



# **TEST REPORT**

**Report Number. :** R13999443-E2

**Applicant :** INFOBIONIC  
400 TOTTEN POND RD STE 315  
WALTHAM, MA 02451, USE

**Model :** 01854 REV B

**FCC ID :** 2AHL001855

**EUT Description :** WIRELESS AMBULATORY ECG MONITORING AND DETECTION  
SYSTEM

**Test Standard(s) :** FCC CFR47 PART 22, PART 24, AND PART 27

**Date Of Issue:**  
2021-12-21

**Prepared by:**  
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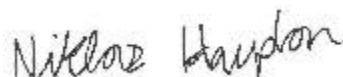
Revision History

| Rev. | Issue Date | Revisions                                                                                   | Revised By    |
|------|------------|---------------------------------------------------------------------------------------------|---------------|
| V1   | 2021-11-23 | Initial Review                                                                              | Niklas Haydon |
| V2   | 2021-12-06 | Revised power note in Section 5.1 and 5.2 to reference SAR report.<br>Removed setup photos. | Brian Kiewra  |
| V3   | 2021-12-14 | Added ERP/EIRP section                                                                      | Brian Kiewra  |
| V4   | 2021-12-16 | Revisions to ERP/EIRP section to include ERP/EIRP in dBm                                    | Brian Kiewra  |
| V5   | 2021-12-17 | Revisions to ERP/EIRP section to include additional decimal places                          | Brian Kiewra  |
| V6   | 2021-12-21 | Revisions to ERP/EIRP section to include note with equation used to calculate ERP/EIRP.     | Brian Kiewra  |

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# 1. ATTESTATION OF TEST RESULTS

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                     |                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Applicant Name and Address                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | INFOBIONIC<br>400 TOTTEN POND RD STE 315<br>WALTHAM, MA 02451, USE                  |                                                                                       |
| Model                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 01854 REV B                                                                         |                                                                                       |
| FCC ID                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2AHL001855                                                                          |                                                                                       |
| EUT Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | WIRELESS AMBULATORY ECG MONITORING AND DETECTION SYSTEM                             |                                                                                       |
| Serial Number                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | MIB1002                                                                             |                                                                                       |
| Sample Receipt Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | SEPTEMBER 13, 2021                                                                  |                                                                                       |
| Date Tested                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | SEPTEMBER 13, 2021 to NOVEMBER 01, 2021                                             |                                                                                       |
| Applicable Standards                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | FCC CFR47 PART 22, PART 24, AND PART 27                                             |                                                                                       |
| Test Results                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | COMPLIES                                                                            |                                                                                       |
| <p>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.</p> <p>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.</p> <p>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, any agency of the Federal Government, or any agency of the U.S. government.</p> |                                                                                     |                                                                                       |
| Approved & Released By:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Reviewed By:                                                                        | Prepared By:                                                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |
| Dan Corona<br>Operations Leader<br>UL Verification Services Inc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Kiya Kedida<br>Senior Project Handler<br>UL Verification Services Inc.              | Niklas Haydon<br>Operations Leader<br>UL LLC.                                         |

## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with the following:

- ANSI C63.26:2015
- FCC CFR 47 Part 2, Part 22, Part 24, and Part 27
- [FCC KDB 971168 D01 v03r01](#): Power Meas License Digital Systems
- [FCC KDB 971168 D02 v02r01](#): Misc Rev Approv License Devices

## 3. FACILITIES AND ACCREDITATION

UL LLC is accredited by A2LA, Certificate Number 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:<br>12 Laboratory Dr<br>RTP, NC 27709, U.S.A                        | US0067     | 2180C               | 703469           |
| <input checked="" type="checkbox"/> | Building:<br>2800 Perimeter Park Dr. Suite B<br>Morrisville, NC 27560, U.S.A |            | 27265               |                  |

## 4. DECISION RULES AND MEASUREMENT UNCERTAINTY

### 4.1. 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.

### 4.2. 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.)

### 4.3. MEASUREMENT UNCERTAINTY

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

| PARAMETER                           | UNCERTAINTY |
|-------------------------------------|-------------|
| Radio Frequency (Spectrum Analyzer) | 141.2 Hz    |
| Occupied Channel Bandwidth          | 1.22%       |
| All emissions, radiated             | 6.01 dB     |
| Temperature                         | 0.57°C      |
| Humidity                            | 3.39%       |
| DC Supply voltages                  | 1.70%       |
| Time                                | 3.39%       |

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

### 4.4. 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.  
 $36.5 \text{ dBuV} + 0 \text{ dB} + 10.1 \text{ dB} + 0 \text{ dB} = 46.6 \text{ dBuV}$

## 5. EQUIPMENT UNDER TEST

### 5.1. DESCRIPTION OF EUT

The EUT is a Wireless Ambulatory ECG Monitoring and Detection System that contains a 3G/4G radio. This report contains the radiated emissions data for 3G radio. For all antenna port conducted data please refer to radio reports under FCC ID: R17LE910CXNF. Power in this report taken from SAR test report R13999443-S1.

### 5.2. MAXIMUM ERP/EIRP

| WCDMA Band | ERP/EIRP (dBm) | ERP/EIRP (W) |
|------------|----------------|--------------|
| 2          | 23.930         | 0.247        |
| 4          | 26.960         | 0.497        |
| 5          | 21.460         | 0.140        |

For maximum output please refer to SAR test report R13999443-S1

### 5.3. SOFTWARE AND FIRMWARE

The EUT firmware installed during testing was version V00.55.

### 5.4. MAXIMUM ANTENNA GAIN

The antenna(s) gain and type, as provided by the manufacturer' are as follows:

| Frequency Range (MHz) | Antenna Gain (dBi) |
|-----------------------|--------------------|
| WCDMA 5, 824 - 849    | 0.39               |
| WCDMA 2, 1850 - 1910  | 0.62               |
| WCDMA 4, 1710 - 1755  | 3.22               |

### 5.5. WORST-CASE CONFIGURATION AND MODE

The EUT supports WDCMA bands:  
Band 2, band 4, and band 5

The EUT supports REL 99, HSDPA, and HSUPA. All radiated spurious emissions testing was performed using REL 99, HSDPA, and HSUPA modulations. The EUT supports only one transmit antenna, therefore all testing was performed with this antenna.

The EUT was investigated in three orthogonal orientations X/Y/Z. For band 5, it was determined that X orientation was worst-case orientation. For bands 2 and 4, it was determined that Y orientation was worst-case orientation.

Radiated spurious emissions were investigated from 9kHz to 30MHz, 30-1000MHz, and above 1GHz. There were no emissions found with less than 20dB of margin from 9kHz to 1GHz.

The EUT is battery operated and the battery is removed from the EUT for charging, therefore the EUT was tested on battery only.

## 5.6. DESCRIPTION OF TEST SETUP

| SUPPORT TEST EQUIPMENT        |                       |                      |                |                |                  |                                                                                                              |
|-------------------------------|-----------------------|----------------------|----------------|----------------|------------------|--------------------------------------------------------------------------------------------------------------|
| Description                   |                       | Manufacturer         | Model          | Serial Number  |                  |                                                                                                              |
| Load Simulating Patient       |                       | N/A                  | N/A            | Non-serialized |                  |                                                                                                              |
| I/O CABLES (RF RADIATED TEST) |                       |                      |                |                |                  |                                                                                                              |
| Cable No.                     | Port                  | # of Identical Ports | Connector Type | Cable Type     | Cable Length (m) | Remarks                                                                                                      |
| 1                             | Patient Coupling Port | 1                    | Samtec         | shielded       | 0.61             | Samtec connector on one end (DUT) and three standard Electrocardiogram connectors on the other end (Patient) |

### RADIATED SETUP

Refer to exhibit R13999443-EP1 for setup diagram.

## 6. TEST AND MEASUREMENT EQUIPMENT

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

### Test Equipment Used – Conducted Output Power Test Equipment

| Equipment ID | Description  | Manufacturer/Brand | Model Number | Last Cal.  | Next Cal.  |
|--------------|--------------|--------------------|--------------|------------|------------|
| MY55136012   | Power Meter  | Keysight           | N1912A       | 2021-07-16 | 2022-07-16 |
| MY55090030   | Power Sensor | Agilent            | N1921A       | 2021-05-27 | 2022-05-27 |

### Test Equipment Used - Radiated Disturbance Emissions Test Equipment (Morrisville – Chamber 4)

| Equipment ID  | Description                                             | Manufacturer/Brand   | Model Number              | Last Cal.  | Next Cal.  |
|---------------|---------------------------------------------------------|----------------------|---------------------------|------------|------------|
|               | <b>30-1000 MHz</b>                                      |                      |                           |            |            |
| 206210        | Hybrid Broadband Antenna                                | Sunol Sciences Corp. | JB3                       | 2021-03-11 | 2022-03-11 |
|               | <b>1-18 GHz</b>                                         |                      |                           |            |            |
| 206211        | Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz       | ETS Lindgren         | 3117                      | 2021-03-11 | 2022-03-11 |
|               | <b>Gain-Loss Chains</b>                                 |                      |                           |            |            |
| C4-SAC02      | Gain-loss string: 25-1000MHz                            | Various              | Various                   | 2021-05-07 | 2022-05-07 |
| C4-SAC03      | Gain-loss string: 1-18GHz                               | Various              | Various                   | 2021-05-07 | 2022-05-07 |
|               | <b>Receiver &amp; Software</b>                          |                      |                           |            |            |
| 206496        | Spectrum Analyzer                                       | Rohde & Schwarz      | ESW44                     | 2021-03-09 | 2022-03-09 |
| SOFTEMI       | EMI Software                                            | UL                   | Version 9.5 (27 May 2021) |            |            |
|               | <b>Additional Equipment used</b>                        |                      |                           |            |            |
| s/n 200037635 | Environmental Meter                                     | Fisher Scientific    | 06-662-4                  | 2020-01-21 | 2022-01-21 |
| NA            | Wideband Radio Communications Tester                    | Rohde and Schwartz   | CMW500                    | 2021-04-26 | 2022-04-26 |
| BRF008        | 1710-1785MHz notch filter, 2W, $F_{high} = 9\text{GHz}$ | Micro-Tronics        | BRM50713-01               | 2021-02-16 | 2022-02-16 |
| BRF001        | 900MHz notch filter, 2W, $F_{high} = 6\text{GHz}$       | Micro-Tronics        | BRM50706                  | 2021-07-22 | 2022-07-22 |
| BRF010        | 1.85-1.97GHz notch filter, 2W, $F_{high} = 9\text{GHz}$ | Micro-Tronics        | BRM50714-01               | 2021-02-16 | 2022-02-16 |
| LPF008        | DC-1000MHz low-pass filter                              | Pasternack           | PE8720                    | 2021-07-31 | 2022-07-31 |
| HPF012        | 1GHz high-pass filter, 2W, $F_{high} = 18\text{GHz}$    | Micro-Tronics        | HPM18129                  | 2021-02-15 | 2022-02-15 |

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

| Equipment ID  | Description                          | Manufacturer/Brand   | Model Number              | Last Cal.  | Next Cal.  |
|---------------|--------------------------------------|----------------------|---------------------------|------------|------------|
|               | <b>0.009-30MHz</b>                   |                      |                           |            |            |
| AT0079        | Active Loop Antenna                  | ETS-Lindgren         | 6502                      | 2021-08-19 | 2022-08-19 |
|               | <b>30-1000 MHz</b>                   |                      |                           |            |            |
| AT0066        | Hybrid Broadband Antenna             | Sunol Sciences Corp. | JB1                       | 2021-02-19 | 2022-02-19 |
|               | <b>18-40 GHz</b>                     |                      |                           |            |            |
| AT0063        | Horn Antenna, 18-26.5GHz             | ARA                  | MWH-1826/B                | 2020-10-30 | 2021-10-30 |
|               | <b>Gain-Loss Chains</b>              |                      |                           |            |            |
| N-SAC01       | Gain-loss string: 0.009-30MHz        | Various              | Various                   | 2021-07-20 | 2022-07-20 |
| N-SAC02       | Gain-loss string: 25-1000MHz         | Various              | Various                   | 2021-07-20 | 2022-07-20 |
| N-SAC04       | Gain-loss string: 18-40GHz           | Various              | Various                   | 2021-07-20 | 2022-07-20 |
|               | <b>Receiver &amp; Software</b>       |                      |                           |            |            |
| 197954        | Spectrum Analyzer                    | Rohde & Schwarz      | ESW44                     | 2021-03-30 | 2022-03-30 |
| SOFTEMI       | EMI Software                         | UL                   | Version 9.5 (24 Jun 2021) |            |            |
|               | <b>Additional Equipment used</b>     |                      |                           |            |            |
| s/n 200037635 | Environmental Meter                  | Fisher Scientific    | 06-662-4                  | 2020-01-21 | 2022-01-21 |
| NA            | Wideband Radio Communications Tester | Rohde and Schwartz   | CMW500                    | 2021-04-26 | 2022-04-26 |

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

| Equipment ID  | Description                                       | Manufacturer/Brand   | Model Number              | Last Cal.  | Next Cal.  |
|---------------|---------------------------------------------------|----------------------|---------------------------|------------|------------|
|               | <b>30-1000 MHz</b>                                |                      |                           |            |            |
| AT0075        | Hybrid Broadband Antenna                          | Sunol Sciences Corp. | JB3                       | 2020-10-27 | 2021-10-27 |
|               | <b>1-18 GHz</b>                                   |                      |                           |            |            |
| AT0072        | Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz | ETS Lindgren         | 3117                      | 2021-05-03 | 2022-05-03 |
|               | <b>Gain-Loss Chains</b>                           |                      |                           |            |            |
| S-SAC02       | Gain-loss string: 25-1000MHz                      | Various              | Various                   | 2021-07-09 | 2022-07-09 |
| S-SAC03       | Gain-loss string: 1-18GHz                         | Various              | Various                   | 2021-07-09 | 2022-07-09 |
|               | <b>Receiver &amp; Software</b>                    |                      |                           |            |            |
| 197955        | Spectrum Analyzer                                 | Rohde & Schwarz      | ESW44                     | 2021-03-10 | 2022-03-10 |
| SOFTEMI       | EMI Software                                      | UL                   | Version 9.5 (24 Jun 2021) |            |            |
|               | <b>Additional Equipment used</b>                  |                      |                           |            |            |
| s/n 200037635 | Environmental Meter                               | Fisher Scientific    | 06-662-4                  | 2020-01-22 | 2022-01-22 |
| NA            | Wideband Radio Communications Tester              | Rohde and Schwartz   | CMW500                    | 2021-04-26 | 2022-04-26 |

**NOTES:**

1. \* Testing is completed before equipment expiration date.
2. Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date.

## 7. ERP/EIRP

### RULE PART(S)

FCC: §2.1053, §22.913, §24.232, and §27.50

### LIMITS

§22.913(a)(5)

The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

§24.232(c),

Mobile and portable stations are limited to 2 watts EIRP

§27.50 (d)(4)

Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP

### TEST PROCEDURE

KDB 971168 D01 v03r01

### RESULTS

ANSI C63.26 Clause 5.2.5.5

Conducted power taken from SAR report R13999443-S1.

### Maximum Output Power (Tune-up Limit) for W-CDMA

| RF Air interface | Mode  | Tune-up Power Limit (dBm) |
|------------------|-------|---------------------------|
|                  |       | Maximum                   |
| W-CDMA Band 2    | R99   | 23.80                     |
|                  | HSDPA | 23.80                     |
|                  | HSUPA | 23.80                     |
| W-CDMA Band 4    | R99   | 24.00                     |
|                  | HSDPA | 24.00                     |
|                  | HSUPA | 24.00                     |
| W-CDMA Band 5    | R99   | 25.00                     |
|                  | HSDPA | 25.00                     |
|                  | HSUPA | 25.00                     |

Power taken on 2021-11-01 by 85502/40882

Note: In tables below EIRP = AV power + Antenna Gain  
EPR = AV power + Antenna Gain – 2.15.

### W-CDMA Band II Measured Results

| Mode       |           | UL Ch No. | Freq. (MHz) | Maximum Average Power (dBm) |               | Antenna Gain (dBi) | EIRP       |          |                |
|------------|-----------|-----------|-------------|-----------------------------|---------------|--------------------|------------|----------|----------------|
|            |           |           |             | Measured Pwr                | Tune-up Limit |                    | EIRP (dBm) | EIRP (W) | EIRP Limit (W) |
| Release 99 | Rel 99    | 9262      | 1852.4      | 23.18                       | 23.8          | 0.62               | 23.800     | 0.240    | 2.0            |
|            |           | 9400      | 1880.0      | 23.31                       |               |                    | 23.930     | 0.247    |                |
|            |           | 9538      | 1907.6      | 23.27                       |               |                    | 23.890     | 0.245    |                |
| HSDPA      | Subtest 1 | 9262      | 1852.4      | 22.10                       | 23.8          | 0.62               | 22.720     | 0.187    | 2.0            |
|            |           | 9400      | 1880.0      | 22.25                       |               |                    | 22.870     | 0.194    |                |
|            |           | 9538      | 1907.6      | 22.25                       |               |                    | 22.870     | 0.194    |                |
|            | Subtest 2 | 9262      | 1852.4      | 22.00                       | 23.8          | 0.62               | 22.620     | 0.183    | 2.0            |
|            |           | 9400      | 1880.0      | 22.24                       |               |                    | 22.860     | 0.193    |                |
|            |           | 9538      | 1907.6      | 22.29                       |               |                    | 22.910     | 0.195    |                |
|            | Subtest 3 | 9262      | 1852.4      | 21.68                       | 23.3          | 0.62               | 22.300     | 0.170    | 2.0            |
|            |           | 9400      | 1880.0      | 21.83                       |               |                    | 22.450     | 0.176    |                |
|            |           | 9538      | 1907.6      | 21.82                       |               |                    | 22.440     | 0.175    |                |
|            | Subtest 4 | 9262      | 1852.4      | 21.71                       | 23.3          | 0.62               | 22.330     | 0.171    | 2.0            |
|            |           | 9400      | 1880.0      | 21.75                       |               |                    | 22.370     | 0.173    |                |
|            |           | 9538      | 1907.6      | 21.84                       |               |                    | 22.460     | 0.176    |                |
| HSUPA      | Subtest 1 | 9262      | 1852.4      | 22.26                       | 23.8          | 0.62               | 22.880     | 0.194    | 2.0            |
|            |           | 9400      | 1880.0      | 22.05                       |               |                    | 22.670     | 0.185    |                |
|            |           | 9538      | 1907.6      | 22.26                       |               |                    | 22.880     | 0.194    |                |
|            | Subtest 2 | 9262      | 1852.4      | 20.50                       | 21.8          | 0.62               | 21.120     | 0.129    | 2.0            |
|            |           | 9400      | 1880.0      | 21.03                       |               |                    | 21.650     | 0.146    |                |
|            |           | 9538      | 1907.6      | 21.03                       |               |                    | 21.650     | 0.146    |                |
|            | Subtest 3 | 9262      | 1852.4      | 21.17                       | 22.8          | 0.62               | 21.790     | 0.151    | 2.0            |
|            |           | 9400      | 1880.0      | 21.21                       |               |                    | 21.830     | 0.152    |                |
|            |           | 9538      | 1907.6      | 21.11                       |               |                    | 21.730     | 0.149    |                |
|            | Subtest 4 | 9262      | 1852.4      | 21.18                       | 21.8          | 0.62               | 21.800     | 0.151    | 2.0            |
|            |           | 9400      | 1880.0      | 21.73                       |               |                    | 22.350     | 0.172    |                |
|            |           | 9538      | 1907.6      | 21.24                       |               |                    | 21.860     | 0.153    |                |
|            | Subtest 5 | 9262      | 1852.4      | 21.81                       | 23.8          | 0.62               | 22.430     | 0.175    | 2.0            |
|            |           | 9400      | 1880.0      | 21.87                       |               |                    | 22.490     | 0.177    |                |
|            |           | 9538      | 1907.6      | 21.86                       |               |                    | 22.480     | 0.177    |                |

