

# TEST REPORT

**Report Number. :** 14749497-E33V1

**Applicant :** eero LLC  
660 3<sup>rd</sup> Street 4<sup>th</sup> Floor  
San Francisco, CA 94107, U.S.A.

**Model :** V1010001

**Brand :** eero

**FCC ID :** 24EM4-711917312

**IC :** 20631-711917312

**EUT Description :** Wireless Access Point

**Test Standard(s) :** FCC 47 CFR PART 15 SUBPART E  
ISED RSS-247 ISSUE 3  
ISED RSS-GEN ISSUE 5 + A1 + A2

**Date Of Issue:**  
2023-09-20

**Prepared by:**  
UL Verification Services Inc.  
47173 Benicia Street  
Fremont, CA 94538 U.S.A.  
TEL: (510) 319-4000  
FAX: (510) 661-0888



## REPORT REVISION HISTORY

Rev.	Issue Date	Revisions	Revised By
V1	2023-09-20	Initial Issue	---

## TABLE OF CONTENTS

<b>REPORT REVISION HISTORY</b> .....	<b>2</b>
<b>TABLE OF CONTENTS</b> .....	<b>3</b>
<b>1. ATTESTATION OF TEST RESULTS</b> .....	<b>6</b>
<b>2. TEST RESULT SUMMARY</b> .....	<b>8</b>
<b>3. TEST METHODOLOGY</b> .....	<b>9</b>
<b>4. FACILITIES AND ACCREDITATION</b> .....	<b>9</b>
<b>5. DECISION RULES AND MEASUREMENT UNCERTAINTY</b> .....	<b>10</b>
5.1. METROLOGICAL TRACEABILITY .....	10
5.2. DECISION RULES .....	10
5.3. MEASUREMENT UNCERTAINTY .....	10
5.4. SAMPLE CALCULATION .....	11
<b>6. EQUIPMENT UNDER TEST</b> .....	<b>12</b>
6.1. EUT DESCRIPTION .....	12
6.2. CLASS II PERMISSIVE CHANGE DESCRIPTION .....	12
6.3. MAXIMUM OUTPUT POWER .....	13
6.4. DESCRIPTION OF AVAILABLE ANTENNAS AND CABLE LOSS .....	15
6.5. SOFTWARE AND FIRMWARE .....	15
6.6. WORST-CASE CONFIGURATION AND MODE .....	16
6.7. DESCRIPTION OF TEST SETUP .....	17
<b>7. MEASUREMENT METHOD</b> .....	<b>20</b>
<b>8. TEST AND MEASUREMENT EQUIPMENT</b> .....	<b>21</b>
<b>9. ANTENNA PORT TEST RESULTS</b> .....	<b>22</b>
9.1. ON TIME AND DUTY CYCLE .....	22
9.2. 26 dB BANDWIDTH .....	23
9.2.1. 802.11ax HE20 MODE IN THE 5.3GHz BAND .....	24
9.2.2. 802.11be EHT20 MODE IN THE 5.3GHz BAND .....	27
9.2.3. 802.11ax HE40 MODE IN THE 5.3GHz BAND .....	30
9.2.4. 802.11be EHT40 MODE IN THE 5.3GHz BAND .....	33
9.2.5. 802.11ax HE80 MODE IN THE 5.3GHz BAND .....	36
9.2.6. 802.11be EHT80 MODE IN THE 5.3GHz BAND .....	39
9.2.7. 802.11ax HE160 MODE IN THE 5.3GHz BAND .....	42
9.2.8. 802.11be EHT160 MODE IN THE 5.3GHz BAND .....	45
9.2.9. 802.11ax HE20 MODE IN THE 5.6GHz BAND .....	48

9.2.10.	802.11be EHT20 MODE IN THE 5.6GHz BAND.....	51
9.2.11.	802.11ax HE40 MODE IN THE 5.6GHz BAND.....	54
9.2.12.	802.11be EHT40 MODE IN THE 5.6GHz BAND.....	57
9.2.13.	802.11ax HE80 MODE IN THE 5.6GHz BAND.....	60
9.2.14.	802.11be EHT80 MODE IN THE 5.6GHz BAND.....	63
9.2.15.	802.11ax HE160 MODE IN THE 5.6GHz BAND.....	66
9.2.16.	802.11be EHT160 MODE IN THE 5.6GHz BAND.....	69
9.2.17.	802.11be EHT240 MODE IN THE 5.6GHz BAND.....	72
9.3.	<i>99% BANDWIDTH.....</i>	<i>75</i>
9.3.1.	802.11ax HE20 MODE IN THE 5.3GHz BAND.....	76
9.3.2.	802.11be EHT20 MODE IN THE 5.3GHz BAND.....	79
9.3.3.	802.11ax HE40 MODE IN THE 5.3GHz BAND.....	82
9.3.4.	802.11be EHT40 MODE IN THE 5.3GHz BAND.....	85
9.3.5.	802.11ax HE80 MODE IN THE 5.3GHz BAND.....	88
9.3.6.	802.11be EHT80 MODE IN THE 5.3GHz BAND.....	91
9.3.7.	802.11ax HE160 MODE IN THE 5.3GHz BAND.....	94
9.3.8.	802.11be EHT160 MODE IN THE 5.3GHz BAND.....	97
9.3.9.	802.11ax HE20 MODE IN THE 5.6GHz BAND.....	100
9.3.10.	802.11be EHT20 MODE IN THE 5.6GHz BAND.....	103
9.3.11.	802.11ax HE40 MODE IN THE 5.6GHz BAND.....	106
9.3.12.	802.11be EHT40 MODE IN THE 5.6GHz BAND.....	109
9.3.13.	802.11ax HE80 MODE IN THE 5.6GHz BAND.....	112
9.3.14.	802.11be EHT80 MODE IN THE 5.6GHz BAND.....	115
9.3.15.	802.11ax HE160 MODE IN THE 5.6GHz BAND.....	118
9.3.16.	802.11be EHT160 MODE IN THE 5.6GHz BAND.....	121
9.3.17.	802.11be EHT240 MODE IN THE 5.6GHz BAND.....	124
9.4.	<i>6 dB BANDWIDTH.....</i>	<i>127</i>
9.4.1.	802.11ax HE20 MODE IN THE 5.6GHz BAND.....	128
9.4.2.	802.11be EHT20 MODE IN THE 5.6GHz BAND.....	131
9.4.3.	802.11ax HE40 MODE IN THE 5.6GHz BAND.....	134
9.4.4.	802.11be EHT40 MODE IN THE 5.6GHz BAND.....	137
9.4.5.	802.11ax HE80 MODE IN THE 5.6GHz BAND.....	140
9.4.6.	802.11be EHT80 MODE IN THE 5.6GHz BAND.....	143
9.5.	<i>OUTPUT POWER AND PSD.....</i>	<i>146</i>
9.5.1.	802.11ax HE20 MODE IN THE 5.3GHz BAND.....	148
9.5.2.	802.11be EHT20 MODE IN THE 5.3GHz BAND.....	154
9.5.3.	802.11ax HE40 MODE IN THE 5.3GHz BAND.....	160
9.5.4.	802.11be EHT40 MODE IN THE 5.3GHz BAND.....	166
9.5.5.	802.11ax HE80 MODE IN THE 5.3GHz BAND.....	172
9.5.6.	802.11be EHT80 MODE IN THE 5.3GHz BAND.....	178
9.5.7.	802.11ax HE160 MODE IN THE 5.3GHz BAND.....	184
9.5.8.	802.11be EHT160 MODE IN THE 5.3GHz BAND.....	190
9.5.9.	802.11ax HE20 MODE IN THE 5.6GHz BAND.....	196
9.5.10.	802.11be EHT20 MODE IN THE 5.6GHz BAND.....	202
9.5.11.	802.11ax HE40 MODE IN THE 5.6GHz BAND.....	208
9.5.12.	802.11be EHT40 MODE IN THE 5.6GHz BAND.....	214
9.5.13.	802.11ax HE80 MODE IN THE 5.6GHz BAND.....	220
9.5.14.	802.11be EHT80 MODE IN THE 5.6GHz BAND.....	226
9.5.15.	802.11ax HE160 MODE IN THE 5.6GHz BAND.....	232
9.5.16.	802.11be EHT160 MODE IN THE 5.6GHz BAND.....	238
9.5.17.	802.11be EHT240 MODE IN THE 5.6GHz BAND.....	244

**10. RADIATED TEST RESULTS ..... 250**

- 10.1. *TRANSMITTER ABOVE 1 GHz* ..... 252
  - 10.1.1. TX ABOVE 1 GHz 802.11ax HE20 MODE IN THE 5.3GHz BAND ..... 252
  - 10.1.2. TX ABOVE 1 GHz 802.11be EHT20 MODE IN THE 5.3GHz BAND ..... 258
  - 10.1.3. TX ABOVE 1 GHz 802.11ax HE40 MODE IN THE 5.3GHz BAND ..... 270
  - 10.1.4. TX ABOVE 1 GHz 802.11be EHT40 MODE IN THE 5.3GHz BAND ..... 276
  - 10.1.5. TX ABOVE 1 GHz 802.11ax HE80 MODE IN THE 5.3GHz BAND ..... 286
  - 10.1.6. TX ABOVE 1 GHz 802.11be EHT80 MODE IN THE 5.3GHz BAND ..... 292
  - 10.1.7. TX ABOVE 1 GHz 802.11ax HE160 MODE IN THE 5.3GHz BAND ..... 300
  - 10.1.8. TX ABOVE 1 GHz 802.11be EHT160 MODE IN THE 5.3GHz BAND ..... 312
  - 10.1.9. TX ABOVE 1 GHz 802.11ax HE20 MODE IN THE 5.6GHz BAND ..... 326
  - 10.1.10. TX ABOVE 1 GHz 802.11be EHT20 MODE IN THE 5.6GHz BAND ..... 338
  - 10.1.11. TX ABOVE 1 GHz 802.11ax HE40 MODE IN THE 5.6GHz BAND ..... 358
  - 10.1.12. TX ABOVE 1 GHz 802.11be EHT40 MODE IN THE 5.6GHz BAND ..... 370
  - 10.1.13. TX ABOVE 1 GHz 802.11ax HE80 MODE IN THE 5.6GHz BAND ..... 390
  - 10.1.14. TX ABOVE 1 GHz 802.11be EHT80 MODE IN THE 5.6GHz BAND ..... 402
  - 10.1.15. TX ABOVE 1 GHz 802.11ax HE160 MODE IN THE 5.6GHz BAND ..... 420
  - 10.1.16. TX ABOVE 1 GHz 802.11be EHT160 MODE IN THE 5.6GHz BAND ..... 432
  - 10.1.17. TX ABOVE 1 GHz 802.11be EHT240 MODE IN THE 5.6GHz BAND ..... 446
- 10.2. *WORST CASE BELOW 30MHz* ..... 454
- 10.3. *WORST CASE BELOW 1 GHz (Foxlink PSU)* ..... 455
- 10.4. *WORST CASE BELOW 1 GHz (Luxshare PSU)* ..... 457
- 10.5. *WORST CASE 18-26 GHz* ..... 459
- 10.6. *WORST CASE 26-40 GHz* ..... 461

**11. AC POWERLINE CONDUCTED EMISSIONS ..... 463**

- 11.1. *AC POWER LINE (Foxlink PSU)* ..... 464
- 11.2. *AC POWER LINE (Luxshare PSU)* ..... 466

**12. SETUP PHOTOS ..... 468**

# 1. ATTESTATION OF TEST RESULTS

**COMPANY NAME:** eero LLC  
660 3<sup>rd</sup> Street 4<sup>th</sup> Floor  
San Francisco, CA 94107, U.S.A.

**EUT DESCRIPTION:** Wireless Access Point

**MODEL:** V010001

**BRAND:** eero

**SERIAL NUMBER:** Radiated: GGB2-1E06-3237-0089, GGB2-1E04-3062-004P,  
GGB2-1E08-3287-0037  
Conducted: GGB2-1E04-3057-00DA, GGB2-1E06-3237-OOBQ

**DATE TESTED:** 2023-05-09 TO 2023-09-15

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart E	Complies
ISED RSS-247 Issue 3	Complies
ISED RSS-GEN Issue 5 + A1	Complies

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

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

This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document.

Approved & Released For  
UL Verification Services Inc. By:



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Francisco De Anda  
Staff Engineer  
Consumer Technology Division  
UL Verification Services Inc.

Prepared By:



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Glenn Escano  
Test Engineer  
Consumer Technology Division  
UL Verification Services Inc.

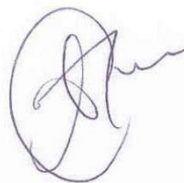
1<sup>st</sup> Reviewed By:



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Vien Tran  
Senior Laboratory Engineer  
Consumer Technology Division  
UL Verification Services Inc.

2<sup>nd</sup> Reviewed By:



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Tina Chu  
Senior Project Engineer  
Consumer Technology Division  
UL Verification Services Inc.

## 2. TEST RESULT SUMMARY

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

Below is a list of the data provided by the customer:

- 1) Antenna gain and type (see section 6.4)
- 2) Cable Loss (see section 6.4)

FCC Clause	ISED Clause	Requirement	Result	Comment
See Comment		Duty Cycle	Reporting purposes only	Per ANSI C63.10, Section 12.2.
See Comment	RSS-GEN 6.7	26dB BW/99% OBW	Reporting purposes only	Per ANSI C63.10 Sections 6.9.2 and 6.9.3
15.407 (e)	RSS-247 6.2.4.1	6 dB BW	Not applicable	None.
15.407 (a) (2), (h) (1)	RSS-247 6.2	Output Power	Compliant	None.
15.407 (a) (2)	RSS-247 6.2	PSD	Compliant	None.
15.209, 15.205, 15.407 (b)	RSS-GEN 8.9, 8.10, RSS-247 6.2	Radiated Emissions	Compliant	None.
15.207	RSS-Gen 8.8	AC Mains Conducted Emissions	Compliant	None.



### 3. TEST METHODOLOGY

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

- FCC CFR 47 Part 2
- FCC CFR 47 Part 15
- FCC KDB 662911 D01
- FCC KDB 905462 D02 /D03 /D06
- FCC KDB 789033 D02
- KDB 414788 D01 Radiated Test Site
- ANSI C63.10-2013
- RSS-GEN Issue 5 + A1
- RSS-247 Issue 3

### 4. FACILITIES AND ACCREDITATION

UL Verification Services Inc. is accredited by A2LA, Certificate Number 0751.05, for all testing performed within the scope of this report. Testing was performed at the locations noted below.

