

# FCC and ISED Test Report

Apple Inc  
Model: A2786

In accordance with FCC 47 CFR Part 15E, ISED  
RSS-247 and ISED RSS-GEN  
(5 GHz WLAN)

Prepared for: Apple Inc  
One Apple Park Way  
Cupertino  
California  
95014  
USA



Add value.  
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FCC ID: BCGA2786

IC: 579C-A2786

## COMMERCIAL-IN-CONFIDENCE

Document 75955426-09 Issue 01

### SIGNATURE

| NAME          | JOB TITLE       | RESPONSIBLE FOR      | ISSUE DATE    |
|---------------|-----------------|----------------------|---------------|
| Phil Harrison | Senior Engineer | Authorised Signatory | 16 March 2023 |

Signatures in this approval box have checked this document in line with the requirements of TÜV SÜD document control rules.

### ENGINEERING STATEMENT

The measurements shown in this report were made in accordance with the procedures described on test pages. All reported testing was carried out on a sample equipment to demonstrate limited compliance with FCC 47 CFR Part 15E, ISED RSS-247 and ISED RSS-GEN. The sample tested was found to comply with the requirements defined in the applied rules.

| RESPONSIBLE FOR   | NAME           | DATE          | SIGNATURE |
|-------------------|----------------|---------------|-----------|
| Report Generation | Lauren Walters | 16 March 2023 |           |

FCC Accreditation

90987 Octagon House, Fareham Test Laboratory

ISED Accreditation

12669A Octagon House, Fareham Test Laboratory

### EXECUTIVE SUMMARY

A sample of this product was tested and found to be compliant with FCC 47 CFR Part 15E: 2021, ISED RSS-247: Issue 2 (2017-02) and ISED RSS-GEN: Issue 5 (2018-04) + A2 (2021-02) for the tests detailed in section 1.3.



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#### ACCREDITATION

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Registered in Scotland at East Kilbride,  
Glasgow G75 0QF, United Kingdom  
Registered number: SC215164

TÜV SÜD Ltd is a  
TÜV SÜD Group Company

Phone: +44 (0) 1489 558100  
Fax: +44 (0) 1489 558101  
[www.tuvsud.com/en](http://www.tuvsud.com/en)

TÜV SÜD  
Octagon House  
Concorde Way  
Fareham  
Hampshire PO15 5RL  
United Kingdom



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## 1 Report Summary

### 1.1 Report Modification Record

Alterations and additions to this report will be issued to the holders of each copy in the form of a complete document.

| Issue | Description of Change | Date of Issue |
|-------|-----------------------|---------------|
| 1     | First Issue           | 16 March 2023 |

**Table 1**

### 1.2 Introduction

|                               |                                                                                                                                                                                            |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Applicant                     | Apple Inc                                                                                                                                                                                  |
| Manufacturer                  | Apple Inc                                                                                                                                                                                  |
| Model Number(s)               | A2786                                                                                                                                                                                      |
| Serial Number(s)              | QX6LNQJCFQ, L217XQ106H, C3Q0QNNQ4L,<br>CVQ3JRKXW6, KR22MV04D7 and L650Q14X71                                                                                                               |
| Hardware Version(s)           | REV 1.0                                                                                                                                                                                    |
| Software Version(s)           | 22E209, 22E51010k, 22E71580u, 22E126, 22E51010k and<br>22E184                                                                                                                              |
| Number of Samples Tested      | 6                                                                                                                                                                                          |
| Test Specification/Issue/Date | FCC 47 CFR Part 15E: 2021<br>ISED RSS-247: Issue 2 (2017-02)<br>ISED RSS-GEN: Issue 5 (2018-04) + A2 (2021-02)                                                                             |
| Order Number                  | 0540246998                                                                                                                                                                                 |
| Start of Test                 | 03-November-2022                                                                                                                                                                           |
| Finish of Test                | 23-February-2023                                                                                                                                                                           |
| Name of Engineer(s)           | Daniel Cameron, Stefan Gilfedder, Mohammad Malik, Elliot<br>Callender, James Woods, Taha Shafique, Colin Brain,<br>Ioan-Alexandru Bogatu, Ian Hart, Christopher Bland and<br>Faisal Malyar |
| Related Document(s)           | ANSI C63.10 (2013)<br>ANSI C63.10 (2020)<br>KDB 662911 D01 v02r01<br>KDB 905462 D02 v02<br>KDB 905462 D03 v01r02<br>KDB 789033 D02 v02r01                                                  |



### 1.3 Brief Summary of Results

A brief summary of the tests carried out in accordance with FCC 47 CFR Part 15E, ISSED RSS-247 and ISSED RSS-GEN is shown below.

| Section                                               | Specification Clause   |                |              | Test Description                                                              | Result | Comments/Base Standard                                                                                      |
|-------------------------------------------------------|------------------------|----------------|--------------|-------------------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------------------------------|
|                                                       | FCC Part 15E           | RSS-247        | RSS-GEN      |                                                                               |        |                                                                                                             |
| Configuration and Mode: 5 GHz WLAN                    |                        |                |              |                                                                               |        |                                                                                                             |
| -                                                     | 15.203                 | -              | -            | Antenna Requirement                                                           | N/T    | The device complies with the provisions of this section, as it uses permanently attached integral antennas. |
| 2.1                                                   | 15.205                 | -              | 8.10         | Restricted Band Edges                                                         | Pass   |                                                                                                             |
| 2.2                                                   | 15.407 (a)             | 6.2            | -            | Maximum Conducted Output Power                                                | Pass   |                                                                                                             |
| 2.3                                                   | 15.407 (a)             | 6.2            | -            | Maximum Conducted Power Spectral Density                                      | Pass   |                                                                                                             |
| 2.4                                                   | 15.407 (a)             | 6.2            | -            | Emission Bandwidth                                                            | Pass   |                                                                                                             |
| 2.5                                                   | 15.407 (b)             | 6.2            | -            | Authorised Band Edges                                                         | Pass   |                                                                                                             |
| 2.6                                                   | 15.209 and 15.407 (b)  | 6.2            | 6.13 and 8.9 | Spurious Radiated Emissions                                                   | Pass   |                                                                                                             |
| 2.7                                                   | 15.407 (h)(2)(iii)(iv) | 6.3.2(c)(d)(e) | -            | Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period | Pass   |                                                                                                             |
| Configuration and Mode: 5 GHz WLAN – Client to Client |                        |                |              |                                                                               |        |                                                                                                             |
| 2.7                                                   | 15.407 (h)(2)(iii)(iv) | 6.3.2(c)(d)(e) | -            | Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period | Pass   |                                                                                                             |

**Table 2**



## 1.4 Product Information

### 1.4.1 Technical Description

The equipment under test was a tower configuration Apple computer, with Bluetooth® and IEEE 802.11 a/b/g/n/ac/ax Wi-Fi capabilities in the 2.4 GHz, 5 GHz and 6 GHz bands.

### 1.4.2 Test Modes

The EUT's 5 GHz 802.11 radio supported Single Input/Single Output (SISO) and 2x2 Multiple Input/Multiple Output (MIMO) modes. 802.11a supports 20 MHz bandwidth only. 802.11n supports 20 MHz and 40 MHz bandwidths and 802.11ac, and ax supports 20 MHz, 40 MHz, 80 MHz and 160 MHz bandwidths.

802.11a mode supports SISO operation only. 802.11n, ac and ax support SISO, Cyclic Delay Diversity (CDD) and Space Division Multiplexing (SDM). 802.11n and ac also additionally support Transmit Beamforming (TxBF) mode. The EUT supports 802.11ax Single User (SU) and Multi-User (MU) with all Resource Unit (RU) sizes from 26 subcarriers, up to the maximum allowed, dependent on channel bandwidth other than in U-NII-2A and U-NII-2C where RU-26 is not supported.

The EUT uses different output powers dependent on how many cores are active. The EUT also uses different power tables for Cyclic Delay Diversity (CDD), Space Division Multiplexing (SDM) and Transmit Beamforming (TxBF) modes. It uses the same conducted power across all cores in any given mode, but due to the different antenna gains the radiated powers per core differ.

US and CA country codes changed the power table used for U-NII band 1. Therefore U-NII-1 channels were tested using both power settings for each country's respective limits.

Band edge testing was performed in all modes with multiple modulation types, with only the worst-case reported. After band edge and additional preliminary investigations were performed to find worst-case operation, the EUT was tested in the following supported transmit modes:

SISO Modes (Core 0 for U-NII-1 and Core 1 for U-NII-2A / 2C / 3):

- 802.11a – 12 Mbps
- 802.11n HT20 – MCS2
- 802.11n HT40 – MCS2
- 802.11ac VHT80 – MCS2x1
- 802.11ac VHT160 – MCS2x1
- 802.11ax HE20 SU – MCS2x1
- 802.11ax HE40 SU – MCS2x1
- 802.11ax HE80 SU – MCS2x1
- 802.11ax HE160 SU – MCS2x1
- 802.11ax HE20 MU RU26/52/106 – MCS2x1

2x2 MIMO Modes (Core 0+1 for U-NII-1 / 2A / 2C / 3):

- 802.11n HT20 - CDD (MCS2), SDM (MCS10) and TxBF (MCS2)
- 802.11n HT40 - CDD (MCS2), SDM (MCS10) and TxBF (MCS2)
- 802.11ac VHT80 – CDD (MCS2x1), SDM (MCS2x2) and TxBF (MCS2x1)
- 802.11ac VHT160 – CDD (MCS2x1) and SDM (MCS2x2)
- 802.11ax HE20 SU – CDD (MCS2x1) and SDM (MCS2x2)
- 802.11ax HE40 SU – CDD (MCS2x1) and SDM (MCS2x2)
- 802.11ax HE80 SU – CDD (MCS2x1) and SDM (MCS2x2)
- 802.11ax HE160 SU – CDD (MCS2x2) and SDM (MCS2x2)
- 802.11ax HE20 MU RU26/52/106 – CDD (MCS2x1) and SDM (MCS2x2)



\*Note: The RU offset for bottom and middle channels were placed in the lowest position and on the top channel, the offset was placed in the upper most position.

Reduced output power is used on the narrower RU26/52/106 size 802.11ax multi-user (MU) modes to meet PSD and Band Edge limits. Therefore, only single user (SU) modes are reported for output power tests since these are always worst-case. All SU and the above MU RU sizes are reported for PSD.

#### 1.4.3 Test Setup

For conducted tests the EUT antennas were disconnected and replaced with U.FL to SMA test cables to enable conducted testing on each core. The loss of these test cables were known and compensated for in any conducted measurements.

For all testing except DFS the EUT was put into a continuous transmit test mode with the chipset manufacturer's test commands via a script running in the EUTs terminal application. The EUT then transmitted the required type of packeted 802.11 data frames of fixed length, containing the standard headers and with pseudo-random data content, ensuring the measured signals were representative and contained all the symbols at the highest power control level.

The test setup used for DFS is described in the test result section of the present document.

#### 1.4.4 Antenna Gain Table

| Antenna Port | Frequency Range (MHz) | Peak Gain (dBi) | Conducted Cable Loss (dB) |
|--------------|-----------------------|-----------------|---------------------------|
| Core 0       | 5150 to 5250          | 4.75            | 1.20                      |
|              | 5250 to 5350          | 4.07            | 1.20                      |
|              | 5470 to 5725          | 5.90            | 1.20                      |
|              | 5725 to 5850          | 5.41            | 1.30                      |
| Core 1       | 5150 to 5250          | 4.14            | 1.20                      |
|              | 5250 to 5350          | 5.76            | 1.20                      |
|              | 5470 to 5725          | 6.05            | 1.20                      |
|              | 5725 to 5850          | 5.87            | 1.30                      |

**Table 3**

#### 1.5 Deviations from the Standard

No deviations from the applicable test standard were made during testing.



## 1.6 EUT Modification Record

The table below details modifications made to the EUT during the test programme.

The modifications incorporated during each test are recorded on the appropriate test pages.

| Modification State                      | Description of Modification still fitted to EUT | Modification Fitted By | Date Modification Fitted |
|-----------------------------------------|-------------------------------------------------|------------------------|--------------------------|
| Model: A2786, Serial Number: CVQ3JRKXW6 |                                                 |                        |                          |
| 0                                       | As supplied by the customer                     | Not Applicable         | Not Applicable           |
| Model: A2786, Serial Number: C3Q0QNNQ4L |                                                 |                        |                          |
| 0                                       | As supplied by the customer                     | Not Applicable         | Not Applicable           |
| Model: A2786, Serial Number: L217XQ106H |                                                 |                        |                          |
| 0                                       | As supplied by the customer                     | Not Applicable         | Not Applicable           |
| Model: A2786, Serial Number: L650Q14X71 |                                                 |                        |                          |
| 0                                       | As supplied by the customer                     | Not Applicable         | Not Applicable           |
| Model: A2786, Serial Number: QX6LNQJCFQ |                                                 |                        |                          |
| 0                                       | As supplied by the customer                     | Not Applicable         | Not Applicable           |
| Model: A2786, Serial Number: KR22MV04D7 |                                                 |                        |                          |
| 0                                       | As supplied by the customer                     | Not Applicable         | Not Applicable           |

**Table 4**

## 1.7 Test Location

TÜV SÜD conducted the following tests at our Octagon House Test Laboratory.

| Test Name                                                                     | Name of Engineer(s) | Accreditation |
|-------------------------------------------------------------------------------|---------------------|---------------|
| Configuration and Mode: 5 GHz WLAN                                            |                     |               |
| Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period | Stefan Gilfedder    | UKAS          |
| Configuration and Mode: 5 GHz WLAN - Client to Client                         |                     |               |
| Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period | Stefan Gilfedder    | UKAS          |

**Table 5**

Office Address:

TÜV SÜD  
Octagon House  
Concorde Way  
Fareham  
Hampshire  
PO15 5RL  
United Kingdom



TÜV SÜD conducted the following tests at our Concorde Park Test Laboratory.

| Test Name                                | Name of Engineer(s)                                                                                                                             | Accreditation |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Configuration and Mode: 5 GHz WLAN       |                                                                                                                                                 |               |
| Restricted Band Edges                    | Mohammad Malik, Elliot Callender, James Woods, Taha Shafique, Colin Brain, Ioan-Alexandru Bogatu, Ian Hart, Christopher Bland and Faisal Malyar | UKAS          |
| Emission Bandwidth                       | Daniel Cameron                                                                                                                                  | UKAS          |
| Maximum Conducted Output Power           | Daniel Cameron                                                                                                                                  | UKAS          |
| Maximum Conducted Power Spectral Density | Daniel Cameron                                                                                                                                  | UKAS          |
| Authorised Band Edges                    | Mohammad Malik, Elliot Callender, James Woods, Taha Shafique, Colin Brain, Ioan-Alexandru Bogatu, Ian Hart, Christopher Bland and Faisal Malyar | UKAS          |
| Spurious Radiated Emissions              | Mohammad Malik, Elliot Callender, Taha Shafique and Ioan-Alexandru Bogatu                                                                       | UKAS          |

**Table 6**

Office Address:

TÜV SÜD  
Concorde Park  
Concorde Way  
Fareham  
Hampshire  
PO15 5FG  
United Kingdom



## 2 Test Details

### 2.1 Restricted Band Edges

#### 2.1.1 Specification Reference

FCC 47 CFR Part 15E, Clause 15.205  
ISED RSS-GEN, Clause 8.10

#### 2.1.2 Equipment Under Test and Modification State

A2786, S/N: CVQ3JRKXW6 - Modification State 0  
A2786, S/N: KR22MV04D7 - Modification State 0

#### 2.1.3 Date of Test

07-November-2022 to 03-December-2022

#### 2.1.4 Test Method

The test was performed in accordance with ANSI C63.10, clause 6.10.5.

Restricted Band Edge measurements were performed with the device operating in SISO and MIMO operation, across the various modes supported by the device.

The measurements displayed within this report have been limited to those modes which have been shown to be worst case.

Where duty cycle corrections were required for average results, these are included in the result tables but are not shown on the plots.

Further measurements are held on file by TÜV SÜD and are available if required.

#### 2.1.5 Environmental Conditions

|                     |                |
|---------------------|----------------|
| Ambient Temperature | 19.3 - 22.1 °C |
| Relative Humidity   | 46.5 - 60.0 %  |

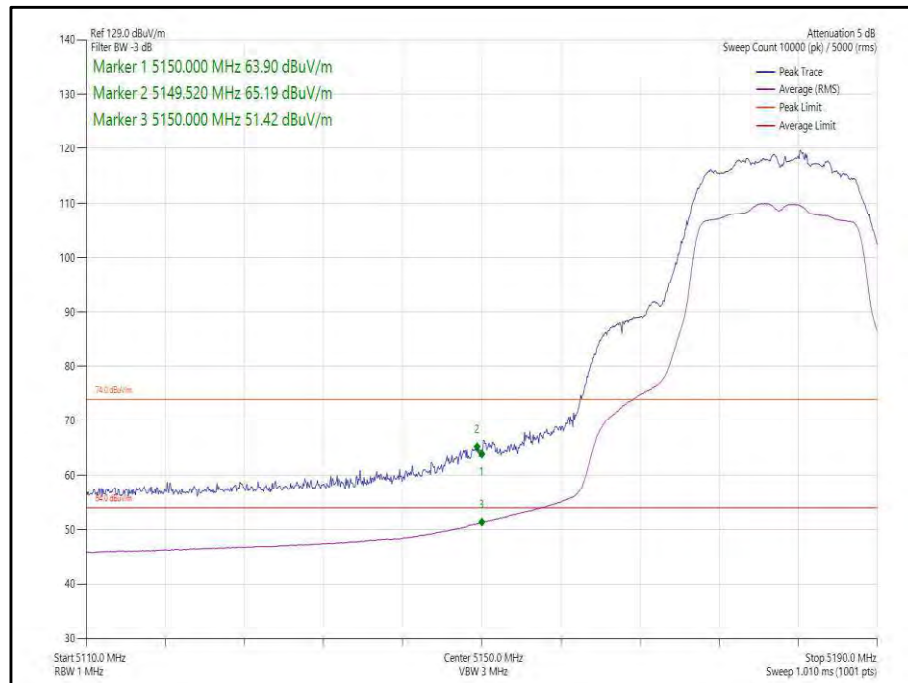
## 2.1.6 Test Results

### 5 GHz WLAN

#### 20 MHz Bandwidth - Core 0 (SISO)

| Mode           | Data Rate/<br>MCS | Resource<br>Size | Resource<br>Index | TX<br>Frequency<br>(MHz) | Band Edge<br>Frequency<br>(MHz) | Peak Level<br>(dBμV/m) | Average<br>Level<br>(dBμV/m) |
|----------------|-------------------|------------------|-------------------|--------------------------|---------------------------------|------------------------|------------------------------|
| 802.11a        | 12 Mbps           | -                | -                 | 5180                     | 5150                            | 65.19                  | 51.42                        |
| 802.11n, HT20  | MCS2              | -                | -                 | 5180                     | 5150                            | 63.58                  | 51.31                        |
| 802.11ax, HE20 | MCS2x1            | SU               | -                 | 5180                     | 5150                            | 64.28                  | 51.39                        |
| 802.11ax, HE20 | MCS11x1           | 106              | 53                | 5180                     | 5150                            | 68.84                  | 50.47                        |
| 802.11a        | 54 Mbps           | -                | -                 | 5320                     | 5350                            | 69.01                  | 51.46                        |
| 802.11n, HT20  | MCS4              | -                | -                 | 5320                     | 5350                            | 66.31                  | 51.44                        |
| 802.11ax, HE20 | MCS4x1            | SU               | -                 | 5320                     | 5350                            | 67.06                  | 51.34                        |
| 802.11ax, HE20 | MCS11x1           | 106              | 54                | 5320                     | 5350                            | 65.33                  | 49.27                        |
| 802.11a        | 24 Mbps           | -                | -                 | 5500                     | 5460                            | 62.38                  | 47.96                        |
| 802.11n, HT20  | MCS2              | -                | -                 | 5500                     | 5460                            | 63.13                  | 49.12                        |
| 802.11ax, HE20 | MCS2x1            | SU               | -                 | 5500                     | 5460                            | 63.05                  | 49.56                        |
| 802.11ax, HE20 | MCS11x1           | 106              | 53                | 5500                     | 5460                            | 63.61                  | 47.58                        |

**Table 7 - SISO Restricted Band Edge Results**



**Figure 1 - 802.11a, SISO, Core 0 - 5180 MHz,  
Band Edge Frequency 5150 MHz**

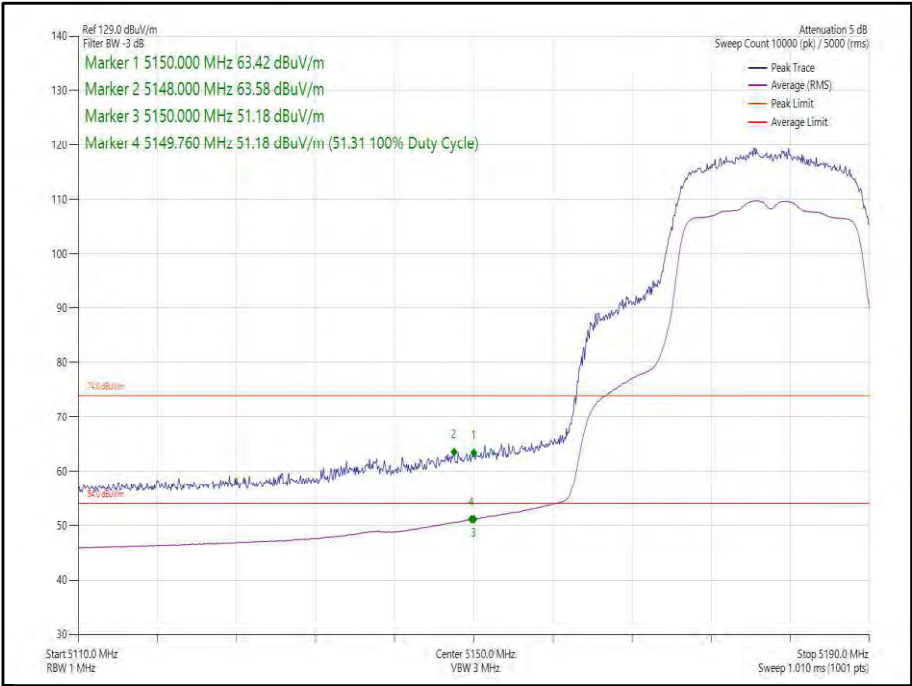


Figure 2 - 802.11n, HT20, SISO, Core 0 - 5180 MHz,  
Band Edge Frequency 5150 MHz

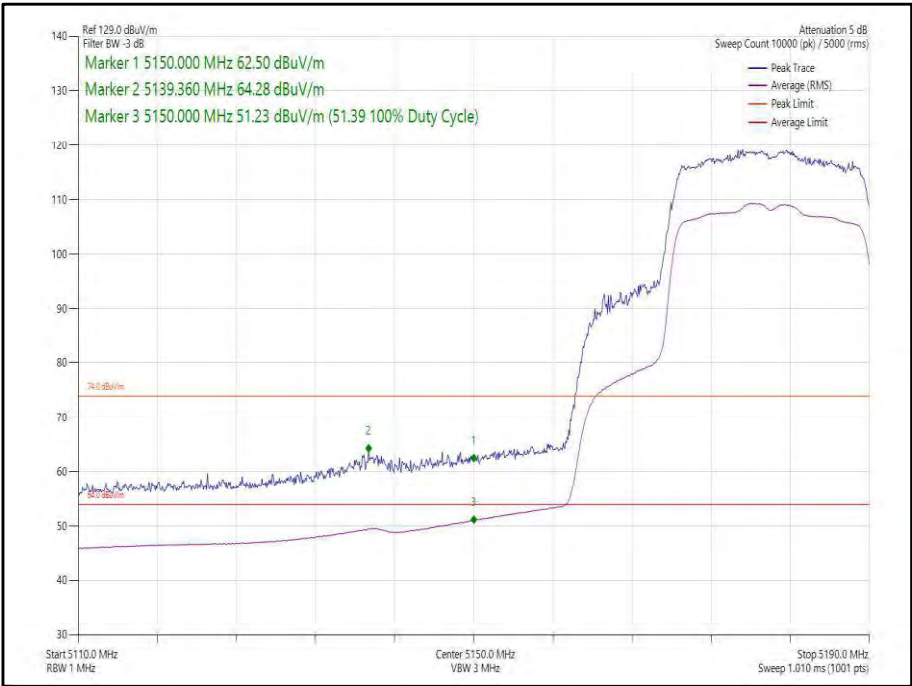
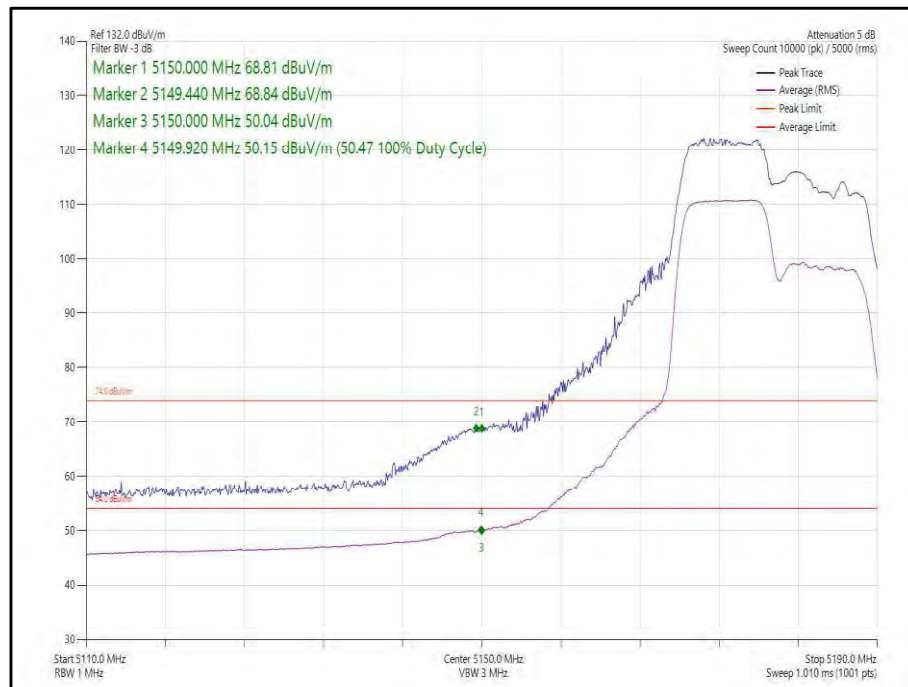
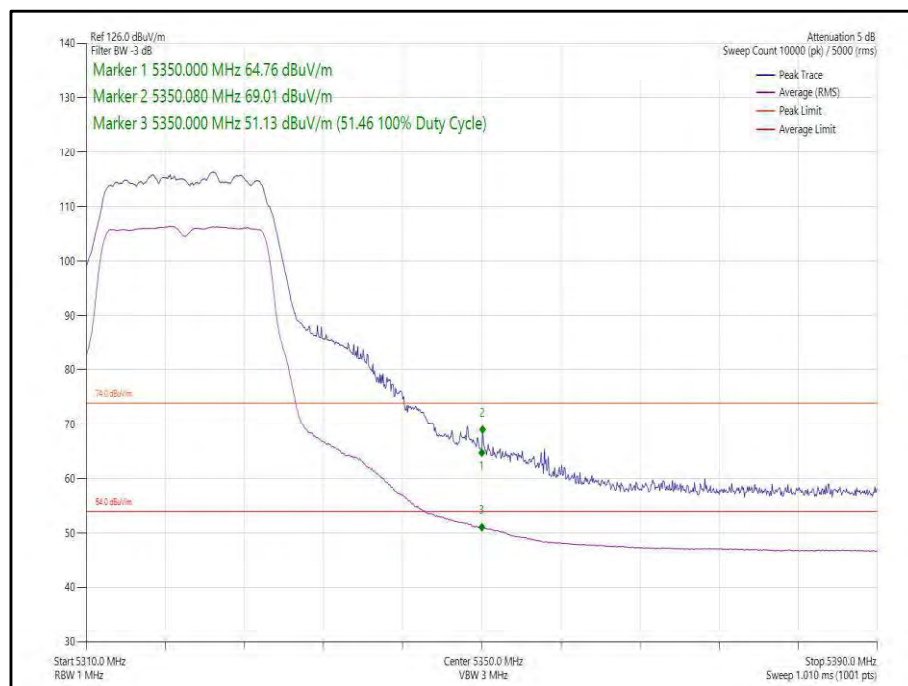


Figure 3 - 802.11ax, HE20, SU, SISO, Core 0 - 5180 MHz,  
Band Edge Frequency 5150 MHz



**Figure 4 - 802.11ax, HE20, RU 106-53, SISO, Core 0 - 5180 MHz,  
Band Edge Frequency 5150 MHz**



**Figure 5 - 802.11a, SISO, Core 0 - 5320 MHz,  
Band Edge Frequency 5350 MHz**

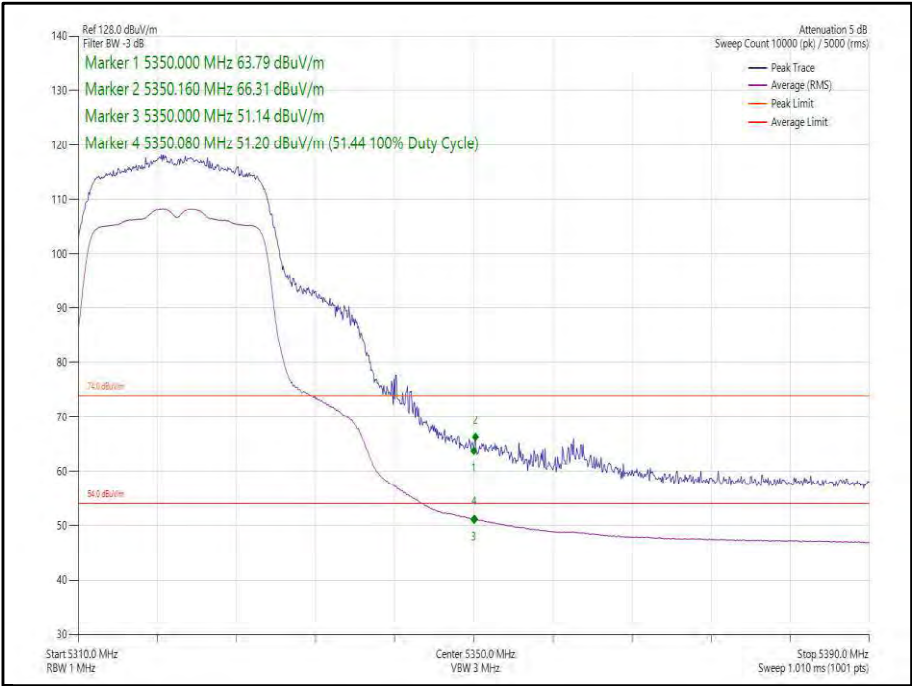


Figure 6 - 802.11n, HT20, SISO, Core 0 - 5320 MHz,  
Band Edge Frequency 5350 MHz

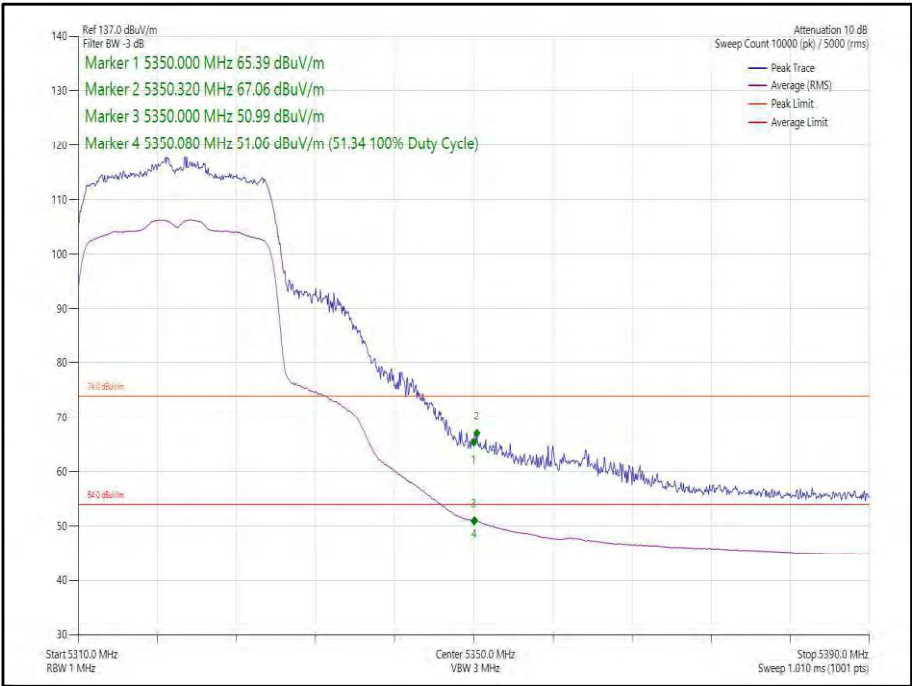
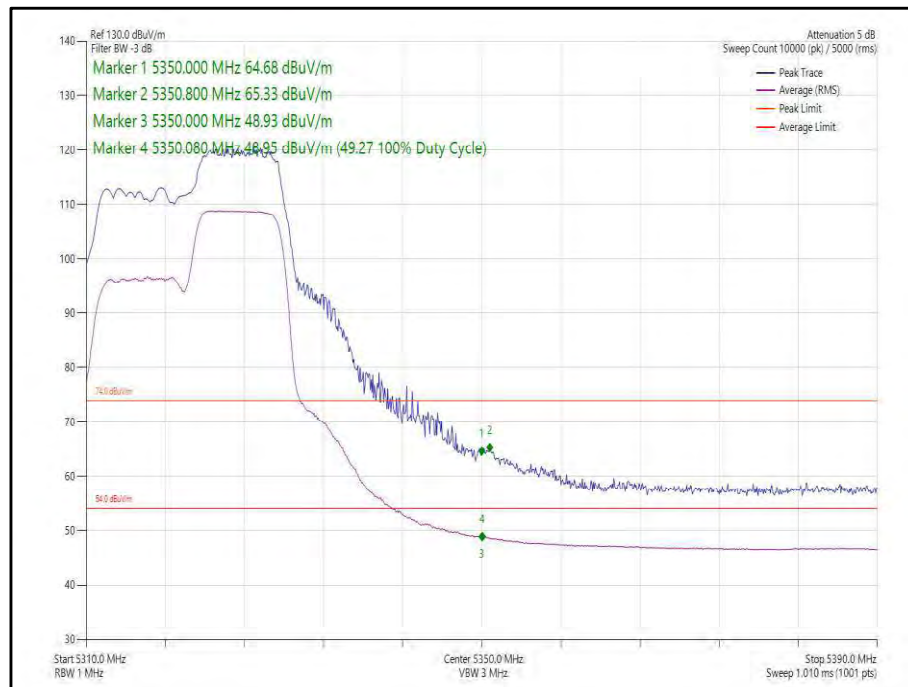
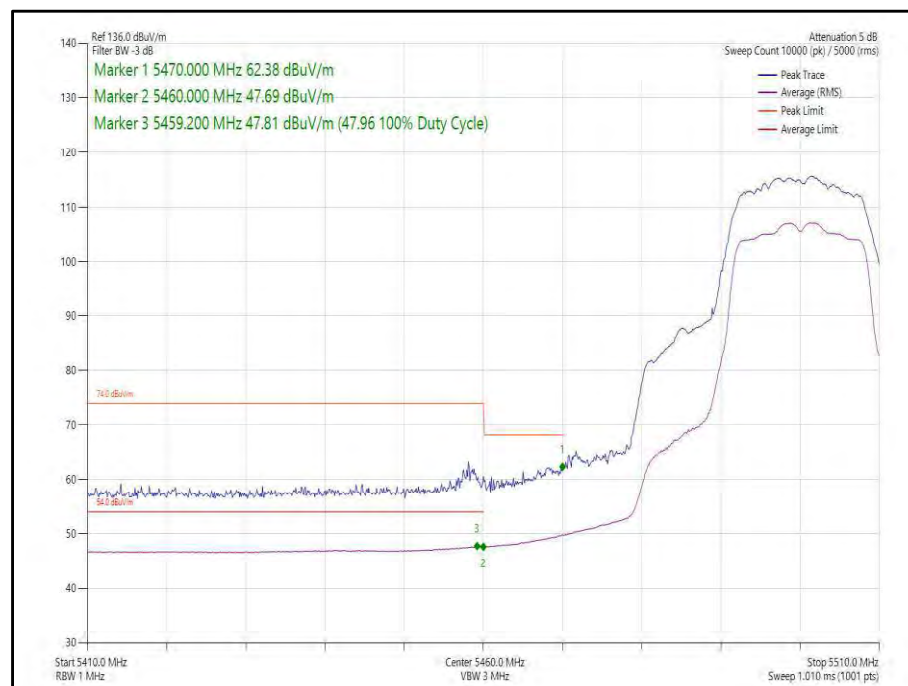