# W-CDMA Band IV Measured Results

| Mode       |           | UL Ch No. | Freq. (MHz) | Maximum Average Power (dBm) |               | Antenna Gain (dBi) | EIRP       |          |                |
|------------|-----------|-----------|-------------|-----------------------------|---------------|--------------------|------------|----------|----------------|
|            |           |           |             | Measured Pwr                | Tune-up Limit |                    | EIRP (dBm) | EIRP (W) | EIRP Limit (W) |
| Release 99 | Rel 99    | 1312      | 1712.4      | 23.49                       | 24.0          | 3.22               | 26.710     | 0.469    | 1.0            |
|            |           | 1413      | 1732.6      | 23.60                       |               |                    | 26.820     | 0.481    |                |
|            |           | 1513      | 1752.6      | 23.74                       |               |                    | 26.960     | 0.497    |                |
| HSDPA      | Subtest 1 | 1312      | 1712.4      | 22.58                       | 24.0          | 3.22               | 25.800     | 0.380    | 1.0            |
|            |           | 1413      | 1732.6      | 22.65                       |               |                    | 25.870     | 0.386    |                |
|            |           | 1513      | 1752.6      | 22.78                       |               |                    | 26.000     | 0.398    |                |
|            | Subtest 2 | 1312      | 1712.4      | 22.58                       | 24.0          | 3.22               | 25.800     | 0.380    | 1.0            |
|            |           | 1413      | 1732.6      | 22.62                       |               |                    | 25.840     | 0.384    |                |
|            |           | 1513      | 1752.6      | 22.85                       |               |                    | 26.070     | 0.405    |                |
|            | Subtest 3 | 1312      | 1712.4      | 22.00                       | 23.5          | 3.22               | 25.220     | 0.333    | 1.0            |
|            |           | 1413      | 1732.6      | 22.04                       |               |                    | 25.260     | 0.336    |                |
|            |           | 1513      | 1752.6      | 22.28                       |               |                    | 25.500     | 0.355    |                |
|            | Subtest 4 | 1312      | 1712.4      | 22.00                       | 23.5          | 3.22               | 25.220     | 0.333    | 1.0            |
|            |           | 1413      | 1732.6      | 22.04                       |               |                    | 25.260     | 0.336    |                |
|            |           | 1513      | 1752.6      | 22.27                       |               |                    | 25.490     | 0.354    |                |
| HSUPA      | Subtest 1 | 1312      | 1712.4      | 21.89                       | 24.0          | 3.22               | 25.110     | 0.324    | 1.0            |
|            |           | 1413      | 1732.6      | 22.63                       |               |                    | 25.850     | 0.385    |                |
|            |           | 1513      | 1752.6      | 22.14                       |               |                    | 25.360     | 0.344    |                |
|            | Subtest 2 | 1312      | 1712.4      | 21.60                       | 22.0          | 3.22               | 24.820     | 0.303    | 1.0            |
|            |           | 1413      | 1732.6      | 21.42                       |               |                    | 24.640     | 0.291    |                |
|            |           | 1513      | 1752.6      | 21.76                       |               |                    | 24.980     | 0.315    |                |
|            | Subtest 3 | 1312      | 1712.4      | 21.36                       | 23.0          | 3.22               | 24.580     | 0.287    | 1.0            |
|            |           | 1413      | 1732.6      | 21.11                       |               |                    | 24.330     | 0.271    |                |
|            |           | 1513      | 1752.6      | 21.42                       |               |                    | 24.640     | 0.291    |                |
|            | Subtest 4 | 1312      | 1712.4      | 22.00                       | 22.0          | 3.22               | 25.220     | 0.333    | 1.0            |
|            |           | 1413      | 1732.6      | 21.64                       |               |                    | 24.860     | 0.306    |                |
|            |           | 1513      | 1752.6      | 21.99                       |               |                    | 25.210     | 0.332    |                |
|            | Subtest 5 | 1312      | 1712.4      | 22.06                       | 24.0          | 3.22               | 25.280     | 0.337    | 1.0            |
|            |           | 1413      | 1732.6      | 22.16                       |               |                    | 25.380     | 0.345    |                |
|            |           | 1513      | 1752.6      | 22.27                       |               |                    | 25.490     | 0.354    |                |

**W-CDMA Band V Measured Results 7W**

| Mode       |           | UL Ch No. | Freq. (MHz) | Maximum Average Power (dBm) |               | Antenna Gain (dBi) | ERP       |         |               |
|------------|-----------|-----------|-------------|-----------------------------|---------------|--------------------|-----------|---------|---------------|
|            |           |           |             | Measured Power              | Tune-up Limit |                    | ERP (dBm) | ERP (W) | ERP Limit (W) |
| Release 99 | Rel 99    | 4132      | 826.4       | 23.03                       | 25.0          | 0.39               | 21.270    | 0.134   | 7.0           |
|            |           | 4183      | 836.6       | 23.04                       |               |                    | 21.280    | 0.134   |               |
|            |           | 4233      | 846.6       | 23.22                       |               |                    | 21.460    | 0.140   |               |
| HSDPA      | Subtest 1 | 4132      | 826.4       | 21.94                       | 25.0          | 0.39               | 20.180    | 0.104   | 7.0           |
|            |           | 4183      | 836.6       | 22.04                       |               |                    | 20.280    | 0.107   |               |
|            |           | 4233      | 846.6       | 22.22                       |               |                    | 20.460    | 0.111   |               |
|            | Subtest 2 | 4132      | 826.4       | 21.90                       | 25.0          | 0.39               | 20.140    | 0.103   | 7.0           |
|            |           | 4183      | 836.6       | 21.94                       |               |                    | 20.180    | 0.104   |               |
|            |           | 4233      | 846.6       | 22.22                       |               |                    | 20.460    | 0.111   |               |
|            | Subtest 3 | 4132      | 826.4       | 21.32                       | 24.5          | 0.39               | 19.560    | 0.090   | 7.0           |
|            |           | 4183      | 836.6       | 21.47                       |               |                    | 19.710    | 0.094   |               |
|            |           | 4233      | 846.6       | 21.67                       |               |                    | 19.910    | 0.098   |               |
|            | Subtest 4 | 4132      | 826.4       | 21.42                       | 24.5          | 0.39               | 19.660    | 0.092   | 7.0           |
|            |           | 4183      | 836.6       | 21.44                       |               |                    | 19.680    | 0.093   |               |
|            |           | 4233      | 846.6       | 21.65                       |               |                    | 19.890    | 0.097   |               |
| HSUPA      | Subtest 1 | 4132      | 826.4       | 21.89                       | 25.0          | 0.39               | 20.130    | 0.103   | 7.0           |
|            |           | 4183      | 836.6       | 21.78                       |               |                    | 20.020    | 0.100   |               |
|            |           | 4233      | 846.6       | 21.95                       |               |                    | 20.190    | 0.104   |               |
|            | Subtest 2 | 4132      | 826.4       | 21.20                       | 23.0          | 0.39               | 19.440    | 0.088   | 7.0           |
|            |           | 4183      | 836.6       | 21.12                       |               |                    | 19.360    | 0.086   |               |
|            |           | 4233      | 846.6       | 21.14                       |               |                    | 19.380    | 0.087   |               |
|            | Subtest 3 | 4132      | 826.4       | 21.22                       | 24.0          | 0.39               | 19.460    | 0.088   | 7.0           |
|            |           | 4183      | 836.6       | 21.11                       |               |                    | 19.350    | 0.086   |               |
|            |           | 4233      | 846.6       | 21.13                       |               |                    | 19.370    | 0.086   |               |
|            | Subtest 4 | 4132      | 826.4       | 21.15                       | 23.0          | 0.39               | 19.390    | 0.087   | 7.0           |
|            |           | 4183      | 836.6       | 21.11                       |               |                    | 19.350    | 0.086   |               |
|            |           | 4233      | 846.6       | 21.03                       |               |                    | 19.270    | 0.085   |               |
|            | Subtest 5 | 4132      | 826.4       | 21.36                       | 25.0          | 0.39               | 19.600    | 0.091   | 7.0           |
|            |           | 4183      | 836.6       | 21.39                       |               |                    | 19.630    | 0.092   |               |
|            |           | 4233      | 846.6       | 21.61                       |               |                    | 19.850    | 0.097   |               |

## 8. RADIATED TEST RESULTS

### 8.1. FIELD STRENGTH OF SPURIOUS RADIATION ABOVE 1GHz

#### RULE PART(S)

FCC: §2.1053, §22.917, §24.238, and §27.53

#### LIMITS

FCC: §22.917(a), §24.238(a), and §27.53 (h)

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

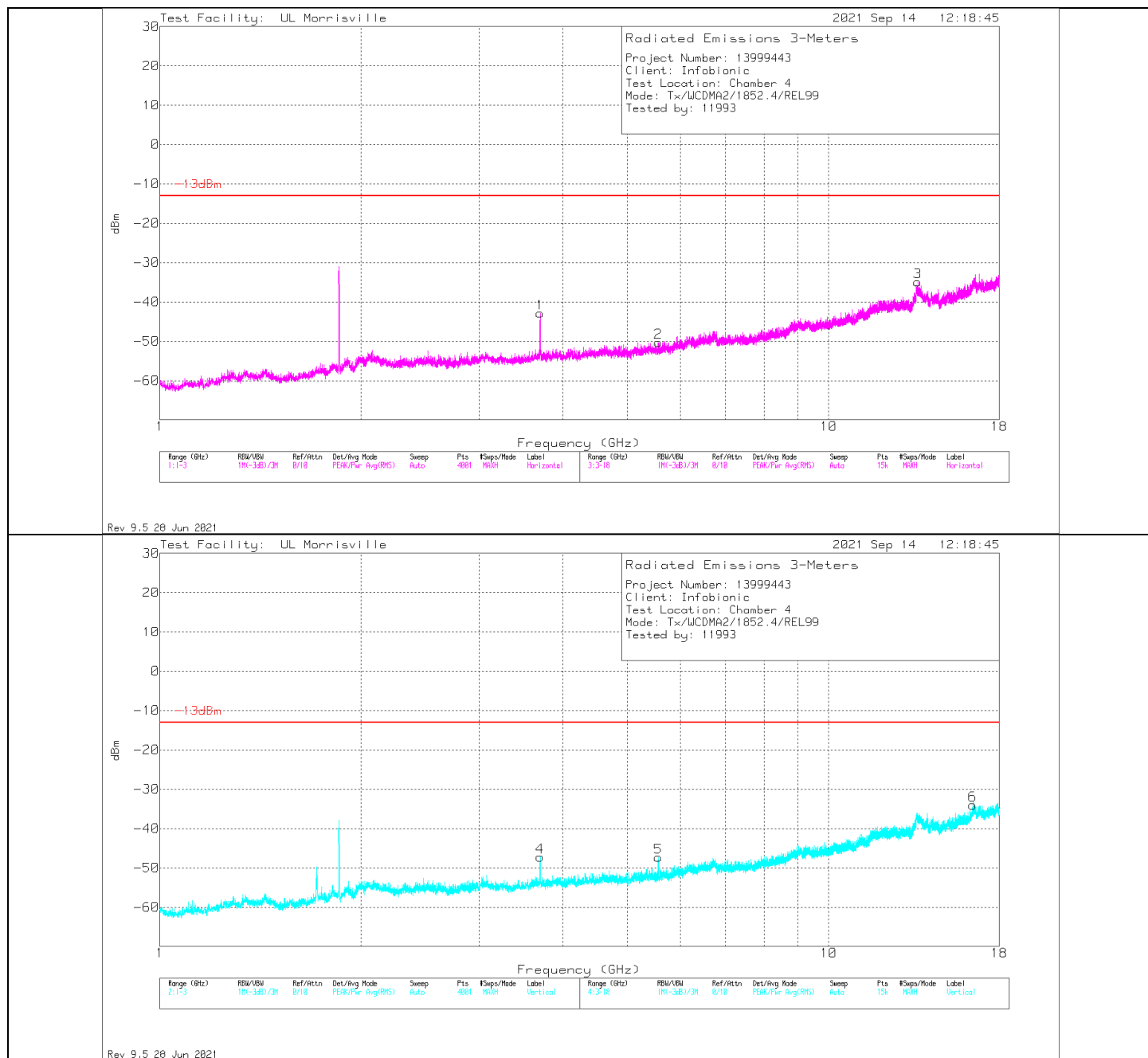
#### TEST PROCEDURE

KDB 971168 D01 v02r02/D02 v01

#### RESULTS

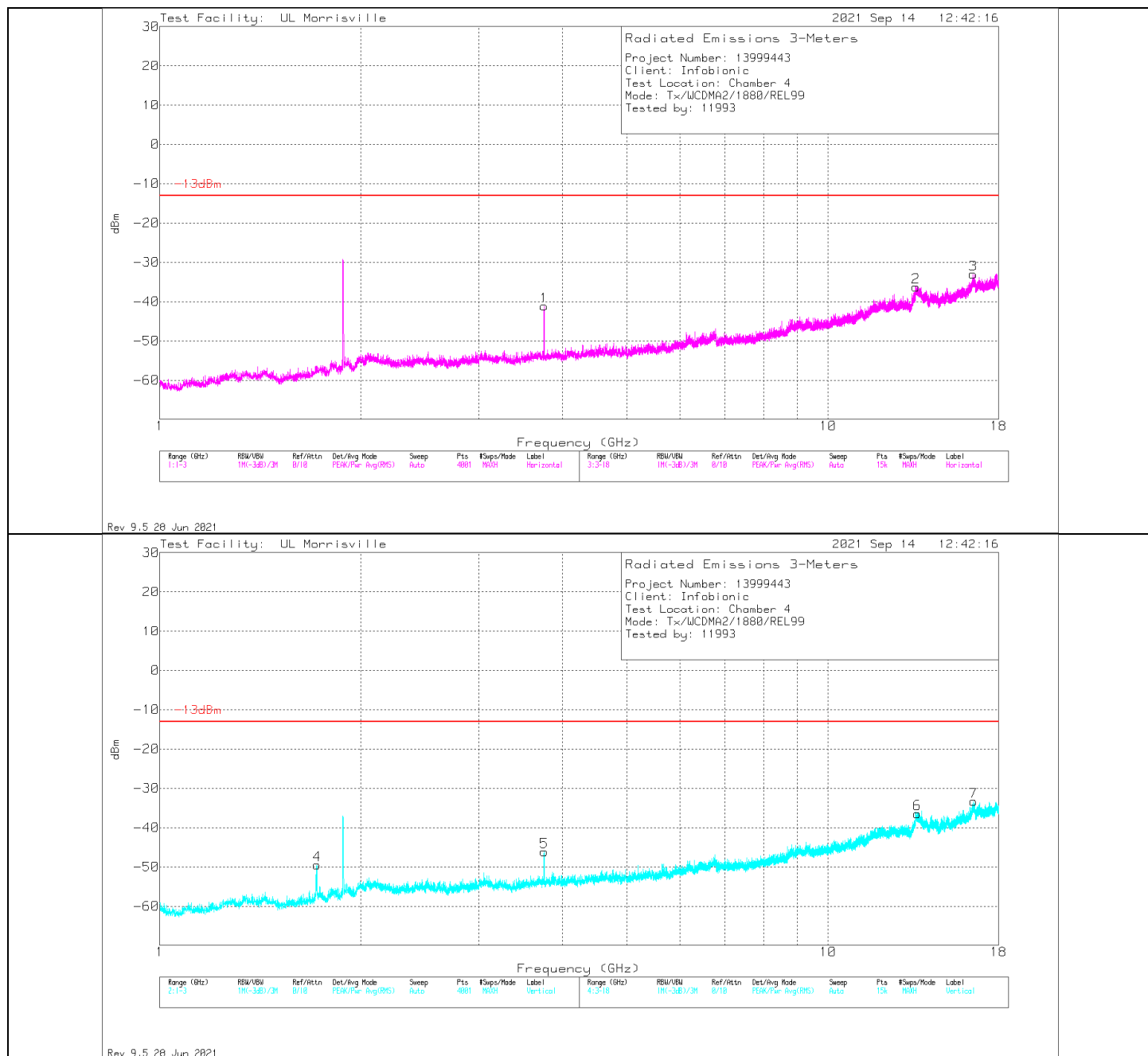
## 8.1.1. WCDMA BAND 2

### Rel 99 Mode



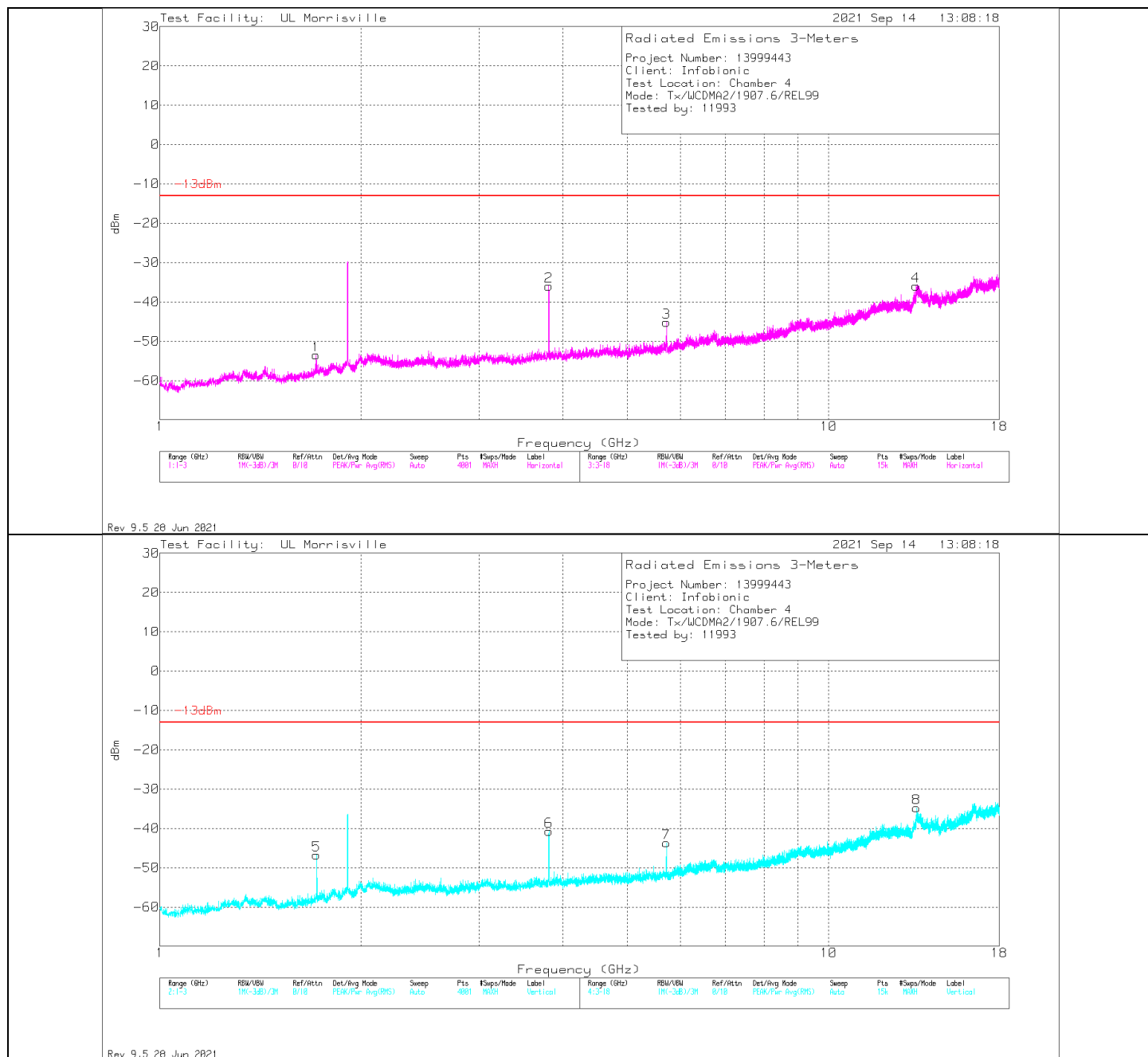
| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 206211 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | CF (dB) | Filter (dB) | Corrected Reading dBm | -13dBm | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|------------------------|---------|-------------|-----------------------|--------|-------------|----------------|-------------|----------|
| 4      | 3.702           | -58.43              | Pk  | 33.1          | -33.7                  | 11.8    | 0           | -47.23                | -13    | -34.23      | 0-360          | 200         | V        |
| 1      | 3.703           | -54.06              | Pk  | 33.1          | -33.7                  | 11.8    | 0           | -42.86                | -13    | -29.86      | 0-360          | 100         | H        |
| 5      | 5.56            | -61.22              | Pk  | 34.4          | -32.3                  | 11.8    | 0           | -47.32                | -13    | -34.32      | 0-360          | 300         | V        |
| 2      | 5.561           | -64.2               | Pk  | 34.4          | -32.3                  | 11.8    | 0           | -50.3                 | -13    | -37.3       | 0-360          | 100         | H        |
| 3      | 13.592          | -62.34              | Pk  | 38.7          | -23.1                  | 11.8    | 0           | -34.94                | -13    | -21.94      | 0-360          | 200         | H        |
| 6      | 16.422          | -65.51              | Pk  | 41.1          | -21.4                  | 11.8    | 0           | -34.01                | -13    | -21.01      | 0-360          | 300         | V        |

Pk - Peak detector



| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 206211 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | CF (dB) | Filter (dB) | Corrected Reading dBm | -13dBm | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|------------------------|---------|-------------|-----------------------|--------|-------------|----------------|-------------|----------|
| 4      | 1.7185          | -55.41              | Pk  | 28.8          | -36.6                  | 11.8    | 1.9         | -49.51                | -13    | -36.51      | 0-360          | 200         | V        |
| 1      | 3.758           | -52.74              | Pk  | 33.3          | -33.5                  | 11.8    | 0           | -41.14                | -13    | -28.14      | 0-360          | 100         | H        |
| 5      | 3.761           | -57.84              | Pk  | 33.3          | -33.4                  | 11.8    | 0           | -46.14                | -13    | -33.14      | 0-360          | 300         | V        |
| 2      | 13.538          | -64.26              | Pk  | 38.7          | -22.5                  | 11.8    | 0           | -36.26                | -13    | -23.26      | 0-360          | 100         | H        |
| 6      | 13.597          | -63.74              | Pk  | 38.6          | -23.1                  | 11.8    | 0           | -36.44                | -13    | -23.44      | 0-360          | 200         | V        |
| 3      | 16.48           | -64.94              | Pk  | 41.2          | -21.1                  | 11.8    | 0           | -33.04                | -13    | -20.04      | 0-360          | 200         | H        |
| 7      | 16.508          | -65.23              | Pk  | 41.3          | -21.2                  | 11.8    | 0           | -33.33                | -13    | -20.33      | 0-360          | 200         | V        |