	Address	ISED CABID	ISED Company Number	FCC Registration
<input checked="" type="checkbox"/>	Building 1: 47173 Benicia Street Fremont, CA 94538, U.S.A	US0104	2324A	550739
<input type="checkbox"/>	Building 2: 47266 Benicia Street Fremont, CA 94538, U.S.A			
<input checked="" type="checkbox"/>	Building 4: 47658 Kato Rd Fremont, CA 94538, U.S.A			

## 5. DECISION RULES AND MEASUREMENT UNCERTAINTY

### 5.1. METROLOGICAL TRACEABILITY

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

### 5.2. DECISION RULES

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

### 5.3. MEASUREMENT UNCERTAINTY

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

PARAMETER	U <sub>Lab</sub>
Radio Frequency (Spectrum Analyzer)	141.16 Hz
Occupied Bandwidth	1.22%
Power Spectral Density	2.47 dB
RF Power Measurement Direct Method Using Power Meter	1.3 dB (PK) / 0.45 dB (AV)
Unwanted Emissions, Conducted	1.94 dB
Worst Case Conducted Disturbance, 9kHz to 0.15 MHz	3.78 dB
Worst Case Conducted Disturbance, 0.15 to 30 MHz	3.40 dB
Worst Case Radiated Disturbance, 9kHz to 30 MHz	2.87 dB
Worst Case Radiated Disturbance, 30 to 1000 MHz	6.01 dB
Worst Case Radiated Disturbance, 1000 to 18000 MHz	4.73 dB
Worst Case Radiated Disturbance, 18000 to 26000 MHz	4.51 dB
Worst Case Radiated Disturbance, 26000 to 40000 MHz	5.29 dB
Time Domain Measurements	3.39%
Temperature	0.57°C
Humidity	3.39%
DC Supply Voltages	0.57%

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

## 5.4. SAMPLE CALCULATION

### **RADIATED EMISSIONS**

Where relevant, the following sample calculation is provided:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)

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

### **MAINS CONDUCTED EMISSIONS**

Where relevant, the following sample calculation is provided:

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

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

## **6. EQUIPMENT UNDER TEST**

### **6.1. EUT DESCRIPTION**

The EUT is a low power indoor Access Point that supports 802.11 a/b/g/n/ac/ax/be Wifi, BLE 1Mbps/2Mbps and 802.15.4 technologies.

This report covers the 802.11ax and 802.11be 5GHz (UNII band 2A and 2C) WiFi radio.

### **6.2. CLASS II PERMISSIVE CHANGE DESCRIPTION**

This Class II Permissive Change is to add additional UNII bands 2A, 2C, 5, 6, 7, 8. No hardware changes were done. This change is done via software only.

### 6.3. MAXIMUM OUTPUT POWER

The transmitter has a maximum conducted output power as follows:

#### 5.3 GHz BAND 802.11ax MODE (FCC/IC)

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
<b>5.3 GHz band, 1TX</b>			
5260-5320	802.11ax HE20 OFDMA, 242-Tones	22.91	195.43
5270-5310	802.11ax HE40 OFDMA, 484-Tones	23.41	219.28
5290	802.11ax HE80 OFDMA, 996-Tones	20.63	115.61
5250	802.11ax HE160 OFDMA, 2x996-Tones	19.04	80.17
<b>5.3 GHz band, 2TX CDD</b>			
5260-5320	802.11ax HE20 OFDMA, 242-Tones	22.07	161.06
5270-5310	802.11ax HE40 OFDMA, 484-Tones	23.78	238.78
5290	802.11ax HE80 OFDMA, 996-Tones	19.98	99.54
5250	802.11ax HE160 OFDMA, 2x996-Tones	19.16	82.41
<b>5.3 GHz band, 4TX CDD</b>			
5260-5320	802.11ax HE20 OFDMA, 242-Tones	18.97	78.89
5270-5310	802.11ax HE40 OFDMA, 484-Tones	22.37	172.58
5290	802.11ax HE80 OFDMA, 996-Tones	21.74	149.28
5250	802.11ax HE160 OFDMA, 2x996-Tones	21.82	152.05

#### 5.3 GHz BAND 802.11be MODE (FCC/IC)

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
<b>5.3 GHz band, 1TX</b>			
5260-5320	802.11be EHT20 OFDMA, 242-Tones	23.67	232.81
5270-5310	802.11be EHT40 OFDMA, 484-Tones	23.28	212.81
5290	802.11be EHT80 OFDMA, 996-Tones	20.12	102.80
5250	802.11be EHT160 OFDMA, 2x996-Tones	18.12	64.86
<b>5.3 GHz band, 2TX CDD</b>			
5260-5320	802.11be EHT20 OFDMA, 242-Tones	22.63	183.23
5270-5310	802.11be EHT40 OFDMA, 484-Tones	23.64	231.21
5290	802.11be EHT80 OFDMA, 996-Tones	19.99	99.77
5250	802.11be EHT160 OFDMA, 2x996-Tones	18.76	75.16
<b>5.3 GHz band, 4TX CDD</b>			
5260-5320	802.11be EHT20 OFDMA, 242-Tones	20.21	104.95
5270-5310	802.11be EHT40 OFDMA, 484-Tones	23.16	207.01
5290	802.11be EHT80 OFDMA, 996-Tones	23.66	232.27
5250	802.11be EHT160 OFDMA, 2x996-Tones	21.90	154.88

**5.6 GHz BAND 802.11ax MODE (FCC/IC)**

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
<b>5.6 GHz band, 1TX</b>			
5500-5720	802.11ax HE20 OFDMA, 242-Tones	22.45	175.79
5510-5710	802.11ax HE40 OFDMA, 484-Tones	23.85	242.66
5530-5690	802.11ax HE80 OFDMA, 996-Tones	23.81	240.44
5570	802.11ax HE160 OFDMA, 2x996-Tones	16.91	49.09
<b>5.6 GHz band, 2TX CDD</b>			
5500-5720	802.11ax HE20 OFDMA, 242-Tones	22.24	167.49
5510-5710	802.11ax HE40 OFDMA, 484-Tones	23.89	244.91
5530-5690	802.11ax HE80 OFDMA, 996-Tones	23.77	238.23
5570	802.11ax HE160 OFDMA, 2x996-Tones	20.16	103.75
<b>5.6 GHz band, 4TX CDD</b>			
5500-5720	802.11ax HE20 OFDMA, 242-Tones	19.51	89.33
5510-5710	802.11ax HE40 OFDMA, 484-Tones	22.60	181.97
5530-5690	802.11ax HE80 OFDMA, 996-Tones	23.86	243.22
5570	802.11ax HE160 OFDMA, 2x996-Tones	19.63	91.83

**5.6 GHz BAND 802.11be MODE (FCC/IC)**

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
<b>5.6 GHz band, 1TX</b>			
5500-5720	802.11be EHT20 OFDMA, 242-Tones	22.75	188.36
5510-5710	802.11be EHT40 OFDMA, 484-Tones	23.84	242.10
5530-5690	802.11be EHT80 OFDMA, 996-Tones	23.49	223.36
5570	802.11be EHT160 OFDMA, 2x996-Tones	17.47	55.85
5610	802.11be EHT240 OFDMA, 2x996-Tones	16.90	48.98
<b>5.6 GHz band, 2TX CDD</b>			
5500-5720	802.11be EHT20 OFDMA, 242-Tones	22.93	196.34
5510-5710	802.11be EHT40 OFDMA, 484-Tones	23.74	236.59
5530-5690	802.11be EHT80 OFDMA, 996-Tones	23.77	238.23
5570	802.11be EHT160 OFDMA, 2x996-Tones	19.88	97.27
5610	802.11be EHT240 OFDMA, 2x996-Tones	18.55	71.61
<b>5.6 GHz band, 4TX CDD</b>			
5500-5720	802.11be EHT20 OFDMA, 242-Tones	19.55	90.16
5510-5710	802.11be EHT40 OFDMA, 484-Tones	22.60	181.97
5530-5690	802.11be EHT80 OFDMA, 996-Tones	23.77	238.23
5570	802.11be EHT160 OFDMA, 2x996-Tones	20.79	119.95
5610	802.11be EHT240 OFDMA, 2x996-Tones	18.39	69.02

## 6.4. DESCRIPTION OF AVAILABLE ANTENNAS AND CABLE LOSS

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

The radio utilizes Flex PCB antennas, with a maximum gain as below table. EUT support the following transmit configurations:

- 1x1 SISO, Antenna 6 only
- 2x2 MIMO, Antenna 6 and Antenna 4 only
- 4x4 MIMO, Antenna 6, Antenna 4, Antenna 9 and Antenna 1

Frequency Range (MHz)	Peak Antenna Gain (dBi)				Cable Loss (dB)
	Antenna 6	Antenna 4	Antenna 9	Antenna 1	
5250 – 5350	3.76	3.76	3.76	3.76	1.3
5500 – 5700	3.59	3.59	3.59	3.59	1.4

## 6.5. SOFTWARE AND FIRMWARE

The EUT firmware installed during testing were ath1210csu1-ipq95xx and ath1210csu1-ipq95xx-20230912.

The test utility software used during testing was Qualcomm Radio Control Toolkit v4.1 Version 4.0.85.1.

## 6.6. WORST-CASE CONFIGURATION AND MODE

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

Investigation was performed on 1TX, 2TX and 4TX 802.11ax/be, and determined that 4Tx 802.11be mode covers 1TX, 2TX, 4TX 802.11ax mode and 1TX, 2TX 802.11be modes for radiated spurious emissions.

Band edge was performed with the EUT set to transmit at the highest power on low, mid, and high channels for 802.11ax and be.

The EUT can only be setup in desktop orientation; therefore, all radiated testing was performed with the EUT in desktop orientation.

This EUT supports BLE/ 802.15.4/DTS + 5GHz + 6GHz simultaneous transmission, please refer to 14749497-E7 for data.

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

802.11ax HE20mode: MCS0  
802.11be EHT20mode: MCS0  
802.11ax HE40mode: MCS0  
802.11be EHT40mode: MCS0  
802.11ax HE80mode: MCS0  
802.11be EHT80mode: MCS0  
802.11ax HE160mode: MCS0  
802.11be EHT160mode: MCS0  
802.11be EHT240mode: MCS0

Plots included in the report are representative of the method and settings parameters used for the test.



