



TEST REPORT

Report Number: R14311585-E2

Applicant : Sony Corporation
1-7-1 Konan Minato-ku
Tokyo, 108-0075, Japan

FCC ID : PY7-93060R

EUT Description : GSM/WCDMA/LTE Phone with BT, DTS/UNII a/b/g/n/ac/ax, GPS,
WPT & NFC

Test Standard(s) : FCC 47 CFR PART 15 SUBPART C AND E

Date Of Issue:

2022-08-17

Prepared by:

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REVISION HISTORY

| Rev. | Issue Date | Revisions | Revised By |
|------|------------|--|---------------|
| V1 | 2022-08-02 | Initial Issue | Charles Moody |
| V2 | 2022-08-09 | Updated sections 7.3, 7.4 and added units to Corrected EIRP column | Charles Moody |
| V3 | 2022-08-12 | Updated with DFS spot check data | Charles Moody |
| V4 | 2022-08-15 | Updated support and measurement equipment used for DFS testing | Charles Moody |
| V5 | 2022-08-17 | Updated note in section 7.4 | Charles Moody |

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: Sony Corporation
1-7-1 Konan Minato-ku
Tokyo, 108-0075, Japan

EUT DESCRIPTION: GSM/WCDMA/LTE Phone with BT, DTS/UNII a/b/g/n/ac/ax, GPS, WPT & NFC

SERIAL NUMBER: QV7700GPD5, QV77000RD5, QV7700HZD5

SAMPLE RECEIPT DATE: 2022-06-10 , 2022-06-17

DATE TESTED: 2022-07-22 to 2022-07-29

| APPLICABLE STANDARDS | |
|--------------------------------|--------------------|
| STANDARD | TEST RESULTS |
| CFR 47 Part 15 Subpart C and E | Refer to Section 2 |

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.

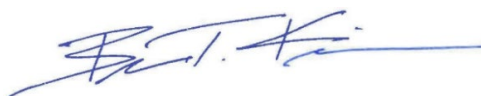
This document may not be altered or revised in any way unless done so by UL LLC and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL LLC will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by a2La, NIST, or any agency of the U.S. government.

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2. TEST RESULTS SUMMARY

This report contains data provided by the applicant which can impact the validity of results. UL LLC is only responsible for the validity of results after the integration of the data provided by the customer.

| FCC Clause | Requirement | Result | Comment |
|--|------------------------------|---------------|---|
| See Comment | Duty Cycle | Not performed | Radiated spot checks performed to justify data reuse. |
| See Comment | 20/26dB BW | | |
| 15.247 (a) (2) 15.407 (e) | 6dB BW | | |
| 15.247 (a)(1) | Hopping Frequency Separation | | |
| 15.247 (a)(1)(iii) | Number of Hopping Channels | | |
| 15.247 (a)(1)(iii) | Average Time of Occupancy | | |
| See Comment | Average Power | | |
| 15.247 (d) | Conducted Spurious Emissions | | |
| 15.247 (b) (1,3) 15.407(a)(1-3)(h)(1) | Output Power | | |
| 15.247 (e) 15.407 (a) (1-3) | PSD | | |
| 15.207 | AC Mains Conducted Emissions | | |
| 15.209, 15.205, 15.225 (d), 15.407(b) | Radiated Emissions | See Comment | Radiated spot checks performed on worst-case channels only to justify data reuse. |

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 and KDB 484596 D01 Referencing Test Data v01.

4. FACILITIES AND ACCREDITATION

UL LLC is accredited by A2LA, certification # 0751.06, for all testing performed within the scope of this report. Testing was performed at the locations noted below.

| | Address | ISED CABID | ISED Company Number | FCC Registration |
|-------------------------------------|--|------------|---------------------|------------------|
| <input type="checkbox"/> | Building: 12 Laboratory Dr RTP, NC 27709, U.S.A | US0067 | 2180C | 825374 |
| <input checked="" type="checkbox"/> | Building: 2800 Perimeter Park Dr. Suite B Morrisville, NC 27560, U.S.A | | 27265 | |

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} |
|-------------------------|------------------|
| All emissions, radiated | 6.01 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 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB = 28.9 dBuV/m

6. EQUIPMENT UNDER TEST

6.1. DESCRIPTION OF EUT

The EUT is a GSM/WCDMA/LTE PHONE with BT, DTS/UNII a/b/g/n/ac/ax, GPS, WPT & NFC.

6.2. WORST-CASE CONFIGURATION AND MODE

Band edge and radiated emissions between 1GHz and 18 GHz were performed with the EUT set to transmit at the worst-case channels and data rates based on the reports of an electrically identical model (see section 7 for data reuse information).

The antenna of the EUT was investigated in three orthogonal orientations X/Y/Z. See the table below for WC Orientations.

| Technology | Orientation |
|-------------|-------------|
| 2.4 WLAN | X |
| 5.0 WLAN | X |
| BLE Chain 0 | X |
| BLE Chain 1 | X |
| BT | X |
| WPT | X |

The Worst-Case scenarios for 1-18GHz are as follows:

| Technology | Test Type | Frequency (MHz) | Mode | Data Rate | Chain |
|----------------|---------------|-----------------|----------------|-----------|-------|
| 2.4 WLAN (DTS) | Band Edge | 2462 | HE20 242T/RU61 | MCS0 | MIMO |
| | RSE | 2437 | HE20 242T/RU61 | MCS0 | MIMO |
| 5 WLAN (UNII) | 5.2 Band Edge | 5210 | 11ac80 | MCS0 | MIMO |
| | 5.3 Band Edge | 5290 | 11ac80 | MCS0 | MIMO |
| | 5.6 Band Edge | 5530 | 11ac80 | MCS0 | MIMO |
| | 5.8 Band Edge | 5775 | 11ac80 | MCS0 | MIMO |
| | RSE | 5260 | 11a | 6 Mbps | MIMO |
| BLE | Band Edge | 2480 | BLE (GFSK) | 2 Mbps | 0 |
| | RSE | 2440 | BLE (GFSK) | 2 Mbps | 1 |
| BT | Band Edge | 2480 | GFSK/DH-5 | 1 Mbps | 0 |
| | RSE | 2441 | GFSK/DH-5 | 1 Mbps | 0 |

The worst-case scenario for WPT is as follows:

The EUT emissions should be measured from 9kHz to 30MHz in its X orientation. The two devices shall be oriented perpendicularly, with coils aligned, and no separation distance between the two devices. Additionally, the device serving as the supply, shall have a battery greater than 70%. The device that is being charged should also have a battery of 50%.

6.3. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

| Support Equipment List | | | | |
|------------------------|--------------|---------------------|------------------------|--------|
| Description | Manufacturer | Model | Serial Number | FCC ID |
| AC Adapter | Sony | XQZ-UC11-010-236-21 | 1821W34209742 | N/A |
| Laptop | ASUS | X515J | M8N0CX14J687338 | N/A |
| Access Point | ASUS | GT-AXE11000 | M9IG0X400839JKM | N/A |
| AP Power Supply | AcBel | ADD011 | 17AG213403440A | N/A |
| Controller Laptop | Lenovo | T450s | RTP0416PCOBHFNX | N/A |
| Laptop Power Supply | Lenovo | ADLX90NLC2A | 11S45N0247Z1ZS9B51A0Z7 | N/A |

I/O CABLES

| I/O Cable List | | | | | | |
|----------------|-------|----------------------|----------------|--------------|------------------|---------------------------|
| Cable No. | Port | # of Identical Ports | Connector Type | Cable Type | Cable Length (m) | Remarks |
| 1 | USB | 1 | USB-C | Non-Shielded | <3m | Connected to Power Supply |
| 2 | 3.5mm | 1 | 3.5mm Audio | Non-Shielded | <1m | Connected to headphones |

7. REUSE OF TEST DATA

7.1. INTRODUCTION

According to the manufacturer, FCC ID: PY7-58692W and FCC ID: PY7-93060R unlicensed radios (WLAN/BT/BLE/WPT) are electrically identical. The FCC ID: PY7-58692W test data shall remain representative of FCC ID: PY7-93060R so, FCC ID: PY7-93060R leverages test data from FCC ID: PY7-58692W

Manufacturer has also declared that DFS mechanism and software is identical to the lead device (PY7-58692W) and is to be reused.

The applicant takes full responsibility that the test data as referenced in this section represents compliance for this FCC ID.

7.2. DEVICES DIFFERENCES

Difference between PY7-58692W and PY7-93060R:

Sony Corporation hereby declares that the hardware of WLAN 2.4GHz , WLAN 5GHz, Bluetooth, GPS and WPT is identical among PY7-58692W and PY7-93060R. The change is related only to the cellular radio. Therefore the following report/data of PY7-58692W may represent for PY7-93060R.

7.3. REFERENCE DETAIL

| Equipment Class | Reference FCC ID | Report Title/Section |
|-----------------|------------------|--|
| DSS (BT) | PY7-58692W | 1M2207200079-05.PY7 PY7-58692W RF Bluetooth Test Report / All sections |
| DTS (BLE) | PY7-58692W | 1M2207200079-06.PY7 PY7-58692W RF BT LE Test Report / All sections |
| DTS (WLAN) | PY7-58692W | 1M2207200079-08.PY7 PY7-58692W RF WLAN Test Report / All sections 1M2207200079-09.PY7 PY7-58692W RF WLAN (OFDMA) Test Report / All sections |
| NII (WLAN) | PY7-58692W | 1M2207200079-10.PY7 PY7-58692W RF UNII Test Report / All sections 1M2207200079-11.PY7 PY7-58692W RF UNII (OFDMA) Test Report / All sections |
| NII (DFS) | PY7-58692W | 1M2207200079-12.PY7 PY7-58692W RF DFS Test Report / All sections |
| DCD (WPT) | PY7-58692W | 1M2207200079-15.PY7 PY7-58692W RF 15C Wireless Charging Test Report / All sections |

7.4. SPOT CHECK VERIFICATION RESULTS SUMMARY

Spot check verification has been done on device PY7-93060R for radiated spurious emissions and DFS. The data from the application has been verified through appropriate spot checks to demonstrate compliance for this device as shown in the summary.

| PY7-93060R SPOT CHECK RESULTS | | | | | | | | | |
|--|--|------------|--------------------------|---------------------|---------------------|---|---------------------|------------------|--------|
| Technology / Mode | Test Item | Channel | Measured Frequency (MHz) | PY7-58692W | | PY7-93060R | | Delta (dB) <+3dB | |
| | | | | PK Reading (dBuV/m) | AV Reading (dBuV/m) | PK Reading (dBuV/m) | AV Reading (dBuV/m) | PK | AV |
| BT (GFSK) | RBE | 78 | 2483 | 61.04 | 35.16 | 47.73 | 29.76 | -13.31 | -5.40 |
| | RSE | 39 | 12205 | 54.12 | 42.30 | 51.44 | 36.91 | -2.68 | -5.39 |
| BLE (GFSK) | RBE | 39 | 2483 | 63.42 | 46.41 | 46.08 | 36.15 | -17.34 | -10.26 |
| | RSE | 19 | 12200 | 51.86 | 39.91 | 50.52 | 43.15 | -1.34 | 3.24** |
| **Note: This measurement included no emissions and is entirely noise floor | | | | | | | | | |
| 2.4GHz WLAN (HE20) | RBE | 11 | 2483 | 62.76 | 47.27 | 56.65 | 40.23 | -6.11 | -7.04 |
| | RSE | 6 | 12185 | 56.49 | 46.09 | 51.20 | 38.28 | -5.29 | -7.81 |
| 5GHz WLAN (11ac80) | RBE | 42 | 5149 | 59.15 | 46.58 | 54.76 | 41.89 | -4.39 | -4.69 |
| | RBE | 58 | 5350 | 58.73 | 46.17 | 54.91 | 41.90 | -3.82 | -4.27 |
| | RBE | 106 | 5460 | 61.78 | 47.02 | 51.49 | 38.08 | -10.29 | -8.94 |
| | RBE | 155 | 5944 | 58.58 | - | 50.09 | - | -8.49 | - |
| | RSE | 52 | 15780 | 59.99 | 48.50 | 53.74 | 41.09 | -6.25 | -7.41 |
| Note: No AV limit for above scan, therefore no AV measurements just PK. | | | | | | | | | |
| WPT | RSE | 148kHz | 0.592 | 11.08 | - | 4.76 | - | -6.32 | - |
| Technology / Mode | Test Item | PY7-58692W | | PY7-93060R | | PY7-58692W representative of PV7-93060R | | | |
| | | Move time | Close time | Move time | Close time | | | | |
| DFS | Channel move time and channel closing transmissions time | 0.8700s | 5.0ms | 0.7428s | 3.2ms | Yes | | | |

8. TEST AND MEASUREMENT EQUIPMENT

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

Test Equipment Used - Radiated Disturbance Emissions Test Equipment (Morrisville – Chamber 1)

| Equip. ID | Description | Manufacturer/Brand | Model Number | Last Cal. | Next Cal. |
|---------------|---|--------------------|---------------------------|------------|------------|
| | 1-18 GHz | | | | |
| AT0072 | Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz | ETS Lindgren | 3117 | 2022-05-11 | 2023-05-11 |
| | Gain-Loss Chains | | | | |
| C1-SAC03 | Gain-loss string: 1-18GHz | Various | Various | 2022-05-05 | 2023-05-05 |
| | Receiver & Software | | | | |
| 197954 | Spectrum Analyzer | Rohde & Schwarz | ESW44 | 2022-04-14 | 2023-04-14 |
| SOFTEMI | EMI Software | UL | Version 9.5 (18 Oct 2021) | | |
| | Additional Equipment used | | | | |
| s/n 181474341 | Environmental Meter | Fisher Scientific | 15-077-963 | 2021-09-27 | 2022-09-27 |
| BRF001 | 900MHz notch filter, 2W, F _{high} =6GHz | Micro-Tronics | BRM50706 | 2021-07-22 | 2022-07-22 |

Test Equipment Used - Radiated Disturbance Emissions Test Equipment (Morrisville – Chamber 2)

| Equip. ID | Description | Manufacturer/Brand | Model Number | Last Cal. | Next Cal. |
|-----------|---|--------------------|---------------------------|------------|------------|
| | 0.009-30MHz | | | | |
| AT0079 | Active Loop Antenna | ETS-Lindgren | 6502 | 2021-08-19 | 2022-08-19 |
| | 1-18 GHz | | | | |
| 206211 | Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz | ETS Lindgren | 3117 | 2022-03-21 | 2023-03-21 |
| | Gain-Loss Chains | | | | |
| C2-SAC01 | Gain-loss string: 0.009-30MHz | Various | Various | 2022-05-10 | 2023-05-10 |
| C2-SAC03 | Gain-loss string: 1-18GHz | Various | Various | 2022-05-10 | 2023-05-10 |
| | Receiver & Software | | | | |
| 197955 | Spectrum Analyzer | Rohde & Schwarz | ESW44 | 2022-03-08 | 2023-03-08 |
| SOFTEMI | EMI Software | UL | Version 9.5 (18 Oct 2021) | | |
| | Additional Equipment used | | | | |
| 200540 | Environmental Meter | Fisher Scientific | 15-077-963 | 2021-09-27 | 2022-09-27 |

Test Equipment Used – DFS Equipment (Chamber 5)

| Description | Manufacturer | Model Number | Equipment ID | Next Cal. | Last Cal. |
|---------------------------------------|-------------------|---------------------|--------------|------------|------------|
| DFS Chamber | | | | | |
| Spectrum Analyzer, PXA, 3Hz to 8.4GHz | Keysight | N9030A | SA0021 | 2023-07-14 | 2022-07-14 |
| Signal Generator, MXG, 9kHz to 6GHz | Agilent | N5182B | SIG003 | 2023-05-19 | 2022-05-19 |
| Additional Equipment used | | | | | |
| Environmental meter | Fisher Scientific | 14-650-118-15557603 | HI0096 | 2022-09-21 | 2021-09-21 |

9. ON TIME AND DUTY CYCLE

LIMITS

None; for reporting purposes only.