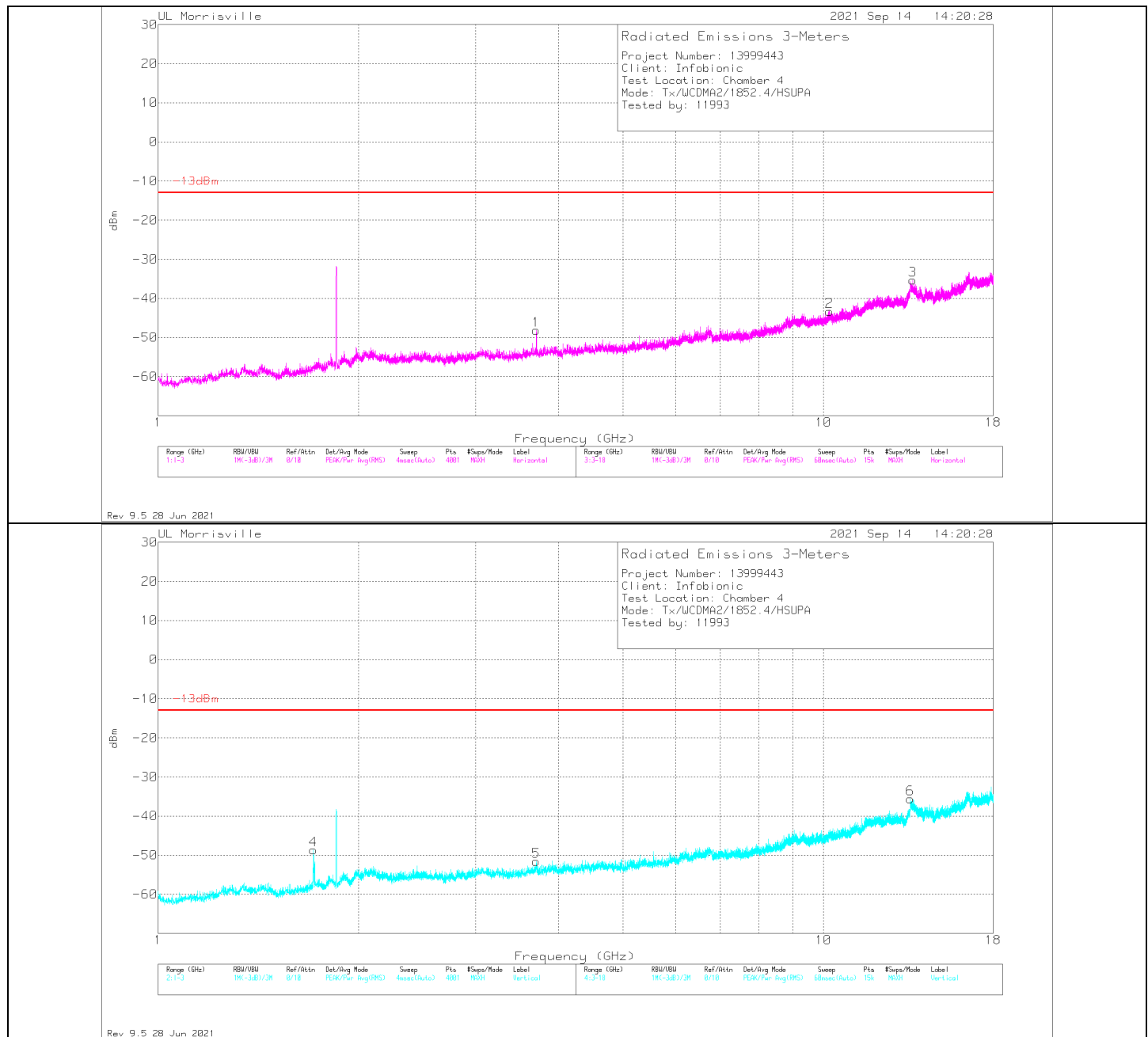
Pk - Peak detector



| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 206211 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | CF (dB) | Filter (dB) | Corrected Reading dBm | -13dBm | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|------------------------|---------|-------------|-----------------------|--------|-------------|----------------|-------------|----------|
| 1      | 1.7115          | -59.2               | Pk  | 28.6          | -36.6                  | 11.8    | 1.9         | -53.5                 | -13    | -40.5       | 0-360          | 200         | H        |
| 5      | 1.714           | -52.57              | Pk  | 28.7          | -36.6                  | 11.8    | 1.9         | -46.77                | -13    | -33.77      | 0-360          | 300         | V        |
| 2      | 3.813           | -47.39              | Pk  | 33.3          | -33.7                  | 11.8    | 0           | -35.99                | -13    | -22.99      | 0-360          | 100         | H        |
| 6      | 3.816           | -52.12              | Pk  | 33.3          | -33.7                  | 11.8    | 0           | -40.72                | -13    | -27.72      | 0-360          | 200         | V        |
| 7      | 5.719           | -59.7               | Pk  | 34.5          | -30.3                  | 11.8    | 0           | -43.7                 | -13    | -30.7       | 0-360          | 200         | V        |
| 3      | 5.721           | -61.19              | Pk  | 34.5          | -30.3                  | 11.8    | 0           | -45.19                | -13    | -32.19      | 0-360          | 100         | H        |
| 4      | 13.503          | -64.08              | Pk  | 38.8          | -22.5                  | 11.8    | 0           | -35.98                | -13    | -22.98      | 0-360          | 100         | H        |
| 8      | 13.529          | -62.78              | Pk  | 38.7          | -22.5                  | 11.8    | 0           | -34.78                | -13    | -21.78      | 0-360          | 100         | V        |

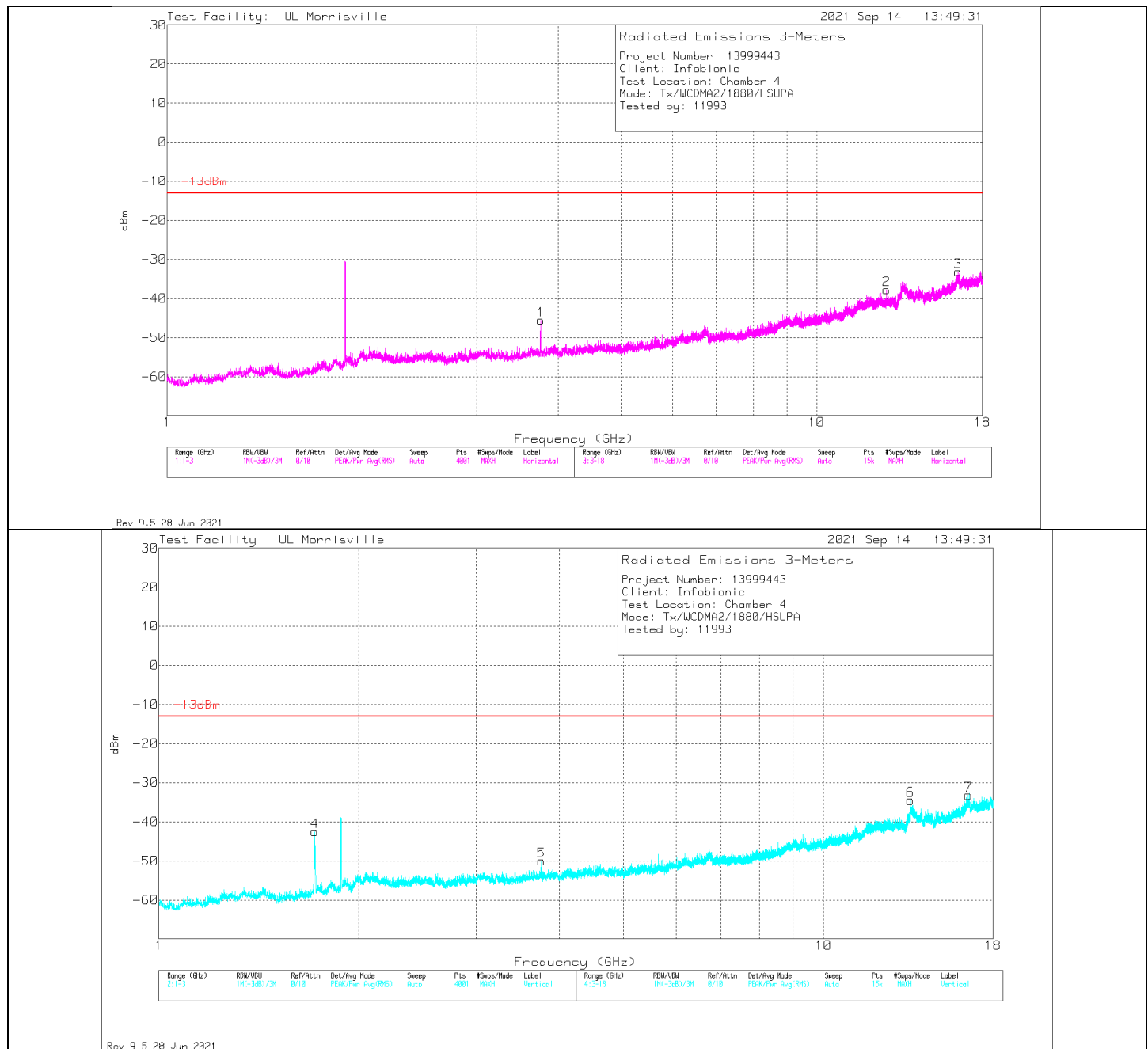
Pk - Peak detector

## HSUPA Mode



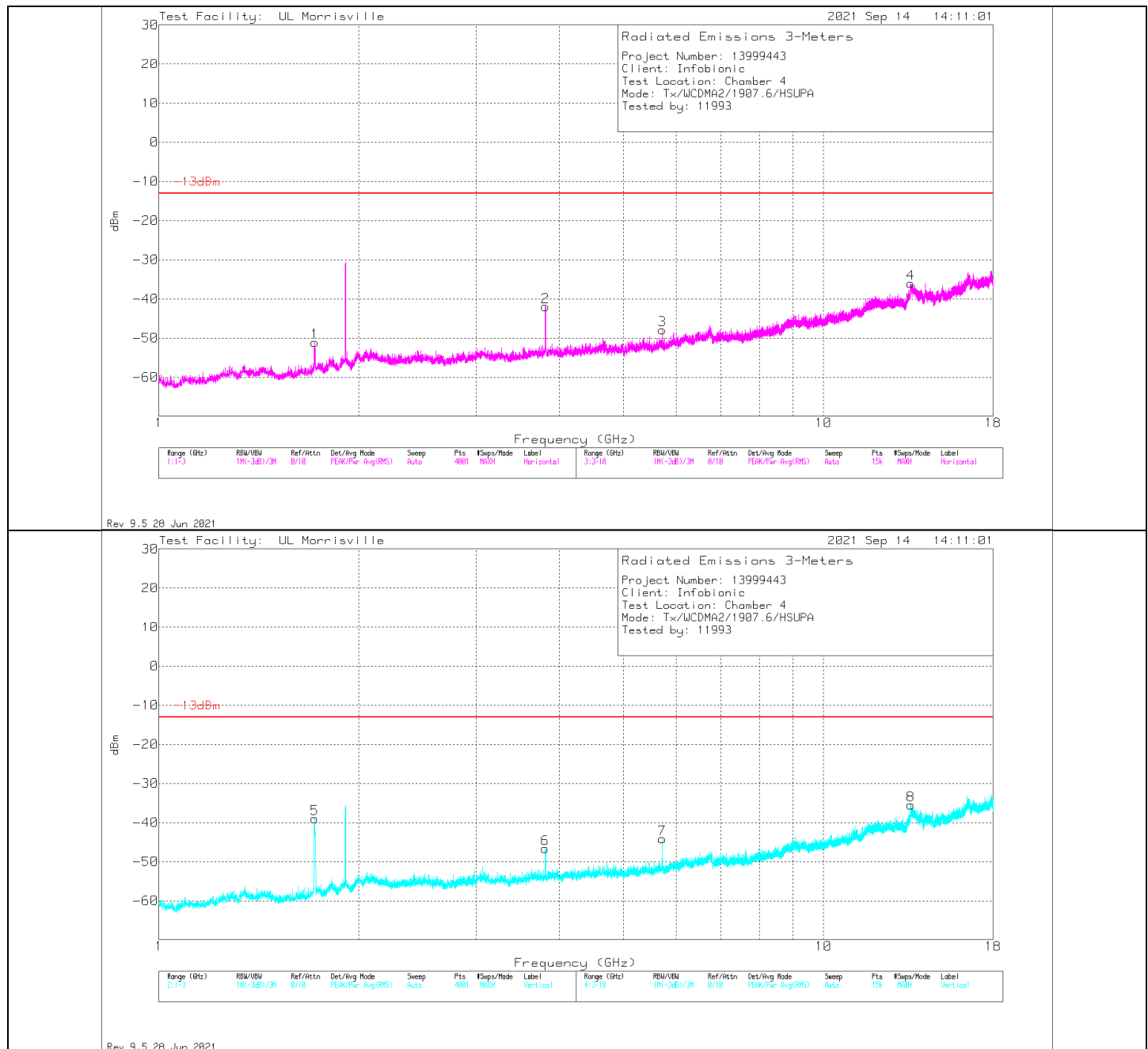
| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 206211 (dB/m) | Amp/Cbl/Fitr/Pad (dB) | CF (dB) | Filter (dB) | Corrected Reading dBm | -13dBm | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|-----------------------|---------|-------------|-----------------------|--------|-------------|----------------|-------------|----------|
| 4      | 1.7115          | -54.39              | Pk  | 28.6          | -36.6                 | 11.8    | 1.9         | -48.69                | -13    | -35.69      | 0-360          | 300         | V        |
| 5      | 3.702           | -62.78              | Pk  | 33.1          | -33.7                 | 11.8    | 0           | -51.58                | -13    | -38.58      | 0-360          | 300         | V        |
| 1      | 3.703           | -59.33              | Pk  | 33.1          | -33.7                 | 11.8    | 0           | -48.13                | -13    | -35.13      | 0-360          | 100         | H        |
| 2      | 10.216          | -66.18              | Pk  | 37.2          | -26.2                 | 11.8    | 0           | -43.38                | -13    | -30.38      | 0-360          | 100         | H        |
| 6      | 13.505          | -63.54              | Pk  | 38.7          | -22.5                 | 11.8    | 0           | -35.54                | -13    | -22.54      | 0-360          | 200         | V        |
| 3      | 13.62           | -62.79              | Pk  | 38.7          | -23                   | 11.8    | 0           | -35.29                | -13    | -22.29      | 0-360          | 100         | H        |

Pk - Peak detector



| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 206211 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | CF (dB) | Filter (dB) | Corrected Reading dBm | -13dBm | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|------------------------|---------|-------------|-----------------------|--------|-------------|----------------|-------------|----------|
| 4      | 1.715           | -48.36              | Pk  | 28.7          | -36.6                  | 11.8    | 1.9         | -42.56                | -13    | -29.56      | 0-360          | 200         | V        |
| 1      | 3.762           | -57.25              | Pk  | 33.3          | -33.4                  | 11.8    | 0           | -45.55                | -13    | -32.55      | 0-360          | 200         | H        |
| 5      | 3.762           | -61.71              | Pk  | 33.3          | -33.4                  | 11.8    | 0           | -50.01                | -13    | -37.01      | 0-360          | 100         | V        |
| 2      | 12.822          | -65.48              | Pk  | 39.1          | -23.2                  | 11.8    | 0           | -37.78                | -13    | -24.78      | 0-360          | 300         | H        |
| 6      | 13.516          | -62.4               | Pk  | 38.7          | -22.6                  | 11.8    | 0           | -34.5                 | -13    | -21.5       | 0-360          | 100         | V        |
| 7      | 16.516          | -65.12              | Pk  | 41.3          | -21.2                  | 11.8    | 0           | -33.22                | -13    | -20.22      | 0-360          | 100         | V        |
| 3      | 16.519          | -65.17              | Pk  | 41.4          | -21.2                  | 11.8    | 0           | -33.17                | -13    | -20.17      | 0-360          | 200         | H        |

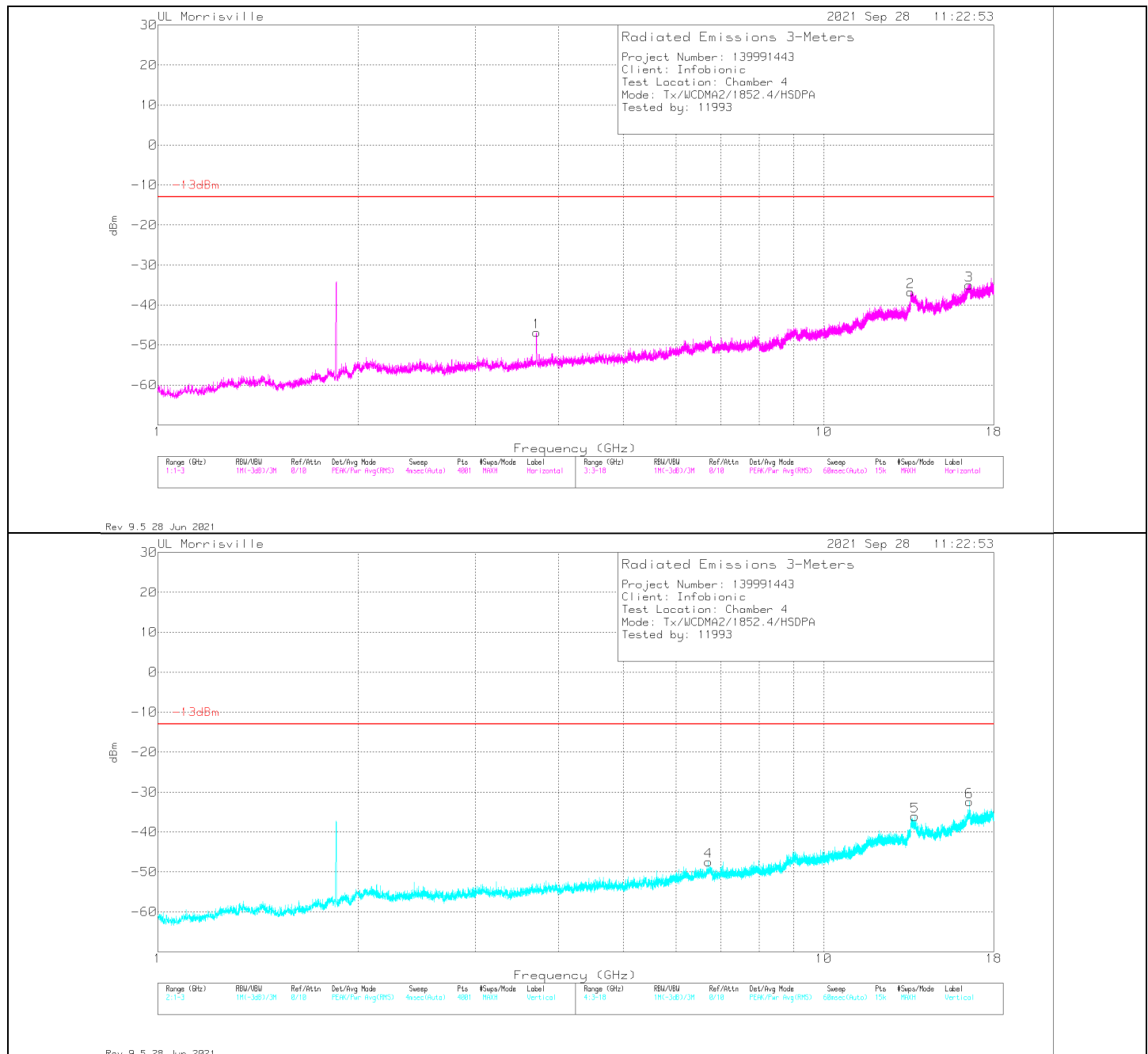
Pk - Peak detector



| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 206211 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | CF (dB) | Filter (dB) | Corrected Reading dBm | -13dBm | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|------------------------|---------|-------------|-----------------------|--------|-------------|----------------|-------------|----------|
| 5      | 1.715           | -44.81              | Pk  | 28.7          | -36.6                  | 11.8    | 1.9         | -39.01                | -13    | -26.01      | 0-360          | 300         | V        |
| 1      | 1.716           | -56.9               | Pk  | 28.7          | -36.6                  | 11.8    | 1.9         | -51.1                 | -13    | -38.1       | 0-360          | 200         | H        |
| 6      | 3.812           | -58.12              | Pk  | 33.3          | -33.7                  | 11.8    | 0           | -46.72                | -13    | -33.72      | 0-360          | 200         | V        |
| 2      | 3.817           | -53.37              | Pk  | 33.3          | -33.7                  | 11.8    | 0           | -41.97                | -13    | -28.97      | 0-360          | 100         | H        |
| 3      | 5.719           | -63.92              | Pk  | 34.5          | -30.3                  | 11.8    | 0           | -47.92                | -13    | -34.92      | 0-360          | 100         | H        |
| 7      | 5.72            | -60.14              | Pk  | 34.5          | -30.3                  | 11.8    | 0           | -44.14                | -13    | -31.14      | 0-360          | 200         | V        |
| 4      | 13.525          | -64.04              | Pk  | 38.7          | -22.5                  | 11.8    | 0           | -36.04                | -13    | -23.04      | 0-360          | 100         | H        |
| 8      | 13.536          | -63.48              | Pk  | 38.7          | -22.5                  | 11.8    | 0           | -35.48                | -13    | -22.48      | 0-360          | 300         | V        |