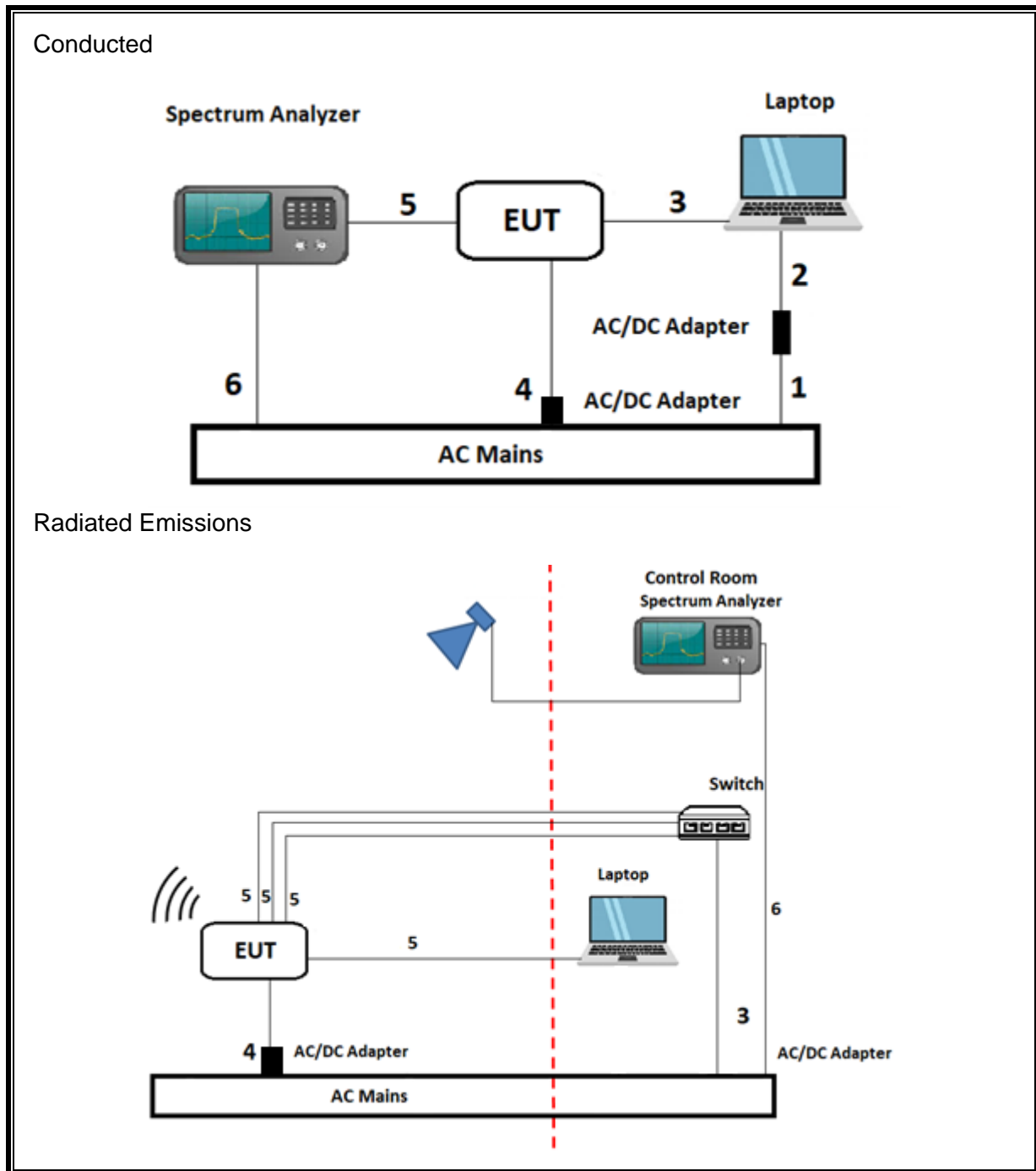
## 6.7. DESCRIPTION OF TEST SETUP

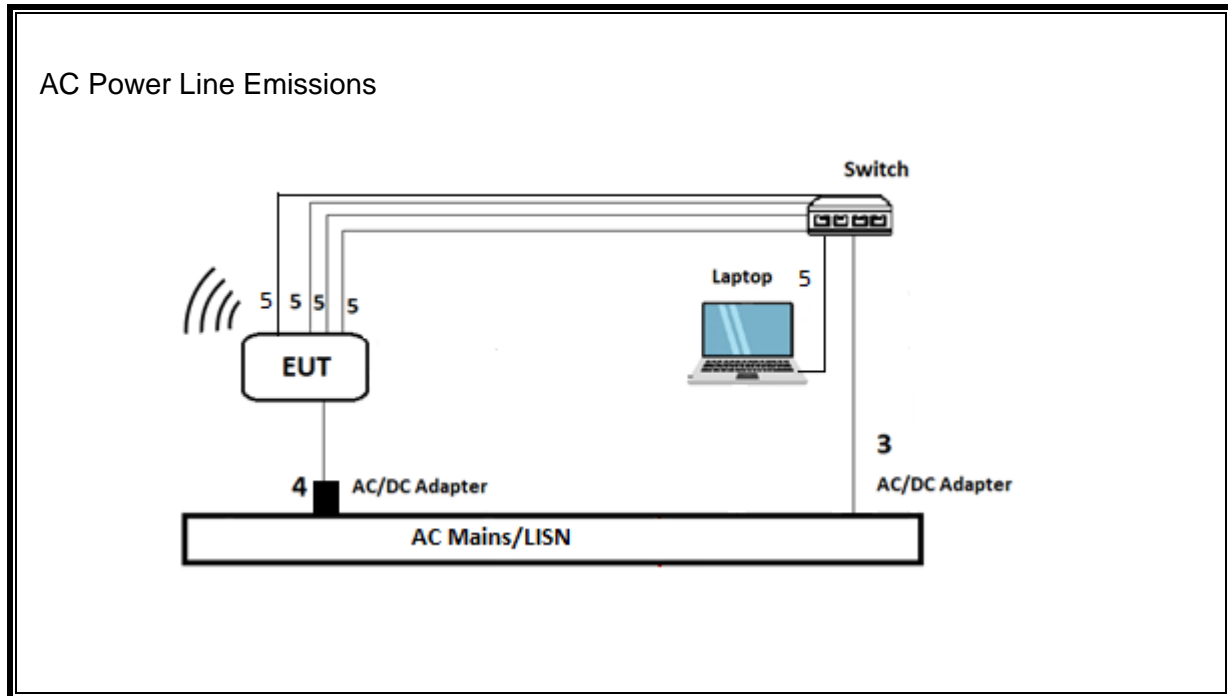
SUPPORT TEST EQUIPMENT						
Description	Manufacturer	Model	Serial Number	FCC ID/ DoC		
EUT AC/DC Adapter (Luxshare)	eero	C310011	NA	DoC		
EUT AC/DC Adapter (Foxlink)	eero	C310011	NA	DoC		
Laptop	Lenovo	ThinkPad P15s Gen 2	PF-2YV2K6	DoC		
Laptop AC/DC Adapter	Lenovo	ADLX65Y	8SSA10R16875C1SG09PRSHT	DoC		
Laptop	Lenovo	ThinkPadT460	PC0JLLUT	DoC		
Laptop AC/DC Adapter	Lenovo	A-17-065N2A	8SSA10J20161C1SG8720X55 Rev:000	DoC		
Switch	Netgear	XS505M	6H11197M00054	DoC		
I/O CABLES (CONDUCTED TEST)						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	AC	1	2-Prong	Un-shielded	1	AC Mains to LT AC/DC Adapter
2	DC	1	Barrel	Un-shielded	1.5	AC/DC Adapter to Laptop
3	Ethernet	1	RJ45	Un-shielded	1	Laptop to EUT
4	DC	1	Barrel	Un-shielded	1.5	AC/DC Adapter to EUT
5	SMA	1	SMA	Un-shielded	0.1	EUT to Spectrum Analyzer
6	AC	1	3-Prong	Un-shielded	1.5	AC Mains to Spectrum Analyzer
I/O CABLES (RADIATED TEST EMISSIONS)						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
3	AC	1	2-Prong	Un-shielded	2	AC Mains to Switch
4	DC	1	Barrel	Un-shielded	1.5	AC/DC Adapter to EUT
5	I/O	4	RJ45	Un-shielded	>3 meter	EUT to Switch /Laptop. One cable connected to switch is <3 meter for 30MHz to 1GHz test.
6	AC	1	3-Prong	Un-shielded	1.5	AC Mains to Spectrum Analyzer
I/O CABLES (AC POWER LINE EMISSIONS)						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
3	AC	1	2-Prong	Un-shielded	2	AC Mains to Switch
4	DC	1	Barrel	Un-shielded	1.5	AC/DC Adapter to EUT
5	I/O	5	RJ45	Un-shielded	>3 meter	EUT to Switch, Laptop to Switch

**TEST SETUP**

The EUT is powered by AC/DC adapter and connected to support equipment, and the radio is exercised remotely by command prompt GUI test utility software via ethernet.

**SETUP DIAGRAM**





## 7. MEASUREMENT METHOD

On Time and Duty Cycle: KDB 789033 D02, Section B.

6 dB Emission BW: KDB 789033 D02, Section C.2

26 dB Emission BW: KDB 789033 D02, Section C.1

99% Occupied BW: KDB 789033 D02, Section D.

Output Power: KDB 789033 D02, Section E.3.b (Method PM-G) and KDB 789033 D02, Section E.2.b (Method SA-1)

Power Spectral Density: KDB 789033 D02, Section F

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

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

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

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

## 8. TEST AND MEASUREMENT EQUIPMENT

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

TEST EQUIPMENT LIST					
Description	Manufacturer	Model	ID Num	Cal Due	Last Cal
Antenna, Passive Loop 30Hz - 1MHz	ELECTRO METRICS	EM-6871	219908	2024-05-31	2023-05-31
Antenna, Passive Loop 100KHz - 30MHz	ELECTRO METRICS	EM-6872	219910	2024-05-31	2023-05-31
Antenna, Broadband Hybrid, 30MHz to 2000MHz	Sunol Sciences Corp.	JB1	80293	2024-04-30	2023-04-11
Amplifier, 9KHz to 1GHz, 32dB	SONOMA INSTRUMENT	310	170647	2023-11-11	2022-11-11
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	222741	2024-08-31	2022-08-31
RF Filter Box, 1-18GHz	UL-FR1	n/a	171875	2023-11-10	2022-11-10
EMI TEST RECEIVER	Rohde & Schwarz	ESW44	230547	2024-02-29	2023-02-15
Antenna, Horn 18 to 26.5GHz	A.R.A.	MWH-1826/B	199659	2023-12-06	2022-12-06
Amplifier 18-26.5GHz, +5Vdc, -54dBm P1dB	AMPLICAL	AMP18G26.5-60	234683	2024-03-29	2023-03-18
Antenna, Horn 26.5 to 40GHz	ARA	MWH-2640/B	199661	2023-12-06	2022-12-06
Amplifier 26-40GHz +5Vdc, -62dBm P1dB	AMPLICAL	AMP26G40-60	234684	2024-03-29	2023-03-18
Antenna, BroadBand Hybrid, 30MHz to 3GHz	Sunol Sciences Corp.	JB3	232075 (chamber k)	2024-03-31	2023-03-31
Amplifier, 9KHz to 1GHz, 32dB	SONOMA INSTRUMENT	310	175953 (chamber k)	2024-03-31	2023-03-31
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	223083 (chamber k)	2023-10-25	2022-10-25
RF Filter Box, 1-18GHz, 8 Port	UL-FR1	SAC 8 port rf box 1	197920 (chamber k)	2024-05-31	2023-05-17
EMI TEST RECEIVER	Rohde & Schwarz	ESW44	225688 (chamber k)	2024-02-29	2023-02-14
Spectrum Analyzer, PXA, 3Hz to 44GHz	Keysight Technologies Inc	N9030A	125178	2024-02-29	2023-02-06
10dB Fixed Attenuator, up to 26GHz	Pasternack Enterprises	PE7087-10	236189	Verified/characterized before use	
Power Meter, P-series single channel	Keysight Technologies Inc	N1921A	81319	2024-01-25	2023-01-25
Power Sensor, P - series, 50MHz to 18GHz, Wideband	Keysight Technologies Inc	N1911A	90718	2024-01-31	2023-01-31
Filter, BRF 5150 to 5350MHz	Micro-Tronics	BRC50703	15648	2023-09-07	2022-09-07
AC Line Conducted					
LISN	Fischer Custom Communications, Inc	FCC-LISN-50/250- 25-2-01-480V	175765	2024-01-31	2023-01-27
EMI TEST RECEIVER	Rohde & Schwarz	ESR	93091	2024-02-29	2023-02-20
Transient Limiter	TE	TBFL1	207996	2023-07-31	2022-07-15
UL TEST SOFTWARE LIST					
Radiated Software	UL	UL EMC	Ver 2023-01-18, 2023-03-03, 2023-05-01		
Antenna Port Software	UL	UL RF	Ver 2022-08-16		
AC Line Conducted Software	UL	UL EMC	Rev 9.5, 2022-02-17		

## 9. ANTENNA PORT TEST RESULTS

### 9.1. ON TIME AND DUTY CYCLE

#### LIMITS

None; for reporting purposes only.

#### PROCEDURE

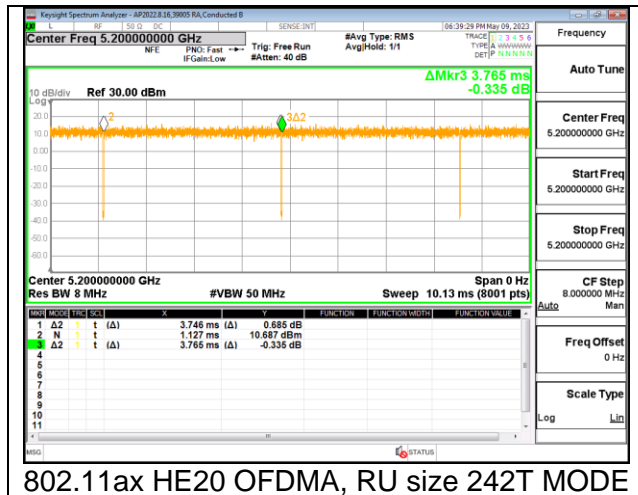
KDB 558074 D01 Zero-Span Spectrum Analyzer Method.

#### ON TIME AND DUTY CYCLE RESULTS

Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
802.11ax HE20 OFDMA, RU size 242T	3.746	3.765	0.995	99.50%	0.00	0.010
802.11be EHT20 OFDMA, RU size 242T	3.754	3.773	0.995	99.50%	0.00	0.010
802.11ax HE40 OFDMA, RU size 484T	3.746	3.765	0.995	99.50%	0.00	0.010
802.11be EHT40 OFDMA, RU size 484T	3.739	3.772	0.991	99.13%	0.00	0.010
802.11ax HE80 OFDMA, RU size 996T	3.578	3.601	0.994	99.36%	0.00	0.010
802.11be EHT80 OFDMA, RU size 996T	3.588	3.607	0.995	99.47%	0.00	0.010
802.11ax HE160 OFDMA, RU size 2x996T	3.581	3.599	0.995	99.50%	0.00	0.010
802.11be EHT160 OFDMA, RU size 2x996T	3.596	3.613	0.995	99.53%	0.00	0.010
802.11be EHT240 OFDMA, RU size 3x996T	5.261	5.355	0.982	98.24%	0.00	0.010

Note: Testing was performed for 1Tx, 2Tx and 4Tx. The above results are representative for 2Tx and 4Tx

### DUTY CYCLE SAMPLE PLOTS



## **9.2. 26 dB BANDWIDTH**

### **LIMITS**

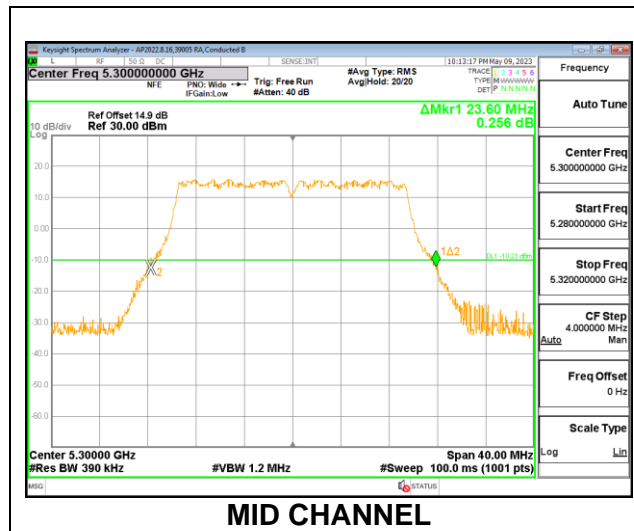
None; for reporting purposes only.

### **RESULTS**

### 9.2.1. 802.11ax HE20 MODE IN THE 5.3GHz BAND

#### 1TX Antenna 6 OFDMA MODE: 242-Tones, RU Index 61

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5260	23.28
Mid	5300	23.60
High	5320	23.16

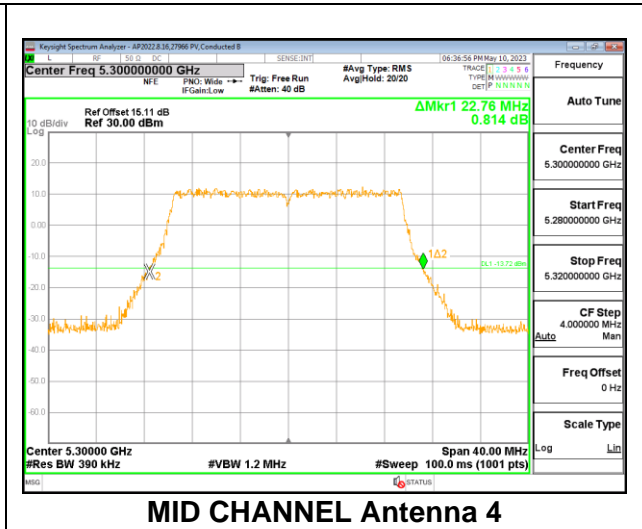
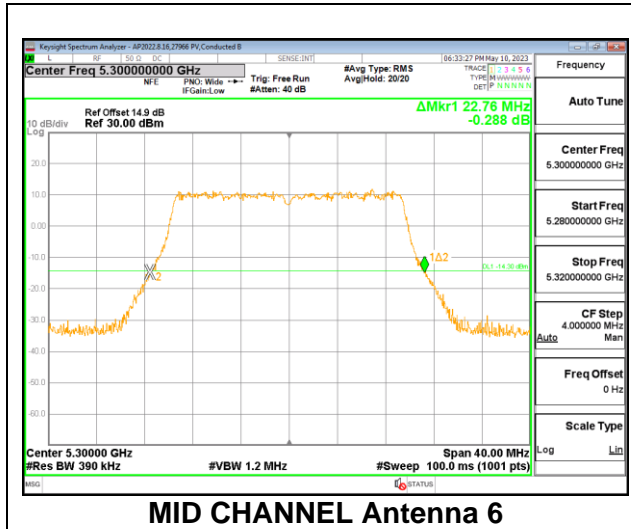




**2TX Antenna 6 + Antenna 4 CDD OFDMA MODE: 242-Tones, RU Index 61**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)	26 dB Bandwidth Antenna 4 (MHz)
Low	5260	22.84	22.72
Mid	5300	22.76	22.76
High	5320	22.84	22.76

