



TEST REPORT

Report Number: R13359833-E4

Applicant : Oxford Nanopore Technologies Ltd
Gosling Building, Edmund Halley Road
Oxford Science Park
Oxford, OX4 4DQ
United Kingdom

Model : ONT-07-01191-00

FCC ID : 2ARGS-P3310

IC : 26200-P3310

EUT Description : BT/BLE/WLAN (2.4GHz and 5GHz) Radio Module

Test Standard(s) : FCC 47 CFR PART 15 SUBPART E
ISED RSS-247 ISSUE 2
ISED RSS-GEN ISSUE 5 +A1:2019

Date Of Issue:
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REPORT REVISION HISTORY

| Ver. | Issue Date | Revisions | Revised By |
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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: Oxford Nanopore Technologies Ltd
Gosling Building, Edmund Halley Road
Oxford Science Park
Oxford, OX4 4DQ
United Kingdom

EUT DESCRIPTION: BT/BLE/WLAN (2.4GHz and 5GHz) Radio Module

MODEL: ONT-07-01191-00

SERIAL NUMBER: 0325117192382

DATE TESTED: 2020-07-21 to 2020-08-27

| APPLICABLE STANDARDS | |
|-------------------------------|--------------|
| STANDARD | TEST RESULTS |
| CFR 47 Part 15 Subpart E | Complies |
| ISED RSS-247 Issue 2 | Complies |
| ISED RSS-GEN Issue 5 +A1:2019 | Complies |

UL LLC tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise.

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, or any agency of the U.S. government.

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2. TEST RESULT SUMMARY

| FCC Clause | ISED Clause | Requirement | Result | Comment |
|----------------------------|--------------------------------|------------------------------|-------------------------|--------------------------------|
| See Comment | | Duty Cycle | Reporting purposes only | Per ANSI C63.10, Section 12.2. |
| Reporting purposes only | RSS-GEN 6.7 | 26dB BW/99% OBW | See Comment | Refer to Section 6 |
| 15.407 (e) | RSS-247 6.2.4.1 | 6 dB BW | | |
| 15.407 (a) (1-4), (h) (1) | RSS-247 6.2 | Output Power | Compliant | None |
| 15.407 (a) (1-3, 5) | RSS-247 6.2 | PSD | See Comment | Refer to Section 6 |
| 15.209, 15.205, 15.407 (b) | RSS-GEN 8.9, 8.10, RSS-247 6.2 | Radiated Emissions | Compliant | None |
| 15.207 | RSS-Gen 8.8 | AC Mains Conducted Emissions | | |

3. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 15, ANSI C63.10-2013, KDB 414788 D01 Radiated Test Site v01r01, FCC KDB 662911 D01 v02r01, FCC KDB 789033 D02 v02r01, RSS-GEN Issue 5, and RSS-247 Issue 2.

4. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 12 Laboratory Drive, Research Triangle Park, NC 27709, USA and 2800 Perimeter Park Dr., Suite B, Morrisville, NC 27560, USA. The following table identifies which facilities were utilized for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

| 12 Laboratory Dr. | 2800 Perimeter Park Dr. |
|--|---|
| Site Code: 2180C | |
| <input type="checkbox"/> Chamber A RTP | <input checked="" type="checkbox"/> North Chamber |
| <input type="checkbox"/> Chamber C RTP | <input checked="" type="checkbox"/> South Chamber |

The above test sites and facilities are covered under FCC Test Firm Registration # 703469. Chambers above are covered under Industry Canada company address and respective code.

UL LLC (RTP) is accredited by NVLAP, Laboratory Code 200246-0

5. DECISION RULES AND MEASUREMENT UNCERTAINTY

5.1. METROLOGICAL TRACEABILITY

All test and measuring equipment utilized to perform the tests documented in this report are calibrated on a regular basis, with a maximum time between calibrations of one year or the manufacturers' recommendation, whichever is less, and where applicable is traceable to recognized national standards.

5.2. DECISION RULES

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4:2012 Clause 8.2. (Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

5.3. MEASUREMENT UNCERTAINTY

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

| PARAMETER | U _{Lab} |
|--|------------------|
| Worst Case Conducted Disturbance, 0.15 to 30 MHz | ±3.07 dB |
| Worst Case Radiated Disturbance, 9kHz to 26GHz | ±4.88 dB |

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

5.4. SAMPLE CALCULATION

RADIATED EMISSIONS

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)

$$36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} = 28.9 \text{ dBuV/m}$$

MAINS CONDUCTED EMISSIONS

Where relevant, the following sample calculation is provided:

Final Voltage (dBuV) = Measured Voltage (dBuV) + Cable Loss (dB) + Limiter Factor (dB) + LISN Insertion Loss.

$$36.5 \text{ dBuV} + 0 \text{ dB} + 10.1 \text{ dB} + 0 \text{ dB} = 46.6 \text{ dBuV}$$

6. DESCRIPTION OF C2PC

The purpose of this class 2 permission change report is to demonstrate that the radio module maintains compliancy when used with an antenna different from the original submission. Therefore full radiated, power, and AC mains testing performed. All other testing is covered by the radio module reports. It is the manufacturer's responsibility to provide these reports upon request.

7. EQUIPMENT UNDER TEST

7.1. EUT DESCRIPTION

The EUT is a BT/BLE/WLAN (2.4GHz and 5GHz) Radio Module. This report covers 5GHz WLAN.

7.2. MAXIMUM AVERAGE OUTPUT POWER

5.2GHz Band

| Frequency Range (MHz) | Mode | Output Power (dBm) | Output Power (mW) |
|-----------------------|----------------|--------------------|-------------------|
| 5180 - 5240 | 802.11a | 16.06 | 40.36 |
| | 802.11n HT20 | 14.95 | 31.26 |
| 5190 - 5230 | 802.11n HT40 | 14.97 | 31.41 |
| 5210 | 802.11ac VHT80 | 14.41 | 27.61 |

5.3GHz Band

| Frequency Range (MHz) | Mode | Output Power (dBm) | Output Power (mW) |
|-----------------------|----------------|--------------------|-------------------|
| 5260 - 5320 | 802.11a | 17.49 | 56.10 |
| | 802.11n HT20 | 19.24 | 83.95 |
| 5270 - 5310 | 802.11n HT40 | 18.42 | 69.50 |
| 5290 | 802.11ac VHT80 | 16.38 | 43.45 |

5.6GHz Band

| Frequency Range (MHz) | Mode | Output Power (dBm) | Output Power (mW) |
|-----------------------|----------------|--------------------|-------------------|
| 5500 - 5700 | 802.11a | 17.63 | 57.94 |
| | 802.11n HT20 | 19.47 | 88.51 |
| 5510 - 5670 | 802.11n HT40 | 17.54 | 56.75 |
| 5530-5610 | 802.11ac VHT80 | 14.81 | 30.27 |

5.8GHz Band

| Frequency Range (MHz) | Mode | Output Power (dBm) | Output Power (mW) |
|-----------------------|----------------|--------------------|-------------------|
| 5745 - 5825 | 802.11a | 17.59 | 57.41 |
| | 802.11n HT20 | 19.30 | 85.11 |
| 5755 - 5795 | 802.11n HT40 | 18.45 | 69.98 |
| 5775 | 802.11ac VHT80 | 15.41 | 34.75 |

7.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes 2 identical PCB patch antennas, with a maximum gains of 3.73dBi in 2.4GHz band and 5.18dBi in 5GHz band.

7.4. SOFTWARE AND FIRMWARE

The EUT firmware installed during testing was fw_bcmdhd_mfg_7.35.221.18.bin.
The test utility software used during testing was wl for WiFi, hcitool for Bluetooth & Bluetooth Low-Energy.

7.5. WORST-CASE CONFIGURATION AND MODE

Radiated emissions below 1GHz, above 18GHz, and power line conducted emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

Band edge and radiated emissions between 1GHz and 18GHz were performed with the EUT set to transmit at the highest power on low, middle and high channels.

Modes supported and tested are as follows:

802.11b: SISO, 802.11n HT20: MIMO, 802.11n HT40: MIMO, and 802.11ac VHT80: MIMO.

Worst-case data rates as provided by the client were:

802.11b mode: 1 Mbps
802.11g mode: 6 Mbps
802.11n HT20mode: MCS0

The fundamental of the EUT was investigated with chain 0 and chain 1 antennas in three orthogonal orientations X,Y,Z, it was determined fo SISO testing that Y orientation was worst-case orientation for chain 0 and Z orientation was worst-case orientation for chain 1. Therefore, all final SISO radiated testing was performed with the chain 0 antenna in Z orientation and chain 1 antenna in Y orientation. For MIMO testing, both antennas in Y orientation was worst-case.

7.6. DESCRIPTION OF TEST SETUP

| Support Equipment List | | | | |
|------------------------|--------------|---------------|---------------|--------|
| Description | Manufacturer | Model | Serial Number | FCC ID |
| Laptop | Dell | E6330 | 59R7PX1 | NA |
| AC Adapter | FSP | FSP065-10AABA | H9221000252 | NA |

I/O CABLES

| I/O Cable List | | | | | | |
|----------------|-------|----------------------|----------------|------------|------------------|-------------------------------------|
| Cable No. | Port | # of Identical Ports | Connector Type | Cable Type | Cable Length (m) | Remarks |
| 1 | Mains | 1 | Barrel | Mains | <3m | Connected to DC power supply |
| 2 | ENET | 1 | RJ456 | I/O | <3m | Connected to laptop outside chamber |

SETUP DIAGRAMS

Please refer to R13359833-EP4 for setup diagram

8. MEASUREMENT METHOD

On Time and Duty Cycle: ANSI C63.10 Section 11.6

Unwanted emissions in restricted bands: KDB 789033 D02 v02r01, Sections G.3, G.4, G.5, and G.6.

Unwanted emissions in non-restricted bands: KDB 789033 D02 v02r01, Sections G.3, G.4, and G.5.

Radiated Spurious Emissions Below 30MHz: ANSI C63.10-2013 Section 6.4

AC Power Line Conducted Emissions: ANSI C63.10-2013, Section 6.2.

9. TEST AND MEASUREMENT EQUIPMENT

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

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

| Equipment ID | Description | Manufacturer | Model Number | Last Cal. | Next Cal. |
|--|---|-------------------|--------------------------|------------|------------|
| 1-18 GHz | | | | | |
| AT0072 | Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz | ETS Lindgren | 3117 | 2020-04-27 | 2021-04-27 |
| Gain-Loss Chains | | | | | |
| N-SAC03 | Gain-loss string: 1-18GHz | Various | Various | 2020-07-28 | 2021-07-28 |
| Receiver & Software | | | | | |
| SA0025 (Out N-SAC @ 0800 on 07/27/2020) | Spectrum Analyzer | Agilent | N9030A | 2020-03-17 | 2021-03-17 |
| 197954 (In N-SAC @ 0800 on 07/27/2020) | Spectrum Analyzer | Rohde & Schwarz | ESW44 | 2020-03-27 | 2021-03-27 |
| SOFTEMI | EMI Software | UL | Version 9.5 (2019-06-12) | | |
| Additional Equipment used | | | | | |
| s/n 200037610 | Environmental Meter | Fisher Scientific | 06-662-4 | 2020-01-22 | 2022-01-22 |

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

| Equipment ID | Description | Manufacturer | Model Number | Last Cal. | Next Cal. |
|----------------------------------|---|----------------------|--------------------------|------------|------------|
| 0.009-30MHz (Loop Ant.) | | | | | |
| AT0059 | Active Loop Antenna | EMCO | 6502 | 2020-08-06 | 2021-08-06 |
| 30-1000 MHz | | | | | |
| AT0081 | Hybrid Broadband Antenna | Sunol Sciences Corp. | JB3 | 2019-11-20 | 2020-11-20 |
| 1-18 GHz | | | | | |
| AT0067 | Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz | ETS Lindgren | 3117 | 2020-04-28 | 2021-04-28 |
| 18-40 GHz | | | | | |
| AT0076 | Horn Antenna, 18-26.5GHz | ARA | MWH-1826/B | 2019-11-07 | 2020-11-07 |
| AT0077 | Horn Antenna, 26-40GHz | ARA | MWH-2640/B | 2019-11-07 | 2020-11-07 |
| Gain-Loss Chains | | | | | |
| S-SAC01 | Gain-loss string: 0.009-30MHz | Various | Various | 2020-07-10 | 2021-07-10 |
| S-SAC02 | Gain-loss string: 25-1000MHz | Various | Various | 2020-07-10 | 2021-07-10 |
| S-SAC03 | Gain-loss string: 1-18GHz | Various | Various | 2020-07-06 | 2020-07-06 |
| S-SAC04 | Gain-loss string: 18-40GHz | Various | Various | 2020-07-07 | 2021-07-07 |
| Receiver & Software | | | | | |
| SA0025 | Spectrum Analyzer | Agilent | N9030A | 2020-03-17 | 2021-03-17 |
| SOFTEMI | EMI Software | UL | Version 9.5 (2019-06-12) | | |
| Additional Equipment used | | | | | |
| s/n 200037635 | Environmental Meter | Fisher Scientific | 06-662-4 | 2020-01-22 | 2022-01-22 |

Test Equipment Used - Line-Conducted Emissions – Voltage (Morrisville – Conducted 1)

| Equipment ID | Description | Manufacturer | Model Number | Last Cal. | Next Cal. |
|--------------|---|-----------------------|-----------------------------|------------|------------|
| CBL087 | Coax cable, RG223, N-male to BNC-male, 20-ft. | Pasternack | PE3W06143-240 | 2020-03-26 | 2021-03-26 |
| HI0091 | Environmental Meter | Fisher Scientific | 14-650-118 | 2020-06-26 | 2021-06-26 |
| LISN003 | LISN, 50-ohm/50-uH, 2-conductor, 25A | Fischer Custom Com. | FCC-LISN-50-25-2-01-550V | 2019-08-19 | 2020-08-19 |
| 75141 | EMI Test Receiver 9kHz-7GHz | Rohde & Schwarz | ESCI 7 | 2019-08-20 | 2020-08-20 |
| ATA222 | Transient Limiter, 0.009-100MHz | Electro-Metrics | EM-7600 | 2020-03-26 | 2021-03-26 |
| PS214 | AC Power Source | Elgar | CW2501M (s/n 1523A02396) | NA | NA |
| SOFTEMI | EMI Software | UL | Version 9.5 (2015-08-20) | | |
| HPF017 | 100kHz High-pass Filter | Solar Electronics Co. | 7801-100 | 2020-02-19 | 2021-02-19 |
| CDECABLE001 | ANSI C63.4 1m extension cable. | UL | Per Annex B of ANSI C63.4 | 2020-08-08 | 2020-08-08 |
| LISN008 | LISN, 50-ohm/50-uH, 2-conductor, 25A (For support gear only.) | Solar Electronics | 8012-50-R-24-BNC | 2020-08-08 | 2020-08-08 |

Test Equipment Used - Wireless Conducted Measurement Equipment

| Equipment ID | Description | Manufacturer | Model Number | Last Cal. | Next Cal. |
|------------------------|---|-----------------------|-------------------|------------|------------|
| 72822 | Spectrum Analyzer | Agilent Technologies | E4446A | 2020-01-02 | 2021-01-02 |
| PWM003 (PRE0137345) | RF Power Meter | Keysight Technologies | N1911A | 2019-08-22 | 2020-08-22 |
| PWS002 (PRE0137348) | Peak and Avg Power Sensor, 50MHz to 18GHz | Keysight Technologies | N1921A | 2019-08-23 | 2020-08-23 |
| PWM001 (PRE0136343) | RF Power Meter | Keysight Technologies | N1912A | 2020-07-17 | 2021-07-17 |
| PWS001 (PRE0137347) | Peak and Avg Power Sensor, 50MHz to 18GHz | Keysight Technologies | N1921A | 2020-05-27 | 2021-05-27 |
| HI0090 | Environmental Meter | Fisher Scientific | 15-077-963 | 2020-06-26 | 2021-06-26 |
| SOFTEMI | EMC Software | UL | Version 2020.5.18 | NA | NA |

Note: All equipment within calibration at time of use.

10. OUTPUT POWER

LIMITS

FCC §15.407 (a) (1)

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

FCC §15.407 (a) (2)

For the band 5.25–5.35 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26–dB emission bandwidth in MHz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1–MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.47–5.725 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26–dB emission bandwidth in MHz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1–MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

IC RSS-247 (6.2.1) (1)

The maximum EIRP shall not exceed 200 mW or $10 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

IC RSS-247 (6.2.2) (1)

The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log_{10} B$, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log_{10} B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

IC RSS-247 (6.2.3) (1)

The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log_{10} B$, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log_{10} B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 13.21 dB (including 10.54 dB pad and 2.67 dB cable) for 5.2 band, 13.22dB (including 10.54 dB pad and 2.68 dB cable) for 5.3 band, 13.29 dB (including 10.59 dB pad and 2.70 dB cable) for 5.6 band, and 13.72 dB (including 10.58 dB pad and 3.14 dB cable) for 5.8 band was entered as an offset in the power meter to allow for a gated average reading of power.

DIRECTIONAL ANTENNA GAIN

SISO:

There is only one transmitter output therefore the directional gain is equal to the antenna gain; 5.18dBi.

MIMO:

For power, the TX chains are uncorrelated and the antenna gain is equal among the chains. The directional gain is:

| Ant 1 Gain (dBi) | Ant 2 Gain (dBi) | Uncorrelated Chains Directional Gain (dBi) |
|------------------|------------------|--|
| 5.18 | 5.18 | 5.18 |

10.1. 5.2 BAND

802.11a

| | | | |
|------------|-------|--------------|------------|
| ID: | 40882 | Date: | 2020-07-14 |
|------------|-------|--------------|------------|

Bandwidth and Antenna Gain

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Min 99% BW (MHz) | Directional Gain (dBi) |
|---------|--------------------|-----------------------------|---------------------------|------------------------------|
| Low | 5180 | 22.00 | 16.70 | 5.18 |
| Mid | 5200 | 21.92 | 16.73 | 5.18 |
| High | 5240 | 21.92 | 16.79 | 5.18 |

Limits

| Channel | Frequency (MHz) | FCC Power Limit (dBm) | IC EIRP Limit (dBm) | Max IC Power (dBm) | Power Limit (dBm) |
|---------|--------------------|--------------------------------|------------------------------|-----------------------------|-------------------------|
| Low | 5180 | 24.00 | 22.23 | 17.05 | 17.05 |
| Mid | 5200 | 24.00 | 22.24 | 17.06 | 17.06 |
| High | 5240 | 24.00 | 22.25 | 17.07 | 17.07 |

Output Power Results

| Channel | Frequency (MHz) | Ant 1 Meas Power (dBm) | Ant 2 Meas Power (dBm) | Power Limit (dBm) | Worst- Case Margin (dB) |
|---------|--------------------|---------------------------------|---------------------------------|----------------------|----------------------------------|
| Low | 5180 | 15.77 | 16.06 | 17.05 | -0.99 |
| Mid | 5200 | 14.35 | 14.40 | 17.06 | -2.66 |
| High | 5240 | 14.09 | 14.21 | 17.07 | -2.86 |

Note 1: Average measurements taken gated.

Note 2: OBW measurements taken from radio module report. Manufacturer is responsible for providing this report upon request.

Note 3: This is SISO mode.

802.11n HT20

| | | | |
|------------|-------|--------------|------------|
| ID: | 40882 | Date: | 2020-07-14 |
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Bandwidth and Antenna Gain

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Min 99% BW (MHz) | Directional Gain for Power (dBi) |
|---------|--------------------|-----------------------------|---------------------------|---|
| Low | 5180 | 21.800 | 17.8402 | 5.18 |
| Mid | 5200 | 21.880 | 17.8317 | 5.18 |
| High | 5240 | 21.760 | 17.8416 | 5.18 |

Limits

| Channel | Frequency (MHz) | FCC Power Limit (dBm) | IC EIRP Limit (dBm) | Max IC Power (dBm) | Power Limit (dBm) |
|---------|--------------------|--------------------------------|------------------------------|-----------------------------|-------------------------|
| Low | 5180 | 24.00 | 22.51 | 17.33 | 17.33 |
| Mid | 5200 | 24.00 | 22.51 | 17.33 | 17.33 |
| High | 5240 | 24.00 | 22.51 | 17.33 | 17.33 |

Output Power Results

| Channel | Frequency (MHz) | Ant 1 Meas Power (dBm) | Ant 2 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---------|--------------------|---------------------------------|---------------------------------|-----------------------------------|-------------------------|-------------------------|
| Low | 5180 | 11.81 | 11.95 | 14.89 | 17.33 | -2.44 |
| Mid | 5200 | 11.71 | 12.02 | 14.88 | 17.33 | -2.45 |
| High | 5240 | 11.70 | 12.17 | 14.95 | 17.33 | -2.38 |

Note 1: Average measurements taken gated.

Note 2: OBW measurements taken from radio module report. Manufacturer is responsible for providing this report upon request.

802.11n HT40

| | | | |
|------------|-------|--------------|------------|
| ID: | 40882 | Date: | 2020-07-14 |
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Bandwidth and Antenna Gain

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Min 99% BW (MHz) | Directional Gain for Power (dBi) |
|---------|--------------------|-----------------------------|---------------------------|---|
| Low | 5190 | 40.960 | 36.014 | 5.18 |
| High | 5230 | 40.400 | 35.976 | 5.18 |

Limits

| Channel | Frequency (MHz) | FCC Power Limit (dBm) | IC EIRP Limit (dBm) | Max IC Power (dBm) | Power Limit (dBm) |
|---------|--------------------|--------------------------------|------------------------------|-----------------------------|-------------------------|
| Low | 5190 | 24.00 | 23.00 | 17.82 | 17.82 |
| High | 5230 | 24.00 | 23.00 | 17.82 | 17.82 |

Output Power Results

| Channel | Frequency (MHz) | Ant 1 Meas Power (dBm) | Ant 2 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---------|--------------------|---------------------------------|---------------------------------|-----------------------------------|-------------------------|-------------------------|
| Low | 5190 | 11.60 | 12.30 | 14.97 | 17.82 | -2.85 |
| High | 5230 | 12.19 | 11.24 | 14.75 | 17.82 | -3.07 |

Note 1: Average measurements taken gated.

Note 2: OBW measurements taken from radio module report. Manufacturer is responsible for providing this report upon request.

802.11ac VHT80

| | | | |
|------------|-------|--------------|------------|
| ID: | 40882 | Date: | 2020-07-14 |
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Bandwidth and Antenna Gain

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Min 99% BW (MHz) | Directional Gain for Power (dBi) |
|---------|--------------------|-----------------------------|---------------------------|---|
| Low | 5210 | 83.200 | 75.653 | 5.18 |

Limits

| Channel | Frequency (MHz) | FCC Power Limit (dBm) | IC EIRP Limit (dBm) | Max IC Power (dBm) | Power Limit (dBm) |
|---------|--------------------|--------------------------------|------------------------------|-----------------------------|-------------------------|
| Low | 5210 | 24.00 | 23.00 | 17.82 | 17.82 |

Output Power Results

| Channel | Frequency (MHz) | Ant 1 Meas Power (dBm) | Ant 2 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---------|--------------------|---------------------------------|---------------------------------|-----------------------------------|-------------------------|-------------------------|
| Low | 5210 | 11.01 | 11.75 | 14.41 | 17.82 | -3.41 |

Note 1: Average measurements taken gated.

Note 2: OBW measurements taken from radio module report. Manufacturer is responsible for providing this report upon request.

10.2. 5.3 BAND

802.11a

| | | | |
|------------|-------|--------------|------------|
| ID: | 40882 | Date: | 2020-07-14 |
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Bandwidth and Antenna Gain

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Min 99% BW (MHz) | Directional Gain (dBi) |
|---------|--------------------|-----------------------------|---------------------------|------------------------------|
| Low | 5260 | 32.36 | 16.71 | 5.18 |
| Mid | 5300 | 22.28 | 16.75 | 5.18 |
| High | 5320 | 22.28 | 16.71 | 5.18 |

Limits

| Channel | Frequency (MHz) | FCC Power Limit (dBm) | IC Power Limit (dBm) | IC EIRP Limit (dBm) | Power Limit (dBm) |
|---------|--------------------|--------------------------------|-------------------------------|------------------------------|-------------------------|
| Low | 5260 | 24.00 | 23.23 | 29.23 | 23.23 |
| Mid | 5300 | 24.00 | 23.24 | 29.24 | 23.24 |
| High | 5320 | 24.00 | 23.23 | 29.23 | 23.23 |

Output Power Results

| Channel | Frequency (MHz) | Ant 1 Meas power (dBm) | Ant 2 Meas power (dBm) | Power Limit (dBm) | Worst- Case Power Margin |
|---------|--------------------|---------------------------------|---------------------------------|----------------------|-----------------------------------|
| Low | 5260 | 17.16 | 17.45 | 23.23 | -5.78 |
| Mid | 5300 | 17.19 | 17.49 | 23.24 | -5.75 |
| High | 5320 | 17.10 | 17.45 | 23.23 | -5.78 |

Note 1: Average measurements taken gated.

Note 2: OBW measurements taken from radio module report. Manufacturer is responsible for providing this report upon request.

802.11n HT20

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|------------|-------|--------------|------------|
| ID: | 40882 | Date: | 2020-07-14 |
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Bandwidth and Antenna Gain

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Min 99% BW (MHz) | Directional Gain for Power (dBi) |
|---------|--------------------|-----------------------------|---------------------------|---|
| Low | 5260 | 28.04 | 17.856 | 5.18 |
| Mid | 5300 | 28.24 | 17.859 | 5.18 |
| High | 5320 | 29.40 | 17.860 | 5.18 |

Limits

| Channel | Frequency (MHz) | FCC Power Limit (dBm) | IC Power Limit (dBm) | IC EIRP Limit (dBm) | Power Limit (dBm) |
|---------|--------------------|--------------------------------|-------------------------------|------------------------------|-------------------------|
| Low | 5260 | 24.00 | 23.52 | 29.52 | 23.52 |
| Mid | 5300 | 24.00 | 23.52 | 29.52 | 23.52 |
| High | 5320 | 24.00 | 23.52 | 29.52 | 23.52 |

Output Power Results

| Channel | Frequency (MHz) | Ant 1 Meas Power (dBm) | Ant 2 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---------|--------------------|---------------------------------|---------------------------------|-----------------------------------|-------------------------|-------------------------|
| Low | 5260 | 16.07 | 16.38 | 19.24 | 23.52 | -4.28 |
| Mid | 5300 | 15.79 | 15.99 | 18.90 | 23.52 | -4.62 |
| High | 5320 | 15.91 | 15.92 | 18.93 | 23.52 | -4.59 |

Note 1: Average measurements taken gated.

Note 2: OBW measurements taken from radio module report. Manufacturer is responsible for providing this report upon request.

802.11n HT40

| | | | |
|------------|-------|--------------|------------|
| ID: | 40882 | Date: | 2020-07-14 |
|------------|-------|--------------|------------|

Bandwidth and Antenna Gain

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Min 99% BW (MHz) | Directional Gain for Power (dBi) |
|---------|--------------------|-----------------------------|---------------------------|---|
| Low | 5270 | 48.64 | 36.342 | 5.18 |
| High | 5310 | 40.32 | 36.116 | 5.18 |

Limits

| Channel | Frequency (MHz) | FCC Power Limit (dBm) | IC Power Limit (dBm) | IC EIRP Limit (dBm) | Power Limit (dBm) |
|---------|--------------------|--------------------------------|-------------------------------|------------------------------|-------------------------|
| Low | 5270 | 24.00 | 24.00 | 30.00 | 24.00 |
| High | 5310 | 24.00 | 24.00 | 30.00 | 24.00 |

Output Power Results

| Channel | Frequency (MHz) | Ant 1 Meas Power (dBm) | Ant 2 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---------|--------------------|---------------------------------|---------------------------------|-----------------------------------|-------------------------|-------------------------|
| Low | 5270 | 15.14 | 15.54 | 18.35 | 24.00 | -5.65 |
| High | 5310 | 15.29 | 15.52 | 18.42 | 24.00 | -5.58 |

Note 1: Average measurements taken gated.

Note 2: OBW measurements taken from radio module report. Manufacturer is responsible for providing this report upon request.

802.11ac VHT80

| | | | |
|------------|-------|--------------|------------|
| ID: | 40882 | Date: | 2020-07-14 |
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Bandwidth and Antenna Gain

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Min 99% BW (MHz) | Directional Gain for Power (dBi) |
|---------|--------------------|-----------------------------|---------------------------|---|
| Low | 5290 | 84.16 | 75.279 | 5.18 |

Limits

| Channel | Frequency (MHz) | FCC Power Limit (dBm) | IC Power Limit (dBm) | IC EIRP Limit (dBm) | Power Limit (dBm) |
|---------|--------------------|--------------------------------|-------------------------------|------------------------------|-------------------------|
| Low | 5290 | 24.00 | 24.00 | 30.00 | 24.00 |

Output Power Results

| Channel | Frequency (MHz) | Ant 1 Meas Power (dBm) | Ant 2 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---------|--------------------|---------------------------------|---------------------------------|-----------------------------------|-------------------------|-------------------------|
| Low | 5290 | 13.11 | 13.62 | 16.38 | 24.00 | -7.62 |

Note 1: Average measurements taken gated.

Note 2: OBW measurements taken from radio module report. Manufacturer is responsible for providing this report upon request.

10.3. 5.6 BAND

802.11a

| | | | |
|------------|-------|--------------|------------|
| ID: | 40882 | Date: | 2020-07-14 |
|------------|-------|--------------|------------|

Bandwidth and Antenna Gain

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Min 99% BW (MHz) | Directional Gain (dBi) |
|---------|--------------------|-----------------------------|---------------------------|------------------------------|
| Low | 5500 | 32.24 | 16.769 | 5.18 |
| Mid | 5580 | 36.76 | 16.867 | 5.18 |
| High | 5700 | 33.80 | 16.843 | 5.18 |

Limits

| Channel | Frequency (MHz) | FCC Power Limit (dBm) | IC Power Limit (dBm) | IC EIRP Limit (dBm) | Power Limit (dBm) |
|---------|--------------------|--------------------------------|-------------------------------|------------------------------|-------------------------|
| Low | 5500 | 24.00 | 23.24 | 29.24 | 23.24 |
| Mid | 5580 | 24.00 | 23.27 | 29.27 | 23.27 |
| High | 5700 | 24.00 | 23.26 | 29.26 | 23.26 |

Output Power Results

| Channel | Frequency (MHz) | Ant 1 Meas Power (dBm) | Ant 2 Meas Power (dBm) | Power Limit (dBm) | Worst- Case Margin (dB) |
|---------|--------------------|---------------------------------|---------------------------------|----------------------|----------------------------------|
| Low | 5500 | 17.20 | 17.63 | 23.24 | -5.61 |
| Mid | 5580 | 17.08 | 17.48 | 23.27 | -5.79 |
| High | 5700 | 15.01 | 15.79 | 23.26 | -7.47 |

Note 1: Average measurements taken gated.

Note 2: OBW measurements taken from radio module report. Manufacturer is responsible for providing this report upon request.

802.11n HT20

| | | | |
|------------|-------|--------------|------------|
| ID: | 40882 | Date: | 2020-07-14 |
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Bandwidth and Antenna Gain

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Min 99% BW (MHz) | Directional Gain for Power (dBi) |
|---------|--------------------|-----------------------------|---------------------------|---|
| Low | 5500 | 30.92 | 17.799 | 5.18 |
| Mid | 5580 | 33.36 | 17.867 | 5.18 |
| High | 5680 | 27.40 | 17.893 | 5.18 |
| High | 5700 | 27.40 | 17.893 | 5.18 |

Limits

| Channel | Frequency (MHz) | FCC Power Limit (dBm) | IC Power Limit (dBm) | IC EIRP Limit (dBm) | Power Limit (dBm) |
|---------|--------------------|--------------------------------|-------------------------------|------------------------------|-------------------------|
| Low | 5500 | 24.00 | 23.50 | 29.50 | 23.50 |
| Mid | 5580 | 24.00 | 23.52 | 29.52 | 23.52 |
| High | 5680 | 24.00 | 23.53 | 29.53 | 23.53 |
| High | 5700 | 24.00 | 23.53 | 29.53 | 23.53 |

Output Power Results

| Channel | Frequency (MHz) | Ant 1 Meas Power (dBm) | Ant 2 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---------|--------------------|---------------------------------|---------------------------------|-----------------------------------|-------------------------|-------------------------|
| Low | 5500 | 15.75 | 16.64 | 19.23 | 23.50 | -4.28 |
| Mid | 5580 | 16.14 | 16.65 | 19.41 | 23.52 | -4.11 |
| High | 5680 | 16.22 | 16.68 | 19.47 | 23.53 | -4.06 |
| High | 5700 | 12.05 | 12.10 | 15.09 | 23.53 | -8.44 |

Note 1: Average measurements taken gated.

Note 2: OBW measurements taken from radio module report. Manufacturer is responsible for providing this report upon request.

802.11n HT40

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|------------|-------|--------------|------------|
| ID: | 40882 | Date: | 2020-07-14 |
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Bandwidth and Antenna Gain

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Min 99% BW (MHz) | Directional Gain for Power (dBi) |
|---------|--------------------|-----------------------------|---------------------------|---|
| Low | 5510 | 40.48 | 36.394 | 5.18 |
| Low | 5550 | 40.48 | 36.394 | 5.18 |
| Mid | 5590 | 58.16 | 36.111 | 5.18 |
| High | 5670 | 76.24 | 36.127 | 5.18 |

Limits

| Channel | Frequency (MHz) | FCC Power Limit (dBm) | IC Power Limit (dBm) | IC EIRP Limit (dBm) | Power Limit (dBm) |
|---------|--------------------|--------------------------------|-------------------------------|------------------------------|-------------------------|
| Low | 5510 | 24.00 | 24.00 | 30.00 | 24.00 |
| Low | 5550 | 24.00 | 24.00 | 30.00 | 24.00 |
| Mid | 5590 | 24.00 | 24.00 | 30.00 | 24.00 |
| High | 5670 | 24.00 | 24.00 | 30.00 | 24.00 |

Output Power Results

| Channel | Frequency (MHz) | Ant 1 Meas Power (dBm) | Ant 2 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---------|--------------------|---------------------------------|---------------------------------|-----------------------------------|-------------------------|-------------------------|
| Low | 5510 | 14.21 | 14.39 | 17.31 | 24.00 | -6.69 |
| Low | 5550 | 13.89 | 14.03 | 16.97 | 24.00 | -7.03 |
| Mid | 5590 | 13.81 | 14.66 | 17.27 | 24.00 | -6.73 |
| High | 5670 | 14.37 | 14.68 | 17.54 | 24.00 | -6.46 |

Note 1: Average measurements taken gated.

Note 2: OBW measurements taken from radio module report. Manufacturer is responsible for providing this report upon request.

802.11ac VHT80

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|------------|-------|--------------|------------|
| ID: | 40882 | Date: | 2020-07-14 |
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Bandwidth and Antenna Gain

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Min 99% BW (MHz) | Directional Gain for Power (dBi) |
|---------|--------------------|-----------------------------|---------------------------|---|
| Low | 5530 | 84.320 | 75.962 | 5.18 |
| High | 5610 | 84.320 | 75.962 | 5.18 |

Limits

| Channel | Frequency (MHz) | FCC Power Limit (dBm) | IC Power Limit (dBm) | IC EIRP Limit (dBm) | Power Limit (dBm) |
|---------|--------------------|--------------------------------|-------------------------------|------------------------------|-------------------------|
| Low | 5530 | 24.00 | 24.00 | 30.00 | 24.00 |
| High | 5610 | 24.00 | 24.00 | 30.00 | 24.00 |

Output Power Results

| Channel | Frequency (MHz) | Ant 1 Meas Power (dBm) | Ant 2 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---------|--------------------|---------------------------------|---------------------------------|-----------------------------------|-------------------------|-------------------------|
| Low | 5530 | 11.24 | 12.17 | 14.74 | 24.00 | -9.26 |
| High | 5610 | 11.32 | 12.24 | 14.81 | 24.00 | -9.19 |

Note 1: Average measurements taken gated.

Note 2: OBW measurements taken from radio module report. Manufacturer is responsible for providing this report upon request.

10.4. 5.8 BAND

802.11a

| | | | |
|------------|-------|--------------|------------|
| ID: | 40882 | Date: | 2020-07-14 |
|------------|-------|--------------|------------|

Antenna Gain and Limit

| Channel | Frequency (MHz) | Directional Gain For Power (dBi) | Power Limit (dBm) |
|---------|--------------------|---|-------------------------|
| Low | 5745 | 5.18 | 30.00 |
| Mid | 5785 | 5.18 | 30.00 |
| High | 5825 | 5.18 | 30.00 |

Output Power Results

| Channel | Frequency (MHz) | Ant 1 Meas Power (dBm) | Ant 2 Meas Power (dBm) | Power Limit (dBm) | Worst-Case Margin (dB) |
|---------|--------------------|------------------------------|------------------------------|----------------------|---------------------------|
| Low | 5745 | 16.98 | 17.20 | 30.00 | -12.80 |
| Mid | 5785 | 17.21 | 17.59 | 30.00 | -12.41 |
| High | 5825 | 17.25 | 17.32 | 30.00 | -12.68 |

Note: Average measurements taken gated.

802.11n HT20

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| ID: | 40882 | Date: | 2020-07-14 |
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Antenna Gain and Limit

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Power Limit (dBm) |
|---------|--------------------|---|-------------------------|
| Low | 5745 | 5.18 | 30.00 |
| Mid | 5785 | 5.18 | 30.00 |
| High | 5825 | 5.18 | 30.00 |

Output Power Results

| Channel | Frequency (MHz) | Ant 1 Meas Power (dBm) | Ant 2 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---------|--------------------|------------------------------|------------------------------|-----------------------------------|-------------------------|-------------------------|
| Low | 5745 | 15.86 | 16.50 | 19.20 | 30.00 | -10.80 |
| Mid | 5785 | 15.34 | 16.68 | 19.07 | 30.00 | -10.93 |
| High | 5825 | 16.14 | 16.44 | 19.30 | 30.00 | -10.70 |

Note: Average measurements taken gated.

802.11n HT40

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|------------|-------|--------------|------------|
| ID: | 40882 | Date: | 2020-07-14 |
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Antenna Gain and Limit

| Channel | Frequency (MHz) | Directional Gain For Power (dBi) | Power Limit (dBm) |
|---------|--------------------|---|-------------------------|
| Low | 5755 | 5.18 | 30.00 |
| High | 5795 | 5.18 | 30.00 |

Output Power Results

| Channel | Frequency (MHz) | Ant 1 Meas Power (dBm) | Ant 2 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---------|--------------------|---------------------------------|---------------------------------|-----------------------------------|-------------------------|-------------------------|
| Low | 5755 | 14.53 | 14.99 | 17.78 | 30.00 | -12.22 |
| High | 5795 | 15.37 | 15.50 | 18.45 | 30.00 | -11.55 |

Note: Average measurements taken gated.

802.11ac VHT80

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|------------|-------|--------------|------------|
| ID: | 40882 | Date: | 2020-07-14 |
|------------|-------|--------------|------------|

Antenna Gain and Limit

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Power Limit (dBm) |
|---------|--------------------|---|-------------------------|
| Mid | 5775 | 5.18 | 30.00 |

Output Power Results

| Channel | Frequency (MHz) | Ant 1 Meas Power (dBm) | Ant 2 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---------|--------------------|---------------------------------|---------------------------------|-----------------------------------|-------------------------|-------------------------|
| Mid | 5775 | 11.84 | 12.90 | 15.41 | 30.00 | -14.59 |

Note: Average measurements taken gated.

11. ON TIME AND DUTY CYCLE

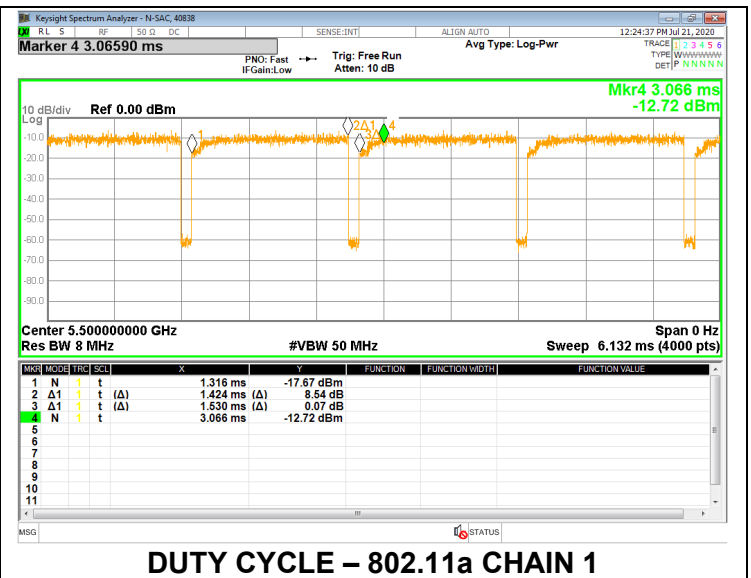
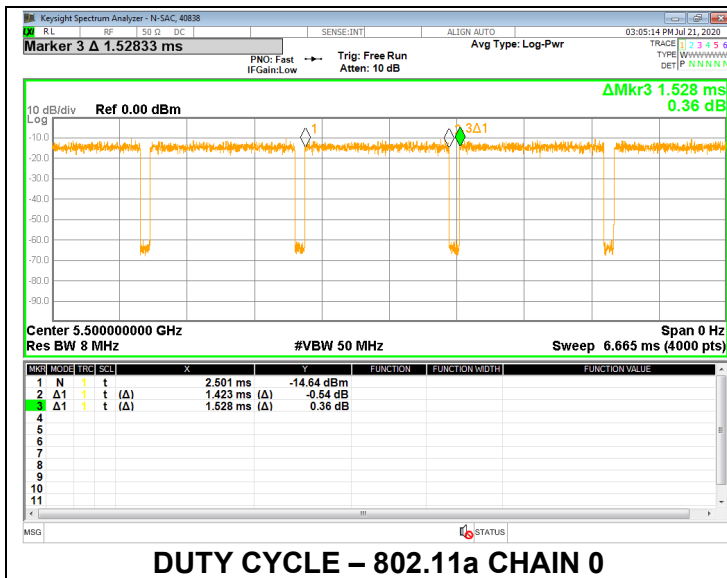
LIMITS

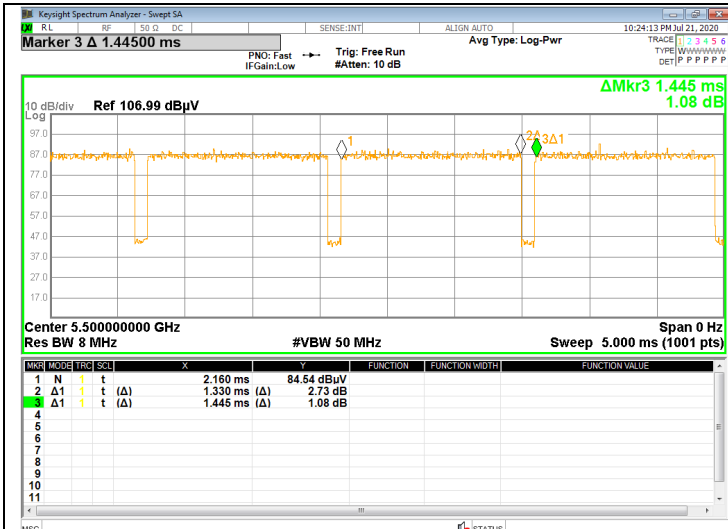
None; for reporting purposes only.