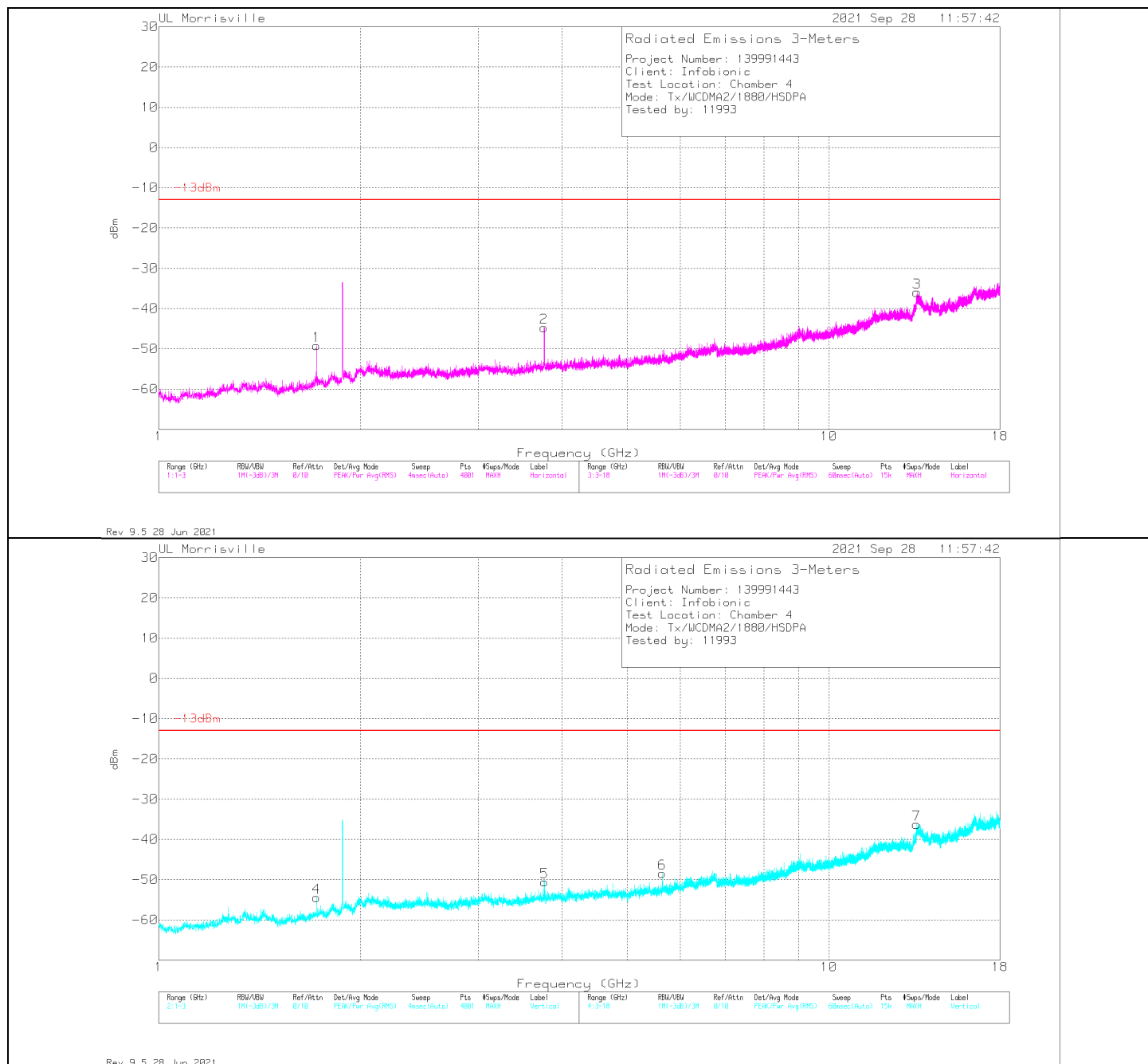
Pk - Peak detector

## HSDPA Mode



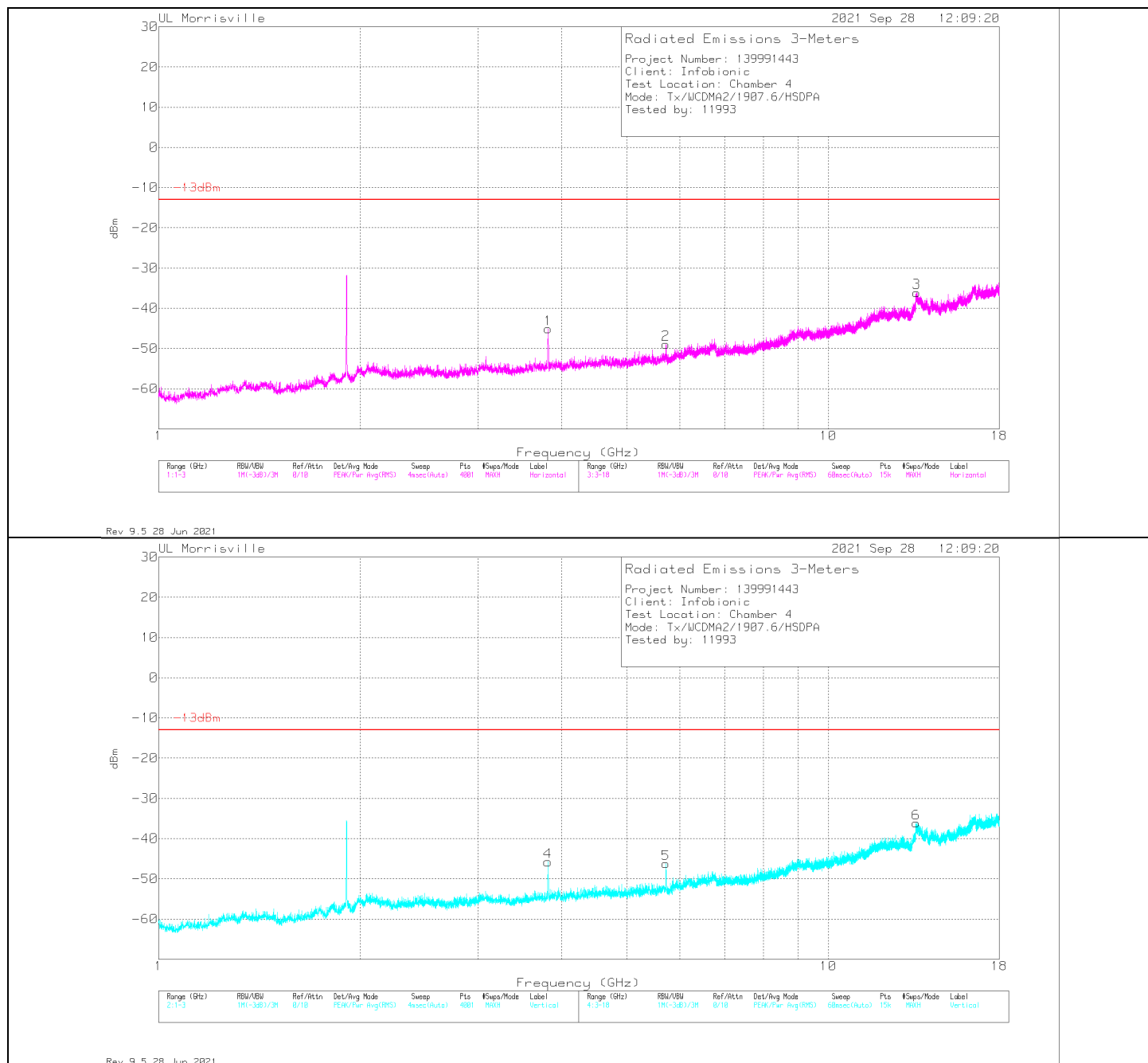
| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 206211 (dB/m) | Amp/Cbl/Fitr/Pad (dB) | CF (dB) | Filter (dB) | Corrected Reading dBm | -13dBm | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|-----------------------|---------|-------------|-----------------------|--------|-------------|----------------|-------------|----------|
| 1      | 3.706           | -57.99              | Pk  | 33.1          | -33.7                 | 11.8    | 0           | -46.79                | -13    | -33.79      | 0-360          | 100         | H        |
| 4      | 6.707           | -66.02              | Pk  | 35.5          | -28.7                 | 11.8    | 0           | -47.42                | -13    | -34.42      | 0-360          | 300         | V        |
| 2      | 13.502          | -64.81              | Pk  | 38.8          | -22.5                 | 11.8    | 0           | -36.71                | -13    | -23.71      | 0-360          | 200         | H        |
| 5      | 13.701          | -64.15              | Pk  | 38.5          | -22.2                 | 11.8    | 0           | -36.05                | -13    | -23.05      | 0-360          | 200         | V        |
| 3      | 16.526          | -67.02              | Pk  | 41.4          | -21.2                 | 11.8    | 0           | -35.02                | -13    | -22.02      | 0-360          | 200         | H        |
| 6      | 16.548          | -64.38              | Pk  | 41.4          | -21.2                 | 11.8    | 0           | -32.38                | -13    | -19.38      | 0-360          | 200         | V        |

Pk - Peak detector



| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 206211 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | CF (dB) | Filter (dB) | Corrected Reading dBm | -13dBm | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|------------------------|---------|-------------|-----------------------|--------|-------------|----------------|-------------|----------|
| 1      | 1.719           | -55.1               | Pk  | 28.8          | -36.6                  | 11.8    | 1.9         | -49.2                 | -13    | -36.2       | 0-360          | 200         | H        |
| 4      | 1.7195          | -60.31              | Pk  | 28.8          | -36.6                  | 11.8    | 1.9         | -54.41                | -13    | -41.41      | 0-360          | 200         | V        |
| 2      | 3.758           | -56.28              | Pk  | 33.3          | -33.5                  | 11.8    | 0           | -44.68                | -13    | -31.68      | 0-360          | 100         | H        |
| 5      | 3.761           | -62.26              | Pk  | 33.3          | -33.4                  | 11.8    | 0           | -50.56                | -13    | -37.56      | 0-360          | 300         | V        |
| 6      | 5.643           | -63.71              | Pk  | 34.4          | -30.9                  | 11.8    | 0           | -48.41                | -13    | -35.41      | 0-360          | 300         | V        |
| 7      | 13.513          | -64.23              | Pk  | 38.7          | -22.5                  | 11.8    | 0           | -36.23                | -13    | -23.23      | 0-360          | 300         | V        |
| 3      | 13.535          | -63.94              | Pk  | 38.7          | -22.5                  | 11.8    | 0           | -35.94                | -13    | -22.94      | 0-360          | 100         | H        |

Pk - Peak detector

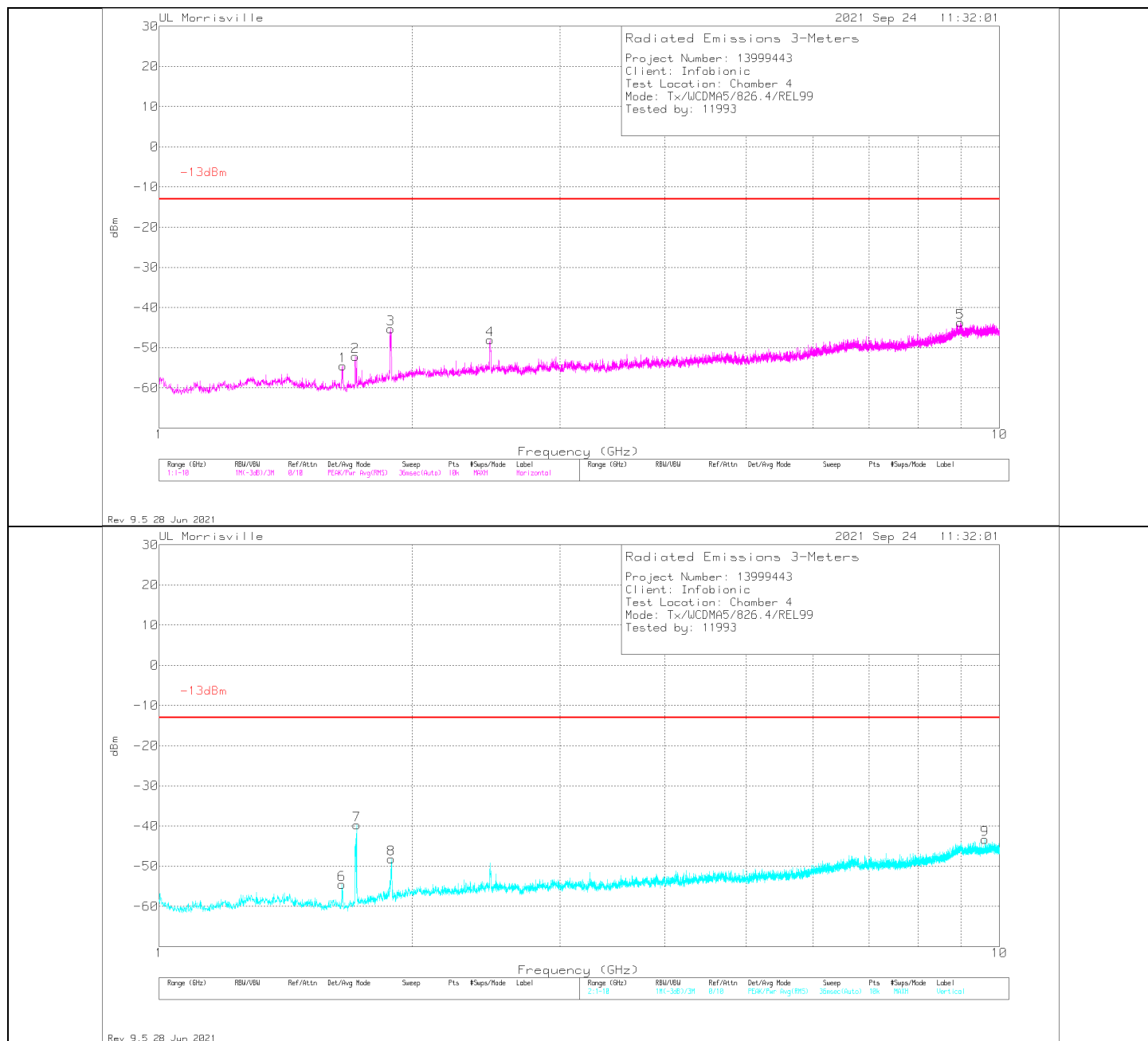


| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 206211 (dB/m) | Amp/Cbl/Fitr/Pad (dB) | CF (dB) | Filter (dB) | Corrected Reading dBm | -13dBm | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|-----------------------|---------|-------------|-----------------------|--------|-------------|----------------|-------------|----------|
| 4      | 3.813           | -57.18              | Pk  | 33.3          | -33.7                 | 11.8    | 0           | -45.78                | -13    | -32.78      | 0-360          | 300         | V        |
| 1      | 3.817           | -56.53              | Pk  | 33.3          | -33.7                 | 11.8    | 0           | -45.13                | -13    | -32.13      | 0-360          | 200         | H        |
| 2      | 5.719           | -64.92              | Pk  | 34.5          | -30.3                 | 11.8    | 0           | -48.92                | -13    | -35.92      | 0-360          | 200         | H        |
| 5      | 5.72            | -62.24              | Pk  | 34.5          | -30.3                 | 11.8    | 0           | -46.24                | -13    | -33.24      | 0-360          | 300         | V        |
| 6      | 13.516          | -64.07              | Pk  | 38.7          | -22.6                 | 11.8    | 0           | -36.17                | -13    | -23.17      | 0-360          | 300         | V        |
| 3      | 13.542          | -63.99              | Pk  | 38.7          | -22.6                 | 11.8    | 0           | -36.09                | -13    | -23.09      | 0-360          | 200         | H        |

Pk - Peak detector

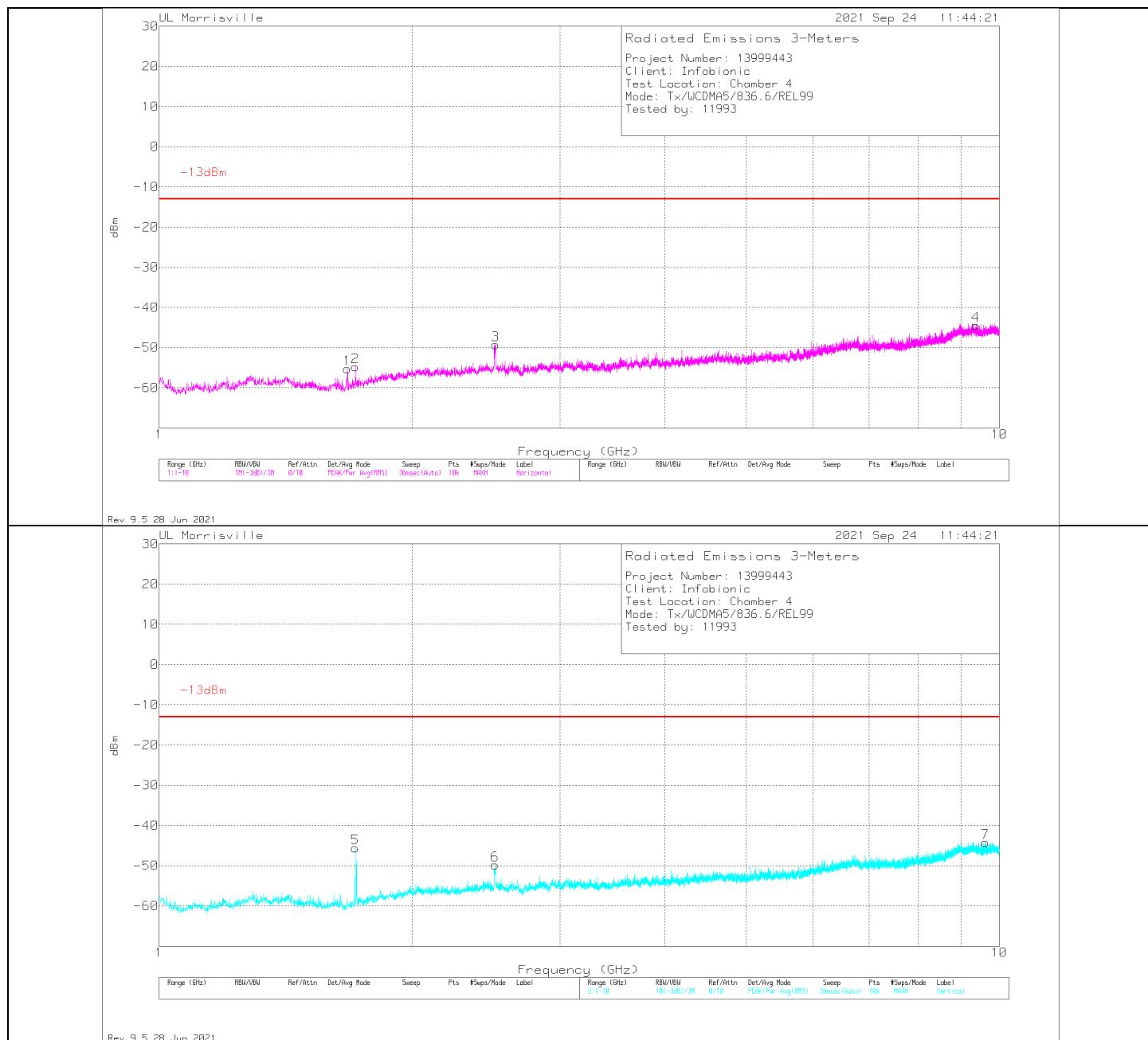
## 8.1.2. WCDMA BAND 5

### Rel 99 Mode



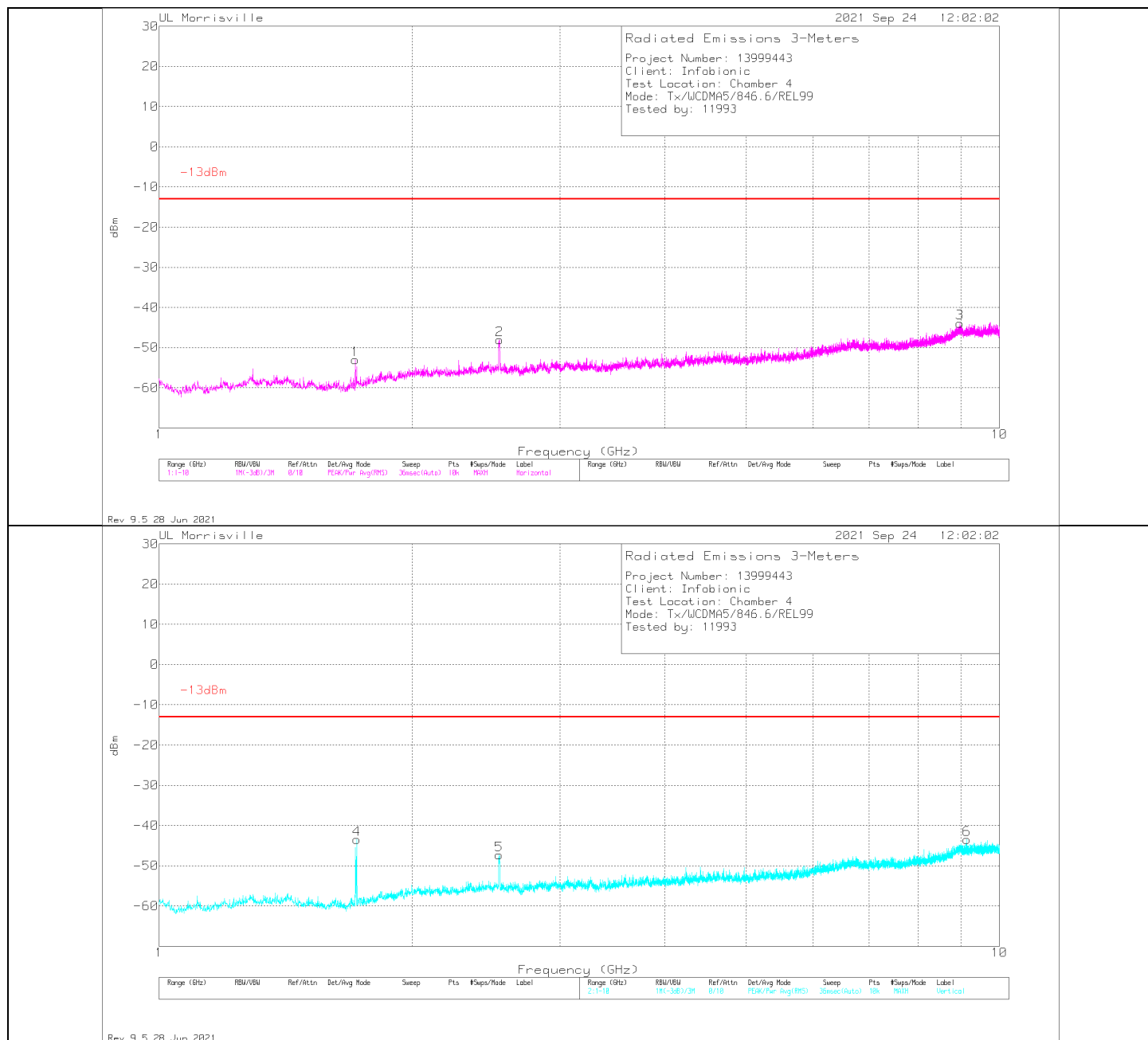
| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 206211 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Filter (dB) | CF (dB) | Corrected Reading dBm | -13dBm | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|------------------------|-------------|---------|-----------------------|--------|-------------|----------------|-------------|----------|
| 6      | 1.6507          | -58.17              | Pk  | 27.9          | -36.6                  | .6          | 11.8    | -54.47                | -13    | -41.47      | 0-360          | 300         | V        |
| 1      | 1.6534          | -58.07              | Pk  | 27.9          | -36.6                  | .5          | 11.8    | -54.47                | -13    | -41.47      | 0-360          | 200         | H        |
| 2      | 1.7119          | -56.44              | Pk  | 28.7          | -36.6                  | .4          | 11.8    | -52.14                | -13    | -39.14      | 0-360          | 200         | H        |
| 7      | 1.7182          | -44.13              | Pk  | 28.8          | -36.6                  | .4          | 11.8    | -39.73                | -13    | -26.73      | 0-360          | 300         | V        |
| 3      | 1.8856          | -51.57              | Pk  | 30.6          | -36.6                  | .4          | 11.8    | -45.37                | -13    | -32.37      | 0-360          | 200         | H        |
| 8      | 1.8901          | -54.33              | Pk  | 30.6          | -36.6                  | .4          | 11.8    | -48.13                | -13    | -35.13      | 0-360          | 200         | V        |
| 4      | 2.476           | -56.21              | Pk  | 32.6          | -36.7                  | .4          | 11.8    | -48.11                | -13    | -35.11      | 0-360          | 100         | H        |
| 5      | 8.983           | -65.49              | Pk  | 35.9          | -26.6                  | .7          | 11.8    | -43.69                | -13    | -30.69      | 0-360          | 100         | H        |
| 9      | 9.6094          | -65.56              | Pk  | 36.6          | -26.9                  | .7          | 11.8    | -43.36                | -13    | -30.36      | 0-360          | 200         | V        |