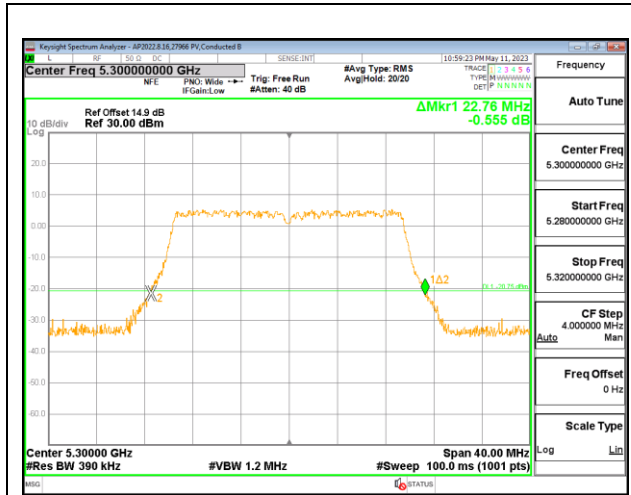
**MID CHANNEL**



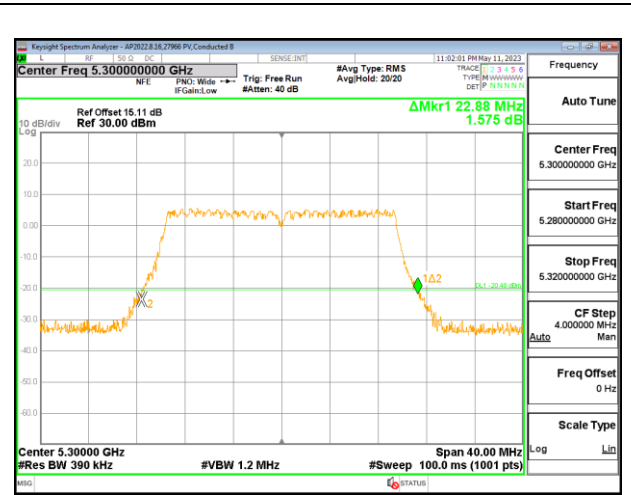
**4TX Antenna 6 + Antenna 4 + Antenna 9 + Antenna 1 CDD OFDMA MODE: 242-Tones, RU Index 61**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)	26 dB Bandwidth Antenna 4 (MHz)	26 dB Bandwidth Antenna 9 (MHz)	26 dB Bandwidth Antenna 1 (MHz)
Low	5260	23.00	22.68	22.36	22.48
Mid	5300	22.76	22.88	22.72	22.84
High	5320	22.84	22.88	22.36	22.80

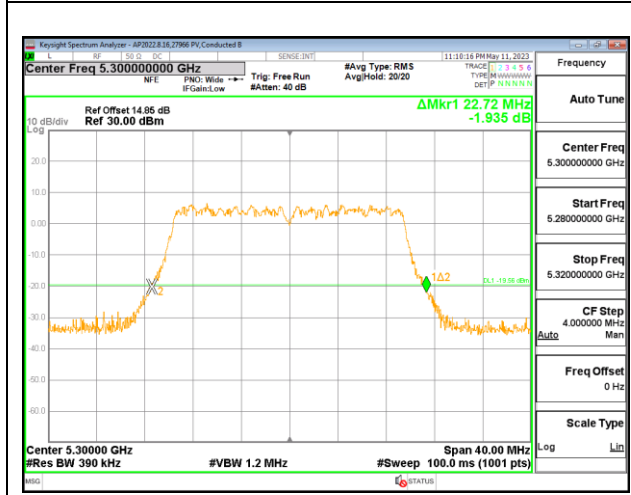
**MID CHANNEL**



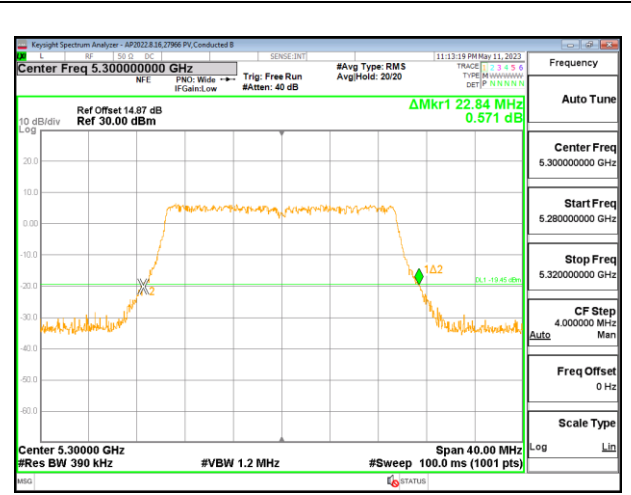
**MID CHANNEL Antenna 6**



**MID CHANNEL Antenna 4**



**MID CHANNEL Antenna 9**

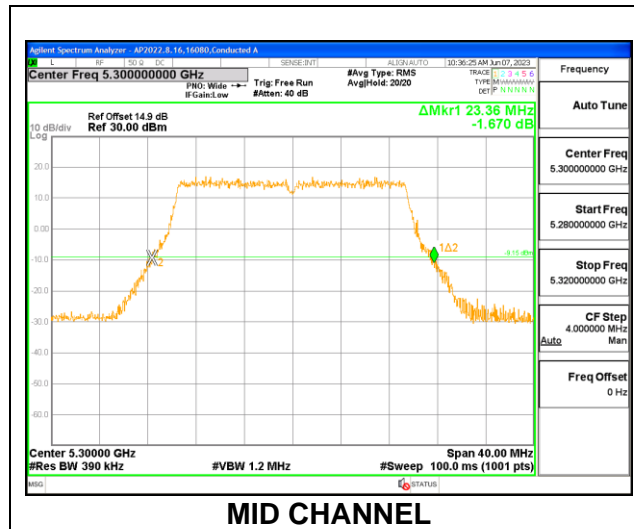


**MID CHANNEL Antenna 1**

### 9.2.2. 802.11be EHT20 MODE IN THE 5.3GHZ BAND

#### 1TX Antenna 6 OFDMA MODE: 242-Tones, RU Index 61

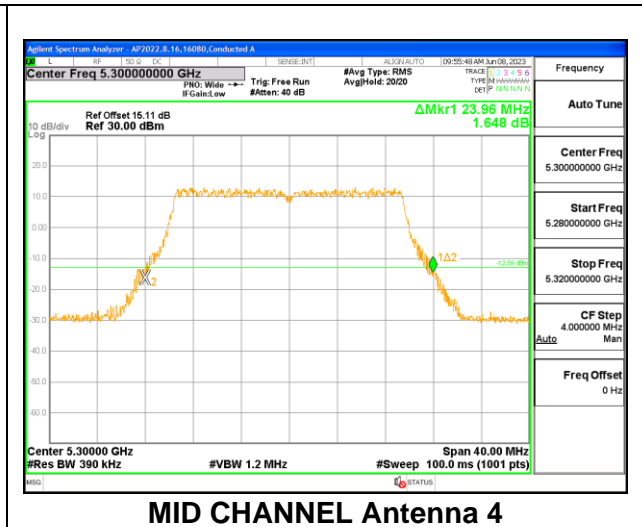
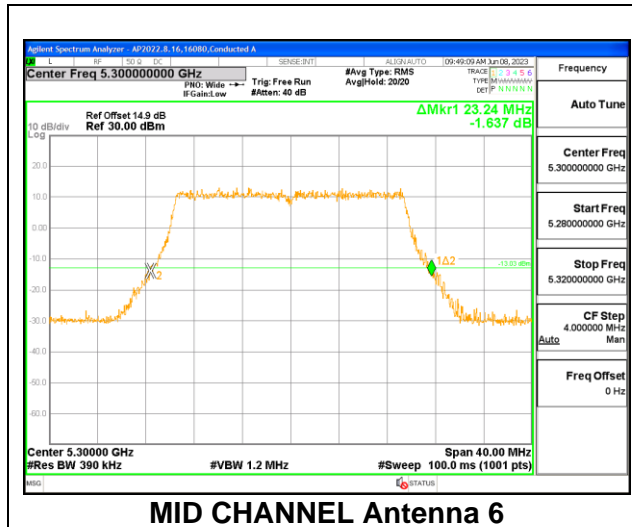
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5260	23.52
Mid	5300	23.36
High	5320	23.60



**2TX Antenna 6 + Antenna 4 CDD OFDMA MODE: 242-Tones, RU Index 61**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)	26 dB Bandwidth Antenna 4 (MHz)
Low	5260	23.40	23.76
Mid	5300	23.24	23.96
High	5320	23.20	24.00

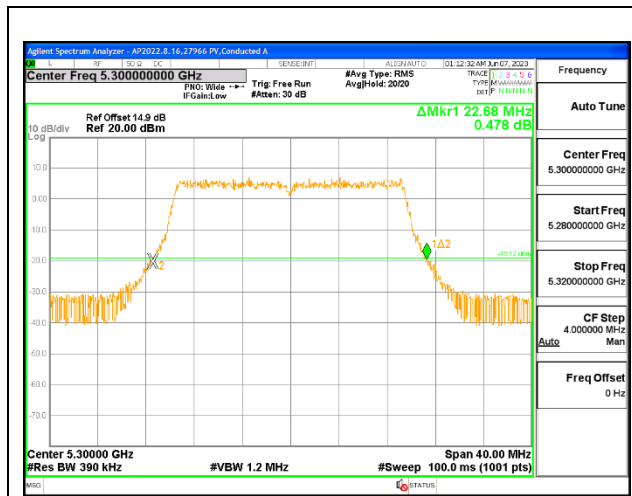
**MID CHANNEL**



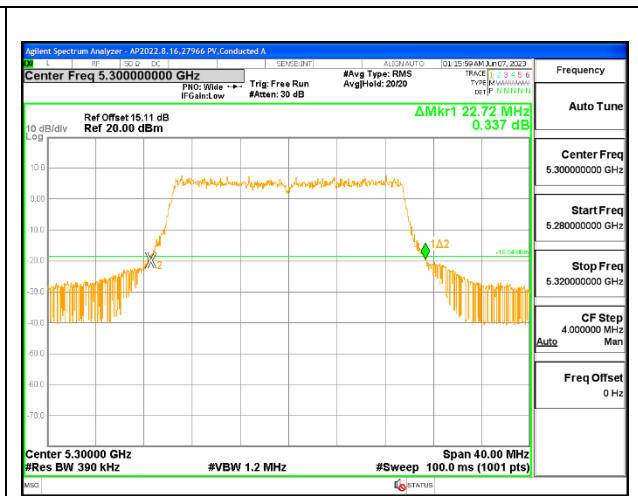
**4TX Antenna 6 + Antenna 4 + Antenna 9 + Antenna 1 CDD OFDMA MODE: 242-Tones, RU Index 61**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)	26 dB Bandwidth Antenna 4 (MHz)	26 dB Bandwidth Antenna 9 (MHz)	26 dB Bandwidth Antenna 1 (MHz)
Low	5260	22.48	22.52	22.48	22.44
Mid	5300	22.68	22.72	22.56	22.40
High	5320	22.68	22.48	22.92	22.40

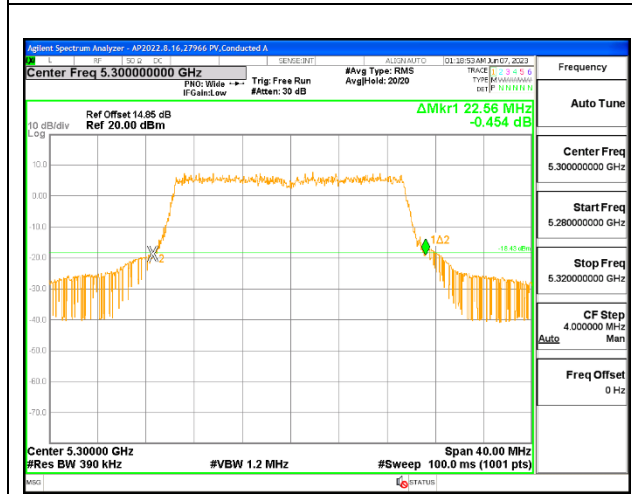
**MID CHANNEL**



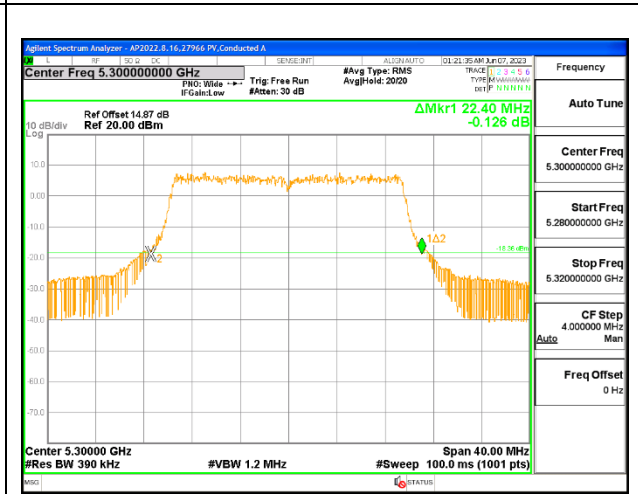
**MID CHANNEL Antenna 6**



**MID CHANNEL Antenna 4**



**MID CHANNEL Antenna 9**

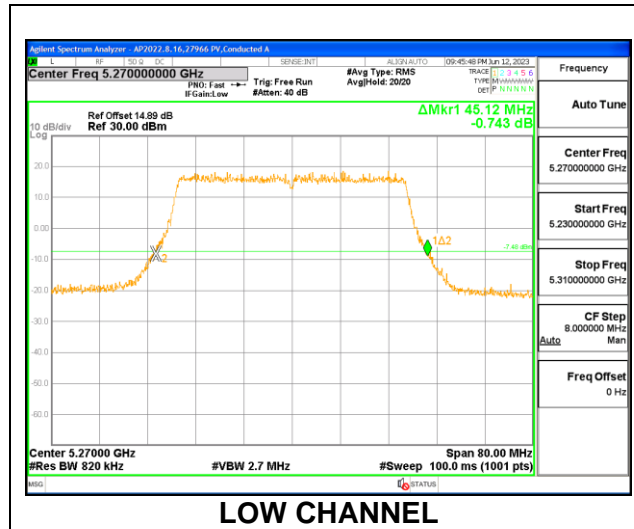


**MID CHANNEL Antenna 1**

### 9.2.3. 802.11ax HE40 MODE IN THE 5.3GHz BAND

#### 1TX Antenna 6 OFDMA MODE: 484-Tones, RU Index 65

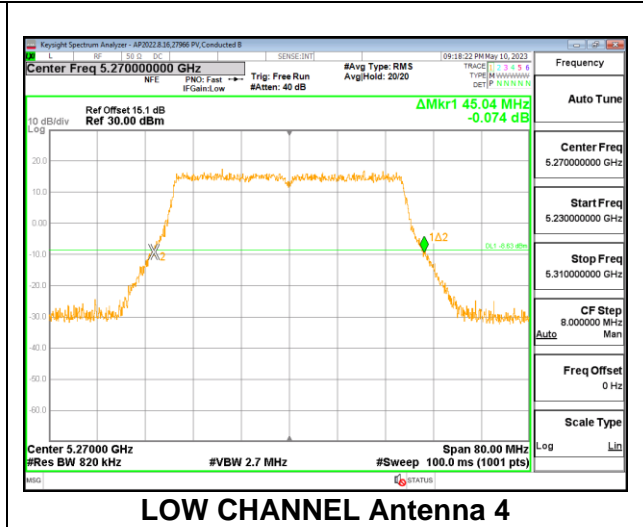
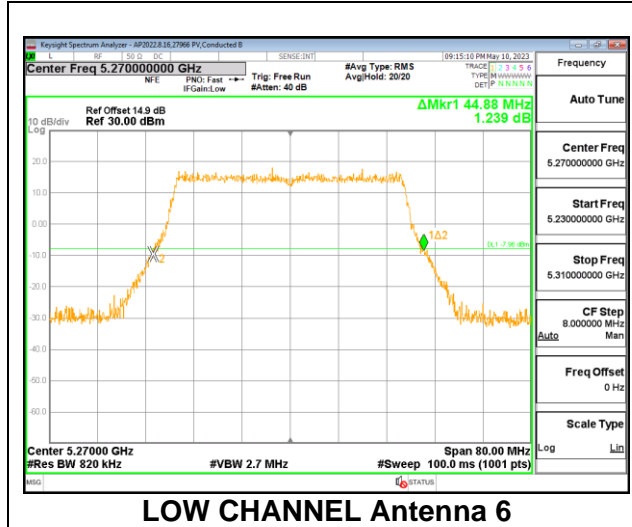
Channel	Frequency (MHz)	26dB Bandwidth (MHz)
Low	5270	45.12
High	5310	45.76