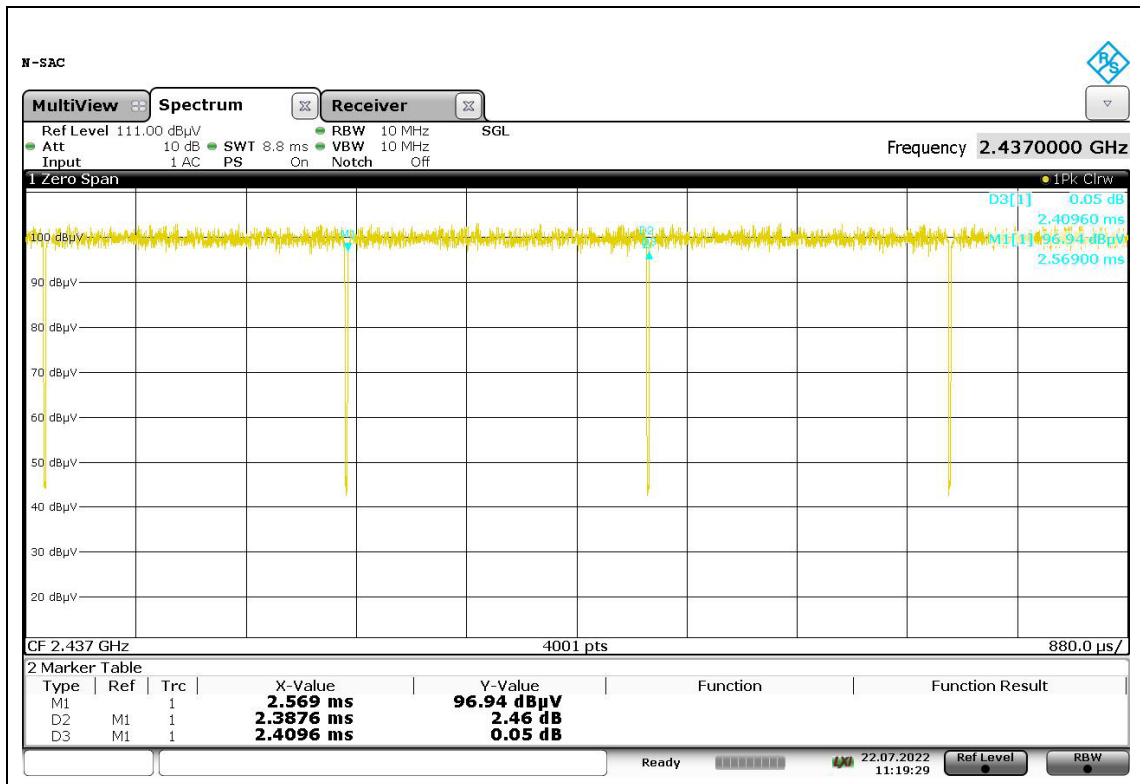
PROCEDURE

KDB 558074 Zero-Span Spectrum Analyzer Method.

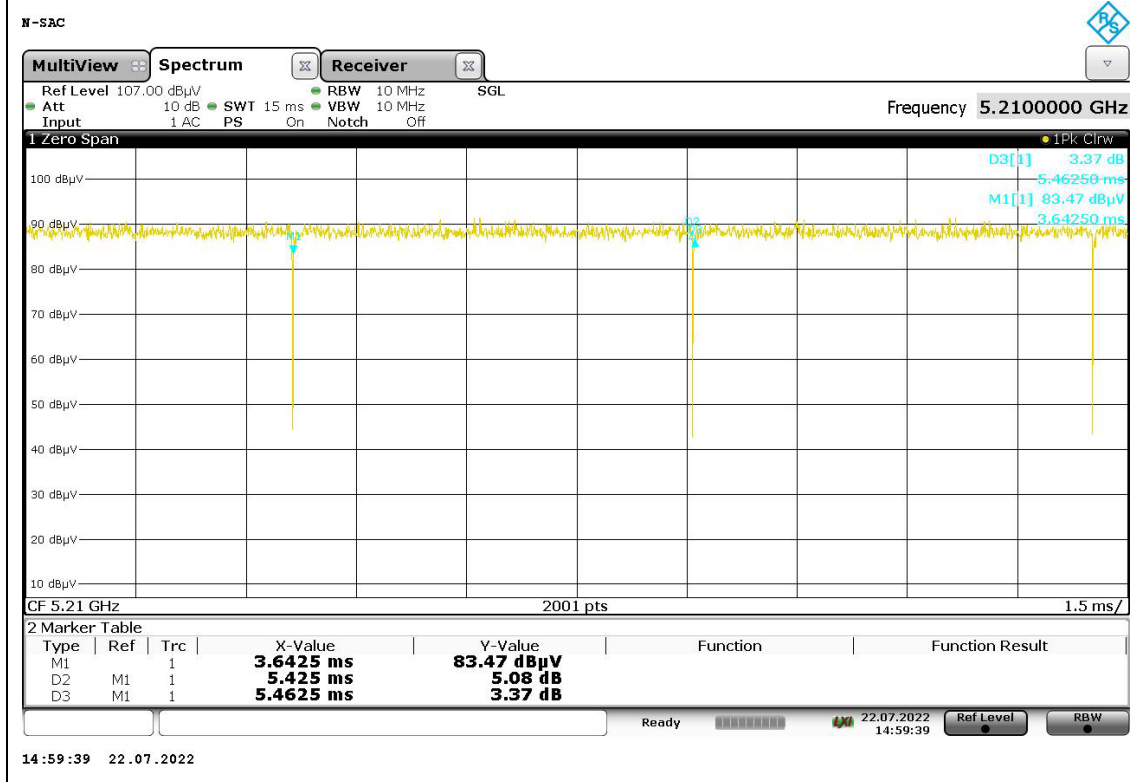
ON TIME AND DUTY CYCLE RESULTS

| Mode | ON Time B (msec) | Period (msec) | Duty Cycle x (linear) | Duty Cycle (%) | Duty Cycle Correction Factor (dB) | 1/B Minimum VBW (kHz) |
|---------------------|------------------------|------------------|-----------------------------|----------------------|---|-----------------------------|
| 2.4 WLAN DTS | | | | | | |
| 802.11ax HE20 | 2.3876 | 2.4096 | 0.991 | 99.09% | 0.00 | 0.010 |
| 5 WLAN UNII | | | | | | |
| 802.11ac 80MHz | 5.4250 | 5.4625 | 0.993 | 99.31% | 0.00 | 0.010 |
| 802.11a 6Mbps | 2.0825 | 2.110 | 0.987 | 98.70% | 0.00 | 0.010 |
| BLE | | | | | | |
| GFSK 2Mbps | 1.0686 | 1.8876 | 0.566 | 56.61% | 4.94 | 0.936 |
| BT | | | | | | |
| GFSK (DH-5) 1Mbps | 2.870 | 3.780 | 0.759 | 75.93% | 2.39 | 0.348 |

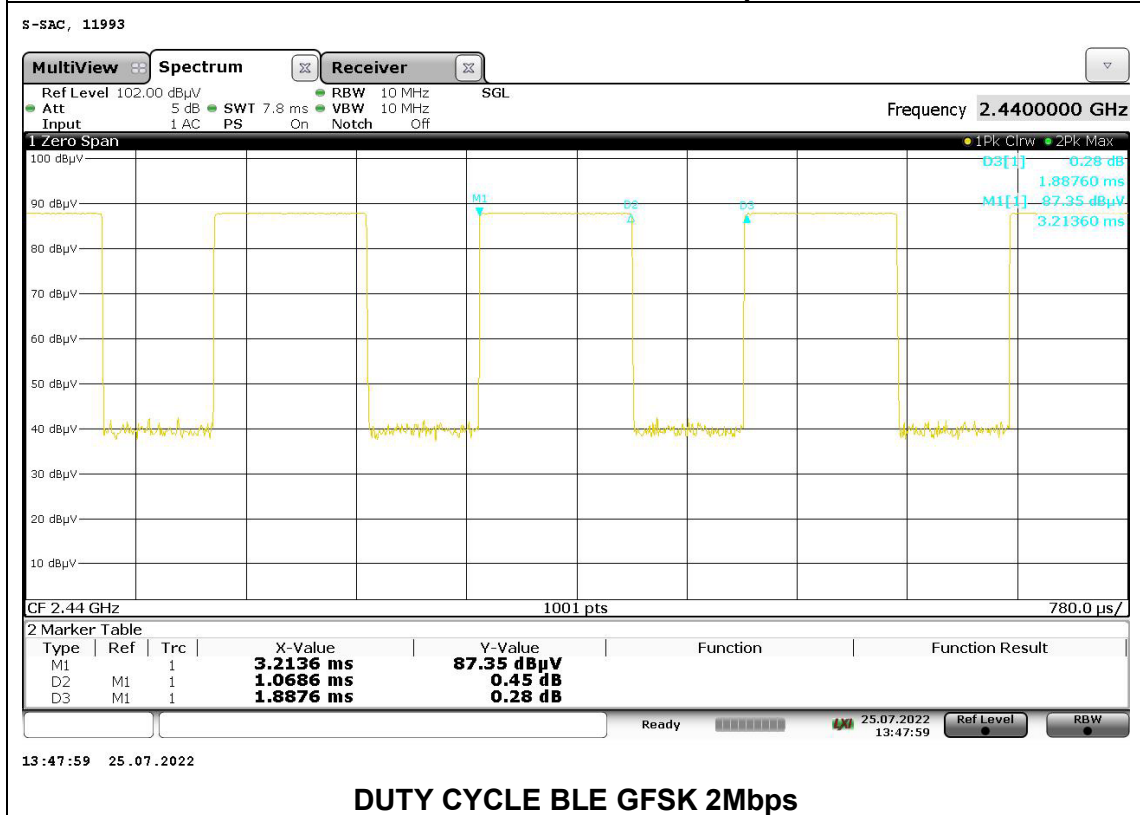
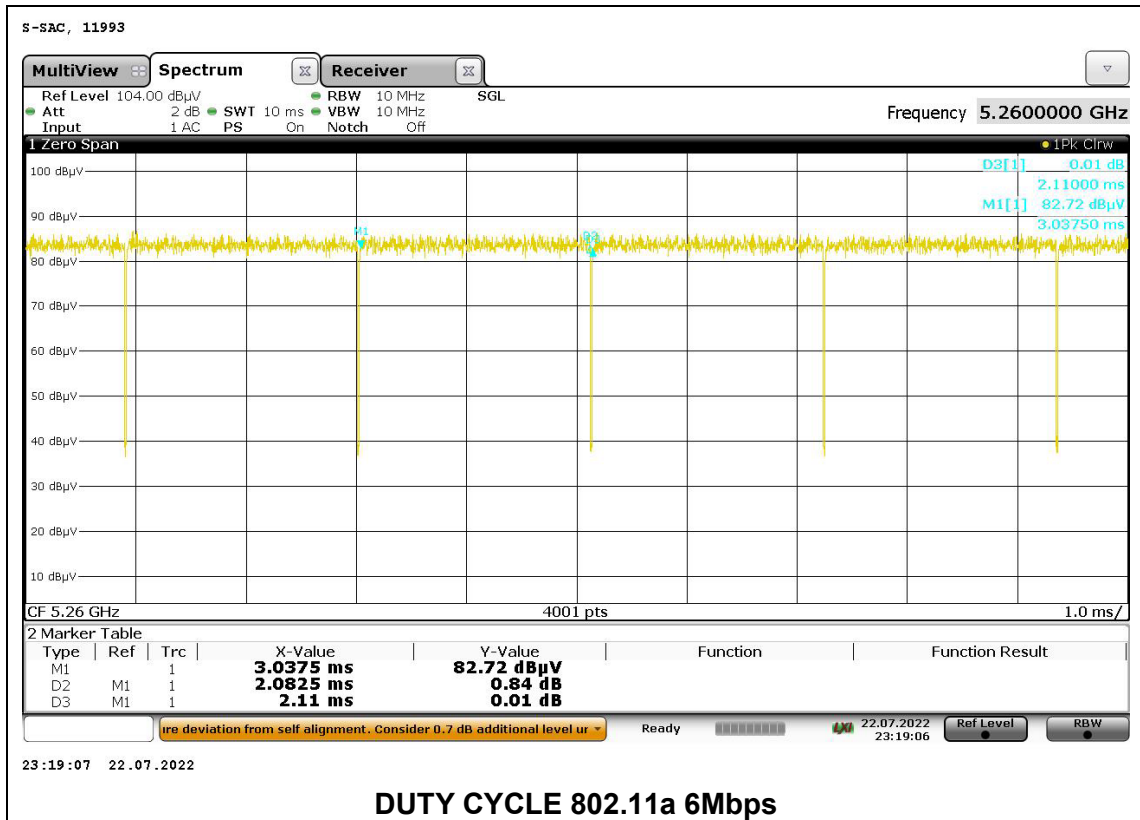
DUTY CYCLE PLOTS

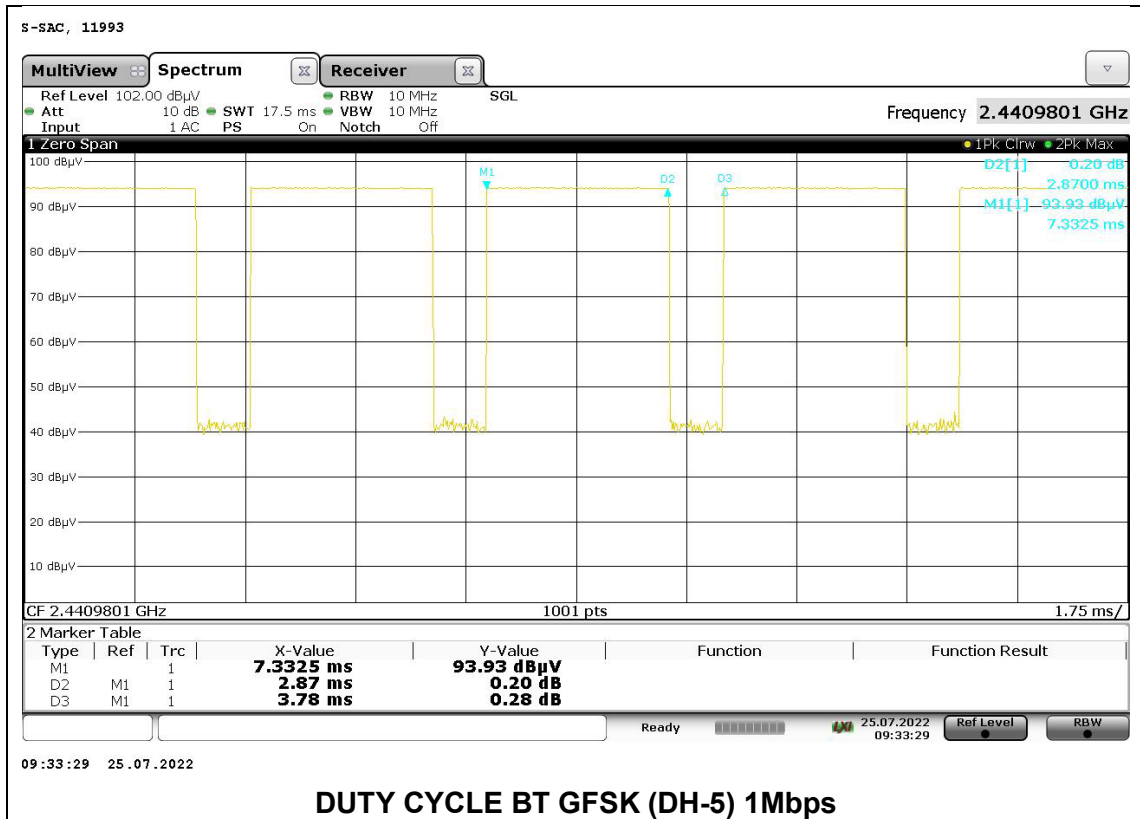


DUTY CYCLE 802.11ax HE20



DUTY CYCLE 802.11ac 80 MHz





10. SPOT CHECK DATA

LIMITS

FCC §15.205 and §15.209

| Frequency Range (MHz) | Field Strength Limit (uV/m) at 3 m | Field Strength Limit (dBuV/m) at 3 m |
|-----------------------|------------------------------------|--------------------------------------|
| 0.009-0.490 | 2400/F(kHz) @ 300 m | - |
| 0.490-1.705 | 24000/F(kHz) @ 30 m | - |
| 1.705 - 30 | 30 @ 30m | - |
| 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 1.5 m above the ground plane for measurement above 1GHz and at 80 cm above the ground plane for measurements below 1 GHz. 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 above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with a minimum of 1/T video bandwidth with peak detector for BT average measurements, linear voltage averaging for BLE measurements, and linear voltage detection for WLAN measurements.