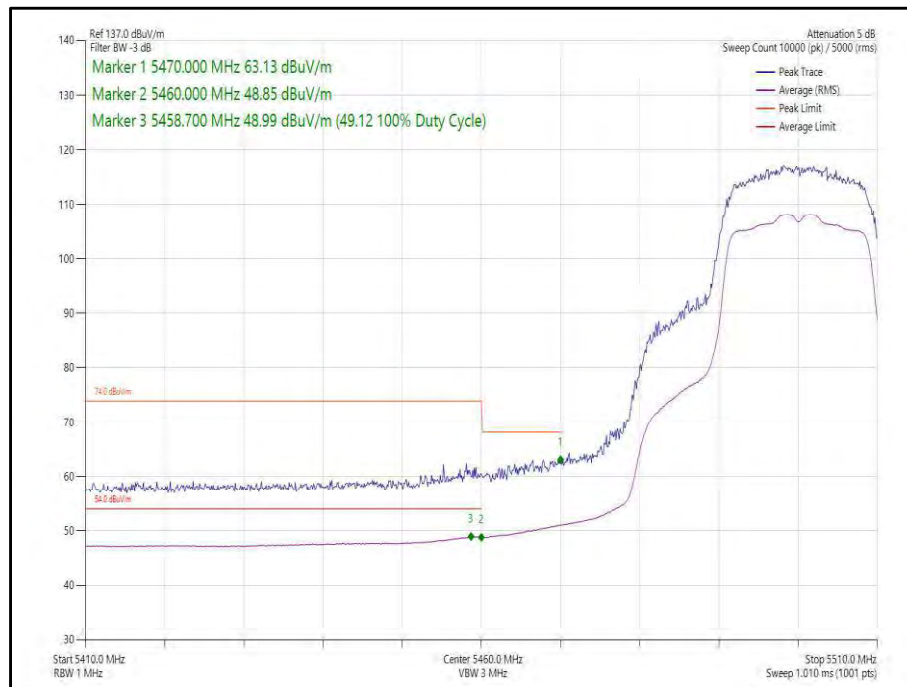
Figure 7 - 802.11ax, HE20, SU, SISO, Core 0 - 5320 MHz,  
Band Edge Frequency 5350 MHz



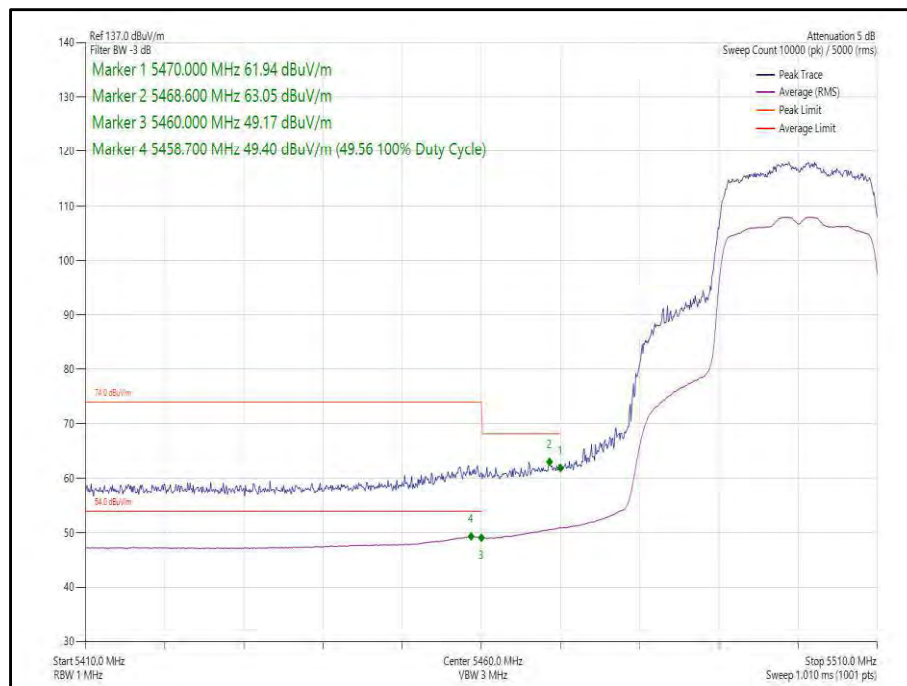
**Figure 8 - 802.11ax, HE20, RU 106-54, SISO, Core 0 - 5320 MHz,  
Band Edge Frequency 5350 MHz**



**Figure 9 - 802.11a, SISO, Core 0 - 5500 MHz,  
Band Edge Frequency 5460 MHz**



**Figure 10 - 802.11n, HT20, SISO, Core 0 - 5500 MHz,  
Band Edge Frequency 5460 MHz**



**Figure 11 - 802.11ax, HE20, SU, SISO, Core 0 - 5500 MHz,  
Band Edge Frequency 5460 MHz**

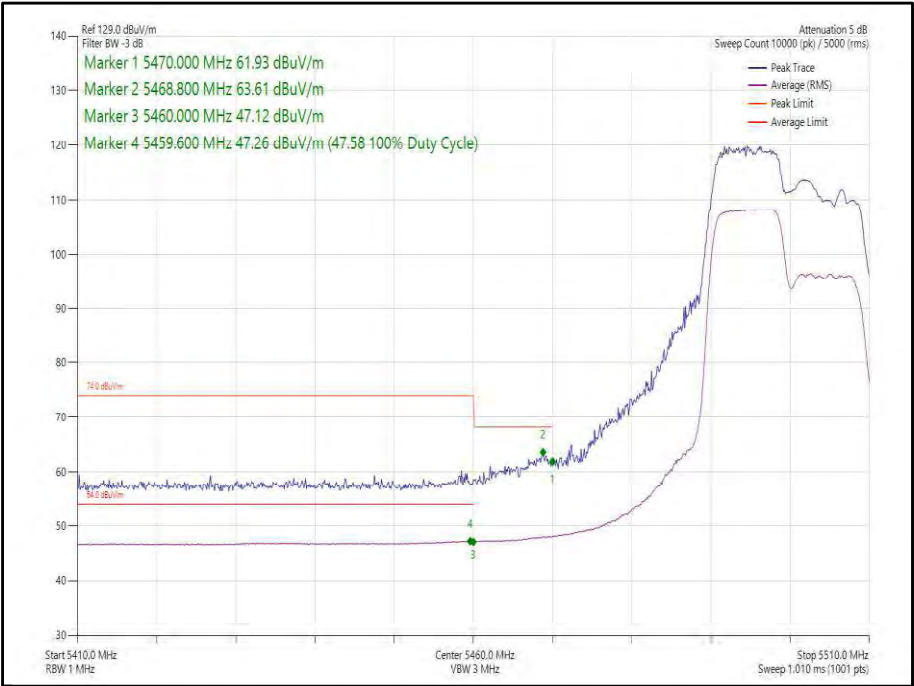


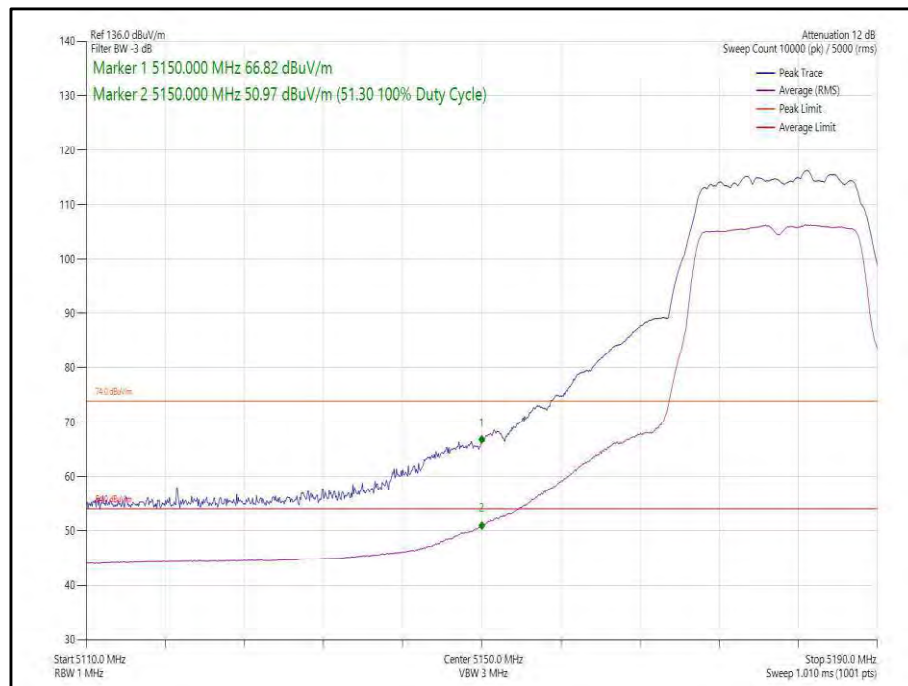
Figure 12 - 802.11ax, HE20, RU 106-53, SISO, Core 0 - 5500 MHz,  
Band Edge Frequency 5460 MHz



20 MHz Bandwidth - Core 1 (SISO)

| Mode           | Data Rate/<br>MCS | Resource<br>Size | Resource<br>Index | TX<br>Frequency<br>(MHz) | Band Edge<br>Frequency<br>(MHz) | Peak Level<br>(dBμV/m) | Average<br>Level<br>(dBμV/m) |
|----------------|-------------------|------------------|-------------------|--------------------------|---------------------------------|------------------------|------------------------------|
| 802.11a        | 54 Mbps           | -                | -                 | 5180                     | 5150                            | 66.82                  | 51.30                        |
| 802.11n, HT20  | MCS4              | -                | -                 | 5180                     | 5150                            | 66.01                  | 51.21                        |
| 802.11ax, HE20 | MCS4x1            | SU               | -                 | 5180                     | 5150                            | 66.15                  | 51.16                        |
| 802.11ax, HE20 | MCS11x1           | 106              | 53                | 5180                     | 5150                            | 64.89                  | 48.67                        |
| 802.11a        | 54 Mbps           | -                | -                 | 5320                     | 5350                            | 67.89                  | 51.32                        |
| 802.11n, HT20  | MCS7              | -                | -                 | 5320                     | 5350                            | 69.32                  | 51.03                        |
| 802.11ax, HE20 | MCS11x1           | SU               | -                 | 5320                     | 5350                            | 69.30                  | 51.33                        |
| 802.11ax, HE20 | MCS11x1           | 106              | 54                | 5320                     | 5350                            | 62.96                  | 47.88                        |
| 802.11a        | 24 Mbps           | -                | -                 | 5500                     | 5460                            | 63.16                  | 48.37                        |
| 802.11n, HT20  | MCS2              | -                | -                 | 5500                     | 5460                            | 63.11                  | 48.99                        |
| 802.11ax, HE20 | MCS2x1            | SU               | -                 | 5500                     | 5460                            | 63.23                  | 49.83                        |
| 802.11ax, HE20 | MCS11x1           | 106              | 53                | 5500                     | 5460                            | 63.38                  | 47.83                        |

**Table 8 - SISO Restricted Band Edge Results**



**Figure 13 - 802.11a, SISO, Core 1 - 5180 MHz,  
Band Edge Frequency 5150 MHz**



Figure 14 - 802.11n, HT20, SISO, Core 1 - 5180 MHz,  
Band Edge Frequency 5150 MHz

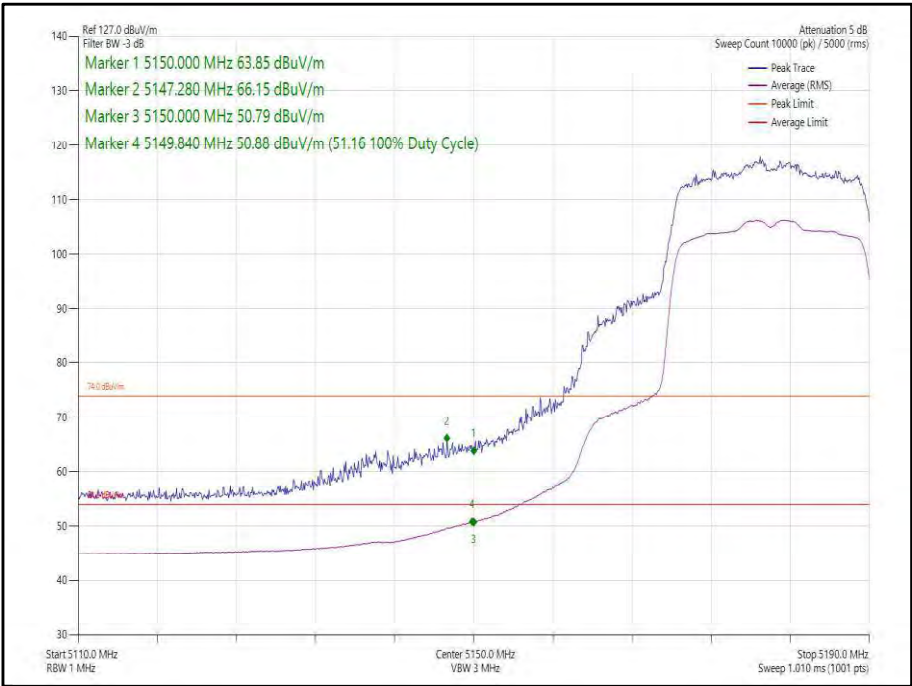
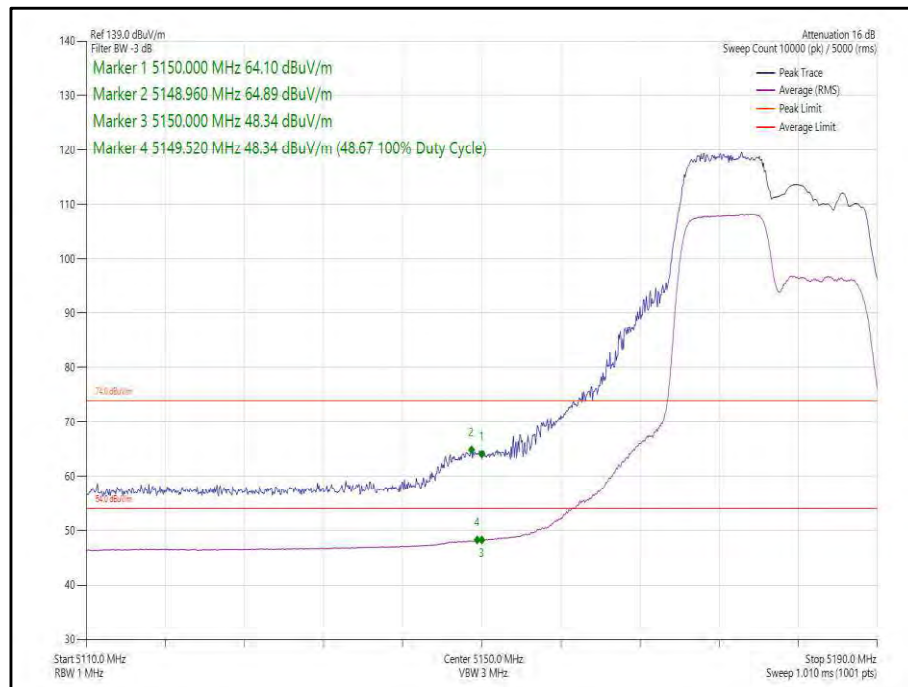
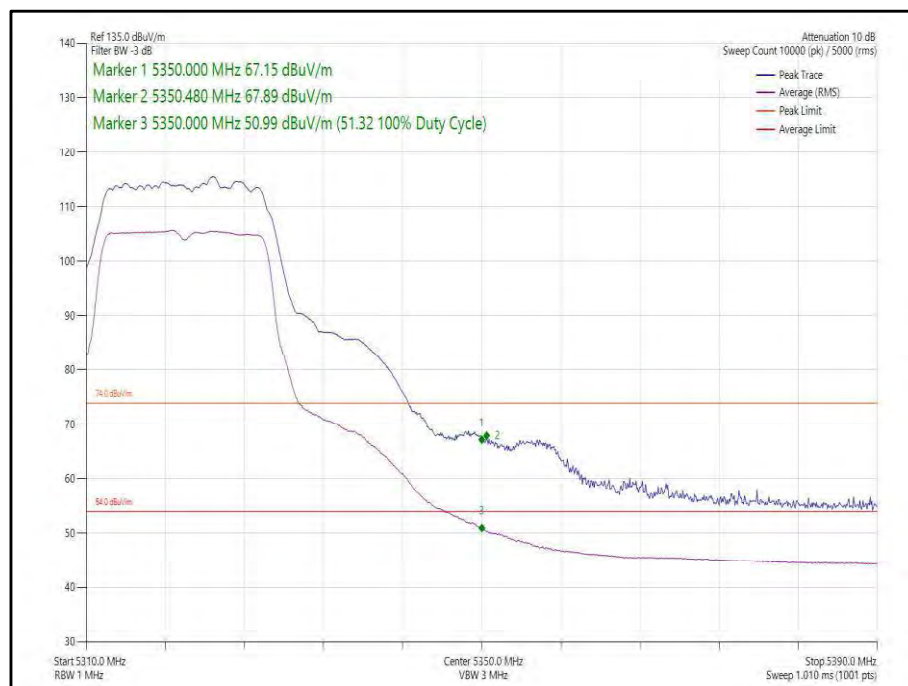


Figure 15 - 802.11ax, HE20, SU, SISO, Core 1 - 5180 MHz,  
Band Edge Frequency 5150 MHz



**Figure 16 - 802.11ax, HE20, RU 106-53, SISO, Core 1 - 5180 MHz,  
Band Edge Frequency 5150 MHz**



**Figure 17 - 802.11a, SISO, Core 1 - 5320 MHz,  
Band Edge Frequency 5350 MHz**

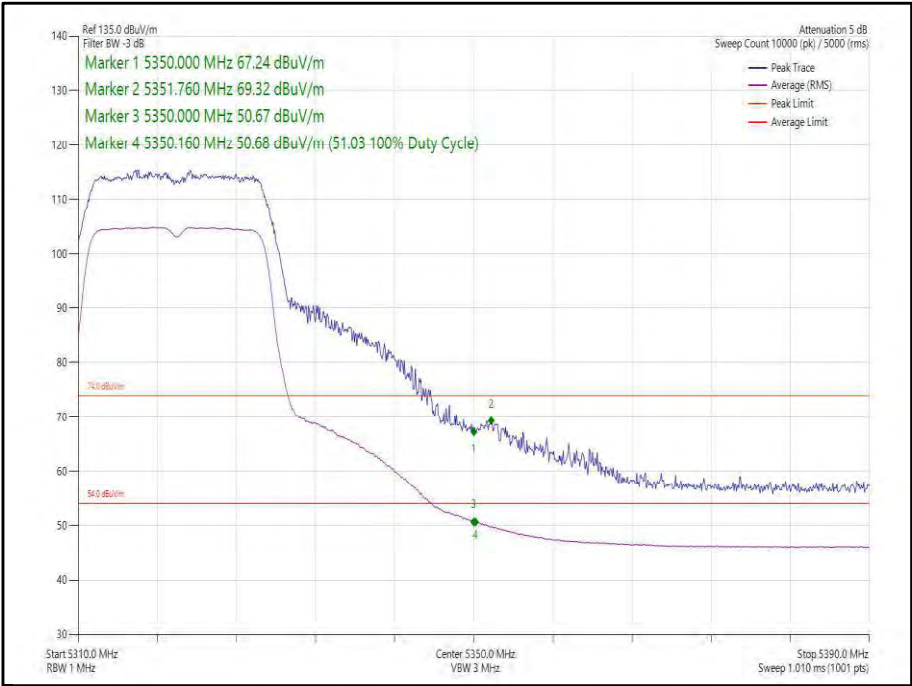


Figure 18 - 802.11n, HT20, SISO, Core 1 - 5320 MHz,  
Band Edge Frequency 5350 MHz

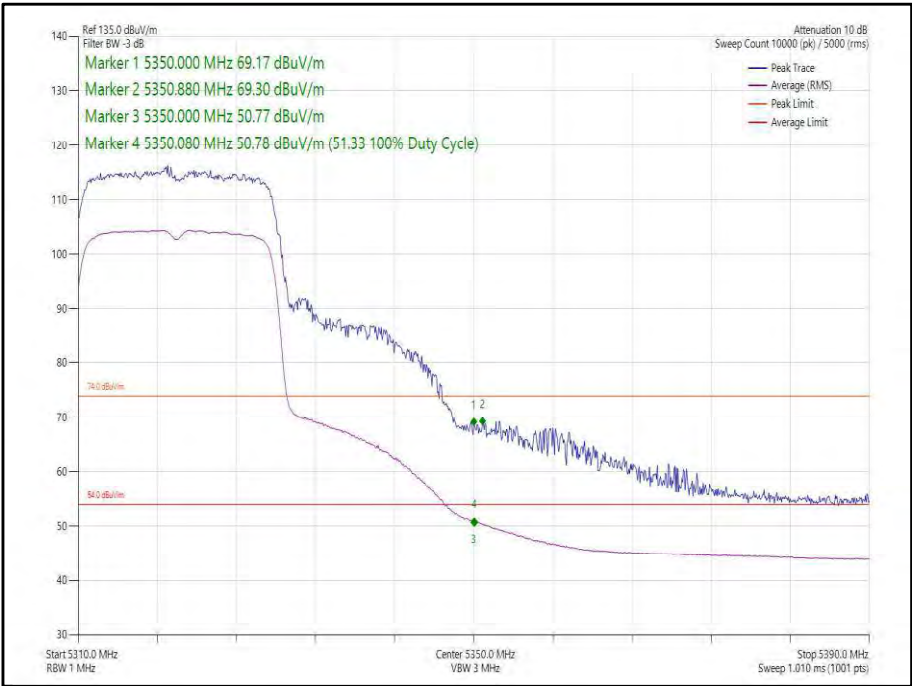
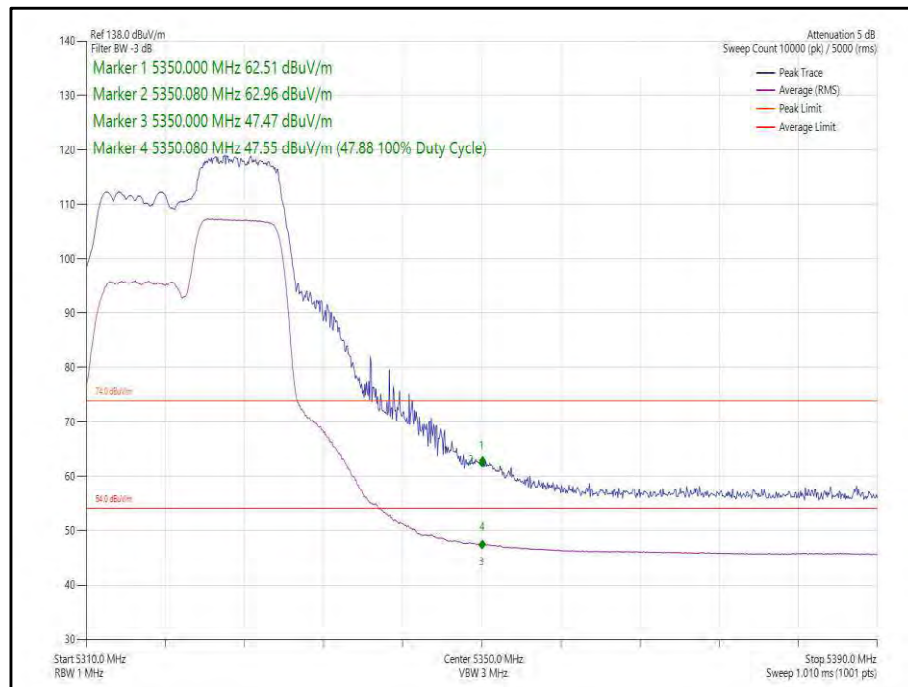
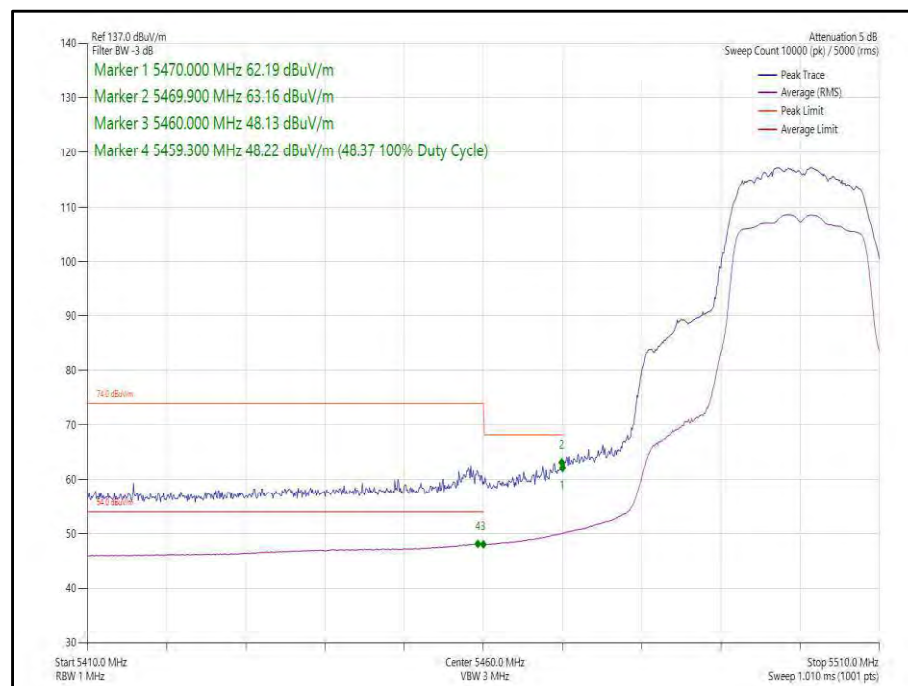


Figure 19 - 802.11ax, HE20, SU, SISO, Core 1 - 5320 MHz,  
Band Edge Frequency 5350 MHz



**Figure 20 - 802.11ax, HE20, RU 106-54, SISO, Core 1 - 5320 MHz,  
Band Edge Frequency 5350 MHz**



**Figure 21 - 802.11a, SISO, Core 1 - 5500 MHz,  
Band Edge Frequency 5460 MHz**



Figure 22 - 802.11n, HT20, SISO, Core 1 - 5500 MHz,  
Band Edge Frequency 5460 MHz

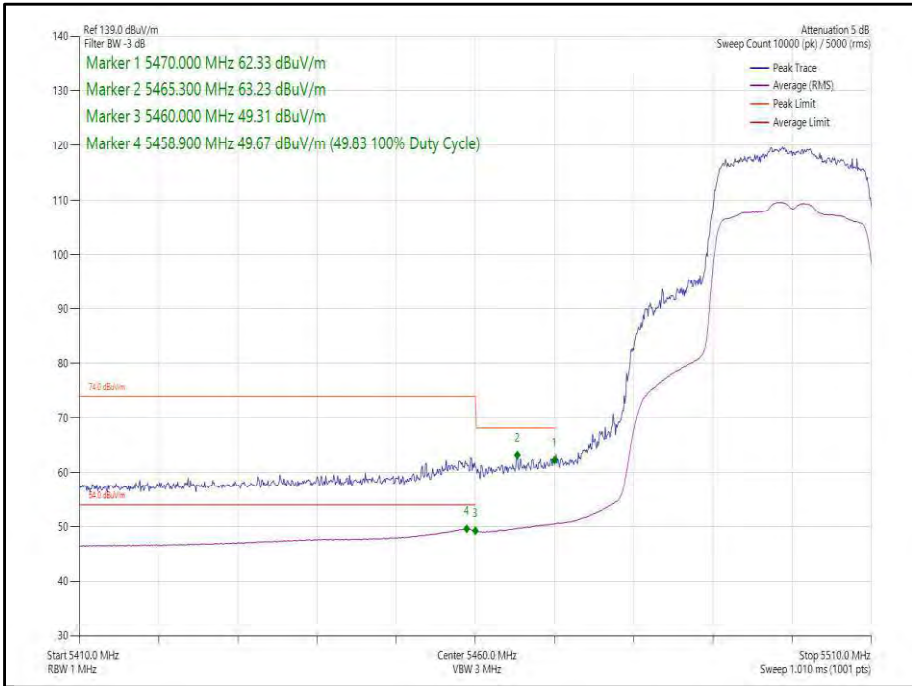


Figure 23 - 802.11ax, HE20, SU, SISO, Core 1 - 5500 MHz,  
Band Edge Frequency 5460 MHz

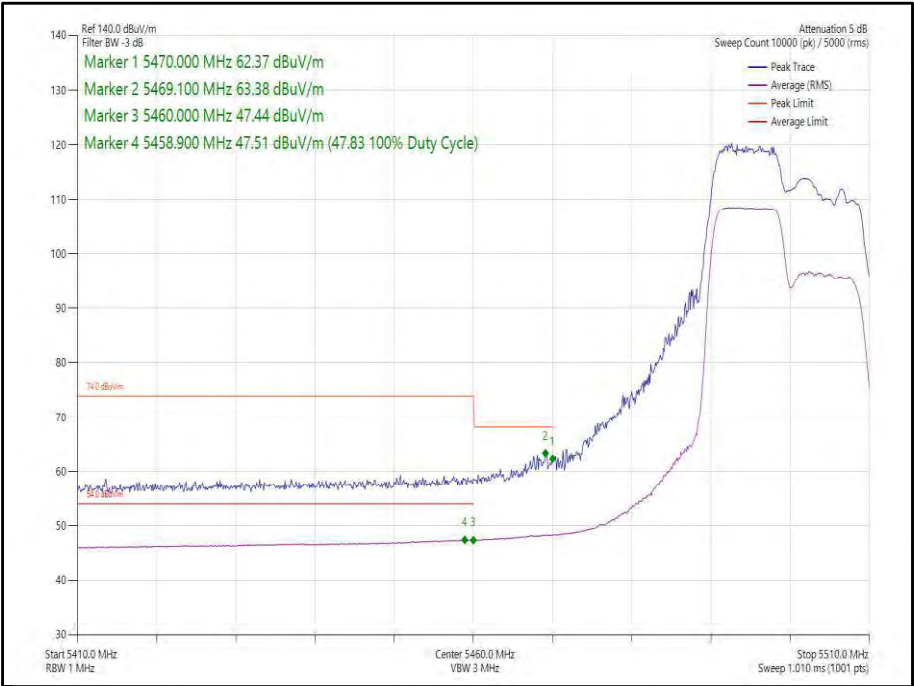


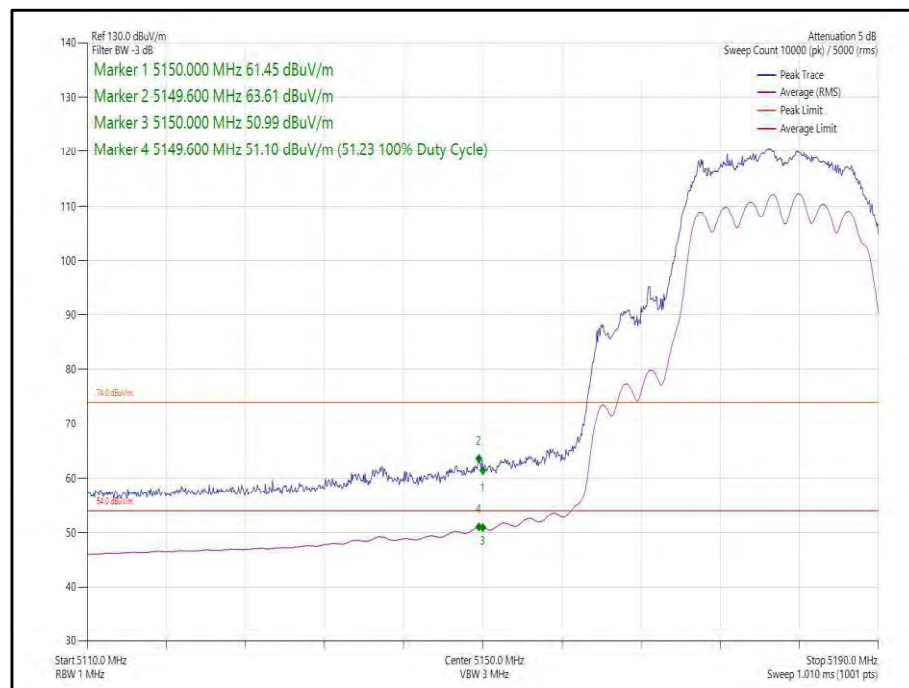
Figure 24 - 802.11ax, HE20, RU 106-53, SISO, Core 1 - 5500 MHz,  
Band Edge Frequency 5460 MHz



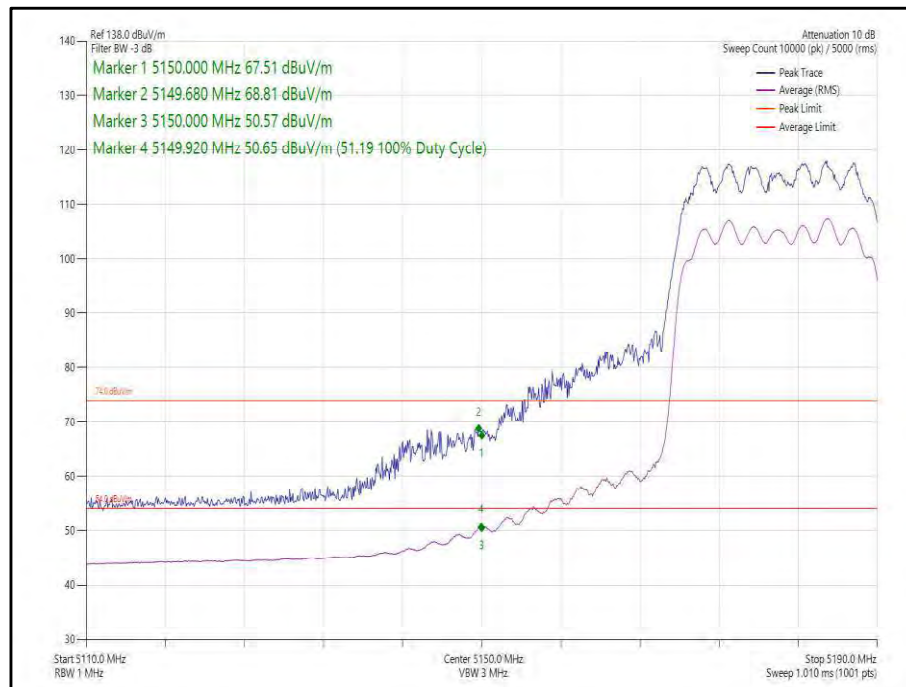
20 MHz Bandwidth - Core 0-1 (CDD)

| Mode           | Data Rate/<br>MCS | Resource<br>Size | Resource<br>Index | TX<br>Frequency<br>(MHz) | Band Edge<br>Frequency<br>(MHz) | Peak Level<br>(dBμV/m) | Average<br>Level<br>(dBμV/m) |
|----------------|-------------------|------------------|-------------------|--------------------------|---------------------------------|------------------------|------------------------------|
| 802.11n, HT20  | MCS2              | -                | -                 | 5180                     | 5150                            | 63.61                  | 51.23                        |
| 802.11ax, HE20 | MCS11x1           | SU               | -                 | 5180                     | 5150                            | 68.81                  | 51.19                        |
| 802.11ax, HE20 | MCS11x1           | 106              | 53                | 5180                     | 5150                            | 69.37                  | 51.48                        |
| 802.11n, HT20  | MCS7              | -                | -                 | 5320                     | 5350                            | 69.13                  | 51.47                        |
| 802.11ax, HE20 | MCS4x1            | SU               | -                 | 5320                     | 5350                            | 65.73                  | 51.49                        |
| 802.11ax, HE20 | MCS11x1           | 106              | 54                | 5320                     | 5350                            | 65.77                  | 50.49                        |
| 802.11n, HT20  | MCS2              | -                | -                 | 5500                     | 5460                            | 63.56                  | 50.75                        |
| 802.11ax, HE20 | MCS2x1            | SU               | -                 | 5500                     | 5460                            | 63.45                  | 49.84                        |
| 802.11ax, HE20 | MCS11x1           | 106              | 53                | 5500                     | 5460                            | 62.86                  | 49.18                        |