Pk - Peak detector



| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 206211 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Filter (dB) | CF (dB) | Corrected Reading dBm | -13dBm | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|------------------------|-------------|---------|-----------------------|--------|-------------|----------------|-------------|----------|
| 1      | 1.675           | -58.85              | Pk  | 28            | -36.6                  | .4          | 11.8    | -55.25                | -13    | -42.25      | 0-360          | 100         | H        |
| 2      | 1.7119          | -59.02              | Pk  | 28.7          | -36.6                  | .4          | 11.8    | -54.72                | -13    | -41.72      | 0-360          | 100         | H        |
| 3      | 2.5129          | -57.36              | Pk  | 32.5          | -36.7                  | .5          | 11.8    | -49.26                | -13    | -36.26      | 0-360          | 100         | H        |
| 4      | 9.3826          | -66.51              | Pk  | 36.4          | -26.7                  | .6          | 11.8    | -44.41                | -13    | -31.41      | 0-360          | 100         | H        |
| 5      | 1.7119          | -49.89              | Pk  | 28.7          | -36.6                  | .4          | 11.8    | -45.59                | -13    | -32.59      | 0-360          | 300         | V        |
| 6      | 2.5111          | -57.88              | Pk  | 32.5          | -36.7                  | .5          | 11.8    | -49.78                | -13    | -36.78      | 0-360          | 200         | V        |
| 7      | 9.6211          | -66.47              | Pk  | 36.6          | -26.8                  | .7          | 11.8    | -44.17                | -13    | -31.17      | 0-360          | 300         | V        |

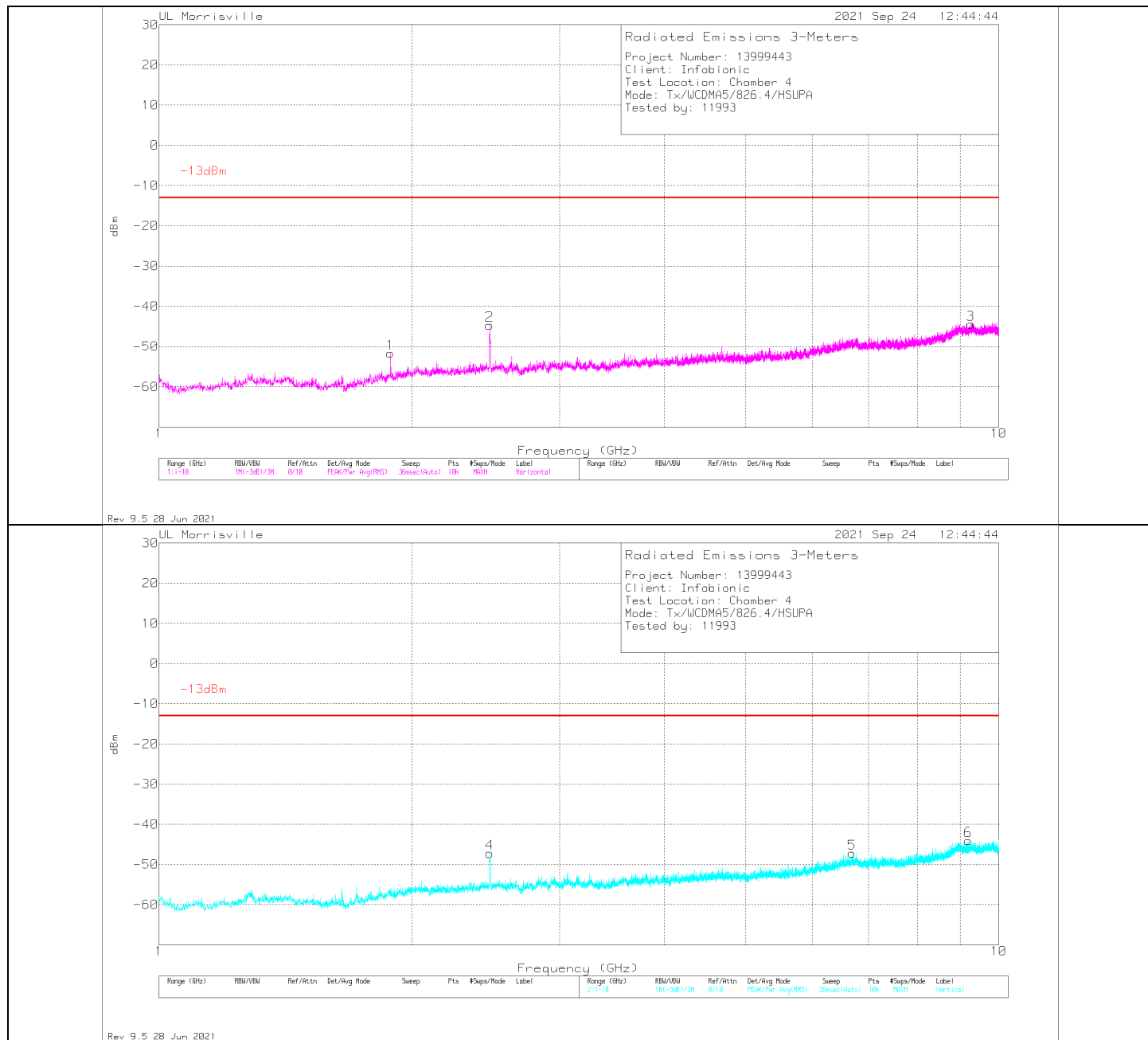
Pk - Peak detector



| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 206211 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Filter (dB) | CF (dB) | Corrected Reading dBm | -13dBm | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|------------------------|-------------|---------|-----------------------|--------|-------------|----------------|-------------|----------|
| 1      | 1.7128          | -57.34              | Pk  | 28.7          | -36.6                  | .4          | 11.8    | -53.04                | -13    | -40.04      | 0-360          | 200         | H        |
| 4      | 1.7182          | -47.92              | Pk  | 28.8          | -36.6                  | .4          | 11.8    | -43.52                | -13    | -30.52      | 0-360          | 300         | V        |
| 5      | 2.5372          | -55.26              | Pk  | 32.4          | -36.7                  | .5          | 11.8    | -47.26                | -13    | -34.26      | 0-360          | 300         | V        |
| 2      | 2.5426          | -55.98              | Pk  | 32.3          | -36.7                  | .5          | 11.8    | -48.08                | -13    | -35.08      | 0-360          | 200         | H        |
| 3      | 8.9785          | -65.6               | Pk  | 35.9          | -26.7                  | .7          | 11.8    | -43.9                 | -13    | -30.9       | 0-360          | 100         | H        |
| 6      | 9.1531          | -65.22              | Pk  | 36.2          | -26.9                  | .6          | 11.8    | -43.52                | -13    | -30.52      | 0-360          | 300         | V        |

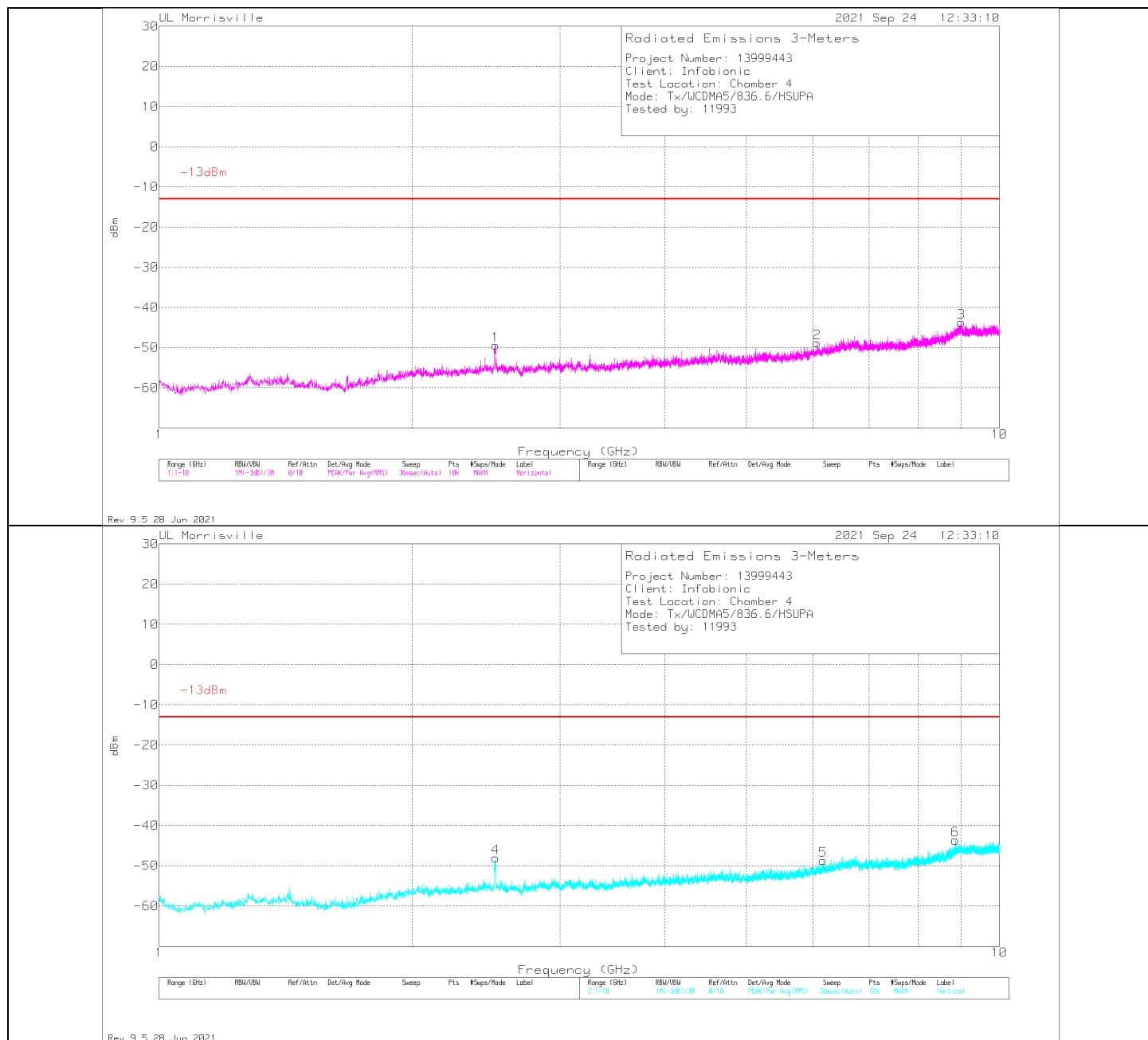
Pk - Peak detector

## HSUPA Mode



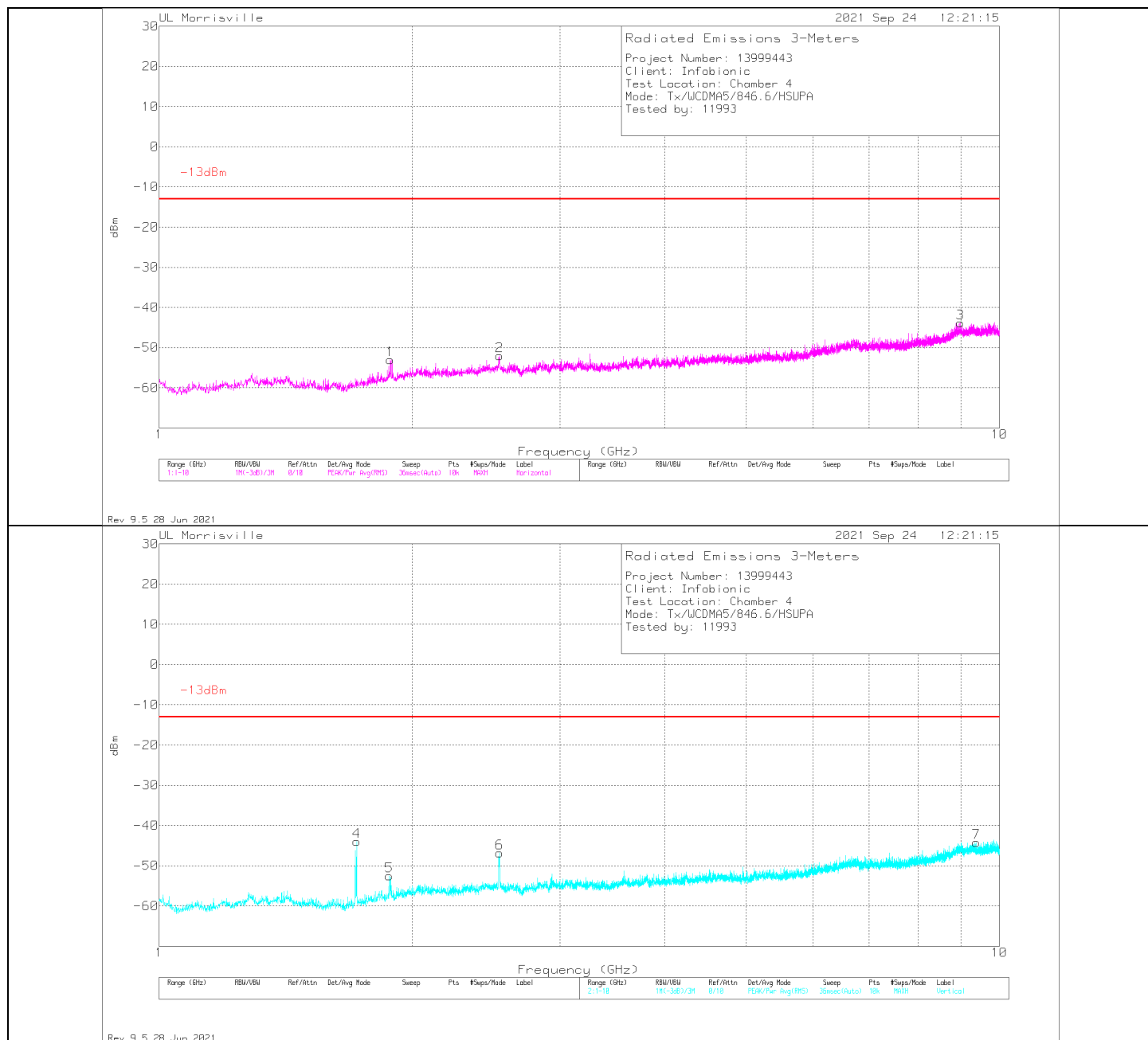
| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 206211 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Filter (dB) | CF (dB) | Corrected Reading dBm | -13dBm | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|------------------------|-------------|---------|-----------------------|--------|-------------|----------------|-------------|----------|
| 1      | 1.8865          | -57.84              | Pk  | 30.6          | -36.6                  | .4          | 11.8    | -51.64                | -13    | -38.64      | 0-360          | 200         | H        |
| 2      | 2.4751          | -52.75              | Pk  | 32.6          | -36.7                  | .4          | 11.8    | -44.65                | -13    | -31.65      | 0-360          | 100         | H        |
| 4      | 2.476           | -55.35              | Pk  | 32.6          | -36.7                  | .4          | 11.8    | -47.25                | -13    | -34.25      | 0-360          | 300         | V        |
| 5      | 6.6862          | -65.52              | Pk  | 35.5          | -29.6                  | .6          | 11.8    | -47.22                | -13    | -34.22      | 0-360          | 200         | V        |
| 6      | 9.1981          | -65.63              | Pk  | 36.2          | -27                    | .6          | 11.8    | -44.03                | -13    | -31.03      | 0-360          | 300         | V        |
| 3      | 9.2575          | -66.26              | Pk  | 36.3          | -26.9                  | .6          | 11.8    | -44.46                | -13    | -31.46      | 0-360          | 100         | H        |

Pk - Peak detector



| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 206211 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Filter (dB) | CF (dB) | Corrected Reading dBm | -13dBm | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|------------------------|-------------|---------|-----------------------|--------|-------------|----------------|-------------|----------|
| 1      | 2.5129          | -57.54              | Pk  | 32.5          | -36.7                  | .5          | 11.8    | -49.44                | -13    | -36.44      | 0-360          | 100         | H        |
| 4      | 2.5129          | -56.15              | Pk  | 32.5          | -36.7                  | .5          | 11.8    | -48.05                | -13    | -35.05      | 0-360          | 300         | V        |
| 2      | 6.0688          | -65.39              | Pk  | 35.2          | -30.9                  | .5          | 11.8    | -48.79                | -13    | -35.79      | 0-360          | 100         | H        |
| 5      | 6.1714          | -65.76              | Pk  | 35.3          | -30.5                  | .5          | 11.8    | -48.66                | -13    | -35.66      | 0-360          | 200         | V        |
| 6      | 8.8705          | -65.15              | Pk  | 36            | -27                    | .7          | 11.8    | -43.65                | -13    | -30.65      | 0-360          | 200         | V        |
| 3      | 9.0154          | -65.64              | Pk  | 35.9          | -26.5                  | .7          | 11.8    | -43.74                | -13    | -30.74      | 0-360          | 100         | H        |

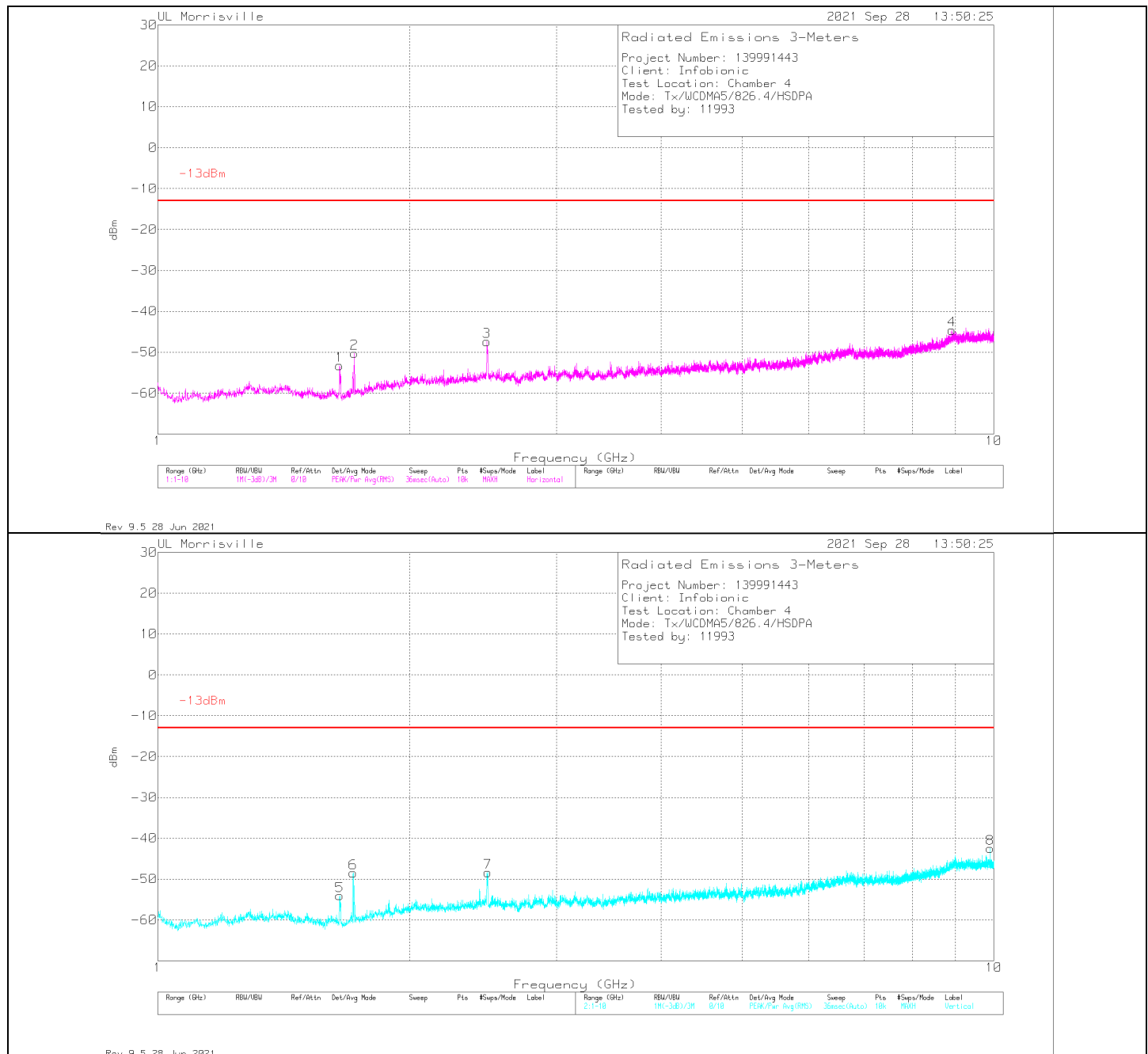
Pk - Peak detector



| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 206211 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Filter (dB) | CF (dB) | Corrected Reading dBm | -13dBm | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|------------------------|-------------|---------|-----------------------|--------|-------------|----------------|-------------|----------|
| 4      | 1.7182          | -48.39              | Pk  | 28.8          | -36.6                  | .4          | 11.8    | -43.99                | -13    | -30.99      | 0-360          | 300         | V        |
| 5      | 1.8793          | -58.71              | Pk  | 30.6          | -36.6                  | .4          | 11.8    | -52.51                | -13    | -39.51      | 0-360          | 200         | V        |
| 1      | 1.8847          | -59.22              | Pk  | 30.6          | -36.6                  | .4          | 11.8    | -53.02                | -13    | -40.02      | 0-360          | 200         | H        |
| 2      | 2.5426          | -59.89              | Pk  | 32.3          | -36.7                  | .5          | 11.8    | -51.99                | -13    | -38.99      | 0-360          | 100         | H        |
| 6      | 2.5426          | -54.73              | Pk  | 32.3          | -36.7                  | .5          | 11.8    | -46.83                | -13    | -33.83      | 0-360          | 300         | V        |
| 3      | 8.9839          | -65.65              | Pk  | 35.9          | -26.6                  | .7          | 11.8    | -43.85                | -13    | -30.85      | 0-360          | 100         | H        |
| 7      | 9.388           | -66.31              | Pk  | 36.4          | -26.7                  | .6          | 11.8    | -44.21                | -13    | -31.21      | 0-360          | 300         | V        |