PROCEDURE

ANSI C63.10 Zero-Span Spectrum Analyzer Method.

| Mode | ON Time B (msec) | Period (msec) | Duty Cycle x (linear) | Duty Cycle (%) | Duty Cycle Correction Factor (dB) |
|---------------------|------------------------|------------------|-----------------------------|----------------------|---|
| 2.4GHz Band | | | | | |
| 802.11a chain 0 | 1.423 | 1.528 | 0.931 | 93.13% | 0.62 |
| 802.11a chain 1 | 1.424 | 1.530 | 0.931 | 93.07% | 0.62 |
| 802.11n HT20 MIMO | 1.330 | 1.445 | 0.920 | 92.04% | 0.72 |
| 802.11n HT40 MIMO | 0.657 | 0.765 | 0.859 | 85.88% | 1.32 |
| 802.11ac VHT80 MIMO | 0.191 | 0.293 | 0.652 | 65.21% | 3.71 |

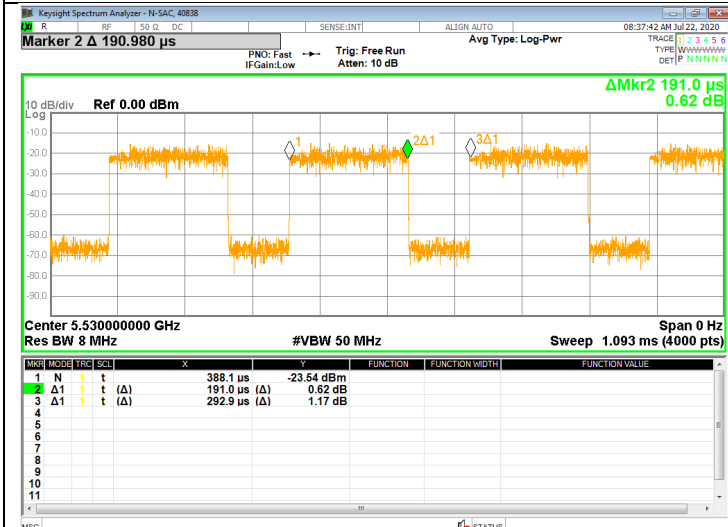




DUTY CYCLE – 802.11nHT20 MIMO



DUTY CYCLE – 802.11n HT40 MIMO



DUTY CYCLE – 802.11ac VHT80 MIMO

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12. RADIATED TEST RESULTS

LIMITS

FCC §15.205 and §15.209 - Restricted bands
FCC §15.407(b)(1-3) - Unrestricted bands

After January 01, 2019 for Outside of the Restricted Bands Emissions

RSS 247 Issue 2 Sections
6.2.1.2 (for 5150-5250 MHz band)
6.2.2.2 (for 5250-5350 MHz band)
6.2.3.2 (for 5470-5600 MHz and 5650-5725 MHz bands)
6.2.4.2 (for 5725-5850 MHz band)

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

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for measurement below 1GHz; 1.5 m above the ground plane for measurement above 1GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements in the 30-1000MHz range, 9kHz for peak and/or quasi-peak detection measurements in the 0.15-30MHz range and 200Hz for peak and/or quasi-peak detection measurements in the 9 to 150kHz range. Peak detection is used unless otherwise noted as quasi-peak.

For pre-scans above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 30 KHz for peak measurements.

For final measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and as applicable for voltage average measurements.

The spectrum from 1 GHz to 18 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band. Below 1GHz and above 18GHz emissions, the channel with the highest output power was tested.

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

3D antenna use - For below 30MHz testing, investigation was done on three antenna orientations (parallel, perpendicular, and ground-parallel).

Base on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.

KDB 414788 Open Field Site(OFS) and Chamber Correlation Justification

OFS and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

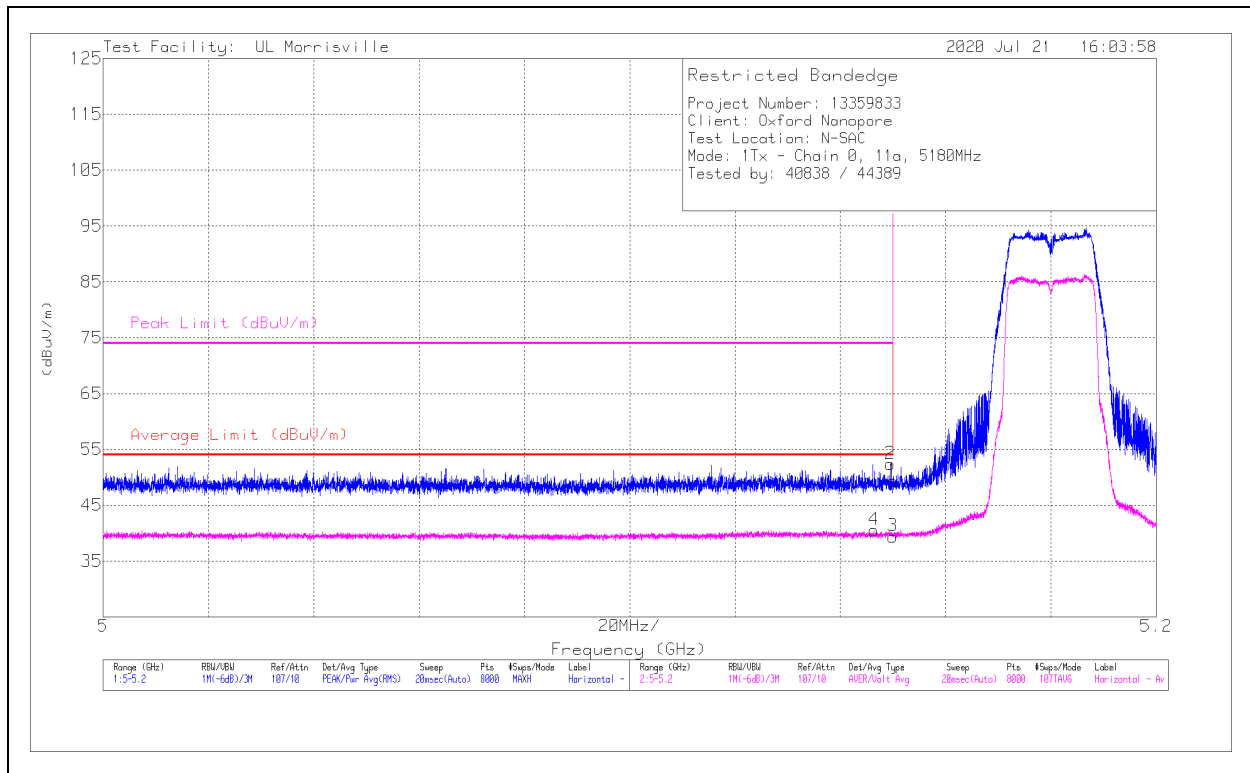
12.1. TRANSMITTER ABOVE 1 GHz

12.1.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.2 GHz BAND

1TX ANTENNA 1 MODE

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB/(m) | Amp/Cbl/Filtr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|------------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | *** 5.14999 | 36.82 | Pk | 34.2 | -21.7 | 0 | 49.32 | - | - | 74 | -24.68 | 357 | 325 | H |
| 2 | *** 5.14944 | 39.86 | Pk | 34.2 | -21.7 | 0 | 52.36 | - | - | 74 | -21.64 | 357 | 325 | H |
| 3 | *** 5.14999 | 26.3 | ADV | 34.2 | -21.7 | .62 | 39.42 | 54 | -14.58 | - | - | 357 | 325 | H |
| 4 | *** 5.14639 | 27.4 | ADV | 34.2 | -21.7 | .62 | 40.52 | 54 | -13.48 | - | - | 357 | 325 | H |

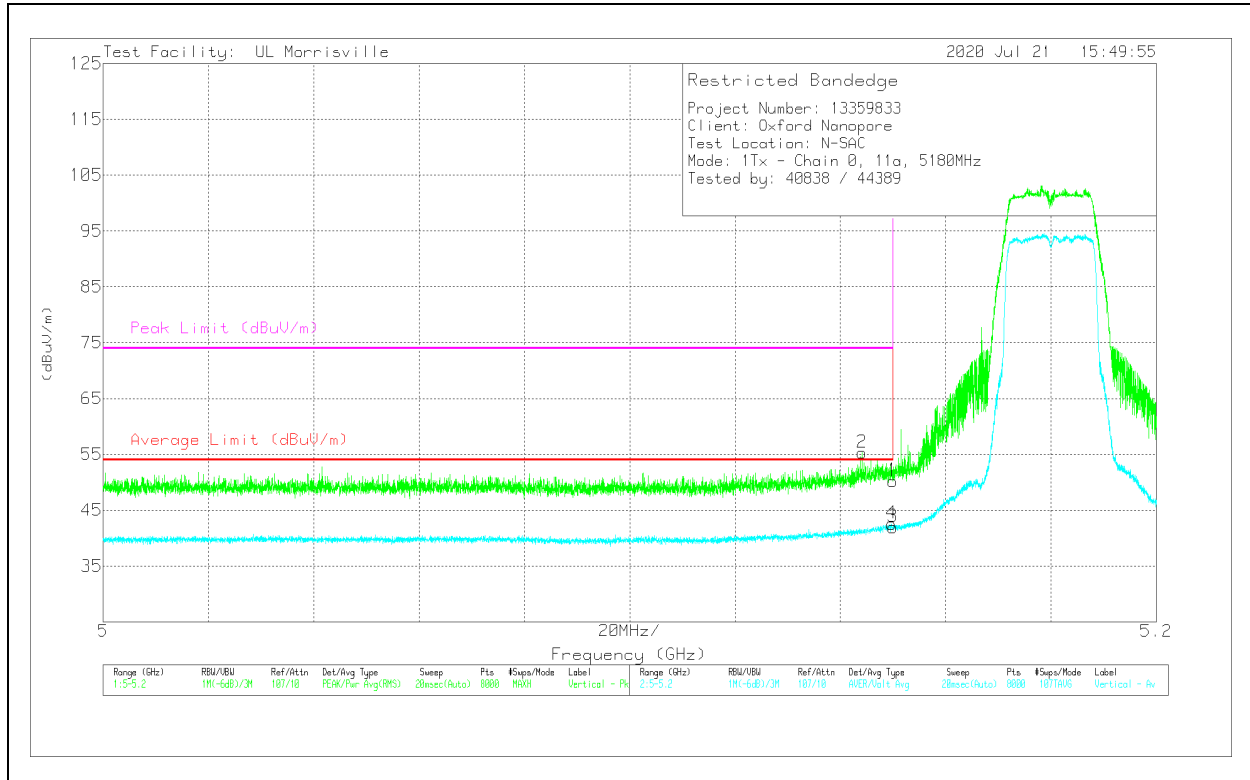
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

ADV - Linear Voltage Average

VERTICAL RESULT

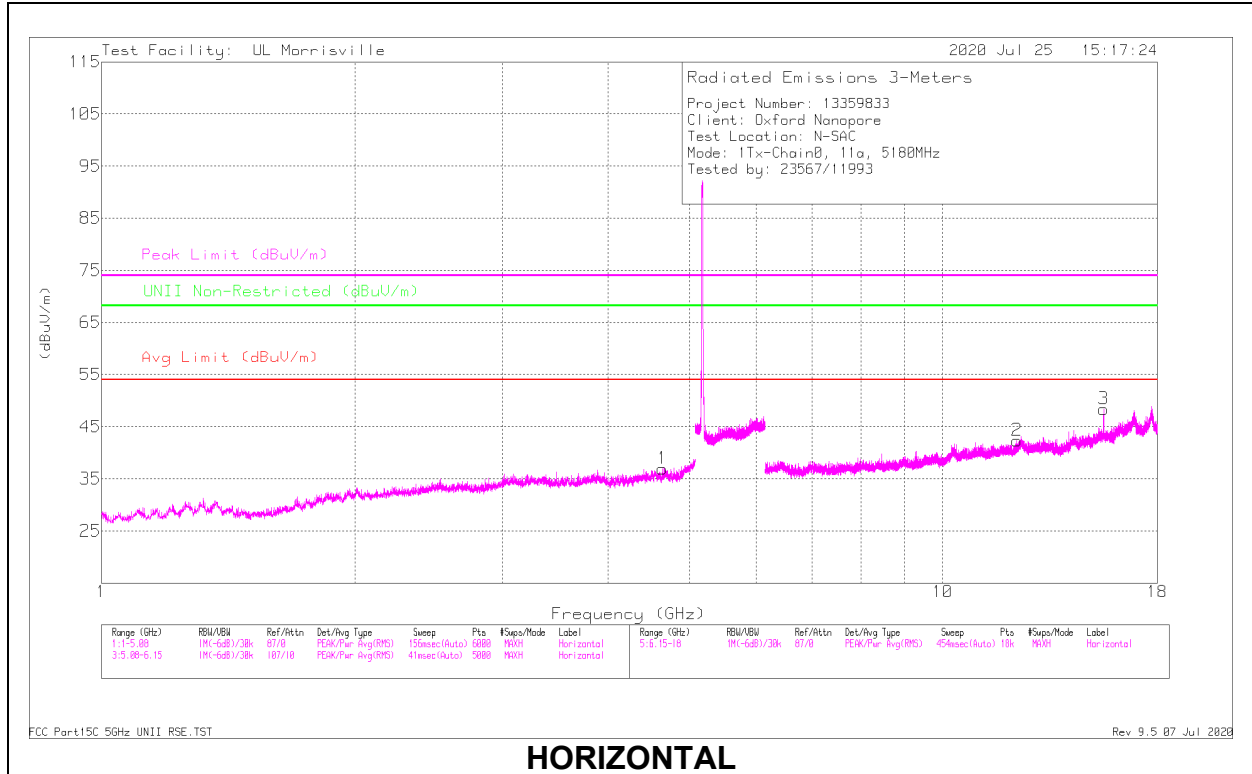


| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB/(m) | Amp/Cbl/Filtr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|------------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | *** 5.14999 | 37.74 | Pk | 34.2 | -21.7 | 0 | 50.24 | - | - | 74 | -23.76 | 70 | 349 | V |
| 2 | *** 5.14414 | 42.79 | Pk | 34.2 | -21.7 | 0 | 55.29 | - | - | 74 | -18.71 | 70 | 349 | V |
| 3 | *** 5.14999 | 28.87 | ADV | 34.2 | -21.7 | .62 | 41.99 | 54 | -12.01 | - | - | 70 | 349 | V |
| 4 | *** 5.14974 | 29.47 | ADV | 34.2 | -21.7 | .62 | 42.59 | 54 | -11.41 | - | - | 70 | 349 | V |

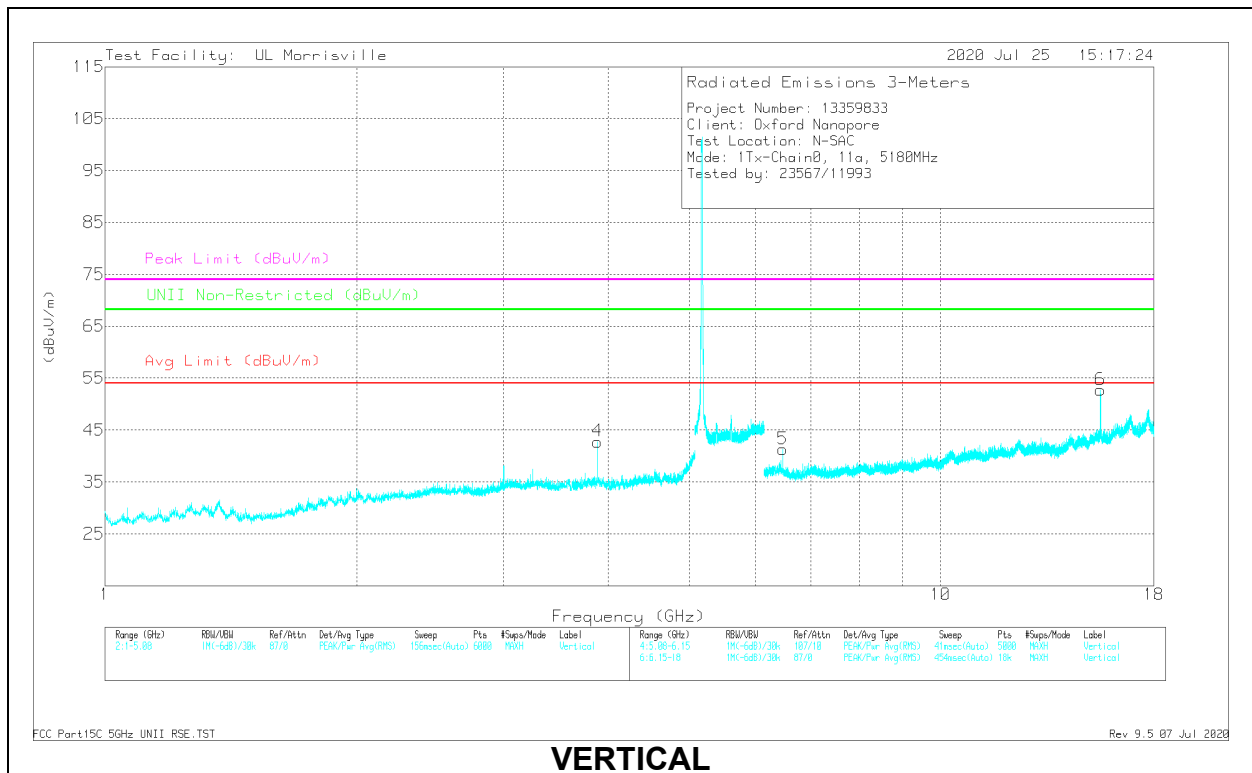
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 ** - indicates frequency in Taiwan NCC LP0002 Restricted Band
 Pk - Peak detector
 ADV - Linear Voltage Average

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



HORIZONTAL



VERTICAL

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB(/m) | Amp/Cbl/Filtr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|---------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | * ** 4.64213 | 39.39 | PK-U | 34.2 | -30.8 | 0 | 42.79 | - | - | 74 | -31.21 | - | - | 3 | 298 | H |
| | * ** 4.64237 | 26.51 | ADV | 34.2 | -30.8 | .62 | 30.53 | 54 | -23.47 | - | - | - | - | 3 | 298 | H |
| 4 | * ** 3.88483 | 46.93 | PK-U | 33.6 | -32.1 | 0 | 48.43 | - | - | 74 | -25.57 | - | - | 282 | 105 | V |
| | * ** 3.88497 | 40.58 | ADV | 33.6 | -32.1 | .62 | 42.7 | 54 | -11.3 | - | - | - | - | 282 | 105 | V |
| 2 | * ** 12.25753 | 35.77 | PK-U | 38.9 | -25.8 | 0 | 48.87 | - | - | 74 | -25.13 | - | - | 119 | 273 | H |
| | * ** 12.25844 | 22.73 | ADV | 38.9 | -25.8 | .62 | 36.45 | 54 | -17.55 | - | - | - | - | 119 | 273 | H |
| 3 | * ** 15.54116 | 43.12 | PK-U | 40.1 | -24.4 | 0 | 58.82 | - | - | 74 | -15.18 | - | - | 309 | 108 | H |
| | * ** 15.54253 | 28.12 | ADV | 40.1 | -24.4 | .62 | 44.44 | 54 | -9.56 | - | - | - | - | 309 | 108 | H |
| 6 | * ** 15.5387 | 43.91 | PK-U | 40.1 | -24.3 | 0 | 59.71 | - | - | 74 | -14.29 | - | - | 347 | 101 | V |
| | * ** 15.53966 | 29.68 | ADV | 40.1 | -24.3 | .62 | 46.1 | 54 | -7.9 | - | - | - | - | 347 | 101 | V |
| 5 | 6.47498 | 40.66 | PK-U | 35.5 | -29.3 | 0 | 46.86 | - | - | - | - | 68.2 | -21.34 | 279 | 103 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

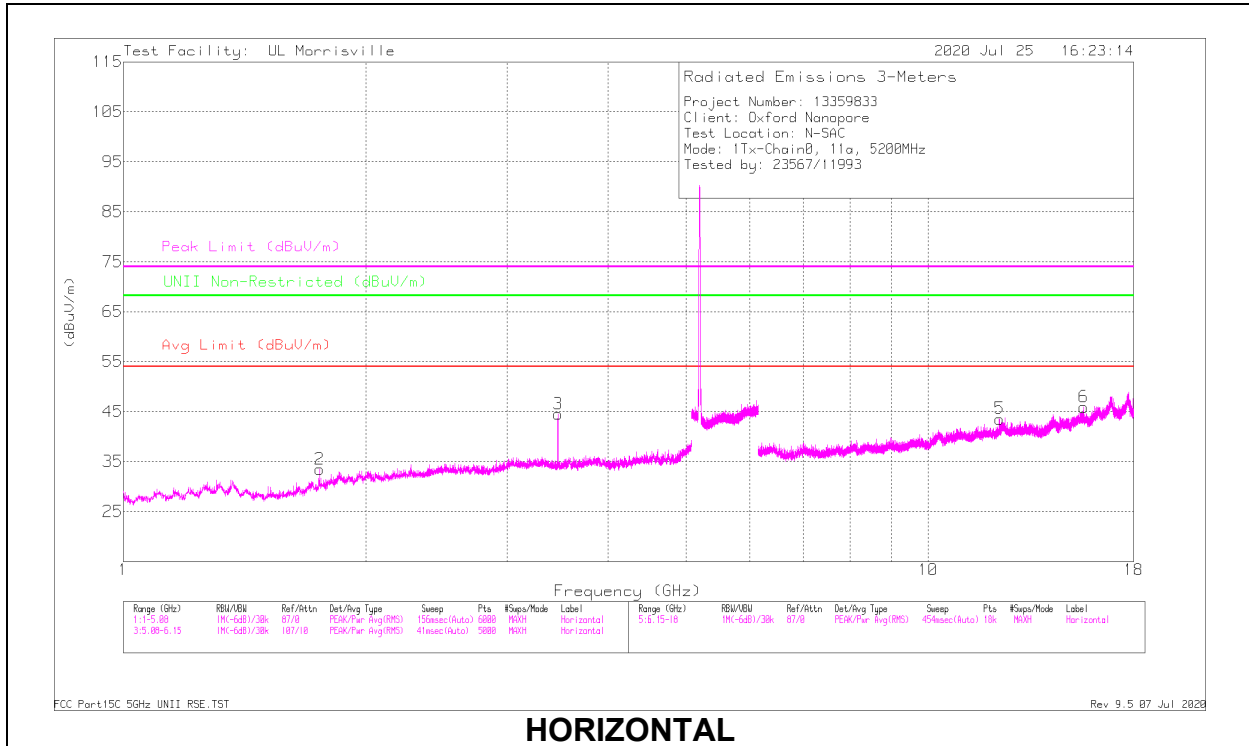
** - indicates frequency in Taiwan NCC LP0002 Restricted Band

PK-U - Maximum Peak

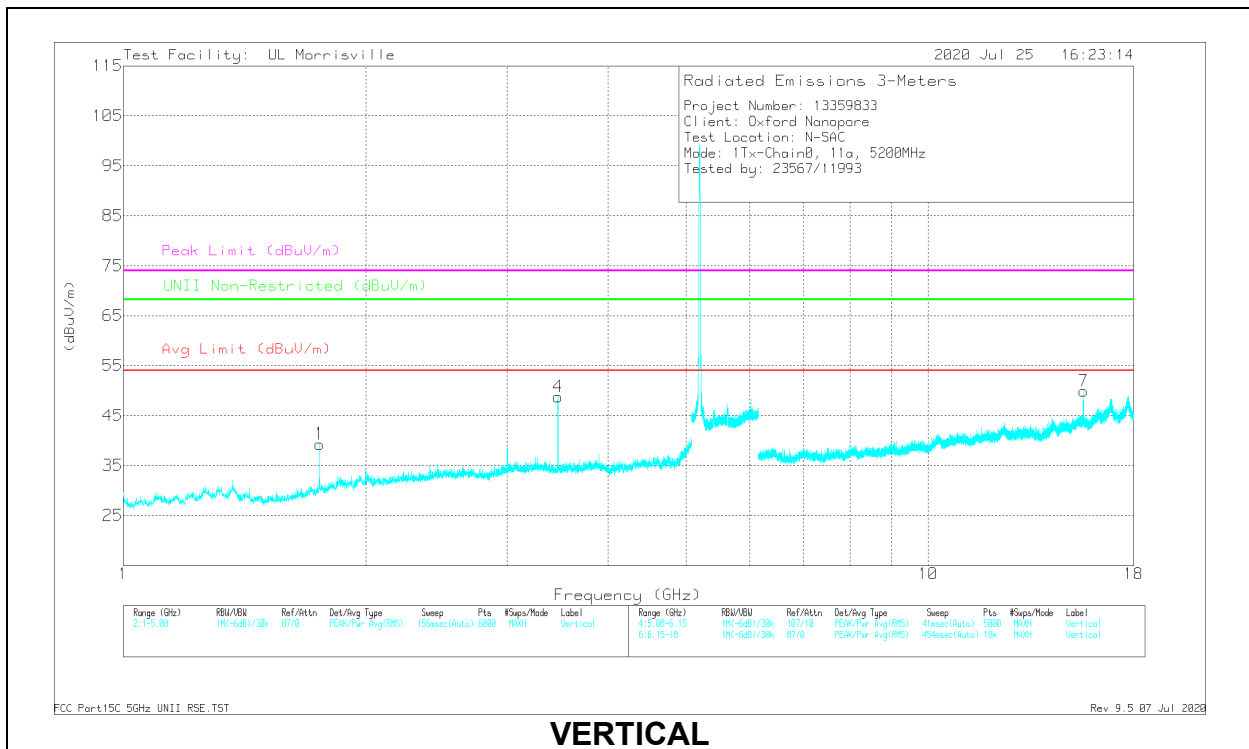
ADV - Linear Voltage Average

Pk - Peak detector

MID CHANNEL RESULTS



HORIZONTAL

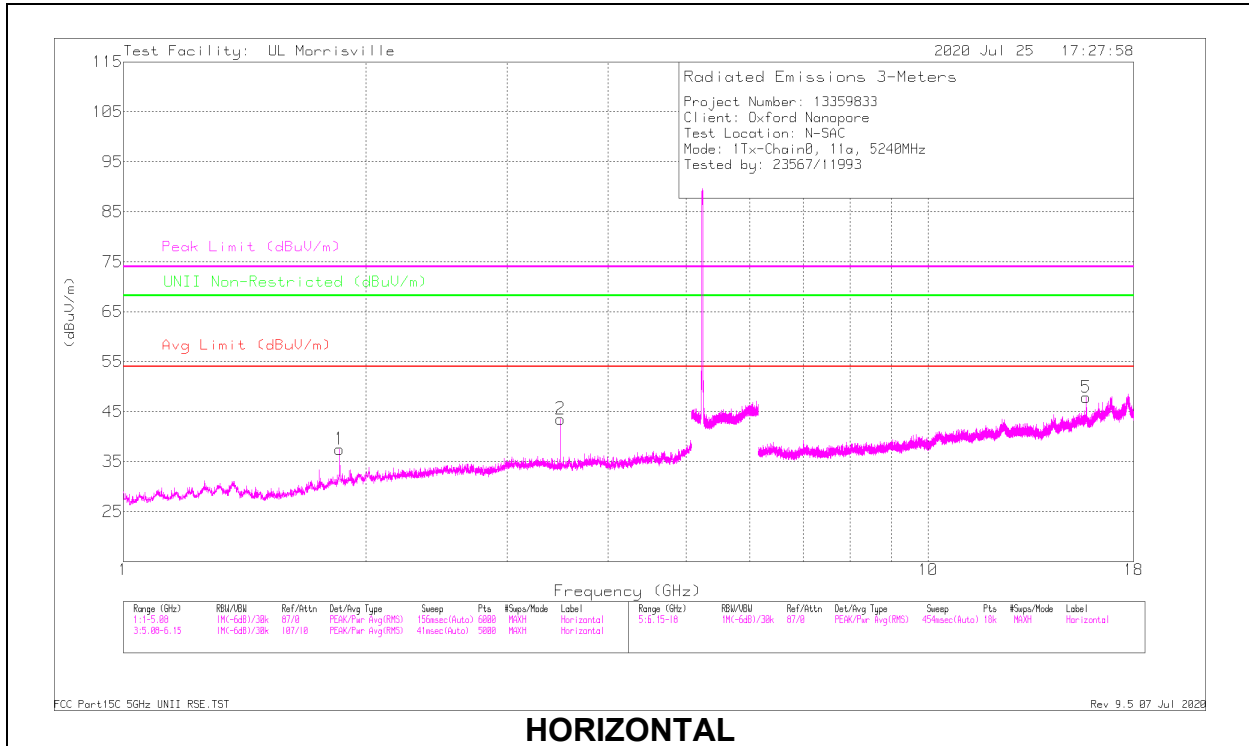


VERTICAL

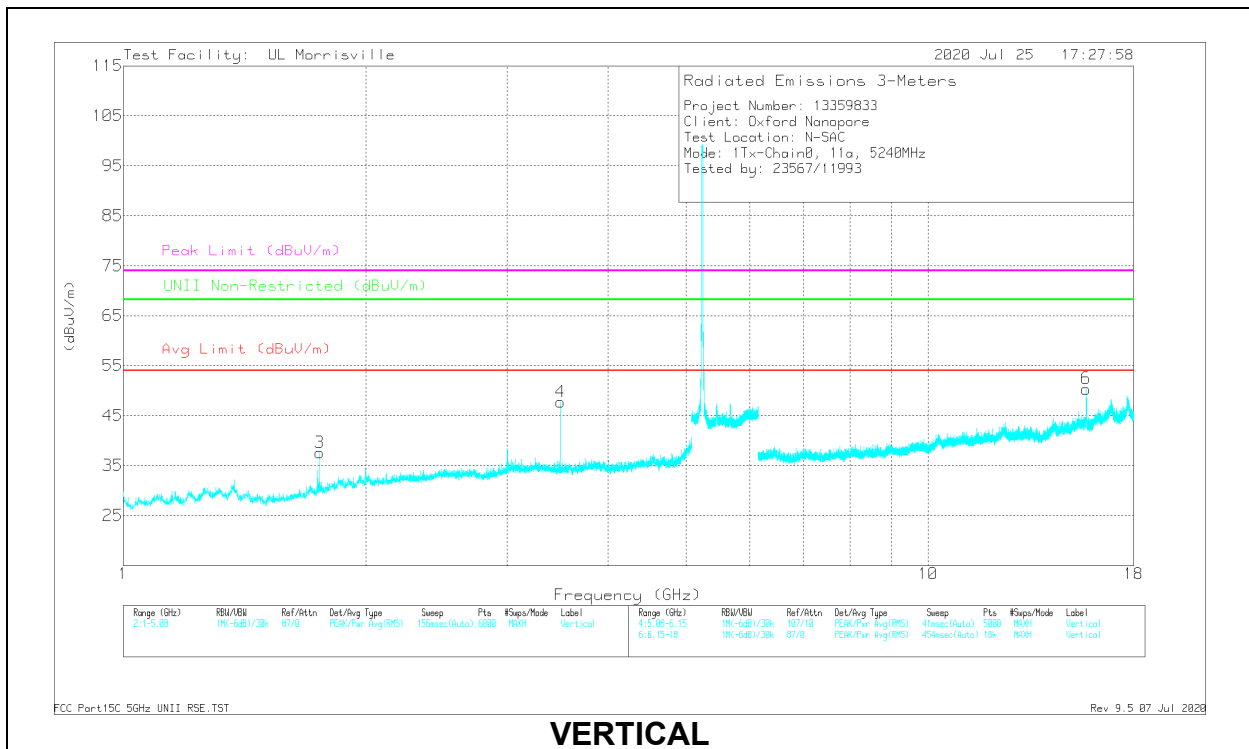
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB/(m) | Amp/Cbl/Filtr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|---------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 2 | ** 1.75341 | 43.09 | PK-U | 29.6 | -35 | 0 | 37.69 | - | - | 74 | -36.31 | 68.2 | -30.51 | 168 | 361 | H |
| | ** 1.75209 | 30.36 | ADV | 29.7 | -35 | .62 | 25.68 | 54 | -28.32 | - | - | - | - | 168 | 361 | H |
| 1 | ** 1.75339 | 45.29 | PK-U | 29.6 | -35 | 0 | 39.89 | - | - | 74 | -34.11 | 68.2 | -28.31 | 75 | 227 | V |
| | ** 1.74989 | 30.46 | ADV | 29.6 | -35 | .62 | 25.68 | 54 | -28.32 | - | - | - | - | 75 | 227 | V |
| 5 | ** 12.2719 | 36.74 | PK-U | 38.9 | -25.9 | 0 | 49.74 | - | - | 74 | -24.26 | - | - | 22 | 393 | H |
| | ** 12.27185 | 22.86 | ADV | 38.9 | -25.9 | .62 | 36.48 | 54 | -17.52 | - | - | - | - | 22 | 393 | H |
| 6 | ** 15.60489 | 40.04 | PK-U | 40.2 | -26.1 | 0 | 54.14 | - | - | 74 | -19.86 | - | - | 294 | 104 | H |
| | ** 15.60502 | 26.45 | ADV | 40.2 | -26.1 | .62 | 41.17 | 54 | -12.83 | - | - | - | - | 294 | 104 | H |
| 7 | ** 15.60309 | 45.9 | PK-U | 40.2 | -26.1 | 0 | 60 | - | - | 74 | -14 | - | - | 350 | 103 | V |
| | ** 15.60308 | 29.95 | ADV | 40.2 | -26.1 | .62 | 44.67 | 54 | -9.33 | - | - | - | - | 350 | 103 | V |
| 3 | 3.46664 | 48.67 | PK-U | 32.9 | -32.8 | 0 | 48.77 | - | - | - | - | 68.2 | -19.43 | 324 | 121 | H |
| 4 | 3.46669 | 51.55 | PK-U | 32.9 | -32.8 | 0 | 51.65 | - | - | - | - | 68.2 | -16.55 | 354 | 105 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 ** - indicates frequency in Taiwan NCC LP0002 Restricted Band
 PK-U - Maximum Peak
 ADV - Linear Voltage Average
 PK - Peak detector

HIGH CHANNEL RESULTS



HORIZONTAL



VERTICAL

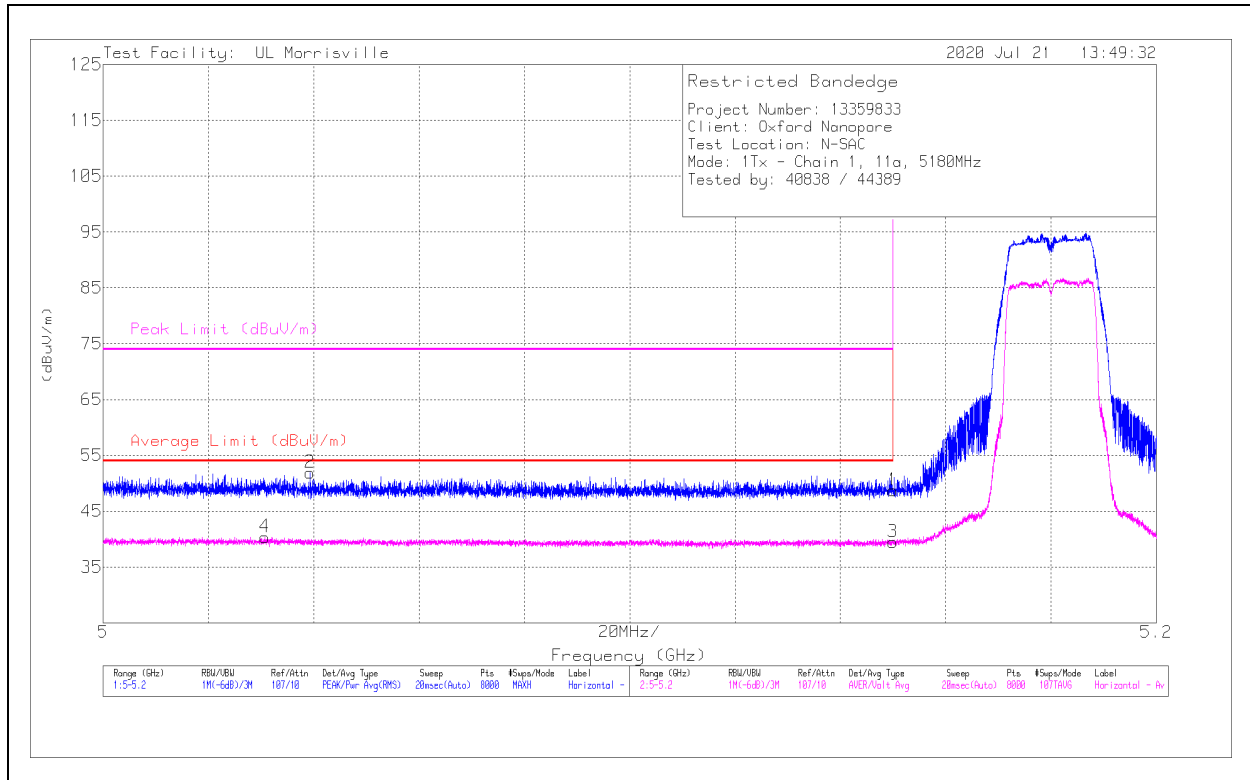
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB(/m) | Amp/Cbl/Filtr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|---------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | ** 1.85645 | 50.39 | PK-U | 31 | -35 | 0 | 46.39 | - | - | 74 | -27.61 | 68.2 | -21.81 | 283 | 394 | H |
| | ** 1.85579 | 30.95 | ADV | 31 | -35 | .62 | 27.57 | 54 | -26.43 | - | - | - | - | 283 | 394 | H |
| 3 | ** 1.75329 | 43.14 | PK-U | 29.6 | -35 | 0 | 37.74 | - | - | 74 | -36.26 | 68.2 | -30.46 | 17 | 303 | V |
| | ** 1.753 | 30.28 | ADV | 29.6 | -35 | .62 | 25.5 | 54 | -28.5 | - | - | - | - | 17 | 303 | V |
| 5 | *** 15.72299 | 43.08 | PK-U | 40.1 | -24.8 | 0 | 58.38 | - | - | 74 | -15.62 | - | - | 321 | 252 | H |
| | *** 15.7221 | 27.21 | ADV | 40.1 | -24.8 | .62 | 43.13 | 54 | -10.87 | - | - | - | - | 321 | 252 | H |
| 6 | *** 15.71386 | 42.42 | PK-U | 40.1 | -24.9 | 0 | 57.62 | - | - | 74 | -16.38 | - | - | 297 | 103 | V |
| | *** 15.71408 | 27.56 | ADV | 40.1 | -24.9 | .62 | 43.38 | 54 | -10.62 | - | - | - | - | 297 | 103 | V |
| 4 | 3.4933 | 50.52 | PK-U | 32.9 | -32.8 | 0 | 50.62 | - | - | - | - | 68.2 | -17.58 | 353 | 233 | V |
| 2 | 3.49331 | 47.51 | PK-U | 32.9 | -32.8 | 0 | 47.61 | - | - | - | - | 68.2 | -20.59 | 325 | 118 | H |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 ** - indicates frequency in Taiwan NCC LP0002 Restricted Band
 PK-U - Maximum Peak
 ADV - Linear Voltage Average
 Pk - Peak detector

1TX ANTENNA 2 MODE

BANDEDGE (LOW CHANNEL)

