



# RADIO TEST REPORT

**FCC ID** : UDX-600191010  
**Equipment** : Catalyst Wireless 9163E Series Wi-Fi 6E Access Point  
**Brand Name** : CISCO  
**Model Name** : CW9163E-B, CW9163E-MR  
**Applicant** : Cisco Systems, Inc.  
170 West Tasman Drive, San Jose, CA 95134 USA  
**Manufacturer** : Cisco Systems, Inc.  
170 West Tasman Drive, San Jose, CA 95134 USA  
**Standard** : 47 CFR FCC Part 15.407

The product was received on Oct. 12, 2023, and testing was started from Oct. 17, 2023 and completed on Nov. 23, 2023. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The test results in this variant report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Hsinchu Laboratory, the test report shall not be reproduced except in full.



Approved by: Sam Chen

**Sporton International Inc. Hsinchu Laboratory**  
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**Photographs of EUT v01**



### History of this test report

| Report No.    | Version | Description  | Issued Date   |
|---------------|---------|--|---------------|
| FR340101-03AH | 01      | Initial issue of report  | Mar. 12, 2024 |
| FR340101-03AH | 02      | Modifying the Maximum Equivalent Isotropically Radiated Power (E.I.R.P.) and Peak Power Spectral Density (E.I.R.P.) test results for UNII 7. | Mar. 15, 2024 |
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### Summary of Test Result

| Report Clause | Ref Std. Clause | Test Items   | Result (PASS/FAIL) | Remark                     |
|---------------|-----------------|--|--------------------|----------------------------|
| 1.1.2         | 15.203          | Antenna Requirement  | PASS               | -                          |
| 3.1           | 15.207          | AC Power-line Conducted Emissions                          | PASS               | -                          |
| 3.2           | 15.407(a)       | Emission Bandwidth   | PASS               | -                          |
| 3.3           | 15.407(a)       | Maximum Equivalent Isotropically Radiated Power (E.I.R.P.) | PASS               | -                          |
| 3.4           | 15.407(a)       | Peak Power Spectral Density (E.I.R.P.)                     | PASS               | -                          |
| 3.5           | 15.407(b)       | Unwanted Emissions   | PASS               | -                          |
| -             | 15.407(d)       | Contention-Based Protocol                                  | N/A                | Standard Power AP w/o test |

**Conformity Assessment Condition:**

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the chapter "Measurement Uncertainty".

**Disclaimer:**

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

**Reviewed by: Sam Chen**  
**Report Producer: Wendy Pan**



# 1 General Description

## 1.1 Information

### 1.1.1 RF General Information

| Frequency Range (MHz) | IEEE Std. 802.11 | Ch. Frequency (MHz) | Channel Number |
|-----------------------|------------------|---------------------|----------------|
| 5925-6425             | ax (HEW20)       | 5955-6415           | 1-93 [24]      |
| 6525-6875             |                  | 6535-6855           | 117-181 [17]   |
| 5925-6425             | ax (HEW40)       | 5965-6405           | 3-91 [12]      |
| 6525-6875             |                  | 6565-6845           | 123-179 [8]    |
| 5925-6425             | ax (HEW80)       | 5985-6385           | 7-87 [6]       |
| 6525-6875             |                  | 6625-6785           | 135-167 [3]    |
| 5925-6425             | ax (HEW160)      | 6025-6345           | 15-79 [3]      |
| 6525-6875             |                  | 6665                | 143 [1]        |

| Band           | Mode               | BWch (MHz) | Nant     |
|----------------|--------------------|------------|----------|
| 5.925-6.425GHz | 802.11ax HEW20     | 20         | 1TX, 2TX |
| 5.925-6.425GHz | 802.11ax HEW20-BF  | 20         | 2TX      |
| 5.925-6.425GHz | 802.11ax HEW40     | 40         | 1TX, 2TX |
| 5.925-6.425GHz | 802.11ax HEW40-BF  | 40         | 2TX      |
| 5.925-6.425GHz | 802.11ax HEW80     | 80         | 1TX, 2TX |
| 5.925-6.425GHz | 802.11ax HEW80-BF  | 80         | 2TX      |
| 5.925-6.425GHz | 802.11ax HEW160    | 160        | 1TX, 2TX |
| 5.925-6.425GHz | 802.11ax HEW160-BF | 160        | 2TX      |
| 6.525-6.875GHz | 802.11ax HEW20     | 20         | 1TX, 2TX |
| 6.525-6.875GHz | 802.11ax HEW20-BF  | 20         | 2TX      |
| 6.525-6.875GHz | 802.11ax HEW40     | 40         | 1TX, 2TX |
| 6.525-6.875GHz | 802.11ax HEW40-BF  | 40         | 2TX      |
| 6.525-6.875GHz | 802.11ax HEW80     | 80         | 1TX, 2TX |
| 6.525-6.875GHz | 802.11ax HEW80-BF  | 80         | 2TX      |
| 6.525-6.875GHz | 802.11ax HEW160    | 160        | 1TX, 2TX |
| 6.525-6.875GHz | 802.11ax HEW160-BF | 160        | 2TX      |

**Note:**

- ◆ HEW20, HEW40, HEW80 and HEW160 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ◆ BWch is the nominal channel bandwidth.



**1.1.2 Antenna Information**

| Set | Ant. | 2.4GHz Port | 5GHz Port | 6GHz Port | Bluetooth/ Zigbee | GPS | Brand | Model Name       | Antenna Type | Connector | Remark           | Gain (dBi) |
|-----|------|-------------|-----------|-----------|-------------------|-----|-------|------------------|--------------|-----------|------------------|------------|
| 1   | 1    | 2           | 2         | -         | -                 | -   | CISCO | CW-ANT-O1-NS-00  | Dipole       | N-Type    | External Antenna | Note 1     |
|     | 2    | 1           | 1         | -         | -                 | -   | CISCO | CW-ANT-O1-NS-00  | Dipole       | N-Type    | External Antenna |            |
|     | 3    | -           | -         | 1         | -                 | -   | CISCO | CW-ANT-O1-NS-00  | Dipole       | N-Type    | External Antenna |            |
|     | 4    | -           | -         | 2         | -                 | -   | CISCO | CW-ANT-O1-NS-00  | Dipole       | N-Type    | External Antenna |            |
| 2   | 5    | 1           | 1         | 1         | -                 | -   | AWAN  | A8M6P-100005     | PIFA         | N-Type    | Internal Antenna |            |
| 3   | 6    | -           | -         | -         | 1                 | -   | AWAN  | A8M6P-100003     | PIFA         | N-Type    | Internal Antenna |            |
| 4   | 7    | -           | -         | -         | -                 | 1   | AWAN  | A8M6P-100004     | PIFA         | N-Type    | Internal Antenna |            |
| 5   | 8    | -           | -         | -         | -                 | 2   | CISCO | CW-ANT-GPS2-S-00 | Patch        | SMA       | External Antenna |            |
| 6   | 9    | 2           | 2         | -         | -                 | -   | CISCO | CW-ANT-D1-NS-00  | Patch        | N-Type    | External Antenna |            |
|     | 10   | 1           | 1         | -         | -                 | -   | CISCO | CW-ANT-D1-NS-00  | Patch        | N-Type    | External Antenna |            |
|     | 11   | -           | -         | 1         | -                 | -   | CISCO | CW-ANT-D1-NS-00  | Patch        | N-Type    | External Antenna |            |
|     | 12   | -           | -         | 2         | -                 | -   | CISCO | CW-ANT-D1-NS-00  | Patch        | N-Type    | External Antenna |            |



Note1:

| Ant. | Gain (dBi) |             |              |              |             |             |             |                    |      |
|------|------------|-------------|--------------|--------------|-------------|-------------|-------------|--------------------|------|
|      | 2.4GHz     | 5GHz UNII 1 | 5GHz UNII 2A | 5GHz UNII 2C | 5GHz UNII 3 | 6GHz UNII 5 | 6GHz UNII 7 | Bluetooth / Zigbee | GPS  |
| 1    | 4          | 8           | 8            | 8            | 8           | -           | -           | -                  | -    |
| 2    | 4          | 8           | 8            | 8            | 8           | -           | -           | -                  | -    |
| 3    | -          | -           | -            | -            | -           | 8           | 8           | -                  | -    |
| 4    | -          | -           | -            | -            | -           | 8           | 8           | -                  | -    |
| 5    | 4.9        | 3           | 3            | 3.1          | 3           | 2.8         | 3.2         | -                  | -    |
| 6    | -          | -           | -            | -            | -           | -           | -           | 5.7                | -    |
| 7    | -          | -           | -            | -            | -           | -           | -           | -                  | 3.7  |
| 8    | -          | -           | -            | -            | -           | -           | -           | -                  | 3.18 |
| 9    | 8          | 9           | 9            | 9            | 9           | -           | -           | -                  | -    |
| 10   | 8          | 9           | 9            | 9            | 9           | -           | -           | -                  | -    |
| 11   | -          | -           | -            | -            | -           | 9           | 9           | -                  | -    |
| 12   | -          | -           | -            | -            | -           | 9           | 9           | -                  | -    |

Note2: The above information was declared by manufacturer.

Note3: The antenna 9~ 10 is the cross-polarized antenna; it doesn't need to evaluate array gain.

Note4: For radio 1: The EUT can be equipped with antenna set 1 or set 6 for radio 1.



Note5: Directional gain information

| Type   | Maximum Output Power  | Power Spectral Density  |
|--------|---|---|
| Non-BF | Directional gain = Max.gain + array gain.<br>For power measurements on IEEE 802.11 devices<br>Array Gain = 0 dB (i.e., no array gain) for N ANT ≤ 4 | $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{ANT}} \left[ \sum_{k=1}^{N_{ANT}} g_{j,k} \right]^2}{N_{ANT}} \right]$ |
| BF     | $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{ANT}} \left[ \sum_{k=1}^{N_{ANT}} g_{j,k} \right]^2}{N_{ANT}} \right]$                 | $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{ANT}} \left[ \sum_{k=1}^{N_{ANT}} g_{j,k} \right]^2}{N_{ANT}} \right]$ |

Ex.

Directional Gain (NSS1) formula :

$$DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{ANT}} \left[ \sum_{k=1}^{N_{ANT}} g_{j,k} \right]^2}{N_{ANT}} \right]$$

$$NSS1(g1,1) = 10^{G1/20} ; NSS1(g1,2) = 10^{G2/20} ; NSS1(g1,3) = 10^{G3/20} ; NSS1(g1,4) = 10^{G4/20}$$

$$g_{j,k} = (NSS1(g1,1) + NSS1(g1,2) + NSS1(g1,3) + NSS1(g1,4))^2$$

$$DG = 10 \log[(NSS1(g1,1) + NSS1(g1,2) + NSS1(g1,3) + NSS1(g1,4))^2 / N_{ANT}] => 10$$

$$\log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20} + 10^{G4/20})^2 / N_{ANT}]$$

Where ;

Set 1 Ant. Dipole

2.4G G1= 4 dBi ; G2= 4 dBi ;DG= 7.01dBi

5G G1= 8 dBi ; G2= 8 dBi ;DG= 11.01dBi

6G G1= 8 dBi ; G2= 8 dBi ;DG= 11.01dBi

Set 6 Ant. Patch Patch (Cross-Polarized Antenna)

2.4G G1= 8.00 dBi ;G2= 8.00 dBi ;

5G UNII-1 G1 = 9.00 dBi; G2 = 9.00 dBi;

5G UNII-2A G1 = 9.00 dBi; G2 = 9.00 dBi;

5G UNII-2C G1 = 9.00 dBi; G2 = 9.00 dBi;

5G UNII-3 G1 = 9.00 dBi; G2 = 9.00 dBi;

2.4G DG = 8.00 dBi

5G UNII-1 DG = 9.00 dBi

5G UNII-2A DG = 9.00 dBi

5G UNII-2C DG = 9.00 dBi

5G UNII-3 DG = 9.00 dBi

Set 6 Ant. Patch

6G G1= 9 dBi ; G2= 9 dBi ;DG= 12.01dBi





**<For Radio 1 (2.4GHz/5GHz/6GHz Functions)>**

**IEEE 802.11a/b/g/n/VHT/ax**

**For 1TX/2RX:**

The EUT supports the antenna with TX diversity functions.

Both Port 1 and Port 2 support transmit and receive functions, but only one of them will be used to transmit at one time.

**For 2TX/2RX:**

Port 1 and Port 2 can be used as transmitting/receiving antenna.

Port 1 and Port 2 could transmit/receive simultaneously.

**<For Scanning Radio 2 (2.4GHz/5GHz/6GHz Functions)>**

**IEEE 802.11a/b/g/n/VHT/ax**

**For 1TX/1RX:**

Only Port 1 can be use as transmitting/receiving antenna.

**<For Radio 3 / Bluetooth/Zigbee Functions>**

**For 1TX/1RX:**

Only Port 1 can be use as transmitting/receiving antenna.

**<For Radio 4 / GPS Functions>**

**For 1RX:**

The EUT supports the antenna with RX diversity functions.

Both Port 1 and Port 2 support receive functions, but only one of them will be used to receive at one time.



### 1.1.3 Mode Test Duty Cycle

For Radio 1 + Set 6 Ant.

For 1TX/Port 1

| Mode            | DC    | DCF(dB) | T(s)   | VBW(Hz) ≥ 1/T |
|-----------------|-------|---------|--------|---------------|
| 802.11ax HEW20  | 0.816 | 0.88    | 5.452m | 300           |
| 802.11ax HEW40  | 0.815 | 0.89    | 5.452m | 300           |
| 802.11ax HEW80  | 0.811 | 0.91    | 5.452m | 300           |
| 802.11ax HEW160 | 0.811 | 0.91    | 5.452m | 300           |

For 1TX/Port 2

| Mode            | DC    | DCF(dB) | T(s)   | VBW(Hz) ≥ 1/T |
|-----------------|-------|---------|--------|---------------|
| 802.11ax HEW20  | 0.816 | 0.88    | 5.452m | 300           |
| 802.11ax HEW40  | 0.815 | 0.89    | 5.452m | 300           |
| 802.11ax HEW80  | 0.811 | 0.91    | 5.452m | 300           |
| 802.11ax HEW160 | 0.811 | 0.91    | 5.452m | 300           |

For 2TX

| Mode               | DC    | DCF(dB) | T(s)   | VBW(Hz) ≥ 1/T |
|--------------------|-------|---------|--------|---------------|
| 802.11ax HEW20     | 0.816 | 0.88    | 5.452m | 300           |
| 802.11ax HEW20-BF  | 0.969 | 0.14    | 3.441m | 300           |
| 802.11ax HEW40     | 0.815 | 0.89    | 5.452m | 300           |
| 802.11ax HEW40-BF  | 0.937 | 0.28    | 3.45m  | 300           |
| 802.11ax HEW80     | 0.811 | 0.91    | 5.452m | 300           |
| 802.11ax HEW80-BF  | 0.926 | 0.33    | 3.7m   | 300           |
| 802.11ax HEW160    | 0.811 | 0.91    | 5.452m | 300           |
| 802.11ax HEW160-BF | 0.928 | 0.32    | 3.894m | 300           |

Note:

- ◆ DC is Duty Cycle.
- ◆ DCF is Duty Cycle Factor.



**1.1.4 EUT Operational Condition**

|                                    |  |   |
|------------------------------------|--|---|
| <b>EUT Power Type</b>              | From PoE   |   |
| <b>Beamforming Function</b>        | <input checked="" type="checkbox"/> With beamforming   | <input type="checkbox"/> Without beamforming                    |
|                                    | The product has beamforming function for 11n/VHT/ax in 2.4GHz, n/ac/ax in 5GHz and ax in 6GHz. |   |
| <b>Device Type</b>                 | <input type="checkbox"/> Indoor Access Point   | <input type="checkbox"/> Subordinate                            |
|                                    | <input type="checkbox"/> Indoor Client   | <input checked="" type="checkbox"/> Standard Power Access Point |
|                                    | <input type="checkbox"/> Dual Client   | <input type="checkbox"/> Standard Client                        |
|                                    | <input type="checkbox"/> Fixed Client  |   |
| <b>Channel Puncturing Function</b> | <input type="checkbox"/> Supported   | <input checked="" type="checkbox"/> Unsupported                 |
| <b>Support RU</b>                  | <input checked="" type="checkbox"/> Full RU  | <input type="checkbox"/> Partial RU                             |
| <b>Test Software Version</b>       | QSPR Version 5.0-00202   |   |

Note: The above information was declared by manufacturer.

**1.1.5 Table for Multiple Listing**

The model names in the following table are all refer to the identical product.

| Model Name | SW     |
|------------|--------|
| CW9163E-B  | Cisco  |
| CW9163E-MR | Meraki |

Note 1: From the above models, model: CW9163E-B was selected as representative model for the test and its data was recorded in this report.

Note 2: The above information was declared by manufacturer.

**1.1.6 Table for Radio Function**

| Radio | Support Band   |
|-------|--|
| 1     | 2.4GHz / 5GHz UNII 1~UNII 3 / 6GHz UNII5 , UNII 7          |
| 2     | Scanning 2.4GHz / 5GHz UNII 1~UNII 3 / 6GHz UNII5 , UNII 7 |
| 3     | Bluetooth / Zigbee   |
| 4     | GPS  |

Note1: The above information was declared by manufacturer.

Note2: The Radio 1 and Radio 2 can't be operated simultaneously.



**1.1.7 Table for EUT Information**

| <b>EUT</b> | <b>RJ-45 Connector</b>                      | <b>Console Connector</b>                   |
|------------|---|--|
| 1          | Brand Name: UDE<br>Model Name: R66-MK-3001  | Brand Name: UDE<br>Model Name: R66-MK-2001 |
| 2          | Brand Name: ODS<br>Model Name: CMK-RJ45-CAP | Brand Name: ODS<br>Model Name: CMK-RJ45-CG |

Note1: From the above EUTs, EUT 1 was selected as representative EUT for all the tests.

Note2: The above information was declared by manufacturer.

**1.1.8 Table for Permissive Change**

This product is an extension of original one reported under Sporton project number: FR340101-02

Below is the table for the change of the product with respect to the original one.

| <b>Modifications</b>  | <b>Performance Checking</b>                                      |
|---|--|
| 1. Adding one set antenna (antenna set 6) with different antenna type and higher gain for Radio 1 use only. | All test items   |
| 2. Adding a bracket of antenna and used for antenna set 6.  | After evaluating, it is not necessary to re-test all test items. |



### 1.2 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ◆ 47 CFR FCC Part 15.407
- ◆ ANSI C63.10-2013
- ◆ FCC KDB 789033 D02 v02r01

The following reference test guidance is not within the scope of accreditation of TAF.

- ◆ FCC KDB 987594 D02 v02r01
- ◆ FCC KDB 662911 D01 v02r01
- ◆ FCC KDB 412172 D01 v01r01
- ◆ FCC KDB 414788 D01 v01r01

### 1.3 Testing Location Information

| Testing Location Information                              |  |
|---|--|
| Test Lab. : Sporton International Inc. Hsinchu Laboratory |  |
| Hsinchu   | ADD: No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.) |
| (TAF: 3787)   | TEL: 886-3-656-9065 FAX: 886-3-656-9085  |
|   | Test site Designation No. TW3787 with FCC.   |
|   | Conformity Assessment Body Identifier (CABID) TW3787 with ISED.                    |

| Test Condition                           | Test Site No. | Test Engineer | Test Environment (°C / %) | Test Date                   |
|--|---------------|---------------|---------------------------|-----------------------------|
| RF Conducted                             | TH01-CB       | Ken Yeh       | 20.5~21.3 / 63~67         | Oct. 17, 2023~Oct. 31, 2023 |
|  |               |               |                           | Mar. 13, 2024~Mar.14, 2024  |
| Radiated below 1GHz                      | 03CH01-CB     | Jackson Peng  | 21.2-22.3 / 56-59         | Oct. 17, 2023~Nov.17, 2023  |
| Radiated (E.I.R.P. Power/PSD/above 1GHz) | 03CH01-CB     | Jackson Peng  | 21.2-22.3 / 56-59         | Oct. 17, 2023~Nov.17, 2023  |
|  | 03CH02-CB     |               | 22.2-23.3 / 56-59         |                             |
|  | 03CH04-CB     |               | 23-24 / 56-59             |                             |
| AC Conduction                            | CO01-CB       | Joe Chu       | 22~23 / 54~55             | Nov. 23, 2023               |



### 1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

| Test Items                           | Uncertainty | Remark                   |
|--------------------------------------|-------------|--------------------------|
| Conducted Emission (150kHz ~ 30MHz)  | 3.4 dB      | Confidence levels of 95% |
| Radiated Emission (9kHz ~ 30MHz)     | 3.7 dB      | Confidence levels of 95% |
| Radiated Emission (30MHz ~ 1,000MHz) | 5.1 dB      | Confidence levels of 95% |
| Radiated Emission (1GHz ~ 18GHz)     | 4.1 dB      | Confidence levels of 95% |
| Radiated Emission (18GHz ~ 40GHz)    | 4.2 dB      | Confidence levels of 95% |
| Conducted Emission                   | 3.1 dB      | Confidence levels of 95% |
| Output Power Measurement             | 0.8 dB      | Confidence levels of 95% |
| Power Density Measurement            | 3.1 dB      | Confidence levels of 95% |
| Bandwidth Measurement                | 2.2%        | Confidence levels of 95% |



## 2 Test Configuration of EUT

### 2.1 Test Channel Mode

For Radio 1 + Set 6 Ant.  
For 1TX/Port 1:

| Mode                            | Power Setting |
|---------------------------------|---------------|
| 802.11ax HEW20_Nss1,(MCS0)_1TX  | -             |
| 5955MHz                         | 26.5          |
| 6195MHz                         | 27            |
| 6415MHz                         | 26.5          |
| 6535MHz                         | 24.5          |
| 6695MHz                         | 24.5          |
| 6855MHz                         | 24.5          |
| 802.11ax HEW40_Nss1,(MCS0)_1TX  | -             |
| 5965MHz                         | 23            |
| 6205MHz                         | 26            |
| 6405MHz                         | 26            |
| 6565MHz                         | 24.5          |
| 6685MHz                         | 24            |
| 6845MHz                         | 24.5          |
| 802.11ax HEW80_Nss1,(MCS0)_1TX  | -             |
| 5985MHz                         | 23            |
| 6225MHz                         | 26            |
| 6385MHz                         | 26            |
| 6625MHz                         | 24.5          |
| 6705MHz                         | 24.5          |
| 6785MHz                         | 24.5          |
| 802.11ax HEW160_Nss1,(MCS0)_1TX | -             |
| 6025MHz                         | 23.5          |
| 6185MHz                         | 26            |
| 6345MHz                         | 25.5          |
| 6665MHz                         | 24            |



**For 1TX/Port 2:**

| <b>Mode</b>                     | <b>Power Setting</b> |
|---------------------------------|----------------------|
| 802.11ax HEW20_Nss1,(MCS0)_1TX  | -                    |
| 5955MHz                         | 26                   |
| 6195MHz                         | 28                   |
| 6415MHz                         | 27                   |
| 6535MHz                         | 26                   |
| 6695MHz                         | 26                   |
| 6855MHz                         | 27                   |
| 802.11ax HEW40_Nss1,(MCS0)_1TX  | -                    |
| 5965MHz                         | 22.5                 |
| 6205MHz                         | 28                   |
| 6405MHz                         | 26                   |
| 6565MHz                         | 25                   |
| 6685MHz                         | 26                   |
| 6845MHz                         | 26                   |
| 802.11ax HEW80_Nss1,(MCS0)_1TX  | -                    |
| 5985MHz                         | 23                   |
| 6225MHz                         | 28                   |
| 6385MHz                         | 26                   |
| 6625MHz                         | 26                   |
| 6705MHz                         | 26                   |
| 6785MHz                         | 26                   |
| 802.11ax HEW160_Nss1,(MCS0)_1TX | -                    |
| 6025MHz                         | 23                   |
| 6185MHz                         | 28                   |
| 6345MHz                         | 25.5                 |
| 6665MHz                         | 26                   |





**For 2TX:**

| <b>Mode</b>                       | <b>Power Setting</b> |
|-----------------------------------|----------------------|
| 802.11ax HEW20_Nss1,(MCS0)_2TX    | -                    |
| 5955MHz                           | 23.5                 |
| 6195MHz                           | 23.5                 |
| 6415MHz                           | 23.5                 |
| 6535MHz                           | 22                   |
| 6695MHz                           | 22                   |
| 6855MHz                           | 22                   |
| 802.11ax HEW20-BF_Nss1,(MCS0)_2TX | -                    |
| 5955MHz                           | 24                   |
| 6195MHz                           | 24                   |
| 6415MHz                           | 24                   |
| 6535MHz                           | 23                   |
| 6695MHz                           | 23                   |
| 6855MHz                           | 23                   |
| 802.11ax HEW40_Nss1,(MCS0)_2TX    | -                    |
| 5965MHz                           | 22                   |
| 6205MHz                           | 23.5                 |
| 6405MHz                           | 23.5                 |
| 6565MHz                           | 22                   |
| 6685MHz                           | 22                   |
| 6845MHz                           | 22                   |
| 802.11ax HEW40-BF_Nss1,(MCS0)_2TX | -                    |
| 5965MHz                           | 24                   |
| 6205MHz                           | 24                   |
| 6405MHz                           | 24                   |
| 6565MHz                           | 23                   |
| 6685MHz                           | 23                   |
| 6845MHz                           | 22                   |
| 802.11ax HEW80_Nss1,(MCS0)_2TX    | -                    |
| 5985MHz                           | 22                   |
| 6225MHz                           | 23.5                 |
| 6385MHz                           | 23.5                 |
| 6625MHz                           | 22                   |
| 6705MHz                           | 22                   |
| 6785MHz                           | 22                   |
| 802.11ax HEW80-BF_Nss1,(MCS0)_2TX | -                    |
| 5985MHz                           | 24                   |
| 6225MHz                           | 24                   |



| <b>Mode</b>                        | <b>Power Setting</b> |
|------------------------------------|----------------------|
| 6385MHz                            | 24                   |
| 6625MHz                            | 22                   |
| 6705MHz                            | 23                   |
| 6785MHz                            | 23                   |
| 802.11ax HEW160_Nss1,(MCS0)_2TX    | -                    |
| 6025MHz                            | 22.5                 |
| 6185MHz                            | 23.5                 |
| 6345MHz                            | 23.5                 |
| 6665MHz                            | 22                   |
| 802.11ax HEW160-BF_Nss1,(MCS0)_2TX | -                    |
| 6025MHz                            | 24                   |
| 6185MHz                            | 24                   |
| 6345MHz                            | 24                   |
| 6665MHz                            | 23                   |



## 2.2 The Worst Case Measurement Configuration

| The Worst Case Mode for Following Conformance Tests  |   |
|--|---|
| <b>Tests Item</b>  | AC power-line conducted emissions   |
| <b>Condition</b>   | AC power-line conducted measurement for line and neutral<br>Test Voltage: 120Vac / 60Hz |
| <b>Operating Mode</b>  | CTX   |
| <p>1. The EUT powered by PoE 1~5, and "PoE 3" has been evaluated to be the worst case. Thus, the measurement will follow this same test mode.</p> <p>2. There are EUT 1 and EUT 2, and "EUT 1" has been evaluated to be the worst case. Thus, the measurement will follow this same test mode.</p> |   |
| 1  | EUT 1 + Radio 1 (2.4GHz) + PoE 3 + Set 6 Ant.   |
| 2  | EUT 1 + Radio 1 (5GHz) + PoE 3 + Set 6 Ant.   |
| 3  | EUT 1 + Radio 1 (6GHz) + PoE 3 + Set 6 Ant.   |
| For operating mode 1 is the worst case and it was record in this test report.  |   |

| The Worst Case Mode for Following Conformance Tests |   |
|---|---|
| <b>Tests Item</b>                                   | Emission Bandwidth<br>E.I.R.P. at any elevation angle above 30 degrees<br>Emission MASK |
| <b>Test Condition</b>                               | Conducted measurement at transmit chains  |
| 1   | EUT 1 + Radio 1 + Set 6 Ant.  |

| The Worst Case Mode for Following Conformance Tests   |   |
|---|---|
| <b>Tests Item</b>   | Maximum Equivalent Isotropically Radiated Power (E.I.R.P.)<br>Peak Power Spectral Density (E.I.R.P.)  |
| <b>Test Condition</b>   | Radiated measurement<br>If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type. |
| After evaluating, and the worst case was found at Y axis, so it was selected to perform test and its test result was written in the report. |   |
| 1   | EUT 1 + Radio 1 + Set 6 Ant.  |



| <b>The Worst Case Mode for Following Conformance Tests</b>   |   |
|--|---|
| <b>Tests Item</b>  | Unwanted Emissions  |
| <b>Test Condition</b>  | Radiated measurement<br>If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type. |
| <b>Operating Mode &lt; 1GHz</b>  | CTX   |
| 1. After evaluating, the worst case was found at Y axis. So the measurement will follow this same test configuration.<br>2. The EUT powered by PoE 1~5, and "PoE 5" has been evaluated to be the worst case. Thus, the measurement will follow this same test mode.<br>3. There are EUT 1 and EUT 2, and "EUT 1" has been evaluated to be the worst case. Thus, the measurement will follow this same test mode. |   |
| 1  | EUT 1 in Y axis + Radio 1 (2.4GHz) + PoE 5 + Set 6 Ant.   |
| 2  | EUT 1 in Y axis + Radio 1 (5GHz) + PoE 5 + Set 6 Ant.   |
| 3  | EUT 1 in Y axis + Radio 1 (6GHz) + PoE 5 + Set 6 Ant.   |
| For operating mode 3 is the worst case and it was record in this test report.  |   |
| <b>Operating Mode &gt; 1GHz</b>  | CTX   |
|  | After evaluating, the worst case was found at Y axis. So the measurement will follow this same test configuration.  |
| 1  | EUT 1 in Y axis + Radio 1 + Set 6 Ant.  |



| The Worst Case Mode for Following Conformance Tests                                   |   |
|---|---|
| Tests Item  | Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation   |
| Operating Mode  |   |
| 1   | Radio 1 + Set 1 Ant. (WLAN 2.4GHz+5GHz+6GHz) + Scanning Radio 2 Set 2 Ant. (WLAN 2.4GHz) + Radio 3 (Bluetooth) + Set 3 Ant. |
| 2   | Radio 1 + Set 1 Ant. (WLAN 2.4GHz+5GHz+6GHz) + Scanning Radio 2 Set 2 Ant. (WLAN 5GHz) + Radio 3 (Bluetooth) + Set 3 Ant.   |
| 3   | Radio 1 + Set 1 Ant. (WLAN 2.4GHz+5GHz+6GHz) + Scanning Radio 2 Set 2 Ant. (WLAN 6Hz) + Radio 3 (Bluetooth) + Set 3 Ant.    |
| 4   | Radio 1 + Set 1 Ant. (WLAN 2.4GHz+5GHz+6GHz) + Scanning Radio 2 Set 2 Ant. (WLAN 2.4GHz) + Radio 3 (Zigbee) + Set 3 Ant.    |
| 5   | Radio 1 + Set 1 Ant. (WLAN 2.4GHz+5GHz+6GHz) + Scanning Radio 2 Set 2 Ant. (WLAN 5GHz) + Radio 3 (Zigbee) + Set 3 Ant.      |
| 6   | Radio 1 + Set 1 Ant. (WLAN 2.4GHz+5GHz+6GHz) + Scanning Radio 2 Set 2 Ant. (WLAN 6Hz) + Radio 3 (Zigbee) + Set 3 Ant.       |
| 7   | Radio 1 + Set 6 Ant. (WLAN 2.4GHz+5GHz+6GHz) + Scanning Radio 2 Set 2 Ant. (WLAN 2.4GHz) + Radio 3 (Bluetooth) + Set 3 Ant. |
| 8   | Radio 1 + Set 6 Ant. (WLAN 2.4GHz+5GHz+6GHz) + Scanning Radio 2 Set 2 Ant. (WLAN 5GHz) + Radio 3 (Bluetooth) + Set 3 Ant.   |
| 9   | Radio 1 + Set 6 Ant. (WLAN 2.4GHz+5GHz+6GHz) + Scanning Radio 2 Set 2 Ant. (WLAN 6Hz) + Radio 3 (Bluetooth) + Set 3 Ant.    |
| 10  | Radio 1 + Set 6 Ant. (WLAN 2.4GHz+5GHz+6GHz) + Scanning Radio 2 Set 2 Ant. (WLAN 2.4GHz) + Radio 3 (Zigbee) + Set 3 Ant.    |
| 11  | Radio 1 + Set 6 Ant. (WLAN 2.4GHz+5GHz+6GHz) + Scanning Radio 2 Set 2 Ant. (WLAN 5GHz) + Radio 3 (Zigbee) + Set 3 Ant.      |
| 12  | Radio 1 + Set 6 Ant. (WLAN 2.4GHz+5GHz+6GHz) + Scanning Radio 2 Set 2 Ant. (WLAN 6Hz) + Radio 3 (Zigbee) + Set 3 Ant.       |
| Refer to Sporton Test Report No.: FA340101-03 for Co-location RF Exposure Evaluation. |   |

Note: The PoEs are for measurement only, would not be marketed.

PoE information as below:

| Power | Brand Name | Model Name     |
|-------|------------|----------------|
| PoE 1 | PHIHONG    | POEA33U-1ATE   |
| PoE 2 | PHIHONG    | POE60U-1BT-X   |
| PoE 3 | PHIHONG    | POE29U-1AT(PL) |
| PoE 4 | Delta      | ADH-65AR B     |
| PoE 5 | Cisco      | POEO75U-1BT    |



### 2.3 EUT Operation during Test

For CTX Mode:

non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

beamforming mode:

For Conducted Mode:

The EUT was programmed to be in continuously transmitting mode.

For Radiated Mode:

During the test, the following programs under WIN 10 were executed.

The program was executed as follows:

1. During the test, the EUT operation to normal function.
2. Executed command fixed test channel under QSPR.
3. Executed "Lantest.exe" to link with the remote workstation to transmit and receive packet by WLAN module and transmit duty cycle no less than 98%.

### 2.4 Accessories

| Equipment                             | Brand Name | Model Name    | Remark              |
|---------------------------------------|------------|---------------|---------------------|
| Mount bracket 1*1                     | Meraki     | MA-MNT-MR-16  | Used for CW9163E-MR |
| Mount bracket 2*1                     | Cisco      | AIR-MNT-VERT1 | Used for CW9163E-B  |
| Waterproof Covering (Cap) 1*1         | UDE        | R66-MK-3001   | Used for EUT 1      |
| Waterproof Covering (Cap) 2*1         | ODS        | CMK-RJ45-CAP  | Used for EUT 2      |
| Waterproof Covering (Cable Gland) 1*1 | UDE        | R66-MK-2001   | Used for EUT 1      |
| Waterproof Covering (Cable Gland) 2*1 | ODS        | CMK-RJ45-CG   | Used for EUT 2      |
| Bracket of antenna                    | Cisco      | CW-WNT-ART2   | Used for Ant.9~12   |



## 2.5 Support Equipment

For AC Conduction:

| Support Equipment |           |            |                |        |
|-------------------|-----------|------------|----------------|--------|
| No.               | Equipment | Brand Name | Model Name     | FCC ID |
| A                 | LAN NB    | DELL       | E6430          | N/A    |
| B                 | PoE 3     | PHIHONG    | POE29U-1AT(PL) | N/A    |

For Radiated (below 1GHz), Radiated (E.I.R.P Power/PSD/above 1GHz)-Non-beamforming mode:

| Support Equipment |           |            |             |        |
|-------------------|-----------|------------|-------------|--------|
| No.               | Equipment | Brand Name | Model Name  | FCC ID |
| A                 | PoE 5     | Cisco      | POEO75U-1BT | N/A    |
| B                 | NB        | DELL       | E6430       | N/A    |

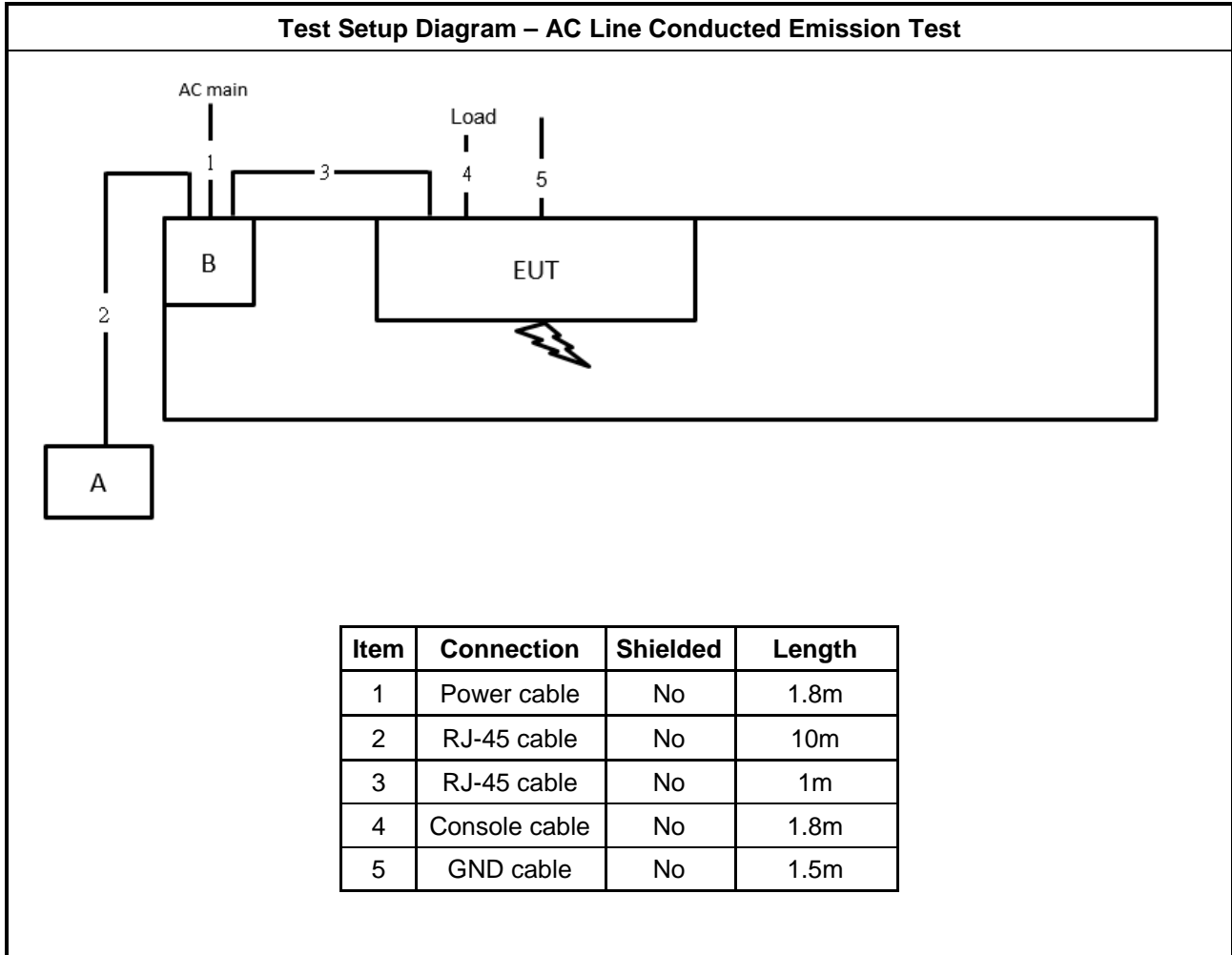
For Radiated (E.I.R.P Power/PSD/above 1GHz)-Beamforming mode:

| Support Equipment |             |            |             |        |
|-------------------|-------------|------------|-------------|--------|
| No.               | Equipment   | Brand Name | Model Name  | FCC ID |
| A                 | PoE 5       | Cisco      | POEO75U-1BT | N/A    |
| B                 | NB          | DELL       | E6430       | N/A    |
| C                 | NB          | DELL       | E6430       | N/A    |
| D                 | WLAN module | Intel      | AX210NGW    | N/A    |

For RF Conducted:

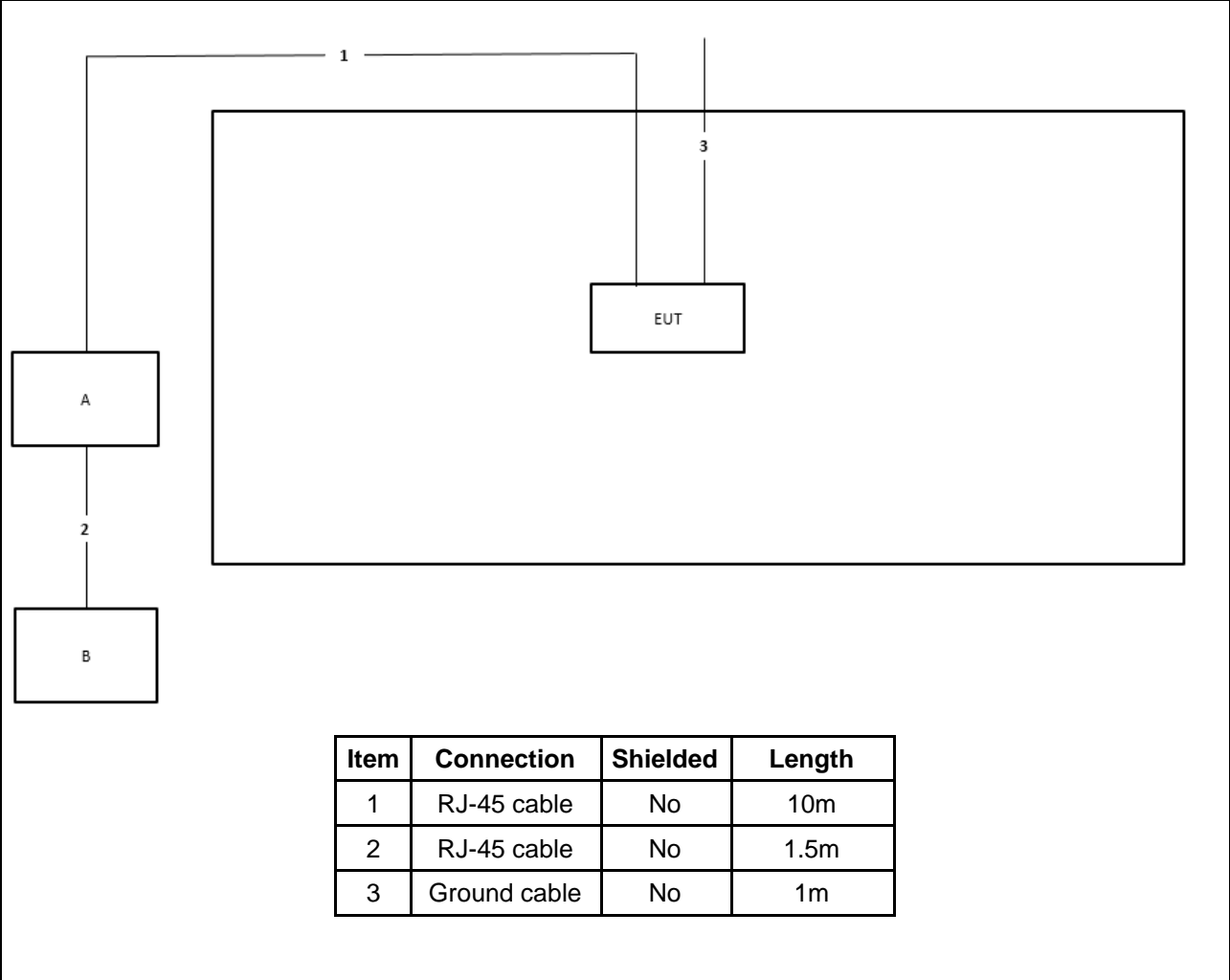
| Support Equipment |           |            |            |        |
|-------------------|-----------|------------|------------|--------|
| No.               | Equipment | Brand Name | Model Name | FCC ID |
| A                 | NB        | DELL       | E4300      | N/A    |
| B                 | PoE 4     | Delta      | ADH-65AR B | N/A    |

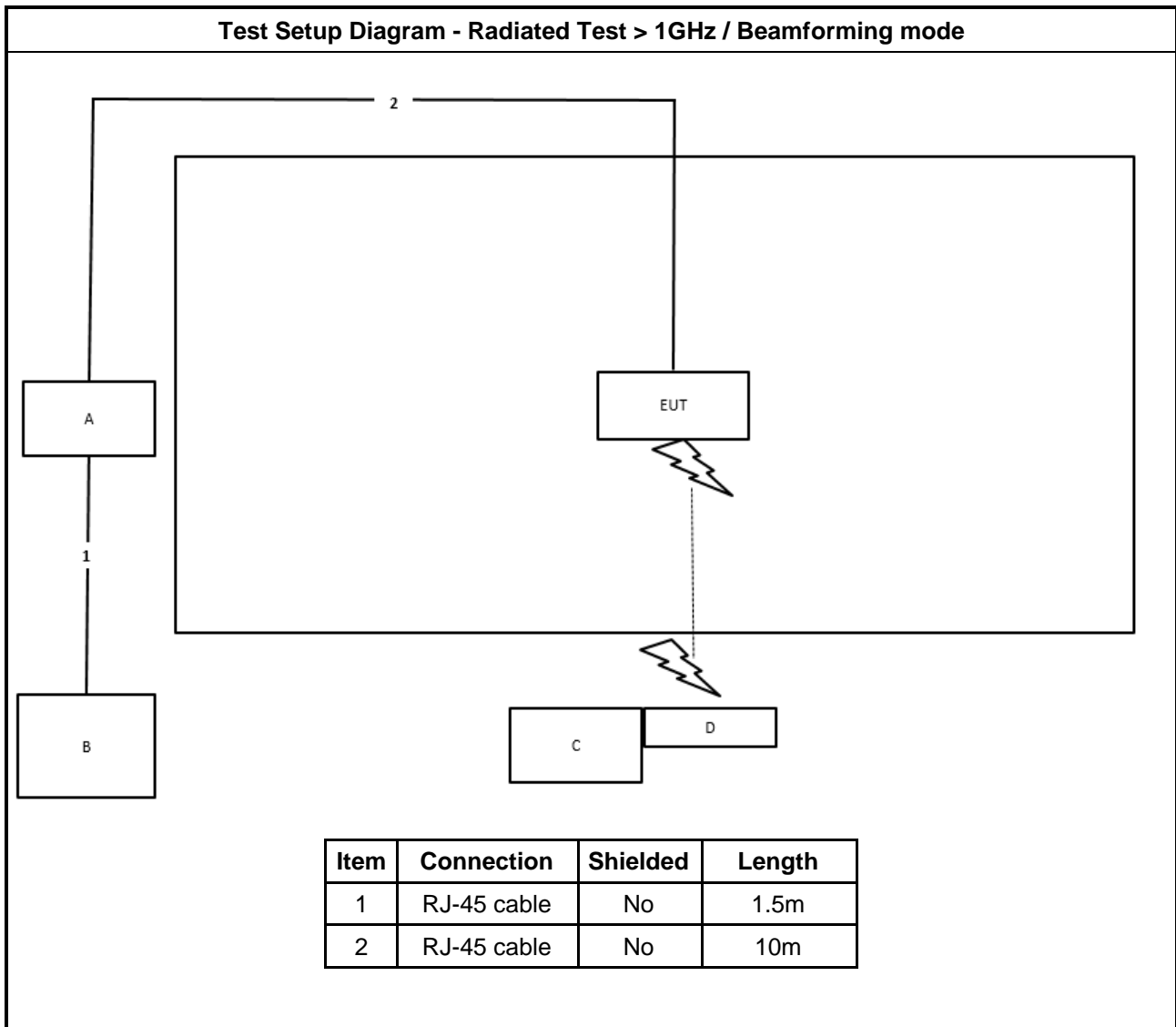
## 2.6 Test Setup Diagram





**Test Setup Diagram - Radiated Test < 1GHz and Radiated Test > 1GHz / Non-beamforming mode**







### 3 Transmitter Test Result

#### 3.1 AC Power-line Conducted Emissions

##### 3.1.1 AC Power-line Conducted Emissions Limit

| AC Power-line Conducted Emissions Limit |            |           |
|---|------------|-----------|
| Frequency Emission (MHz)                | Quasi-Peak | Average   |
| 0.15-0.5                                | 66 - 56 *  | 56 - 46 * |
| 0.5-5                                   | 56         | 46        |
| 5-30                                    | 60         | 50        |

Note 1: \* Decreases with the logarithm of the frequency.

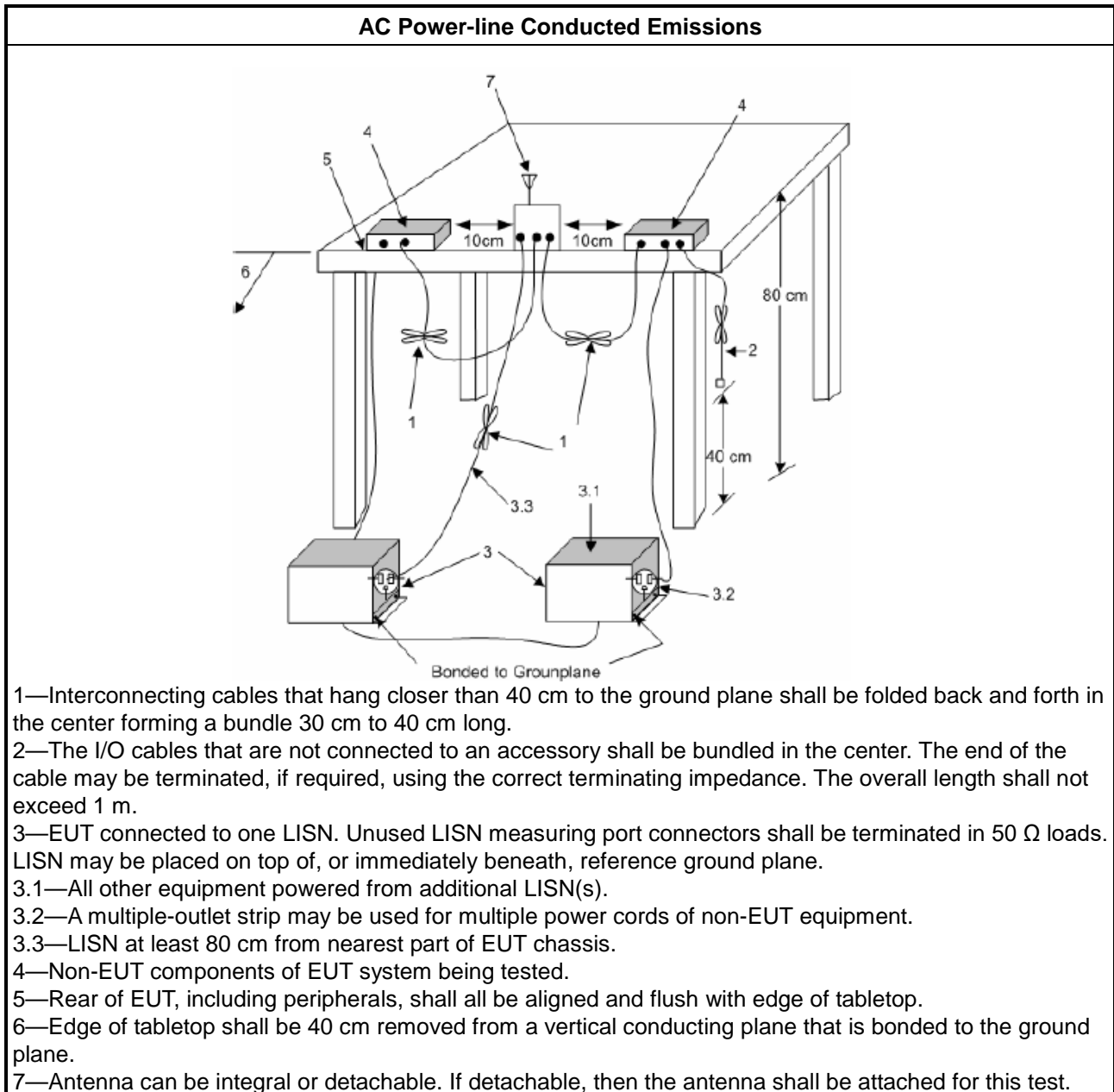
##### 3.1.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

##### 3.1.3 Test Procedures

| Test Method  |
|--|
| <input checked="" type="checkbox"/> Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions. |

### 3.1.4 Test Setup



### 3.1.5 Measurement Results Calculation

The measured Level is calculated using:

- a. Corrected Reading (dBuV) = LISN Factor + Cable Loss + Read Level = Level
- b. Margin = - Limit + (Read Level + LISN Factor + Cable Loss)

### 3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

### 3.2 Emission Bandwidth

#### 3.2.1 Emission Bandwidth Limit

| Emission Bandwidth Limit            |                                 |
|-------------------------------------|---------------------------------|
| <b>UNII Devices</b>                 |                                 |
| <input checked="" type="checkbox"/> | For the 5925-6425 GHz band, N/A |
| <input type="checkbox"/>            | For the 6425-6525 GHz band, N/A |
| <input checked="" type="checkbox"/> | For the 6525-6875 GHz band, N/A |
| <input type="checkbox"/>            | For the 6875-7125 GHz band, N/A |
| <b>RLAN Devices</b>                 |                                 |
| <input type="checkbox"/>            | For the 5925-6425 GHz band, N/A |
| <input type="checkbox"/>            | For the 6425-6525 GHz band, N/A |
| <input type="checkbox"/>            | For the 6525-6875 GHz band, N/A |
| <input type="checkbox"/>            | For the 6875-7125 GHz band, N/A |

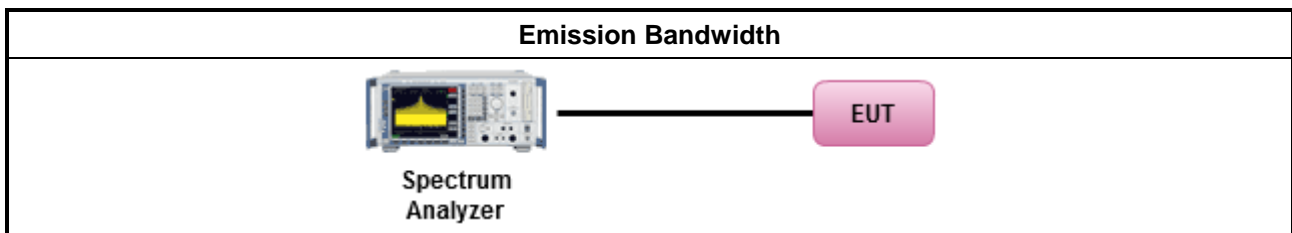
#### 3.2.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

#### 3.2.3 Test Procedures

| Test Method  |  |
|--|--|
| <ul style="list-style-type: none"> <li>▪ For the emission bandwidth shall be measured using one of the options below:</li> </ul> |  |
| <input checked="" type="checkbox"/>  | According to FCC KDB 987594 D02 clause II.C, measurement procedure shall refer to FCC KDB 789033 D02, clause C for EBW and clause D for OBW measurement. |
| <input type="checkbox"/>   | Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.   |
| <input type="checkbox"/>   | Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.   |

#### 3.2.4 Test Setup



#### 3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B



### 3.3 Maximum Equivalent Isotropically Radiated Power (E.I.R.P.)

#### 3.3.1 Maximum Equivalent Isotropically Radiated Power (E.I.R.P.) Limit

| Maximum Equivalent Isotropically Radiated Power (E.I.R.P.) Limit |   |
|--|---|
| <b>UNII Devices</b>  |   |
| <input checked="" type="checkbox"/>                              | For the 5.925 ~ 6.425 GHz band:   |
| <input type="checkbox"/>   | <ul style="list-style-type: none"> <li>▪ For standard power access point and fixed client device : e.i.r.p &lt; 36 dBm , For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees not exceed 125 mW (21 dBm).</li> <li>▪ For indoor access point : e.i.r.p &lt; 30 dBm.</li> <li>▪ For subordinate device control of an indoor access point : e.i.r.p &lt; 30 dBm.</li> <li>▪ For client device control of a standard power access point : e.i.r.p &lt; 30 dBm.</li> <li>▪ For client device control of an indoor access point : e.i.r.p &lt; 24 dBm.</li> </ul> |
| <input type="checkbox"/>   | For the 6.425 ~ 6.525 GHz band:   |
| <input type="checkbox"/>   | <ul style="list-style-type: none"> <li>▪ For indoor access point : e.i.r.p &lt; 30 dBm.</li> <li>▪ For client device control of an indoor access point : e.i.r.p &lt; 24 dBm.</li> </ul>  |
| <input checked="" type="checkbox"/>                              | For the 6.525 ~ 6.875 GHz band:   |
| <input type="checkbox"/>   | <ul style="list-style-type: none"> <li>▪ For standard power access point and fixed client device : e.i.r.p &lt; 36 dBm , For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees not exceed 125 mW (21 dBm).</li> <li>▪ For indoor access point : e.i.r.p &lt; 30 dBm.</li> <li>▪ For subordinate device control of an indoor access point : e.i.r.p &lt; 30 dBm.</li> <li>▪ For client device control of a standard power access point : e.i.r.p &lt; 30 dBm.</li> <li>▪ For client device control of an indoor access point : e.i.r.p &lt; 24 dBm.</li> </ul> |
| <input type="checkbox"/>   | For the 6.875 ~ 7.125 GHz band:   |
| <input type="checkbox"/>   | <ul style="list-style-type: none"> <li>▪ For indoor access point : e.i.r.p &lt; 30 dBm.</li> <li>▪ For client device control of an indoor access point : e.i.r.p &lt; 24 dBm.</li> </ul>  |
| <b>RLAN Devices</b>  |   |
| <input type="checkbox"/>   | For the 5.925 ~ 7.125 GHz band:   |
| <input type="checkbox"/>   | <ul style="list-style-type: none"> <li>▪ For low-power indoor access-points &amp; indoor subordinate devices &lt; 30 dBm .</li> <li>▪ For low-power client devices &lt; 24 dBm.</li> </ul>  |
| <input type="checkbox"/>   | For the 5.925 ~ 6.875 GHz band:   |
| <input type="checkbox"/>   | <ul style="list-style-type: none"> <li>▪ For standard-power access points &amp; fixed client devices &lt; 36 dBm.</li> <li>▪ For standard client devices &lt; 30 dBm.</li> </ul>  |

### 3.3.2 Measuring Instruments

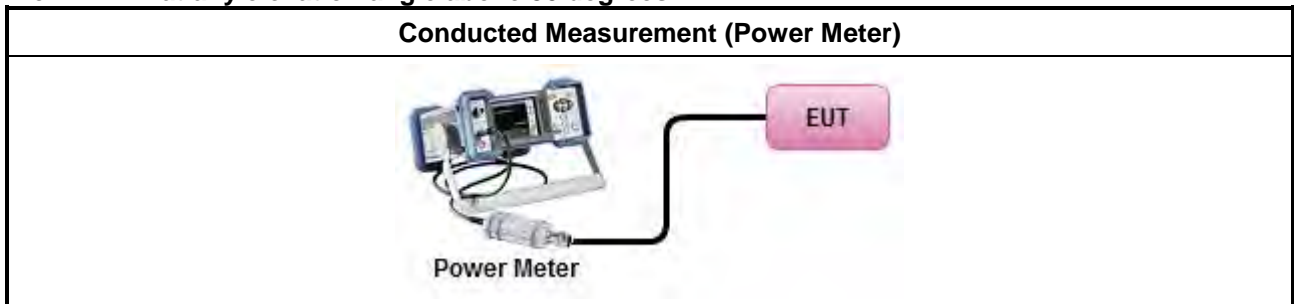
Refer a test equipment and calibration data table in this test report.

### 3.3.3 Test Procedures

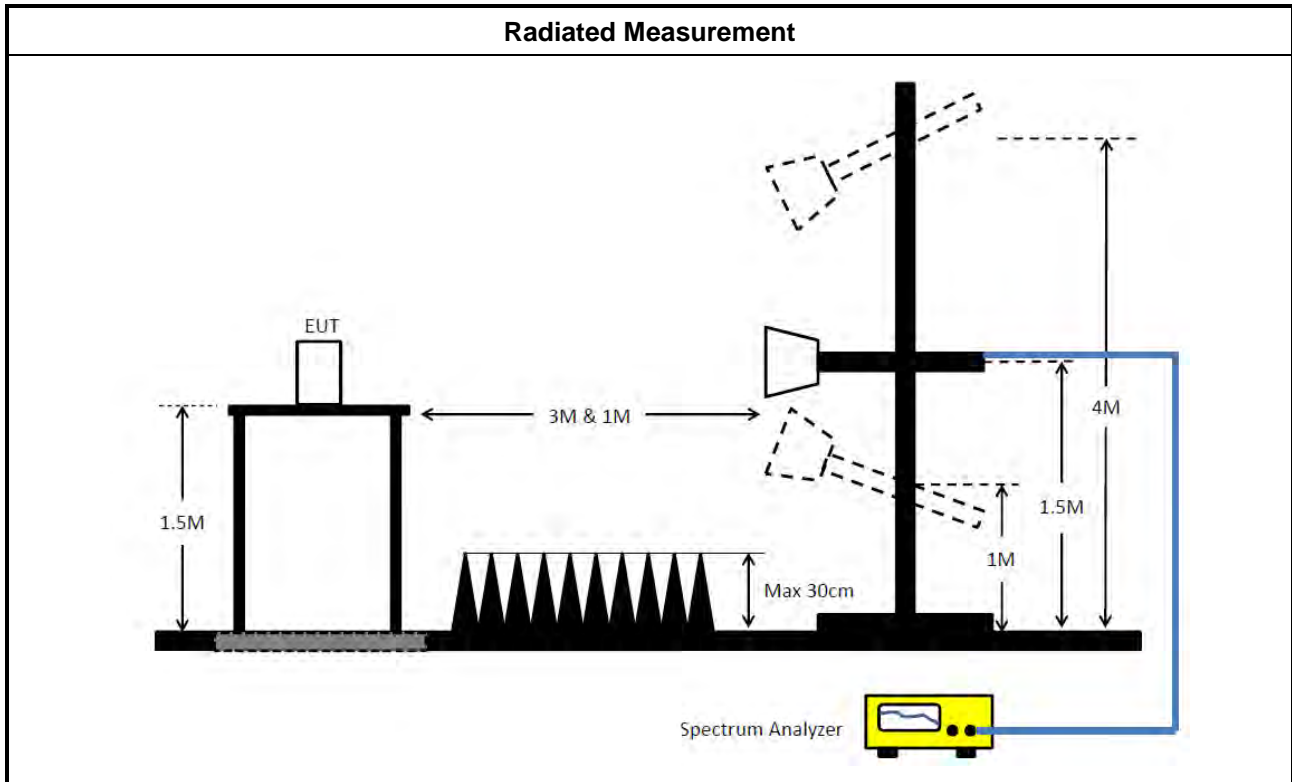
| Test Method  |  |
|--|--|
| <ul style="list-style-type: none"> <li>According to FCC KDB 987594 D02 clause II.E, the test measurement procedure shall refer to KDB 789033.</li> </ul>   |  |
| Average over on/off periods with duty factor   |  |
| <input checked="" type="checkbox"/>  | Refer as FCC KDB 789033 D02, clause E Method SA-2 (spectral trace averaging). For E.I.R.P. Power<br>Spectrum analyzer setting: RBW/VBW : 1/3MHz ; Detector : RMS ; Trace mode : Average ; Sweep Count 100. |
| <input type="checkbox"/>   | Refer as FCC KDB 789033 D02, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)   |
| Wideband RF power meter and average over on/off periods with duty factor   |  |
| <input checked="" type="checkbox"/>  | Refer as FCC KDB 789033 D02, clause E Method PM-G (using an RF average power meter). For E.I.R.P. at any elevation angle above 30 degrees  |
| <input checked="" type="checkbox"/>  | For conducted measurement. For E.I.R.P. at any elevation angle above 30 degrees  |
| <ul style="list-style-type: none"> <li>If the EUT supports multiple transmit chains using options given below:<br/>Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.</li> </ul> |  |
| <ul style="list-style-type: none"> <li>If multiple transmit chains, EIRP calculation could be following as methods:<br/> <math>P_{total} = P_1 + P_2 + \dots + P_n</math><br/>                     (calculated in linear unit [mW] and transfer to log unit [dBm])<br/> <math>EIRP_{total} = P_{total} + DG</math> </li> </ul>   |  |
| <input checked="" type="checkbox"/>  | For radiated measurement. For E.I.R.P. Power   |
| <ul style="list-style-type: none"> <li>Refer as FCC KDB 789033 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing"</li> <li>Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.</li> <li>Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation.</li> </ul>  |  |

### 3.3.4 Test Setup

For E.I.R.P. at any elevation angle above 30 degrees:



For E.I.R.P. Power:



### 3.3.5 Test Result of Maximum Equivalent Isotropically Radiated Power (E.I.R.P)

Refer as Appendix C





### 3.4 Peak Power Spectral Density (E.I.R.P.)

#### 3.4.1 Peak Power Spectral Density (E.I.R.P.) Limit

| Peak Power Spectral Density (E.I.R.P.) Limit |                                 |
|--|---------------------------------|
| <b>UNII Devices</b>                          |                                 |
| <input checked="" type="checkbox"/>          | For the 5.925 ~ 6.425 GHz band: |
| <input type="checkbox"/>                     | For the 6.425 ~ 6.525 GHz band: |
| <input checked="" type="checkbox"/>          | For the 6.525 ~ 6.875 GHz band: |
| <input type="checkbox"/>                     | For the 6.875 ~ 7.125 GHz band: |
| <b>RLAN Devices</b>                          |                                 |
| <input type="checkbox"/>                     | For the 5.925 ~ 7.125 GHz band: |
| <input type="checkbox"/>                     | For the 5.925 ~ 6.875 GHz band: |

#### 3.4.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

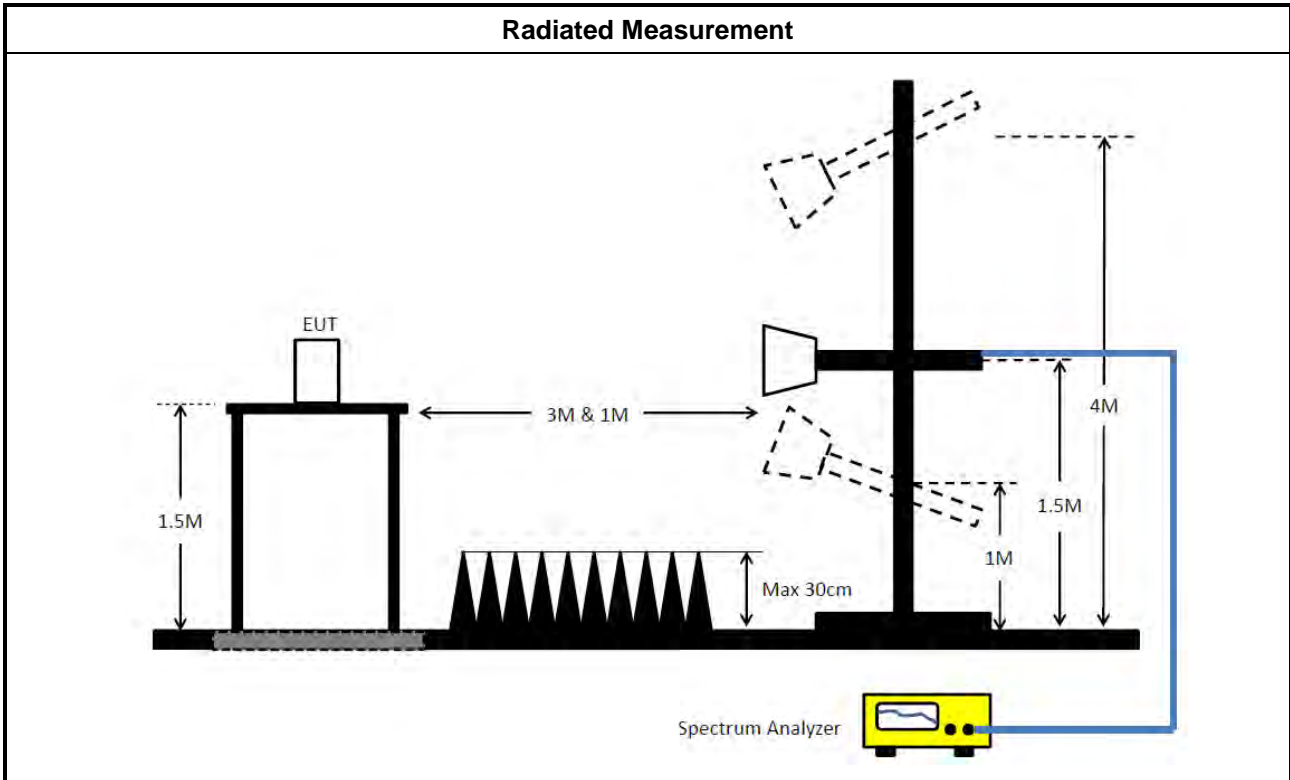


**3.4.3 Test Procedures**

| <b>Test Method</b>                  |   |
|-------------------------------------|---|
|                                     | <ul style="list-style-type: none"> <li>▪ According to FCC KDB 987594 D02 clause II.F, the measurement procedure shall refer to KDB 789033. Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options:</li> </ul>   |
| <input type="checkbox"/>            | Refer as FCC KDB 789033 D02, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth  |
|                                     | [duty cycle ≥ 98% or external video / power trigger]  |
| <input checked="" type="checkbox"/> | Refer as FCC KDB 789033 D02, clause E Method SA-1 (spectral trace averaging).   |
| <input type="checkbox"/>            | Refer as FCC KDB 789033 D02, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)  |
|                                     | duty cycle < 98% and average over on/off periods with duty factor   |
| <input checked="" type="checkbox"/> | Refer as FCC KDB 789033 D02, clause E Method SA-2 (spectral trace averaging).   |
| <input type="checkbox"/>            | Refer as FCC KDB 789033 D02, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)  |
| <input type="checkbox"/>            | For conducted measurement.  |
|                                     | <ul style="list-style-type: none"> <li>▪ If the EUT supports multiple transmit chains using options given below:               <ul style="list-style-type: none"> <li><input type="checkbox"/> Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.</li> <li><input type="checkbox"/> Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,</li> <li><input type="checkbox"/> Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.</li> </ul> </li> <li>▪ If multiple transmit chains, EIRP PPSD calculation could be following as methods:<br/> <math>PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n</math><br/>               (calculated in linear unit [mW] and transfer to log unit [dBm])<br/> <math>EIRP_{total} = PPSD_{total} + DG</math> </li> </ul> |
| <input checked="" type="checkbox"/> | For radiated measurement.   |
|                                     | <ul style="list-style-type: none"> <li>▪ Refer as FCC KDB 789033 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing"</li> <li>▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.</li> </ul>   |

| Test Method |  |
|-------------|--|
|             | Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation. |

**3.4.4 Test Setup**



**3.4.5 Test Result of Peak Power Spectral Density (E.I.R.P.)**

Refer as Appendix D



### 3.5 Unwanted Emissions

#### 3.5.1 Transmitter Unwanted Emissions Limit

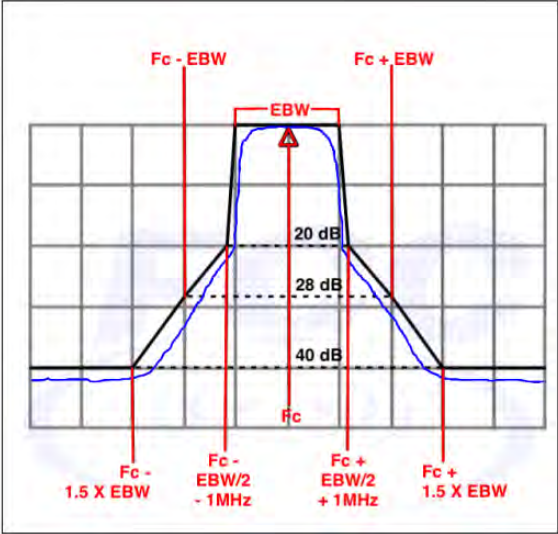
| Unwanted emissions below 1 GHz and restricted band emissions above 1GHz limit |                       |                         |                      |
|---|-----------------------|-------------------------|----------------------|
| Frequency Range (MHz)   | Field Strength (uV/m) | Field Strength (dBuV/m) | Measure Distance (m) |
| 0.009~0.490   | 2400/F(kHz)           | 48.5 - 13.8             | 300                  |
| 0.490~1.705   | 24000/F(kHz)          | 33.8 - 23               | 30                   |
| 1.705~30.0  | 30                    | 29                      | 30                   |
| 30~88   | 100                   | 40                      | 3                    |
| 88~216  | 150                   | 43.5                    | 3                    |
| 216~960   | 200                   | 46                      | 3                    |
| Above 960   | 500                   | 54                      | 3                    |

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m( $20 \times \log(\text{standard distance}/\text{test distance}) = 20\log(3/1) = 9.54\text{dB}$ ).  
 EX. Above 18GHz emission limit calculation (3m to 1m) =  $54\text{dBuV/m at } 3\text{m} + 9.54\text{dB} = 63.54\text{ dBuV/m at } 1\text{m}$ .

| Un-restricted band emissions above 1GHz Limit |   |
|---|---|
| Frequency                                     | Limit   |
| Any outside the 5.945 – 7.125 GHz emission    | e.i.r.p. -27 dBm [68.2 dBuV/m@3m]<br>Note 1: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m( $20 \times \log(\text{standard distance}/\text{test distance}) = 20\log(3/1) = 9.54\text{dB}$ ).<br>EX. Above 18GHz emission limit calculation (3m to 1m) = $68.2\text{dBuV/m at } 3\text{m} + 9.54\text{dB} = 77.74\text{ dBuV/m at } 1\text{m}$ .<br>Note 2:-27 dBm EIRP OOBE is measured RMS which is a deviation from the current 15E rules for 5 GHz bands. In addition, 15.35(b) applies where the peak emissions must be limited to no more than 20 dB above the average limit. |

| Frequency         | Emission MASK Limit   |
|-------------------|---|
| 5.945 – 7.125 GHz | <p>Power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel center, and by 40 dB at one- and one-half times the channel bandwidth away from channel center. At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel center by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB.</p>  |



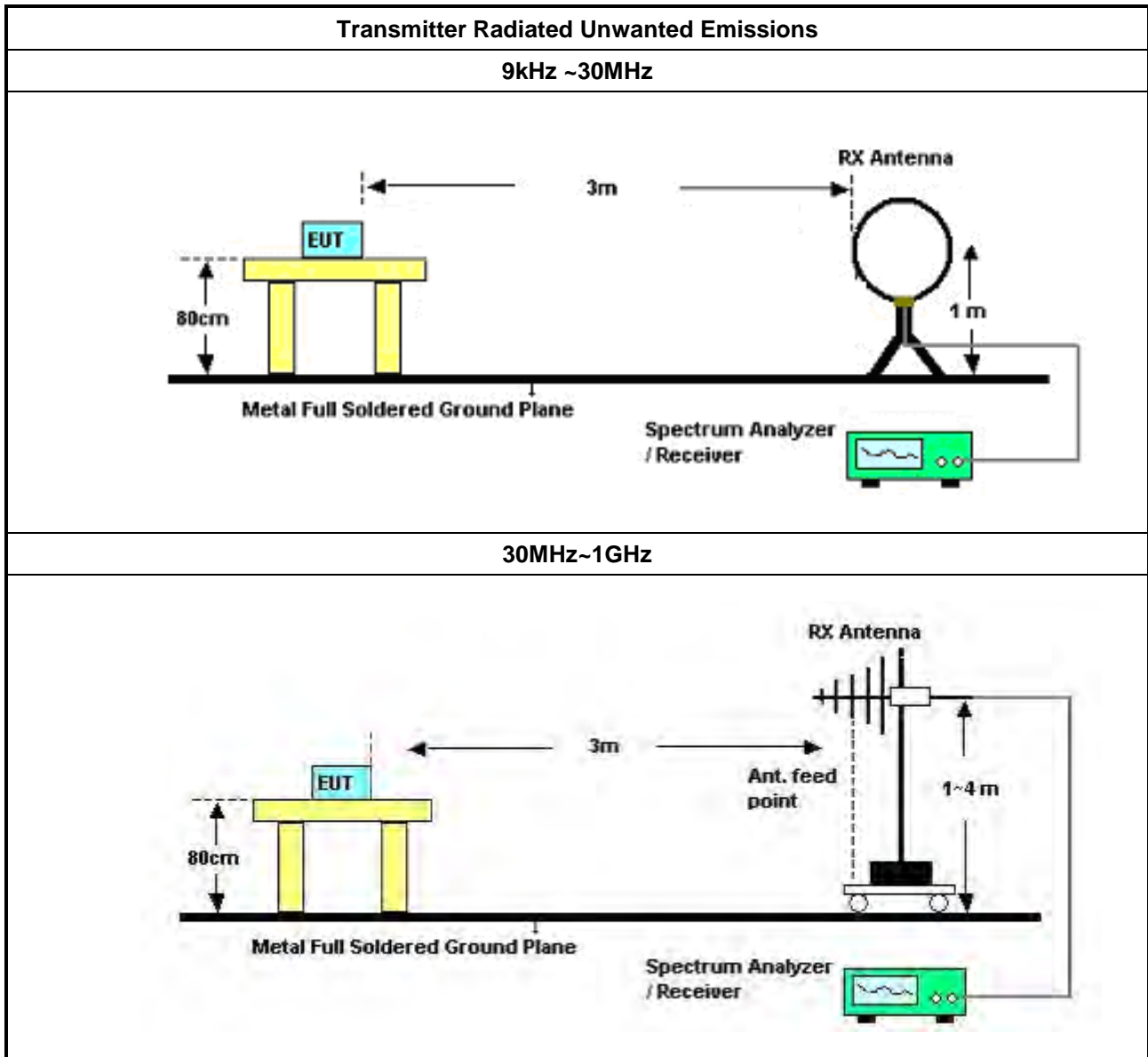
**3.5.2 Measuring Instruments**

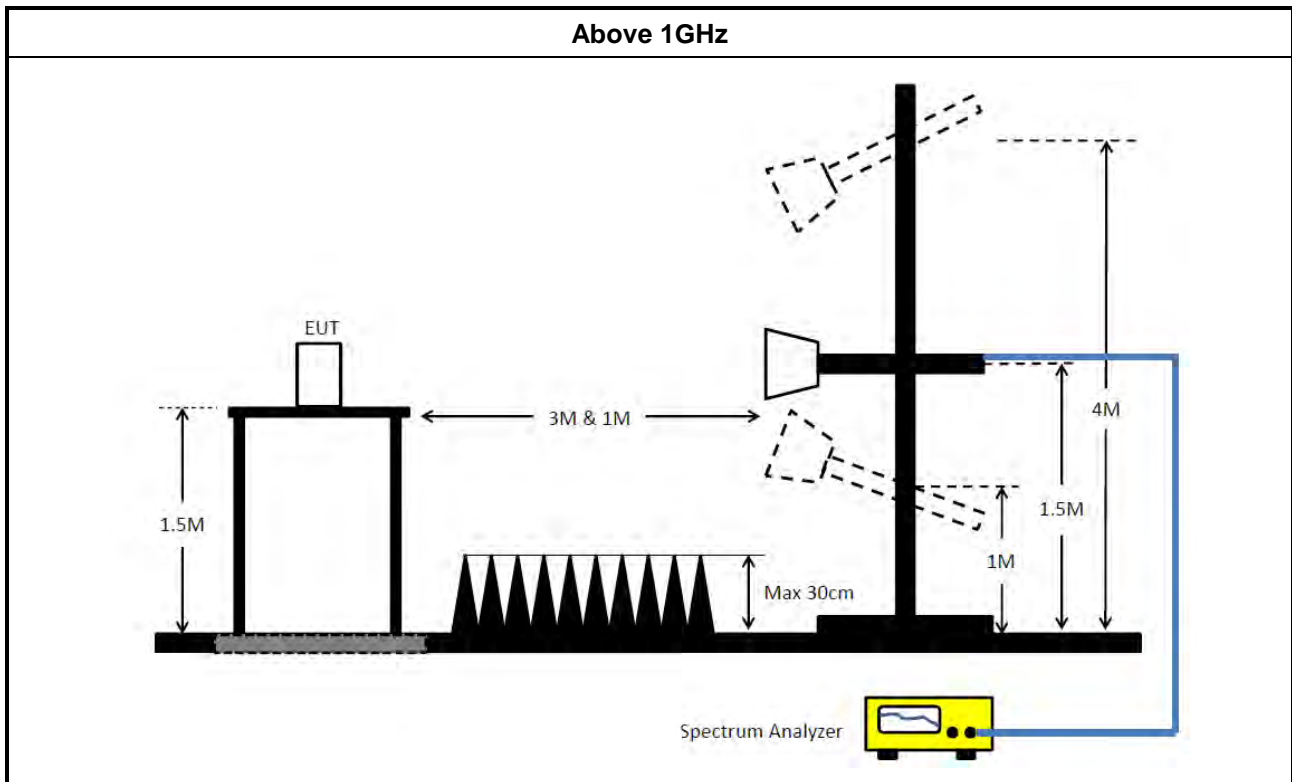
Refer a test equipment and calibration data table in this test report.

**3.5.3 Test Procedures**

| <b>Test Method</b>  |   |
|---|---|
| <ul style="list-style-type: none"> <li>▪ According to FCC KDB 987594 D02 II.G. the unwanted emission measurement procedure shall refer to KDB 789300(except emission MASK).<br/>Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).</li> </ul> |   |
| <ul style="list-style-type: none"> <li>▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].</li> </ul>  |   |
| <ul style="list-style-type: none"> <li>▪ For the transmitter unwanted emissions shall be measured using following options below:</li> </ul>   |   |
|   | <ul style="list-style-type: none"> <li>▪ Refer as FCC KDB 789033 D02, clause G)2) for unwanted emissions into non-restricted bands.</li> </ul>                          |
|   | <ul style="list-style-type: none"> <li>▪ Refer as FCC KDB 789033 D02, clause G)1) for unwanted emissions into restricted bands.</li> </ul>                              |
|   | <input checked="" type="checkbox"/> Refer as FCC KDB 789033 D02, G)6) Method AD (Trace Averaging).<br>(For unrestricted band measurement)                               |
|   | <input type="checkbox"/> Refer as FCC KDB 789033 D02, G)6) Method VB (Reduced VBW).   |
|   | <input checked="" type="checkbox"/> Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.( For restricted band average measurement) |
|   | <input type="checkbox"/> Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.  |
|   | <input checked="" type="checkbox"/> Refer as FCC KDB 789033 D02, clause G)5) measurement procedure peak limit.  |
|   | <input type="checkbox"/> Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.   |
| <ul style="list-style-type: none"> <li>▪ Refer as FCC KDB 789033 D02, clause G)3)d)ii) for Band edge Integration measurements.</li> </ul>   |   |
| <ul style="list-style-type: none"> <li>▪ For emission MASK shall be measured using following options below:</li> </ul>  |   |
|   | <input checked="" type="checkbox"/> Refer as FCC KDB 987594 D02, J) In-Band Emissions   |
| <ul style="list-style-type: none"> <li>▪ For radiated measurement.</li> </ul>   |   |
|   | <ul style="list-style-type: none"> <li>▪ Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.</li> </ul>                       |
|   | <ul style="list-style-type: none"> <li>▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.</li> </ul>                    |
|   | <ul style="list-style-type: none"> <li>▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.</li> </ul>   |
| <ul style="list-style-type: none"> <li>▪ The any unwanted emissions level shall not exceed the fundamental emission level.</li> </ul>   |   |
| <ul style="list-style-type: none"> <li>▪ All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.</li> </ul>  |   |

**3.5.4 Test Setup**





### 3.5.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna factor (AF) + Cable loss (CL) + Read level (Raw) - Preamp factor (PA)(if applicable)  
= Level

### 3.5.6 Transmitter Unwanted Emissions (Below 30MHz)

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to KDB414788 Radiated Test Site, and the result came out very similar.

All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10th harmonic or 40 GHz, whichever is appropriate.