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

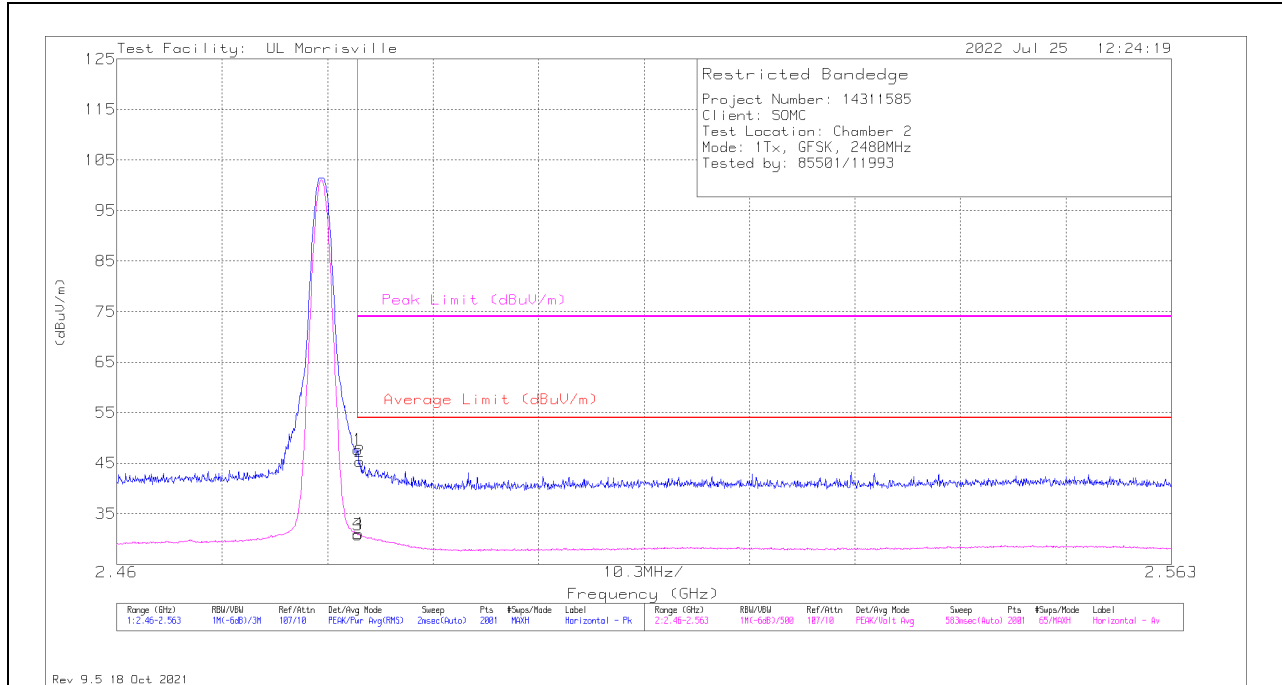
The spectrum from 1 GHz to 18 GHz is investigated with the transmitter set to worst case mode.

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.

10.1. BLUETOOTH

BANDEDGE (HIGH CHANNEL - CHAIN 0, GFSK)

HORIZONTAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 206211 (dB/m) | Gain/Loss (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|---------------|----------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | *** 2.48354 | 39.73 | Pk | 32.3 | -24.3 | 47.73 | - | - | 74 | -26.27 | 64 | 377 | H |
| 2 | *** 2.48374 | 37.29 | Pk | 32.3 | -24.3 | 45.29 | - | - | 74 | -28.71 | 64 | 377 | H |
| 3 | *** 2.48354 | 20.43 | V1TV | 32.3 | -24.3 | 28.43 | 54 | -25.57 | - | - | 64 | 377 | H |
| 4 | *** 2.48359 | 20.69 | V1TV | 32.3 | -24.3 | 28.69 | 54 | -25.31 | - | - | 64 | 377 | H |

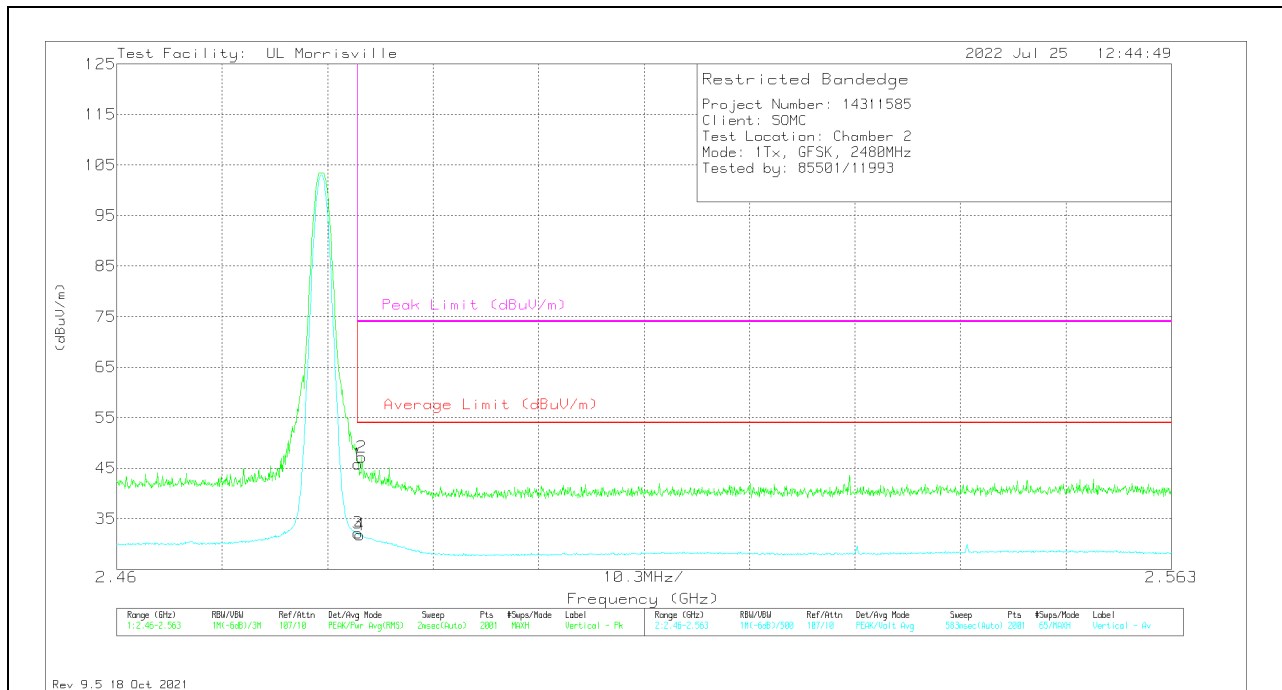
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

V1TV - $VB=1/Ton$, Linear Voltage Average where: Ton is packet duration

VERTICAL RESULT

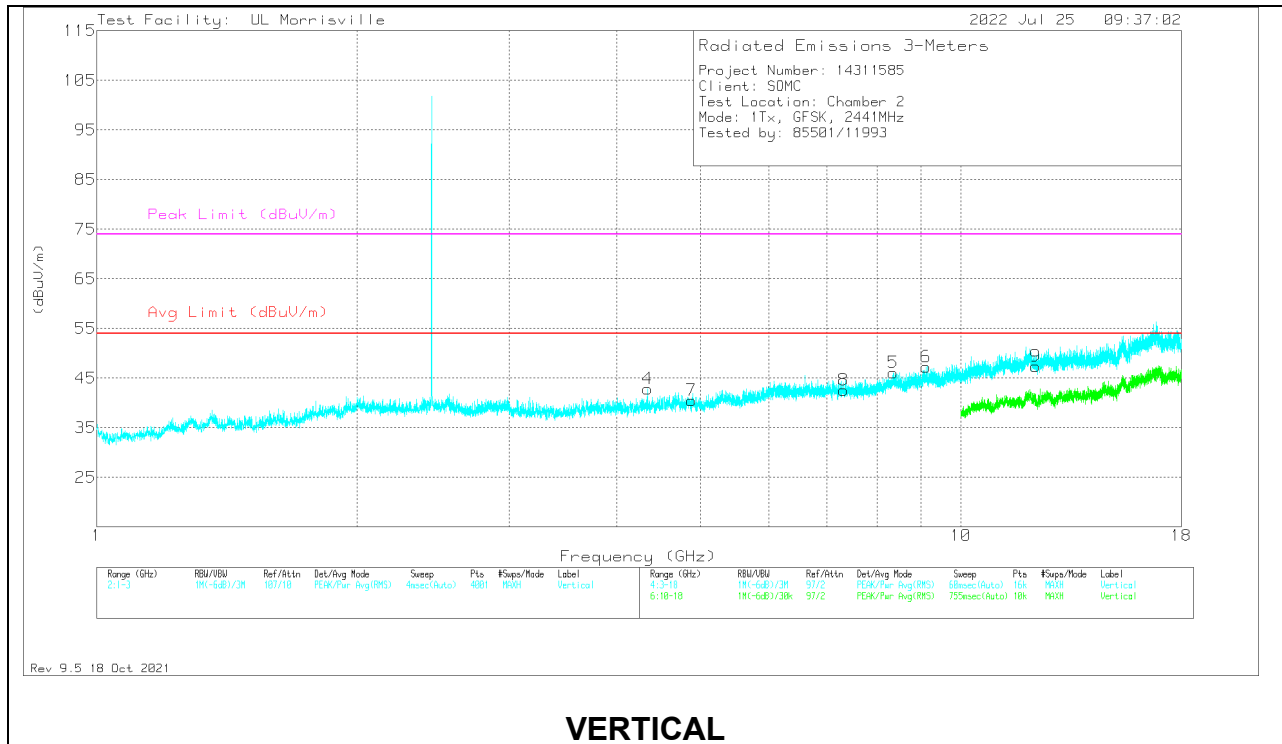
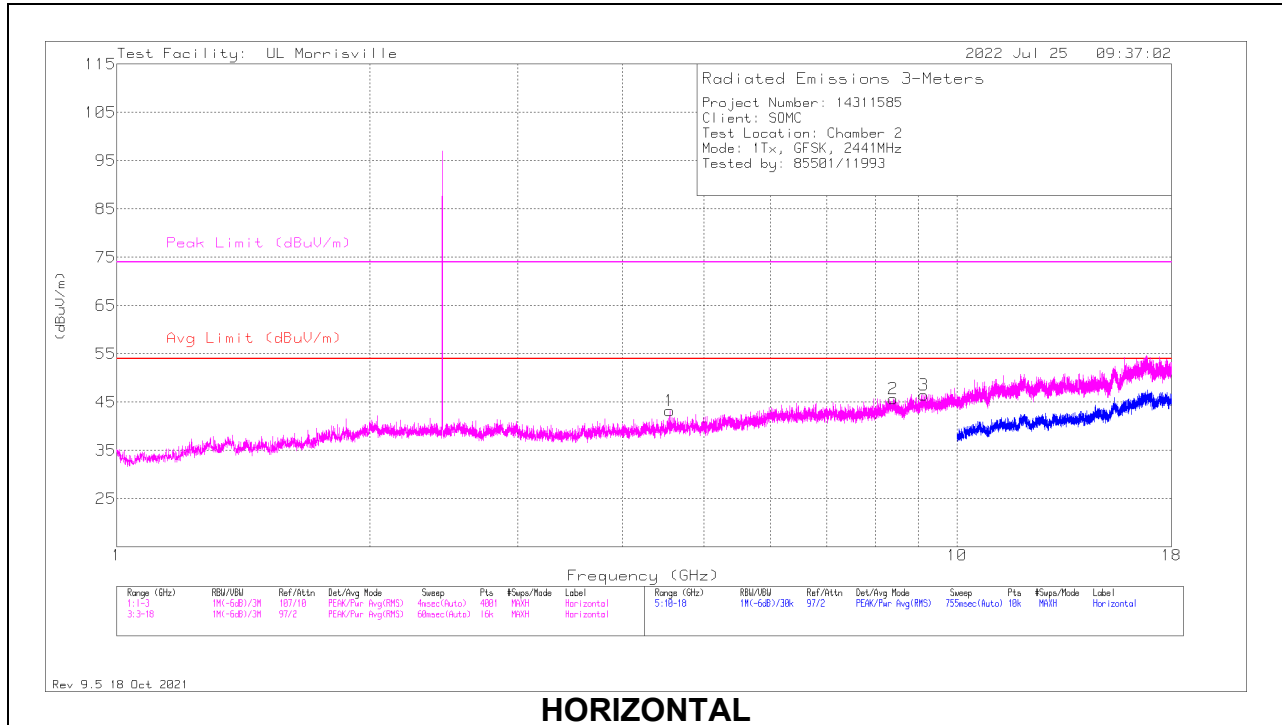


| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 206211 (dB/m) | Gain/Loss (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|---------------|----------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | *** 2.48354 | 37.77 | Pk | 32.3 | -24.3 | 45.77 | - | - | 74 | -28.23 | 47 | 343 | V |
| 2 | *** 2.48395 | 39.34 | Pk | 32.3 | -24.4 | 47.24 | - | - | 74 | -26.76 | 47 | 343 | V |
| 3 | *** 2.48354 | 21.76 | V1TV | 32.3 | -24.3 | 29.76 | 54 | -24.24 | - | - | 47 | 343 | V |
| 4 | *** 2.48374 | 21.45 | V1TV | 32.3 | -24.3 | 29.45 | 54 | -24.55 | - | - | 47 | 343 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 ** - indicates frequency in Taiwan NCC LP0002 Restricted Band
 Pk - Peak detector
 V1TV - VB=1/Ton, Linear Voltage Average where: Ton is packet duration

HARMONICS AND SPURIOUS EMISSIONS

MID CHANNEL – CHAIN 0, GFSK



RADIATED EMISSIONS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 206211 (dB/m) | Gain/Loss (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|---------------|----------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | *** 4.55156 | 40.38 | Pk | 34.1 | -31.2 | 43.28 | 54 | -10.72 | 74 | -30.72 | 0-360 | 101 | H |
| 2 | *** 8.39719 | 36.71 | Pk | 35.8 | -26.8 | 45.71 | 54 | -8.29 | 74 | -28.29 | 0-360 | 199 | H |
| 3 | *** 9.13313 | 35.3 | Pk | 36.2 | -25 | 46.5 | 54 | -7.5 | 74 | -27.5 | 0-360 | 101 | H |
| 4 | *** 4.33875 | 40.56 | Pk | 33.6 | -31.3 | 42.86 | 54 | -11.14 | 74 | -31.14 | 0-360 | 199 | V |
| 5 | *** 8.34844 | 36.84 | Pk | 35.8 | -26.6 | 46.04 | 54 | -7.96 | 74 | -27.96 | 0-360 | 101 | V |
| 6 | *** 9.12188 | 36.37 | Pk | 36.2 | -25.3 | 47.27 | 54 | -6.73 | 74 | -26.73 | 0-360 | 101 | V |
| 7 | *** 4.88471 | 39.77 | PK2 | 33.9 | -30.6 | 43.07 | - | - | 74 | -30.93 | 203 | 249 | V |
| | *** 4.88133 | 25.52 | V1TV | 33.9 | -30.7 | 28.72 | 54 | -25.28 | - | - | 203 | 249 | V |
| 8 | *** 7.323 | 37.54 | PK2 | 35.6 | -26.9 | 46.24 | - | - | 74 | -27.76 | 203 | 249 | V |
| | *** 7.32244 | 22.95 | V1TV | 35.6 | -26.9 | 31.65 | 54 | -22.35 | - | - | 203 | 249 | V |
| 9 | *** 12.20568 | 36.64 | PK2 | 38.8 | -24 | 51.44 | - | - | 74 | -22.56 | 128 | 321 | V |
| | *** 12.20469 | 22.01 | V1TV | 38.8 | -23.9 | 36.91 | 54 | -17.09 | - | - | 128 | 321 | V |