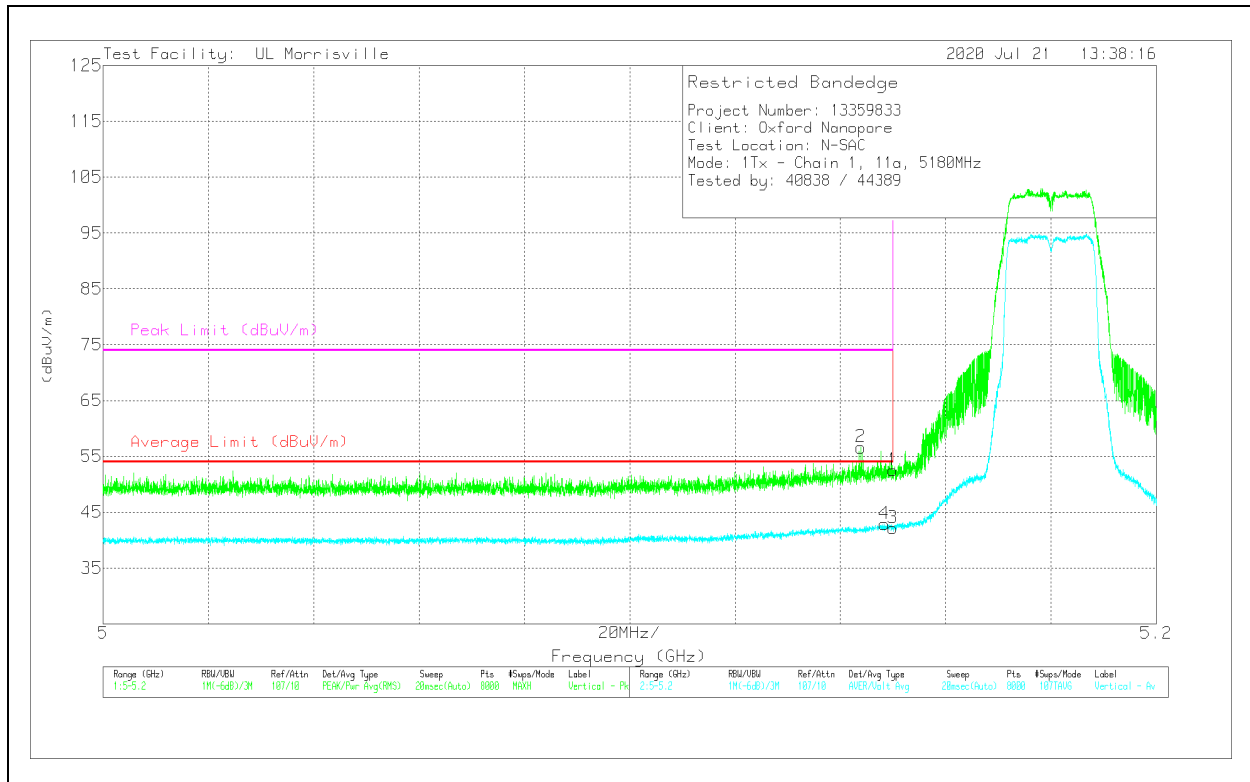
HORIZONTAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB/(m) | Amp/Cbl/Filtr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|------------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | *** 5.14999 | 36.23 | Pk | 34.2 | -21.7 | 0 | 48.73 | - | - | 74 | -25.27 | 237 | 118 | H |
| 2 | *** 5.03933 | 39.18 | Pk | 34.1 | -21.4 | 0 | 51.88 | - | - | 74 | -22.12 | 237 | 118 | H |
| 3 | *** 5.14999 | 26.35 | ADV | 34.2 | -21.7 | .62 | 39.47 | 54 | -14.53 | - | - | 237 | 118 | H |
| 4 | *** 5.03068 | 26.92 | ADV | 34.1 | -21.3 | .62 | 40.34 | 54 | -13.66 | - | - | 237 | 118 | H |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 ** - indicates frequency in Taiwan NCC LP0002 Restricted Band
 Pk - Peak detector
 ADV - Linear Voltage Average

VERTICAL RESULT

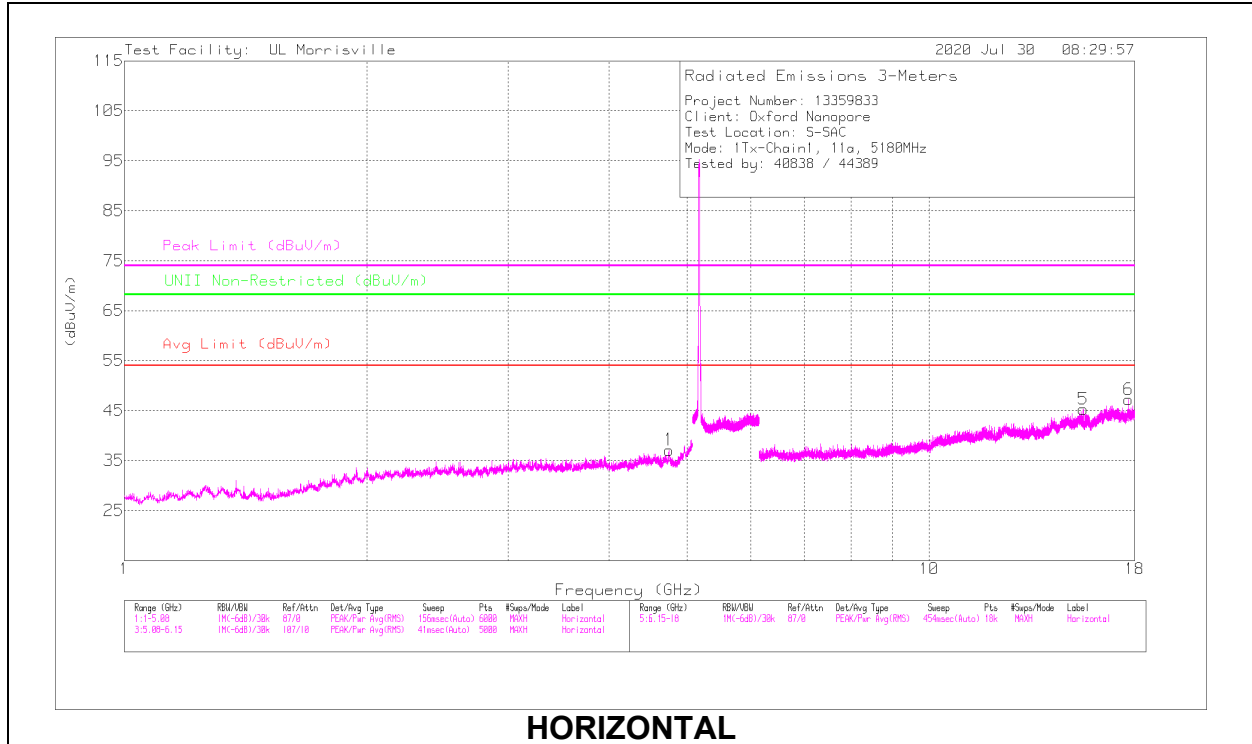


| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB/(m) | Amp/Cbl/Filtr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|------------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | *** 5.14999 | 40 | Pk | 34.2 | -21.7 | 0 | 52.5 | - | - | 74 | -21.5 | 23 | 149 | V |
| 2 | *** 5.14392 | 44.11 | Pk | 34.2 | -21.7 | 0 | 56.61 | - | - | 74 | -17.39 | 23 | 149 | V |
| 3 | *** 5.14999 | 29.02 | ADV | 34.2 | -21.7 | .62 | 42.14 | 54 | -11.86 | - | - | 23 | 149 | V |
| 4 | *** 5.14834 | 29.75 | ADV | 34.2 | -21.7 | .62 | 42.87 | 54 | -11.13 | - | - | 23 | 149 | V |

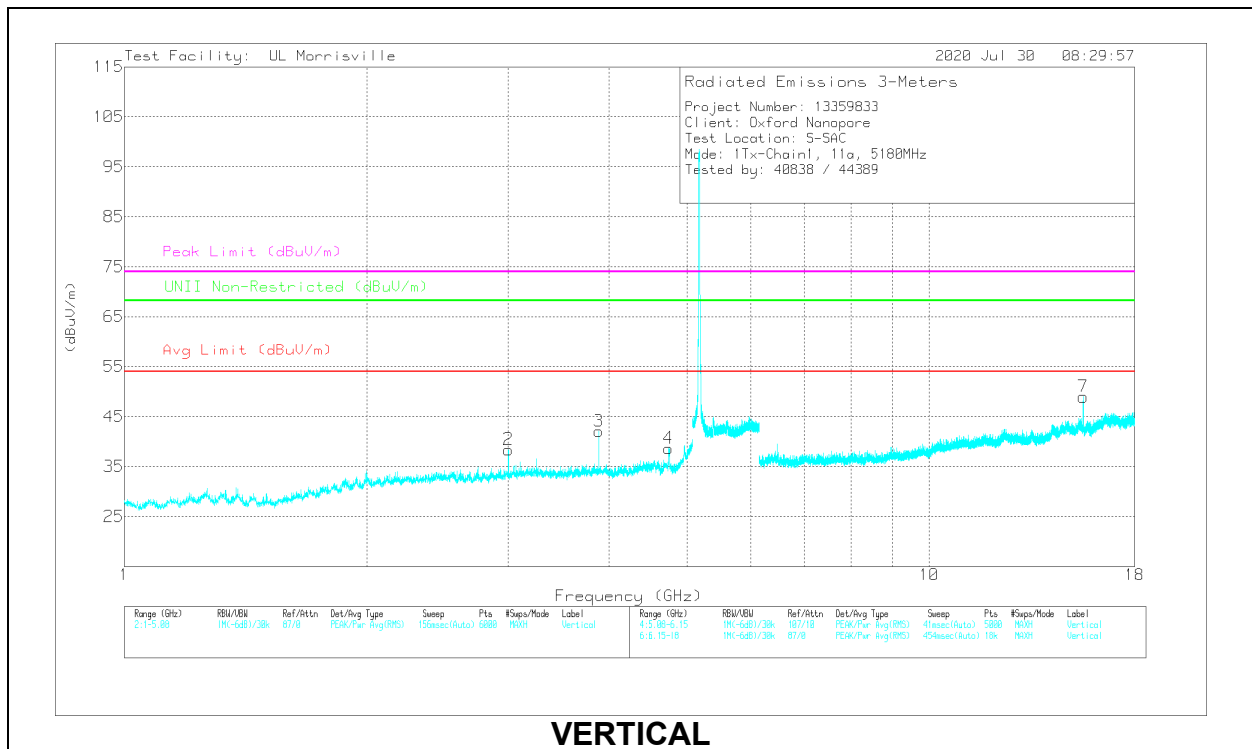
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 ** - indicates frequency in Taiwan NCC LP0002 Restricted Band
 Pk - Peak detector
 ADV - Linear Voltage Average

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



HORIZONTAL

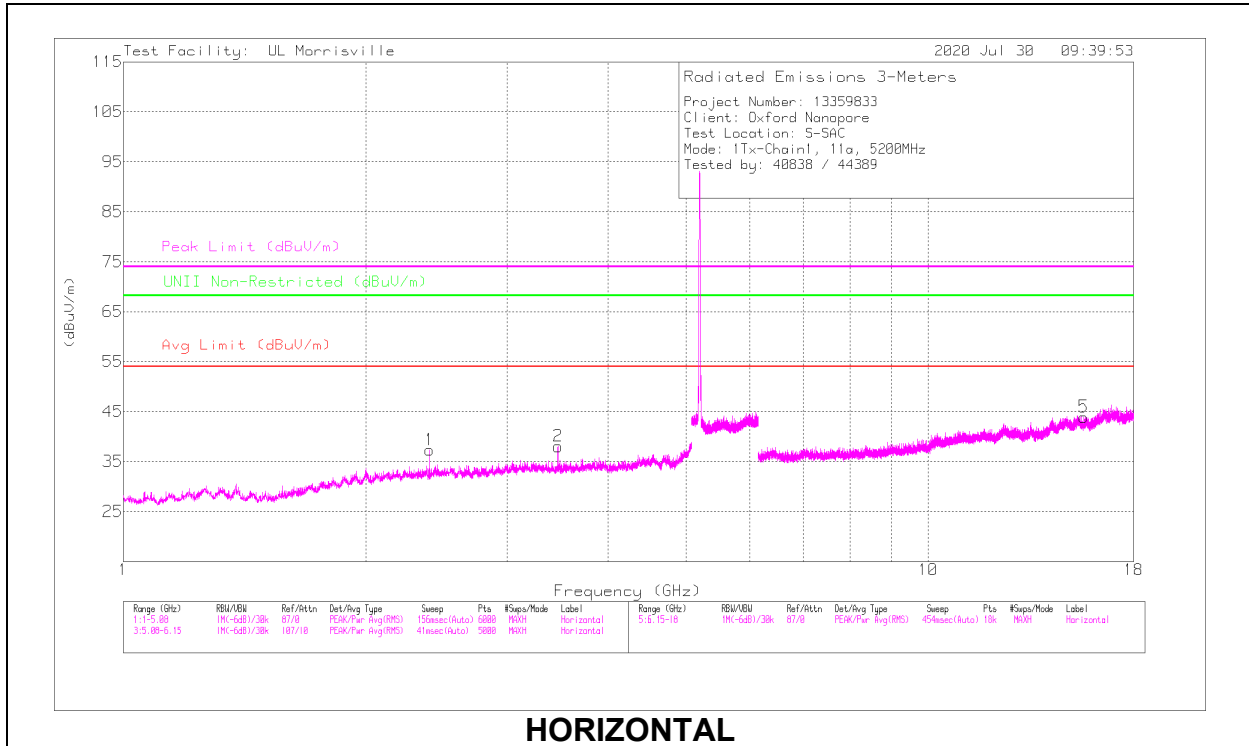


VERTICAL

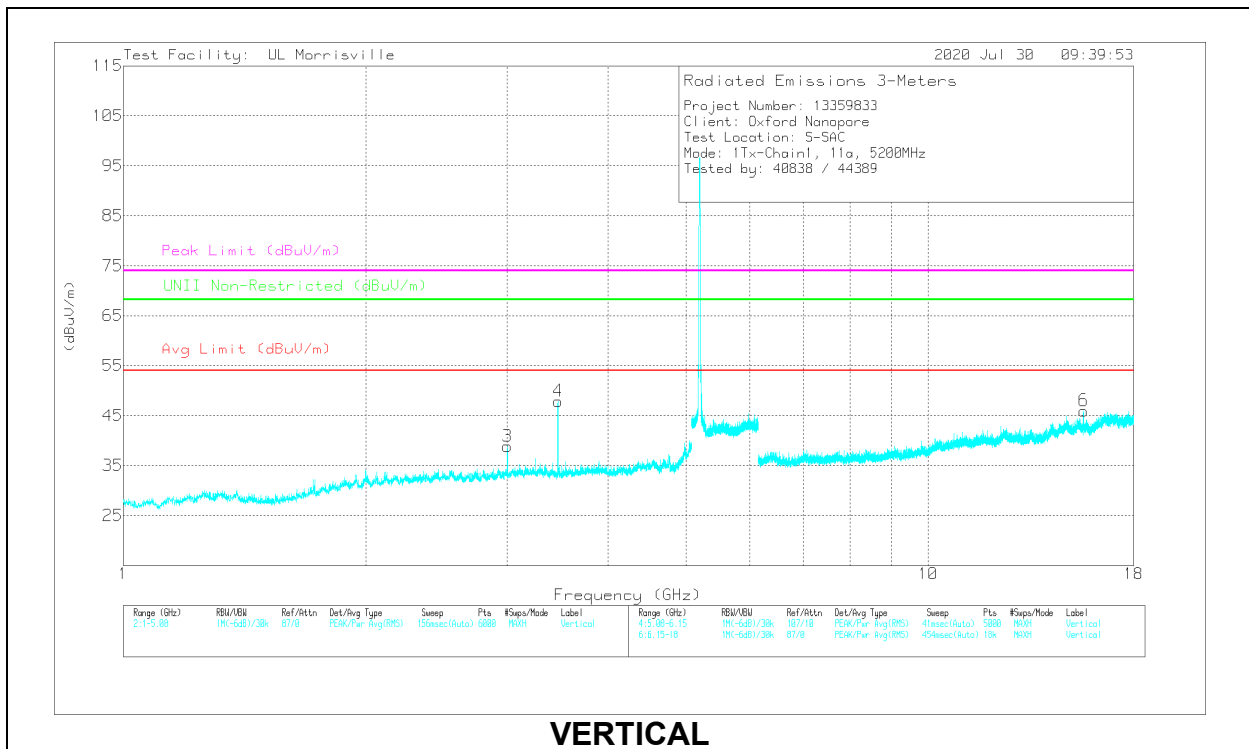
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0067 (dB/m) | Amp/Cbl/fltr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|---------------|-----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | * ** 4.75017 | 42.18 | PK-U | 34.1 | -31.3 | 0 | 44.98 | - | - | 74 | -29.02 | - | - | 343 | 330 | H |
| | * ** 4.7503 | 28.8 | ADV | 34.1 | -31.3 | .62 | 32.22 | 54 | -21.78 | - | - | - | - | 343 | 330 | H |
| 3 | * ** 3.88502 | 44.85 | PK-U | 33.4 | -32.5 | 0 | 45.75 | - | - | 74 | -28.25 | - | - | 80 | 256 | V |
| | * ** 3.88494 | 29.84 | ADV | 33.4 | -32.5 | .62 | 31.36 | 54 | -22.64 | - | - | - | - | 80 | 256 | V |
| 4 | * ** 4.74661 | 44.04 | PK-U | 34.1 | -31.3 | 0 | 46.84 | - | - | 74 | -27.16 | - | - | 282 | 268 | V |
| | * ** 4.74594 | 31.76 | ADV | 34.1 | -31.3 | .62 | 35.18 | 54 | -18.82 | - | - | - | - | 282 | 268 | V |
| 5 | * ** 15.54035 | 38.79 | PK-U | 40.3 | -25.1 | 0 | 53.99 | - | - | 74 | -20.01 | - | - | 36 | 233 | H |
| | * ** 15.54033 | 25.31 | ADV | 40.3 | -25.1 | .62 | 41.13 | 54 | -12.87 | - | - | - | - | 36 | 233 | H |
| 7 | * ** 15.54292 | 43.05 | PK-U | 40.3 | -25.1 | 0 | 58.25 | - | - | 74 | -15.75 | - | - | 10 | 186 | V |
| | * ** 15.54336 | 27.37 | ADV | 40.3 | -25.1 | .62 | 43.19 | 54 | -10.81 | - | - | - | - | 10 | 186 | V |
| 2 | 2.99993 | 45.2 | PK-U | 32.9 | -33.6 | 0 | 44.5 | - | - | - | - | 68.2 | -23.7 | 335 | 249 | V |
| 6 | 17.69992 | 33.54 | PK-U | 41.1 | -22.7 | 0 | 51.94 | - | - | - | - | 68.2 | -16.26 | 88 | 339 | H |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 ** - indicates frequency in Taiwan NCC LP0002 Restricted Band
 PK-U - Maximum Peak
 ADV - Linear Voltage Average

MID CHANNEL RESULTS



HORIZONTAL



VERTICAL

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0067 (dB/m) | Amp/Cbl/fltr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|---------------|-----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 5 | * ** 15.60197 | 38.05 | PK-U | 40.2 | -25 | 0 | 53.25 | - | - | 74 | -20.75 | - | - | 107 | 352 | H |
| | * ** 15.60213 | 23.53 | ADV | 40.2 | -25 | .62 | 39.35 | 54 | -14.65 | - | - | - | - | 107 | 352 | H |
| 6 | * ** 15.6028 | 38.2 | PK-U | 40.2 | -25 | 0 | 53.4 | - | - | 74 | -20.6 | - | - | 256 | 234 | V |
| | * ** 15.60324 | 23.45 | ADV | 40.2 | -25 | .62 | 39.27 | 54 | -14.73 | - | - | - | - | 256 | 234 | V |
| 1 | 2.40216 | 43.48 | PK-U | 32.1 | -34.2 | 0 | 41.38 | - | - | - | - | 68.2 | -26.82 | 273 | 392 | H |
| 3 | 2.99999 | 45.86 | PK-U | 32.9 | -33.6 | 0 | 45.16 | - | - | - | - | 68.2 | -23.04 | 333 | 338 | V |
| 4 | 3.46656 | 51.52 | PK-U | 32.8 | -33 | 0 | 51.32 | - | - | - | - | 68.2 | -16.88 | 13 | 298 | V |
| 2 | 3.46666 | 48.87 | PK-U | 32.8 | -33 | 0 | 48.67 | - | - | - | - | 68.2 | -19.53 | 297 | 387 | H |

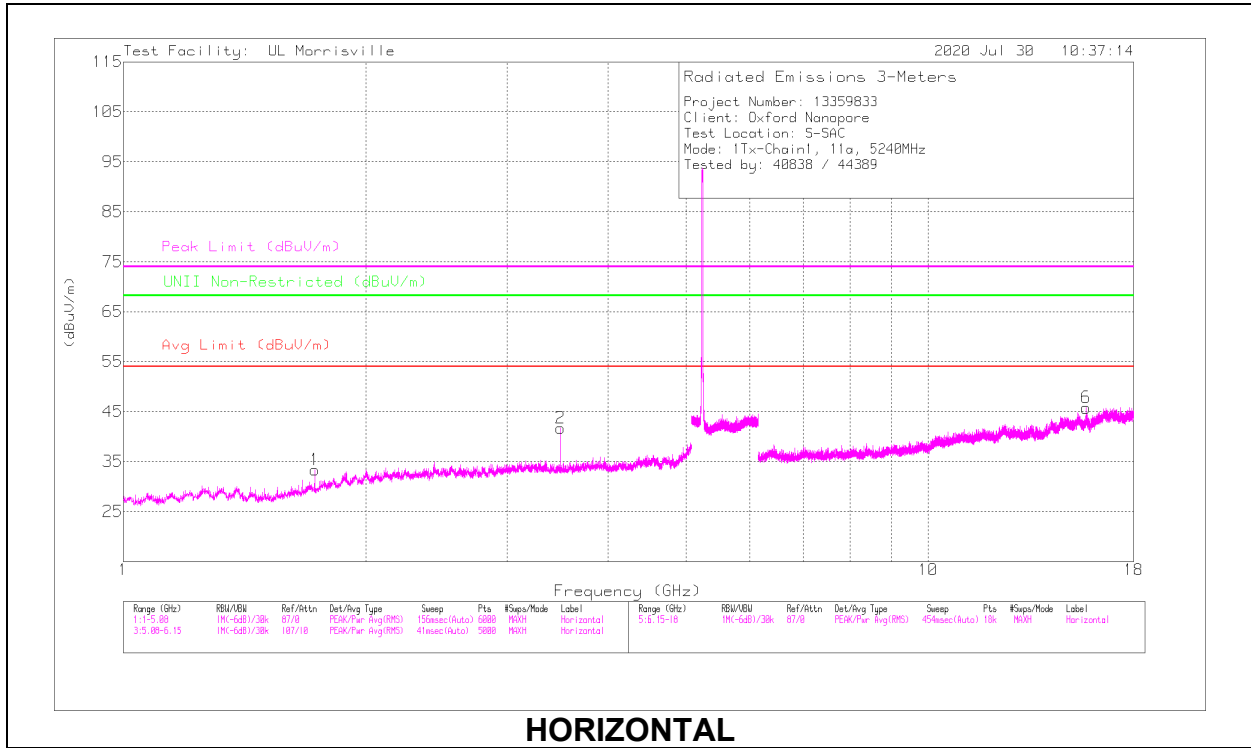
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

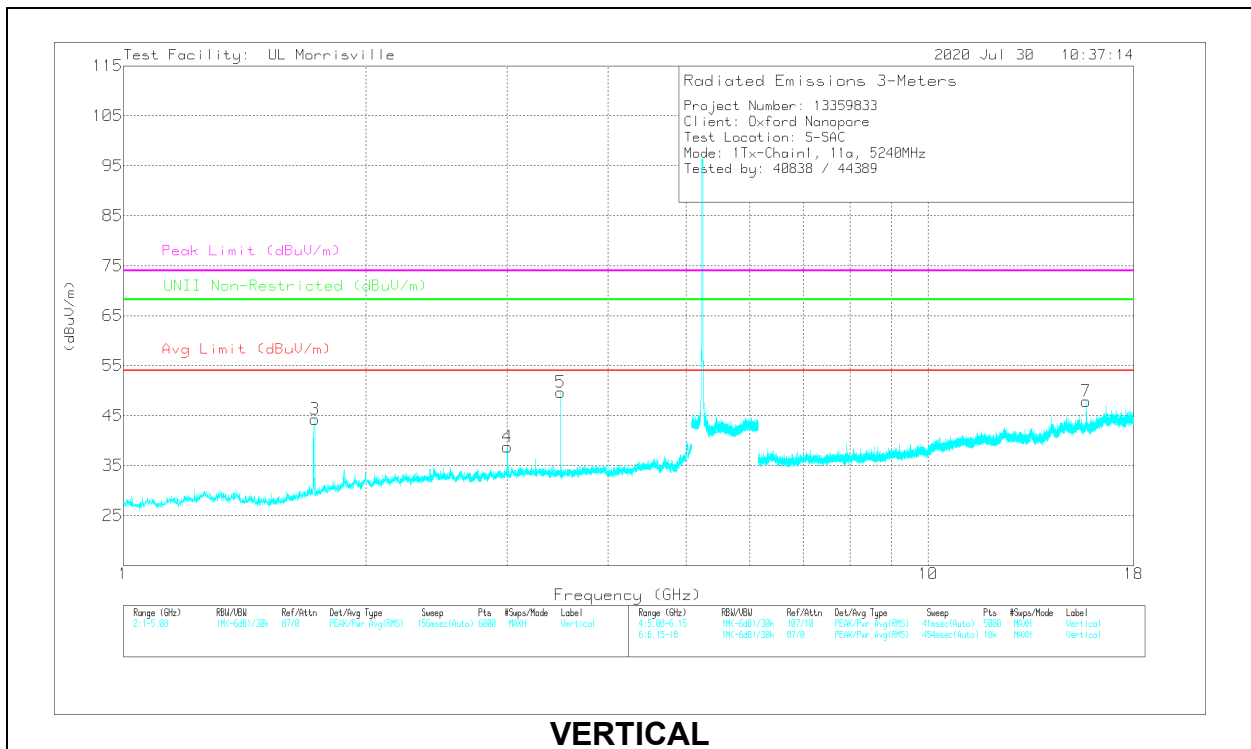
PK-U - Maximum Peak

ADV - Linear Voltage Average

HIGH CHANNEL RESULTS



HORIZONTAL



VERTICAL

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0067 (dB/m) | Amp/Cbl/fttr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|---------------|-----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | ** 1.72966 | 42.1 | PK-U | 29.7 | -34.5 | 0 | 37.3 | - | - | 74 | -36.7 | 68.2 | -30.9 | 334 | 132 | H |
| | ** 1.72891 | 28.68 | ADV | 29.7 | -34.5 | .62 | 24.5 | 54 | -29.5 | - | - | - | - | 334 | 132 | H |
| 3 | ** 1.72951 | 42.41 | PK-U | 29.7 | -34.5 | 0 | 37.61 | - | - | 74 | -36.39 | 68.2 | -30.59 | 63 | 165 | V |
| | ** 1.72915 | 28.81 | ADV | 29.7 | -34.5 | .62 | 24.63 | 54 | -29.37 | - | - | - | - | 63 | 165 | V |
| 6 | *** 15.72055 | 37.22 | PK-U | 40.2 | -23.9 | 0 | 53.52 | - | - | 74 | -20.48 | - | - | 49 | 187 | H |
| | *** 15.72087 | 24.01 | ADV | 40.2 | -23.9 | .62 | 40.93 | 54 | -13.07 | - | - | - | - | 49 | 187 | H |
| 7 | *** 15.7229 | 39.09 | PK-U | 40.2 | -23.9 | 0 | 55.39 | - | - | 74 | -18.61 | - | - | 16 | 187 | V |
| | *** 15.72233 | 23.79 | ADV | 40.2 | -23.9 | .62 | 40.71 | 54 | -13.29 | - | - | - | - | 16 | 187 | V |
| 4 | 3.00009 | 46.21 | PK-U | 32.9 | -33.6 | 0 | 45.51 | - | - | - | - | 68.2 | -22.69 | 334 | 253 | V |
| 5 | 3.49328 | 52.13 | PK-U | 32.8 | -33.2 | 0 | 51.73 | - | - | - | - | 68.2 | -16.47 | 33 | 249 | V |
| 2 | 3.49336 | 48.22 | PK-U | 32.8 | -33.2 | 0 | 47.82 | - | - | - | - | 68.2 | -20.38 | 35 | 340 | H |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

PK-U - Maximum Peak

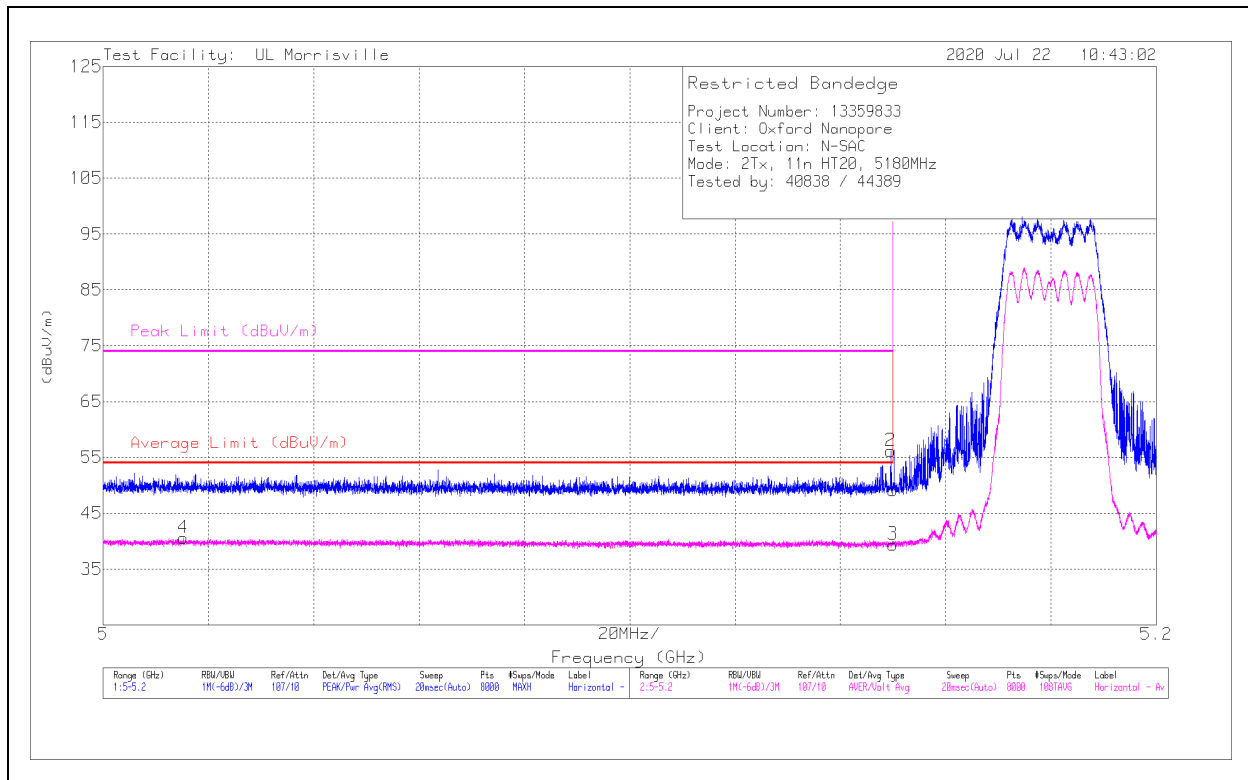
ADV - Linear Voltage Average

12.1.2. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.2 GHz BAND

2TX ANTENNA 1 + ANTENNA 2 MODE

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB(/m) | Amp/Cbl/Fitr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|-----------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | *** 5.14999 | 36.58 | Pk | 34.2 | -21.7 | 0 | 49.08 | - | - | 74 | -24.92 | 24 | 252 | H |
| 2 | *** 5.14954 | 43.66 | Pk | 34.2 | -21.7 | 0 | 56.16 | - | - | 74 | -17.84 | 24 | 252 | H |
| 3 | *** 5.14999 | 26.18 | ADV | 34.2 | -21.7 | .72 | 39.4 | 54 | -14.6 | - | - | 24 | 252 | H |
| 4 | *** 5.01523 | 26.93 | ADV | 34.2 | -21.3 | .72 | 40.55 | 54 | -13.45 | - | - | 24 | 252 | H |

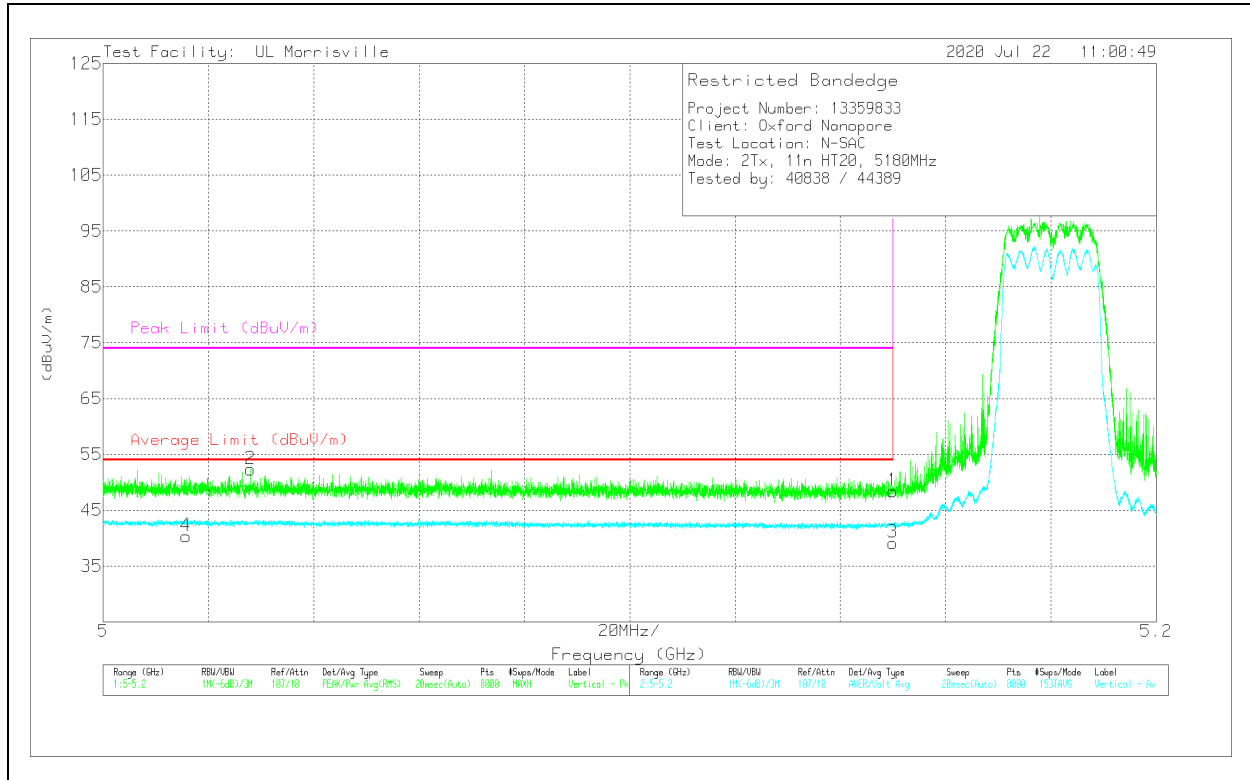
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

ADV - Linear Voltage Average

VERTICAL RESULT

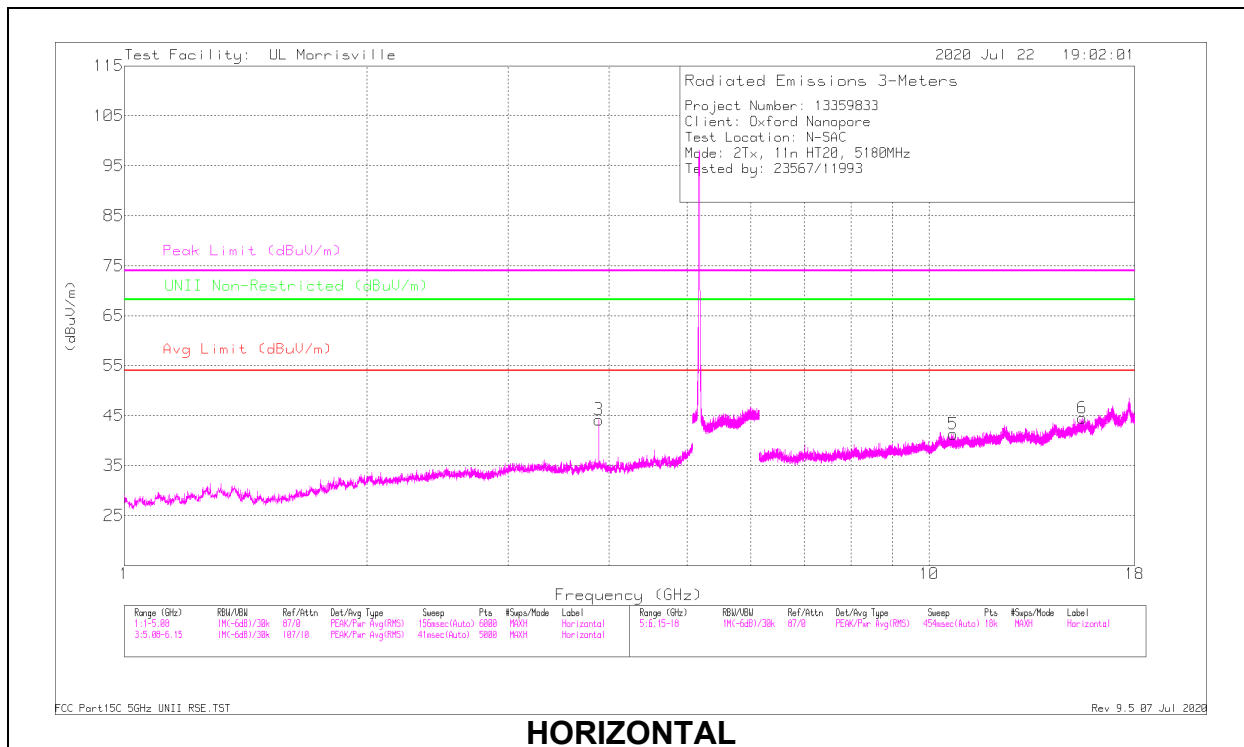


| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB/(m) | Amp/Cbl/Filtr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|------------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | *** 5.14999 | 35.93 | Pk | 34.2 | -21.7 | 0 | 48.43 | - | - | 74 | -25.57 | 12 | 385 | V |
| 2 | *** 5.02798 | 39.54 | Pk | 34.1 | -21.3 | 0 | 52.34 | - | - | 74 | -21.66 | 12 | 385 | V |
| 3 | *** 5.14999 | 25.95 | ADV | 34.2 | -21.7 | .72 | 39.17 | 54 | -14.83 | - | - | 12 | 385 | V |
| 4 | *** 5.01575 | 26.72 | ADV | 34.2 | -21.3 | .72 | 40.34 | 54 | -13.66 | - | - | 12 | 385 | V |

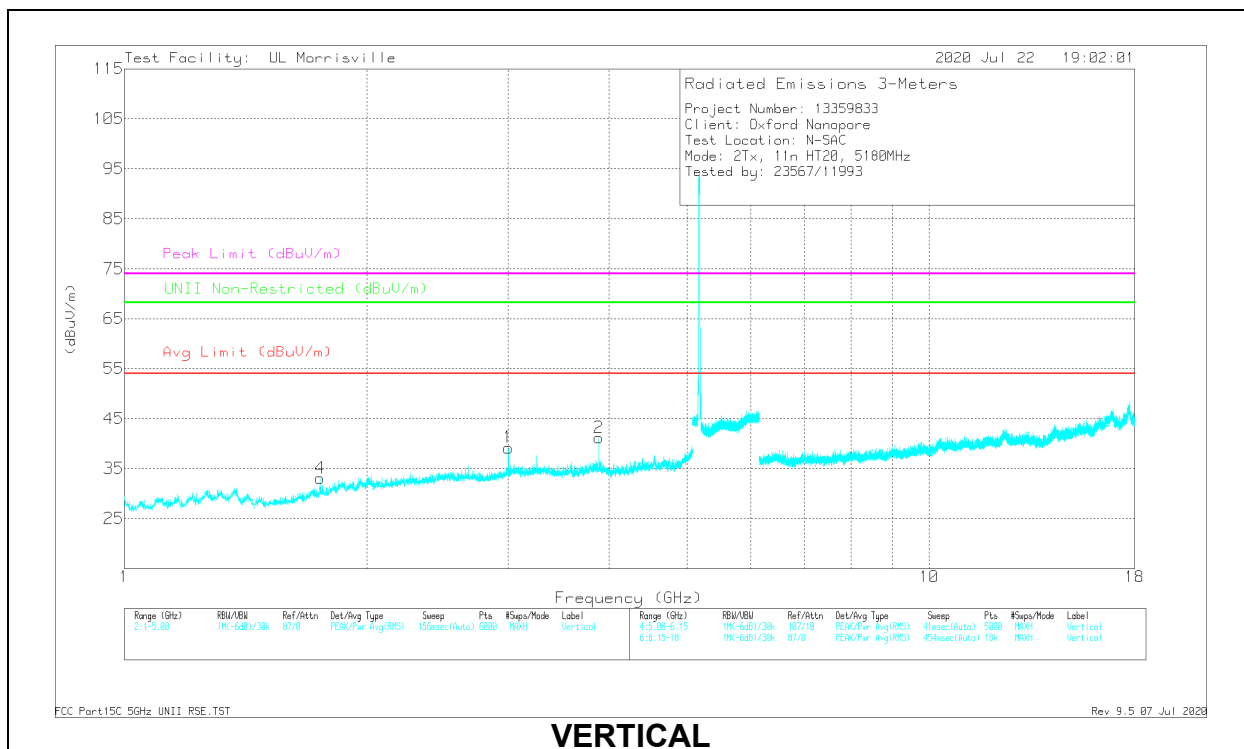
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 ** - indicates frequency in Taiwan NCC LP0002 Restricted Band
 Pk - Peak detector
 ADV - Linear Voltage Average

