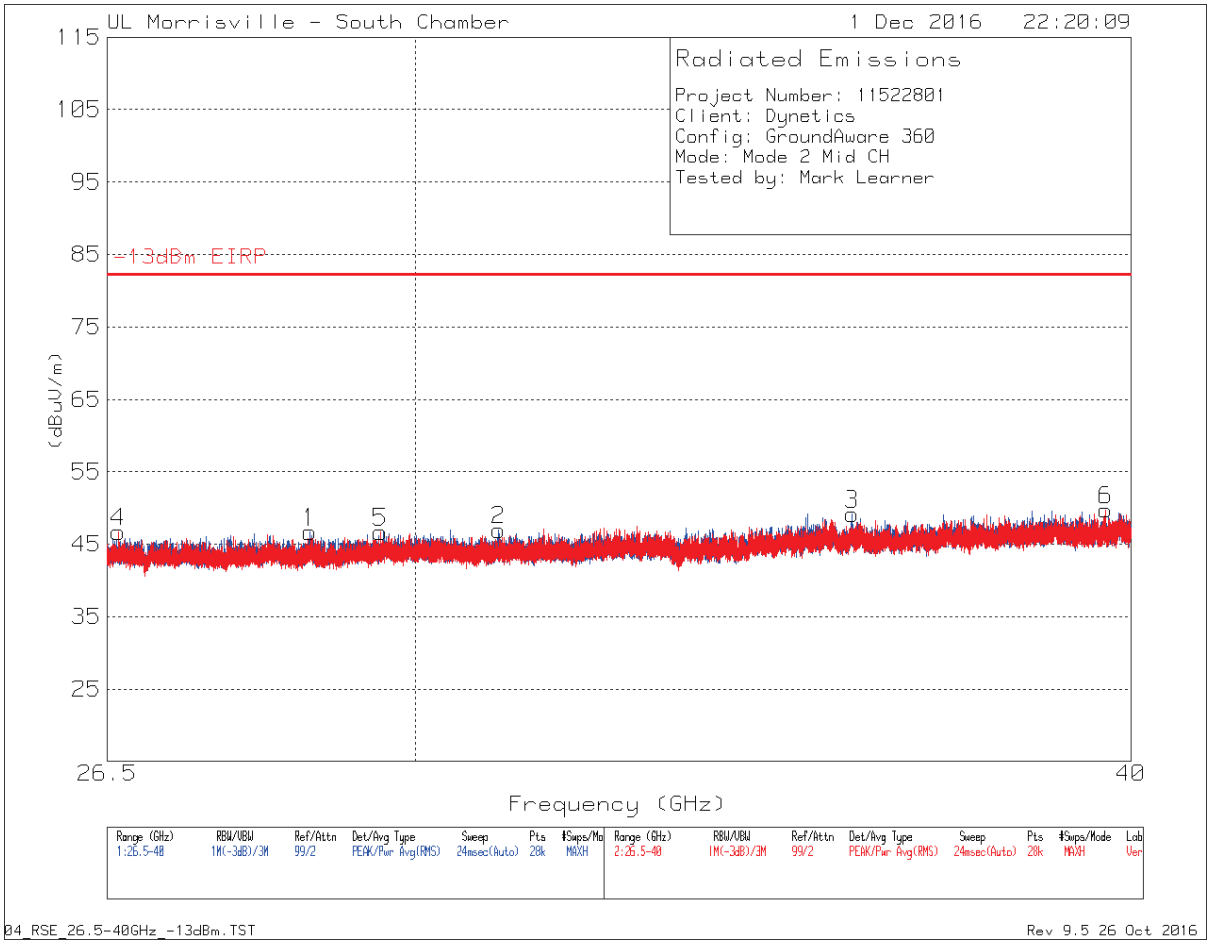
**Mode 2, Middle Channel, Above 26.5GHz – Plot**




Limit line represents an E-field equivalent of 82.2dBuV/m at a 3m measurement distance.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**Mode 2, Middle Channel, Above 26.5GHz– Tabular Data**