### 3.5.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E





## 4 Test Equipment and Calibration Data

| Instrument                        | Brand         | Model No.         | Serial No.       | Characteristics | Calibration Date | Calibration Due Date | Remark                |
|-----------------------------------|---------------|-------------------|------------------|-----------------|------------------|----------------------|-----------------------|
| EMI Receiver                      | Agilent       | N9038A            | My52260123       | 9kHz ~ 8.4GHz   | Feb. 20, 2023    | Feb. 19, 2024        | Conduction (CO01-CB)  |
| LISN                              | F.C.C.        | FCC-LISN-5 0-16-2 | 04083            | 150kHz ~ 100MHz | Feb. 16, 2023    | Feb. 15, 2024        | Conduction (CO01-CB)  |
| LISN                              | Schwarzbeck   | NSLK 8127         | 8127647          | 9kHz ~ 30MHz    | Apr. 27, 2023    | Apr. 26, 2024        | Conduction (CO01-CB)  |
| Pulse Limiter                     | Rohde&Schwarz | ESH3-Z2           | 100430           | 9kHz ~ 30MHz    | Feb. 09, 2023    | Feb. 08, 2024        | Conduction (CO01-CB)  |
| COND Cable                        | Woken         | Cable             | Low cable-CO01   | 9kHz ~ 30MHz    | Oct. 17, 2023    | Oct. 16, 2024        | Conduction (CO01-CB)  |
| Software                          | SPORTON       | SENSE             | V5.10            | -               | N.C.R.           | N.C.R.               | Conduction (CO01-CB)  |
| Loop Antenna                      | Teseq         | HLA 6121          | 65417            | 9kHz - 30 MHz   | Oct. 13, 2023    | Oct. 12, 2024        | Radiation (03CH01-CB) |
| 3m Semi Anechoic Chamber NSA      | TDK           | SAC-3M            | 03CH01-CB        | 30 MHz ~ 1 GHz  | Jan. 16, 2023    | Jan. 15, 2024        | Radiation (03CH01-CB) |
| 3m Semi Anechoic Chamber VSWR     | TDK           | SAC-3M            | 03CH01-CB        | 1GHz ~18GHz 3m  | May 05, 2023     | May 04, 2024         | Radiation (03CH01-CB) |
| BILOG ANTENNA with 6dB Attenuator | TESEQ & EMC I | CBL6112D N-6-06   | 37880 & AT-N0609 | 20MHz ~ 2GHz    | Feb. 19, 2023    | Feb. 18, 2024        | Radiation (03CH01-CB) |
| Horn Antenna                      | ETS-LINDGREN  | 3115              | 00075790         | 750MHz ~ 18GHz  | Nov. 04, 2022    | Nov. 03, 2023        | Radiation (03CH01-CB) |
| Horn Antenna                      | ETS-LINDGREN  | 3115              | 00075790         | 750MHz ~ 18GHz  | Oct. 30, 2023    | Oct. 29, 2024        | Radiation (03CH01-CB) |
| Horn Antenna                      | Schwarzbeck   | BBHA 9170         | BBHA9170252      | 15GHz ~ 40GHz   | Sep. 04, 2023    | Sep. 03, 2024        | Radiation (03CH01-CB) |
| Pre-Amplifier                     | SGH           | SGH0301           | 20230109-2       | 10M~1GHz        | Jun. 23, 2023    | Jun. 22, 2024        | Radiation (03CH01-CB) |
| Pre-Amplifier                     | Agilent       | 8449B             | 3008A02121       | 1GHz ~ 26.5GHz  | May 18, 2023     | May 17, 2024         | Radiation (03CH01-CB) |
| Pre-Amplifier                     | SGH           | SGH184            | 20230109-3       | 18~40GHz        | Jan. 13, 2023    | Jan. 12, 2024        | Radiation (03CH01-CB) |
| Signal Analyzer                   | R&S           | FSV3044           | 101437           | 10kHz ~ 44GHz   | Nov. 29, 2022    | Nov. 29, 2023        | Radiation (03CH01-CB) |
| EMI Test Receiver                 | R&S           | ESCS              | 826547/017       | 9kHz ~ 2.75GHz  | Jun. 13, 2023    | Jun. 12, 2024        | Radiation (03CH01-CB) |
| RF Cable-low                      | Woken         | RG402             | Low Cable-16+17  | 30 MHz ~ 1 GHz  | Oct. 02, 2023    | Oct. 01, 2024        | Radiation (03CH01-CB) |
| RF Cable-low                      | Woken         | RG402             | Low Cable-31+32  | 30 MHz ~ 1 GHz  | Nov. 06, 2023    | Nov. 05, 2024        | Radiation (03CH01-CB) |



| Instrument                    | Brand       | Model No. | Serial No.       | Characteristics | Calibration Date | Calibration Due Date | Remark                |
|-------------------------------|-------------|-----------|------------------|-----------------|------------------|----------------------|-----------------------|
| RF Cable-high                 | Woken       | RG402     | High Cable-16    | 1 GHz ~ 18 GHz  | Oct. 02, 2023    | Oct. 01, 2024        | Radiation (03CH01-CB) |
| RF Cable-high                 | Woken       | RG402     | High Cable-16    | 1 GHz ~ 18 GHz  | Nov. 06, 2023    | Nov. 05, 2024        | Radiation (03CH01-CB) |
| RF Cable-high                 | Woken       | RG402     | High Cable-16+17 | 1 GHz ~ 18 GHz  | Oct. 02, 2023    | Oct. 01, 2024        | Radiation (03CH01-CB) |
| RF Cable-high                 | Woken       | RG402     | High Cable-16+17 | 1 GHz ~ 18 GHz  | Nov. 06, 2023    | Nov. 05, 2024        | Radiation (03CH01-CB) |
| High Cable                    | Woken       | WCA0929M  | 40G#5+6          | 1GHz ~ 40 GHz   | Oct. 02, 2023    | Oct. 01, 2024        | Radiation (03CH01-CB) |
| High Cable                    | Woken       | WCA0929M  | 40G#5            | 1GHz ~ 40 GHz   | Oct. 02, 2023    | Oct. 01, 2024        | Radiation (03CH01-CB) |
| High Cable                    | Woken       | WCA0929M  | 40G#6            | 1GHz ~ 40 GHz   | Oct. 02, 2023    | Oct. 01, 2024        | Radiation (03CH01-CB) |
| Test Software                 | SPORTON     | SENSE     | V5.10            | -               | N.C.R.           | N.C.R.               | Radiation (03CH01-CB) |
| 3m Semi Anechoic Chamber VSWR | RIKEN       | SAC-3M    | 03CH02-CB        | 1GHz ~18GHz     | Mar. 25, 2023    | Mar. 24, 2024        | Radiation (03CH02-CB) |
| Horn Antenna                  | EMCO        | 3115      | 9610-4976        | 1GHz ~ 18GHz    | Apr. 18, 2023    | Apr. 17, 2024        | Radiation (03CH02-CB) |
| Horn Antenna                  | Schwarzbeck | BBHA 9170 | BBHA9170252      | 15GHz ~ 40GHz   | Sep. 04, 2023    | Sep. 03, 2024        | Radiation (03CH02-CB) |
| Pre-Amplifier                 | Agilent     | 83017A    | MY39501305       | 1GHz ~ 26.5GHz  | Jun. 30, 2023    | Jun. 29, 2024        | Radiation (03CH02-CB) |
| Pre-Amplifier                 | SGH         | SGH184    | 20221107-3       | 18GHz ~ 40GHz   | Nov. 16, 2022    | Nov. 15, 2023        | Radiation (03CH02-CB) |
| Pre-Amplifier                 | SGH         | SGH184    | 20230109-3       | 18~40GHz        | Jan. 13, 2023    | Jan. 12, 2024        | Radiation (03CH02-CB) |
| Spectrum analyzer             | R&S         | FSU       | 100015           | 9kHz~26GHz      | Dec. 05, 2022    | Dec. 04, 2023        | Radiation (03CH02-CB) |
| RF Cable-high                 | Woken       | RG402     | High Cable-18    | 1GHz ~ 18GHz    | Oct. 03, 2022    | Oct. 02, 2023        | Radiation (03CH02-CB) |
| RF Cable-high                 | Woken       | RG402     | High Cable-18    | 1GHz ~ 18GHz    | Oct. 02, 2023    | Oct. 01, 2024        | Radiation (03CH02-CB) |
| RF Cable-high                 | Woken       | RG402     | High Cable-18+19 | 1GHz ~ 18GHz    | Oct. 03, 2022    | Oct. 02, 2023        | Radiation (03CH02-CB) |
| RF Cable-high                 | Woken       | RG402     | High Cable-18+19 | 1GHz ~ 18GHz    | Oct. 02, 2023    | Oct. 01, 2024        | Radiation (03CH02-CB) |
| High Cable                    | Woken       | WCA0929M  | 40G#5+6          | 1GHz ~ 40 GHz   | Dec. 07, 2022    | Dec. 06, 2023        | Radiation (03CH02-CB) |
| High Cable                    | Woken       | WCA0929M  | 40G#5+6          | 1GHz ~ 40 GHz   | Oct. 02, 2023    | Oct. 01, 2024        | Radiation (03CH02-CB) |
| High Cable                    | Woken       | WCA0929M  | 40G#5            | 1GHz ~ 40 GHz   | Dec. 07, 2022    | Dec. 06, 2023        | Radiation (03CH02-CB) |



| Instrument                    | Brand        | Model No. | Serial No.       | Characteristics     | Calibration Date | Calibration Due Date | Remark                |
|-------------------------------|--------------|-----------|------------------|---------------------|------------------|----------------------|-----------------------|
| High Cable                    | Woken        | WCA0929M  | 40G#5            | 1GHz ~ 40 GHz       | Oct. 02, 2023    | Oct. 01, 2024        | Radiation (03CH02-CB) |
| High Cable                    | Woken        | WCA0929M  | 40G#6            | 1GHz ~ 40 GHz       | Dec. 07, 2022    | Dec. 06, 2023        | Radiation (03CH02-CB) |
| High Cable                    | Woken        | WCA0929M  | 40G#6            | 1GHz ~ 40 GHz       | Oct. 02, 2023    | Oct. 01, 2024        | Radiation (03CH02-CB) |
| Test Software                 | SPORTON      | SENSE     | V5.10            | -                   | N.C.R.           | N.C.R.               | Radiation (03CH02-CB) |
| 3m Semi Anechoic Chamber VSWR | TDK          | SAC-3M    | 03CH04-CB        | 1GHz ~18GHz<br>3m   | Feb. 23, 2023    | Feb. 22, 2024        | Radiation (03CH04-CB) |
| Horn Antenna                  | ETS-Lindgren | 3115      | 00143147         | 750MHz~<br>18GHz    | Oct. 04, 2023    | Oct. 03, 2024        | Radiation (03CH04-CB) |
| Horn Antenna                  | Schwarzbeck  | BBHA 9170 | BBHA9170252      | 15GHz ~ 40GHz       | Sep. 04, 2023    | Sep. 03, 2024        | Radiation (03CH04-CB) |
| Pre-Amplifier                 | Agilent      | 83017A    | MY53270063       | 0.5GHz ~<br>26.5GHz | Jun. 30, 2023    | Jun. 29, 2024        | Radiation (03CH04-CB) |
| Pre-Amplifier                 | SGH          | SGH184    | 20221107-3       | 18GHz ~ 40GHz       | Nov. 16, 2022    | Nov. 15, 2023        | Radiation (03CH04-CB) |
| Pre-Amplifier                 | SGH          | SGH184    | 20230109-3       | 18~40GHz            | Jan. 13, 2023    | Jan. 12, 2024        | Radiation (03CH04-CB) |
| Spectrum Analyzer             | R&S          | FSP40     | 100142           | 9kHz~40GHz          | Mar. 21, 2023    | Mar. 20, 2024        | Radiation (03CH04-CB) |
| RF Cable-high                 | Woken        | RG402     | High Cable-21    | 1GHz - 18GHz        | Oct. 02, 2023    | Oct. 01, 2024        | Radiation (03CH04-CB) |
| RF Cable-high                 | Woken        | RG402     | High Cable-21+67 | 1GHz - 18GHz        | Oct. 02, 2023    | Oct. 01, 2024        | Radiation (03CH04-CB) |
| High Cable                    | Woken        | WCA0929M  | 40G#5+6          | 1GHz ~ 40 GHz       | Oct. 02, 2023    | Oct. 01, 2024        | Radiation (03CH04-CB) |
| High Cable                    | Woken        | WCA0929M  | 40G#5            | 1GHz ~ 40 GHz       | Oct. 02, 2023    | Oct. 01, 2024        | Radiation (03CH04-CB) |
| High Cable                    | Woken        | WCA0929M  | 40G#6            | 1GHz ~ 40 GHz       | Oct. 02, 2023    | Oct. 01, 2024        | Radiation (03CH04-CB) |
| Test Software                 | SPORTON      | SENSE     | V5.10            | -                   | N.C.R.           | N.C.R.               | Radiation (03CH04-CB) |
| Signal Analyzer               | R&S          | FSV40     | 101904           | 9kHz ~ 40GHz        | Apr. 21, 2023    | Apr. 20, 2024        | Conducted (TH01-CB)   |
| Spectrum analyzer             | R&S          | FSV40     | 100979           | 9kHz~40GHz          | May 29, 2023     | May 28, 2024         | Conducted (TH01-CB)   |
| Switch                        | SPTCB        | SP-SWI    | SWI-01           | 1~26.5 GHz          | Oct. 03, 2023    | Oct. 02, 2024        | Conducted (TH01-CB)   |
| RF Cable-high                 | Woken        | RG402     | High Cable-06    | 1 GHz – 18 GHz      | Oct. 02, 2023    | Oct. 01, 2024        | Conducted (TH01-CB)   |
| RF Cable-high                 | Woken        | RG402     | High Cable-07    | 1 GHz – 18 GHz      | Oct. 02, 2023    | Oct. 01, 2024        | Conducted (TH01-CB)   |
| RF Cable-high                 | Woken        | RG402     | High Cable-08    | 1 GHz – 18 GHz      | Oct. 02, 2023    | Oct. 01, 2024        | Conducted (TH01-CB)   |



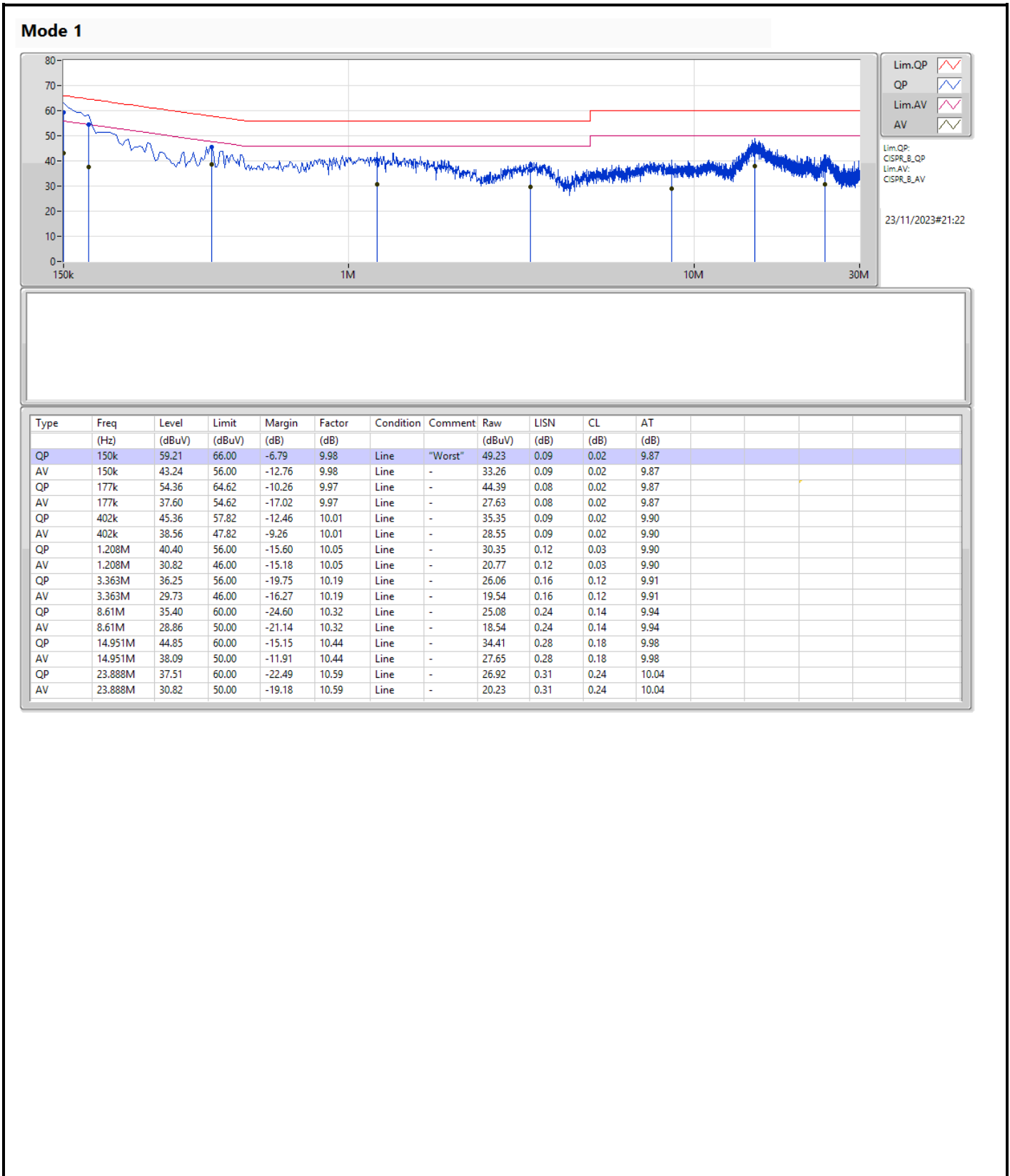
| Instrument    | Brand   | Model No. | Serial No.    | Characteristics | Calibration Date | Calibration Due Date | Remark              |
|---------------|---------|-----------|---------------|-----------------|------------------|----------------------|---------------------|
| RF Cable-high | Woken   | RG402     | High Cable-09 | 1 GHz – 18 GHz  | Oct. 02, 2023    | Oct. 01, 2024        | Conducted (TH01-CB) |
| RF Cable-high | Woken   | RG402     | High Cable-10 | 1 GHz – 18 GHz  | Oct. 02, 2023    | Oct. 01, 2024        | Conducted (TH01-CB) |
| RF Cable-high | Woken   | RG402     | High Cable-30 | 1 GHz – 18 GHz  | Oct. 02, 2023    | Oct. 01, 2024        | Conducted (TH01-CB) |
| Power Sensor  | Agilent | E9327A    | US40442088    | 50MHz~18GHz     | Feb. 22, 2023    | Feb. 21, 2024        | Conducted (TH01-CB) |
| Power Sensor  | Agilent | E9327A    | US40442088    | 50MHz~18GHz     | Mar. 01, 2024    | Feb. 28, 2025        | Conducted (TH01-CB) |
| Power Meter   | Agilent | E4416A    | GB41291199    | 50MHz~18GHz     | Feb. 22, 2023    | Feb. 21, 2024        | Conducted (TH01-CB) |
| Power Meter   | Agilent | E4416A    | GB41291199    | 50MHz~18GHz     | Mar. 04, 2024    | Mar. 03, 2025        | Conducted (TH01-CB) |
| Test Software | SPORTON | SENSE     | V5.10         | -               | N.C.R.           | N.C.R.               | Conducted (TH01-CB) |

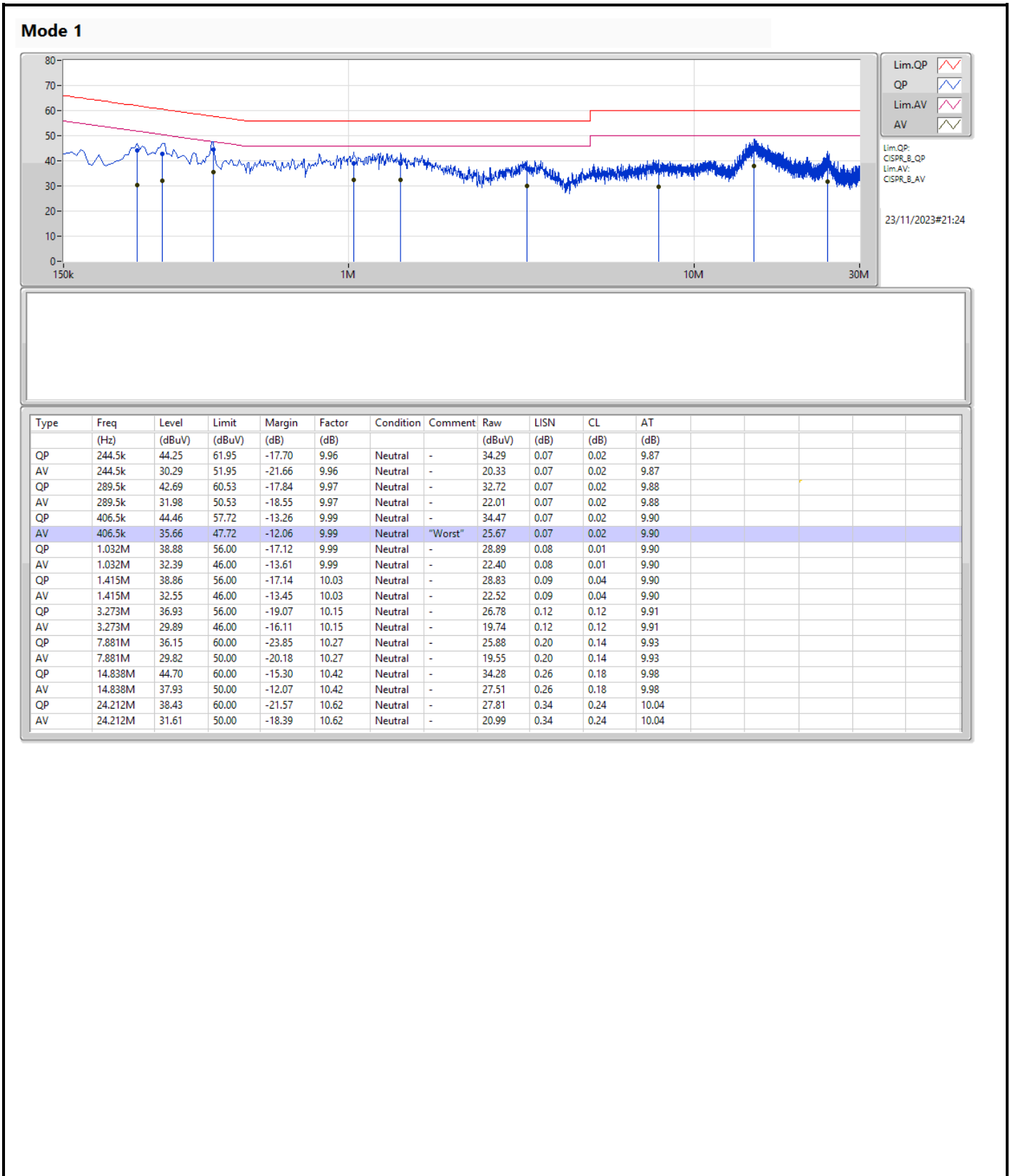
Note: Calibration Interval of instruments listed above is one year.  
NCR means Non-Calibration required.



**Summary**

| Mode   | Result | Type | Freq (Hz) | Level (dBuV) | Limit (dBuV) | Margin (dB) | Condition |
|--------|--------|------|-----------|--------------|--------------|-------------|-----------|
| Mode 1 | Pass   | QP   | 150k      | 59.21        | 66.00        | -6.79       | Line      |





**Summary**

| Mode                            | Max-N dB<br>(Hz) | Max-OBW<br>(Hz) | ITU-Code | Min-N dB<br>(Hz) | Min-OBW<br>(Hz) |
|---------------------------------|------------------|-----------------|----------|------------------|-----------------|
| 5.925-6.425GHz                  | -                | -               | -        | -                | -               |
| 802.11ax HEW20_Nss1,(MCS0)_1TX  | 42.845M          | 24.068M         | 24M1D1D  | 35.53M           | 20.381M         |
| 802.11ax HEW40_Nss1,(MCS0)_1TX  | 75.57M           | 39.005M         | 39MOD1D  | 42.02M           | 37.774M         |
| 802.11ax HEW80_Nss1,(MCS0)_1TX  | 158.18M          | 79.042M         | 79MOD1D  | 80.96M           | 77.136M         |
| 802.11ax HEW160_Nss1,(MCS0)_1TX | 315.04M          | 169.63M         | 170MD1D  | 161.48M          | 155.244M        |
| 6.525-6.875GHz                  | -                | -               | -        | -                | -               |
| 802.11ax HEW20_Nss1,(MCS0)_1TX  | 25.685M          | 18.986M         | 19MOD1D  | 20.625M          | 18.95M          |
| 802.11ax HEW40_Nss1,(MCS0)_1TX  | 39.49M           | 37.804M         | 37M8D1D  | 39.27M           | 37.697M         |
| 802.11ax HEW80_Nss1,(MCS0)_1TX  | 98.78M           | 77.437M         | 77M4D1D  | 82.28M           | 77.276M         |
| 802.11ax HEW160_Nss1,(MCS0)_1TX | 162.36M          | 155.544M        | 156MD1D  | 162.36M          | 155.544M        |

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;  
 Max-OBW = Maximum 99% occupied bandwidth;  
 Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;  
 Min-OBW = Minimum 99% occupied bandwidth



**Result**

| Mode                            | Result | Limit (Hz) | Port 1-N dB (Hz) | Port 1-OBW (Hz) |
|---------------------------------|--------|------------|------------------|-----------------|
| 802.11ax HEW20_Nss1,(MCS0)_1TX  | -      | -          | -                | -               |
| 5955MHz                         | Pass   | Inf        | 42.845M          | 24.068M         |
| 6195MHz                         | Pass   | Inf        | 42.24M           | 20.72M          |
| 6415MHz                         | Pass   | Inf        | 35.53M           | 20.381M         |
| 6535MHz                         | Pass   | Inf        | 21.615M          | 18.95M          |
| 6695MHz                         | Pass   | Inf        | 25.685M          | 18.986M         |
| 6855MHz                         | Pass   | Inf        | 20.625M          | 18.958M         |
| 802.11ax HEW40_Nss1,(MCS0)_1TX  | -      | -          | -                | -               |
| 5965MHz                         | Pass   | Inf        | 42.02M           | 37.774M         |
| 6205MHz                         | Pass   | Inf        | 74.58M           | 39.005M         |
| 6405MHz                         | Pass   | Inf        | 75.57M           | 38.39M          |
| 6565MHz                         | Pass   | Inf        | 39.27M           | 37.697M         |
| 6685MHz                         | Pass   | Inf        | 39.27M           | 37.744M         |
| 6845MHz                         | Pass   | Inf        | 39.49M           | 37.804M         |
| 802.11ax HEW80_Nss1,(MCS0)_1TX  | -      | -          | -                | -               |
| 5985MHz                         | Pass   | Inf        | 80.96M           | 77.136M         |
| 6225MHz                         | Pass   | Inf        | 135.08M          | 78.918M         |
| 6385MHz                         | Pass   | Inf        | 158.18M          | 79.042M         |
| 6625MHz                         | Pass   | Inf        | 82.94M           | 77.408M         |
| 6705MHz                         | Pass   | Inf        | 98.78M           | 77.437M         |
| 6785MHz                         | Pass   | Inf        | 82.28M           | 77.276M         |
| 802.11ax HEW160_Nss1,(MCS0)_1TX | -      | -          | -                | -               |
| 6025MHz                         | Pass   | Inf        | 161.48M          | 155.244M        |
| 6185MHz                         | Pass   | Inf        | 315.04M          | 169.63M         |
| 6345MHz                         | Pass   | Inf        | 282.48M          | 159.561M        |
| 6665MHz                         | Pass   | Inf        | 162.36M          | 155.544M        |

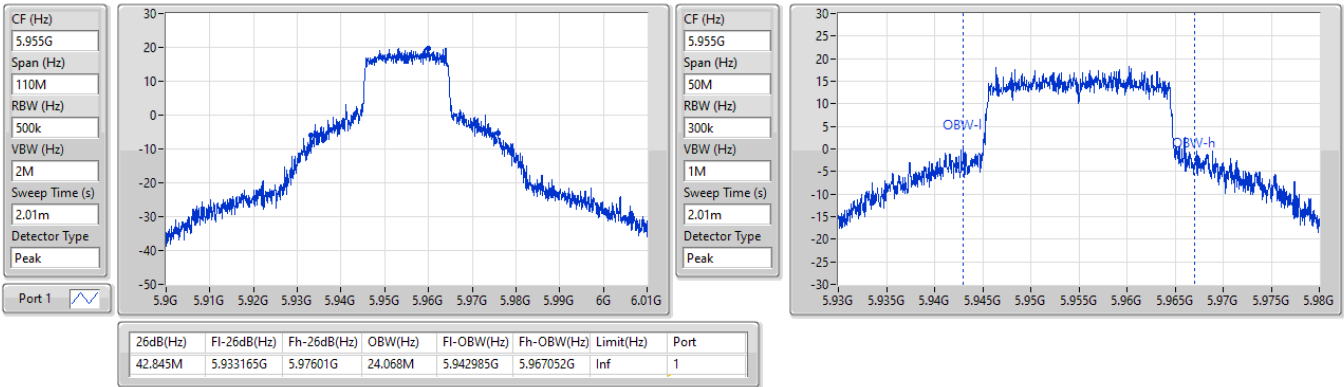
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band  
 Port X-OBW = Port X 99% occupied bandwidth

5.925-6.425GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

5955MHz

27/10/2023

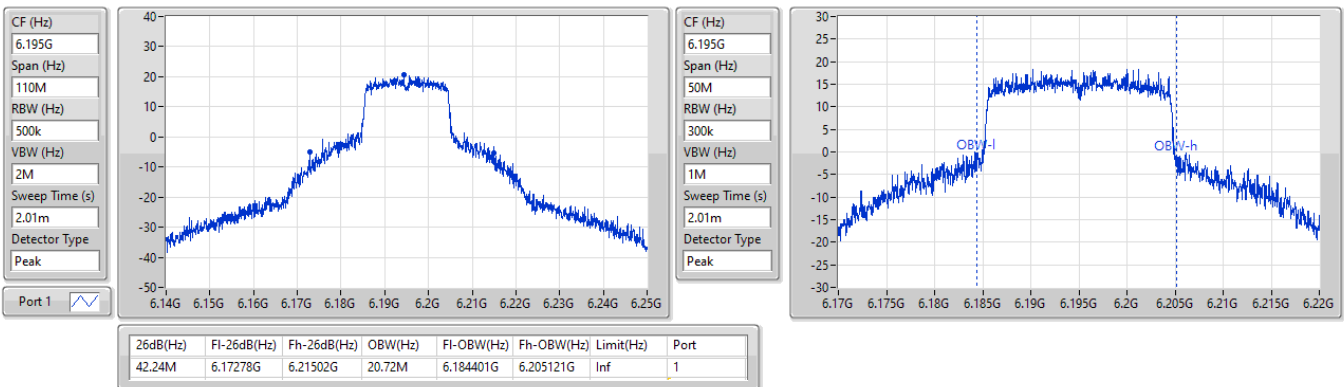


5.925-6.425GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

6195MHz

27/10/2023

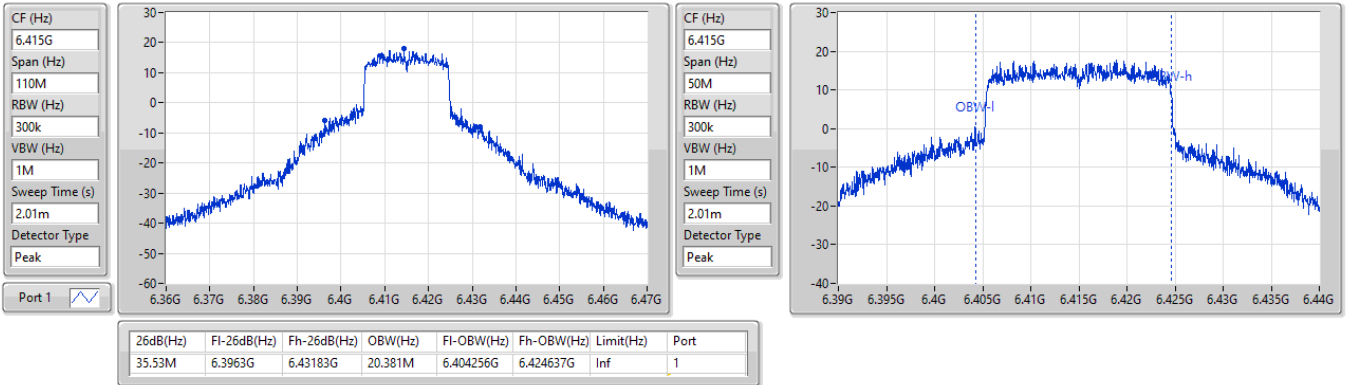


5.925-6.425GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

6415MHz

27/10/2023

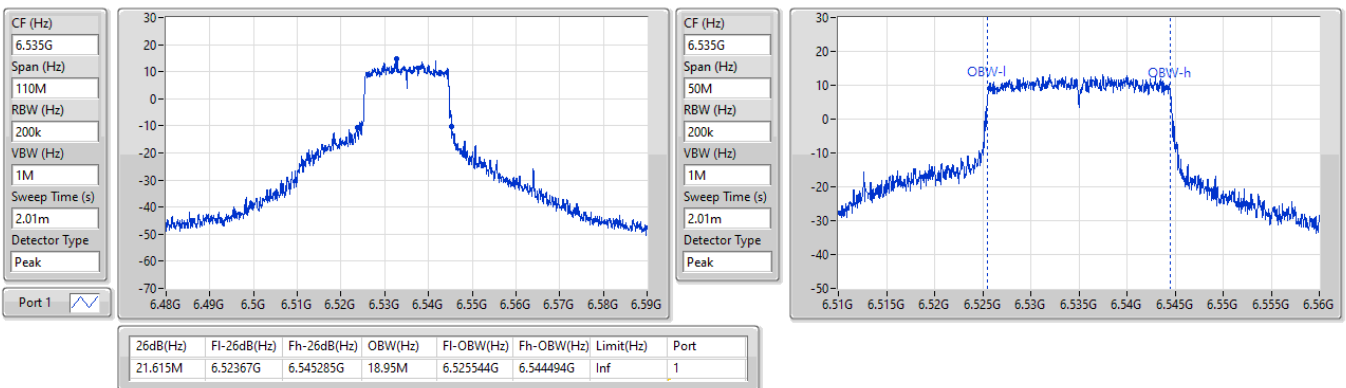


6.525-6.875GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

6535MHz

27/10/2023

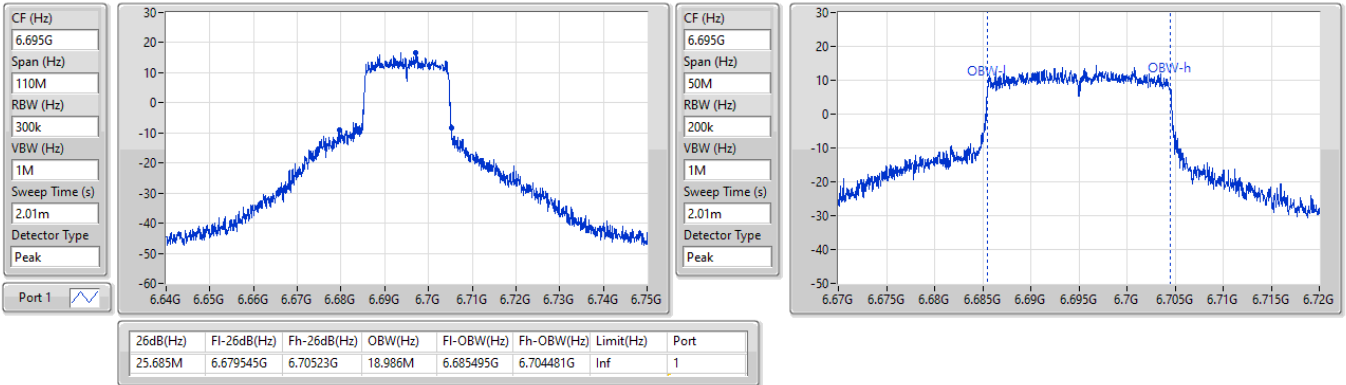


6.525-6.875GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

6695MHz

27/10/2023

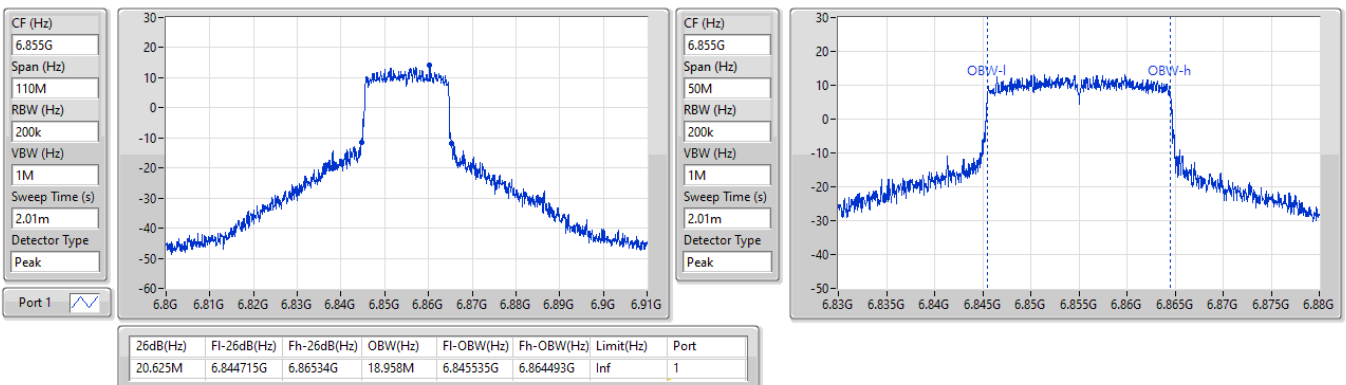


6.525-6.875GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

6855MHz

27/10/2023

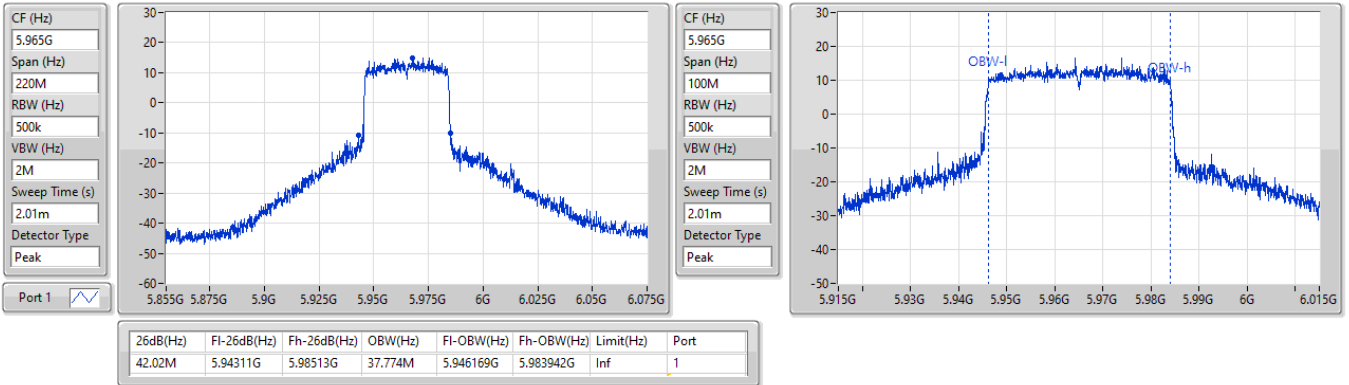


5.925-6.425GHz\_802.11ax HEW40\_Nss1,(MCS0)\_1TX

EBW

5965MHz

27/10/2023

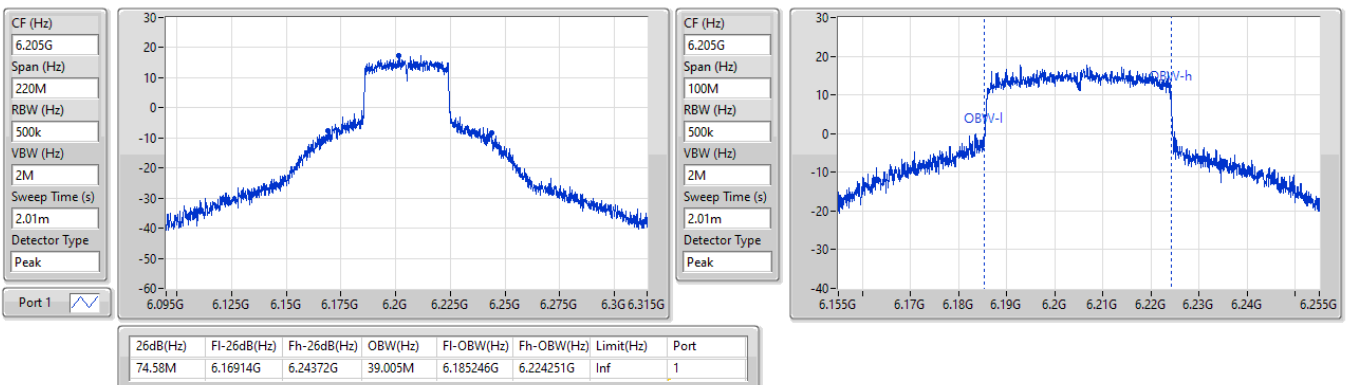


5.925-6.425GHz\_802.11ax HEW40\_Nss1,(MCS0)\_1TX

EBW

6205MHz

27/10/2023

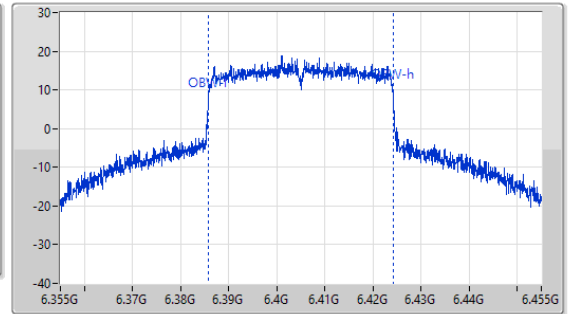
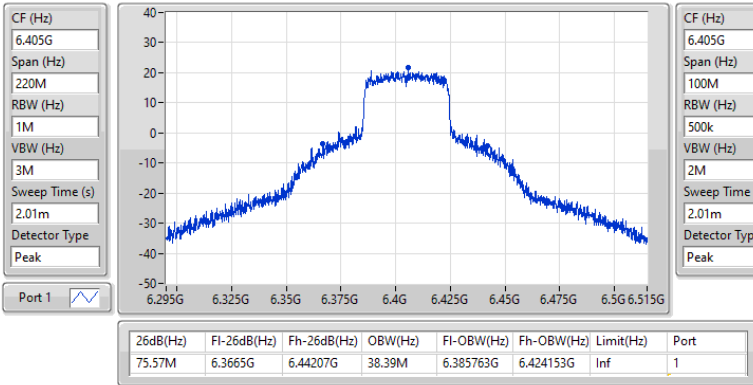


5.925-6.425GHz\_802.11ax HEW40\_Nss1,(MCS0)\_1TX

EBW

6405MHz

27/10/2023

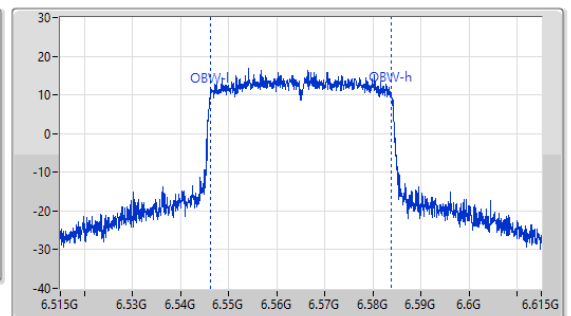
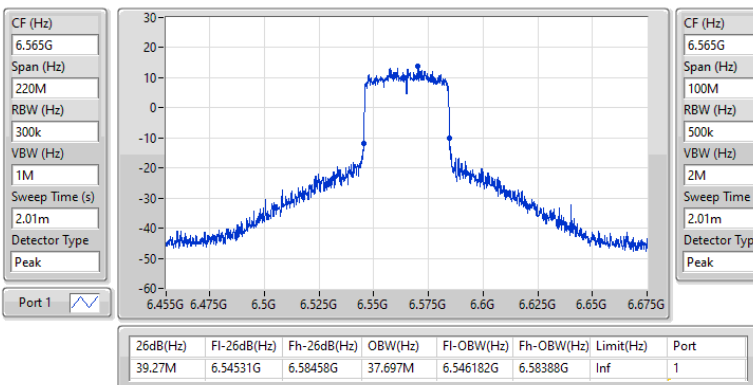


6.525-6.875GHz\_802.11ax HEW40\_Nss1,(MCS0)\_1TX

EBW

6565MHz

27/10/2023

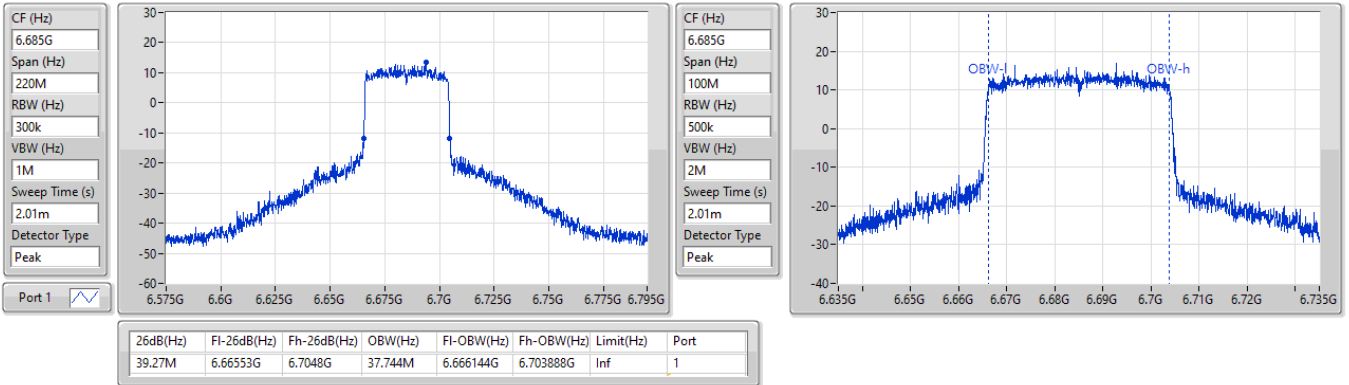


6.525-6.875GHz\_802.11ax HEW40\_Nss1,(MCS0)\_1TX

EBW

6685MHz

27/10/2023

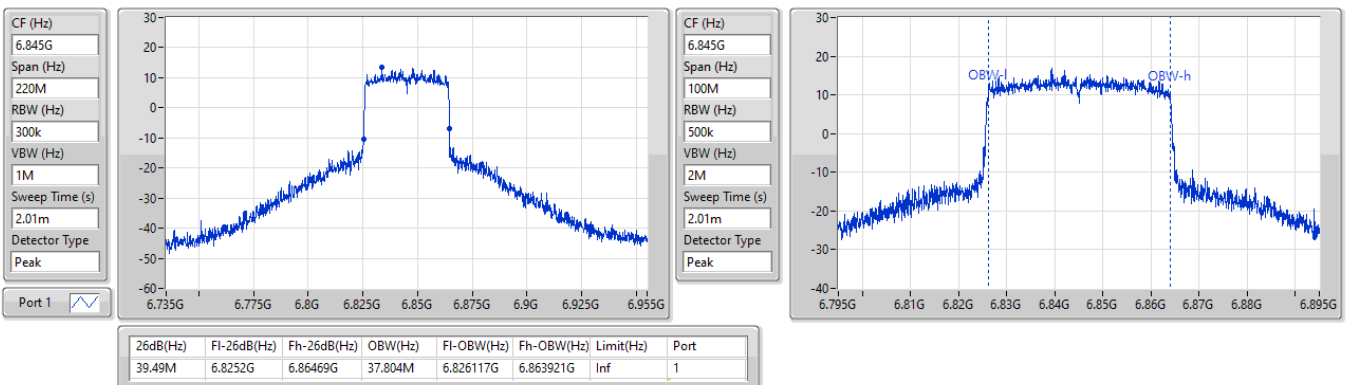


6.525-6.875GHz\_802.11ax HEW40\_Nss1,(MCS0)\_1TX

EBW

6845MHz

27/10/2023

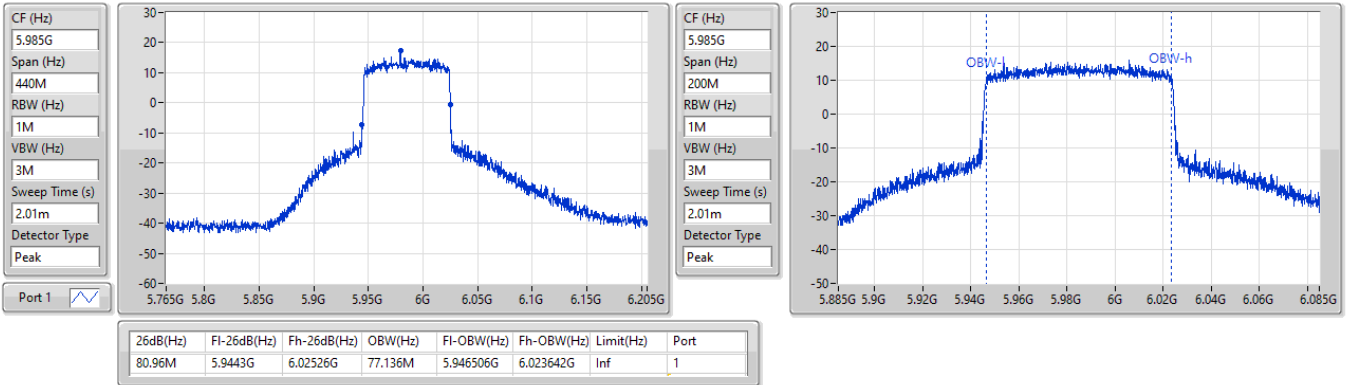


5.925-6.425GHz\_802.11ax HEW80\_Nss1,(MCS0)\_1TX

EBW

5985MHz

27/10/2023

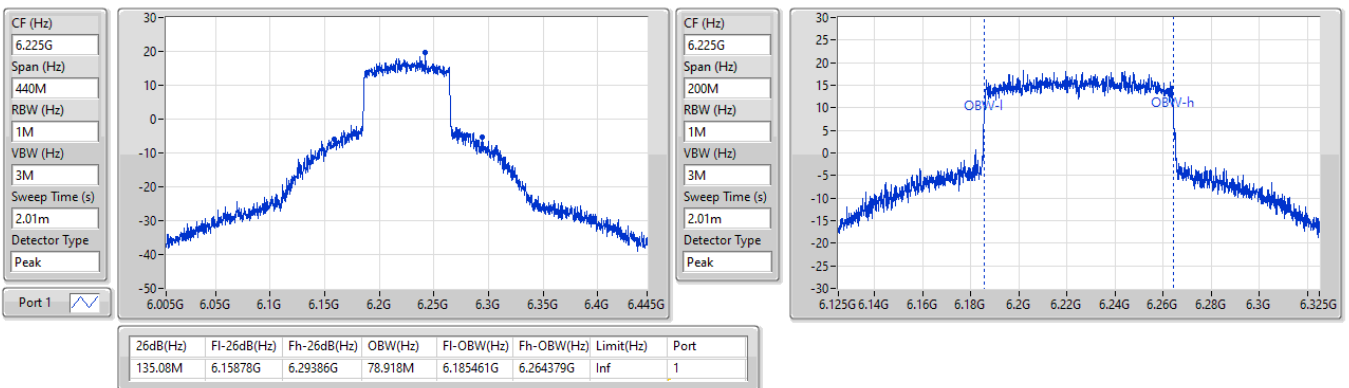


5.925-6.425GHz\_802.11ax HEW80\_Nss1,(MCS0)\_1TX

EBW

6225MHz

27/10/2023



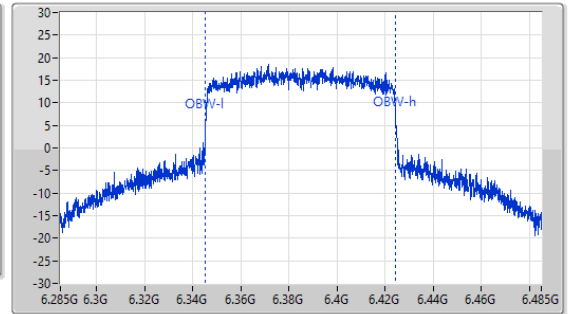
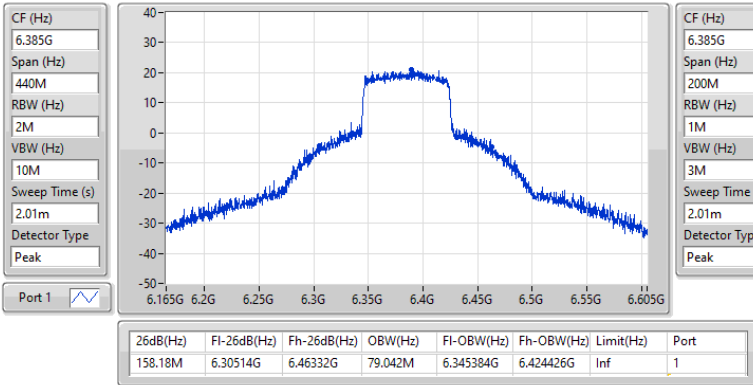


5.925-6.425GHz\_802.11ax HEW80\_Nss1,(MCS0)\_1TX

EBW

6385MHz

27/10/2023

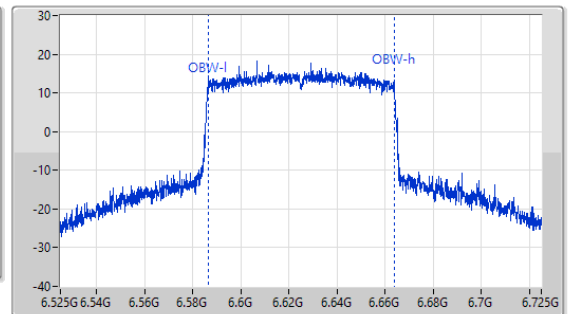
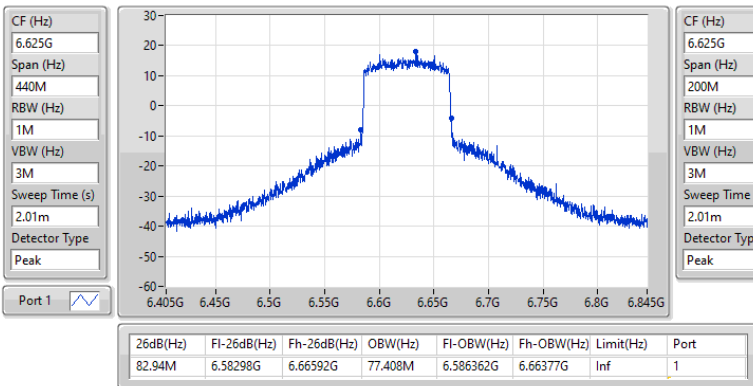


6.525-6.875GHz\_802.11ax HEW80\_Nss1,(MCS0)\_1TX

EBW

6625MHz

27/10/2023

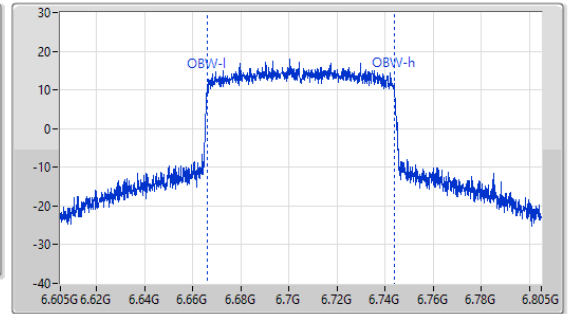
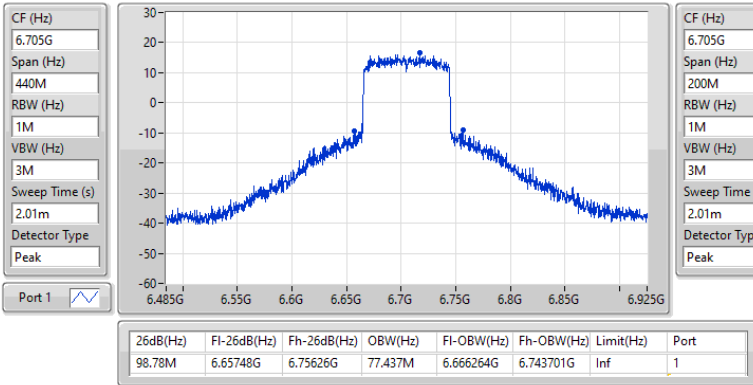


6.525-6.875GHz\_802.11ax HEW80\_Nss1,(MCS0)\_1TX

EBW

6705MHz

27/10/2023

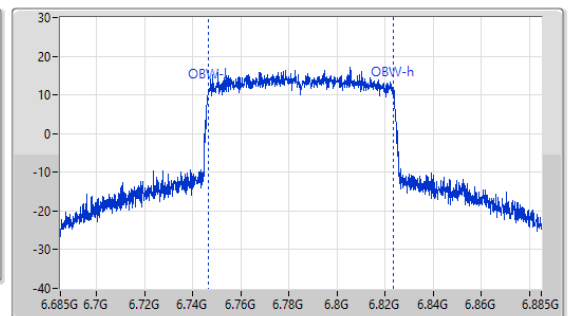
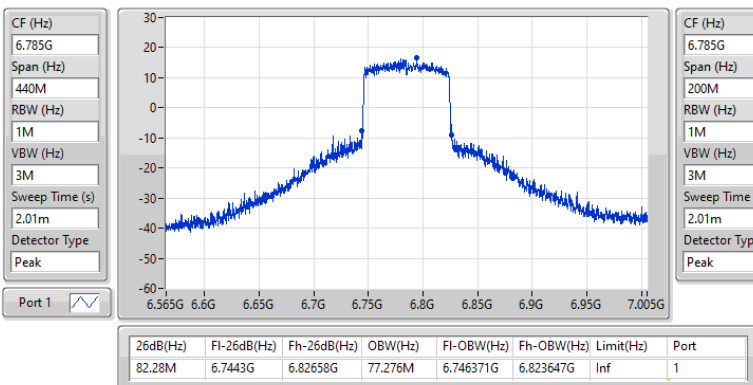


6.525-6.875GHz\_802.11ax HEW80\_Nss1,(MCS0)\_1TX

EBW

6785MHz

27/10/2023

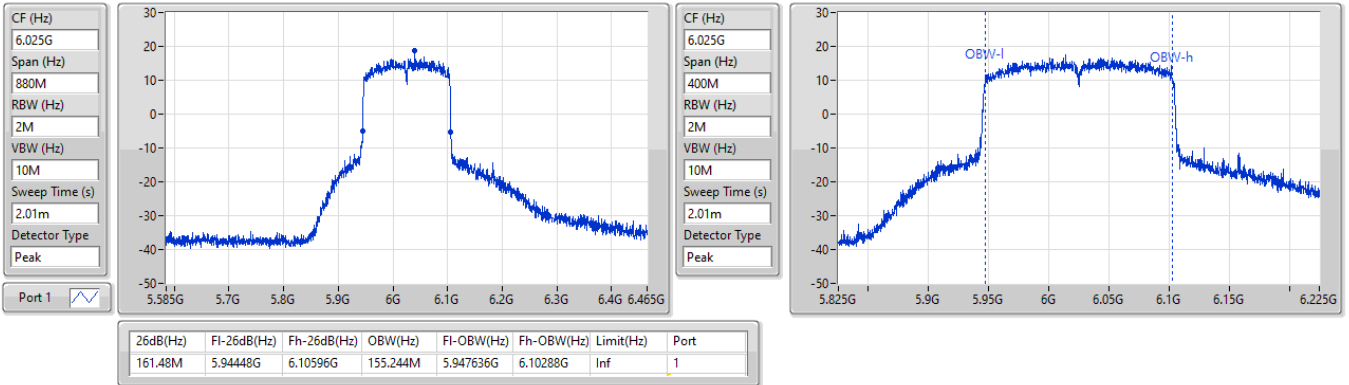


5.925-6.425GHz\_802.11ax HEW160\_Nss1,(MCS0)\_1TX

EBW

6025MHz

27/10/2023

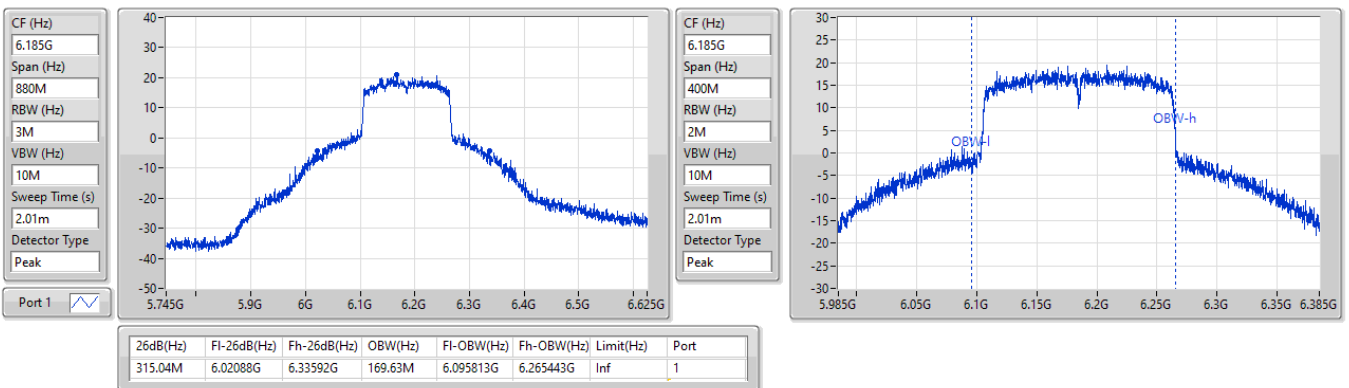


5.925-6.425GHz\_802.11ax HEW160\_Nss1,(MCS0)\_1TX

EBW

6185MHz

27/10/2023

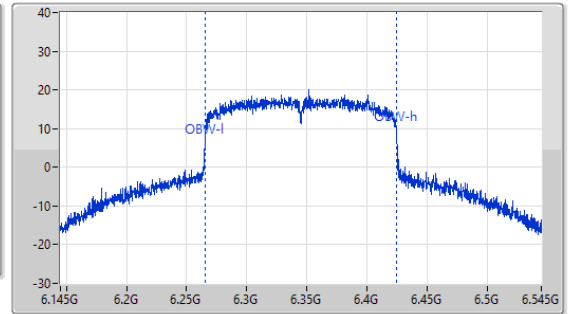
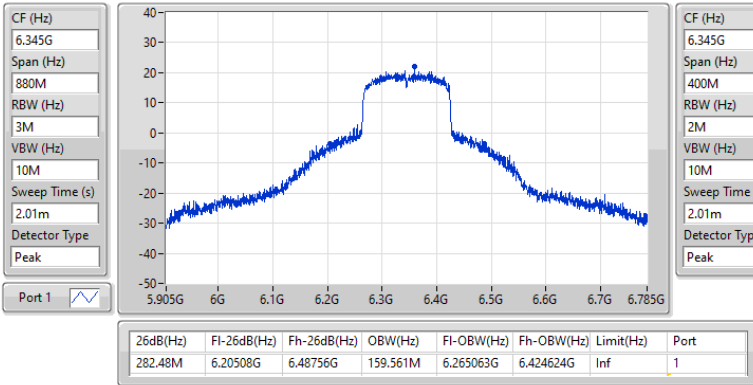


5.925-6.425GHz\_802.11ax HEW160\_Nss1,(MCS0)\_1TX

EBW

6345MHz

27/10/2023

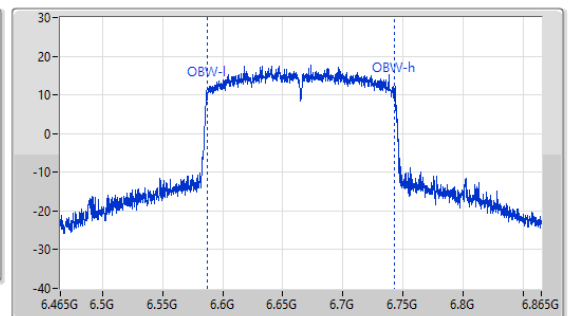
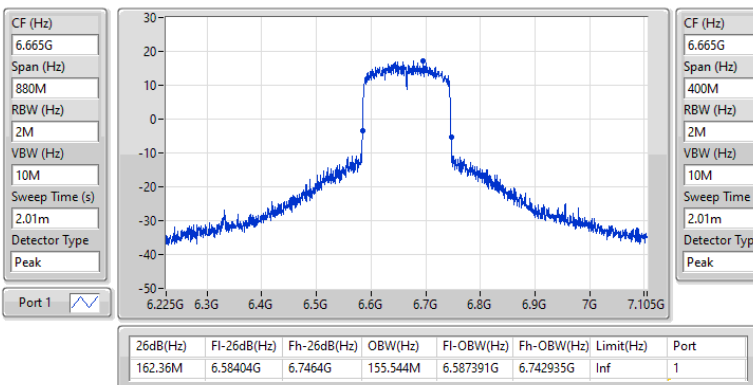


6.525-6.875GHz\_802.11ax HEW160\_Nss1,(MCS0)\_1TX

EBW

6665MHz

27/10/2023



**Summary**

| Mode                            | Max-N dB<br>(Hz) | Max-OBW<br>(Hz) | ITU-Code | Min-N dB<br>(Hz) | Min-OBW<br>(Hz) |
|---------------------------------|------------------|-----------------|----------|------------------|-----------------|
| 5.925-6.425GHz                  | -                | -               | -        | -                | -               |
| 802.11ax HEW20_Nss1,(MCS0)_1TX  | 41.69M           | 23.722M         | 23M7D1D  | 31.625M          | 19.454M         |
| 802.11ax HEW40_Nss1,(MCS0)_1TX  | 106.37M          | 66.288M         | 66M3D1D  | 39.6M            | 37.661M         |
| 802.11ax HEW80_Nss1,(MCS0)_1TX  | 202.4M           | 129.793M        | 130MD1D  | 80.74M           | 77.177M         |
| 802.11ax HEW160_Nss1,(MCS0)_1TX | 399.52M          | 250.926M        | 251MD1D  | 165M             | 154.842M        |
| 6.525-6.875GHz                  | -                | -               | -        | -                | -               |
| 802.11ax HEW20_Nss1,(MCS0)_1TX  | 39.545M          | 21.357M         | 21M4D1D  | 26.895M          | 19.03M          |
| 802.11ax HEW40_Nss1,(MCS0)_1TX  | 73.7M            | 41.561M         | 41M6D1D  | 47.08M           | 37.871M         |
| 802.11ax HEW80_Nss1,(MCS0)_1TX  | 171.38M          | 78.411M         | 78M4D1D  | 125.84M          | 78.009M         |
| 802.11ax HEW160_Nss1,(MCS0)_1TX | 319.44M          | 158.461M        | 158MD1D  | 319.44M          | 158.461M        |

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;  
 Max-OBW = Maximum 99% occupied bandwidth;  
 Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;  
 Min-OBW = Minimum 99% occupied bandwidth

**Result**

| Mode                            | Result | Limit (Hz) | Port 1-N dB (Hz) | Port 1-OBW (Hz) |
|---------------------------------|--------|------------|------------------|-----------------|
| 802.11ax HEW20_Nss1,(MCS0)_1TX  | -      | -          | -                | -               |
| 5955MHz                         | Pass   | Inf        | 35.915M          | 19.573M         |
| 6195MHz                         | Pass   | Inf        | 41.69M           | 23.722M         |
| 6415MHz                         | Pass   | Inf        | 31.625M          | 19.454M         |
| 6535MHz                         | Pass   | Inf        | 32.175M          | 19.167M         |
| 6695MHz                         | Pass   | Inf        | 26.895M          | 19.03M          |
| 6855MHz                         | Pass   | Inf        | 39.545M          | 21.357M         |
| 802.11ax HEW40_Nss1,(MCS0)_1TX  | -      | -          | -                | -               |
| 5965MHz                         | Pass   | Inf        | 39.6M            | 37.661M         |
| 6205MHz                         | Pass   | Inf        | 106.37M          | 66.288M         |
| 6405MHz                         | Pass   | Inf        | 79.86M           | 38.654M         |
| 6565MHz                         | Pass   | Inf        | 47.08M           | 37.871M         |
| 6685MHz                         | Pass   | Inf        | 63.8M            | 38.208M         |
| 6845MHz                         | Pass   | Inf        | 73.7M            | 41.561M         |
| 802.11ax HEW80_Nss1,(MCS0)_1TX  | -      | -          | -                | -               |
| 5985MHz                         | Pass   | Inf        | 80.74M           | 77.177M         |
| 6225MHz                         | Pass   | Inf        | 202.4M           | 129.793M        |
| 6385MHz                         | Pass   | Inf        | 161.04M          | 78.642M         |
| 6625MHz                         | Pass   | Inf        | 125.84M          | 78.009M         |
| 6705MHz                         | Pass   | Inf        | 146.74M          | 78.051M         |
| 6785MHz                         | Pass   | Inf        | 171.38M          | 78.411M         |
| 802.11ax HEW160_Nss1,(MCS0)_1TX | -      | -          | -                | -               |
| 6025MHz                         | Pass   | Inf        | 165M             | 154.842M        |
| 6185MHz                         | Pass   | Inf        | 399.52M          | 250.926M        |
| 6345MHz                         | Pass   | Inf        | 348.48M          | 167.243M        |
| 6665MHz                         | Pass   | Inf        | 319.44M          | 158.461M        |

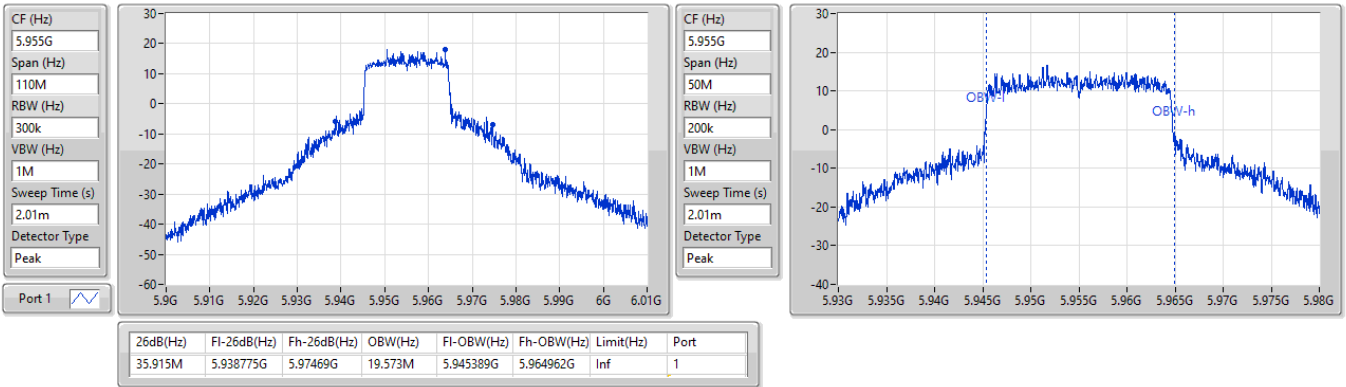
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band  
 Port X-OBW = Port X 99% occupied bandwidth

5.925-6.425GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

5955MHz

27/10/2023

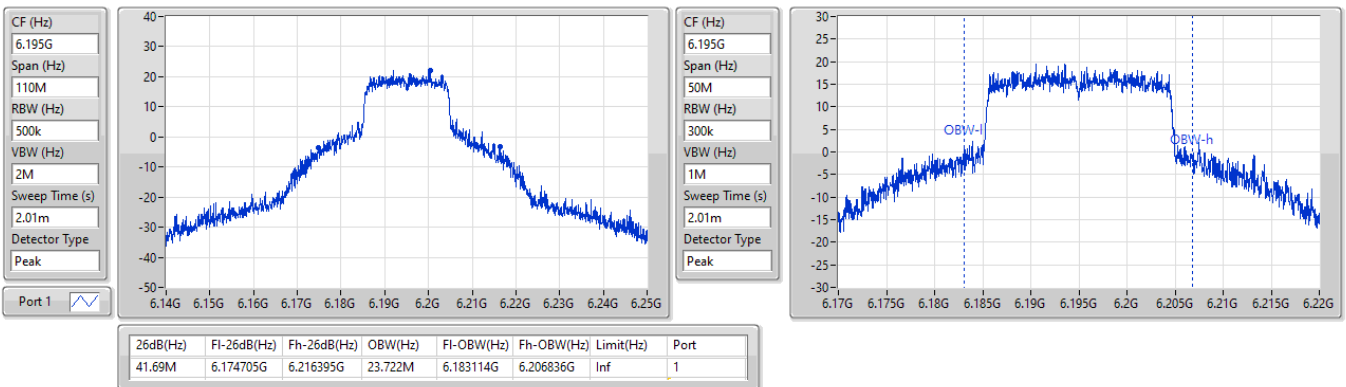


5.925-6.425GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

6195MHz

27/10/2023



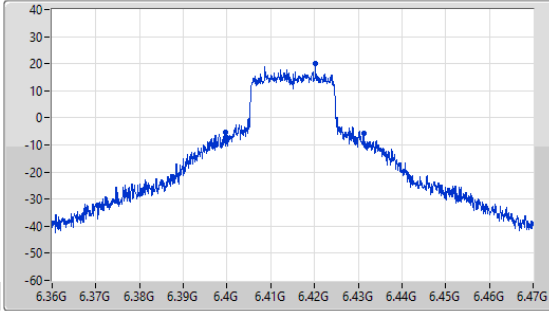
5.925-6.425GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

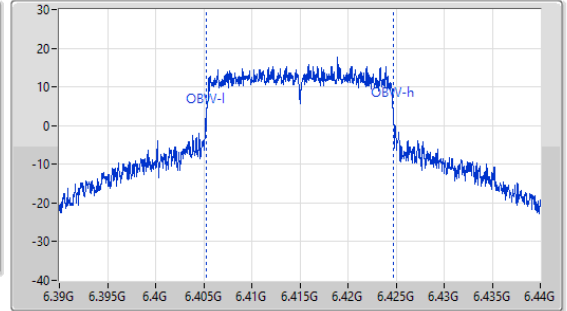
6415MHz

27/10/2023

CF (Hz)  
6.415G  
Span (Hz)  
110M  
RBW (Hz)  
300k  
VBW (Hz)  
1M  
Sweep Time (s)  
2.01m  
Detector Type  
Peak



CF (Hz)  
6.415G  
Span (Hz)  
50M  
RBW (Hz)  
200k  
VBW (Hz)  
1M  
Sweep Time (s)  
2.01m  
Detector Type  
Peak



| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|----------|-------------|-------------|---------|------------|------------|-----------|------|
| 31.625M  | 6.399655G   | 6.43128G    | 19.454M | 6.40524G   | 6.424693G  | Inf       | 1    |

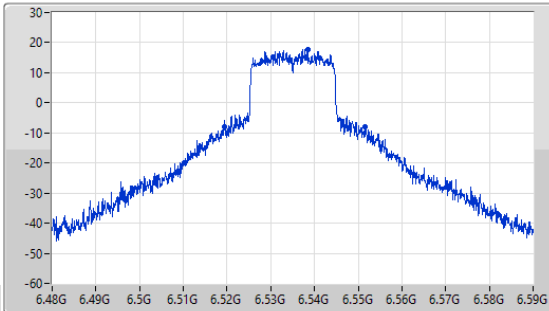
6.525-6.875GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

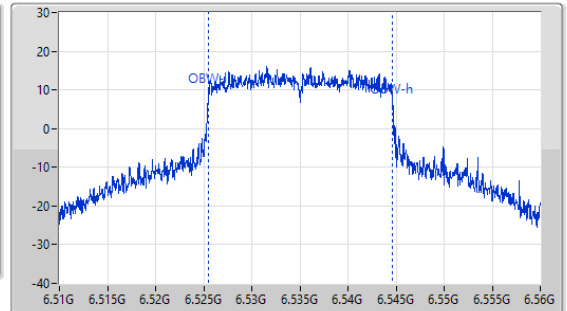
6535MHz

27/10/2023

CF (Hz)  
6.535G  
Span (Hz)  
110M  
RBW (Hz)  
300k  
VBW (Hz)  
1M  
Sweep Time (s)  
2.01m  
Detector Type  
Peak



CF (Hz)  
6.535G  
Span (Hz)  
50M  
RBW (Hz)  
200k  
VBW (Hz)  
1M  
Sweep Time (s)  
2.01m  
Detector Type  
Peak



| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|----------|-------------|-------------|---------|------------|------------|-----------|------|
| 32.175M  | 6.519325G   | 6.5515G     | 19.167M | 6.525467G  | 6.544634G  | Inf       | 1    |

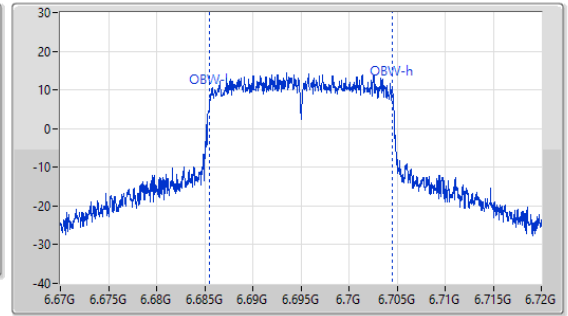
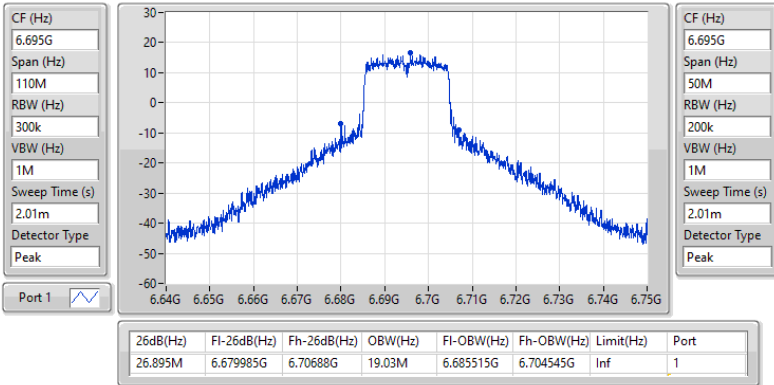


6.525-6.875GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

6695MHz

27/10/2023

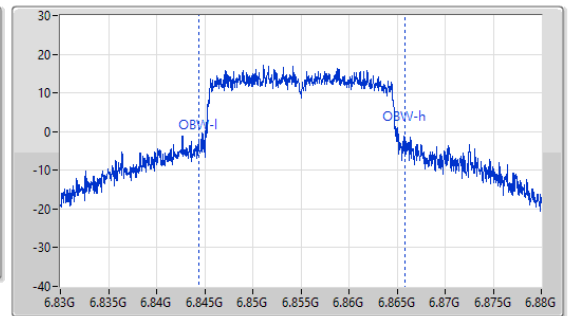
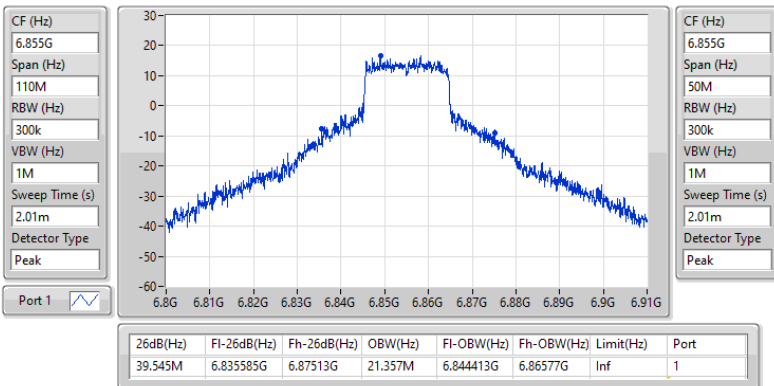


6.525-6.875GHz\_802.11ax HEW20\_Nss1,(MCS0)\_1TX

EBW

6855MHz

27/10/2023

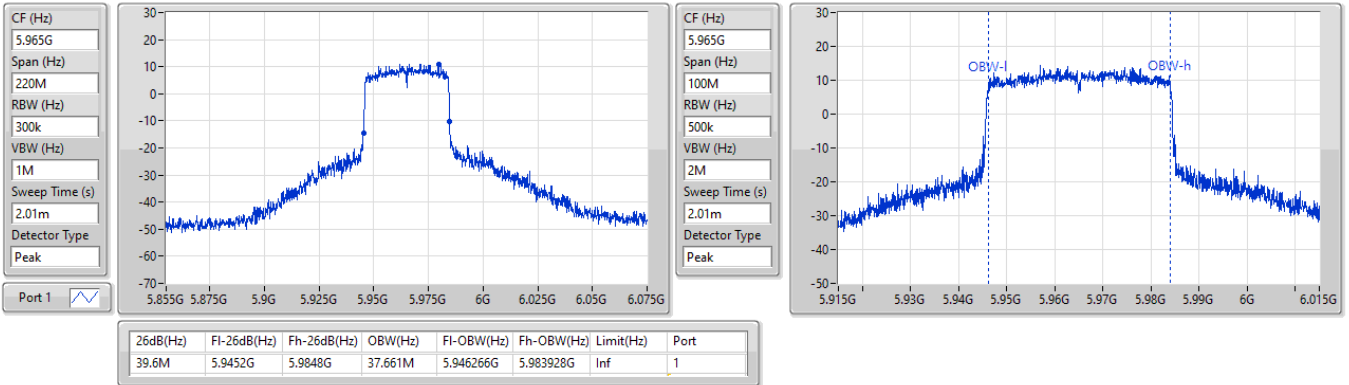


5.925-6.425GHz\_802.11ax HEW40\_Nss1,(MCS0)\_1TX

EBW

5965MHz

27/10/2023

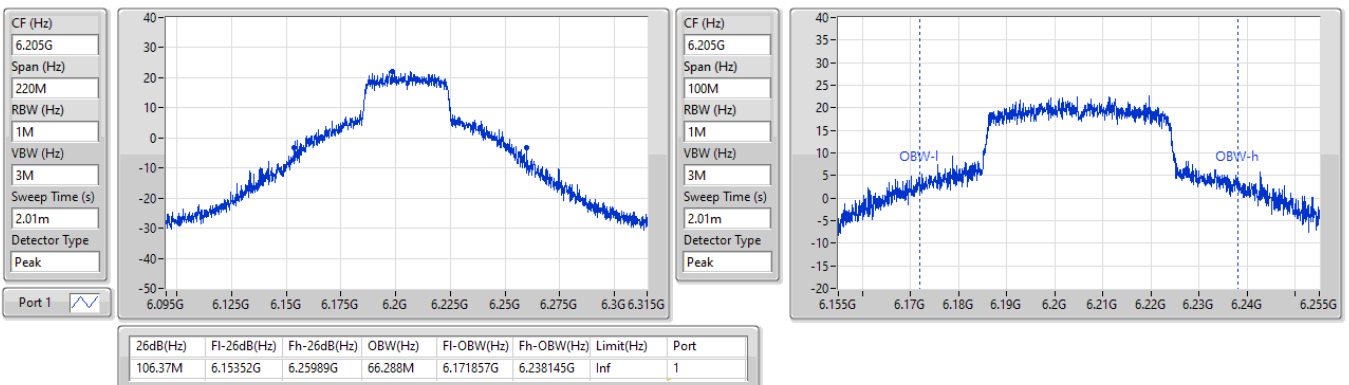


5.925-6.425GHz\_802.11ax HEW40\_Nss1,(MCS0)\_1TX

EBW

6205MHz

27/10/2023

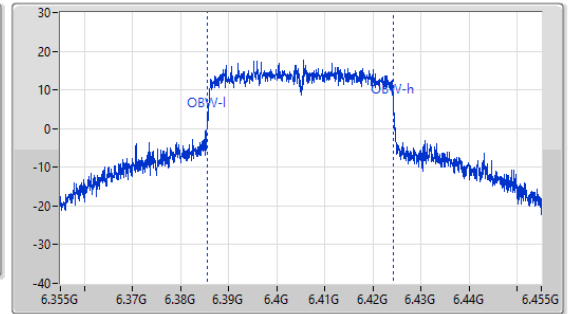
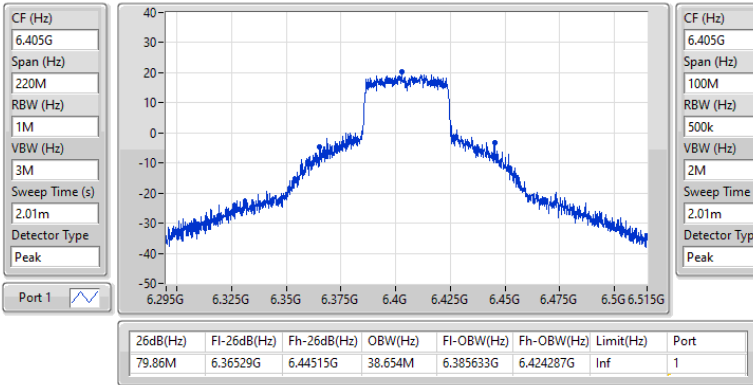


5.925-6.425GHz\_802.11ax HEW40\_Nss1,(MCS0)\_1TX

EBW

6405MHz

27/10/2023

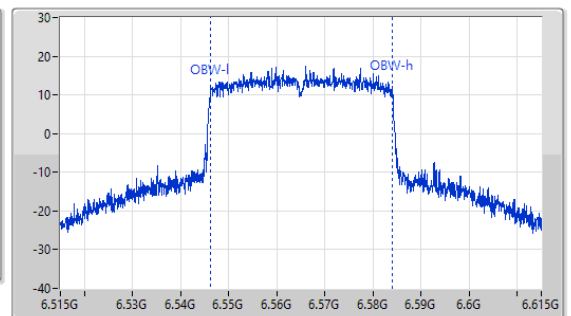
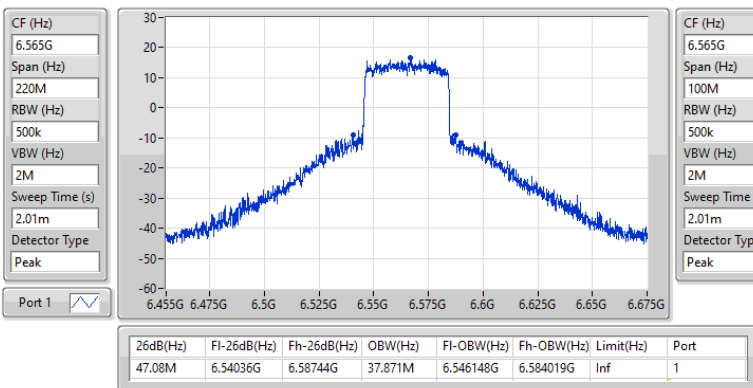


6.525-6.875GHz\_802.11ax HEW40\_Nss1,(MCS0)\_1TX

EBW

6565MHz

27/10/2023

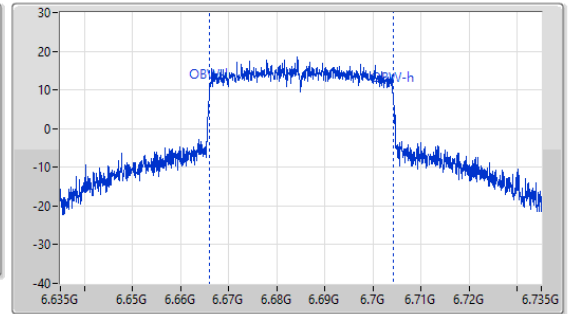
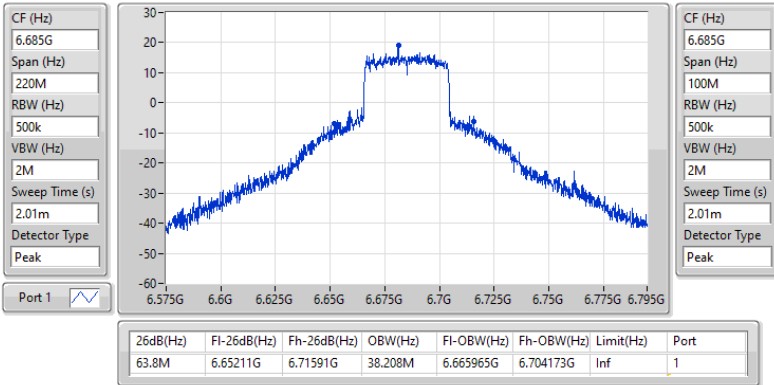


6.525-6.875GHz\_802.11ax HEW40\_Nss1,(MCS0)\_1TX

EBW

6685MHz

27/10/2023

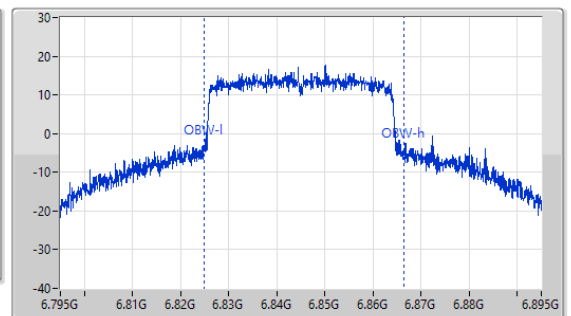
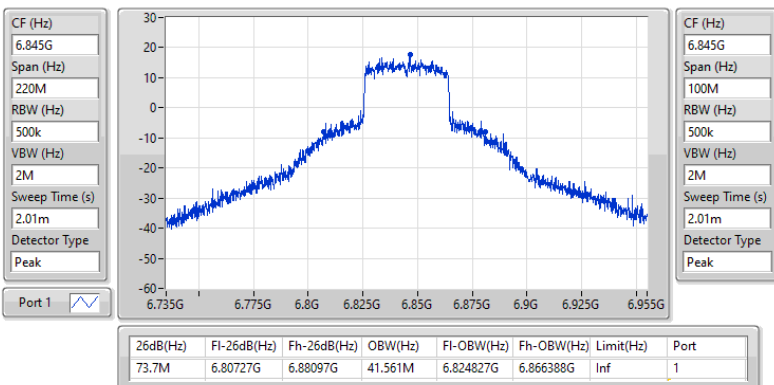


6.525-6.875GHz\_802.11ax HEW40\_Nss1,(MCS0)\_1TX

EBW

6845MHz

27/10/2023

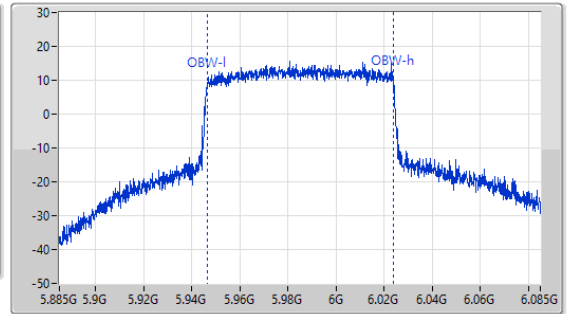
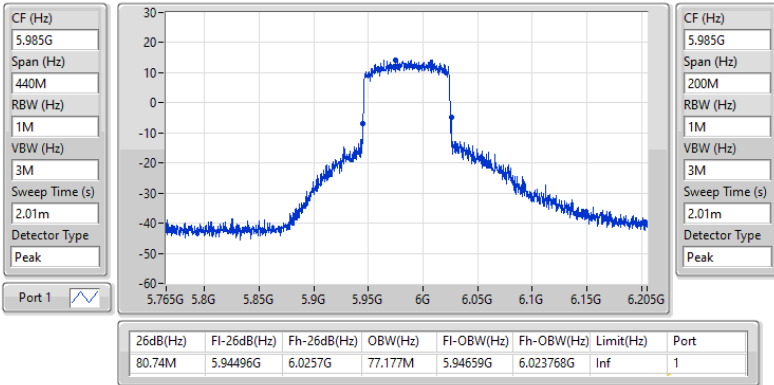


5.925-6.425GHz\_802.11ax HEW80\_Nss1,(MCS0)\_1TX

EBW

5985MHz

27/10/2023

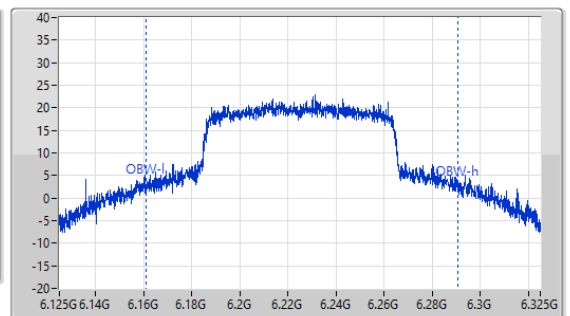
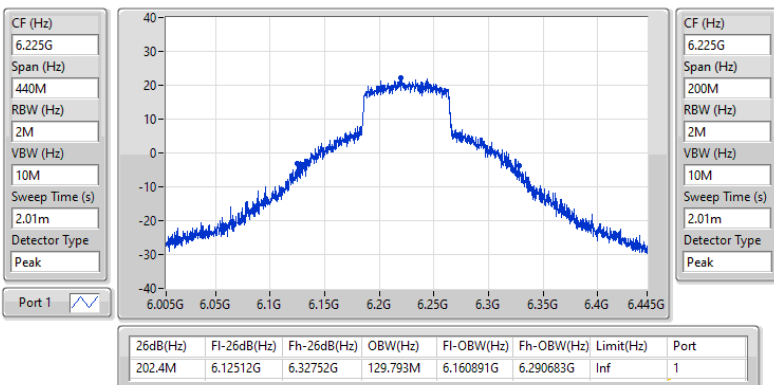


5.925-6.425GHz\_802.11ax HEW80\_Nss1,(MCS0)\_1TX

EBW

6225MHz

27/10/2023

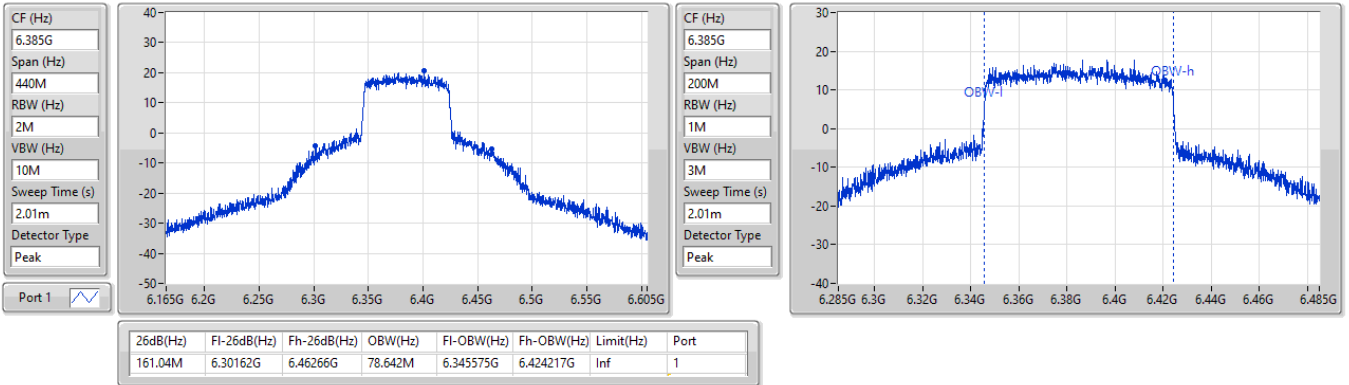


5.925-6.425GHz\_802.11ax HEW80\_Nss1,(MCS0)\_1TX

EBW

6385MHz

27/10/2023

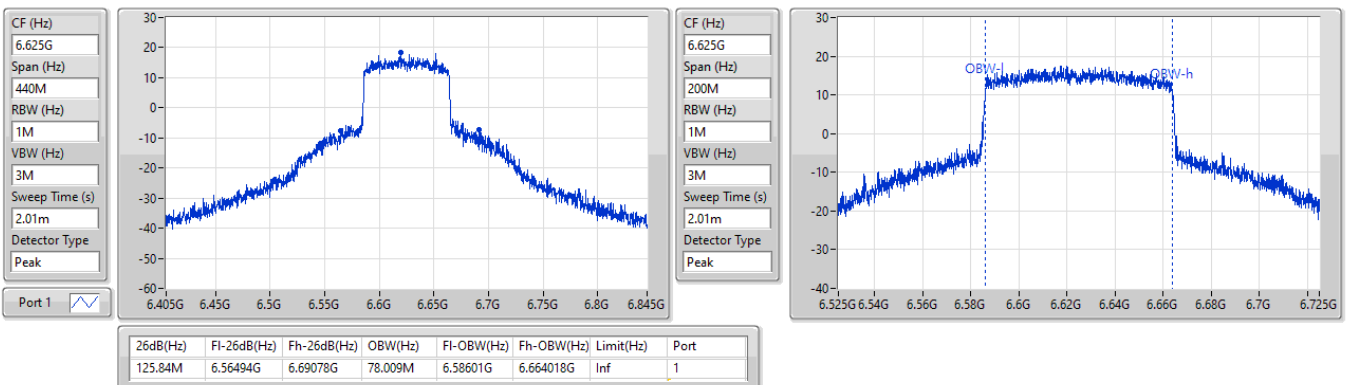


6.525-6.875GHz\_802.11ax HEW80\_Nss1,(MCS0)\_1TX

EBW

6625MHz

27/10/2023

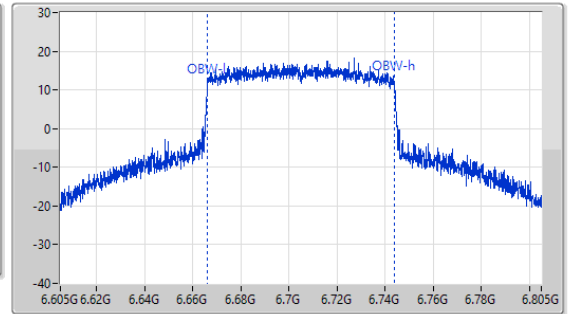
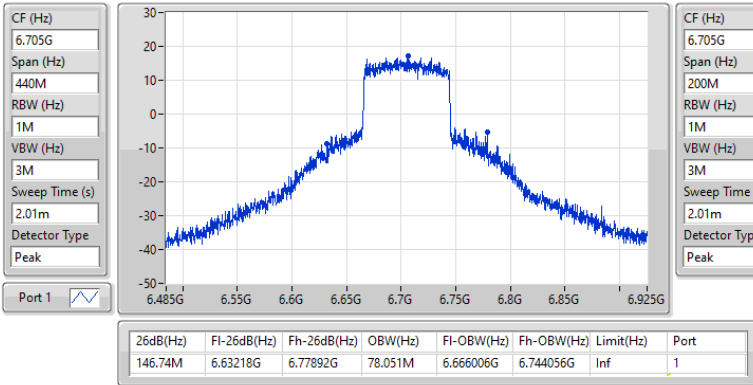