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



HORIZONTAL

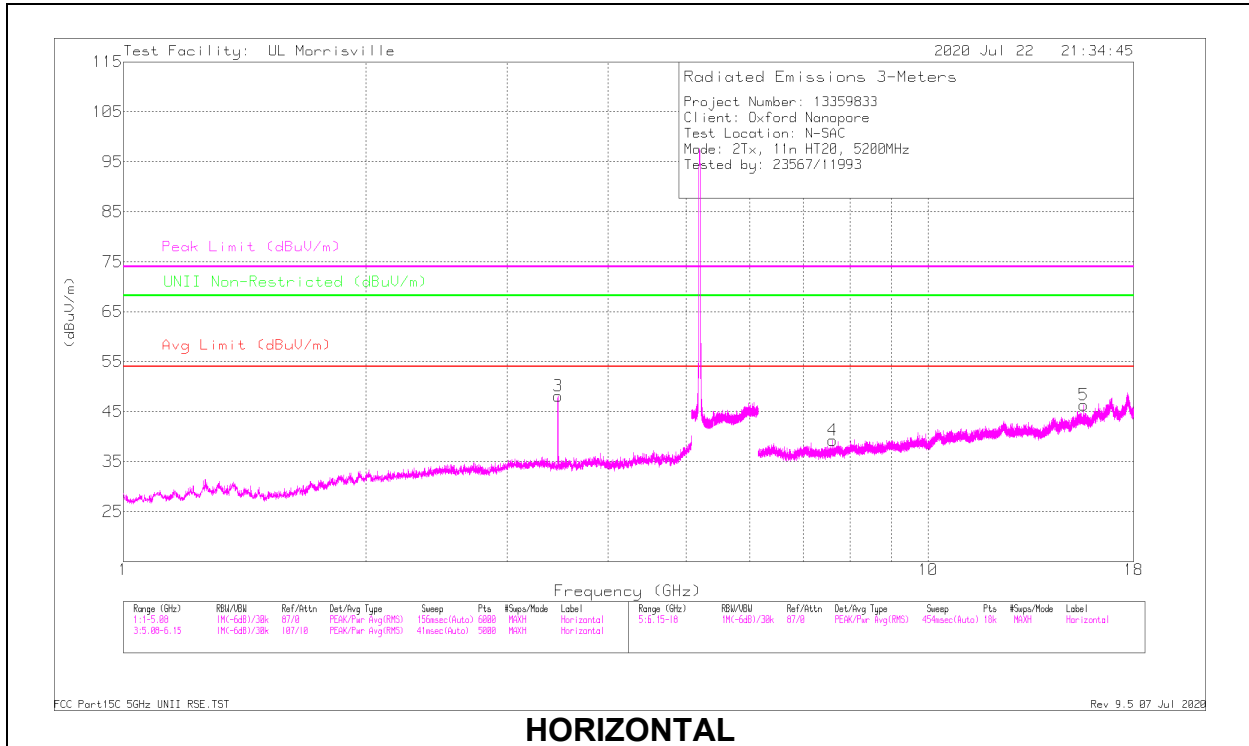


VERTICAL

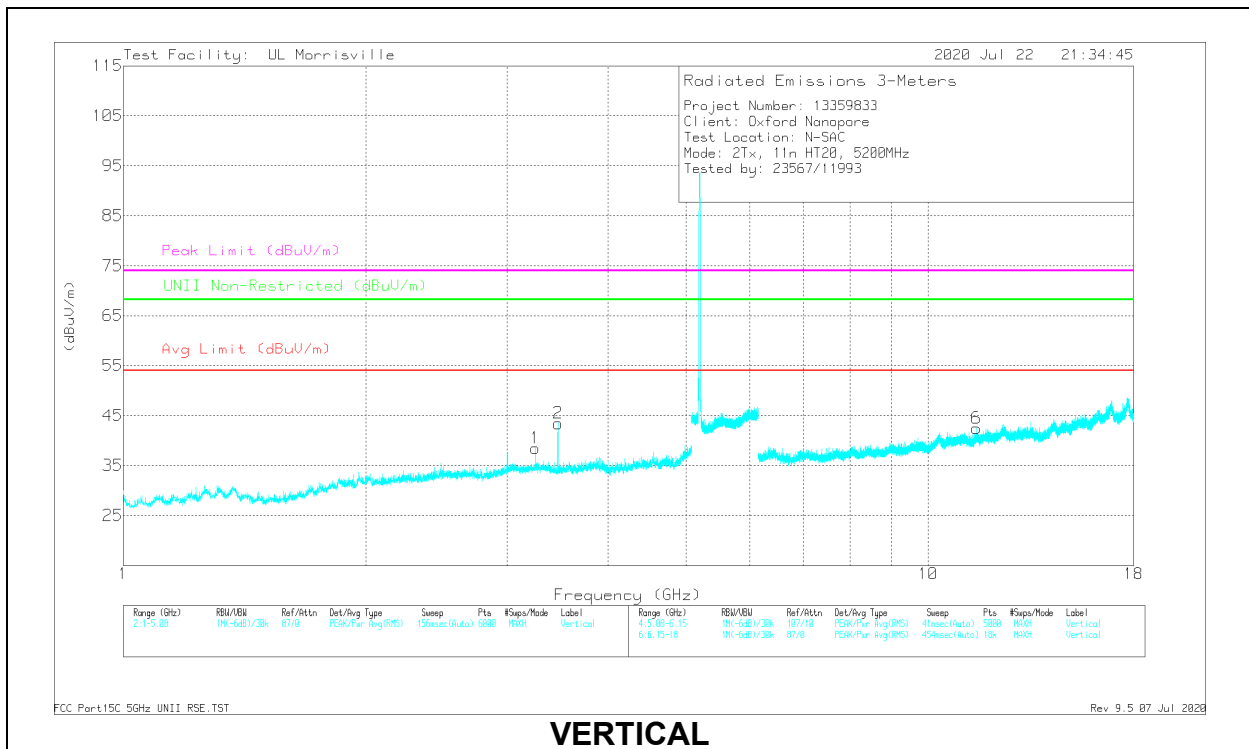
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB(/m) | Amp/Cbl/Fitr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|---------------|-----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 3 | * ** 3.88504 | 47.4 | PK-U | 33.6 | -32.1 | 0 | 48.9 | - | - | 74 | -25.1 | - | - | 326 | 114 | H |
| | * ** 3.88499 | 42.24 | ADV | 33.6 | -32.1 | .72 | 44.46 | 54 | -9.54 | - | - | - | - | 326 | 114 | H |
| 2 | * ** 3.88507 | 44.53 | PK-U | 33.6 | -32.1 | 0 | 46.03 | - | - | 74 | -27.97 | - | - | 20 | 202 | V |
| | * ** 3.88493 | 36.8 | ADV | 33.6 | -32.1 | .72 | 39.02 | 54 | -14.98 | - | - | - | - | 20 | 202 | V |
| 4 | ** 1.74856 | 44.43 | PK-U | 29.6 | -35 | 0 | 39.03 | - | - | 74 | -34.97 | 68.2 | -29.17 | 332 | 257 | V |
| | ** 1.74994 | 32.03 | ADV | 29.6 | -35 | .72 | 27.35 | 54 | -26.65 | - | - | - | - | 332 | 257 | V |
| 5 | * ** 10.71592 | 34.87 | PK-U | 37.8 | -25.4 | 0 | 47.27 | - | - | 74 | -26.73 | - | - | 0 | 240 | H |
| | * ** 10.71647 | 22.03 | ADV | 37.8 | -25.4 | .72 | 35.15 | 54 | -18.85 | - | - | - | - | 0 | 240 | H |
| 6 | * ** 15.50195 | 35.29 | PK-U | 40.2 | -24.1 | 0 | 51.39 | - | - | 74 | -22.61 | - | - | 143 | 321 | H |
| | * ** 15.50115 | 21.95 | ADV | 40.2 | -24.1 | .72 | 38.77 | 54 | -15.23 | - | - | - | - | 143 | 321 | H |
| 1 | 3.00002 | 45.01 | PK-U | 33 | -32.6 | 0 | 45.41 | - | - | - | - | 68.2 | -22.79 | 277 | 337 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 ** - indicates frequency in Taiwan NCC LP0002 Restricted Band
 PK-U - Maximum Peak
 ADV - Linear Voltage Average
 Pk - Peak detector

MID CHANNEL RESULTS



HORIZONTAL

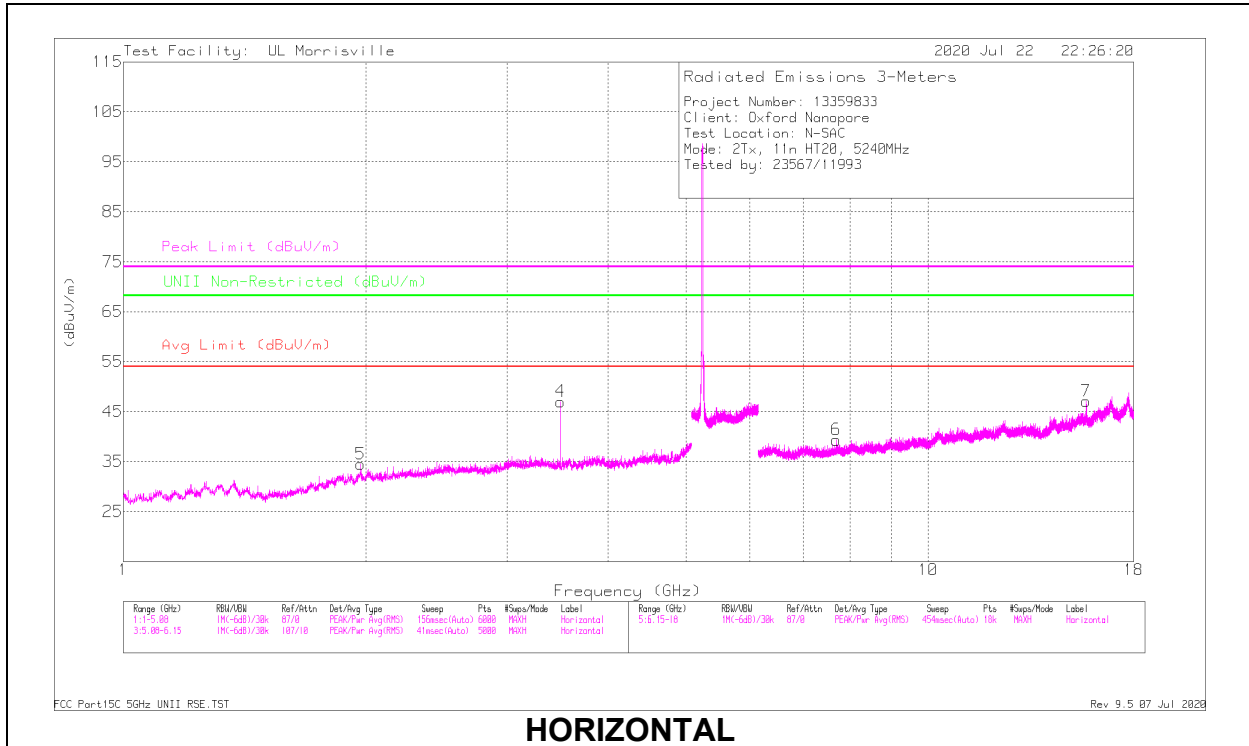


VERTICAL

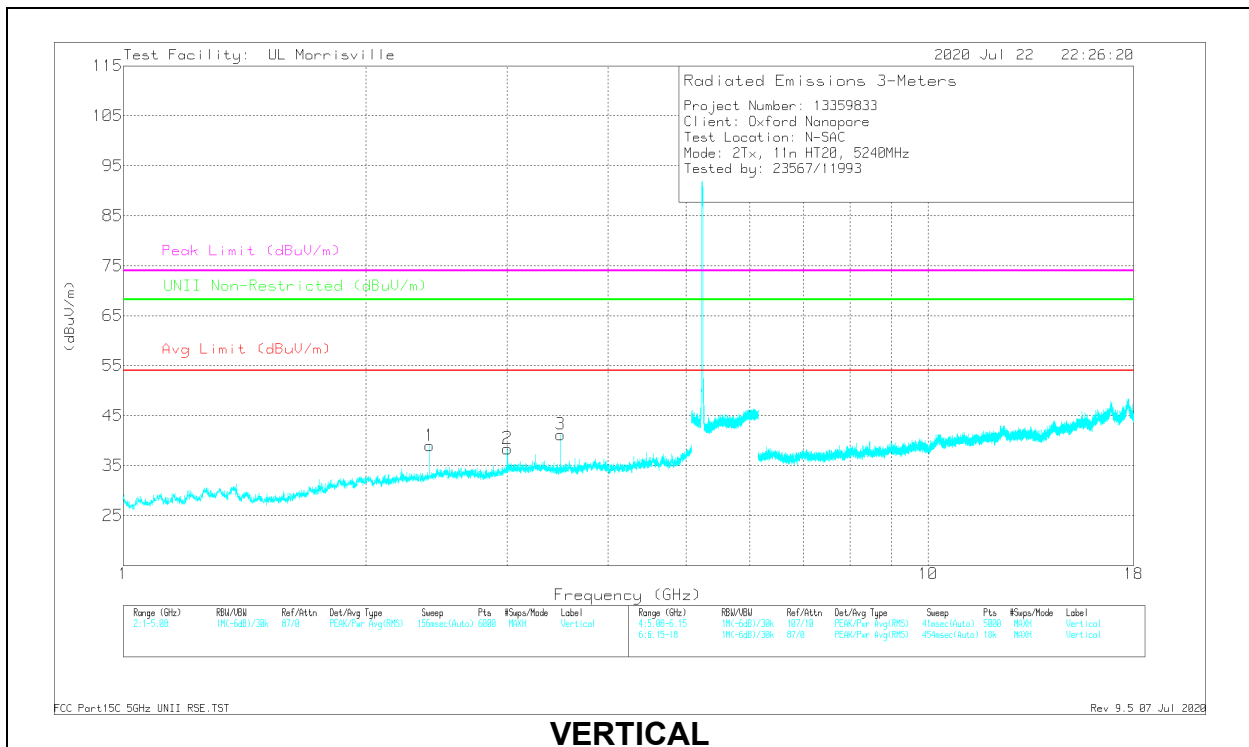
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB(/m) | Amp/Cbl/Filtr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|---------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 4 | * ** 7.60937 | 37.36 | PK-U | 35.7 | -28.6 | 0 | 44.46 | - | - | 74 | -29.54 | - | - | 152 | 277 | H |
| | * ** 7.60779 | 24.36 | ADV | 35.7 | -28.6 | .72 | 32.18 | 54 | -21.82 | - | - | - | - | 152 | 277 | H |
| 5 | * ** 15.59545 | 41.46 | PK-U | 40.2 | -26 | 0 | 55.66 | - | - | 74 | -18.34 | - | - | 352 | 251 | H |
| | * ** 15.5956 | 26.79 | ADV | 40.2 | -26 | .72 | 41.71 | 54 | -12.29 | - | - | - | - | 352 | 251 | H |
| 6 | * ** 11.4823 | 35.39 | PK-U | 38.2 | -24.6 | 0 | 48.99 | - | - | 74 | -25.01 | - | - | 219 | 224 | V |
| | * ** 11.4821 | 21.77 | ADV | 38.2 | -24.6 | .72 | 36.09 | 54 | -17.91 | - | - | - | - | 219 | 224 | V |
| 1 | 3.24945 | 42.64 | PK-U | 33.3 | -32.5 | 0 | 43.44 | - | - | - | - | 68.2 | -24.76 | 262 | 296 | V |
| 2 | 3.46658 | 48.57 | PK-U | 32.9 | -32.8 | 0 | 48.67 | - | - | - | - | 68.2 | -19.53 | 138 | 109 | V |
| 3 | 3.46661 | 52.59 | PK-U | 32.9 | -32.8 | 0 | 52.69 | - | - | - | - | 68.2 | -15.51 | 349 | 288 | H |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 ** - indicates frequency in Taiwan NCC LP0002 Restricted Band
 PK-U - Maximum Peak
 ADV - Linear Voltage Average
 Pk - Peak detector

HIGH CHANNEL RESULTS



HORIZONTAL



VERTICAL

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB(/m) | Amp/Cbl/Filtr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|---------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 5 | ** 1.97205 | 42.51 | PK-U | 31.2 | -34.2 | 0 | 39.51 | - | - | 74 | -34.49 | 68.2 | -28.69 | 279 | 268 | H |
| | ** 1.97038 | 29.6 | ADV | 31.1 | -34.2 | .72 | 27.22 | 54 | -26.78 | - | - | - | - | 279 | 268 | H |
| 6 | * ** 7.68945 | 37.49 | PK-U | 35.8 | -28.5 | 0 | 44.79 | - | - | 74 | -29.21 | - | - | 7 | 345 | H |
| | * ** 7.6897 | 24.47 | ADV | 35.8 | -28.5 | .72 | 32.49 | 54 | -21.51 | - | - | - | - | 7 | 345 | H |
| 7 | * ** 15.71747 | 42.22 | PK-U | 40 | -24.9 | 0 | 57.32 | - | - | 74 | -16.68 | - | - | 347 | 248 | H |
| | * ** 15.71761 | 27.39 | ADV | 40 | -24.9 | .72 | 43.21 | 54 | -10.79 | - | - | - | - | 347 | 248 | H |
| 1 | 2.40178 | 44.51 | PK-U | 31.9 | -33.6 | 0 | 42.81 | - | - | - | - | 68.2 | -25.39 | 245 | 219 | V |
| 2 | 2.9998 | 44.6 | PK-U | 33 | -32.6 | 0 | 45 | - | - | - | - | 68.2 | -23.2 | 275 | 332 | V |
| 3 | 3.49327 | 47.61 | PK-U | 32.9 | -32.8 | 0 | 47.71 | - | - | - | - | 68.2 | -20.49 | 140 | 137 | V |
| 4 | 3.49333 | 50.5 | PK-U | 32.9 | -32.8 | 0 | 50.6 | - | - | - | - | 68.2 | -17.6 | 350 | 260 | H |

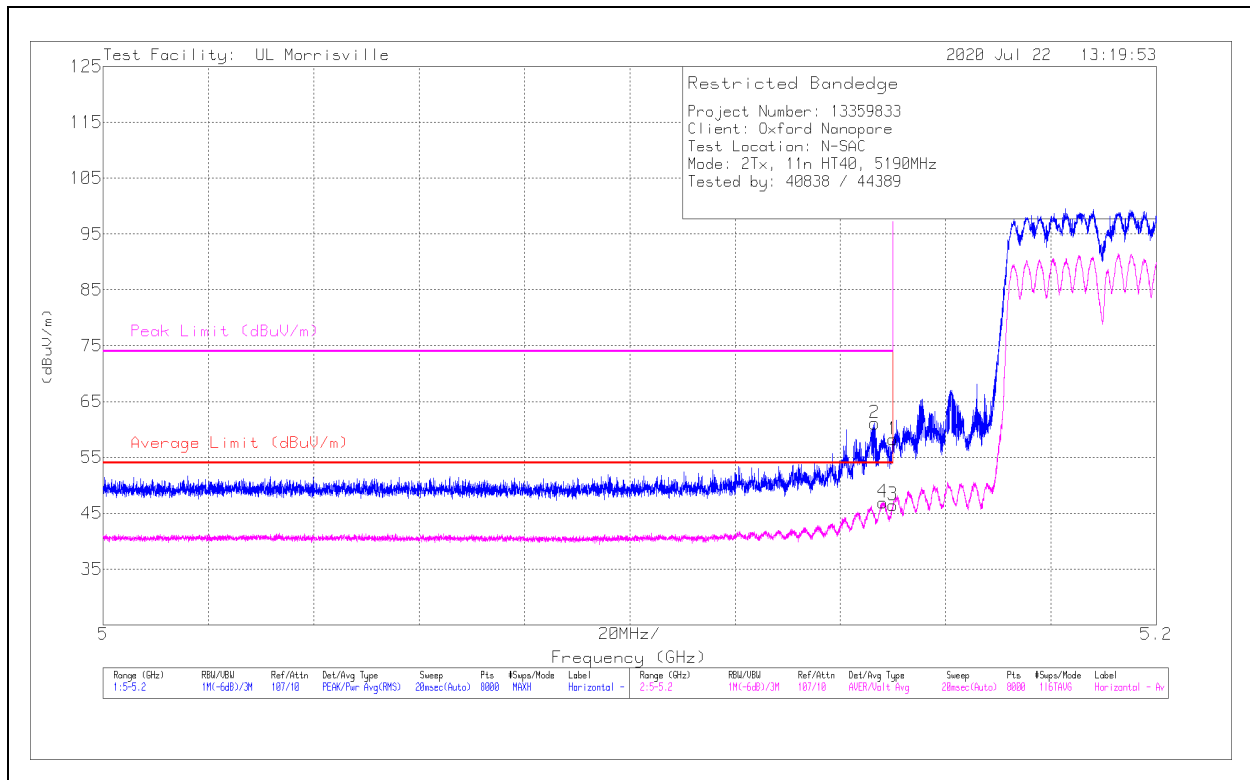
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 ** - indicates frequency in Taiwan NCC LP0002 Restricted Band
 PK-U - Maximum Peak
 ADV - Linear Voltage Average
 Pk - Peak detector

12.1.3. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.2 GHz BAND

2TX ANTENNA 1 + ANTENNA 2 MODE

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB(/m) | Amp/Cbl/Fitr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|-----------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | *** 5.14999 | 45.72 | Pk | 34.2 | -21.7 | 0 | 58.22 | - | - | 74 | -15.78 | 327 | 349 | H |
| 2 | *** 5.14647 | 48.61 | Pk | 34.2 | -21.7 | 0 | 61.11 | - | - | 74 | -12.89 | 327 | 349 | H |
| 3 | *** 5.14999 | 32.65 | ADV | 34.2 | -21.7 | 1.32 | 46.47 | 54 | -7.53 | - | - | 327 | 349 | H |
| 4 | *** 5.14807 | 33.13 | ADV | 34.2 | -21.7 | 1.32 | 46.95 | 54 | -7.05 | - | - | 327 | 349 | H |

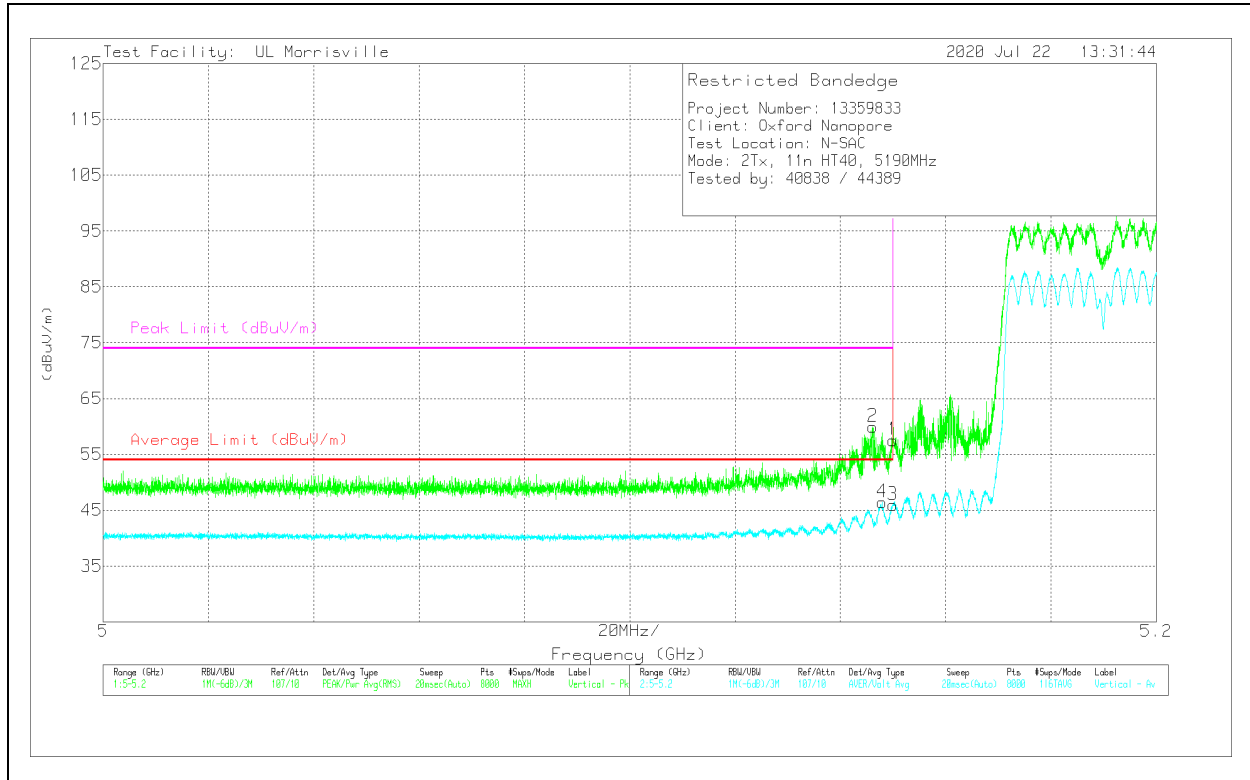
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

ADV - Linear Voltage Average

VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB/(m) | Amp/Cbl/Fitr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|-----------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | *** 5.14999 | 45.07 | Pk | 34.2 | -21.7 | 0 | 57.57 | - | - | 74 | -16.43 | 85 | 287 | V |
| 2 | *** 5.14617 | 47.46 | Pk | 34.2 | -21.7 | 0 | 59.96 | - | - | 74 | -14.04 | 85 | 287 | V |
| 3 | *** 5.14999 | 32.12 | ADV | 34.2 | -21.7 | 1.32 | 45.94 | 54 | -8.06 | - | - | 85 | 287 | V |
| 4 | *** 5.14792 | 32.62 | ADV | 34.2 | -21.7 | 1.32 | 46.44 | 54 | -7.56 | - | - | 85 | 287 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

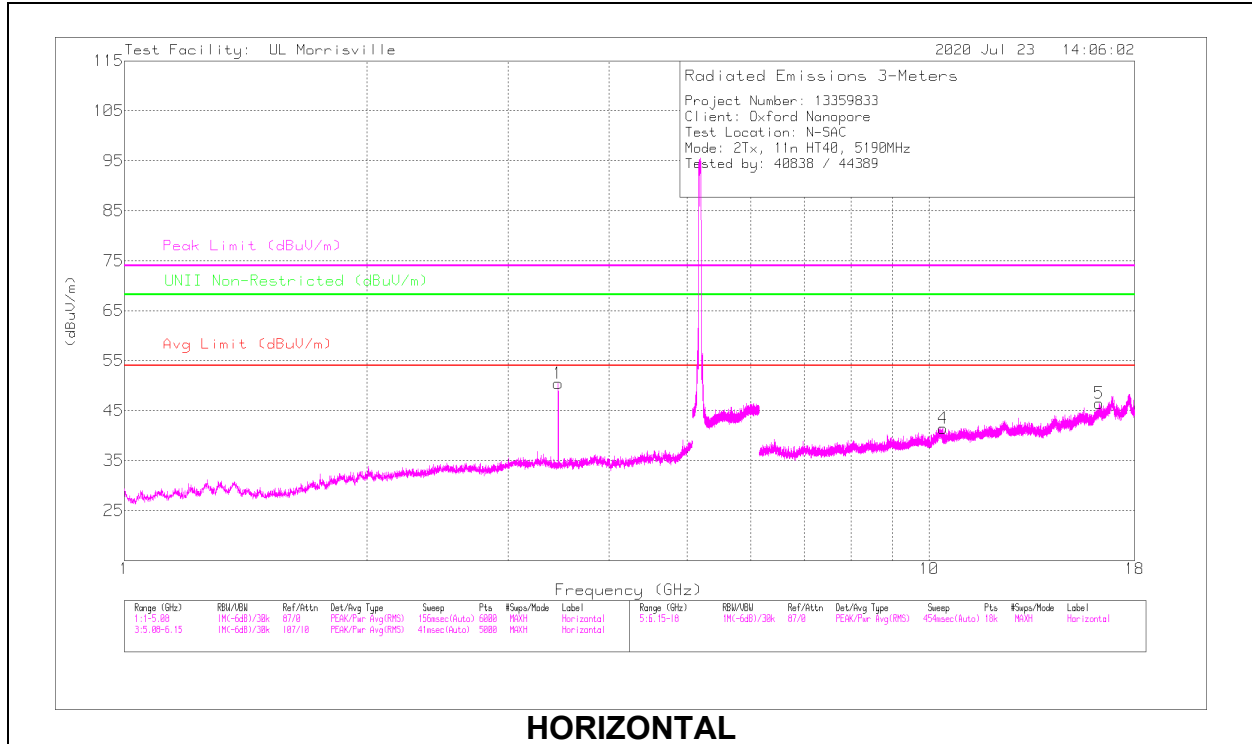
** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

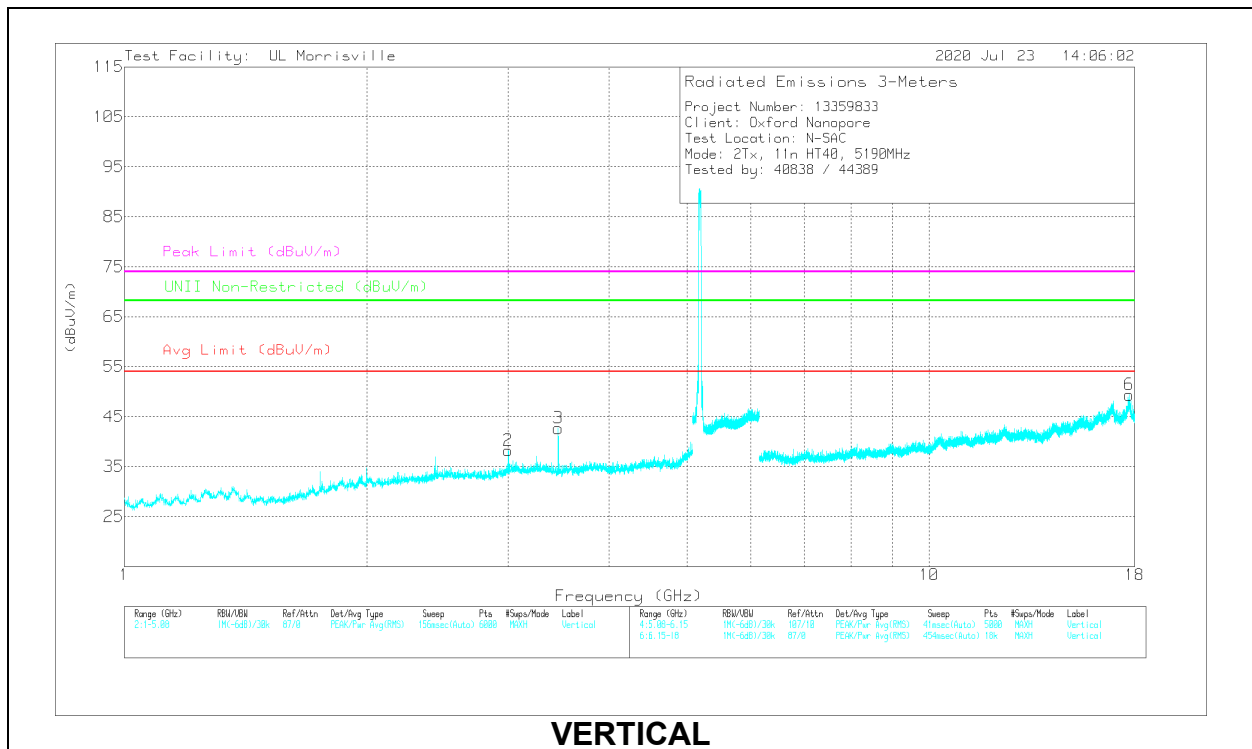
ADV - Linear Voltage Average

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



HORIZONTAL



VERTICAL

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB(/m) | Amp/Cbl/Filtr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|---------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 6 | *** 17.73053 | 33.21 | PK-U | 41.6 | -19.7 | 0 | 55.11 | - | - | 74 | -18.89 | - | - | 298 | 254 | V |
| | *** 17.73138 | 20.24 | ADV | 41.6 | -19.7 | 1.32 | 43.46 | 54 | -10.54 | - | - | - | - | 298 | 254 | V |
| 2 | 3.00003 | 44.75 | PK-U | 33 | -32.6 | 0 | 45.15 | - | - | - | - | 68.2 | -23.05 | 260 | 253 | V |
| 1 | 3.45994 | 52.56 | PK-U | 32.9 | -32.8 | 0 | 52.66 | - | - | - | - | 68.2 | -15.54 | 351 | 293 | H |
| 3 | 3.46008 | 48.38 | PK-U | 32.9 | -32.8 | 0 | 48.48 | - | - | - | - | 68.2 | -19.72 | 357 | 244 | V |
| 4 | 10.40795 | 35.47 | PK-U | 37.5 | -25.7 | 0 | 47.27 | - | - | - | - | 68.2 | -20.93 | 9 | 246 | H |
| 5 | 16.25588 | 34.85 | PK-U | 40.8 | -23.8 | 0 | 51.85 | - | - | - | - | 68.2 | -16.35 | 219 | 321 | H |

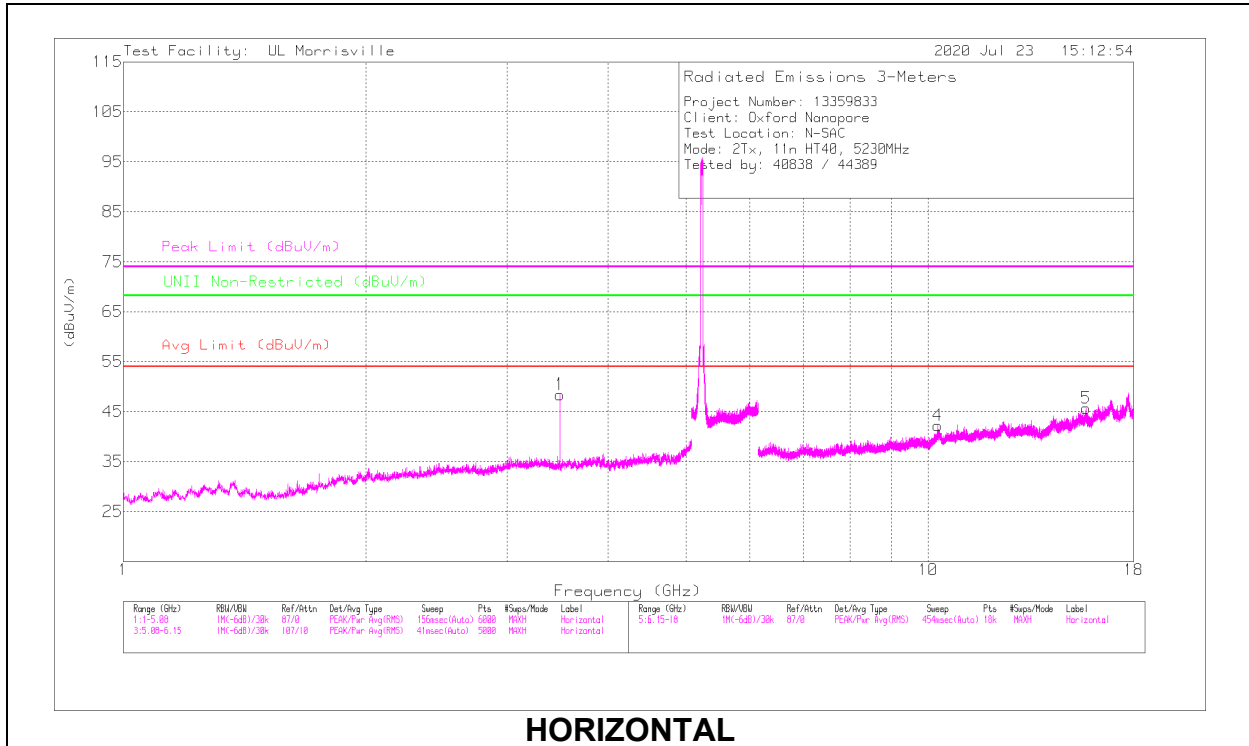
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

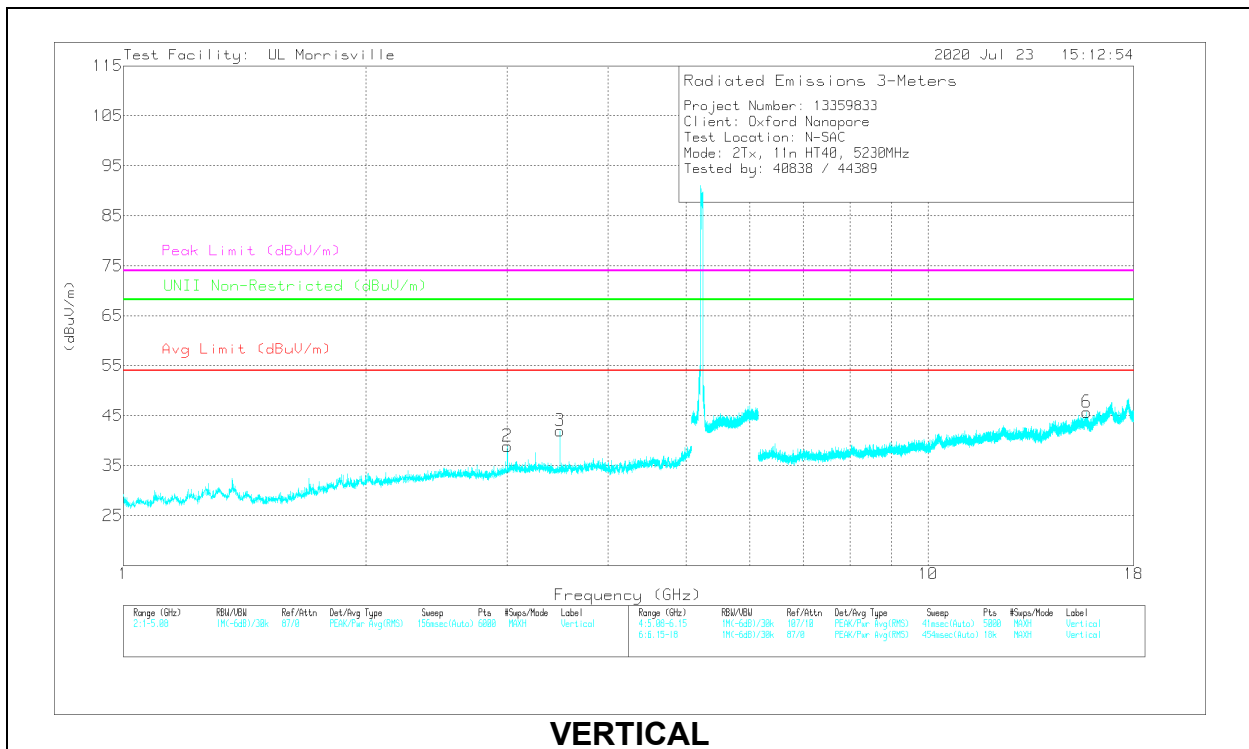
PK-U - Maximum Peak

ADV - Linear Voltage Average

HIGH CHANNEL RESULTS



HORIZONTAL



VERTICAL

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB(/m) | Amp/Cbl/Filtr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|---------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 5 | *** 15.70679 | 38.74 | PK-U | 40.1 | -25 | 0 | 53.84 | - | - | 74 | -20.16 | - | - | 337 | 100 | H |
| | ** 15.70667 | 25.19 | ADV | 40.1 | -25 | 1.32 | 41.61 | 54 | -12.39 | - | - | - | - | 337 | 100 | H |
| 6 | *** 15.73507 | 35.95 | PK-U | 40.1 | -24.8 | 0 | 51.25 | - | - | 74 | -22.75 | - | - | 28 | 212 | V |
| | ** 15.73458 | 22.59 | ADV | 40.1 | -24.8 | 1.32 | 39.21 | 54 | -14.79 | - | - | - | - | 28 | 212 | V |
| 2 | 3.00015 | 45.37 | PK-U | 33 | -32.6 | 0 | 45.77 | - | - | - | - | 68.2 | -22.43 | 271 | 373 | V |
| 1 | 3.48661 | 51.38 | PK-U | 33 | -32.8 | 0 | 51.58 | - | - | - | - | 68.2 | -16.62 | 349 | 126 | H |
| 3 | 3.48661 | 48.74 | PK-U | 33 | -32.8 | 0 | 48.94 | - | - | - | - | 68.2 | -19.26 | 15 | 369 | V |
| 4 | 10.28393 | 35.85 | PK-U | 37.4 | -24.8 | 0 | 48.45 | - | - | - | - | 68.2 | -19.75 | 350 | 341 | H |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

PK-U - Maximum Peak

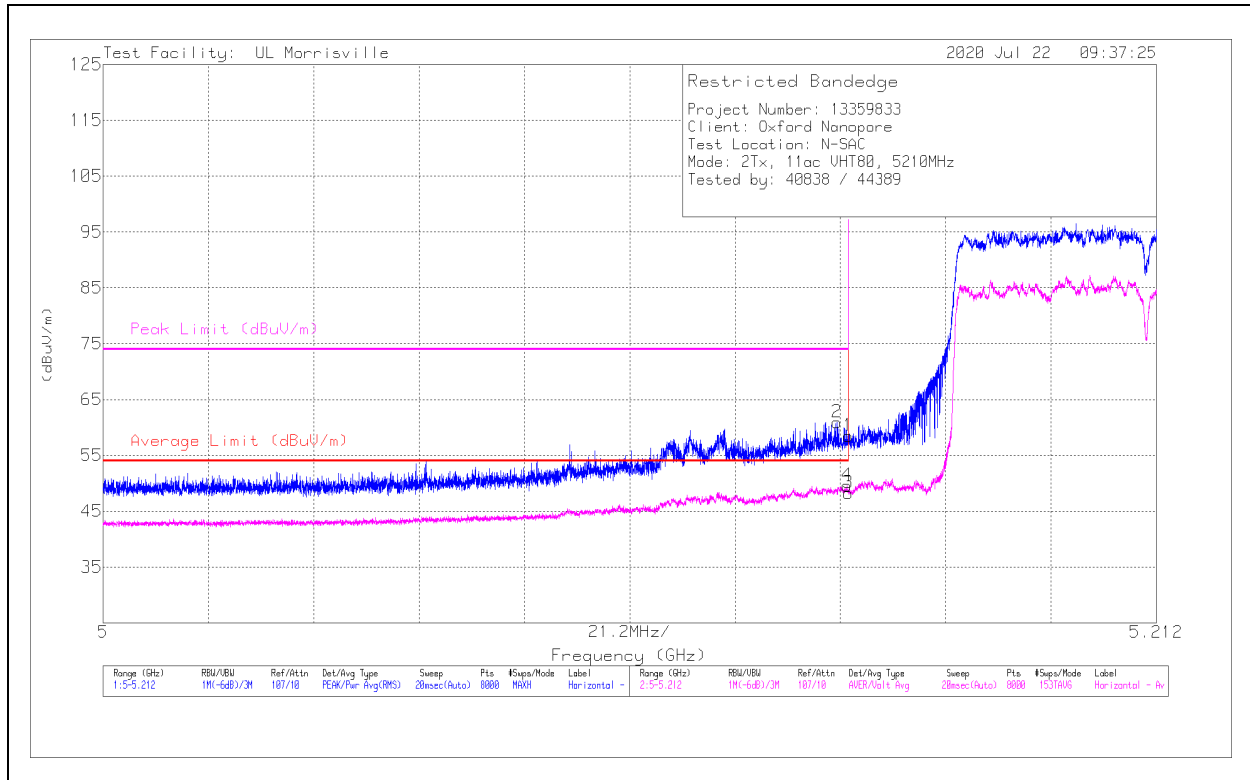
ADV - Linear Voltage Average

12.1.4. TX ABOVE 1 GHz 802.11ac VHT80 MODE IN THE 5.2 GHz BAND

2TX ANTENNA 1 + ANTENNA 2 MODE

BANDEDGE (MID CHANNEL)