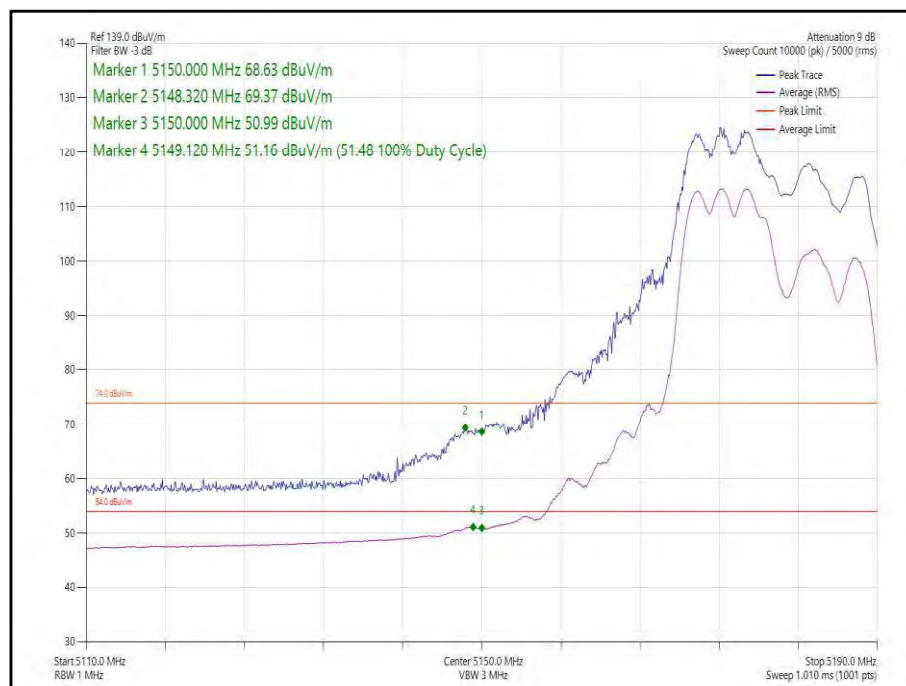
**Table 9 - CDD Restricted Band Edge Results**



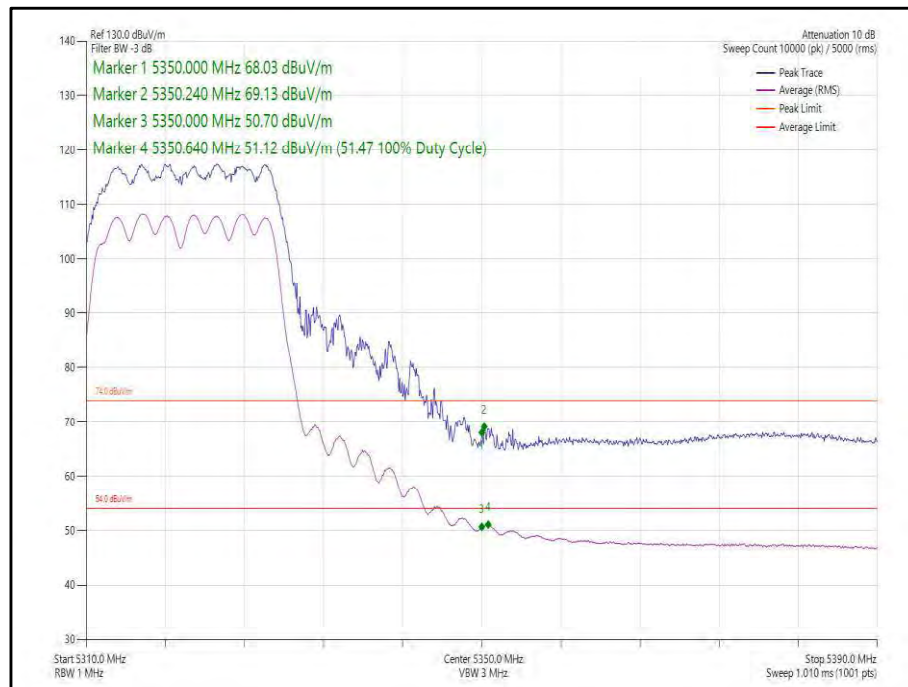
**Figure 25 - 802.11n, HT20, CDD, Core 0-1 - 5180 MHz,  
Band Edge Frequency 5150 MHz**



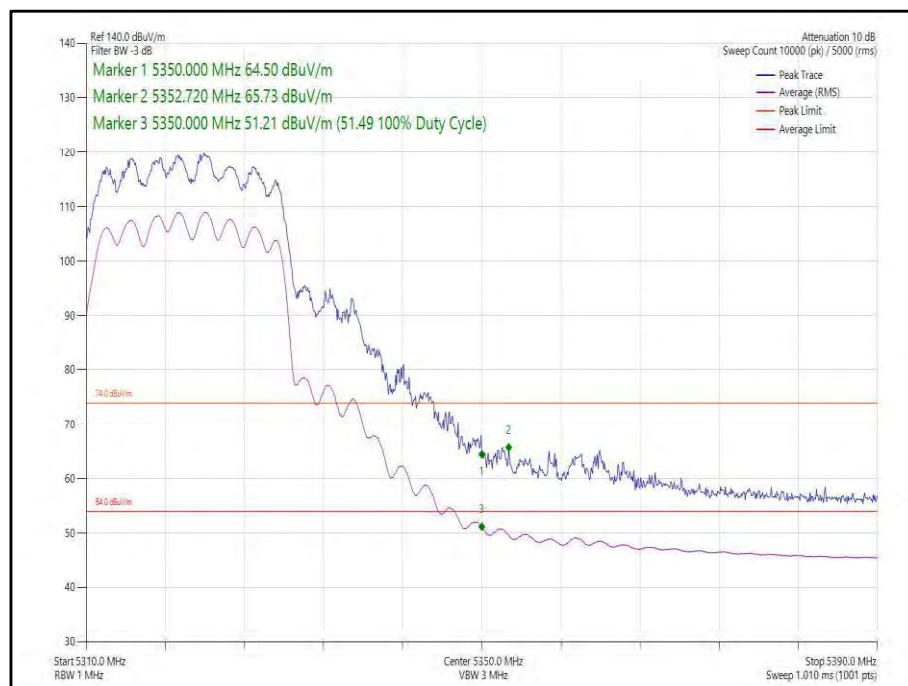
**Figure 26 - 802.11ax, HE20, SU, CDD, Core 0-1 - 5180 MHz,  
Band Edge Frequency 5150 MHz**



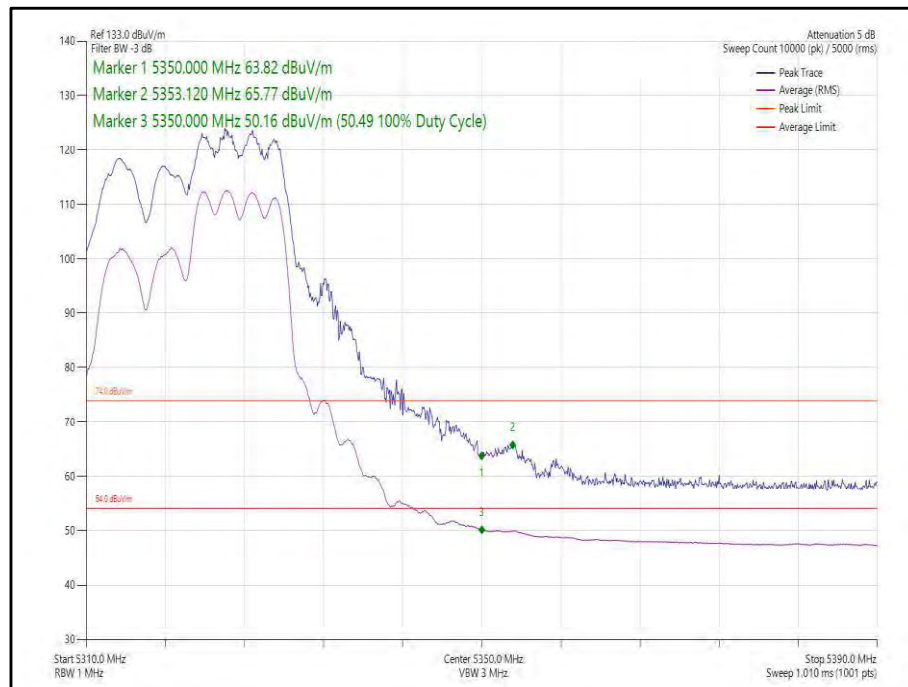
**Figure 27 - 802.11ax, HE20, RU 106-53, CDD, Core 0-1 - 5180 MHz,  
Band Edge Frequency 5150 MHz**



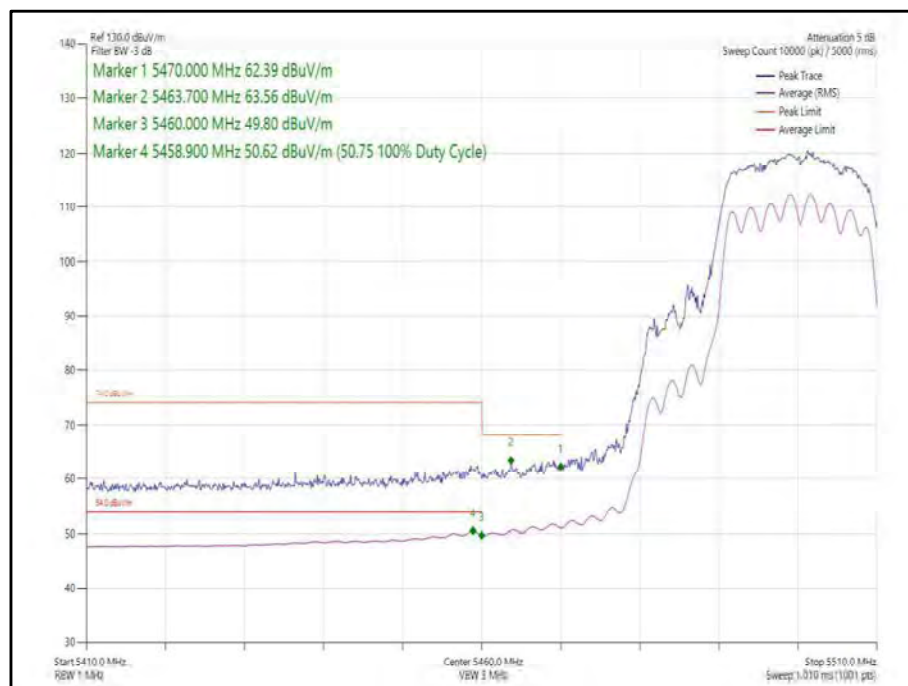
**Figure 28 - 802.11n, HT20, CDD, Core 0-1 - 5320 MHz,  
Band Edge Frequency 5350 MHz**



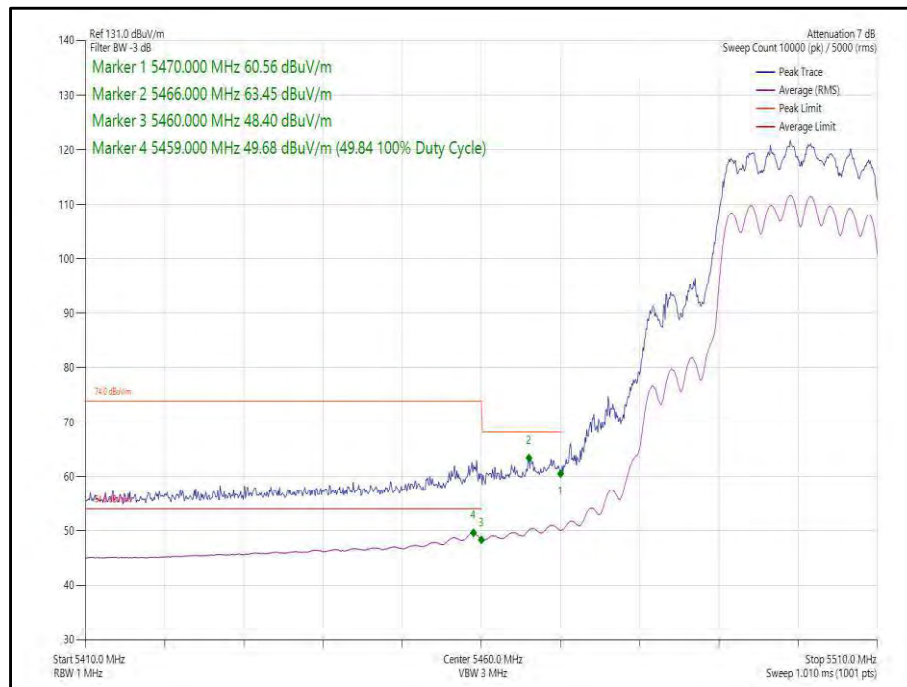
**Figure 29 - 802.11ax, HE20, SU, CDD, Core 0-1 - 5320 MHz,  
Band Edge Frequency 5350 MHz**



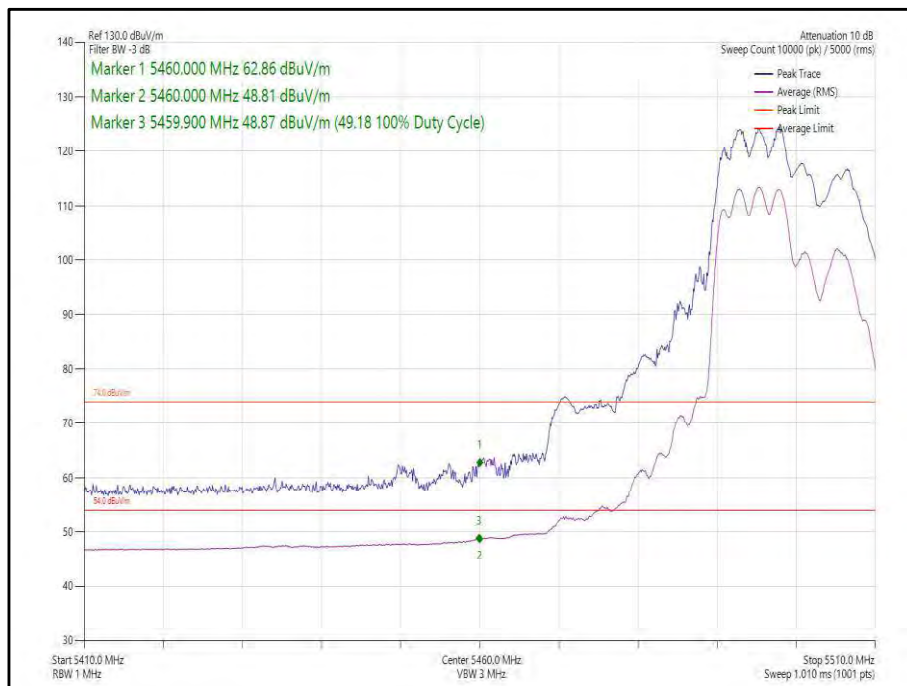
**Figure 30 - 802.11ax, HE20, RU 106-54, CDD, Core 0-1 - 5320 MHz,  
Band Edge Frequency 5350 MHz**



**Figure 31 - 802.11n, HT20, CDD, Core 0-1 - 5500 MHz,  
Band Edge Frequency 5460 MHz**



**Figure 32 - 802.11ax, HE20, SU, CDD, Core 0-1 - 5500 MHz,  
Band Edge Frequency 5460 MHz**



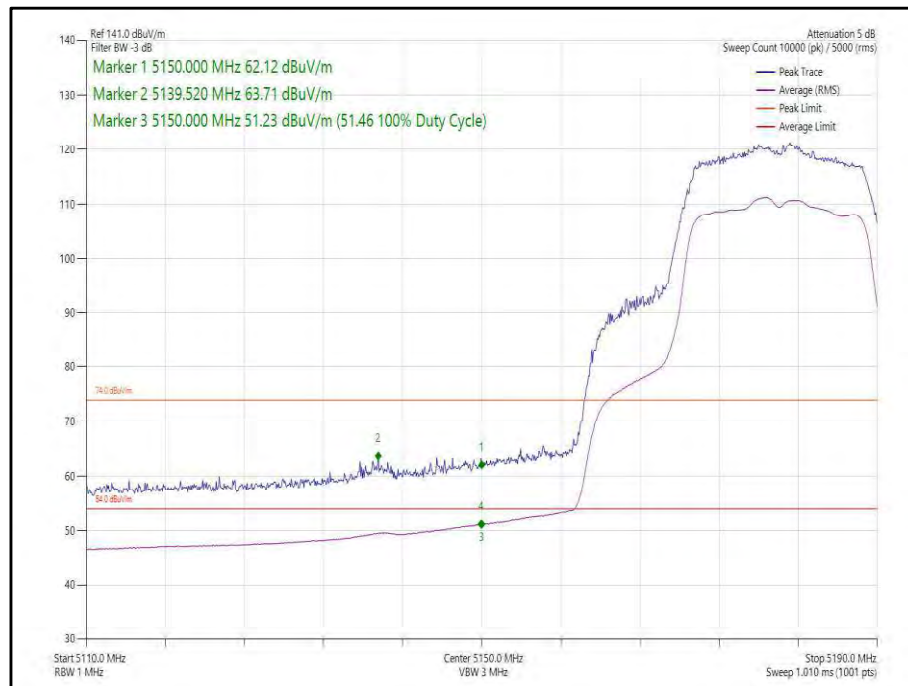
**Figure 33 - 802.11ax, HE20, RU 106-53, CDD, Core 0-1 - 5500 MHz,  
Band Edge Frequency 5460 MHz**



20 MHz Bandwidth - Core 0-1 (SDM)

| Mode           | Data Rate/<br>MCS | Resource<br>Size | Resource<br>Index | TX<br>Frequency<br>(MHz) | Band Edge<br>Frequency<br>(MHz) | Peak Level<br>(dBμV/m) | Average<br>Level<br>(dBμV/m) |
|----------------|-------------------|------------------|-------------------|--------------------------|---------------------------------|------------------------|------------------------------|
| 802.11n, HT20  | MCS10             | -                | -                 | 5180                     | 5150                            | 63.71                  | 51.46                        |
| 802.11ax, HE20 | MCS4x2            | SU               | -                 | 5180                     | 5150                            | 64.82                  | 51.46                        |
| 802.11ax, HE20 | MCS11x2           | 106              | 54                | 5180                     | 5150                            | 69.49                  | 51.09                        |
| 802.11n, HT20  | MCS12             | -                | -                 | 5320                     | 5350                            | 65.07                  | 51.15                        |
| 802.11ax, HE20 | MCS4x2            | SU               | -                 | 5320                     | 5350                            | 64.87                  | 51.30                        |
| 802.11ax, HE20 | MCS11x2           | 106              | 54                | 5320                     | 5350                            | 66.13                  | 50.98                        |
| 802.11n, HT20  | MCS10             | -                | -                 | 5500                     | 5460                            | 63.10                  | 50.96                        |
| 802.11ax, HE20 | MCS2x2            | SU               | -                 | 5500                     | 5460                            | 62.84                  | 50.73                        |
| 802.11ax, HE20 | MCS11x2           | 106              | 54                | 5500                     | 5460                            | 62.30                  | 48.84                        |

**Table 10 - SDM Restricted Band Edge Results**



**Figure 34 - 802.11n, HT20, SDM, Core 0-1 - 5180 MHz,  
Band Edge Frequency 5150 MHz**

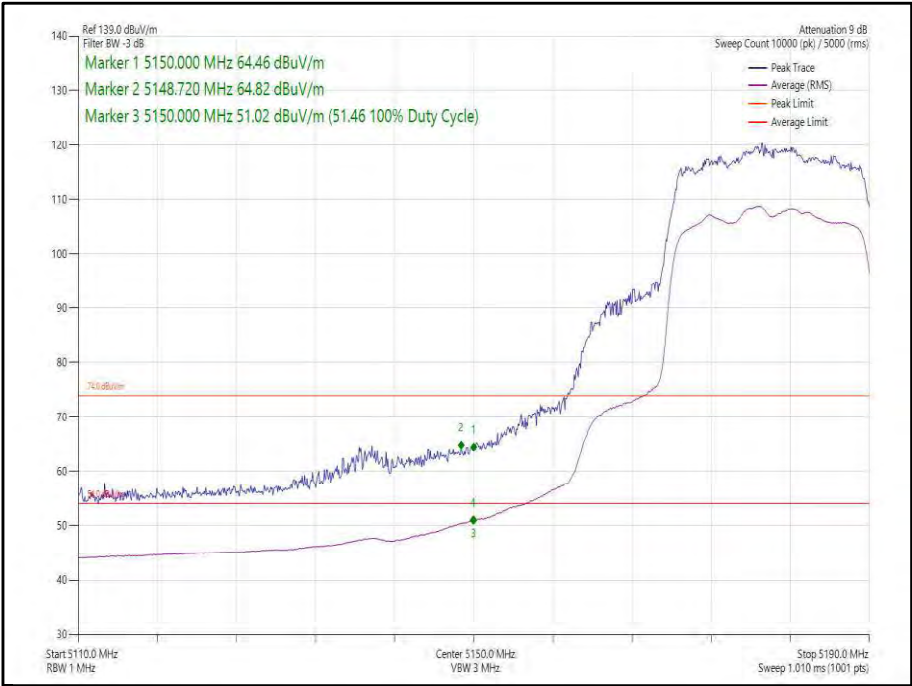


Figure 35 - 802.11ax, HE20, SU, SDM, Core 0-1 - 5180 MHz,  
Band Edge Frequency 5150 MHz

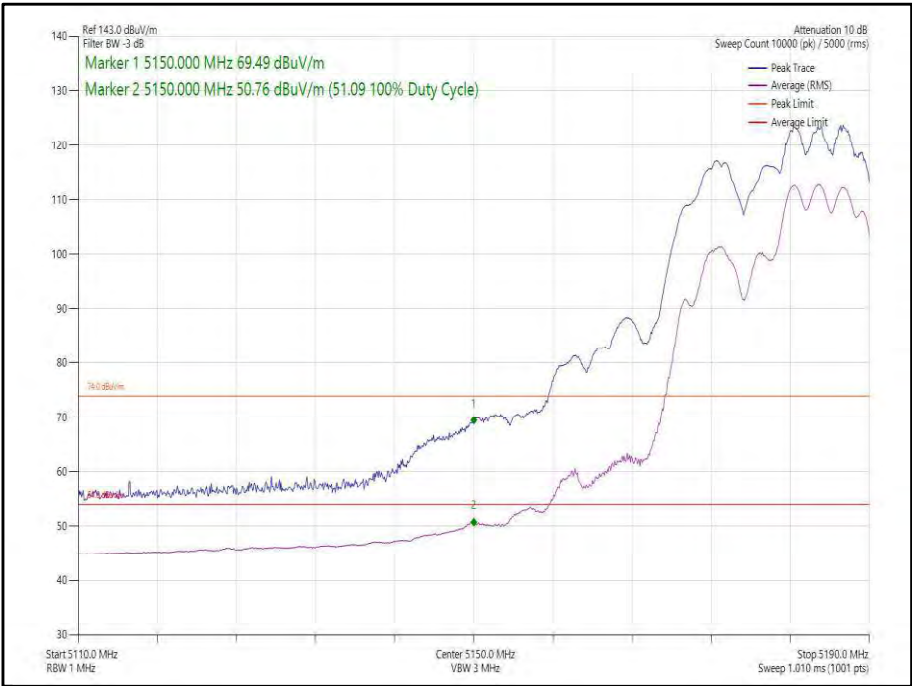


Figure 36 - 802.11ax, HE20, RU 106-54, SDM, Core 0-1 - 5180 MHz,  
Band Edge Frequency 5150 MHz

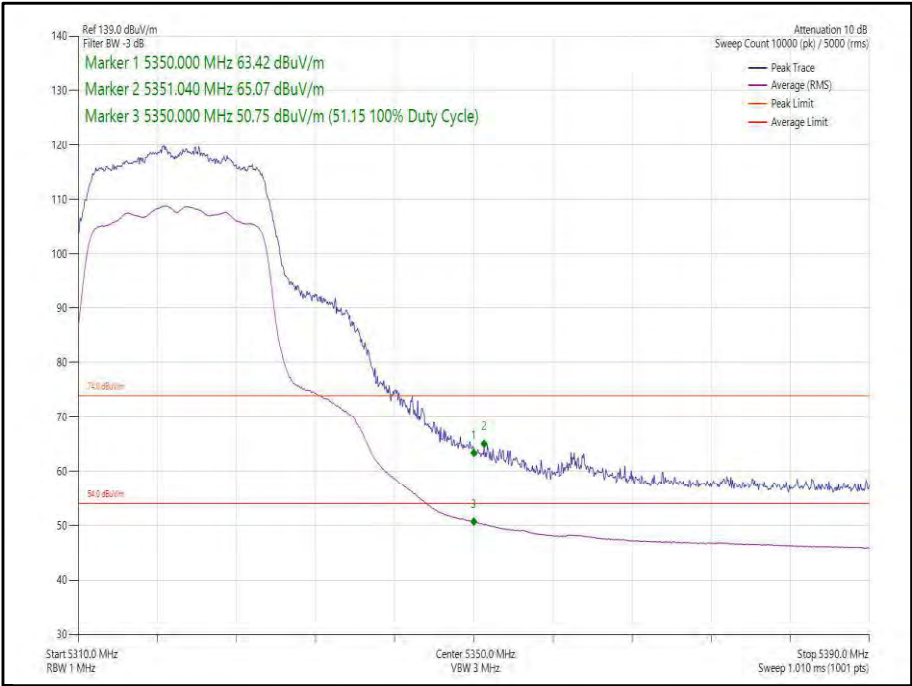


Figure 37 - 802.11n, HT20, SDM, Core 0-1 - 5320 MHz, Band Edge Frequency 5350 MHz

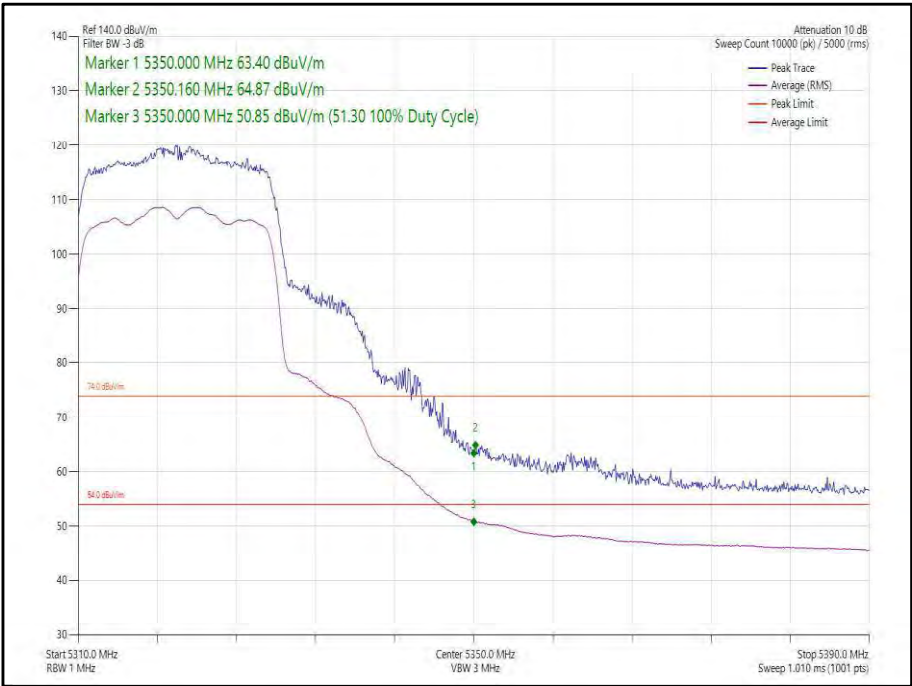
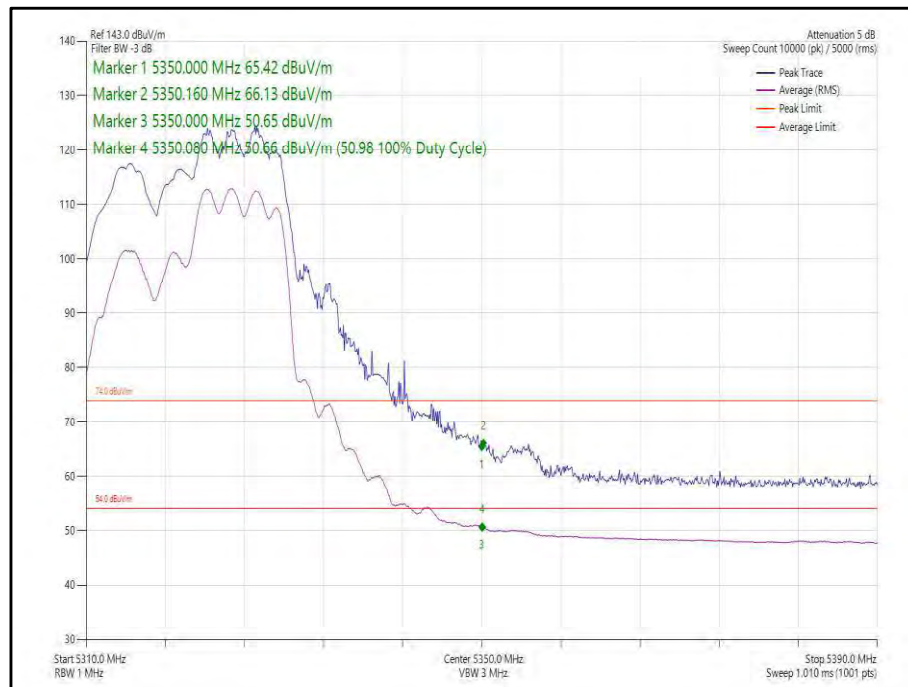
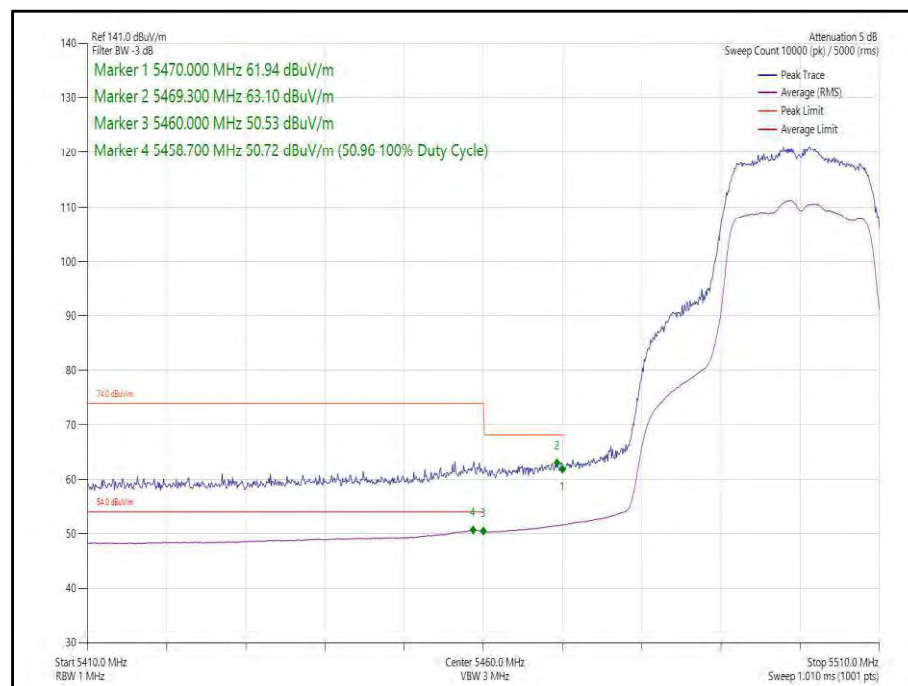


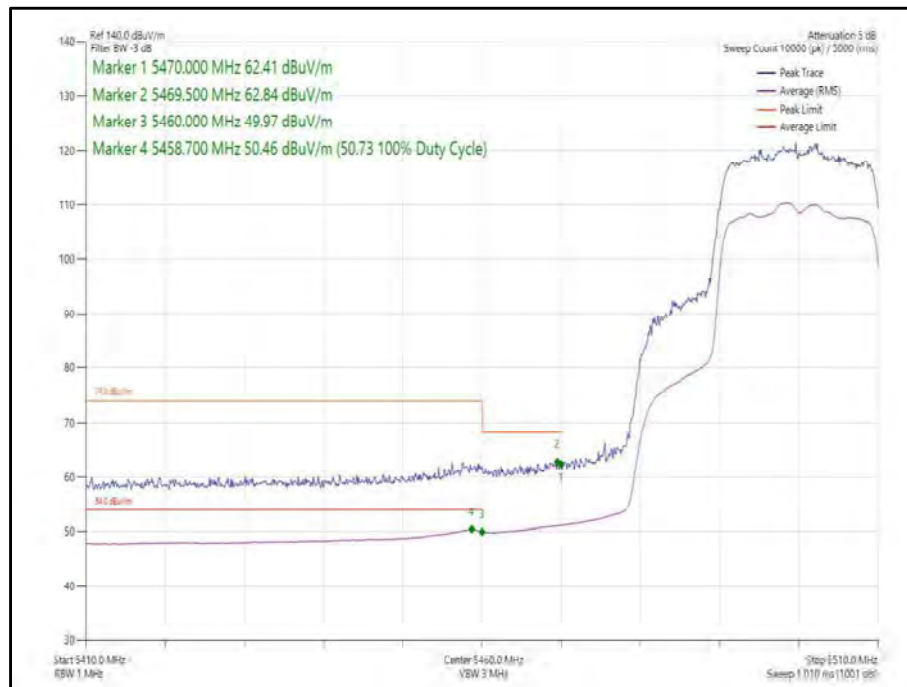
Figure 38 - 802.11ax, HE20, SU, SDM, Core 0-1 - 5320 MHz, Band Edge Frequency 5350 MHz



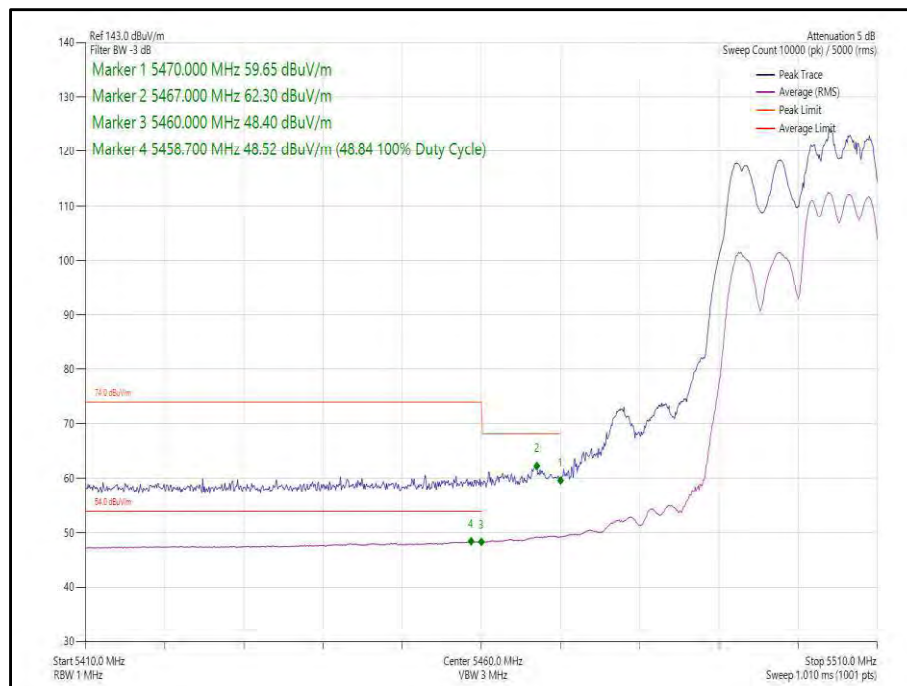
**Figure 39 - 802.11ax, HE20, RU 106-54, SDM, Core 0-1 - 5320 MHz,  
Band Edge Frequency 5350 MHz**