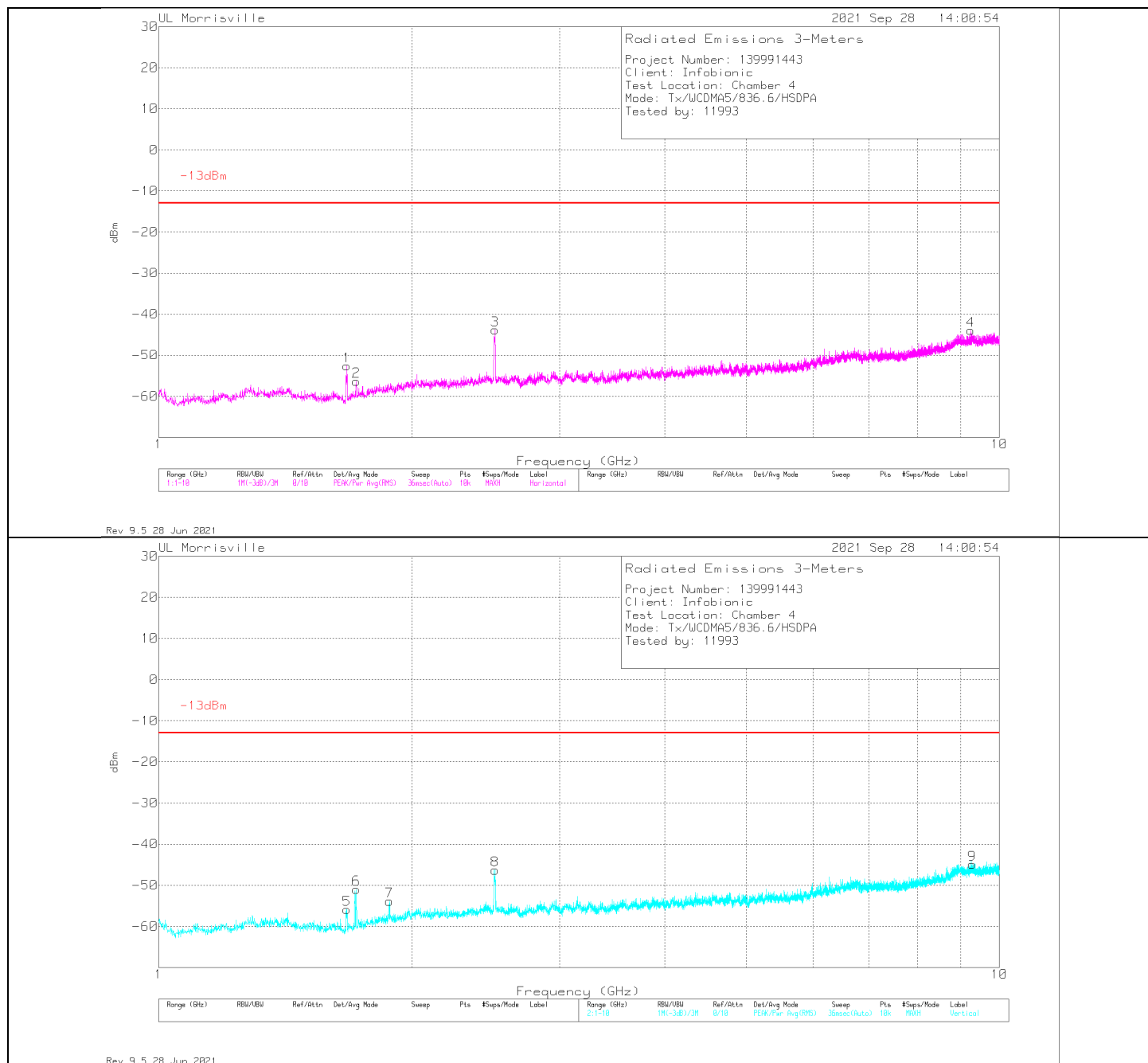
Pk - Peak detector

## HSDPA Mode



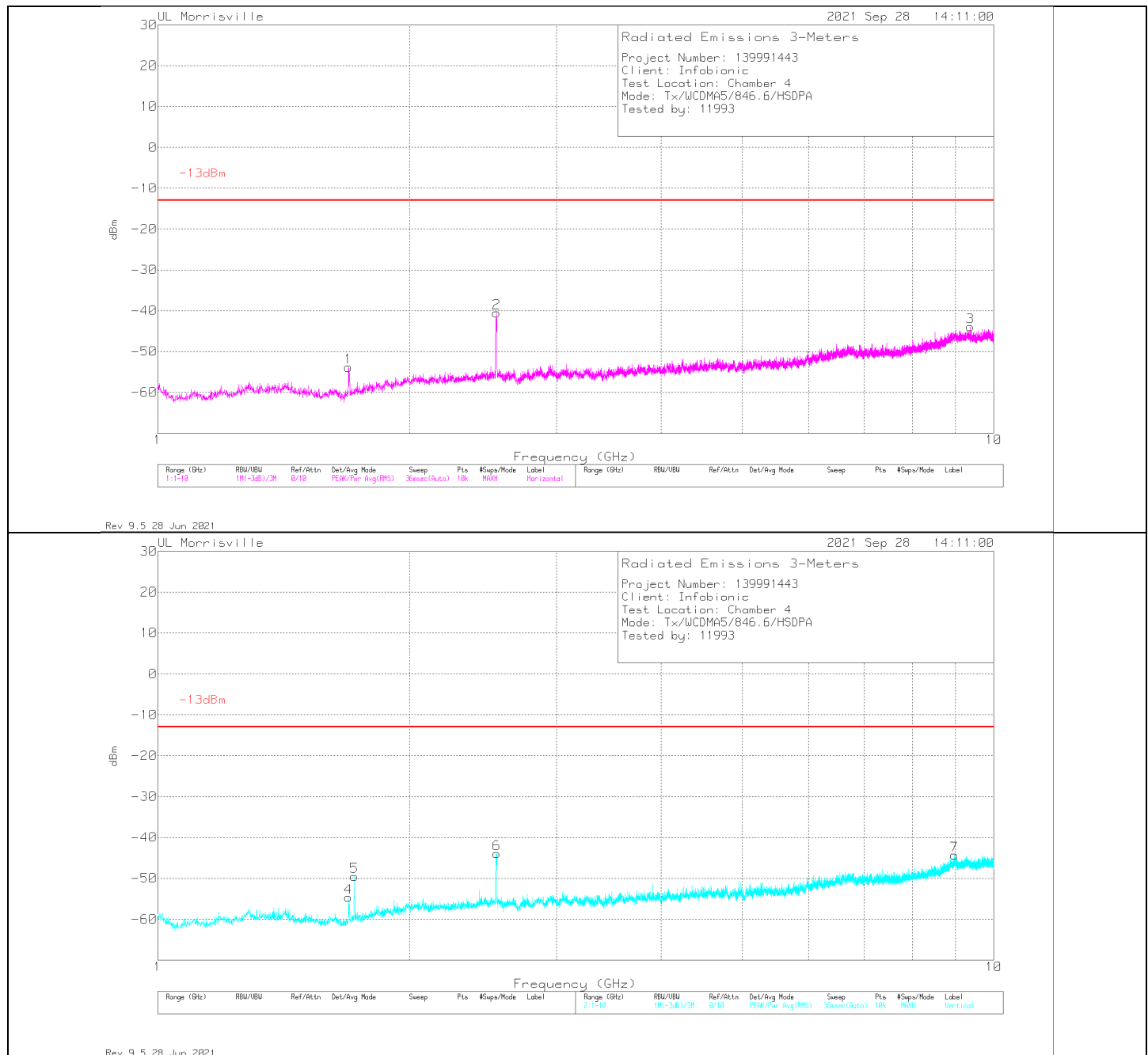
| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 206211 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Filter (dB) | CF (dB) | Corrected Reading dBm | -13dBm | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|------------------------|-------------|---------|-----------------------|--------|-------------|----------------|-------------|----------|
| 1      | 1.6498          | -56.96              | Pk  | 27.9          | -36.6                  | .6          | 11.8    | -53.26                | -13    | -40.26      | 0-360          | 200         | H        |
| 5      | 1.6507          | -57.78              | Pk  | 27.9          | -36.6                  | .6          | 11.8    | -54.08                | -13    | -41.08      | 0-360          | 300         | V        |
| 6      | 1.7128          | -52.79              | Pk  | 28.7          | -36.6                  | .4          | 11.8    | -48.49                | -13    | -35.49      | 0-360          | 300         | V        |
| 2      | 1.7182          | -54.64              | Pk  | 28.8          | -36.6                  | .4          | 11.8    | -50.24                | -13    | -37.24      | 0-360          | 200         | H        |
| 3      | 2.4751          | -55.5               | Pk  | 32.6          | -36.7                  | .4          | 11.8    | -47.4                 | -13    | -34.4       | 0-360          | 200         | H        |
| 7      | 2.4823          | -56.47              | Pk  | 32.6          | -36.7                  | .4          | 11.8    | -48.37                | -13    | -35.37      | 0-360          | 300         | V        |
| 4      | 8.9128          | -66.21              | Pk  | 36            | -26.9                  | .7          | 11.8    | -44.61                | -13    | -31.61      | 0-360          | 100         | H        |
| 8      | 9.9028          | -64.62              | Pk  | 37            | -27.3                  | .6          | 11.8    | -42.52                | -13    | -29.52      | 0-360          | 300         | V        |

Pk - Peak detector



| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 206211 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Filter (dB) | CF (dB) | Corrected Reading dBm | -13dBm | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|------------------------|-------------|---------|-----------------------|--------|-------------|----------------|-------------|----------|
| 1      | 1.6741          | -56.23              | Pk  | 28            | -36.6                  | .4          | 11.8    | -52.63                | -13    | -39.63      | 0-360          | 100         | H        |
| 5      | 1.675           | -59.5               | Pk  | 28            | -36.6                  | .4          | 11.8    | -55.9                 | -13    | -42.9       | 0-360          | 200         | V        |
| 2      | 1.7182          | -60.73              | Pk  | 28.8          | -36.6                  | .4          | 11.8    | -56.33                | -13    | -43.33      | 0-360          | 200         | H        |
| 6      | 1.7182          | -55.39              | Pk  | 28.8          | -36.6                  | .4          | 11.8    | -50.99                | -13    | -37.99      | 0-360          | 200         | V        |
| 7      | 1.882           | -60.06              | Pk  | 30.6          | -36.6                  | .4          | 11.8    | -53.86                | -13    | -40.86      | 0-360          | 300         | V        |
| 8      | 2.512           | -54.41              | Pk  | 32.5          | -36.7                  | .5          | 11.8    | -46.31                | -13    | -33.31      | 0-360          | 300         | V        |
| 3      | 2.5129          | -51.96              | Pk  | 32.5          | -36.7                  | .5          | 11.8    | -43.86                | -13    | -30.86      | 0-360          | 100         | H        |
| 4      | 9.2485          | -65.75              | Pk  | 36.3          | -26.9                  | .6          | 11.8    | -43.95                | -13    | -30.95      | 0-360          | 200         | H        |
| 9      | 9.2809          | -66.83              | Pk  | 36.4          | -26.9                  | .6          | 11.8    | -44.93                | -13    | -31.93      | 0-360          | 200         | V        |

Pk - Peak detector

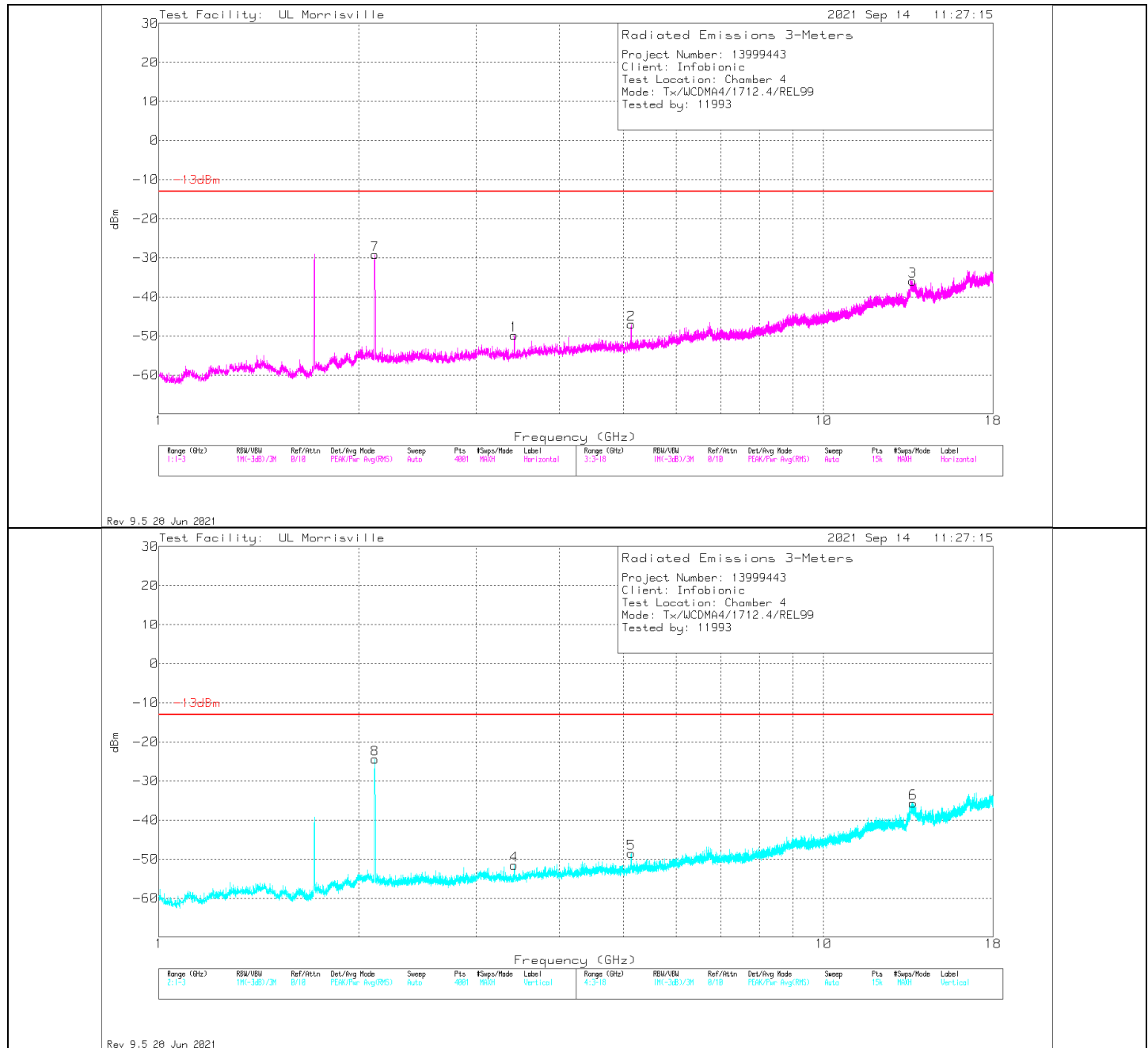


| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 206211 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Filter (dB) | CF (dB) | Corrected Reading dBm | -13dBm | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|------------------------|-------------|---------|-----------------------|--------|-------------|----------------|-------------|----------|
| 4      | 1.6903          | -58.59              | Pk  | 28.3          | -36.6                  | .4          | 11.8    | -54.69                | -13    | -41.69      | 0-360          | 300         | V        |
| 1      | 1.69075         | -57.86              | Pk  | 28.4          | -36.6                  | .4          | 11.8    | -53.86                | -13    | -40.86      | 0-360          | 200         | H        |
| 5      | 1.7191          | -53.93              | Pk  | 28.8          | -36.6                  | .4          | 11.8    | -49.53                | -13    | -36.53      | 0-360          | 200         | V        |
| 2      | 2.5426          | -48.4               | Pk  | 32.3          | -36.7                  | .5          | 11.8    | -40.5                 | -13    | -27.5       | 0-360          | 100         | H        |
| 6      | 2.5435          | -51.87              | Pk  | 32.3          | -36.7                  | .5          | 11.8    | -43.97                | -13    | -30.97      | 0-360          | 300         | V        |
| 7      | 8.9722          | -65.93              | Pk  | 35.9          | -26.8                  | .7          | 11.8    | -44.33                | -13    | -31.33      | 0-360          | 300         | V        |
| 3      | 9.3772          | -66.08              | Pk  | 36.4          | -26.7                  | .6          | 11.8    | -43.98                | -13    | -30.98      | 0-360          | 100         | H        |