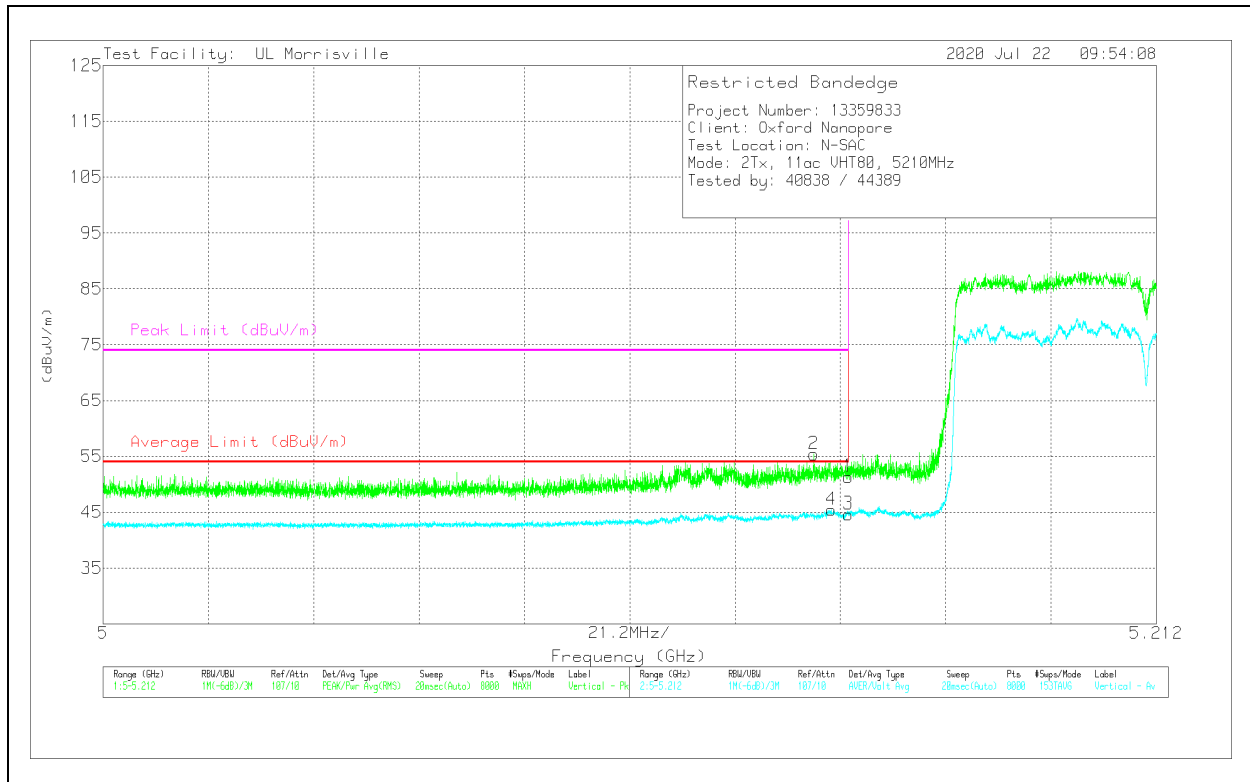
HORIZONTAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB(/m) | Amp/Cbl/Fitr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|-----------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | *** 5.14998 | 45.95 | Pk | 34.2 | -21.7 | 0 | 58.45 | - | - | 74 | -15.55 | 1 | 104 | H |
| 2 | *** 5.14775 | 48.39 | Pk | 34.2 | -21.7 | 0 | 60.89 | - | - | 74 | -13.11 | 1 | 104 | H |
| 3 | *** 5.14998 | 32.02 | ADV | 34.2 | -21.7 | 3.71 | 48.23 | 54 | -5.77 | - | - | 1 | 104 | H |
| 4 | *** 5.14972 | 33.38 | ADV | 34.2 | -21.7 | 3.71 | 49.59 | 54 | -4.41 | - | - | 1 | 104 | H |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 ** - indicates frequency in Taiwan NCC LP0002 Restricted Band
 Pk - Peak detector
 ADV - Linear Voltage Average

VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB/(m) | Amp/Cbl/Filtr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|------------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | *** 5.14998 | 38.83 | Pk | 34.2 | -21.7 | 0 | 51.33 | - | - | 74 | -22.67 | 289 | 125 | V |
| 2 | *** 5.14306 | 43 | Pk | 34.2 | -21.8 | 0 | 55.4 | - | - | 74 | -18.6 | 289 | 125 | V |
| 3 | *** 5.14998 | 28.43 | ADV | 34.2 | -21.7 | 3.71 | 44.64 | 54 | -9.36 | - | - | 289 | 125 | V |
| 4 | *** 5.14654 | 29.21 | ADV | 34.2 | -21.7 | 3.71 | 45.42 | 54 | -8.58 | - | - | 289 | 125 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

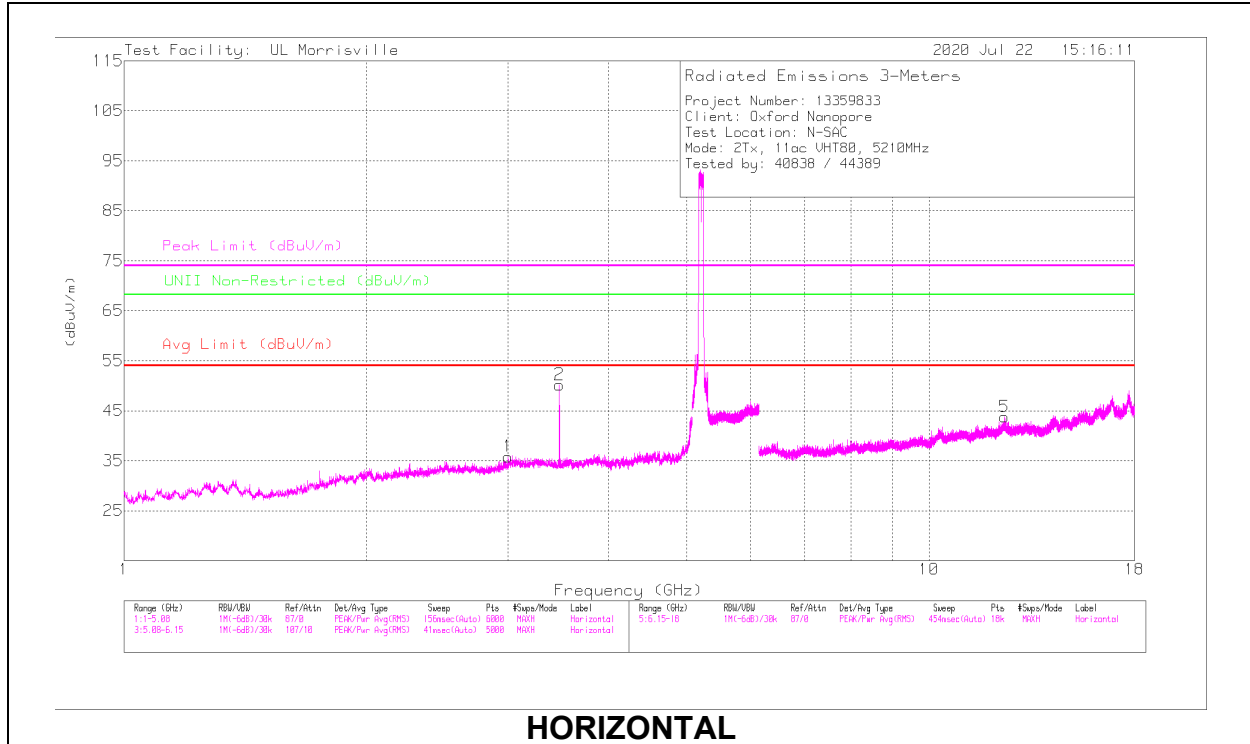
** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

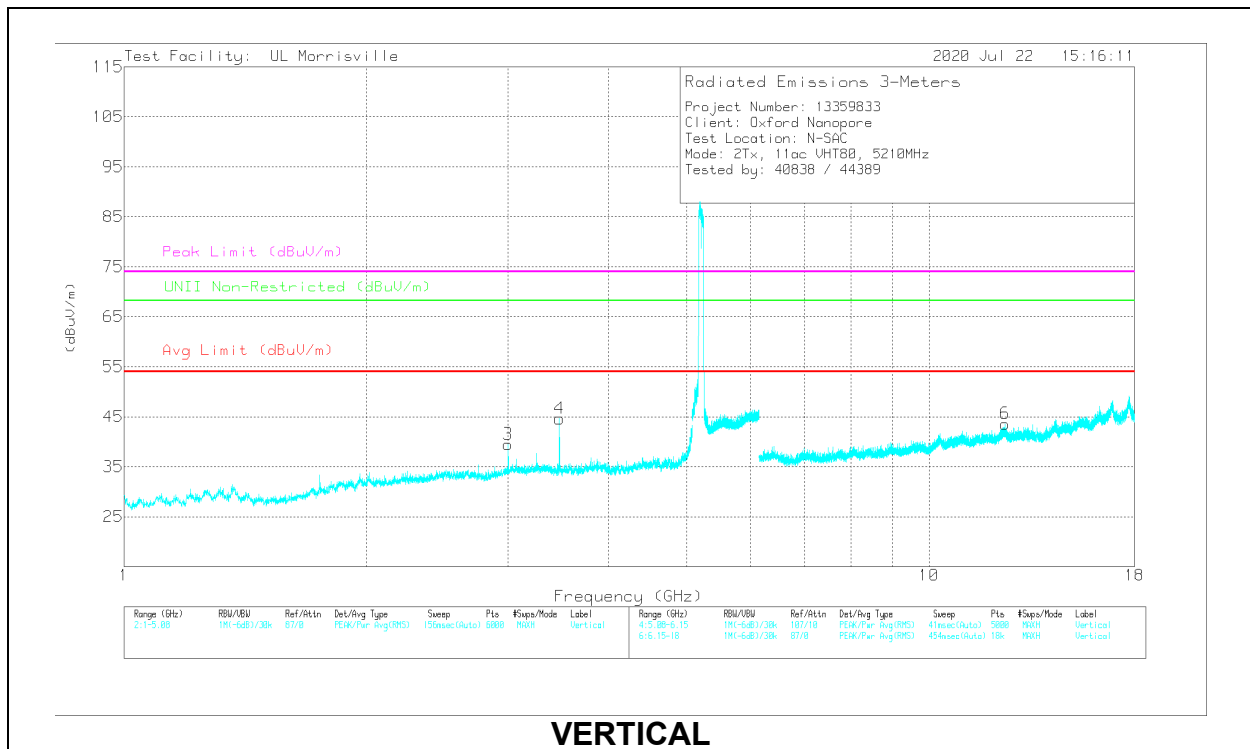
ADV - Linear Voltage Average

HARMONICS AND SPURIOUS EMISSIONS

MID CHANNEL RESULTS



HORIZONTAL



VERTICAL

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB(/m) | Amp/Cbl/Fitr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|---------------|-----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 5 | *** 12.40433 | 35.35 | PK-U | 39 | -24.3 | 0 | 50.05 | - | - | 74 | -23.95 | - | - | 179 | 168 | H |
| | *** 12.40382 | 21.88 | ADV | 39 | -24.3 | 3.71 | 40.29 | 54 | -13.71 | - | - | - | - | 179 | 168 | H |
| 6 | *** 12.43583 | 34.99 | PK-U | 38.9 | -24.4 | 0 | 49.49 | - | - | 74 | -24.51 | - | - | 358 | 305 | V |
| | *** 12.43586 | 21.79 | ADV | 38.9 | -24.4 | 3.71 | 40 | 54 | -14 | - | - | - | - | 358 | 305 | V |
| 1 | 2.99994 | 42.9 | PK-U | 33 | -32.6 | 0 | 43.3 | - | - | - | - | 68.2 | -24.9 | 22 | 217 | H |
| 3 | 3.0001 | 45.55 | PK-U | 33 | -32.6 | 0 | 45.95 | - | - | - | - | 68.2 | -22.25 | 268 | 335 | V |
| 4 | 3.47327 | 50.12 | PK-U | 32.9 | -32.8 | 0 | 50.22 | - | - | - | - | 68.2 | -17.98 | 18 | 363 | V |
| 2 | 3.47336 | 52.27 | PK-U | 32.9 | -32.8 | 0 | 52.37 | - | - | - | - | 68.2 | -15.83 | 347 | 288 | H |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

PK-U - Maximum Peak

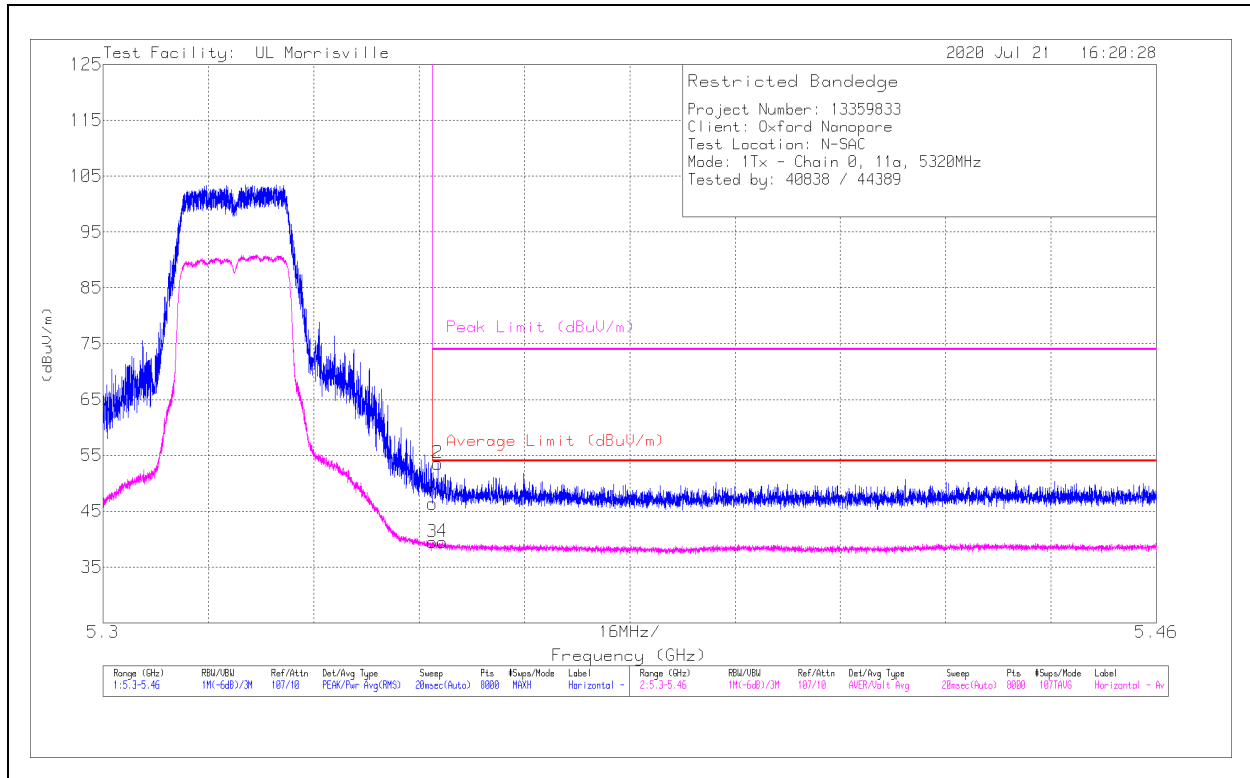
ADV - Linear Voltage Average

12.1.5. TX ABOVE 1 GHz 802.11a MODE IN THE 5.3 GHz BAND

1TX ANTENNA 1 MODE

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB(/m) | Amp/Cbl/Filtr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|------------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | *** 5.35001 | 34.08 | Pk | 34.4 | -22.1 | 0 | 46.38 | - | - | 74 | -27.62 | 75 | 391 | H |
| 2 | *** 5.35083 | 41.26 | Pk | 34.4 | -22.1 | 0 | 53.56 | - | - | 74 | -20.44 | 75 | 391 | H |
| 3 | *** 5.35001 | 26.54 | ADV | 34.4 | -22.1 | .62 | 39.46 | 54 | -14.54 | - | - | 75 | 391 | H |
| 4 | *** 5.35157 | 26.58 | ADV | 34.4 | -22.1 | .62 | 39.5 | 54 | -14.5 | - | - | 75 | 391 | H |

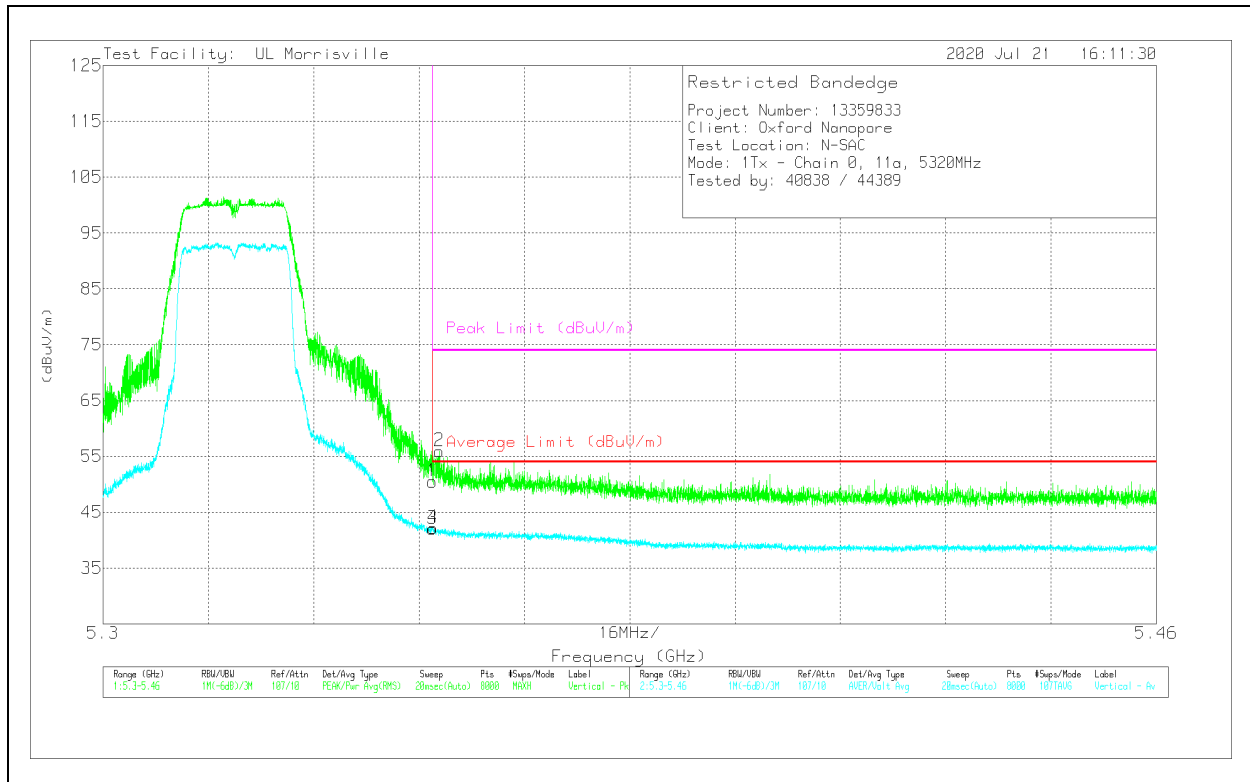
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

ADV - Linear Voltage Average

VERTICAL RESULT

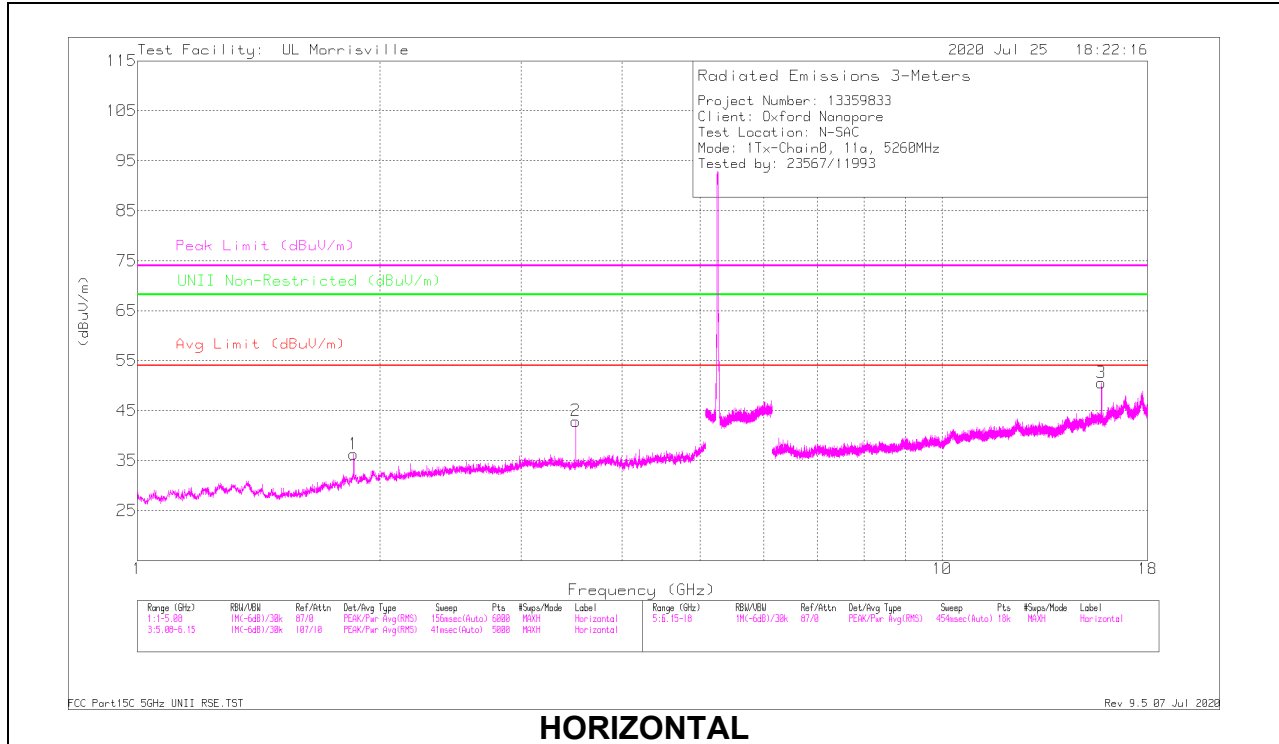


| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB/(m) | Amp/Cbl/Filtr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|------------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | *** 5.35001 | 38.21 | Pk | 34.4 | -22.1 | 0 | 50.51 | - | - | 74 | -23.49 | 74 | 342 | V |
| 2 | *** 5.35107 | 43.64 | Pk | 34.4 | -22.1 | 0 | 55.94 | - | - | 74 | -18.06 | 74 | 342 | V |
| 3 | *** 5.35001 | 29.13 | ADV | 34.4 | -22.1 | .62 | 42.05 | 54 | -11.95 | - | - | 74 | 342 | V |
| 4 | *** 5.35011 | 29.26 | ADV | 34.4 | -22.1 | .62 | 42.18 | 54 | -11.82 | - | - | 74 | 342 | V |

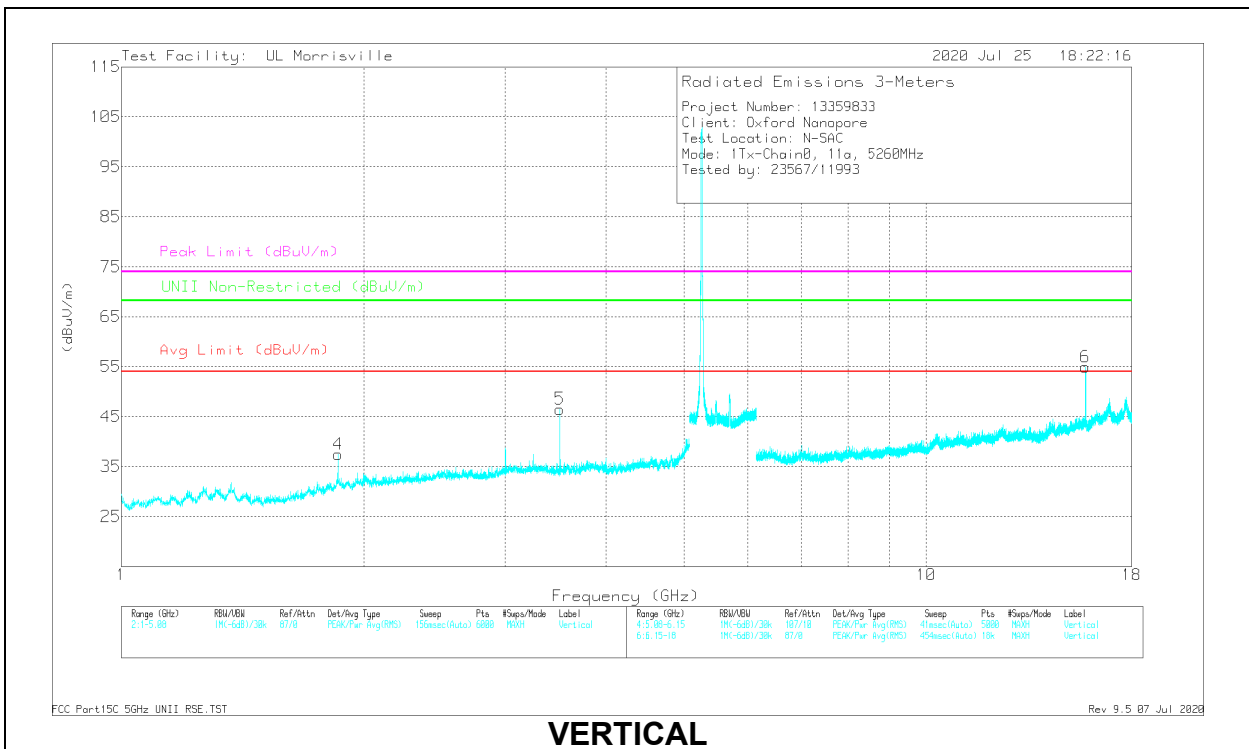
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 ** - indicates frequency in Taiwan NCC LP0002 Restricted Band
 Pk - Peak detector
 ADV - Linear Voltage Average

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



HORIZONTAL

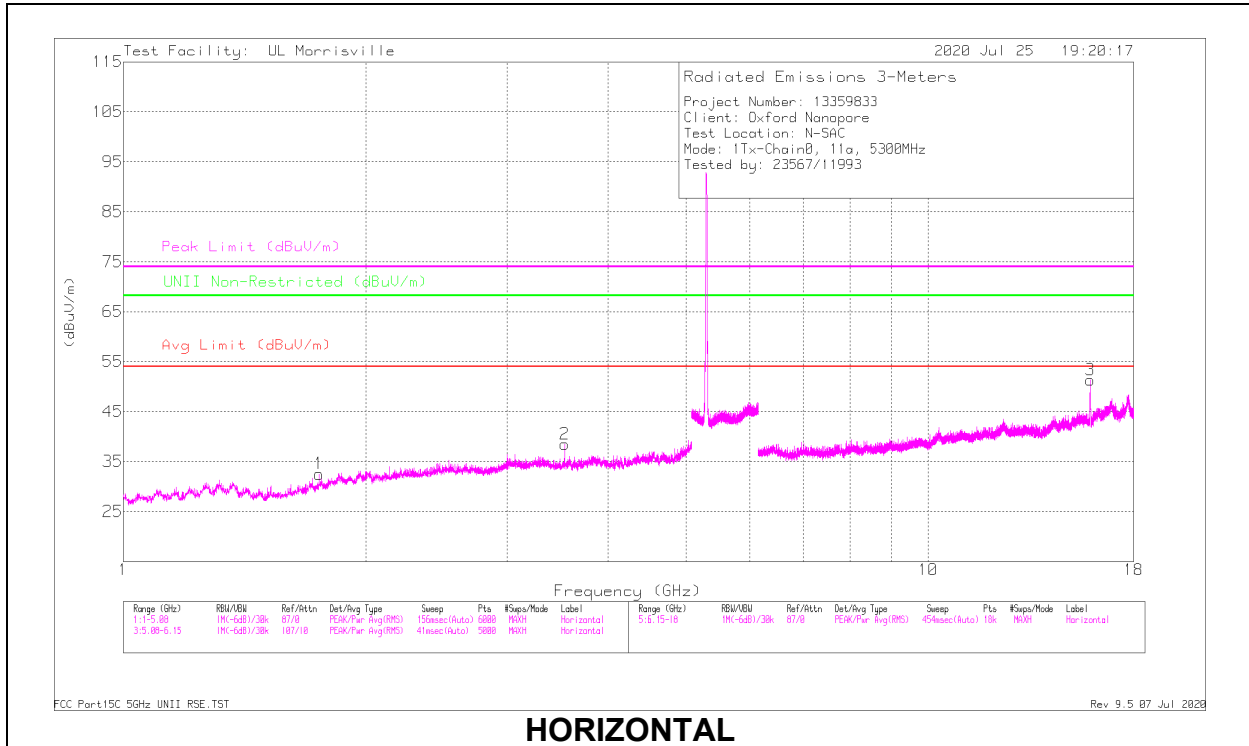


VERTICAL

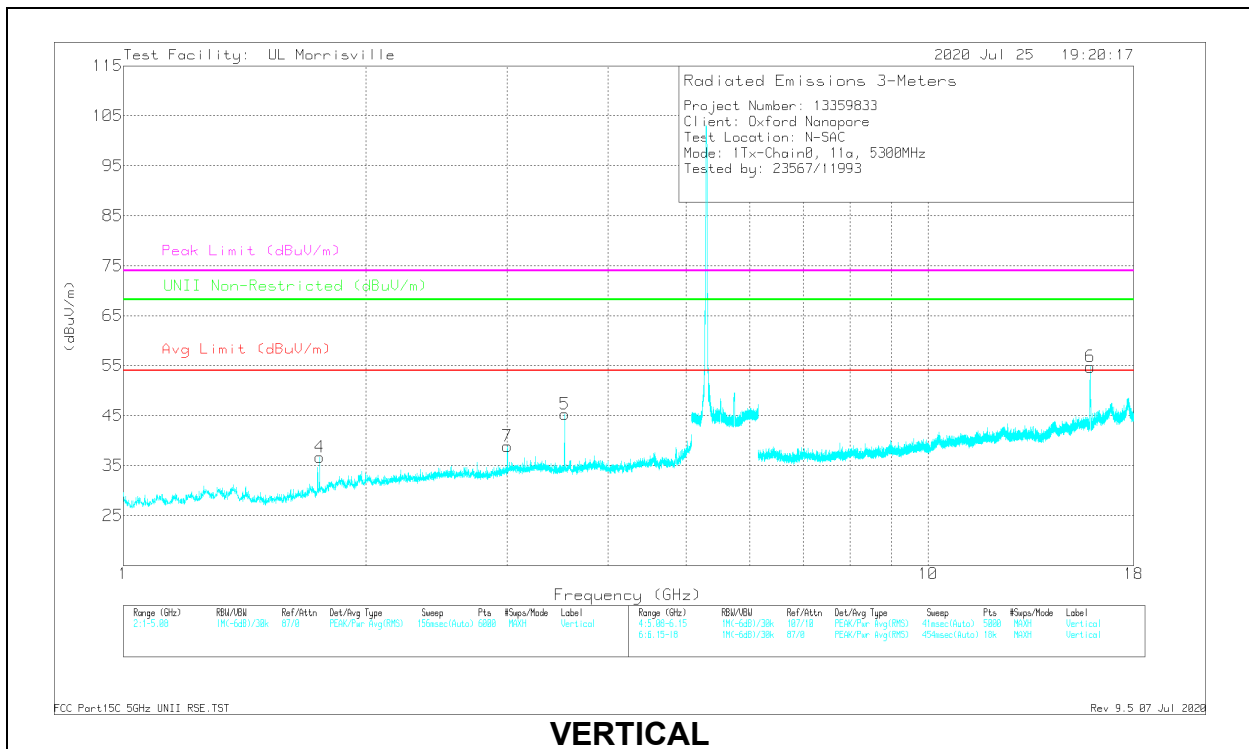
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB(/m) | Amp/Cbl/Filtr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|---------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | ** 1.85703 | 43.9 | PK-U | 31 | -35 | 0 | 39.9 | - | - | 74 | -34.1 | 68.2 | -28.3 | 117 | 241 | H |
| | ** 1.85764 | 30.17 | ADV | 30.9 | -35 | .62 | 26.69 | 54 | -27.39 | - | - | - | - | 117 | 241 | H |
| 2 | *** 3.50664 | 47.18 | PK-U | 33 | -32.7 | 0 | 47.48 | - | - | 74 | -26.52 | - | - | 326 | 101 | H |
| | *** 3.50664 | 34.74 | ADV | 33 | -32.7 | .62 | 35.66 | 54 | -18.34 | - | - | - | - | 326 | 101 | H |
| 4 | ** 1.85769 | 43.3 | PK-U | 30.9 | -35 | 0 | 39.2 | - | - | 74 | -34.8 | 68.2 | -29 | 278 | 321 | V |
| | ** 1.85655 | 30.12 | ADV | 31 | -35 | .62 | 26.74 | 54 | -27.26 | - | - | - | - | 278 | 321 | V |
| 5 | *** 3.50671 | 49.86 | PK-U | 33 | -32.7 | 0 | 50.16 | - | - | 74 | -23.84 | - | - | 355 | 234 | V |
| | *** 3.50668 | 33.61 | ADV | 33 | -32.7 | .62 | 34.53 | 54 | -19.47 | - | - | - | - | 355 | 234 | V |
| 3 | *** 15.77696 | 40.92 | PK-U | 40.1 | -25.2 | 0 | 55.82 | - | - | 74 | -18.18 | - | - | 0 | 260 | H |
| | *** 15.77696 | 27.31 | ADV | 40.1 | -25.2 | .62 | 42.83 | 54 | -11.17 | - | - | - | - | 0 | 260 | H |
| 6 | *** 15.77733 | 47.32 | PK-U | 40.1 | -25.2 | 0 | 62.22 | - | - | 74 | -11.78 | - | - | 305 | 112 | V |
| | *** 15.77711 | 33.46 | ADV | 40.1 | -25.2 | .62 | 48.98 | 54 | -5.02 | - | - | - | - | 305 | 112 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 ** - indicates frequency in Taiwan NCC LP0002 Restricted Band
 PK-U - Maximum Peak
 ADV - Linear Voltage Average
 Pk - Peak detector

MID CHANNEL RESULTS



HORIZONTAL

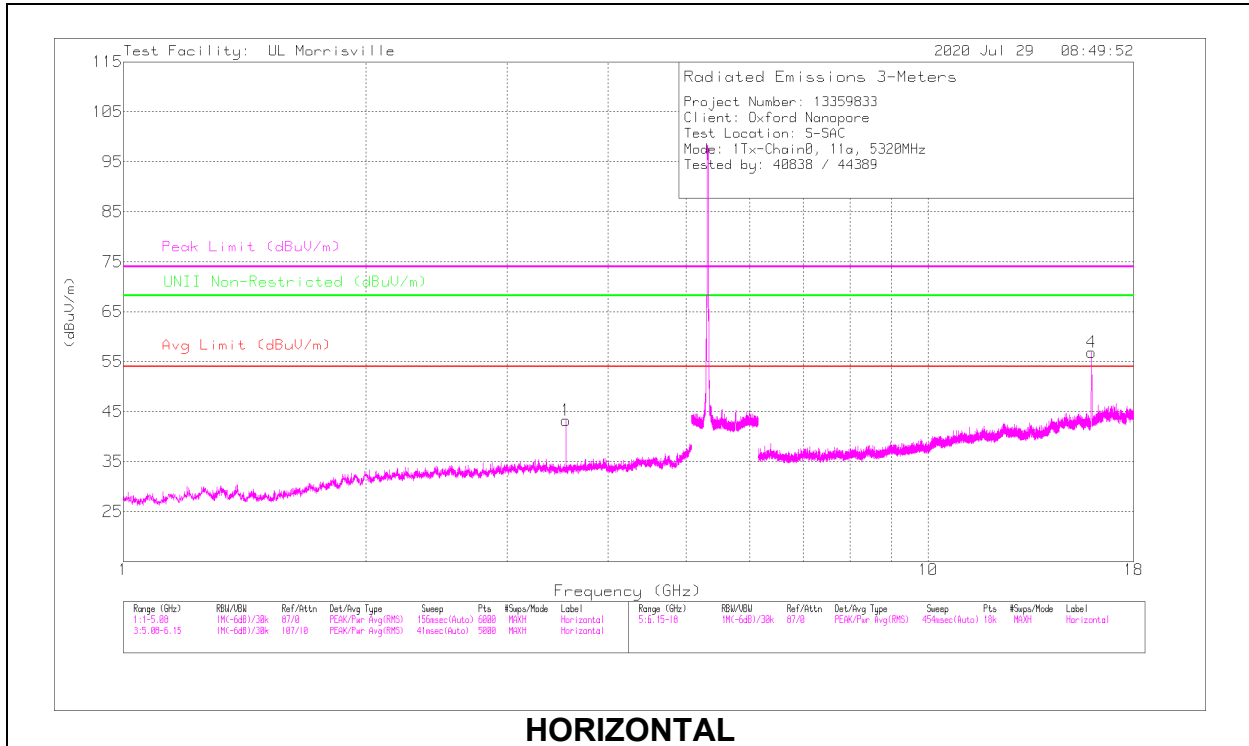


VERTICAL

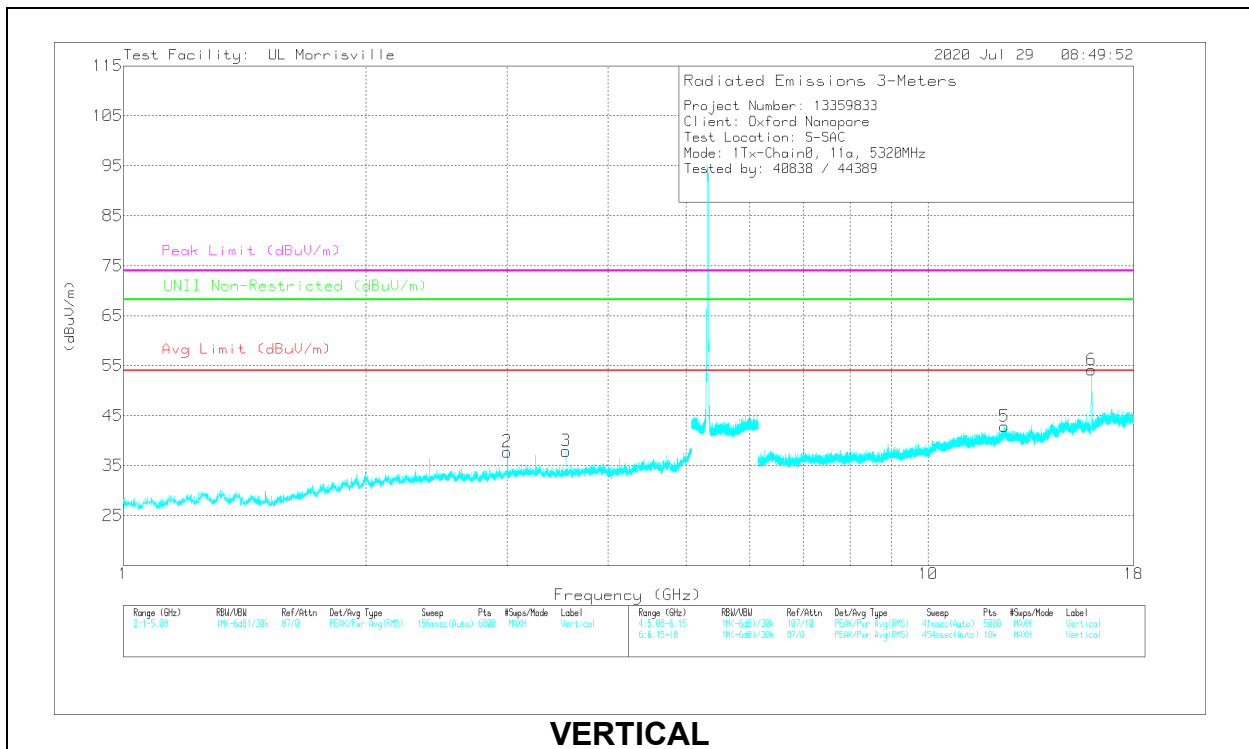
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB(/m) | Amp/Cbl/Filtr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|---------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | ** 1.75254 | 43.28 | PK-U | 29.6 | -35 | 0 | 37.88 | - | - | 74 | -36.12 | 68.2 | -30.32 | 221 | 381 | H |
| | ** 1.75289 | 30.34 | ADV | 29.6 | -35 | .62 | 25.56 | 54 | -28.44 | - | - | - | - | 221 | 381 | H |
| 2 | *** 3.53335 | 45.33 | PK-U | 33 | -32.4 | 0 | 45.93 | - | - | 74 | -28.07 | - | - | 325 | 240 | H |
| | *** 3.53329 | 32.8 | ADV | 33 | -32.4 | .62 | 34.02 | 54 | -19.98 | - | - | - | - | 325 | 240 | H |
| 4 | ** 1.75347 | 51.34 | PK-U | 29.6 | -35 | 0 | 45.94 | - | - | 74 | -28.06 | 68.2 | -22.26 | 348 | 388 | V |
| | ** 1.75157 | 31.13 | ADV | 29.7 | -35 | .62 | 26.45 | 54 | -27.55 | - | - | - | - | 348 | 388 | V |
| 5 | *** 3.53326 | 48.87 | PK-U | 33 | -32.4 | 0 | 49.47 | - | - | 74 | -24.53 | - | - | 357 | 233 | V |
| | *** 3.53322 | 33.61 | ADV | 33 | -32.4 | .62 | 34.83 | 54 | -19.17 | - | - | - | - | 357 | 233 | V |
| 3 | *** 15.9029 | 47 | PK-U | 40.2 | -25.4 | 0 | 61.8 | - | - | 74 | -12.2 | - | - | 360 | 112 | H |
| | *** 15.90328 | 31.3 | ADV | 40.2 | -25.4 | .62 | 46.72 | 54 | -7.28 | - | - | - | - | 360 | 112 | H |
| 6 | *** 15.8971 | 46.55 | PK-U | 40.1 | -25.4 | 0 | 61.25 | - | - | 74 | -12.75 | - | - | 296 | 107 | V |
| | *** 15.89709 | 33.16 | ADV | 40.1 | -25.4 | .62 | 48.48 | 54 | -5.52 | - | - | - | - | 296 | 107 | V |
| 7 | 2.99978 | 44.52 | PK-U | 33 | -32.6 | 0 | 44.92 | - | - | - | - | 68.2 | -23.28 | 268 | 361 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 ** - indicates frequency in Taiwan NCC LP0002 Restricted Band
 PK-U - Maximum Peak
 ADV - Linear Voltage Average
 Pk - Peak detector