**Figure 40 - 802.11n, HT20, SDM, Core 0-1 - 5500 MHz,  
Band Edge Frequency 5460 MHz**



**Figure 41 - 802.11ax, HE20, SU, SDM, Core 0-1 - 5500 MHz,  
Band Edge Frequency 5460 MHz**

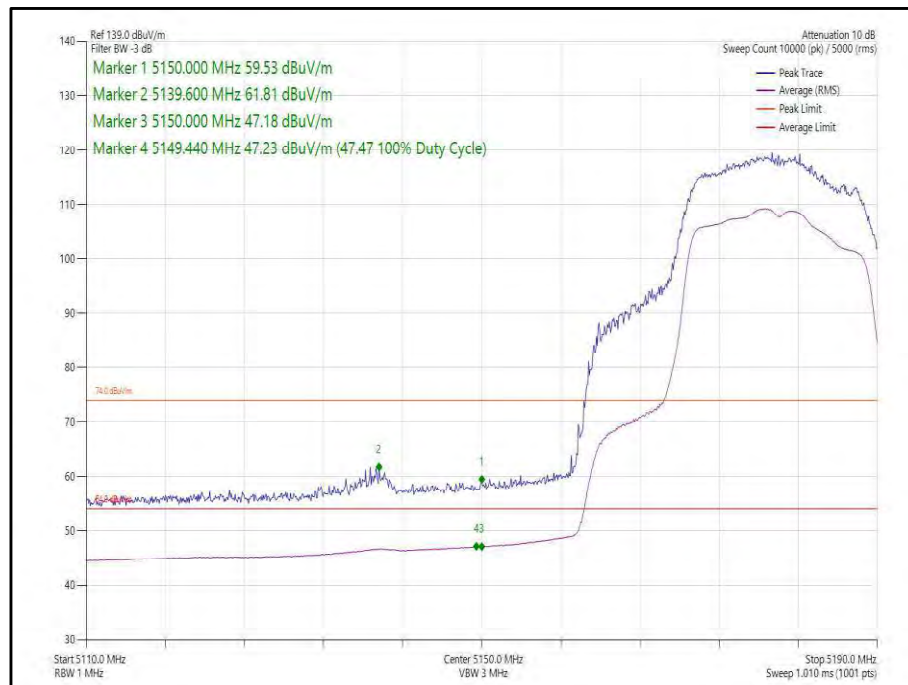


**Figure 42 - 802.11ax, HE20, RU 106-54, SDM, Core 0-1 - 5500 MHz,  
Band Edge Frequency 5460 MHz**

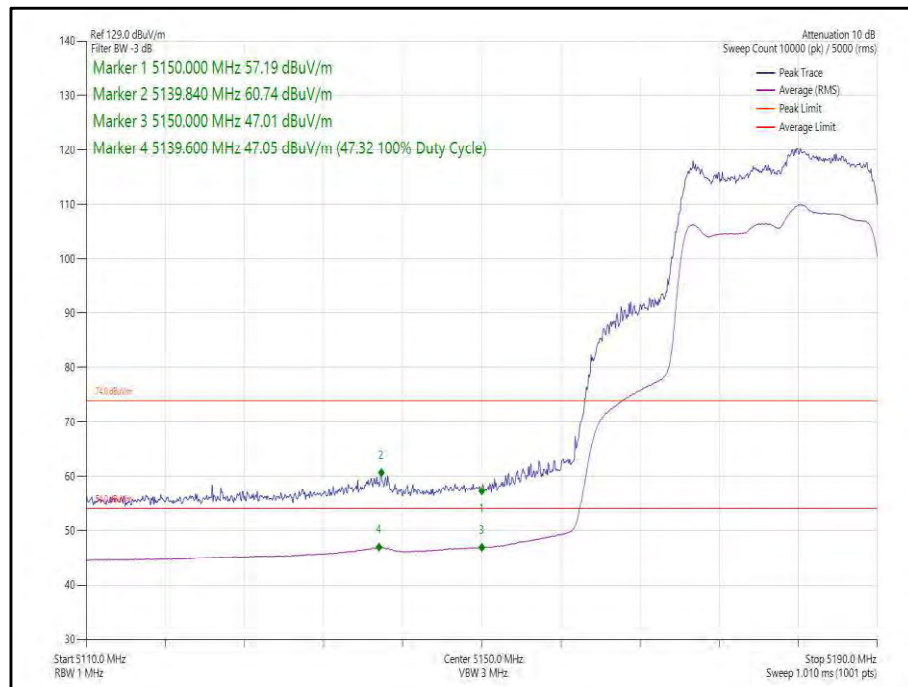
20 MHz Bandwidth - Core 0-1 (TxBF)

| Mode           | Data Rate/<br>MCS | Resource<br>Size | Resource<br>Index | TX<br>Frequency<br>(MHz) | Band Edge<br>Frequency<br>(MHz) | Peak Level<br>(dBμV/m) | Average<br>Level<br>(dBμV/m) |
|----------------|-------------------|------------------|-------------------|--------------------------|---------------------------------|------------------------|------------------------------|
| 802.11n, HT20  | MCS4              | -                | -                 | 5180                     | 5150                            | 61.81                  | 47.47                        |
| 802.11ax, HE20 | MCS2x1            | SU               | -                 | 5180                     | 5150                            | 60.74                  | 47.32                        |
| 802.11n, HT20  | MCS2              | -                | -                 | 5320                     | 5350                            | 60.74                  | 48.67                        |
| 802.11ax, HE20 | MCS4x1            | SU               | -                 | 5320                     | 5350                            | 62.81                  | 48.13                        |
| 802.11n, HT20  | MCS2              | -                | -                 | 5500                     | 5460                            | 60.38                  | 47.87                        |
| 802.11ax, HE20 | MCS2x1            | SU               | -                 | 5500                     | 5460                            | 60.06                  | 48.00                        |

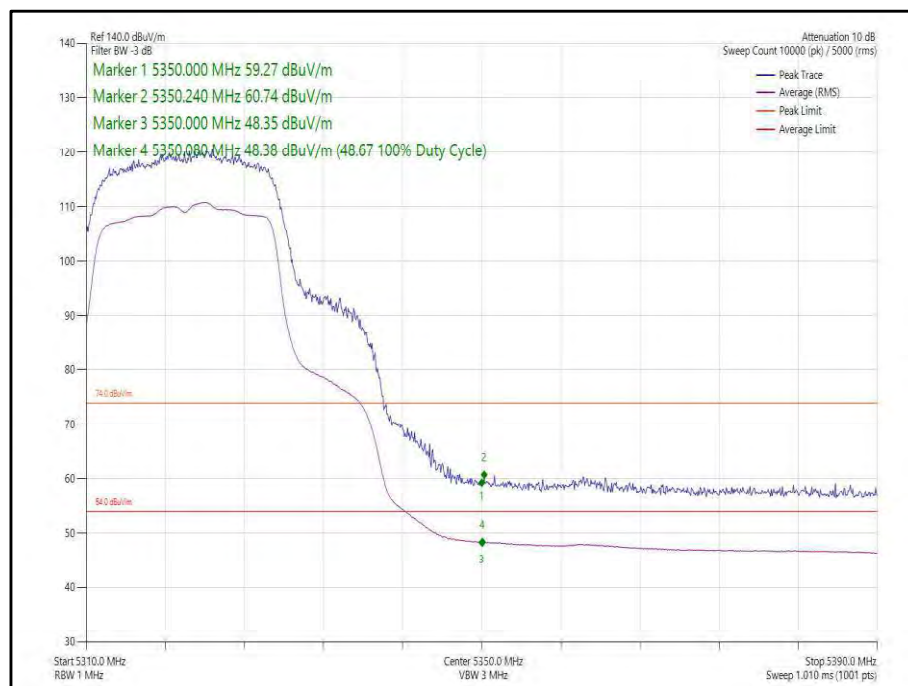
**Table 11 - TxBF Restricted Band Edge Results**



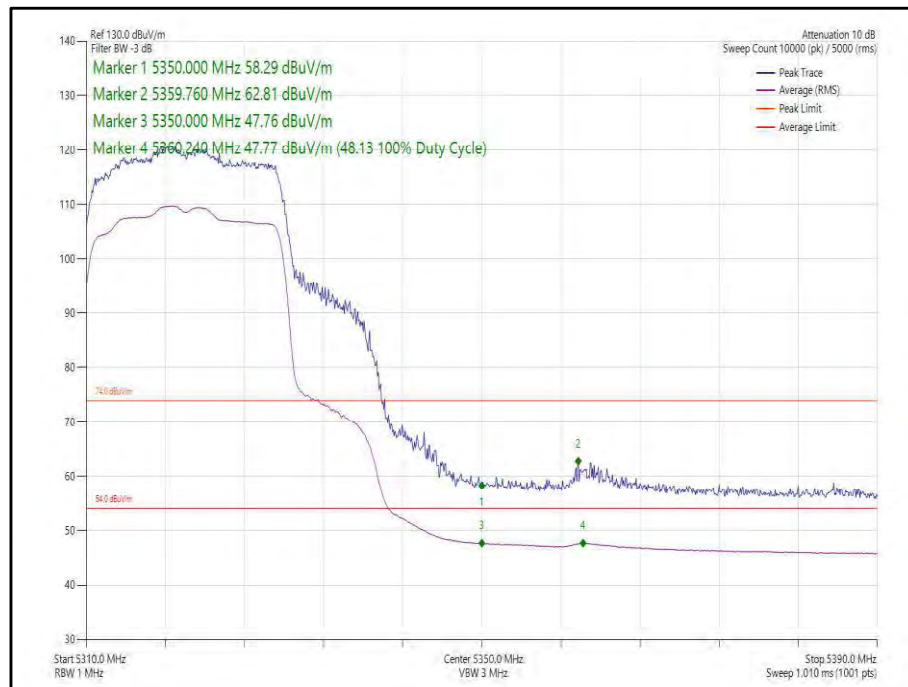
**Figure 43 - 802.11n, HT20, TxBF, Core 0-1 - 5180 MHz,  
Band Edge Frequency 5150 MHz**



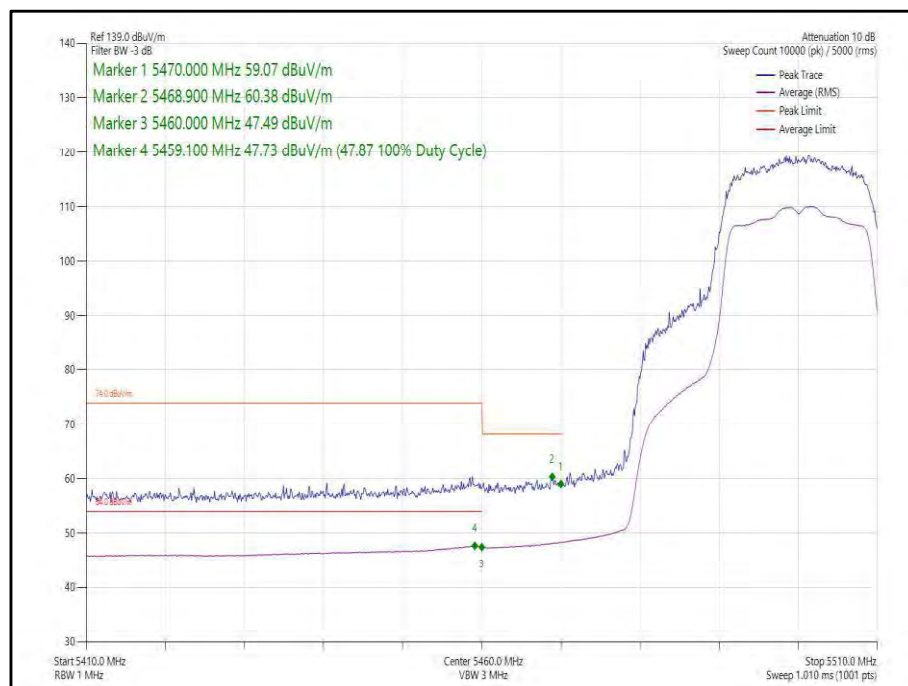
**Figure 44 - 802.11ax, HE20, SU, TxBF, Core 0-1 - 5180 MHz,  
Band Edge Frequency 5150 MHz**



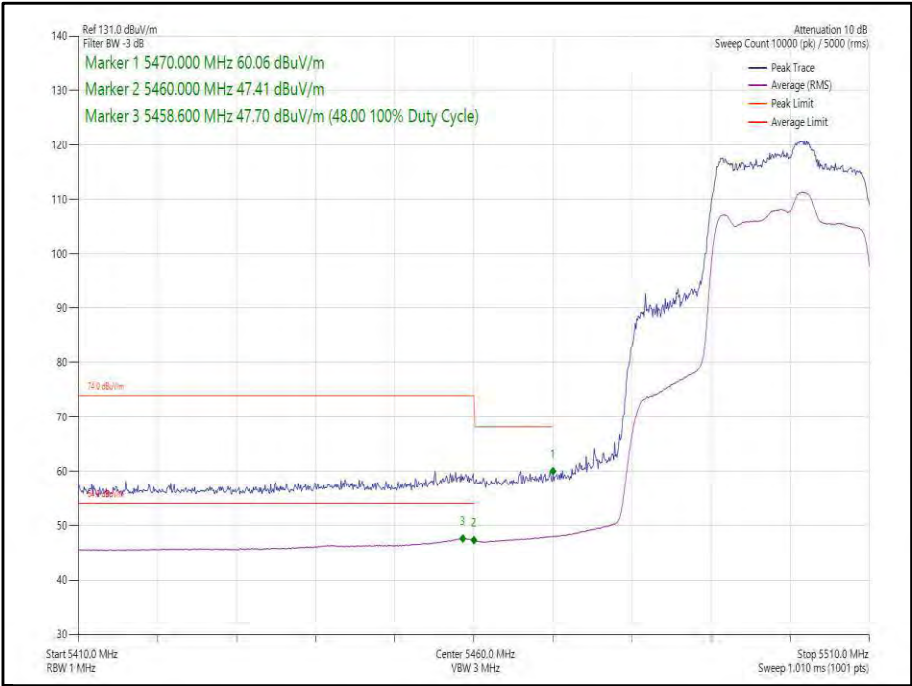
**Figure 45 - 802.11n, HT20, TxBF, Core 0-1 - 5320 MHz,  
Band Edge Frequency 5350 MHz**



**Figure 46 - 802.11ax, HE20, SU, TxBF, Core 0-1 - 5320 MHz,  
Band Edge Frequency 5350 MHz**



**Figure 47 - 802.11n, HT20, TxBF, Core 0-1 - 5500 MHz,  
Band Edge Frequency 5460 MHz**



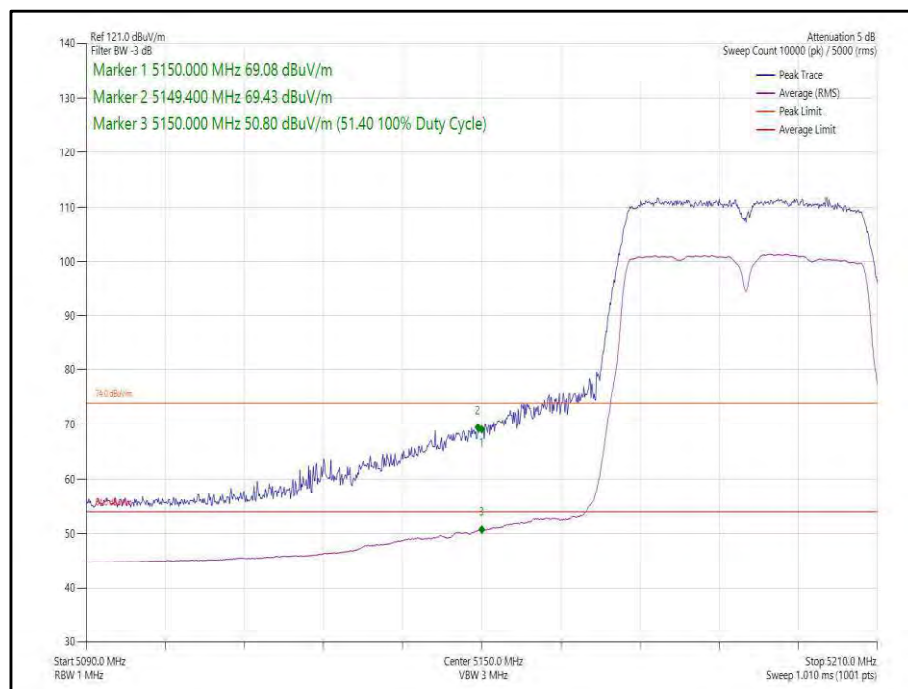
**Figure 48 - 802.11ax, HE20, SU, TxBF, Core 0-1 - 5500 MHz,  
Band Edge Frequency 5460 MHz**



40 MHz Bandwidth - Core 0 (SISO)

| Mode           | Data Rate/<br>MCS | Resource<br>Size | Resource<br>Index | TX<br>Frequency<br>(MHz) | Band Edge<br>Frequency<br>(MHz) | Peak Level<br>(dBμV/m) | Average<br>Level<br>(dBμV/m) |
|----------------|-------------------|------------------|-------------------|--------------------------|---------------------------------|------------------------|------------------------------|
| 802.11n, HT40  | MCS7              | -                | -                 | 5190                     | 5150                            | 69.43                  | 51.40                        |
| 802.11ax, HE40 | MCS2x1            | SU               | -                 | 5190                     | 5150                            | 63.12                  | 51.48                        |
| 802.11ax, HE40 | MCS11x1           | 106              | 56                | 5190                     | 5150                            | 63.34                  | 50.93                        |
| 802.11n, HT40  | MCS4              | -                | -                 | 5310                     | 5350                            | 65.11                  | 51.44                        |
| 802.11ax, HE40 | MCS11x1           | SU               | -                 | 5310                     | 5350                            | 68.69                  | 51.48                        |
| 802.11ax, HE40 | MCS11x1           | 106              | 53                | 5310                     | 5350                            | 68.40                  | 51.19                        |
| 802.11n, HT40  | MCS2              | -                | -                 | 5510                     | 5460                            | 63.18                  | 50.09                        |
| 802.11ax, HE40 | MCS4x1            | SU               | -                 | 5510                     | 5460                            | 63.29                  | 50.53                        |
| 802.11ax, HE40 | MCS11x1           | 52               | 44                | 5510                     | 5460                            | 63.05                  | 49.80                        |

**Table 12 - SISO Restricted Band Edge Results**



**Figure 49 - 802.11n, HT40, SISO, Core 0 - 5190 MHz,  
Band Edge Frequency 5150 MHz**



Figure 50 - 802.11ax, HE40, SU SISO, Core 0 - 5190 MHz,  
Band Edge Frequency 5150 MHz

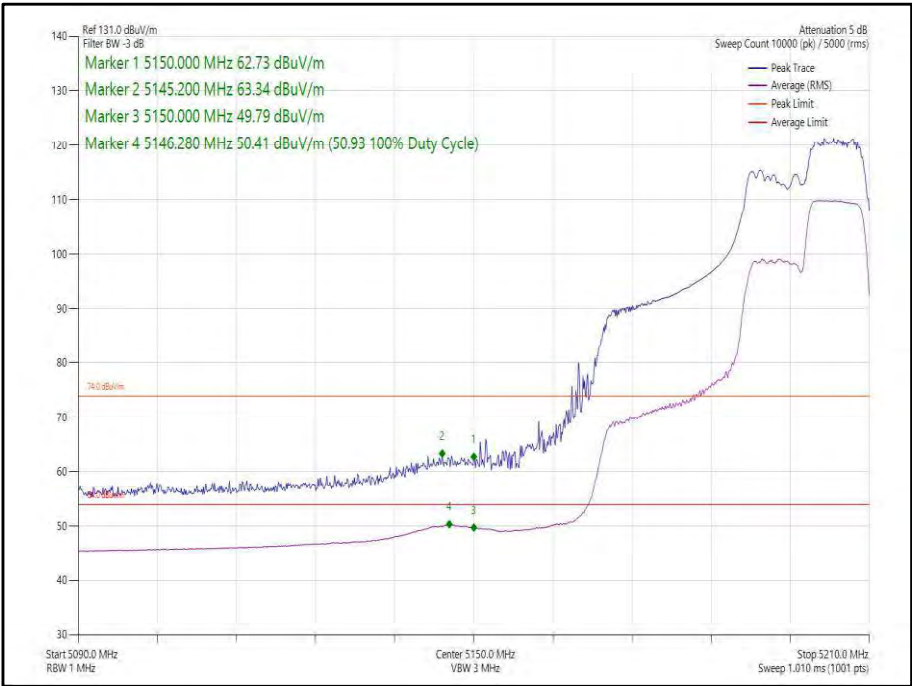
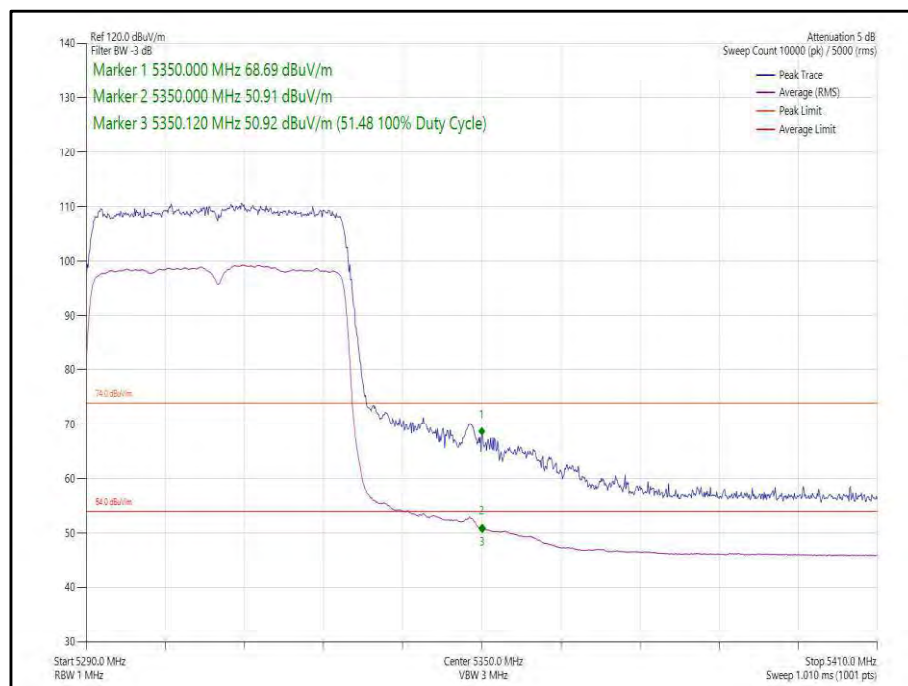


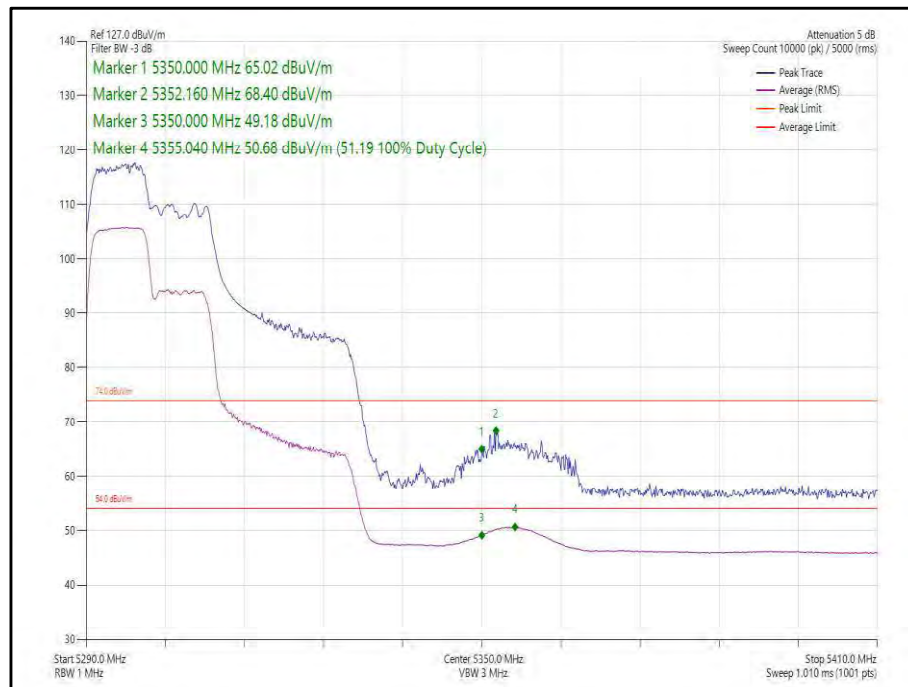
Figure 51 - 802.11ax, HE40, RU 106-56 SISO, Core 0 - 5190 MHz  
,Band Edge Frequency 5150 MHz



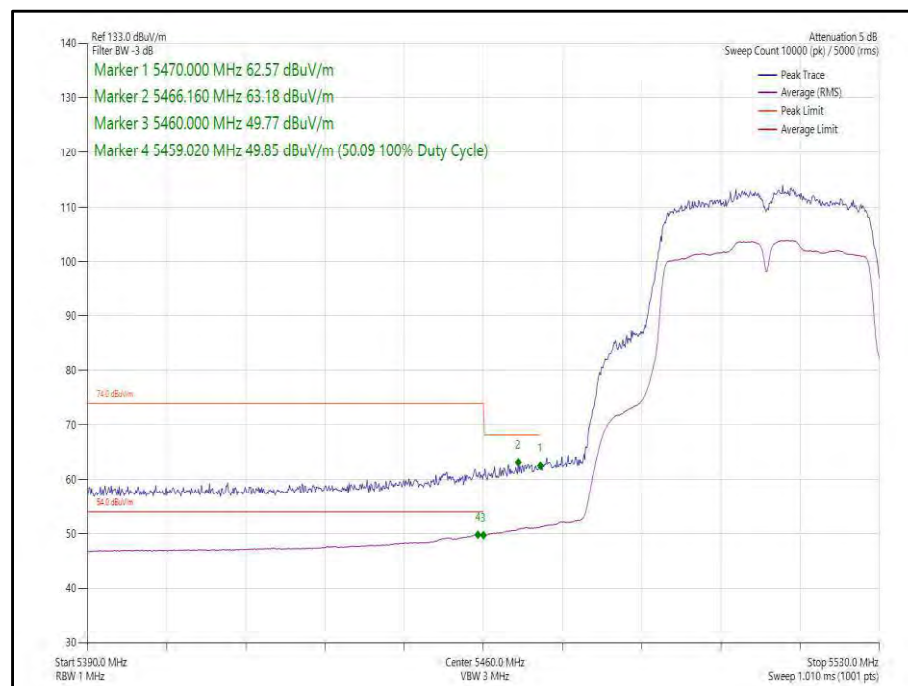
**Figure 52 - 802.11n, HT40, SISO, Core 0 - 5310 MHz,  
Band Edge Frequency 5350 MHz**



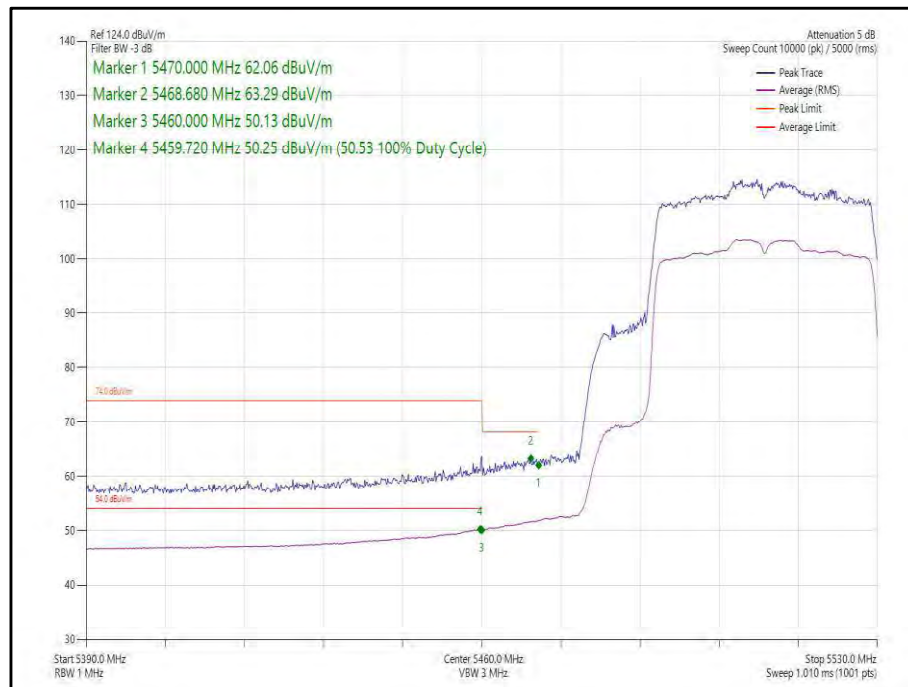
**Figure 53 - 802.11ax, HE40, SU, SISO, Core 0 - 5310 MHz,  
Band Edge Frequency 5350 MHz**



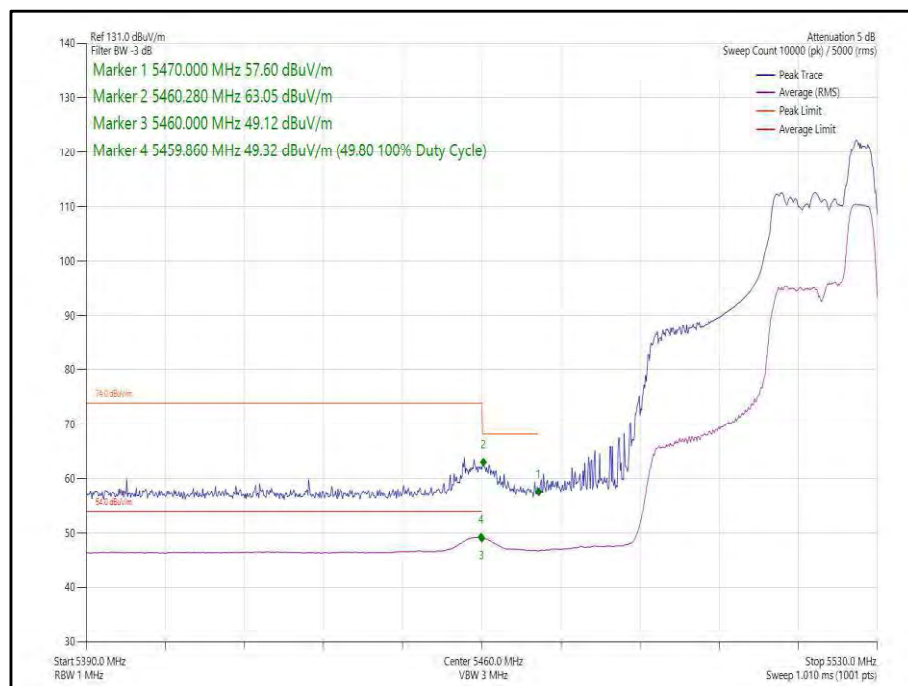
**Figure 54 - 802.11ax, HE40, RU 106-53, SISO, Core 0 - 5310 MHz,  
Band Edge Frequency 5350 MHz**



**Figure 55 - 802.11n, HT40, SISO, Core 0 - 5510 MHz,  
Band Edge Frequency 5460 MHz**



**Figure 56 - 802.11ax, HE40, SU, SISO, Core 0 - 5510 MHz,  
Band Edge Frequency 5460 MHz**



**Figure 57 - 802.11ax, HE40, RU 52-44, SISO, Core 0 - 5510 MHz,  
Band Edge Frequency 5460 MHz**



40 MHz Bandwidth - Core 1 (SISO)

| Mode           | Data Rate/<br>MCS | Resource<br>Size | Resource<br>Index | TX<br>Frequency<br>(MHz) | Band Edge<br>Frequency<br>(MHz) | Peak Level<br>(dBμV/m) | Average<br>Level<br>(dBμV/m) |
|----------------|-------------------|------------------|-------------------|--------------------------|---------------------------------|------------------------|------------------------------|
| 802.11n, HT40  | MCS2              | -                | -                 | 5190                     | 5150                            | 63.67                  | 51.25                        |
| 802.11ax, HE40 | MCS4x1            | SU               | -                 | 5190                     | 5150                            | 64.42                  | 51.04                        |
| 802.11ax, HE40 | MCS11x1           | 106              | 56                | 5190                     | 5150                            | 61.02                  | 48.73                        |
| 802.11n, HT40  | MCS2              | -                | -                 | 5310                     | 5350                            | 65.32                  | 51.44                        |
| 802.11ax, HE40 | MCS2x1            | SU               | -                 | 5310                     | 5350                            | 63.77                  | 51.09                        |
| 802.11ax, HE40 | MCS11x1           | 106              | 53                | 5310                     | 5350                            | 65.14                  | 50.53                        |
| 802.11n, HT40  | MCS2              | -                | -                 | 5510                     | 5460                            | 63.15                  | 49.92                        |
| 802.11ax, HE40 | MCS4x1            | SU               | -                 | 5510                     | 5460                            | 63.19                  | 49.15                        |
| 802.11ax, HE40 | MCS11x1           | 52               | 44                | 5510                     | 5460                            | 63.36                  | 48.90                        |

Table 13 - SISO Restricted Band Edge Results

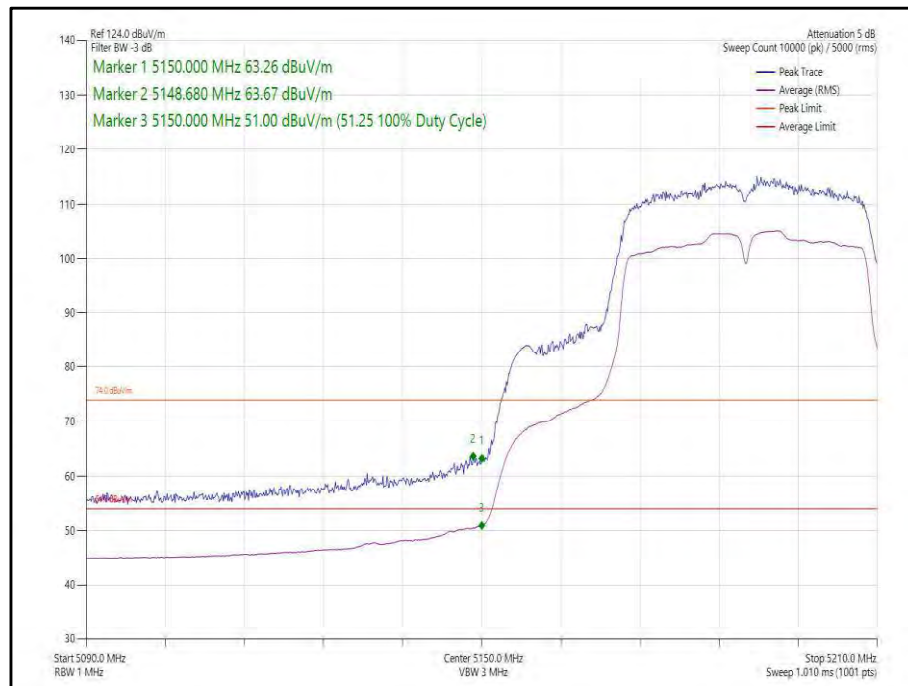
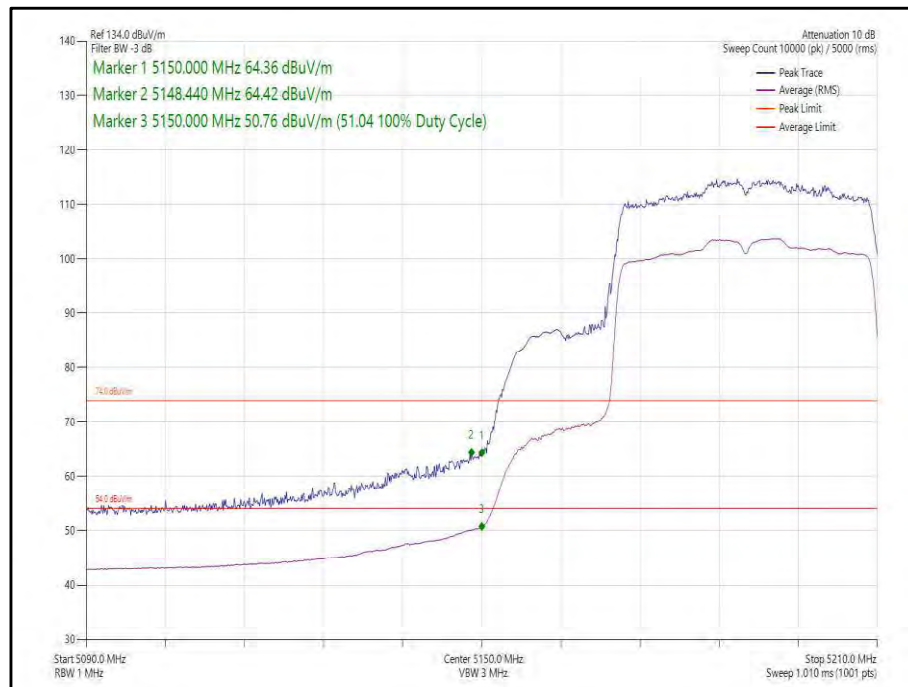
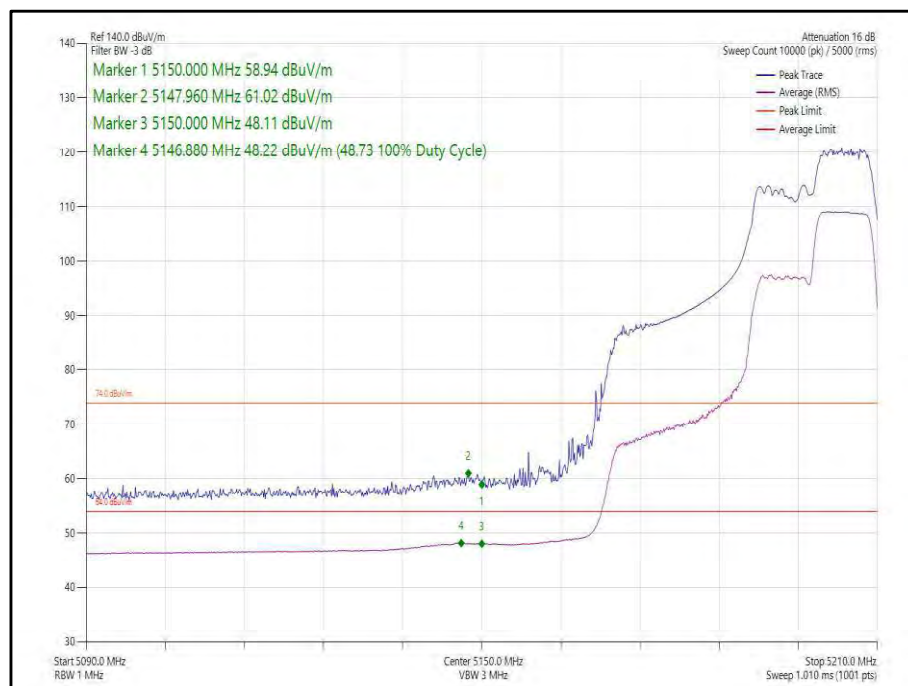