Pk - Peak detector

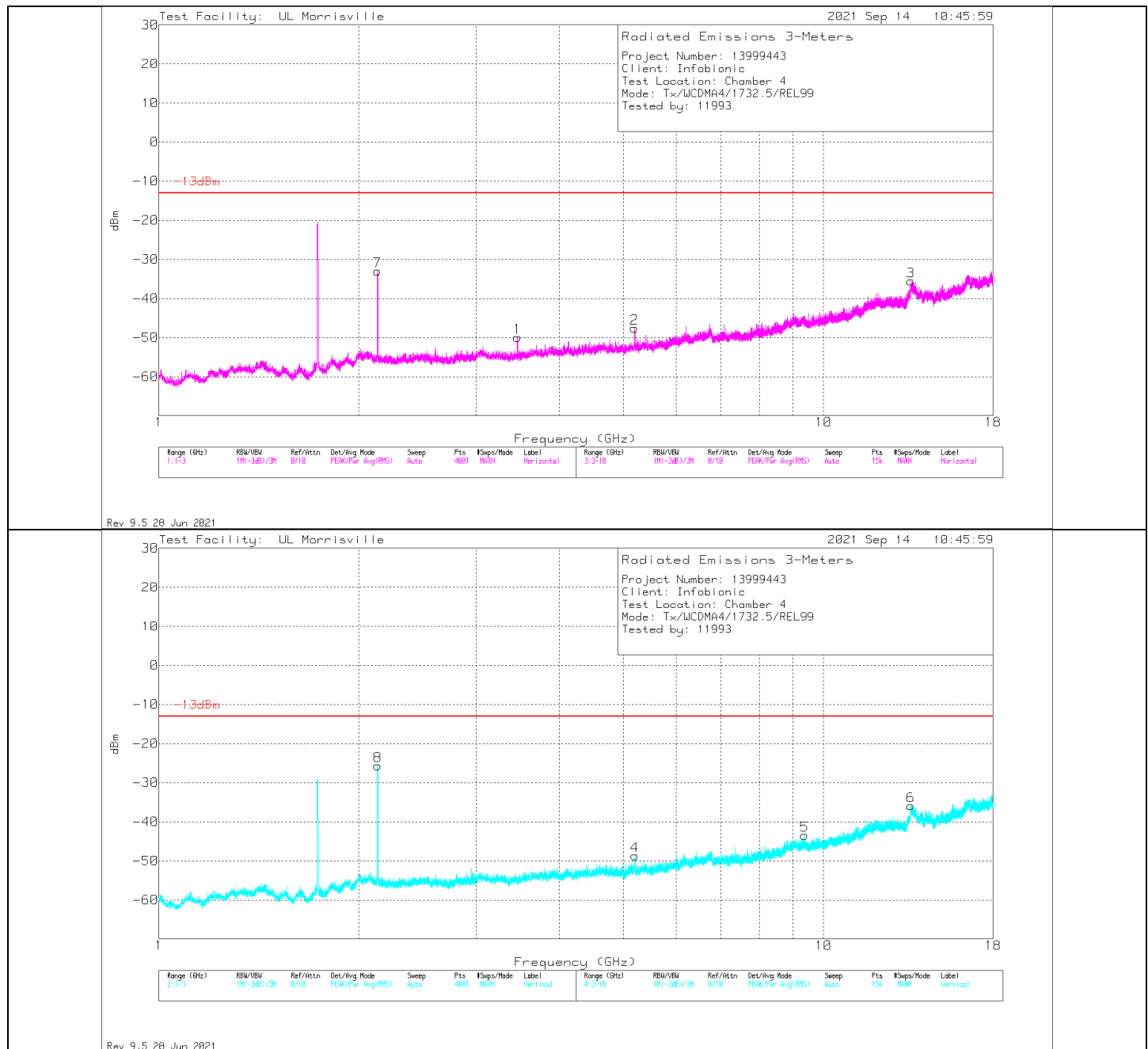
### 8.1.3. WCDMA BAND 4

#### Rel 99 Mode



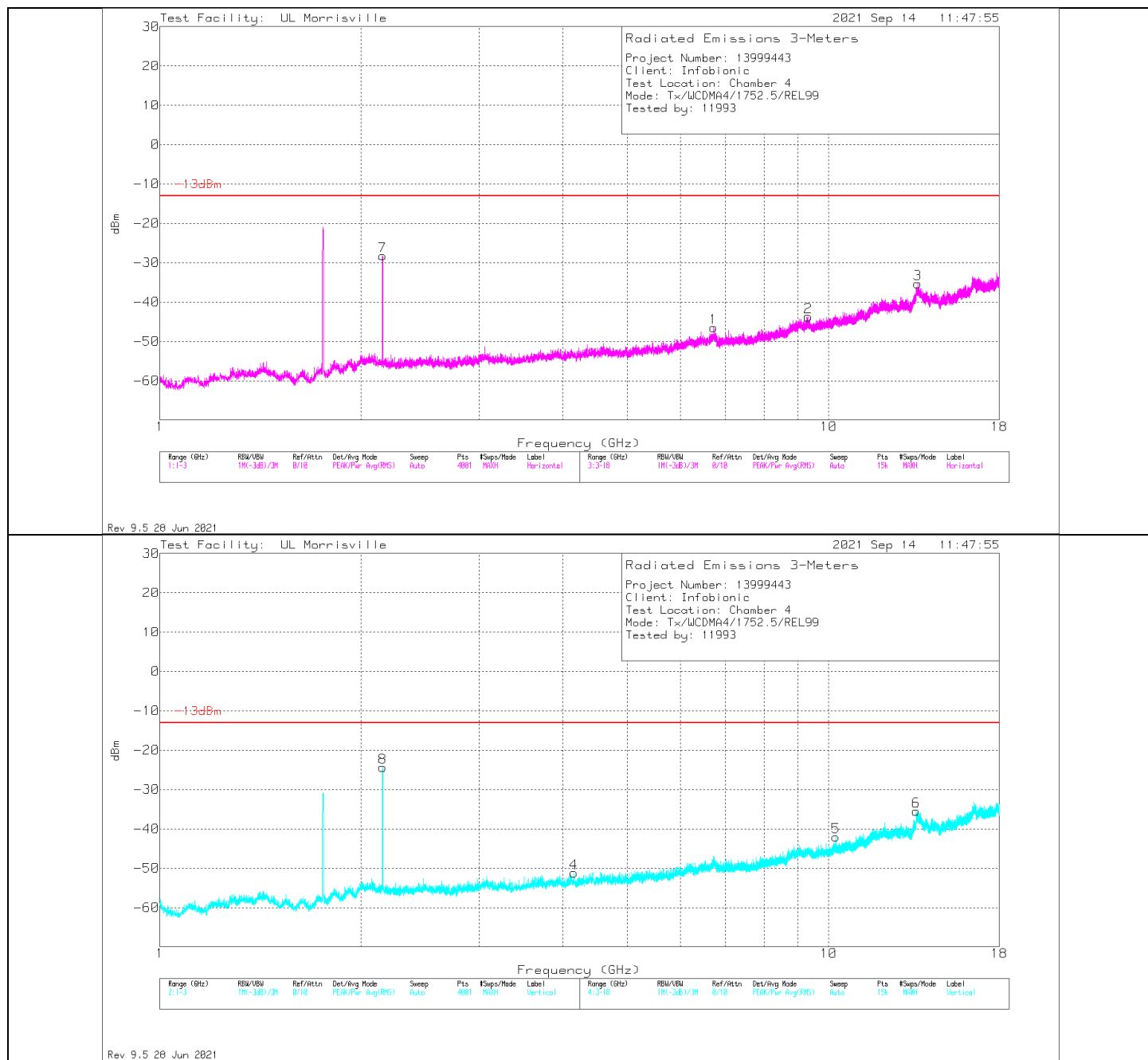
| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 206211 (dB/m) | Amp/Cbl/Fitr/Pad (dB) | CF (dB) | Filter (dB) | Corrected Reading dBm | -13dBm | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|-----------------------|---------|-------------|-----------------------|--------|-------------|----------------|-------------|----------|
| 8      | 2.113 (DL)      | -32.32              | Pk  | 31.4          | -36.7                 | 11.8    | 1.4         | -24.42                | -      | -           | 0-360          | 300         | V        |
| 7      | 2.1135 (DL)     | -37.11              | Pk  | 31.4          | -36.7                 | 11.8    | 1.4         | -29.21                | -      | -           | 0-360          | 200         | H        |
| 1      | 3.422           | -59.29              | Pk  | 32.5          | -34.8                 | 11.8    | 0           | -49.79                | -13    | -36.79      | 0-360          | 100         | H        |
| 4      | 3.422           | -61.04              | Pk  | 32.5          | -34.8                 | 11.8    | 0           | -51.54                | -13    | -38.54      | 0-360          | 200         | V        |
| 5      | 5.135           | -62.61              | Pk  | 34.2          | -31.9                 | 11.8    | 0           | -48.51                | -13    | -35.51      | 0-360          | 200         | V        |
| 2      | 5.139           | -61.09              | Pk  | 34.2          | -31.9                 | 11.8    | 0           | -46.99                | -13    | -33.99      | 0-360          | 100         | H        |
| 3      | 13.608          | -63.43              | Pk  | 38.7          | -23                   | 11.8    | 0           | -35.93                | -13    | -22.93      | 0-360          | 200         | H        |
| 6      | 13.637          | -63.28              | Pk  | 38.7          | -22.9                 | 11.8    | 0           | -35.68                | -13    | -22.68      | 0-360          | 300         | V        |

Pk - Peak detector



| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 206211 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | CF (dB) | Filter (dB) | Corrected Reading dBm | -13dBm | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|------------------------|---------|-------------|-----------------------|--------|-------------|----------------|-------------|----------|
| 7      | 2.13175 (DL)    | -40.75              | Pk  | 31.5          | -36.7                  | 11.8    | 1.2         | -32.95                | -      | -           | 0-360          | 200         | H        |
| 8      | 2.134 (DL)      | -33.51              | Pk  | 31.6          | -36.7                  | 11.8    | 1.2         | -25.61                | -      | -           | 0-360          | 300         | V        |
| 1      | 3.462           | -59.53              | Pk  | 32.6          | -34.8                  | 11.8    | 0           | -49.93                | -13    | -36.93      | 0-360          | 100         | H        |
| 2      | 5.195           | -61.87              | Pk  | 34.3          | -31.8                  | 11.8    | 0           | -47.57                | -13    | -34.57      | 0-360          | 100         | H        |
| 4      | 5.201           | -62.9               | Pk  | 34.3          | -31.9                  | 11.8    | 0           | -48.7                 | -13    | -35.7       | 0-360          | 200         | V        |
| 5      | 9.366           | -65.74              | Pk  | 36.4          | -25.9                  | 11.8    | 0           | -43.44                | -13    | -30.44      | 0-360          | 300         | V        |
| 6      | 13.525          | -63.88              | Pk  | 38.7          | -22.5                  | 11.8    | 0           | -35.88                | -13    | -22.88      | 0-360          | 200         | V        |
| 3      | 13.538          | -63.59              | Pk  | 38.7          | -22.5                  | 11.8    | 0           | -35.59                | -13    | -22.59      | 0-360          | 100         | H        |

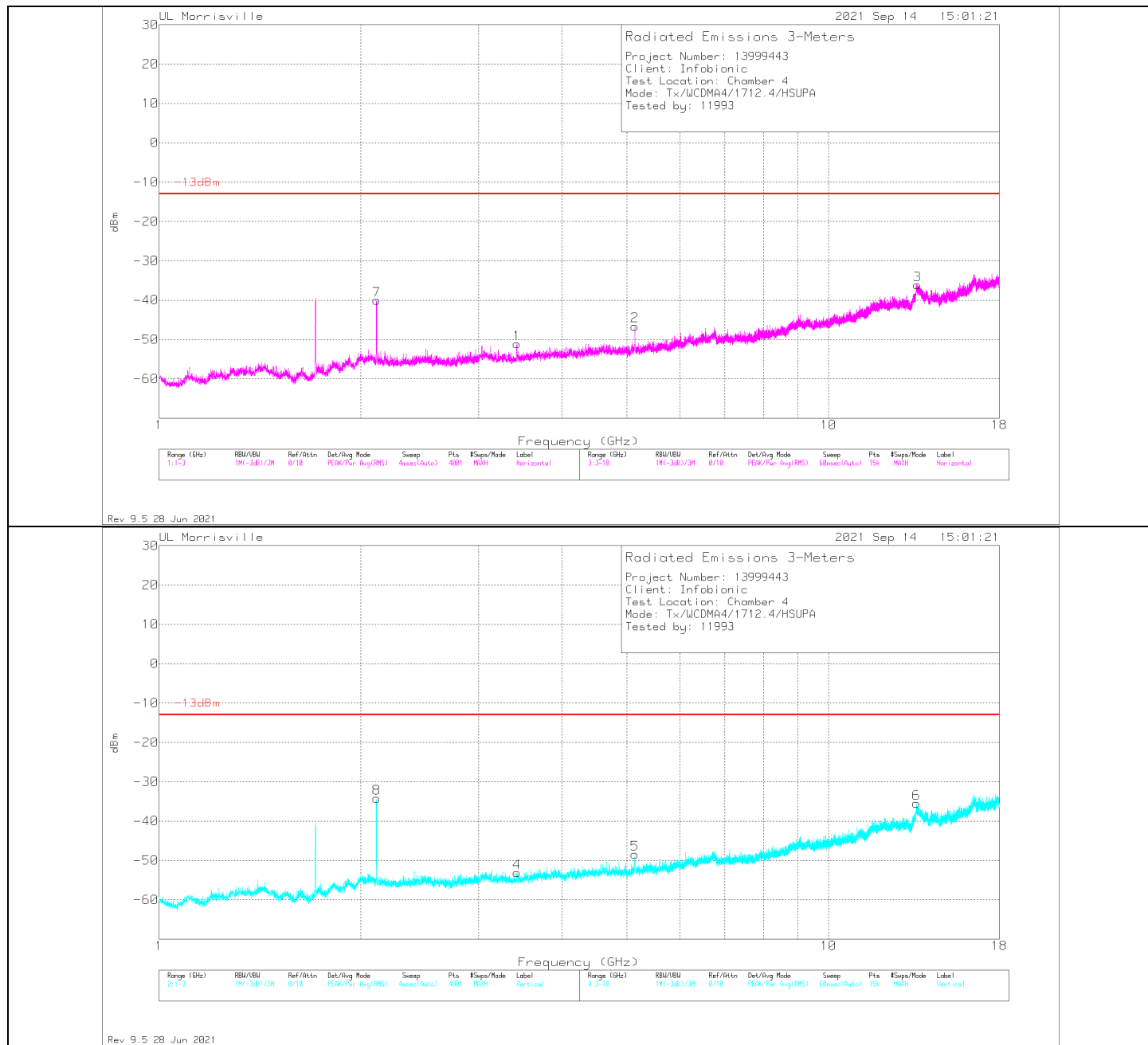
Pk - Peak detector



| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 206211 (dB/m) | Amp/Cbl/Fitr/Pad (dB) | CF (dB) | Filter (dB) | Corrected Reading dBm | -13dBm | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|-----------------------|---------|-------------|-----------------------|--------|-------------|----------------|-------------|----------|
| 7      | 2.1515 (DL)     | -36.03              | Pk  | 31.6          | -36.7                 | 11.8    | 1.1         | -28.23                | -      | -           | 0-360          | 200         | H        |
| 8      | 2.154 (DL)      | -32.16              | Pk  | 31.6          | -36.7                 | 11.8    | 1.1         | -24.36                | -      | -           | 0-360          | 300         | V        |
| 4      | 4.158           | -63.79              | Pk  | 33.3          | -32.5                 | 11.8    | 0           | -51.19                | -13    | -38.19      | 0-360          | 200         | V        |
| 1      | 6.728           | -65.25              | Pk  | 35.5          | -28.5                 | 11.8    | 0           | -46.45                | -13    | -33.45      | 0-360          | 100         | H        |
| 2      | 9.316           | -65.91              | Pk  | 36.4          | -26                   | 11.8    | 0           | -43.71                | -13    | -30.71      | 0-360          | 100         | H        |
| 5      | 10.247          | -64.54              | Pk  | 37.2          | -26.5                 | 11.8    | 0           | -42.04                | -13    | -29.04      | 0-360          | 300         | V        |
| 6      | 13.511          | -63.49              | Pk  | 38.7          | -22.5                 | 11.8    | 0           | -35.49                | -13    | -22.49      | 0-360          | 300         | V        |
| 3      | 13.592          | -62.71              | Pk  | 38.7          | -23.1                 | 11.8    | 0           | -35.31                | -13    | -22.31      | 0-360          | 100         | H        |

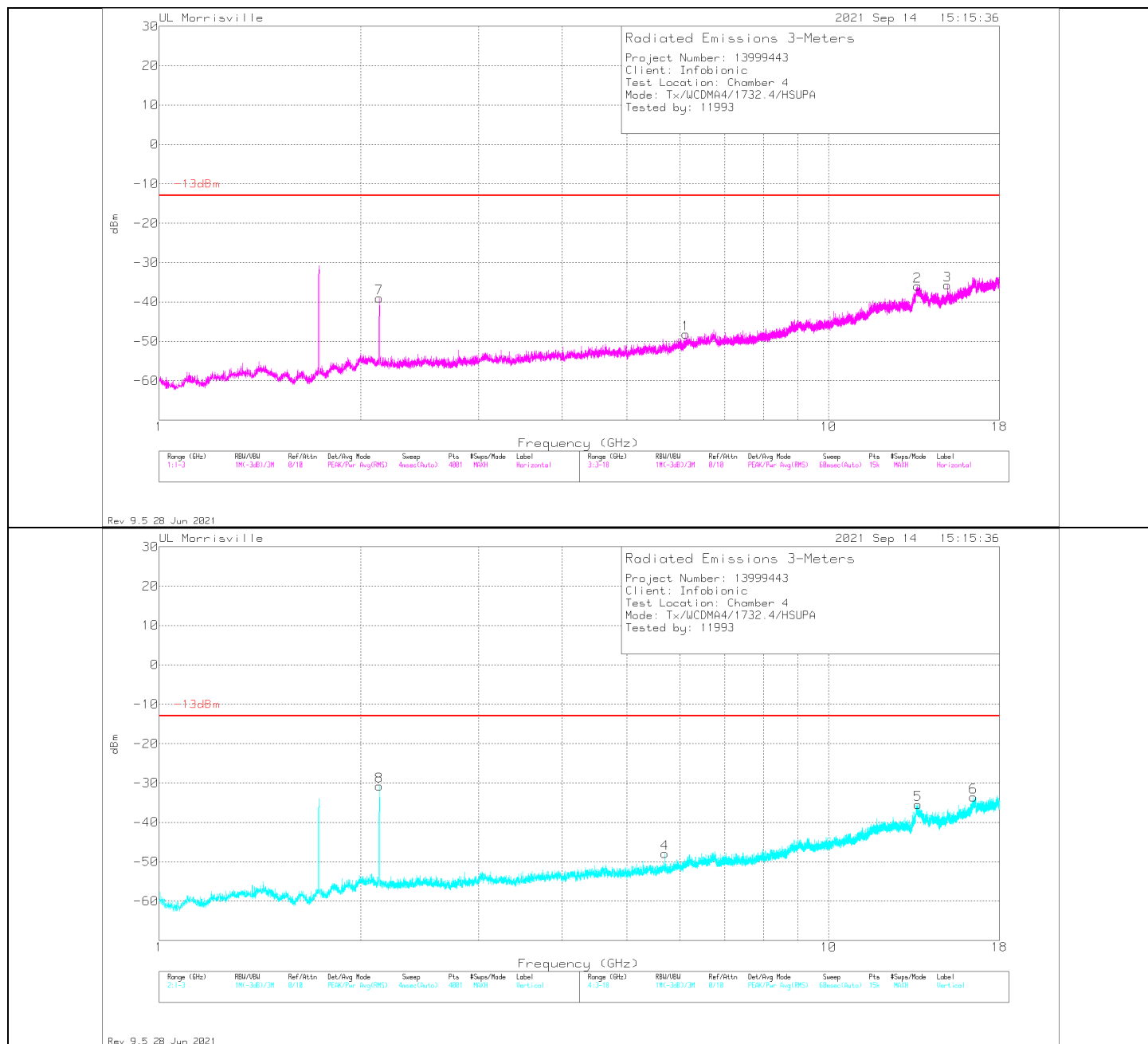
Pk - Peak detector

## HSUPA Mode



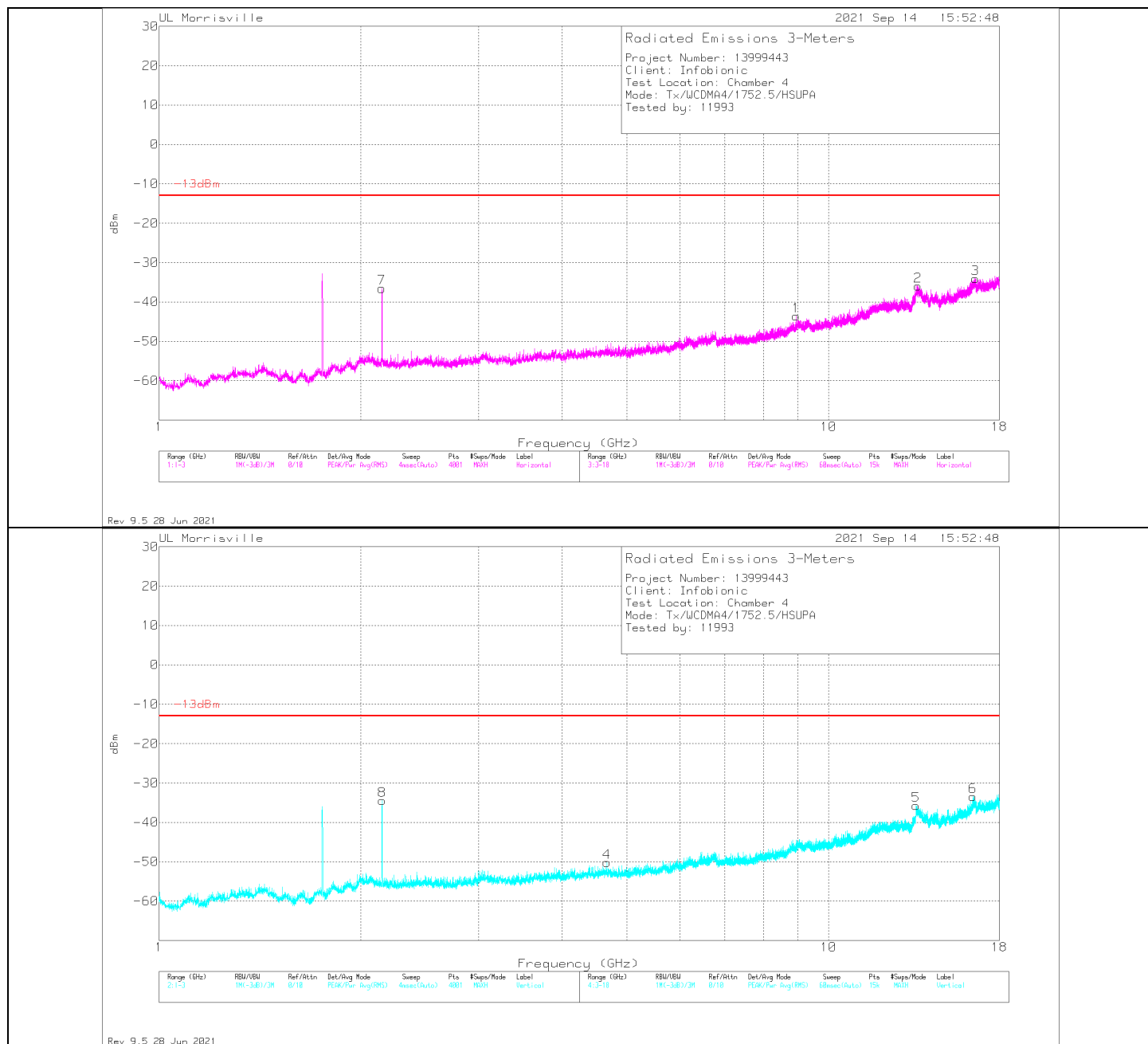
| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 206211 (dB/m) | Amp/Cbl/Fitr/Pad (dB) | CF (dB) | Filter (dB) | Corrected Reading dBm | -13dBm | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|-----------------------|---------|-------------|-----------------------|--------|-------------|----------------|-------------|----------|
| 8      | 2.1135 (DL)     | -42.1               | Pk  | 31.4          | -36.7                 | 11.8    | 1.4         | -34.2                 | -      | -           | 0-360          | 300         | V        |
| 7      | 2.114 (DL)      | -47.99              | Pk  | 31.4          | -36.7                 | 11.8    | 1.4         | -40.09                | -      | -           | 0-360          | 200         | H        |
| 1      | 3.423           | -60.67              | Pk  | 32.6          | -34.8                 | 11.8    | 0           | -51.07                | -13    | -38.07      | 0-360          | 100         | H        |
| 4      | 3.427           | -62.73              | Pk  | 32.6          | -34.8                 | 11.8    | 0           | -53.13                | -13    | -40.13      | 0-360          | 200         | V        |
| 2      | 5.134           | -60.67              | Pk  | 34.2          | -31.9                 | 11.8    | 0           | -46.57                | -13    | -33.57      | 0-360          | 100         | H        |
| 5      | 5.134           | -62.53              | Pk  | 34.2          | -31.9                 | 11.8    | 0           | -48.43                | -13    | -35.43      | 0-360          | 200         | V        |
| 6      | 13.543          | -63.39              | Pk  | 38.7          | -22.6                 | 11.8    | 0           | -35.49                | -13    | -22.49      | 0-360          | 200         | V        |
| 3      | 13.585          | -63.5               | Pk  | 38.7          | -23.1                 | 11.8    | 0           | -36.1                 | -13    | -23.1       | 0-360          | 200         | H        |