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF AT0077 (dB/m) | Amp/Cbl (dB) | Corrected Reading (dBuV/m) | -13dBm EIRP equivalent E-field (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 26.621 | 47.91 | Pk | 36 | -37.2 | 46.71 | 82.2 | -35.49 | 0-360 | 151 | V |
| 1 | 28.753 | 46.38 | Pk | 36.3 | -36 | 46.68 | 82.2 | -35.52 | 0-360 | 249 | H |
| 5 | 29.581 | 45.88 | Pk | 36.6 | -35.8 | 46.68 | 82.2 | -35.52 | 0-360 | 101 | V |
| 2 | 31.021 | 45.69 | Pk | 36.8 | -35.5 | 46.99 | 82.2 | -35.21 | 0-360 | 102 | H |
| 3 | 35.759 | 47.34 | Pk | 38.1 | -36.3 | 49.14 | 82.2 | -33.06 | 0-360 | 249 | H |
| 6 | 39.596 | 46.55 | Pk | 39 | -35.8 | 49.75 | 82.2 | -32.45 | 0-360 | 251 | V |

Pk - Peak detector


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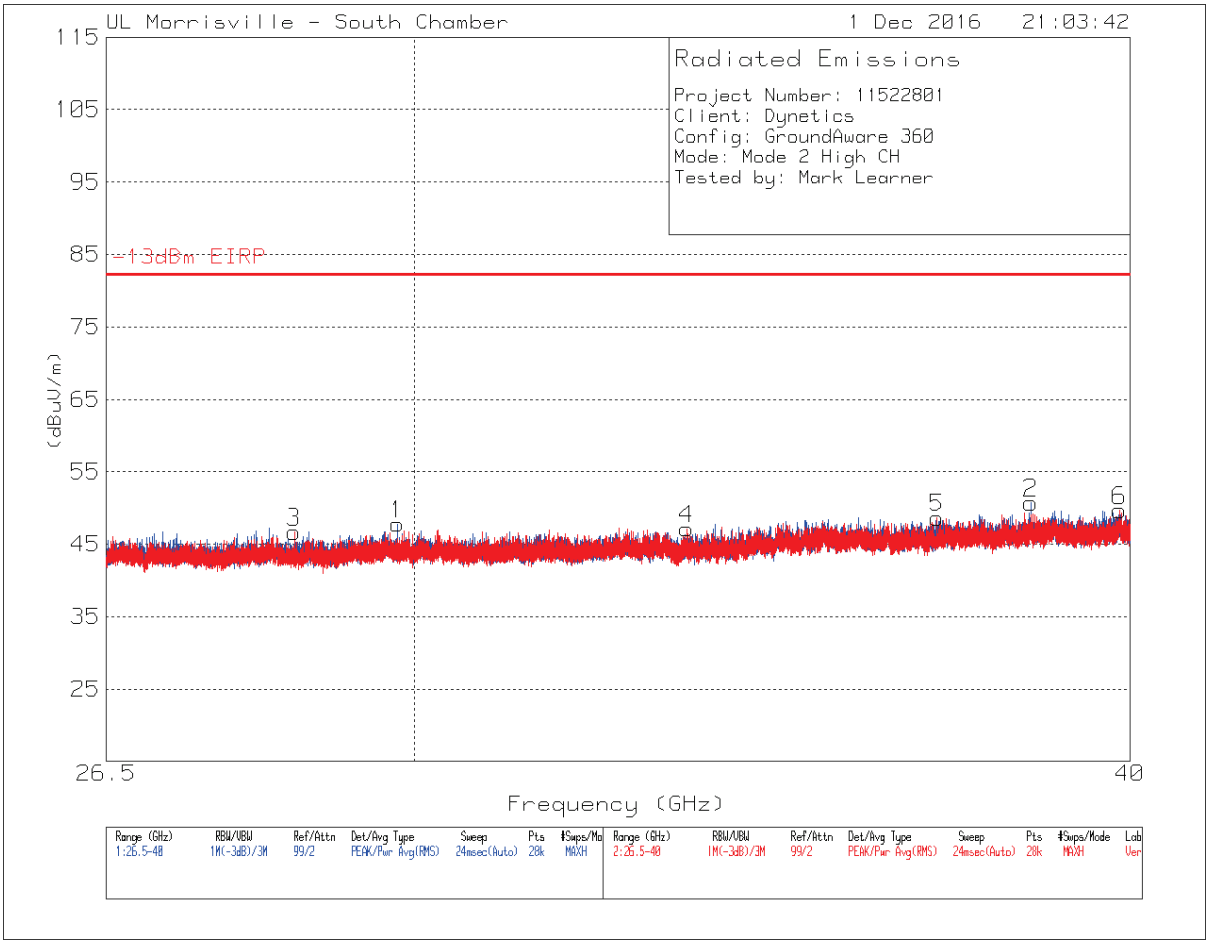
**Mode 2, High Channel, Above 26.5GHz – Plot**