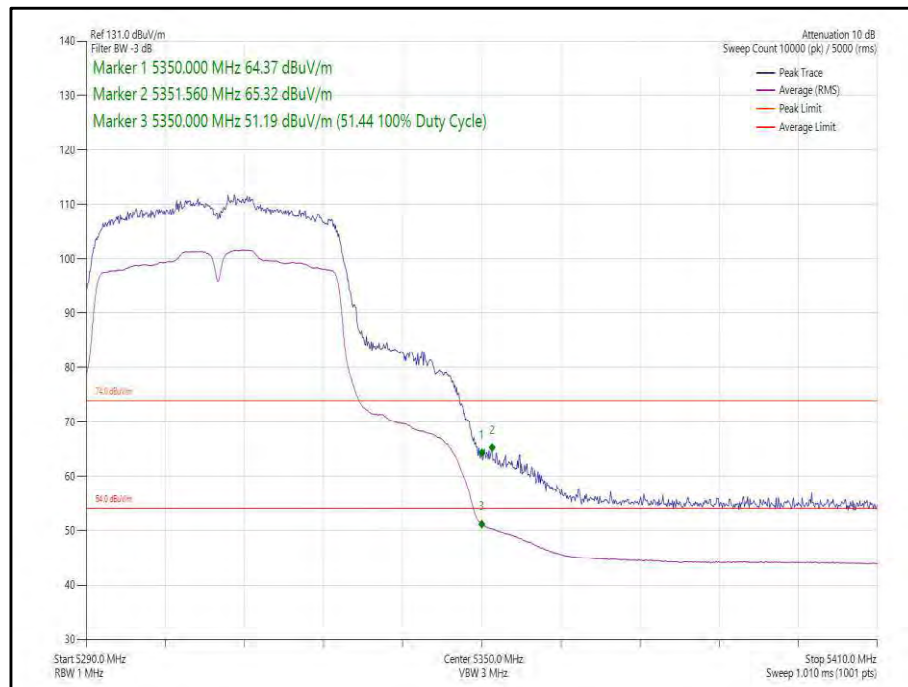
Figure 58 - 802.11n, HT40, SISO, Core 1 - 5190 MHz,  
Band Edge Frequency 5150 MHz



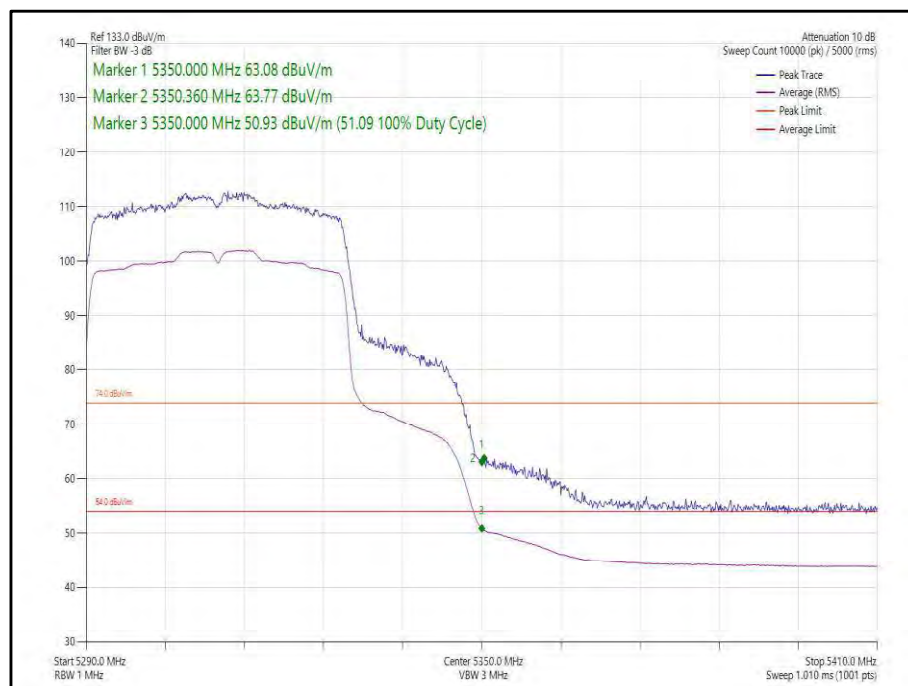
**Figure 59 - 802.11ax, HE40, SU, SISO, Core 1 - 5190 MHz,  
Band Edge Frequency 5150 MHz**



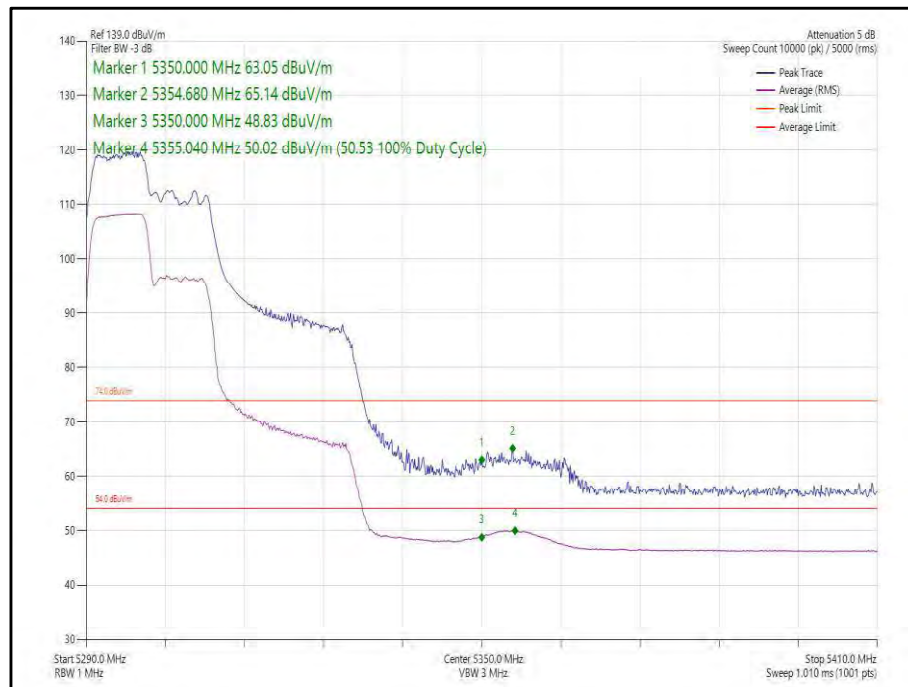
**Figure 60 - 802.11ax, HE40, RU 106-56, SISO, Core 1 - 5190 MHz,  
Band Edge Frequency 5150 MHz**



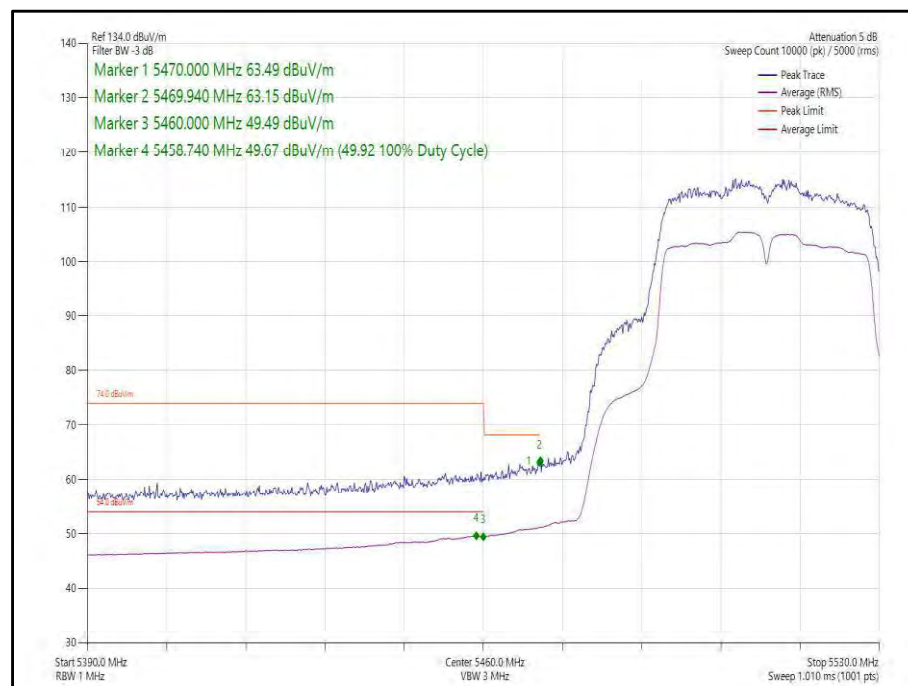
**Figure 61 - 802.11n, HT40, SISO, Core 1 - 5310 MHz,  
Band Edge Frequency 5350 MHz**



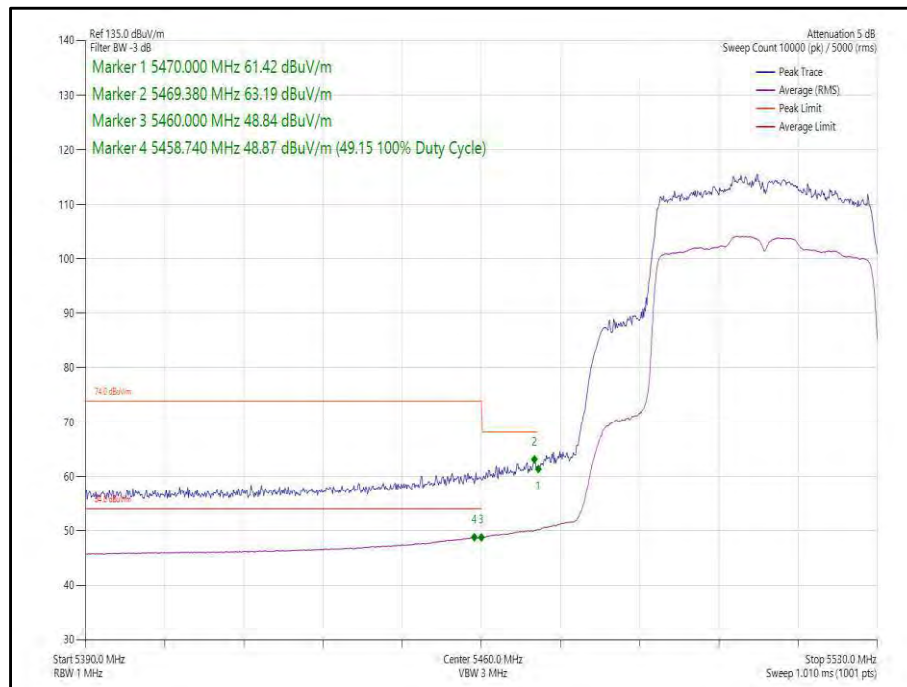
**Figure 62 - 802.11ax, HE40, SU, SISO, Core 1 - 5310 MHz,  
Band Edge Frequency 5350 MHz**



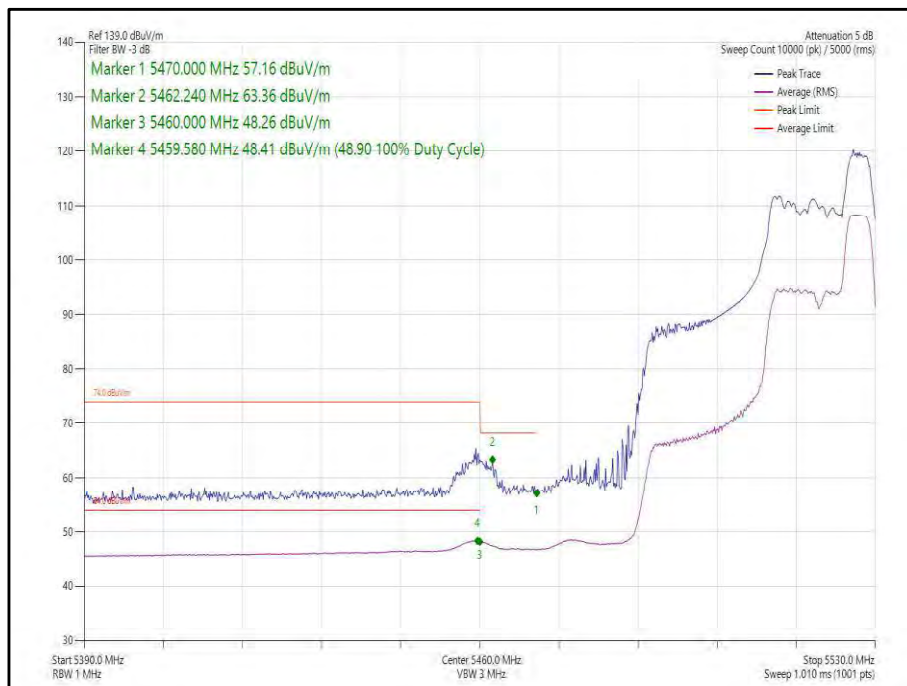
**Figure 63 - 802.11ax, HE40, RU 106-53, SISO, Core 1 - 5310 MHz,  
Band Edge Frequency 5350 MHz**



**Figure 64 - 802.11n, HT40, SISO, Core 1 - 5510 MHz,  
Band Edge Frequency 5460 MHz**



**Figure 65 - 802.11ax, HE40, SU SISO, Core 1 - 5510 MHz,  
Band Edge Frequency 5460 MHz**



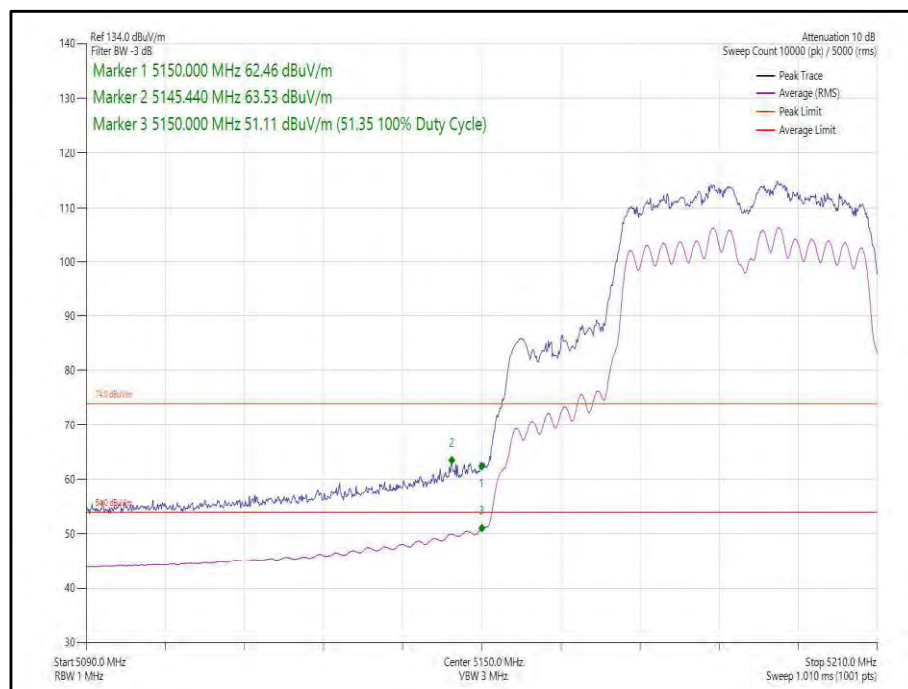
**Figure 66 - 802.11ax, HE40, RU 52-44, SISO, Core 1 - 5510 MHz,  
Band Edge Frequency 5460 MHz**



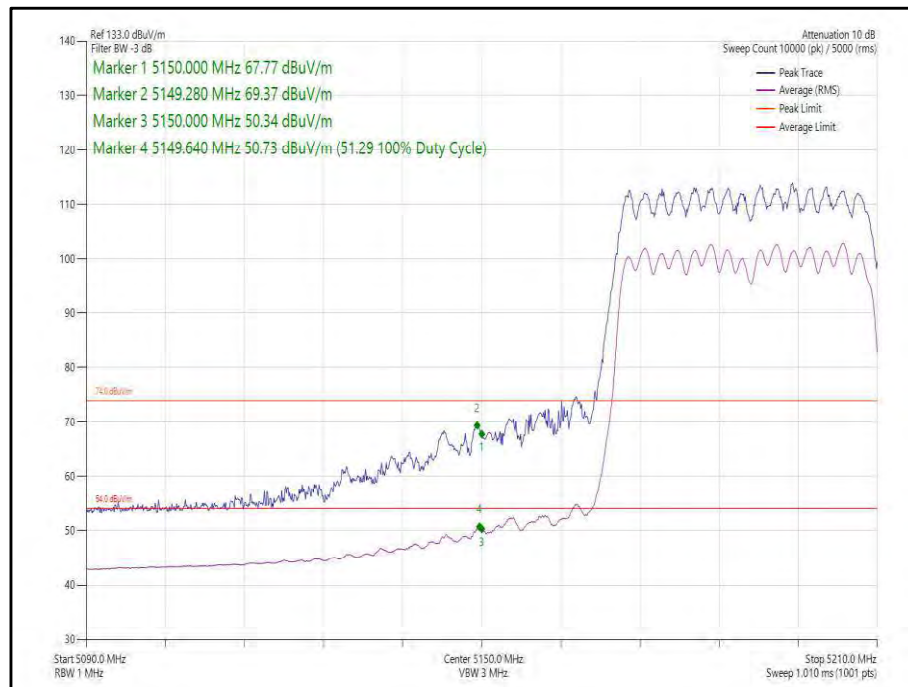
#### 40 MHz Bandwidth - Core 0-1 (CDD)

| Mode           | Data Rate/<br>MCS | Resource<br>Size | Resource<br>Index | TX<br>Frequency<br>(MHz) | Band Edge<br>Frequency<br>(MHz) | Peak Level<br>(dBμV/m) | Average<br>Level<br>(dBμV/m) |
|----------------|-------------------|------------------|-------------------|--------------------------|---------------------------------|------------------------|------------------------------|
| 802.11n, HT40  | MCS2              | -                | -                 | 5190                     | 5150                            | 63.53                  | 51.35                        |
| 802.11ax, HE40 | MCS11x1           | SU               | -                 | 5190                     | 5150                            | 69.37                  | 51.29                        |
| 802.11ax, HE40 | MCS11x1           | 106              | 56                | 5190                     | 5150                            | 64.85                  | 51.05                        |
| 802.11ax, HE40 | MCS11x1           | 106              | 53                | 5230                     | 5150                            | 60.80                  | 46.56                        |
| 802.11n, HT40  | MCS2              | -                | -                 | 5310                     | 5350                            | 63.67                  | 51.33                        |
| 802.11ax, HE40 | MCS11x1           | 106              | 53                | 5270                     | 5350                            | 58.39                  | 47.04                        |
| 802.11ax, HE40 | MCS2x1            | SU               | -                 | 5310                     | 5350                            | 62.75                  | 51.17                        |
| 802.11ax, HE40 | MCS11x1           | 106              | 53                | 5310                     | 5350                            | 68.82                  | 51.14                        |
| 802.11n, HT40  | MCS2              | -                | -                 | 5510                     | 5460                            | 63.04                  | 47.97                        |
| 802.11ax, HE40 | MCS2x1            | SU               | -                 | 5510                     | 5460                            | 63.58                  | 50.41                        |
| 802.11ax, HE40 | MCS11x1           | 52               | 37                | 5510                     | 5460                            | 63.56                  | 51.10                        |

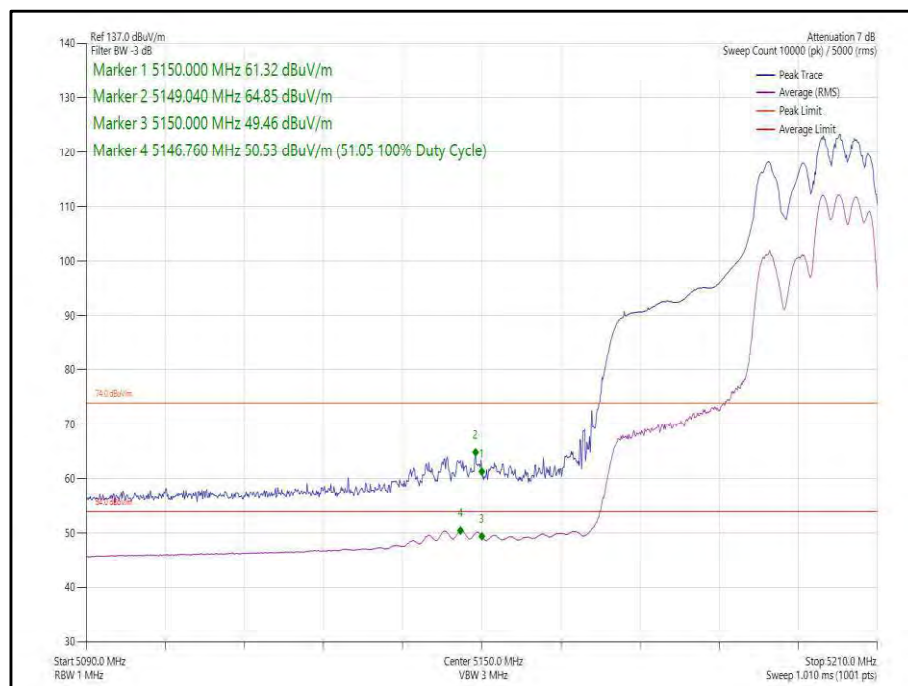
**Table 14 - CDD Restricted Band Edge Results**



**Figure 67 - 802.11n, HT40, CDD, Core 0-1 - 5190 MHz,  
Band Edge Frequency 5150 MHz**



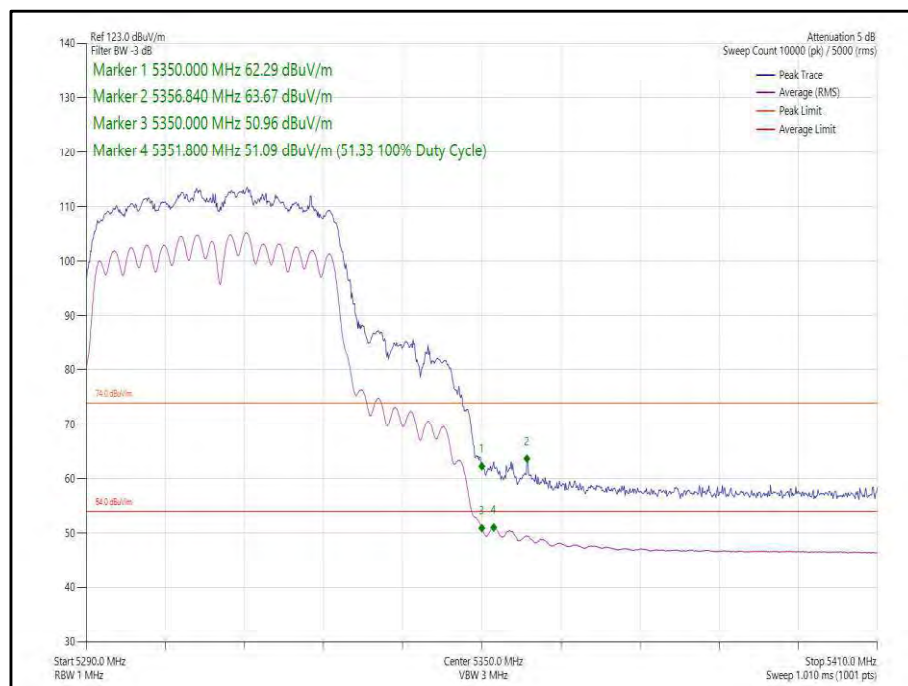
**Figure 68 - 802.11ax, HE40, SU, CDD, Core 0-1 - 5190 MHz,  
Band Edge Frequency 5150 MHz**



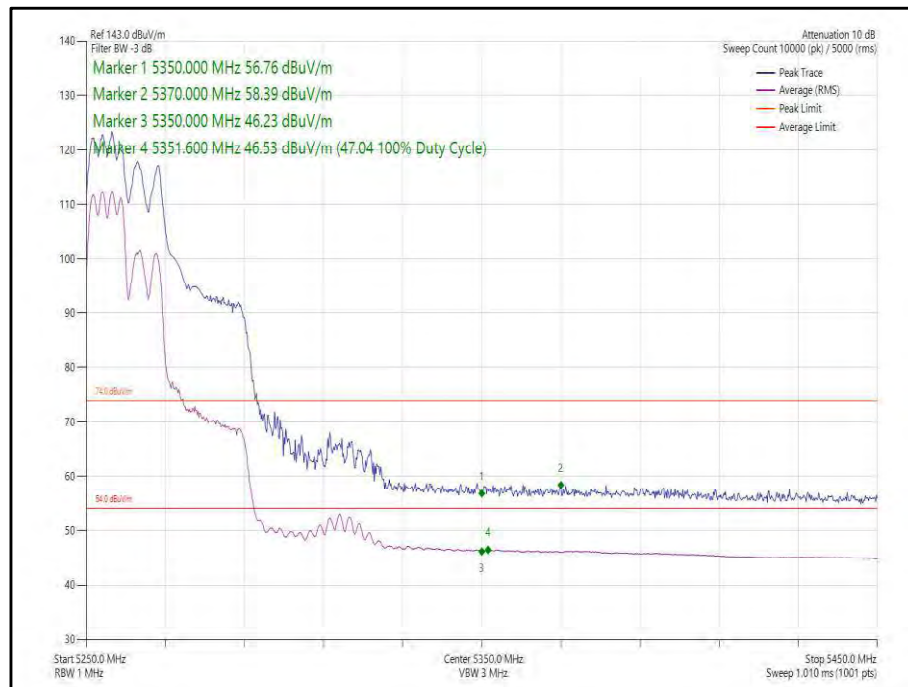
**Figure 69 - 802.11ax, HE40, RU 106-56, CDD, Core 0-1 - 5190 MHz,  
Band Edge Frequency 5150 MHz**



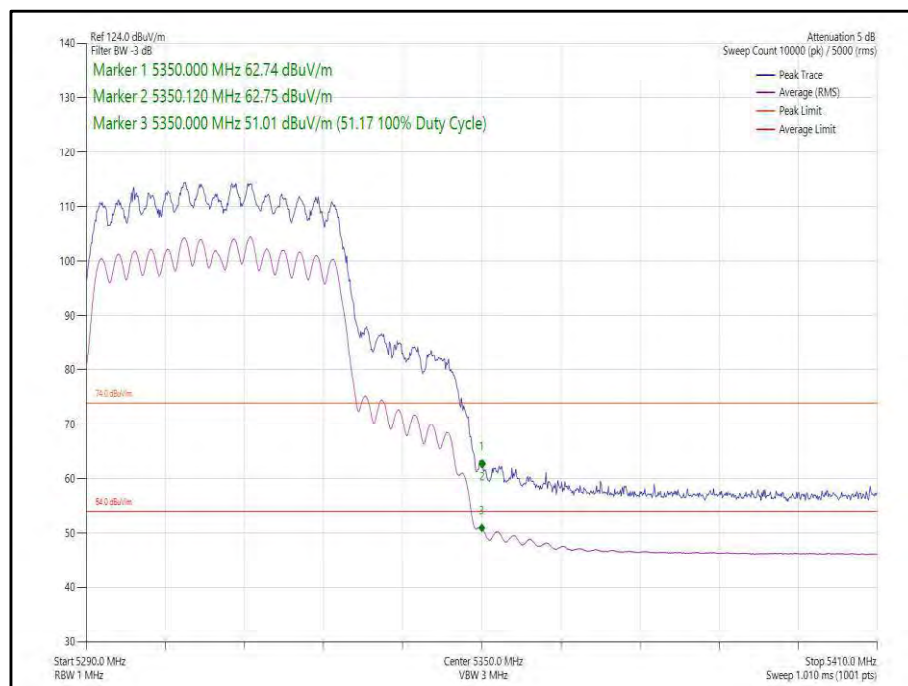
**Figure 70 - 802.11ax, HE40, RU 106-53, CDD, Core 0-1 - 5230 MHz, Band Edge Frequency 5150 MHz**



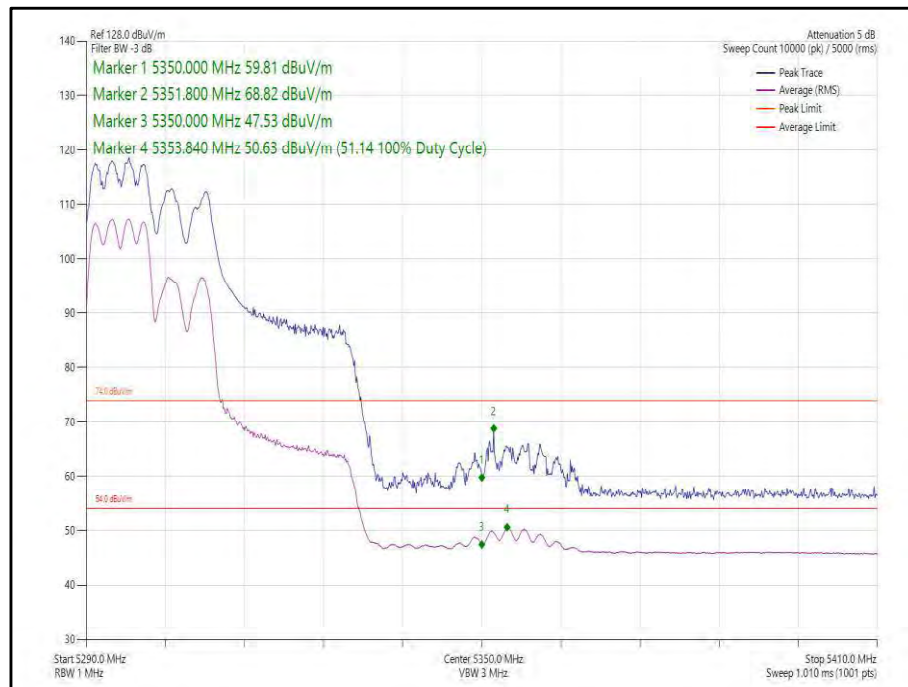
**Figure 71 - 802.11n, HT40, CDD, Core 0-1 - 5310 MHz, Band Edge Frequency 5350 MHz**



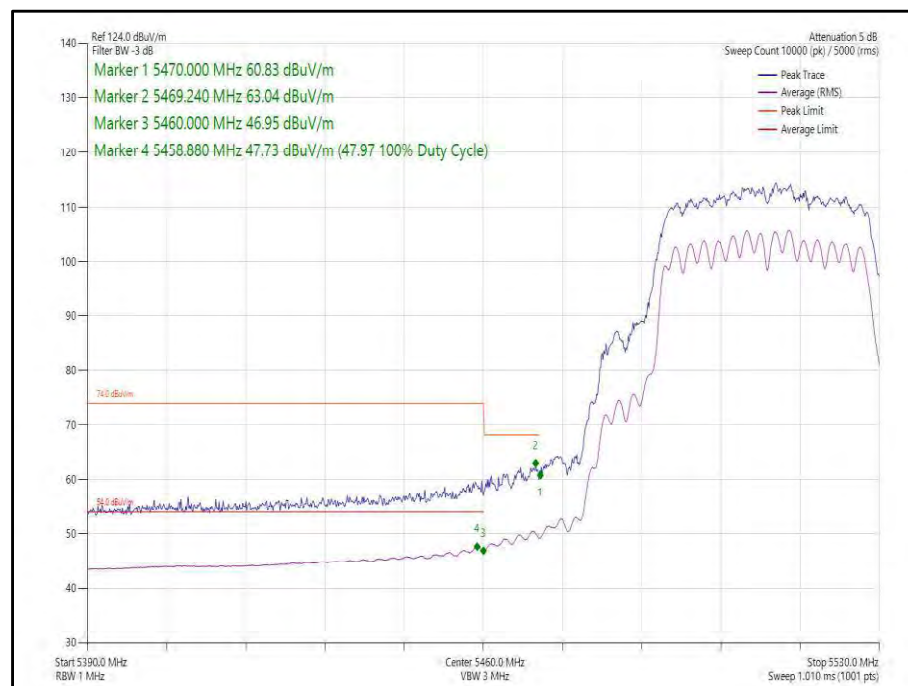
**Figure 72 - 802.11ax, HE40, RU 106-53, CDD, Core 0-1 - 5270 MHz,  
Band Edge Frequency 5350 MHz**



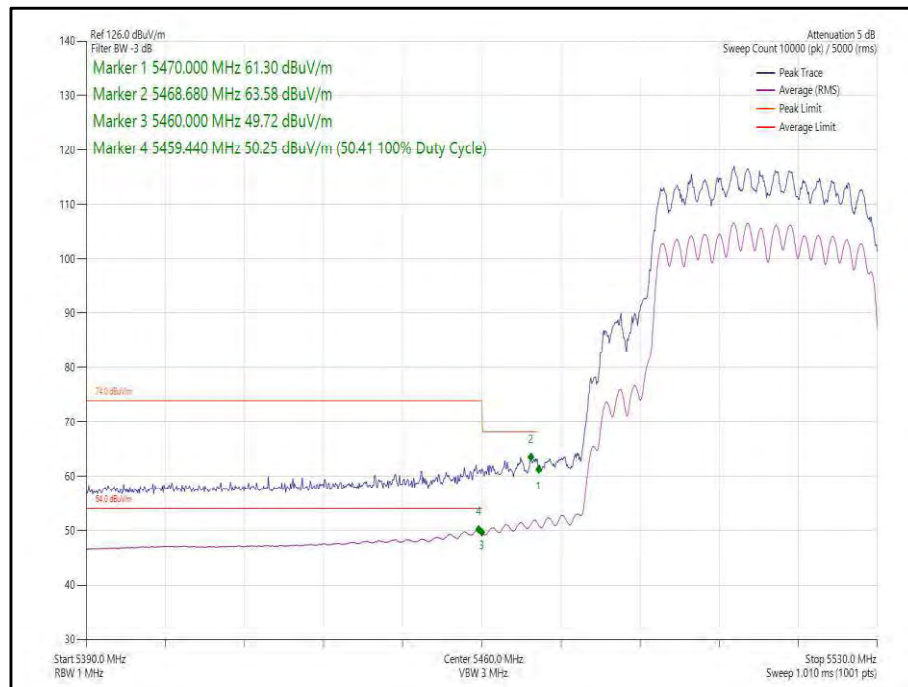
**Figure 73 - 802.11ax, HE40, SU, CDD, Core 0-1 - 5310 MHz,  
Band Edge Frequency 5350 MHz**