HIGH CHANNEL RESULTS



HORIZONTAL



VERTICAL

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0067 (dB/m) | Amp/Cbl/fttr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|---------------|-----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | * ** 3.54653 | 47.56 | PK-U | 32.9 | -33.2 | 0 | 47.26 | - | - | 74 | -26.74 | - | - | 2 | 110 | H |
| | * ** 3.54668 | 32.7 | ADV | 32.9 | -33.2 | .62 | 33.02 | 54 | -20.98 | - | - | - | - | 2 | 110 | H |
| 3 | * ** 3.54674 | 47.34 | PK-U | 32.9 | -33.2 | 0 | 47.04 | - | - | 74 | -26.96 | - | - | 95 | 301 | V |
| | * ** 3.54662 | 32.21 | ADV | 32.9 | -33.2 | .62 | 32.53 | 54 | -21.47 | - | - | - | - | 95 | 301 | V |
| 4 | * ** 15.96296 | 50.29 | PK-U | 40.4 | -24.8 | 0 | 65.89 | - | - | 74 | -8.11 | - | - | 49 | 300 | H |
| | * ** 15.96341 | 34.81 | ADV | 40.4 | -24.8 | .62 | 51.03 | 54 | -2.97 | - | - | - | - | 49 | 300 | H |
| 5 | * ** 12.44321 | 34.18 | PK-U | 39 | -24 | 0 | 49.18 | - | - | 74 | -24.82 | - | - | 343 | 104 | V |
| | * ** 12.4431 | 20.82 | ADV | 39 | -24 | .62 | 36.44 | 54 | -17.56 | - | - | - | - | 343 | 104 | V |
| 6 | * ** 15.96292 | 45.2 | PK-U | 40.4 | -24.8 | 0 | 60.8 | - | - | 74 | -13.2 | - | - | 28 | 101 | V |
| | * ** 15.96069 | 30.2 | ADV | 40.4 | -24.7 | .62 | 46.52 | 54 | -7.48 | - | - | - | - | 28 | 101 | V |
| 2 | 3.00002 | 45.22 | PK-U | 32.9 | -33.6 | 0 | 44.52 | - | - | - | - | 68.2 | -23.68 | 334 | 300 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

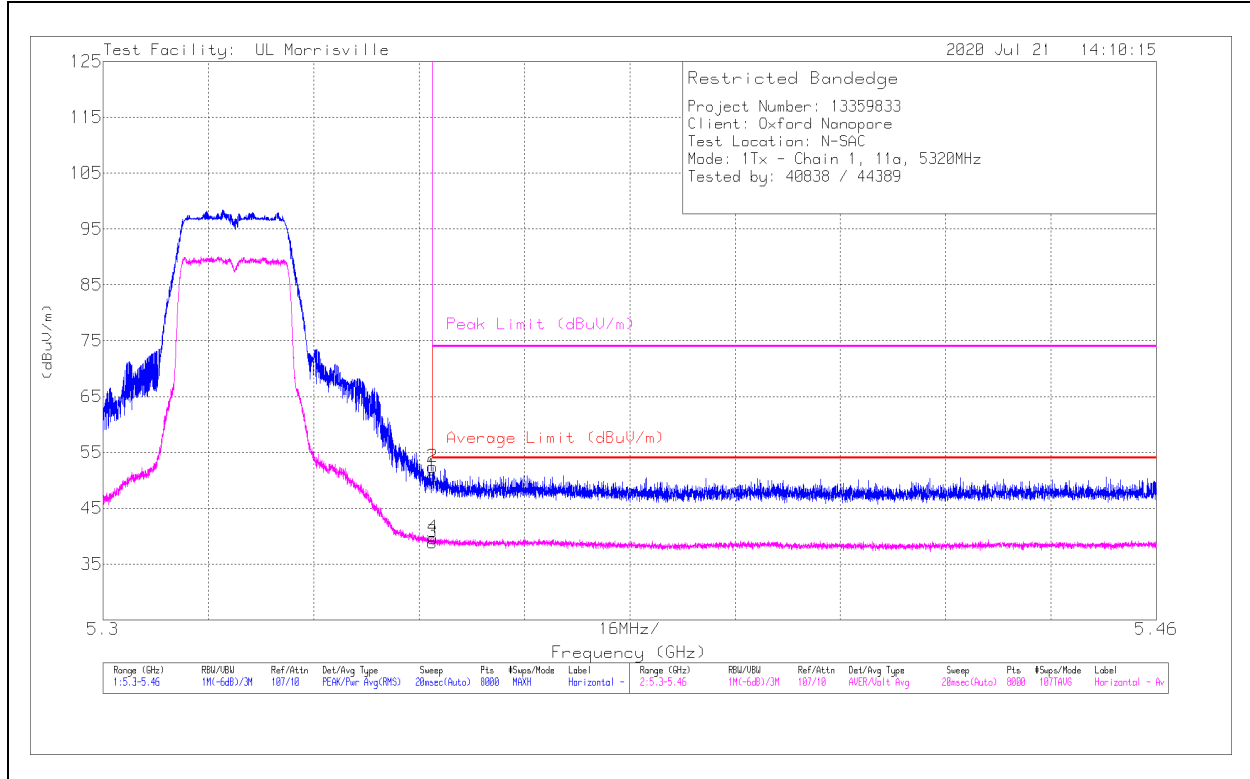
PK-U - Maximum Peak

ADV - Linear Voltage Average

1TX ANTENNA 2 MODE

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB/(m) | Amp/Cbl/Filtr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|------------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | *** 5.35001 | 38.41 | Pk | 34.4 | -22.1 | 0 | 50.71 | - | - | 74 | -23.29 | 2 | 108 | H |
| 2 | *** 5.35007 | 40.06 | Pk | 34.4 | -22.1 | 0 | 52.36 | - | - | 74 | -21.64 | 2 | 108 | H |
| 3 | *** 5.35001 | 25.93 | ADV | 34.4 | -22.1 | .62 | 38.85 | 54 | -15.15 | - | - | 2 | 108 | H |
| 4 | *** 5.35011 | 26.75 | ADV | 34.4 | -22.1 | .62 | 39.67 | 54 | -14.33 | - | - | 2 | 108 | H |

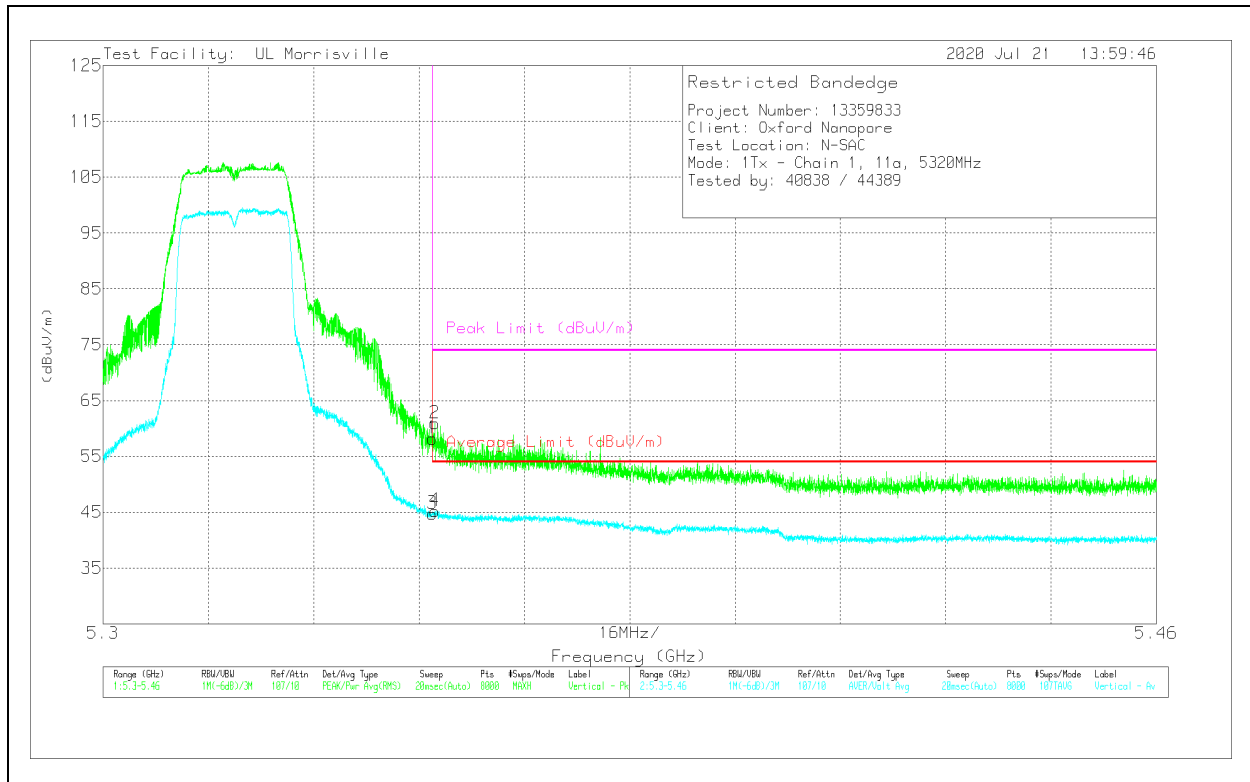
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

ADV - Linear Voltage Average

VERTICAL RESULT

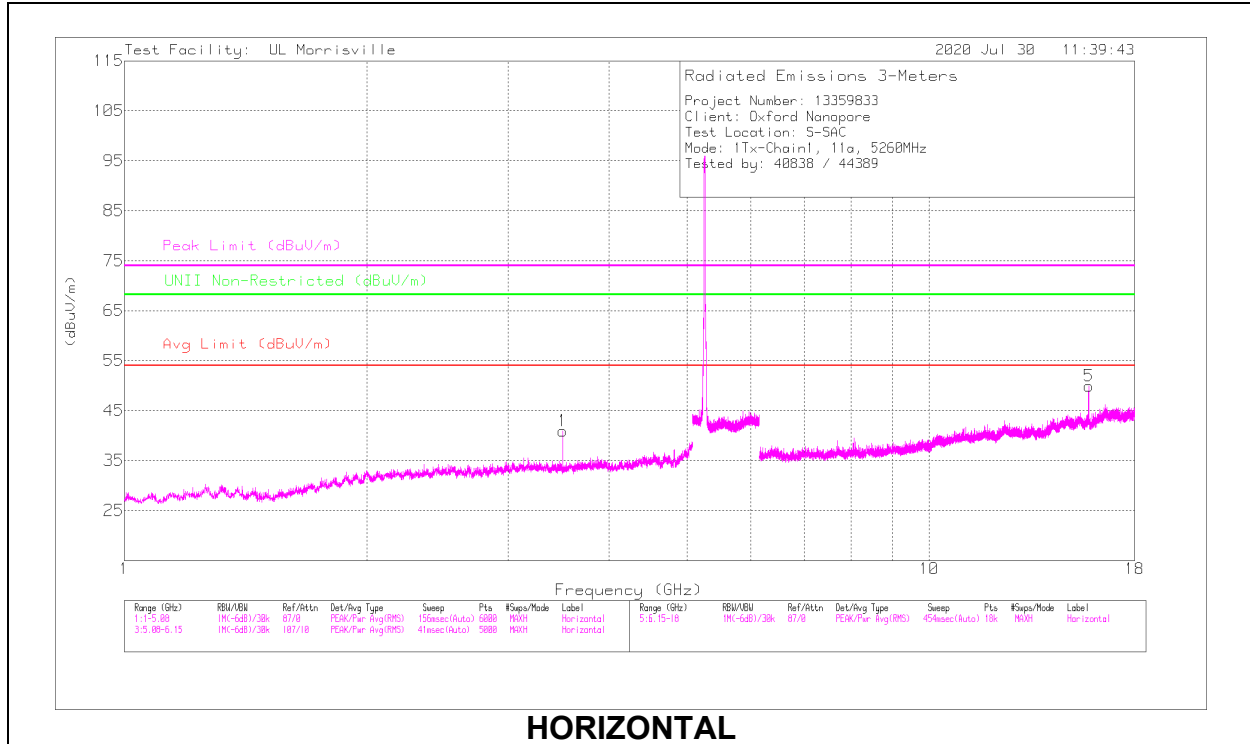


| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB/(m) | Amp/Cbl/Filtr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|------------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | *** 5.35001 | 45.9 | Pk | 34.4 | -22.1 | 0 | 58.2 | - | - | 74 | -15.8 | 256 | 106 | V |
| 2 | *** 5.35039 | 48.61 | Pk | 34.4 | -22.1 | 0 | 60.91 | - | - | 74 | -13.09 | 256 | 106 | V |
| 3 | *** 5.35001 | 31.82 | ADV | 34.4 | -22.1 | .62 | 44.74 | 54 | -9.26 | - | - | 256 | 106 | V |
| 4 | *** 5.35043 | 32.3 | ADV | 34.4 | -22.1 | .62 | 45.22 | 54 | -8.78 | - | - | 256 | 106 | V |

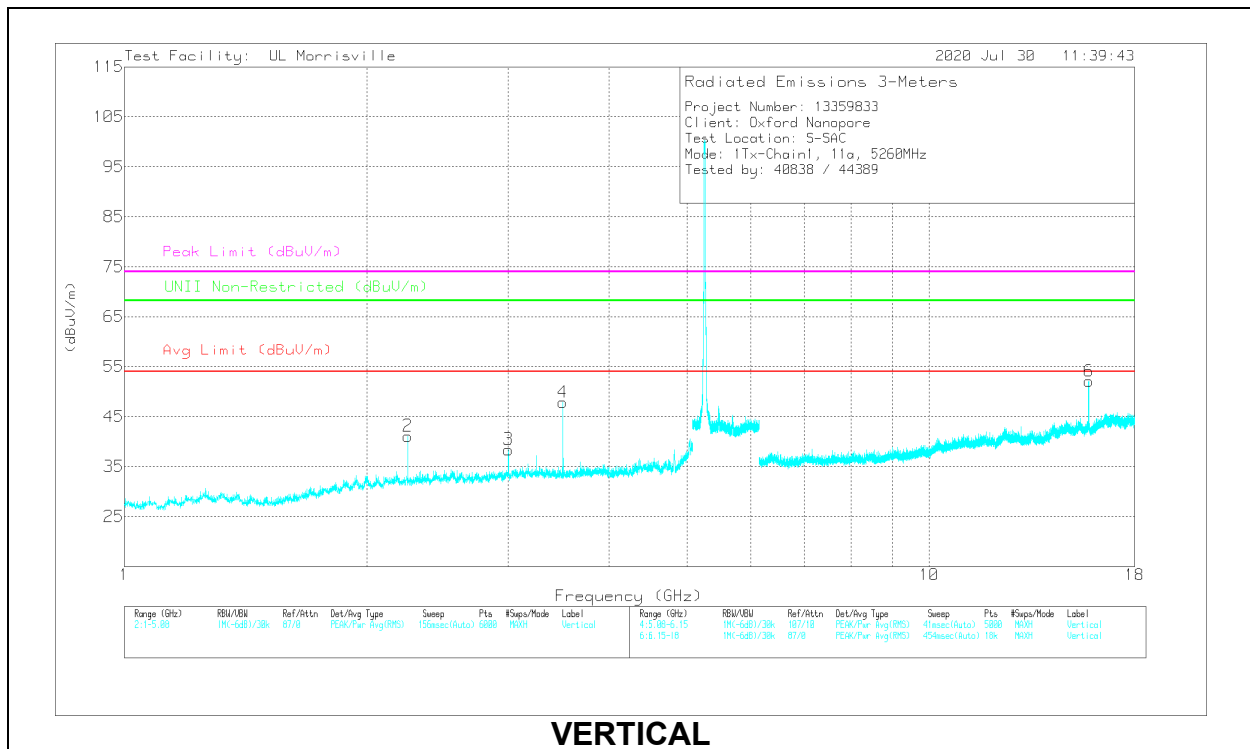
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 ** - indicates frequency in Taiwan NCC LP0002 Restricted Band
 Pk - Peak detector
 ADV - Linear Voltage Average

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



HORIZONTAL

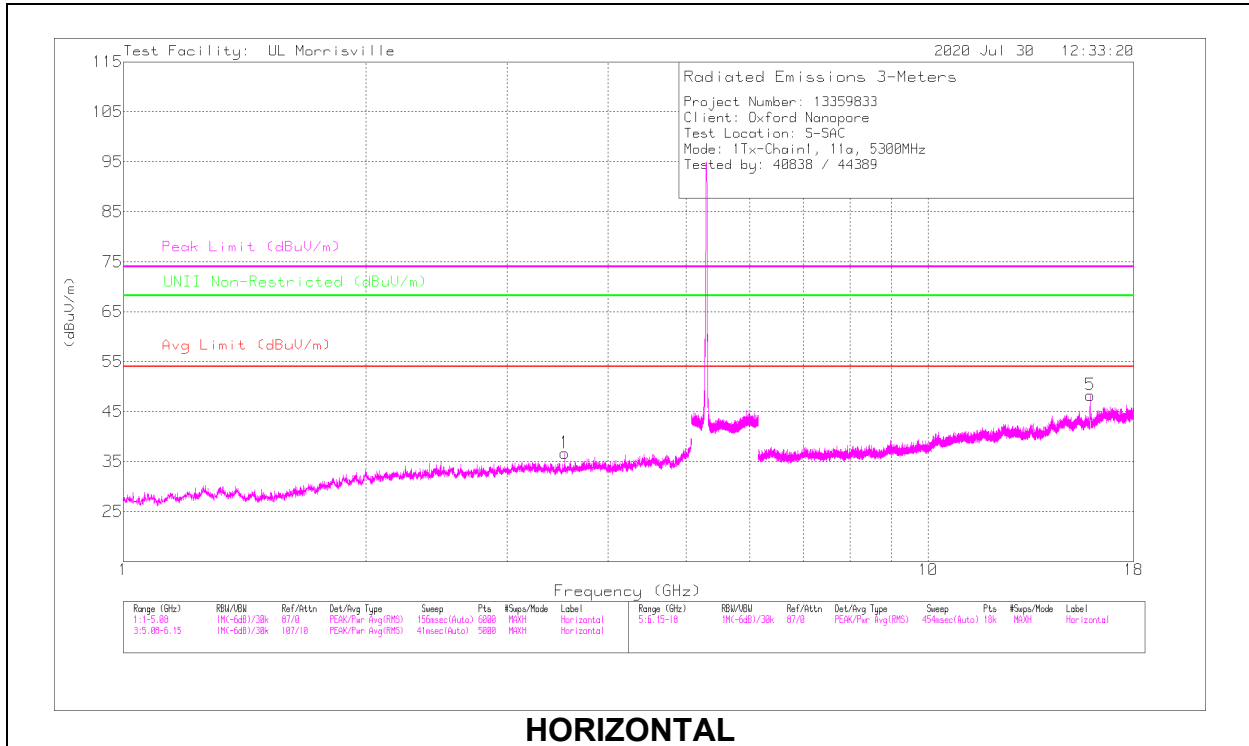


VERTICAL

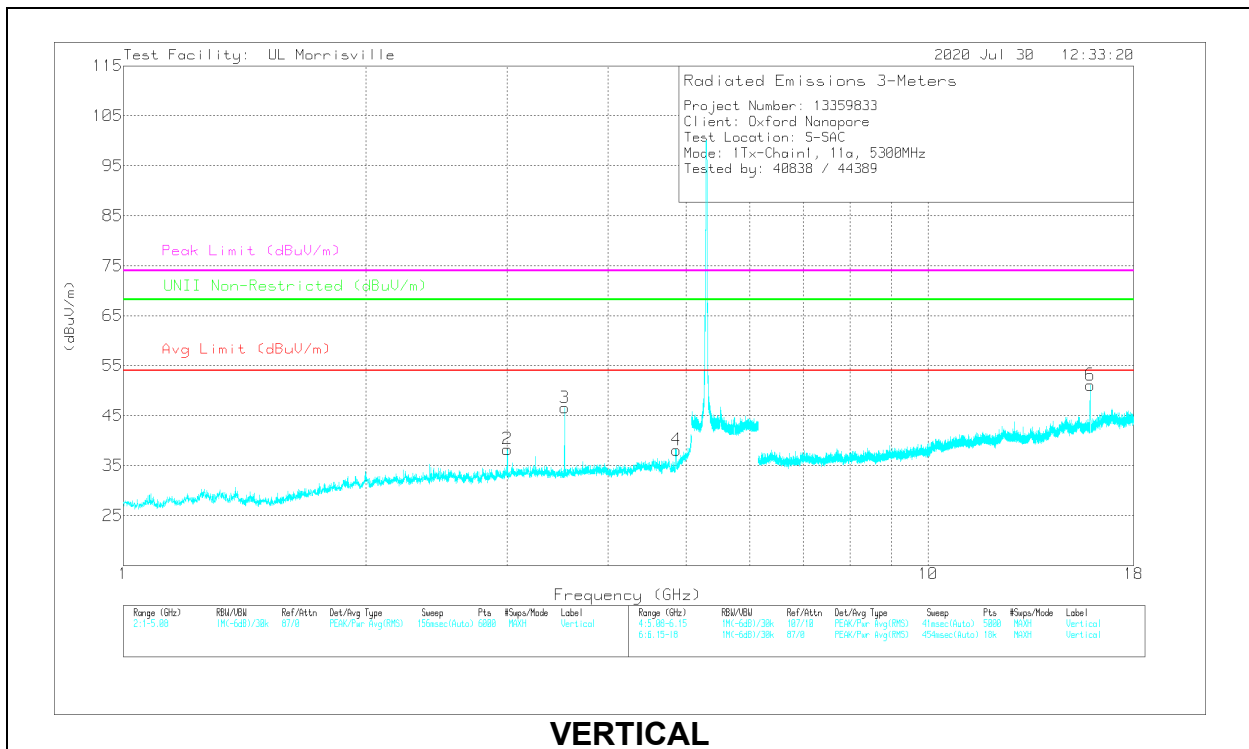
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0067 (dB/m) | Amp/Cbl/fltr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|---------------|-----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | *** 3.50665 | 48.48 | PK-U | 32.8 | -33.2 | 0 | 48.08 | - | - | 74 | -25.92 | - | - | 40 | 368 | H |
| | *** 3.50671 | 32.8 | ADV | 32.8 | -33.2 | .62 | 33.02 | 54 | -20.98 | - | - | - | - | 40 | 368 | H |
| 2 | *** 2.24974 | 42.7 | PK-U | 32.1 | -34 | 0 | 40.8 | - | - | 74 | -33.2 | - | - | 151 | 195 | V |
| | *** 2.25 | 30.15 | ADV | 32.1 | -34 | .62 | 28.87 | 54 | -25.13 | - | - | - | - | 151 | 195 | V |
| 4 | *** 3.50662 | 51.35 | PK-U | 32.8 | -33.2 | 0 | 50.95 | - | - | 74 | -23.05 | - | - | 35 | 229 | V |
| | *** 3.50664 | 36.72 | ADV | 32.8 | -33.2 | .62 | 36.94 | 54 | -17.06 | - | - | - | - | 35 | 229 | V |
| 5 | *** 15.78634 | 41.22 | PK-U | 40.3 | -23.9 | 0 | 57.62 | - | - | 74 | -16.38 | - | - | 48 | 198 | H |
| | *** 15.78656 | 27.22 | ADV | 40.3 | -23.9 | .62 | 44.24 | 54 | -9.76 | - | - | - | - | 48 | 198 | H |
| 6 | *** 15.78615 | 42.85 | PK-U | 40.3 | -23.9 | 0 | 59.25 | - | - | 74 | -14.75 | - | - | 13 | 194 | V |
| | *** 15.78655 | 27.58 | ADV | 40.3 | -23.9 | .62 | 44.6 | 54 | -9.4 | - | - | - | - | 13 | 194 | V |
| 3 | 2.99997 | 45.58 | PK-U | 32.9 | -33.6 | 0 | 44.88 | - | - | - | - | 68.2 | -23.32 | 334 | 254 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 ** - indicates frequency in Taiwan NCC LP0002 Restricted Band
 PK-U - Maximum Peak
 ADV – U Linear Voltage Average

MID CHANNEL RESULTS



HORIZONTAL



VERTICAL

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0067 (dB/m) | Amp/Cbl/fltr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|---------------|-----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | * ** 3.53339 | 47.03 | PK-U | 32.8 | -33.3 | 0 | 46.53 | - | - | 74 | -27.47 | - | - | 34 | 361 | H |
| | * ** 3.53334 | 31.54 | ADV | 32.8 | -33.3 | .62 | 31.66 | 54 | -22.34 | - | - | - | - | 34 | 361 | H |
| 3 | * ** 3.53335 | 50.85 | PK-U | 32.8 | -33.3 | 0 | 50.35 | - | - | 74 | -23.65 | - | - | 64 | 243 | V |
| | * ** 3.53336 | 34.9 | ADV | 32.8 | -33.3 | .62 | 35.02 | 54 | -18.98 | - | - | - | - | 64 | 243 | V |
| 4 | * ** 4.86361 | 43.16 | PK-U | 34 | -30.6 | 0 | 46.56 | - | - | 74 | -27.44 | - | - | 273 | 261 | V |
| | * ** 4.86338 | 31.3 | ADV | 34 | -30.6 | .62 | 35.32 | 54 | -18.68 | - | - | - | - | 273 | 261 | V |
| 5 | * ** 15.89394 | 42.81 | PK-U | 40.3 | -25.2 | 0 | 57.91 | - | - | 74 | -16.09 | - | - | 39 | 187 | H |
| | * ** 15.89418 | 27.76 | ADV | 40.3 | -25.2 | .62 | 43.48 | 54 | -10.52 | - | - | - | - | 39 | 187 | H |
| 6 | * ** 15.89714 | 43.14 | PK-U | 40.3 | -25.3 | 0 | 58.14 | - | - | 74 | -15.86 | - | - | 8 | 101 | V |
| | * ** 15.89714 | 29.77 | ADV | 40.3 | -25.3 | .62 | 45.39 | 54 | -8.61 | - | - | - | - | 8 | 101 | V |
| 2 | 2.99985 | 45.22 | PK-U | 32.9 | -33.6 | 0 | 44.52 | - | - | - | - | 68.2 | -23.68 | 330 | 210 | V |

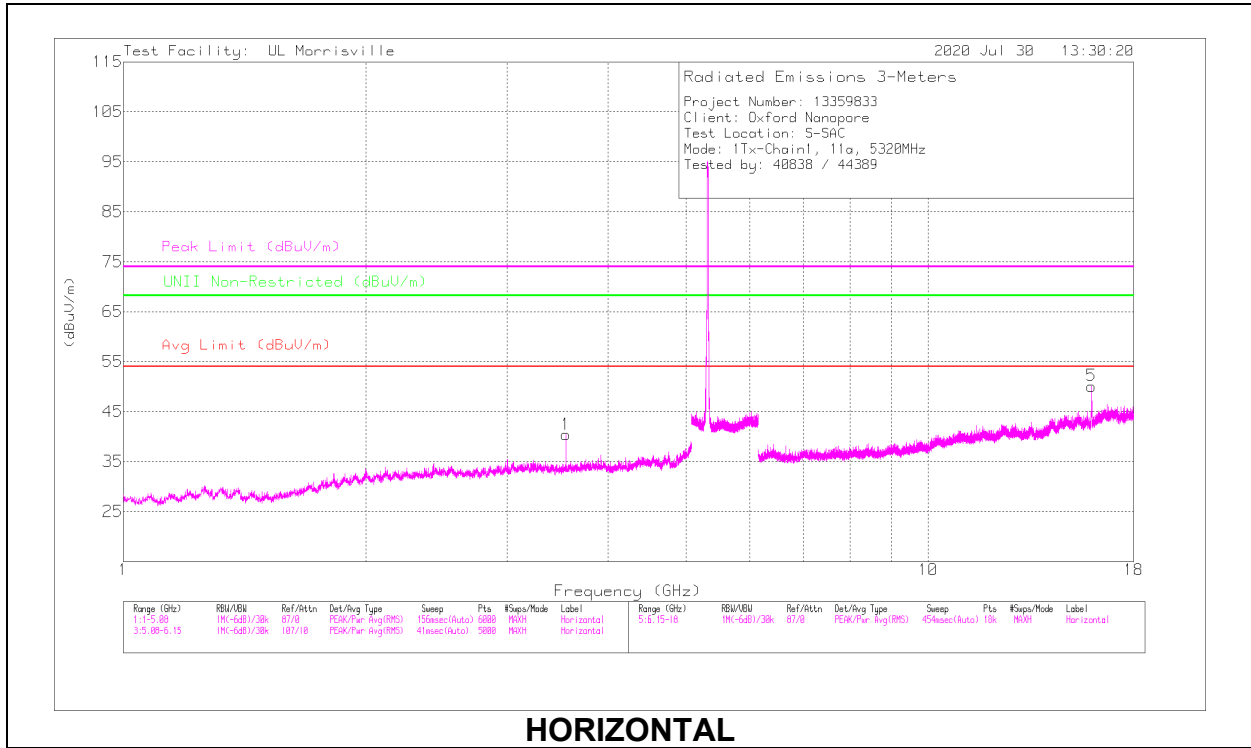
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

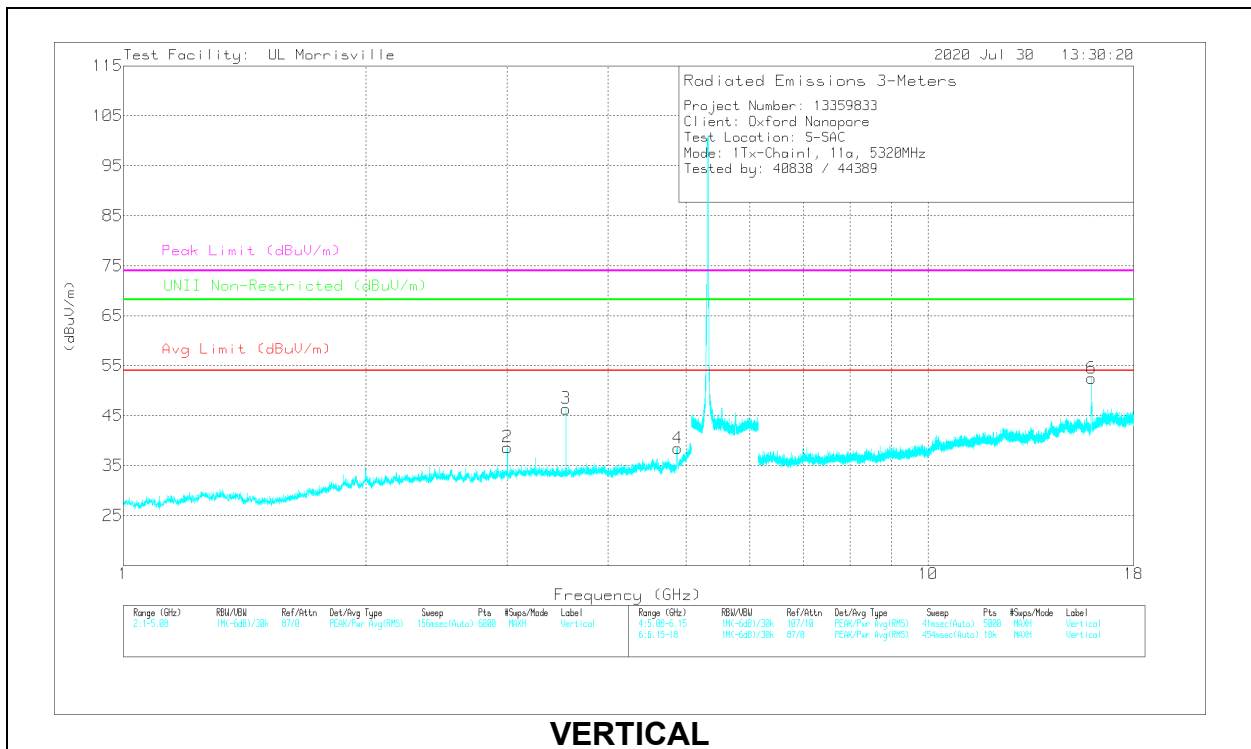
PK-U - Maximum Peak

ADV - Linear Voltage Average

HIGH CHANNEL RESULTS



HORIZONTAL



VERTICAL

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0067 (dB/m) | Amp/Cbl/fltr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|---------------|-----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | *** 3.54666 | 46.46 | PK-U | 32.9 | -33.2 | 0 | 46.16 | - | - | 74 | -27.84 | - | - | 42 | 299 | H |
| | *** 3.54662 | 31.25 | ADV | 32.9 | -33.2 | .62 | 31.57 | 54 | -22.43 | - | - | - | - | 42 | 299 | H |
| 3 | *** 3.5467 | 49.79 | PK-U | 32.9 | -33.2 | 0 | 49.49 | - | - | 74 | -24.51 | - | - | 60 | 107 | V |
| | *** 3.54662 | 34.85 | ADV | 32.9 | -33.2 | .62 | 35.17 | 54 | -18.83 | - | - | - | - | 60 | 107 | V |
| 4 | *** 4.88243 | 41.99 | PK-U | 34 | -30.4 | 0 | 45.59 | - | - | 74 | -28.41 | - | - | 347 | 116 | V |
| | *** 4.88238 | 29.73 | ADV | 34 | -30.4 | .62 | 33.95 | 54 | -20.05 | - | - | - | - | 347 | 116 | V |
| 5 | *** 15.95393 | 41.84 | PK-U | 40.4 | -24.8 | 0 | 57.44 | - | - | 74 | -16.56 | - | - | 75 | 101 | H |
| | *** 15.95428 | 26.75 | ADV | 40.4 | -24.8 | .62 | 42.97 | 54 | -11.03 | - | - | - | - | 75 | 101 | H |
| 6 | *** 15.95384 | 44.43 | PK-U | 40.4 | -24.8 | 0 | 60.03 | - | - | 74 | -13.97 | - | - | 351 | 101 | V |
| | *** 15.95423 | 29.35 | ADV | 40.4 | -24.8 | .62 | 45.57 | 54 | -8.43 | - | - | - | - | 351 | 101 | V |
| 2 | 3.00018 | 46.12 | PK-U | 32.9 | -33.6 | 0 | 45.42 | - | - | - | - | 68.2 | -22.78 | 328 | 276 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

PK-U - Maximum Peak

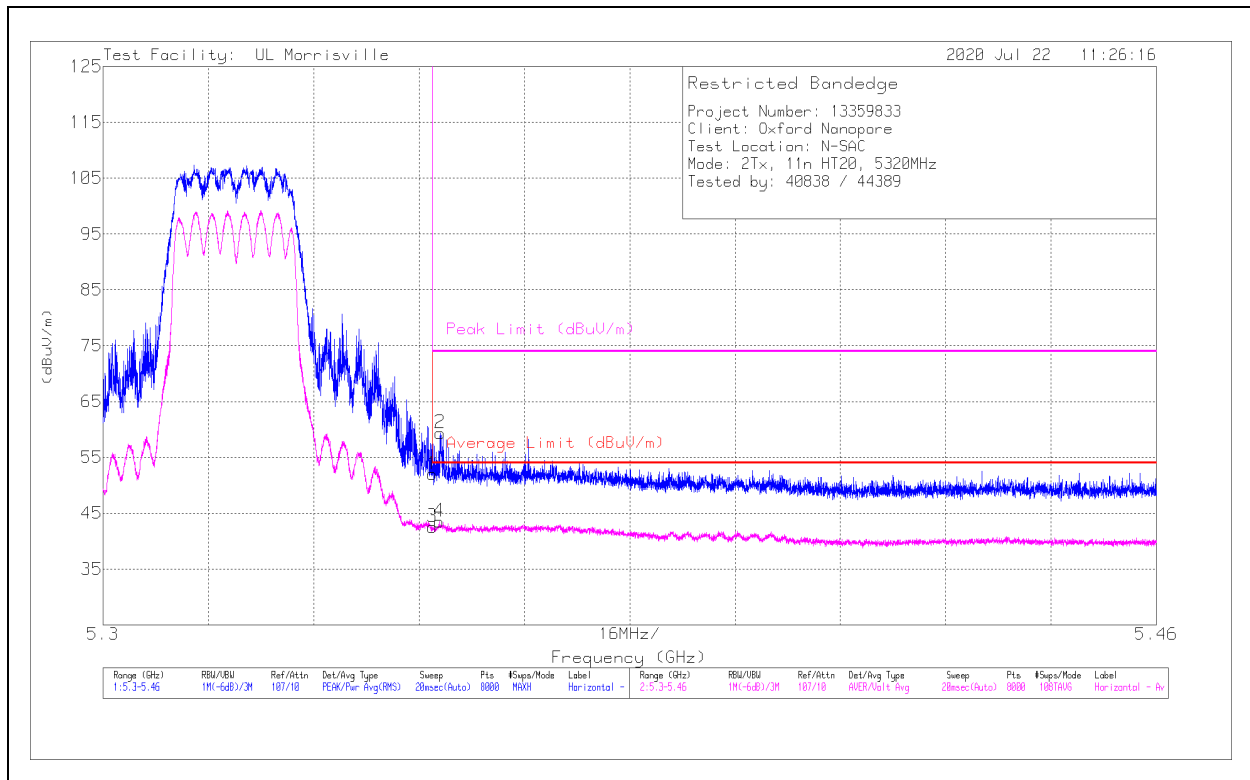
ADV - Linear Voltage Average

12.1.6. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.3 GHz BAND

2TX ANTENNA 1 + ANTENNA 2 MODE

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB(/m) | Amp/Cbl/Filtr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|------------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | *** 5.35001 | 39.72 | Pk | 34.4 | -22.1 | 0 | 52.02 | - | - | 74 | -21.98 | 308 | 114 | H |
| 2 | *** 5.35121 | 47.08 | Pk | 34.4 | -22.1 | 0 | 59.38 | - | - | 74 | -14.62 | 308 | 114 | H |
| 3 | *** 5.35001 | 29.51 | ADV | 34.4 | -22.1 | .72 | 42.53 | 54 | -11.47 | - | - | 308 | 114 | H |
| 4 | *** 5.35107 | 30.49 | ADV | 34.4 | -22.1 | .72 | 43.51 | 54 | -10.49 | - | - | 308 | 114 | H |