6.525-6.875GHz\_802.11ax HEW80\_Nss1,(MCS0)\_1TX

EBW

6705MHz

27/10/2023

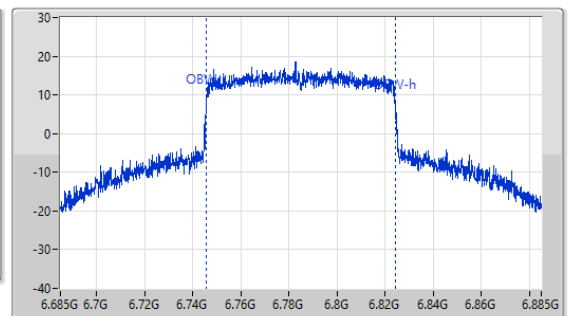
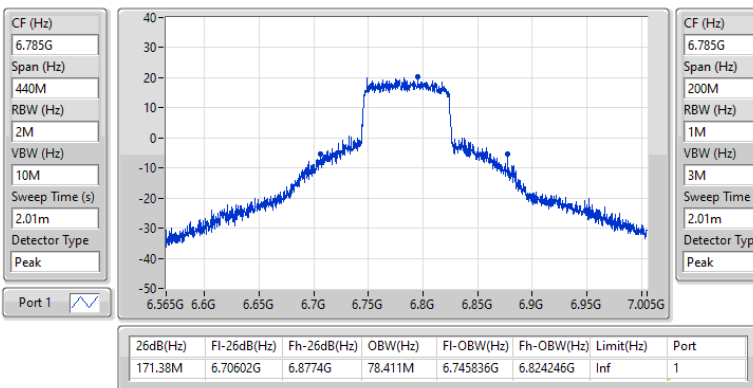


6.525-6.875GHz\_802.11ax HEW80\_Nss1,(MCS0)\_1TX

EBW

6785MHz

27/10/2023



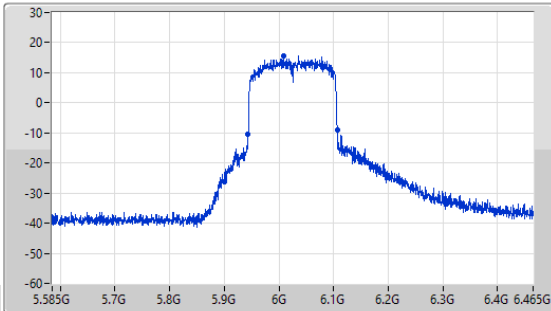
5.925-6.425GHz\_802.11ax HEW160\_Nss1,(MCS0)\_1TX

EBW

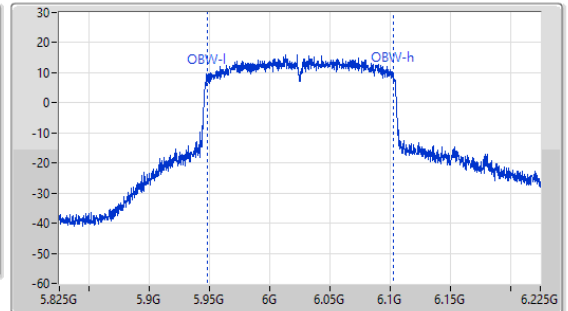
6025MHz

27/10/2023

CF (Hz)  
6.025G  
Span (Hz)  
880M  
RBW (Hz)  
2M  
VBW (Hz)  
10M  
Sweep Time (s)  
2.01m  
Detector Type  
Peak



CF (Hz)  
6.025G  
Span (Hz)  
400M  
RBW (Hz)  
2M  
VBW (Hz)  
10M  
Sweep Time (s)  
2.01m  
Detector Type  
Peak



| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz)  | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|----------|-------------|-------------|----------|------------|------------|-----------|------|
| 165M     | 5.94228G    | 6.10728G    | 154.842M | 5.948015G  | 6.102857G  | Inf       | 1    |

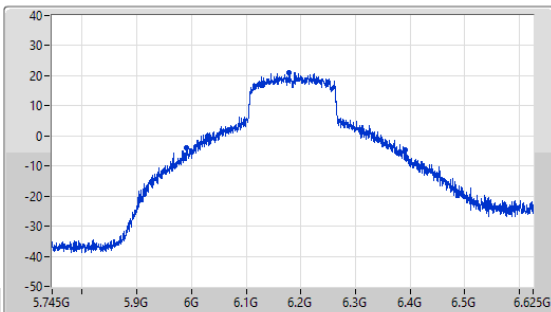
5.925-6.425GHz\_802.11ax HEW160\_Nss1,(MCS0)\_1TX

EBW

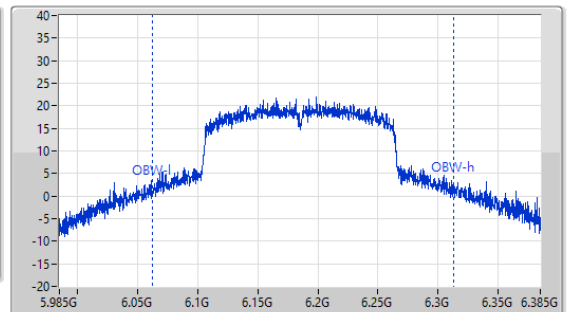
6185MHz

27/10/2023

CF (Hz)  
6.185G  
Span (Hz)  
880M  
RBW (Hz)  
3M  
VBW (Hz)  
10M  
Sweep Time (s)  
2.01m  
Detector Type  
Peak



CF (Hz)  
6.185G  
Span (Hz)  
400M  
RBW (Hz)  
3M  
VBW (Hz)  
10M  
Sweep Time (s)  
2.01m  
Detector Type  
Peak



| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz)  | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|----------|-------------|-------------|----------|------------|------------|-----------|------|
| 399.52M  | 5.9914G     | 6.39092G    | 250.926M | 6.06242G   | 6.313346G  | Inf       | 1    |

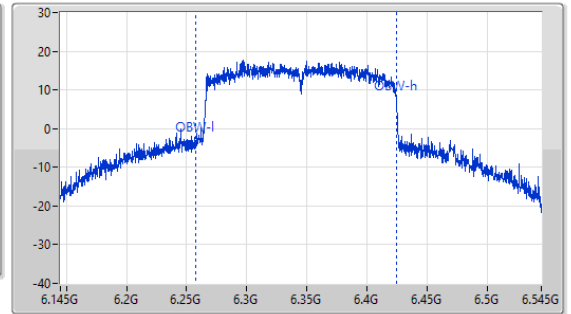
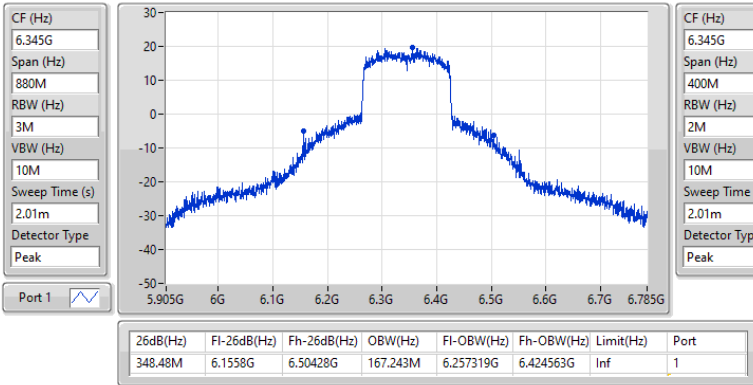


5.925-6.425GHz\_802.11ax HEW160\_Nss1,(MCS0)\_1TX

EBW

6345MHz

27/10/2023

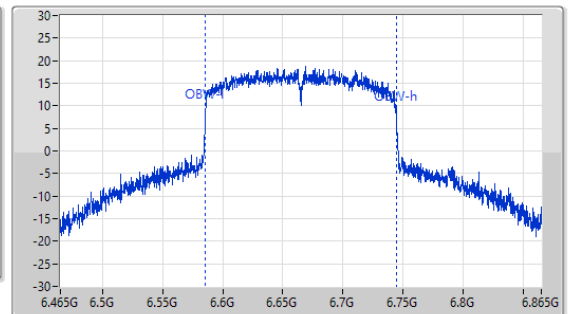
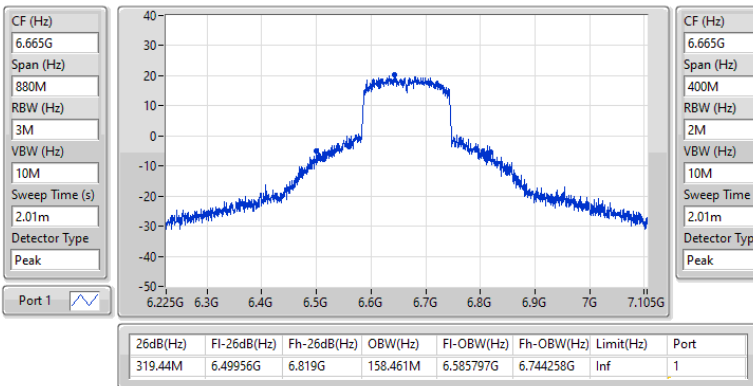


6.525-6.875GHz\_802.11ax HEW160\_Nss1,(MCS0)\_1TX

EBW

6665MHz

27/10/2023



**Summary**

| Mode                            | Max-N dB<br>(Hz) | Max-OBW<br>(Hz) | ITU-Code | Min-N dB<br>(Hz) | Min-OBW<br>(Hz) |
|---------------------------------|------------------|-----------------|----------|------------------|-----------------|
| 5.925-6.425GHz                  | -                | -               | -        | -                | -               |
| 802.11ax HEW20_Nss1,(MCS0)_2TX  | 21.285M          | 18.963M         | 19MOD1D  | 19.965M          | 18.865M         |
| 802.11ax HEW40_Nss1,(MCS0)_2TX  | 39.71M           | 37.855M         | 37M9D1D  | 39.27M           | 37.564M         |
| 802.11ax HEW80_Nss1,(MCS0)_2TX  | 85.14M           | 77.694M         | 77M7D1D  | 79.86M           | 77.111M         |
| 802.11ax HEW160_Nss1,(MCS0)_2TX | 163.68M          | 155.676M        | 156MD1D  | 161.48M          | 154.314M        |
| 6.525-6.875GHz                  | -                | -               | -        | -                | -               |
| 802.11ax HEW20_Nss1,(MCS0)_2TX  | 20.57M           | 18.919M         | 18M9D1D  | 19.745M          | 18.849M         |
| 802.11ax HEW40_Nss1,(MCS0)_2TX  | 39.71M           | 37.889M         | 37M9D1D  | 38.72M           | 37.577M         |
| 802.11ax HEW80_Nss1,(MCS0)_2TX  | 80.96M           | 77.347M         | 77M3D1D  | 80.08M           | 76.656M         |
| 802.11ax HEW160_Nss1,(MCS0)_2TX | 161.92M          | 155.312M        | 155MD1D  | 161.92M          | 154.172M        |

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;  
 Max-OBW = Maximum 99% occupied bandwidth;  
 Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;  
 Min-OBW = Minimum 99% occupied bandwidth

**Result**

| Mode                            | Result | Limit (Hz) | Port 1-N dB (Hz) | Port 1-OBW (Hz) | Port 2-N dB (Hz) | Port 2-OBW (Hz) |
|---------------------------------|--------|------------|------------------|-----------------|------------------|-----------------|
| 802.11ax HEW20_Nss1,(MCS0)_2TX  | -      | -          | -                | -               | -                | -               |
| 5955MHz                         | Pass   | Inf        | 21.285M          | 18.879M         | 20.13M           | 18.869M         |
| 6195MHz                         | Pass   | Inf        | 20.075M          | 18.919M         | 19.965M          | 18.865M         |
| 6415MHz                         | Pass   | Inf        | 19.965M          | 18.963M         | 20.13M           | 18.921M         |
| 6535MHz                         | Pass   | Inf        | 19.965M          | 18.849M         | 19.745M          | 18.857M         |
| 6695MHz                         | Pass   | Inf        | 20.57M           | 18.904M         | 19.965M          | 18.86M          |
| 6855MHz                         | Pass   | Inf        | 20.185M          | 18.896M         | 19.965M          | 18.919M         |
| 802.11ax HEW40_Nss1,(MCS0)_2TX  | -      | -          | -                | -               | -                | -               |
| 5965MHz                         | Pass   | Inf        | 39.71M           | 37.628M         | 39.6M            | 37.661M         |
| 6205MHz                         | Pass   | Inf        | 39.71M           | 37.855M         | 39.27M           | 37.577M         |
| 6405MHz                         | Pass   | Inf        | 39.38M           | 37.564M         | 39.38M           | 37.657M         |
| 6565MHz                         | Pass   | Inf        | 39.38M           | 37.889M         | 39.05M           | 37.593M         |
| 6685MHz                         | Pass   | Inf        | 39.16M           | 37.679M         | 38.72M           | 37.577M         |
| 6845MHz                         | Pass   | Inf        | 39.27M           | 37.637M         | 39.71M           | 37.616M         |
| 802.11ax HEW80_Nss1,(MCS0)_2TX  | -      | -          | -                | -               | -                | -               |
| 5985MHz                         | Pass   | Inf        | 80.52M           | 77.111M         | 79.86M           | 77.253M         |
| 6225MHz                         | Pass   | Inf        | 85.14M           | 77.639M         | 80.96M           | 77.236M         |
| 6385MHz                         | Pass   | Inf        | 80.52M           | 77.502M         | 81.62M           | 77.694M         |
| 6625MHz                         | Pass   | Inf        | 80.52M           | 77.121M         | 80.52M           | 77.052M         |
| 6705MHz                         | Pass   | Inf        | 80.3M            | 76.847M         | 80.96M           | 77.347M         |
| 6785MHz                         | Pass   | Inf        | 80.3M            | 76.656M         | 80.08M           | 76.738M         |
| 802.11ax HEW160_Nss1,(MCS0)_2TX | -      | -          | -                | -               | -                | -               |
| 6025MHz                         | Pass   | Inf        | 161.92M          | 154.744M        | 161.48M          | 154.314M        |
| 6185MHz                         | Pass   | Inf        | 162.36M          | 155.374M        | 162.36M          | 154.605M        |
| 6345MHz                         | Pass   | Inf        | 163.68M          | 155.676M        | 161.92M          | 155.555M        |
| 6665MHz                         | Pass   | Inf        | 161.92M          | 154.172M        | 161.92M          | 155.312M        |

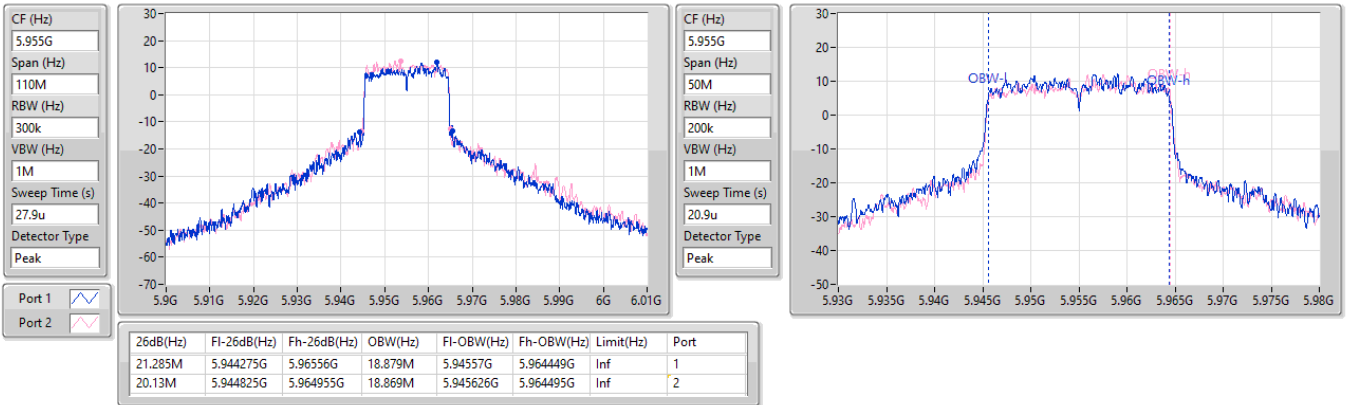
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band  
 Port X-OBW = Port X 99% occupied bandwidth

5.925-6.425GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

5955MHz

31/10/2023

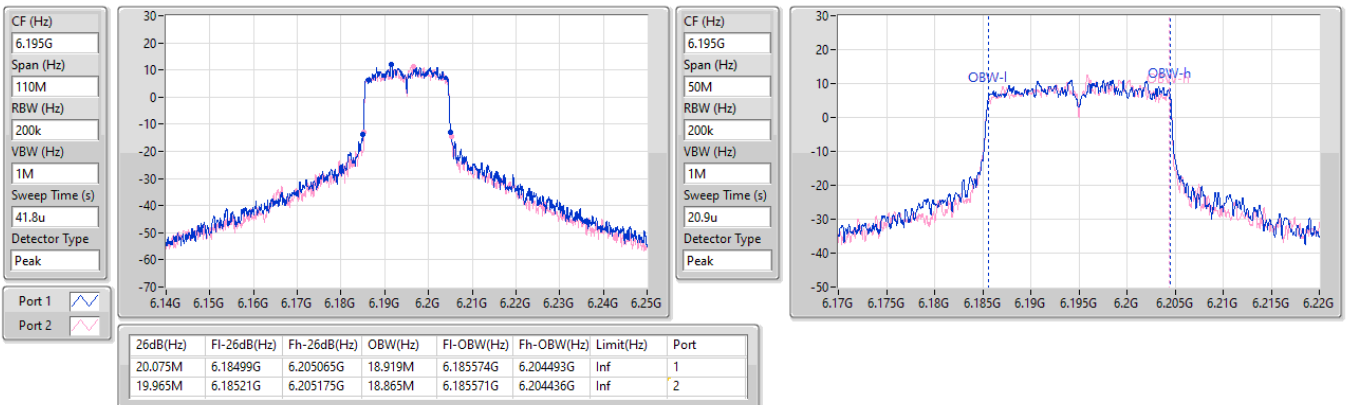


5.925-6.425GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

6195MHz

31/10/2023

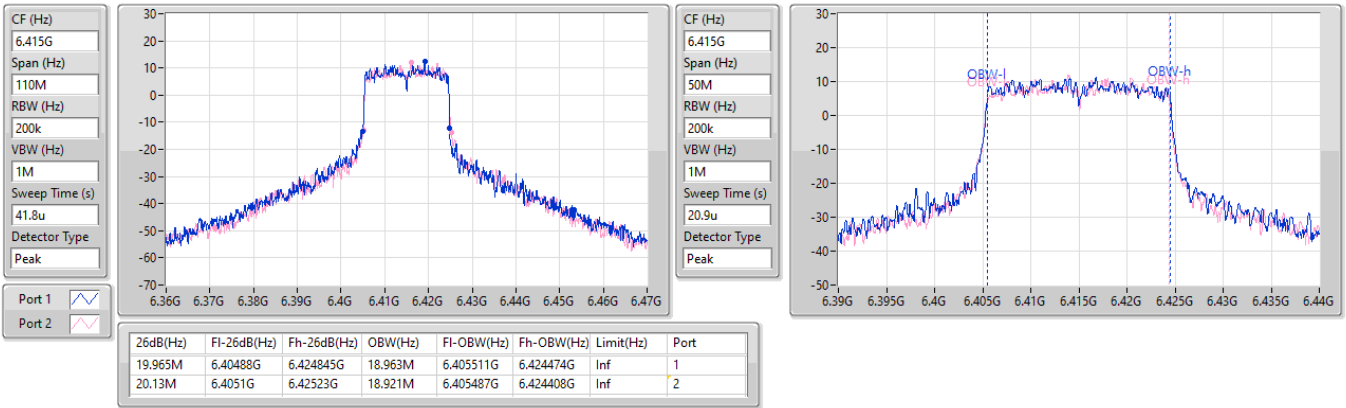


5.925-6.425GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

6415MHz

31/10/2023

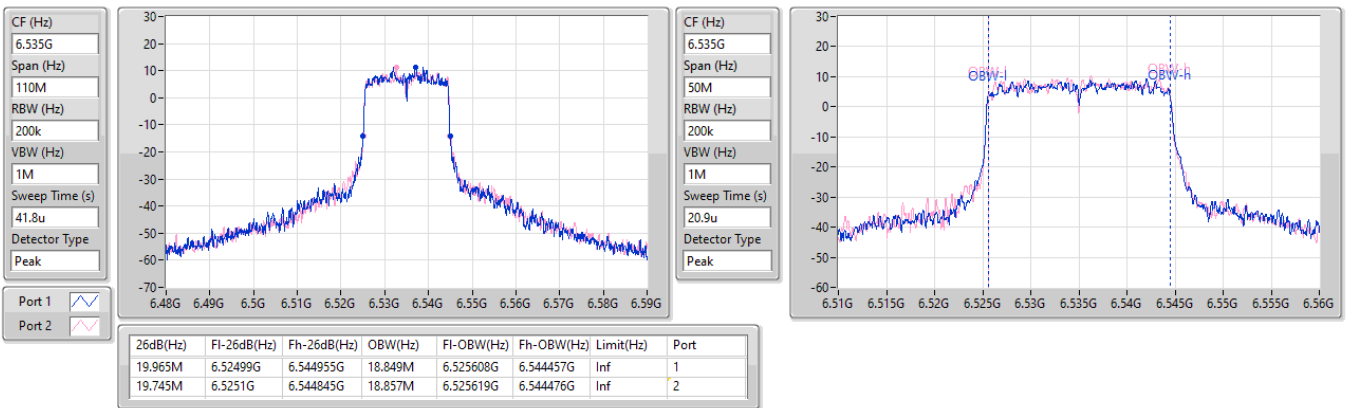


6.525-6.875GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

6535MHz

31/10/2023

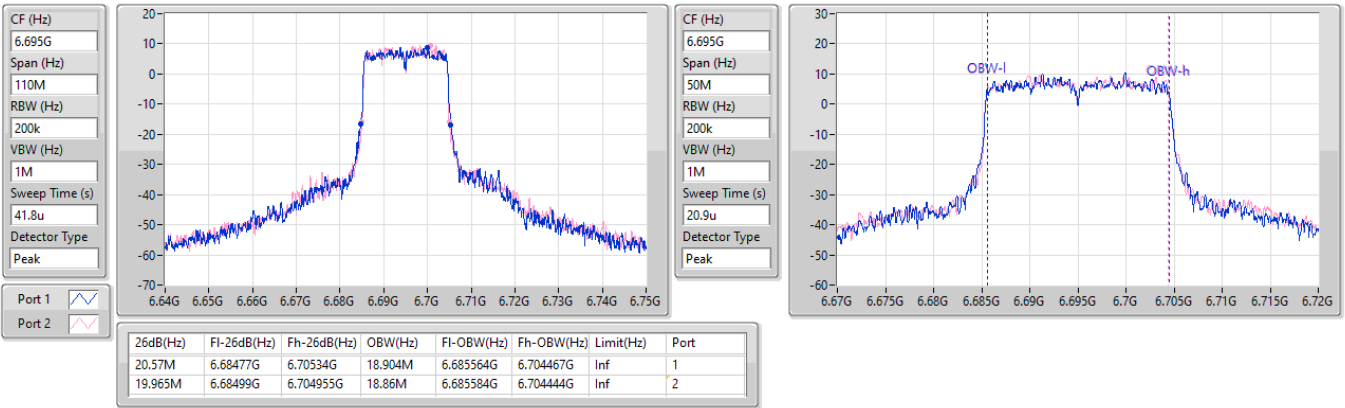


6.525-6.875GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

6695MHz

31/10/2023

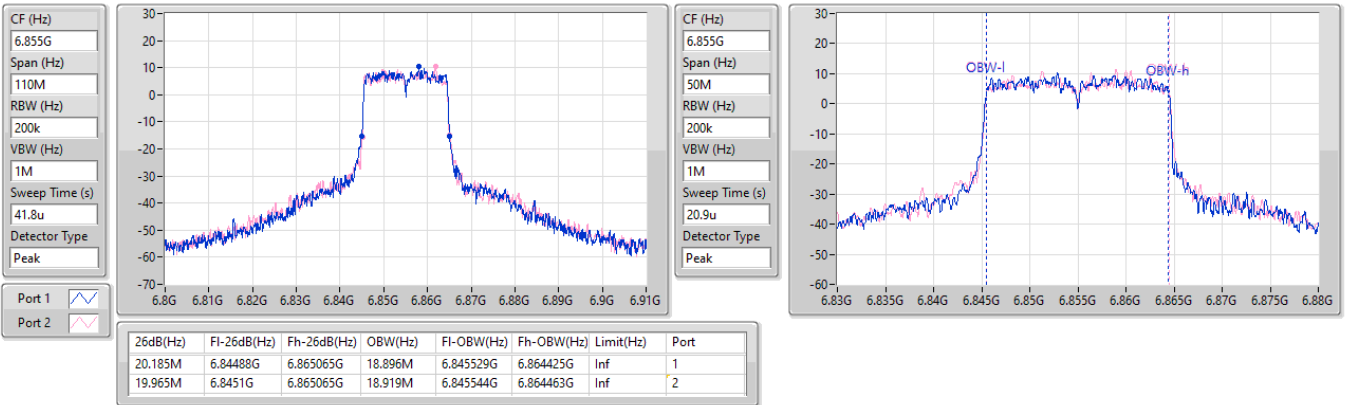


6.525-6.875GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

6855MHz

31/10/2023



5.925-6.425GHz\_802.11ax HEW40\_Nss1,(MCS0)\_2TX

EBW

5965MHz

31/10/2023

CF (Hz)  
5.965G

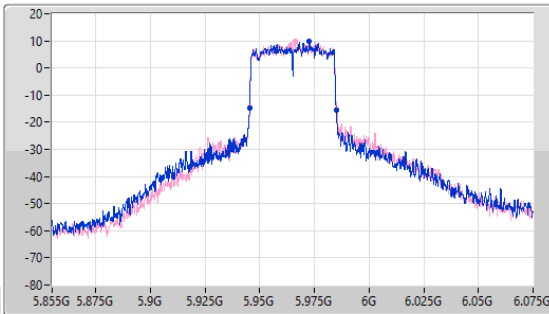
Span (Hz)  
220M

RBW (Hz)  
300k

VBW (Hz)  
1M

Sweep Time (s)  
48.7u

Detector Type  
Peak



CF (Hz)  
5.965G

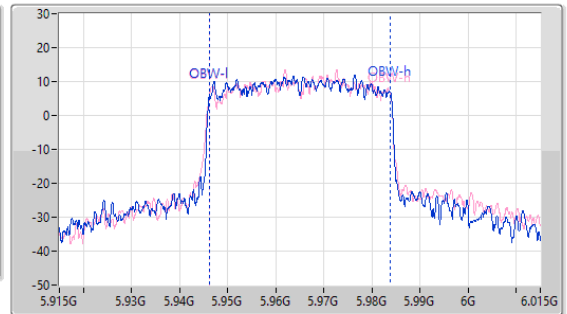
Span (Hz)  
100M

RBW (Hz)  
500k

VBW (Hz)  
2M

Sweep Time (s)  
12.6u

Detector Type  
Peak



Port 1

Port 2

| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|----------|-------------|-------------|---------|------------|------------|-----------|------|
| 39.71M   | 5.94531G    | 5.98502G    | 37.628M | 5.946259G  | 5.983887G  | Inf       | 1    |
| 39.6M    | 5.94542G    | 5.98502G    | 37.661M | 5.946159G  | 5.983819G  | Inf       | 2    |

5.925-6.425GHz\_802.11ax HEW40\_Nss1,(MCS0)\_2TX

EBW

6205MHz

31/10/2023

CF (Hz)  
6.205G

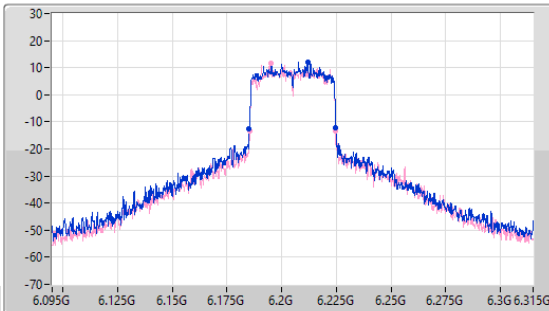
Span (Hz)  
220M

RBW (Hz)  
300k

VBW (Hz)  
1M

Sweep Time (s)  
48.7u

Detector Type  
Peak



CF (Hz)  
6.205G

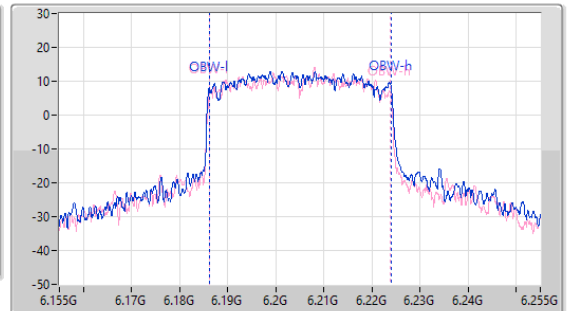
Span (Hz)  
100M

RBW (Hz)  
500k

VBW (Hz)  
2M

Sweep Time (s)  
12.6u

Detector Type  
Peak



Port 1

Port 2

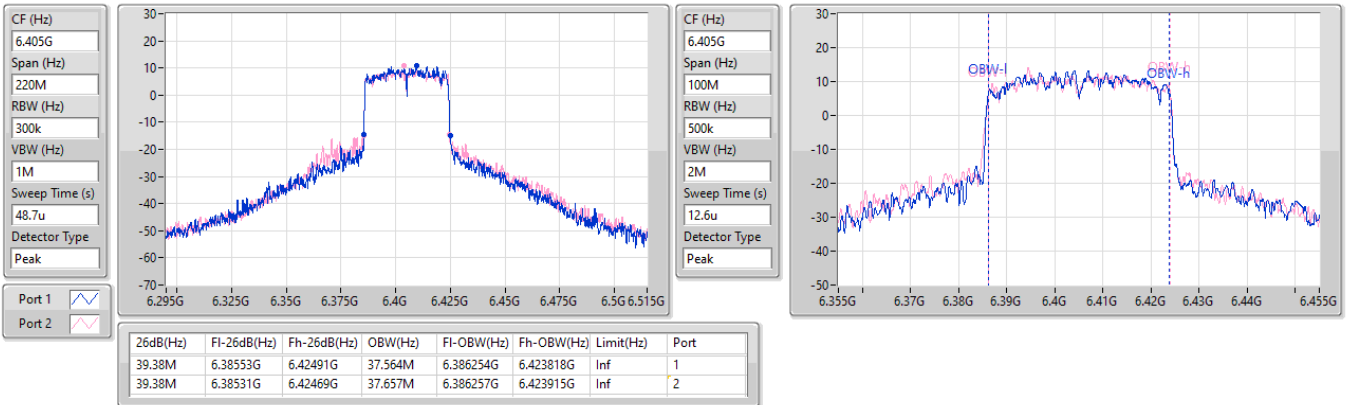
| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz) | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|----------|-------------|-------------|---------|------------|------------|-----------|------|
| 39.71M   | 6.18509G    | 6.2248G     | 37.855M | 6.186122G  | 6.223977G  | Inf       | 1    |
| 39.27M   | 6.18542G    | 6.22469G    | 37.577M | 6.18625G   | 6.223827G  | Inf       | 2    |

5.925-6.425GHz\_802.11ax HEW40\_Nss1,(MCS0)\_2TX

EBW

6405MHz

31/10/2023

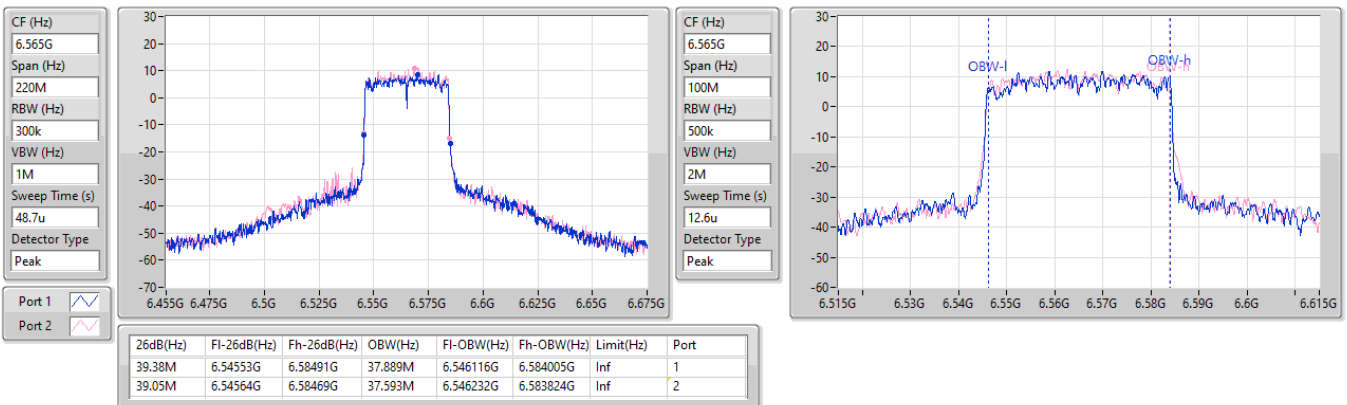


6.525-6.875GHz\_802.11ax HEW40\_Nss1,(MCS0)\_2TX

EBW

6565MHz

31/10/2023



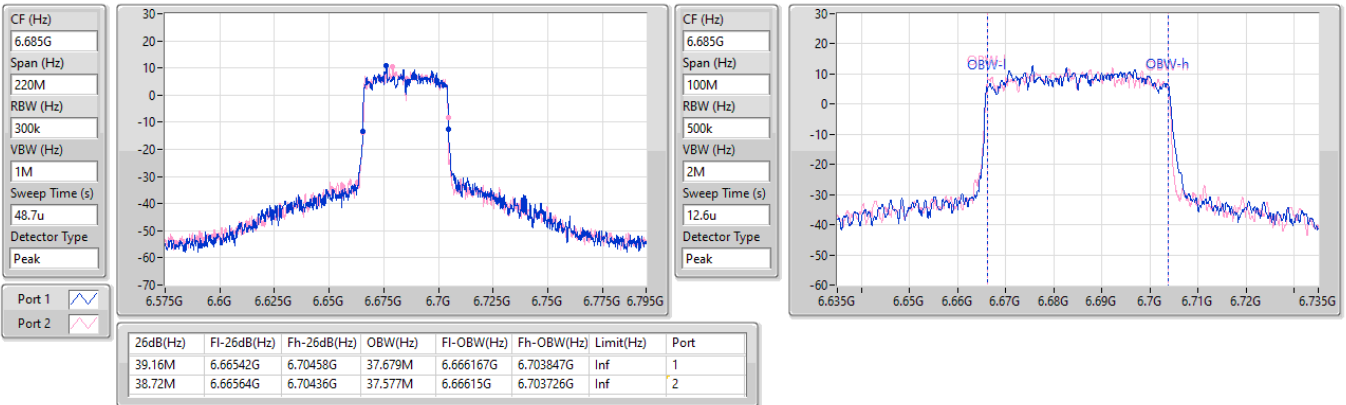


6.525-6.875GHz\_802.11ax HEW40\_Nss1,(MCS0)\_2TX

EBW

6685MHz

31/10/2023

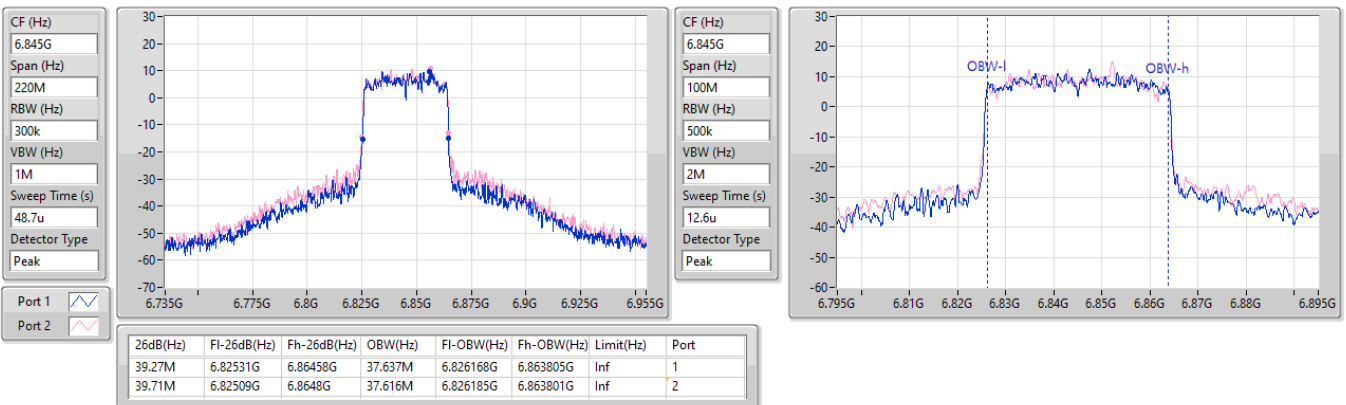


6.525-6.875GHz\_802.11ax HEW40\_Nss1,(MCS0)\_2TX

EBW

6845MHz

31/10/2023

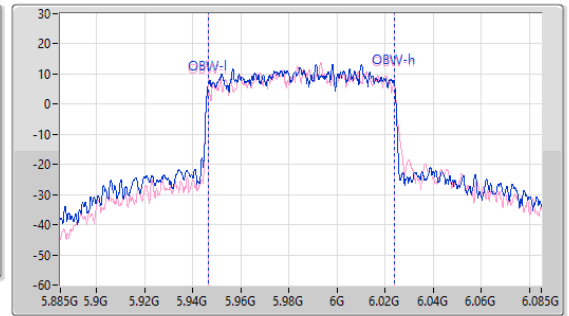
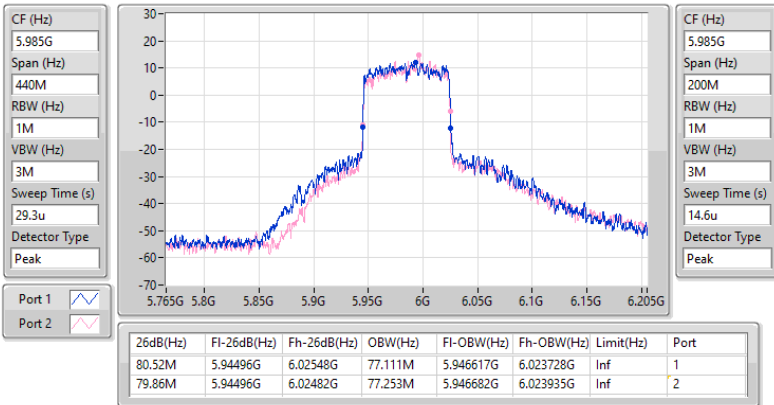


5.925-6.425GHz\_802.11ax HEW80\_Nss1,(MCS0)\_2TX

EBW

5985MHz

31/10/2023

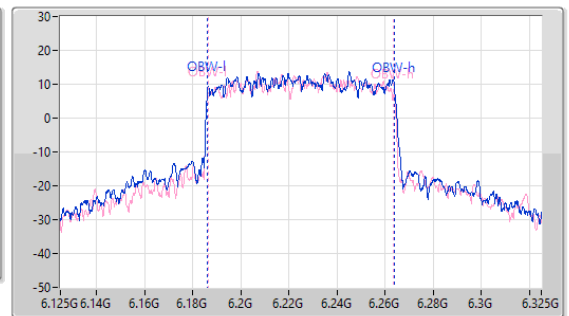
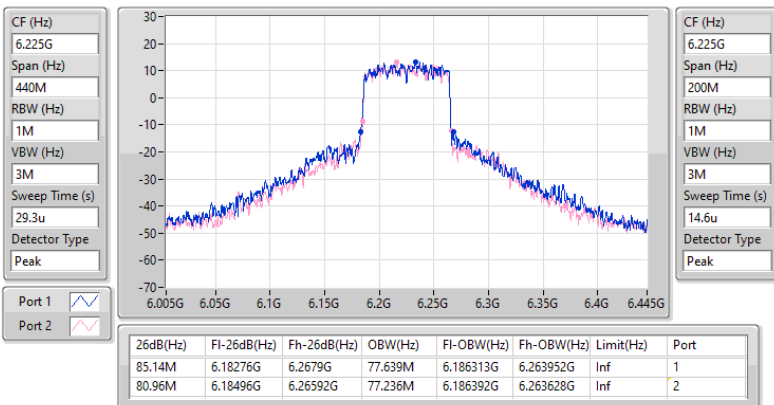


5.925-6.425GHz\_802.11ax HEW80\_Nss1,(MCS0)\_2TX

EBW

6225MHz

31/10/2023

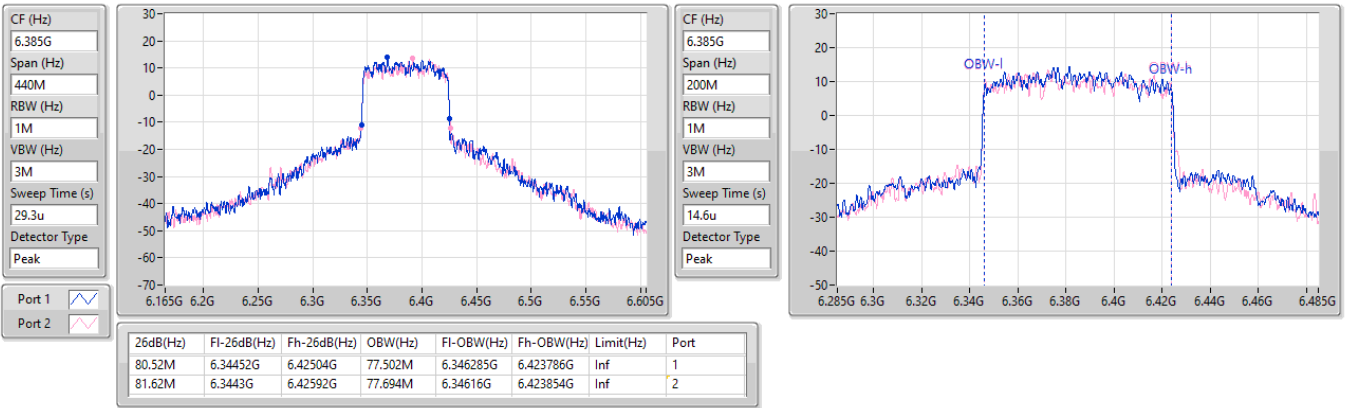


5.925-6.425GHz\_802.11ax HEW80\_Nss1,(MCS0)\_2TX

EBW

6385MHz

31/10/2023

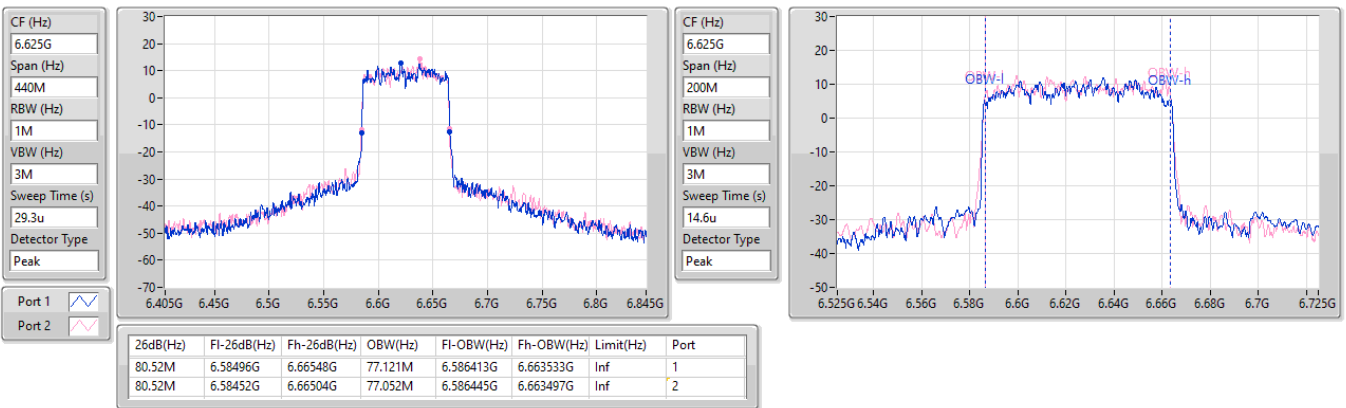


6.525-6.875GHz\_802.11ax HEW80\_Nss1,(MCS0)\_2TX

EBW

6625MHz

31/10/2023

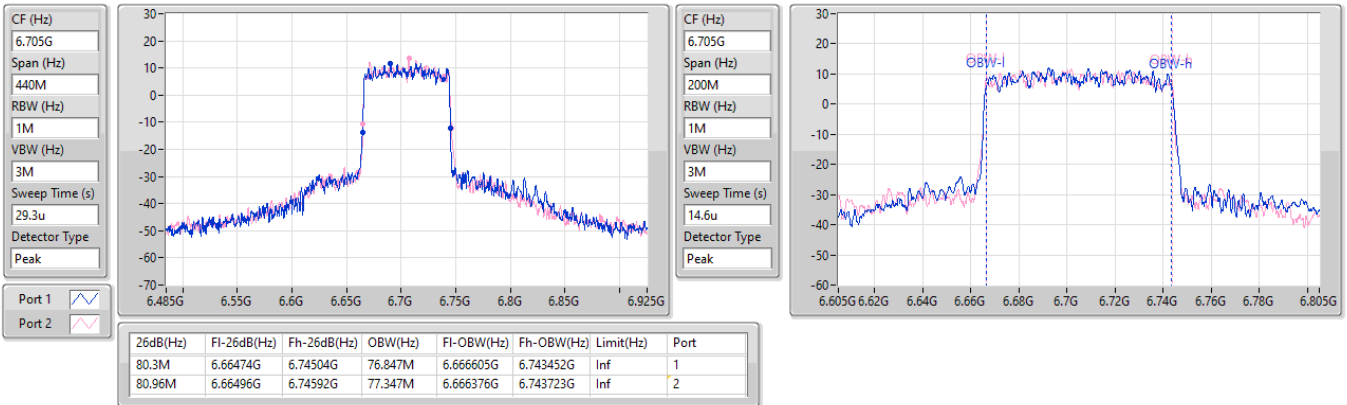


6.525-6.875GHz\_802.11ax HEW80\_Nss1,(MCS0)\_2TX

EBW

6705MHz

31/10/2023

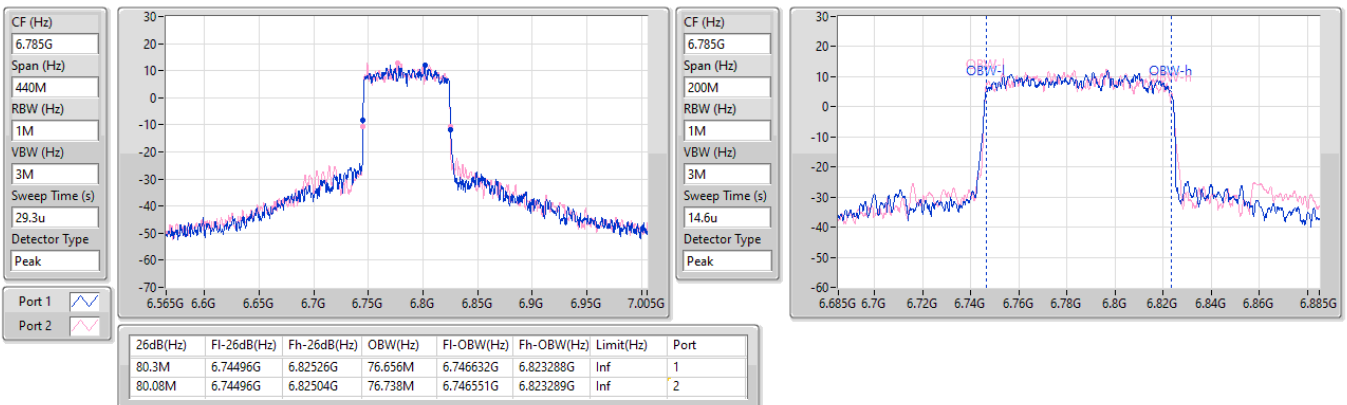


6.525-6.875GHz\_802.11ax HEW80\_Nss1,(MCS0)\_2TX

EBW

6785MHz

31/10/2023

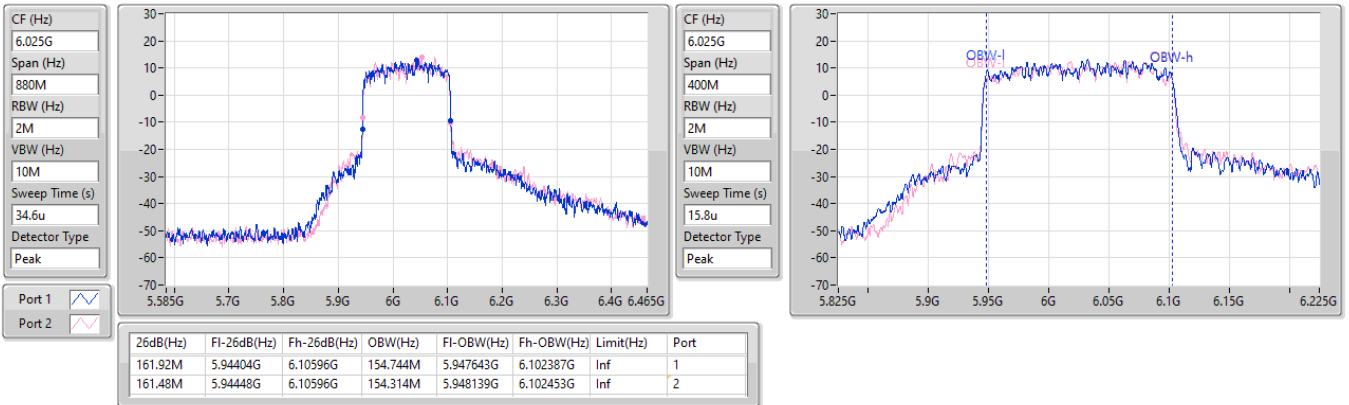


5.925-6.425GHz\_802.11ax HEW160\_Nss1,(MCS0)\_2TX

EBW

6025MHz

31/10/2023

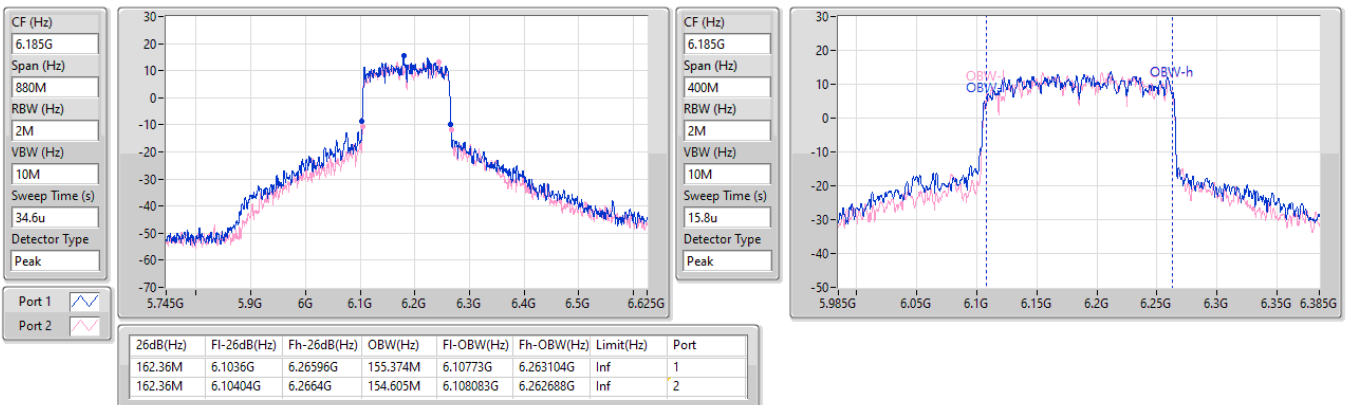


5.925-6.425GHz\_802.11ax HEW160\_Nss1,(MCS0)\_2TX

EBW

6185MHz

31/10/2023

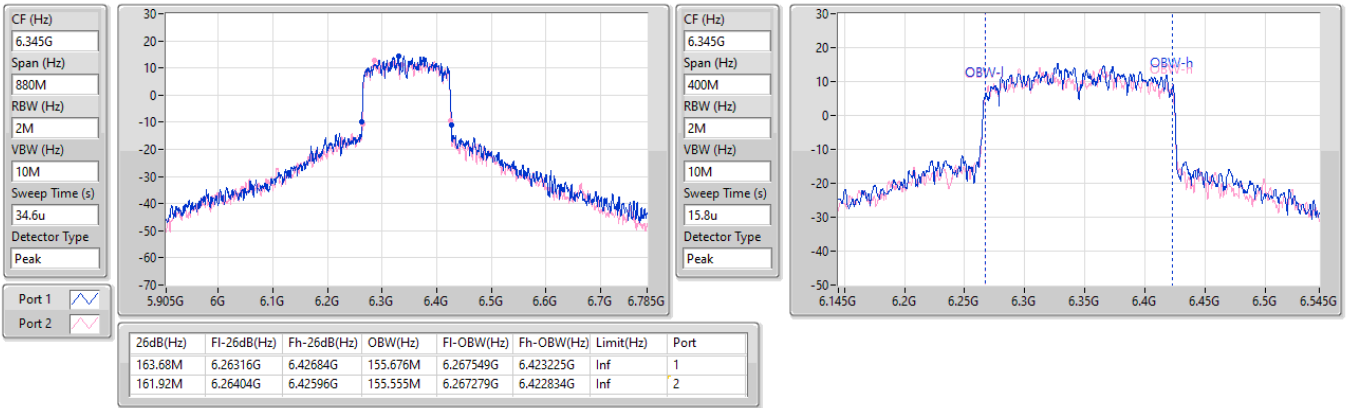


5.925-6.425GHz\_802.11ax HEW160\_Nss1,(MCS0)\_2TX

EBW

6345MHz

31/10/2023

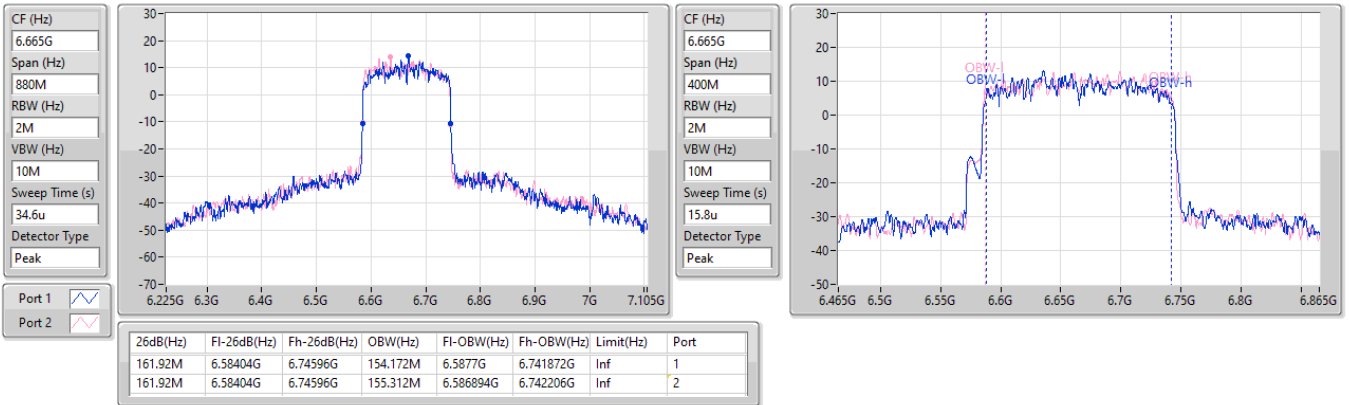


6.525-6.875GHz\_802.11ax HEW160\_Nss1,(MCS0)\_2TX

EBW

6665MHz

31/10/2023



**Summary**

| Mode                               | Max-N dB<br>(Hz) | Max-OBW<br>(Hz) | ITU-Code | Min-N dB<br>(Hz) | Min-OBW<br>(Hz) |
|------------------------------------|------------------|-----------------|----------|------------------|-----------------|
| 5.925-6.425GHz                     | -                | -               | -        | -                | -               |
| 802.11ax HEW20-BF_Nss1,(MCS0)_2TX  | 20.35M           | 18.973M         | 19MOD1D  | 19.745M          | 18.794M         |
| 802.11ax HEW40-BF_Nss1,(MCS0)_2TX  | 39.6M            | 37.68M          | 37M7D1D  | 39.16M           | 37.586M         |
| 802.11ax HEW80-BF_Nss1,(MCS0)_2TX  | 81.18M           | 77.065M         | 77M1D1D  | 80.3M            | 76.88M          |
| 802.11ax HEW160-BF_Nss1,(MCS0)_2TX | 164.56M          | 155.055M        | 155MD1D  | 161.92M          | 154.55M         |
| 6.525-6.875GHz                     | -                | -               | -        | -                | -               |
| 802.11ax HEW20-BF_Nss1,(MCS0)_2TX  | 20.295M          | 18.975M         | 19MOD1D  | 19.745M          | 18.802M         |
| 802.11ax HEW40-BF_Nss1,(MCS0)_2TX  | 39.71M           | 37.828M         | 37M8D1D  | 38.94M           | 37.59M          |
| 802.11ax HEW80-BF_Nss1,(MCS0)_2TX  | 80.96M           | 77.341M         | 77M3D1D  | 80.08M           | 76.876M         |
| 802.11ax HEW160-BF_Nss1,(MCS0)_2TX | 162.8M           | 155.218M        | 155MD1D  | 161.92M          | 152.874M        |

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;  
 Max-OBW = Maximum 99% occupied bandwidth;  
 Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;  
 Min-OBW = Minimum 99% occupied bandwidth

**Result**

| Mode                               | Result | Limit (Hz) | Port 1-N dB (Hz) | Port 1-OBW (Hz) | Port 2-N dB (Hz) | Port 2-OBW (Hz) |
|------------------------------------|--------|------------|------------------|-----------------|------------------|-----------------|
| 802.11ax HEW20-BF_Nss1,(MCS0)_2TX  | -      | -          | -                | -               | -                | -               |
| 5955MHz                            | Pass   | Inf        | 20.02M           | 18.865M         | 20.295M          | 18.837M         |
| 6195MHz                            | Pass   | Inf        | 20.185M          | 18.794M         | 20.35M           | 18.973M         |
| 6415MHz                            | Pass   | Inf        | 19.745M          | 18.897M         | 20.075M          | 18.9M           |
| 6535MHz                            | Pass   | Inf        | 19.745M          | 18.835M         | 20.295M          | 18.946M         |
| 6695MHz                            | Pass   | Inf        | 20.02M           | 18.879M         | 20.24M           | 18.975M         |
| 6855MHz                            | Pass   | Inf        | 20.24M           | 18.802M         | 19.91M           | 18.922M         |
| 802.11ax HEW40-BF_Nss1,(MCS0)_2TX  | -      | -          | -                | -               | -                | -               |
| 5965MHz                            | Pass   | Inf        | 39.38M           | 37.586M         | 39.38M           | 37.68M          |
| 6205MHz                            | Pass   | Inf        | 39.49M           | 37.621M         | 39.16M           | 37.628M         |
| 6405MHz                            | Pass   | Inf        | 39.6M            | 37.619M         | 39.49M           | 37.607M         |
| 6565MHz                            | Pass   | Inf        | 39.05M           | 37.736M         | 39.71M           | 37.59M          |
| 6685MHz                            | Pass   | Inf        | 38.94M           | 37.828M         | 38.94M           | 37.725M         |
| 6845MHz                            | Pass   | Inf        | 39.16M           | 37.623M         | 39.16M           | 37.649M         |
| 802.11ax HEW80-BF_Nss1,(MCS0)_2TX  | -      | -          | -                | -               | -                | -               |
| 5985MHz                            | Pass   | Inf        | 81.18M           | 77.065M         | 80.96M           | 76.88M          |
| 6225MHz                            | Pass   | Inf        | 80.3M            | 76.925M         | 80.96M           | 76.966M         |
| 6385MHz                            | Pass   | Inf        | 80.74M           | 76.996M         | 80.3M            | 76.935M         |
| 6625MHz                            | Pass   | Inf        | 80.3M            | 77.341M         | 80.3M            | 77.291M         |
| 6705MHz                            | Pass   | Inf        | 80.08M           | 77.333M         | 80.08M           | 76.876M         |
| 6785MHz                            | Pass   | Inf        | 80.96M           | 76.891M         | 80.52M           | 77.055M         |
| 802.11ax HEW160-BF_Nss1,(MCS0)_2TX | -      | -          | -                | -               | -                | -               |
| 6025MHz                            | Pass   | Inf        | 164.56M          | 154.97M         | 161.92M          | 154.55M         |
| 6185MHz                            | Pass   | Inf        | 162.8M           | 155.055M        | 163.24M          | 154.772M        |
| 6345MHz                            | Pass   | Inf        | 162.8M           | 154.656M        | 161.92M          | 154.812M        |
| 6665MHz                            | Pass   | Inf        | 161.92M          | 155.218M        | 162.8M           | 152.874M        |

Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band  
 Port X-OBW = Port X 99% occupied bandwidth

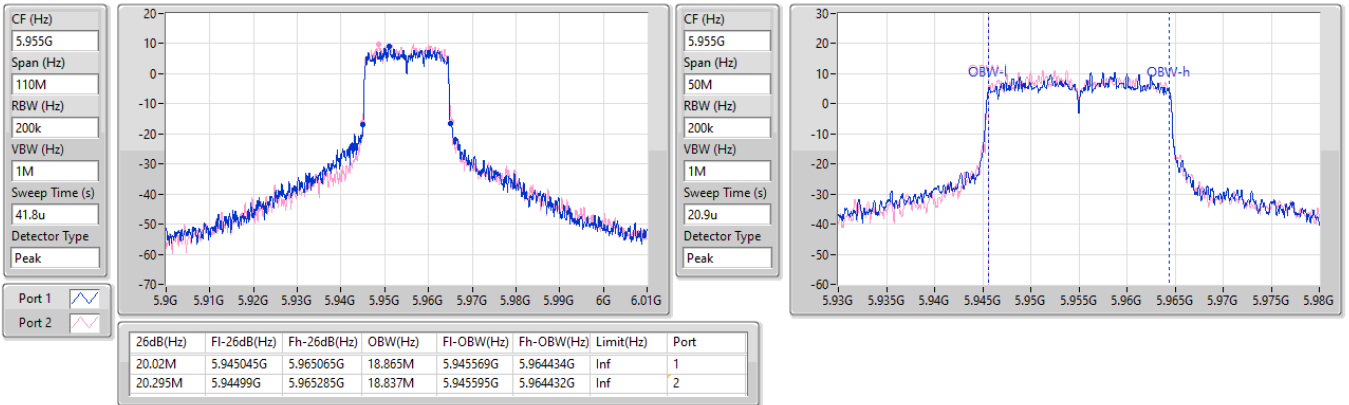


5.925-6.425GHz\_802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

EBW

5955MHz

26/10/2023

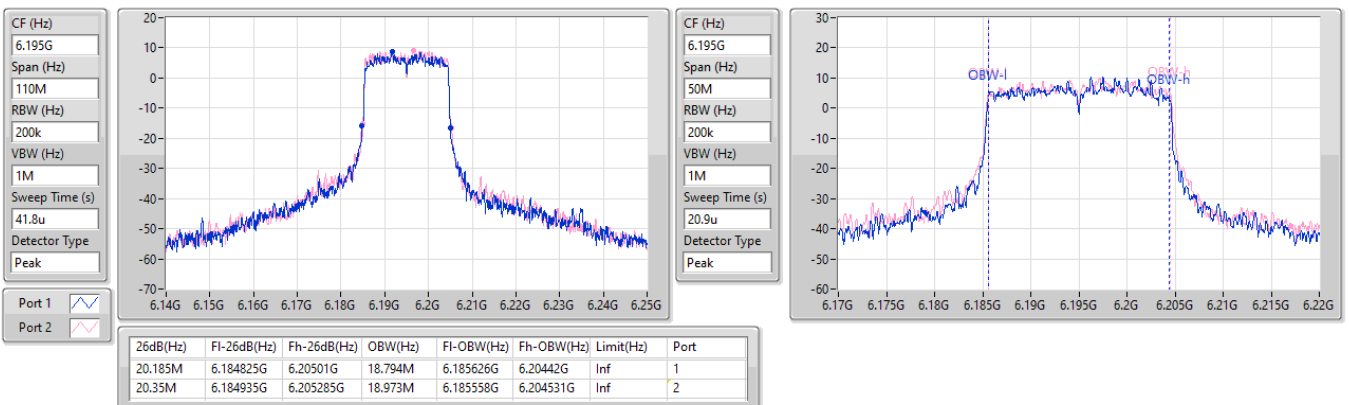


5.925-6.425GHz\_802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

EBW

6195MHz

26/10/2023

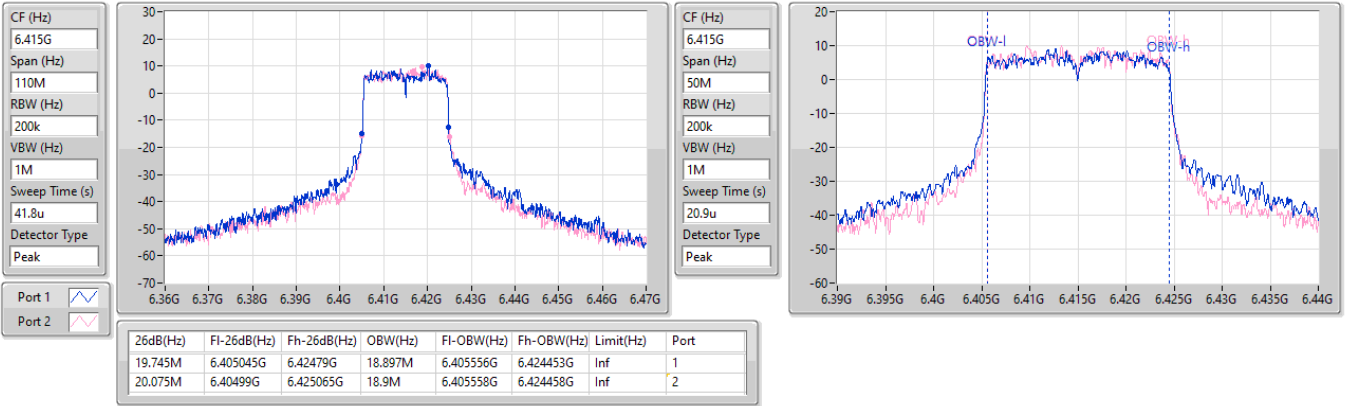


5.925-6.425GHz\_802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

EBW

6415MHz

26/10/2023

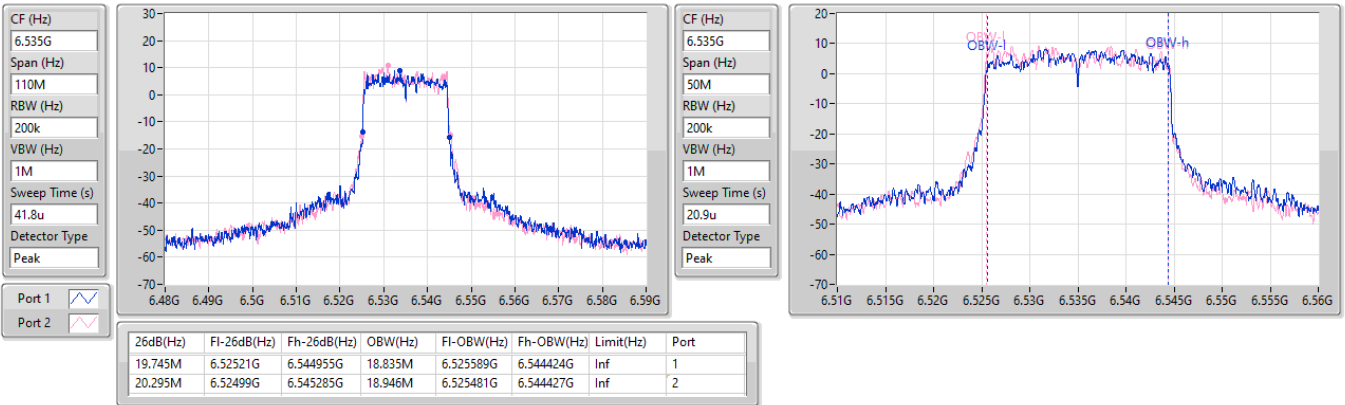


6.525-6.875GHz\_802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

EBW

6535MHz

26/10/2023

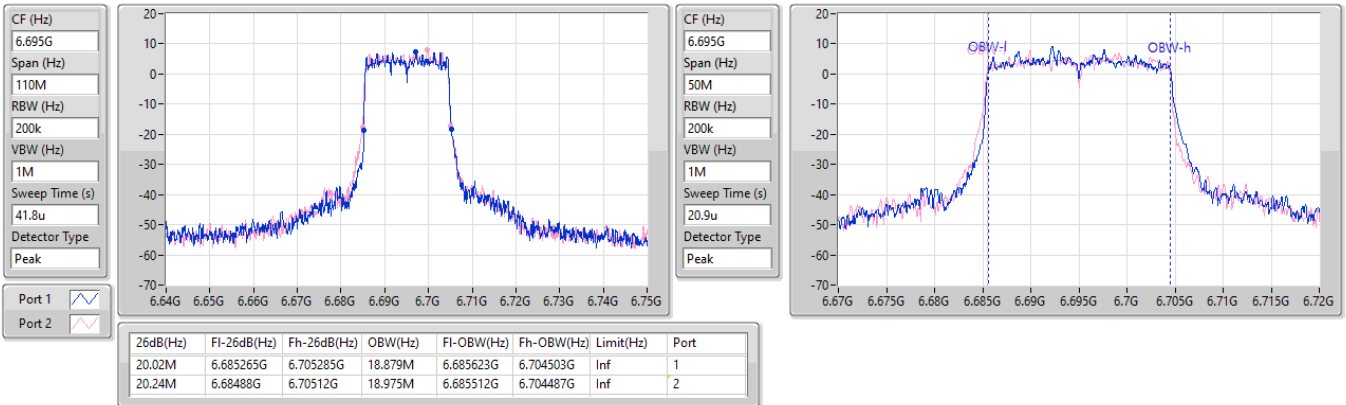


6.525-6.875GHz\_802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

EBW

6695MHz

26/10/2023

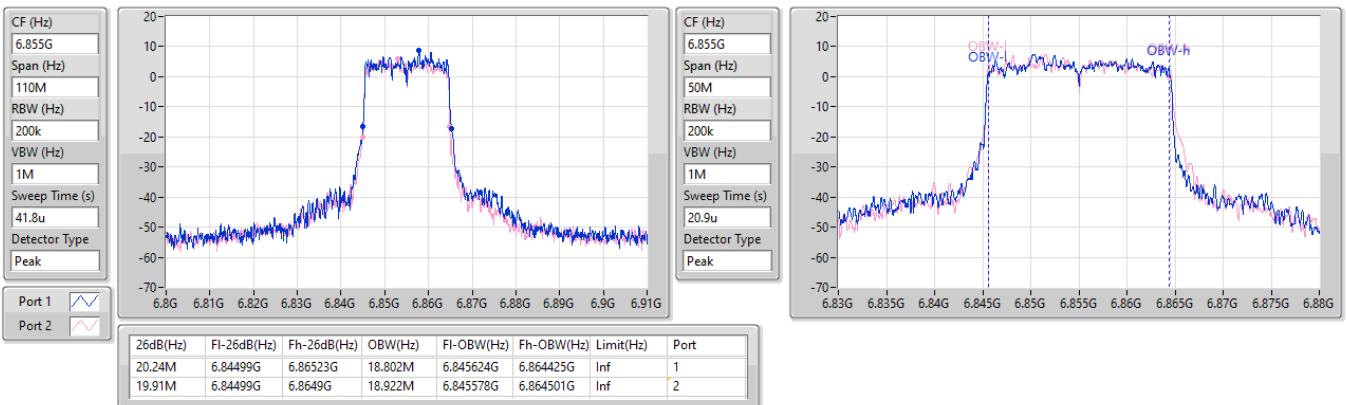


6.525-6.875GHz\_802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

EBW

6855MHz

26/10/2023

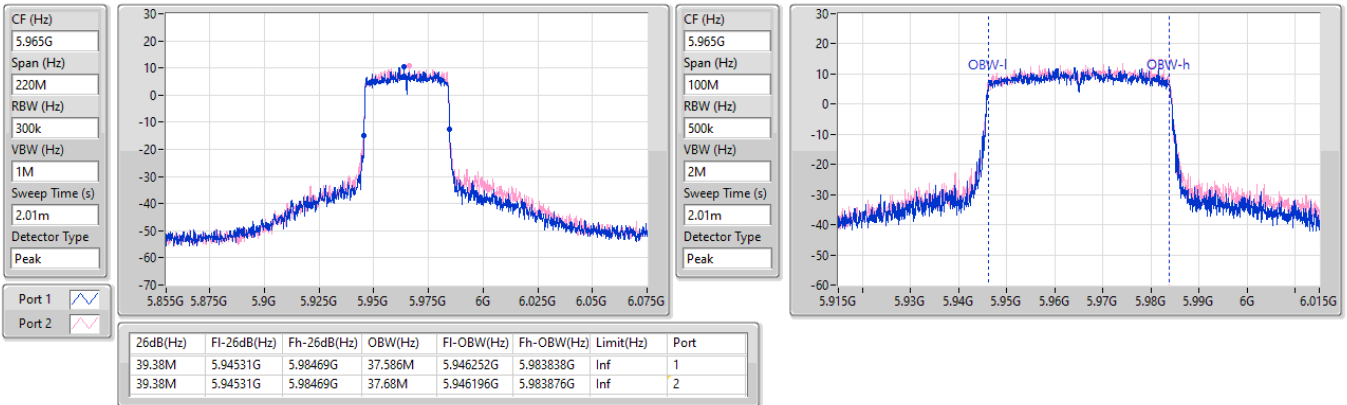


5.925-6.425GHz\_802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

EBW

5965MHz

27/10/2023

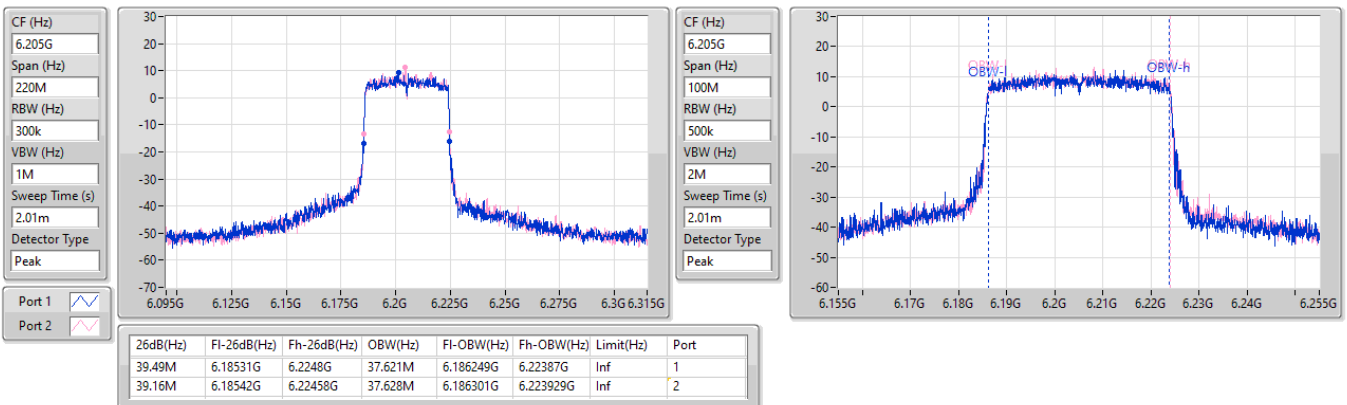


5.925-6.425GHz\_802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

EBW

6205MHz

27/10/2023

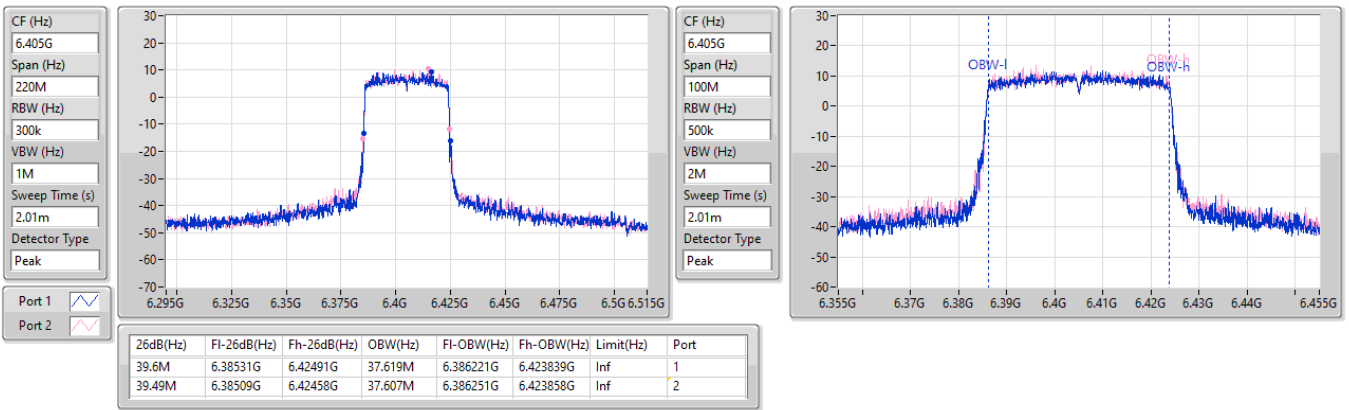


5.925-6.425GHz\_802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

EBW

6405MHz

27/10/2023

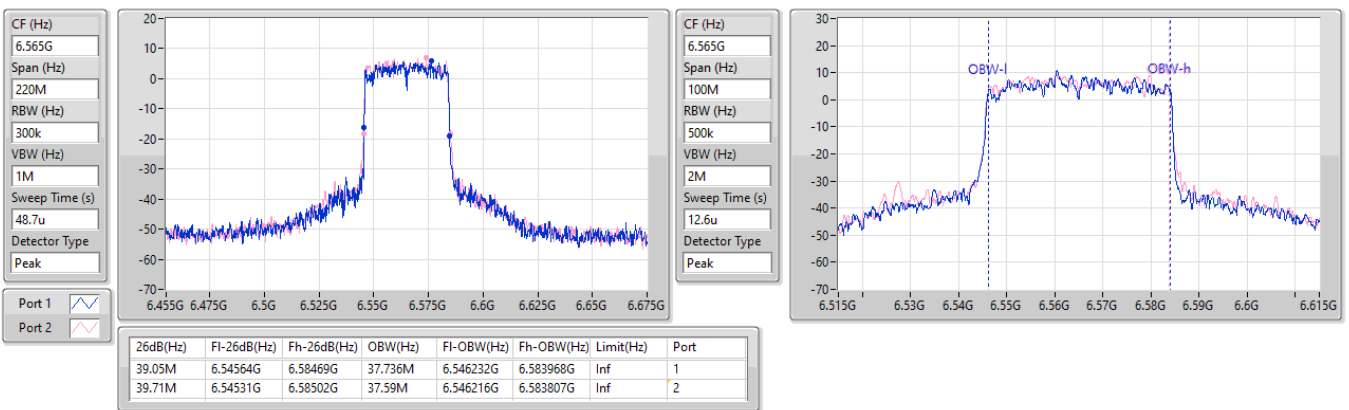


6.525-6.875GHz\_802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

EBW

6565MHz

26/10/2023

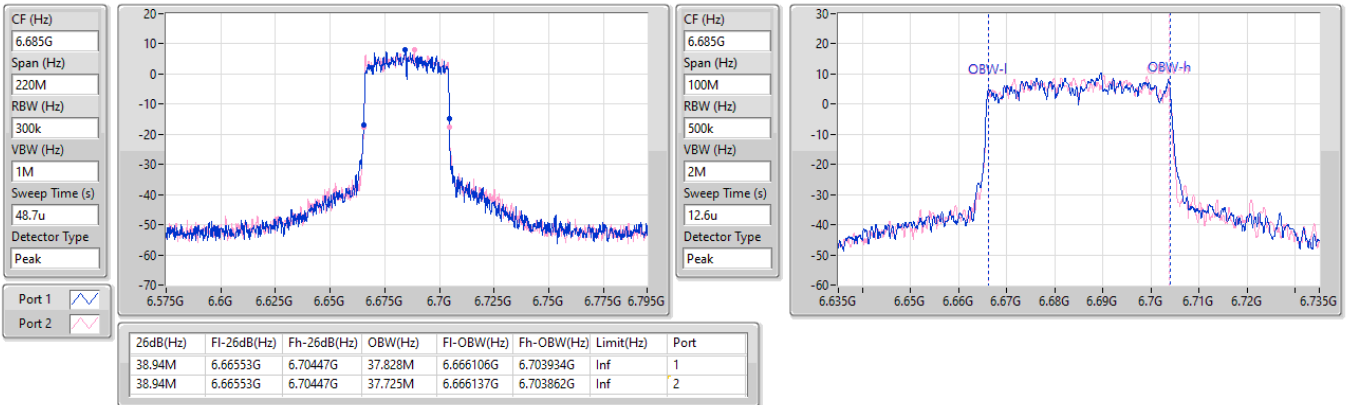


6.525-6.875GHz\_802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

EBW

6685MHz

26/10/2023

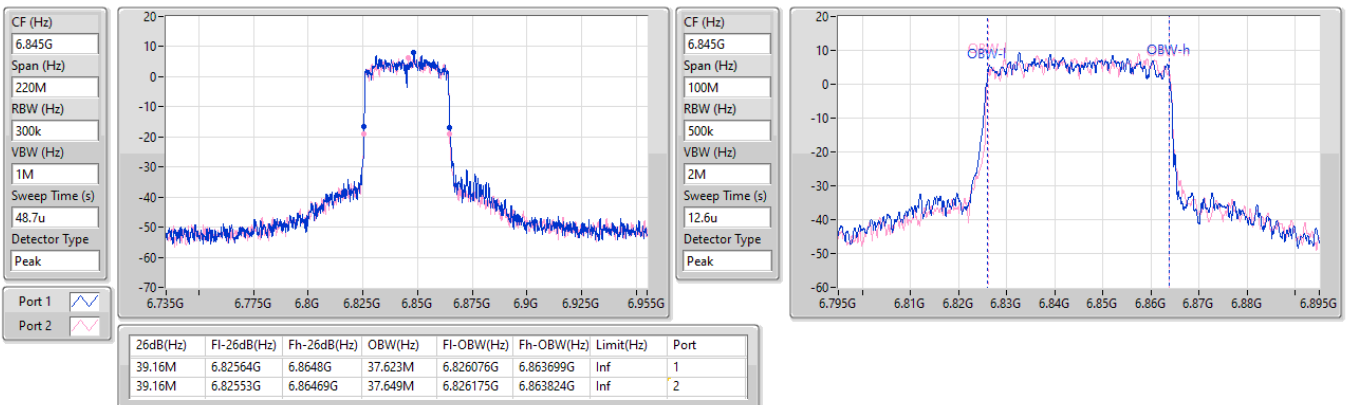


6.525-6.875GHz\_802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

EBW

6845MHz

26/10/2023

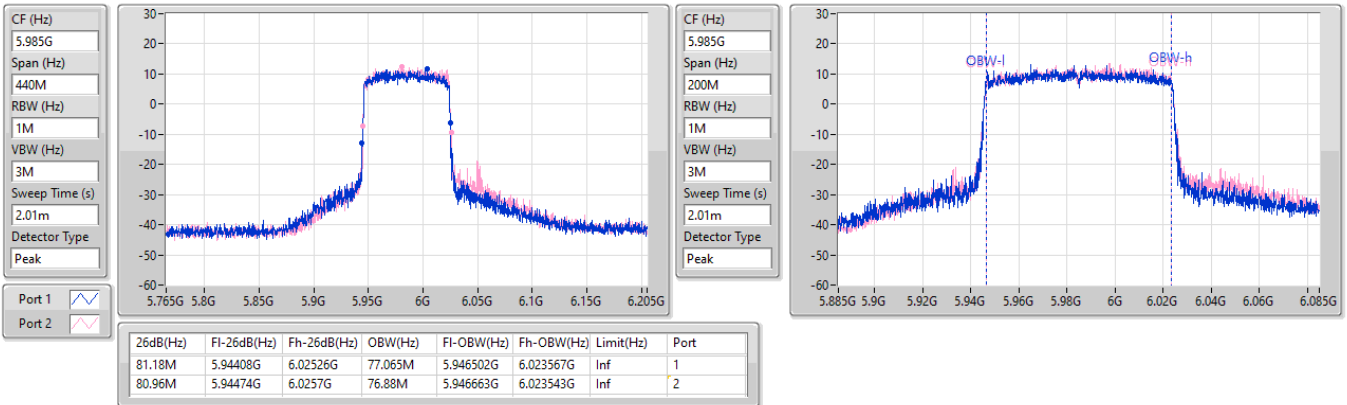


5.925-6.425GHz\_802.11ax HEW80-BF\_Nss1,(MCS0)\_2TX

EBW

5985MHz

27/10/2023

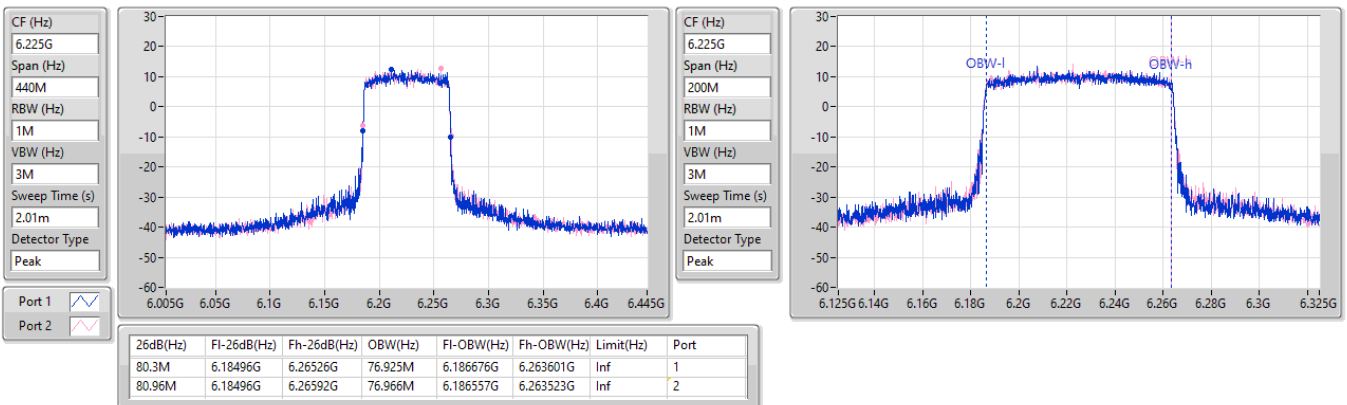


5.925-6.425GHz\_802.11ax HEW80-BF\_Nss1,(MCS0)\_2TX

EBW

6225MHz

27/10/2023

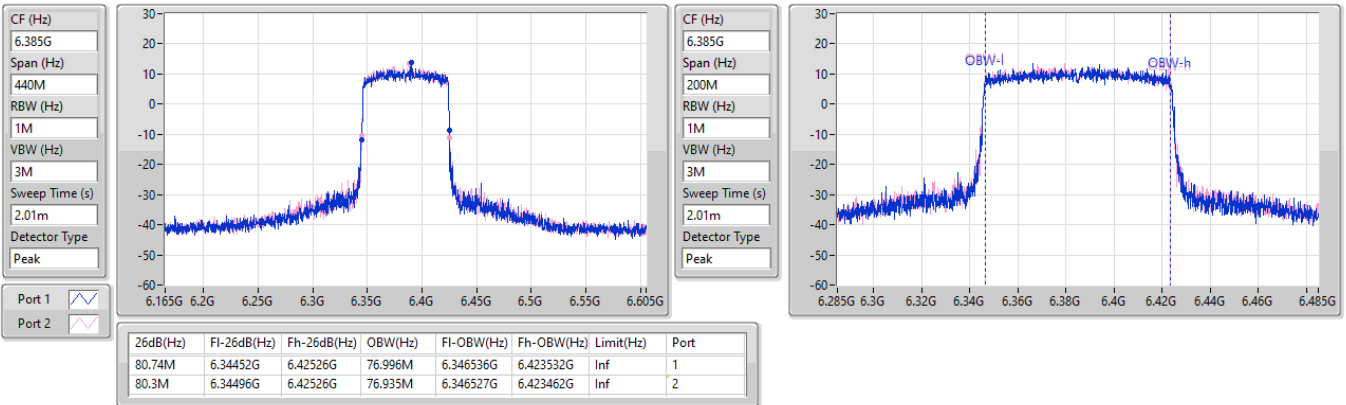


5.925-6.425GHz\_802.11ax HEW80-BF\_Nss1,(MCS0)\_2TX

EBW

6385MHz

27/10/2023

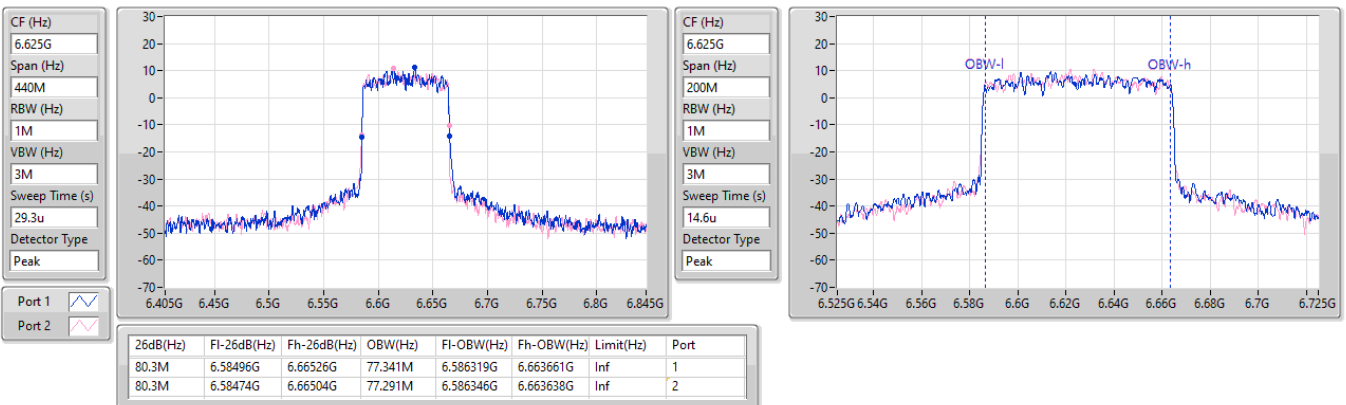


6.525-6.875GHz\_802.11ax HEW80-BF\_Nss1,(MCS0)\_2TX

EBW

6625MHz

26/10/2023



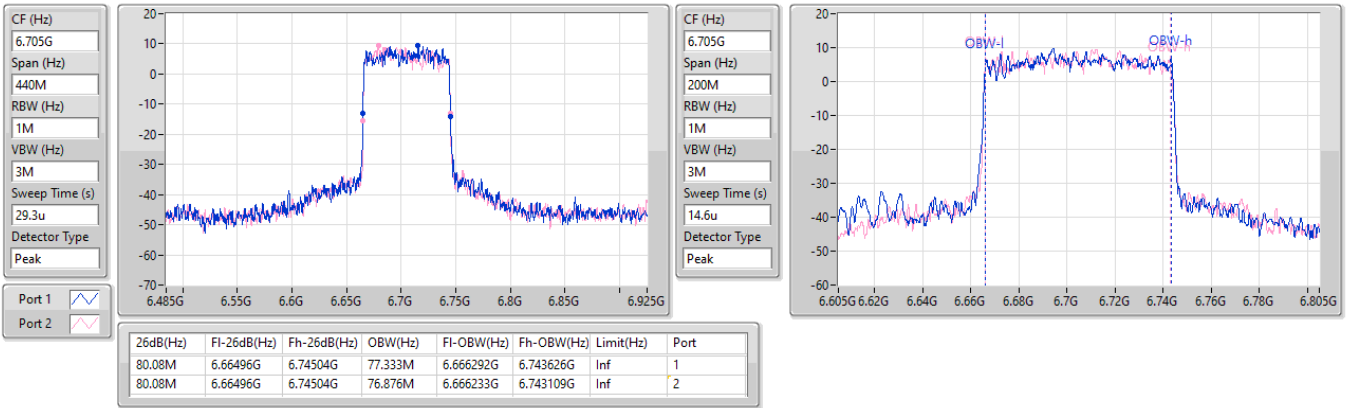


6.525-6.875GHz\_802.11ax HEW80-BF\_Nss1,(MCS0)\_2TX

EBW

6705MHz

26/10/2023

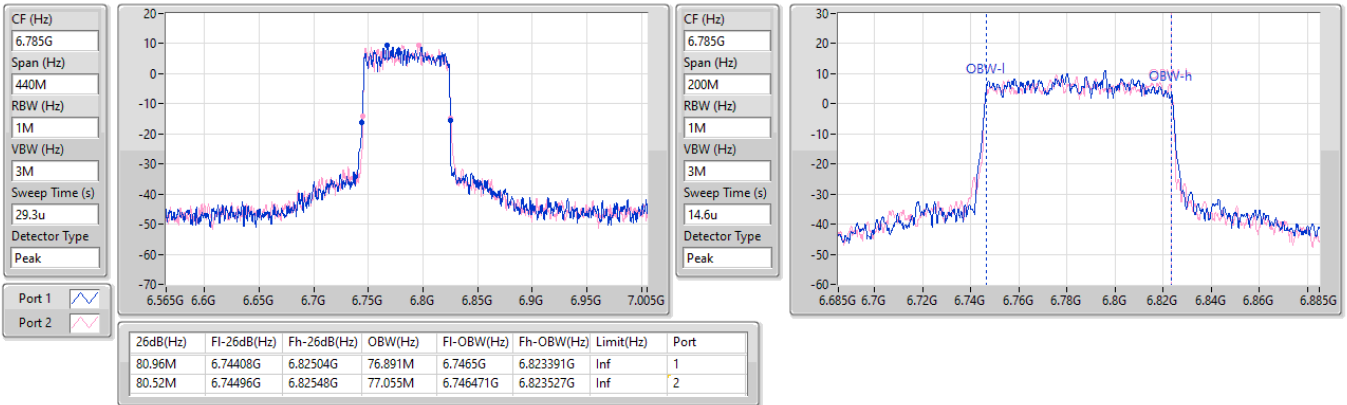


6.525-6.875GHz\_802.11ax HEW80-BF\_Nss1,(MCS0)\_2TX

EBW

6785MHz

26/10/2023

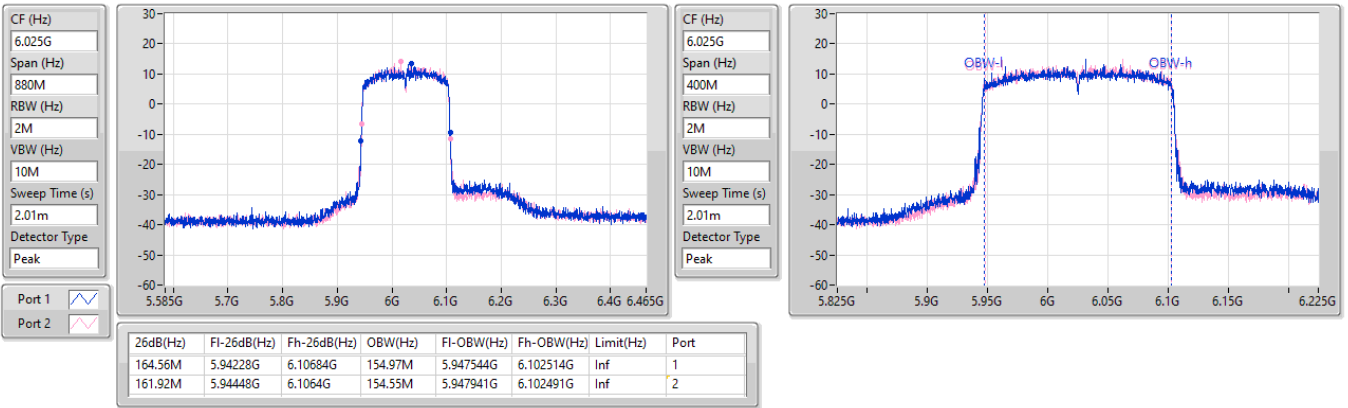


5.925-6.425GHz\_802.11ax HEW160-BF\_Nss1,(MCS0)\_2TX

EBW

6025MHz

27/10/2023

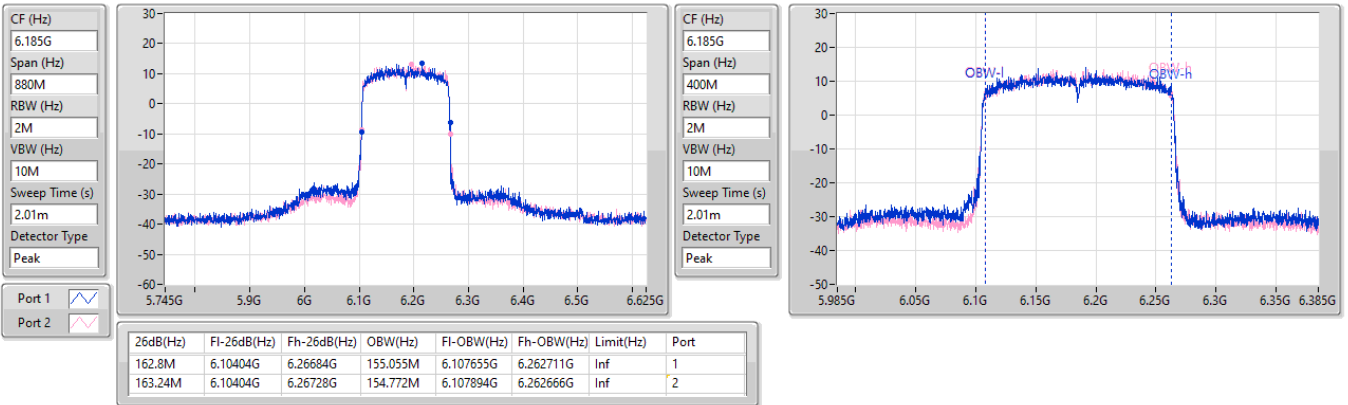


5.925-6.425GHz\_802.11ax HEW160-BF\_Nss1,(MCS0)\_2TX

EBW

6185MHz

27/10/2023



5.925-6.425GHz\_802.11ax HEW160-BF\_Nss1,(MCS0)\_2TX

EBW

6345MHz

27/10/2023

CF (Hz)  
6.345G

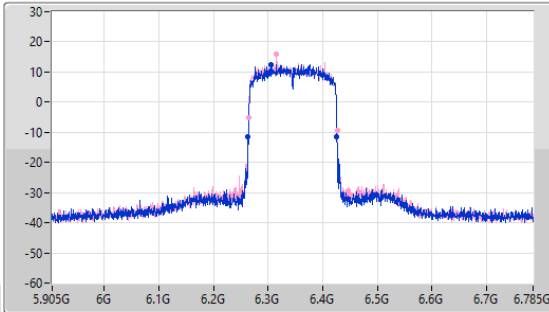
Span (Hz)  
880M

RBW (Hz)  
2M

VBW (Hz)  
10M

Sweep Time (s)  
2.01m

Detector Type  
Peak



CF (Hz)  
6.345G

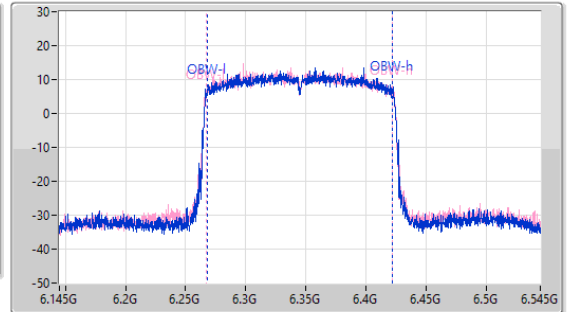
Span (Hz)  
400M

RBW (Hz)  
2M

VBW (Hz)  
10M

Sweep Time (s)  
2.01m

Detector Type  
Peak



| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz)  | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|----------|-------------|-------------|----------|------------|------------|-----------|------|
| 162.8M   | 6.26316G    | 6.42596G    | 154.656M | 6.267695G  | 6.42235G   | Inf       | 1    |
| 161.92M  | 6.26448G    | 6.4264G     | 154.812M | 6.267478G  | 6.42229G   | Inf       | 2    |