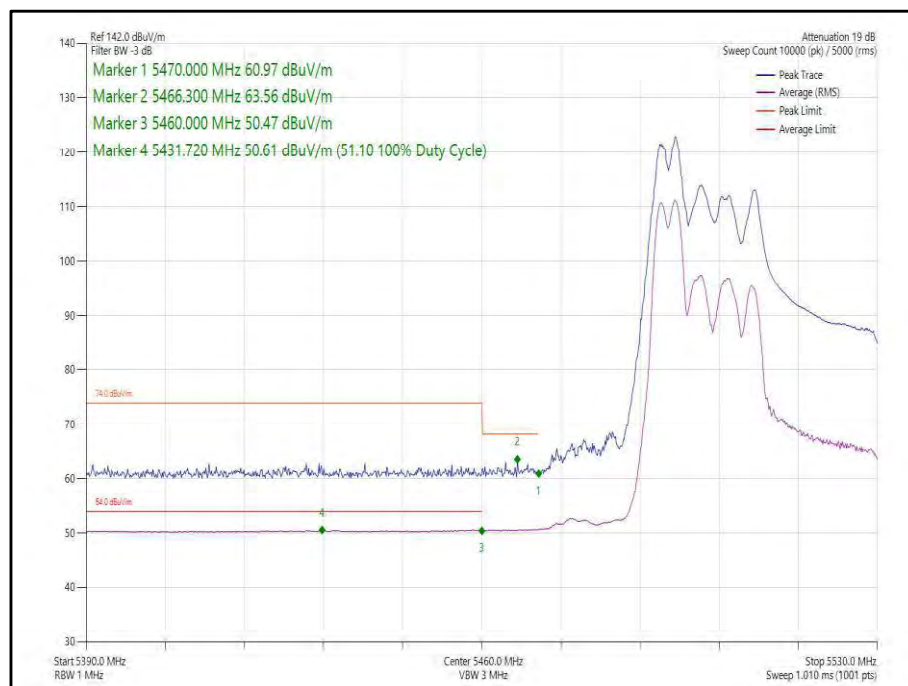
**Figure 74 - 802.11ax, HE40, RU 106-53, CDD, Core 0-1 - 5310 MHz,  
Band Edge Frequency 5350 MHz**



**Figure 75 - 802.11n, HT40, CDD, Core 0-1 - 5510 MHz,  
Band Edge Frequency 5460 MHz**



**Figure 76 - 802.11ax, HE40, SU, CDD, Core 0-1 - 5510 MHz,  
 Band Edge Frequency 5460 MHz**



**Figure 77 - 802.11ax, HE40, RU 52-37, CDD, Core 0-1 - 5510 MHz,  
 Band Edge Frequency 5460 MHz**



40 MHz Bandwidth - Core 0-1 (SDM)

| Mode           | Data Rate/<br>MCS | Resource<br>Size | Resource<br>Index | TX<br>Frequency<br>(MHz) | Band Edge<br>Frequency<br>(MHz) | Peak Level<br>(dBμV/m) | Average<br>Level<br>(dBμV/m) |
|----------------|-------------------|------------------|-------------------|--------------------------|---------------------------------|------------------------|------------------------------|
| 802.11n, HT40  | MCS12             | -                | -                 | 5190                     | 5150                            | 63.04                  | 51.48                        |
| 802.11ax, HE40 | MCS2x2            | SU               | -                 | 5190                     | 5150                            | 64.40                  | 51.45                        |
| 802.11ax, HE40 | MCS11x2           | 106              | 56                | 5190                     | 5150                            | 64.41                  | 51.20                        |
| 802.11ax, HE40 | MCS11x2           | 106              | 53                | 5230                     | 5150                            | 61.31                  | 46.29                        |
| 802.11n, HT40  | MCS12             | -                | -                 | 5310                     | 5350                            | 63.75                  | 51.39                        |
| 802.11ax, HE40 | MCS11x2           | 106              | 53                | 5270                     | 5350                            | 58.97                  | 47.06                        |
| 802.11ax, HE40 | MCS4x2            | SU               | -                 | 5310                     | 5350                            | 63.35                  | 51.45                        |
| 802.11ax, HE40 | MCS11x2           | 106              | 53                | 5310                     | 5350                            | 67.18                  | 51.44                        |
| 802.11n, HT40  | MCS12             | -                | -                 | 5510                     | 5460                            | 62.99                  | 51.06                        |
| 802.11ax, HE40 | MCS4x2            | SU               | -                 | 5510                     | 5460                            | 63.40                  | 50.53                        |
| 802.11ax, HE40 | MCS11x2           | 52               | 44                | 5510                     | 5460                            | 63.46                  | 49.75                        |

Table 15 - SDM Restricted Band Edge Results

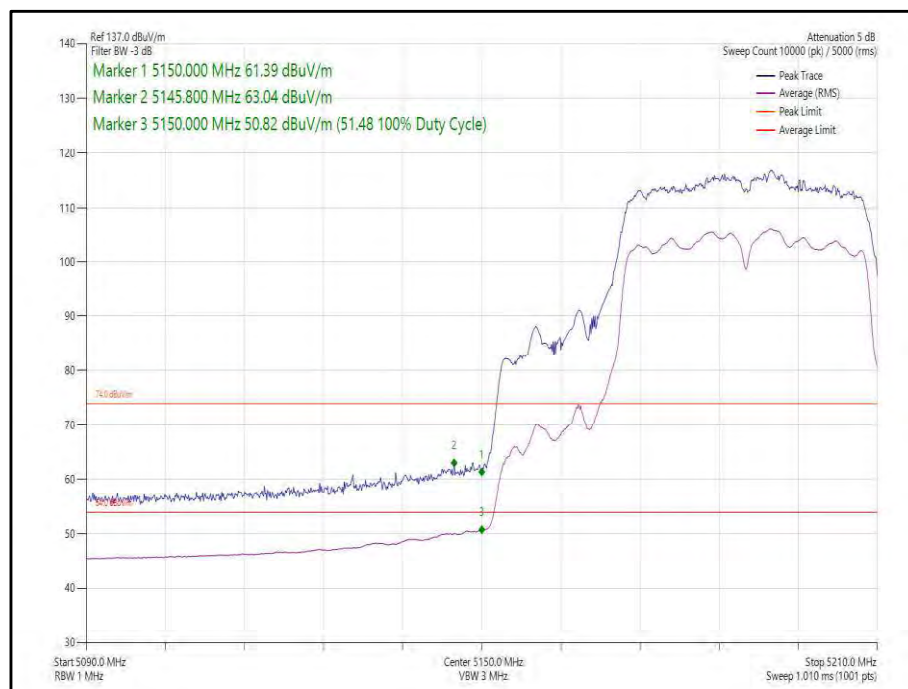
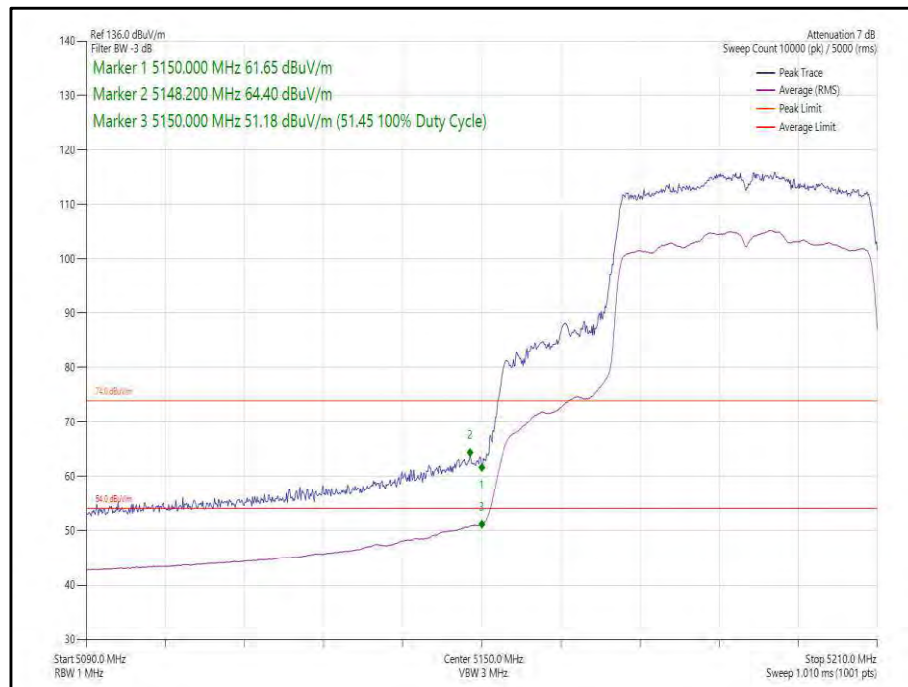
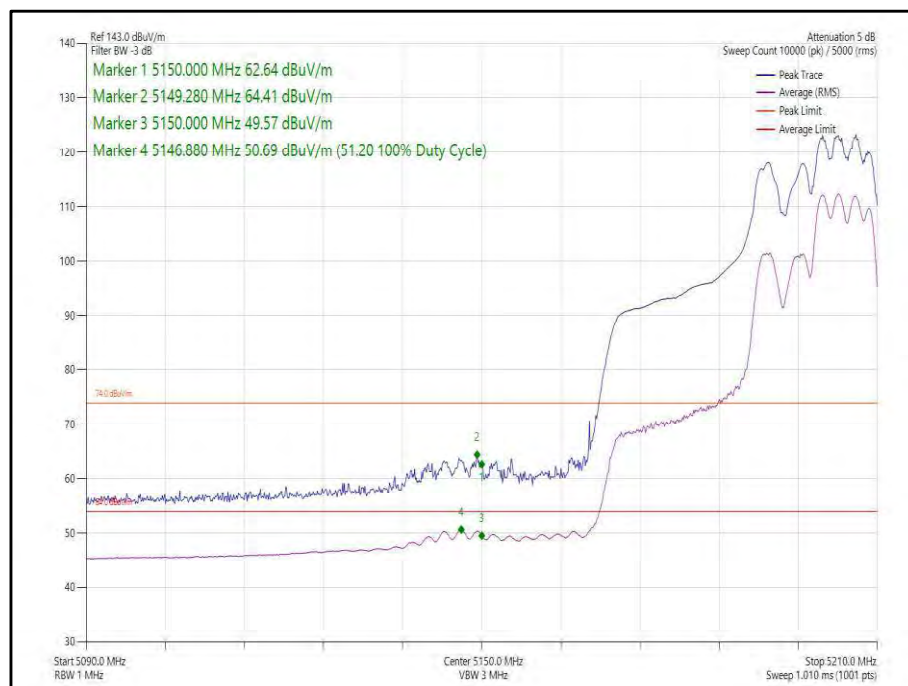


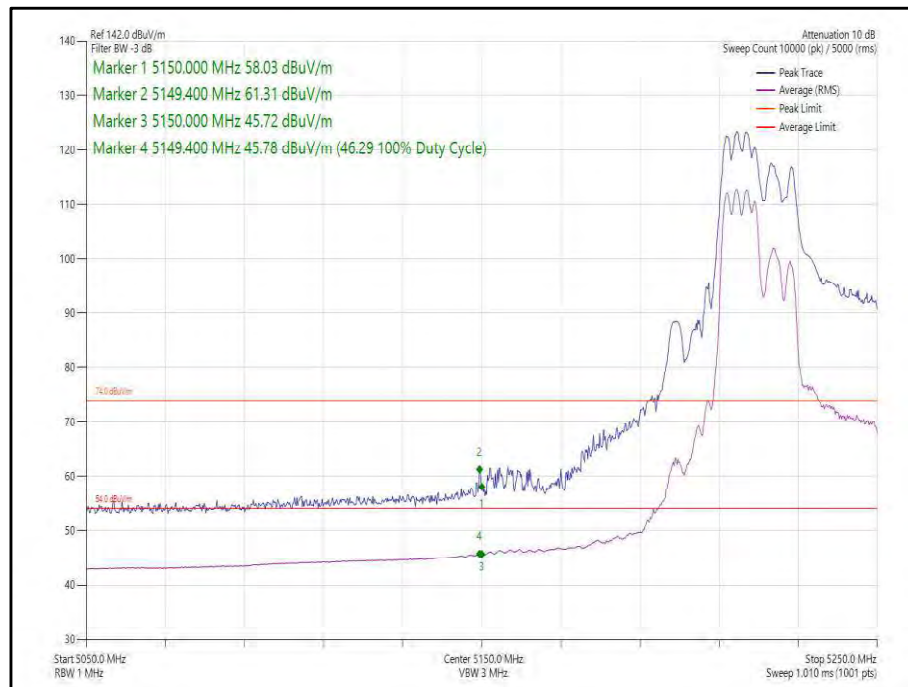
Figure 78 - 802.11n, HT40, SDM, Core 0-1 - 5190 MHz,  
Band Edge Frequency 5150 MHz



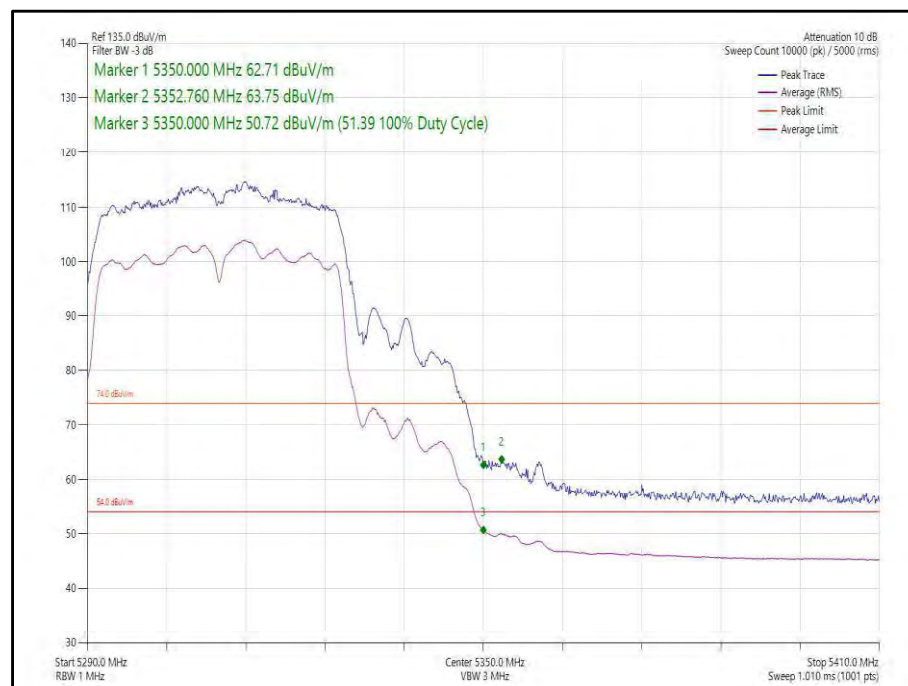
**Figure 79 - 802.11ax, HE40, SU, SDM, Core 0-1 - 5190 MHz,  
Band Edge Frequency 5150 MHz**



**Figure 80 - 802.11ax, HE40, RU 106-56, SDM, Core 0-1 - 5190 MHz,  
Band Edge Frequency 5150 MHz**



**Figure 81 - 802.11ax, HE40, RU 106-53, SDM, Core 0-1 - 5230 MHz,  
Band Edge Frequency 5150 MHz**



**Figure 82 - 802.11n, HT40, SDM, Core 0-1 - 5310 MHz,  
Band Edge Frequency 5350 MHz**

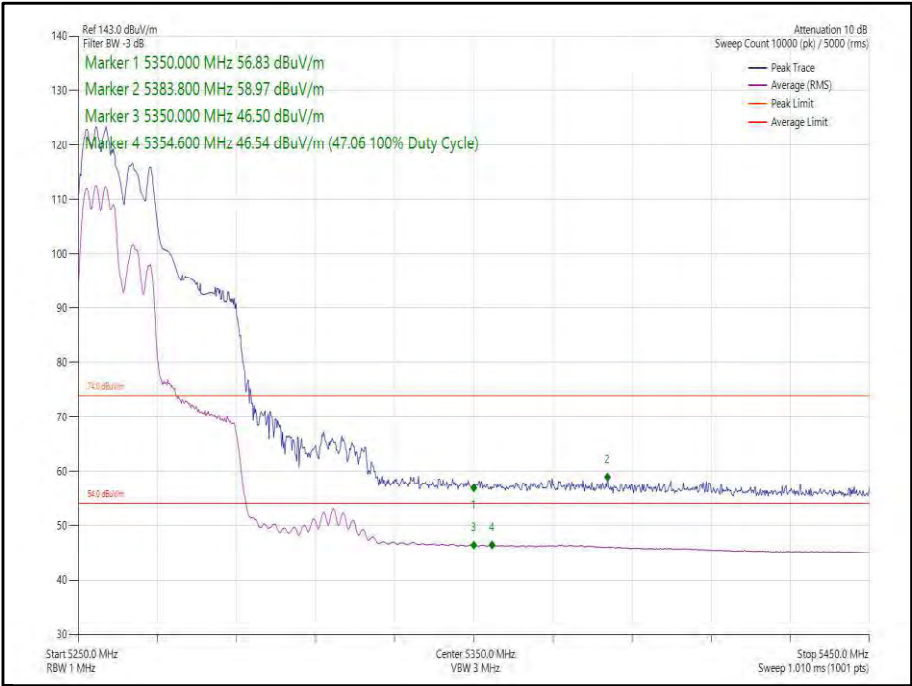


Figure 83 - 802.11ax, HE40, RU 106-53, SDM, Core 0-1 - 5270 MHz,  
Band Edge Frequency 5350 MHz

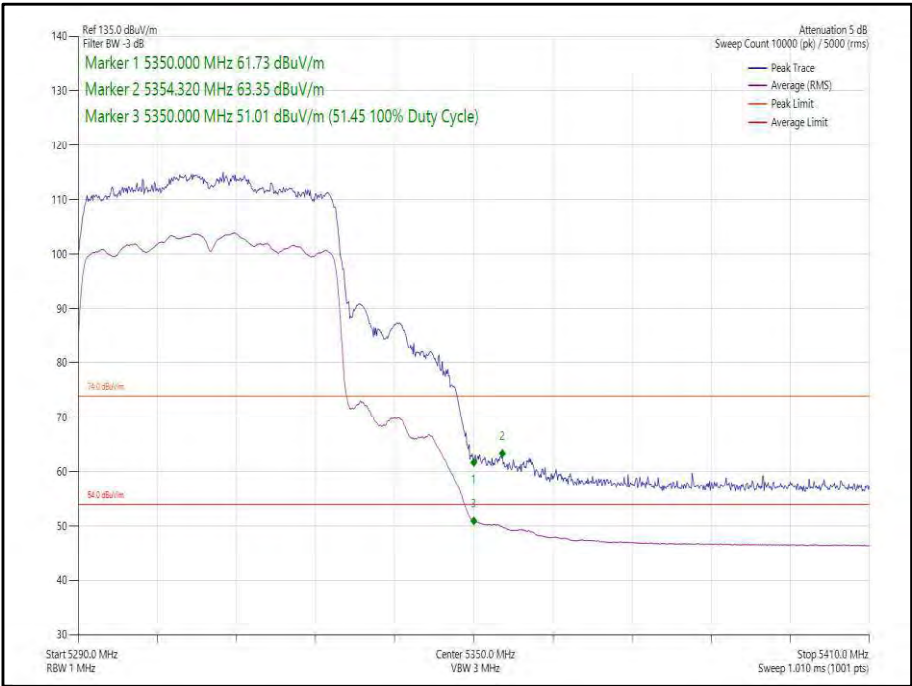
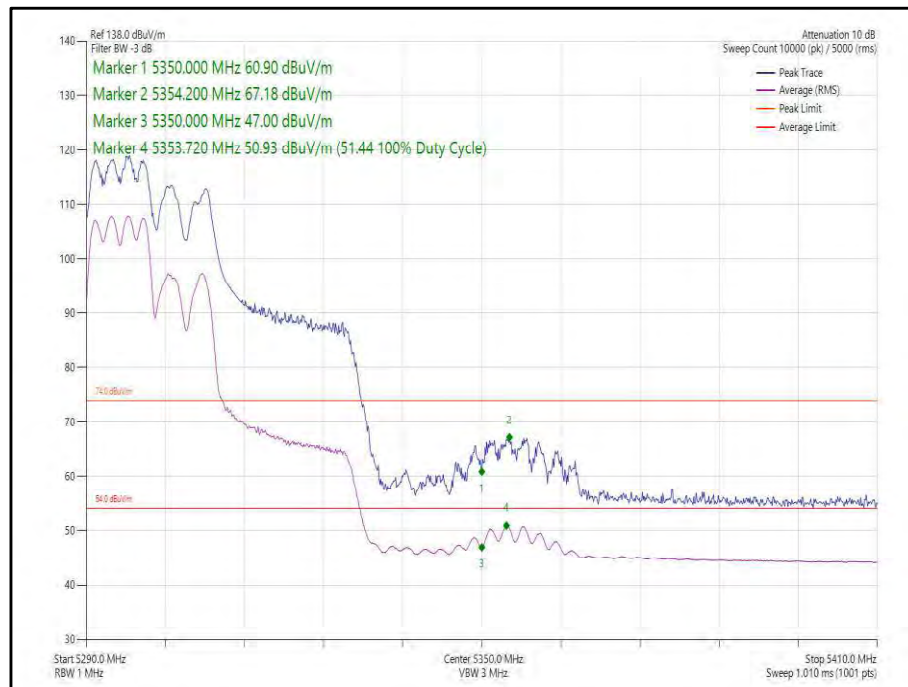
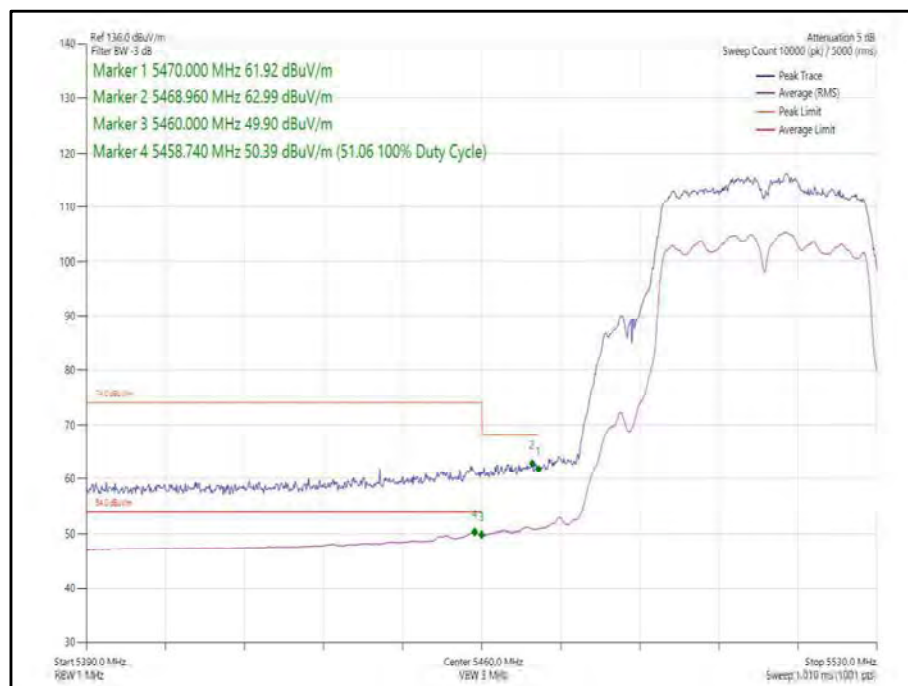


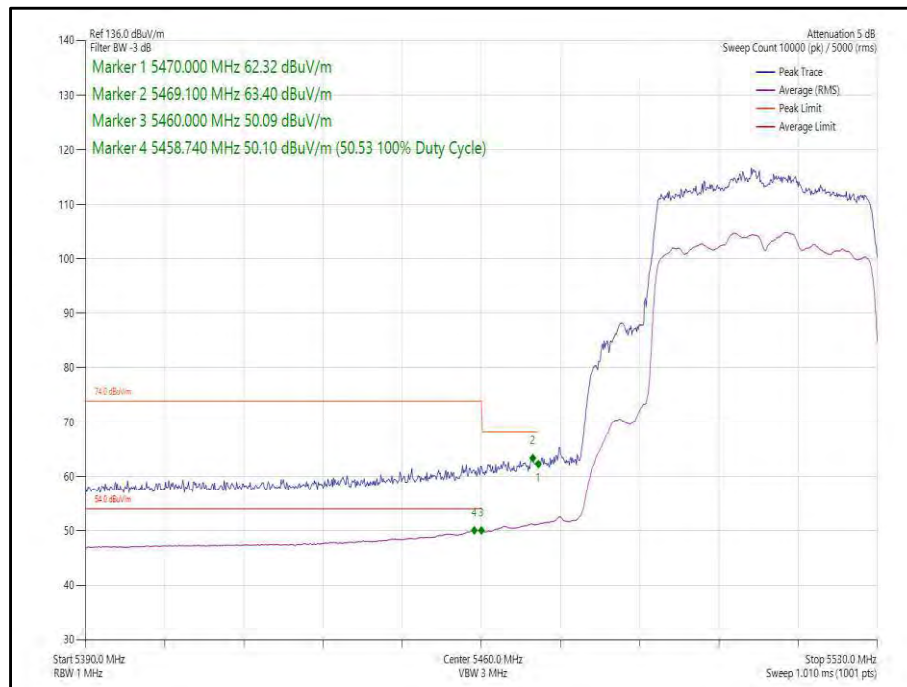
Figure 84 - 802.11ax, HE40, SU, SDM, Core 0-1 - 5310 MHz,  
Band Edge Frequency 5350 MHz



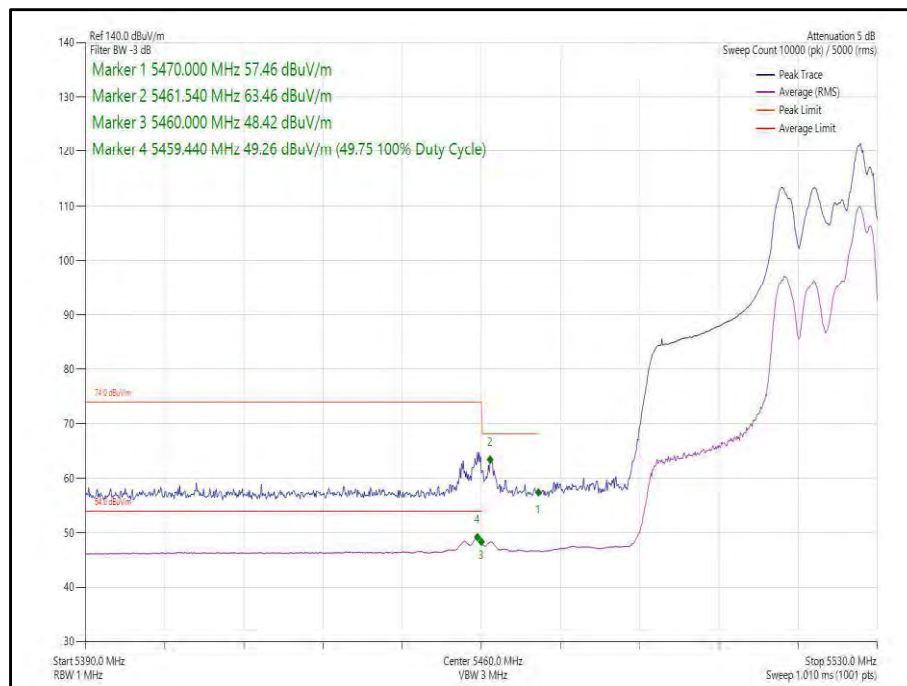
**Figure 85 - 802.11ax, HE40, RU 106-53, SDM, Core 0-1 - 5310 MHz,  
Band Edge Frequency 5350 MHz**



**Figure 86 - 802.11n, HT40, SDM, Core 0-1 - 5510 MHz,  
Band Edge Frequency 5460 MHz**



**Figure 87 - 802.11ax, HE40, SU, SDM, Core 0-1 - 5510 MHz,  
Band Edge Frequency 5460 MHz**

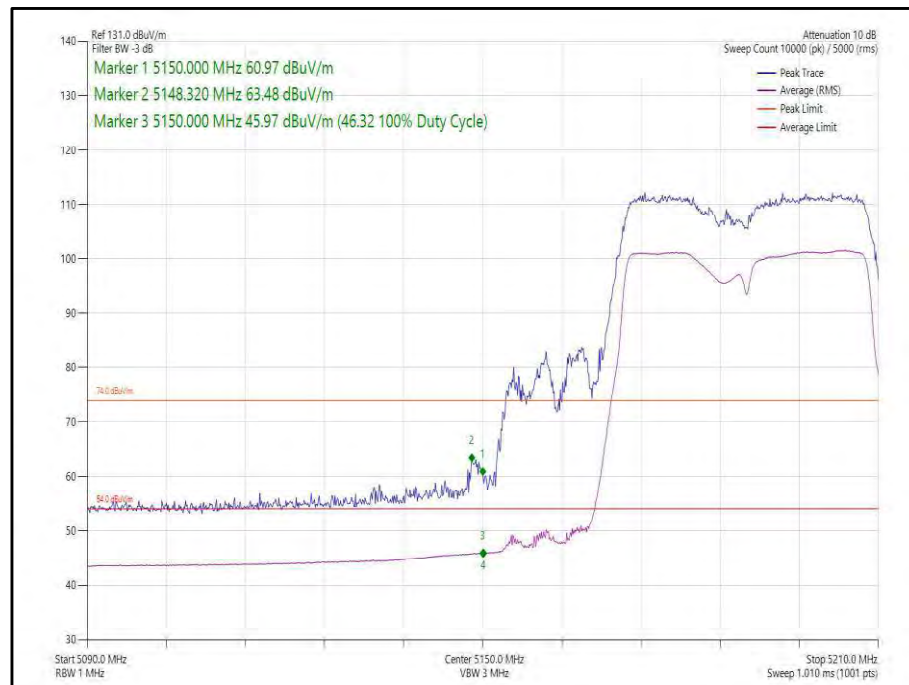


**Figure 88 - 802.11ax, HE40, RU 52-44, SDM, Core 0-1 - 5510 MHz,  
Band Edge Frequency 5460 MHz**

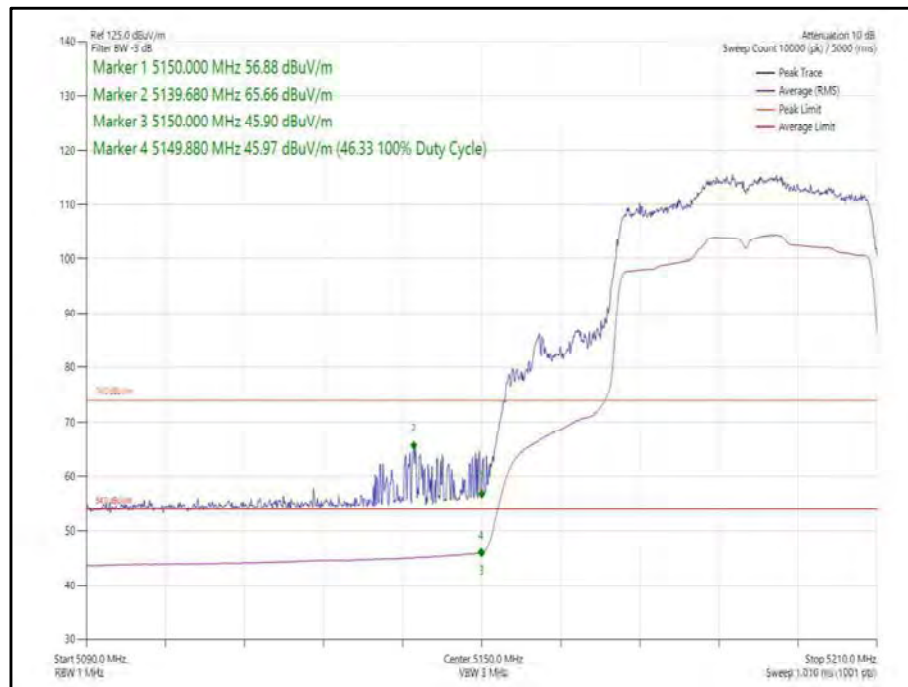
#### 40 MHz Bandwidth - Core 0-1 (TxBF)

| Mode           | Data Rate/<br>MCS | Resource<br>Size | Resource<br>Index | TX<br>Frequency<br>(MHz) | Band Edge<br>Frequency<br>(MHz) | Peak Level<br>(dBμV/m) | Average<br>Level<br>(dBμV/m) |
|----------------|-------------------|------------------|-------------------|--------------------------|---------------------------------|------------------------|------------------------------|
| 802.11n, HT40  | MCS7              | -                | -                 | 5190                     | 5150                            | 63.48                  | 46.32                        |
| 802.11ax, HE40 | MCS2x1            | SU               | -                 | 5190                     | 5150                            | 65.66                  | 46.33                        |
| 802.11n, HT40  | MCS2              | -                | -                 | 5310                     | 5350                            | 61.28                  | 48.73                        |
| 802.11ax, HE40 | MCS11x1           | SU               | -                 | 5310                     | 5350                            | 65.21                  | 48.44                        |
| 802.11n, HT40  | MCS4              | -                | -                 | 5510                     | 5460                            | 57.86                  | 45.38                        |
| 802.11ax, HE40 | MCS2x1            | SU               | -                 | 5510                     | 5460                            | 61.36                  | 46.12                        |

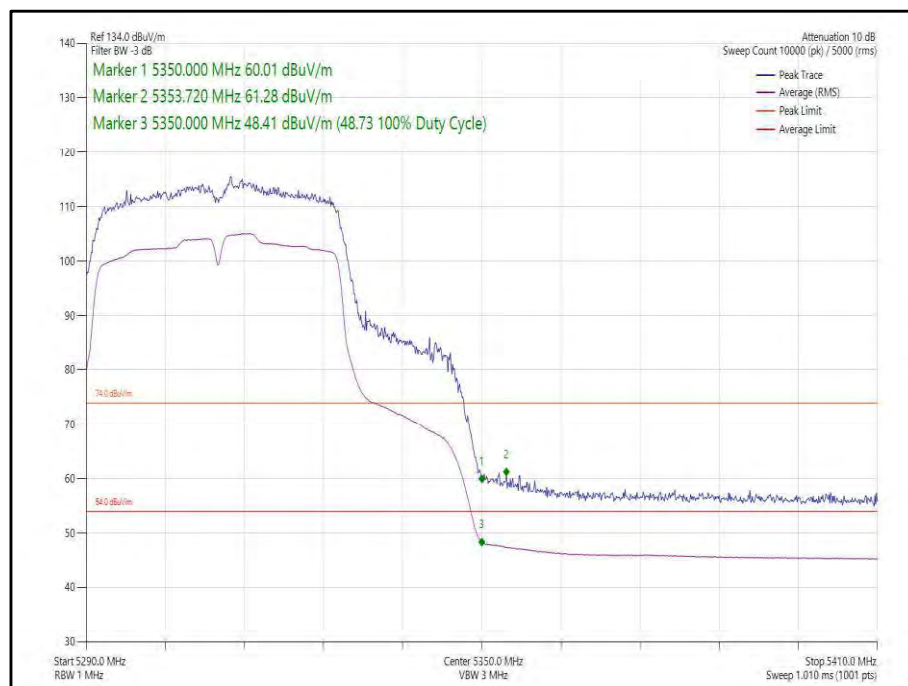
**Table 16 - TxBF Restricted Band Edge Results**