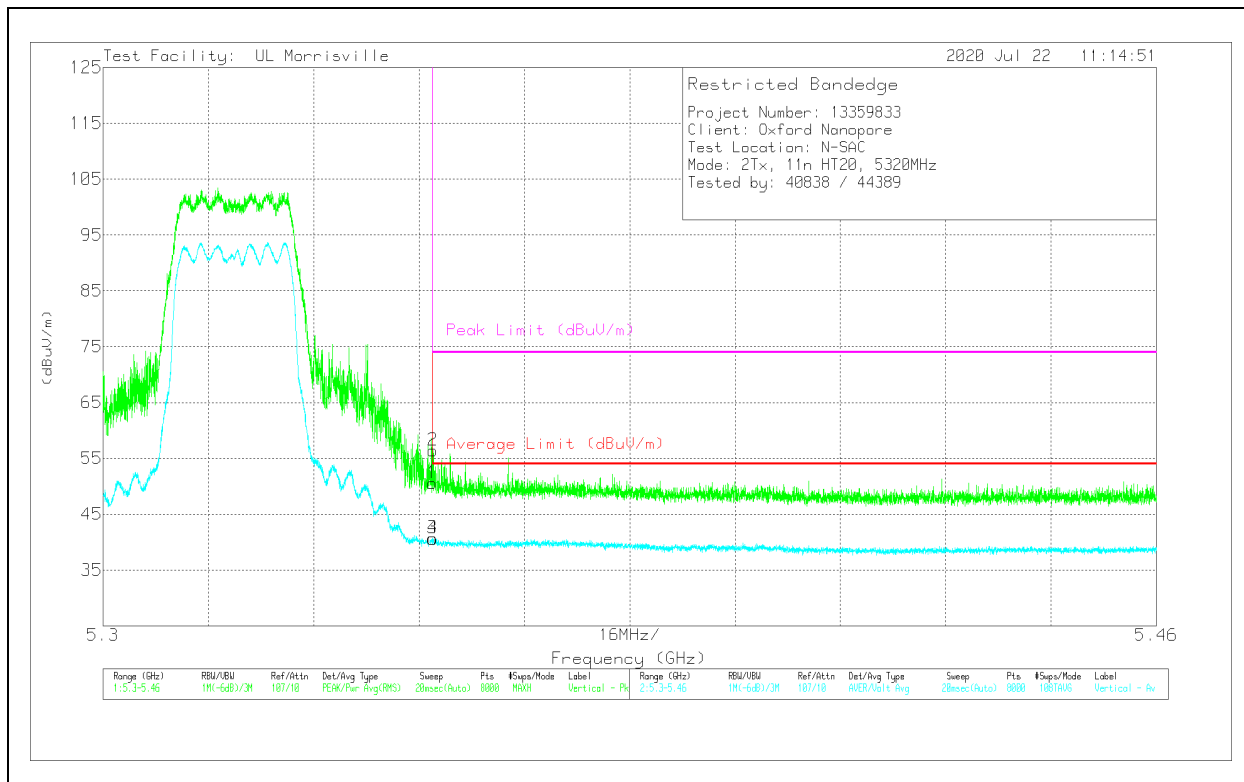
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

ADV - Linear Voltage Average

VERTICAL RESULT

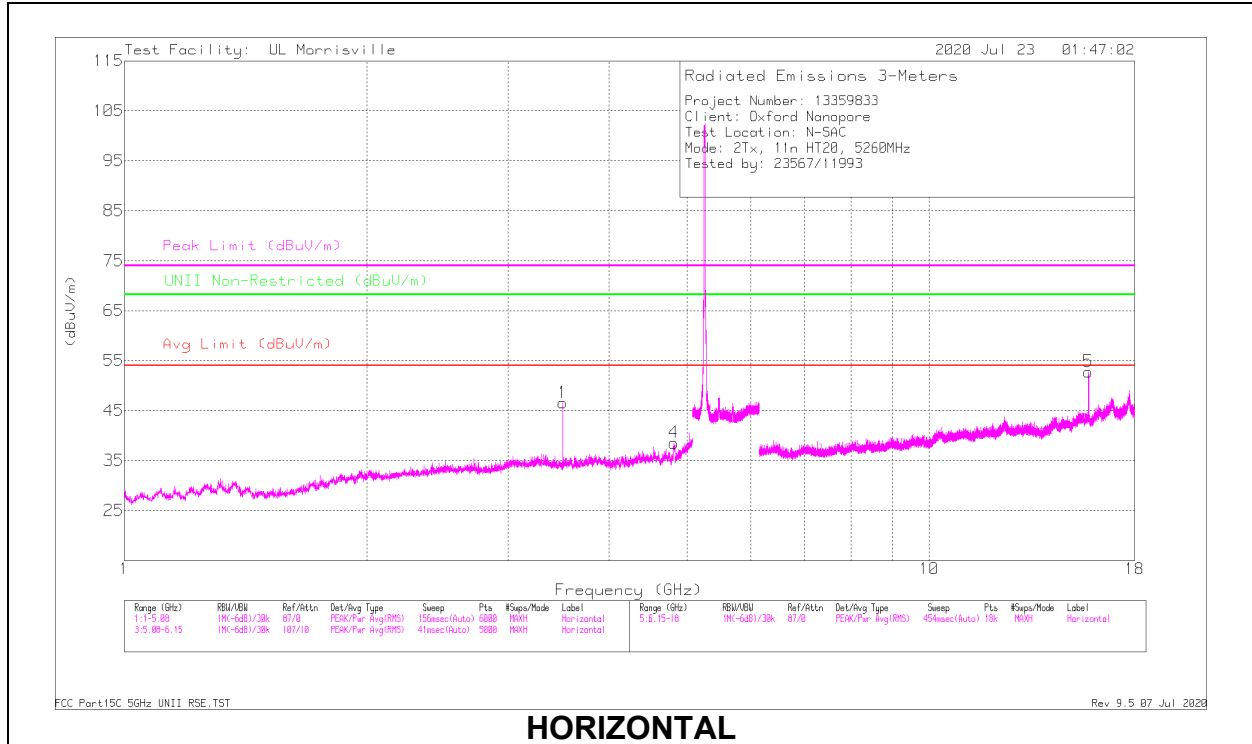


| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB/(m) | Amp/Cbl/Fitr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|-----------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | *** 5.35001 | 38.27 | Pk | 34.4 | -22.1 | 0 | 50.57 | - | - | 74 | -23.43 | 88 | 290 | V |
| 2 | *** 5.35011 | 44.08 | Pk | 34.4 | -22.1 | 0 | 56.38 | - | - | 74 | -17.62 | 88 | 290 | V |
| 3 | *** 5.35001 | 27.64 | ADV | 34.4 | -22.1 | .72 | 40.66 | 54 | -13.34 | - | - | 88 | 289 | V |
| 4 | *** 5.35011 | 27.62 | ADV | 34.4 | -22.1 | .72 | 40.64 | 54 | -13.36 | - | - | 88 | 289 | V |

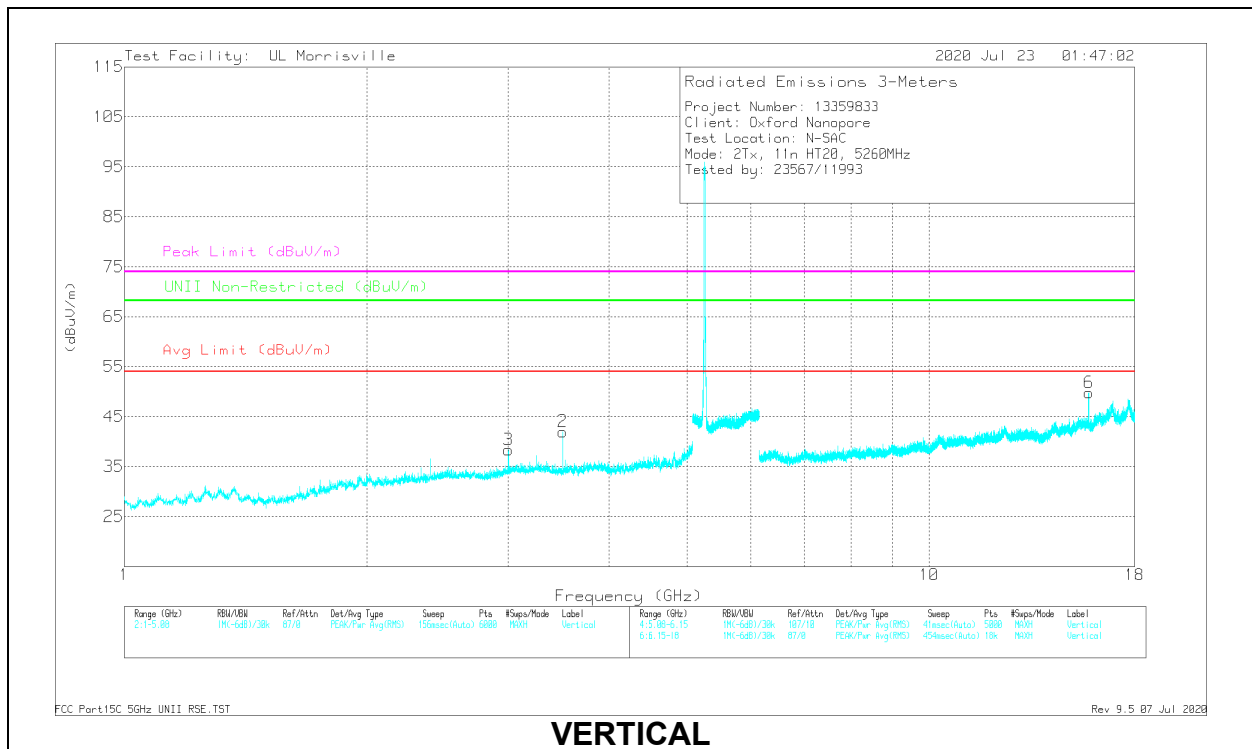
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 ** - indicates frequency in Taiwan NCC LP0002 Restricted Band
 Pk - Peak detector
 ADV - Linear Voltage Average

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



HORIZONTAL



VERTICAL

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB(/m) | Amp/Cbl/Filtr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|---------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | * ** 3.50655 | 48.56 | PK-U | 33 | -32.7 | 0 | 48.86 | - | - | 74 | -25.14 | - | - | 0 | 362 | H |
| | * ** 3.50658 | 35.37 | ADV | 33 | -32.7 | .72 | 36.39 | 54 | -17.61 | - | - | - | - | 0 | 362 | H |
| 4 | * ** 4.81408 | 43.87 | PK-U | 34.1 | -30.3 | 0 | 47.67 | - | - | 74 | -26.33 | - | - | 339 | 337 | H |
| | * ** 4.81453 | 31.49 | ADV | 34.1 | -30.3 | .72 | 36.01 | 54 | -17.99 | - | - | - | - | 339 | 337 | H |
| 2 | * ** 3.50667 | 46.94 | PK-U | 33 | -32.7 | 0 | 47.24 | - | - | 74 | -26.76 | - | - | 11 | 327 | V |
| | * ** 3.50672 | 31.9 | ADV | 33 | -32.7 | .72 | 32.92 | 54 | -21.08 | - | - | - | - | 11 | 327 | V |
| 5 | * ** 15.77523 | 48.09 | PK-U | 40.1 | -25.1 | 0 | 63.09 | - | - | 74 | -10.91 | - | - | 354 | 240 | H |
| | * ** 15.77494 | 33.17 | ADV | 40.1 | -25.1 | .72 | 48.89 | 54 | -5.11 | - | - | - | - | 354 | 240 | H |
| 6 | * ** 15.79004 | 44.39 | PK-U | 40.1 | -25.1 | 0 | 59.39 | - | - | 74 | -14.61 | - | - | 309 | 208 | V |
| | * ** 15.79025 | 28.41 | ADV | 40.1 | -25.1 | .72 | 44.13 | 54 | -9.87 | - | - | - | - | 309 | 208 | V |
| 3 | 3.00028 | 44.29 | PK-U | 33 | -32.6 | 0 | 44.69 | - | - | - | - | 68.2 | -23.51 | 280 | 327 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

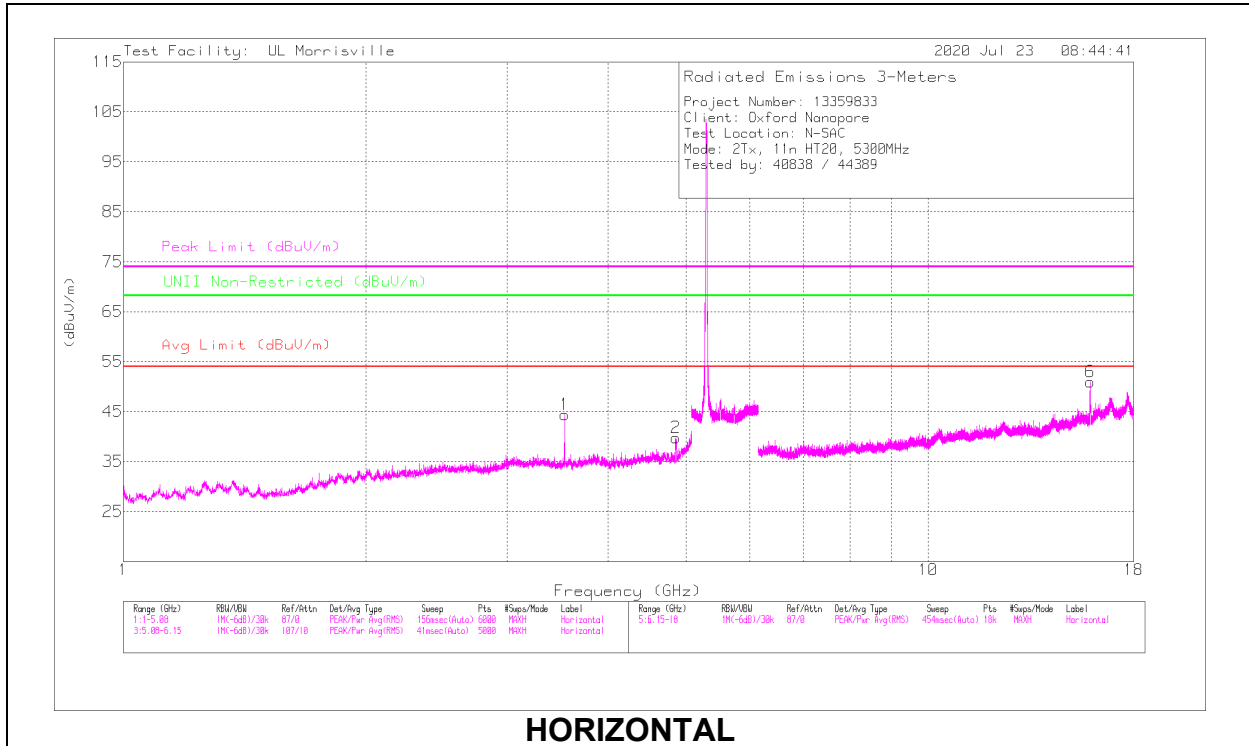
** - indicates frequency in Taiwan NCC LP0002 Restricted Band

PK-U - Maximum Peak

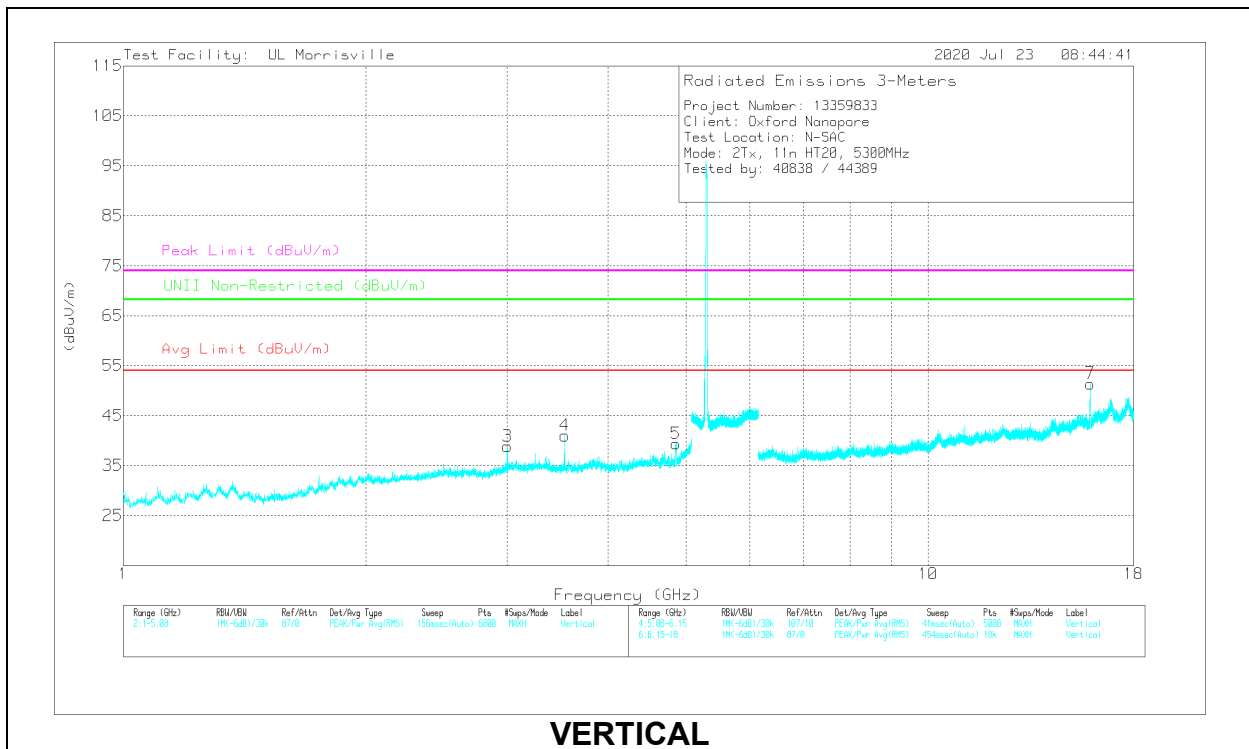
ADV - Linear Voltage Average

Pk - Peak detector

MID CHANNEL RESULTS



HORIZONTAL

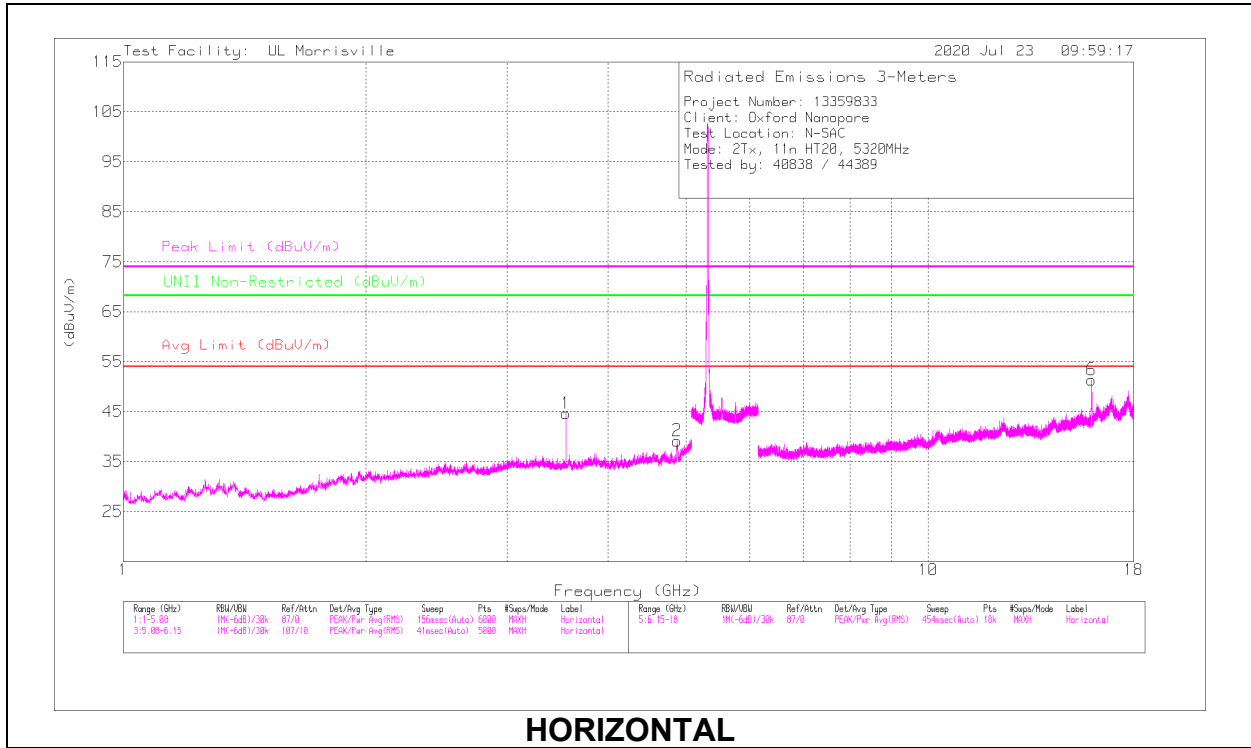


VERTICAL

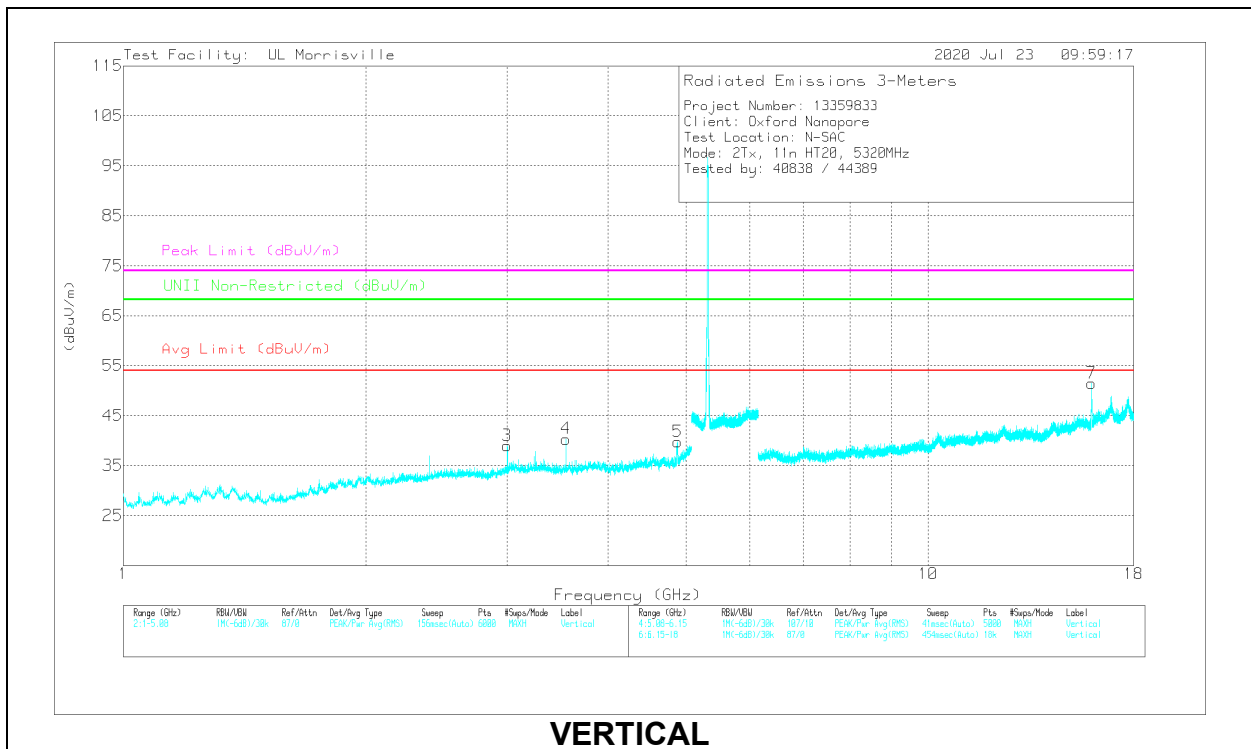
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB(/m) | Amp/Cbl/Filtr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|---------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | * ** 3.53333 | 48.92 | PK-U | 33 | -32.4 | 0 | 49.52 | - | - | 74 | -24.48 | - | - | 350 | 106 | H |
| | * ** 3.53326 | 32.5 | ADV | 33 | -32.4 | .72 | 33.82 | 54 | -20.18 | - | - | - | - | 350 | 106 | H |
| 2 | * ** 4.85645 | 44.5 | PK-U | 34.1 | -31 | 0 | 47.6 | - | - | 74 | -26.4 | - | - | 343 | 382 | H |
| | * ** 4.85614 | 32.53 | ADV | 34.1 | -31 | .72 | 36.35 | 54 | -17.65 | - | - | - | - | 343 | 382 | H |
| 4 | * ** 3.53324 | 46.77 | PK-U | 33 | -32.4 | 0 | 47.37 | - | - | 74 | -26.63 | - | - | 214 | 373 | V |
| | * ** 3.53322 | 30.66 | ADV | 33 | -32.4 | .72 | 31.98 | 54 | -22.02 | - | - | - | - | 214 | 373 | V |
| 5 | * ** 4.86147 | 43.91 | PK-U | 34.2 | -31.2 | 0 | 46.91 | - | - | 74 | -27.09 | - | - | 94 | 381 | V |
| | * ** 4.86179 | 31.57 | ADV | 34.2 | -31.2 | .72 | 35.29 | 54 | -18.71 | - | - | - | - | 94 | 381 | V |
| 6 | * ** 15.90579 | 47.76 | PK-U | 40.3 | -25.4 | 0 | 62.66 | - | - | 74 | -11.34 | - | - | 336 | 253 | H |
| | * ** 15.90594 | 32.46 | ADV | 40.3 | -25.4 | .72 | 48.08 | 54 | -5.92 | - | - | - | - | 336 | 253 | H |
| 7 | * ** 15.8971 | 45.53 | PK-U | 40.1 | -25.4 | 0 | 60.23 | - | - | 74 | -13.77 | - | - | 297 | 178 | V |
| | * ** 15.89744 | 30.74 | ADV | 40.2 | -25.4 | .72 | 46.26 | 54 | -7.74 | - | - | - | - | 297 | 178 | V |
| 3 | 2.99989 | 44.81 | PK-U | 33 | -32.6 | 0 | 45.21 | - | - | - | - | 68.2 | -22.99 | 269 | 373 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 ** - indicates frequency in Taiwan NCC LP0002 Restricted Band
 PK-U - Maximum Peak
 ADV - Linear Voltage Average

HIGH CHANNEL RESULTS



HORIZONTAL



VERTICAL

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB(/m) | Amp/Cbl/Filtr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|---------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | * ** 3.54661 | 47.59 | PK-U | 33 | -32.2 | 0 | 48.39 | - | - | 74 | -25.61 | - | - | 349 | 102 | H |
| | * ** 3.54659 | 32.44 | ADV | 33 | -32.2 | .72 | 33.96 | 54 | -20.04 | - | - | - | - | 349 | 102 | H |
| 2 | * ** 4.87771 | 45.23 | PK-U | 34.1 | -31.2 | 0 | 48.13 | - | - | 74 | -25.87 | - | - | 339 | 297 | H |
| | * ** 4.8775 | 33.29 | ADV | 34.1 | -31.2 | .72 | 36.91 | 54 | -17.09 | - | - | - | - | 339 | 297 | H |
| 4 | * ** 3.54662 | 45.04 | PK-U | 33 | -32.2 | 0 | 45.84 | - | - | 74 | -28.16 | - | - | 358 | 292 | V |
| | * ** 3.54663 | 29.98 | ADV | 33 | -32.2 | .72 | 31.5 | 54 | -22.5 | - | - | - | - | 358 | 292 | V |
| 5 | * ** 4.88471 | 45.08 | PK-U | 34 | -31.2 | 0 | 47.88 | - | - | 74 | -26.12 | - | - | 235 | 335 | V |
| | * ** 4.88478 | 32.86 | ADV | 34 | -31.2 | .72 | 36.38 | 54 | -17.62 | - | - | - | - | 235 | 335 | V |
| 6 | * ** 15.9585 | 49.29 | PK-U | 40.3 | -26.4 | 0 | 63.19 | - | - | 74 | -10.81 | - | - | 334 | 223 | H |
| | * ** 15.95839 | 34.09 | ADV | 40.3 | -26.4 | .72 | 48.71 | 54 | -5.29 | - | - | - | - | 334 | 223 | H |
| 7 | * ** 15.95747 | 46.94 | PK-U | 40.3 | -26.4 | 0 | 60.84 | - | - | 74 | -13.16 | - | - | 298 | 203 | V |
| | * ** 15.95752 | 32.48 | ADV | 40.3 | -26.4 | .72 | 47.1 | 54 | -6.9 | - | - | - | - | 298 | 203 | V |
| 3 | 2.99993 | 45.5 | PK-U | 33 | -32.6 | 0 | 45.9 | - | - | - | - | 68.2 | -22.3 | 267 | 310 | V |

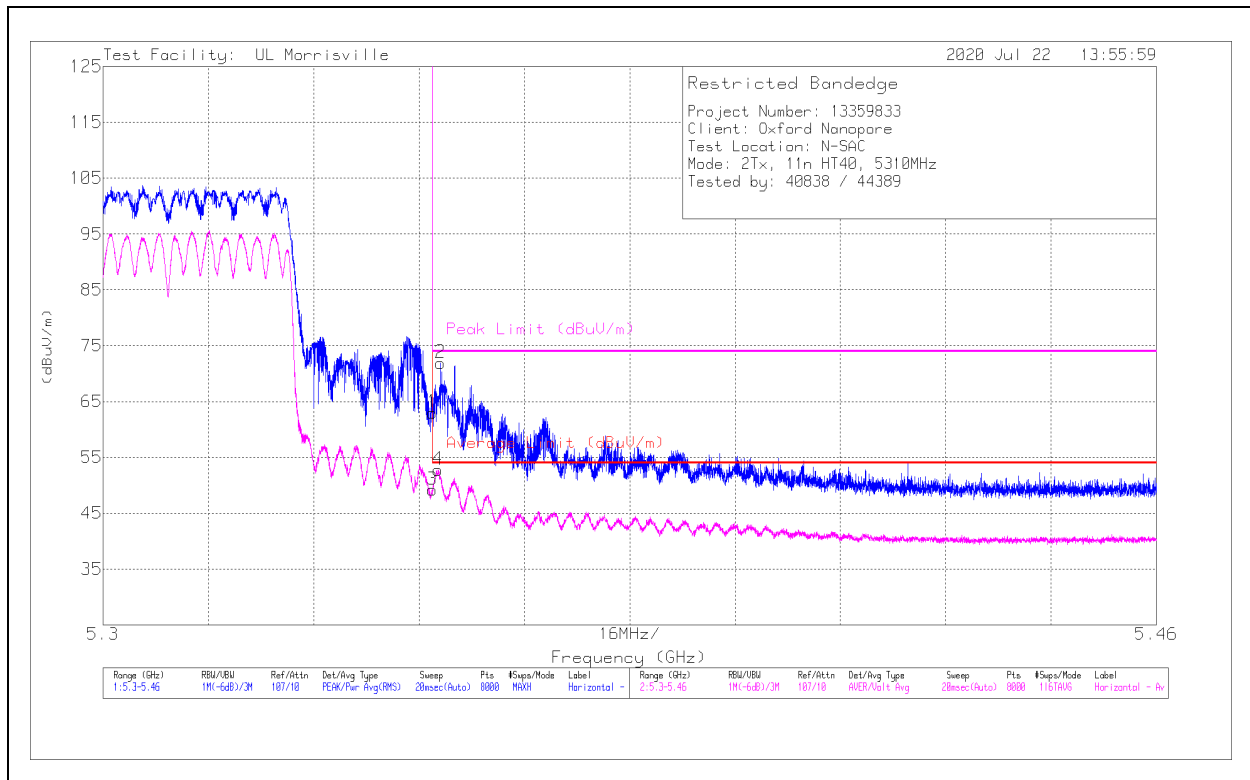
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 ** - indicates frequency in Taiwan NCC LP0002 Restricted Band
 PK-U - Maximum Peak
 ADV - Linear Voltage Average

12.1.7. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.3 GHz BAND

2TX ANTENNA 1 + ANTENNA 2 MODE

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB(/m) | Amp/Cbl/Fitr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|-----------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | *** 5.35001 | 50.74 | Pk | 34.4 | -22.1 | 0 | 63.04 | - | - | 74 | -10.96 | 297 | 110 | H |
| 2 | *** 5.35123 | 59.59 | Pk | 34.4 | -22.1 | 0 | 71.89 | - | - | 74 | -2.11 | 297 | 110 | H |
| 3 | *** 5.35001 | 35.58 | ADV | 34.4 | -22.1 | 1.32 | 49.2 | 54 | -4.8 | - | - | 297 | 109 | H |
| 4 | *** 5.35089 | 39.17 | ADV | 34.4 | -22.1 | 1.32 | 52.79 | 54 | -1.21 | - | - | 297 | 109 | H |

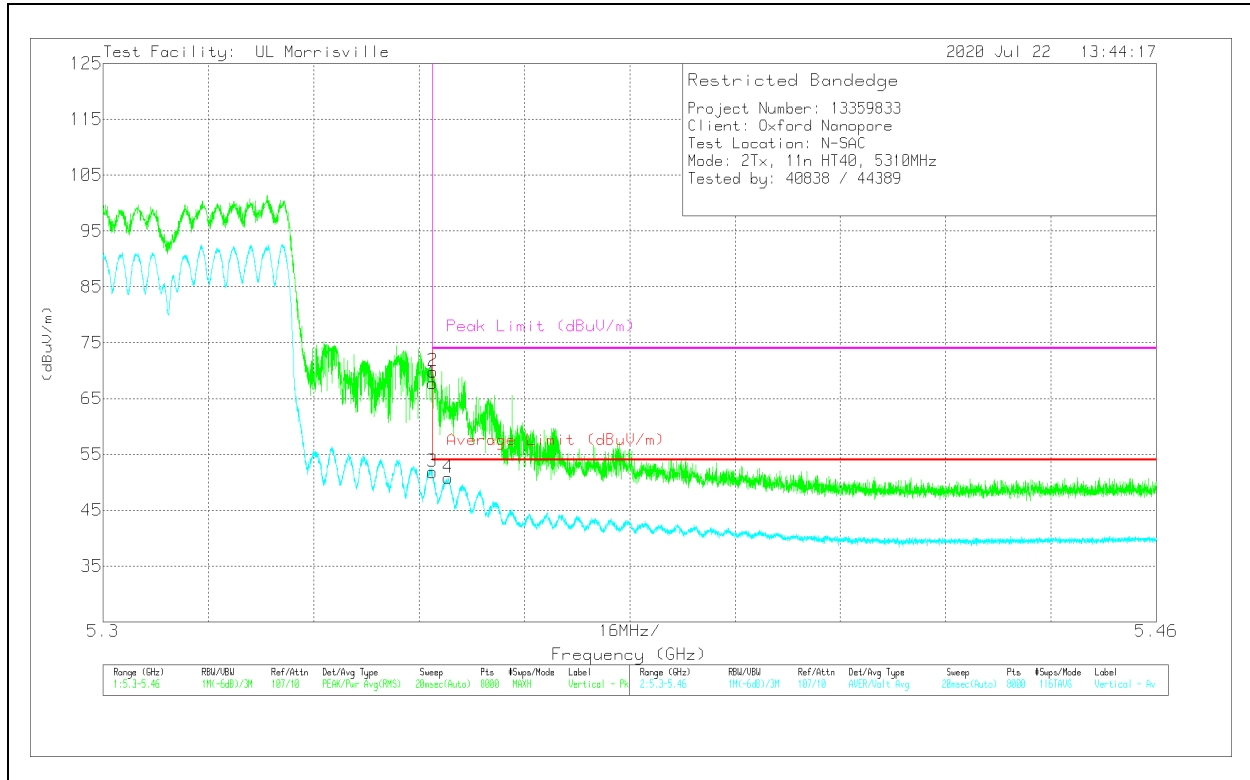
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

ADV - Linear Voltage Average

VERTICAL RESULT

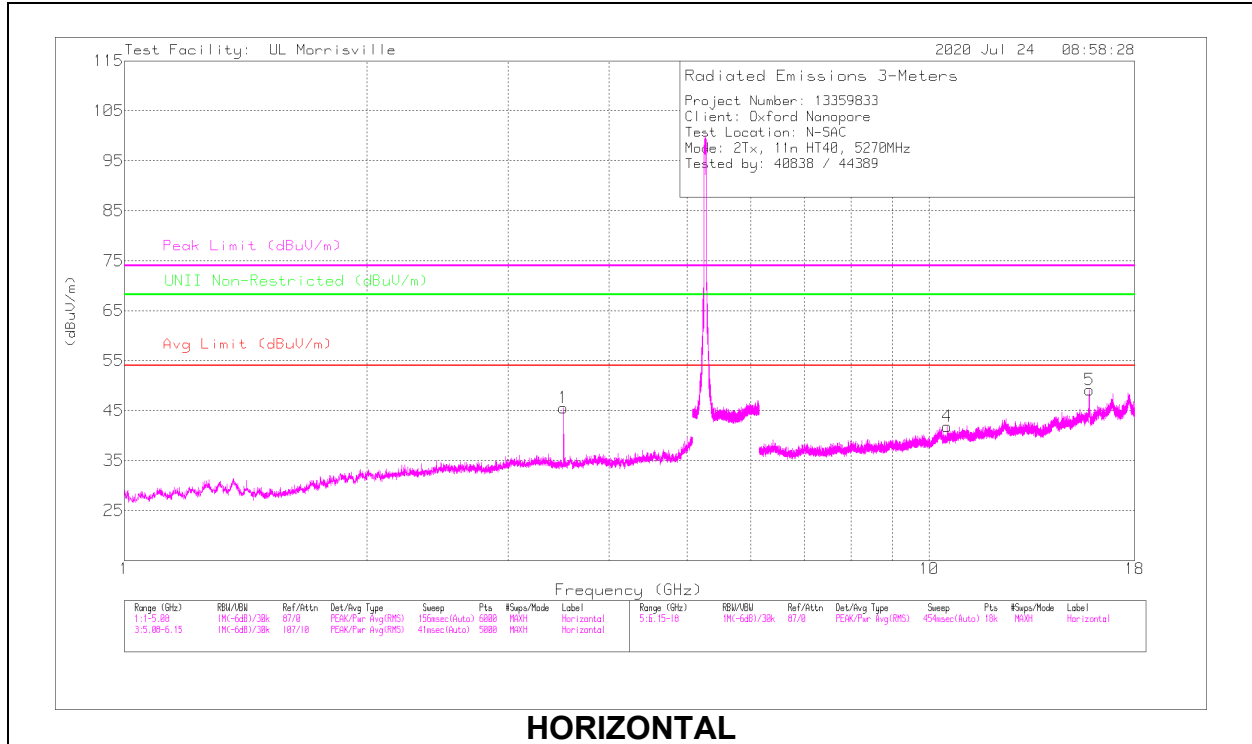


| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB/(m) | Amp/Cbl/Filtr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|------------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | *** 5.35001 | 55.42 | Pk | 34.4 | -22.1 | 0 | 67.72 | - | - | 74 | -6.28 | 80 | 374 | V |
| 2 | *** 5.35013 | 57.57 | Pk | 34.4 | -22.1 | 0 | 69.87 | - | - | 74 | -4.13 | 80 | 374 | V |
| 3 | *** 5.35001 | 38.24 | ADV | 34.4 | -22.1 | 1.32 | 51.86 | 54 | -2.14 | - | - | 80 | 374 | V |
| 4 | *** 5.35239 | 37.18 | ADV | 34.4 | -22.1 | 1.32 | 50.8 | 54 | -3.2 | - | - | 80 | 374 | V |

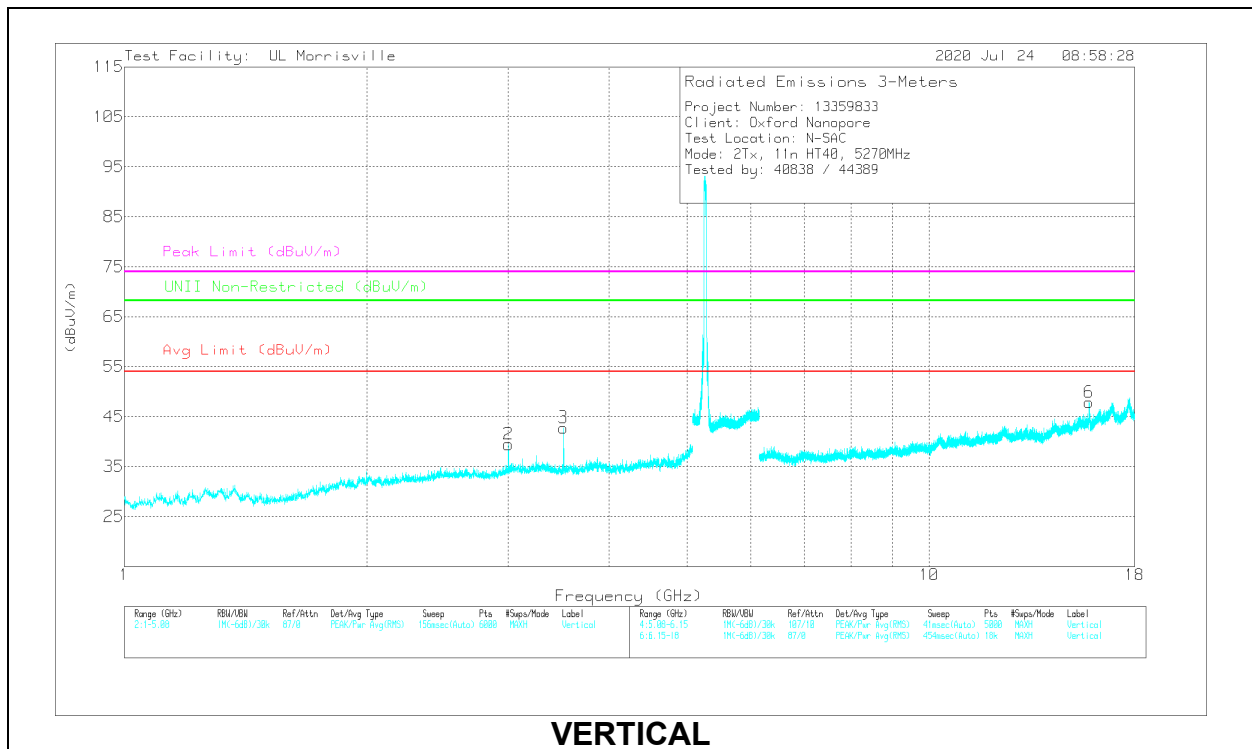
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 ** - indicates frequency in Taiwan NCC LP0002 Restricted Band
 Pk - Peak detector
 ADV - Linear Voltage Average