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

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

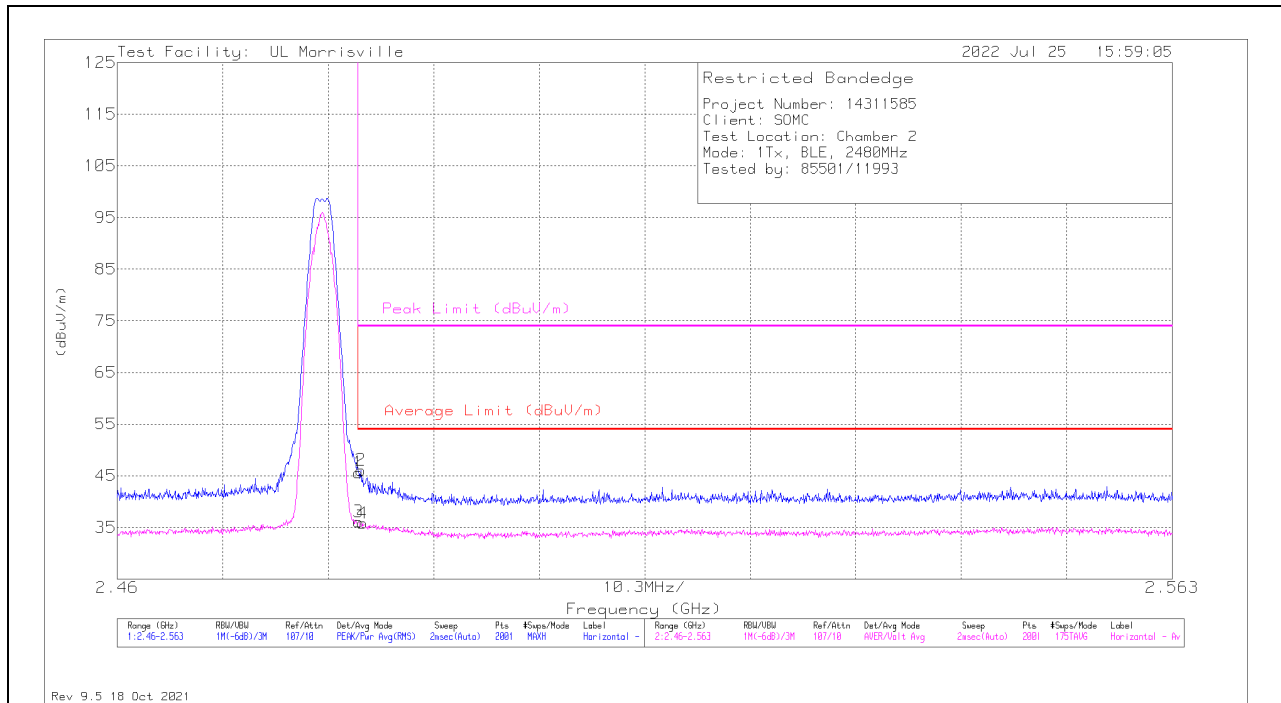
PK2 - Maximum Peak

V1TV - VB=1/Ton, Linear Voltage Average where: Ton is packet duration

10.2. BLE

BANDEDGE (HIGH CHANNEL – CHAIN 0, 2Mbps)

HORIZONTAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 206211 (dB/m) | Gain/Loss (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 | * ** 2.48354 | 37.59 | Pk | 32.3 | -24.3 | 0 | 45.59 | - | - | 74 | -28.41 | 175 | 135 | H |
| 2 | * ** 2.48379 | 38.18 | Pk | 32.3 | -24.4 | 0 | 46.08 | - | - | 74 | -27.92 | 175 | 135 | H |
| 3 | * ** 2.48354 | 23.21 | ADV | 32.3 | -24.3 | 4.94 | 36.15 | 54 | -17.85 | - | - | 175 | 135 | H |
| 4 | * ** 2.48395 | 23.01 | ADV | 32.3 | -24.4 | 4.94 | 35.85 | 54 | -18.15 | - | - | 175 | 135 | H |

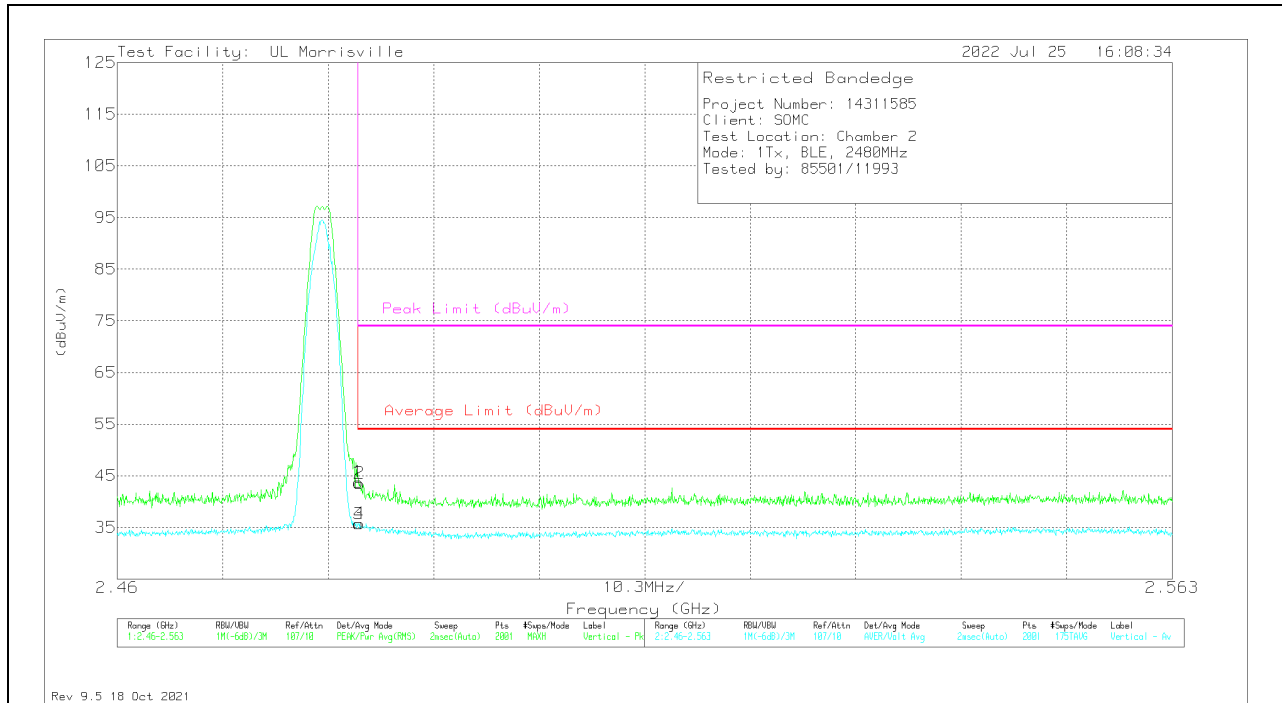
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

ADV - Linear Voltage Average

VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 206211 (dB/m) | Gain/Loss (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 | *** 2.48354 | 35.79 | Pk | 32.3 | -24.3 | 0 | 43.79 | - | - | 74 | -30.21 | 267 | 109 | V |
| 2 | *** 2.48364 | 35.54 | Pk | 32.3 | -24.3 | 0 | 43.54 | - | - | 74 | -30.46 | 267 | 109 | V |
| 3 | *** 2.48354 | 22.8 | ADV | 32.3 | -24.3 | 4.94 | 35.74 | 54 | -18.26 | - | - | 267 | 109 | V |
| 4 | *** 2.48364 | 22.83 | ADV | 32.3 | -24.3 | 4.94 | 35.77 | 54 | -18.23 | - | - | 267 | 109 | V |

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

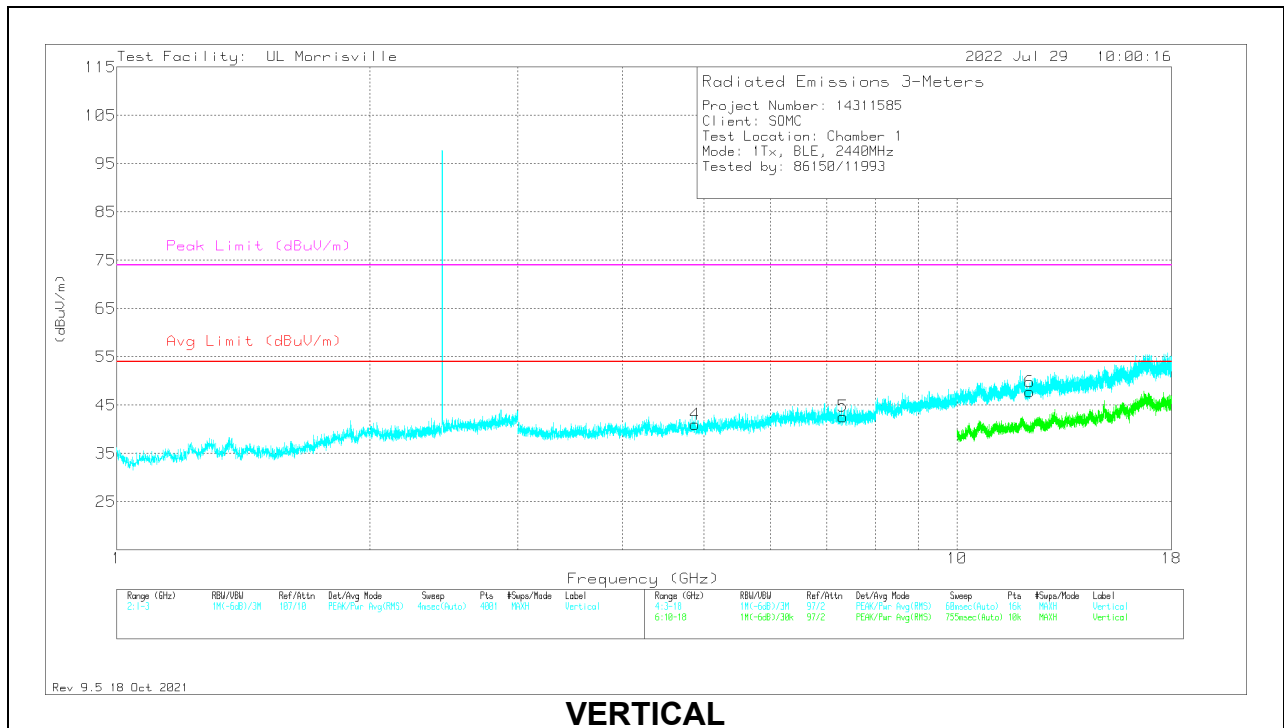
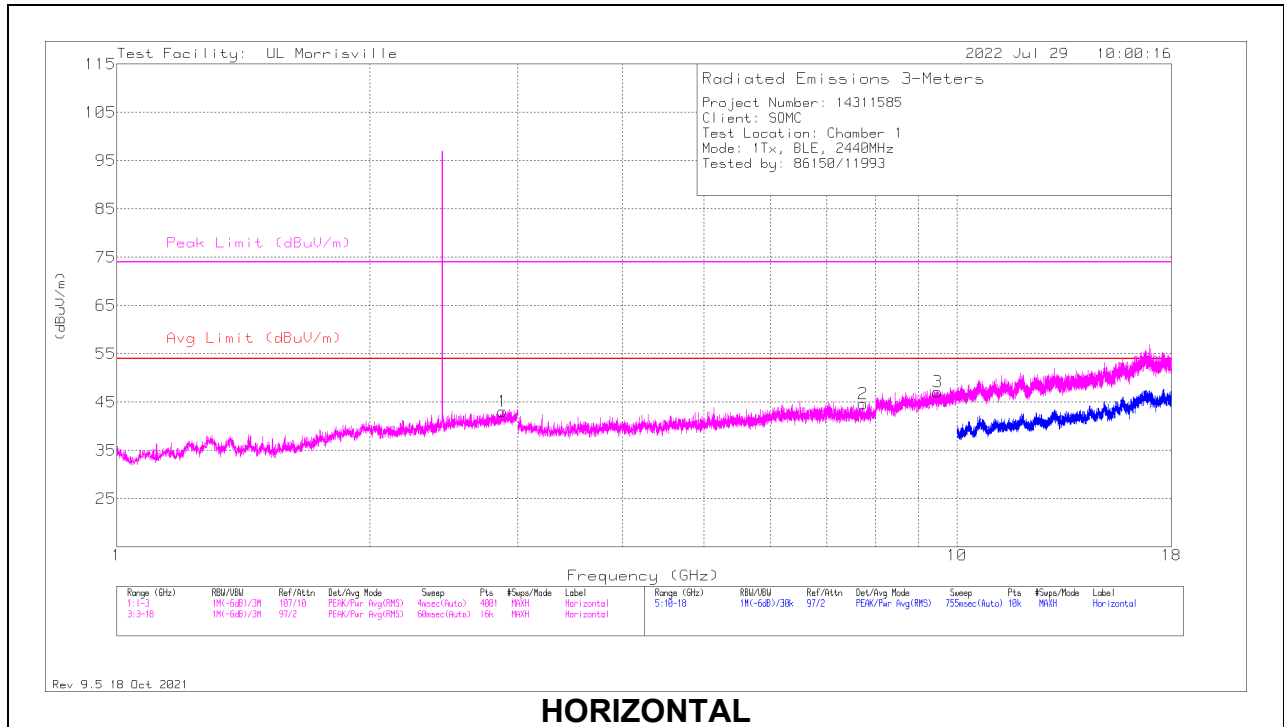
** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

ADV - Linear Voltage Average

HARMONICS AND SPURIOUS EMISSIONS

MID CHANNEL – CHAIN 1, 2Mbps



RADIATED EMISSIONS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 (dB/m) | Gain/Loss (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|----------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | *** 2.8795 | 34.35 | Pk | 32.7 | -23.9 | 0 | 43.15 | 54 | -10.85 | 74 | -30.85 | 0-360 | 200 | H |
| 2 | *** 7.72688 | 38.25 | Pk | 35.7 | -29.3 | 0 | 44.65 | 54 | -9.35 | 74 | -29.35 | 0-360 | 101 | H |
| 3 | *** 9.48375 | 38.88 | Pk | 36.7 | -28.4 | 0 | 47.18 | 54 | -6.82 | 74 | -26.82 | 0-360 | 200 | H |
| 4 | *** 4.87781 | 41.71 | PK2 | 34 | -31.4 | 0 | 44.31 | - | - | 74 | -29.69 | 110 | 338 | V |
| | *** 4.88031 | 28.87 | ADV | 34 | -31.4 | 4.94 | 36.41 | 54 | -17.59 | - | - | 110 | 338 | V |
| 5 | *** 7.3223 | 39.4 | PK2 | 35.6 | -29.4 | 0 | 45.6 | - | - | 74 | -28.4 | 138 | 258 | V |
| | *** 7.32066 | 26.59 | ADV | 35.6 | -29.5 | 4.94 | 37.63 | 54 | -16.37 | - | - | 138 | 258 | V |
| 6 | *** 12.20331 | 38.32 | PK2 | 38.9 | -26.7 | 0 | 50.52 | - | - | 74 | -23.48 | 210 | 183 | V |
| | *** 12.20065 | 25.81 | ADV | 38.9 | -26.5 | 4.94 | 43.15 | 54 | -10.85 | - | - | 210 | 183 | V |