**2TX Antenna 6 + Antenna 4 CDD OFDMA MODE: 484-Tones, RU Index 65**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)	26 dB Bandwidth Antenna 4 (MHz)
Low	5270	44.88	45.04
High	5310	44.72	45.28

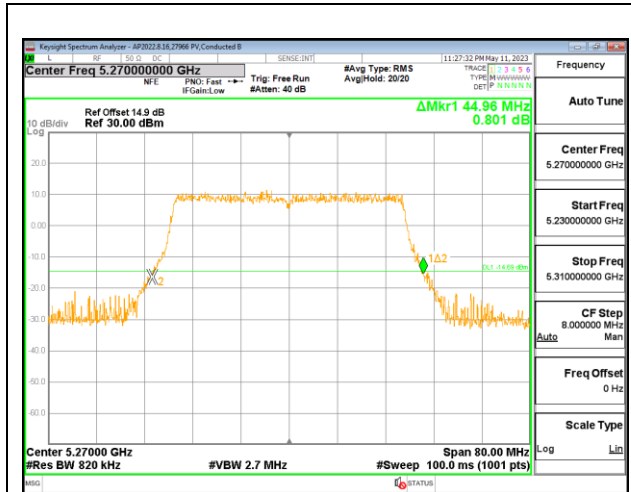
**LOW CHANNEL**



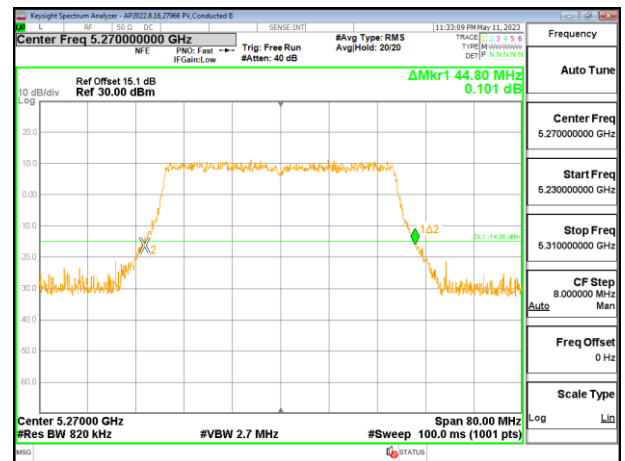
**4TX Antenna 6 + Antenna 4 + Antenna 9 + Antenna 1 CDD OFDMA MODE: 484-Tones, RU Index 65**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)	26 dB Bandwidth Antenna 4 (MHz)	26 dB Bandwidth Antenna 9 (MHz)	26 dB Bandwidth Antenna 1 (MHz)
Low	5270	44.96	44.80	45.20	44.96
High	5310	45.84	45.52	44.96	45.28

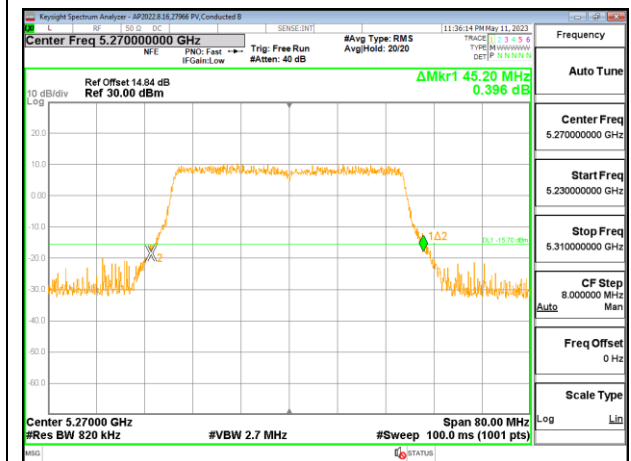
**LOW CHANNEL**



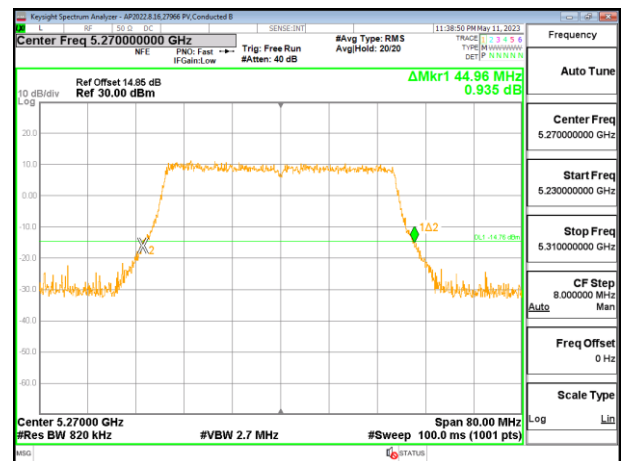
**LOW CHANNEL Antenna 6**



**LOW CHANNEL Antenna 4**



**LOW CHANNEL Antenna 9**



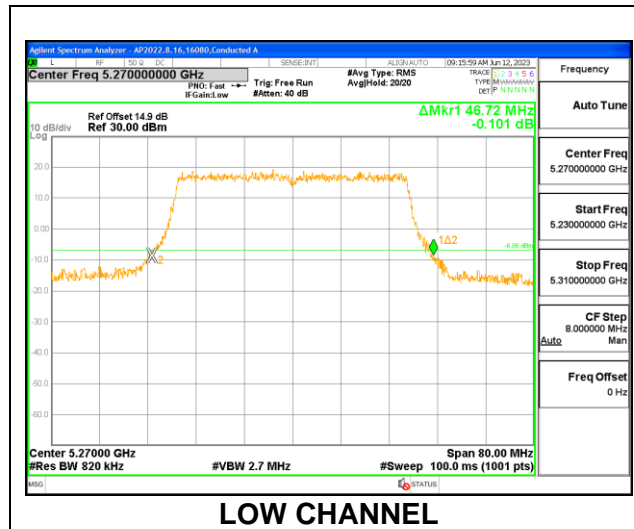
**LOW CHANNEL Antenna 1**



### 9.2.4. 802.11be EHT40 MODE IN THE 5.3GHZ BAND

#### 1TX Antenna 6 OFDMA MODE: 484-Tones, RU Index 65

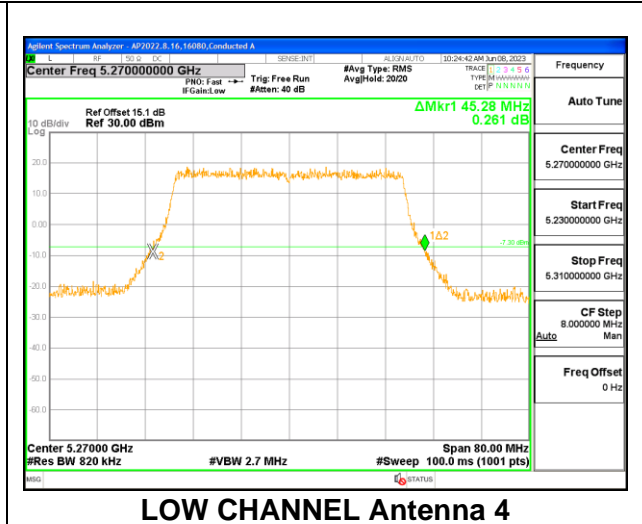
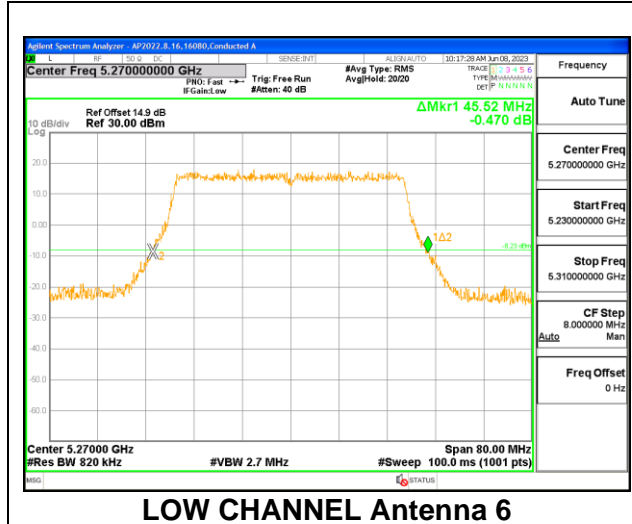
Channel	Frequency (MHz)	26dB Bandwidth (MHz)
Low	5270	46.72
High	5310	45.76



**2TX Antenna 6 + Antenna 4 CDD OFDMA MODE: 484-Tones, RU Index 65**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)	26 dB Bandwidth Antenna 4 (MHz)
Low	5270	45.52	45.28
High	5310	45.92	45.04

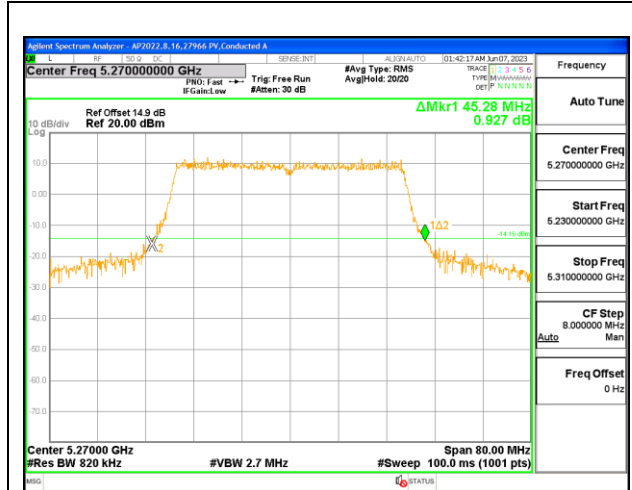
**LOW CHANNEL**



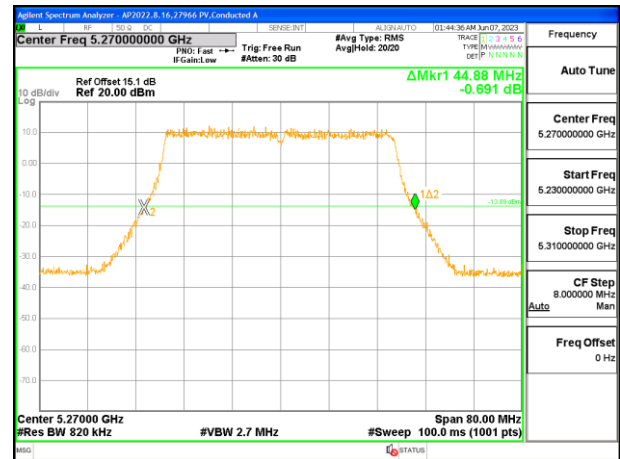
**4TX Antenna 6 + Antenna 4 + Antenna 9 + Antenna 1 CDD OFDMA MODE: 484-Tones, RU Index 65**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)	26 dB Bandwidth Antenna 4 (MHz)	26 dB Bandwidth Antenna 9 (MHz)	26 dB Bandwidth Antenna 1 (MHz)
Low	5270	45.28	44.88	44.56	44.72
High	5310	45.36	44.88	45.44	45.36