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



HORIZONTAL

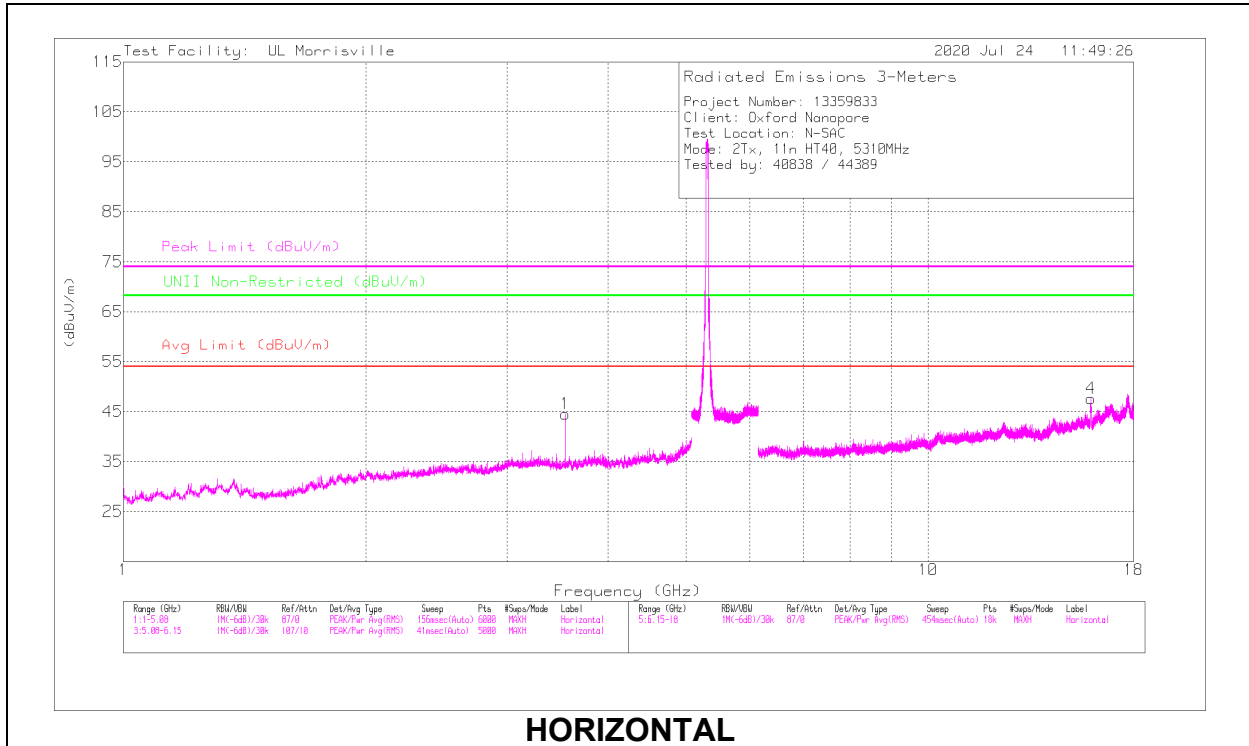


VERTICAL

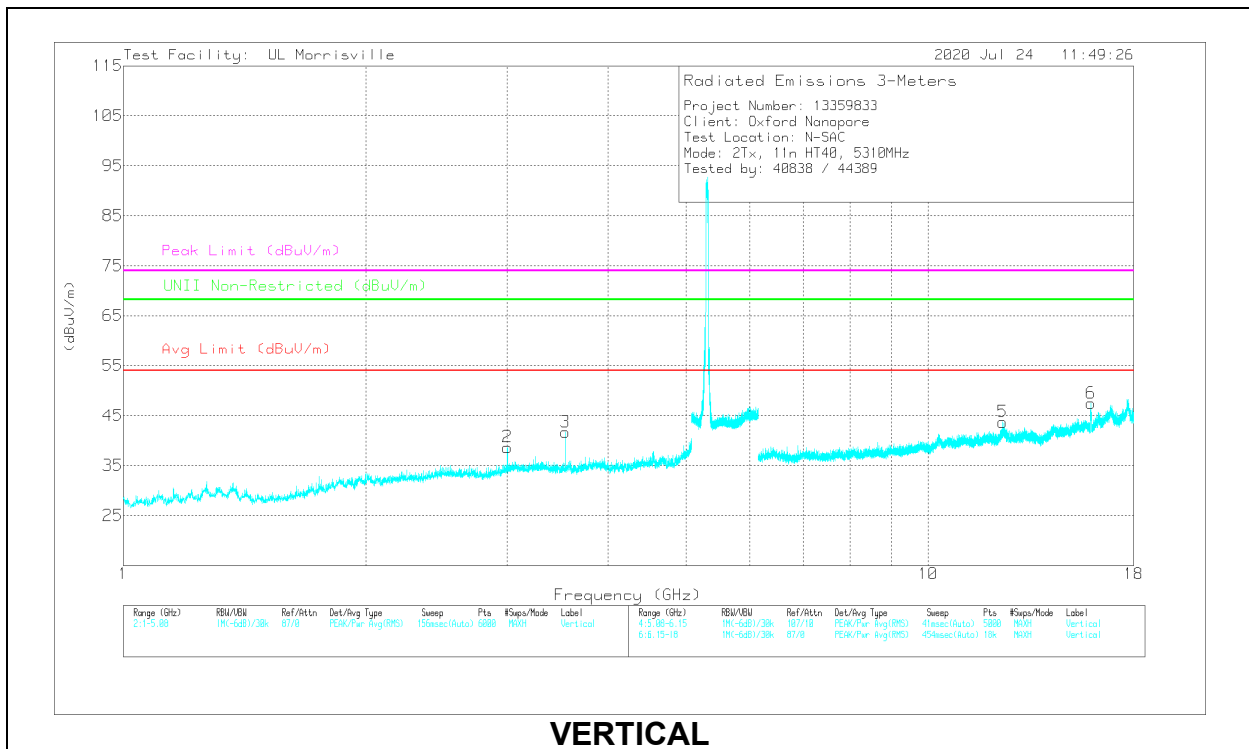
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB(/m) | Amp/Cbl/Filtr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|---------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | *** 3.5133 | 51.24 | PK-U | 33 | -32.7 | 0 | 51.54 | - | - | 74 | -22.46 | - | - | 348 | 266 | H |
| | *** 3.51328 | 36.16 | ADV | 33 | -32.7 | 1.32 | 37.78 | 54 | -16.22 | - | - | - | - | 348 | 266 | H |
| 3 | *** 3.51337 | 47.8 | PK-U | 33 | -32.7 | 0 | 48.1 | - | - | 74 | -25.9 | - | - | 18 | 366 | V |
| | *** 3.51327 | 34.3 | ADV | 33 | -32.7 | 1.32 | 35.92 | 54 | -18.08 | - | - | - | - | 18 | 366 | V |
| 5 | *** 15.82006 | 41.59 | PK-U | 40.2 | -24.9 | 0 | 56.89 | - | - | 74 | -17.11 | - | - | 347 | 239 | H |
| | *** 15.81993 | 27.65 | ADV | 40.2 | -24.9 | 1.32 | 44.27 | 54 | -9.73 | - | - | - | - | 347 | 239 | H |
| 6 | *** 15.80233 | 44.4 | PK-U | 40.1 | -24.8 | 0 | 59.7 | - | - | 74 | -14.3 | - | - | 302 | 203 | V |
| | *** 15.80293 | 26.97 | ADV | 40.1 | -24.8 | 1.32 | 43.59 | 54 | -10.41 | - | - | - | - | 302 | 203 | V |
| 2 | 2.99999 | 44.89 | PK-U | 33 | -32.6 | 0 | 45.29 | - | - | - | - | 68.2 | -22.91 | 267 | 339 | V |
| 4 | 10.52252 | 35.62 | PK-U | 37.6 | -26 | 0 | 47.22 | - | - | - | - | 68.2 | -20.98 | 151 | 215 | H |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 ** - indicates frequency in Taiwan NCC LP0002 Restricted Band
 PK-U - Maximum Peak
 ADV - Linear Voltage Average

HIGH CHANNEL RESULTS



HORIZONTAL



VERTICAL

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB(/m) | Amp/Cbl/Filtr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|---------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | * ** 3.53999 | 49.15 | PK-U | 33.1 | -32.3 | 0 | 49.95 | - | - | 74 | -24.05 | - | - | 350 | 101 | H |
| | * ** 3.53989 | 35.53 | ADV | 33.1 | -32.3 | 1.32 | 37.65 | 54 | -16.35 | - | - | - | - | 350 | 101 | H |
| 3 | * ** 3.54001 | 45.98 | PK-U | 33.1 | -32.3 | 0 | 46.78 | - | - | 74 | -27.22 | - | - | 225 | 367 | V |
| | * ** 3.54001 | 32.36 | ADV | 33.1 | -32.3 | 1.32 | 34.48 | 54 | -19.52 | - | - | - | - | 225 | 367 | V |
| 4 | * ** 15.9333 | 45.63 | PK-U | 40.2 | -26.1 | 0 | 59.73 | - | - | 74 | -14.27 | - | - | 121 | 316 | H |
| | * ** 15.9331 | 30.97 | ADV | 40.2 | -26.1 | 1.32 | 46.39 | 54 | -7.61 | - | - | - | - | 121 | 316 | H |
| 5 | * ** 12.38303 | 35.65 | PK-U | 38.9 | -24.7 | 0 | 49.85 | - | - | 74 | -24.15 | - | - | 154 | 164 | V |
| | * ** 12.38284 | 22.3 | ADV | 38.9 | -24.7 | 1.32 | 37.82 | 54 | -16.18 | - | - | - | - | 154 | 164 | V |
| 6 | * ** 15.92222 | 45.64 | PK-U | 40.3 | -25.9 | 0 | 60.04 | - | - | 74 | -13.96 | - | - | 302 | 109 | V |
| | * ** 15.92292 | 28.35 | ADV | 40.3 | -25.9 | 1.32 | 44.07 | 54 | -9.93 | - | - | - | - | 302 | 109 | V |
| 2 | 3.0001 | 45.06 | PK-U | 33 | -32.6 | 0 | 45.46 | - | - | - | - | 68.2 | -22.74 | 268 | 349 | V |

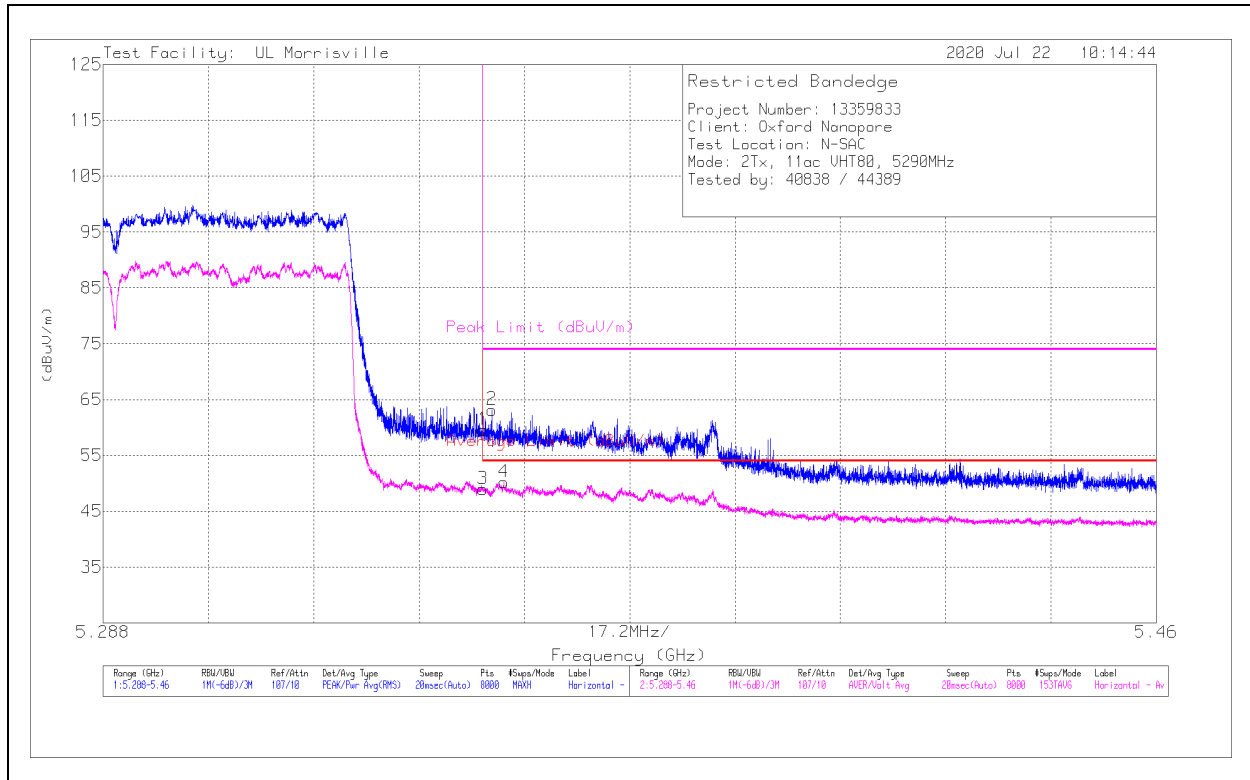
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 ** - indicates frequency in Taiwan NCC LP0002 Restricted Band
 PK-U - Maximum Peak
 ADV - Linear Voltage Average

12.1.8. TX ABOVE 1 GHz 802.11ac VHT80 MODE IN THE 5.3 GHz BAND

2TX ANTENNA 1 + ANTENNA 2 MODE

BANDEDGE (MID CHANNEL)

HORIZONTAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB(/m) | Amp/Cbl/Fitr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|-----------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | *** 5.35001 | 47.25 | Pk | 34.4 | -22.1 | 0 | 59.55 | - | - | 74 | -14.45 | 309 | 103 | H |
| 2 | *** 5.35148 | 50.85 | Pk | 34.4 | -22.1 | 0 | 63.15 | - | - | 74 | -10.85 | 309 | 103 | H |
| 3 | *** 5.35001 | 32.96 | ADV | 34.4 | -22.1 | 3.71 | 48.97 | 54 | -5.03 | - | - | 309 | 103 | H |
| 4 | *** 5.35341 | 34.16 | ADV | 34.4 | -22.1 | 3.71 | 50.17 | 54 | -3.83 | - | - | 309 | 103 | H |

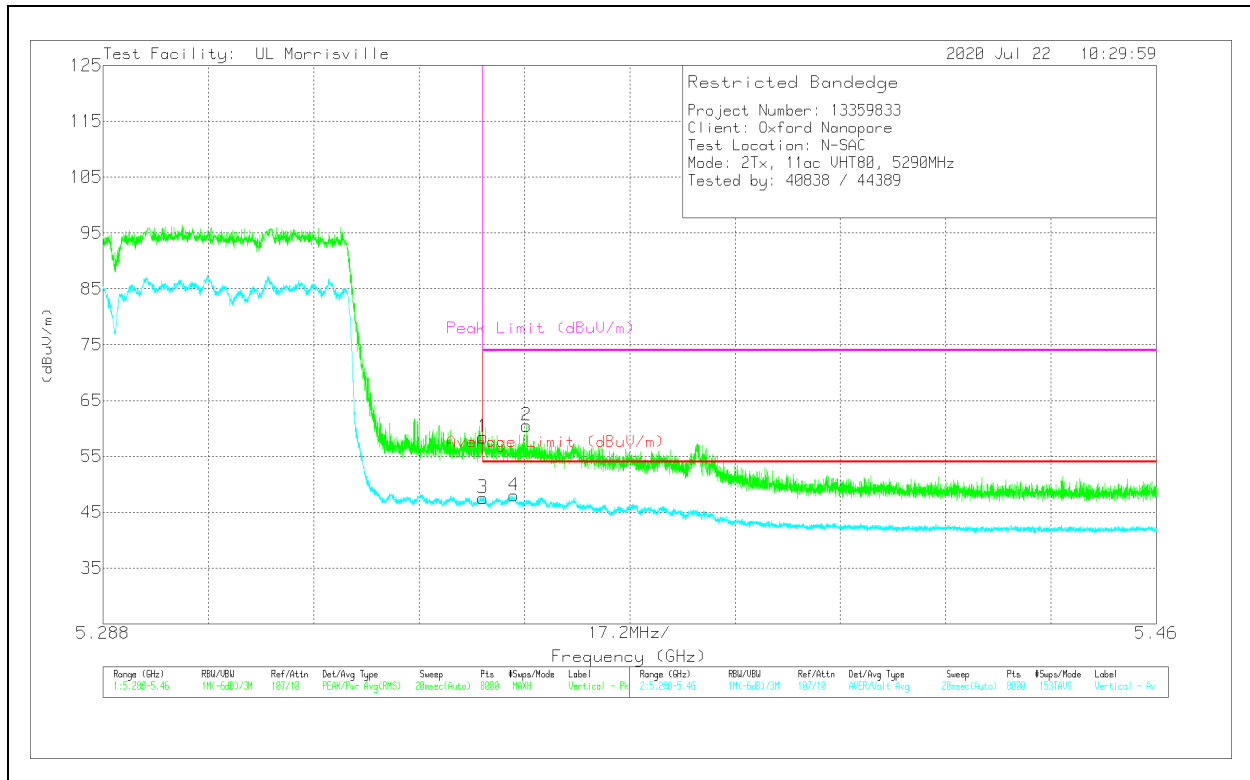
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

ADV - Linear Voltage Average

VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB/(m) | Amp/Cbl/Filtr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|------------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | *** 5.35001 | 46.13 | Pk | 34.4 | -22.1 | 0 | 58.43 | - | - | 74 | -15.57 | 76 | 316 | V |
| 2 | *** 5.35715 | 48.2 | Pk | 34.4 | -22.1 | 0 | 60.5 | - | - | 74 | -13.5 | 76 | 316 | V |
| 3 | *** 5.35001 | 31.53 | ADV | 34.4 | -22.1 | 3.71 | 47.54 | 54 | -6.46 | - | - | 76 | 316 | V |
| 4 | *** 5.35509 | 31.99 | ADV | 34.4 | -22.1 | 3.71 | 48 | 54 | -6 | - | - | 76 | 316 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

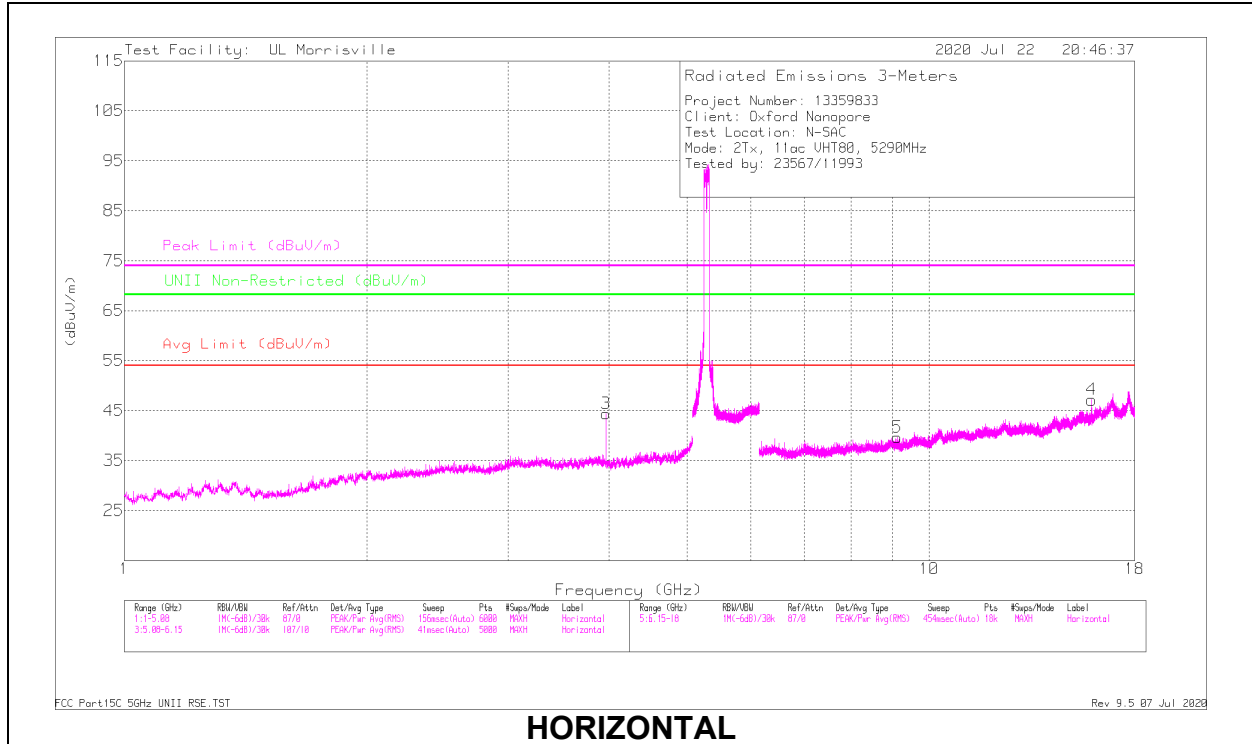
** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

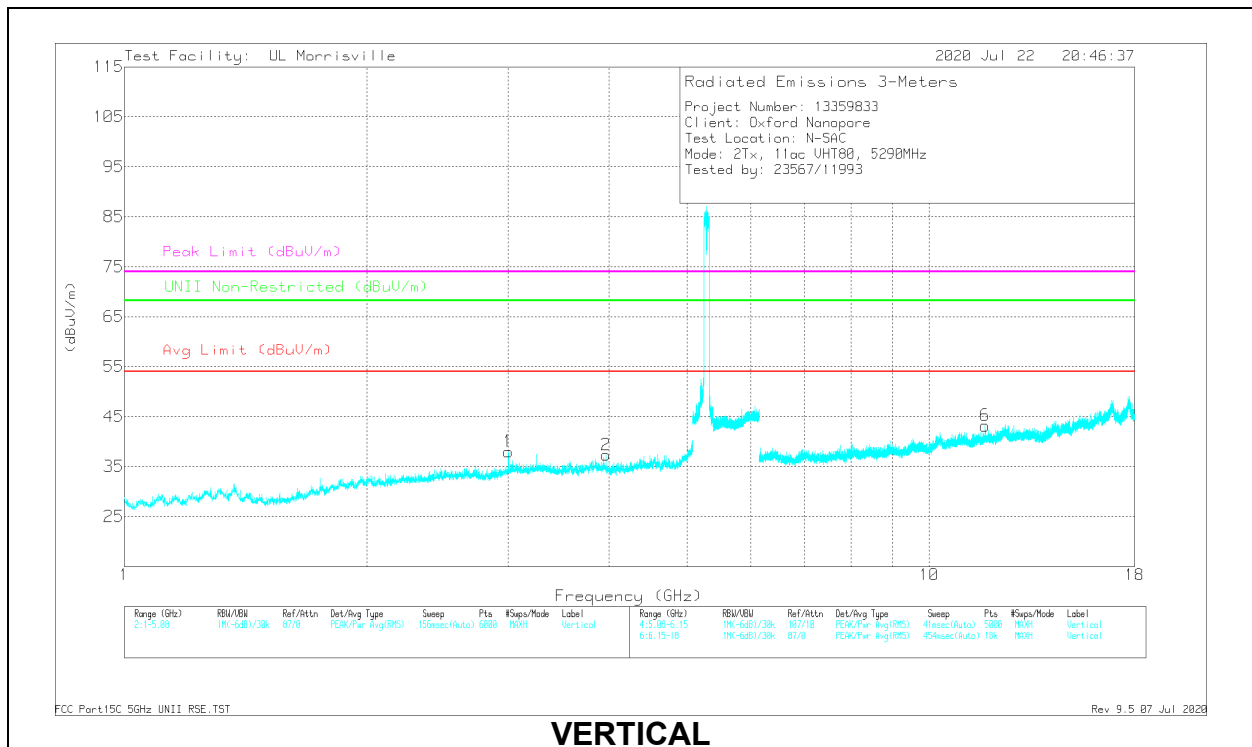
ADV - Linear Voltage Average

HARMONICS AND SPURIOUS EMISSIONS

MID CHANNEL RESULTS



HORIZONTAL



VERTICAL

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB(/m) | Amp/Cbl/Filtr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|---------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 3 | * ** 3.96738 | 46.53 | PK-U | 33.6 | -31.9 | 0 | 48.23 | - | - | 74 | -25.77 | - | - | 325 | 101 | H |
| | * ** 3.96743 | 40.16 | ADV | 33.6 | -31.9 | 3.71 | 45.57 | 54 | -8.43 | - | - | - | - | 325 | 101 | H |
| 2 | * ** 3.96732 | 42.41 | PK-U | 33.6 | -31.9 | 0 | 44.11 | - | - | 74 | -29.89 | - | - | 292 | 386 | V |
| | * ** 3.96746 | 31.2 | ADV | 33.6 | -31.9 | 3.71 | 36.61 | 54 | -17.39 | - | - | - | - | 292 | 386 | V |
| 4 | * ** 15.91739 | 39.01 | PK-U | 40.3 | -25.8 | 0 | 53.51 | - | - | 74 | -20.49 | - | - | 349 | 271 | H |
| | * ** 15.91732 | 24.54 | ADV | 40.3 | -25.8 | 3.71 | 42.75 | 54 | -11.25 | - | - | - | - | 349 | 271 | H |
| 5 | * ** 9.13458 | 37.34 | PK-U | 36.5 | -27.9 | 0 | 45.94 | - | - | 74 | -28.06 | - | - | 222 | 274 | H |
| | * ** 9.13325 | 23.92 | ADV | 36.5 | -28 | 3.71 | 36.13 | 54 | -17.87 | - | - | - | - | 222 | 274 | H |
| 6 | * ** 11.73913 | 34.78 | PK-U | 38.4 | -25.1 | 0 | 48.08 | - | - | 74 | -25.92 | - | - | 219 | 101 | V |
| | * ** 11.73864 | 22.07 | ADV | 38.4 | -25.1 | 3.71 | 39.08 | 54 | -14.92 | - | - | - | - | 219 | 101 | V |
| 1 | 2.99987 | 44.61 | PK-U | 33 | -32.6 | 0 | 45.01 | - | - | - | - | 68.2 | -23.19 | 278 | 337 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

PK-U - Maximum Peak

ADV - Linear Voltage Average

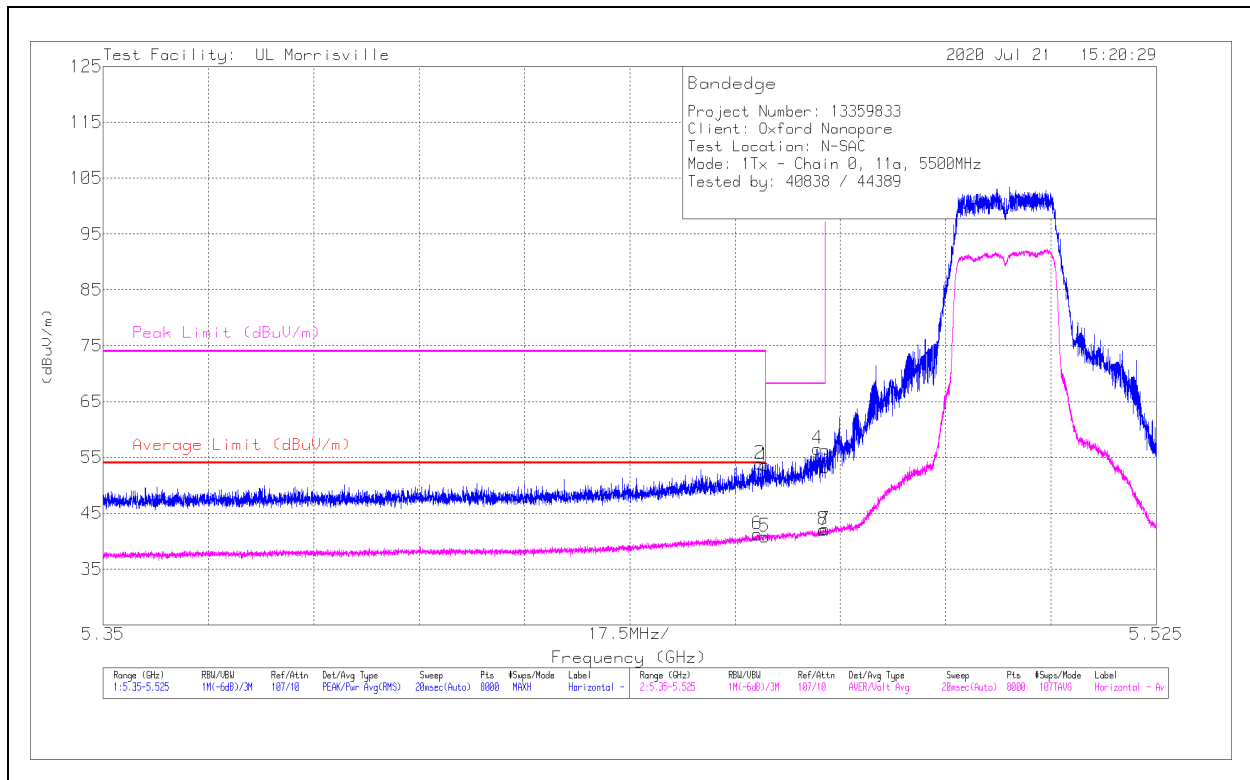
Pk - Peak detector

12.1.9. TX ABOVE 1 GHz 802.11a MODE IN THE 5.6 GHz BAND

1TX ANTENNA 1 MODE

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB(/m) | Amp/Cbl/Fitr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|-----------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | *** 5.45998 | 41.19 | Pk | 34.4 | -22 | 0 | 53.59 | - | - | 74 | -20.41 | 81 | 361 | H |
| 2 | *** 5.45915 | 41.48 | Pk | 34.4 | -22 | 0 | 53.88 | - | - | 74 | -20.12 | 81 | 361 | H |
| 5 | *** 5.45998 | 27.81 | ADV | 34.4 | -22 | .62 | 40.83 | 54 | -13.17 | - | - | 81 | 361 | H |
| 6 | *** 5.45869 | 28.23 | ADV | 34.4 | -22 | .62 | 41.25 | 54 | -12.75 | - | - | 81 | 361 | H |
| 4 | 5.46871 | 44.15 | Pk | 34.4 | -22 | 0 | 56.55 | - | - | 68.2 | -11.65 | 81 | 361 | H |
| 8 | 5.46965 | 29.04 | ADV | 34.4 | -22 | .62 | 42.06 | - | - | - | - | 81 | 361 | H |
| 3 | 5.46998 | 40.81 | Pk | 34.4 | -21.9 | 0 | 53.31 | - | - | 68.2 | -14.89 | 81 | 361 | H |
| 7 | 5.46998 | 29.03 | ADV | 34.4 | -21.9 | .62 | 42.15 | - | - | - | - | 81 | 361 | H |

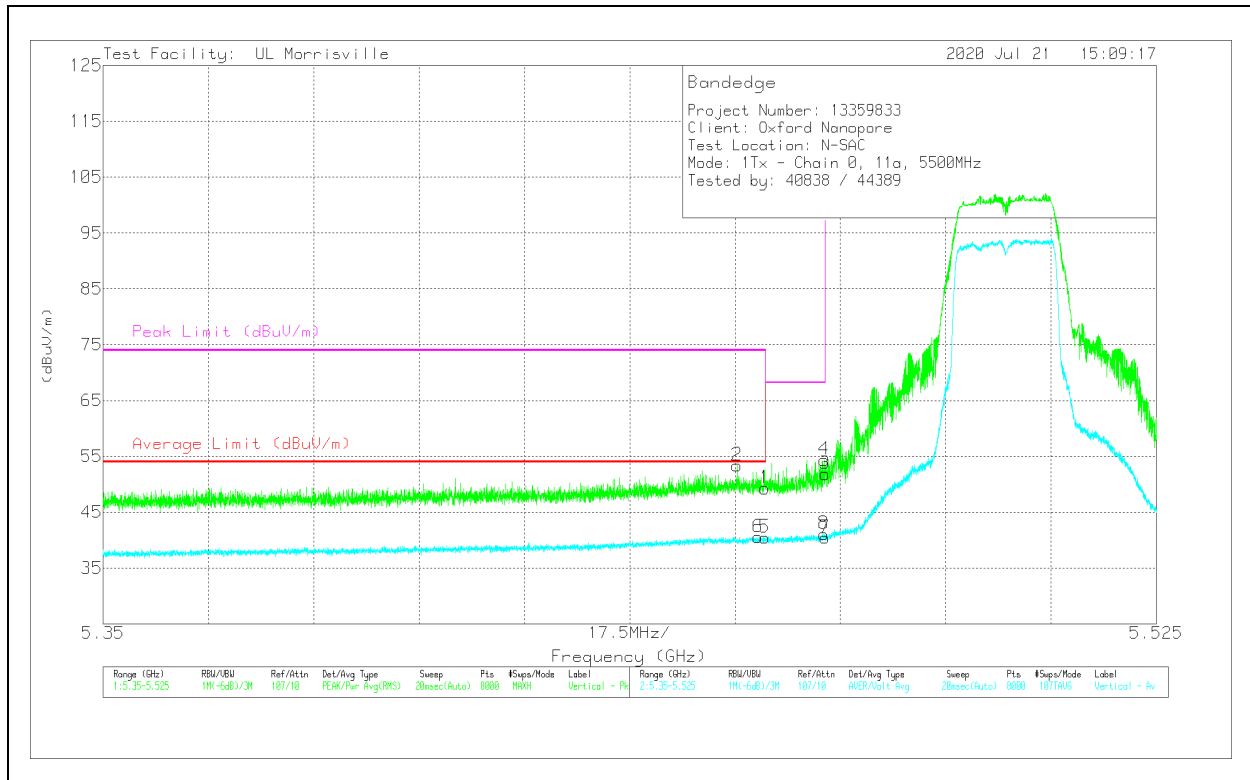
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

ADV - Linear Voltage Average

VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB/(m) | Amp/Cbl/Fitr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|-----------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | *** 5.45998 | 36.91 | Pk | 34.4 | -22 | 0 | 49.31 | - | - | 74 | -24.69 | 13 | 324 | V |
| 2 | *** 5.45532 | 40.97 | Pk | 34.4 | -22 | 0 | 53.37 | - | - | 74 | -20.63 | 13 | 324 | V |
| 5 | *** 5.45998 | 27.44 | ADV | 34.4 | -22 | .62 | 40.46 | 54 | -13.54 | - | - | 13 | 324 | V |
| 6 | *** 5.45878 | 27.55 | ADV | 34.4 | -22 | .62 | 40.57 | 54 | -13.43 | - | - | 13 | 324 | V |
| 8 | 5.46978 | 28.08 | ADV | 34.4 | -22 | .62 | 41.1 | - | - | - | - | 13 | 324 | V |
| 4 | 5.4698 | 42 | Pk | 34.4 | -22 | 0 | 54.4 | - | - | 68.2 | -13.8 | 13 | 324 | V |
| 3 | 5.46998 | 39.37 | Pk | 34.4 | -21.9 | 0 | 51.87 | - | - | 68.2 | -16.33 | 13 | 324 | V |
| 7 | 5.46998 | 27.32 | ADV | 34.4 | -21.9 | .62 | 40.44 | - | - | - | - | 13 | 324 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

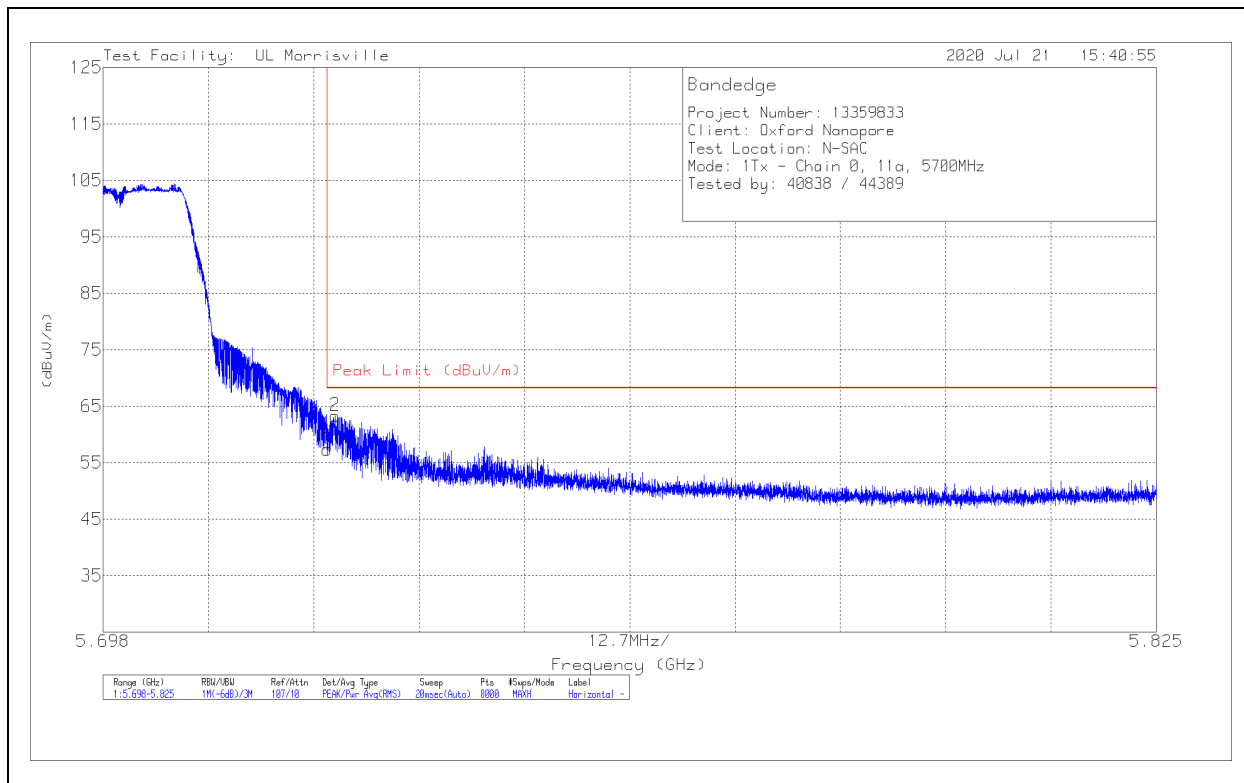
** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

ADV - Linear Voltage Average

BANDEGE (HIGH CHANNEL)

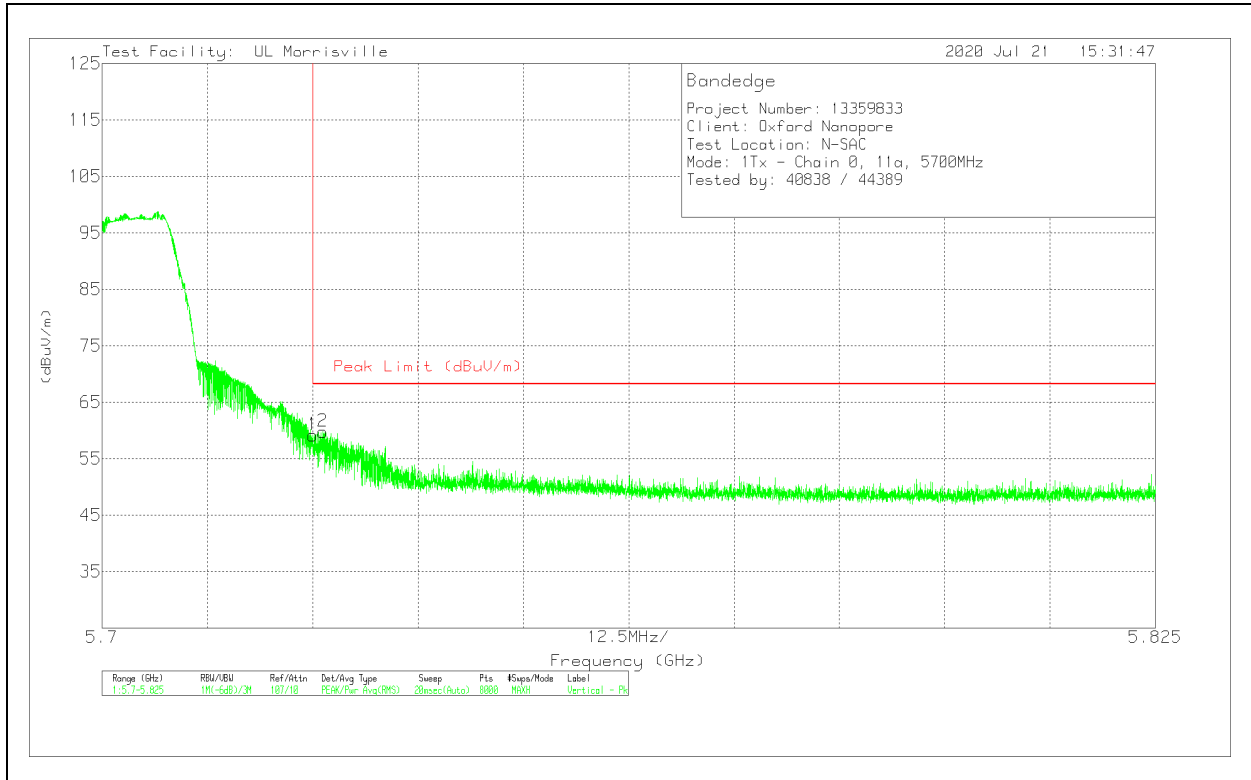
HORIZONTAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB(/m) | Amp/Cbl/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|------------------------|----------------------------|---------------------|----------------|----------------|-------------|----------|
| 1 | 5.72501 | 44.54 | Pk | 34.6 | -21.8 | 57.34 | 68.2 | -10.86 | 124 | 352 | H |
| 2 | 5.72599 | 50.5 | Pk | 34.6 | -21.8 | 63.3 | 68.2 | -4.9 | 124 | 352 | H |

Pk - Peak detector

VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 dB(/m) | Amp/Cbl/Fitr/Pad (dB) | Corrected Reading (dBuV/m) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|-----------------------|----------------------------|---------------------|----------------|----------------|-------------|----------|
| 1 | 5.725 | 46.35 | Pk | 34.6 | -21.8 | 59.15 | 68.2 | -9.05 | 181 | 356 | V |
| 2 | 5.72622 | 46.96 | Pk | 34.6 | -21.8 | 59.76 | 68.2 | -8.44 | 181 | 356 | V |

Pk - Peak detector