6.525-6.875GHz\_802.11ax HEW160-BF\_Nss1,(MCS0)\_2TX

EBW

6665MHz

26/10/2023

CF (Hz)  
6.665G

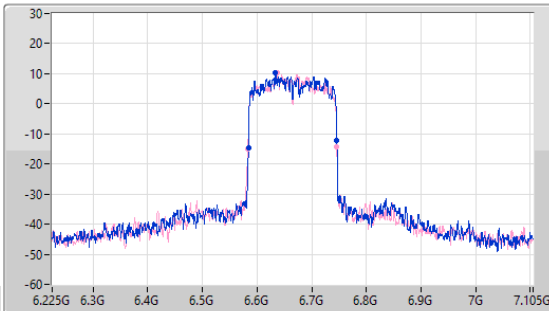
Span (Hz)  
880M

RBW (Hz)  
2M

VBW (Hz)  
10M

Sweep Time (s)  
34.6u

Detector Type  
Peak



CF (Hz)  
6.665G

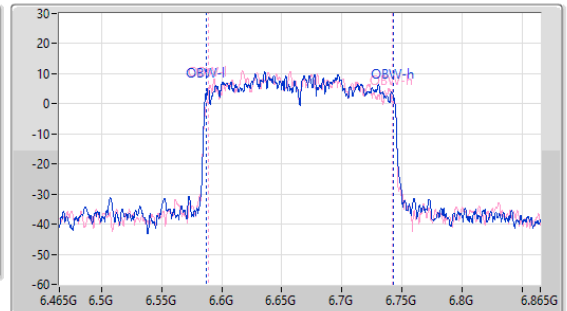
Span (Hz)  
400M

RBW (Hz)  
2M

VBW (Hz)  
10M

Sweep Time (s)  
15.8u

Detector Type  
Peak



| 26dB(Hz) | Fl-26dB(Hz) | Fh-26dB(Hz) | OBW(Hz)  | Fl-OBW(Hz) | Fh-OBW(Hz) | Limit(Hz) | Port |
|----------|-------------|-------------|----------|------------|------------|-----------|------|
| 161.92M  | 6.58404G    | 6.74596G    | 155.218M | 6.587235G  | 6.742453G  | Inf       | 1    |
| 162.8M   | 6.58316G    | 6.74596G    | 152.874M | 6.589033G  | 6.741906G  | Inf       | 2    |



Summary

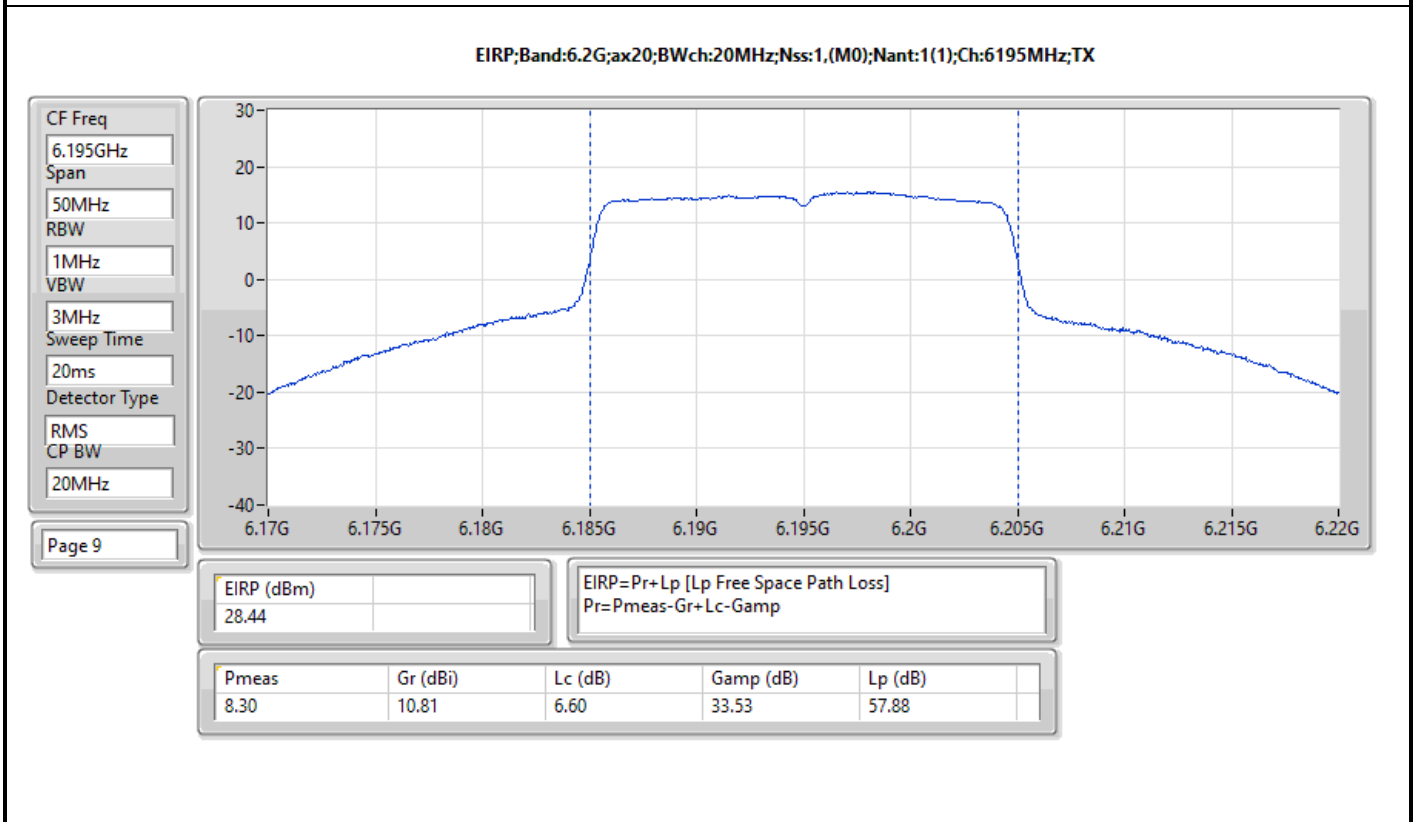
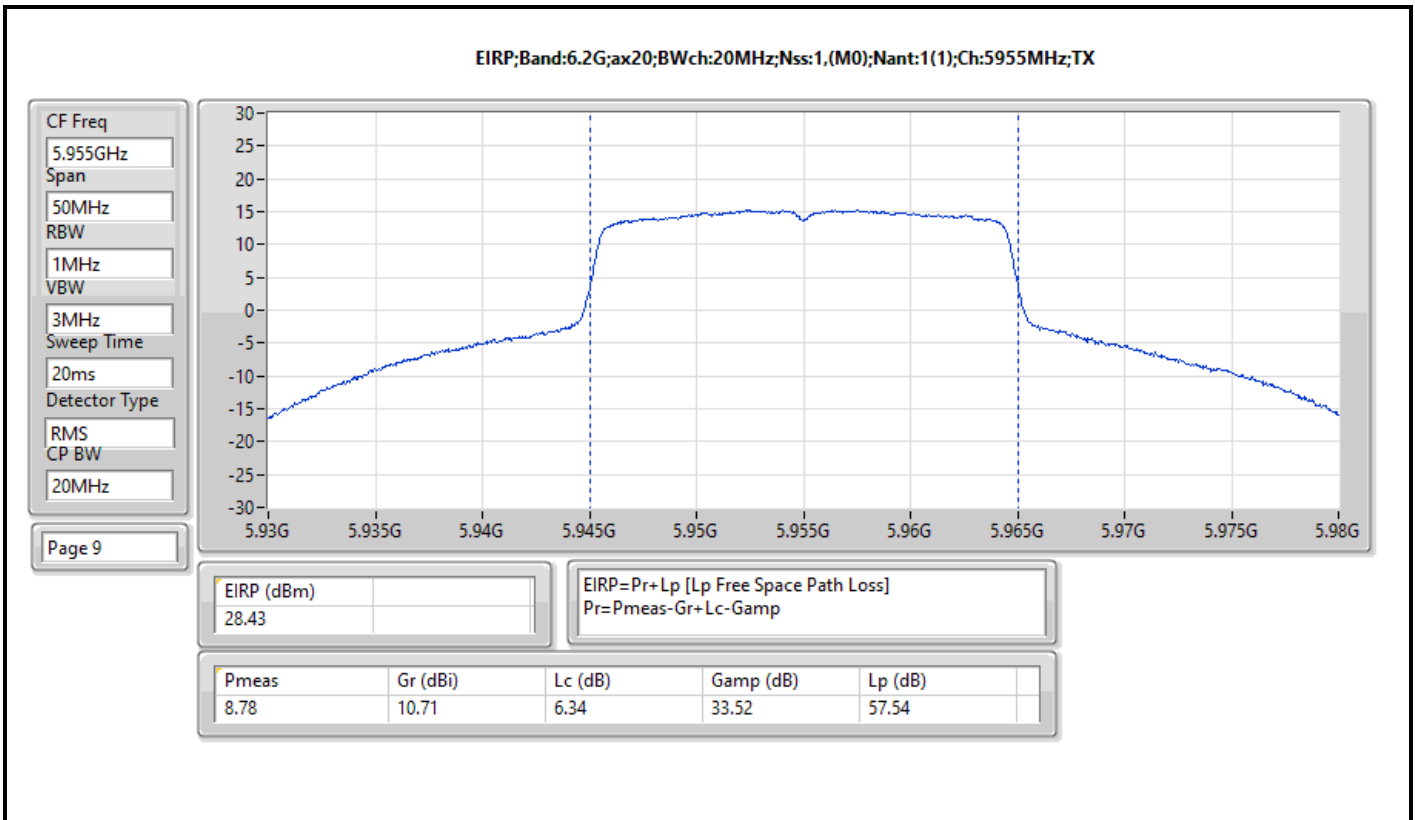
| Mode                            | EIRP (dBm) | EIRP (W) |
|---------------------------------|------------|----------|
| 5.925-6.425GHz                  | -          | -        |
| 802.11ax HEW20_Nss1,(MCS0)_1TX  | 28.44      | 0.69823  |
| 802.11ax HEW40_Nss1,(MCS0)_1TX  | 29.13      | 0.81846  |
| 802.11ax HEW80_Nss1,(MCS0)_1TX  | 28.39      | 0.69024  |
| 802.11ax HEW160_Nss1,(MCS0)_1TX | 28.57      | 0.71945  |
| 6.525-6.875GHz                  | -          | -        |
| 802.11ax HEW20_Nss1,(MCS0)_1TX  | 28.24      | 0.66681  |
| 802.11ax HEW40_Nss1,(MCS0)_1TX  | 28.08      | 0.64269  |
| 802.11ax HEW80_Nss1,(MCS0)_1TX  | 28.77      | 0.75336  |
| 802.11ax HEW160_Nss1,(MCS0)_1TX | 27.27      | 0.53333  |

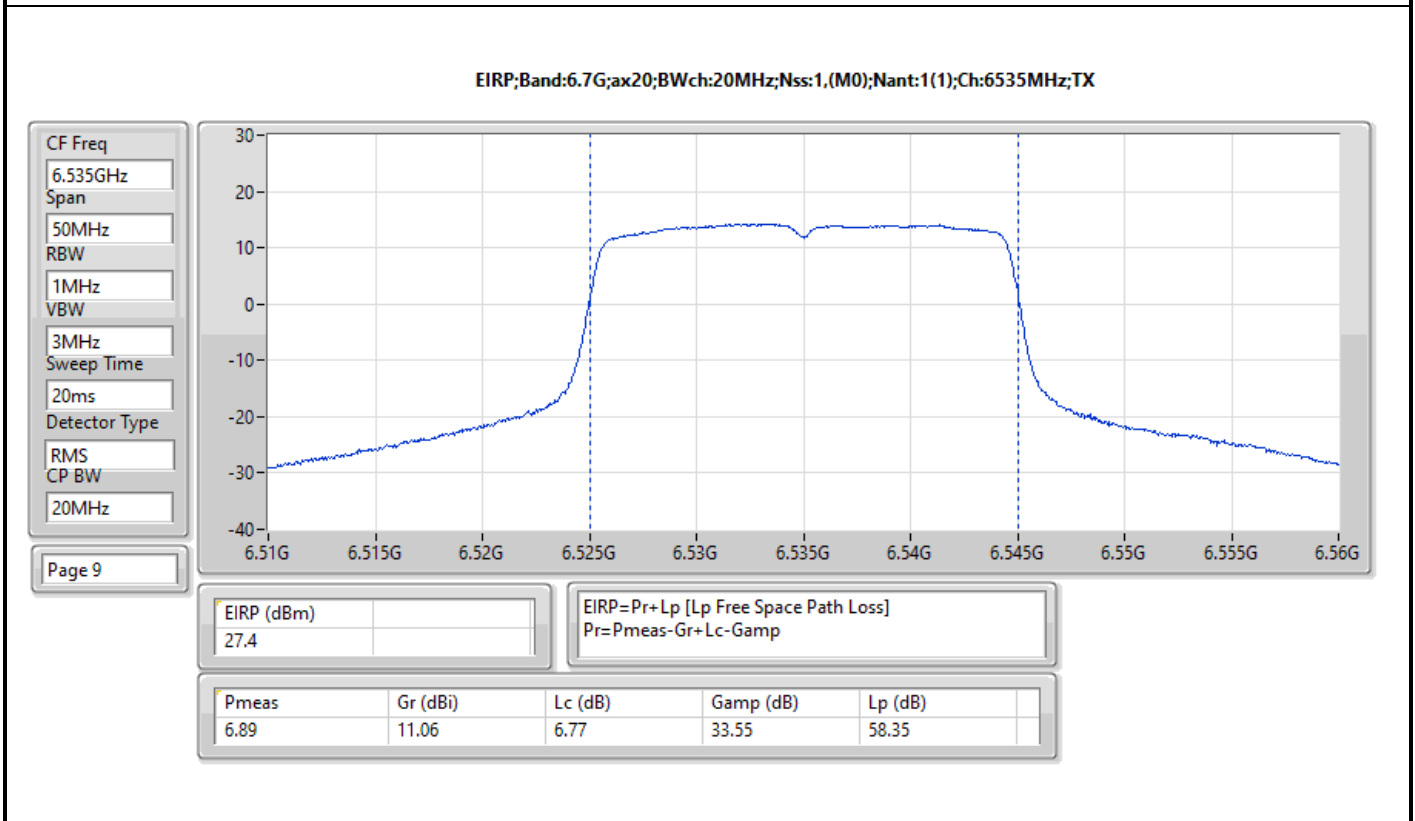
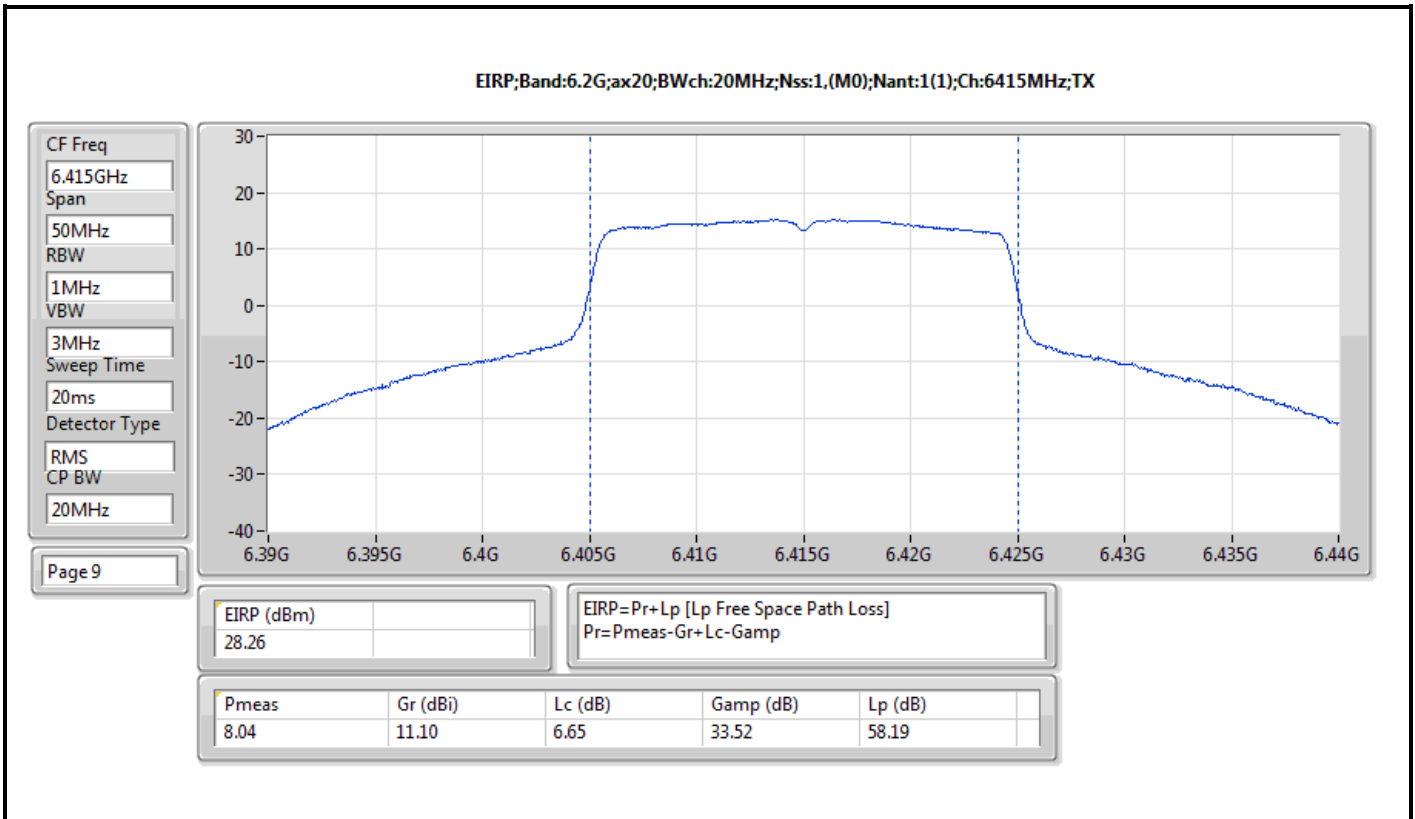


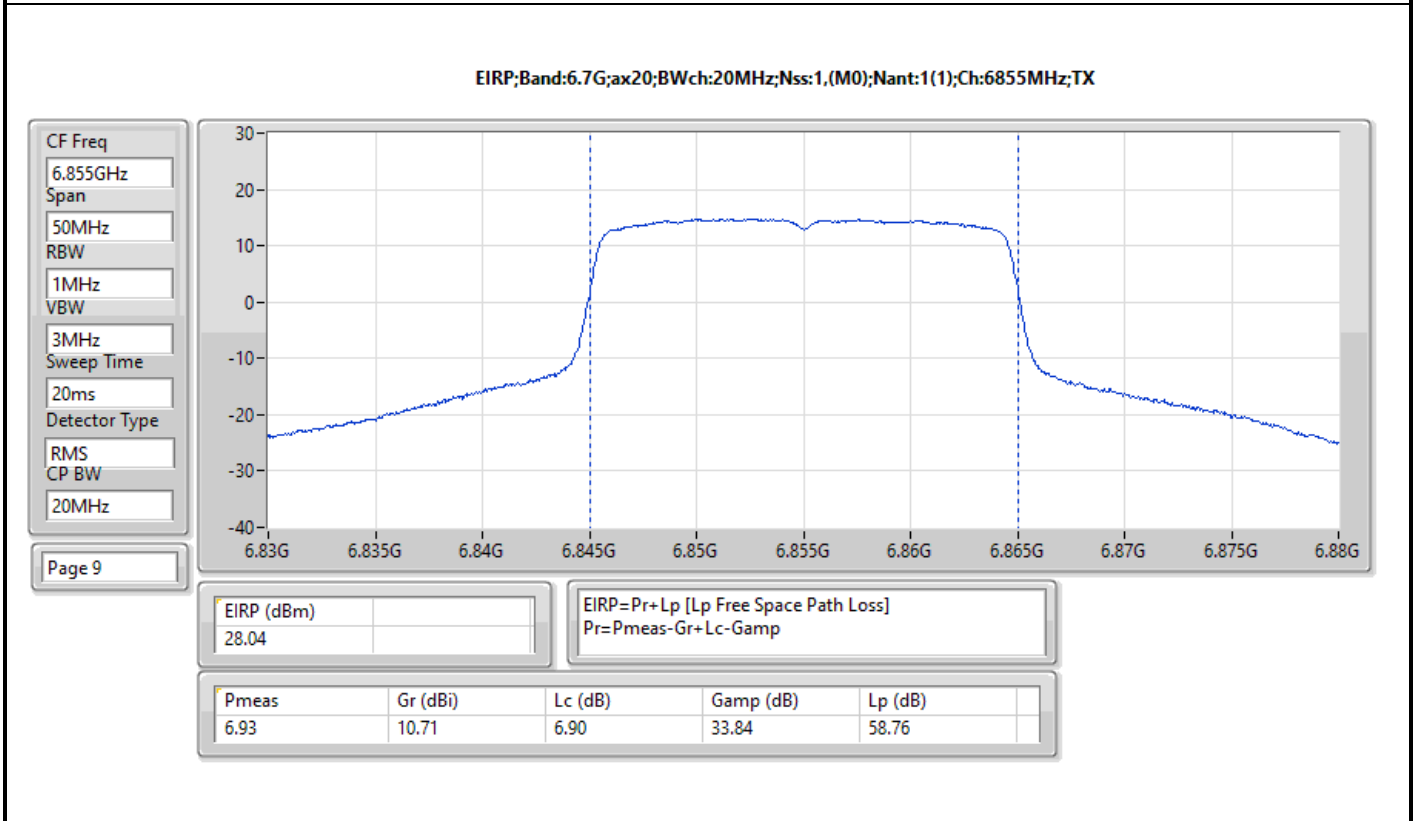
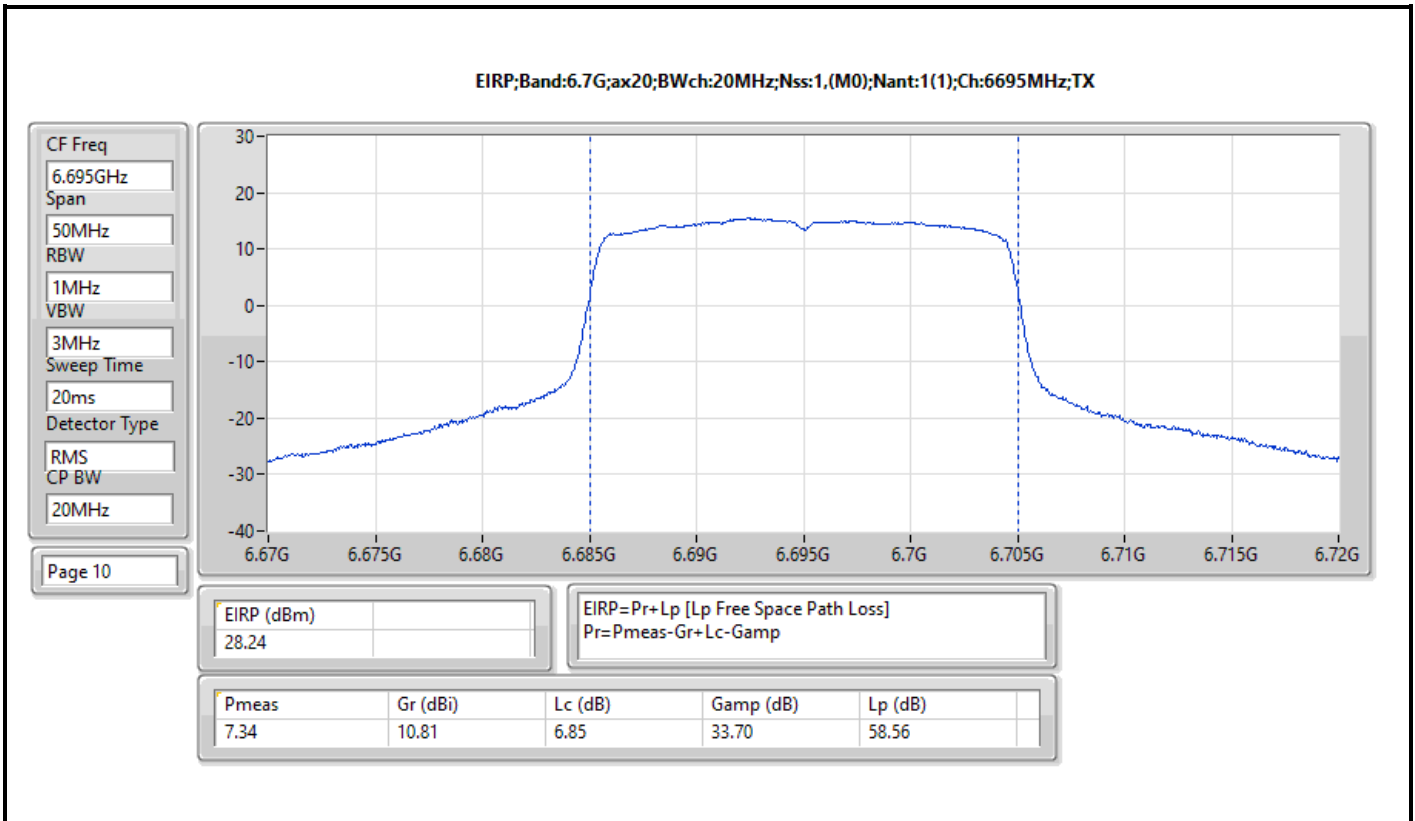
**Result**

| Mode                            | Result | Radiated EIRP (dBm) | EIRP Limit (dBm) |
|---------------------------------|--------|---------------------|------------------|
| 802.11ax HEW20_Nss1,(MCS0)_1TX  | -      | -                   | -                |
| 5955MHz                         | Pass   | 28.43               | 36.00            |
| 6195MHz                         | Pass   | 28.44               | 36.00            |
| 6415MHz                         | Pass   | 28.26               | 36.00            |
| 6535MHz                         | Pass   | 27.40               | 36.00            |
| 6695MHz                         | Pass   | 28.24               | 36.00            |
| 6855MHz                         | Pass   | 28.04               | 36.00            |
| 802.11ax HEW40_Nss1,(MCS0)_1TX  | -      | -                   | -                |
| 5965MHz                         | Pass   | 25.89               | 36.00            |
| 6205MHz                         | Pass   | 28.46               | 36.00            |
| 6405MHz                         | Pass   | 29.13               | 36.00            |
| 6565MHz                         | Pass   | 28.08               | 36.00            |
| 6685MHz                         | Pass   | 28.03               | 36.00            |
| 6845MHz                         | Pass   | 28.07               | 36.00            |
| 802.11ax HEW80_Nss1,(MCS0)_1TX  | -      | -                   | -                |
| 5985MHz                         | Pass   | 25.86               | 36.00            |
| 6225MHz                         | Pass   | 28.39               | 36.00            |
| 6385MHz                         | Pass   | 28.35               | 36.00            |
| 6625MHz                         | Pass   | 27.91               | 36.00            |
| 6705MHz                         | Pass   | 28.77               | 36.00            |
| 6785MHz                         | Pass   | 28.34               | 36.00            |
| 802.11ax HEW160_Nss1,(MCS0)_1TX | -      | -                   | -                |
| 6025MHz                         | Pass   | 27.75               | 36.00            |
| 6185MHz                         | Pass   | 28.57               | 36.00            |
| 6345MHz                         | Pass   | 28.56               | 36.00            |
| 6665MHz                         | Pass   | 27.27               | 36.00            |

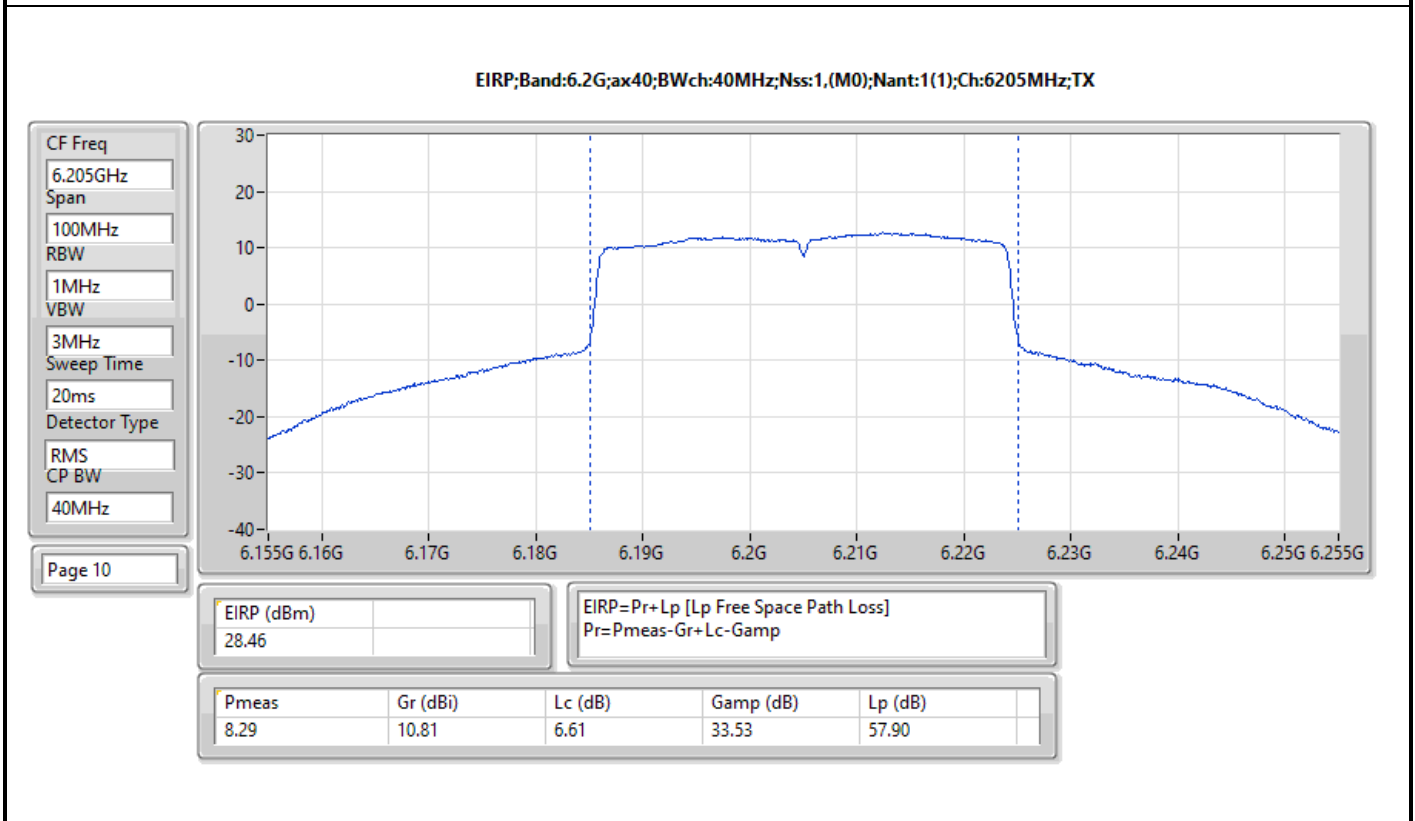
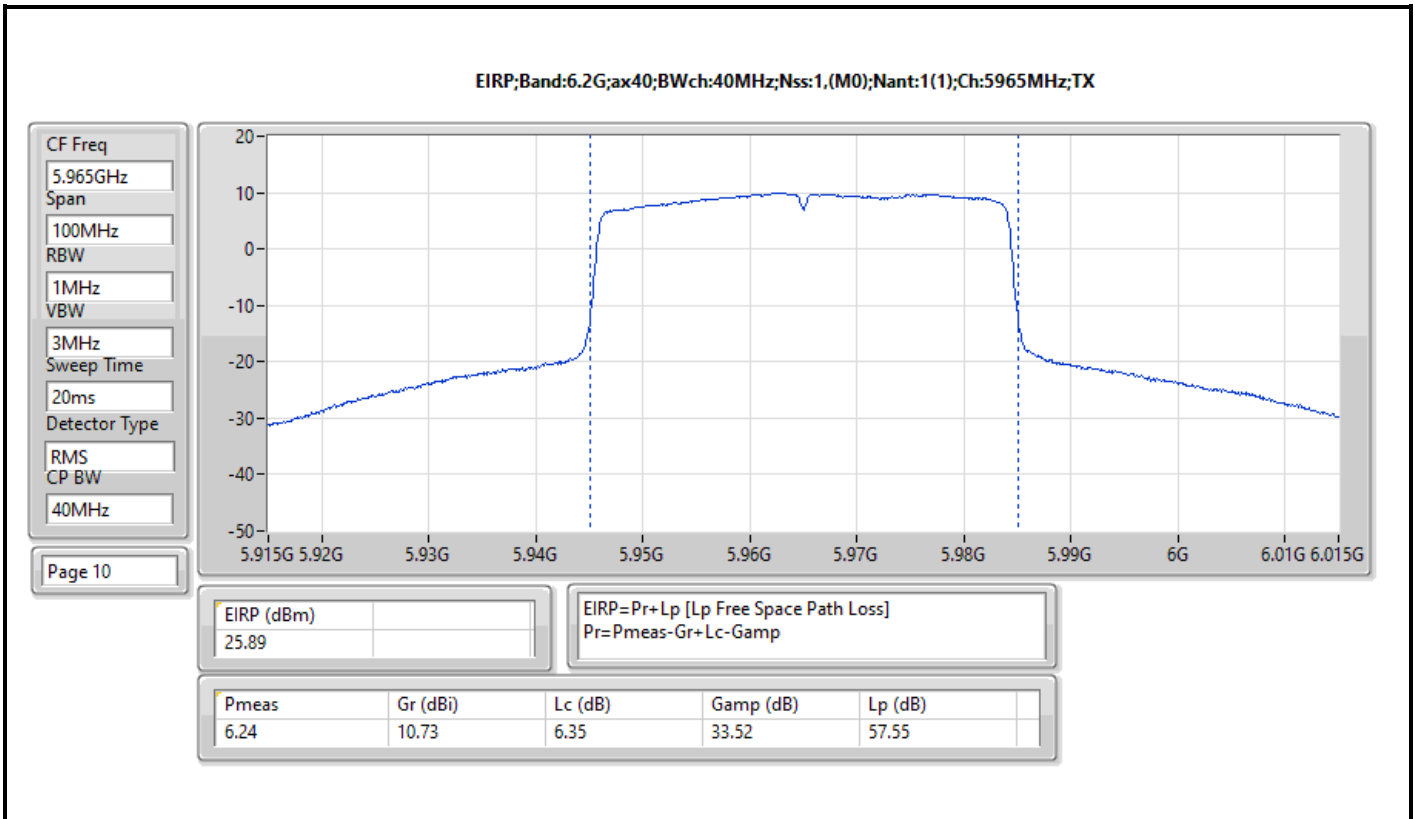
DG = Directional Gain; Port X = Port X output power

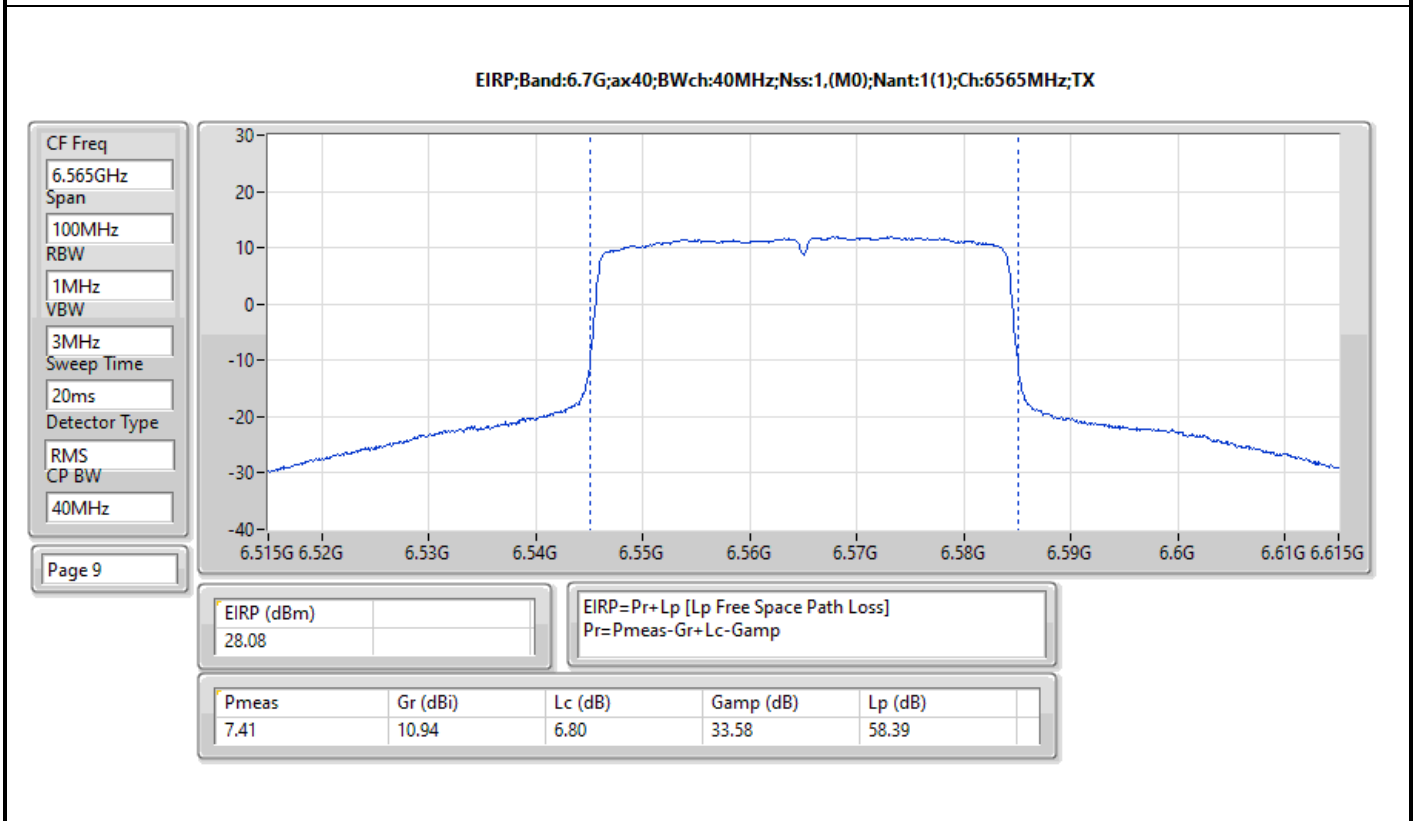
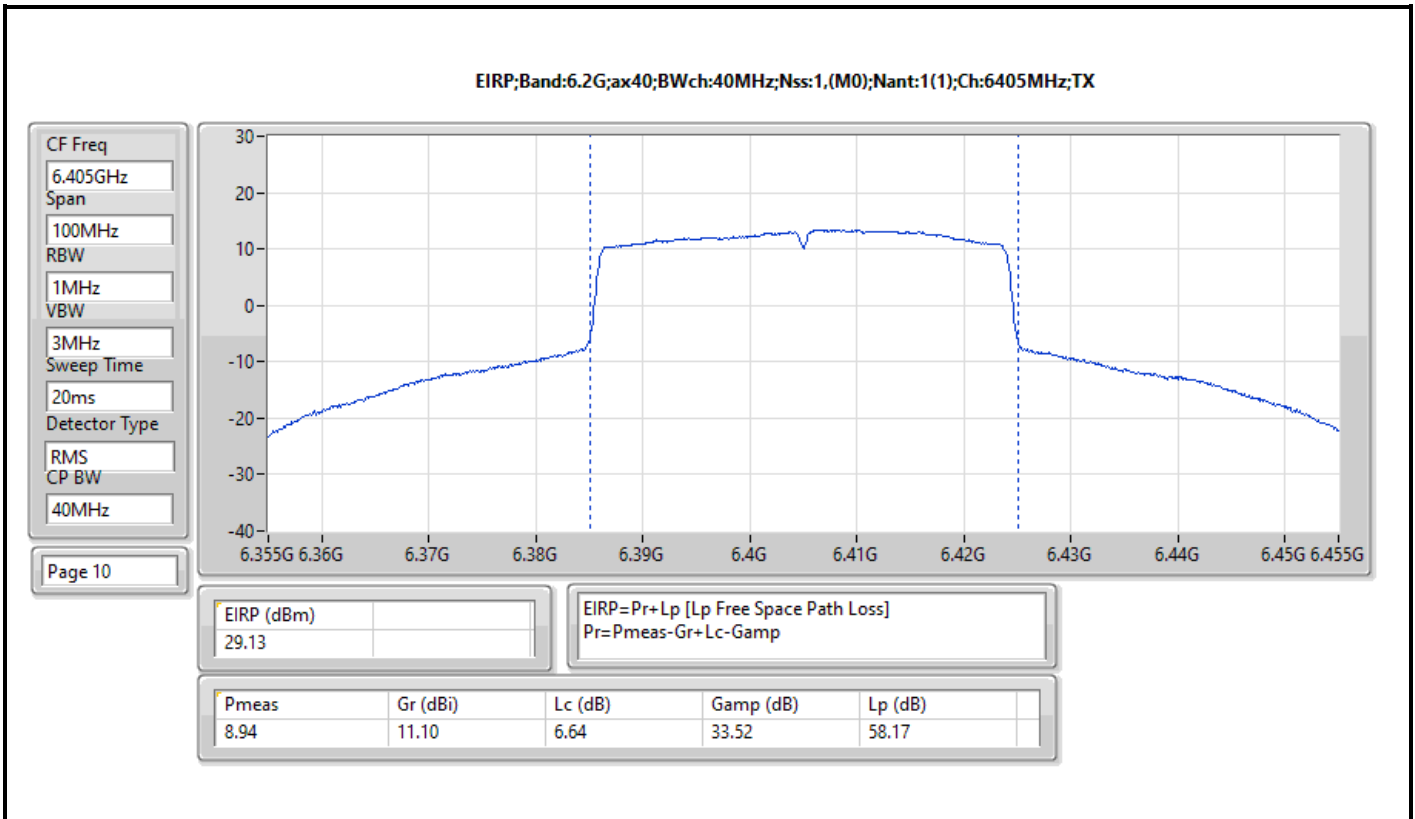


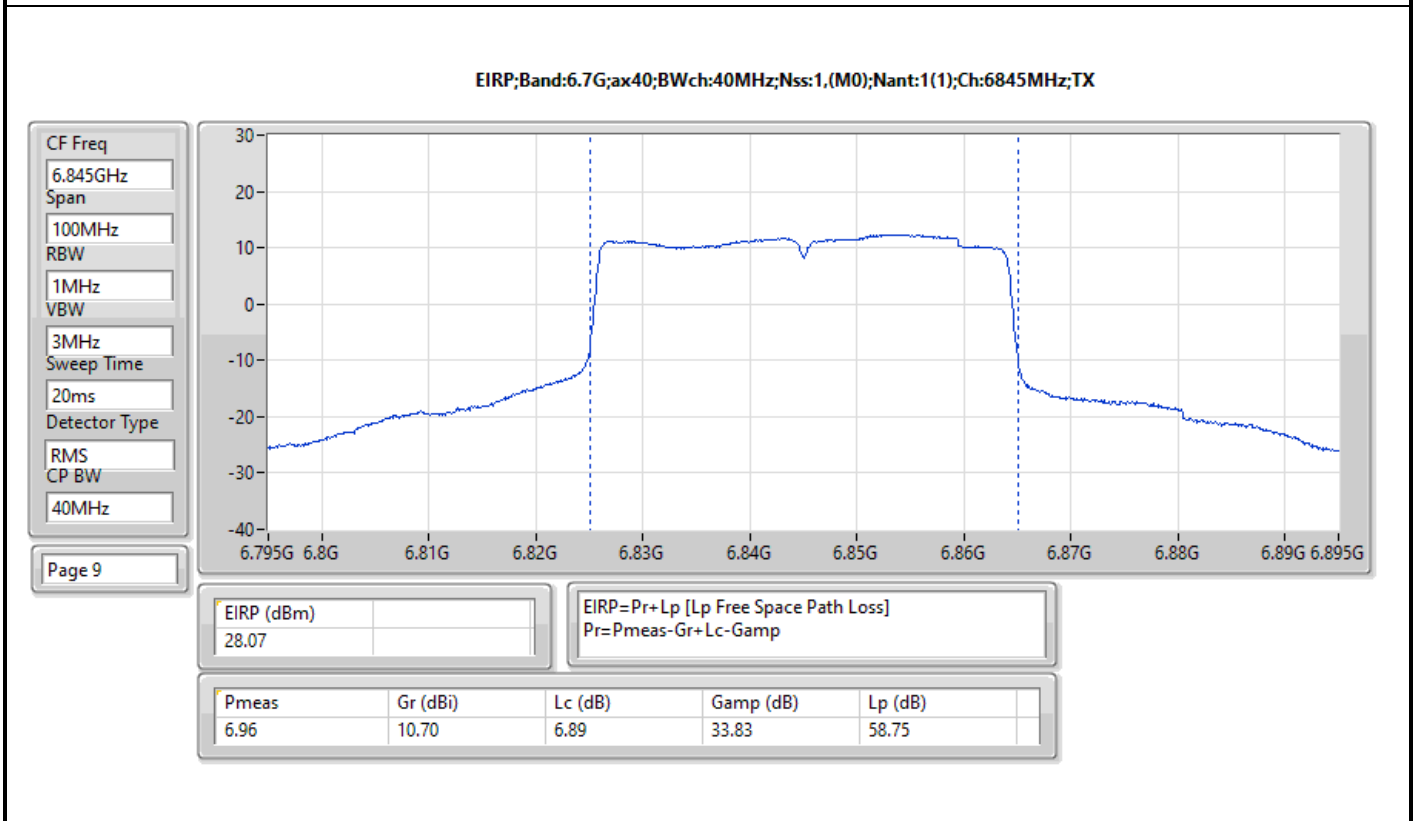
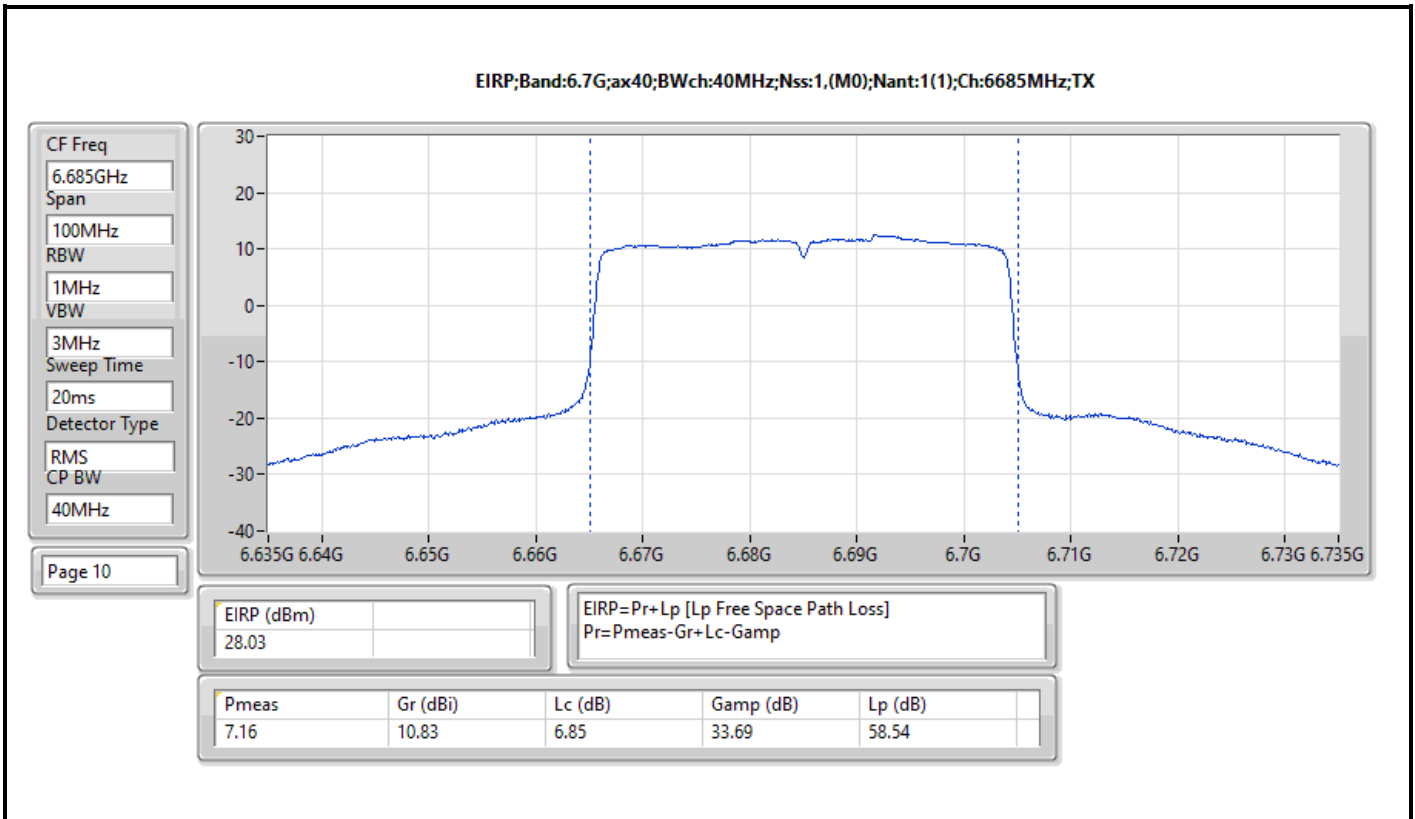


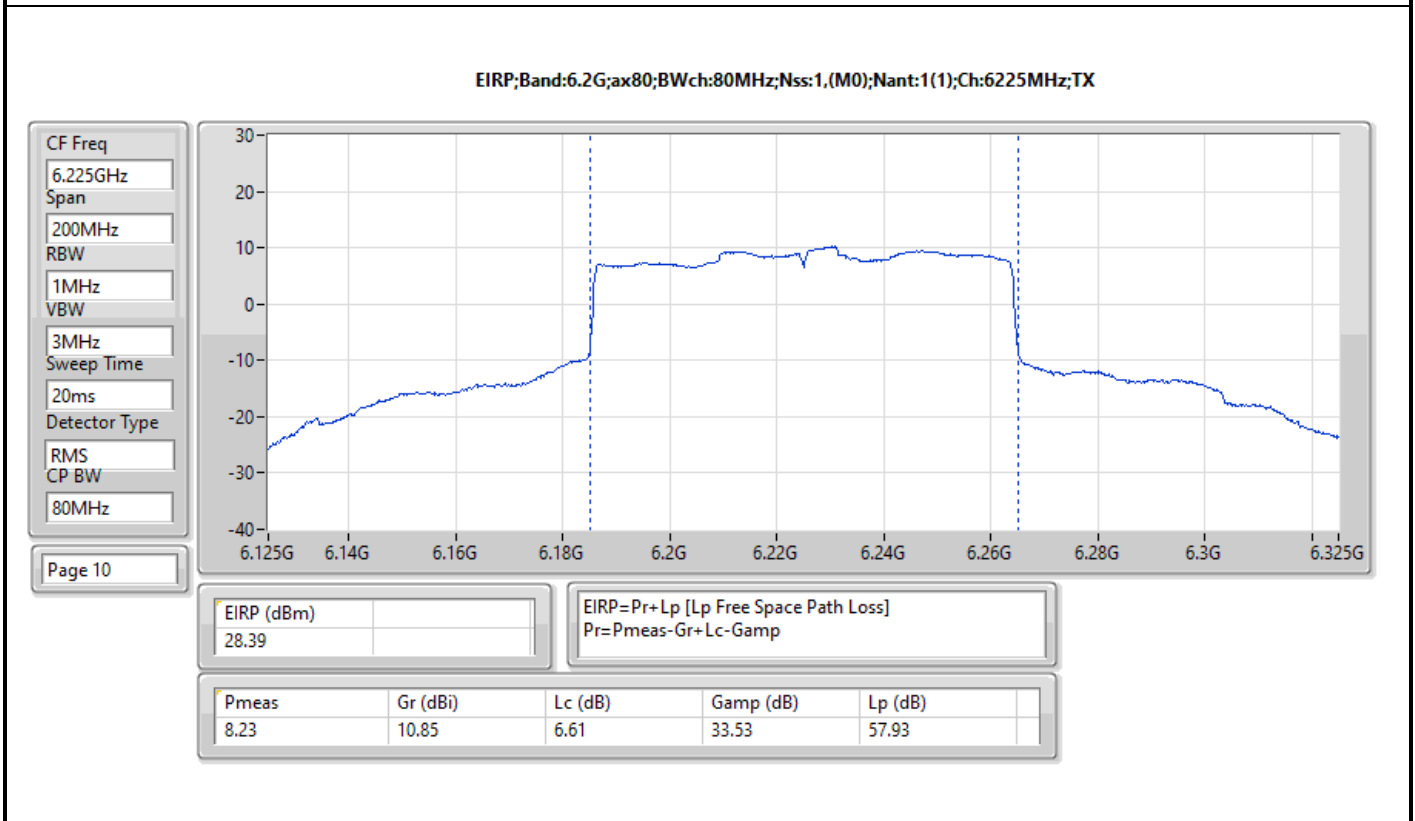
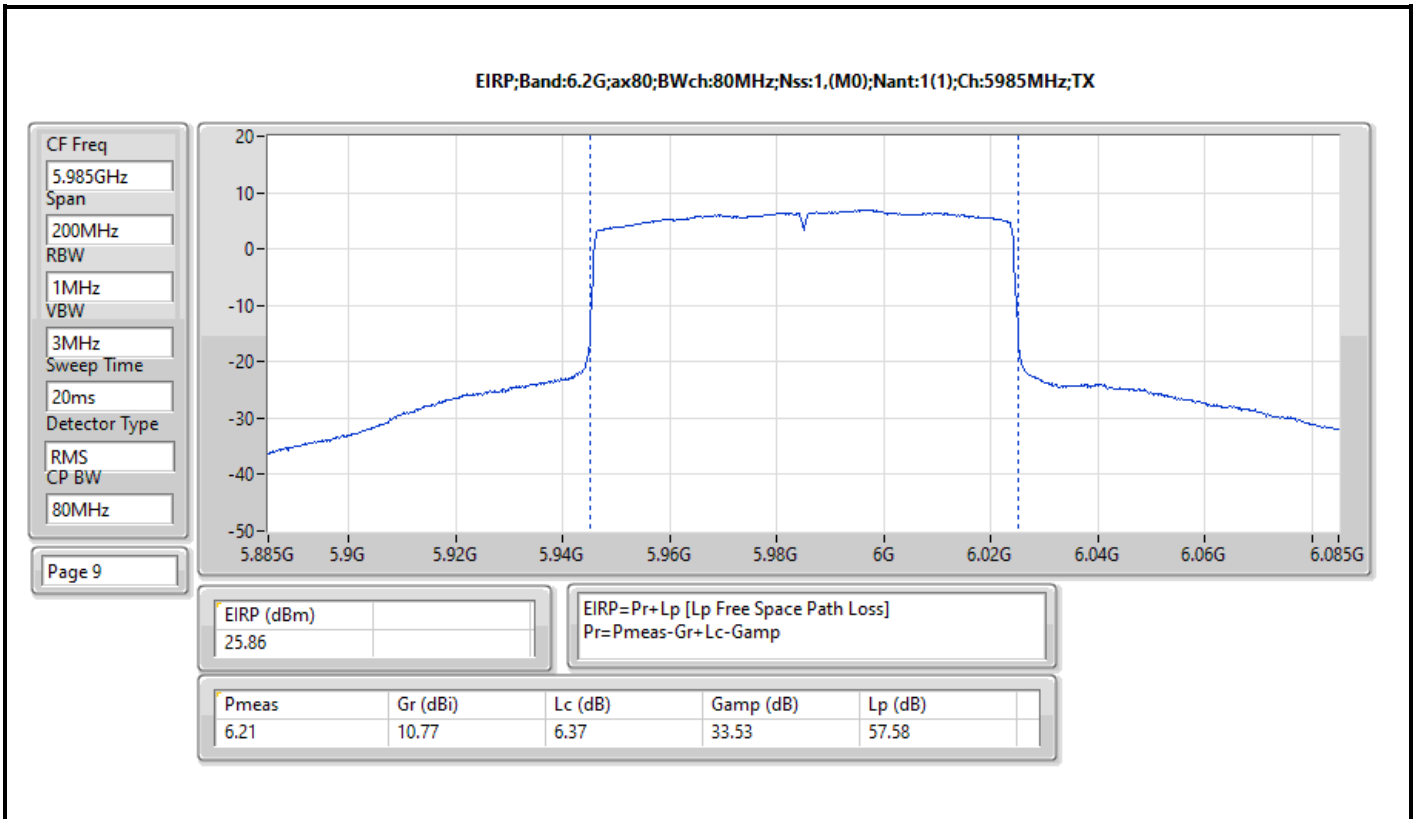


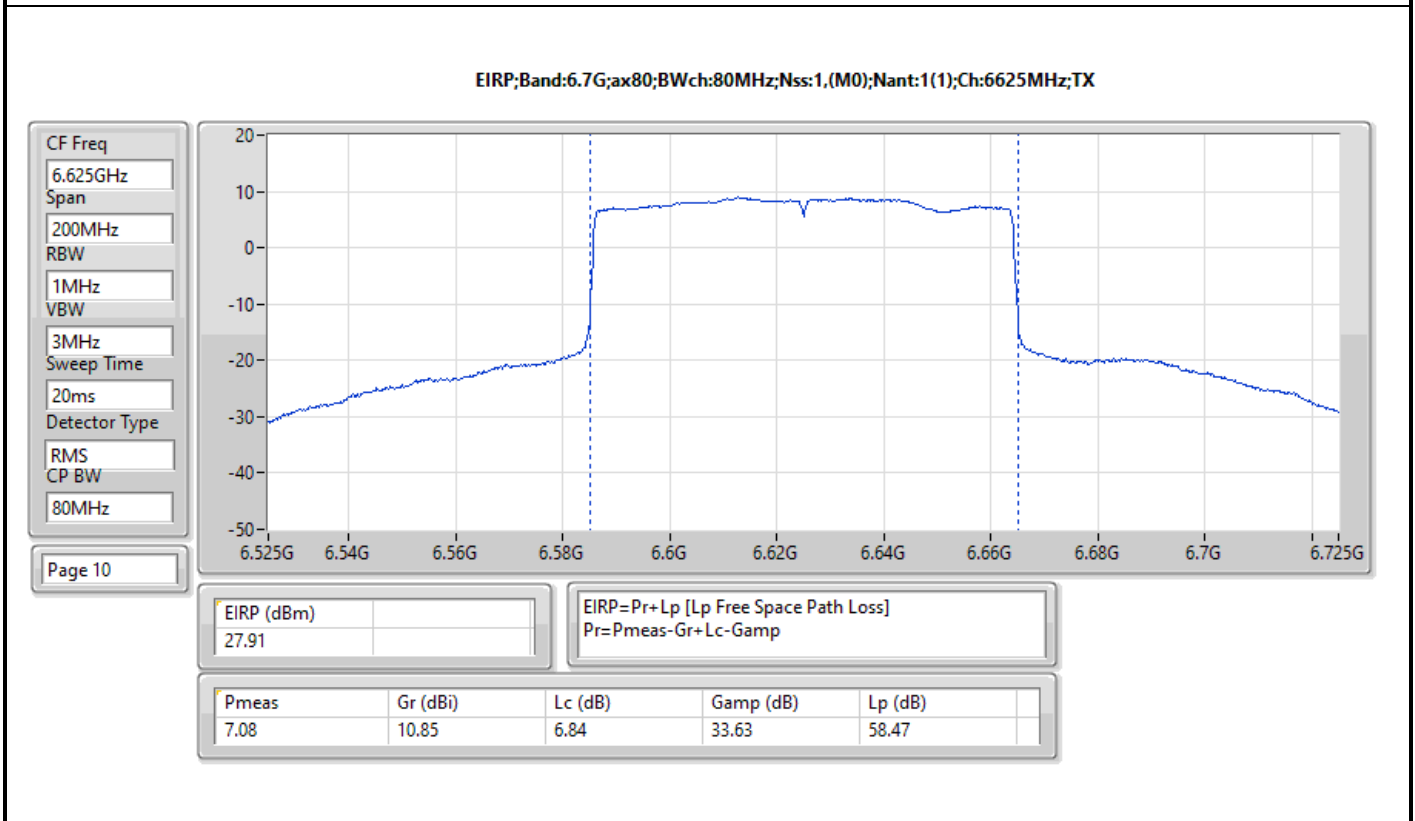
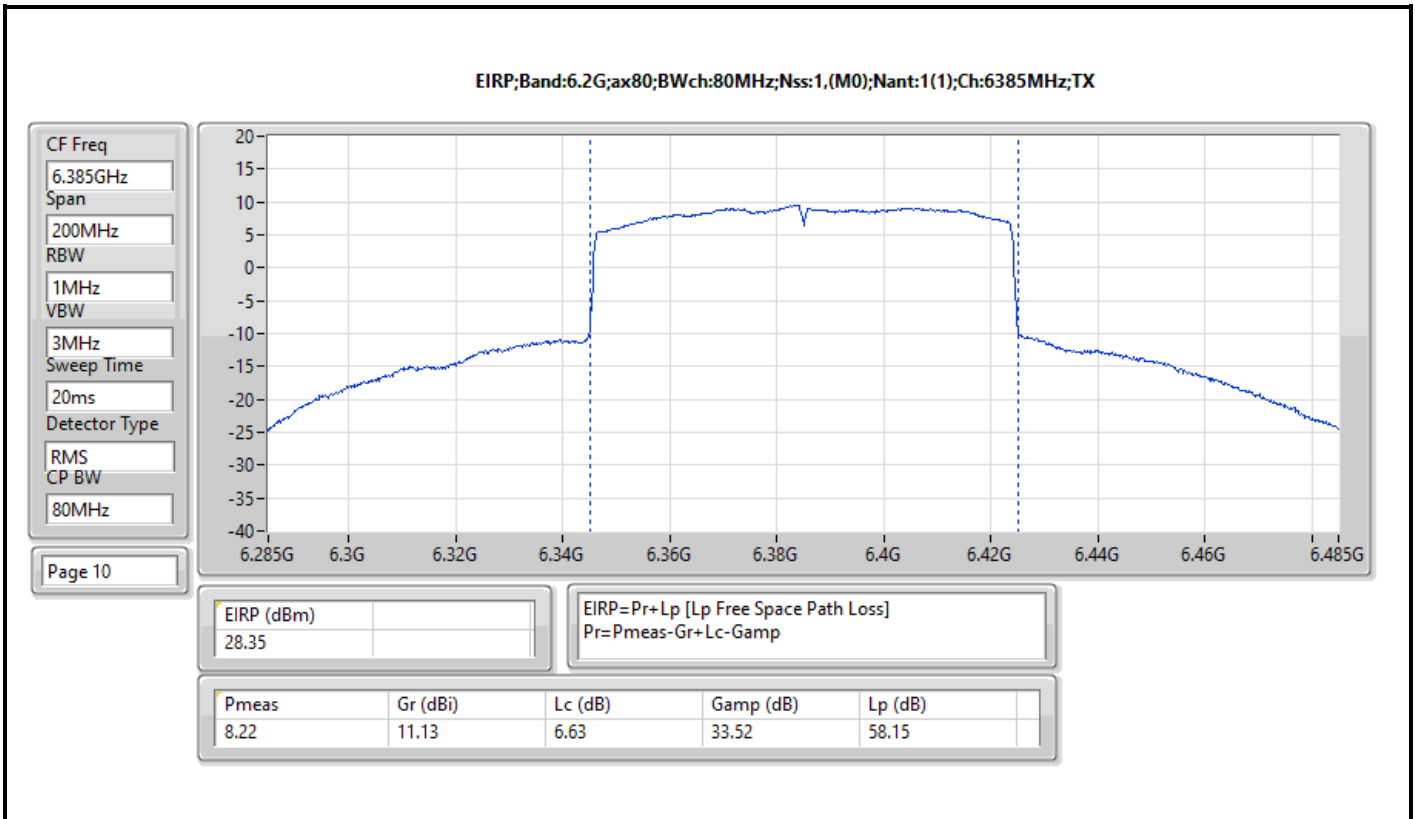


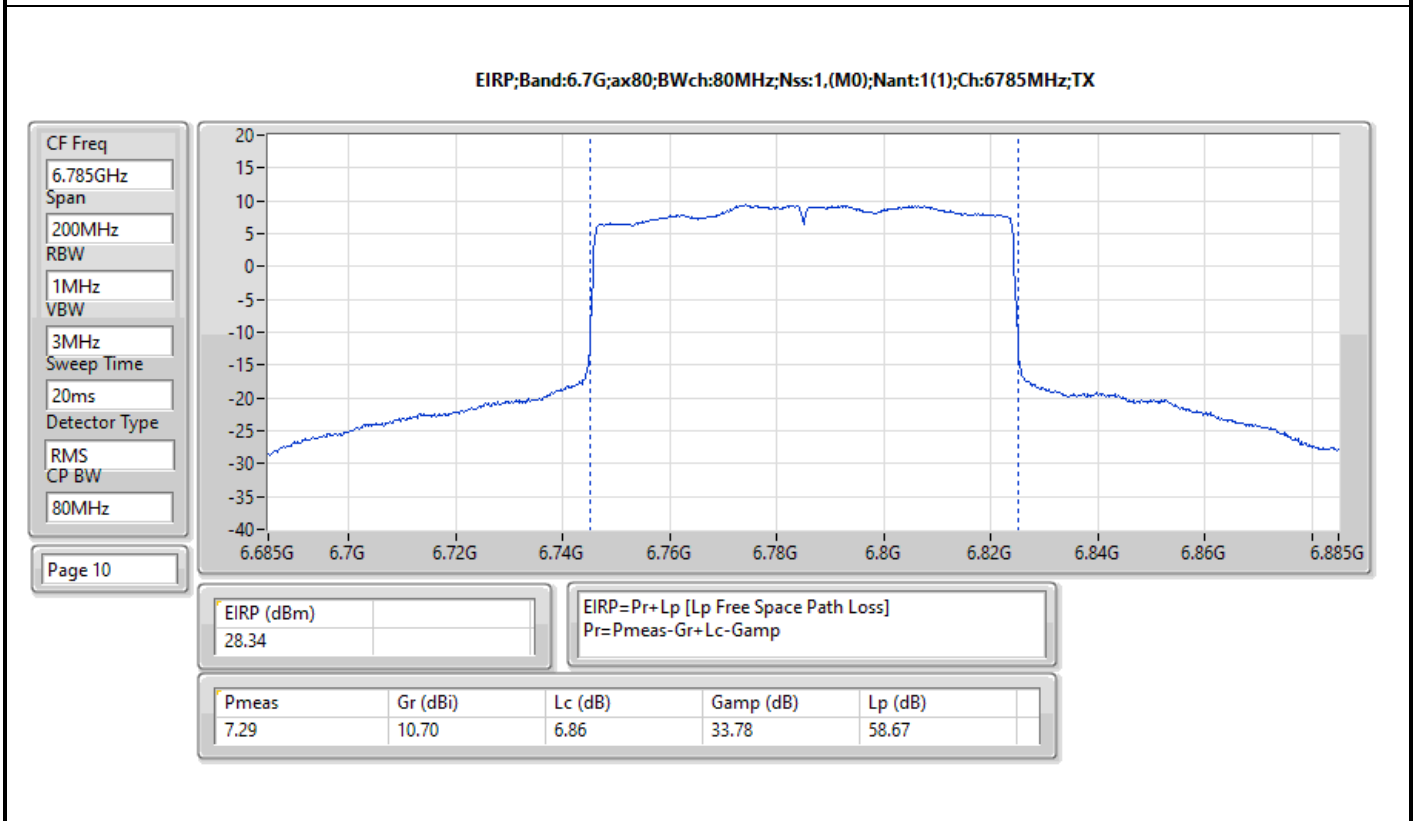
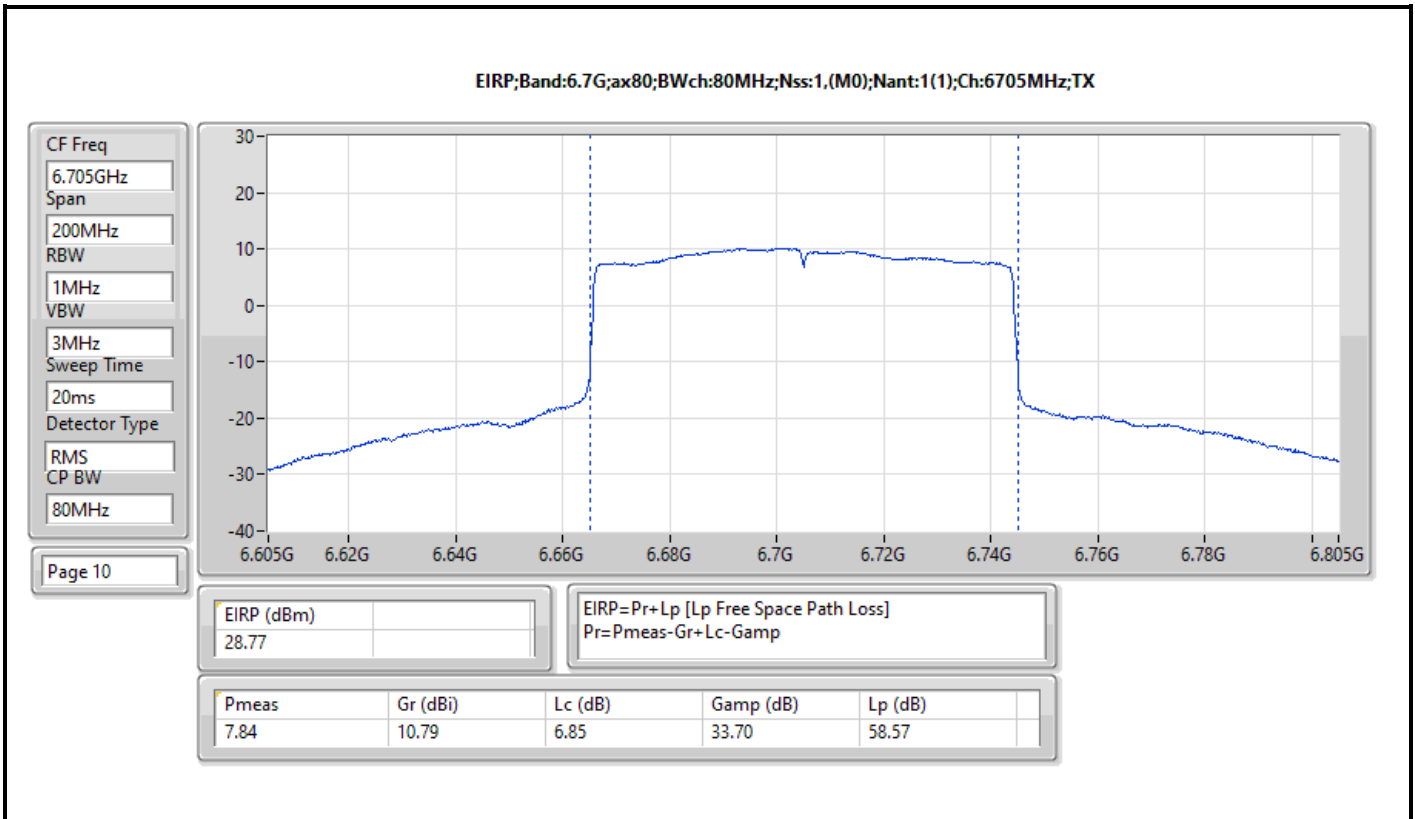


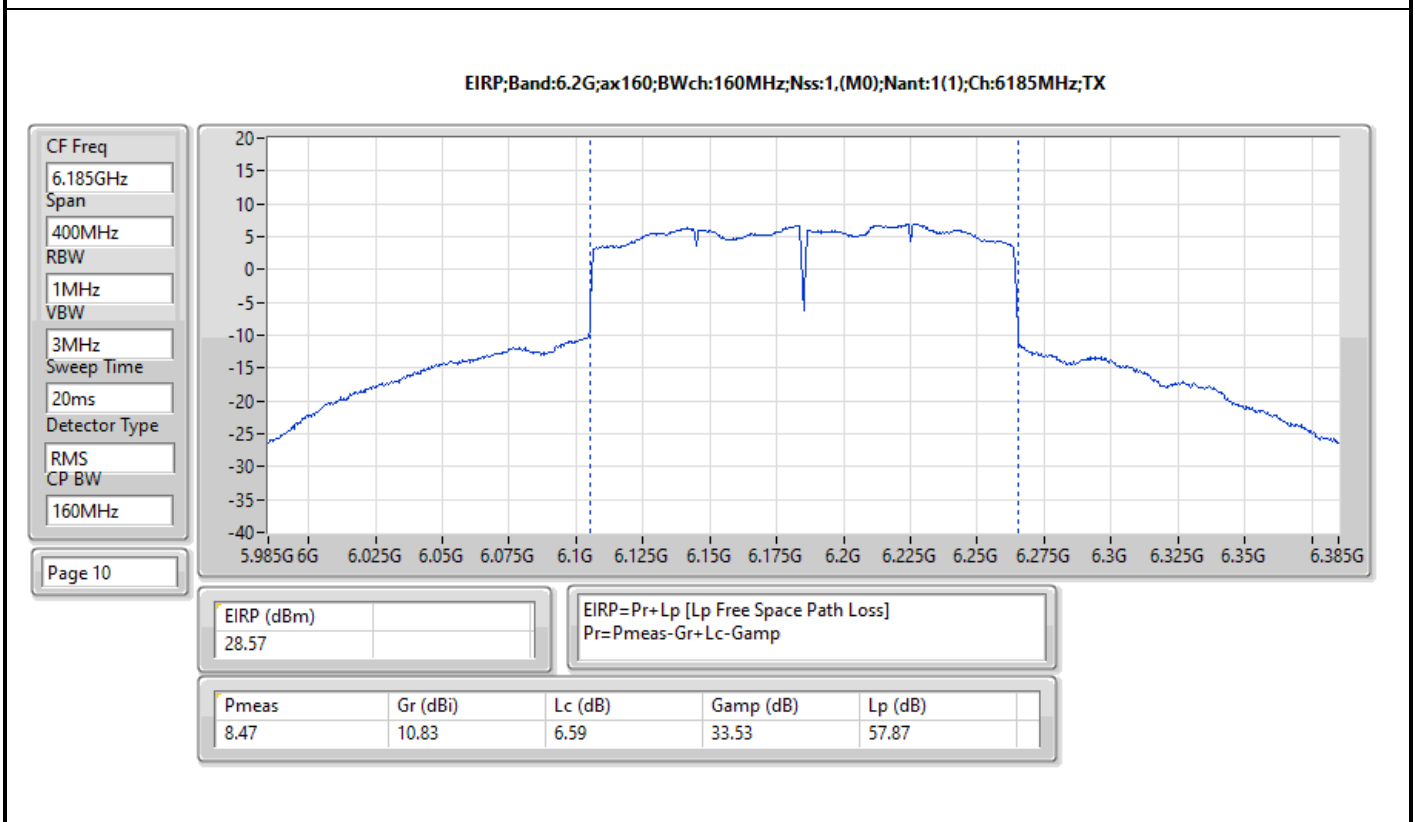
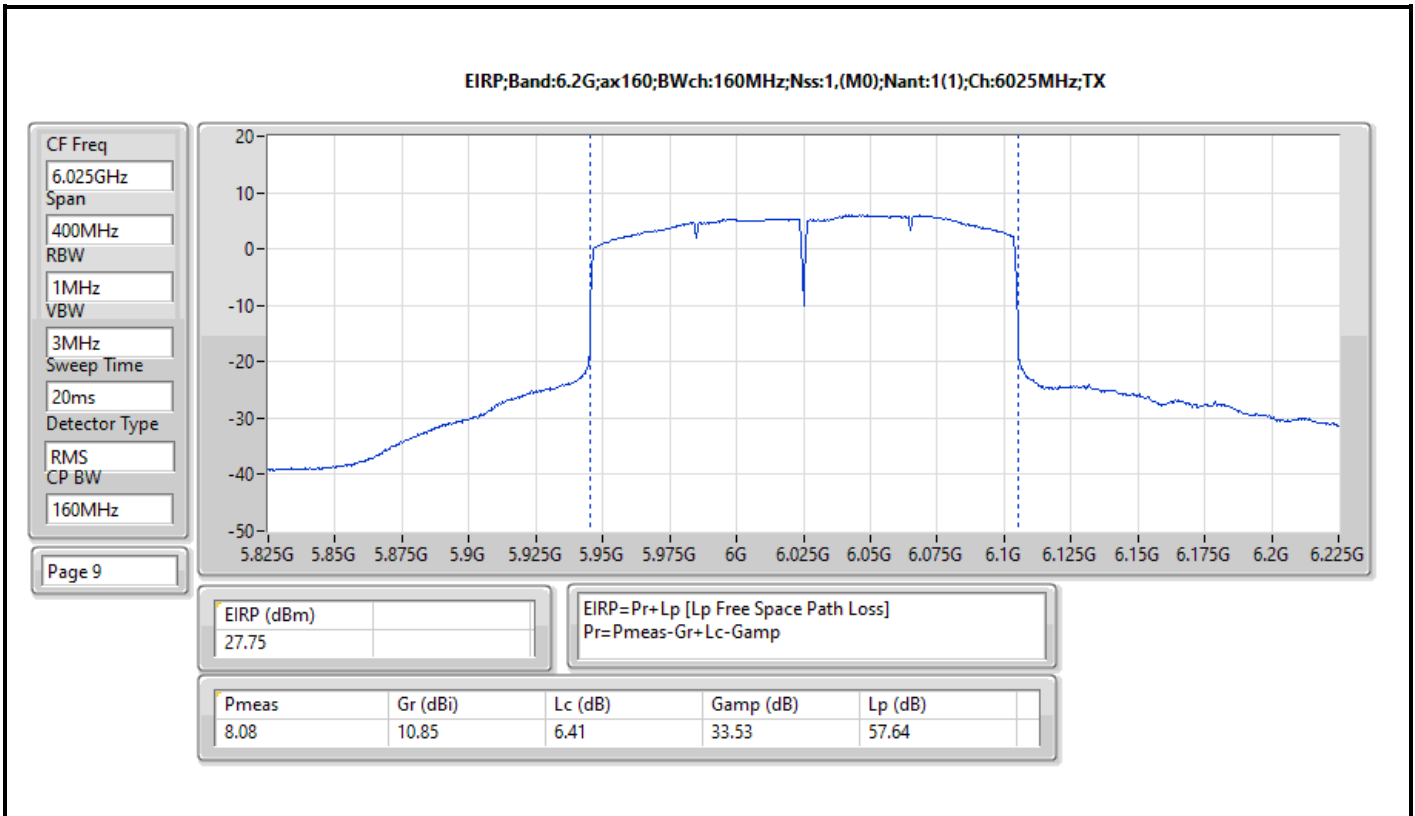