Limit line represents an E-field equivalent of 82.2dBuV/m at a 3m measurement distance.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**Mode 2, High Channel, Above 26.5GHz– Tabular Data**

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF AT0077 (dB/m) | Amp/Cbl (dB) | Corrected Reading (dBuV/m) | -13dBm EIRP equivalent E-field (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 28.582 | 46.38 | Pk | 36.5 | -36.2 | 46.68 | 82.2 | -35.52 | 0-360 | 151 | V |
| 1 | 29.796 | 46.79 | Pk | 36.6 | -35.6 | 47.79 | 82.2 | -34.41 | 0-360 | 299 | H |
| 4 | 33.47 | 46.56 | Pk | 37.2 | -36.6 | 47.16 | 82.2 | -35.04 | 0-360 | 299 | V |
| 5 | 37.015 | 47.66 | Pk | 38.3 | -37.3 | 48.66 | 82.2 | -33.54 | 0-360 | 201 | V |
| 2 | 38.442 | 48.7 | Pk | 38.7 | -36.7 | 50.7 | 82.2 | -31.5 | 0-360 | 102 | H |
| 6 | 39.834 | 45.98 | Pk | 39 | -35.3 | 49.68 | 82.2 | -32.52 | 0-360 | 151 | V |

Pk - Peak detector


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# 10. FREQUENCY STABILITY

**RULE PART(S)**

**§2.1055**

**§90.213 Frequency stability**

Above 2450 MHz [10]

[10]Except for DSRCS equipment in the 5850-5925 MHz band, frequency stability is to be specified in the station authorization. Frequency stability for DSRCS equipment in the 5850-5925 MHz band is specified in subpart M of this part.

**LIMITS**

Device must remain operating in between 3100MHz to 3300MHz.

**TEST PROCEDURE**

Use spectrum analyzer to measure -6dBc points

- Temp. = −30° to +50°C
- Voltage = Nominal & Nominal +/-15%

**Frequency Stability vs Temperature:**
The EUT is place inside a temperature chamber. The temperature is set to 25ºC and allowed to stabilize. After sufficient soak time, the transmitting frequency error is measured. The temperature is increased by changed to either +30°C or +20°C degrees, allowed to stabilize and soak, and then the measurement is repeated. This is repeated until +50ºC and -30°C is reached in 10° steps.

**Frequency Stability vs Voltage:**
The peak frequency error is recorded (worst-case).

**RESULTS**

Based on the band edge measurements and the frequency error data the device will operate in between the frequency range of 3100MHz - 3300MHz under all temperature and voltage variations.

See UL LLC report number 10965797A (FCC ID QFS001-10024640) for data demonstrating compliance to this requirement. All clocks that are a part of the system were tested for frequency stability under the previous grant for FCC ID: QFS001-10024640. The exact same PCB that supplies all clocks and waveforms for that product is employed to supply clocks and waveforms for this product without revision, therefore the test data for that FCC ID is useable for this submission also.


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# 11. AC POWER LINE CONDUCTED EMISSIONS

**LIMITS**

FCC §15.207 (a)

| Frequency of Emission (MHz) | Conducted Limit (dBuV) | |
|---|---|---|
| | Quasi-peak | Average |
| 0.15-0.5 | 66 to 56 * | 56 to 46 * |
| 0.5-5 | 56 | 46 |
| 5-30 | 60 | 50 |

* Decreases with the logarithm of the frequency.

**TEST PROCEDURE**

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.4.

The receiver is set to a resolution bandwidth of 9 kHz. Quasi-Peak and CISPR Average detection is used unless otherwise noted.

Line conducted data is recorded for both line of the power supply feeding the EUT via a PoE injector.