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

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

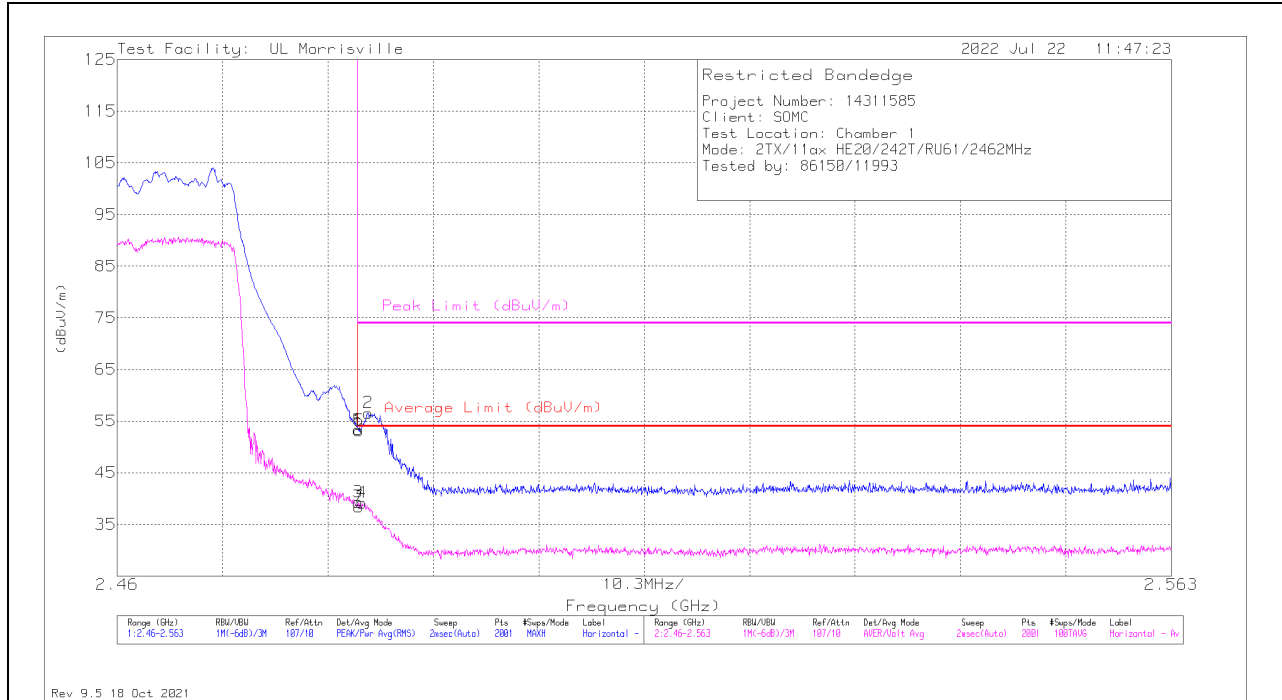
PK2 - Maximum Peak

ADV - Linear Voltage Average

10.3. 2.4GHz WLAN

BANDEDGE (HIGH CHANNEL – 2TX, 802.11ax HE20 242T/RU61)

HORIZONTAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 (dB/m) | Gain/Loss (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|----------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | * ** 2.48354 | 45.25 | Pk | 32.5 | -24.4 | 53.35 | - | - | 74 | -20.65 | 85 | 162 | H |
| 2 | * ** 2.48451 | 48.39 | Pk | 32.5 | -24.3 | 56.59 | - | - | 74 | -17.41 | 85 | 162 | H |
| 5 | * ** 2.48359 | 45.07 | Pk | 32.5 | -24.4 | 53.17 | - | - | 74 | -20.83 | 85 | 162 | H |
| 6 | * ** 2.48359 | 45.07 | Pk | 32.5 | -24.4 | 53.17 | - | - | 74 | -20.83 | 85 | 162 | H |
| 3 | * ** 2.48354 | 31.2 | ADV | 32.5 | -24.4 | 39.3 | 54 | -14.7 | - | - | 85 | 162 | H |
| 4 | * ** 2.4839 | 31.08 | ADV | 32.5 | -24.4 | 39.18 | 54 | -14.82 | - | - | 85 | 162 | H |
| 7 | * ** 2.48359 | 30.29 | ADV | 32.5 | -24.4 | 38.39 | 54 | -15.61 | - | - | 85 | 162 | H |

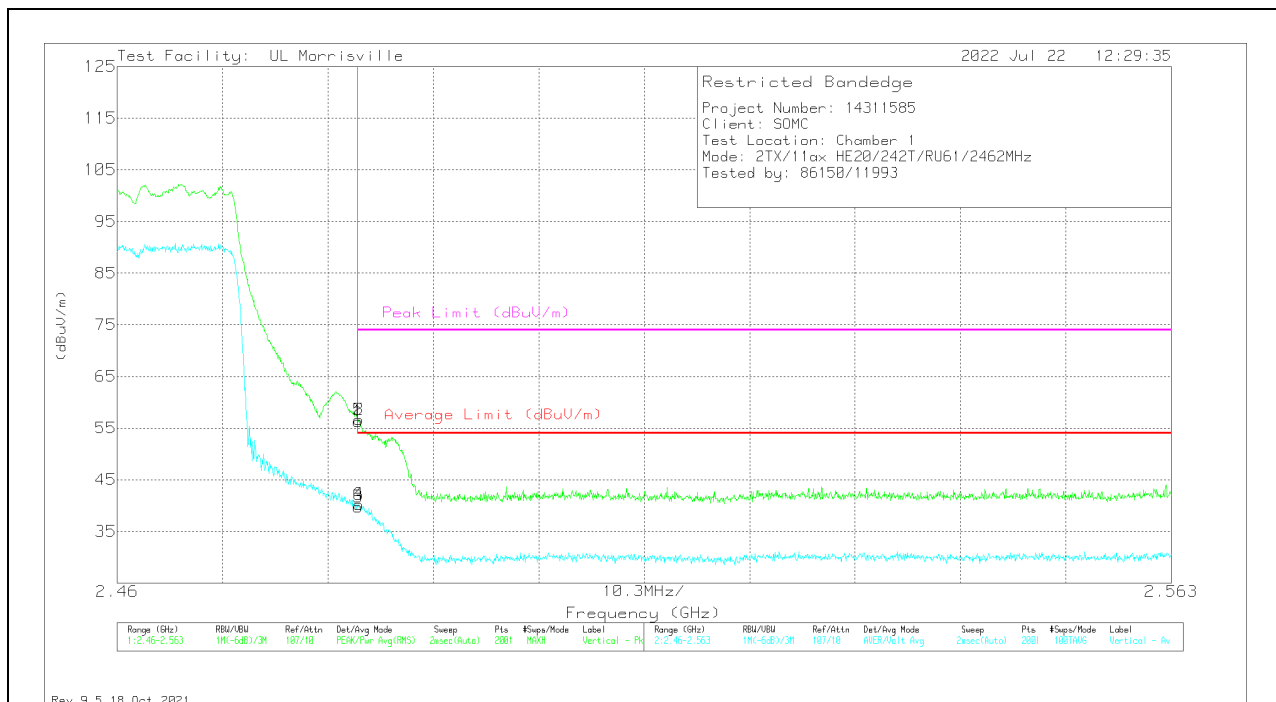
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - 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) | Gain/Loss (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|----------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | * ** 2.48354 | 48.23 | Pk | 32.5 | -24.4 | 56.33 | - | - | 74 | -17.67 | 154 | 339 | V |
| 2 | * ** 2.48359 | 48.55 | Pk | 32.5 | -24.4 | 56.65 | - | - | 74 | -17.35 | 154 | 339 | V |
| 5 | * ** 2.48359 | 48.55 | Pk | 32.5 | -24.4 | 56.65 | - | - | 74 | -17.35 | 154 | 339 | V |
| 3 | * ** 2.48354 | 31.66 | ADV | 32.5 | -24.4 | 39.76 | 54 | -14.24 | - | - | 154 | 339 | V |
| 4 | * ** 2.48359 | 32.13 | ADV | 32.5 | -24.4 | 40.23 | 54 | -13.77 | - | - | 154 | 339 | V |
| 6 | * ** 2.48359 | 32.13 | ADV | 32.5 | -24.4 | 40.23 | 54 | -13.77 | - | - | 154 | 339 | V |

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

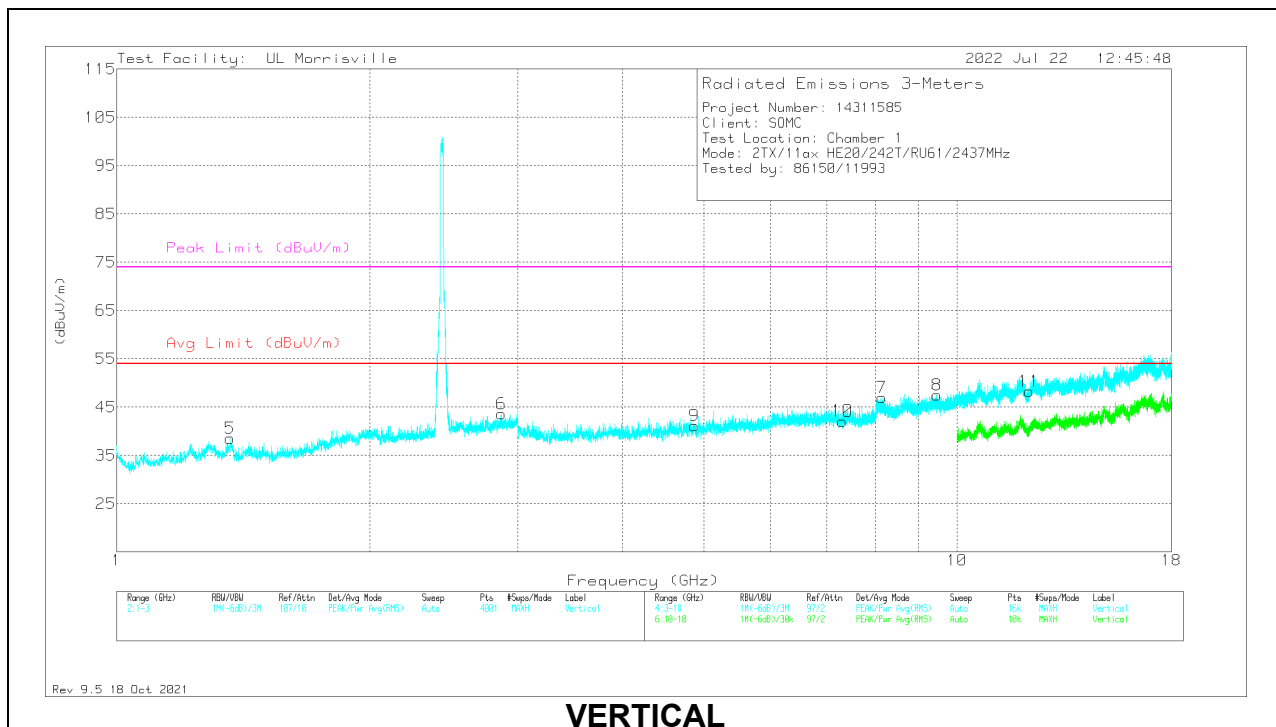
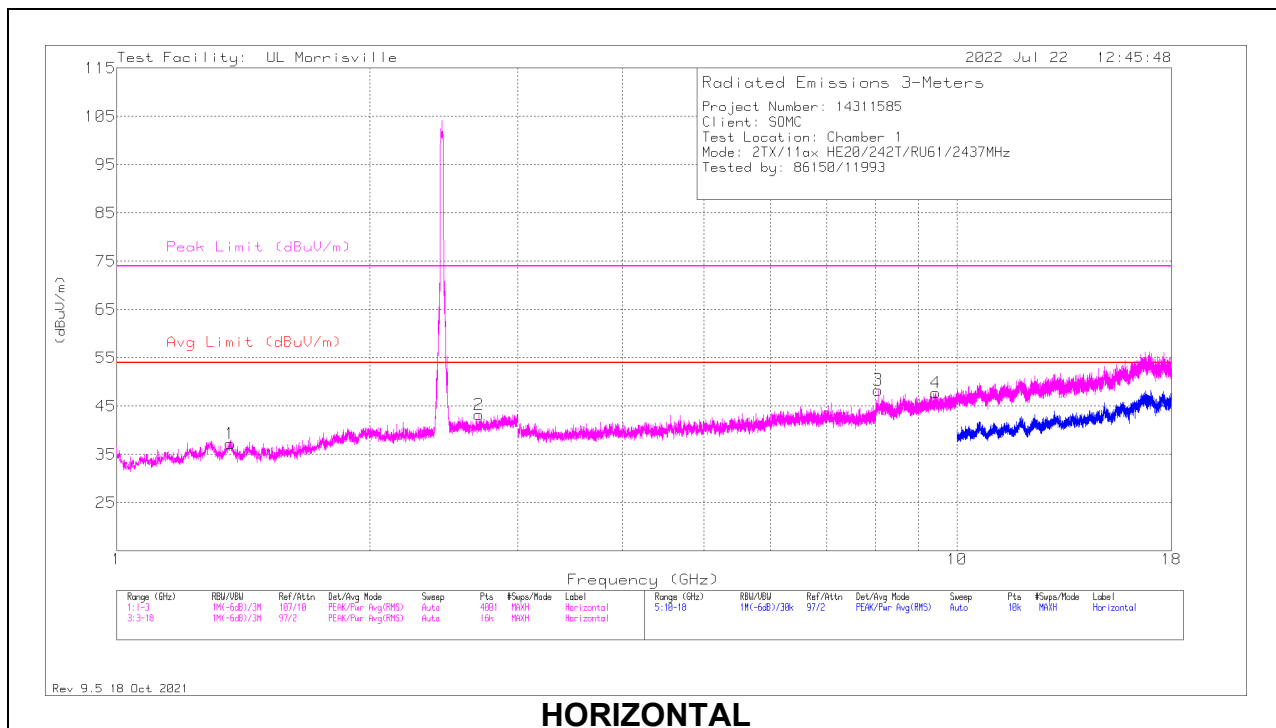
** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

ADV - Linear Voltage Average

HARMONICS AND SPURIOUS EMISSIONS

HIGH CHANNEL 2TX, 802.11ax HE20 242T/RU61



RADIATED EMISSIONS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AT0072 (dB/m) | Gain/Loss (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|----------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | * ** 1.3655 | 33.15 | Pk | 29.5 | -25.4 | 37.25 | 54 | -16.75 | 74 | -36.75 | 0-360 | 101 | H |
| 2 | * ** 2.6965 | 34.87 | Pk | 32.5 | -24.1 | 43.27 | 54 | -10.73 | 74 | -30.73 | 0-360 | 101 | H |
| 5 | * ** 1.3645 | 34.37 | Pk | 29.5 | -25.3 | 38.57 | 54 | -15.43 | 74 | -35.43 | 0-360 | 200 | V |
| 6 | * ** 2.8695 | 34.6 | Pk | 32.7 | -23.7 | 43.6 | 54 | -10.4 | 74 | -30.4 | 0-360 | 200 | V |
| 3 | * ** 8.04908 | 41.41 | PK2 | 35.9 | -28.6 | 48.71 | - | - | 74 | -25.29 | 2 | 261 | H |
| | * ** 8.04931 | 28.48 | ADV | 35.9 | -28.6 | 35.78 | 54 | -18.22 | - | - | 2 | 261 | H |
| 4 | * ** 9.42844 | 39.6 | Pk | 36.6 | -28.4 | 47.8 | 54 | -6.2 | 74 | -26.2 | 0-360 | 199 | H |
| 7 | * ** 8.14594 | 40.15 | Pk | 35.8 | -28.9 | 47.05 | 54 | -6.95 | 74 | -26.95 | 0-360 | 101 | V |
| 8 | * ** 9.46594 | 39.44 | Pk | 36.7 | -28.6 | 47.54 | 54 | -6.46 | 74 | -26.46 | 0-360 | 200 | V |
| 9 | * ** 4.87447 | 41.44 | PK2 | 34 | -31.7 | 43.74 | - | - | 74 | -30.26 | 75 | 393 | V |
| | * ** 4.87628 | 28.92 | ADV | 34 | -31.6 | 31.32 | 54 | -22.68 | - | - | 75 | 393 | V |
| 10 | * ** 7.31439 | 39.68 | PK2 | 35.6 | -29.6 | 45.68 | - | - | 74 | -28.32 | 28 | 293 | V |
| | * ** 7.31423 | 26.7 | ADV | 35.6 | -29.6 | 32.7 | 54 | -21.3 | - | - | 28 | 293 | V |
| 11 | * ** 12.18705 | 38.9 | PK2 | 38.9 | -26.6 | 51.2 | - | - | 74 | -22.8 | 160 | 235 | V |
| | * ** 12.18555 | 25.78 | ADV | 38.9 | -26.4 | 38.28 | 54 | -15.72 | - | - | 160 | 235 | V |