Pk - Peak detector



| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 206211 (dB/m) | Amp/Cbl/Fitr/Pad (dB) | CF (dB) | Filter (dB) | Corrected Reading dBm | -13dBm | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|-----------------------|---------|-------------|-----------------------|--------|-------------|----------------|-------------|----------|
| 8      | 2.1315 (DL)     | -38.59              | Pk  | 31.5          | -36.7                 | 11.8    | 1.2         | -30.79                | -      | -           | 0-360          | 300         | V        |
| 7      | 2.132 (DL)      | -46.8               | Pk  | 31.5          | -36.7                 | 11.8    | 1.2         | -39                   | -      | -           | 0-360          | 200         | H        |
| 4      | 5.699           | -63.96              | Pk  | 34.5          | -30.3                 | 11.8    | 0           | -47.96                | -13    | -34.96      | 0-360          | 300         | V        |
| 1      | 6.123           | -65.02              | Pk  | 35.3          | -30.2                 | 11.8    | 0           | -48.12                | -13    | -35.12      | 0-360          | 100         | H        |
| 2      | 13.582          | -63.38              | Pk  | 38.7          | -23.1                 | 11.8    | 0           | -35.98                | -13    | -22.98      | 0-360          | 100         | H        |
| 5      | 13.602          | -62.83              | Pk  | 38.6          | -23                   | 11.8    | 0           | -35.43                | -13    | -22.43      | 0-360          | 300         | V        |
| 3      | 15.06           | -65.89              | Pk  | 39.6          | -21.2                 | 11.8    | 0           | -35.69                | -13    | -22.69      | 0-360          | 100         | H        |
| 6      | 16.45           | -65.37              | Pk  | 41.2          | -21.2                 | 11.8    | 0           | -33.57                | -13    | -20.57      | 0-360          | 300         | V        |

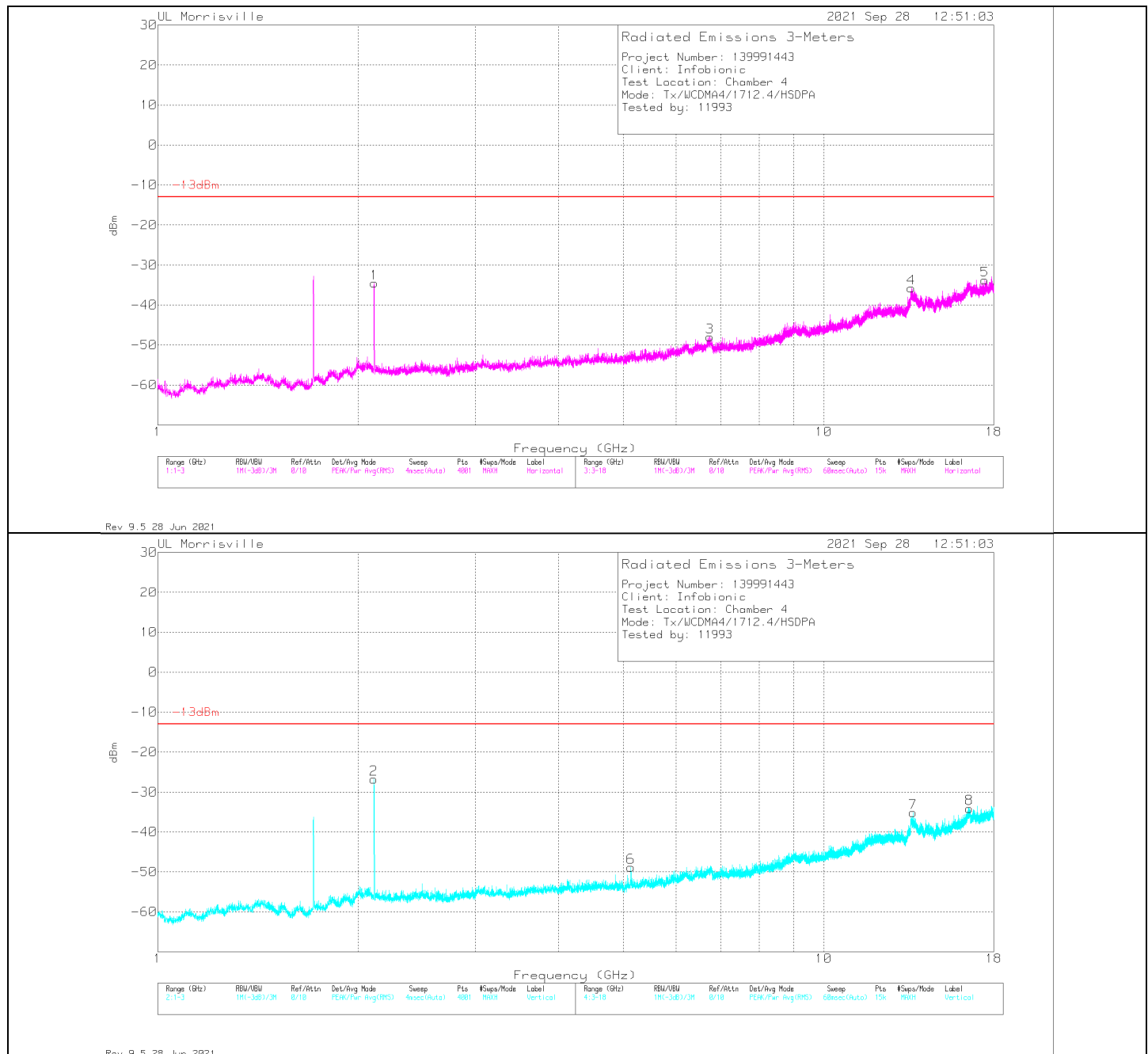
Pk - Peak detector



| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 206211 (dB/m) | Amp/Cbl/Fitr/Pad (dB) | CF (dB) | Filter (dB) | Corrected Reading dBm | -13dBm | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|-----------------------|---------|-------------|-----------------------|--------|-------------|----------------|-------------|----------|
| 7      | 2.152 (DL)      | -44.34              | Pk  | 31.6          | -36.7                 | 11.8    | 1.1         | -36.54                | -      | -           | 0-360          | 200         | H        |
| 8      | 2.1535 (DL)     | -42.26              | Pk  | 31.6          | -36.7                 | 11.8    | 1.1         | -34.46                | -      | -           | 0-360          | 300         | V        |
| 4      | 4.664           | -63.97              | Pk  | 34.1          | -32.1                 | 11.8    | 0           | -50.17                | -13    | -37.17      | 0-360          | 300         | V        |
| 1      | 8.942           | -64.72              | Pk  | 35.9          | -26.6                 | 11.8    | 0           | -43.62                | -13    | -30.62      | 0-360          | 100         | H        |
| 5      | 13.503          | -63.87              | Pk  | 38.8          | -22.5                 | 11.8    | 0           | -35.77                | -13    | -22.77      | 0-360          | 300         | V        |
| 2      | 13.611          | -63.47              | Pk  | 38.7          | -23                   | 11.8    | 0           | -35.97                | -13    | -22.97      | 0-360          | 100         | H        |
| 6      | 16.428          | -64.9               | Pk  | 41.1          | -21.4                 | 11.8    | 0           | -33.4                 | -13    | -20.4       | 0-360          | 200         | V        |
| 3      | 16.58           | -66.15              | Pk  | 41.5          | -21.2                 | 11.8    | 0           | -34.05                | -13    | -21.05      | 0-360          | 100         | H        |

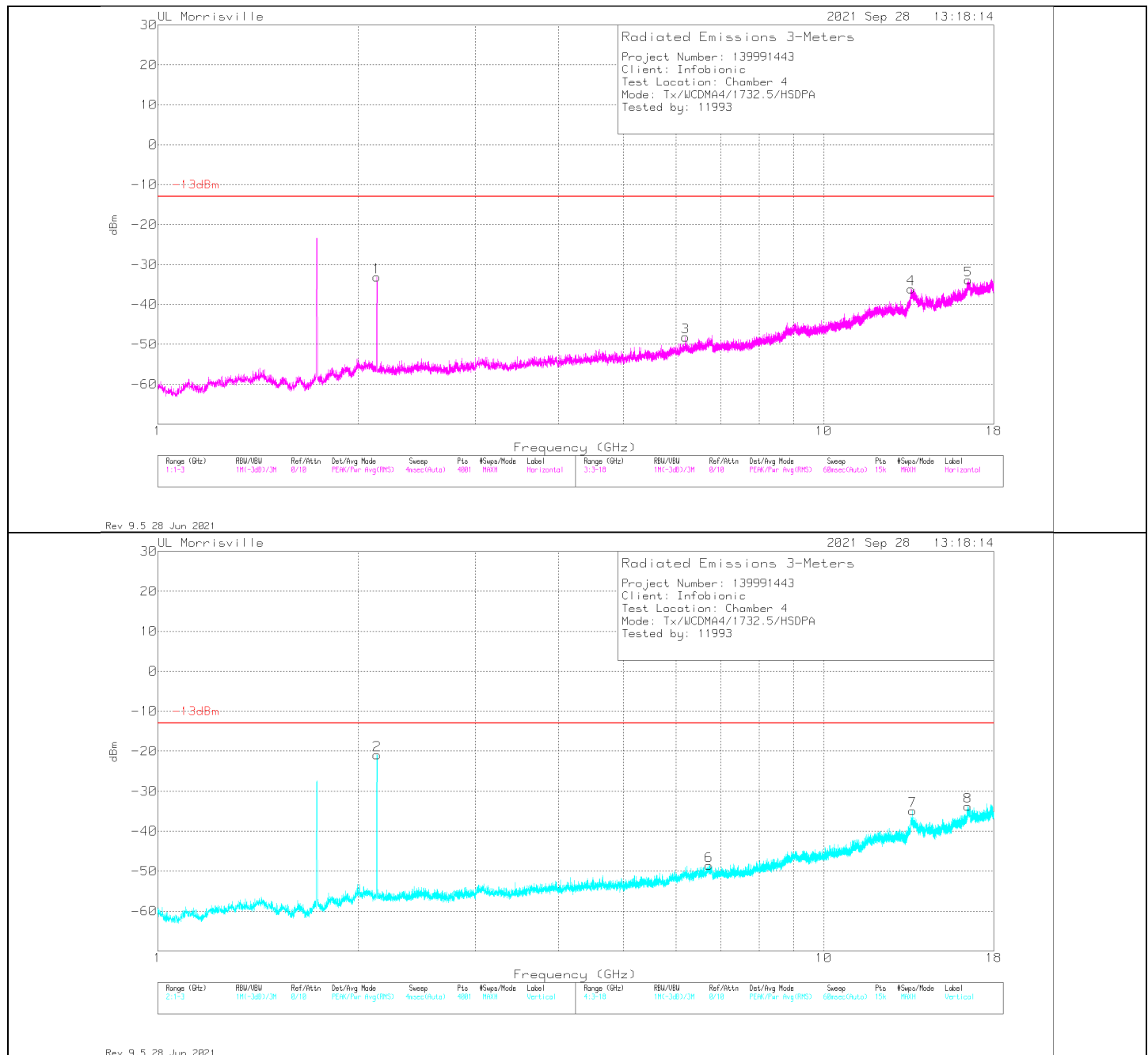
Pk - Peak detector

## HSDPA Mode



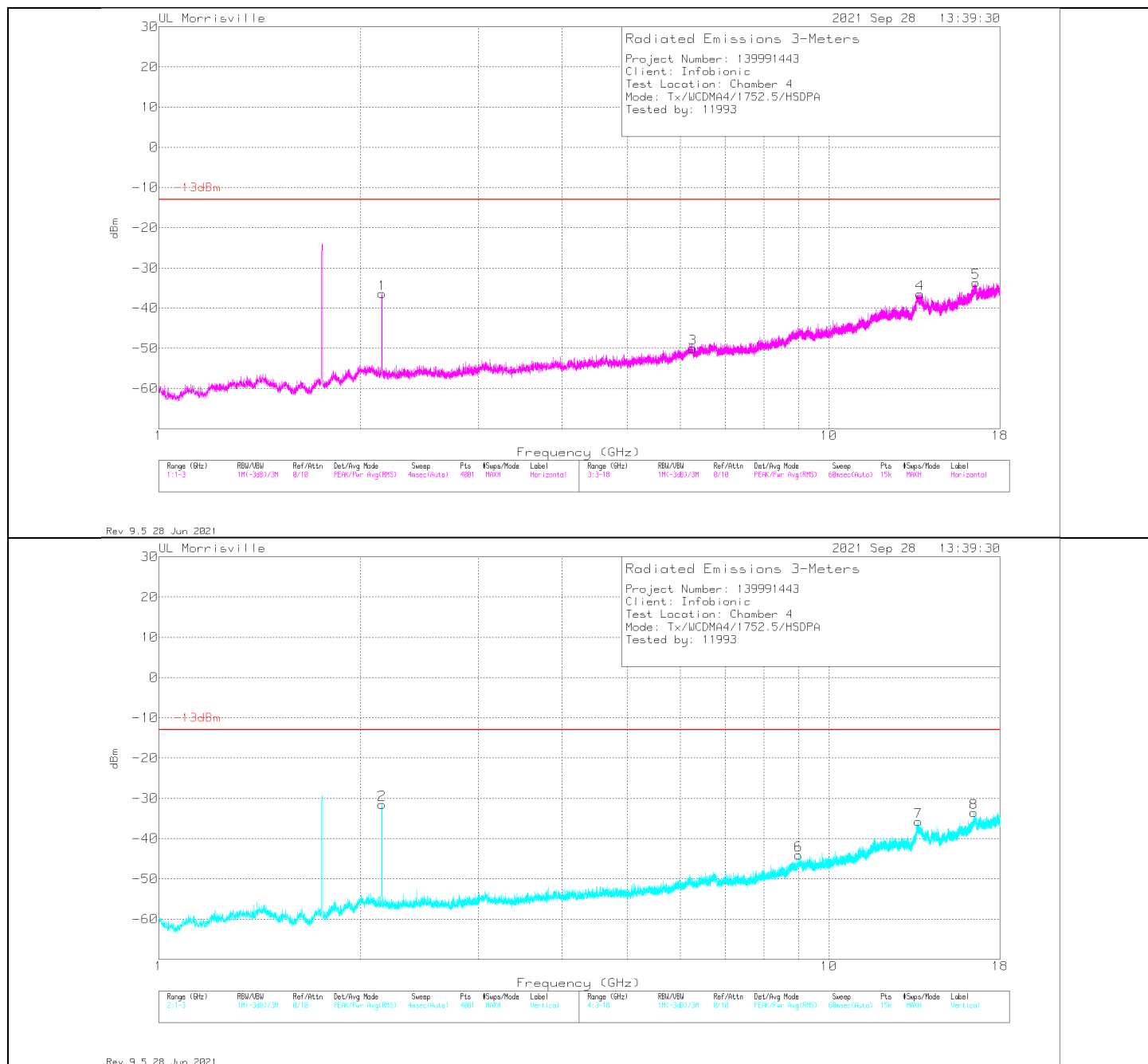
| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 206211 (dB/m) | Amp/Cbl/Fitr/Pad (dB) | CF (dB) | Filter (dB) | Corrected Reading dBm | -13dBm | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|-----------------------|---------|-------------|-----------------------|--------|-------------|----------------|-------------|----------|
| 2      | 2.1115 (DL)     | -34.79              | Pk  | 31.4          | -36.7                 | 11.8    | 1.5         | -26.79                | -      | -           | 0-360          | 300         | V        |
| 1      | 2.1135 (DL)     | -42.44              | Pk  | 31.4          | -36.7                 | 11.8    | 1.4         | -34.54                | -      | -           | 0-360          | 200         | H        |
| 6      | 5.134           | -62.92              | Pk  | 34.2          | -31.9                 | 11.8    | 0           | -48.82                | -13    | -35.82      | 0-360          | 200         | V        |
| 3      | 6.748           | -66.8               | Pk  | 35.5          | -28.5                 | 11.8    | 0           | -48                   | -13    | -35         | 0-360          | 100         | H        |
| 4      | 13.538          | -63.79              | Pk  | 38.7          | -22.5                 | 11.8    | 0           | -35.79                | -13    | -22.79      | 0-360          | 200         | H        |
| 7      | 13.623          | -62.77              | Pk  | 38.7          | -22.9                 | 11.8    | 0           | -35.17                | -13    | -22.17      | 0-360          | 300         | V        |
| 8      | 16.533          | -66.11              | Pk  | 41.4          | -21.2                 | 11.8    | 0           | -34.11                | -13    | -21.11      | 0-360          | 300         | V        |
| 5      | 17.441          | -66.28              | Pk  | 41.1          | -20.4                 | 11.8    | 0           | -33.78                | -13    | -20.78      | 0-360          | 200         | H        |

Pk - Peak detector



| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 206211 (dB/m) | Amp/Cbl/Fitr/Pad (dB) | CF (dB) | Filter (dB) | Corrected Reading dBm | -13dBm | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|-----------------------|---------|-------------|-----------------------|--------|-------------|----------------|-------------|----------|
| 1      | 2.1315 (DL)     | -40.91              | Pk  | 31.5          | -36.7                 | 11.8    | 1.2         | -33.11                | -      | -           | 0-360          | 100         | H        |
| 2      | 2.134 (DL)      | -28.82              | Pk  | 31.6          | -36.7                 | 11.8    | 1.2         | -20.92                | -      | -           | 0-360          | 300         | V        |
| 3      | 6.202           | -66.45              | Pk  | 35.3          | -28.8                 | 11.8    | 0           | -48.15                | -13    | -35.15      | 0-360          | 100         | H        |
| 6      | 6.722           | -67.39              | Pk  | 35.5          | -28.5                 | 11.8    | 0           | -48.59                | -13    | -35.59      | 0-360          | 300         | V        |
| 4      | 13.53           | -64.1               | Pk  | 38.7          | -22.5                 | 11.8    | 0           | -36.1                 | -13    | -23.1       | 0-360          | 100         | H        |
| 7      | 13.587          | -62.28              | Pk  | 38.7          | -23.1                 | 11.8    | 0           | -34.88                | -13    | -21.88      | 0-360          | 300         | V        |
| 8      | 16.461          | -65.7               | Pk  | 41.2          | -21.1                 | 11.8    | 0           | -33.8                 | -13    | -20.8       | 0-360          | 200         | V        |
| 5      | 16.488          | -65.9               | Pk  | 41.3          | -21.1                 | 11.8    | 0           | -33.9                 | -13    | -20.9       | 0-360          | 100         | H        |

Pk - Peak detector



| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 206211 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | CF (dB) | Filter (dB) | Corrected Reading dBm | -13dBm | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|------------------------|---------|-------------|-----------------------|--------|-------------|----------------|-------------|----------|
| 1      | 2.153 (DL)      | -44.22              | Pk  | 31.6          | -36.7                  | 11.8    | 1.1         | -36.42                | -      | -           | 0-360          | 200         | H        |
| 2      | 2.153 (DL)      | -39.29              | Pk  | 31.6          | -36.7                  | 11.8    | 1.1         | -31.49                | -      | -           | 0-360          | 300         | V        |
| 3      | 6.261           | -67.8               | Pk  | 35.3          | -29.3                  | 11.8    | 0           | -50                   | -13    | -37         | 0-360          | 100         | H        |
| 6      | 9.006           | -65.89              | Pk  | 35.9          | -25.9                  | 11.8    | 0           | -44.09                | -13    | -31.09      | 0-360          | 300         | V        |
| 7      | 13.599          | -63.08              | Pk  | 38.6          | -23.1                  | 11.8    | 0           | -35.78                | -13    | -22.78      | 0-360          | 300         | V        |
| 4      | 13.675          | -64.26              | Pk  | 38.6          | -22.6                  | 11.8    | 0           | -36.46                | -13    | -23.46      | 0-360          | 100         | H        |
| 8      | 16.454          | -65.33              | Pk  | 41.2          | -21.2                  | 11.8    | 0           | -33.53                | -13    | -20.53      | 0-360          | 300         | V        |
| 5      | 16.565          | -65.74              | Pk  | 41.5          | -21.2                  | 11.8    | 0           | -33.64                | -13    | -20.64      | 0-360          | 200         | H        |

Pk - Peak detector

## 9. SETUP PHOTOS

Refer to exhibit R13999443-EP1 for setup photos.

**END OF REPORT**