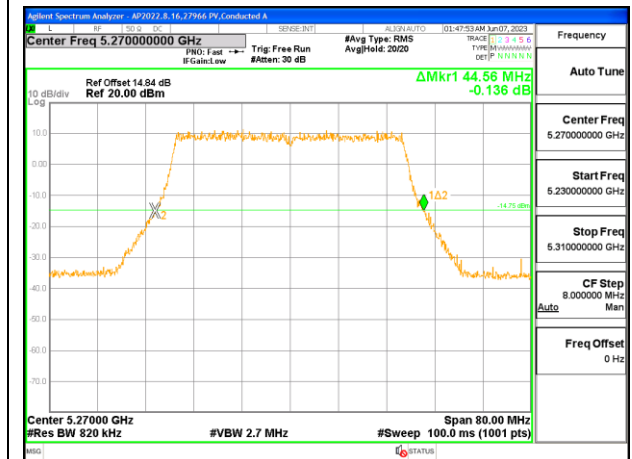
**LOW CHANNEL**



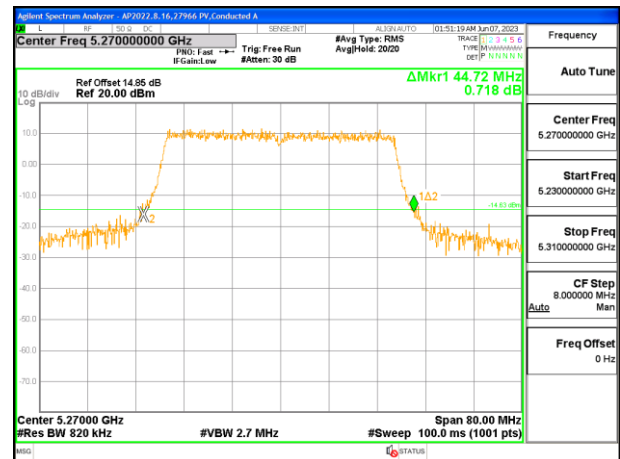
**LOW CHANNEL Antenna 6**



**LOW CHANNEL Antenna 4**



**LOW CHANNEL Antenna 9**

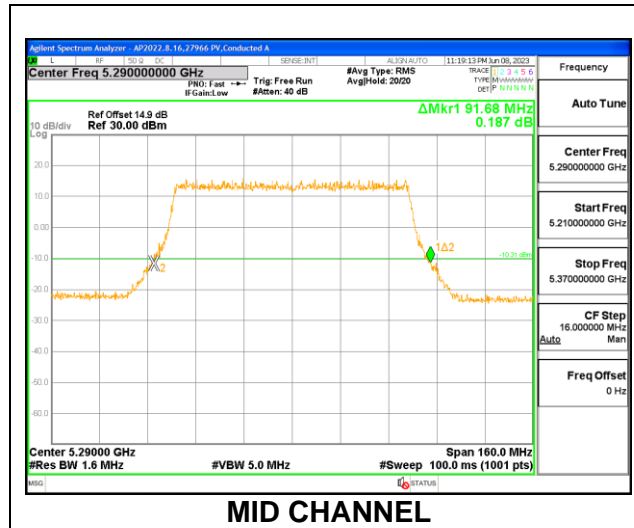


**LOW CHANNEL Antenna 1**

### 9.2.5. 802.11ax HE80 MODE IN THE 5.3GHz BAND

#### 1TX Antenna 6 OFDMA MODE: 996-Tones, RU Index 67

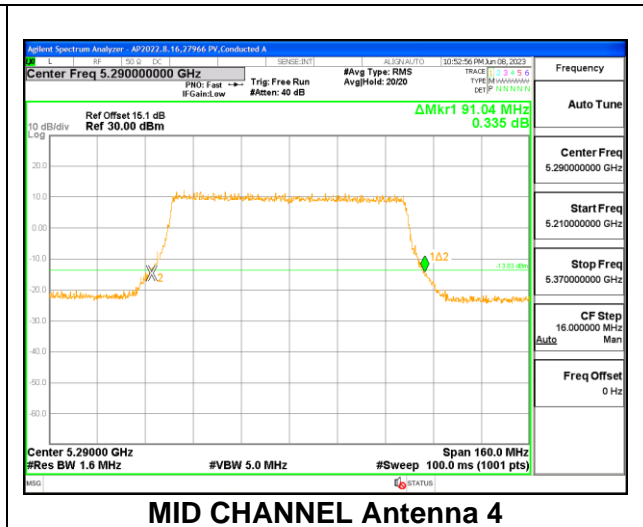
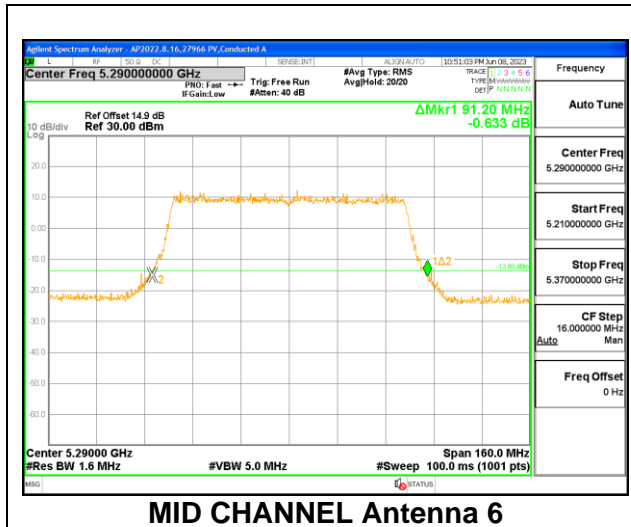
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Mid	5290	91.68



**2TX Antenna 6 + Antenna 4 CDD OFDMA MODE: 996-Tones, RU Index 67**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)	26 dB Bandwidth Antenna 4 (MHz)
Mid	5290	91.20	91.04

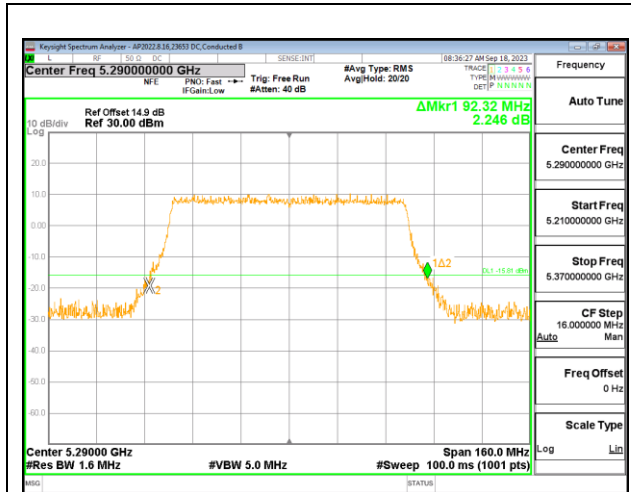
**MID CHANNEL**



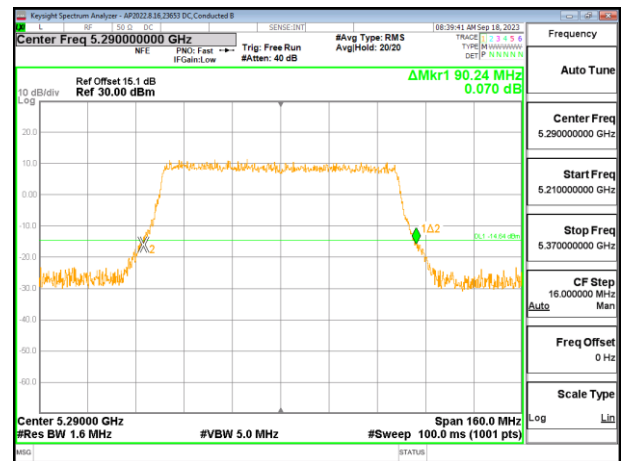
**4TX Antenna 6 + Antenna 4 + Antenna 9 + Antenna 1 CDD OFDMA MODE: 996-Tones, RU Index 67**

Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)	26 dB Bandwidth Antenna 4 (MHz)	26 dB Bandwidth Antenna 9 (MHz)	26 dB Bandwidth Antenna 1 (MHz)
5290	92.32	90.24	91.68	93.12

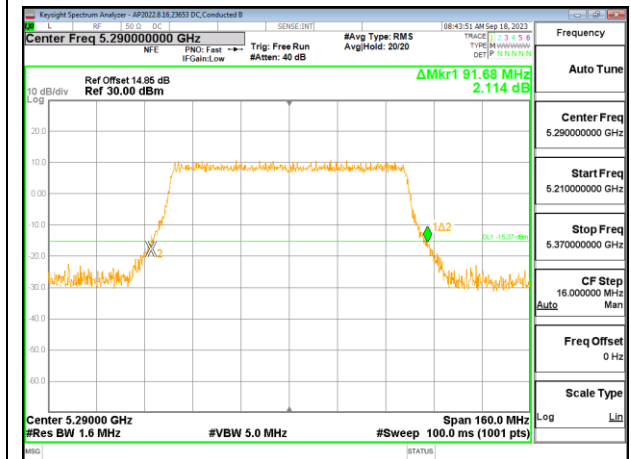
**MID CHANNEL**



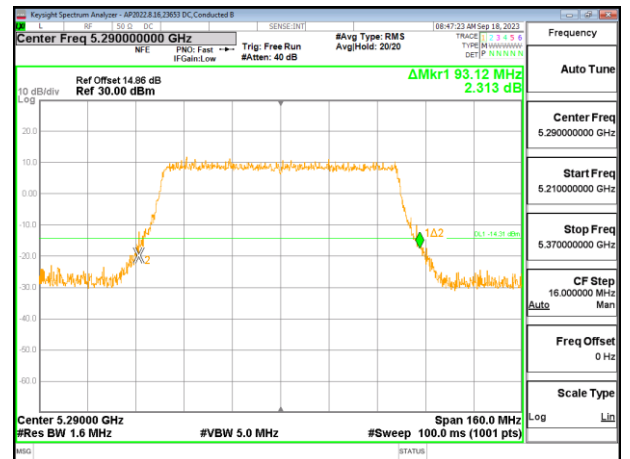
**MID CHANNEL Antenna 6**



**MID CHANNEL Antenna 4**



**MID CHANNEL Antenna 9**

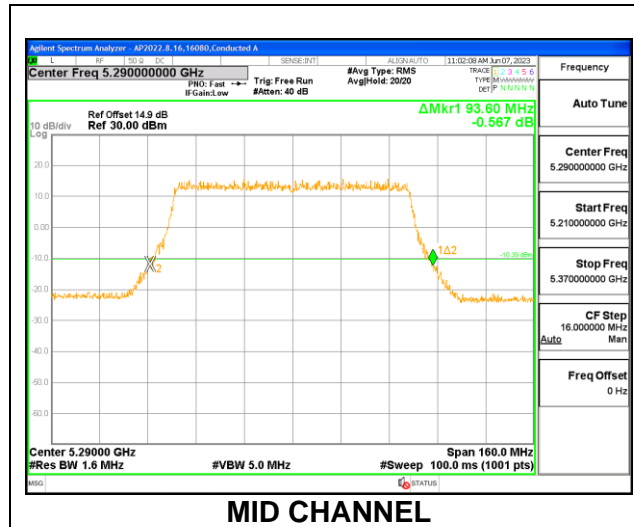


**MID CHANNEL Antenna 1**

### 9.2.6. 802.11be EHT80 MODE IN THE 5.3GHz BAND

#### 1TX Antenna 6 OFDMA MODE: 996-Tones, RU Index 67

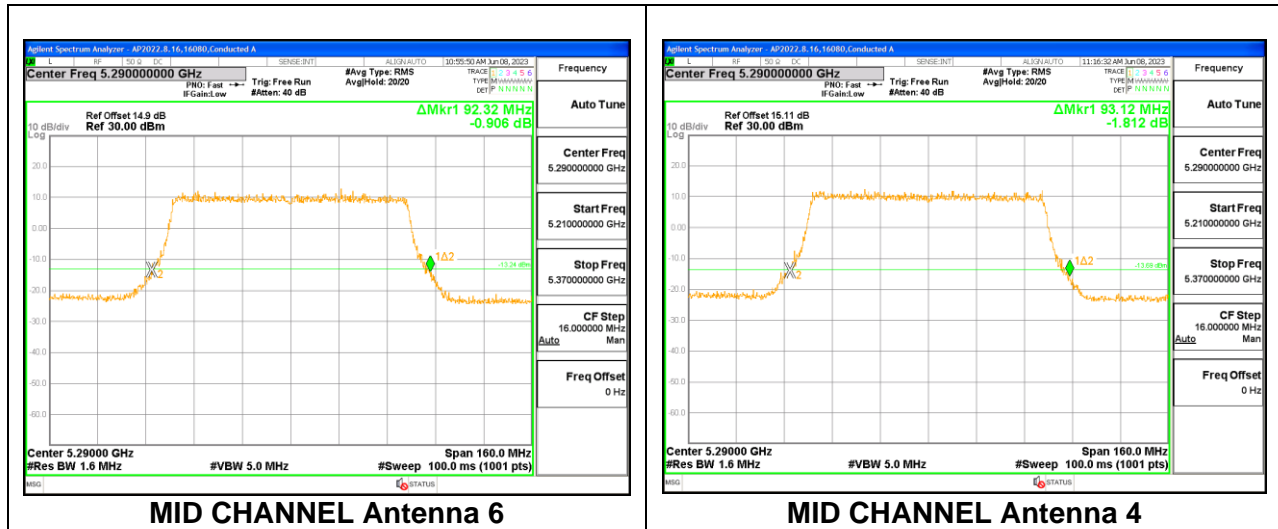
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Mid	5290	93.60



**2TX Antenna 6 + Antenna 4 CDD OFDMA MODE: 996-Tones, RU Index 67**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)	26 dB Bandwidth Antenna 4 (MHz)
Mid	5290	92.32	93.12

**MID CHANNEL**

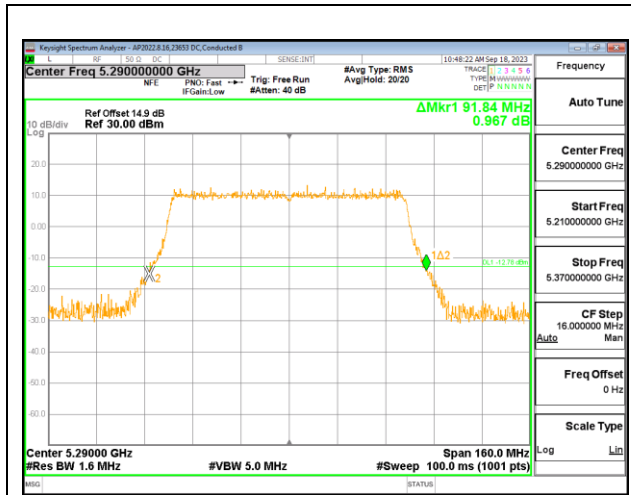




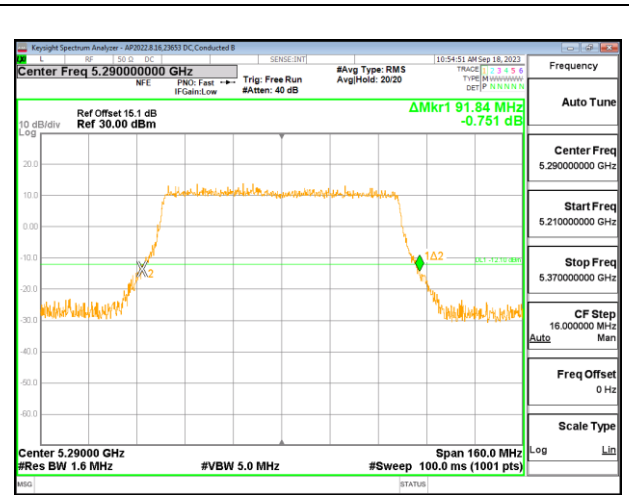
**4TX Antenna 6 + Antenna 4 + Antenna 9 + Antenna 1 CDD OFDMA MODE: 996-Tones, RU Index 67**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)	26 dB Bandwidth Antenna 4 (MHz)	26 dB Bandwidth Antenna 9 (MHz)	26 dB Bandwidth Antenna 1 (MHz)
Mid	5290	91.84	91.84	91.04	91.36