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

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

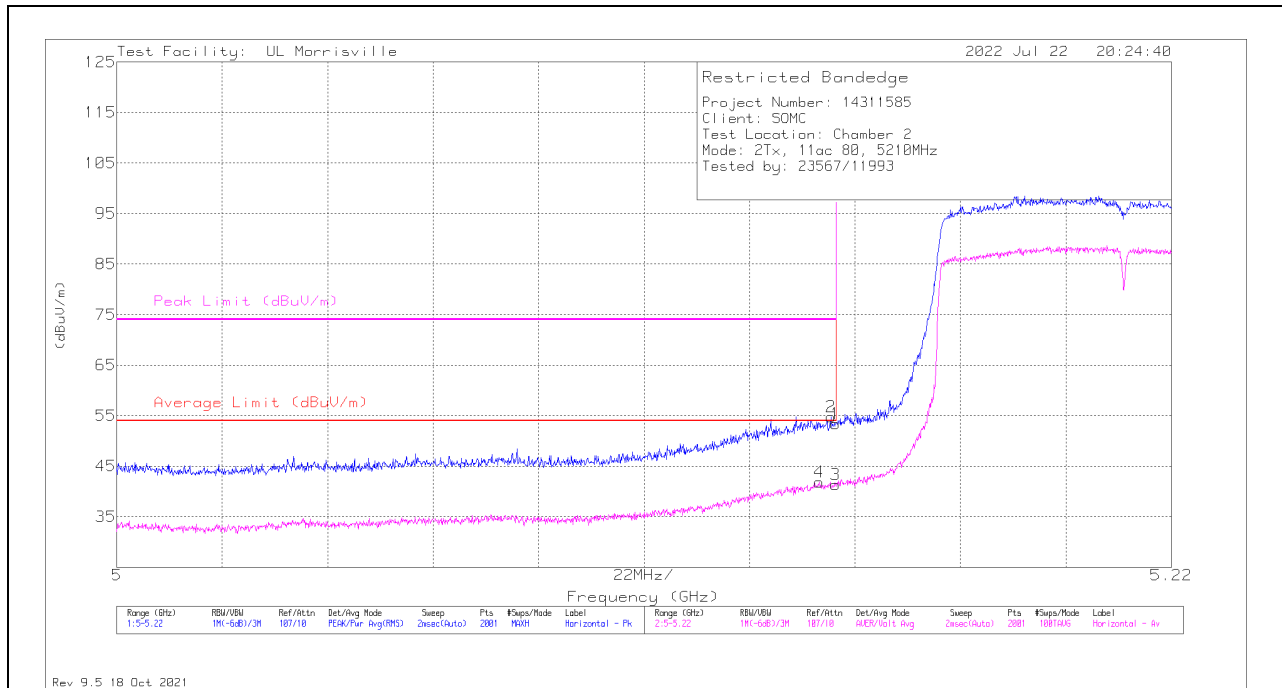
PK2 - Maximum Peak

ADV - Linear Voltage Average

10.4. 5GHz WLAN

BANDEDGE (5.2 BAND LOW CHANNEL – 2TX, 802.11ac 80MHz)

HORIZONTAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 206211 (dB/m) | Gain/Loss (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|----------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | * ** 5.14993 | 41.75 | Pk | 34.2 | -22.6 | 53.35 | - | - | 74 | -20.65 | 171 | 125 | H |
| 2 | * ** 5.14905 | 43.16 | Pk | 34.2 | -22.6 | 54.76 | - | - | 74 | -19.24 | 171 | 125 | H |
| 3 | * ** 5.14993 | 29.79 | ADV | 34.2 | -22.6 | 41.39 | 54 | -12.61 | - | - | 171 | 125 | H |
| 4 | * ** 5.14652 | 30.29 | ADV | 34.2 | -22.6 | 41.89 | 54 | -12.11 | - | - | 171 | 125 | H |

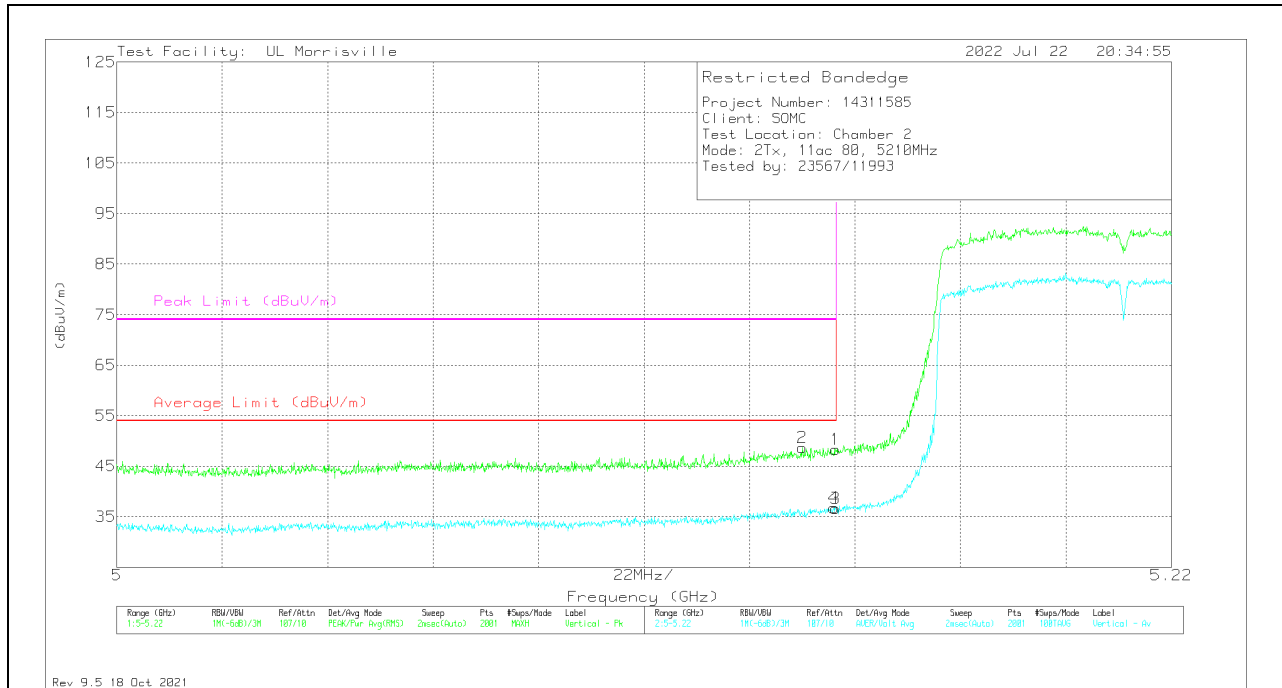
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

ADV - Linear Voltage Average

VERTICAL RESULT

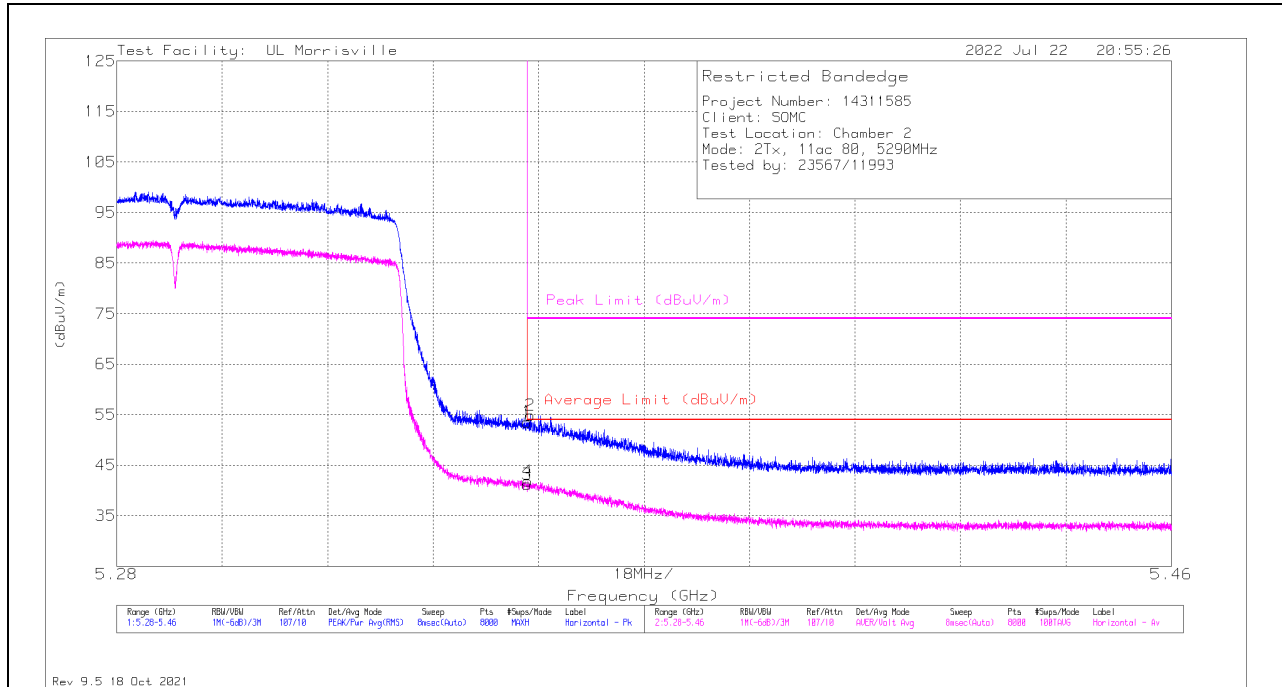


| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 206211 (dB/m) | Gain/Loss (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|----------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | * ** 5.14993 | 36.71 | Pk | 34.2 | -22.6 | 48.31 | - | - | 74 | -25.69 | 110 | 268 | V |
| 2 | * ** 5.143 | 36.96 | Pk | 34.2 | -22.5 | 48.66 | - | - | 74 | -25.34 | 110 | 268 | V |
| 3 | * ** 5.14993 | 25.08 | ADV | 34.2 | -22.6 | 36.68 | 54 | -17.32 | - | - | 110 | 268 | V |
| 4 | * ** 5.1496 | 25.12 | ADV | 34.2 | -22.6 | 36.72 | 54 | -17.28 | - | - | 110 | 268 | 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

BANDEDGE (5.3 BAND HIGH CHANNEL – 2TX, 802.11ac 80MHz)

HORIZONTAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 206211 (dB/m) | Gain/Loss (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 | 41.68 | Pk | 34.6 | -22.7 | 53.58 | - | - | 74 | -20.42 | 180 | 111 | H |
| 2 | *** 5.35061 | 43.01 | Pk | 34.6 | -22.7 | 54.91 | - | - | 74 | -19.09 | 180 | 111 | H |
| 3 | *** 5.35001 | 29.28 | ADV | 34.6 | -22.7 | 41.18 | 54 | -12.82 | - | - | 180 | 111 | H |
| 4 | *** 5.35019 | 30 | ADV | 34.6 | -22.7 | 41.9 | 54 | -12.1 | - | - | 180 | 111 | H |

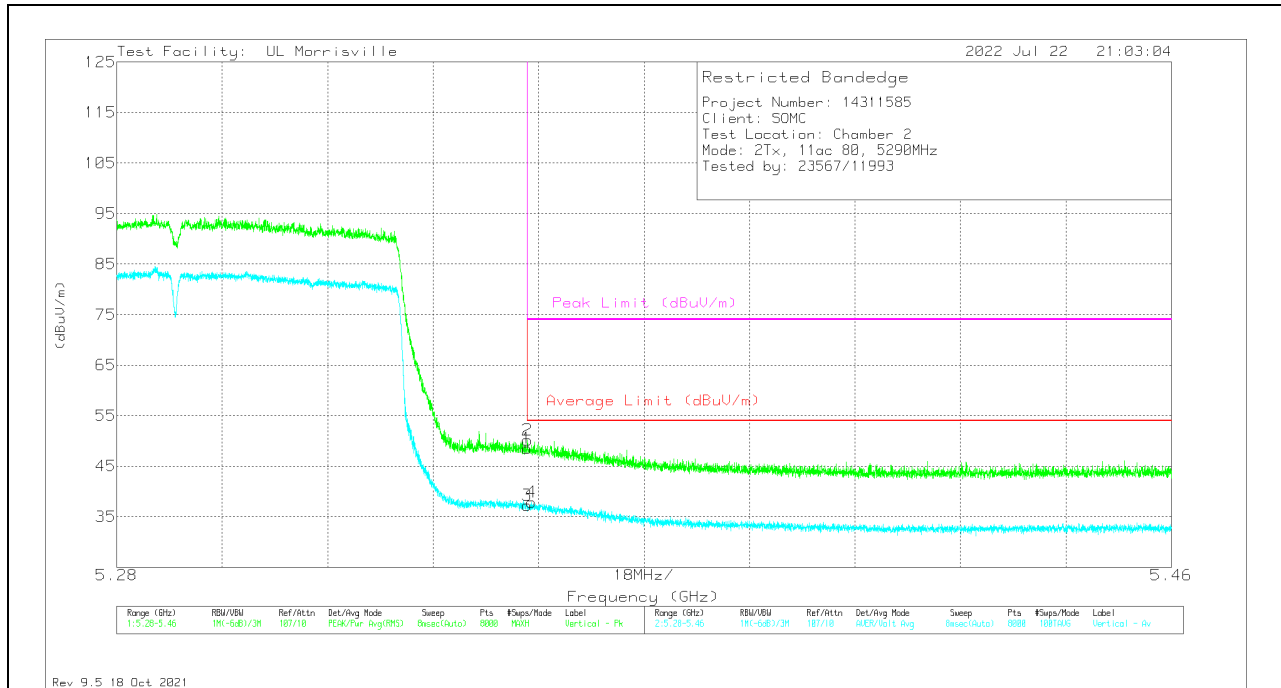
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