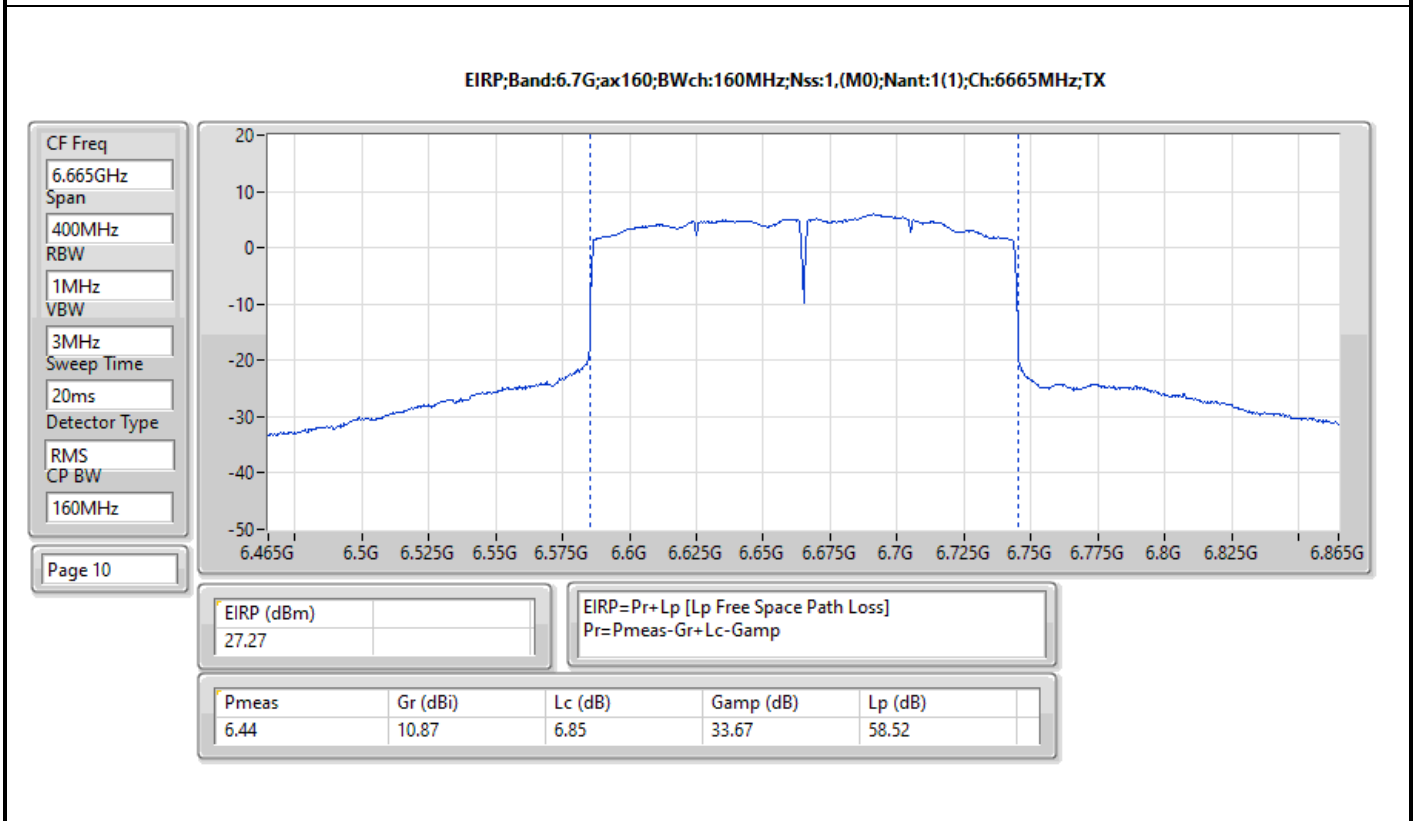
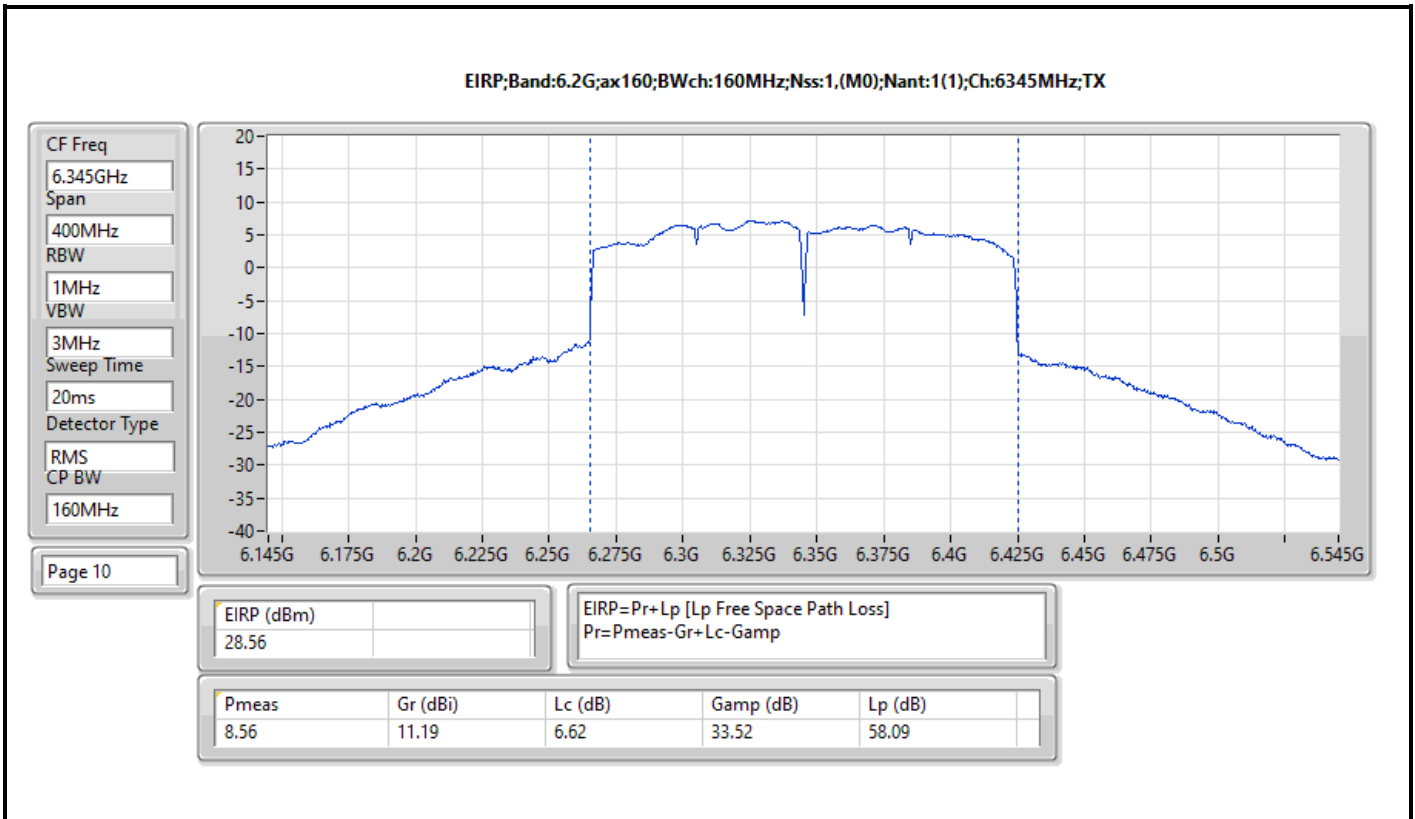
















## Average Power-E.I.R.P. at any elevation angle above 30 degrees Appendix C.2

### Summary

| Mode                            | Total Power (dBm) | Total Power (W) | EIRP [Phi 30°] (dBm) | EIRP [Phi 30°] (W) |
|---------------------------------|-------------------|-----------------|----------------------|--------------------|
| 5.925-6.425GHz                  | -                 | -               | -                    | -                  |
| 802.11ax HEW20_Nss1,(MCS0)_1TX  | 26.33             | 0.42954         | 20.59                | 0.114551           |
| 802.11ax HEW40_Nss1,(MCS0)_1TX  | 26.44             | 0.44055         | 20.70                | 0.117490           |
| 802.11ax HEW80_Nss1,(MCS0)_1TX  | 26.49             | 0.44566         | 20.75                | 0.118850           |
| 802.11ax HEW160_Nss1,(MCS0)_1TX | 26.69             | 0.46666         | 20.95                | 0.124451           |
| 6.525-6.875GHz                  | -                 | -               | -                    | -                  |
| 802.11ax HEW20_Nss1,(MCS0)_1TX  | 24.84             | 0.30479         | 20.80                | 0.120226           |
| 802.11ax HEW40_Nss1,(MCS0)_1TX  | 24.87             | 0.30690         | 20.83                | 0.121060           |
| 802.11ax HEW80_Nss1,(MCS0)_1TX  | 24.98             | 0.31477         | 20.94                | 0.124165           |
| 802.11ax HEW160_Nss1,(MCS0)_1TX | 24.90             | 0.30903         | 20.86                | 0.121899           |



## Average Power-E.I.R.P. at any elevation angle above 30 degrees Appendix C.2

### Result

| Mode                            | Result | DG [Phi 30°]<br>(dBi) | Port 1<br>(dBm) | Total Power<br>(dBm) | EIRP [Phi 30°]<br>(dBm) | EIRP [Phi 30°] Limit<br>(dBm) |
|---------------------------------|--------|-----------------------|-----------------|----------------------|-------------------------|-------------------------------|
| 802.11ax HEW20_Nss1,(MCS0)_1TX  | -      | -                     | -               | -                    | -                       | -                             |
| 5955MHz                         | Pass   | -5.74                 | 26.12           | 26.12                | 20.38                   | 21.00                         |
| 6195MHz                         | Pass   | -5.74                 | 26.33           | 26.33                | 20.59                   | 21.00                         |
| 6415MHz                         | Pass   | -5.74                 | 25.68           | 25.68                | 19.94                   | 21.00                         |
| 6535MHz                         | Pass   | -4.04                 | 24.60           | 24.60                | 20.56                   | 21.00                         |
| 6695MHz                         | Pass   | -4.04                 | 24.84           | 24.84                | 20.80                   | 21.00                         |
| 6855MHz                         | Pass   | -4.04                 | 24.58           | 24.58                | 20.54                   | 21.00                         |
| 802.11ax HEW40_Nss1,(MCS0)_1TX  | -      | -                     | -               | -                    | -                       | -                             |
| 5965MHz                         | Pass   | -5.74                 | 23.57           | 23.57                | 17.83                   | 21.00                         |
| 6205MHz                         | Pass   | -5.74                 | 26.44           | 26.44                | 20.70                   | 21.00                         |
| 6405MHz                         | Pass   | -5.74                 | 26.33           | 26.33                | 20.59                   | 21.00                         |
| 6565MHz                         | Pass   | -4.04                 | 24.87           | 24.87                | 20.83                   | 21.00                         |
| 6685MHz                         | Pass   | -4.04                 | 24.63           | 24.63                | 20.59                   | 21.00                         |
| 6845MHz                         | Pass   | -4.04                 | 24.76           | 24.76                | 20.72                   | 21.00                         |
| 802.11ax HEW80_Nss1,(MCS0)_1TX  | -      | -                     | -               | -                    | -                       | -                             |
| 5985MHz                         | Pass   | -5.74                 | 23.66           | 23.66                | 17.92                   | 21.00                         |
| 6225MHz                         | Pass   | -5.74                 | 26.49           | 26.49                | 20.75                   | 21.00                         |
| 6385MHz                         | Pass   | -5.74                 | 26.30           | 26.30                | 20.56                   | 21.00                         |
| 6625MHz                         | Pass   | -4.04                 | 24.98           | 24.98                | 20.94                   | 21.00                         |
| 6705MHz                         | Pass   | -4.04                 | 24.98           | 24.98                | 20.94                   | 21.00                         |
| 6785MHz                         | Pass   | -4.04                 | 24.87           | 24.87                | 20.83                   | 21.00                         |
| 802.11ax HEW160_Nss1,(MCS0)_1TX | -      | -                     | -               | -                    | -                       | -                             |
| 6025MHz                         | Pass   | -5.74                 | 24.59           | 24.59                | 18.85                   | 21.00                         |
| 6185MHz                         | Pass   | -5.74                 | 26.69           | 26.69                | 20.95                   | 21.00                         |
| 6345MHz                         | Pass   | -5.74                 | 26.59           | 26.59                | 20.85                   | 21.00                         |
| 6665MHz                         | Pass   | -4.04                 | 24.90           | 24.90                | 20.86                   | 21.00                         |

DG = Directional Gain; Port X = Port X output power



Summary

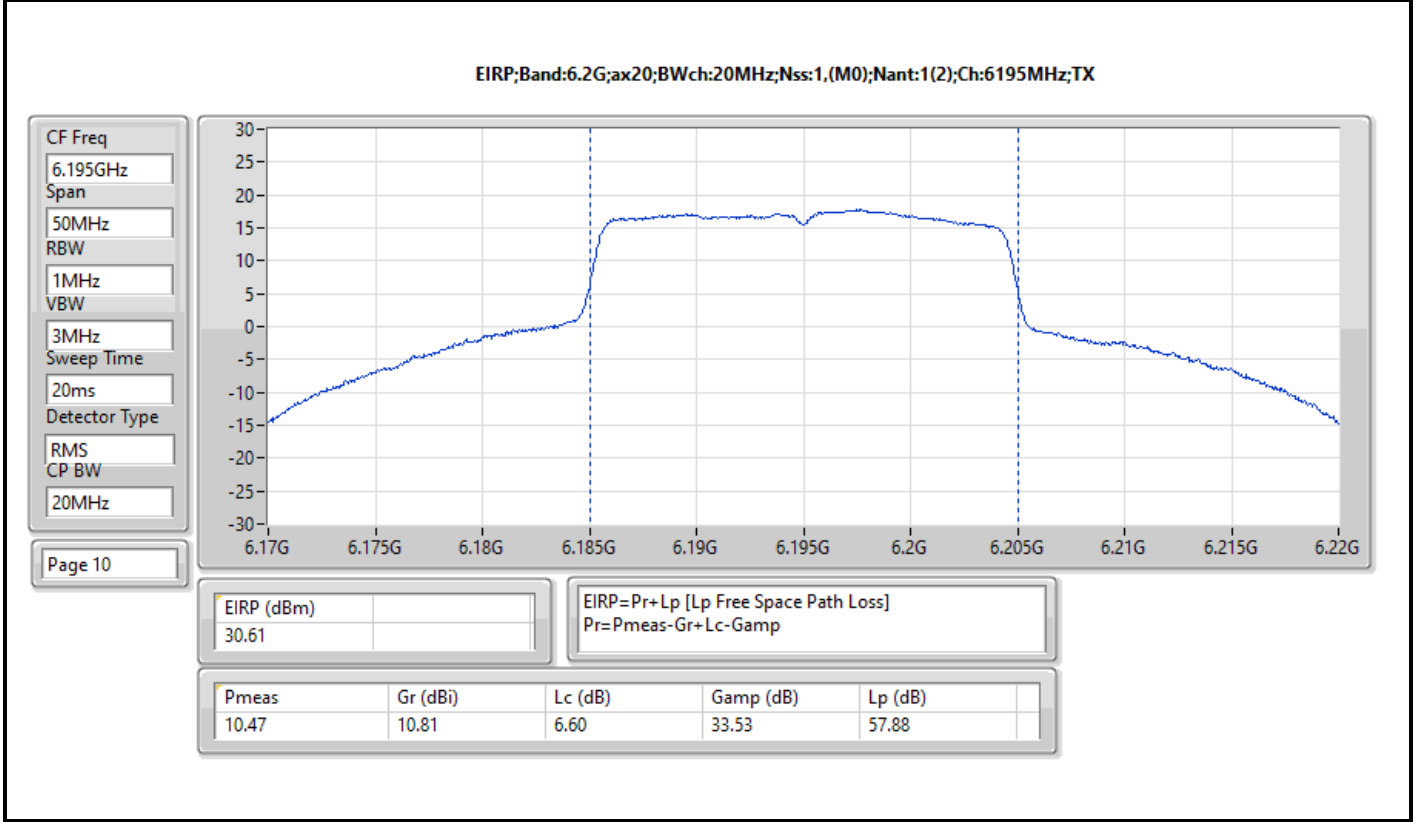
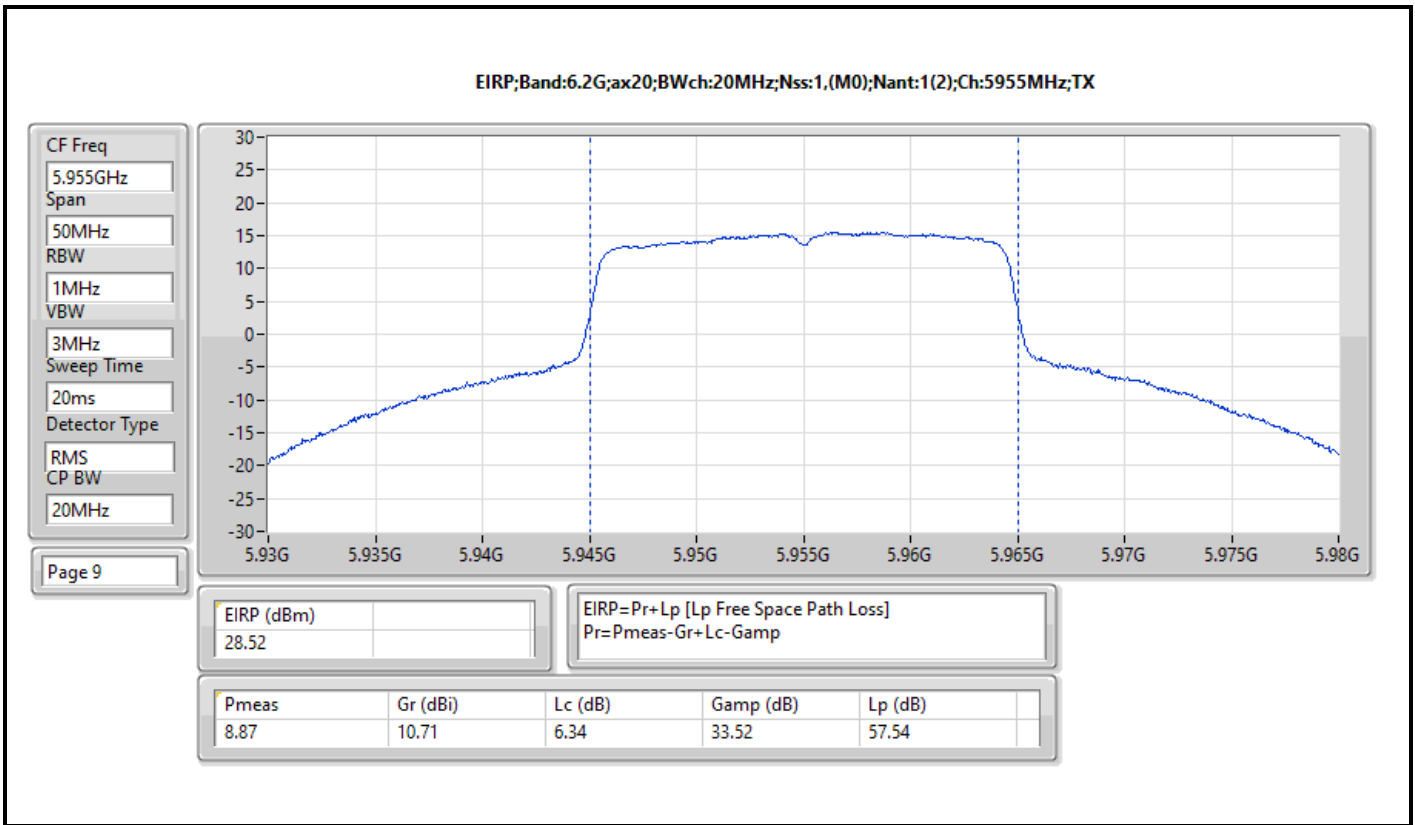
| Mode                            | EIRP (dBm) | EIRP (W) |
|---------------------------------|------------|----------|
| 5.925-6.425GHz                  | -          | -        |
| 802.11ax HEW20_Nss1,(MCS0)_1TX  | 30.61      | 1.15080  |
| 802.11ax HEW40_Nss1,(MCS0)_1TX  | 31.39      | 1.37721  |
| 802.11ax HEW80_Nss1,(MCS0)_1TX  | 30.94      | 1.24165  |
| 802.11ax HEW160_Nss1,(MCS0)_1TX | 31.62      | 1.45211  |
| 6.525-6.875GHz                  | -          | -        |
| 802.11ax HEW20_Nss1,(MCS0)_1TX  | 29.57      | 0.90573  |
| 802.11ax HEW40_Nss1,(MCS0)_1TX  | 29.46      | 0.88308  |
| 802.11ax HEW80_Nss1,(MCS0)_1TX  | 28.92      | 0.77983  |
| 802.11ax HEW160_Nss1,(MCS0)_1TX | 29.21      | 0.83368  |

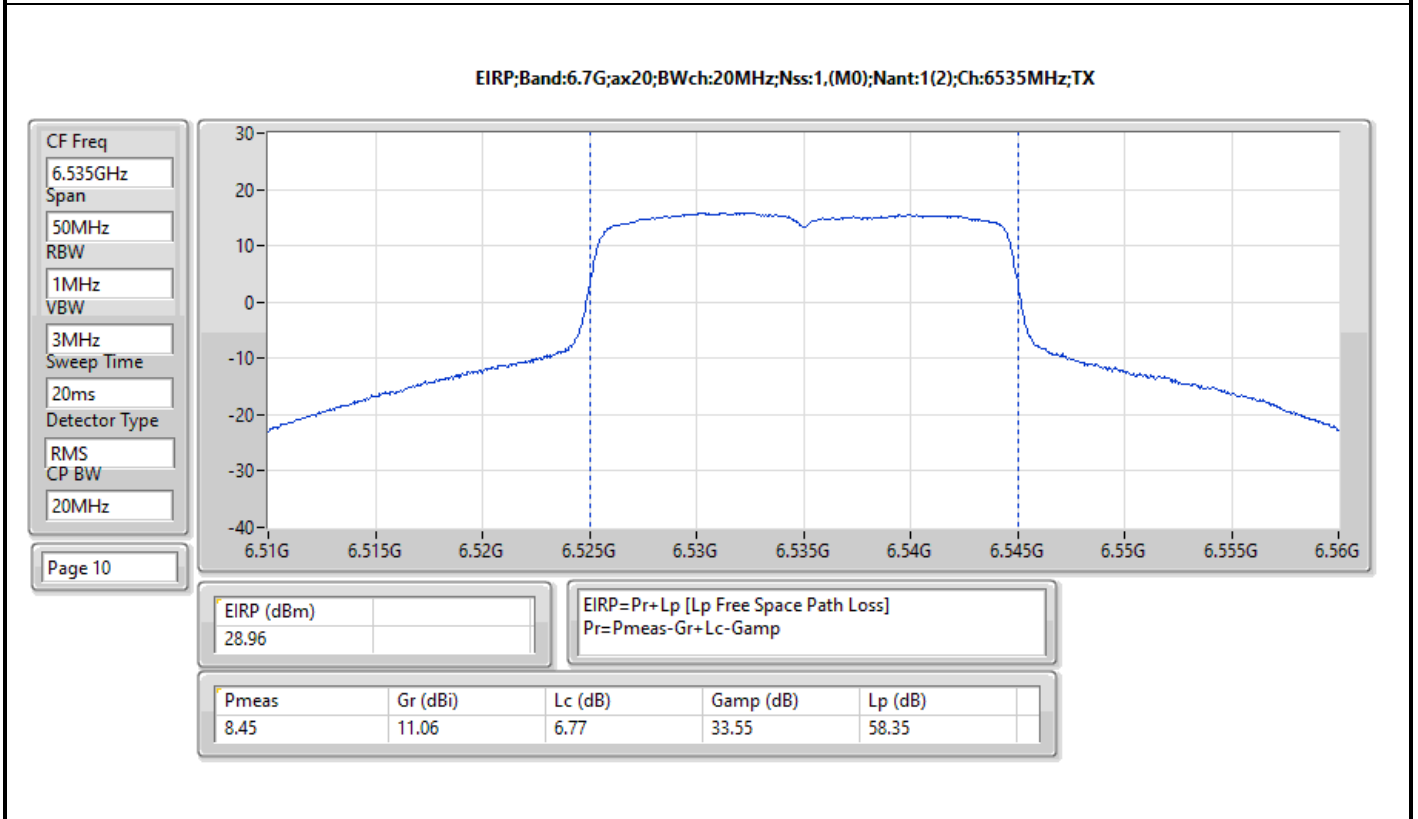
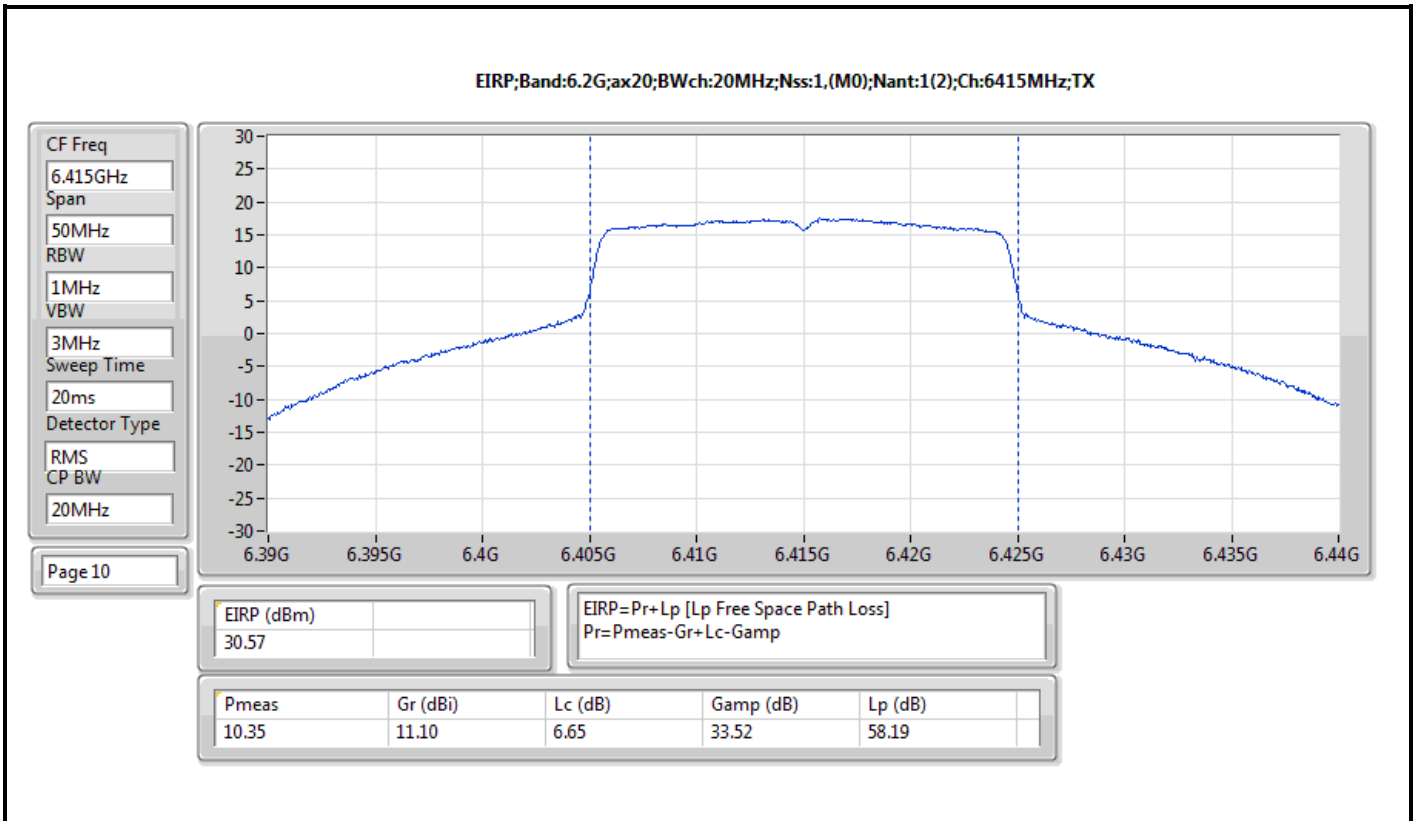


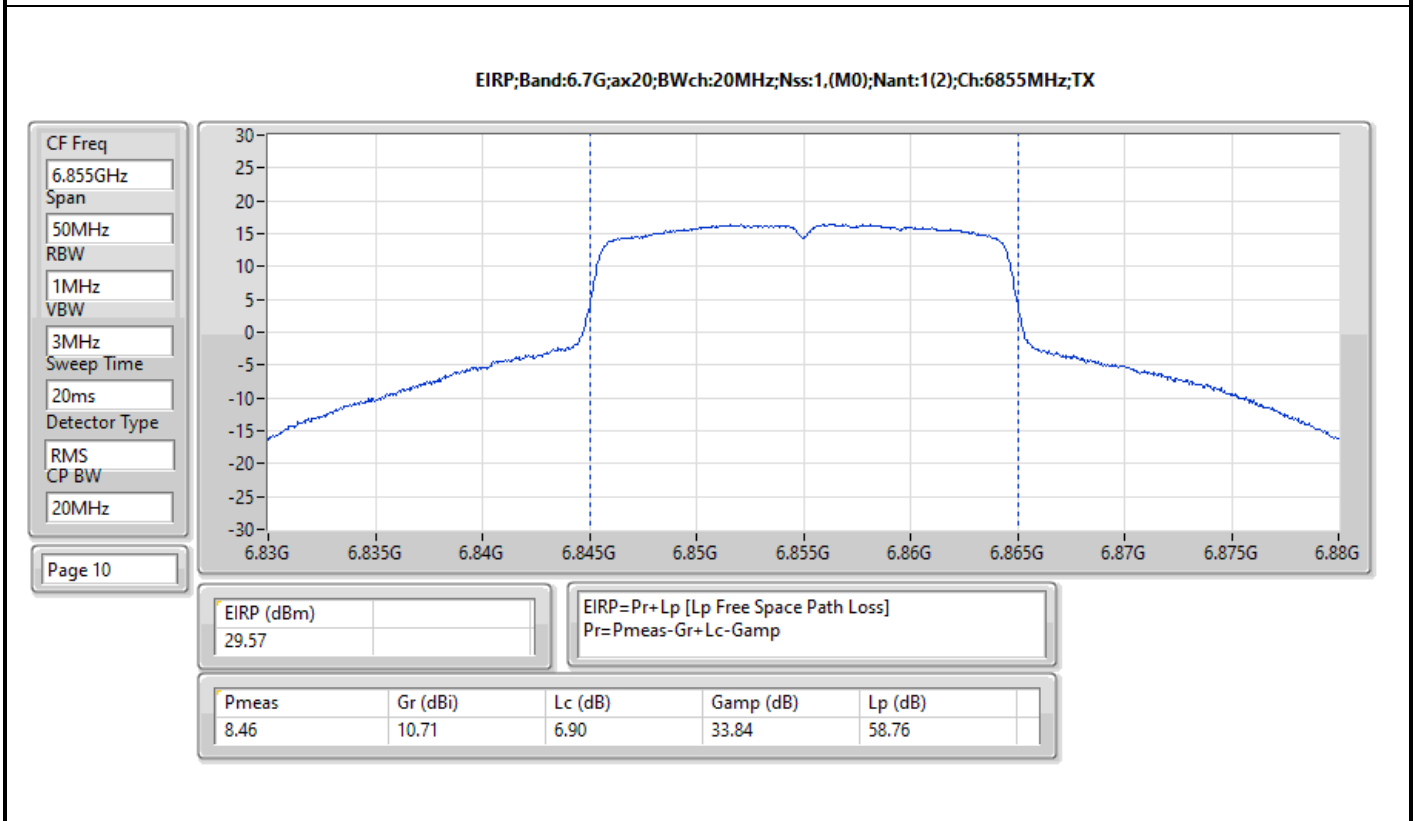
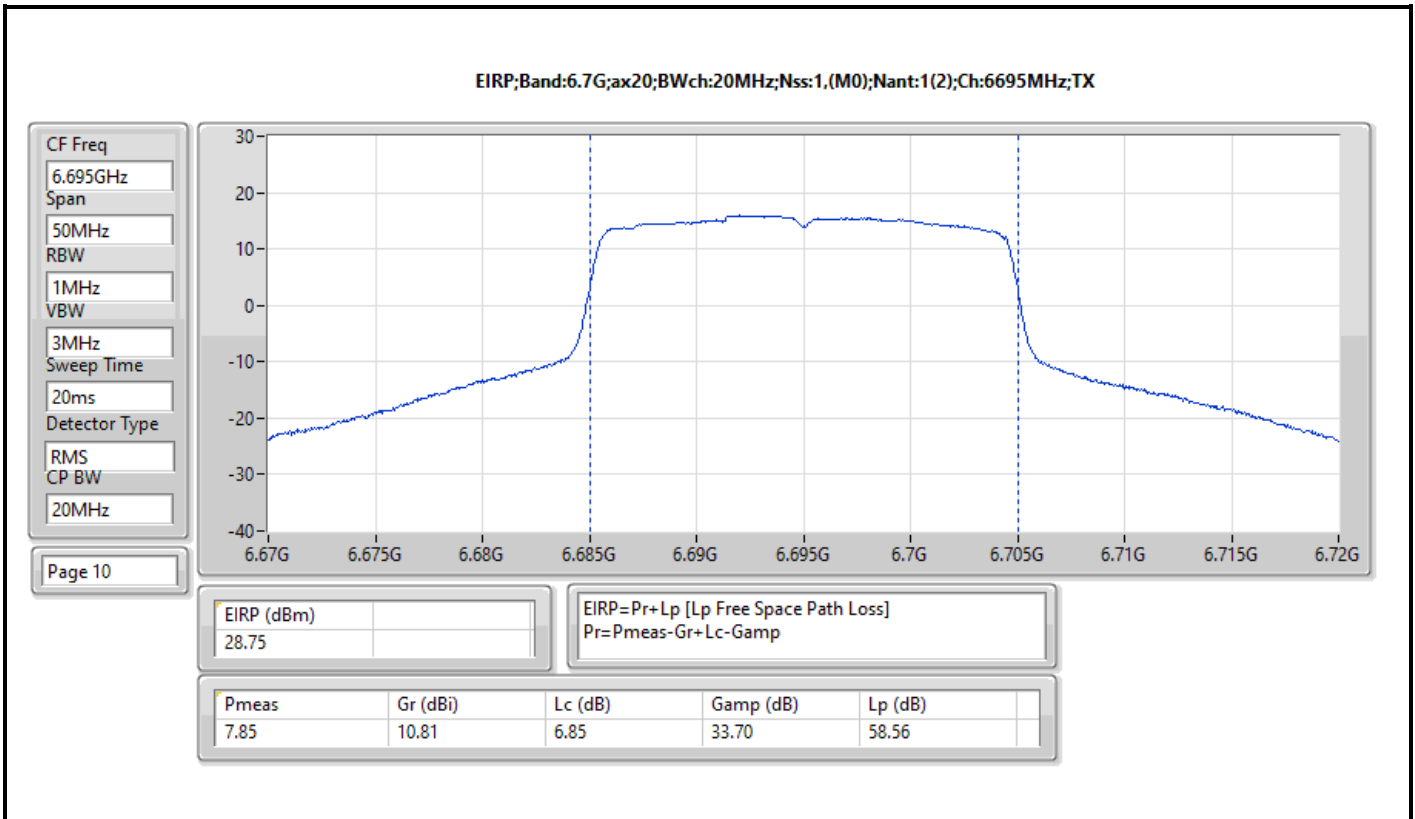
Result

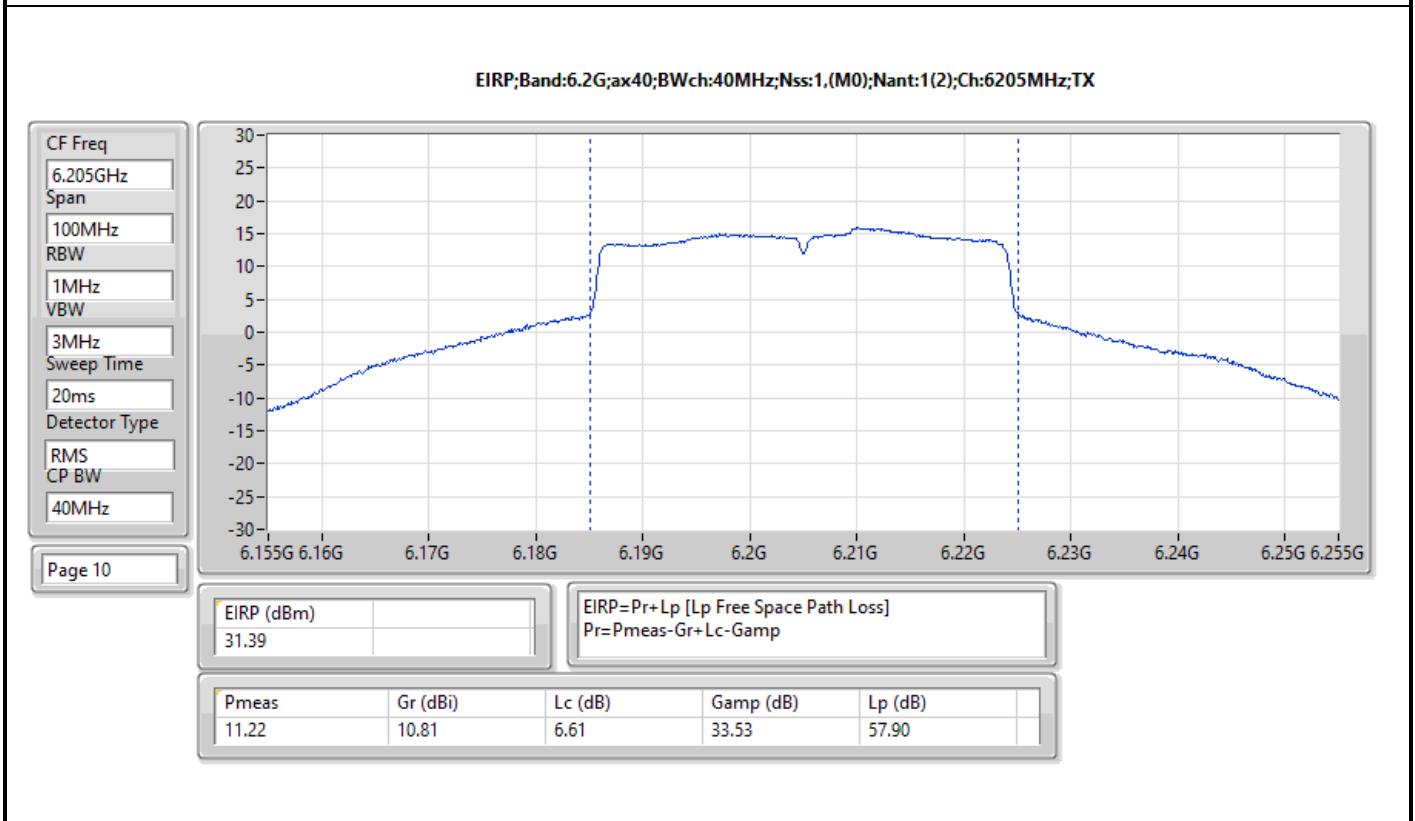
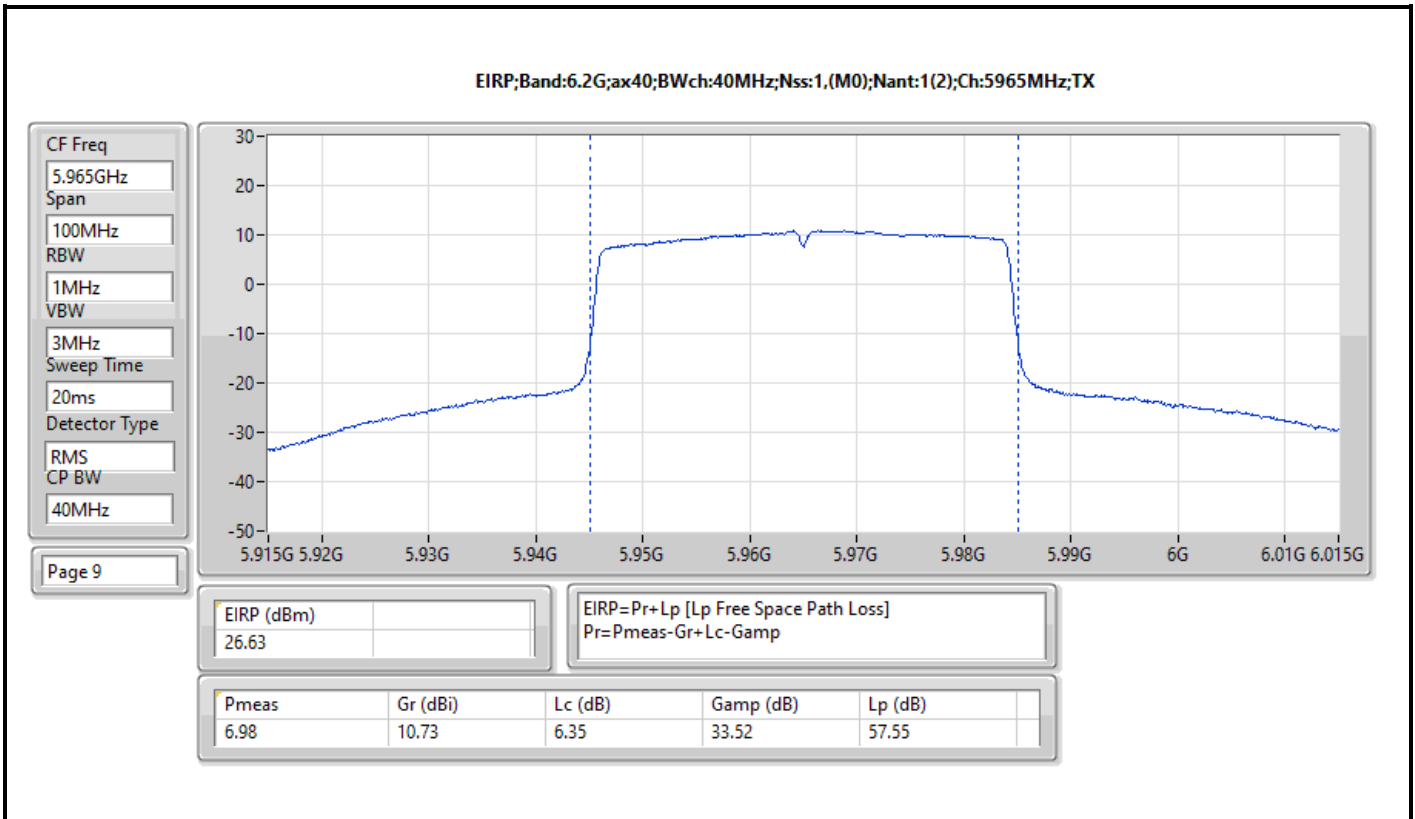
| Mode                            | Result | Radiated EIRP (dBm) | EIRP Limit (dBm) |
|---------------------------------|--------|---------------------|------------------|
| 802.11ax HEW20_Nss1,(MCS0)_1TX  | -      | -                   | -                |
| 5955MHz                         | Pass   | 28.52               | 36.00            |
| 6195MHz                         | Pass   | 30.61               | 36.00            |
| 6415MHz                         | Pass   | 30.57               | 36.00            |
| 6535MHz                         | Pass   | 28.96               | 36.00            |
| 6695MHz                         | Pass   | 28.75               | 36.00            |
| 6855MHz                         | Pass   | 29.57               | 36.00            |
| 802.11ax HEW40_Nss1,(MCS0)_1TX  | -      | -                   | -                |
| 5965MHz                         | Pass   | 26.63               | 36.00            |
| 6205MHz                         | Pass   | 31.39               | 36.00            |
| 6405MHz                         | Pass   | 30.12               | 36.00            |
| 6565MHz                         | Pass   | 28.79               | 36.00            |
| 6685MHz                         | Pass   | 29.20               | 36.00            |
| 6845MHz                         | Pass   | 29.46               | 36.00            |
| 802.11ax HEW80_Nss1,(MCS0)_1TX  | -      | -                   | -                |
| 5985MHz                         | Pass   | 26.65               | 36.00            |
| 6225MHz                         | Pass   | 30.94               | 36.00            |
| 6385MHz                         | Pass   | 28.66               | 36.00            |
| 6625MHz                         | Pass   | 28.92               | 36.00            |
| 6705MHz                         | Pass   | 28.07               | 36.00            |
| 6785MHz                         | Pass   | 28.00               | 36.00            |
| 802.11ax HEW160_Nss1,(MCS0)_1TX | -      | -                   | -                |
| 6025MHz                         | Pass   | 27.82               | 36.00            |
| 6185MHz                         | Pass   | 31.62               | 36.00            |
| 6345MHz                         | Pass   | 28.59               | 36.00            |
| 6665MHz                         | Pass   | 29.21               | 36.00            |

DG = Directional Gain; Port X = Port X output power

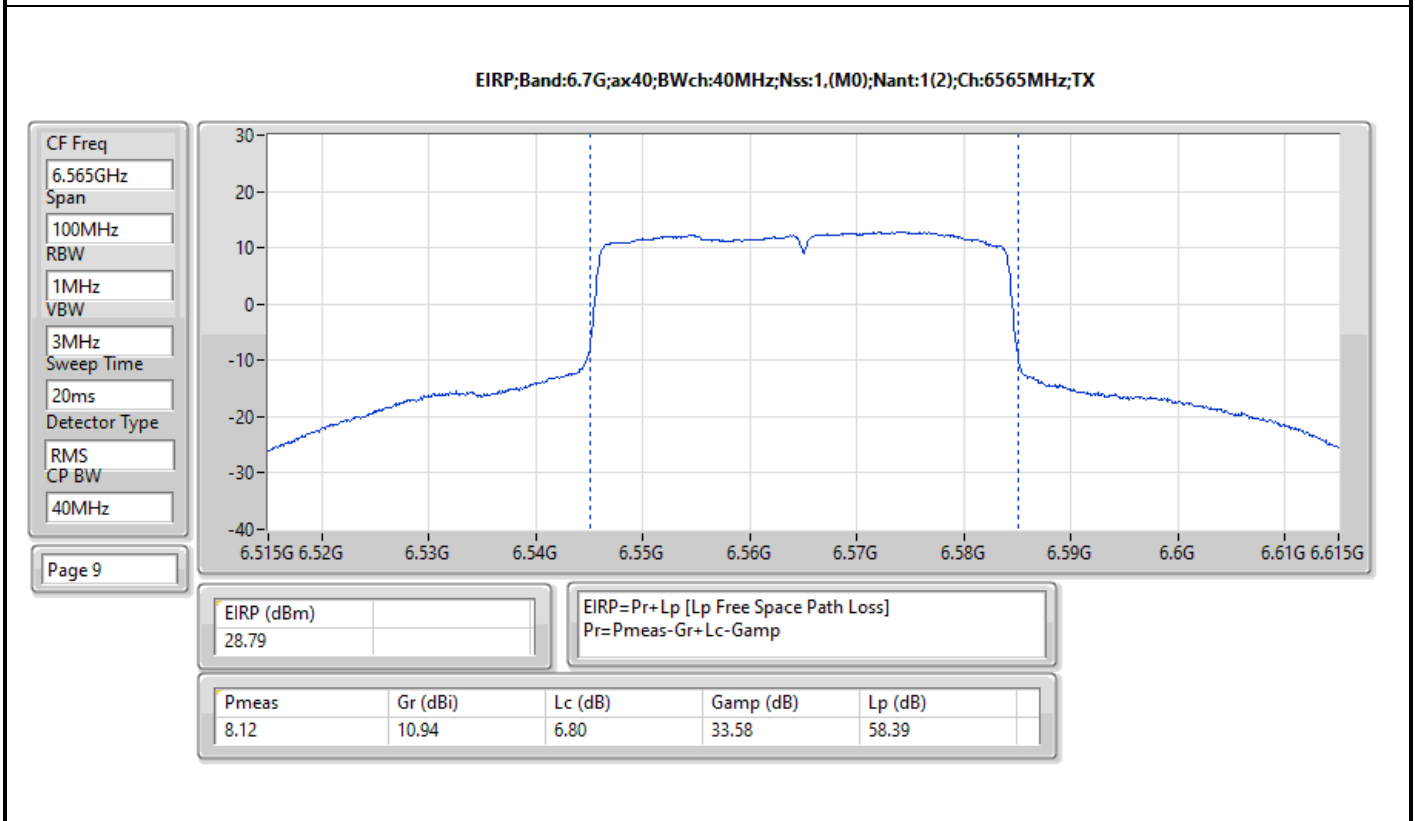
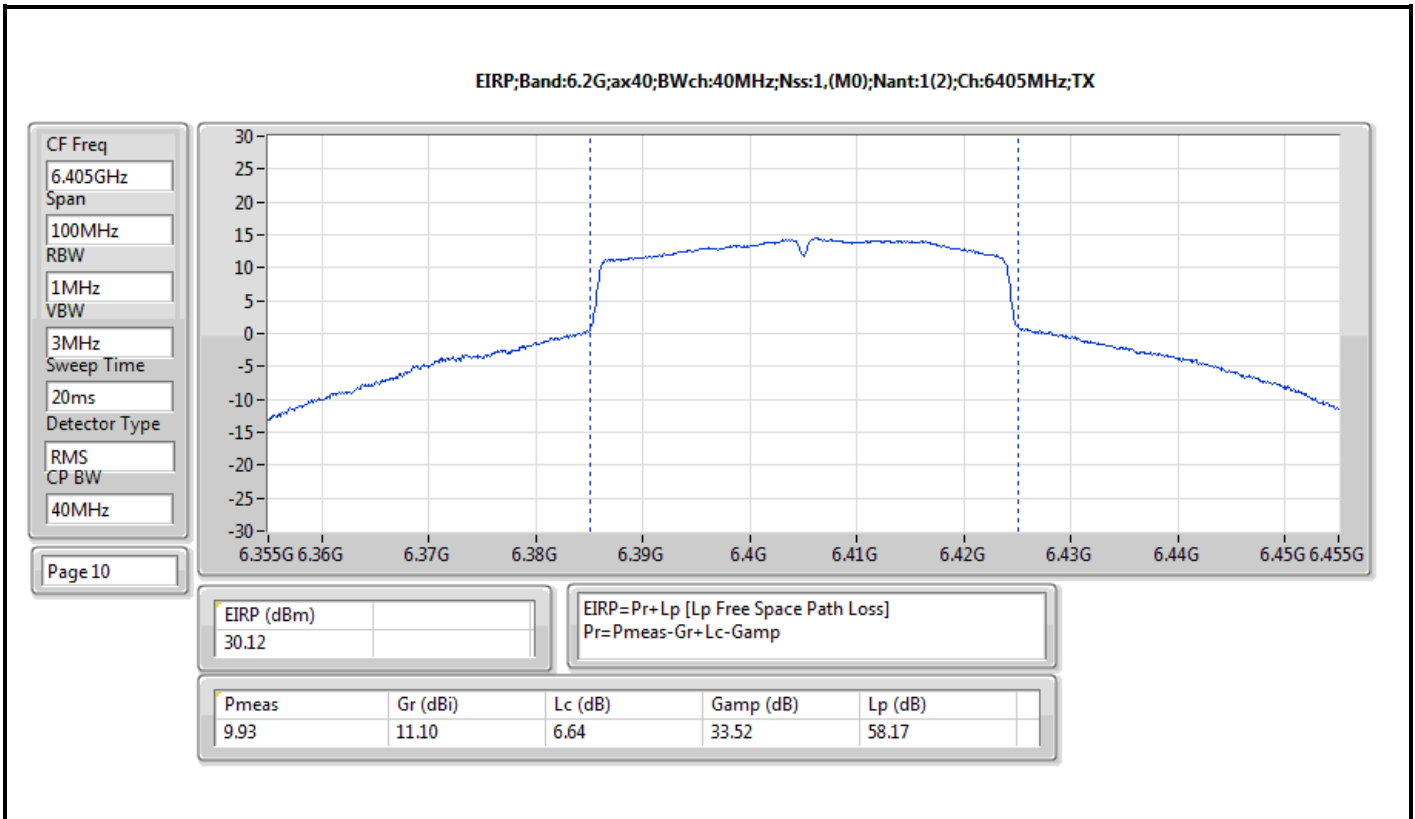


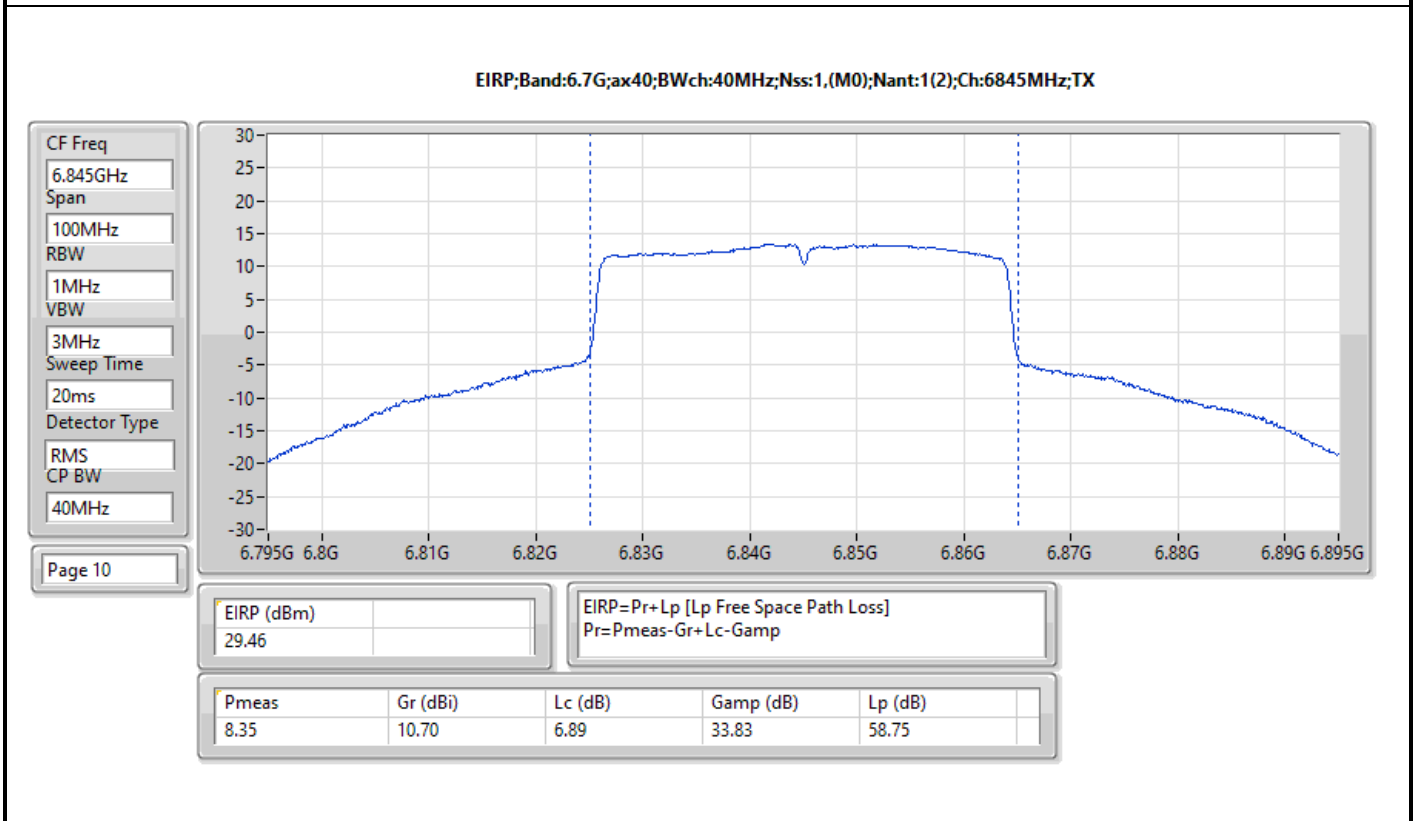
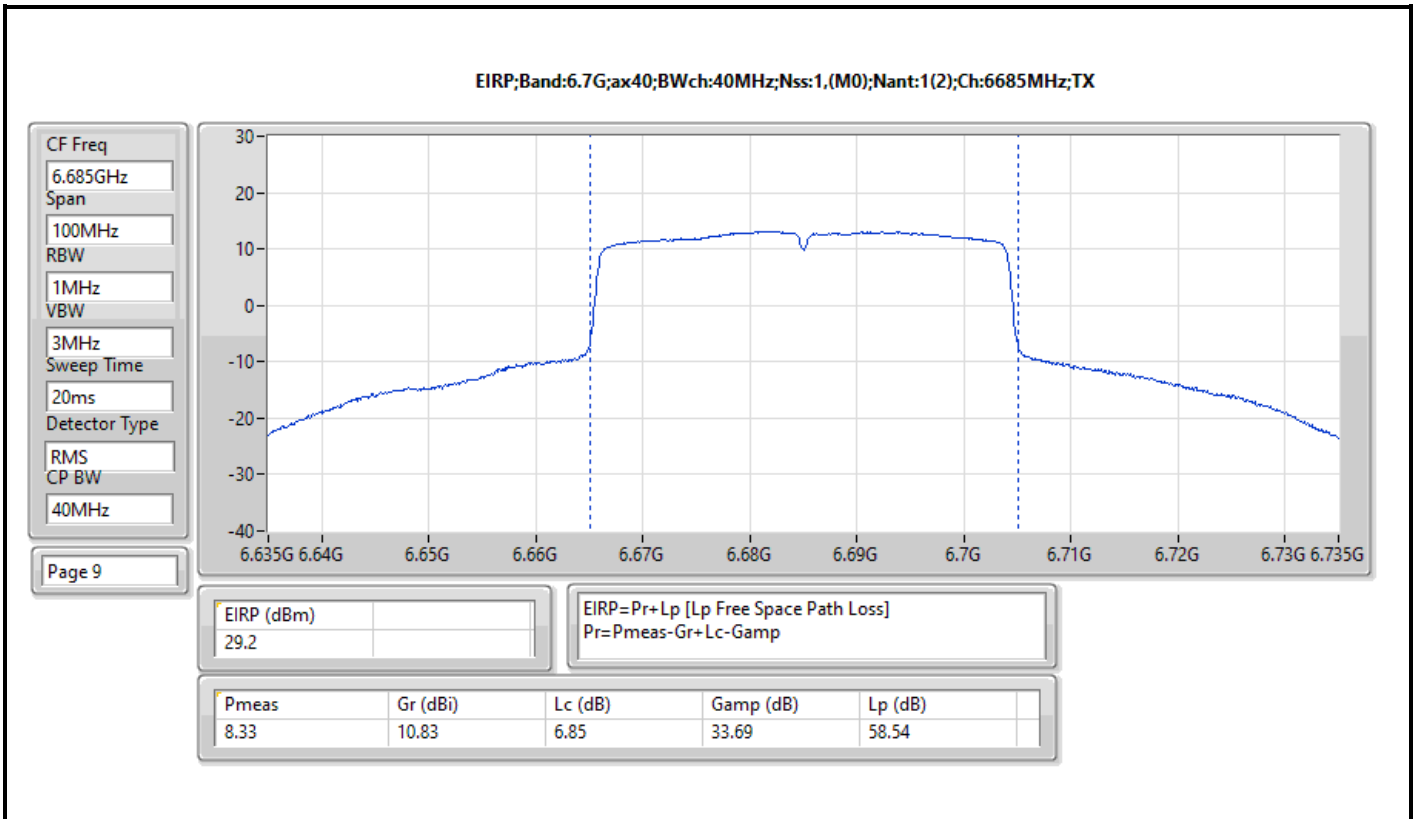


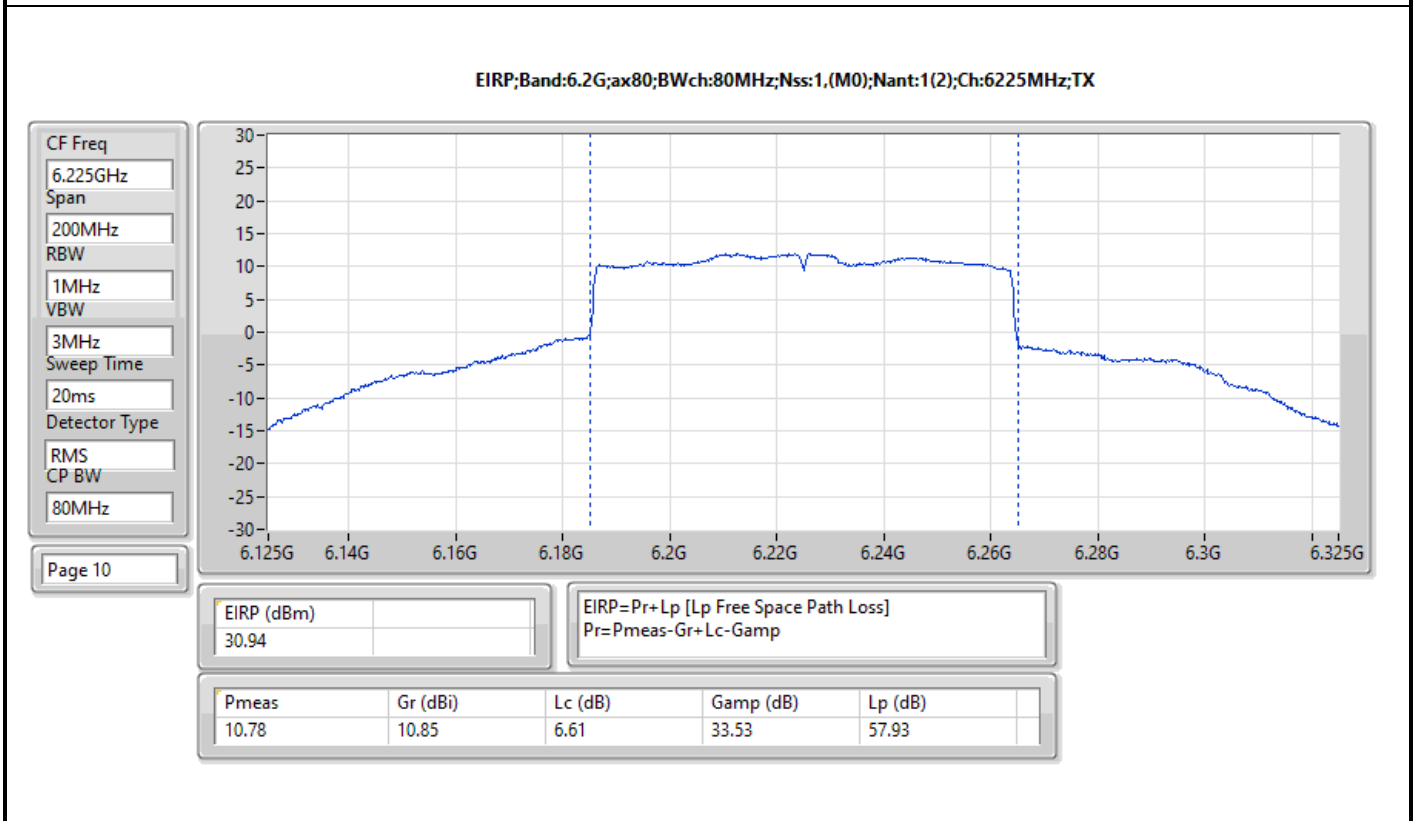
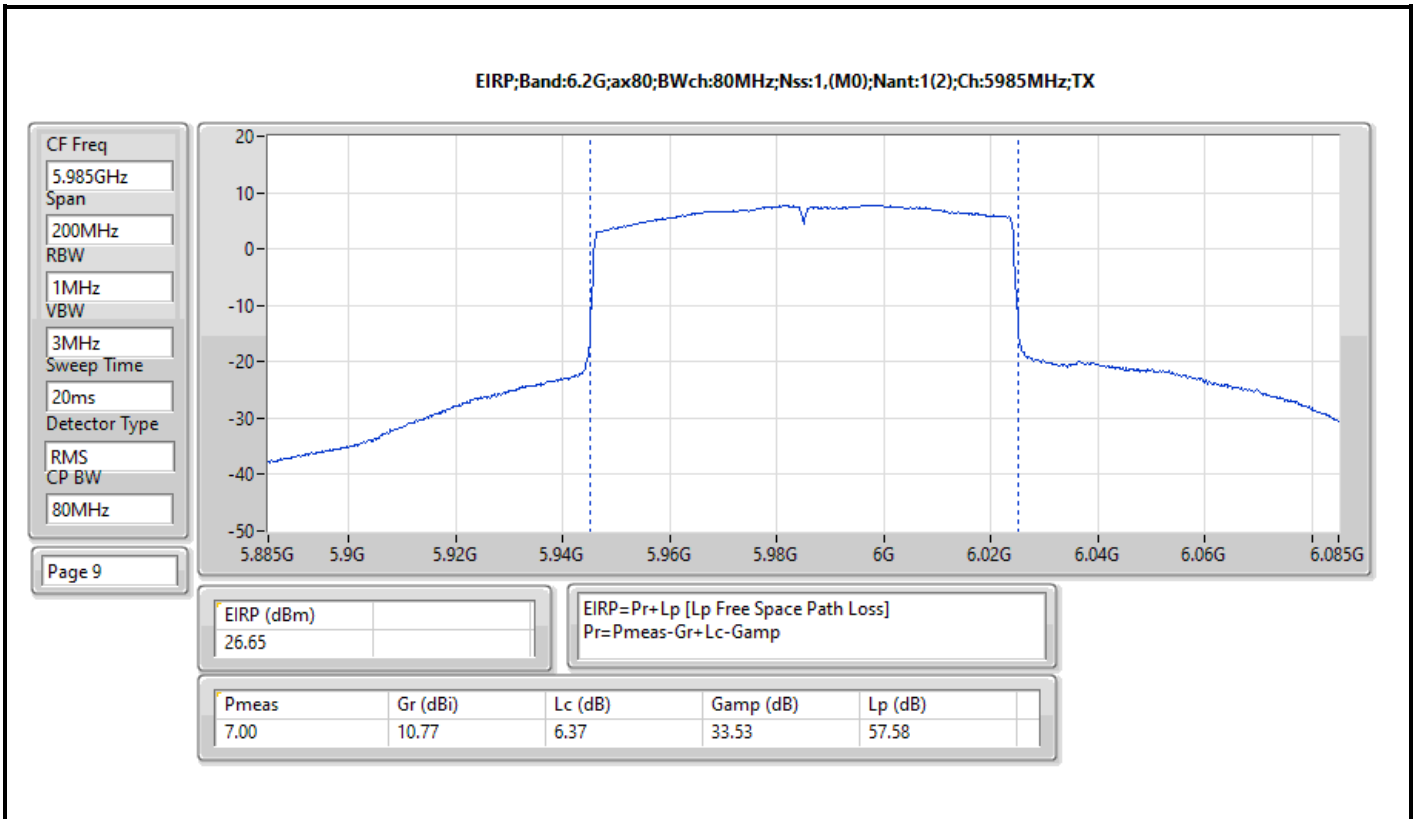


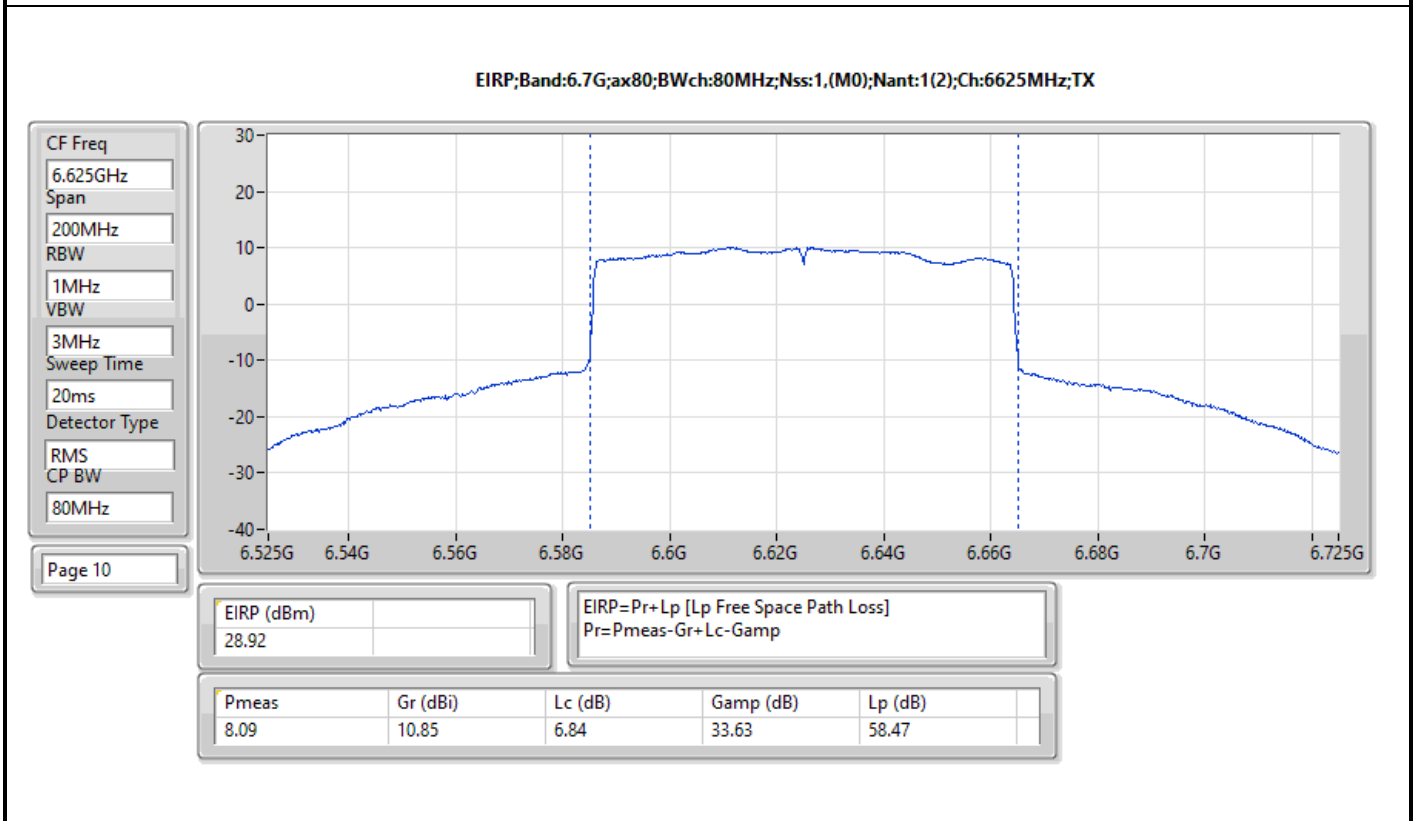
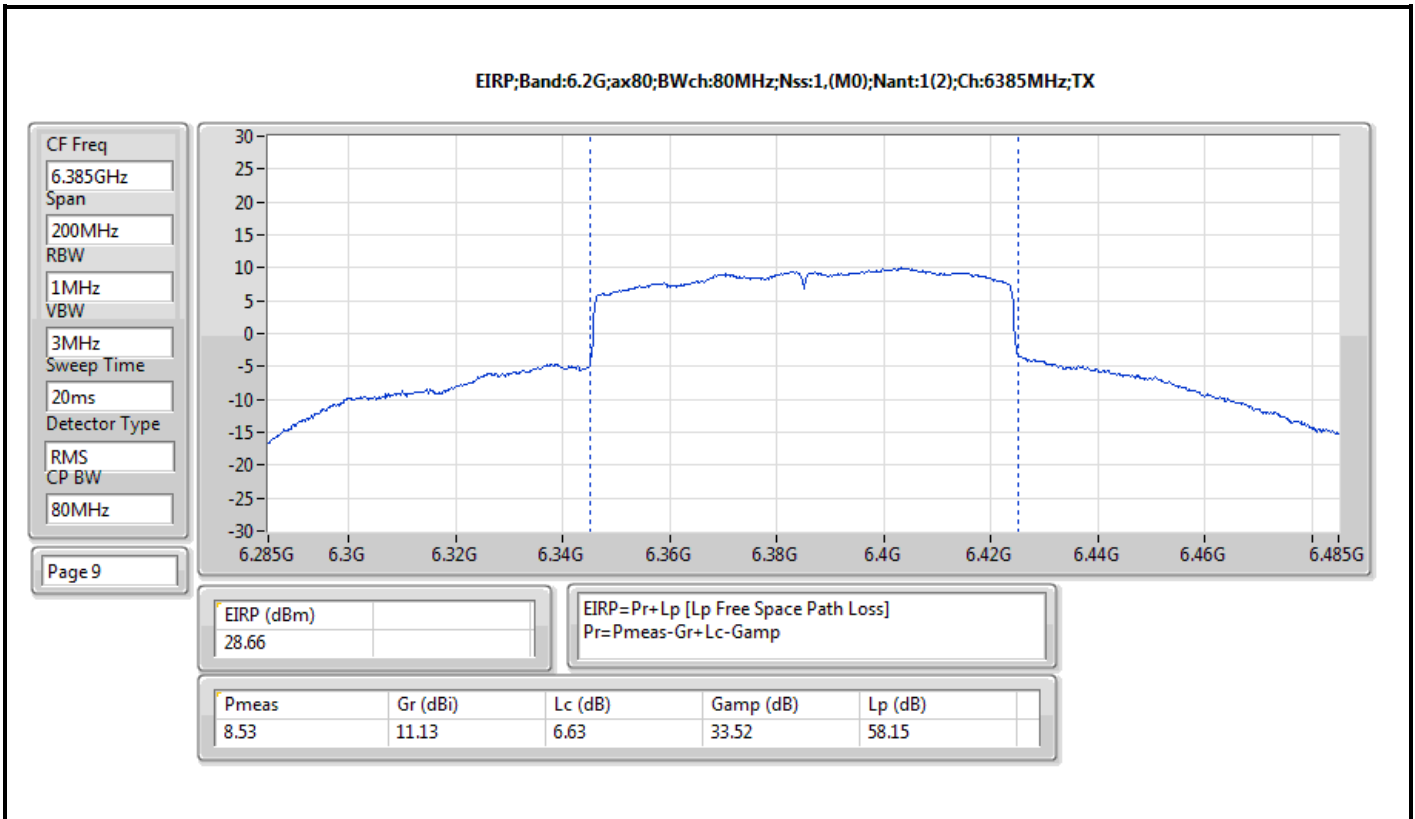


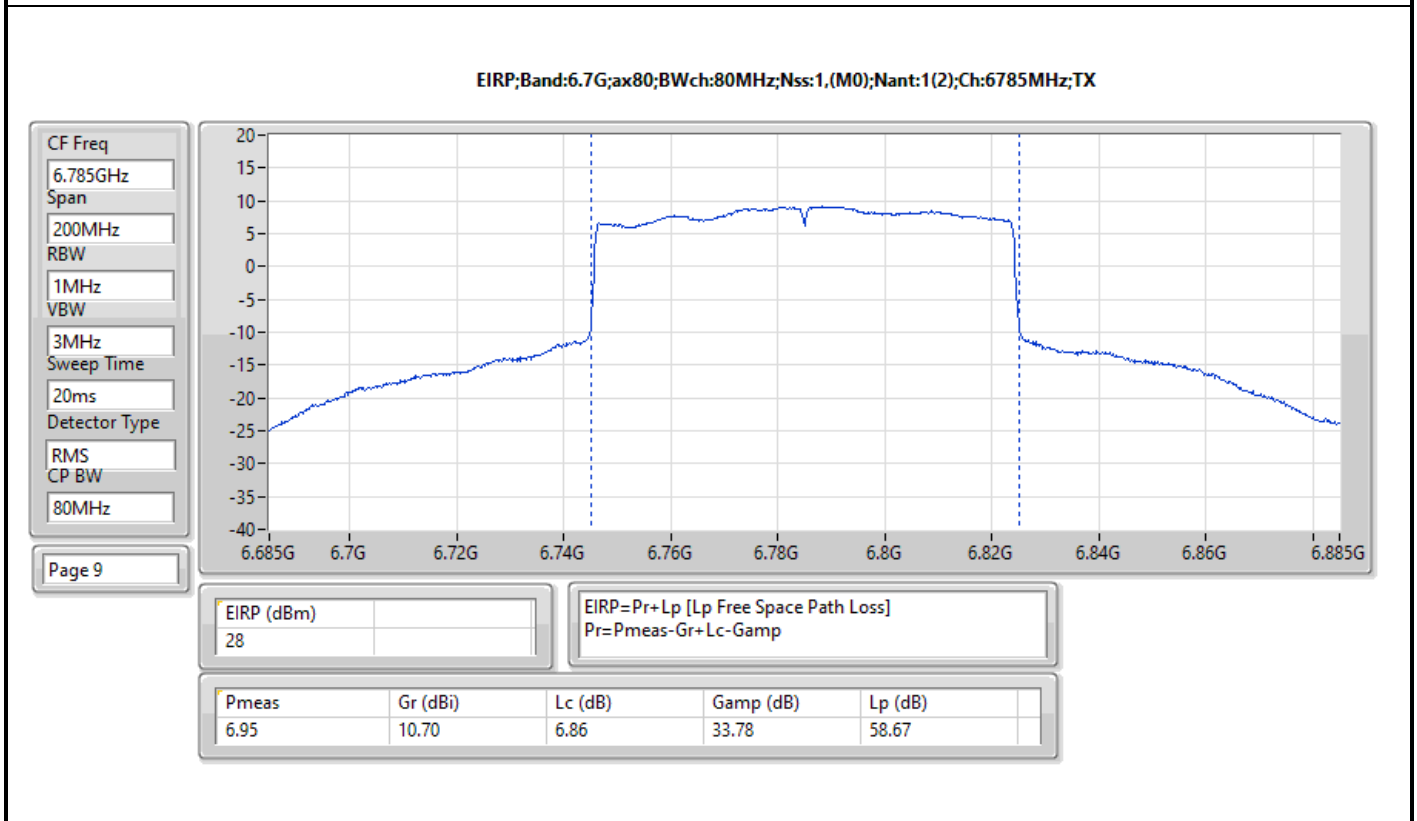
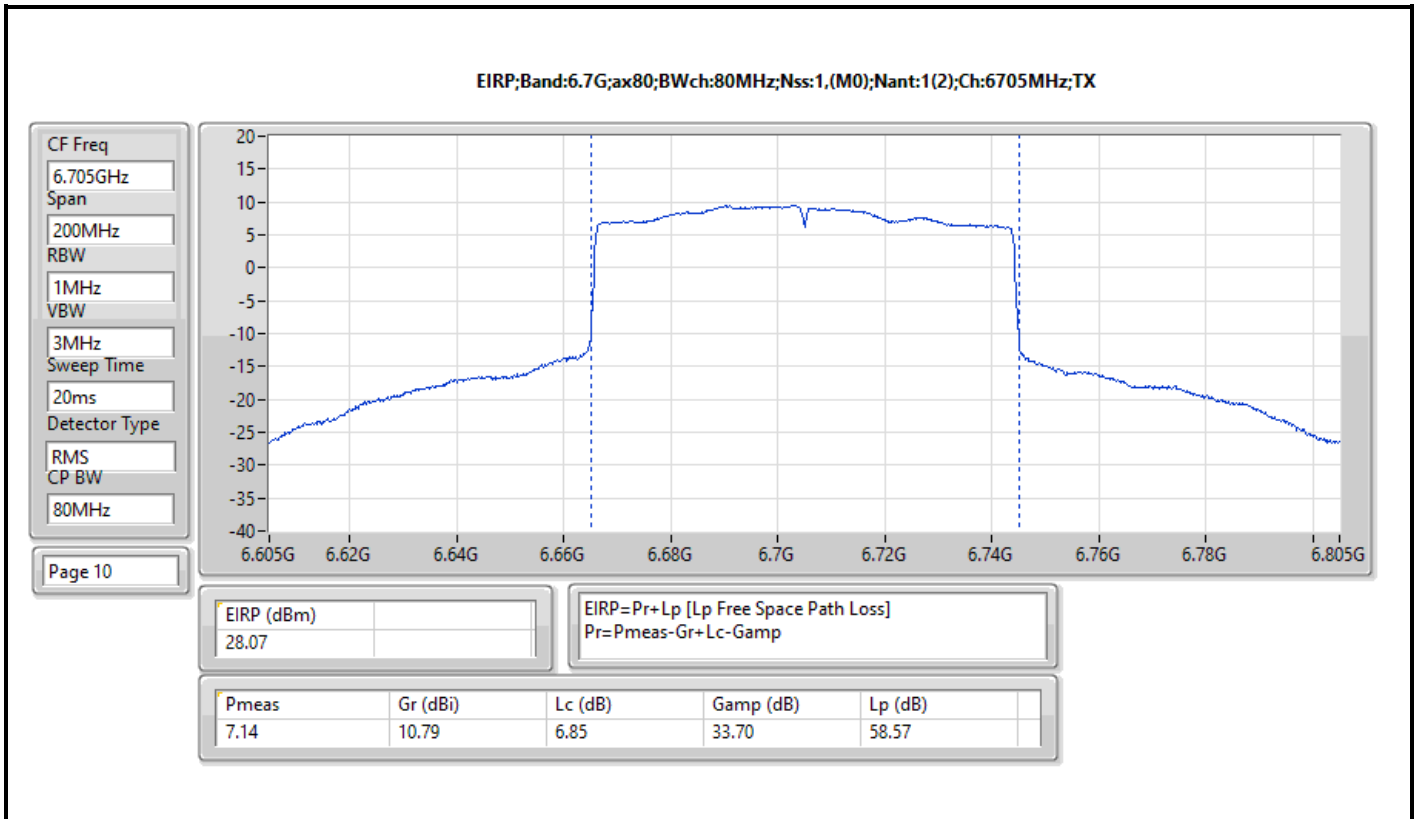


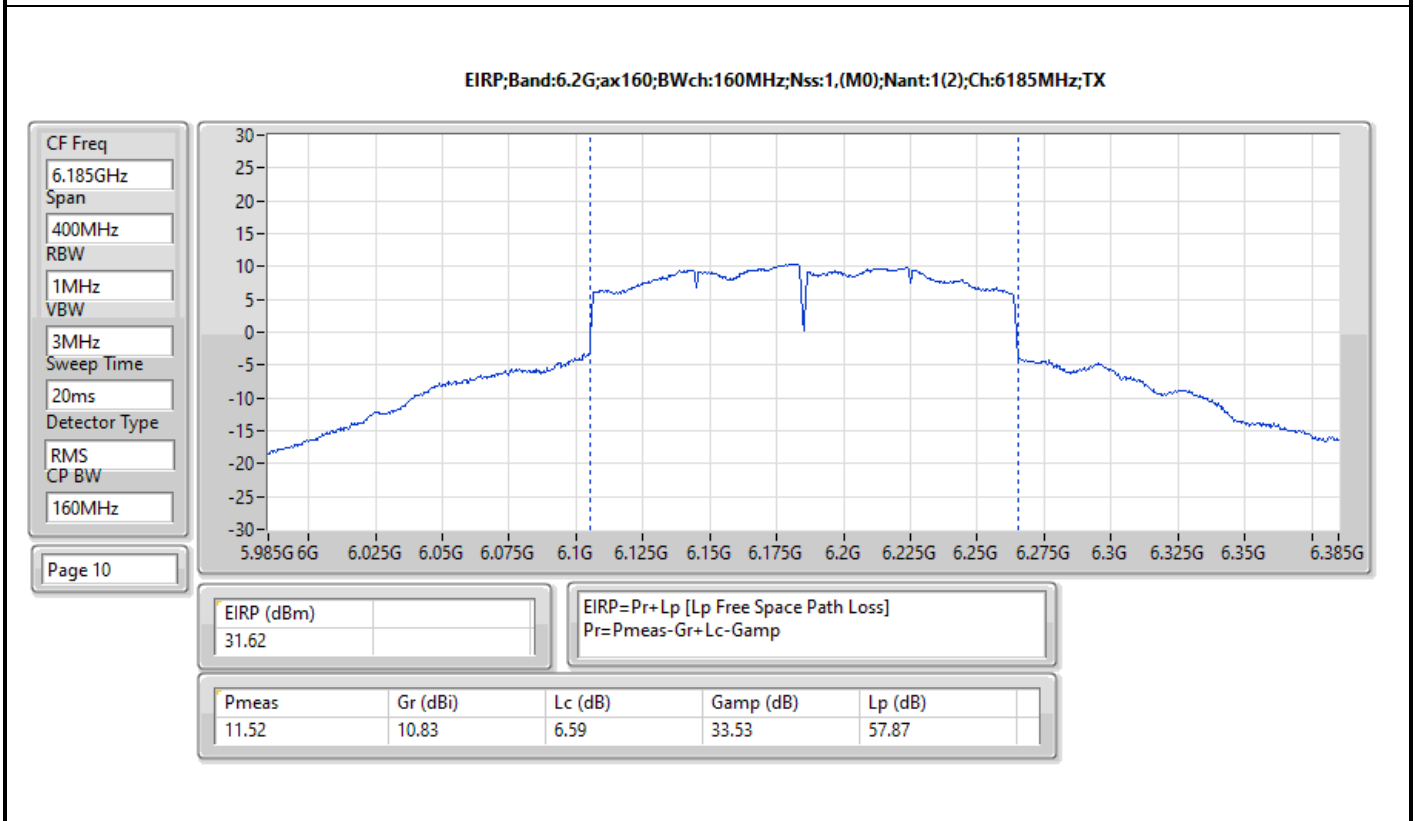
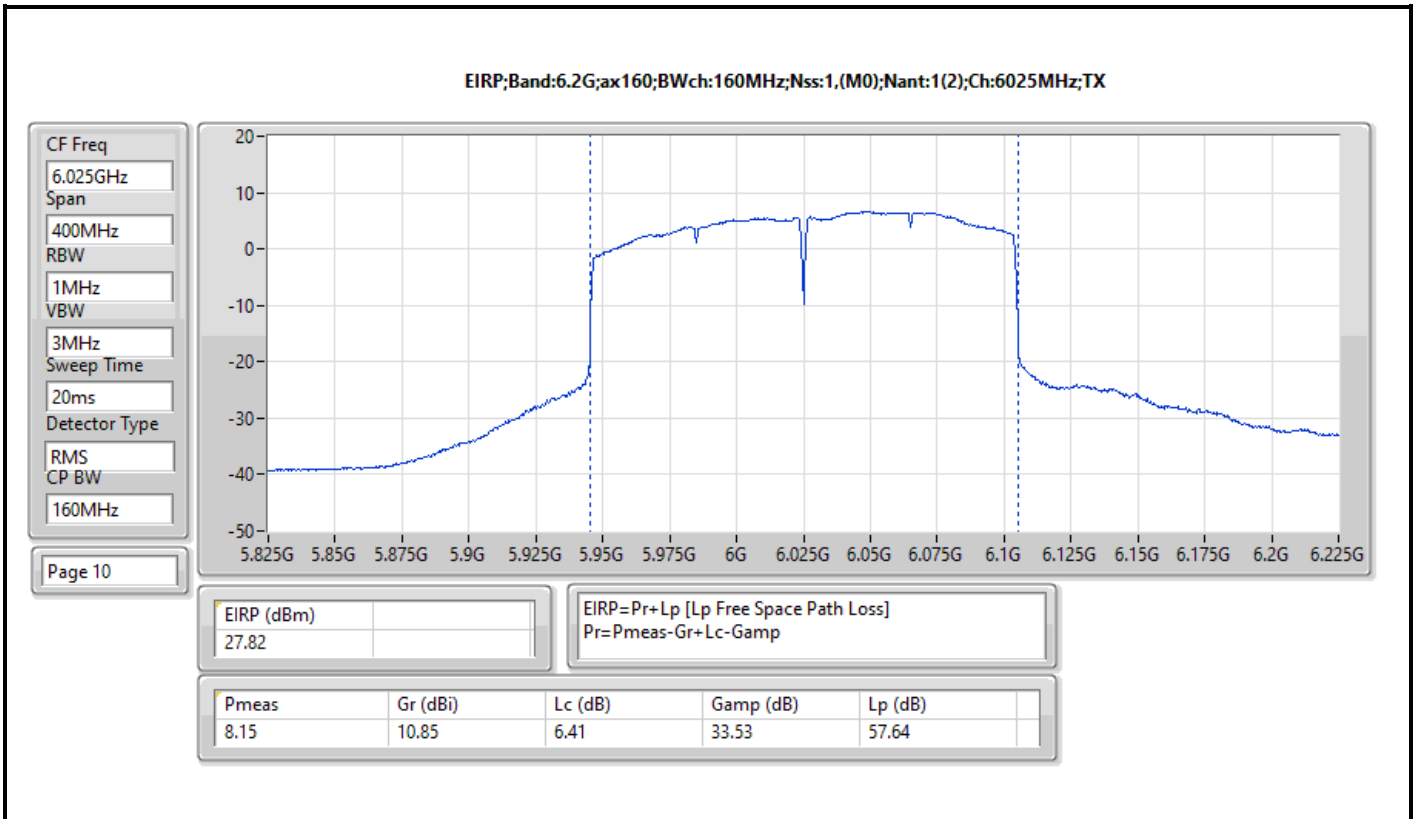


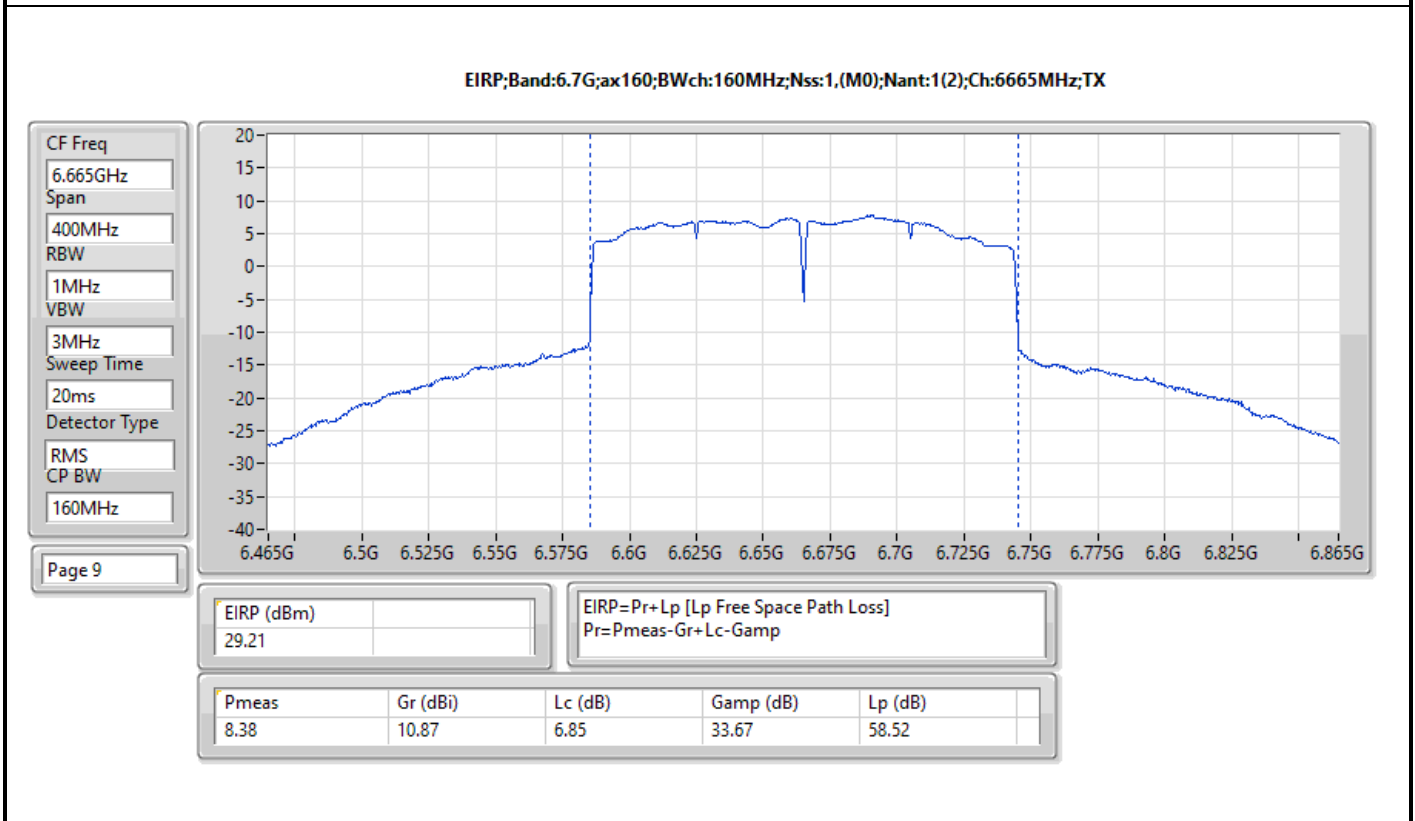
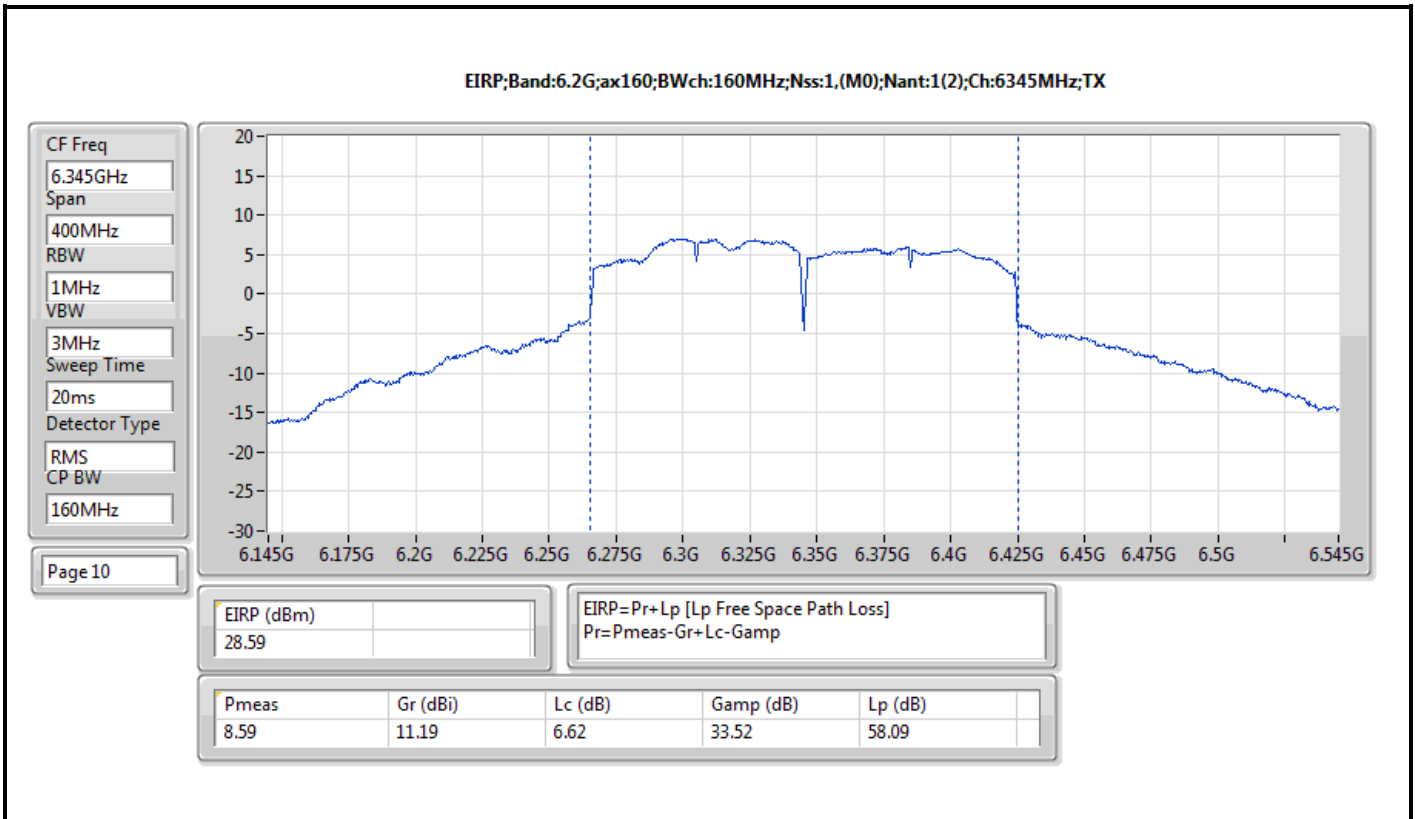