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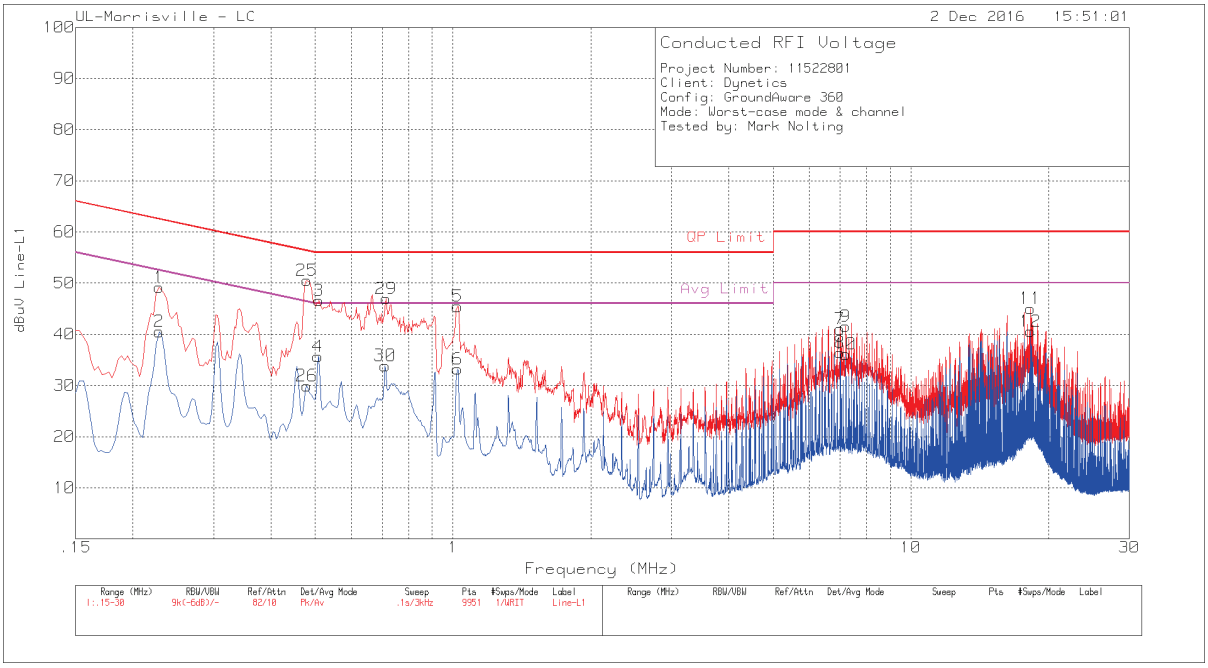
**RESULTS**

**LINE 1 RESULTS**

Graphical Data





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Tabular Data

| Line-L1 .15 - 30MHz | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | LISN VCF (dB) | Cbl/Limiter (dB) | Corrected Reading dBuV | QP Limit | Margin (dB) | Avg Limit | Margin (dB) |
| 1 | .228 | 39.09 | Pk | .1 | 10 | 49.19 | 62.52 | -13.33 | - | - |
| 2 | .228 | 30.43 | Av | .1 | 10 | 40.53 | - | - | 52.52 | -11.99 |
| 25 | .48 | 40.52 | Pk | 0 | 10 | 50.52 | 56.34 | -5.82 | - | - |
| 26 | .48 | 19.93 | Av | 0 | 10 | 29.93 | - | - | 46.34 | -16.41 |
| 3 | .51 | 36.6 | Pk | 0 | 10 | 46.6 | 56 | -9.4 | - | - |
| 4 | .507 | 25.65 | Av | 0 | 10 | 35.65 | - | - | 46 | -10.35 |
| 29 | .714 | 37 | Pk | 0 | 10 | 47 | 56 | -9 | - | - |
| 30 | .711 | 23.88 | Av | 0 | 10 | 33.88 | - | - | 46 | -12.12 |
| 5 | 1.023 | 35.45 | Pk | 0 | 10 | 45.45 | 56 | -10.55 | - | - |
| 6 | 1.023 | 23.21 | Av | 0 | 10 | 33.21 | - | - | 46 | -12.79 |
| 7 | 7.008 | 30.73 | Pk | .1 | 10.2 | 41.03 | 60 | -18.97 | - | - |
| 8 | 7.008 | 26.14 | Av | .1 | 10.2 | 36.44 | - | - | 50 | -13.56 |
| 9 | 7.212 | 31.25 | Pk | .1 | 10.2 | 41.55 | 60 | -18.45 | - | - |
| 10 | 7.209 | 25.81 | Av | .1 | 10.2 | 36.11 | - | - | 50 | -13.89 |
| 11 | 18.243 | 34.36 | Pk | .2 | 10.5 | 45.06 | 60 | -14.94 | - | - |
| 12 | 18.243 | 29.87 | Av | .2 | 10.5 | 40.57 | - | - | 50 | -9.43 |