ADV - Linear Voltage Average

VERTICAL RESULT

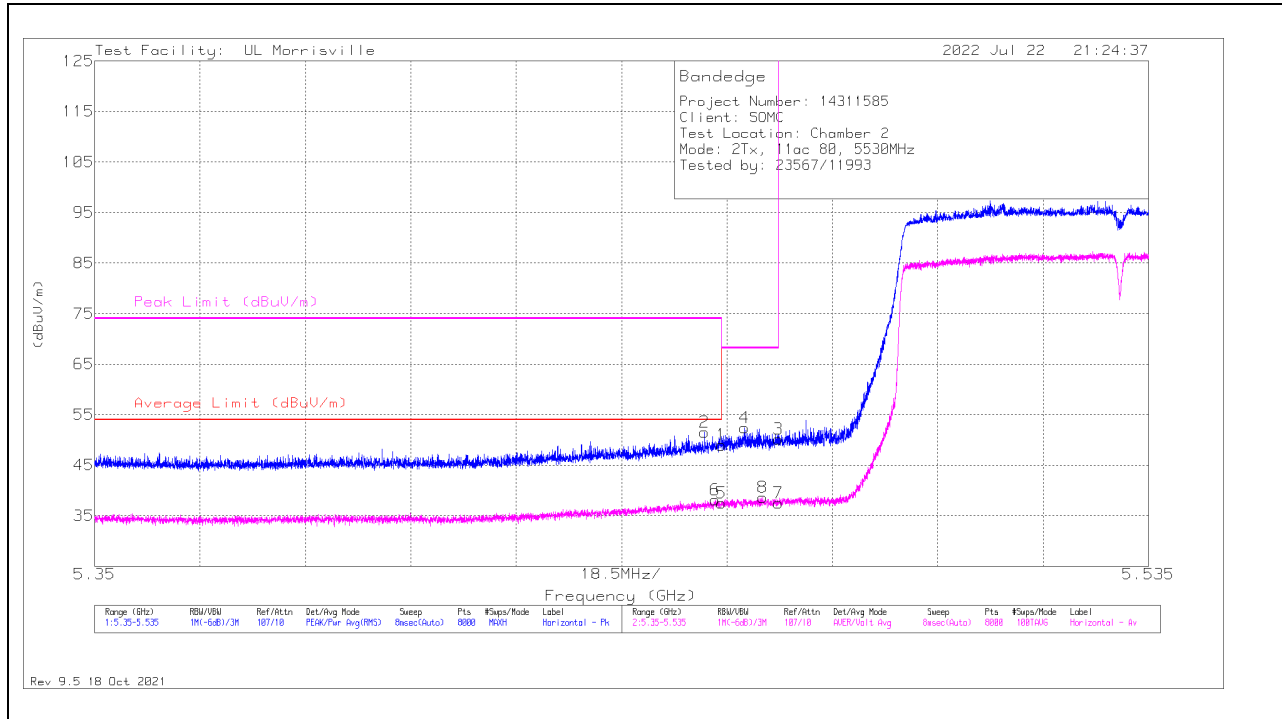


| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 206211 (dB/m) | Gain/Loss (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|----------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | * ** 5.35001 | 36.62 | Pk | 34.6 | -22.7 | 48.52 | - | - | 74 | -25.48 | 59 | 103 | V |
| 2 | * ** 5.3501 | 38.28 | Pk | 34.6 | -22.7 | 50.18 | - | - | 74 | -23.82 | 59 | 103 | V |
| 3 | * ** 5.35001 | 25.4 | ADV | 34.6 | -22.7 | 37.3 | 54 | -16.7 | - | - | 59 | 103 | V |
| 4 | * ** 5.35084 | 25.92 | ADV | 34.6 | -22.7 | 37.82 | 54 | -16.18 | - | - | 59 | 103 | 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

BANDEDGE (5.6 BAND LOW CHANNEL – 2TX, 802.11ac 80MHz)

HORIZONTAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 206211 (dB/m) | Gain/Loss (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|----------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | * ** 5.46 | 37.89 | Pk | 34.4 | -23.3 | 48.99 | - | - | 74 | -25.01 | 177 | 161 | H |
| 2 | * ** 5.45708 | 40.39 | Pk | 34.4 | -23.3 | 51.49 | - | - | 74 | -22.51 | 177 | 161 | H |
| 5 | * ** 5.46 | 26.37 | ADV | 34.4 | -23.3 | 37.47 | 54 | -16.53 | - | - | 177 | 161 | H |
| 6 | * ** 5.45896 | 26.98 | ADV | 34.4 | -23.3 | 38.08 | 54 | -15.92 | - | - | 177 | 161 | H |
| 4 | 5.46407 | 41.37 | Pk | 34.4 | -23.4 | 52.37 | - | - | 68.2 | -15.83 | 177 | 161 | H |
| 8 | 5.46726 | 27.76 | ADV | 34.4 | -23.5 | 38.66 | - | - | - | - | 177 | 161 | H |
| 3 | 5.46999 | 39.37 | Pk | 34.4 | -23.6 | 50.17 | - | - | 68.2 | -18.03 | 177 | 161 | H |
| 7 | 5.46999 | 26.7 | ADV | 34.4 | -23.6 | 37.5 | - | - | - | - | 177 | 161 | H |

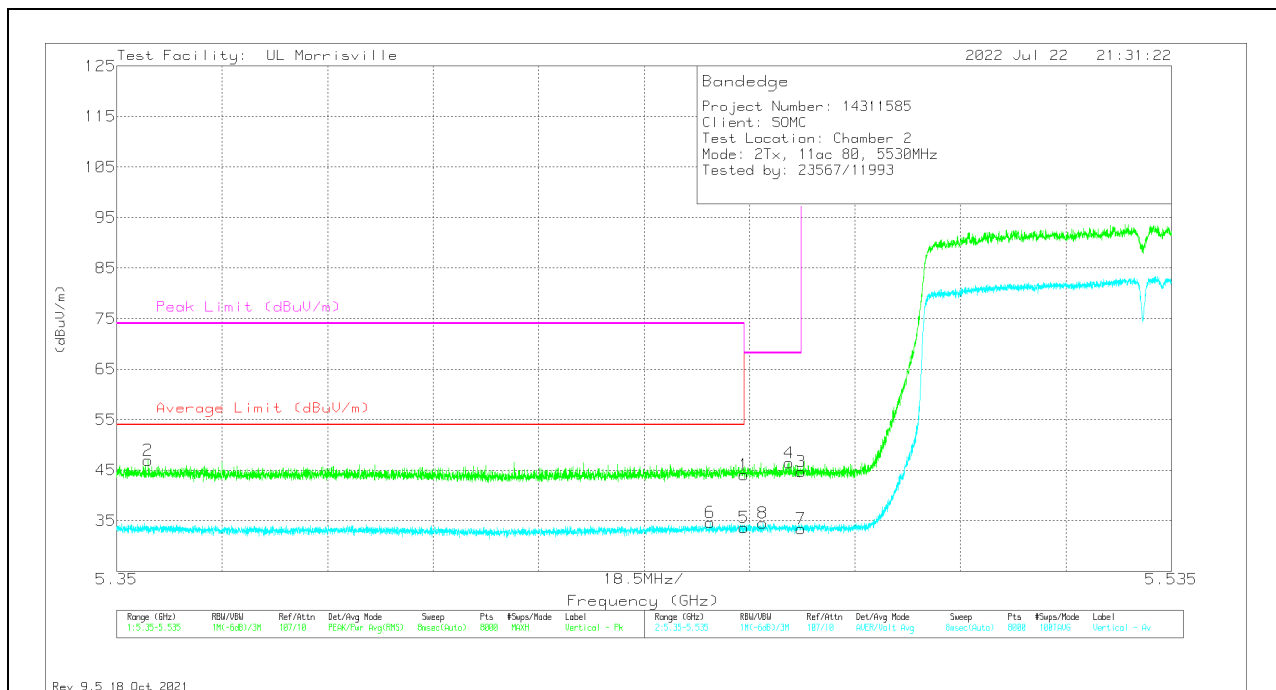
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

ADV - Linear Voltage Average

VERTICAL RESULT

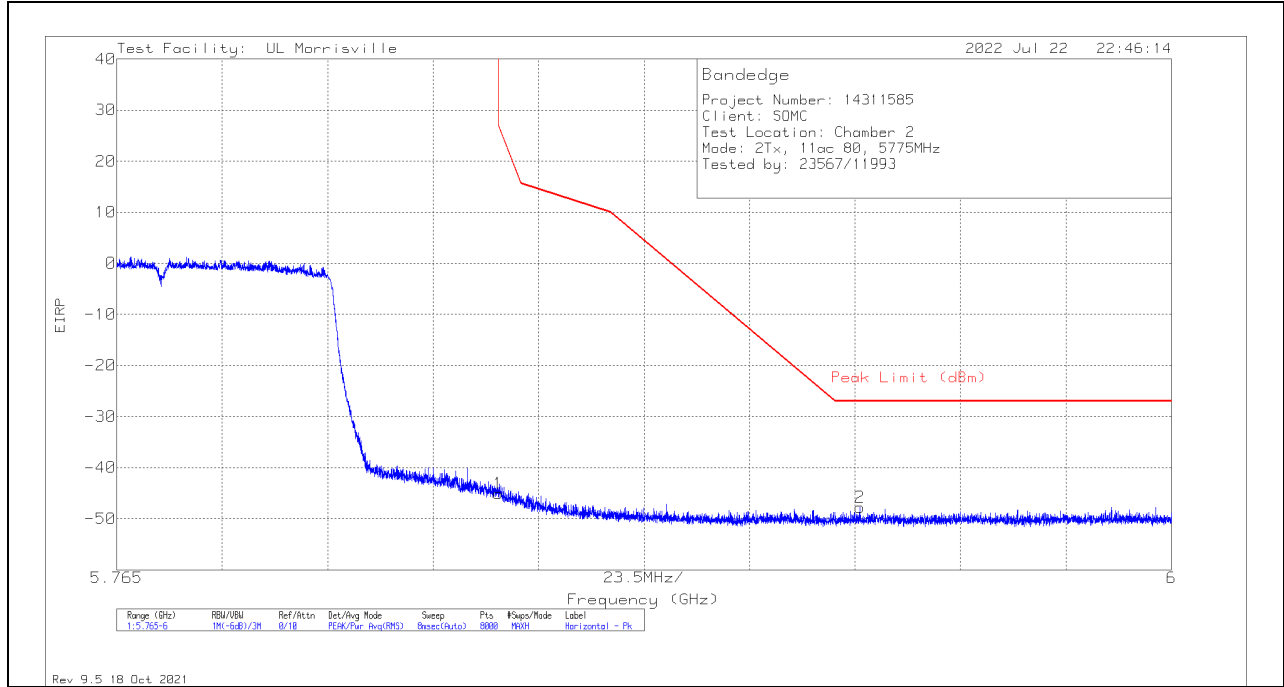


| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 206211 (dB/m) | Gain/Loss (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|----------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | *** 5.46 | 32.97 | Pk | 34.4 | -23.3 | 44.07 | - | - | 74 | -29.93 | 77 | 115 | V |
| 2 | *** 5.3555 | 35.12 | Pk | 34.6 | -22.8 | 46.92 | - | - | 74 | -27.08 | 77 | 115 | V |
| 5 | *** 5.46 | 22.58 | ADV | 34.4 | -23.3 | 33.68 | 54 | -20.32 | - | - | 77 | 115 | V |
| 6 | *** 5.45408 | 23.56 | ADV | 34.4 | -23.3 | 34.66 | 54 | -19.34 | - | - | 77 | 115 | V |
| 8 | 5.46335 | 23.56 | ADV | 34.4 | -23.4 | 34.56 | - | - | - | - | 77 | 115 | V |
| 4 | 5.46791 | 35.57 | Pk | 34.4 | -23.5 | 46.47 | - | - | 68.2 | -21.73 | 77 | 115 | V |
| 3 | 5.46999 | 33.89 | Pk | 34.4 | -23.6 | 44.69 | - | - | 68.2 | -23.51 | 77 | 115 | V |
| 7 | 5.46999 | 22.63 | ADV | 34.4 | -23.6 | 33.43 | - | - | - | - | 77 | 115 | 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

BANDEDGE (5.8 BAND HIGH CHANNEL – 2TX, 802.11ac 80MHz)

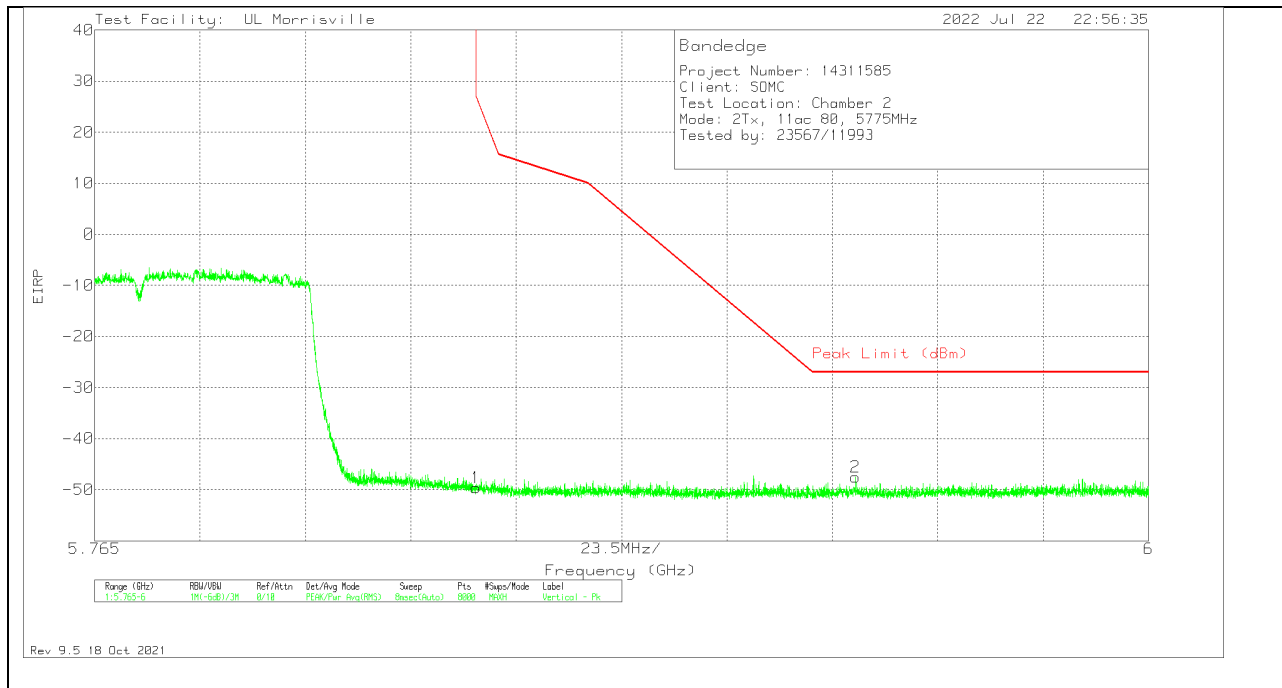
HORIZONTAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 206211 (dB/m) | Gain/Loss (dB) | Conversion Factor (dB) | Corrected Reading EIRP (dBm) | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|----------------|------------------------|------------------------------|------------------|----------------|----------------|-------------|----------|
| 1 | 5.85002 | -68.91 | Pk | 34.9 | -22.9 | 11.8 | -45.11 | 26.95 | -72.06 | 180 | 172 | H |
| 2 | 5.93061 | -71.84 | Pk | 35.1 | -22.8 | 11.8 | -47.74 | -27 | -20.74 | 180 | 172 | H |