## Average Power-E.I.R.P. at any elevation angle above 30 degrees Appendix C.4

### Summary

| Mode                            | Total Power (dBm) | Total Power (W) | EIRP [Phi 30°] (dBm) | EIRP [Phi 30°] (W) |
|---------------------------------|-------------------|-----------------|----------------------|--------------------|
| 5.925-6.425GHz                  | -                 | -               | -                    | -                  |
| 802.11ax HEW20_Nss1,(MCS0)_1TX  | 27.74             | 0.59429         | 20.56                | 0.113763           |
| 802.11ax HEW40_Nss1,(MCS0)_1TX  | 27.98             | 0.62806         | 20.80                | 0.120226           |
| 802.11ax HEW80_Nss1,(MCS0)_1TX  | 27.78             | 0.59979         | 20.60                | 0.114815           |
| 802.11ax HEW160_Nss1,(MCS0)_1TX | 27.90             | 0.61660         | 20.72                | 0.118032           |
| 6.525-6.875GHz                  | -                 | -               | -                    | -                  |
| 802.11ax HEW20_Nss1,(MCS0)_1TX  | 25.82             | 0.38194         | 20.84                | 0.121339           |
| 802.11ax HEW40_Nss1,(MCS0)_1TX  | 25.91             | 0.38994         | 20.93                | 0.123880           |
| 802.11ax HEW80_Nss1,(MCS0)_1TX  | 25.84             | 0.38371         | 20.86                | 0.121899           |
| 802.11ax HEW160_Nss1,(MCS0)_1TX | 25.67             | 0.36898         | 20.69                | 0.117220           |





**Average Power-E.I.R.P. at any elevation angle above 30 degrees Appendix C.4**

**Result**

| Mode                            | Result | DG [Phi 30°]<br>(dBi) | Port 1<br>(dBm) | Total Power<br>(dBm) | EIRP [Phi 30°]<br>(dBm) | EIRP [Phi 30°] Limit<br>(dBm) |
|---------------------------------|--------|-----------------------|-----------------|----------------------|-------------------------|-------------------------------|
| 802.11ax HEW20_Nss1,(MCS0)_1TX  | -      | -                     | -               | -                    | -                       | -                             |
| 5955MHz                         | Pass   | -7.18                 | 25.89           | 25.89                | 18.71                   | 21.00                         |
| 6195MHz                         | Pass   | -7.18                 | 27.74           | 27.74                | 20.56                   | 21.00                         |
| 6415MHz                         | Pass   | -7.18                 | 26.73           | 26.73                | 19.55                   | 21.00                         |
| 6535MHz                         | Pass   | -4.98                 | 25.74           | 25.74                | 20.76                   | 21.00                         |
| 6695MHz                         | Pass   | -4.98                 | 25.62           | 25.62                | 20.64                   | 21.00                         |
| 6855MHz                         | Pass   | -4.98                 | 25.82           | 25.82                | 20.84                   | 21.00                         |
| 802.11ax HEW40_Nss1,(MCS0)_1TX  | -      | -                     | -               | -                    | -                       | -                             |
| 5965MHz                         | Pass   | -7.18                 | 22.67           | 22.67                | 15.49                   | 21.00                         |
| 6205MHz                         | Pass   | -7.18                 | 27.98           | 27.98                | 20.80                   | 21.00                         |
| 6405MHz                         | Pass   | -7.18                 | 25.44           | 25.44                | 18.26                   | 21.00                         |
| 6565MHz                         | Pass   | -4.98                 | 25.53           | 25.53                | 20.55                   | 21.00                         |
| 6685MHz                         | Pass   | -4.98                 | 25.91           | 25.91                | 20.93                   | 21.00                         |
| 6845MHz                         | Pass   | -4.98                 | 25.58           | 25.58                | 20.60                   | 21.00                         |
| 802.11ax HEW80_Nss1,(MCS0)_1TX  | -      | -                     | -               | -                    | -                       | -                             |
| 5985MHz                         | Pass   | -7.18                 | 23.08           | 23.08                | 15.90                   | 21.00                         |
| 6225MHz                         | Pass   | -7.18                 | 27.78           | 27.78                | 20.60                   | 21.00                         |
| 6385MHz                         | Pass   | -7.18                 | 25.11           | 25.11                | 17.93                   | 21.00                         |
| 6625MHz                         | Pass   | -4.98                 | 25.84           | 25.84                | 20.86                   | 21.00                         |
| 6705MHz                         | Pass   | -4.98                 | 25.57           | 25.57                | 20.59                   | 21.00                         |
| 6785MHz                         | Pass   | -4.98                 | 25.59           | 25.59                | 20.61                   | 21.00                         |
| 802.11ax HEW160_Nss1,(MCS0)_1TX | -      | -                     | -               | -                    | -                       | -                             |
| 6025MHz                         | Pass   | -7.18                 | 22.88           | 22.88                | 15.70                   | 21.00                         |
| 6185MHz                         | Pass   | -7.18                 | 27.90           | 27.90                | 20.72                   | 21.00                         |
| 6345MHz                         | Pass   | -7.18                 | 25.35           | 25.35                | 18.17                   | 21.00                         |
| 6665MHz                         | Pass   | -4.98                 | 25.67           | 25.67                | 20.69                   | 21.00                         |

DG = Directional Gain; Port X = Port X output power



Summary

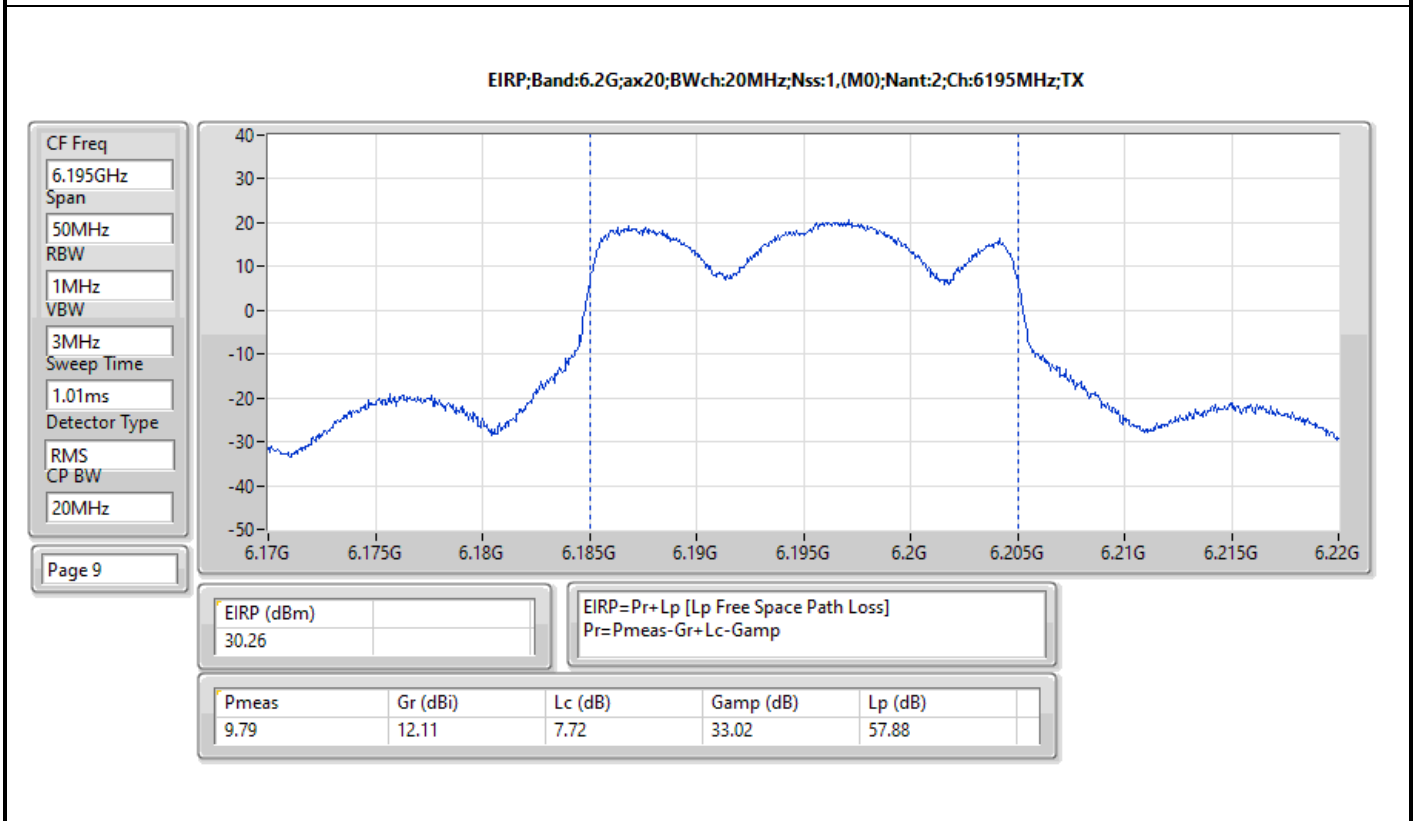
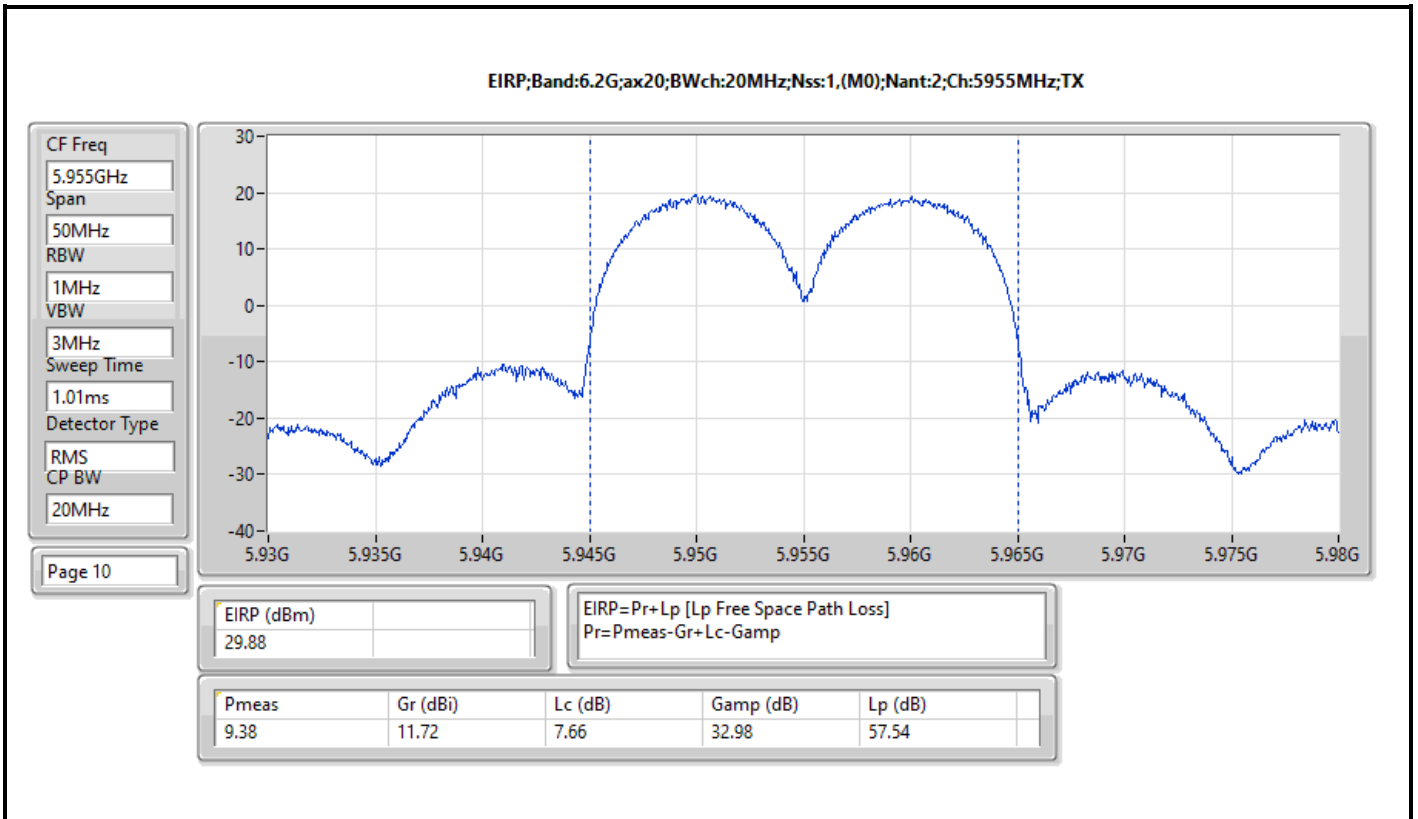
| Mode                            | EIRP (dBm) | EIRP (W) |
|---------------------------------|------------|----------|
| 5.925-6.425GHz                  | -          | -        |
| 802.11ax HEW20_Nss1,(MCS0)_2TX  | 31.38      | 1.37404  |
| 802.11ax HEW40_Nss1,(MCS0)_2TX  | 31.87      | 1.53815  |
| 802.11ax HEW80_Nss1,(MCS0)_2TX  | 31.18      | 1.31220  |
| 802.11ax HEW160_Nss1,(MCS0)_2TX | 31.73      | 1.48936  |
| 6.525-6.875GHz                  | -          | -        |
| 802.11ax HEW20_Nss1,(MCS0)_2TX  | 30.08      | 1.01859  |
| 802.11ax HEW40_Nss1,(MCS0)_2TX  | 29.92      | 0.98175  |
| 802.11ax HEW80_Nss1,(MCS0)_2TX  | 29.95      | 0.98855  |
| 802.11ax HEW160_Nss1,(MCS0)_2TX | 30.50      | 1.12202  |

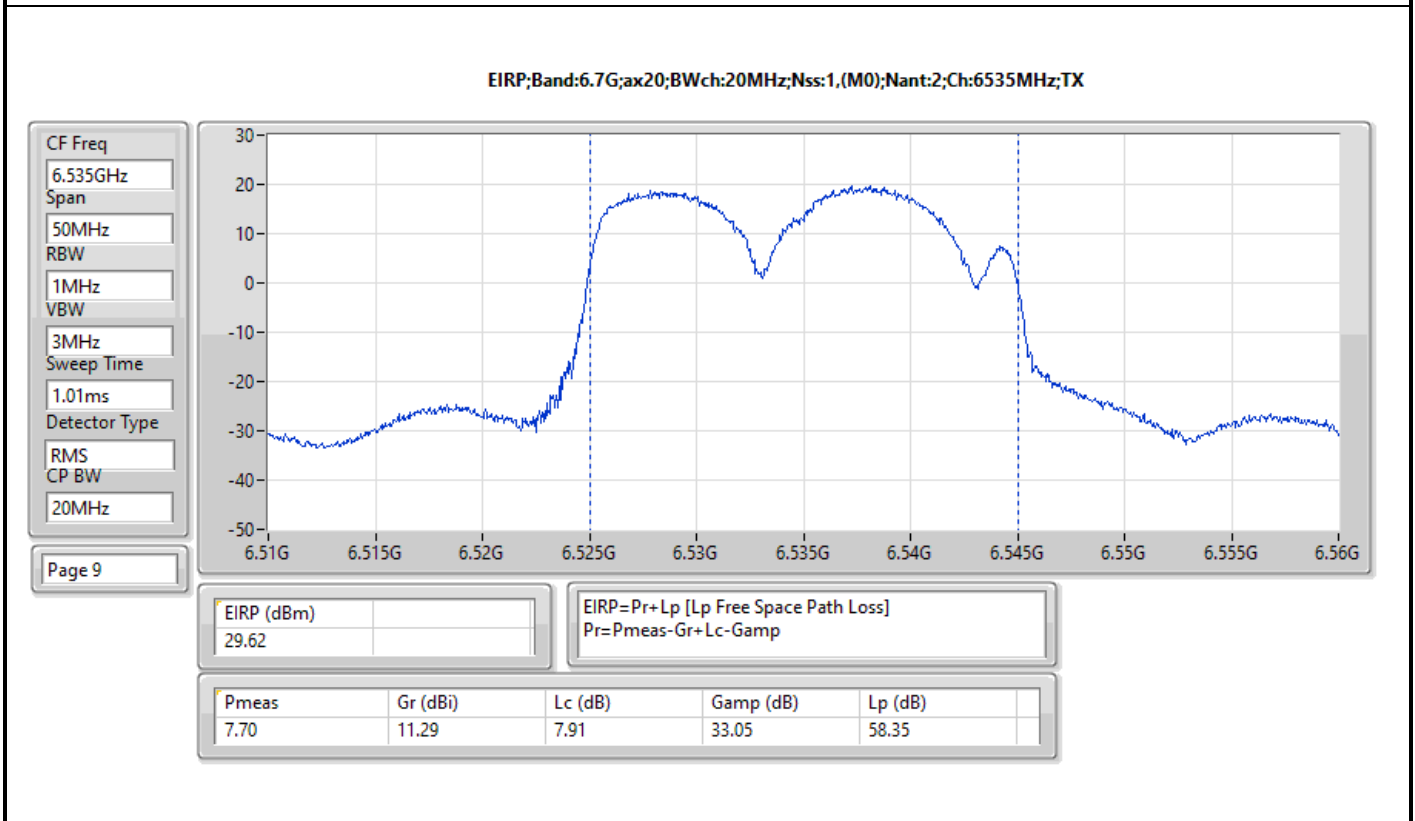
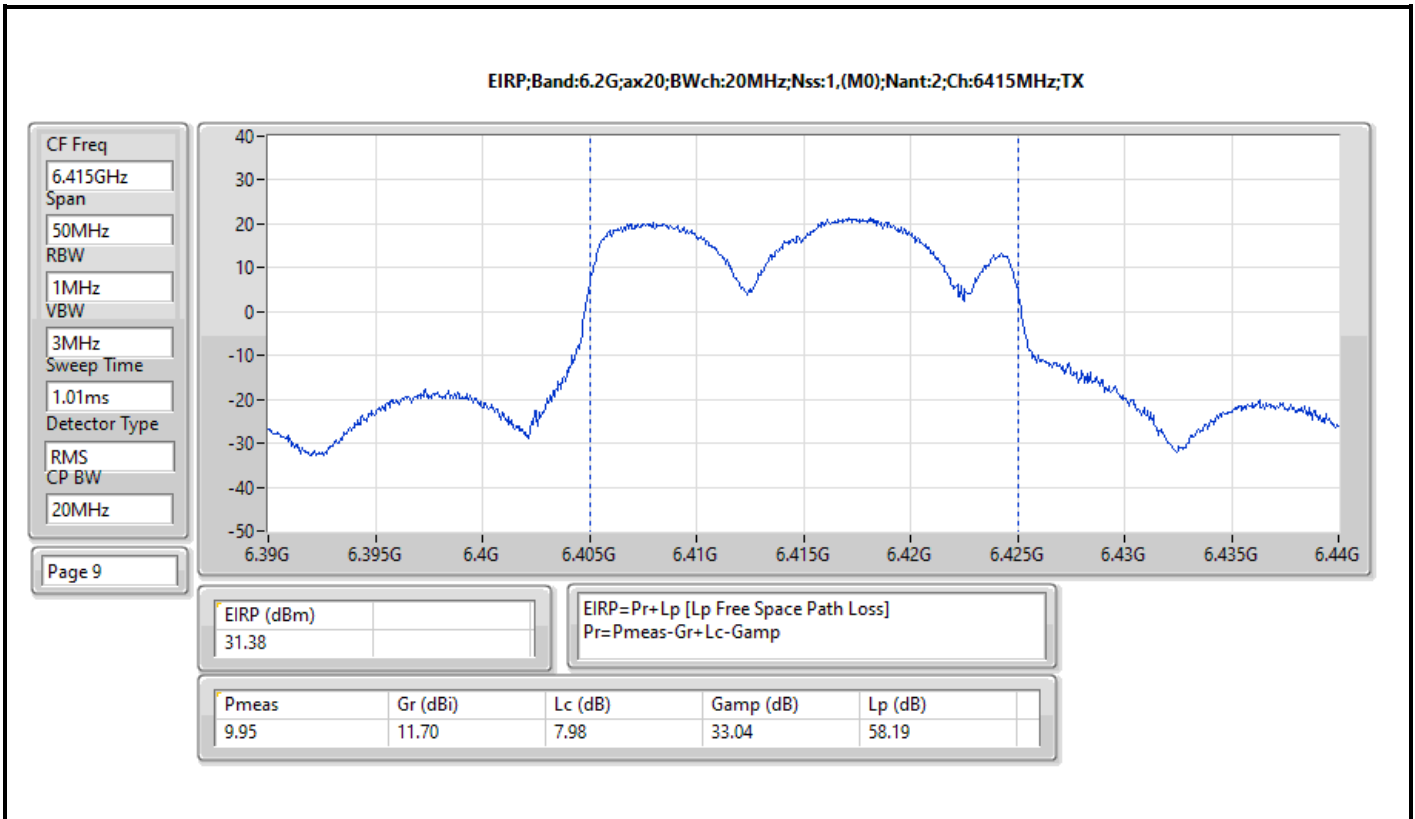


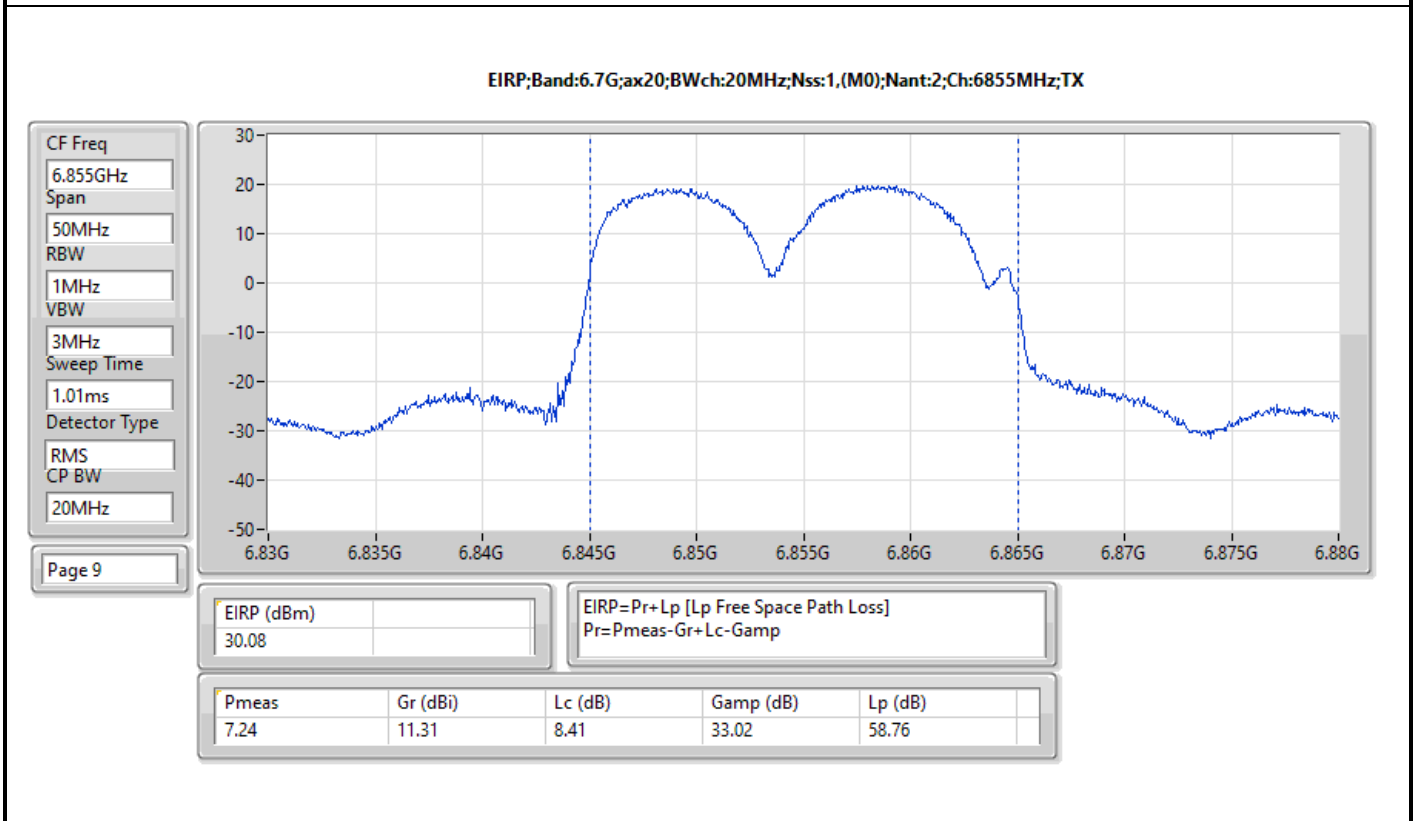
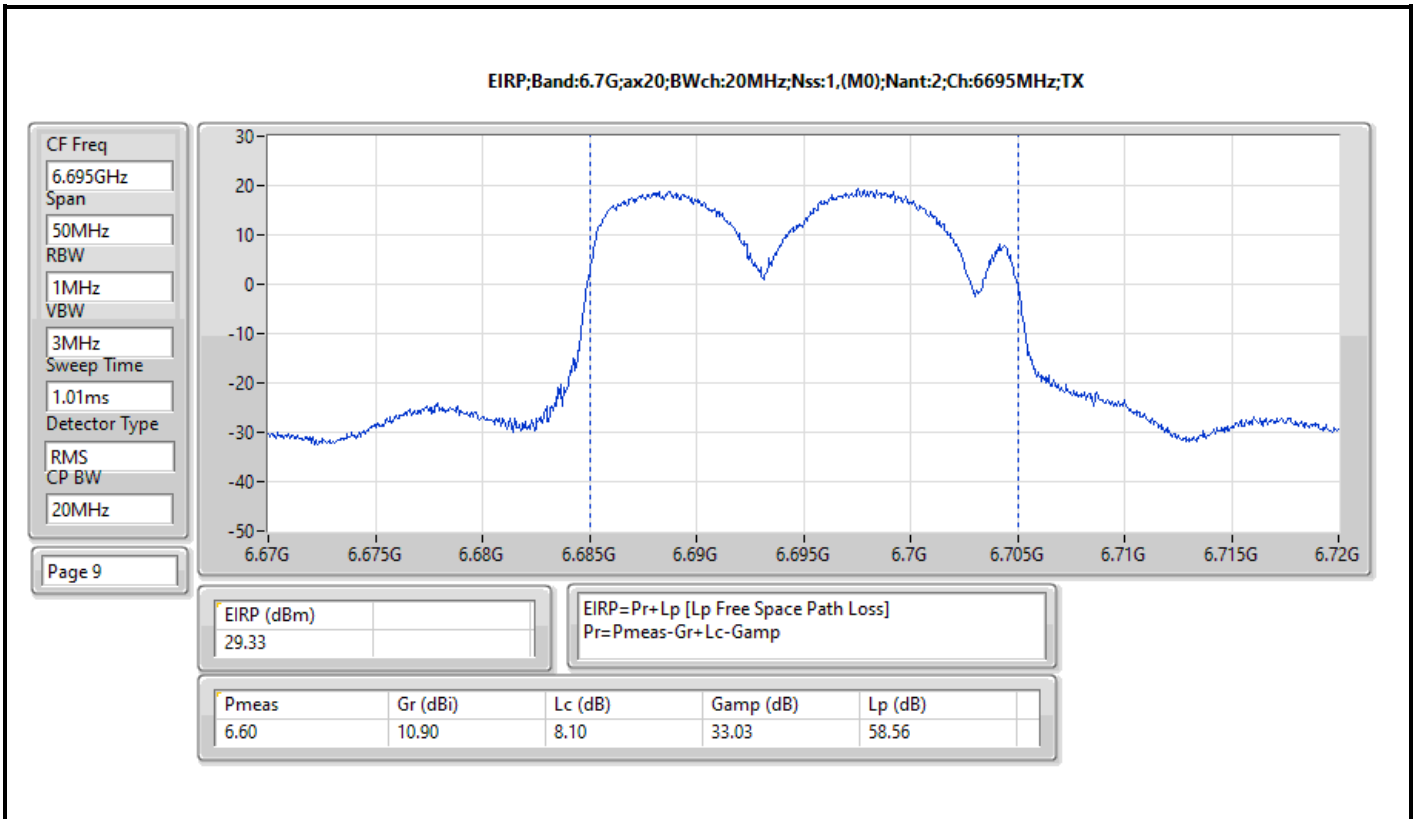
Result

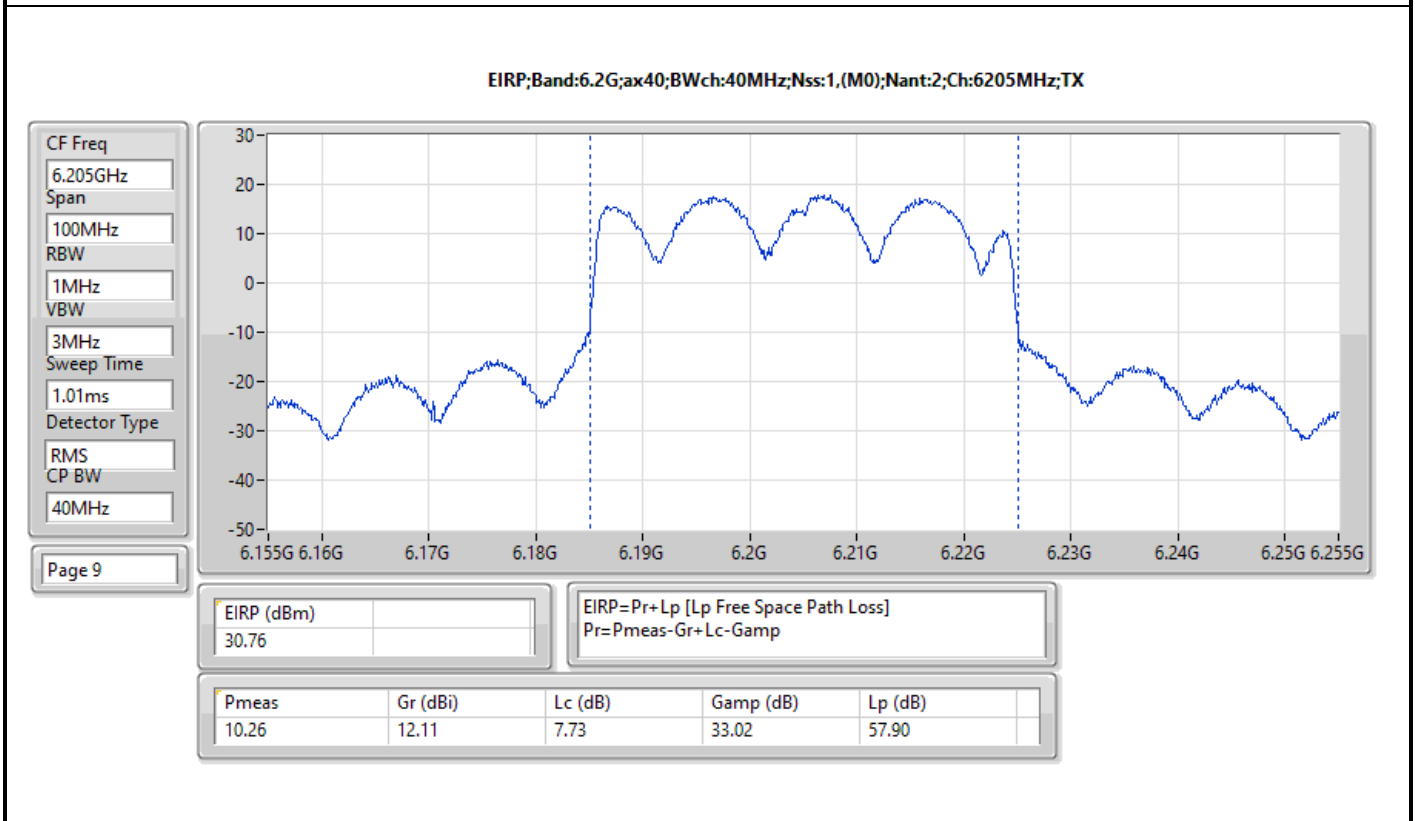
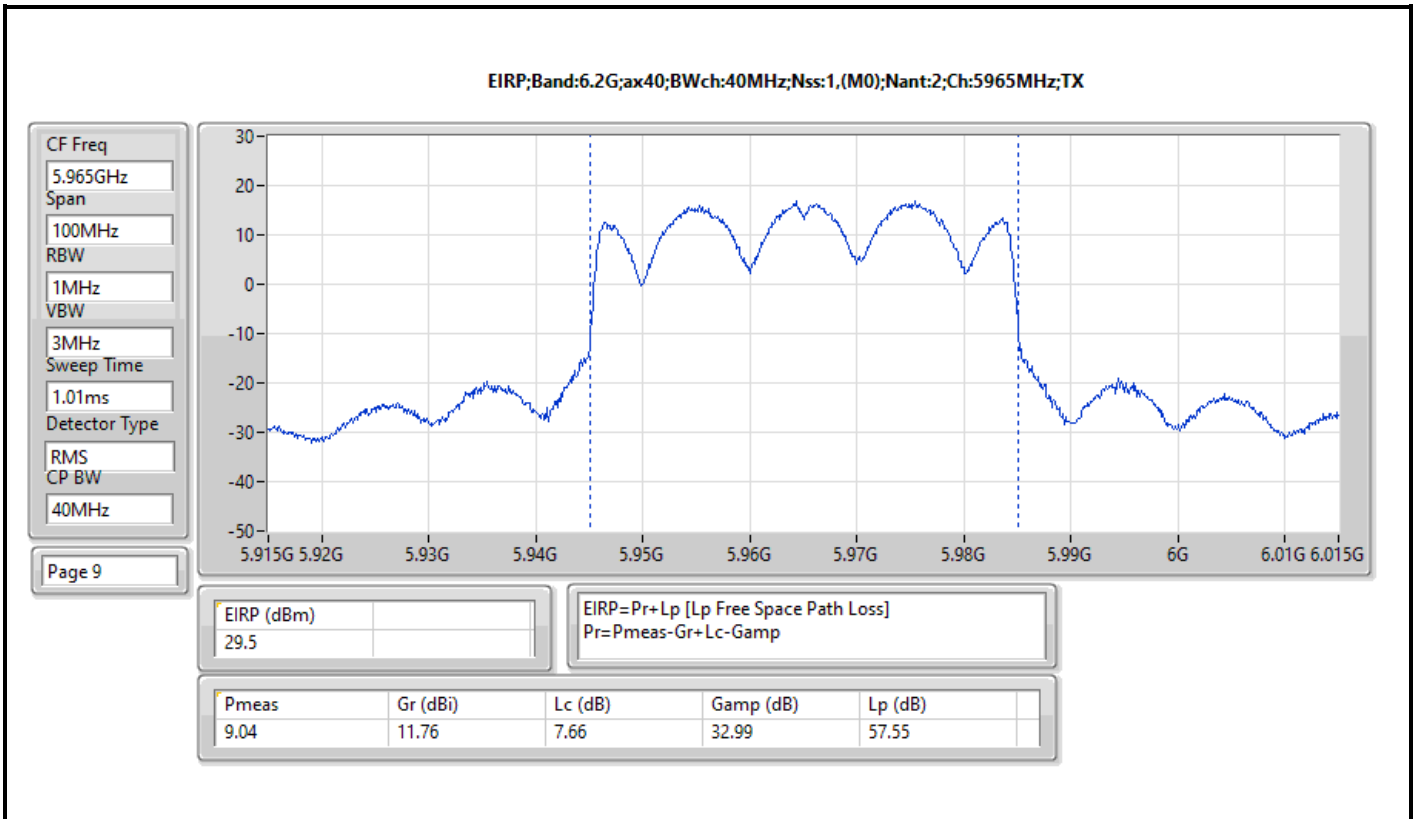
| Mode                            | Result | Radiated EIRP (dBm) | EIRP Limit (dBm) |
|---------------------------------|--------|---------------------|------------------|
| 802.11ax HEW20_Nss1,(MCS0)_2TX  | -      | -                   | -                |
| 5955MHz                         | Pass   | 29.88               | 36.00            |
| 6195MHz                         | Pass   | 30.26               | 36.00            |
| 6415MHz                         | Pass   | 31.38               | 36.00            |
| 6535MHz                         | Pass   | 29.62               | 36.00            |
| 6695MHz                         | Pass   | 29.33               | 36.00            |
| 6855MHz                         | Pass   | 30.08               | 36.00            |
| 802.11ax HEW40_Nss1,(MCS0)_2TX  | -      | -                   | -                |
| 5965MHz                         | Pass   | 29.50               | 36.00            |
| 6205MHz                         | Pass   | 30.76               | 36.00            |
| 6405MHz                         | Pass   | 31.87               | 36.00            |
| 6565MHz                         | Pass   | 29.73               | 36.00            |
| 6685MHz                         | Pass   | 29.92               | 36.00            |
| 6845MHz                         | Pass   | 29.82               | 36.00            |
| 802.11ax HEW80_Nss1,(MCS0)_2TX  | -      | -                   | -                |
| 5985MHz                         | Pass   | 29.78               | 36.00            |
| 6225MHz                         | Pass   | 31.07               | 36.00            |
| 6385MHz                         | Pass   | 31.18               | 36.00            |
| 6625MHz                         | Pass   | 29.51               | 36.00            |
| 6705MHz                         | Pass   | 29.73               | 36.00            |
| 6785MHz                         | Pass   | 29.95               | 36.00            |
| 802.11ax HEW160_Nss1,(MCS0)_2TX | -      | -                   | -                |
| 6025MHz                         | Pass   | 30.22               | 36.00            |
| 6185MHz                         | Pass   | 31.20               | 36.00            |
| 6345MHz                         | Pass   | 31.73               | 36.00            |
| 6665MHz                         | Pass   | 30.50               | 36.00            |

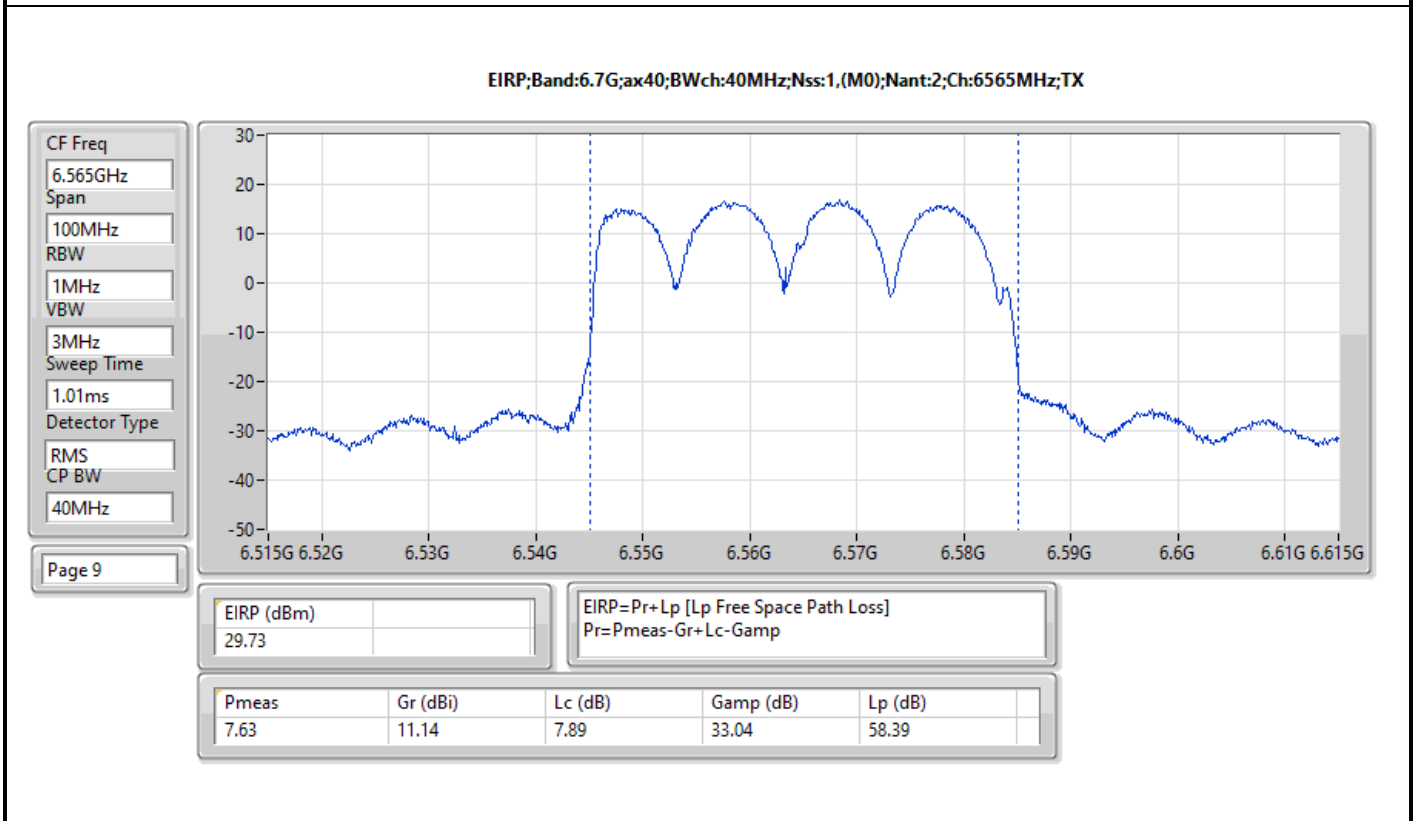
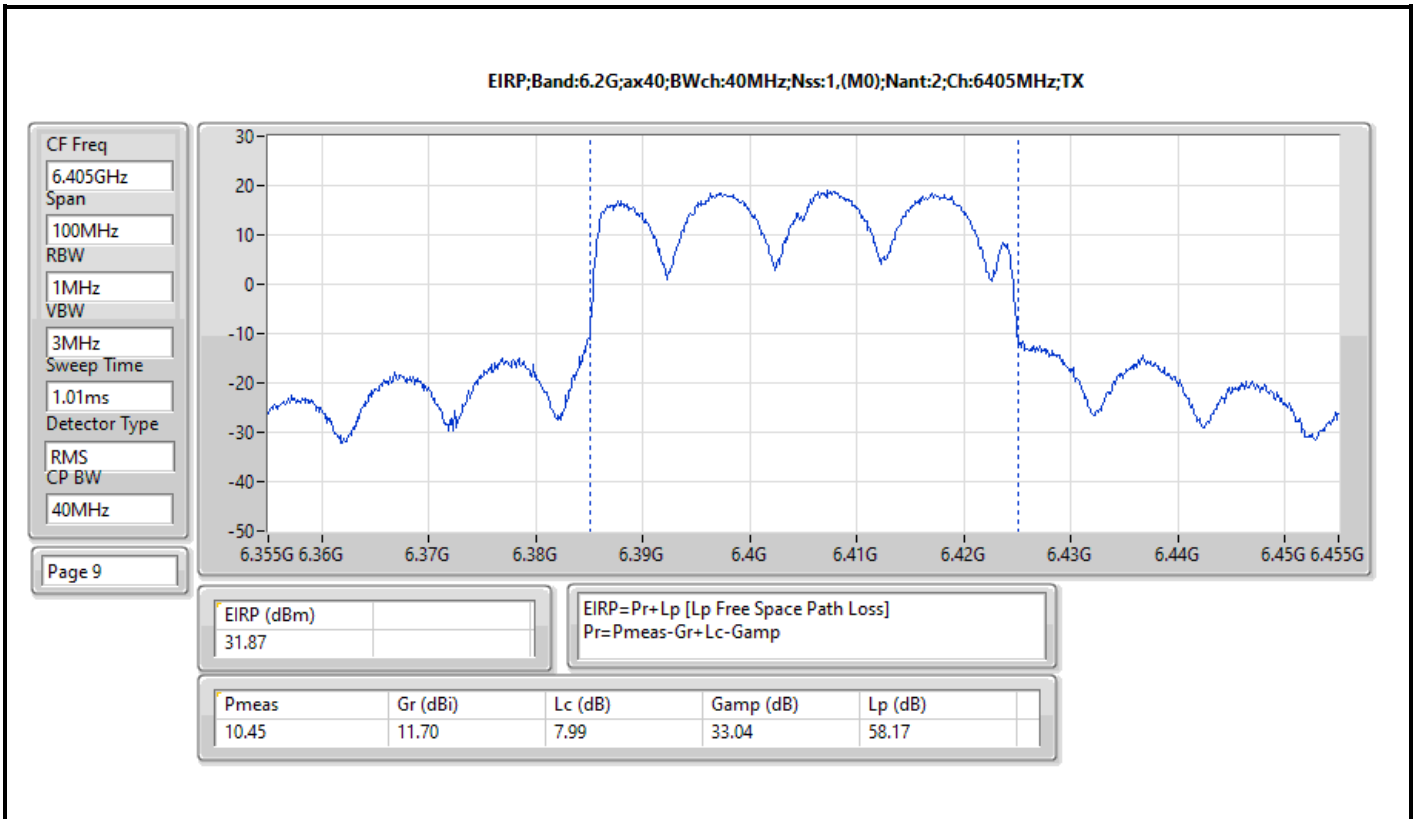
DG = Directional Gain; Port X = Port X output power



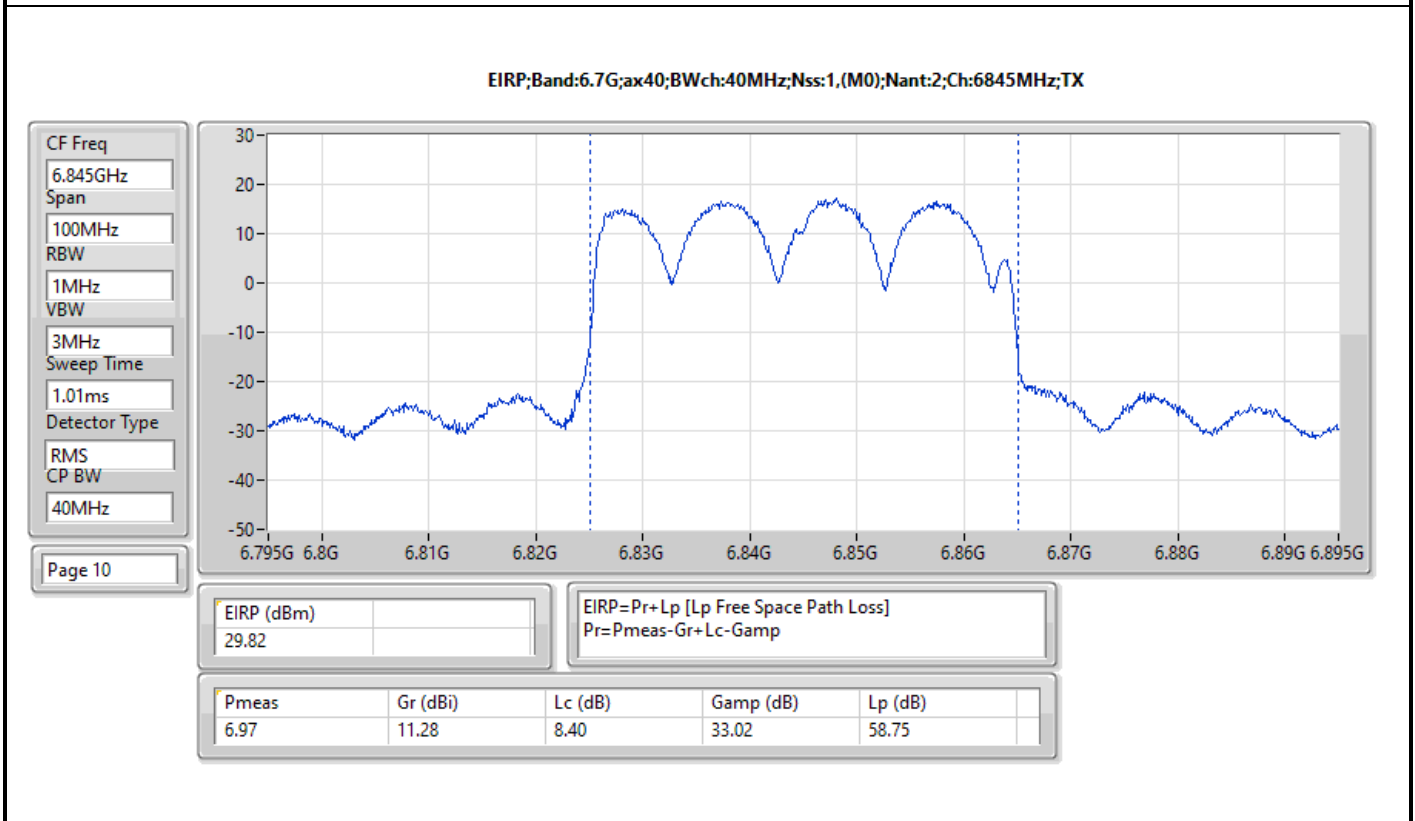
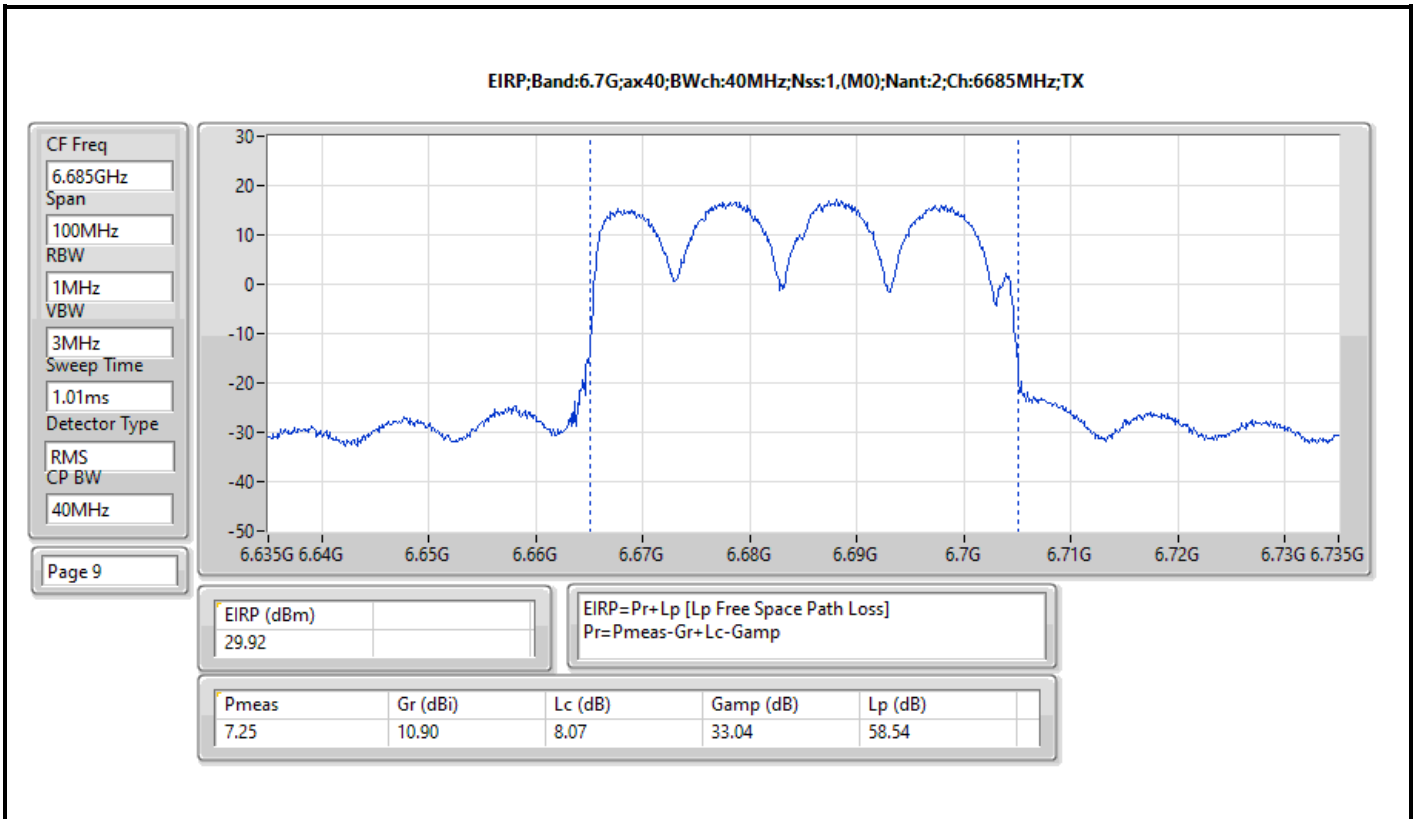


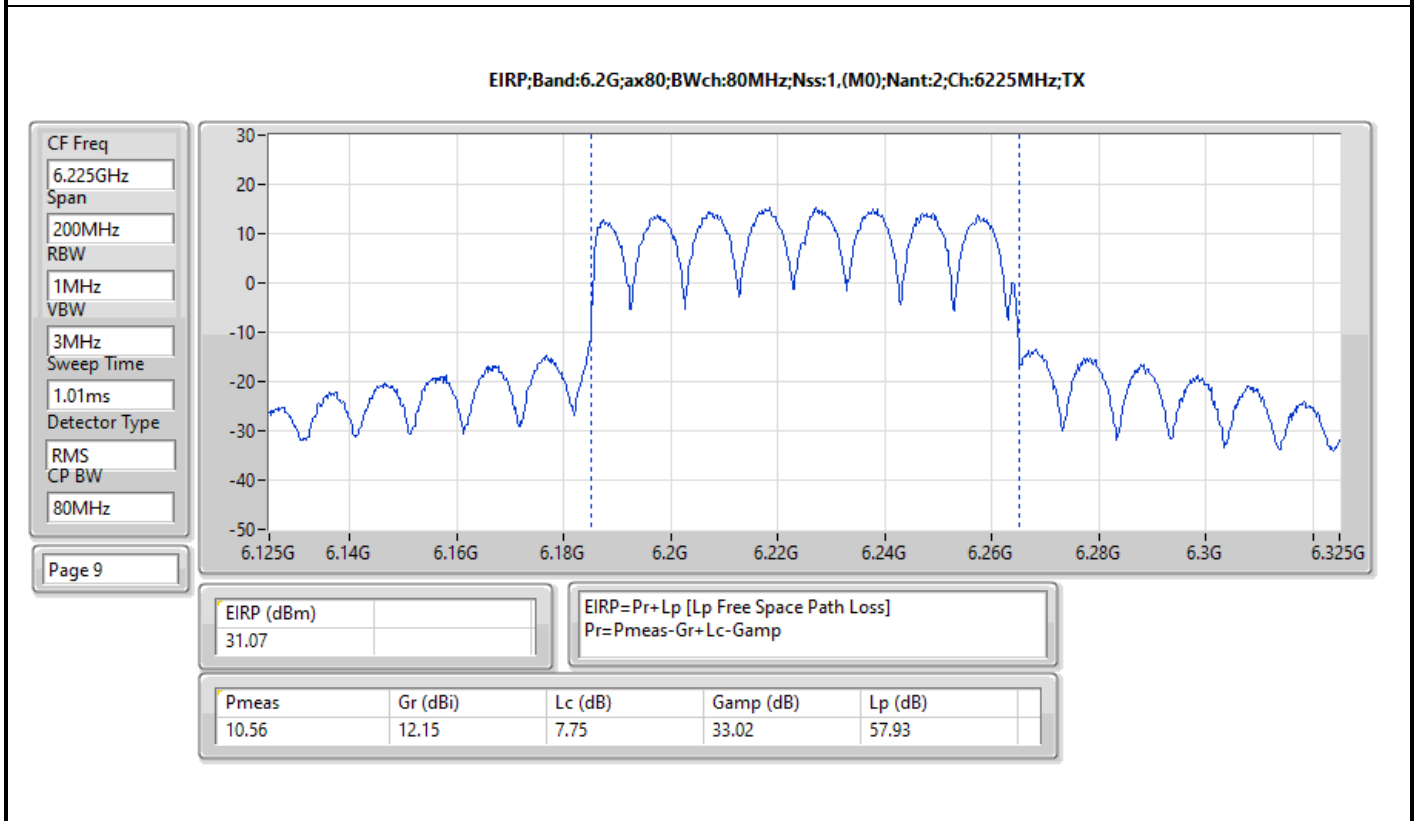
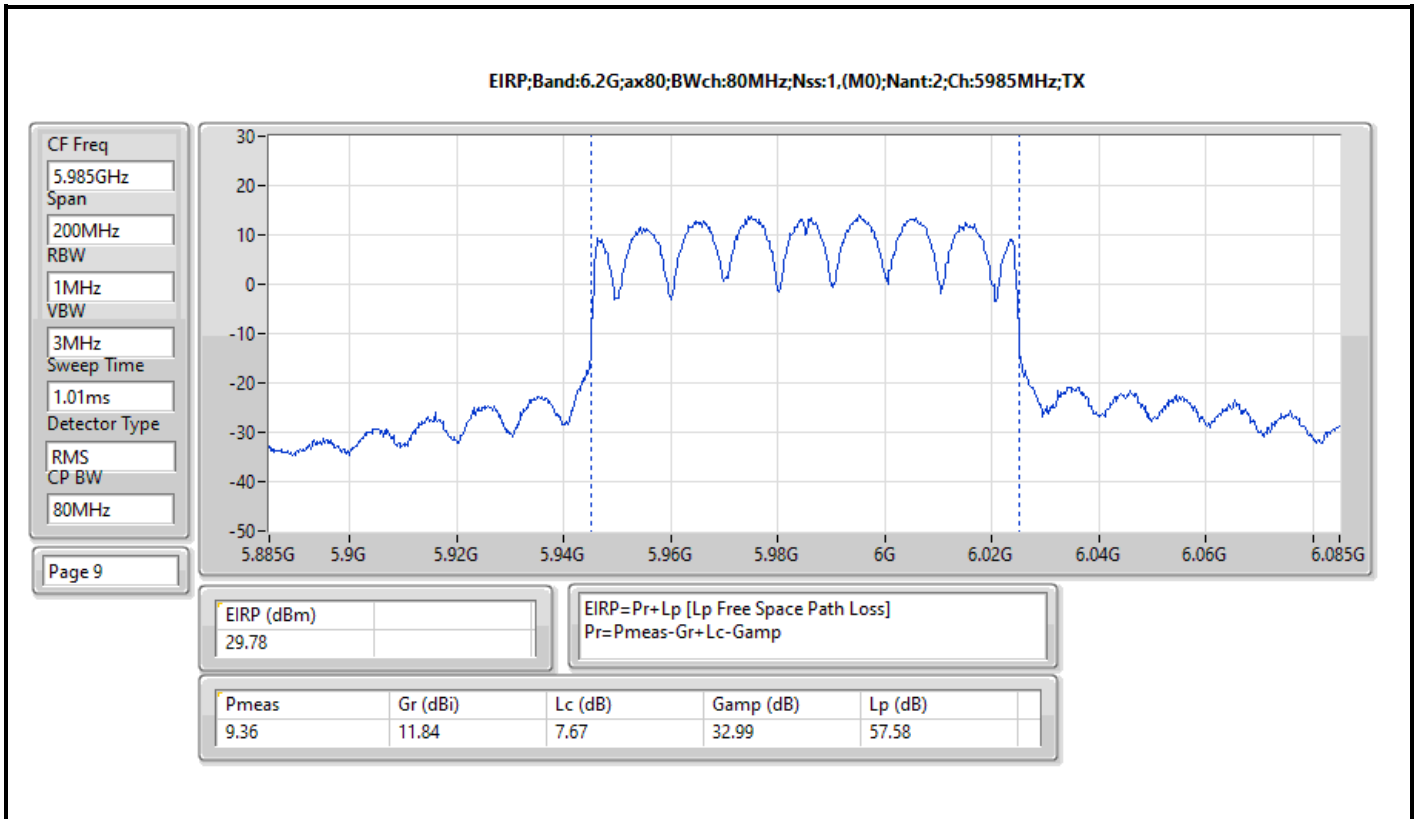


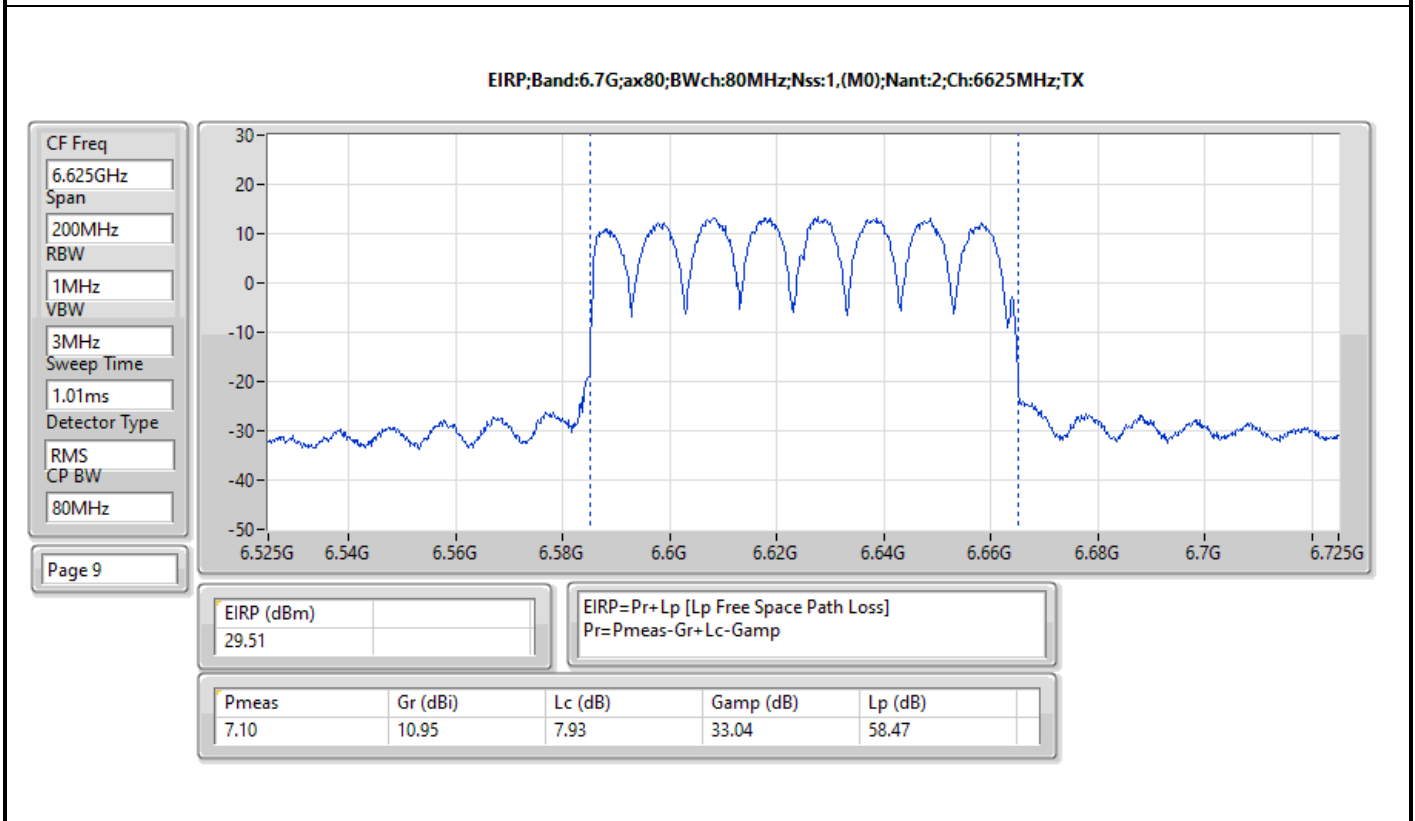
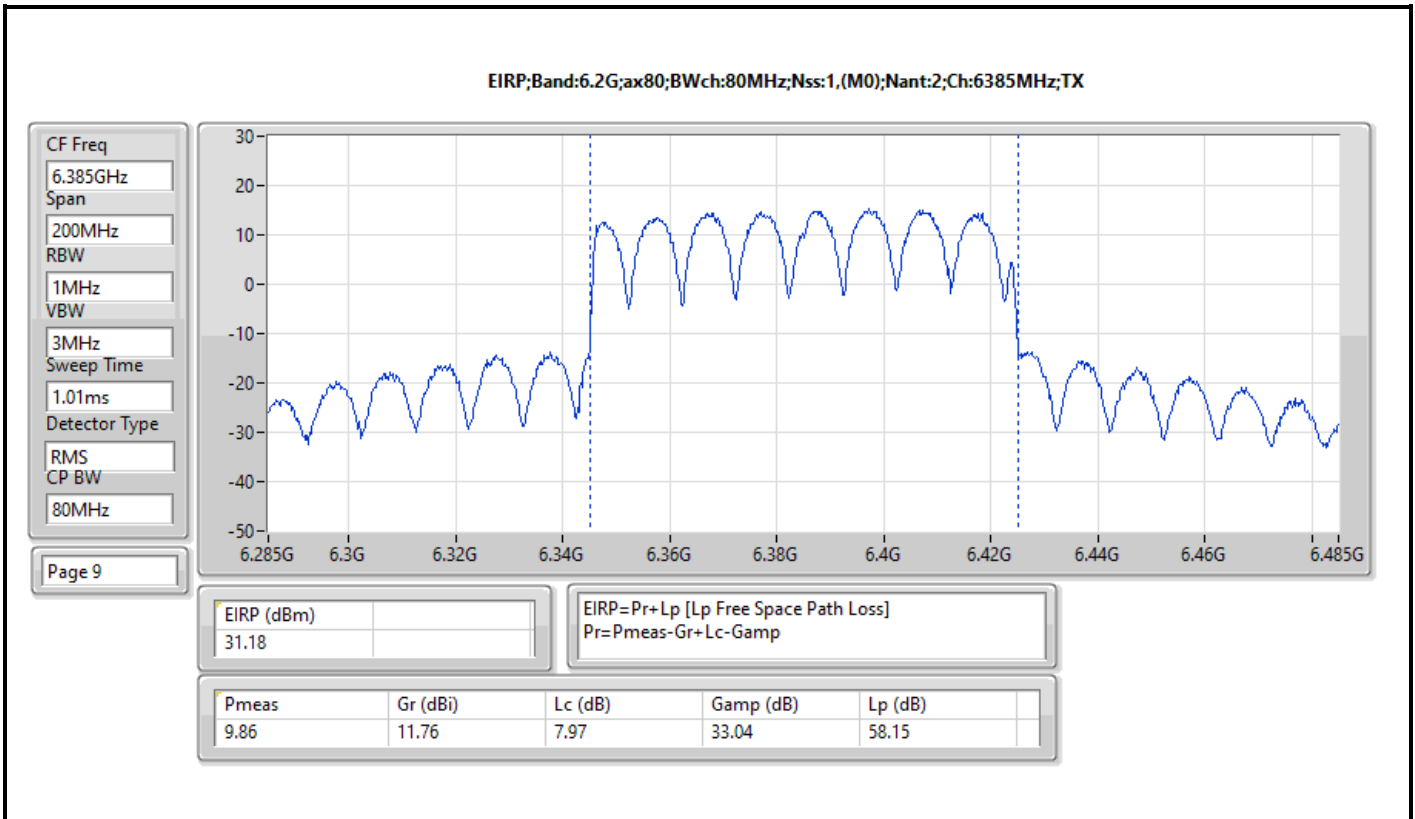


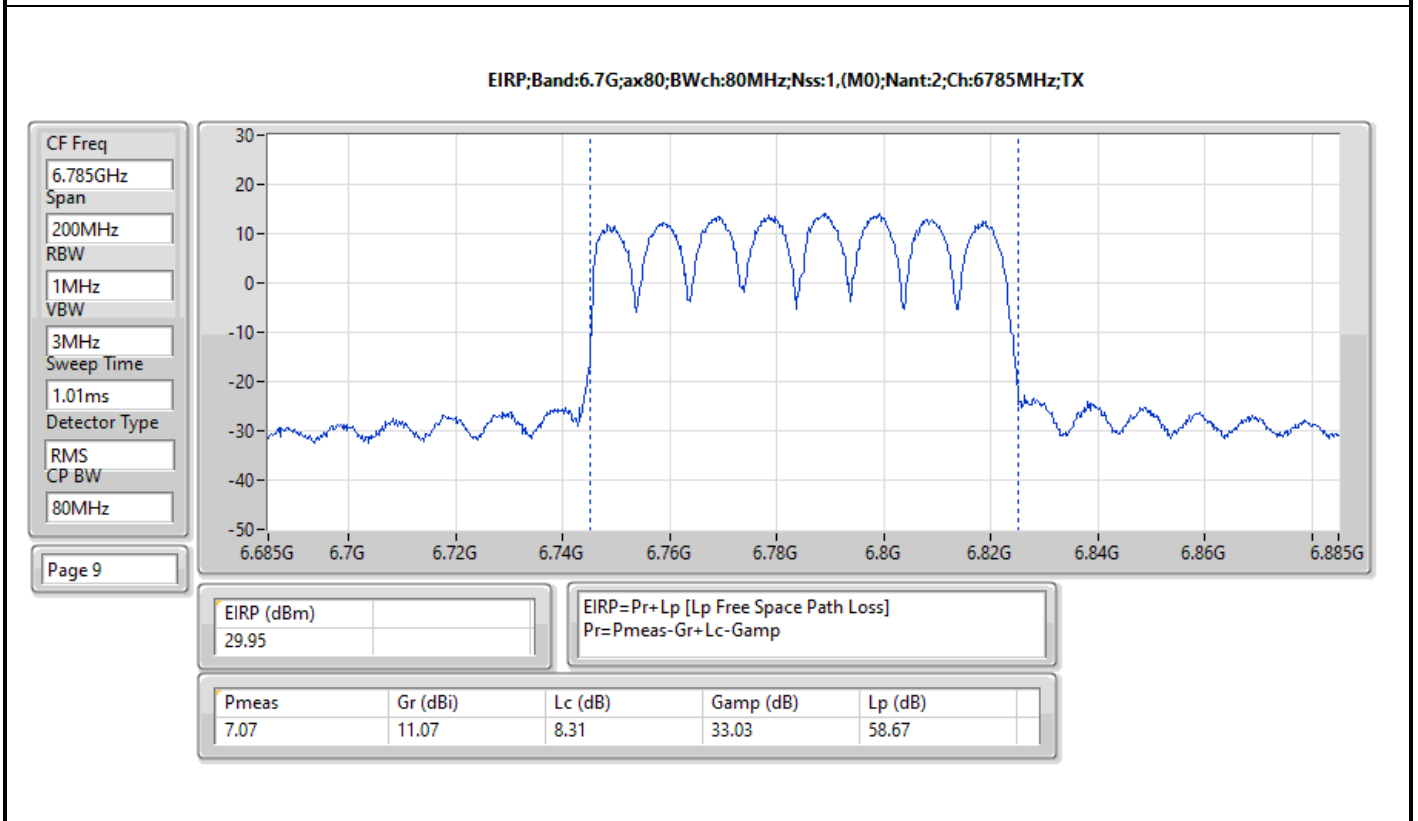
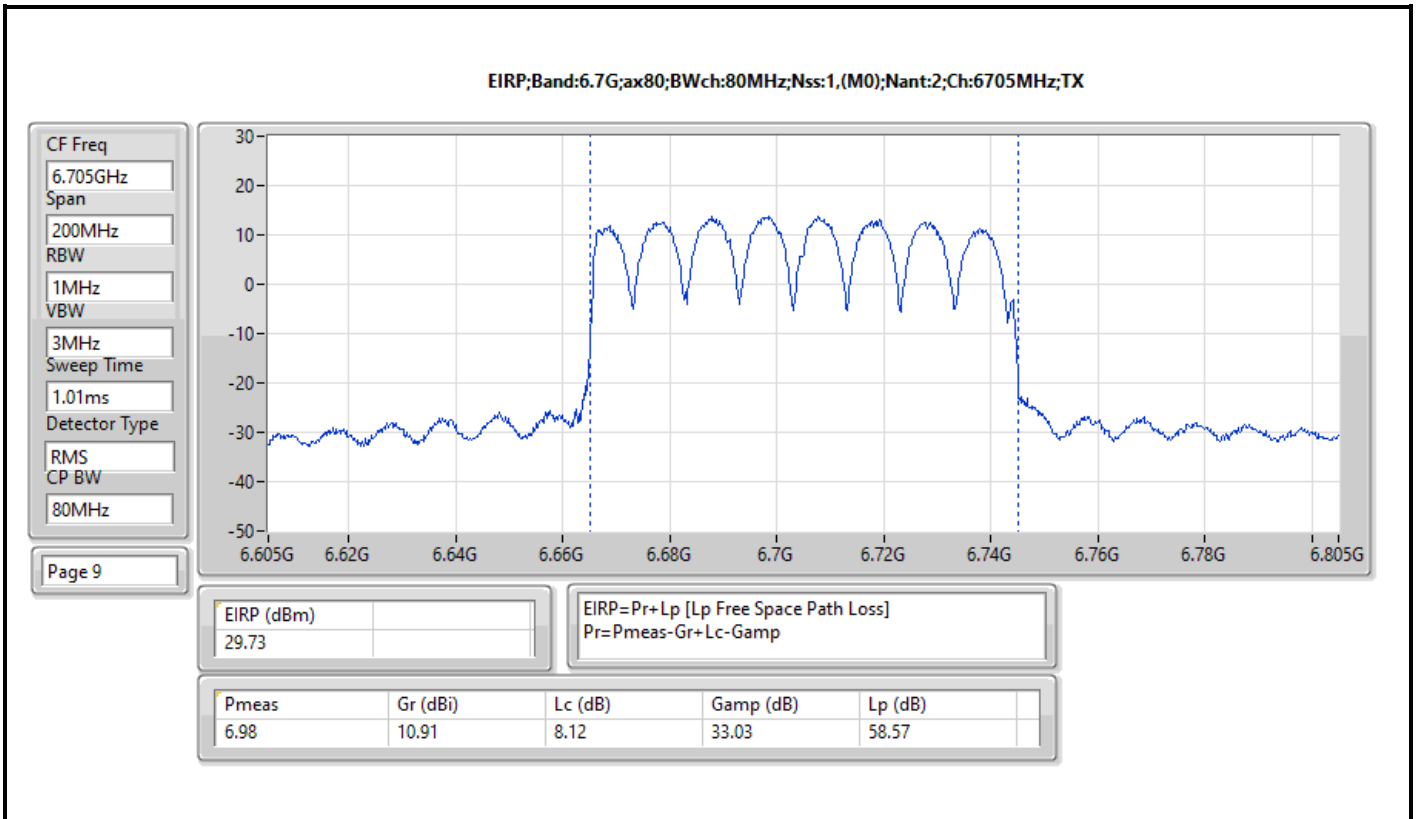


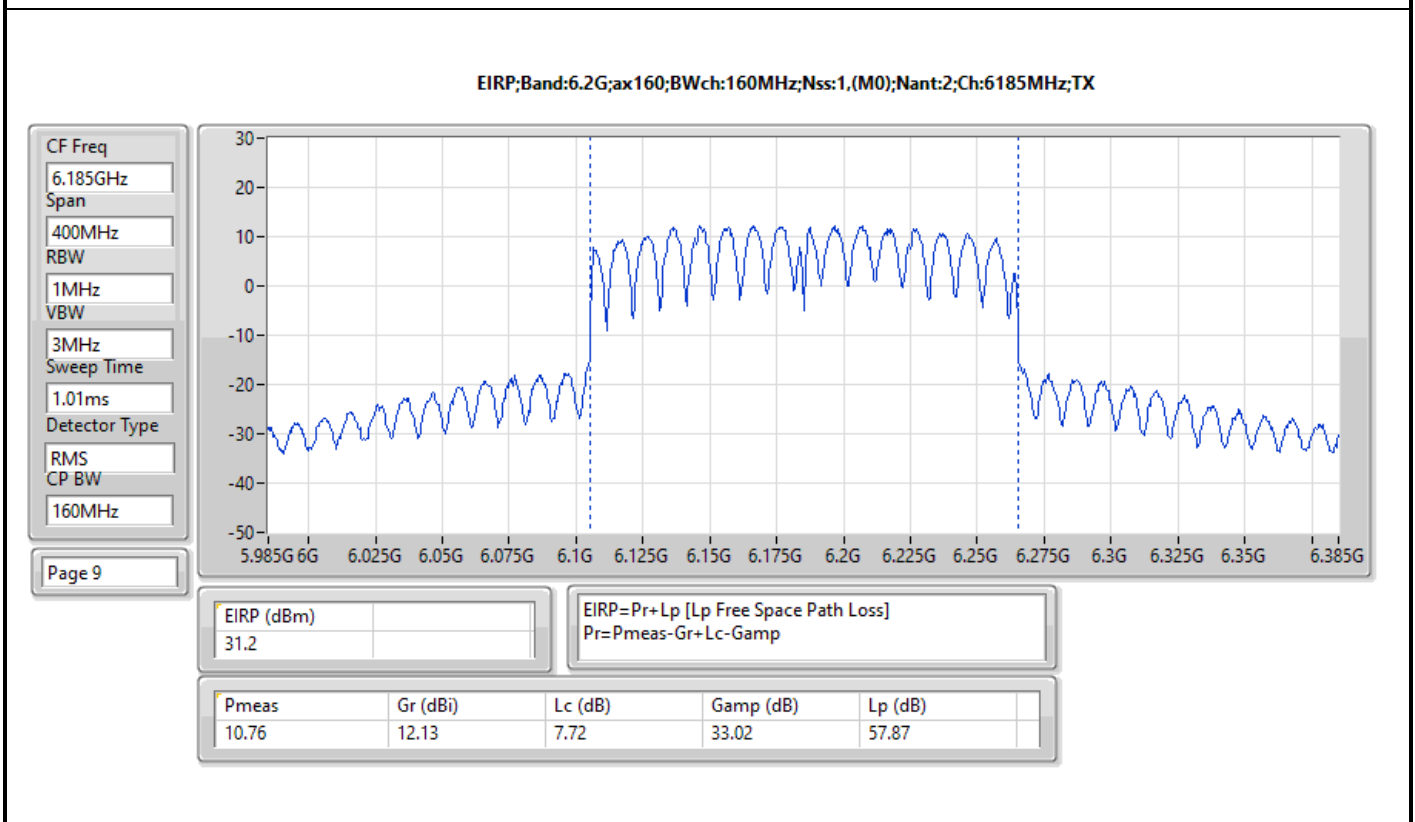
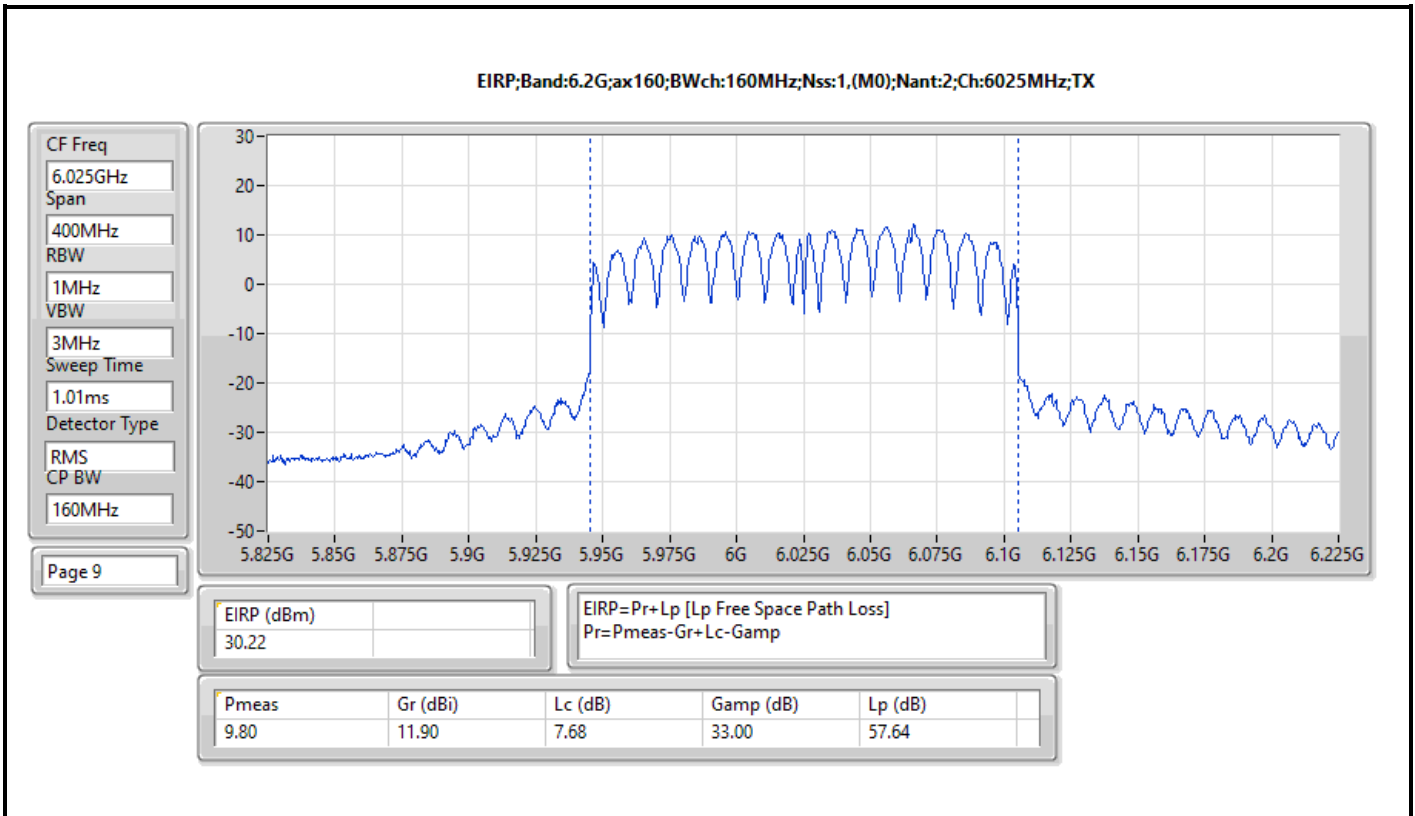


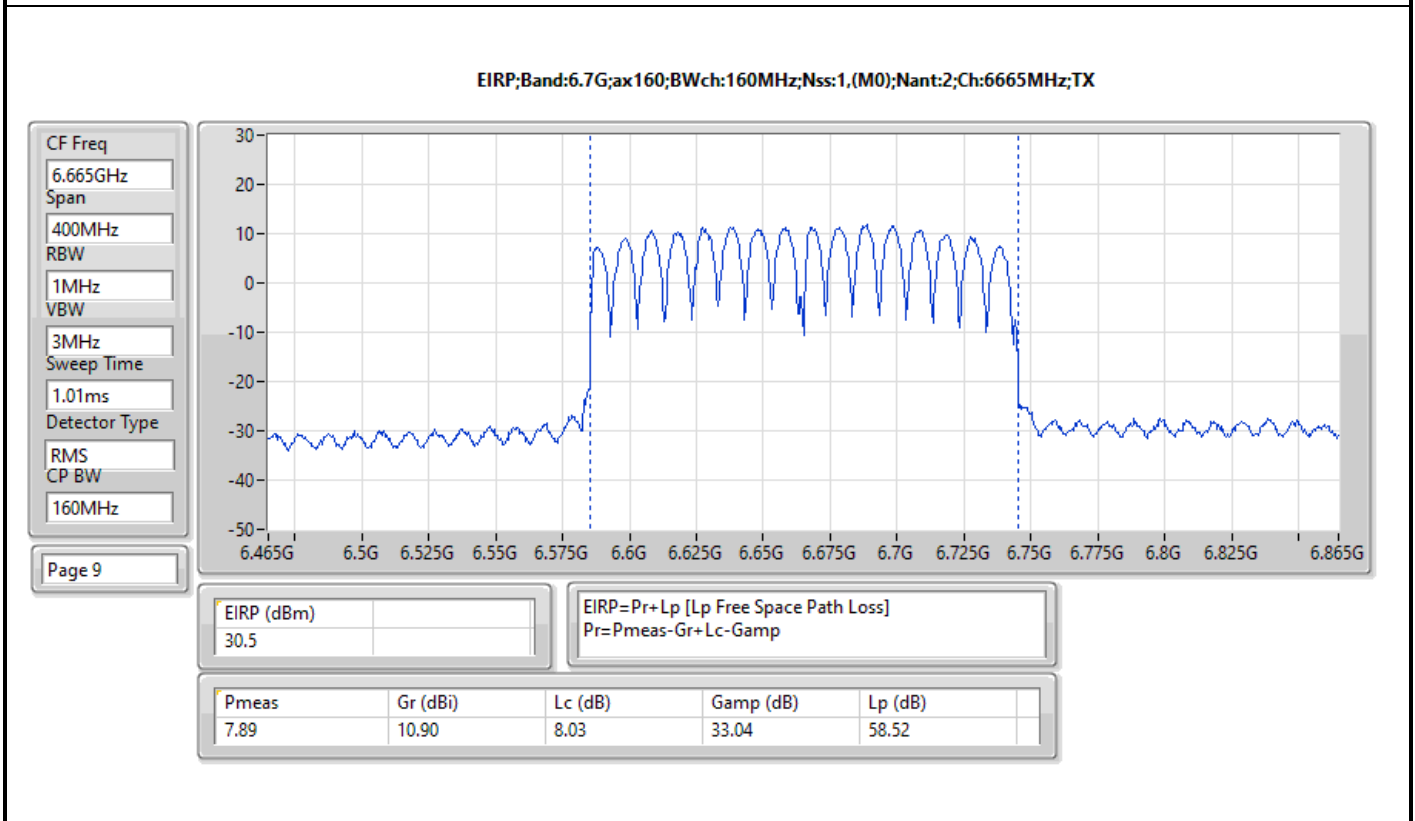
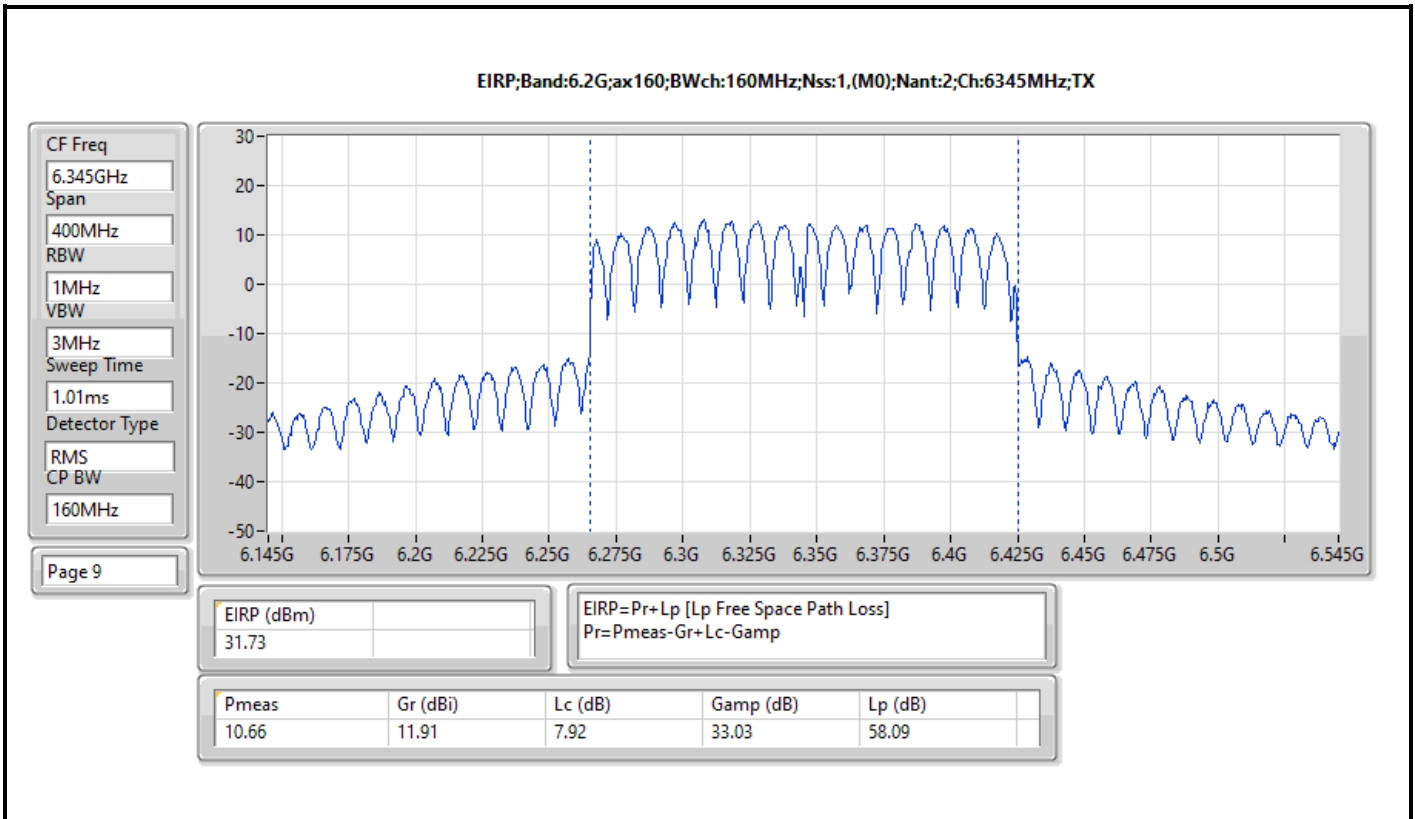