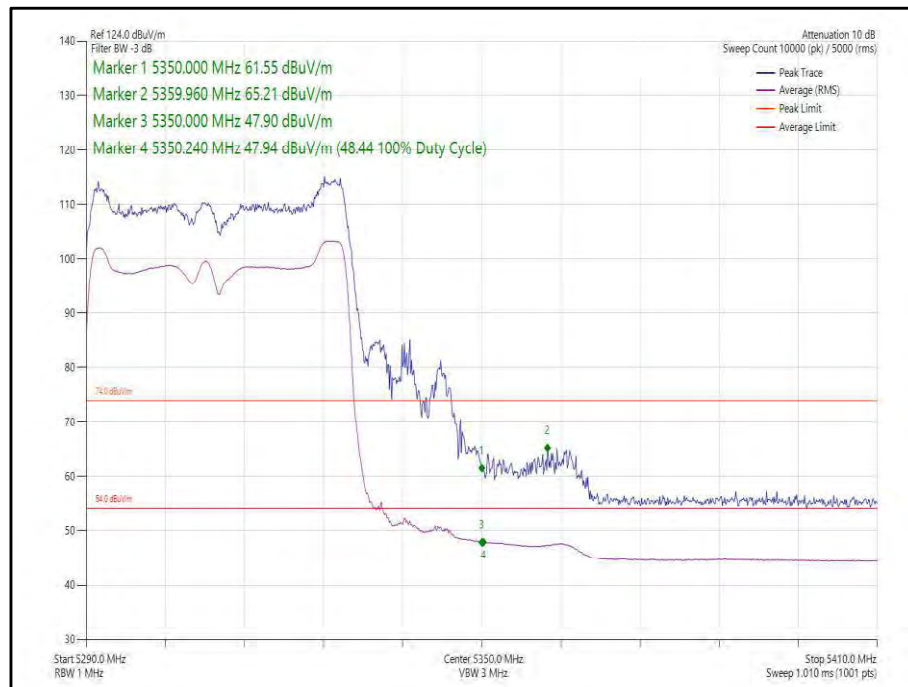
**Figure 89 - 802.11n, HT40, TxBF, Core 0-1 - 5190 MHz,  
Band Edge Frequency 5150 MHz**



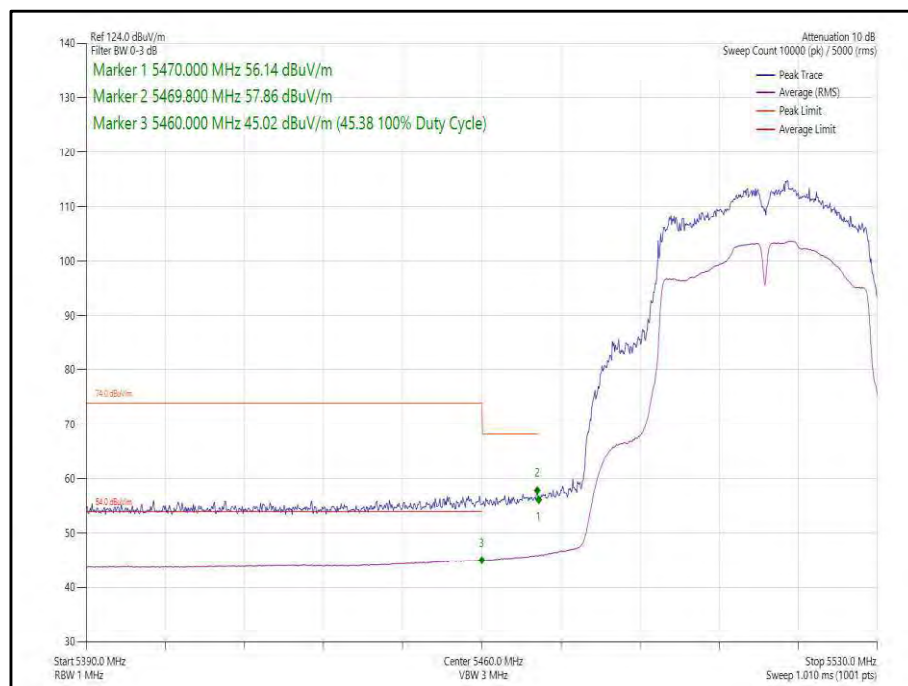
**Figure 90 - 802.11ax, HE40, SU, TxBF, Core 0-1 - 5190 MHz,  
Band Edge Frequency 5150 MHz**



**Figure 91 - 802.11n, HT40, TxBF, Core 0-1 - 5310 MHz,  
Band Edge Frequency 5350 MHz**



**Figure 92 - 802.11ax, HE40, SU, TxBF, Core 0-1 - 5310 MHz,  
Band Edge Frequency 5350 MHz**



**Figure 93 - 802.11n, HT40, TxBF, Core 0-1 - 5510 MHz,  
Band Edge Frequency 5460 MHz**

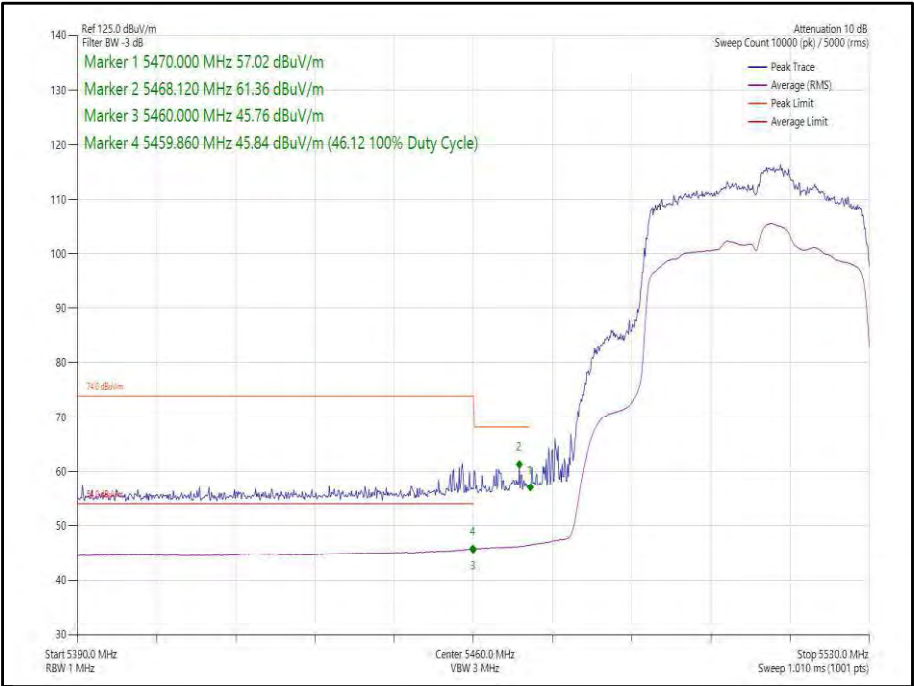


Figure 94 - 802.11ax, HE40, SU, TxBF, Core 0-1 - 5510 MHz,  
Band Edge Frequency 5460 MHz



80 MHz Bandwidth - Core 0 (SISO)

| Mode            | Data Rate/<br>MCS | Resource<br>Size | Resource<br>Index | TX<br>Frequency<br>(MHz) | Band Edge<br>Frequency<br>(MHz) | Peak Level<br>(dBμV/m) | Average<br>Level<br>(dBμV/m) |
|-----------------|-------------------|------------------|-------------------|--------------------------|---------------------------------|------------------------|------------------------------|
| 802.11ac, VHT80 | MCS2x1            | -                | -                 | 5210                     | 5150                            | 62.19                  | 51.20                        |
| 802.11ax, HE80  | MCS2x1            | SU               | -                 | 5210                     | 5150                            | 62.89                  | 51.29                        |
| 802.11ax, HE80  | MCS11x1           | 26               | 0                 | 5210                     | 5150                            | 65.10                  | 50.18                        |
| 802.11ac, VHT80 | MCS4x1            | -                | -                 | 5290                     | 5350                            | 63.30                  | 51.38                        |
| 802.11ax, HE80  | MCS11x1           | SU               | -                 | 5290                     | 5350                            | 66.96                  | 51.46                        |
| 802.11ax, HE80  | MCS11x1           | 106              | 53                | 5290                     | 5350                            | 65.95                  | 50.49                        |
| 802.11ac, VHT80 | MCS4x1            | -                | -                 | 5530                     | 5460                            | 62.74                  | 51.33                        |
| 802.11ax, HE80  | MCS2x1            | SU               | -                 | 5530                     | 5460                            | 63.59                  | 51.42                        |
| 802.11ax, HE80  | MCS11x1           | 106              | 60                | 5530                     | 5460                            | 62.92                  | 50.09                        |

Table 17 - SISO Restricted Band Edge Results

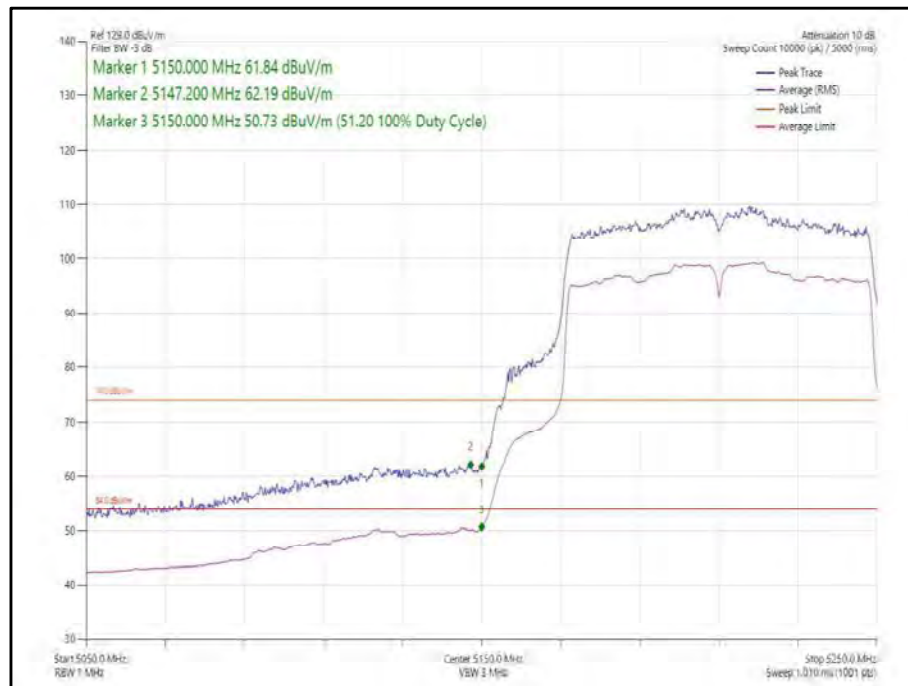
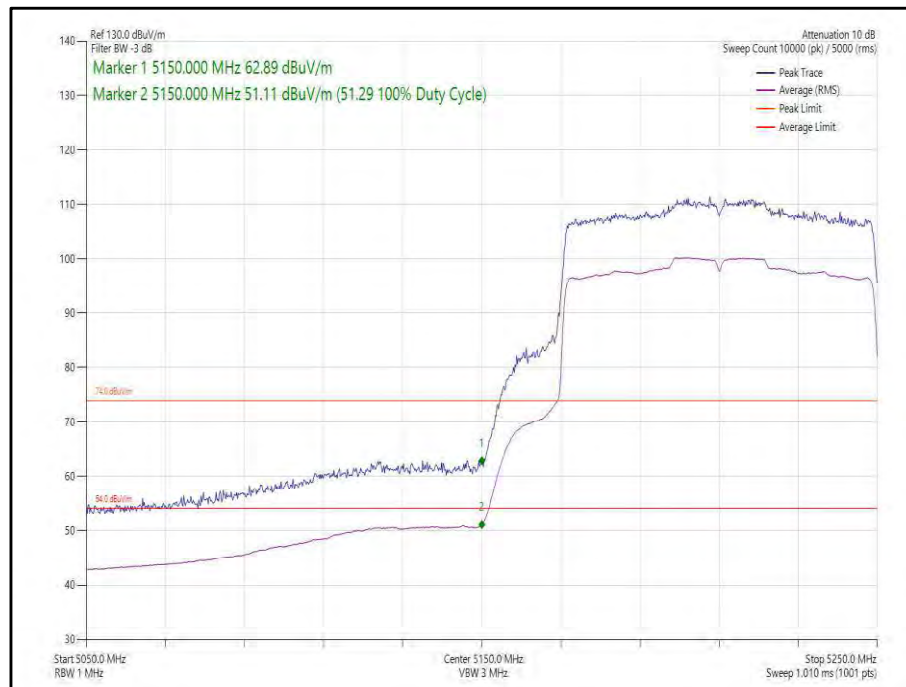
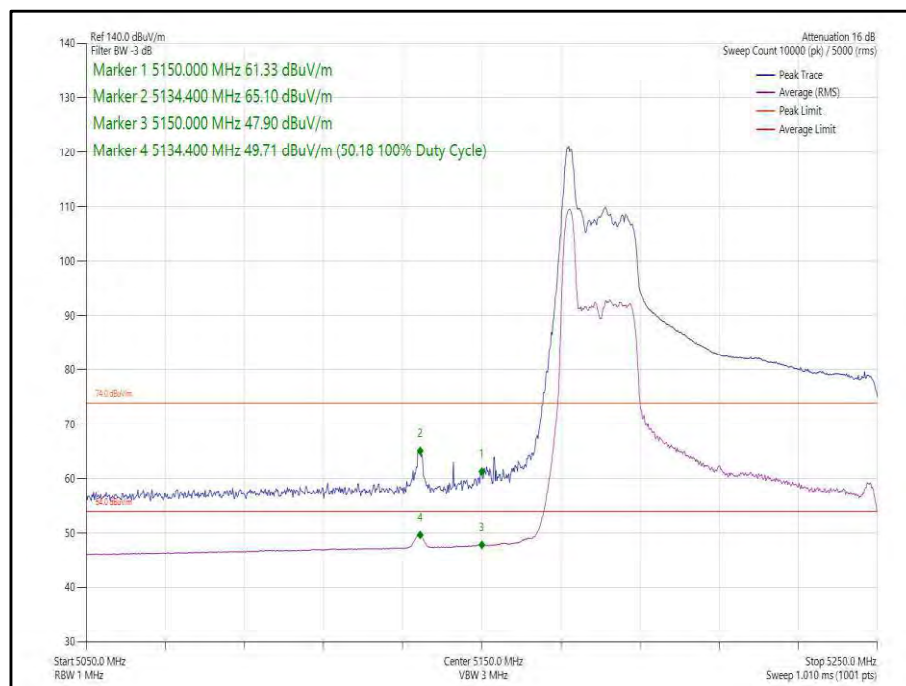


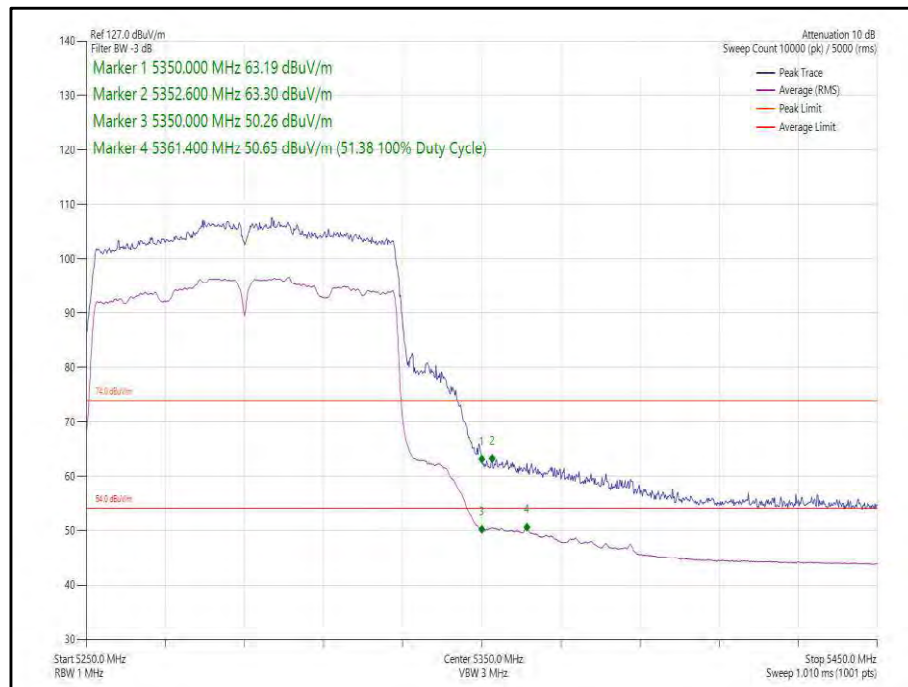
Figure 95 - 802.11ac, VHT80, SISO, Core 0 - 5210 MHz,  
Band Edge Frequency 5150 MHz



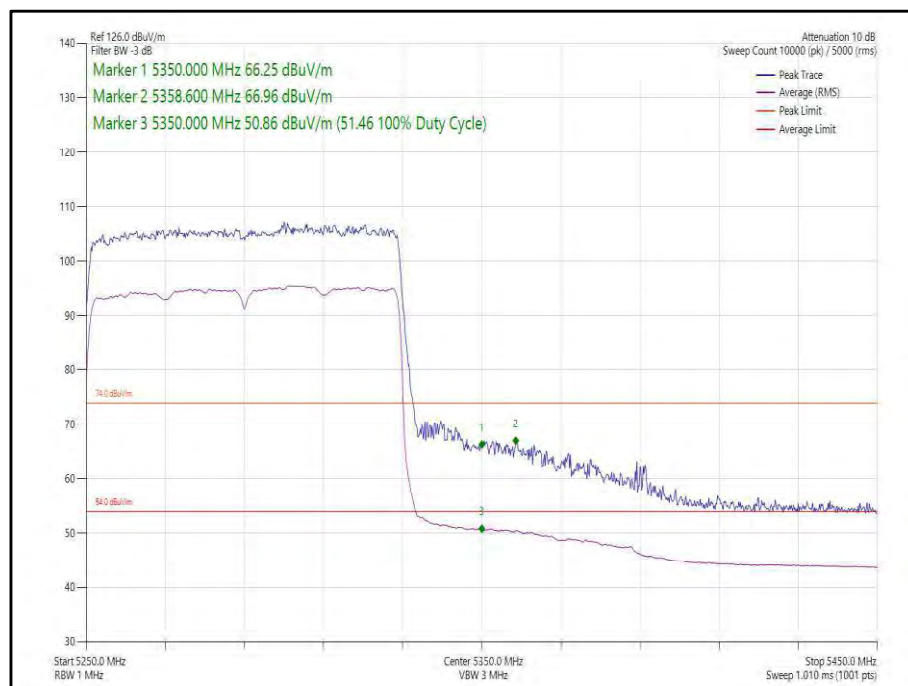
**Figure 96 - 802.11ax, HE80, SU, SISO, Core 0 - 5210 MHz,  
Band Edge Frequency 5150 MHz**



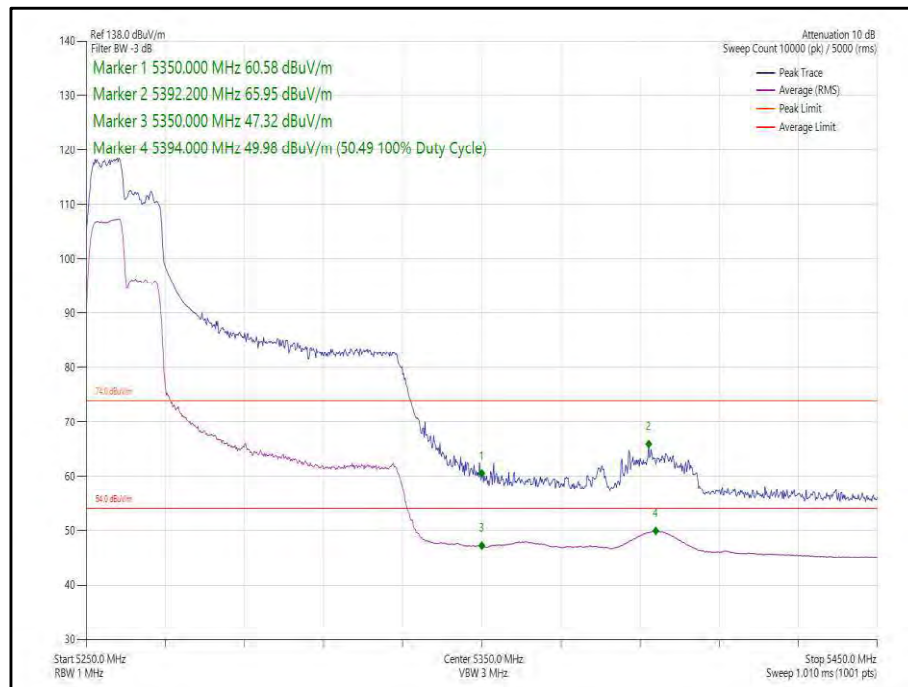
**Figure 97 - 802.11ax, HE80, RU 26-0, SISO, Core 0 - 5210 MHz,  
Band Edge Frequency 5150 MHz**



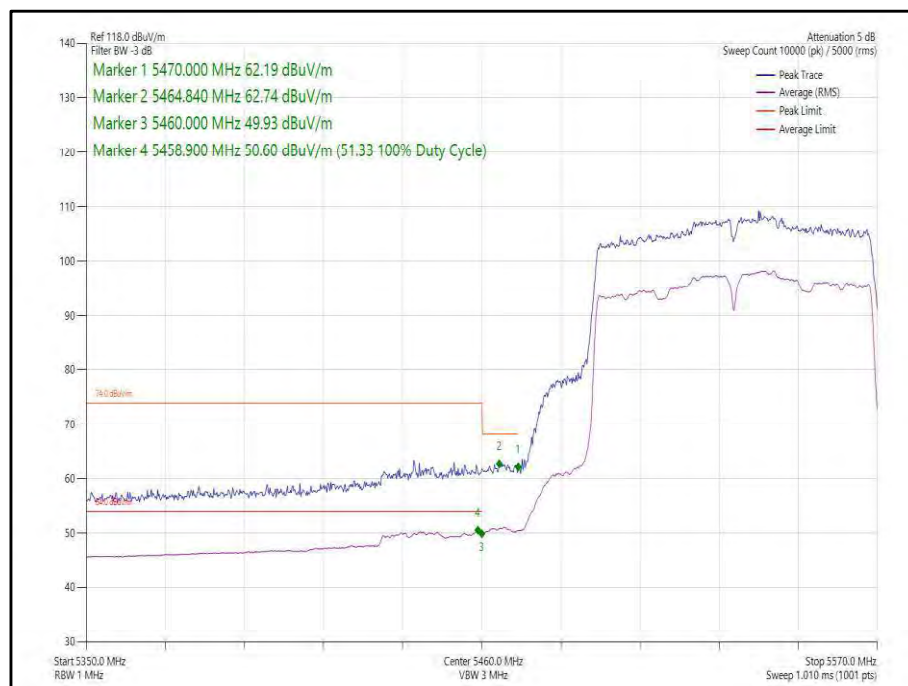
**Figure 98 - 802.11ac, VHT80, SISO, Core 0 - 5290 MHz,  
Band Edge Frequency 5350 MHz**



**Figure 99 - 802.11ax, HE80, SU, SISO, Core 0 - 5290 MHz,  
Band Edge Frequency 5350 MHz**



**Figure 100 - 802.11ax, HE80, RU 106-53, SISO, Core 0 - 5290 MHz,  
Band Edge Frequency 5350 MHz**



**Figure 101 - 802.11ac, VHT80, SISO, Core 0 - 5530 MHz,  
Band Edge Frequency 5460 MHz**

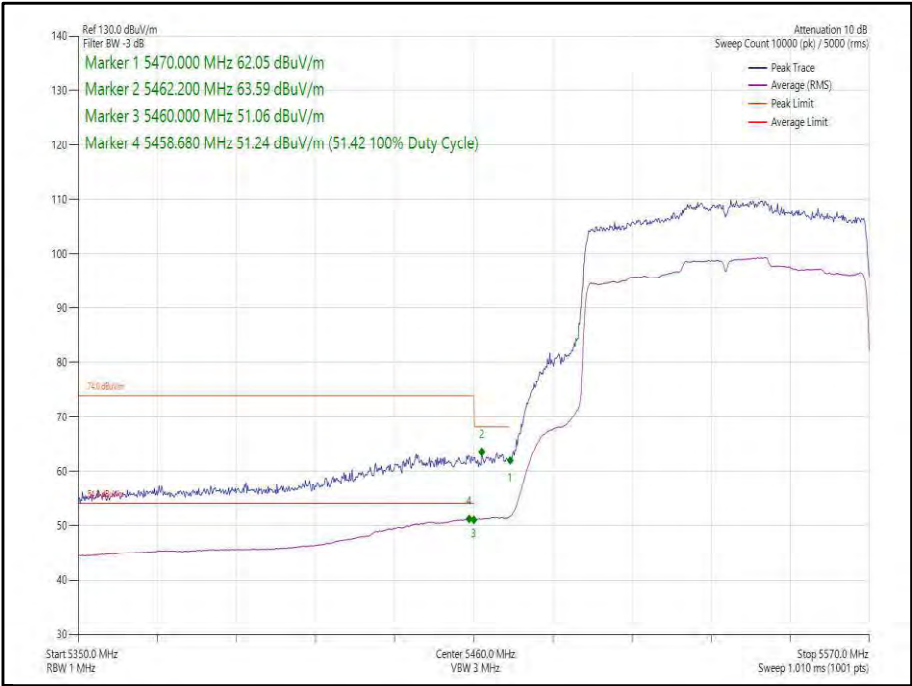


Figure 102 - 802.11ax, HE80, SU, SISO, Core 0 - 5530 MHz,  
Band Edge Frequency 5460 MHz

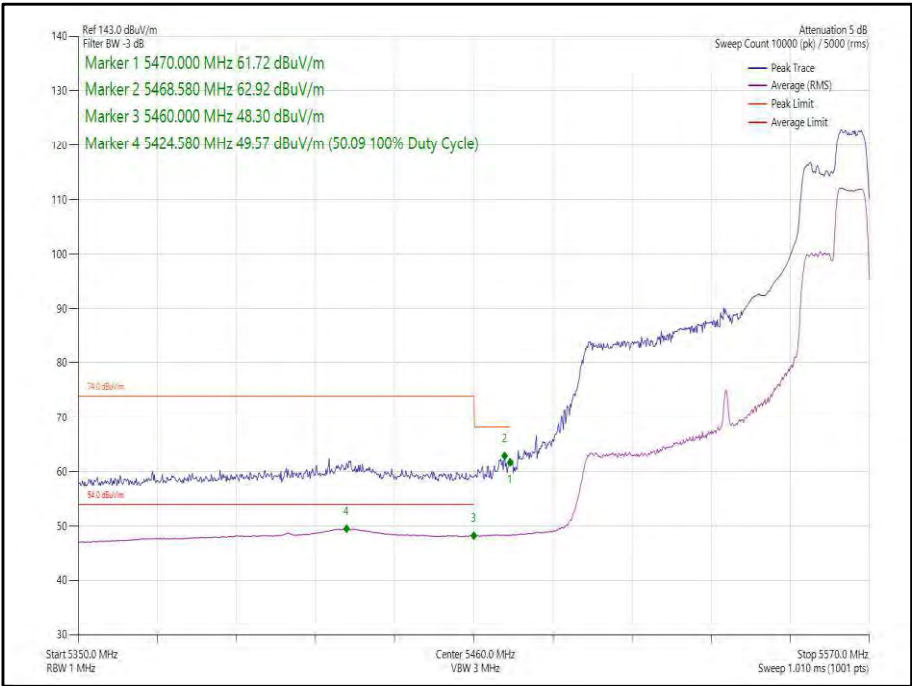


Figure 103 - 802.11ax, HE80, RU 106-60, SISO, Core 0 - 5530 MHz,  
Band Edge Frequency 5460 MHz



80 MHz Bandwidth - Core 1 (SISO)

| Mode            | Data Rate/<br>MCS | Resource<br>Size | Resource<br>Index | TX<br>Frequency<br>(MHz) | Band Edge<br>Frequency<br>(MHz) | Peak Level<br>(dBμV/m) | Average<br>Level<br>(dBμV/m) |
|-----------------|-------------------|------------------|-------------------|--------------------------|---------------------------------|------------------------|------------------------------|
| 802.11ac, VHT80 | MCS2x1            | -                | -                 | 5210                     | 5150                            | 63.34                  | 51.49                        |
| 802.11ax, HE80  | MCS2x1            | SU               | -                 | 5210                     | 5150                            | 64.01                  | 51.29                        |
| 802.11ax, HE80  | MCS11x1           | 106              | 53                | 5210                     | 5150                            | 68.95                  | 47.46                        |
| 802.11ac, VHT80 | MCS8x1            | -                | -                 | 5290                     | 5350                            | 67.88                  | 51.49                        |
| 802.11ax, HE80  | MCS11x1           | SU               | -                 | 5290                     | 5350                            | 68.92                  | 51.27                        |
| 802.11ax, HE80  | MCS11x1           | 106              | 53                | 5290                     | 5350                            | 66.01                  | 51.49                        |
| 802.11ac, VHT80 | MCS2x1            | -                | -                 | 5530                     | 5460                            | 63.22                  | 51.23                        |
| 802.11ax, HE80  | MCS4x1            | SU               | -                 | 5530                     | 5460                            | 63.15                  | 50.79                        |
| 802.11ax, HE80  | MCS11x1           | 106              | 60                | 5530                     | 5460                            | 61.65                  | 49.71                        |

Table 18 - SISO Restricted Band Edge Results

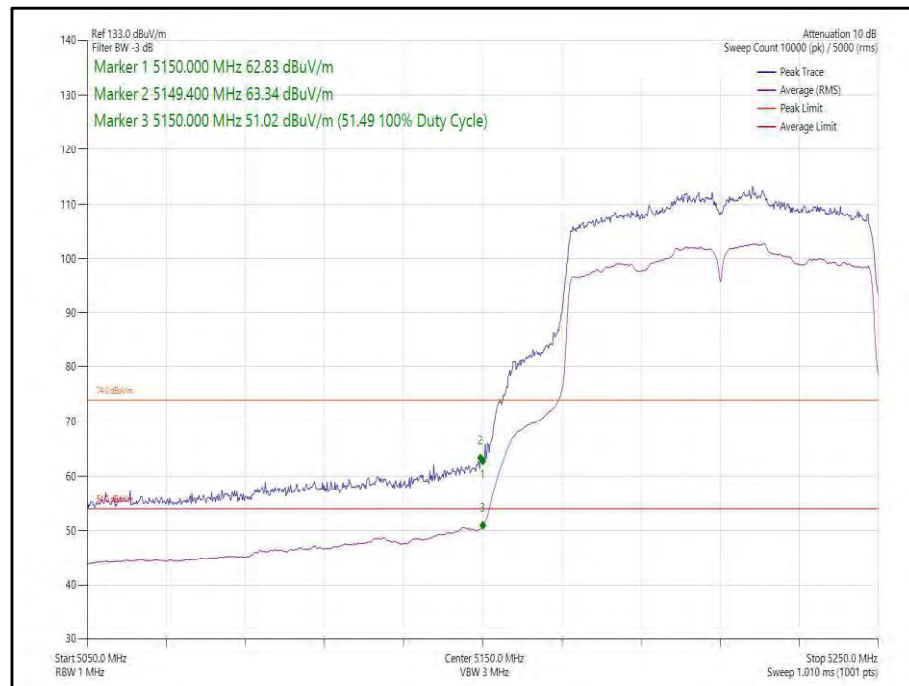
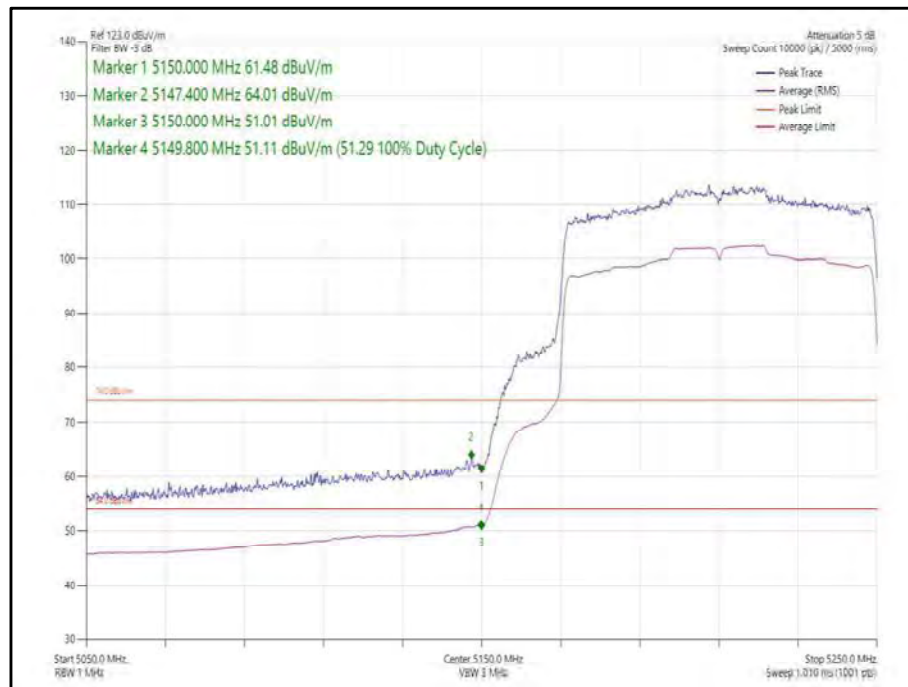
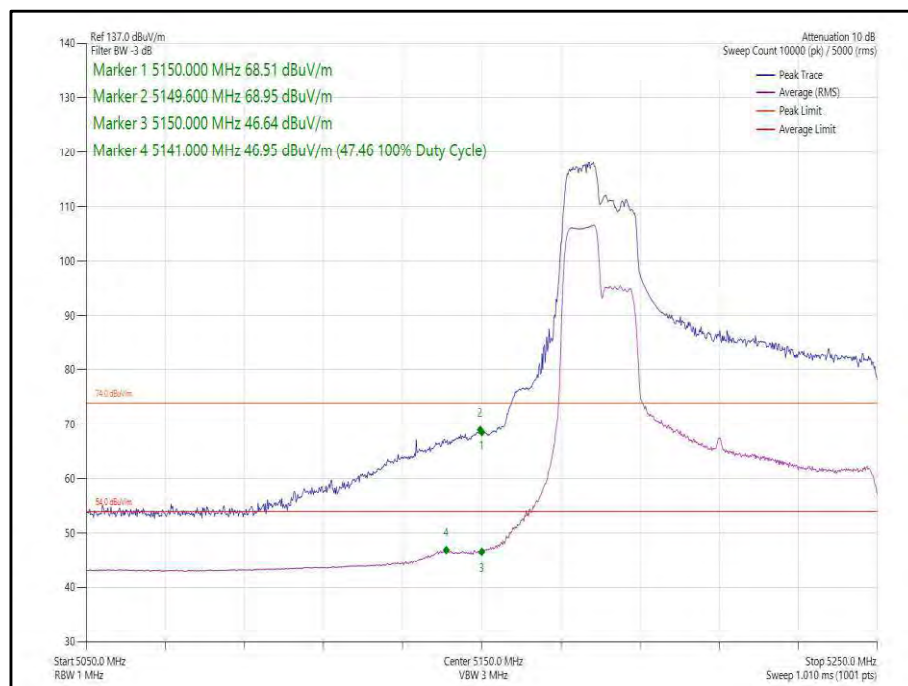


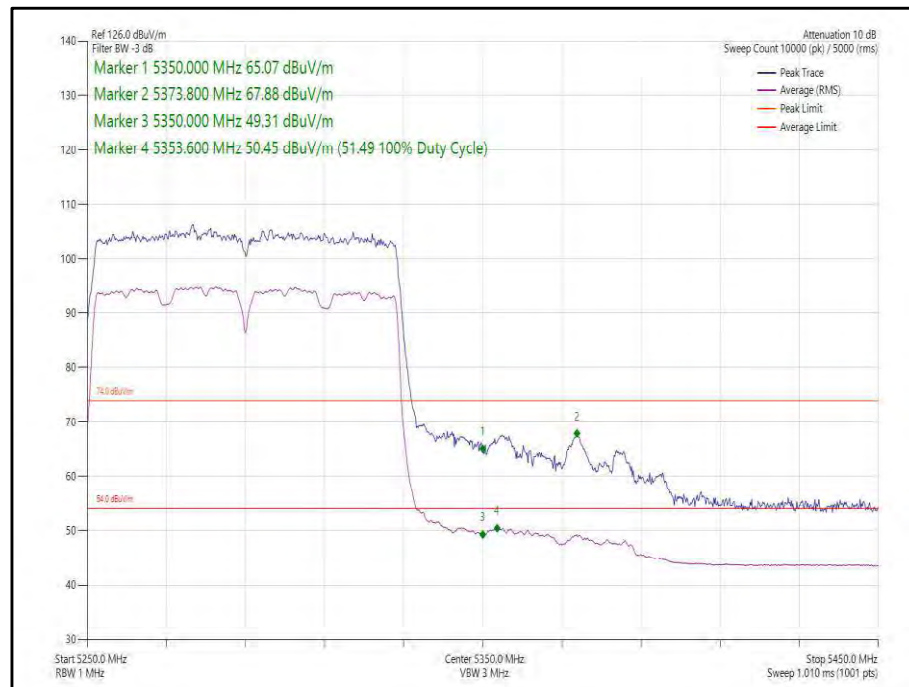
Figure 104 - 802.11ac, VHT80, SISO, Core 1 - 5210 MHz,  
Band Edge Frequency 5150 MHz