Pk - Peak detector
Av - Average detection


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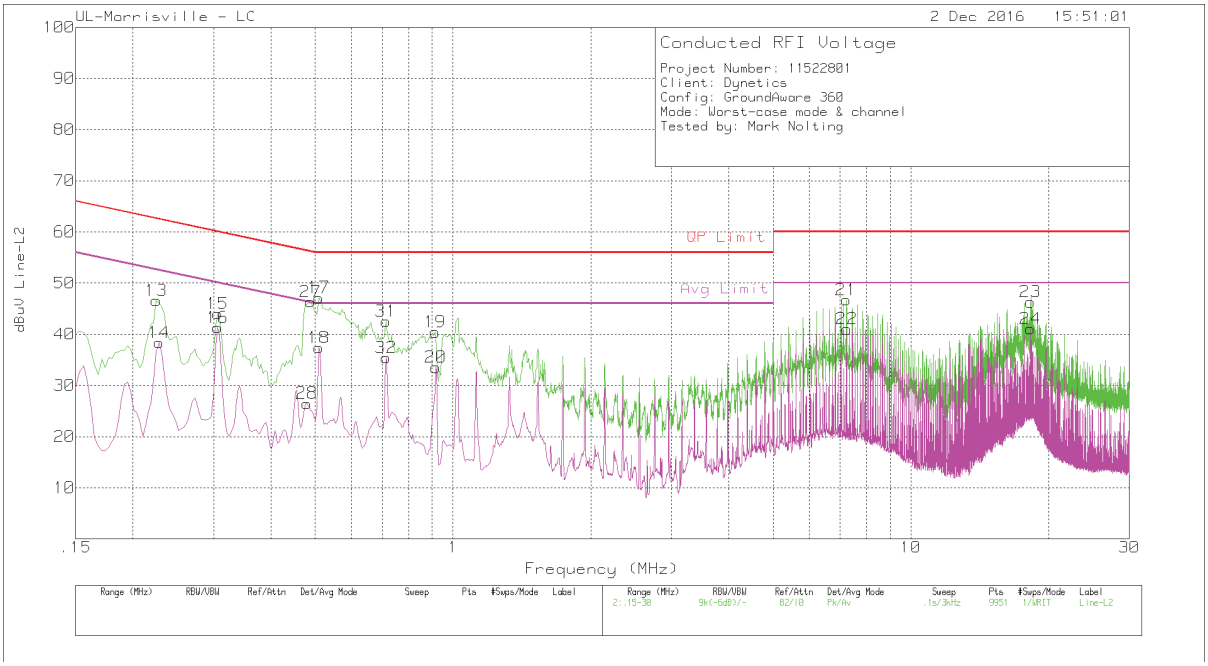
**LINE 2 RESULTS**

Graphical Data





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Tabular Data

| Line-L2 .15 - 30MHz | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | LISN VCF (dB) | Cbl/Limiter (dB) | Corrected Reading dBuV | QP Limit | Margin (dB) | Avg Limit | Margin (dB) |
| 13 | .225 | 36.53 | Pk | .1 | 10 | 46.63 | 62.63 | -16 | - | - |
| 14 | .228 | 28.23 | Av | .1 | 10 | 38.33 | - | - | 52.52 | -14.19 |
| 15 | .306 | 33.93 | Pk | .1 | 10 | 44.03 | 60.08 | -16.05 | - | - |
| 16 | .306 | 31.22 | Av | .1 | 10 | 41.32 | - | - | 50.08 | -8.76 |
| 27 | .489 | 36.24 | Pk | .1 | 10 | 46.34 | 56.18 | -9.84 | - | - |
| 28 | .48 | 16.4 | Av | .1 | 10 | 26.5 | - | - | 46.34 | -19.84 |
| 17 | .51 | 37.14 | Pk | 0 | 10 | 47.14 | 56 | -8.86 | - | - |
| 18 | .51 | 27.39 | Av | 0 | 10 | 37.39 | - | - | 46 | -8.61 |
| 31 | .714 | 32.58 | Pk | 0 | 10 | 42.58 | 56 | -13.42 | - | - |
| 32 | .714 | 25.43 | Av | 0 | 10 | 35.43 | - | - | 46 | -10.57 |
| 19 | .915 | 30.41 | Pk | 0 | 10 | 40.41 | 56 | -15.59 | - | - |
| 20 | .918 | 23.53 | Av | 0 | 10 | 33.53 | - | - | 46 | -12.47 |
| 21 | 7.221 | 36.41 | Pk | .1 | 10.2 | 46.71 | 60 | -13.29 | - | - |
| 22 | 7.242 | 30.73 | Av | .1 | 10.2 | 41.03 | - | - | 50 | -8.97 |
| 23 | 18.243 | 35.71 | Pk | .1 | 10.5 | 46.31 | 60 | -13.69 | - | - |
| 24 | 18.243 | 30.45 | Av | .1 | 10.5 | 41.05 | - | - | 50 | -8.95 |

Pk - Peak detector
Av - Average detection


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