## Average Power-E.I.R.P. at any elevation angle above 30 degrees Appendix C.6

### Summary

| Mode                            | Total Power (dBm) | Total Power (W) | EIRP [Phi 30°] (dBm) | EIRP [Phi 30°] (W) |
|---------------------------------|-------------------|-----------------|----------------------|--------------------|
| 5.925-6.425GHz                  | -                 | -               | -                    | -                  |
| 802.11ax HEW20_Nss1,(MCS0)_2TX  | 26.52             | 0.44875         | 20.78                | 0.119674           |
| 802.11ax HEW40_Nss1,(MCS0)_2TX  | 26.50             | 0.44668         | 20.76                | 0.119124           |
| 802.11ax HEW80_Nss1,(MCS0)_2TX  | 26.34             | 0.43053         | 20.60                | 0.114815           |
| 802.11ax HEW160_Nss1,(MCS0)_2TX | 26.63             | 0.46026         | 20.89                | 0.122744           |
| 6.525-6.875GHz                  | -                 | -               | -                    | -                  |
| 802.11ax HEW20_Nss1,(MCS0)_2TX  | 25.01             | 0.31696         | 20.97                | 0.125026           |
| 802.11ax HEW40_Nss1,(MCS0)_2TX  | 25.00             | 0.31623         | 20.96                | 0.124738           |
| 802.11ax HEW80_Nss1,(MCS0)_2TX  | 24.90             | 0.30903         | 20.86                | 0.121899           |
| 802.11ax HEW160_Nss1,(MCS0)_2TX | 24.87             | 0.30690         | 20.83                | 0.121060           |



**Average Power-E.I.R.P. at any elevation angle above 30 degrees Appendix C.6**

**Result**

| Mode                            | Result | DG [Phi 30°]<br>(dBi) | Port 1<br>(dBm) | Port 2<br>(dBm) | Total Power<br>(dBm) | EIRP [Phi 30°]<br>(dBm) | EIRP [Phi 30°]<br>Limit<br>(dBm) |
|---------------------------------|--------|-----------------------|-----------------|-----------------|----------------------|-------------------------|----------------------------------|
| 802.11ax HEW20_Nss1,(MCS0)_2TX  | -      | -                     | -               | -               | -                    | -                       | -                                |
| 5955MHz                         | Pass   | -5.74                 | 23.34           | 23.67           | 26.52                | 20.78                   | 21.00                            |
| 6195MHz                         | Pass   | -5.74                 | 23.34           | 23.54           | 26.45                | 20.71                   | 21.00                            |
| 6415MHz                         | Pass   | -5.74                 | 23.23           | 23.49           | 26.37                | 20.63                   | 21.00                            |
| 6535MHz                         | Pass   | -4.04                 | 21.54           | 22.41           | 25.01                | 20.97                   | 21.00                            |
| 6695MHz                         | Pass   | -4.04                 | 21.69           | 22.12           | 24.92                | 20.88                   | 21.00                            |
| 6855MHz                         | Pass   | -4.04                 | 21.42           | 21.98           | 24.72                | 20.68                   | 21.00                            |
| 802.11ax HEW40_Nss1,(MCS0)_2TX  | -      | -                     | -               | -               | -                    | -                       | -                                |
| 5965MHz                         | Pass   | -5.74                 | 21.93           | 21.84           | 24.90                | 19.16                   | 21.00                            |
| 6205MHz                         | Pass   | -5.74                 | 23.31           | 23.67           | 26.50                | 20.76                   | 21.00                            |
| 6405MHz                         | Pass   | -5.74                 | 23.25           | 23.66           | 26.47                | 20.73                   | 21.00                            |
| 6565MHz                         | Pass   | -4.04                 | 21.55           | 22.35           | 24.98                | 20.94                   | 21.00                            |
| 6685MHz                         | Pass   | -4.04                 | 21.65           | 22.31           | 25.00                | 20.96                   | 21.00                            |
| 6845MHz                         | Pass   | -4.04                 | 21.52           | 22.01           | 24.78                | 20.74                   | 21.00                            |
| 802.11ax HEW80_Nss1,(MCS0)_2TX  | -      | -                     | -               | -               | -                    | -                       | -                                |
| 5985MHz                         | Pass   | -5.74                 | 21.99           | 21.65           | 24.83                | 19.09                   | 21.00                            |
| 6225MHz                         | Pass   | -5.74                 | 23.17           | 23.48           | 26.34                | 20.60                   | 21.00                            |
| 6385MHz                         | Pass   | -5.74                 | 23.04           | 23.59           | 26.33                | 20.59                   | 21.00                            |
| 6625MHz                         | Pass   | -4.04                 | 21.71           | 22.06           | 24.90                | 20.86                   | 21.00                            |
| 6705MHz                         | Pass   | -4.04                 | 21.60           | 21.93           | 24.78                | 20.74                   | 21.00                            |
| 6785MHz                         | Pass   | -4.04                 | 21.65           | 21.75           | 24.71                | 20.67                   | 21.00                            |
| 802.11ax HEW160_Nss1,(MCS0)_2TX | -      | -                     | -               | -               | -                    | -                       | -                                |
| 6025MHz                         | Pass   | -5.74                 | 22.76           | 22.50           | 25.64                | 19.90                   | 21.00                            |
| 6185MHz                         | Pass   | -5.74                 | 23.13           | 23.68           | 26.42                | 20.68                   | 21.00                            |
| 6345MHz                         | Pass   | -5.74                 | 23.56           | 23.68           | 26.63                | 20.89                   | 21.00                            |
| 6665MHz                         | Pass   | -4.04                 | 21.72           | 22.00           | 24.87                | 20.83                   | 21.00                            |

DG = Directional Gain; Port X = Port X output power





**Summary**

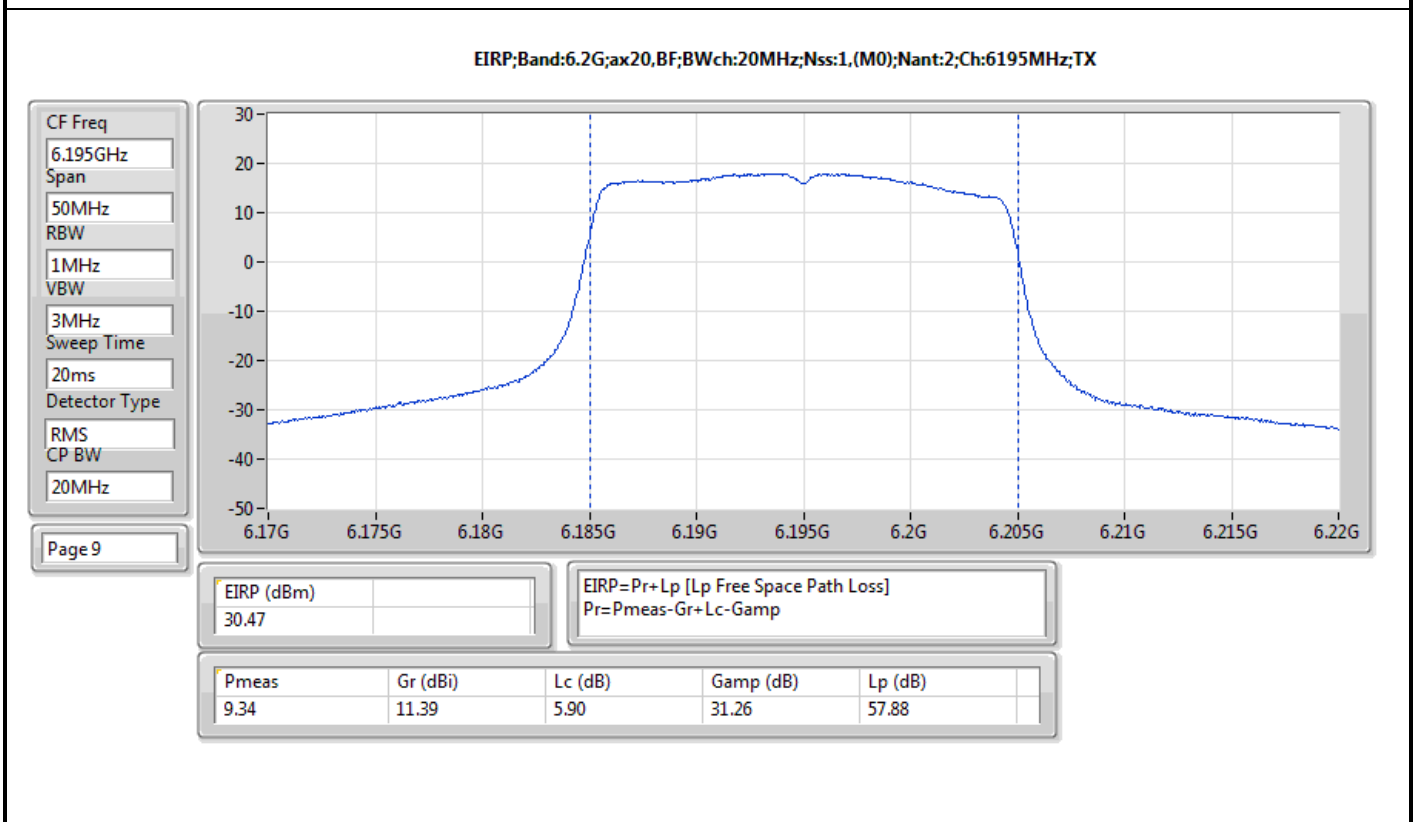
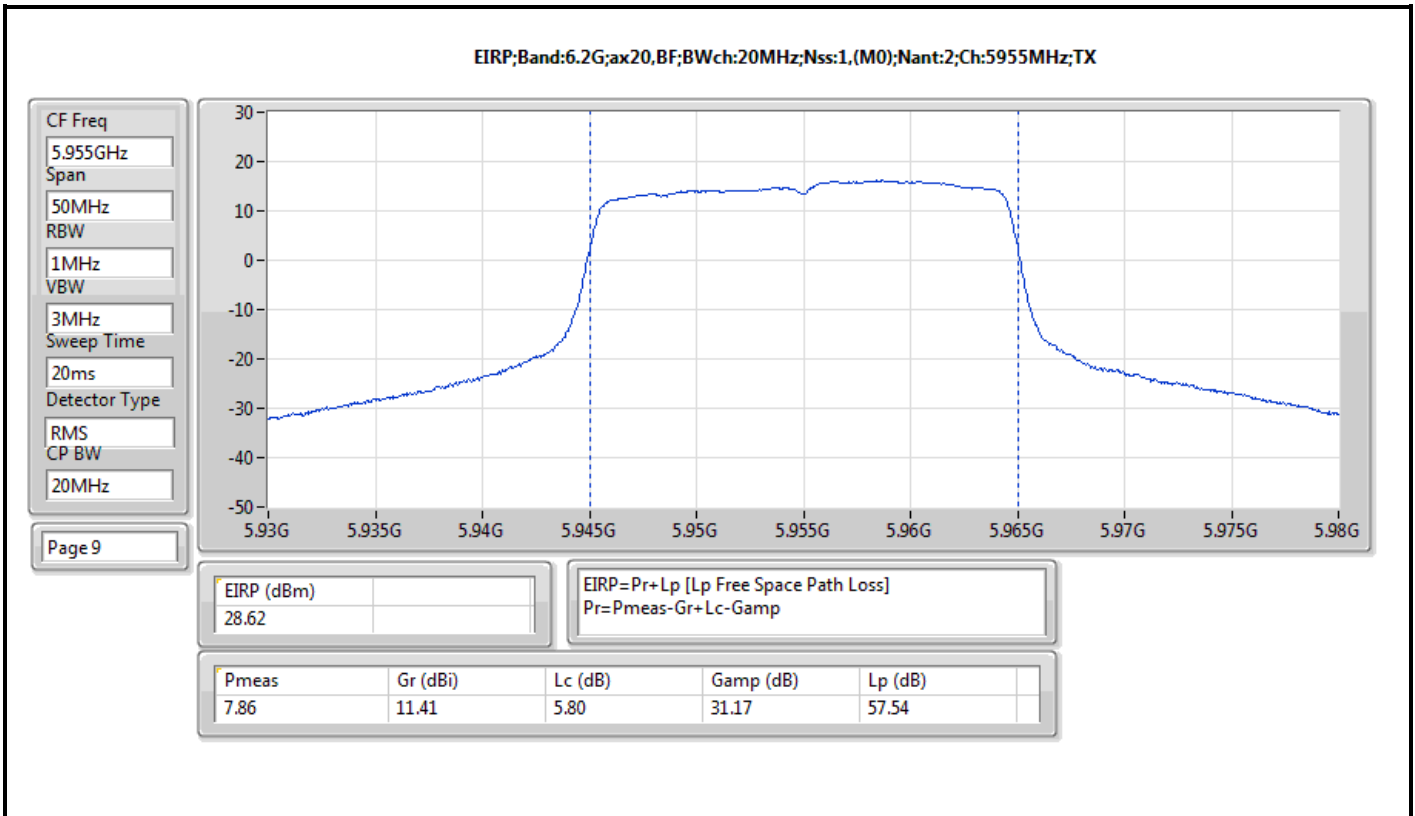
| Mode                               | EIRP<br>(dBm) | EIRP<br>(W) |
|------------------------------------|---------------|-------------|
| 5.925-6.425GHz                     | -             | -           |
| 802.11ax HEW20-BF_Nss1,(MCS0)_2TX  | 30.47         | 1.11429     |
| 802.11ax HEW40-BF_Nss1,(MCS0)_2TX  | 31.40         | 1.38038     |
| 802.11ax HEW80-BF_Nss1,(MCS0)_2TX  | 29.96         | 0.99083     |
| 802.11ax HEW160-BF_Nss1,(MCS0)_2TX | 28.54         | 0.71450     |
| 6.525-6.875GHz                     | -             | -           |
| 802.11ax HEW20-BF_Nss1,(MCS0)_2TX  | 29.51         | 0.89331     |
| 802.11ax HEW40-BF_Nss1,(MCS0)_2TX  | 30.49         | 1.11944     |
| 802.11ax HEW80-BF_Nss1,(MCS0)_2TX  | 30.50         | 1.12202     |
| 802.11ax HEW160-BF_Nss1,(MCS0)_2TX | 29.46         | 0.88308     |

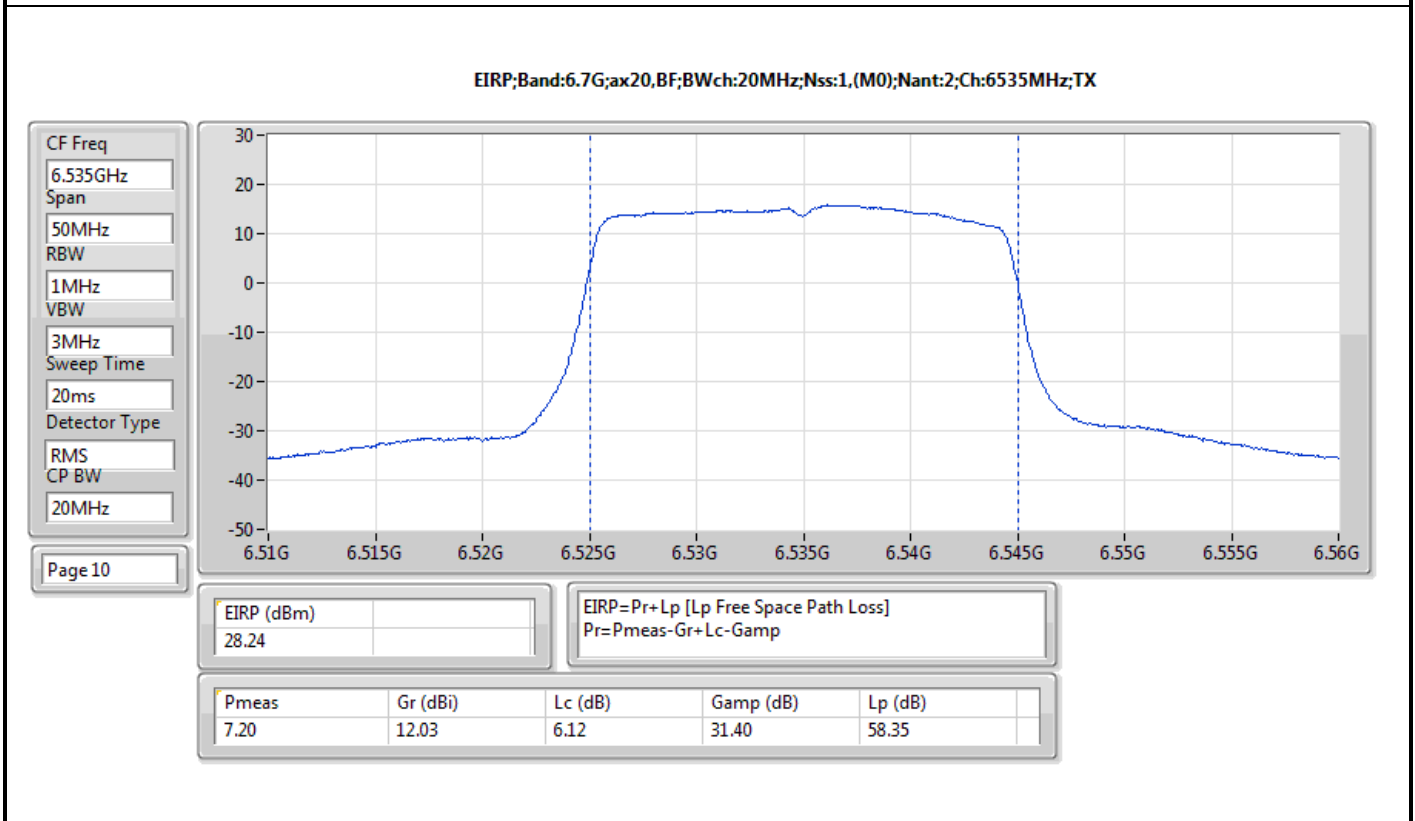
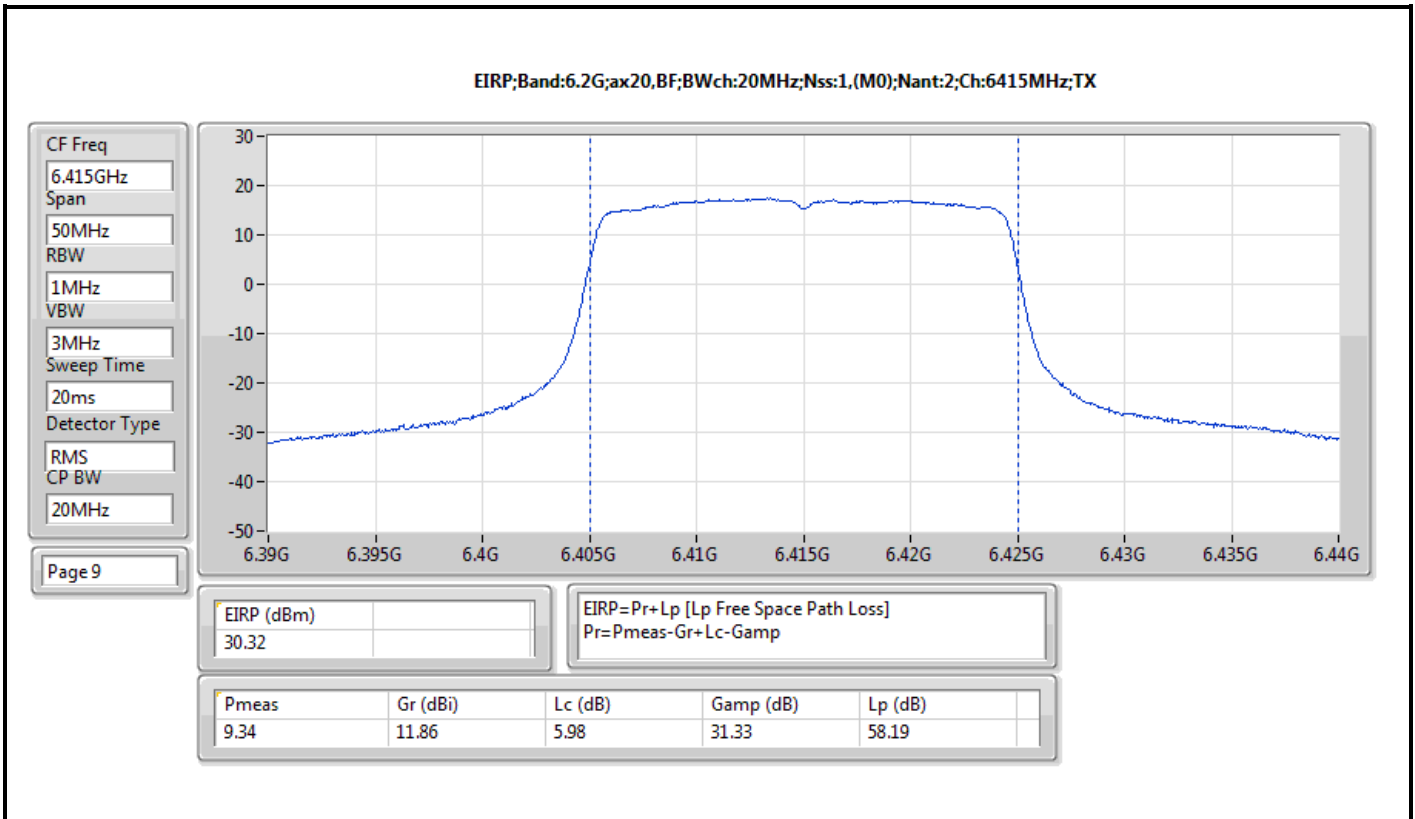


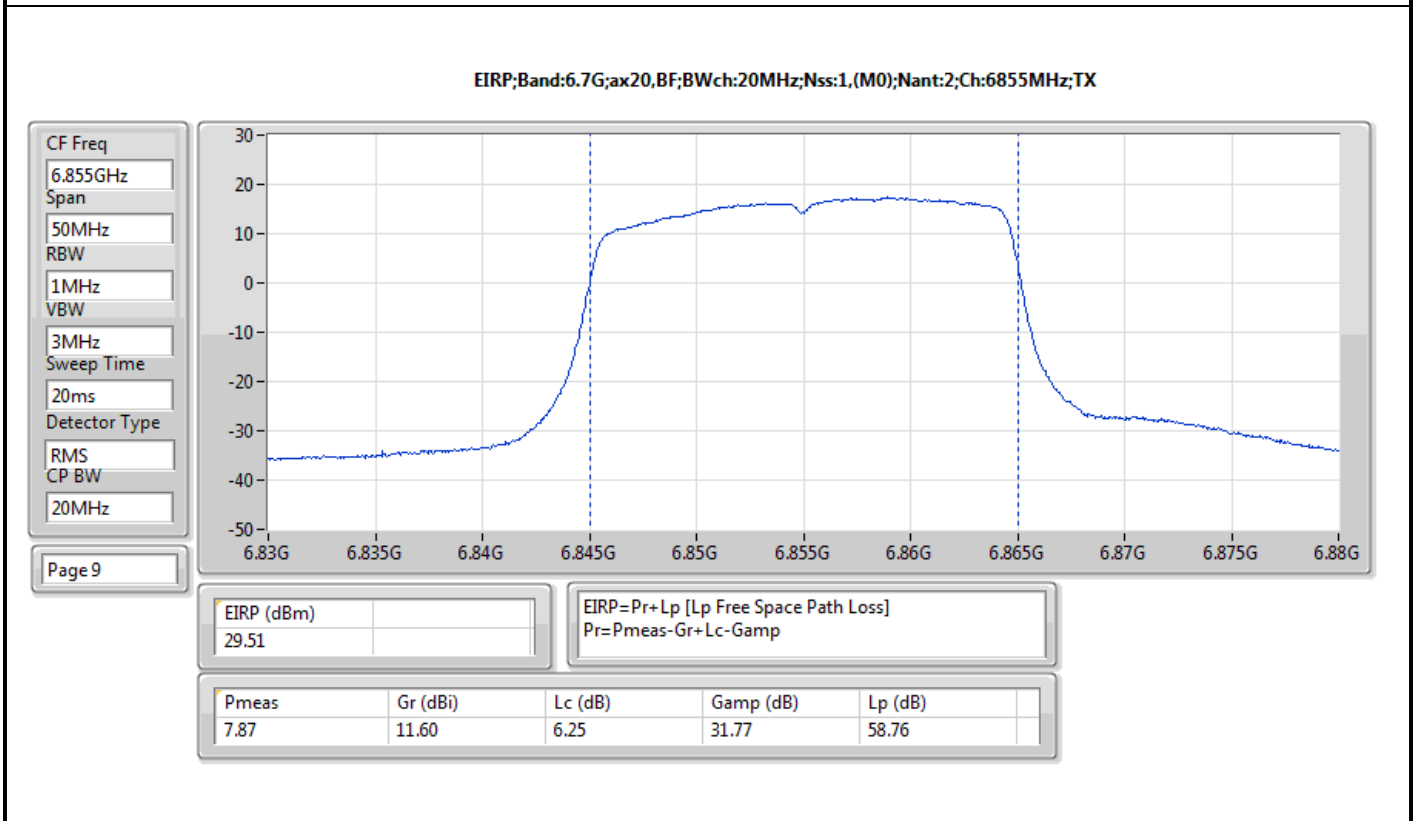
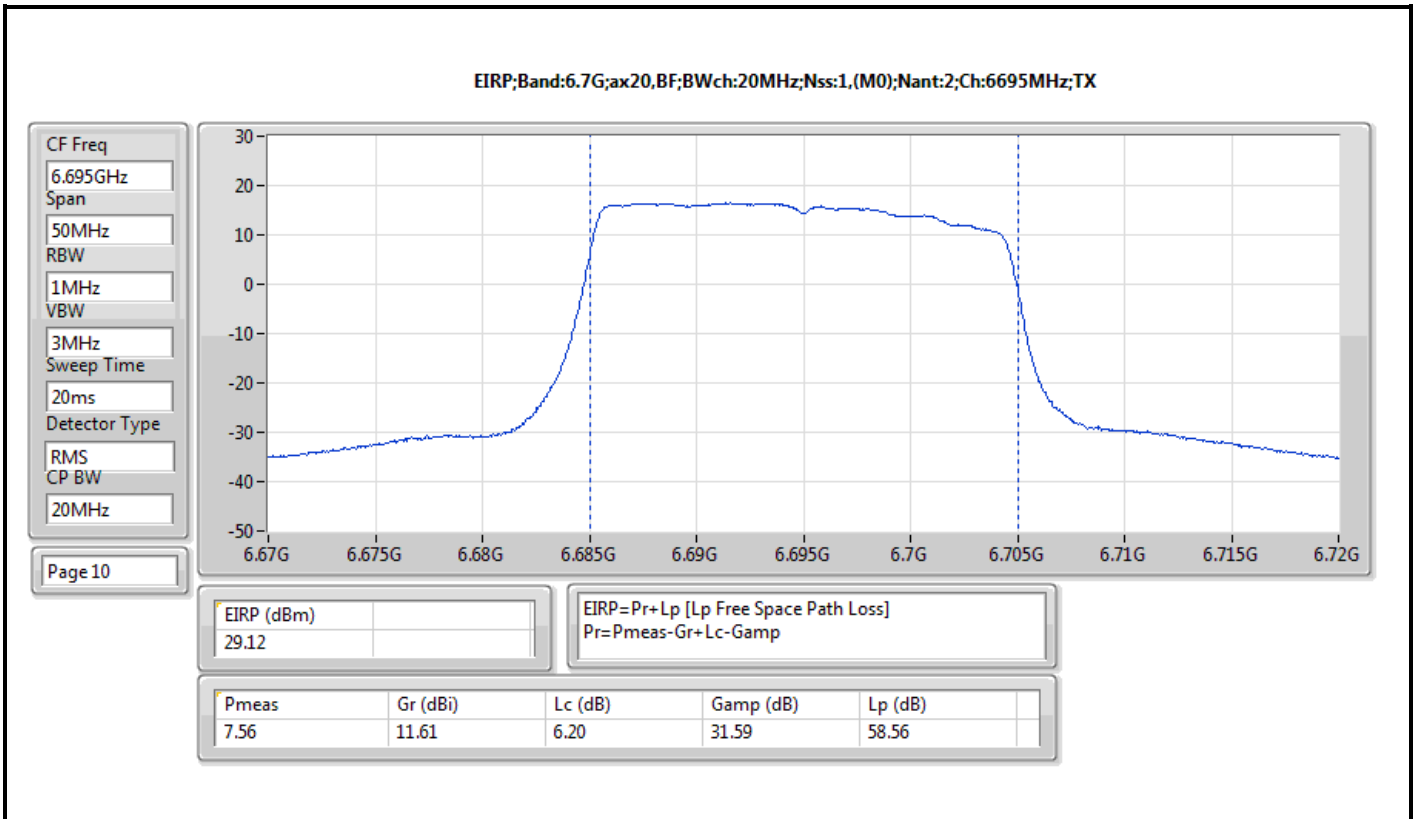
**Result**

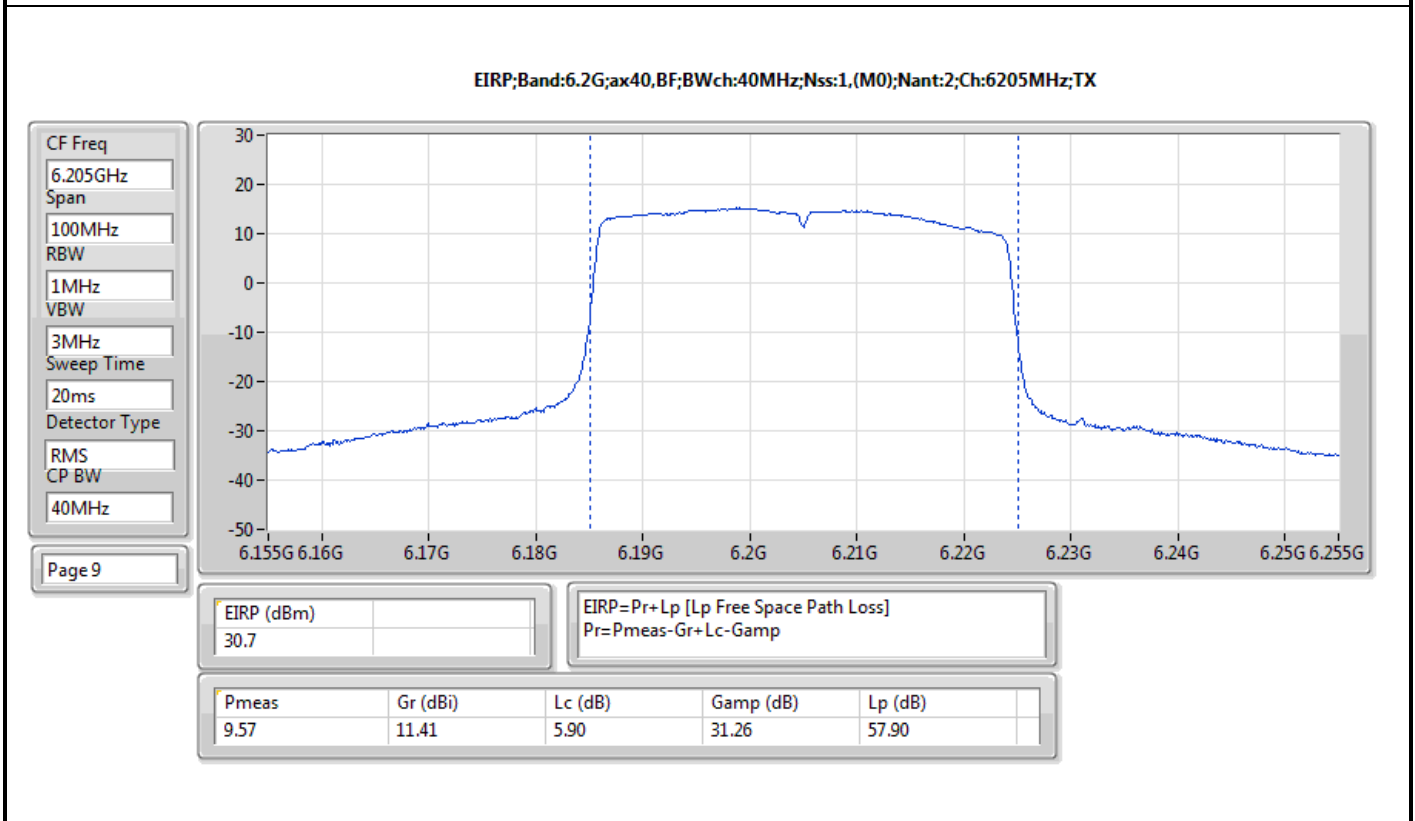
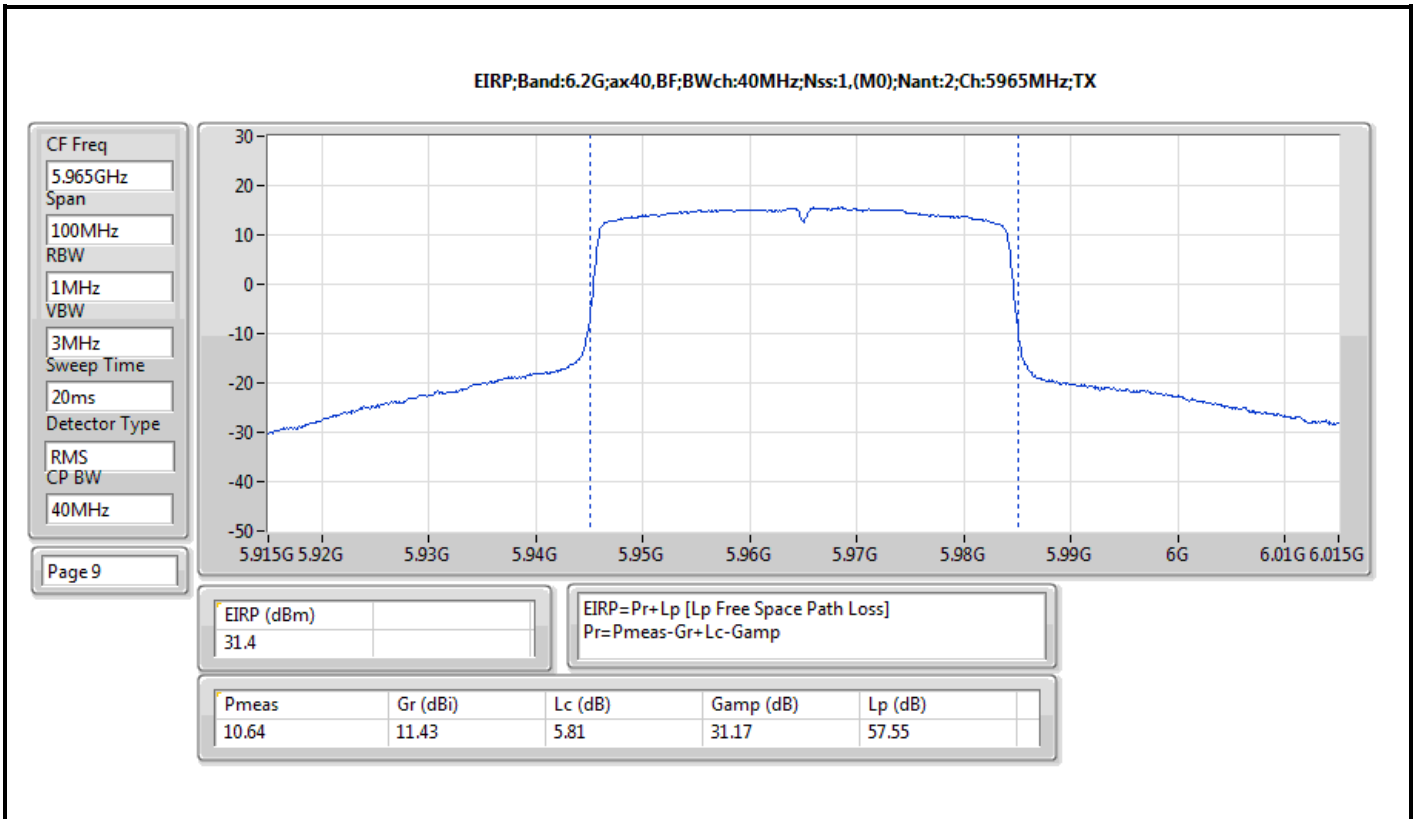
| Mode                               | Result | EIRP (dBm) | EIRP Limit (dBm) |
|------------------------------------|--------|------------|------------------|
| 802.11ax HEW20-BF_Nss1,(MCS0)_2TX  | -      | -          | -                |
| 5955MHz                            | Pass   | 28.62      | 36.00            |
| 6195MHz                            | Pass   | 30.47      | 36.00            |
| 6415MHz                            | Pass   | 30.32      | 36.00            |
| 6535MHz                            | Pass   | 28.24      | 36.00            |
| 6695MHz                            | Pass   | 29.12      | 36.00            |
| 6855MHz                            | Pass   | 29.51      | 36.00            |
| 802.11ax HEW40-BF_Nss1,(MCS0)_2TX  | -      | -          | -                |
| 5965MHz                            | Pass   | 31.40      | 36.00            |
| 6205MHz                            | Pass   | 30.70      | 36.00            |
| 6405MHz                            | Pass   | 29.96      | 36.00            |
| 6565MHz                            | Pass   | 29.71      | 36.00            |
| 6685MHz                            | Pass   | 30.32      | 36.00            |
| 6845MHz                            | Pass   | 30.49      | 36.00            |
| 802.11ax HEW80-BF_Nss1,(MCS0)_2TX  | -      | -          | -                |
| 5985MHz                            | Pass   | 28.25      | 36.00            |
| 6225MHz                            | Pass   | 29.96      | 36.00            |
| 6385MHz                            | Pass   | 29.37      | 36.00            |
| 6625MHz                            | Pass   | 30.50      | 36.00            |
| 6705MHz                            | Pass   | 30.02      | 36.00            |
| 6785MHz                            | Pass   | 30.18      | 36.00            |
| 802.11ax HEW160-BF_Nss1,(MCS0)_2TX | -      | -          | -                |
| 6025MHz                            | Pass   | 27.13      | 36.00            |
| 6185MHz                            | Pass   | 28.18      | 36.00            |
| 6345MHz                            | Pass   | 28.54      | 36.00            |
| 6665MHz                            | Pass   | 29.46      | 36.00            |

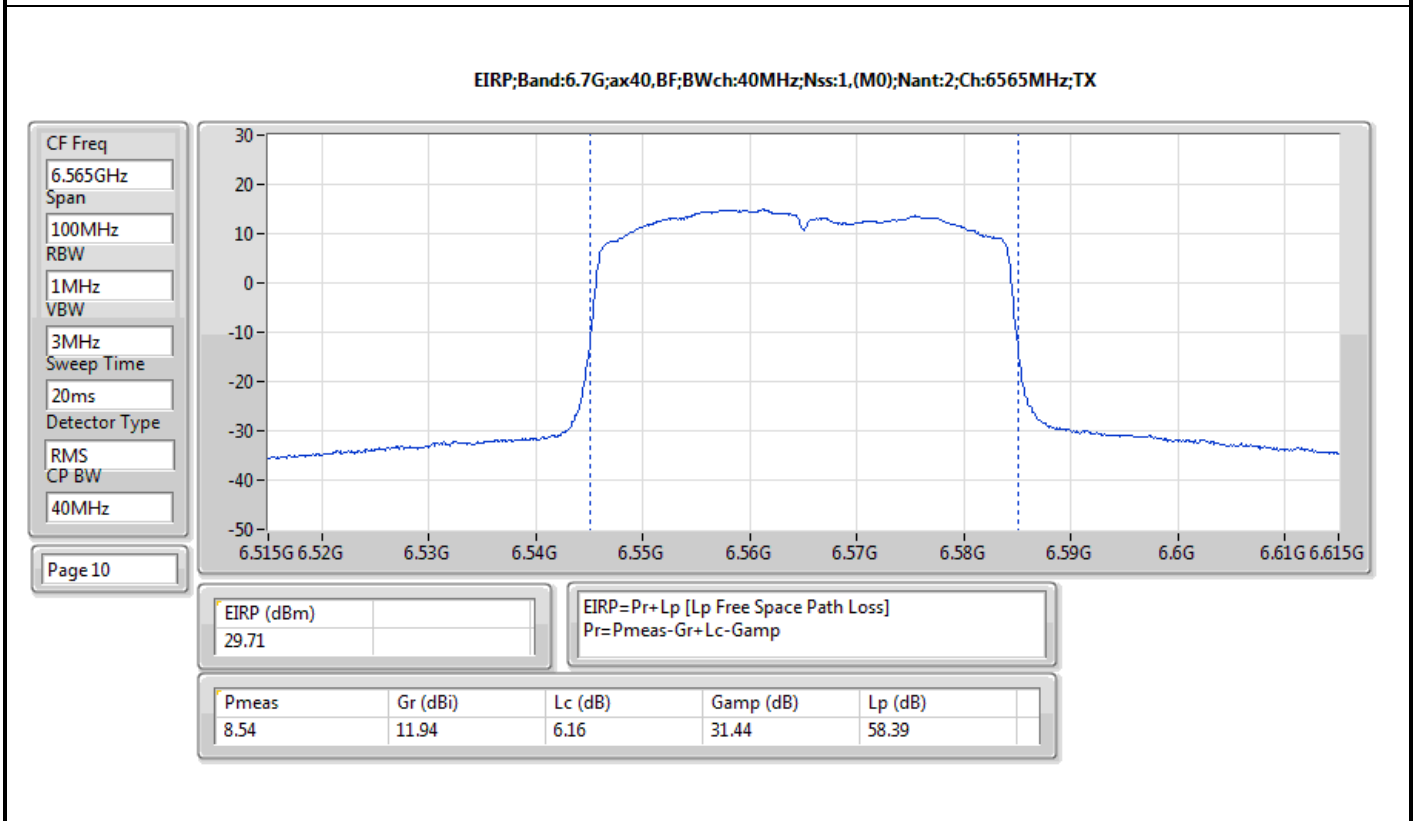
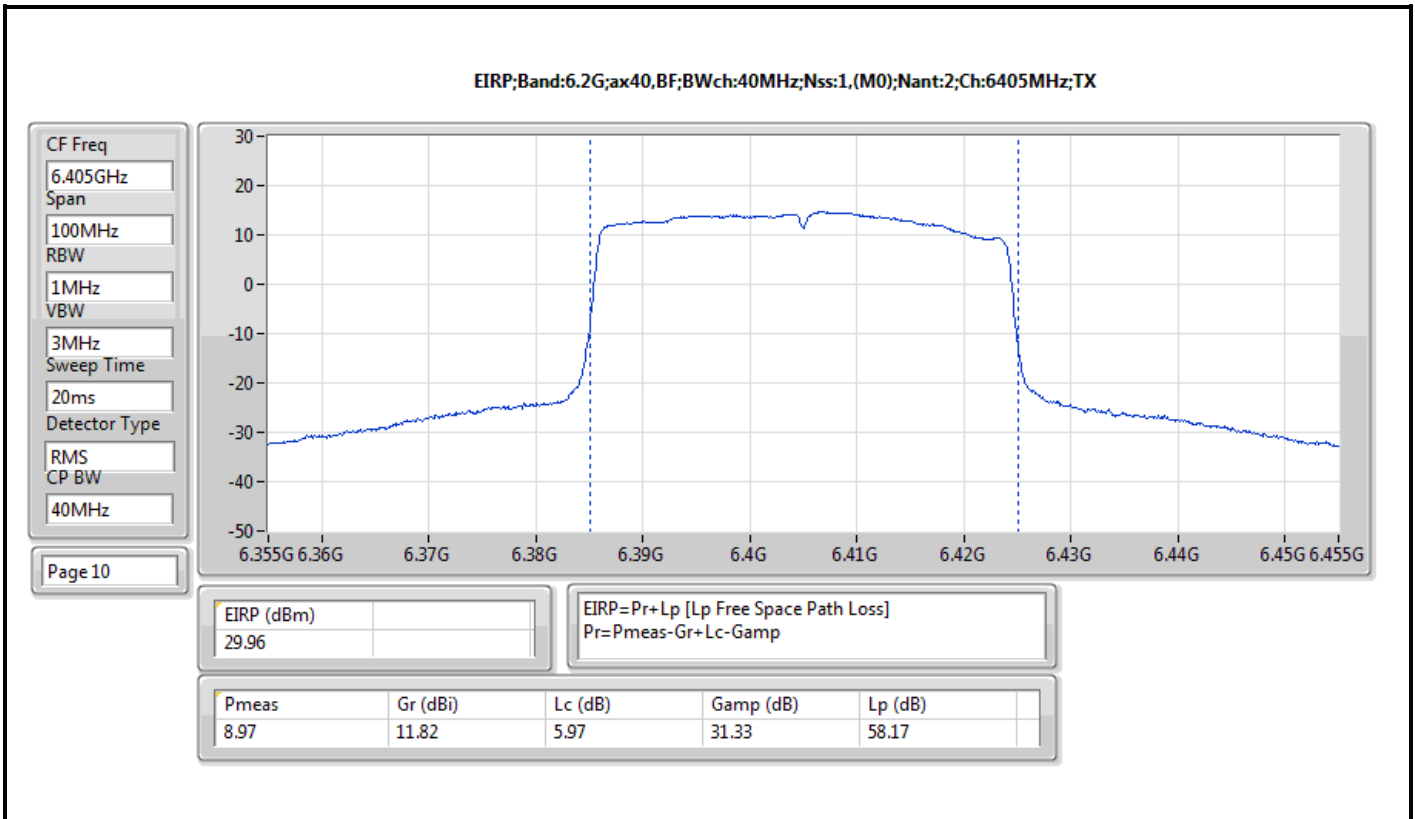
DG = Directional Gain; Port X = Port X output power

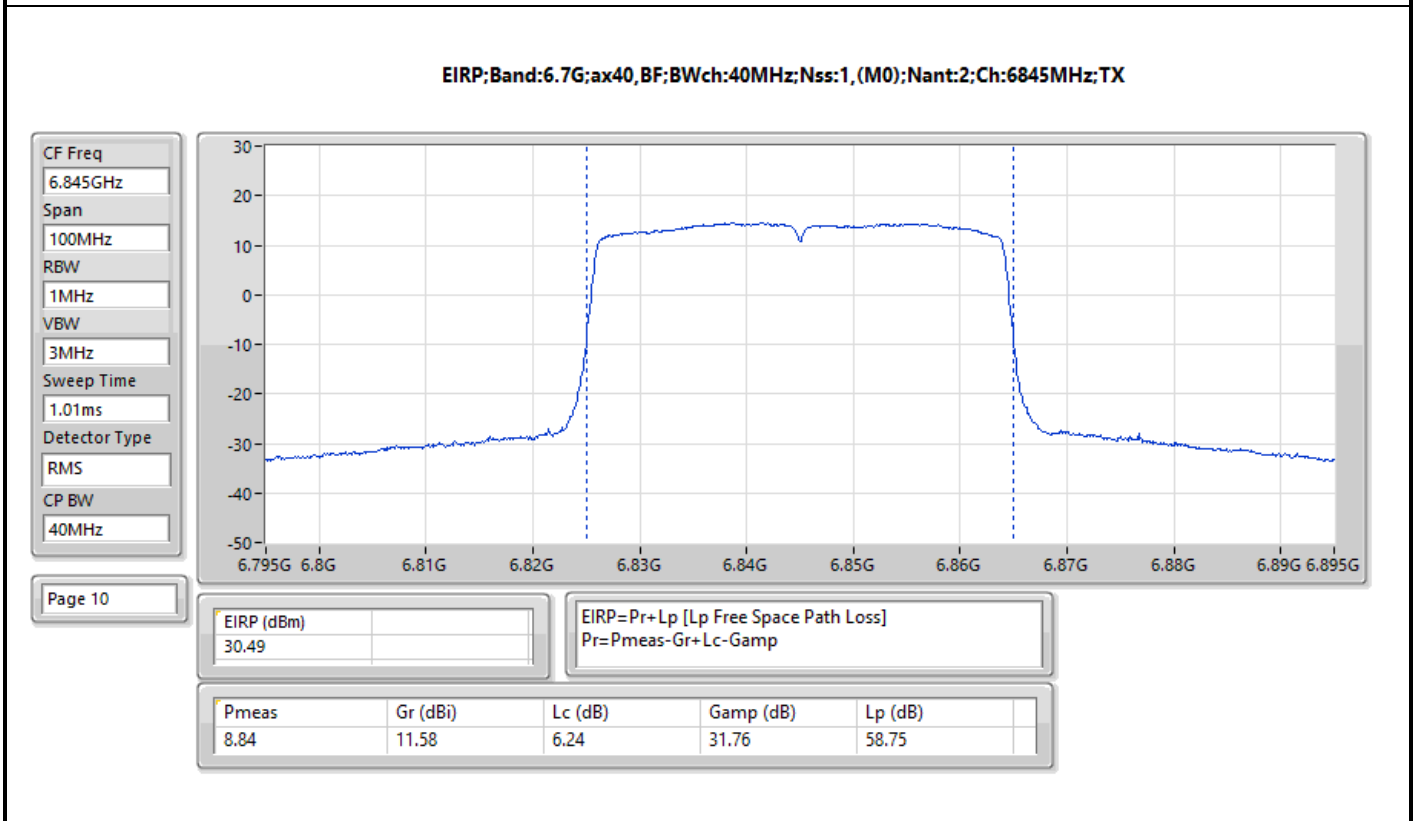
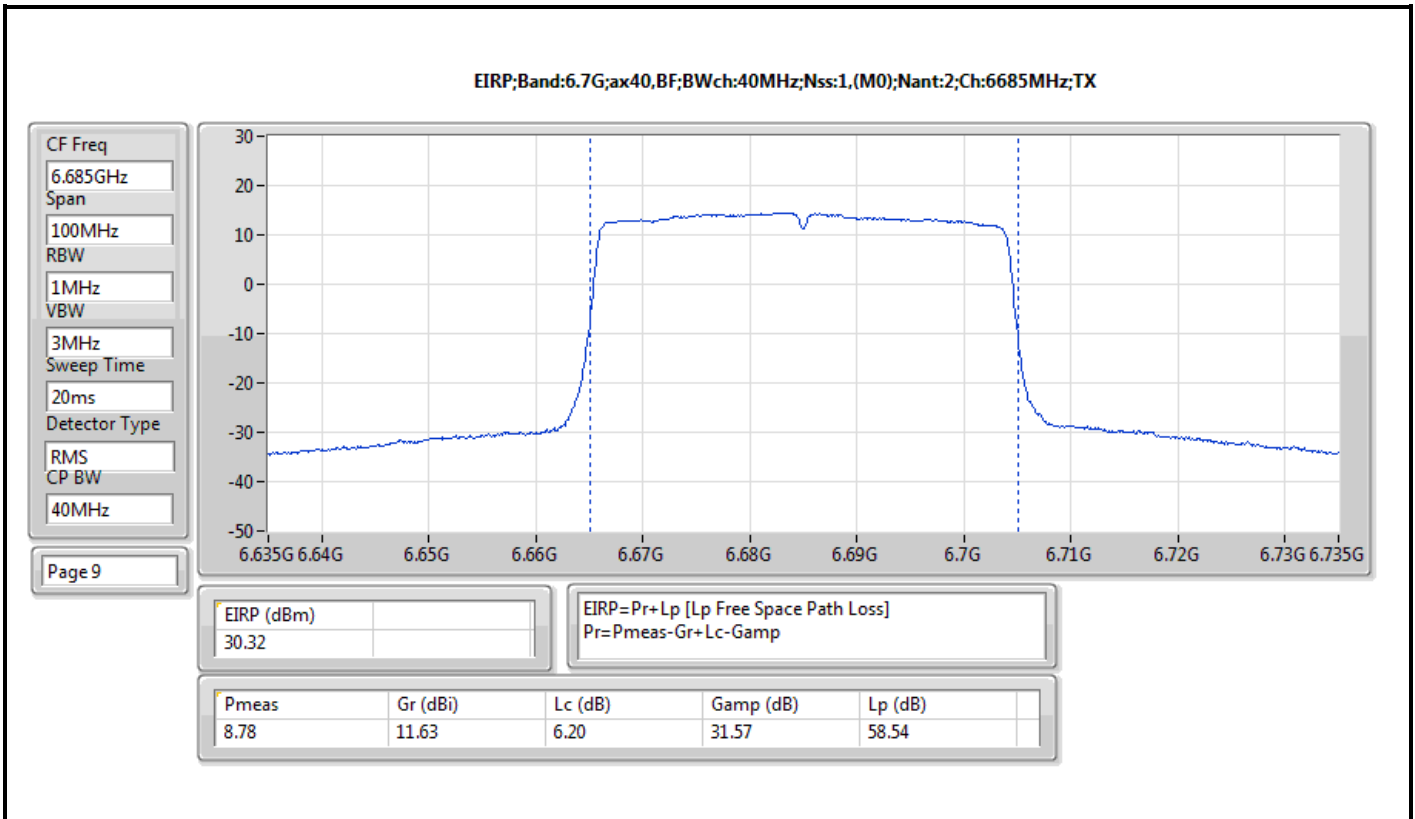




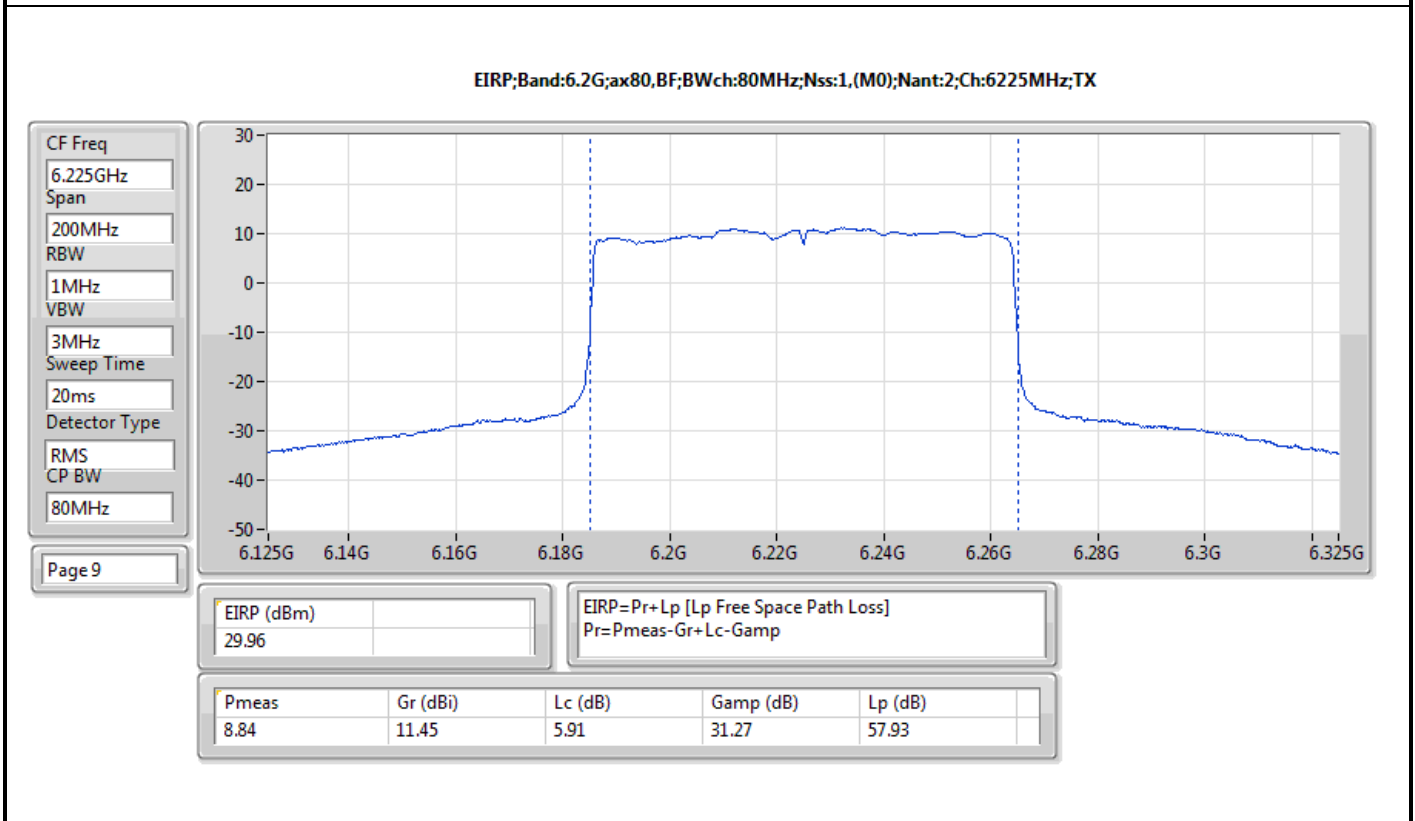
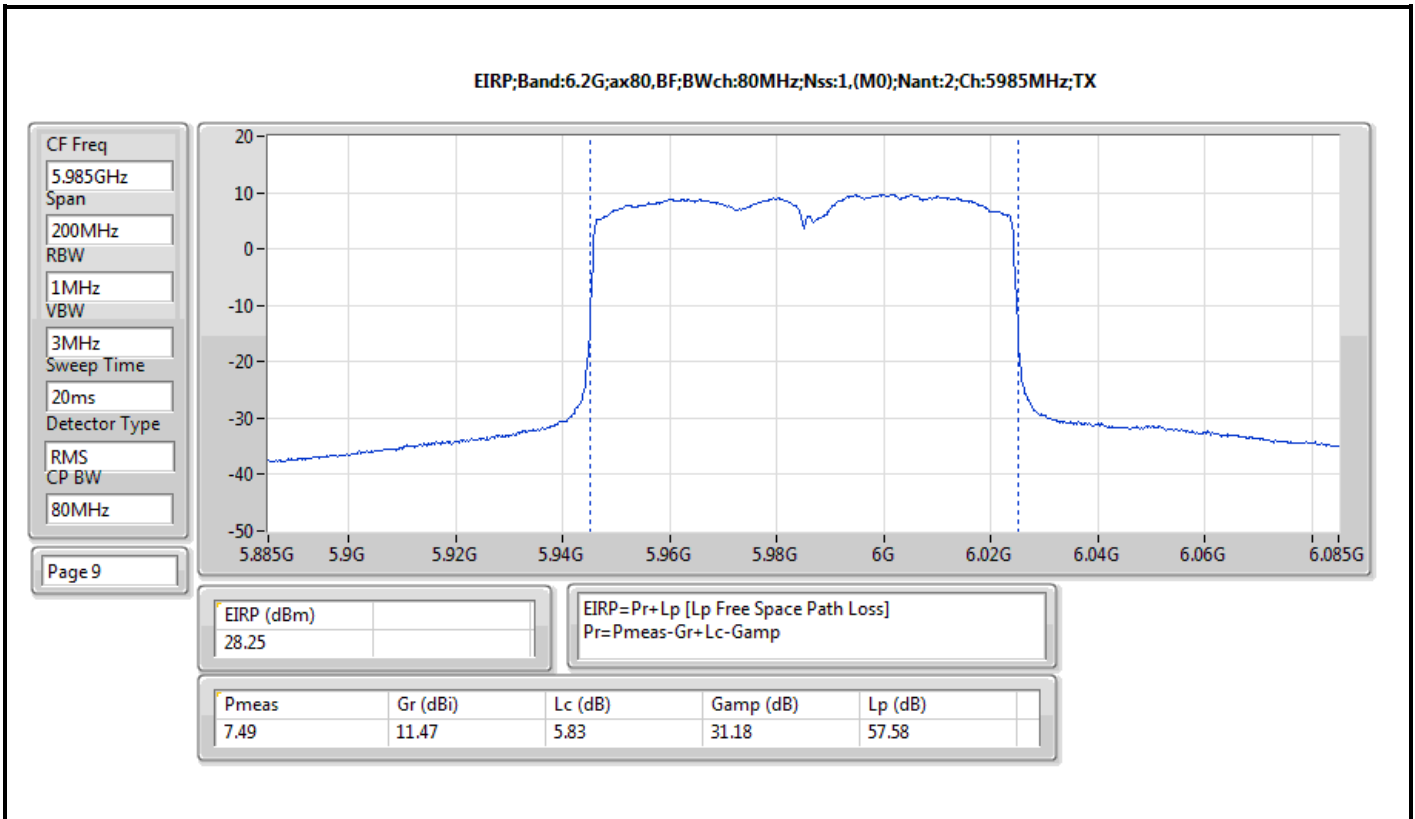


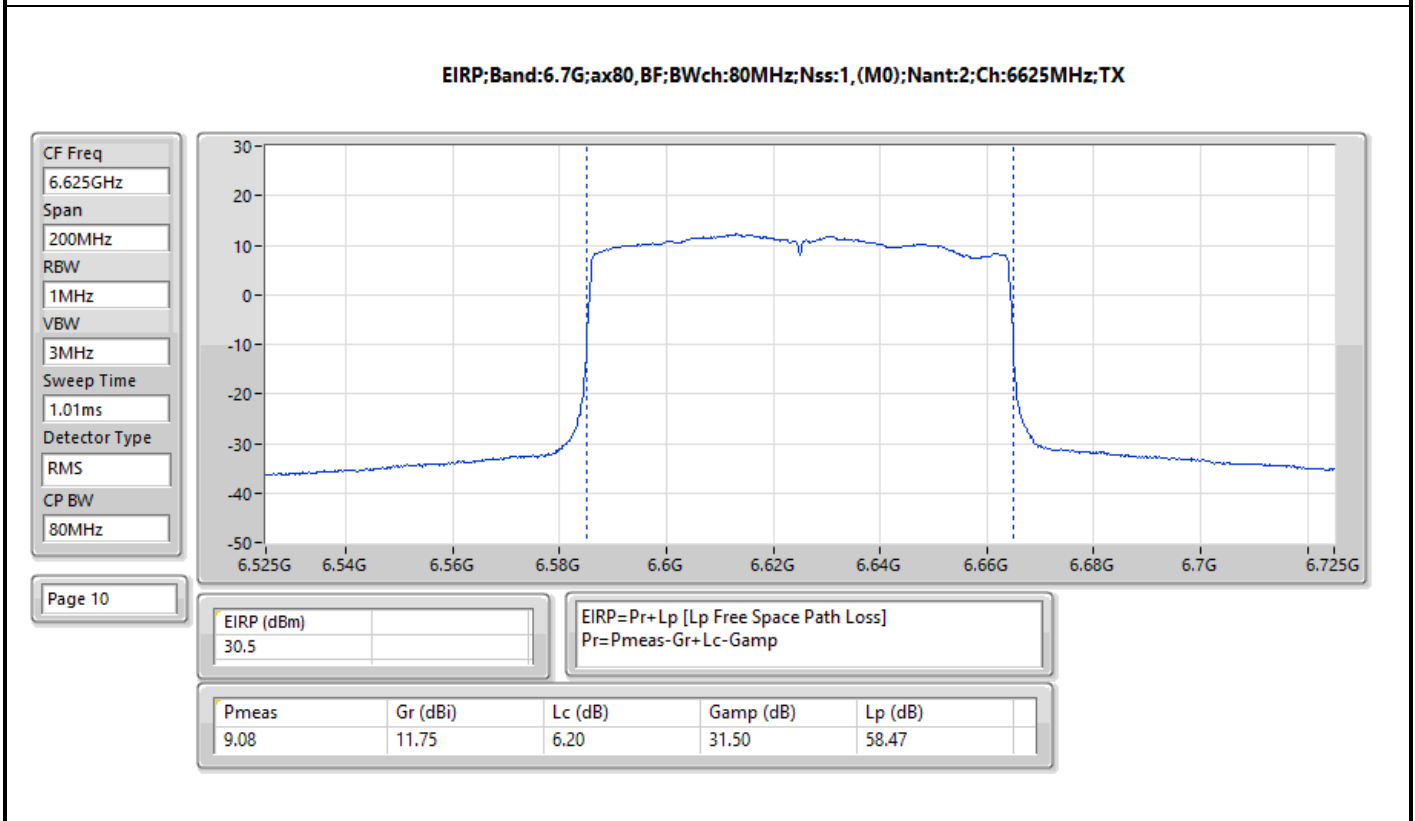
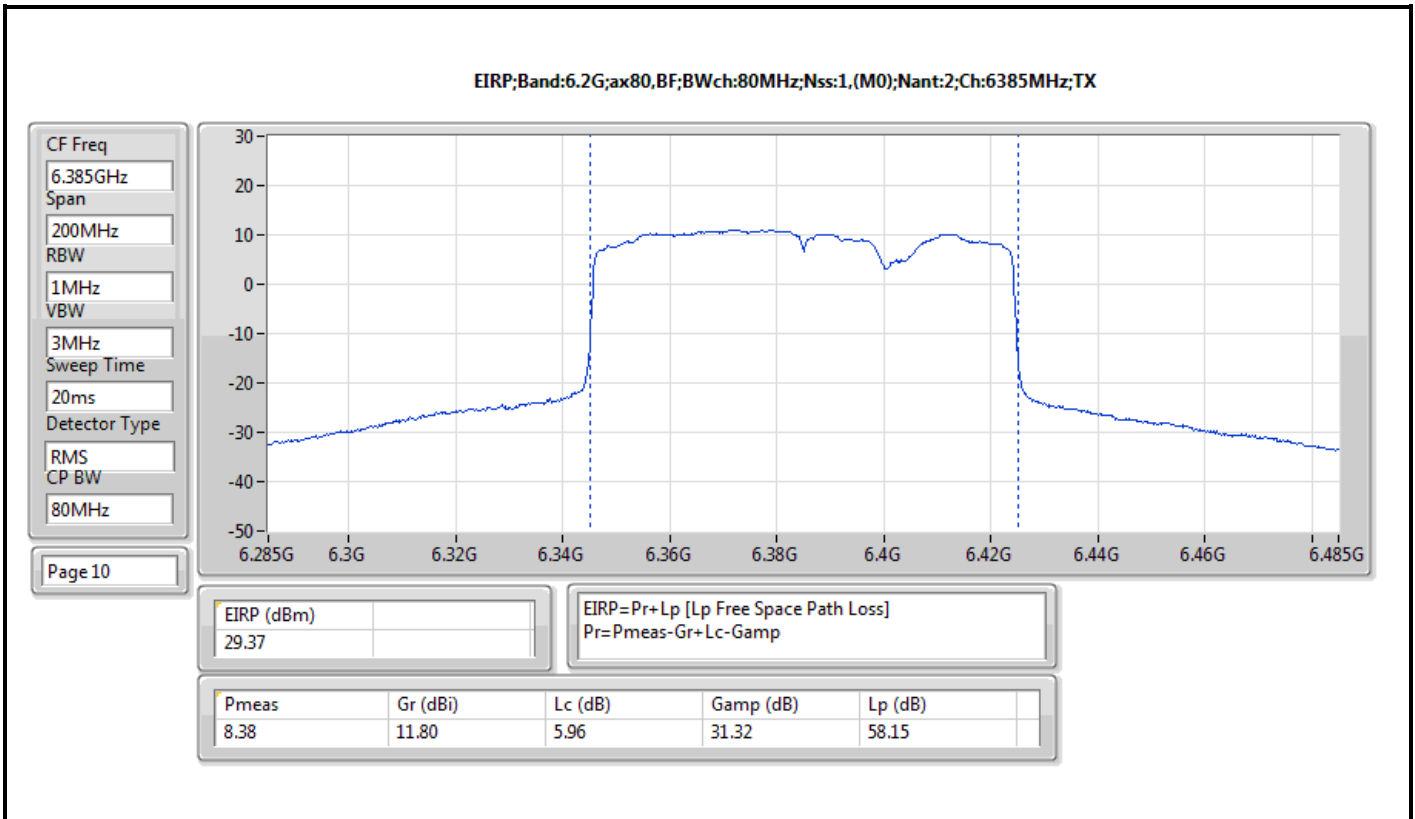


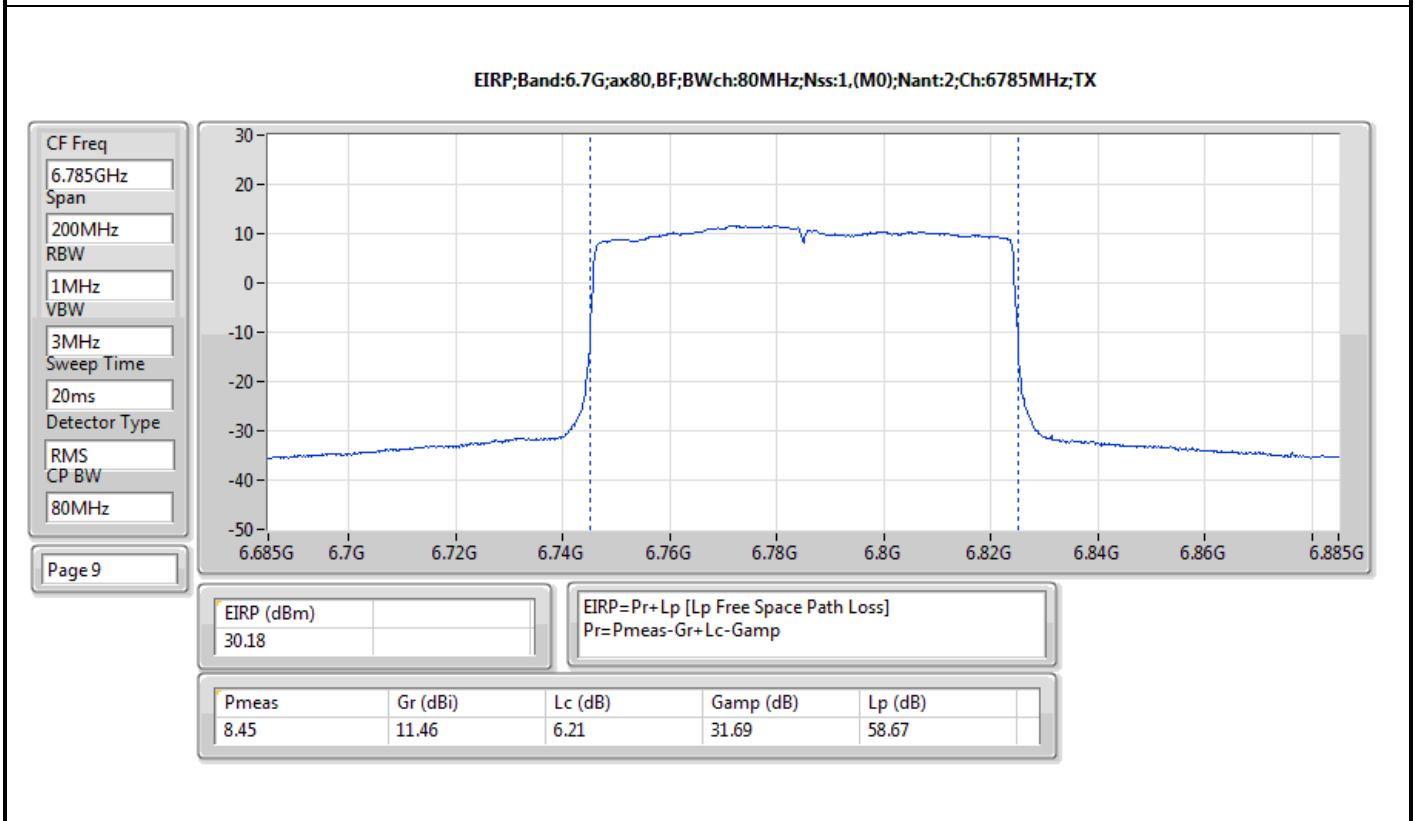
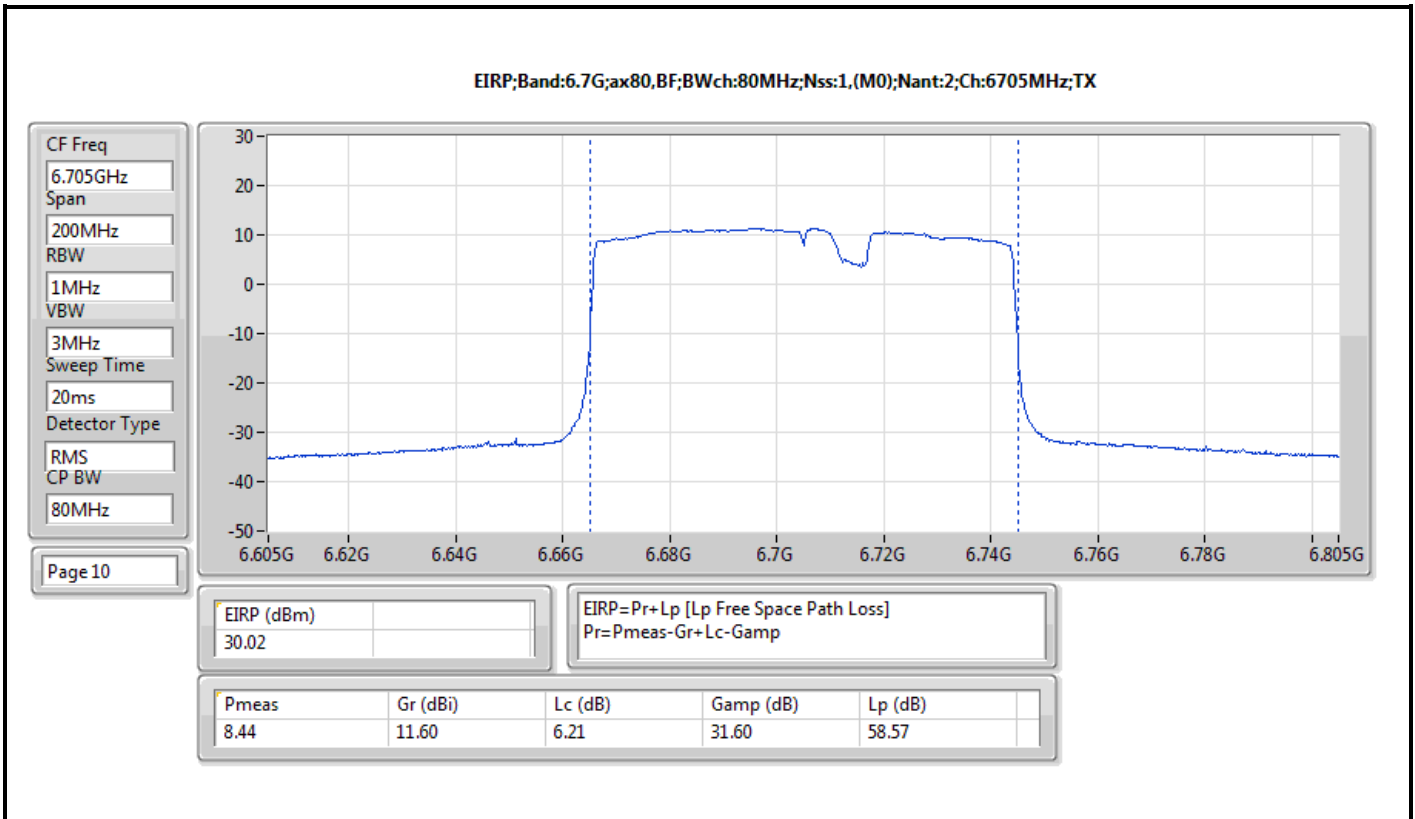


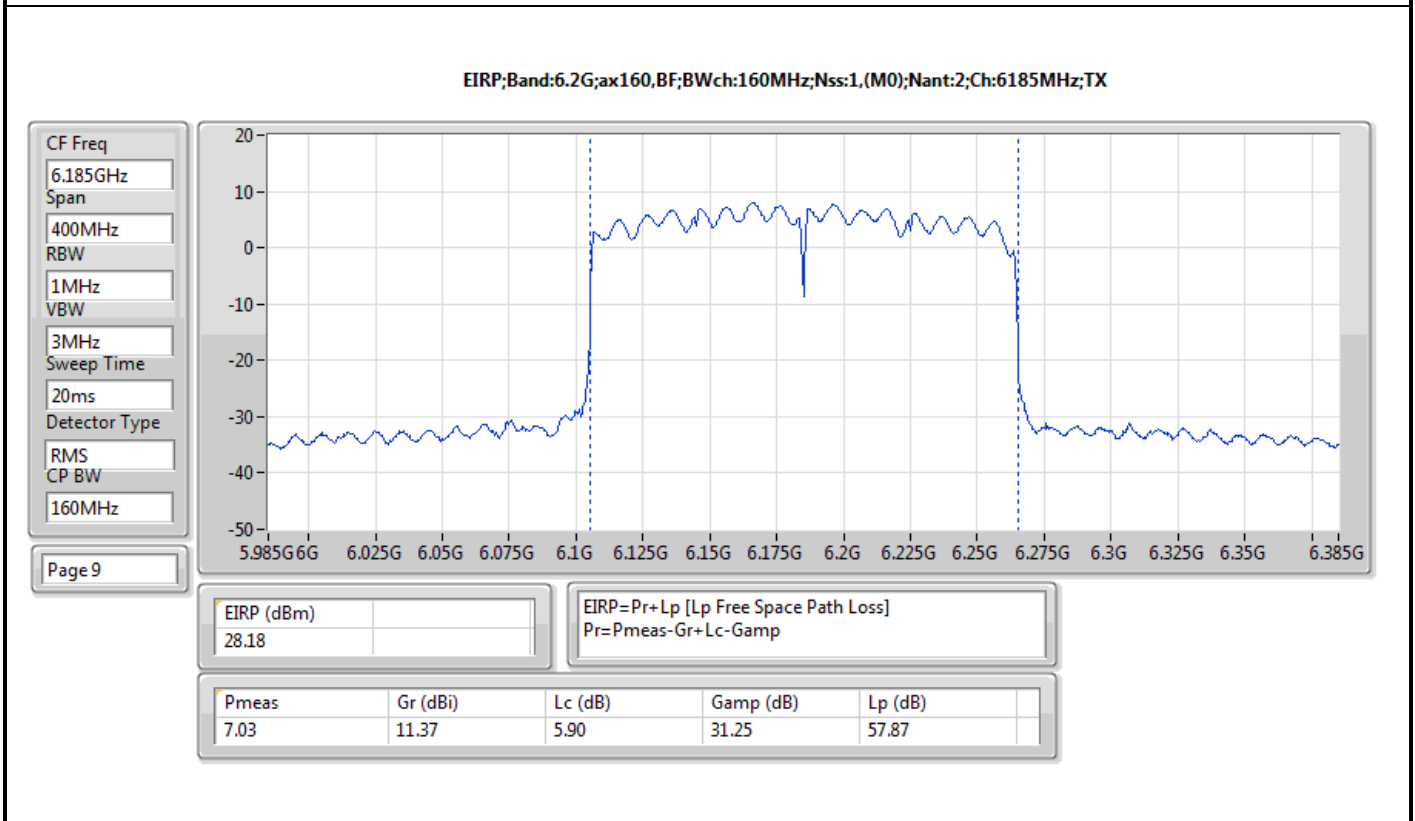
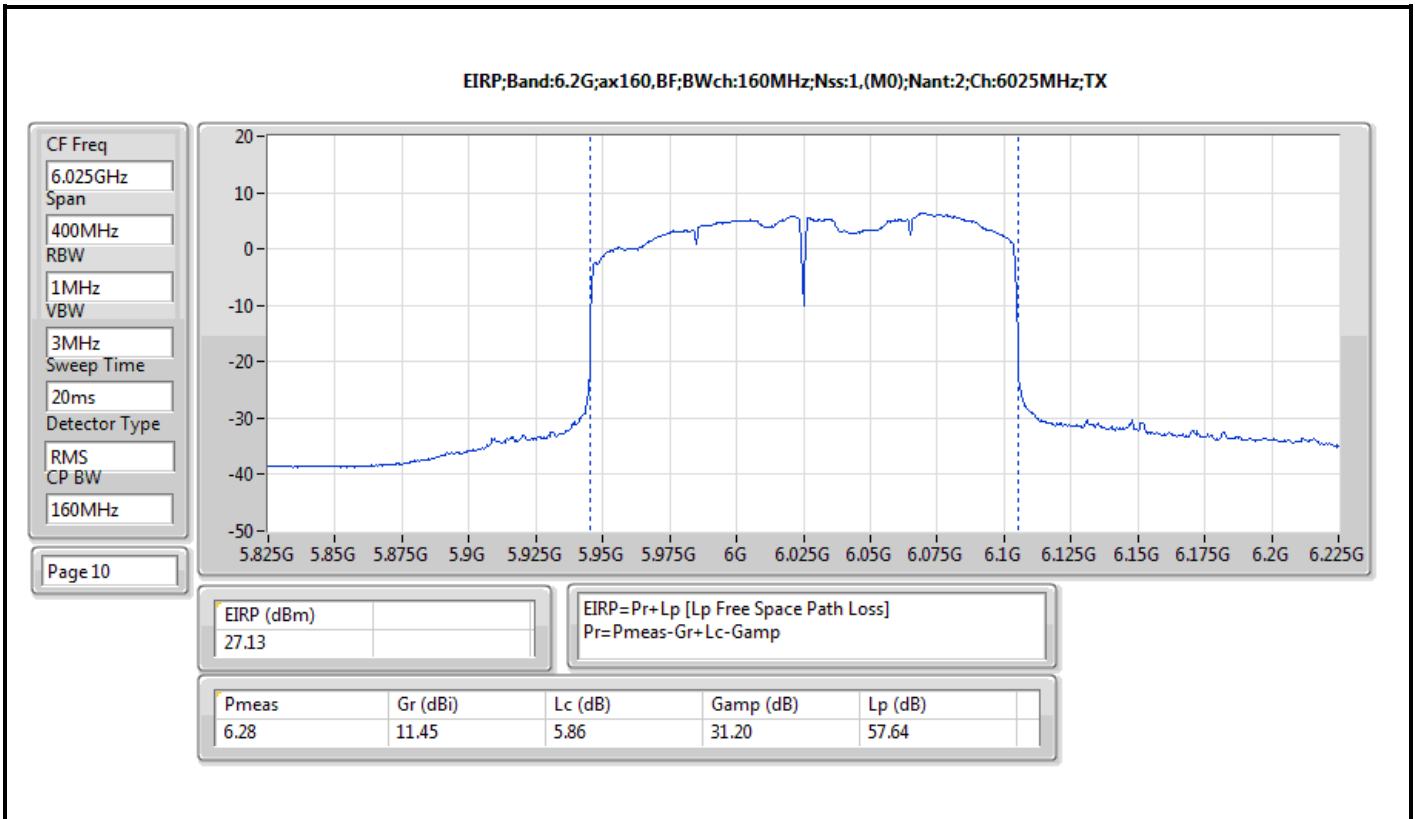


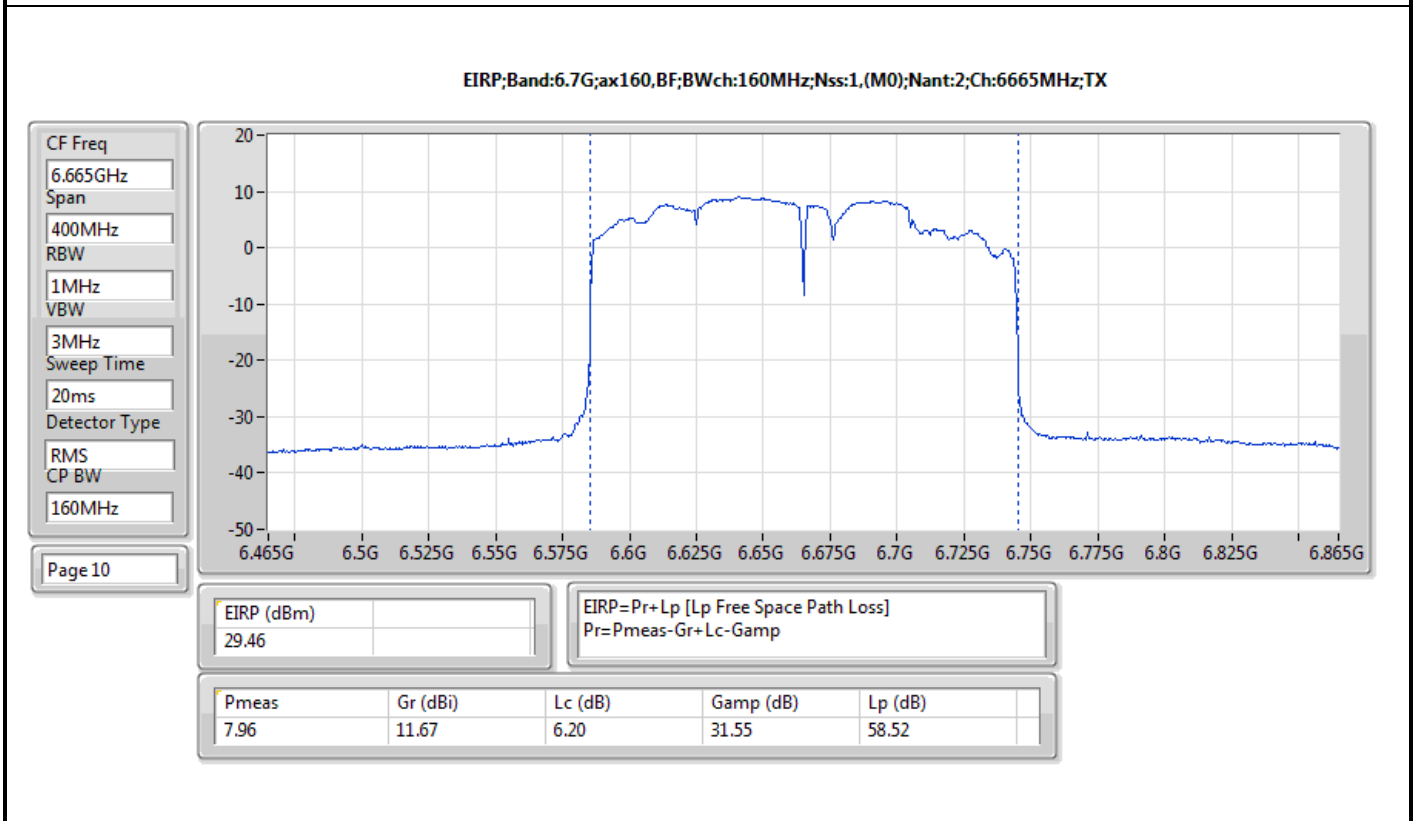
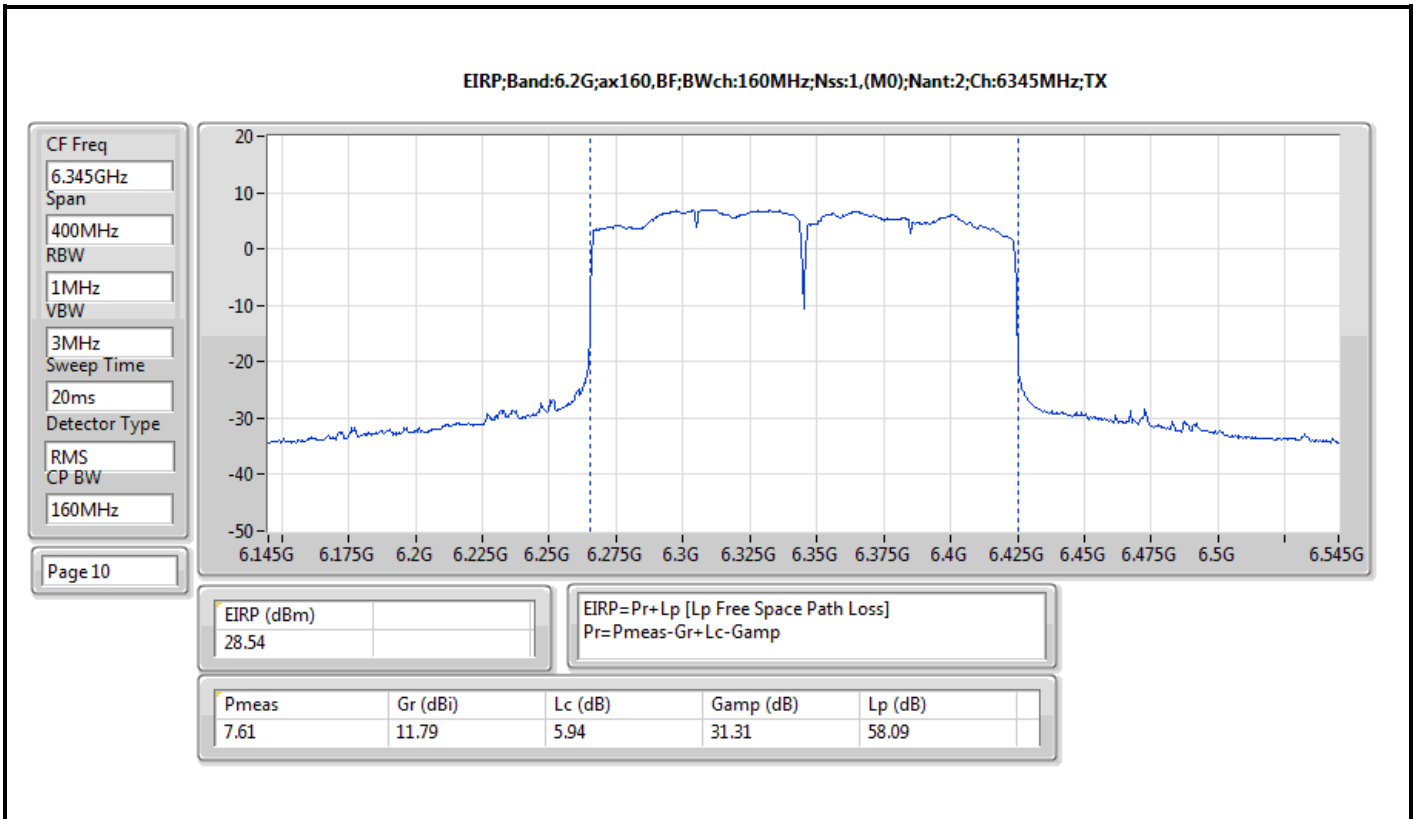














**Average Power-E.I.R.P. at any elevation angle above 30 degrees**

**Appendix B**

**Summary**

| Mode                               | Total Power (dBm) | Total Power (W) | EIRP [Phi 30°] (dBm) | EIRP [Phi 30°] (W) |
|------------------------------------|-------------------|-----------------|----------------------|--------------------|
| 5.925-6.425GHz                     | -                 | -               | -                    | -                  |
| 802.11ax HEW20-BF_Nss1,(MCS0)_2TX  | 23.76             | 0.23768         | 18.35                | 0.068391           |
| 802.11ax HEW40-BF_Nss1,(MCS0)_2TX  | 23.66             | 0.23227         | 18.25                | 0.066834           |
| 802.11ax HEW80-BF_Nss1,(MCS0)_2TX  | 23.62             | 0.23014         | 18.21                | 0.066222           |
| 802.11ax HEW160-BF_Nss1,(MCS0)_2TX | 23.58             | 0.22803         | 18.17                | 0.065615           |
| 6.525-6.875GHz                     | -                 | -               | -                    | -                  |
| 802.11ax HEW20-BF_Nss1,(MCS0)_2TX  | 22.60             | 0.18197         | 20.46                | 0.111173           |
| 802.11ax HEW40-BF_Nss1,(MCS0)_2TX  | 22.75             | 0.18836         | 20.61                | 0.115080           |
| 802.11ax HEW80-BF_Nss1,(MCS0)_2TX  | 22.68             | 0.18535         | 20.54                | 0.113240           |
| 802.11ax HEW160-BF_Nss1,(MCS0)_2TX | 22.62             | 0.18281         | 20.48                | 0.111686           |