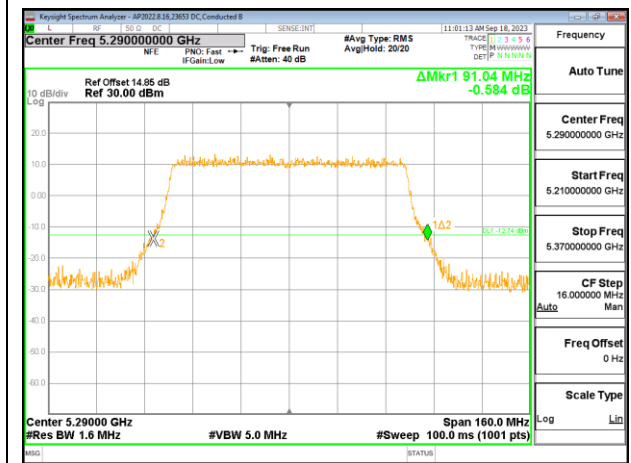
**MID CHANNEL**



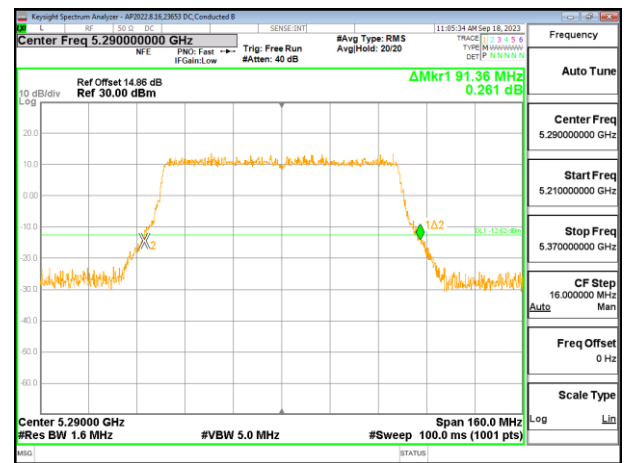
**MID CHANNEL Antenna 6**



**MID CHANNEL Antenna 4**



**MID CHANNEL Antenna 9**

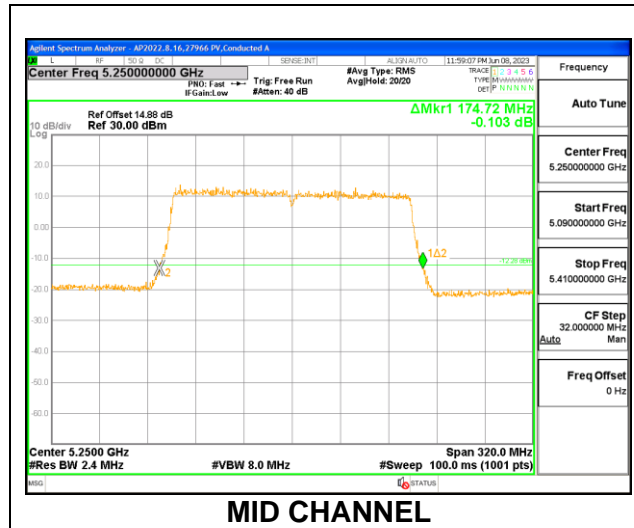


**MID CHANNEL Antenna 1**

### 9.2.7. 802.11ax HE160 MODE IN THE 5.3GHz BAND

#### 1TX Antenna 6 OFDMA MODE: 2x 996-Tones, Index S68

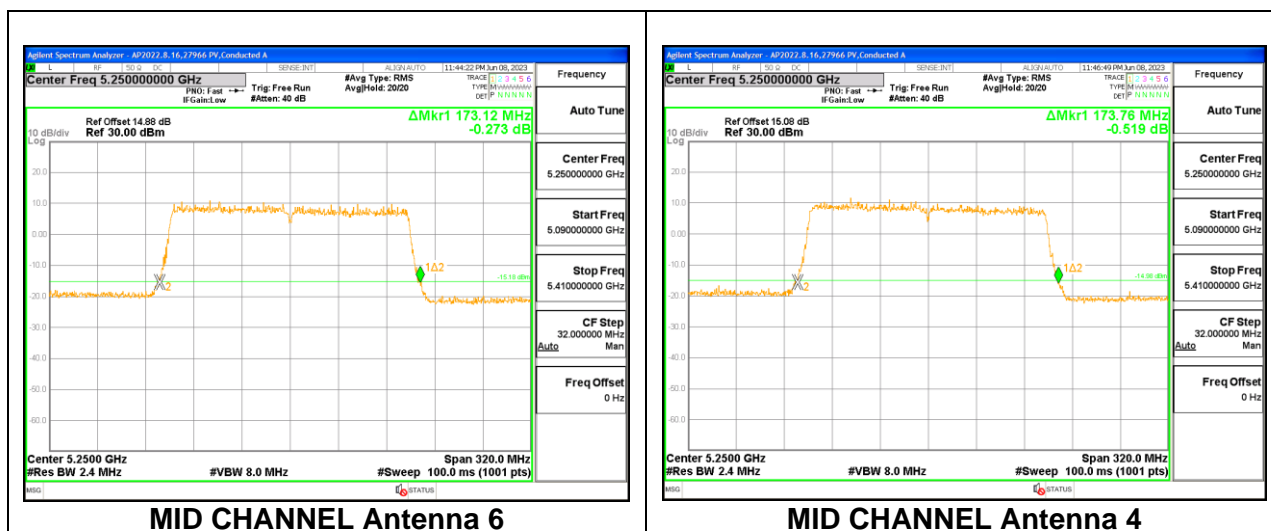
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Mid	5250	174.72



**2TX Antenna 6 + Antenna 4 CDD OFDMA MODE: 2x 996-Tones, Index S68**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)	26 dB Bandwidth Antenna 4 (MHz)
Mid	5250	173.12	173.76

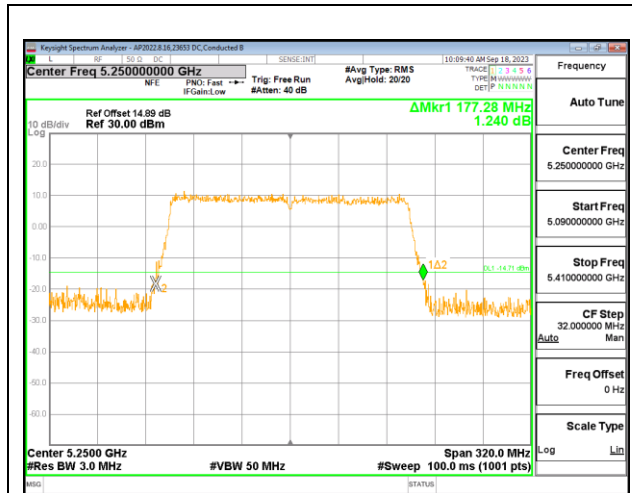
**MID CHANNEL**



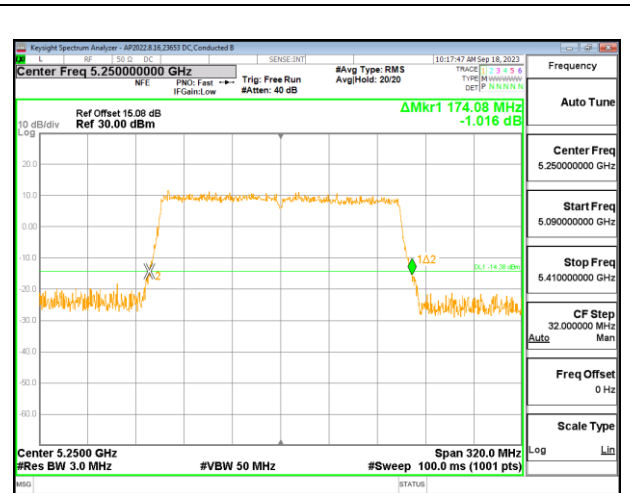
**4TX Antenna 6 + Antenna 4 + Antenna 9 + Antenna 1 CDD OFDMA MODE: 2x 996-Tones, Index S68**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)	26 dB Bandwidth Antenna 4 (MHz)	26 dB Bandwidth Antenna 9 (MHz)	26 dB Bandwidth Antenna 1 (MHz)
Mid	5250	177.28	174.08	178.56	175.36

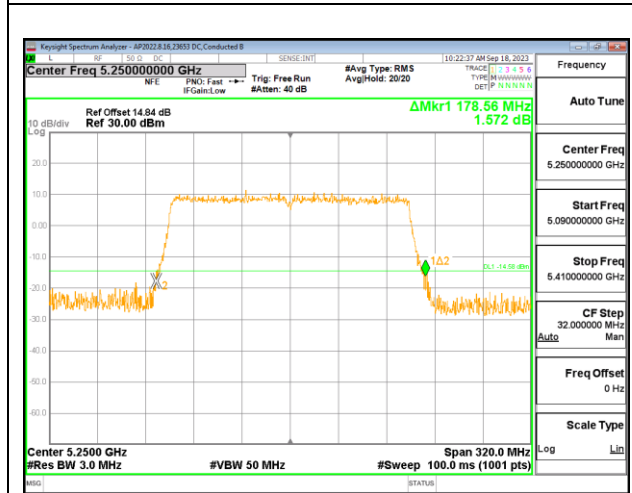
**MID CHANNEL**



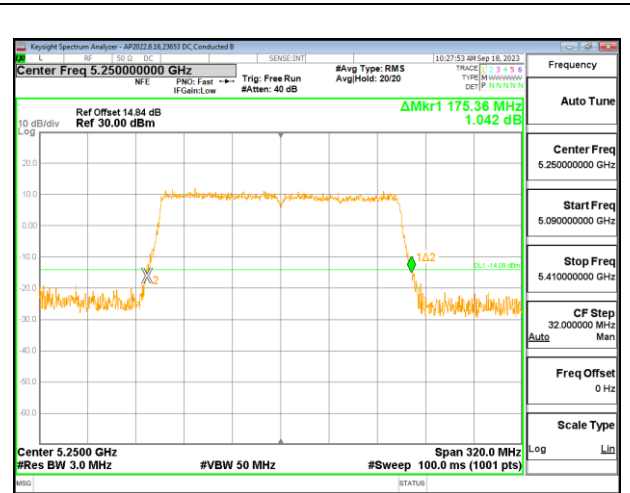
**MID CHANNEL Antenna 6**



**MID CHANNEL Antenna 4**



**MID CHANNEL Antenna 9**

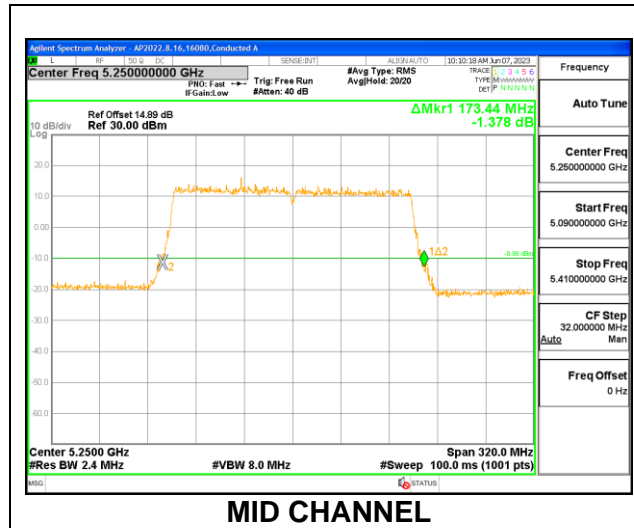


**MID CHANNEL Antenna 1**

### 9.2.8. 802.11be EHT160 MODE IN THE 5.3GHz BAND

#### 1TX Antenna 6 OFDMA MODE: 2x 996-Tones, Index S68

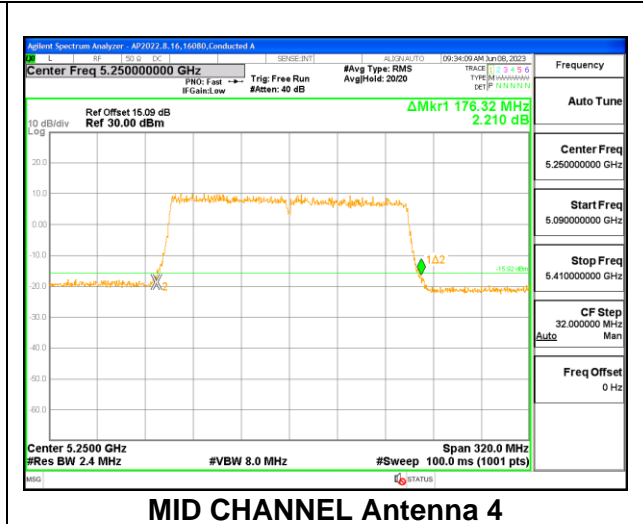
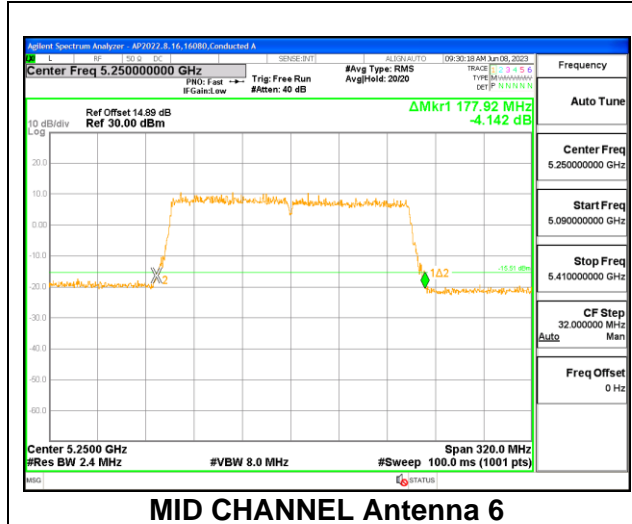
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Mid	5250	173.44



**2TX Antenna 6 + Antenna 4 CDD OFDMA MODE: 2x 996-Tones, Index S68**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)	26 dB Bandwidth Antenna 4 (MHz)
Mid	5250	177.92	176.32