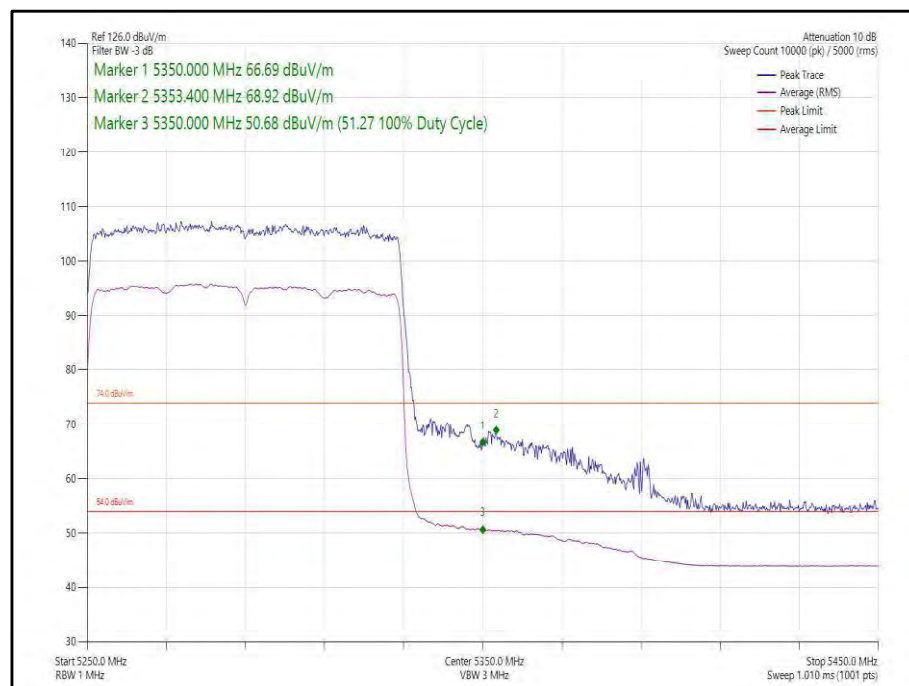
**Figure 105 - 802.11ax, HE80, SU, SISO, Core 1 - 5210 MHz,  
Band Edge Frequency 5150 MHz**



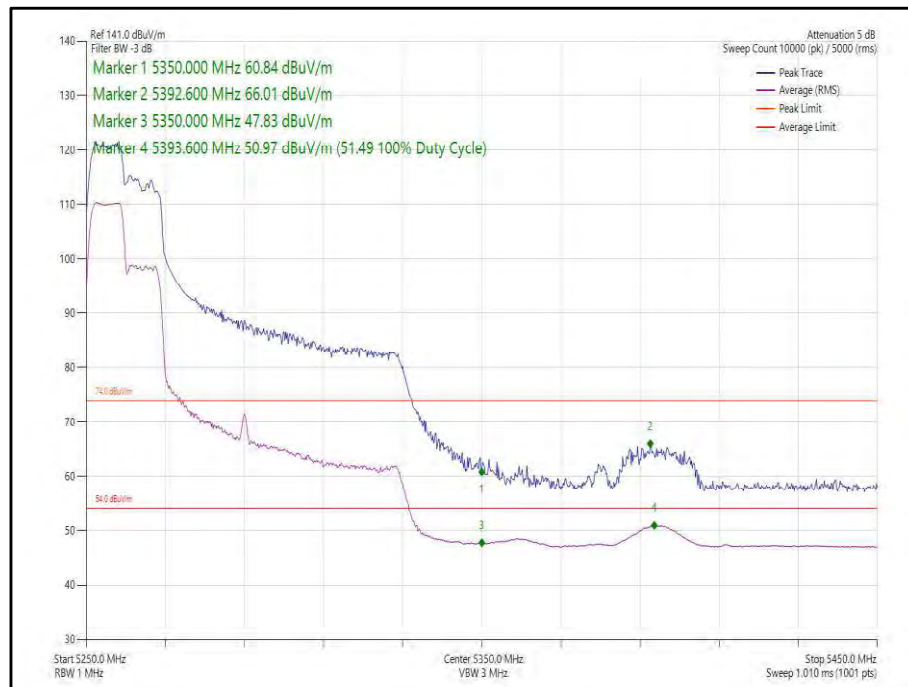
**Figure 106 - 802.11ax, HE80, RU 106-53, SISO, Core 1 - 5210 MHz,  
Band Edge Frequency 5150 MHz**



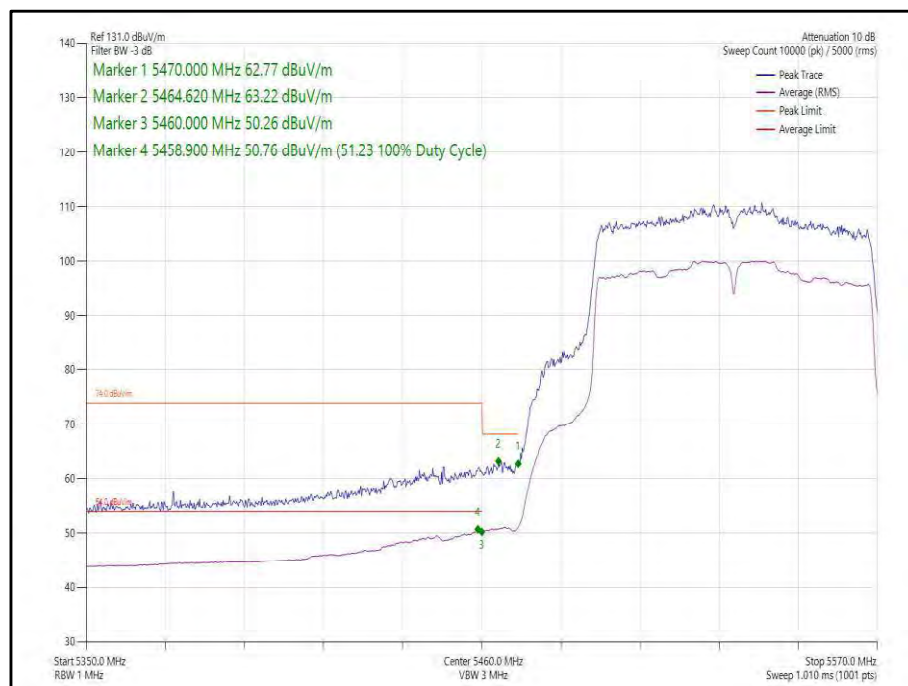
**Figure 107 - 802.11ac, VHT80, SISO, Core 1 - 5290 MHz,  
Band Edge Frequency 5350 MHz**



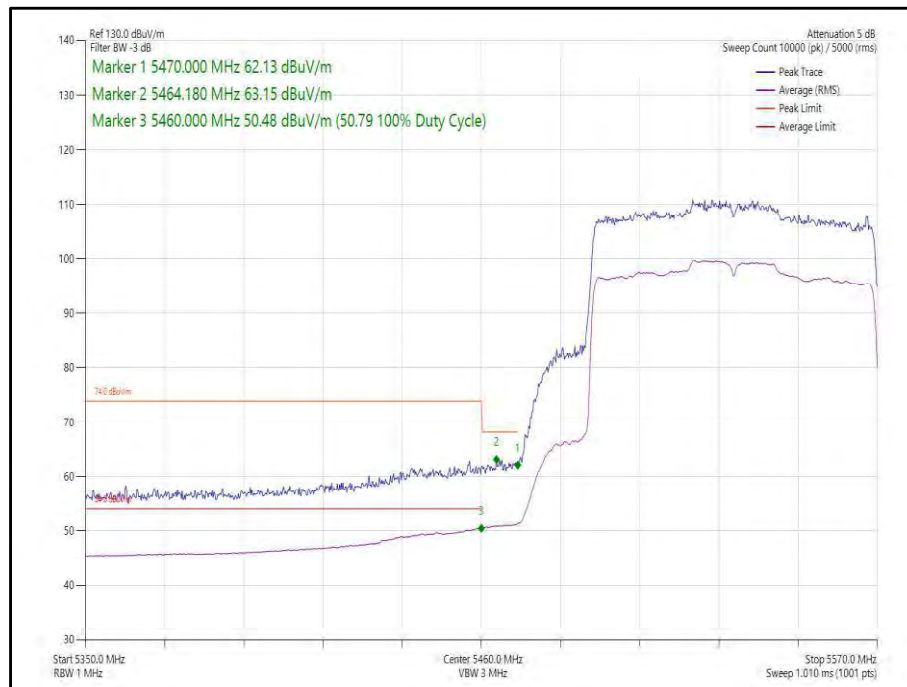
**Figure 108 - 802.11ax, HE80, SU, SISO, Core 1 - 5290 MHz,  
Band Edge Frequency 5350 MHz**



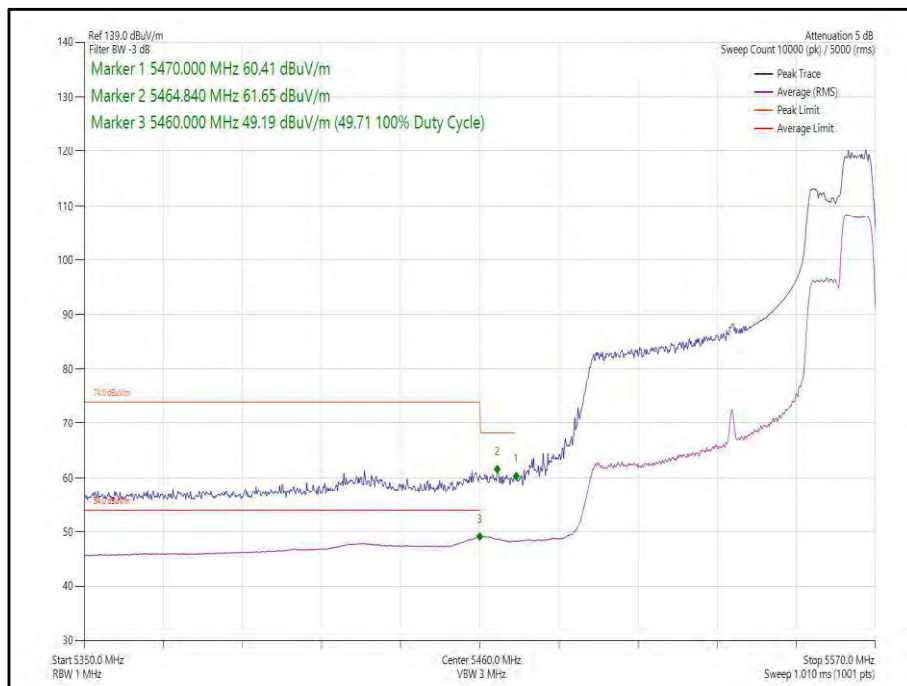
**Figure 109 - 802.11ax, HE80, RU 106-53, SISO, Core 1 - 5290 MHz,  
Band Edge Frequency 5350 MHz**



**Figure 110 - 802.11ac, VHT80, SISO, Core 1 - 5530 MHz,  
Band Edge Frequency 5460 MHz**



**Figure 111 - 802.11ax, HE80, SU, SISO, Core 1 - 5530 MHz,  
Band Edge Frequency 5460 MHz**



**Figure 112 - 802.11ax, HE80, RU 106-60, SISO, Core 1 - 5530 MHz,  
Band Edge Frequency 5460 MHz**



80 MHz Bandwidth - Core 0-1 (CDD)

| Mode            | Data Rate/<br>MCS | Resource<br>Size | Resource<br>Index | TX<br>Frequency<br>(MHz) | Band Edge<br>Frequency<br>(MHz) | Peak Level<br>(dBμV/m) | Average<br>Level<br>(dBμV/m) |
|-----------------|-------------------|------------------|-------------------|--------------------------|---------------------------------|------------------------|------------------------------|
| 802.11ac, VHT80 | MCS2x1            | -                | -                 | 5210                     | 5150                            | 62.26                  | 51.43                        |
| 802.11ax, HE80  | MCS11x1           | SU               | -                 | 5210                     | 5150                            | 63.95                  | 51.49                        |
| 802.11ax, HE80  | MCS11x1           | 106              | 60                | 5210                     | 5150                            | 63.74                  | 50.02                        |
| 802.11ac, VHT80 | MCS4x1            | -                | -                 | 5290                     | 5350                            | 61.82                  | 50.92                        |
| 802.11ax, HE80  | MCS4x1            | SU               | -                 | 5290                     | 5350                            | 63.47                  | 51.16                        |
| 802.11ax, HE80  | MCS11x1           | 106              | 53                | 5290                     | 5350                            | 68.70                  | 51.11                        |
| 802.11ac, VHT80 | MCS4x1            | -                | -                 | 5530                     | 5460                            | 62.92                  | 51.14                        |
| 802.11ax, HE80  | MCS2x1            | SU               | -                 | 5530                     | 5460                            | 63.12                  | 51.36                        |
| 802.11ax, HE80  | MCS11x1           | 106              | 60                | 5530                     | 5460                            | 62.68                  | 50.90                        |

Table 19 - CDD Restricted Band Edge Results

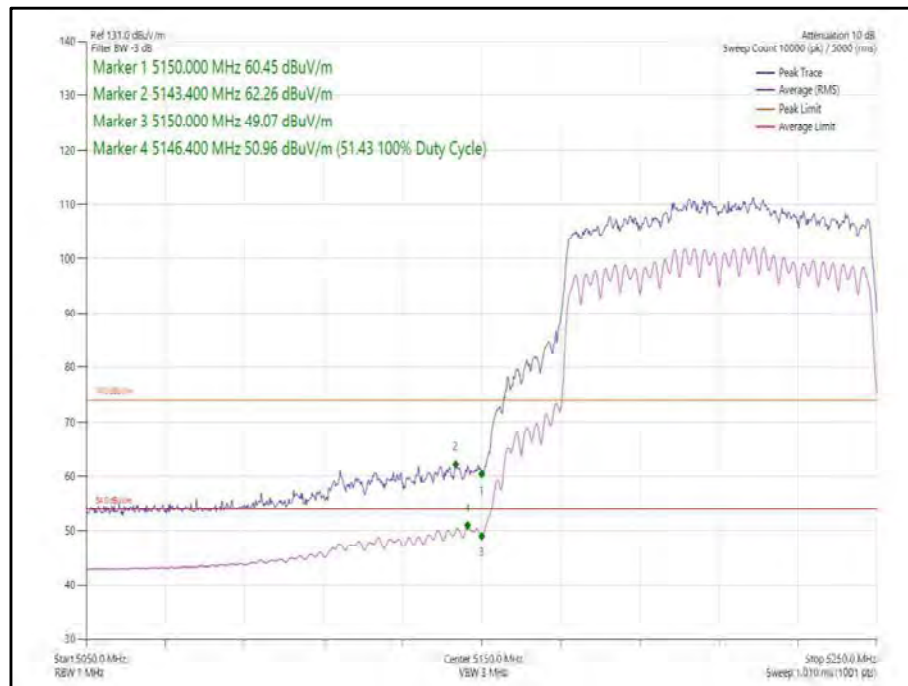
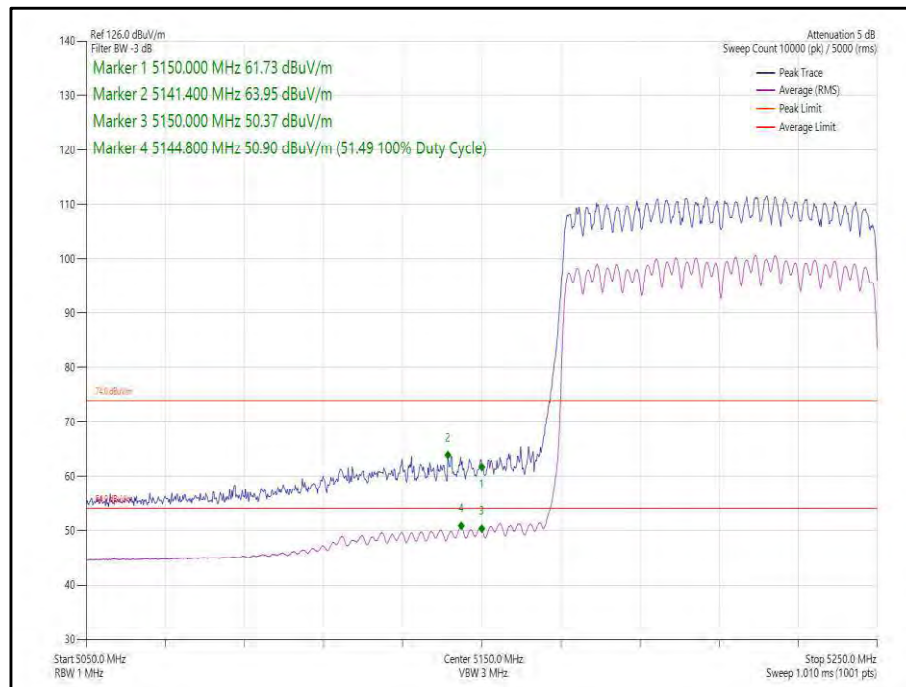
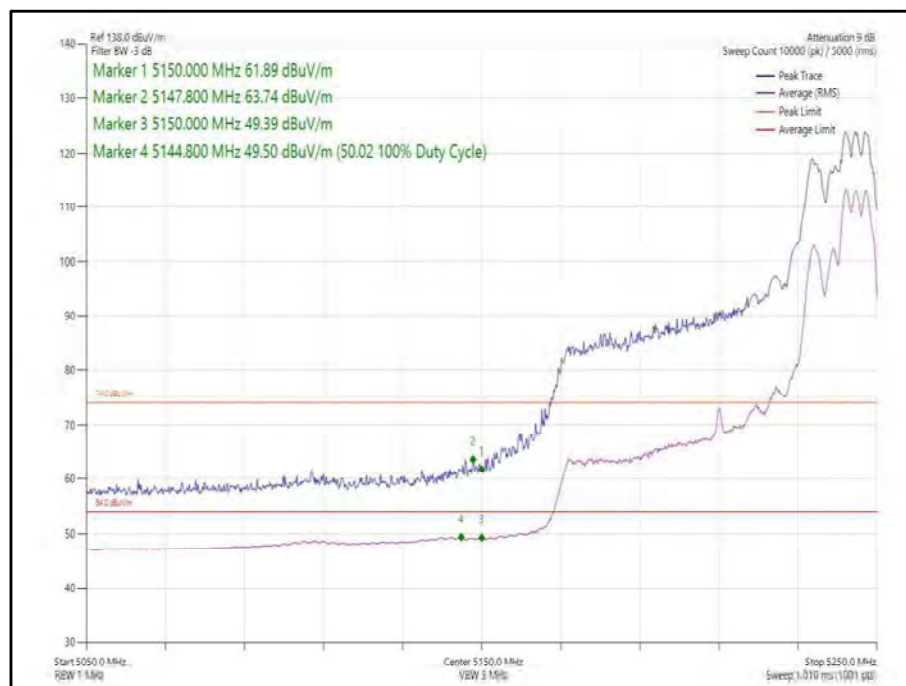


Figure 113 - 802.11ac, VHT80, CDD, Core 0-1 - 5210 MHz,  
Band Edge Frequency 5150 MHz



**Figure 114 - 802.11ax, HE80, SU, CDD, Core 0-1 - 5210 MHz,  
Band Edge Frequency 5150 MHz**



**Figure 115 - 802.11ax, HE80, RU 106-60, CDD, Core 0-1 - 5210 MHz,  
Band Edge Frequency 5150 MHz**

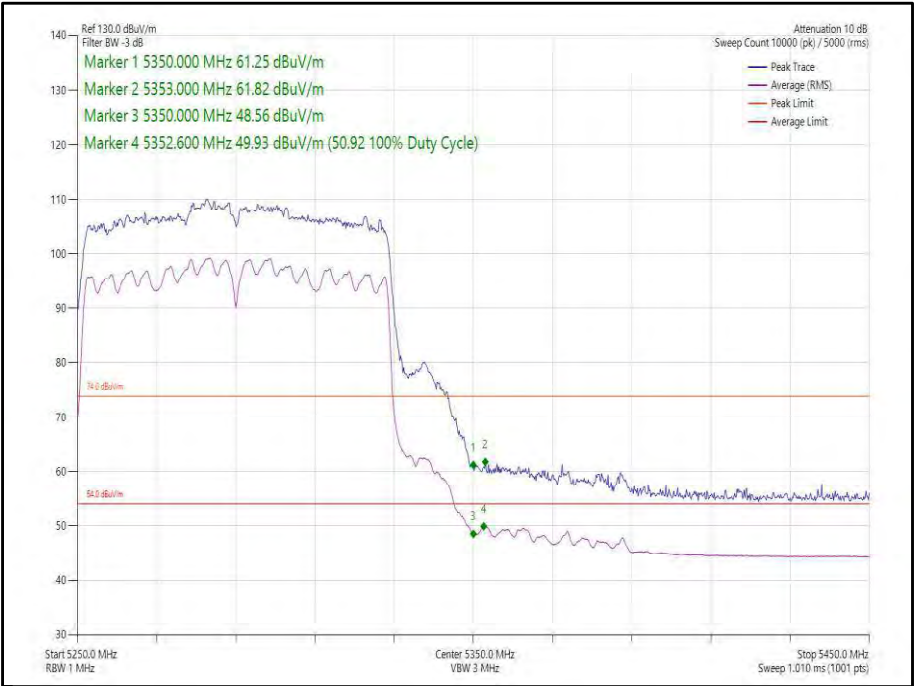


Figure 116 - 802.11ac, VHT80, CDD, Core 0-1 - 5290 MHz,  
Band Edge Frequency 5350 MHz

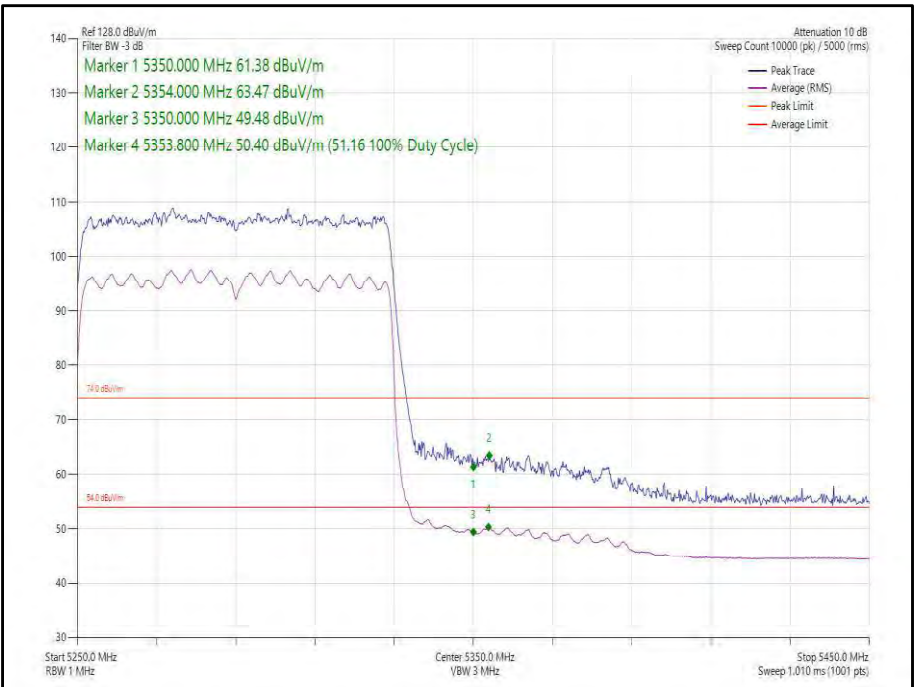
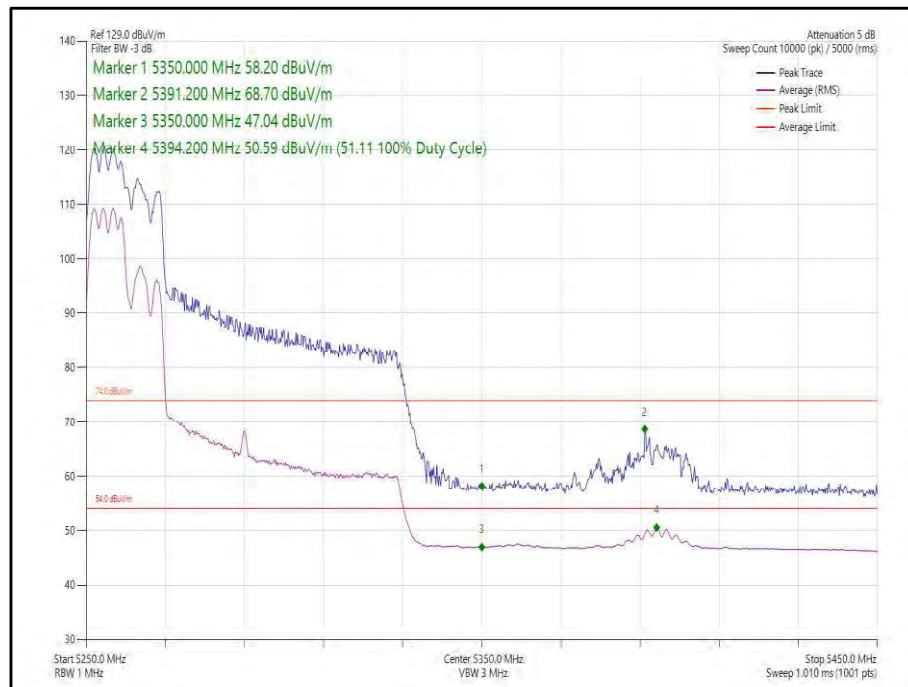
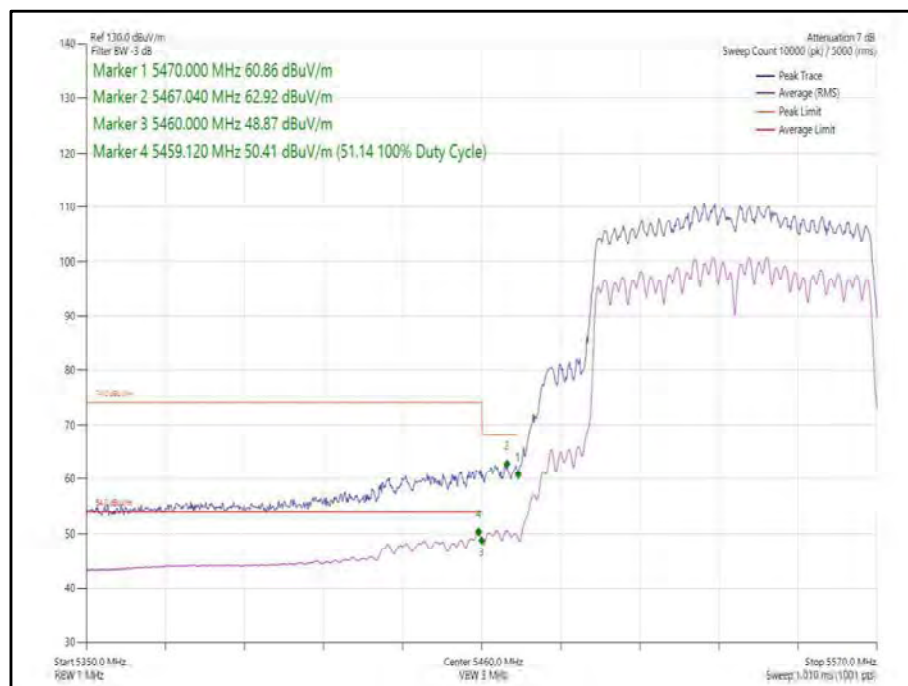


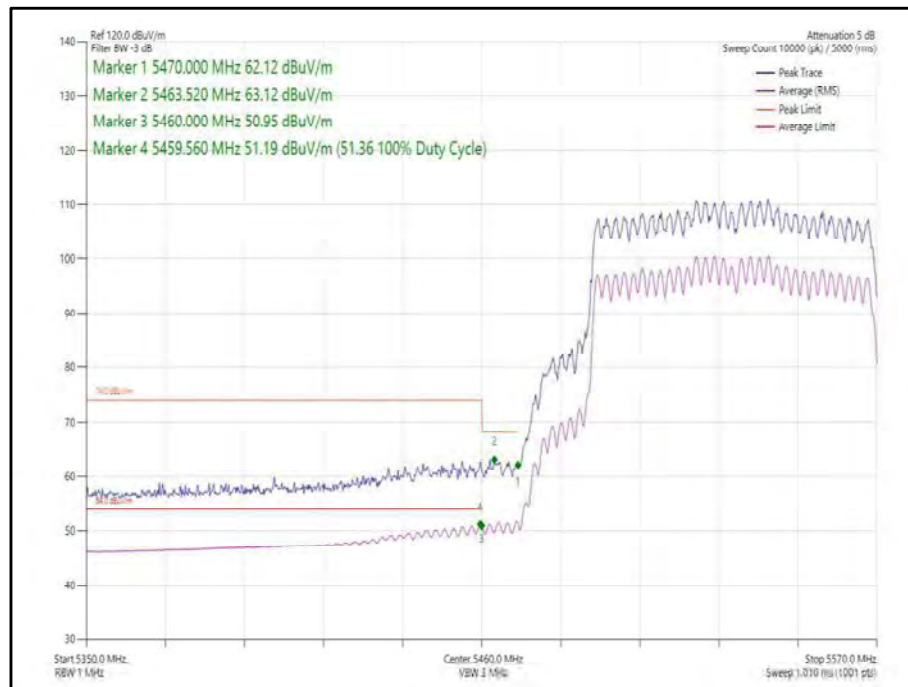
Figure 117 - 802.11ax, HE80, SU, CDD, Core 0-1 - 5290 MHz,  
Band Edge Frequency 5350 MHz



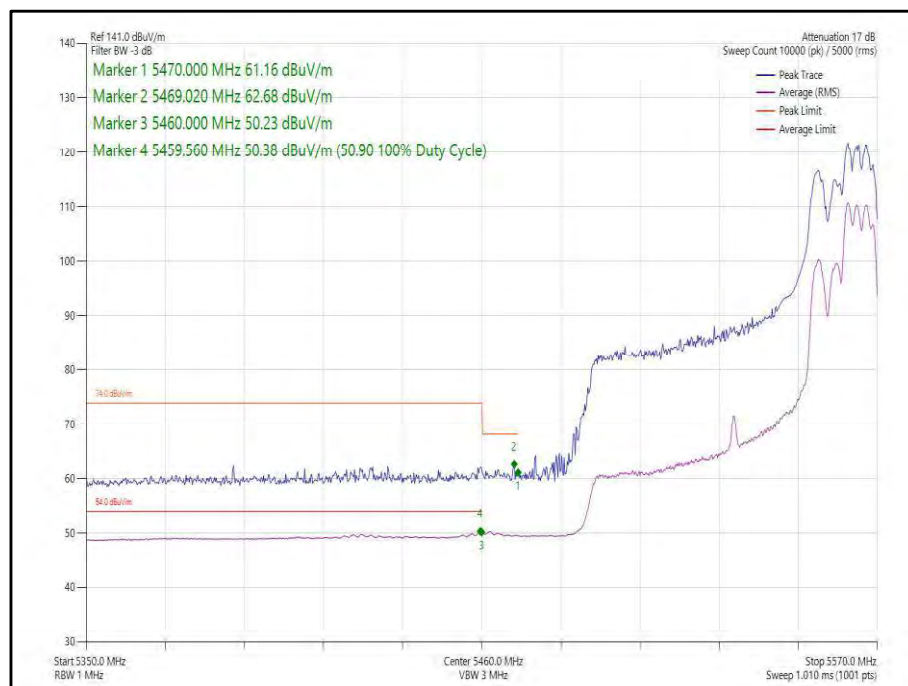
**Figure 118 - 802.11ax, HE80, RU 106-53, CDD, Core 0-1 - 5290 MHz, Band Edge Frequency 5350 MHz**



**Figure 119 - 802.11ac, VHT80, CDD, Core 0-1 - 5530 MHz, Band Edge Frequency 5460 MHz**



**Figure 120 - 802.11ax, HE80, SU, CDD, Core 0-1 - 5530 MHz,  
Band Edge Frequency 5460 MHz**



**Figure 121 - 802.11ax, HE80, RU 106-60, CDD, Core 0-1 - 5530 MHz,  
Band Edge Frequency 5460 MHz**



80 MHz Bandwidth - Core 0-1 (SDM)

| Mode            | Data Rate/<br>MCS | Resource<br>Size | Resource<br>Index | TX<br>Frequency<br>(MHz) | Band Edge<br>Frequency<br>(MHz) | Peak Level<br>(dBμV/m) | Average<br>Level<br>(dBμV/m) |
|-----------------|-------------------|------------------|-------------------|--------------------------|---------------------------------|------------------------|------------------------------|
| 802.11ac, VHT80 | MCS8x2            | -                | -                 | 5210                     | 5150                            | 63.75                  | 51.39                        |
| 802.11ax, HE80  | MCS2x2            | SU               | -                 | 5210                     | 5150                            | 62.75                  | 51.26                        |
| 802.11ax, HE80  | MCS11x2           | 26               | 0                 | 5210                     | 5150                            | 67.29                  | 50.32                        |
| 802.11ac, VHT80 | MCS2x2            | -                | -                 | 5290                     | 5350                            | 62.49                  | 51.22                        |
| 802.11ax, HE80  | MCS4x2            | SU               | -                 | 5290                     | 5350                            | 62.72                  | 51.38                        |
| 802.11ax, HE80  | MCS11x2           | 106              | 53                | 5290                     | 5350                            | 67.54                  | 51.46                        |
| 802.11ac, VHT80 | MCS8x2            | -                | -                 | 5530                     | 5460                            | 62.43                  | 51.22                        |
| 802.11ax, HE80  | MCS4x2            | SU               | -                 | 5530                     | 5460                            | 63.13                  | 49.83                        |
| 802.11ax, HE80  | MCS11x2           | 106              | 60                | 5530                     | 5460                            | 63.12                  | 51.38                        |

Table 20 - SDM Restricted Band Edge Results

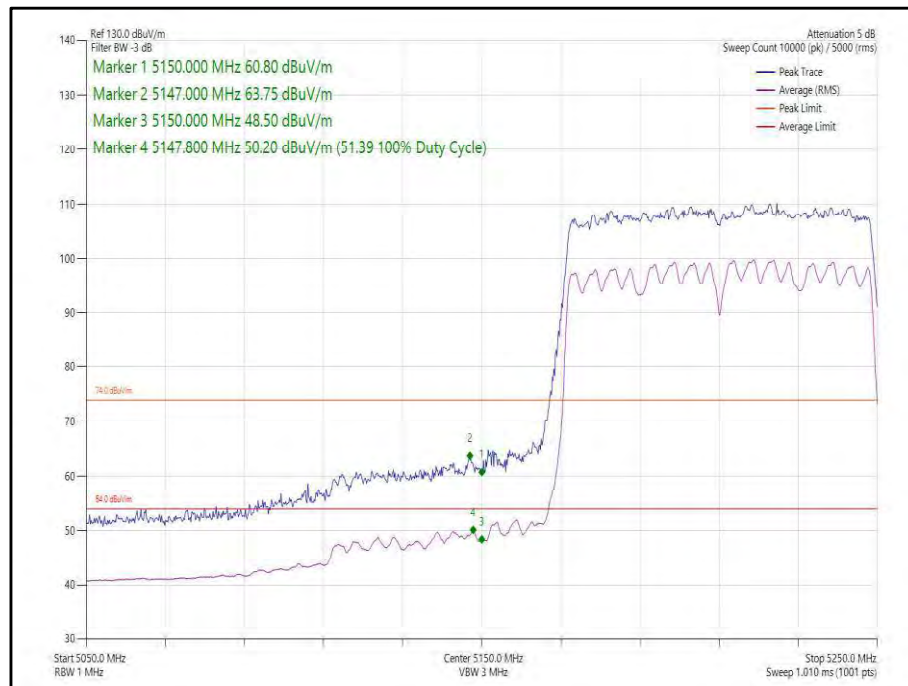


Figure 122 - 802.11ac, VHT80, SDM, Core 0-1 - 5210 MHz,  
Band Edge Frequency 5150 MHz