**Average Power-E.I.R.P. at any elevation angle above 30 degrees**

**Appendix B**

**Result**

| Mode                               | Result | DG<br>(dBi) | Port 1<br>(dBm) | Port 2<br>(dBm) | Total Power<br>(dBm) | EIRP [Phi 30°]<br>(dBm) | EIRP [Phi 30°]<br>Limit<br>(dBm) |
|------------------------------------|--------|-------------|-----------------|-----------------|----------------------|-------------------------|----------------------------------|
| 802.11ax HEW20-BF_Nss1,(MCS0)_2TX  | -      | -           | -               | -               | -                    | -                       | -                                |
| 5955MHz                            | Pass   | 9.00/-5.41  | 20.48           | 21.00           | 23.76                | 18.35                   | 21.00                            |
| 6195MHz                            | Pass   | 9.00/-5.41  | 20.36           | 20.58           | 23.48                | 18.07                   | 21.00                            |
| 6415MHz                            | Pass   | 9.00/-5.41  | 20.04           | 20.54           | 23.31                | 17.90                   | 21.00                            |
| 6535MHz                            | Pass   | 9.00/-2.14  | 19.64           | 19.45           | 22.56                | 20.42                   | 21.00                            |
| 6695MHz                            | Pass   | 9.00/-2.14  | 19.48           | 19.49           | 22.50                | 20.36                   | 21.00                            |
| 6855MHz                            | Pass   | 9.00/-2.14  | 19.59           | 19.58           | 22.60                | 20.46                   | 21.00                            |
| 802.11ax HEW40-BF_Nss1,(MCS0)_2TX  | -      | -           | -               | -               | -                    | -                       | -                                |
| 5965MHz                            | Pass   | 9.00/-5.41  | 20.57           | 20.69           | 23.64                | 18.23                   | 21.00                            |
| 6205MHz                            | Pass   | 9.00/-5.41  | 20.29           | 20.71           | 23.52                | 18.11                   | 21.00                            |
| 6405MHz                            | Pass   | 9.00/-5.41  | 20.50           | 20.79           | 23.66                | 18.25                   | 21.00                            |
| 6565MHz                            | Pass   | 9.00/-2.14  | 19.20           | 19.94           | 22.60                | 20.46                   | 21.00                            |
| 6685MHz                            | Pass   | 9.00/-2.14  | 19.71           | 19.76           | 22.75                | 20.61                   | 21.00                            |
| 6845MHz                            | Pass   | 9.00/-2.14  | 18.67           | 18.66           | 21.68                | 19.54                   | 21.00                            |
| 802.11ax HEW80-BF_Nss1,(MCS0)_2TX  | -      | -           | -               | -               | -                    | -                       | -                                |
| 5985MHz                            | Pass   | 9.00/-5.41  | 20.23           | 20.86           | 23.57                | 18.16                   | 21.00                            |
| 6225MHz                            | Pass   | 9.00/-5.41  | 20.52           | 20.69           | 23.62                | 18.21                   | 21.00                            |
| 6385MHz                            | Pass   | 9.00/-5.41  | 20.34           | 20.68           | 23.52                | 18.11                   | 21.00                            |
| 6625MHz                            | Pass   | 9.00/-2.14  | 18.63           | 18.71           | 21.68                | 19.54                   | 21.00                            |
| 6705MHz                            | Pass   | 9.00/-2.14  | 19.72           | 19.61           | 22.68                | 20.54                   | 21.00                            |
| 6785MHz                            | Pass   | 9.00/-2.14  | 19.56           | 19.36           | 22.47                | 20.33                   | 21.00                            |
| 802.11ax HEW160-BF_Nss1,(MCS0)_2TX | -      | -           | -               | -               | -                    | -                       | -                                |
| 6025MHz                            | Pass   | 9.00/-5.41  | 20.21           | 20.63           | 23.44                | 18.03                   | 21.00                            |
| 6185MHz                            | Pass   | 9.00/-5.41  | 20.42           | 20.53           | 23.49                | 18.08                   | 21.00                            |
| 6345MHz                            | Pass   | 9.00/-5.41  | 20.52           | 20.62           | 23.58                | 18.17                   | 21.00                            |
| 6665MHz                            | Pass   | 9.00/-2.14  | 19.63           | 19.59           | 22.62                | 20.48                   | 21.00                            |

DG = Directional Gain; Port X = Port X output power

## Summary

| Mode                            | Radiated EIRP PSD<br>(dBm/RBW) |
|---------------------------------|--------------------------------|
| 5.925-6.425GHz                  | -                              |
| 802.11ax HEW20_Nss1,(MCS0)_1TX  | 15.84                          |
| 802.11ax HEW40_Nss1,(MCS0)_1TX  | 13.39                          |
| 802.11ax HEW80_Nss1,(MCS0)_1TX  | 10.33                          |
| 802.11ax HEW160_Nss1,(MCS0)_1TX | 7.01                           |
| 6.525-6.875GHz                  | -                              |
| 802.11ax HEW20_Nss1,(MCS0)_1TX  | 15.46                          |
| 802.11ax HEW40_Nss1,(MCS0)_1TX  | 12.47                          |
| 802.11ax HEW80_Nss1,(MCS0)_1TX  | 10.14                          |
| 802.11ax HEW160_Nss1,(MCS0)_1TX | 6.10                           |

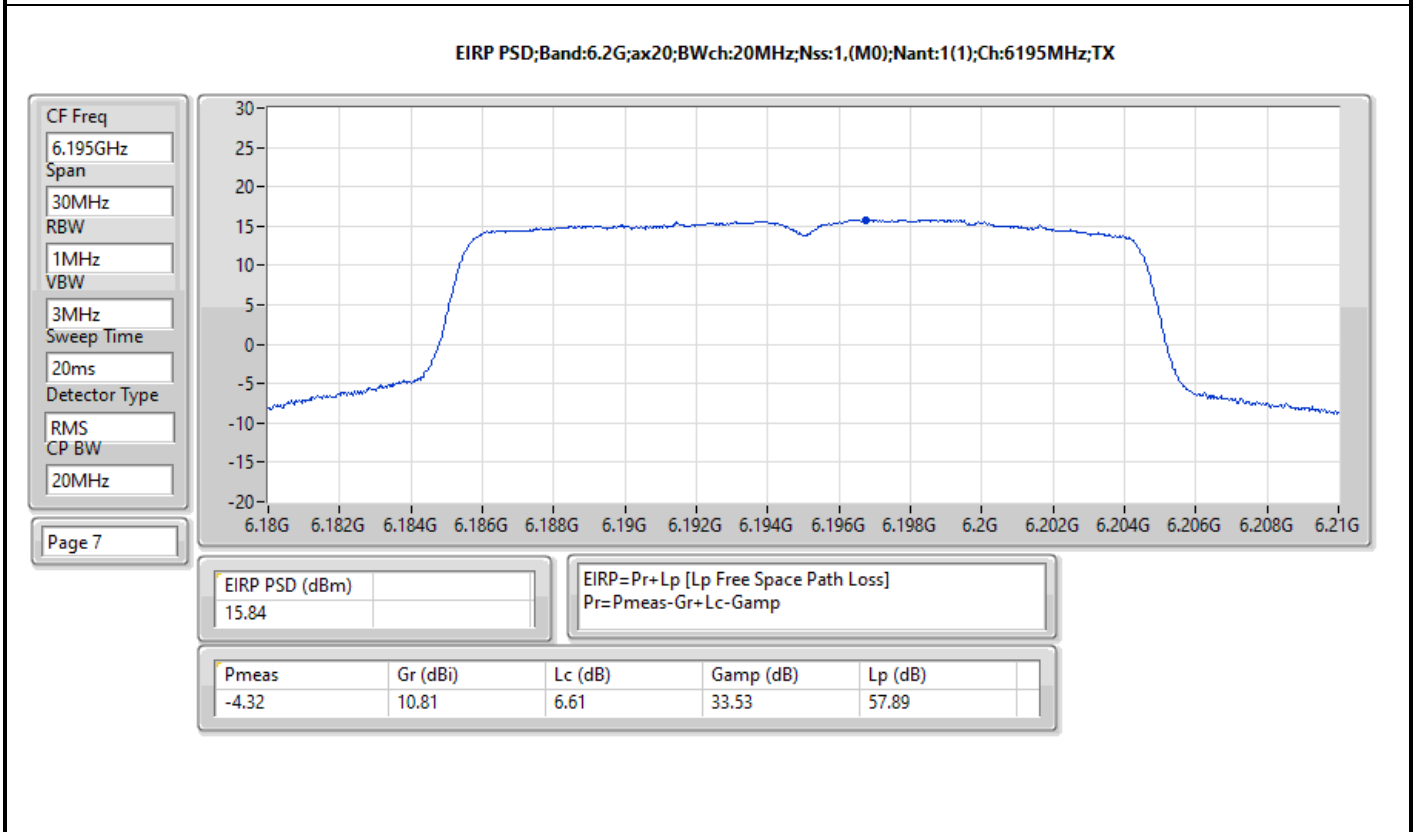
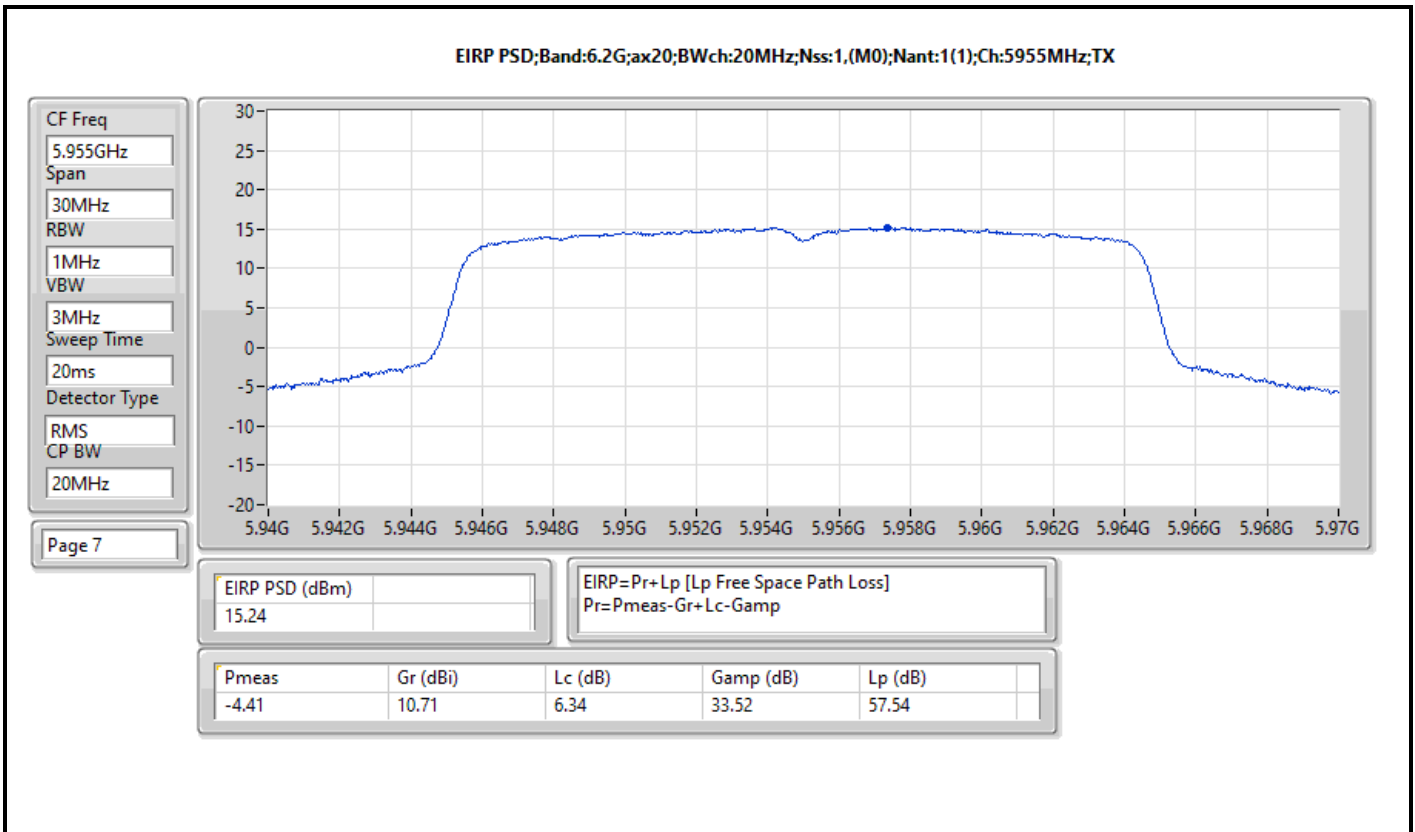
RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;

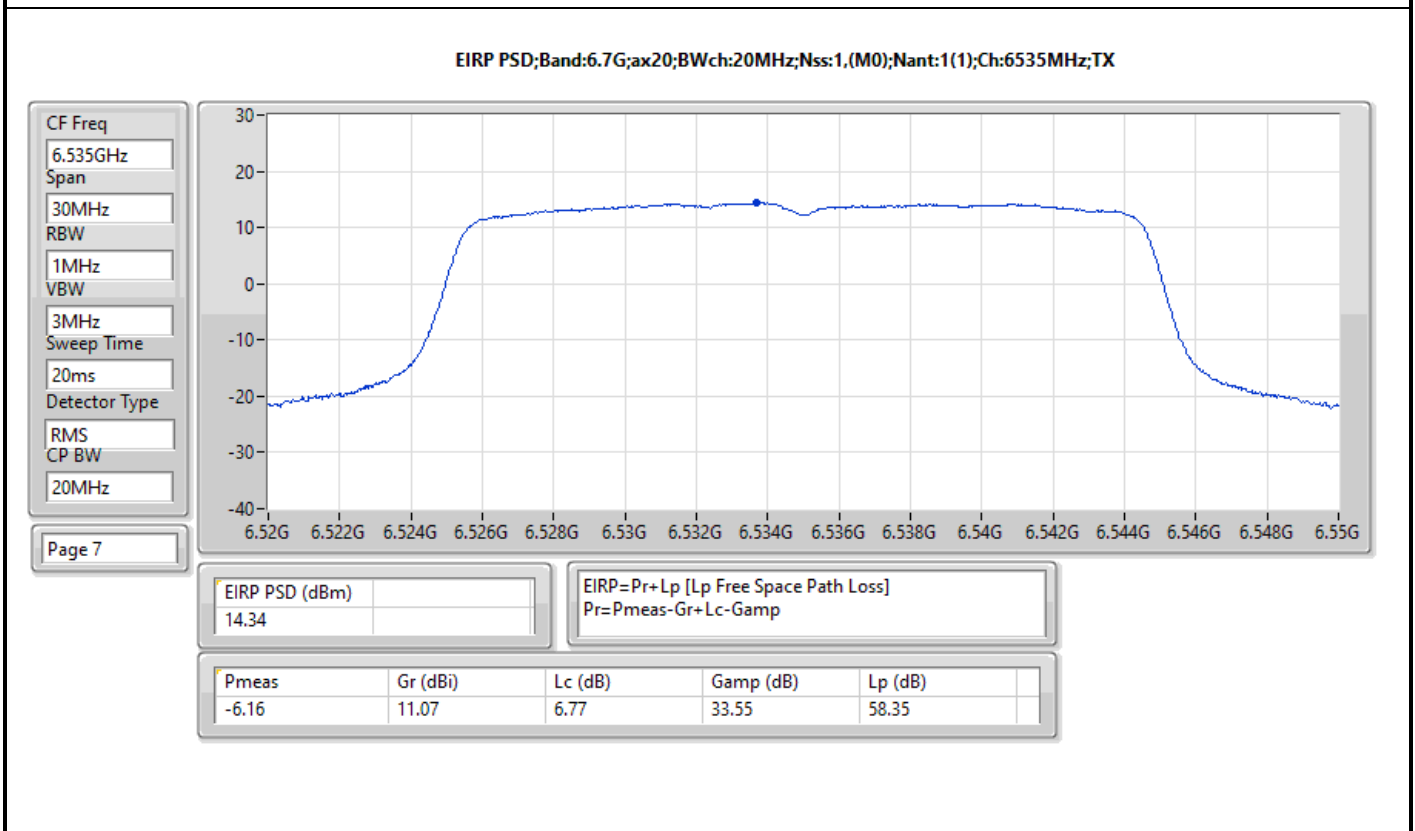
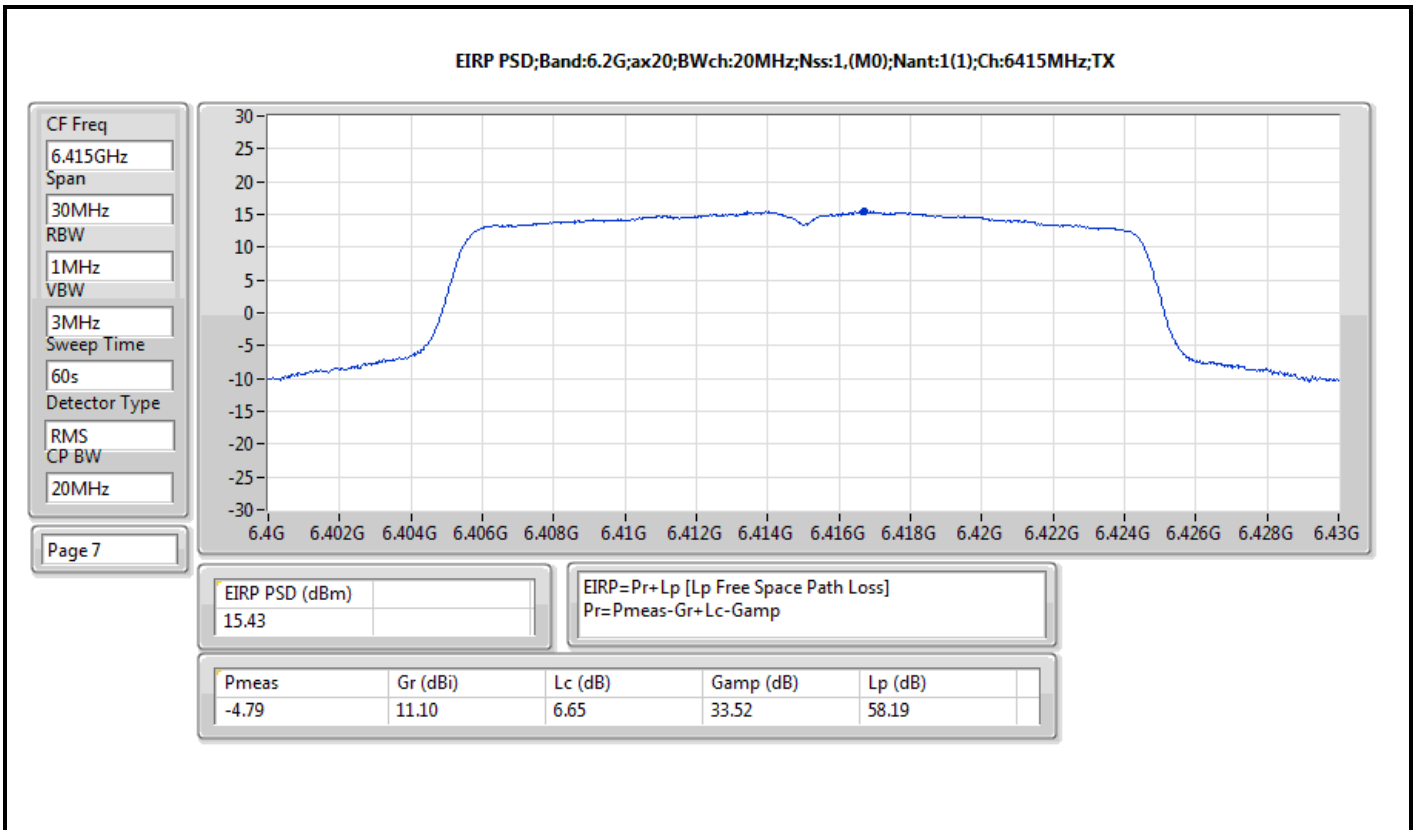


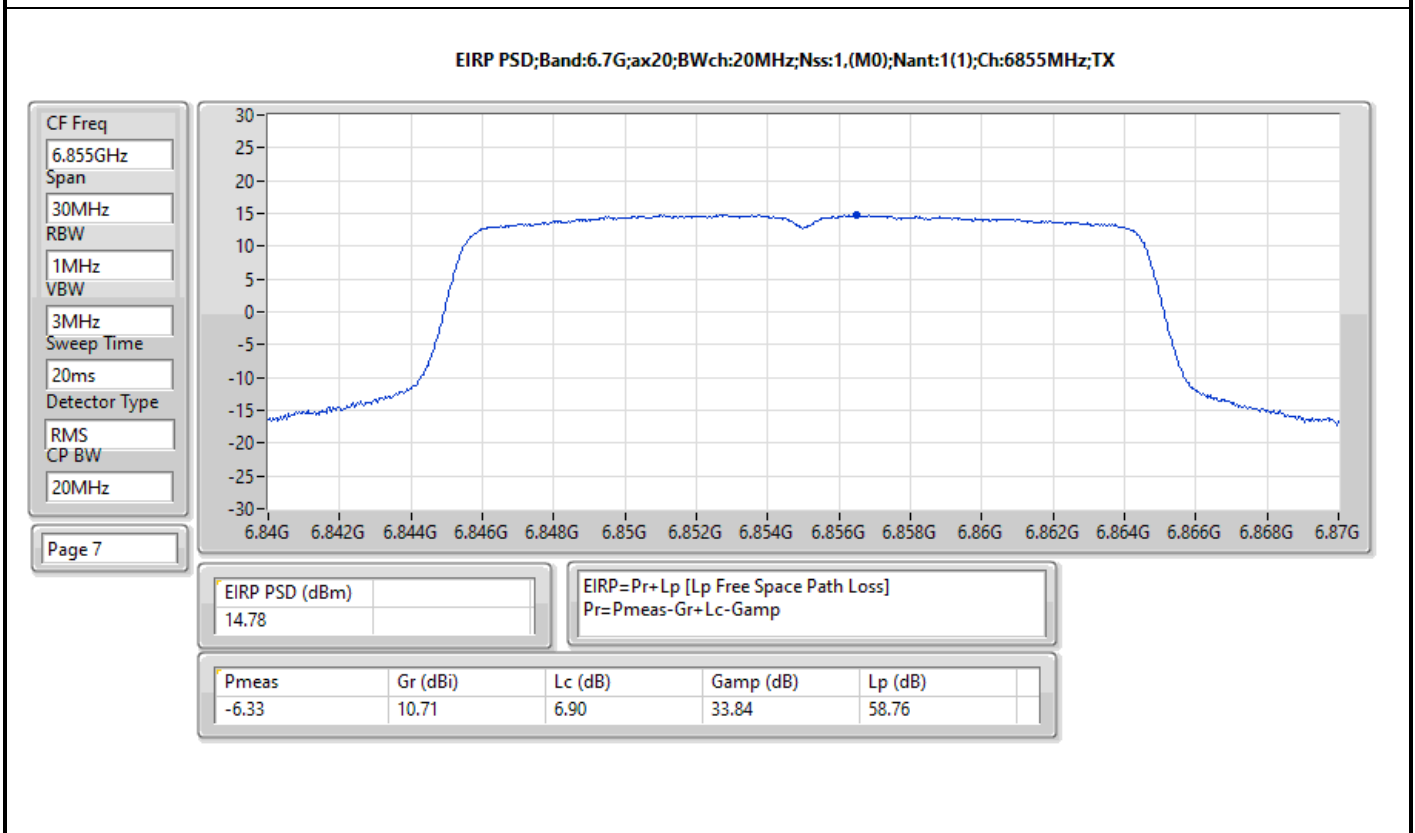
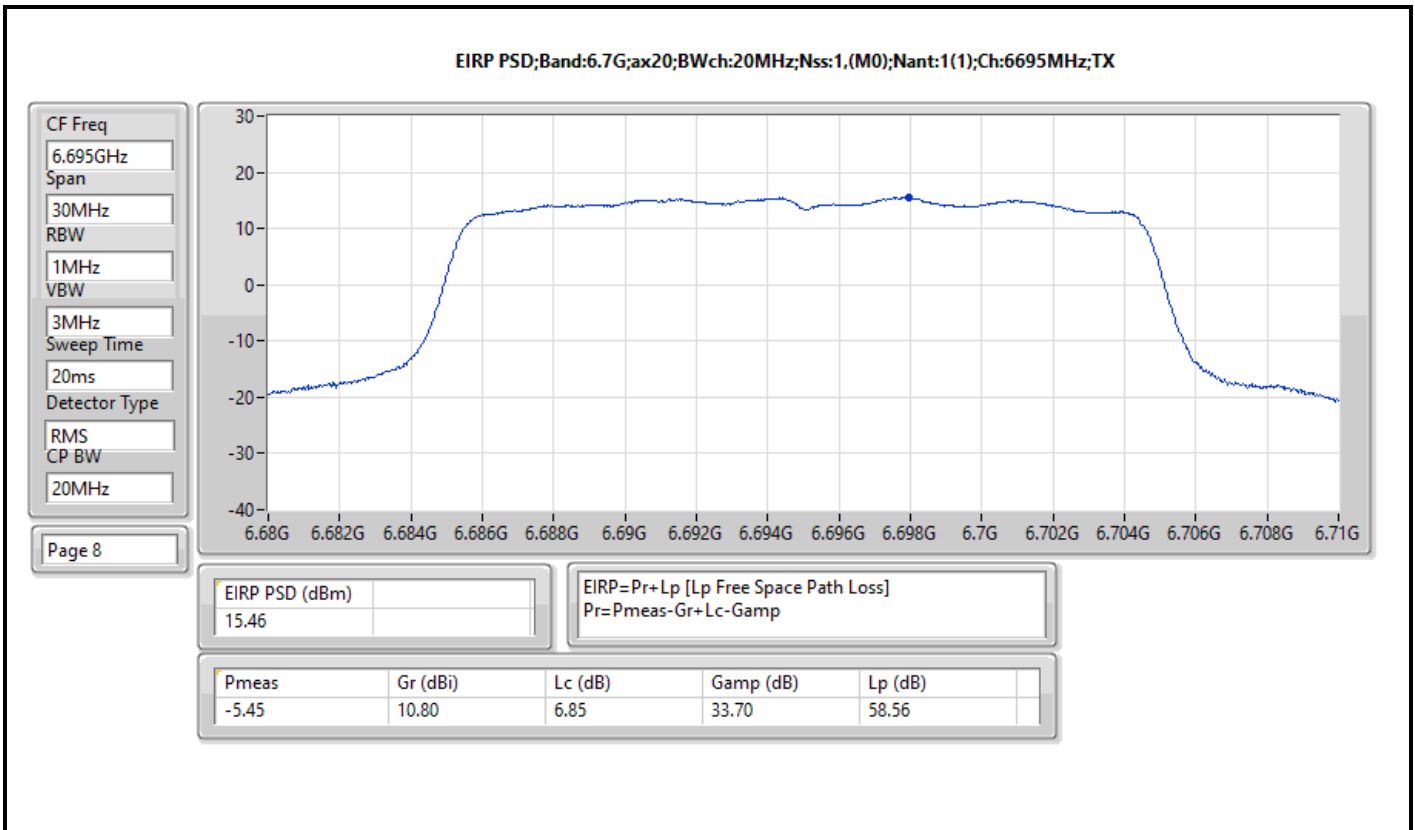
Result

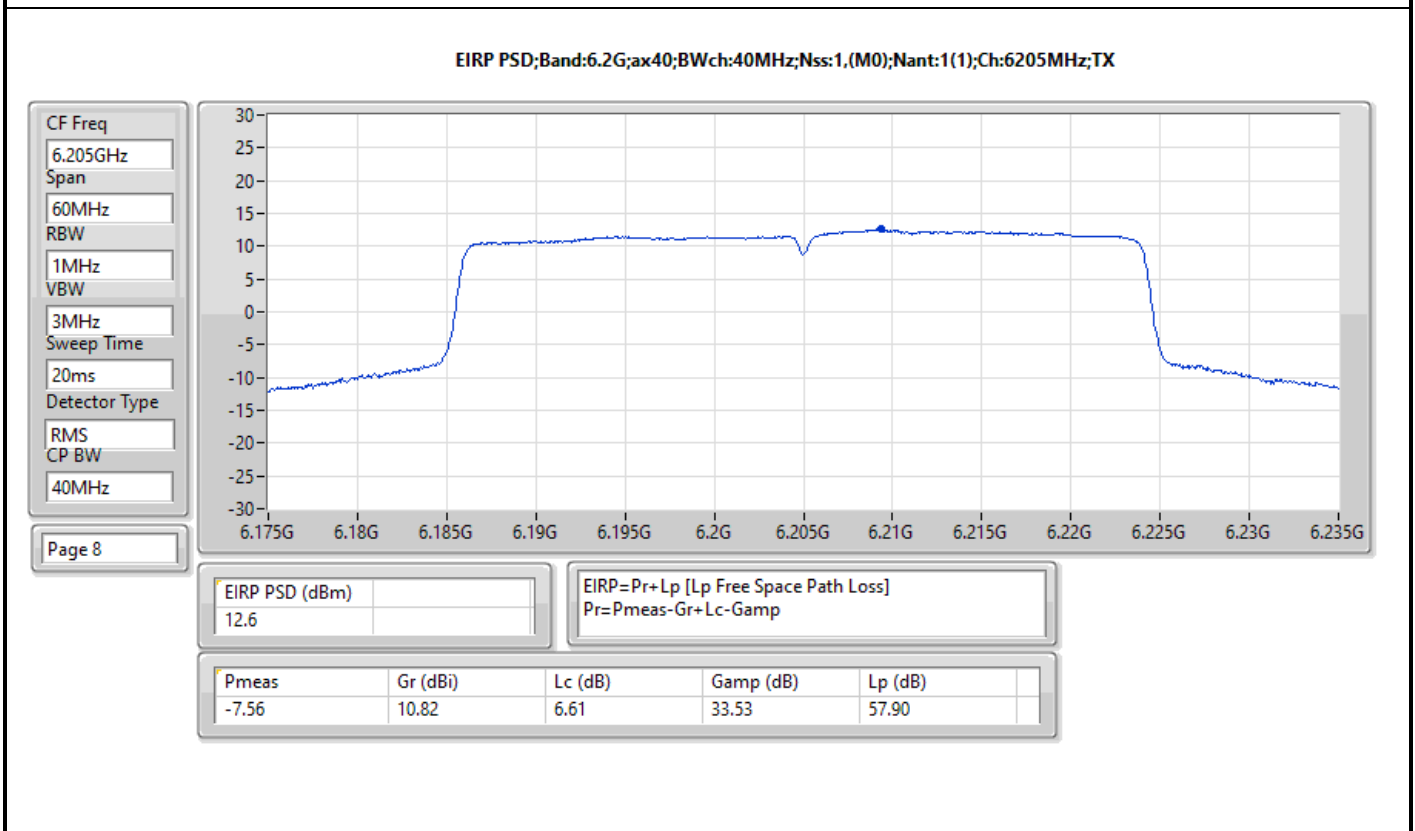
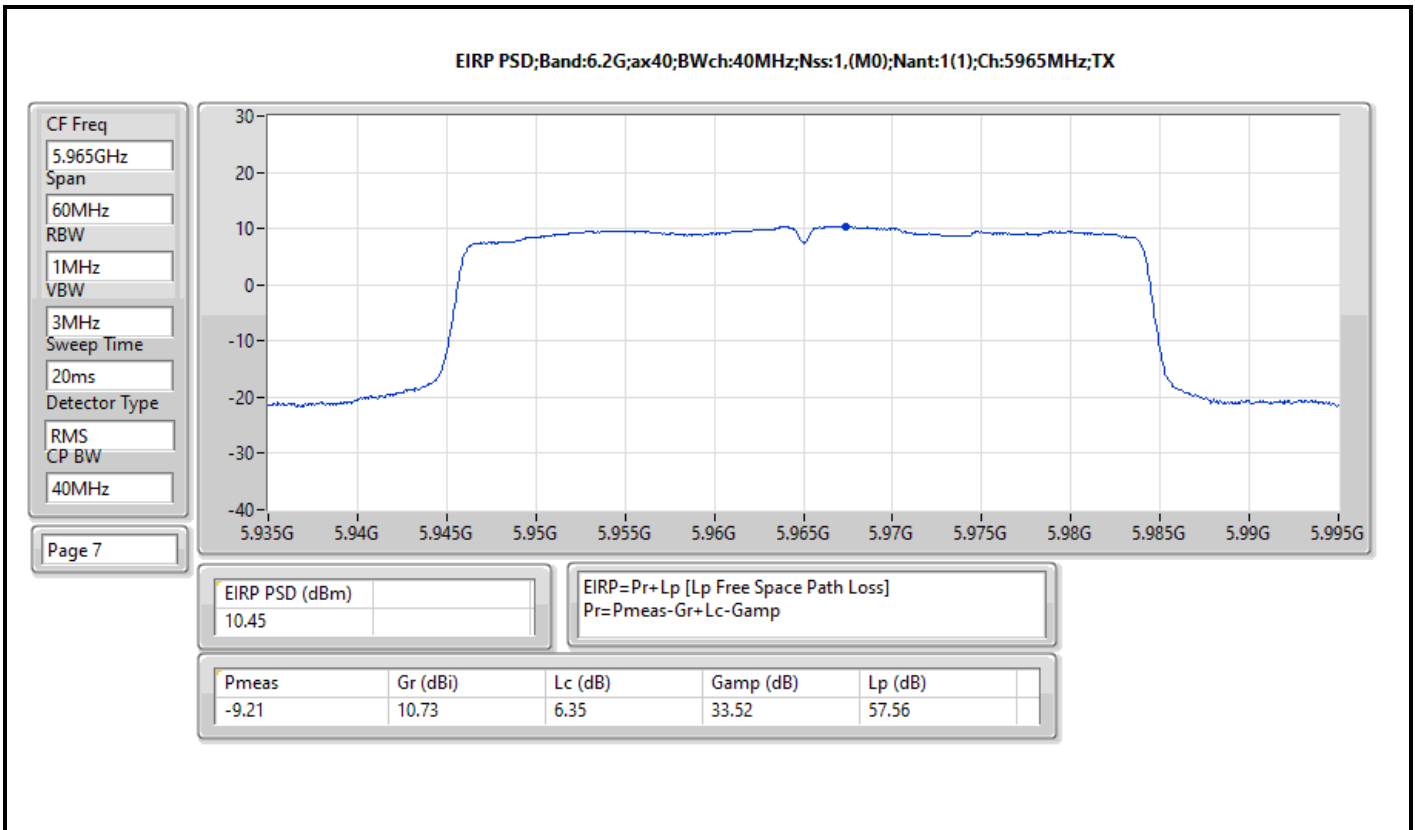
| Mode                            | Result | Radiated EIRP PSD (dBm/RBW) | Radiated EIRP PSD Limit (dBm/RBW) |
|---------------------------------|--------|-----------------------------|-----------------------------------|
| 802.11ax HEW20_Nss1,(MCS0)_1TX  | -      | -                           | -                                 |
| 5955MHz                         | Pass   | 15.24                       | 23.00                             |
| 6195MHz                         | Pass   | 15.84                       | 23.00                             |
| 6415MHz                         | Pass   | 15.43                       | 23.00                             |
| 6535MHz                         | Pass   | 14.34                       | 23.00                             |
| 6695MHz                         | Pass   | 15.46                       | 23.00                             |
| 6855MHz                         | Pass   | 14.78                       | 23.00                             |
| 802.11ax HEW40_Nss1,(MCS0)_1TX  | -      | -                           | -                                 |
| 5965MHz                         | Pass   | 10.45                       | 23.00                             |
| 6205MHz                         | Pass   | 12.60                       | 23.00                             |
| 6405MHz                         | Pass   | 13.39                       | 23.00                             |
| 6565MHz                         | Pass   | 12.02                       | 23.00                             |
| 6685MHz                         | Pass   | 12.25                       | 23.00                             |
| 6845MHz                         | Pass   | 12.47                       | 23.00                             |
| 802.11ax HEW80_Nss1,(MCS0)_1TX  | -      | -                           | -                                 |
| 5985MHz                         | Pass   | 7.02                        | 23.00                             |
| 6225MHz                         | Pass   | 10.33                       | 23.00                             |
| 6385MHz                         | Pass   | 9.34                        | 23.00                             |
| 6625MHz                         | Pass   | 8.49                        | 23.00                             |
| 6705MHz                         | Pass   | 10.14                       | 23.00                             |
| 6785MHz                         | Pass   | 9.38                        | 23.00                             |
| 802.11ax HEW160_Nss1,(MCS0)_1TX | -      | -                           | -                                 |
| 6025MHz                         | Pass   | 7.01                        | 23.00                             |
| 6185MHz                         | Pass   | 6.96                        | 23.00                             |
| 6345MHz                         | Pass   | 7.00                        | 23.00                             |
| 6665MHz                         | Pass   | 6.10                        | 23.00                             |

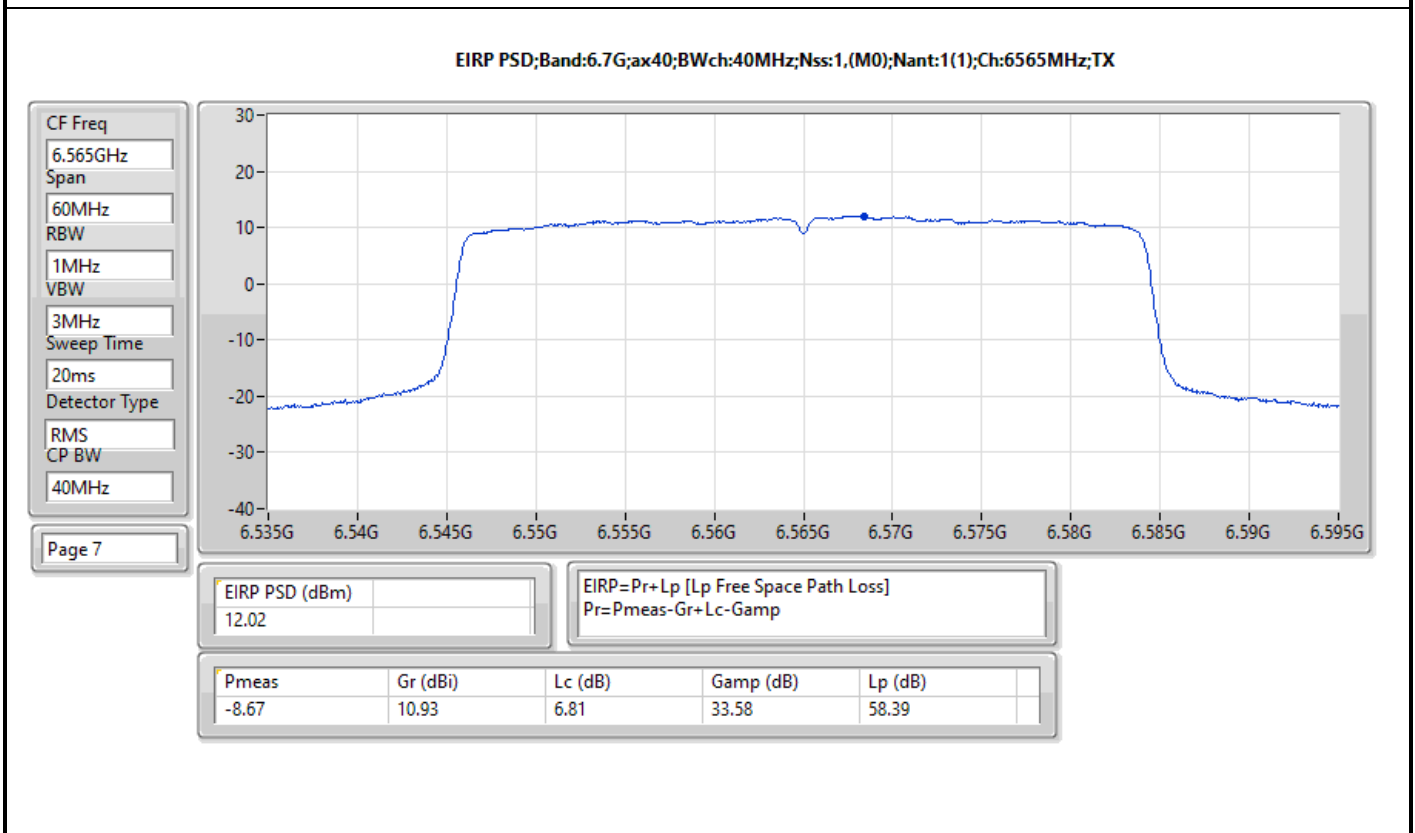
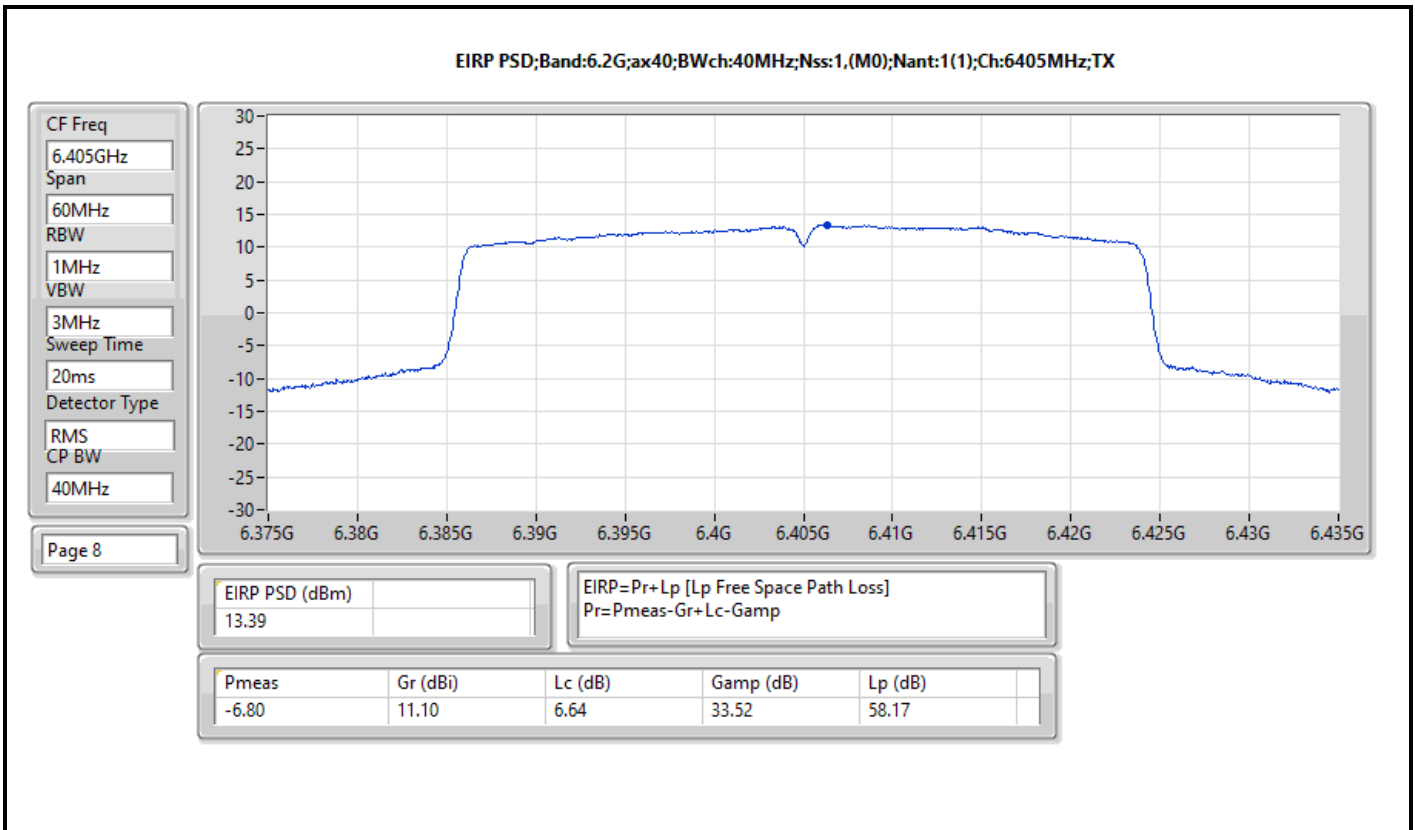
DG = Directional Gain; RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;  
 PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

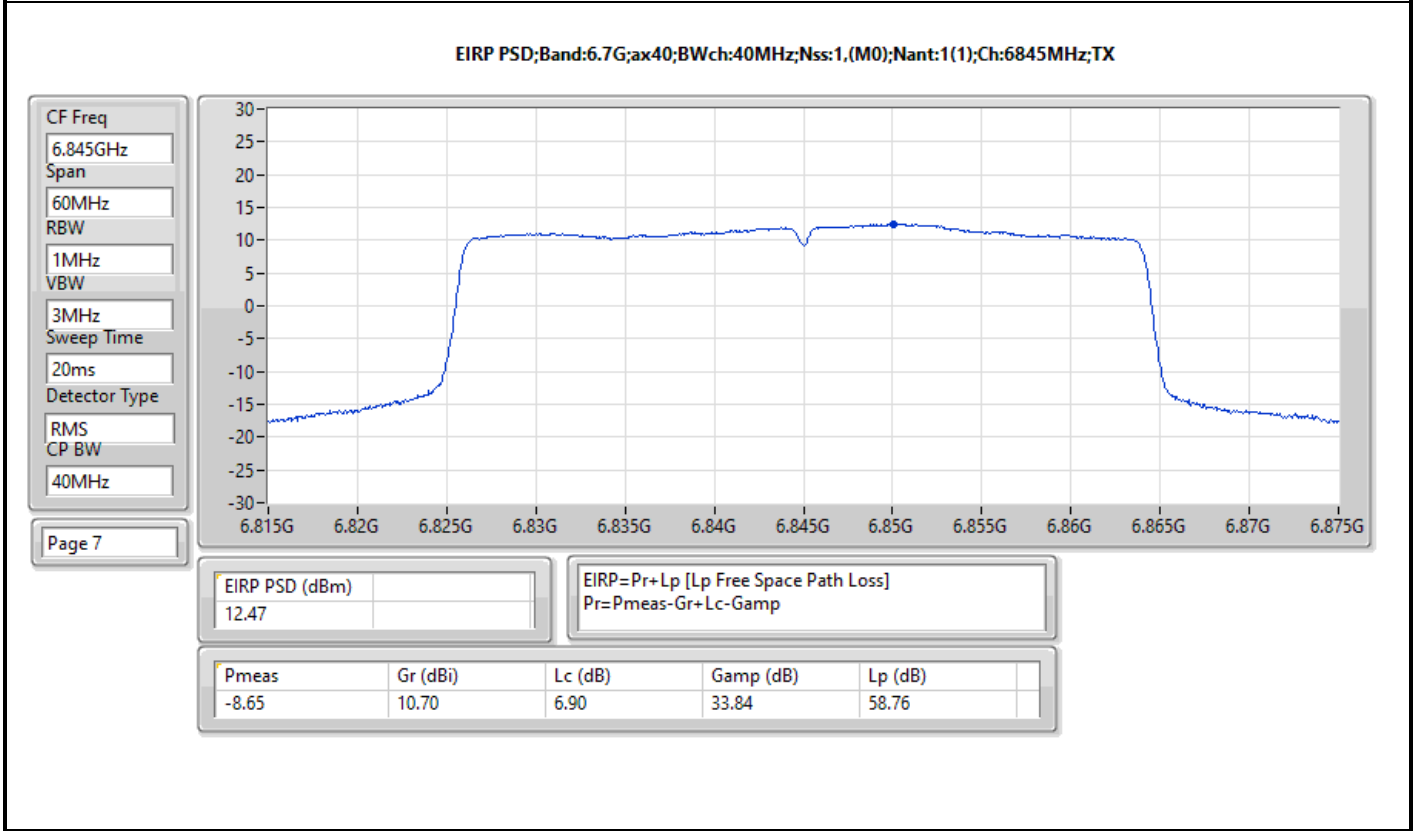
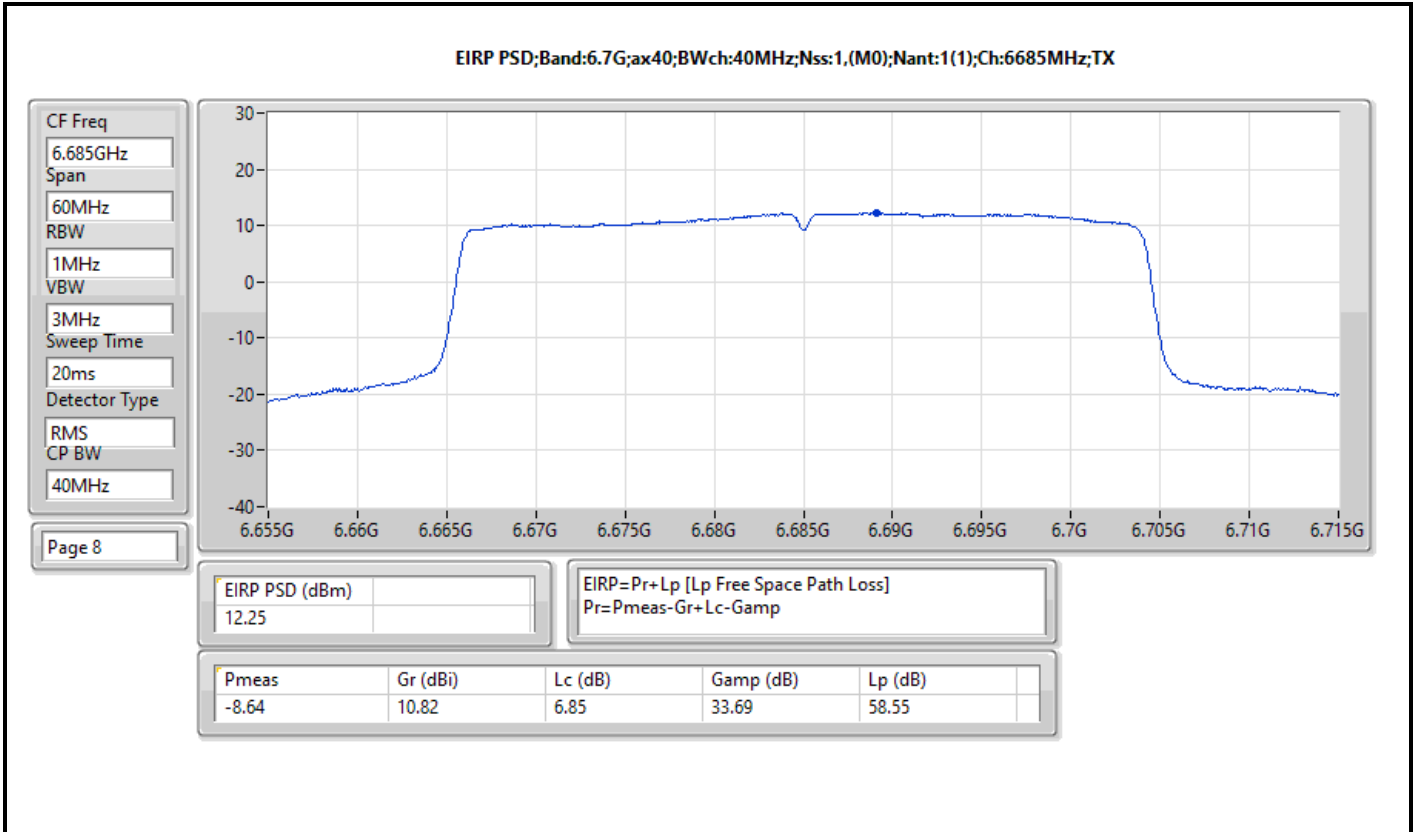


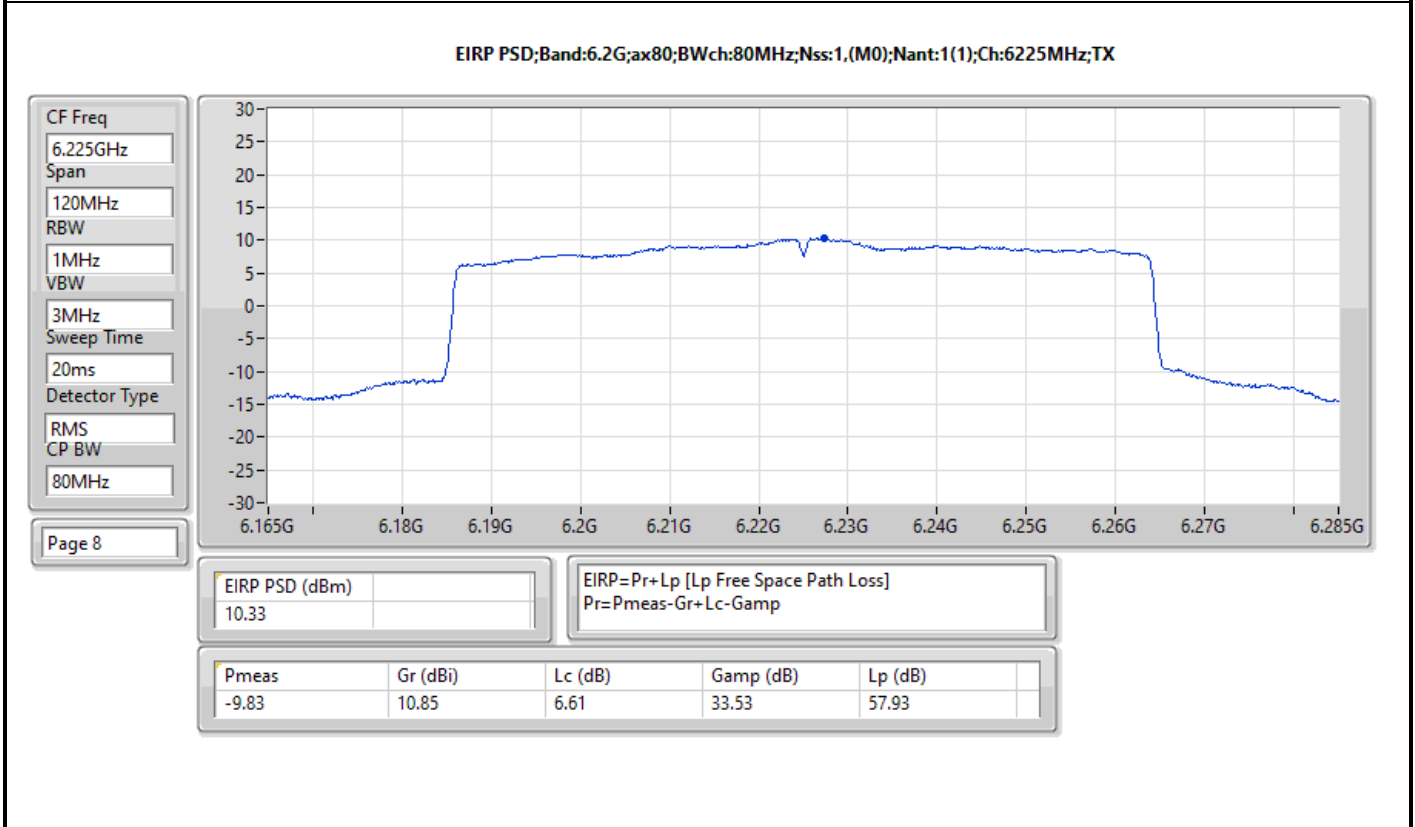
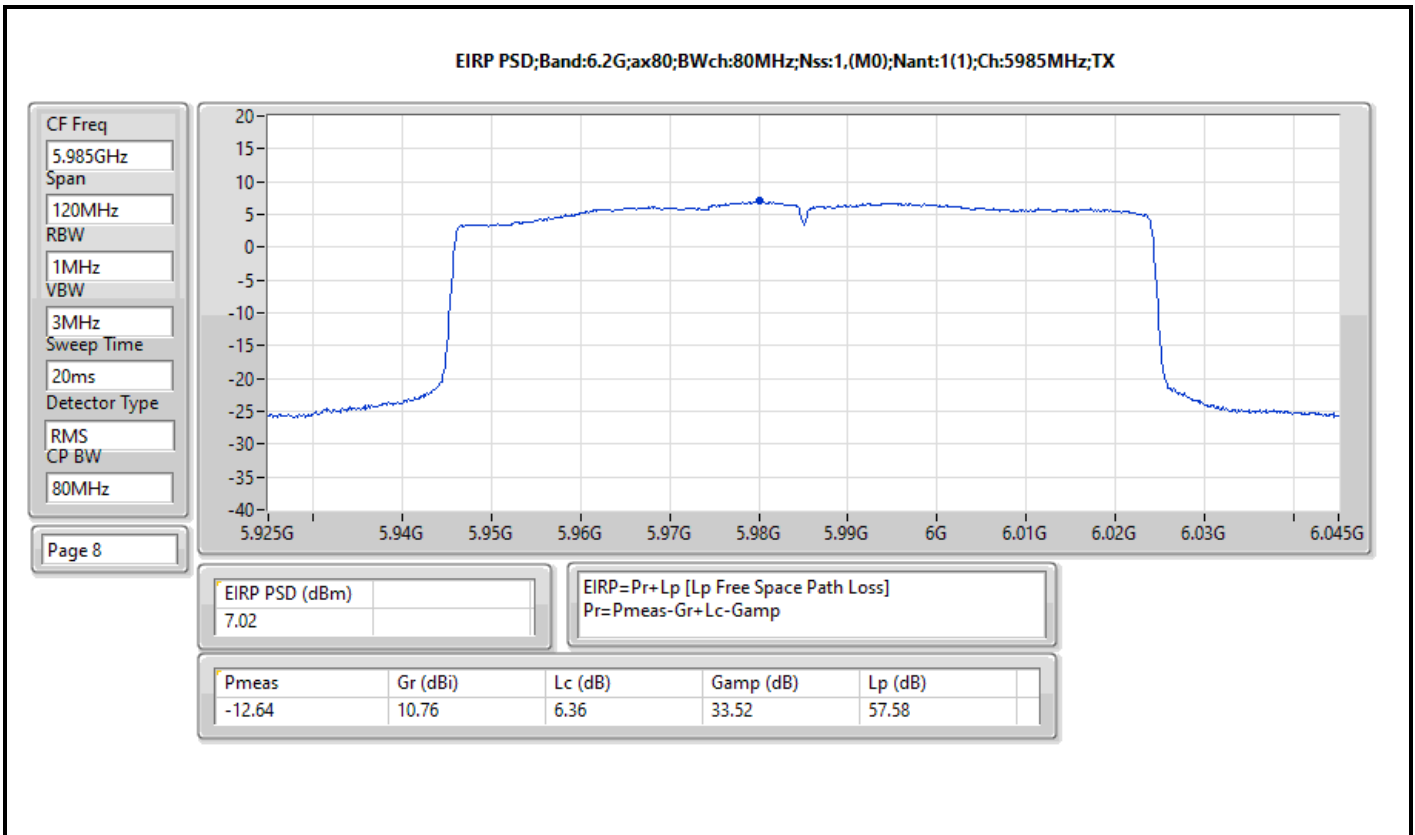




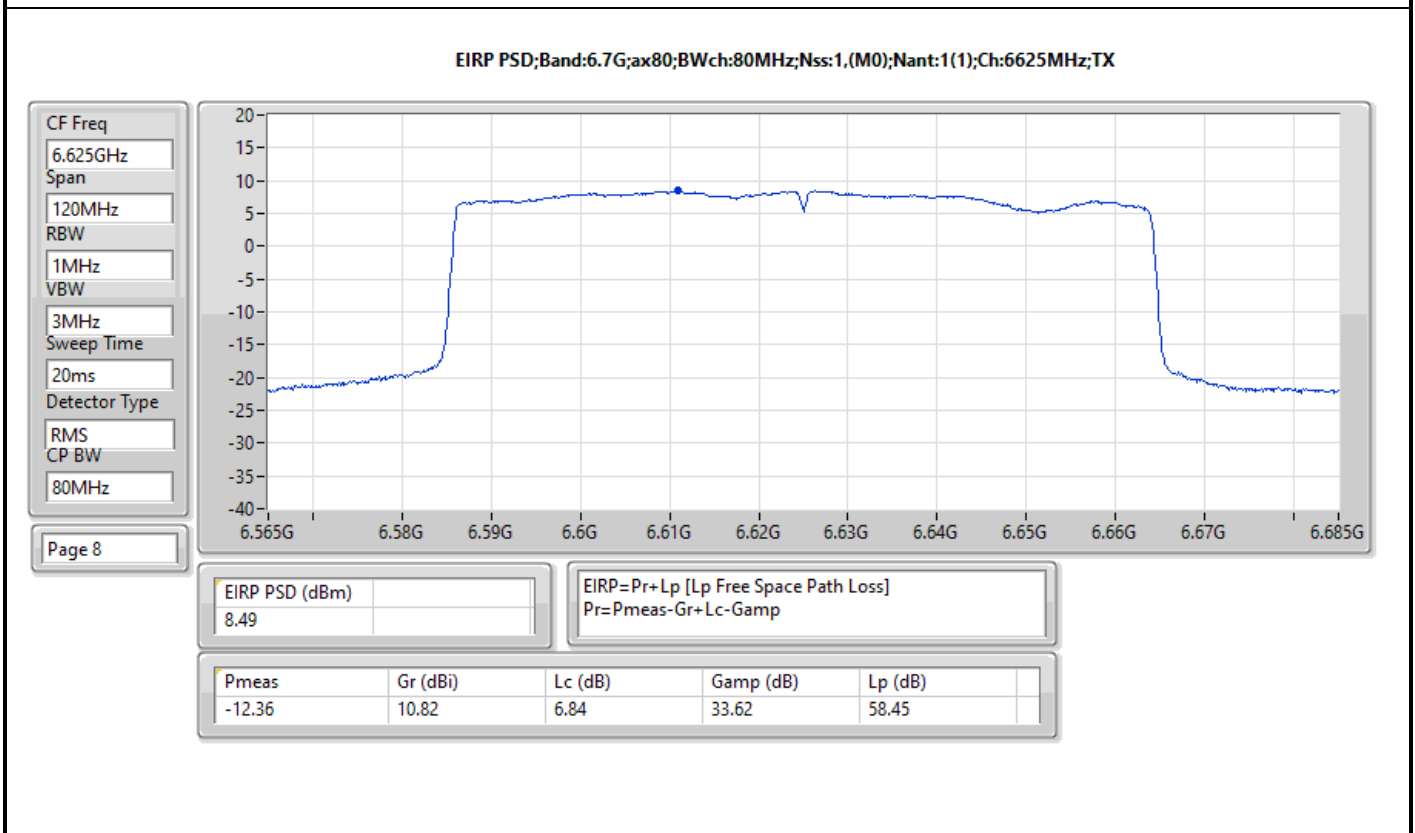
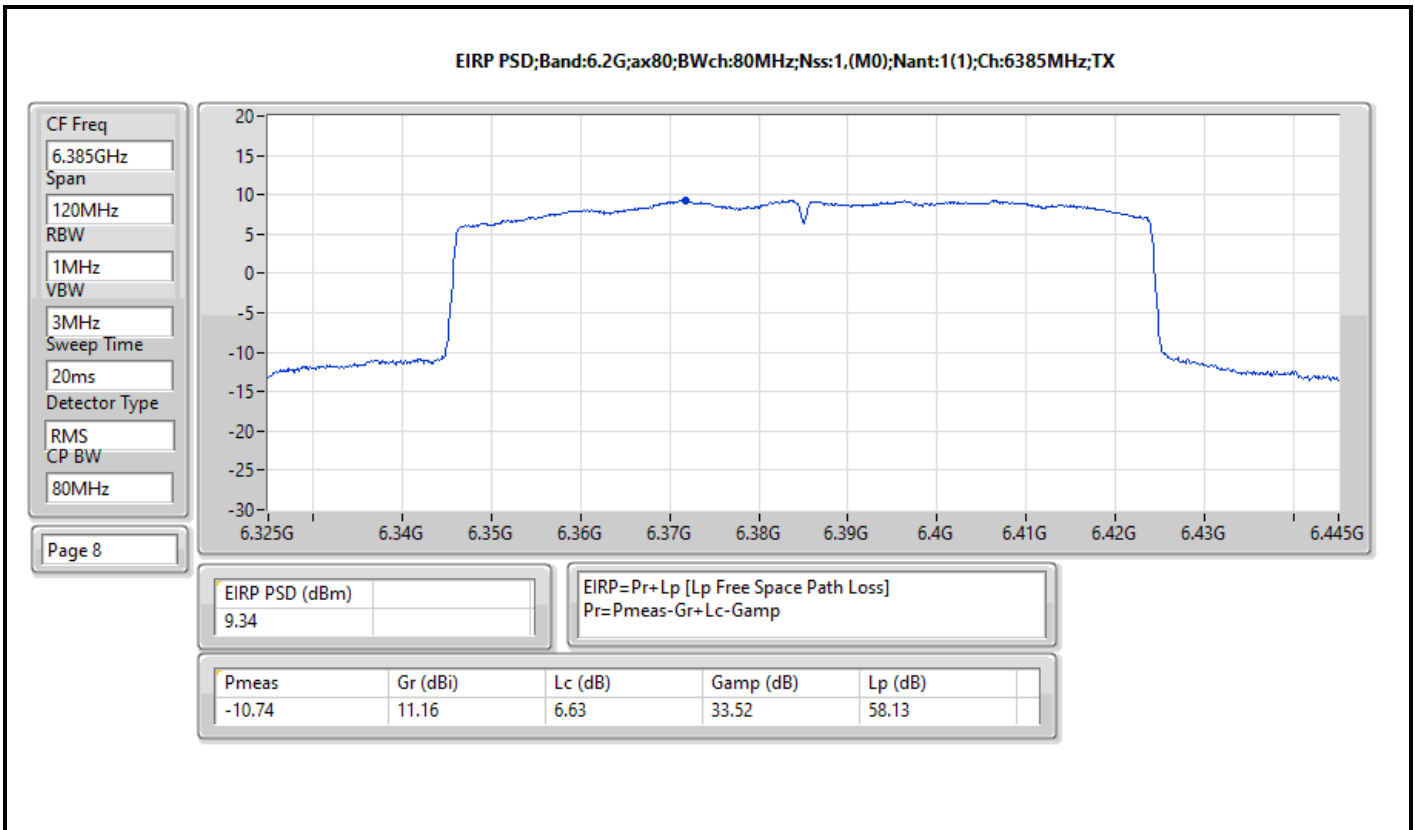


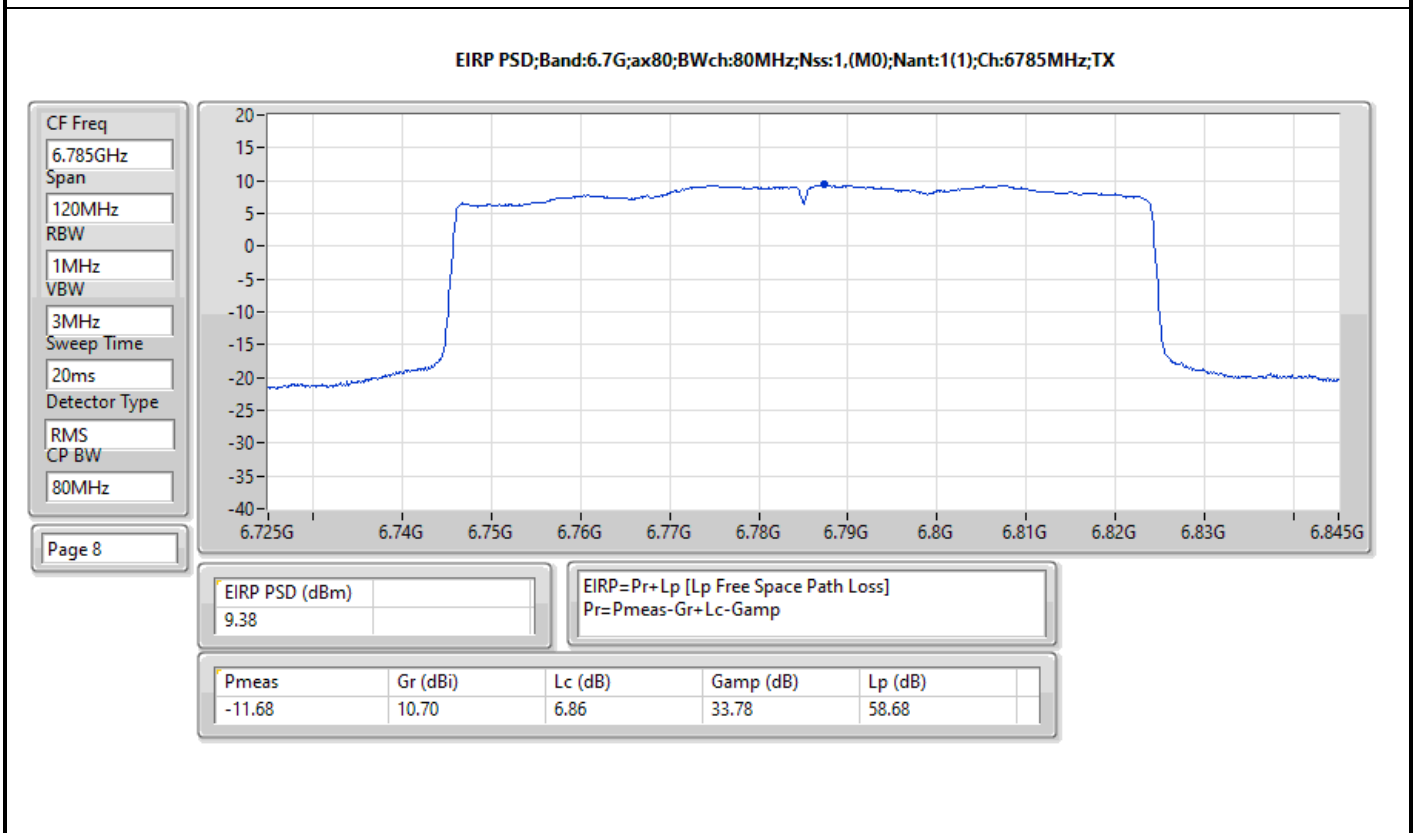
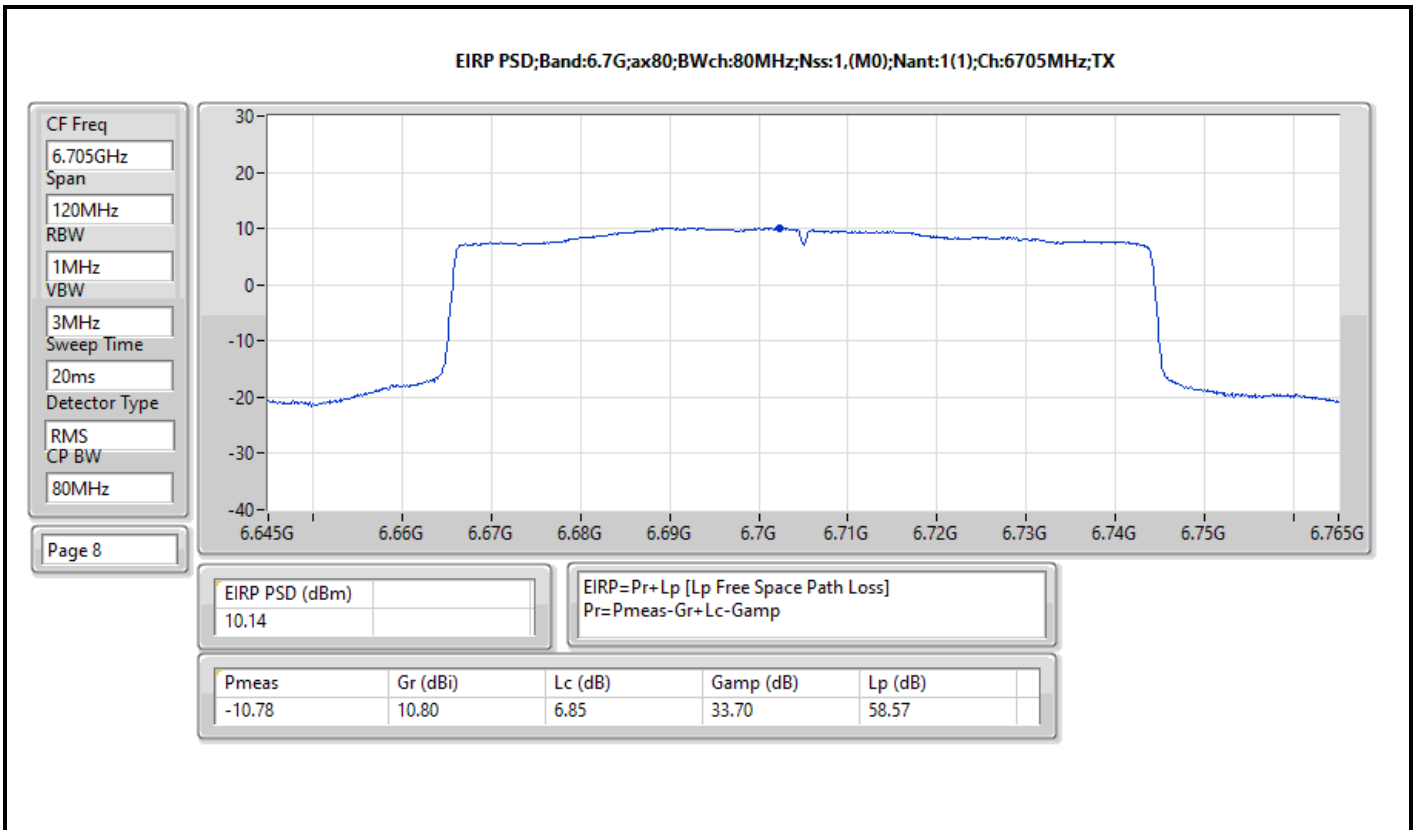


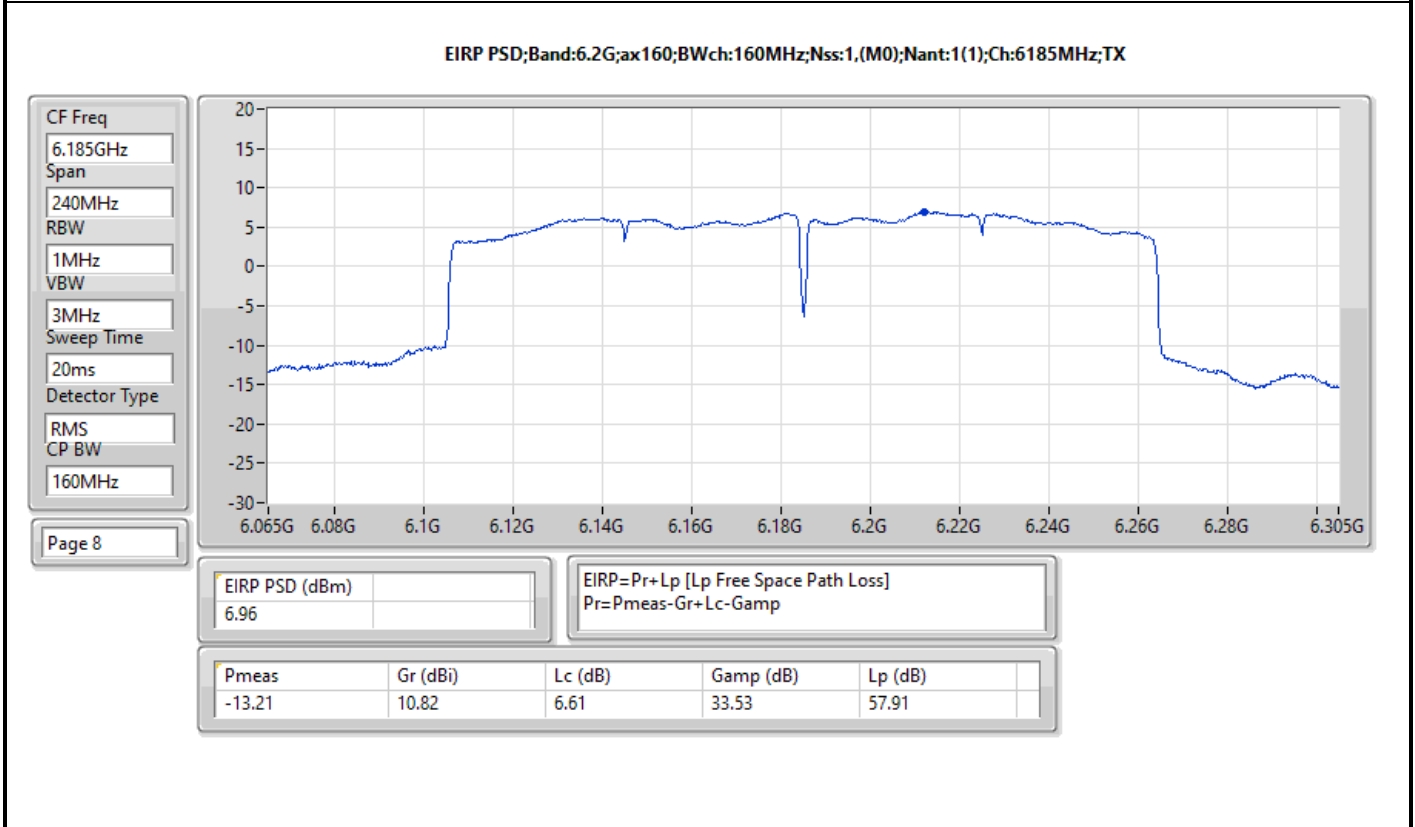
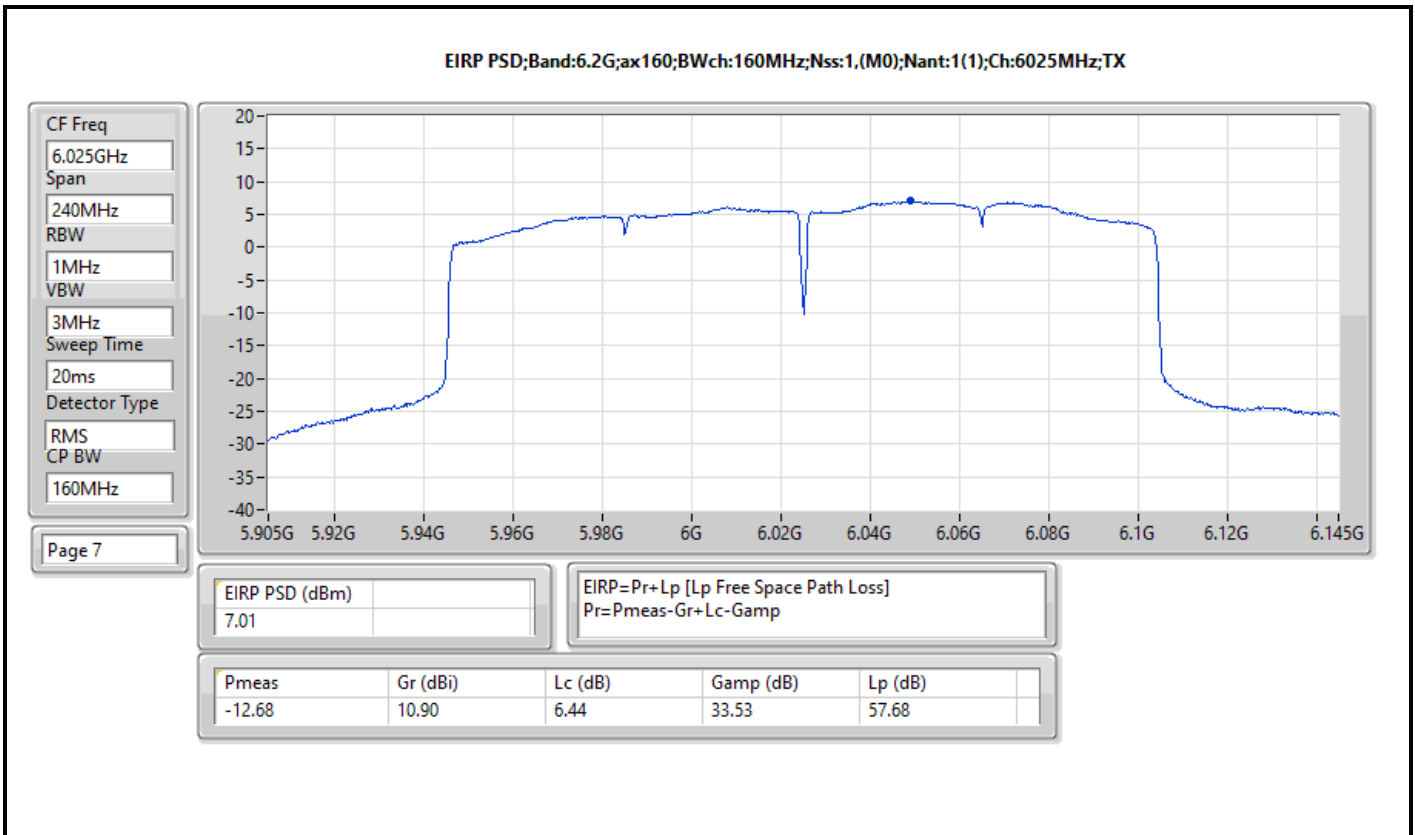


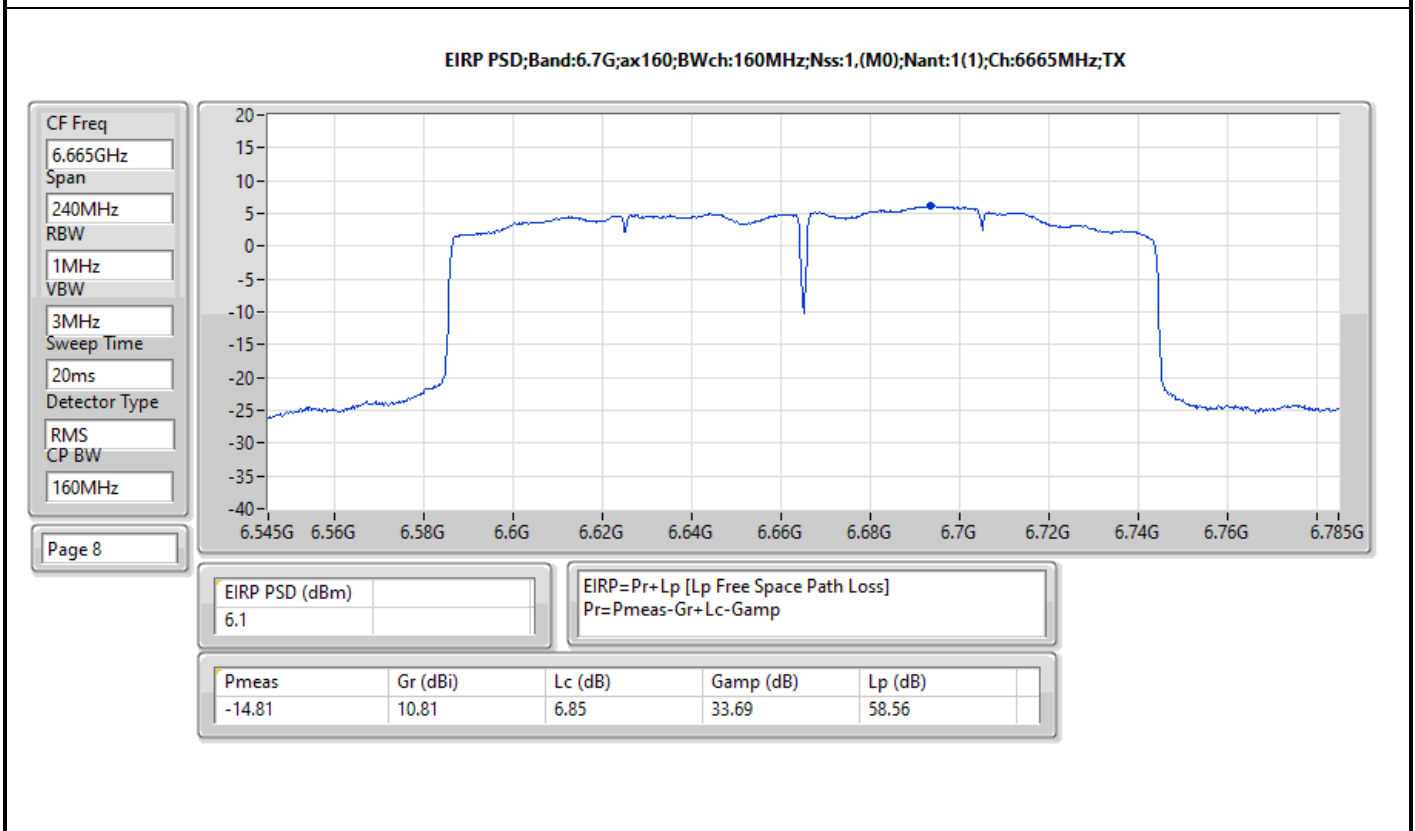
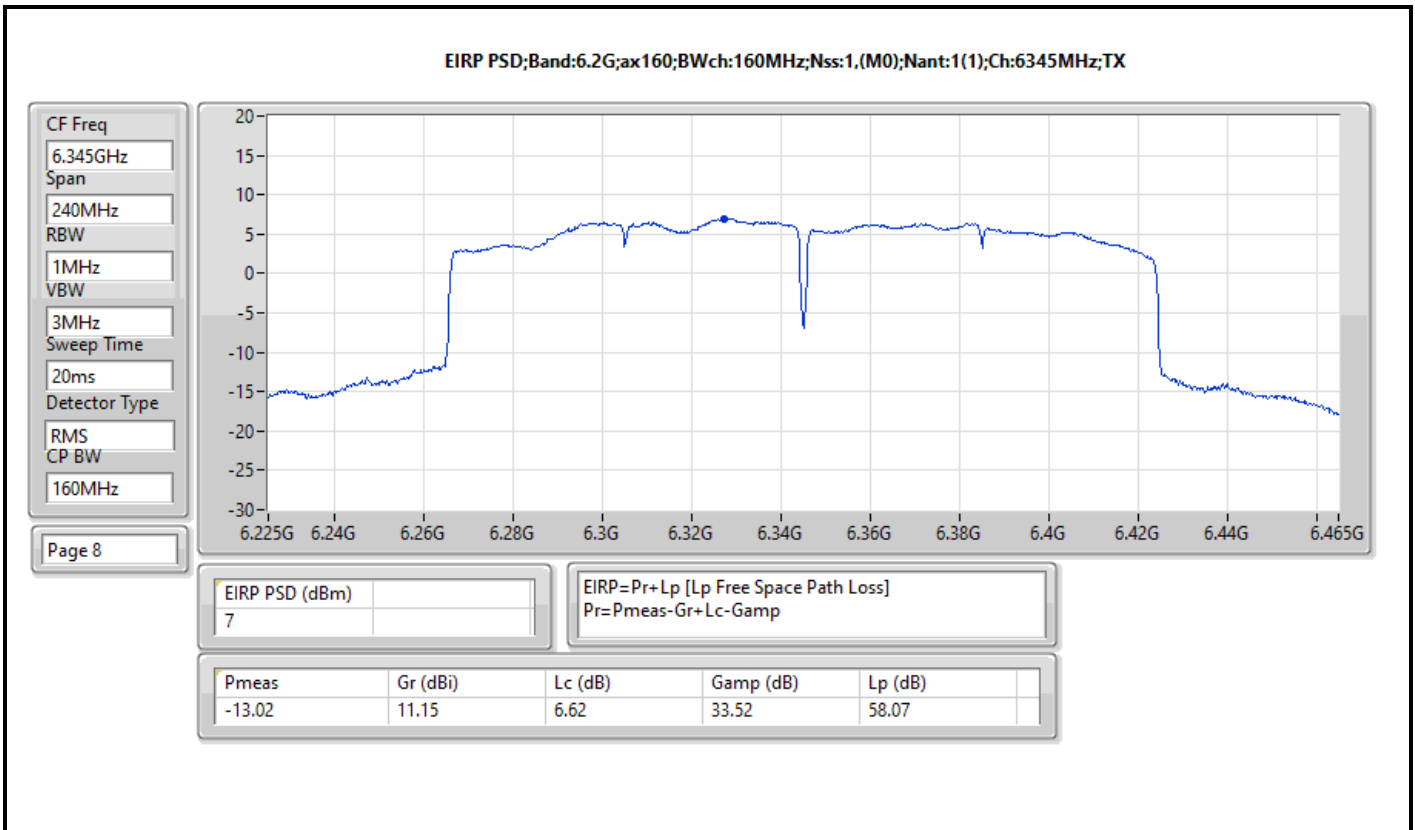














Summary

| Mode                            | Radiated EIRP PD<br>(dBm/RBW) |
|---------------------------------|-------------------------------|
| 5.925-6.425GHz                  | -                             |
| 802.11ax HEW20_Nss1,(MCS0)_1TX  | 17.66                         |
| 802.11ax HEW40_Nss1,(MCS0)_1TX  | 14.93                         |
| 802.11ax HEW80_Nss1,(MCS0)_1TX  | 12.58                         |
| 802.11ax HEW160_Nss1,(MCS0)_1TX | 10.23                         |
| 6.525-6.875GHz                  | -                             |
| 802.11ax HEW20_Nss1,(MCS0)_1TX  | 16.29                         |
| 802.11ax HEW40_Nss1,(MCS0)_1TX  | 14.02                         |
| 802.11ax HEW80_Nss1,(MCS0)_1TX  | 10.23                         |
| 802.11ax HEW160_Nss1,(MCS0)_1TX | 7.70                          |

RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;

| Mode                            | Result | Radiated EIRP PD (dBm/RBW) | Radiated EIRP PD Limit (dBm/RBW) |
|---------------------------------|--------|----------------------------|----------------------------------|
| 802.11ax HEW20_Nss1,(MCS0)_1TX  | -      | -                          | -                                |
| 5955MHz                         | Pass   | 15.35                      | 23.00                            |
| 6195MHz                         | Pass   | 17.66                      | 23.00                            |
| 6415MHz                         | Pass   | 17.53                      | 23.00                            |
| 6535MHz                         | Pass   | 16.06                      | 23.00                            |
| 6695MHz                         | Pass   | 16.03                      | 23.00                            |
| 6855MHz                         | Pass   | 16.29                      | 23.00                            |
| 802.11ax HEW40_Nss1,(MCS0)_1TX  | -      | -                          | -                                |
| 5965MHz                         | Pass   | 10.64                      | 23.00                            |
| 6205MHz                         | Pass   | 14.93                      | 23.00                            |
| 6405MHz                         | Pass   | 14.28                      | 23.00                            |
| 6565MHz                         | Pass   | 12.48                      | 23.00                            |
| 6685MHz                         | Pass   | 14.02                      | 23.00                            |
| 6845MHz                         | Pass   | 13.30                      | 23.00                            |
| 802.11ax HEW80_Nss1,(MCS0)_1TX  | -      | -                          | -                                |
| 5985MHz                         | Pass   | 7.97                       | 23.00                            |
| 6225MHz                         | Pass   | 12.58                      | 23.00                            |
| 6385MHz                         | Pass   | 9.84                       | 23.00                            |
| 6625MHz                         | Pass   | 10.23                      | 23.00                            |
| 6705MHz                         | Pass   | 9.74                       | 23.00                            |
| 6785MHz                         | Pass   | 9.02                       | 23.00                            |
| 802.11ax HEW160_Nss1,(MCS0)_1TX | -      | -                          | -                                |
| 6025MHz                         | Pass   | 6.89                       | 23.00                            |
| 6185MHz                         | Pass   | 10.23                      | 23.00                            |
| 6345MHz                         | Pass   | 7.77                       | 23.00                            |
| 6665MHz                         | Pass   | 7.70                       | 23.00                            |

DG = Directional Gain; RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;  
 PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