Pk - Peak detector

VERTICAL RESULT

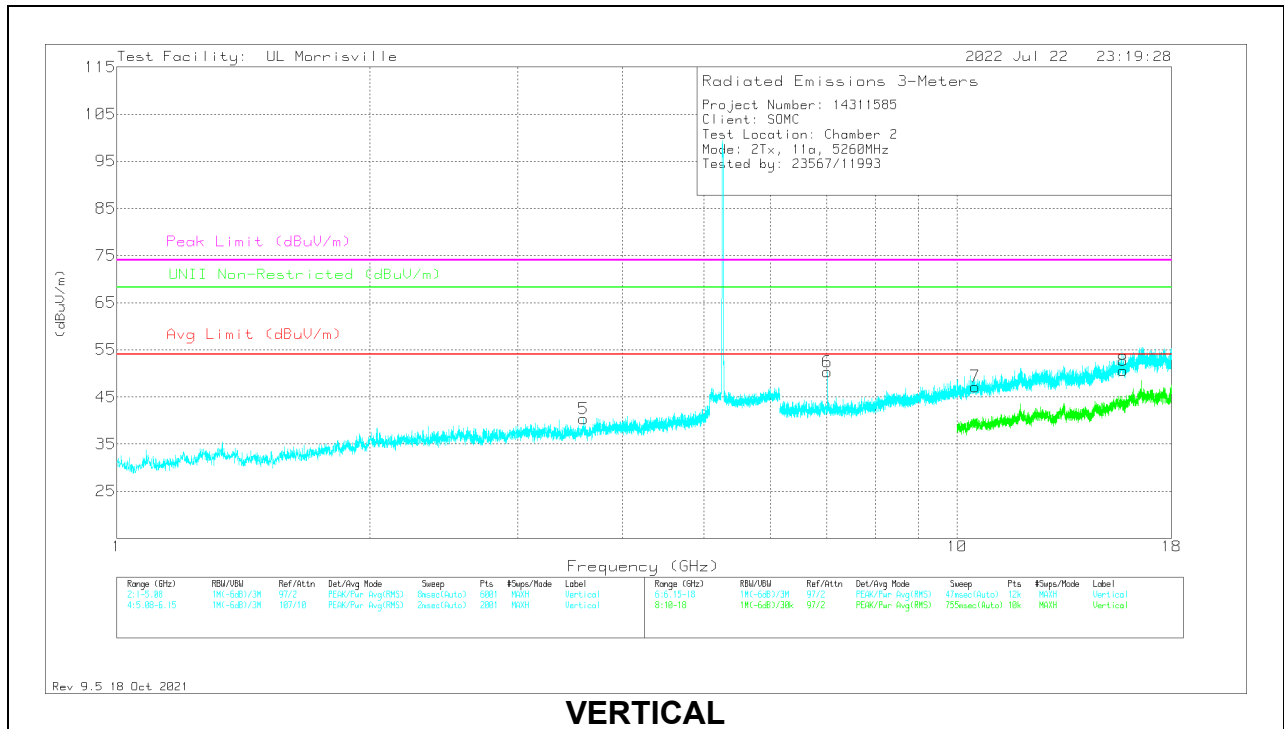
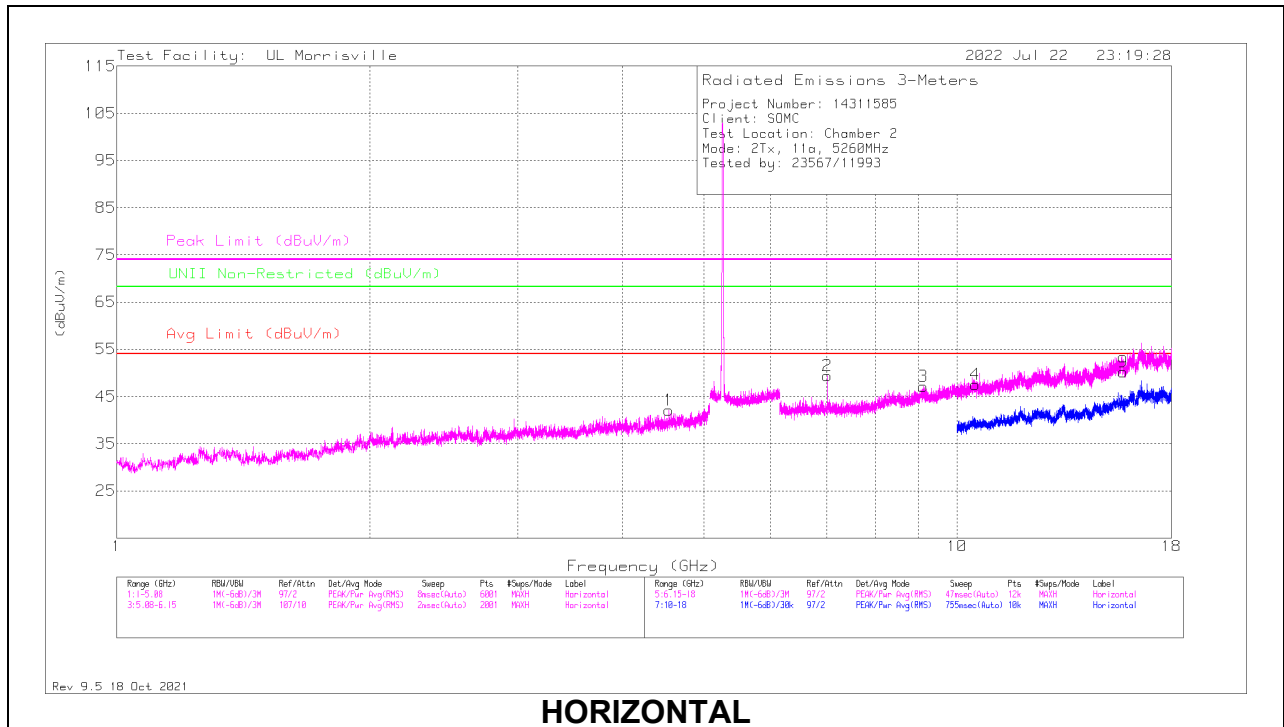


| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 206211 (dB/m) | Gain/Loss (dB) | Conversion Factor (dB) | Corrected Reading EIRP (dBm) | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|----------------|------------------------|------------------------------|------------------|----------------|----------------|-------------|----------|
| 1 | 5.85002 | -73.46 | Pk | 34.9 | -22.9 | 11.8 | -49.66 | 26.95 | -76.61 | 126 | 144 | V |
| 2 | 5.93463 | -71.77 | Pk | 35.1 | -22.7 | 11.8 | -47.57 | -27 | -20.57 | 126 | 144 | V |

Pk - Peak detector

HARMONICS AND SPURIOUS EMISSIONS

5.3 BAND LOW CHANNEL 2TX, 802.11a 6Mbps



RADIATED EMISSIONS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 206211 (dB/m) | Gain/Loss (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|---------------|----------------|----------------------------|--------------------|-------------|---------------------|-------------|------------------------------|----------------|----------------|-------------|----------|
| 9 | * ** 15.78126 | 36.14 | PK-U | 40.5 | -22.9 | 53.74 | - | - | 74 | -20.26 | - | - | 29 | 277 | H |
| | * ** 15.78337 | 23.49 | ADV | 40.5 | -22.9 | 41.09 | 54 | -12.91 | - | - | - | - | 29 | 277 | H |
| 8 | * ** 15.78148 | 35.56 | PK-U | 40.5 | -22.9 | 53.16 | - | - | 74 | -20.84 | - | - | 85 | 273 | V |
| | * ** 15.78321 | 23.16 | ADV | 40.5 | -22.9 | 40.76 | 54 | -13.24 | - | - | - | - | 85 | 273 | V |
| 1 | * ** 4.5428 | 39.39 | Pk | 34.1 | -31.4 | 42.09 | 54 | -11.91 | 74 | -31.91 | - | - | 0-360 | 200 | H |
| 5 | * ** 3.59624 | 39.32 | Pk | 33 | -32 | 40.32 | 54 | -13.68 | 74 | -33.68 | - | - | 0-360 | 200 | V |
| 3 | * ** 9.11151 | 37.17 | Pk | 36.2 | -26.2 | 47.17 | 54 | -6.83 | 74 | -26.83 | - | - | 0-360 | 101 | H |
| 2 | 7.01323 | 44.4 | PK-U | 35.6 | -27.9 | 52.1 | - | - | - | - | 68.2 | -16.1 | 120 | 109 | H |
| 6 | 7.01328 | 44.94 | PK-U | 35.6 | -27.9 | 52.64 | - | - | - | - | 68.2 | -15.56 | 172 | 129 | V |
| 4 | 10.51927 | 36.35 | PK-U | 37.5 | -24.9 | 48.95 | - | - | 74 | -25.05 | 68.2 | -19.25 | 243 | 248 | H |
| | 10.52063 | 24.12 | ADV | 37.5 | -24.8 | 36.82 | 54 | -17.18 | - | - | - | - | 243 | 248 | H |
| 7 | 10.52398 | 37.13 | PK-U | 37.5 | -24.8 | 49.83 | - | - | 74 | -24.17 | 68.2 | -18.37 | 122 | 359 | V |
| | 10.52119 | 24.24 | ADV | 37.5 | -24.8 | 36.94 | 54 | -17.06 | - | - | - | - | 122 | 359 | 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

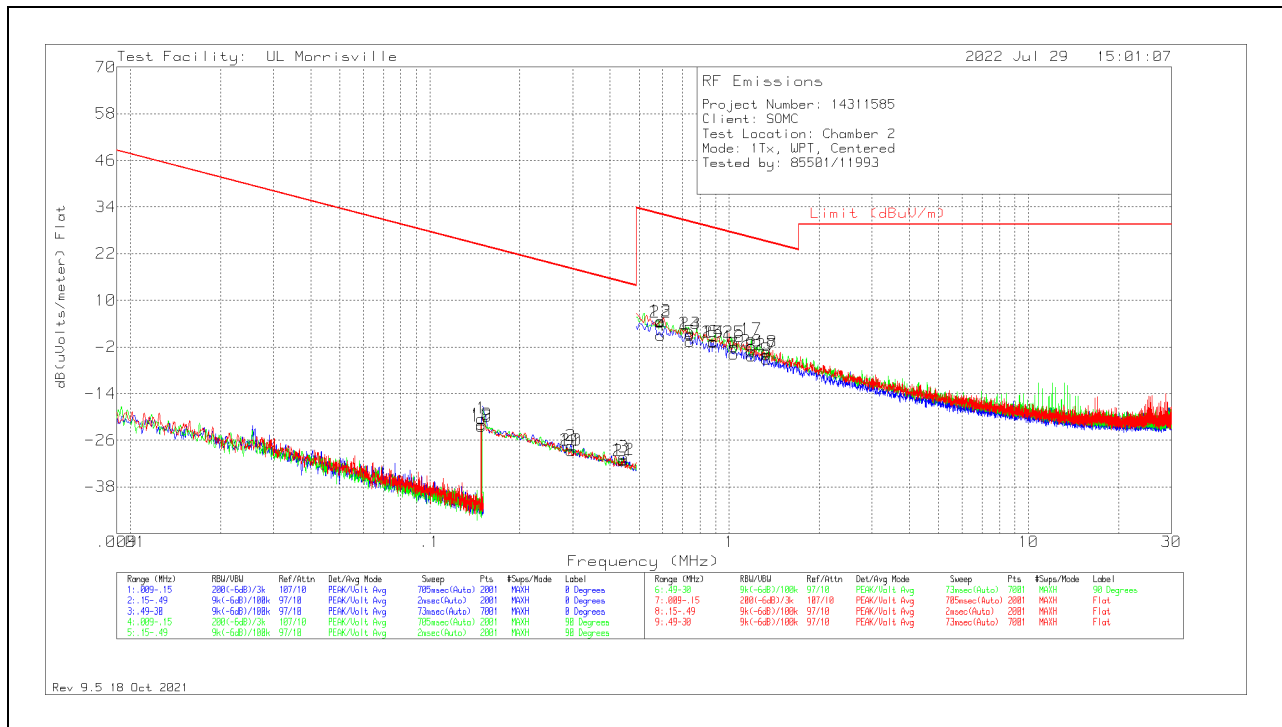
Pk - Peak detector

10.5. WPT

Note: All measurements were made at a test distance of 3 m. The measured data was extrapolated from the test distance (3m) to the specification distance (300 m from 9-490 kHz and 30 m from 490 kHz – 30 MHz) to clearly show the relative levels of fundamental and spurious emissions and demonstrate compliance with the requirement that the level of any spurious emissions be below the level of the intentionally transmitted signal. The extrapolation factor for the limits were $40 \cdot \log(\text{test distance} / \text{specification distance})$.

HARMONICS AND SPURIOUS EMISSIONS – CONFIG 1

0.009 to 30MHz



RADIATED EMISSIONS

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | AT0079 (dB/m) | Gain/Loss (dB) | Dist. Corr. Factor (dB) | Corrected Reading dB(uVolts/meter) | QP/AV Limit (dBuV/m) | PK Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Loop Angle |
|--------|-----------------|----------------------|-----|---------------|----------------|-------------------------|------------------------------------|----------------------|-------------------|-------------|----------------|------------|
| 19 | .14851 | 46.39 | Av | 11.2 | .1 | -80 | -22.31 | 24.17 | 44.17 | -46.48 | 228 | Flat |
| 1 | .14836 | 49.64 | Av | 11.2 | .1 | -80 | -19.06 | 24.18 | 44.18 | -43.24 | 229 | 0 degs |
| 10 | .14843 | 45.44 | Av | 11.2 | .1 | -80 | -23.26 | 24.17 | 44.17 | -47.43 | 155 | 90 degs |
| 2 | .2962 | 41.34 | Pk | 11.2 | .1 | -80 | -27.36 | 18.17 | 38.17 | -45.53 | 0-360 | 0 degs |
| 11 | .2962 | 40.06 | Pk | 11.2 | .1 | -80 | -28.64 | 18.17 | 38.17 | -46.81 | 0-360 | 90 degs |
| 20 | .29637 | 40.08 | Pk | 11.2 | .1 | -80 | -28.62 | 18.17 | 38.17 | -46.79 | 0-360 | Flat |
| 21 | .44393 | 37.42 | Pk | 11.2 | .1 | -80 | -31.28 | 14.66 | 34.66 | -45.94 | 0-360 | Flat |
| 3 | .4441 | 38.37 | Pk | 11.2 | .1 | -80 | -30.33 | 14.65 | 34.65 | -44.98 | 0-360 | 0 degs |
| 12 | .4441 | 37.71 | Pk | 11.2 | .1 | -80 | -30.99 | 14.65 | 34.65 | -45.64 | 0-360 | 0 degs |
| 4 | .59118 | 29.52 | Pk | 11.2 | .2 | -40 | .92 | 32.17 | - | -31.25 | 0-360 | 0 degs |
| 13 | .59118 | 33.36 | Pk | 11.2 | .2 | -40 | 4.76 | 32.17 | - | -27.41 | 0-360 | 90 degs |
| 22 | .59118 | 32.99 | Pk | 11.2 | .2 | -40 | 4.39 | 32.17 | - | -27.78 | 0-360 | Flat |
| 5 | .73874 | 27.81 | Pk | 11.3 | .2 | -40 | -.69 | 30.23 | - | -30.92 | 0-360 | 0 degs |
| 14 | .73874 | 29.6 | Pk | 11.3 | .2 | -40 | 1.1 | 30.23 | - | -29.13 | 0-360 | 90 degs |
| 23 | .73874 | 30.02 | Pk | 11.3 | .2 | -40 | 1.52 | 30.23 | - | -28.71 | 0-360 | Flat |
| 6 | .8863 | 27.93 | Pk | 11.3 | .2 | -40 | -.57 | 28.65 | - | -29.22 | 0-360 | 0 degs |
| 15 | .8863 | 27.68 | Pk | 11.3 | .2 | -40 | -.82 | 28.65 | - | -29.47 | 0-360 | 90 degs |
| 24 | .8863 | 27.74 | Pk | 11.3 | .2 | -40 | -.76 | 28.65 | - | -29.41 | 0-360 | Flat |
| 7 | 1.03808 | 24.61 | Pk | 11.3 | .2 | -40 | -3.89 | 27.28 | - | -31.17 | 0-360 | 0 degs |
| 16 | 1.03808 | 26.53 | Pk | 11.3 | .2 | -40 | -1.97 | 27.28 | - | -29.25 | 0-360 | 90 degs |
| 25 | 1.03808 | 27.76 | Pk | 11.3 | .2 | -40 | -.74 | 27.28 | - | -28.02 | 0-360 | Flat |
| 8 | 1.18564 | 24.12 | Pk | 11.3 | .2 | -40 | -4.38 | 26.13 | - | -30.51 | 0-360 | 0 degs |
| 17 | 1.18564 | 28.46 | Pk | 11.3 | .2 | -40 | -.04 | 26.13 | - | -26.17 | 0-360 | 90 degs |
| 26 | 1.18564 | 25.38 | Pk | 11.3 | .2 | -40 | -3.12 | 26.13 | - | -29.25 | 0-360 | Flat |
| 9 | 1.3332 | 23.37 | Pk | 11.3 | .2 | -40 | -5.13 | 25.11 | - | -30.24 | 0-360 | 0 degs |
| 18 | 1.3332 | 25.24 | Pk | 11.3 | .2 | -40 | -3.26 | 25.11 | - | -28.37 | 0-360 | 90 degs |
| 27 | 1.3332 | 24.5 | Pk | 11.3 | .2 | -40 | -4 | 25.11 | - | -29.11 | 0-360 | Flat |

Pk - Peak detector
 Av - Average detection

11. SETUP PHOTOS

Refer to R14311585-EP2 for setup photos.

END OF REPORT