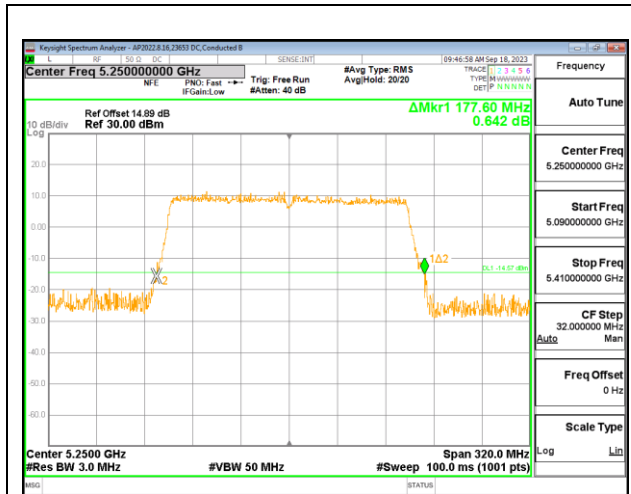
**MID CHANNEL**



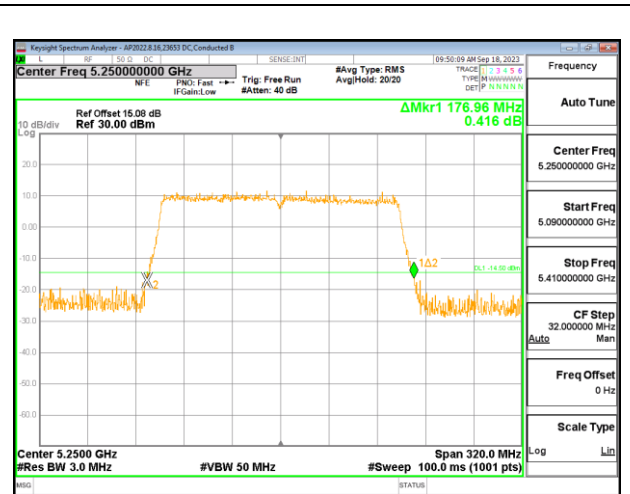
**4TX Antenna 6 + Antenna 4 + Antenna 9 + Antenna 1 CDD OFDMA MODE: 2x 996-Tones, Index S68**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)	26 dB Bandwidth Antenna 4 (MHz)	26 dB Bandwidth Antenna 9 (MHz)	26 dB Bandwidth Antenna 1 (MHz)
Mid	5250	177.60	176.96	175.68	174.40

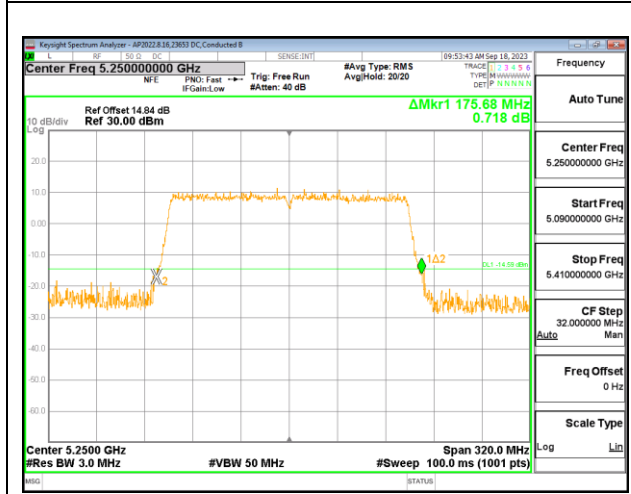
**MID CHANNEL**



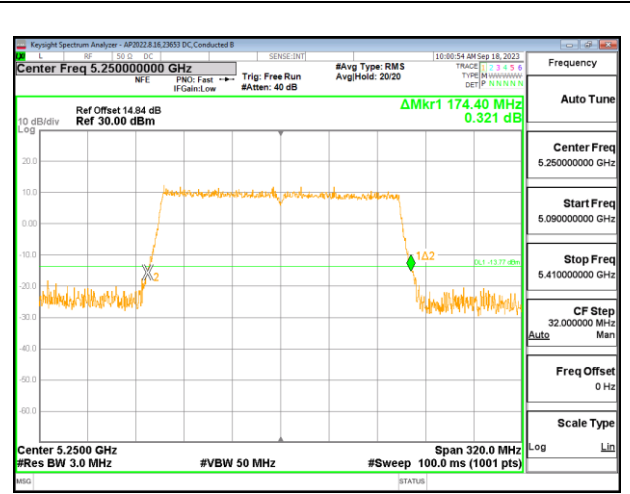
**MID CHANNEL Antenna 6**



**MID CHANNEL Antenna 4**



**MID CHANNEL Antenna 9**



**MID CHANNEL Antenna 1**

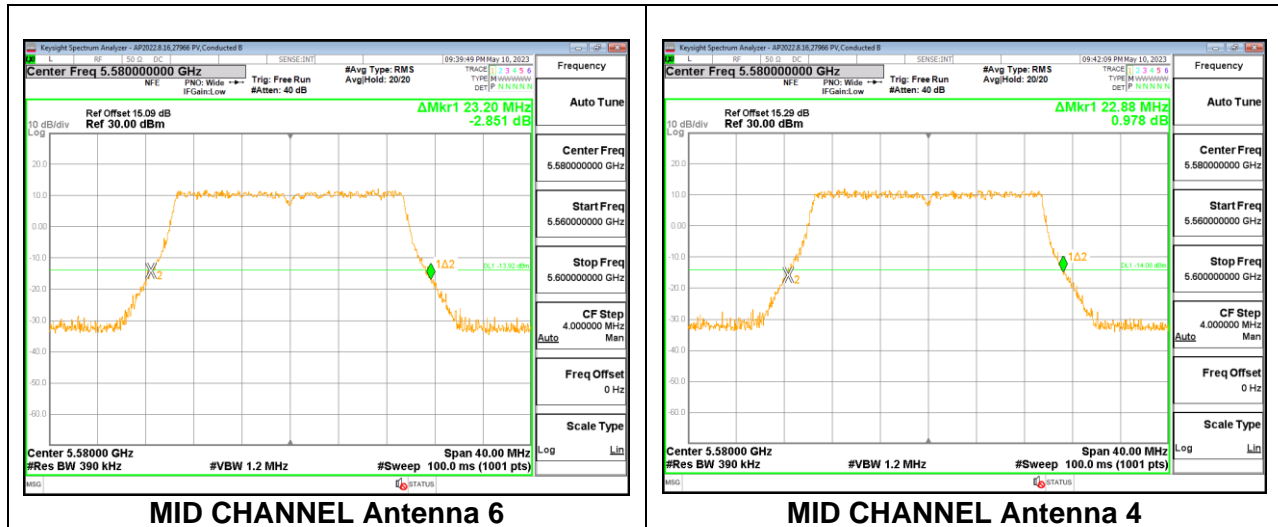




**2TX Antenna 6 + Antenna 4 CDD OFDMA MODE: 242-Tones, RU Index 61**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)	26 dB Bandwidth Antenna 4 (MHz)
Low	5500	23.04	22.56
Mid	5580	23.20	22.88
High	5700	22.96	22.84
144	5720	22.68	22.92

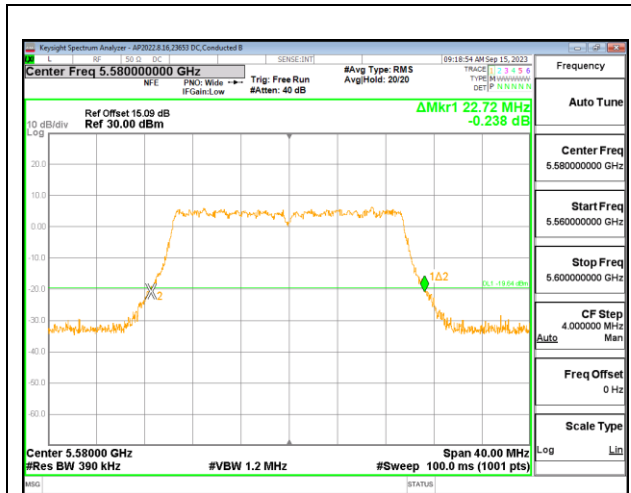
**MID CHANNEL**



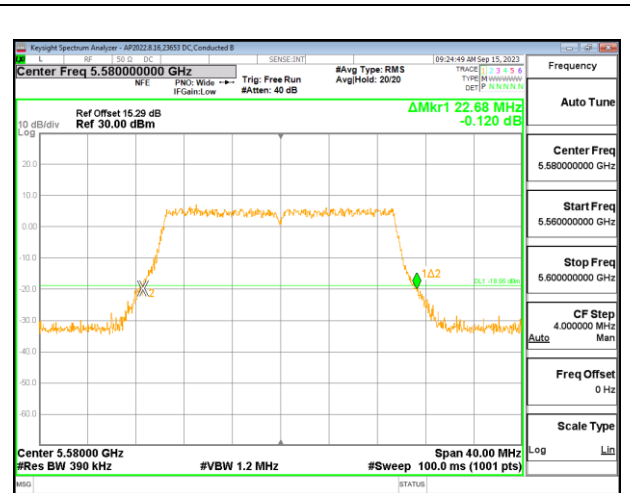
**4TX Antenna 6 + Antenna 4 + Antenna 9 + Antenna 1 CDD OFDMA MODE: 242-Tones, RU Index 61**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)	26 dB Bandwidth Antenna 4 (MHz)	26 dB Bandwidth Antenna 9 (MHz)	26 dB Bandwidth Antenna 1 (MHz)
Low	5500	23.08	22.48	22.76	22.92
Mid	5580	22.72	22.68	22.48	22.76
High	5700	23.28	23.12	22.80	22.52
144	5720	23.28	23.00	22.44	23.16

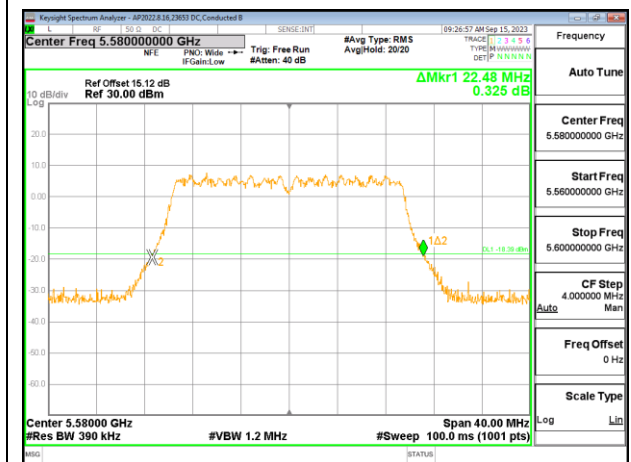
**MID CHANNEL**



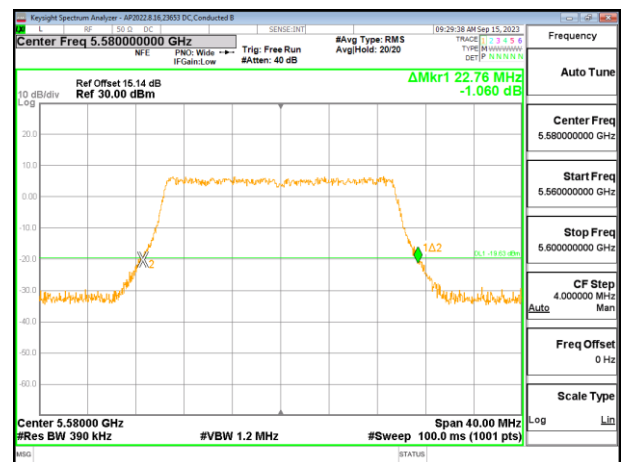
**MID CHANNEL Antenna 6**



**MID CHANNEL Antenna 4**



**MID CHANNEL Antenna 9**

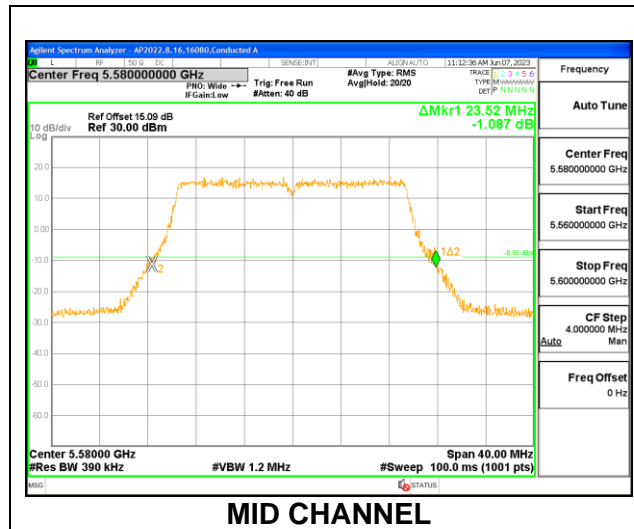


**MID CHANNEL Antenna 1**

### 9.2.10. 802.11be EHT20 MODE IN THE 5.6GHz BAND

#### 1TX Antenna 6 OFDMA MODE: 242-Tones, RU Index 61

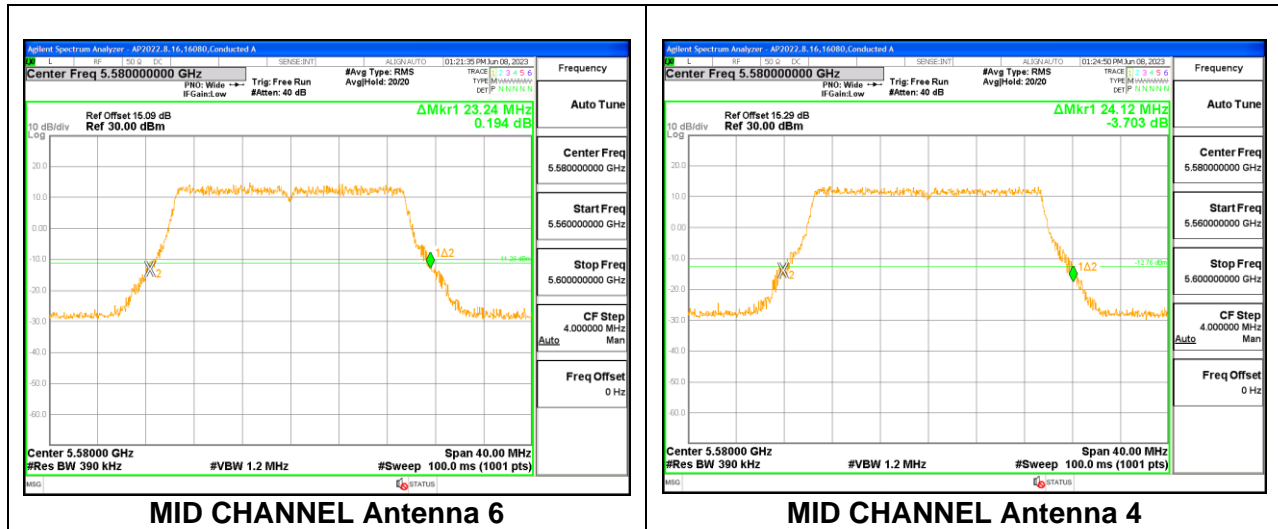
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5500	23.36
Mid	5580	23.52
High	5700	23.40
144	5720	23.60



**2TX Antenna 6 + Antenna 4 CDD OFDMA MODE: 242-Tones, RU Index 61**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)	26 dB Bandwidth Antenna 4 (MHz)
Low	5500	23.28	24.00
Mid	5580	23.24	24.12
High	5700	23.36	23.80
144	5720	23.20	23.56

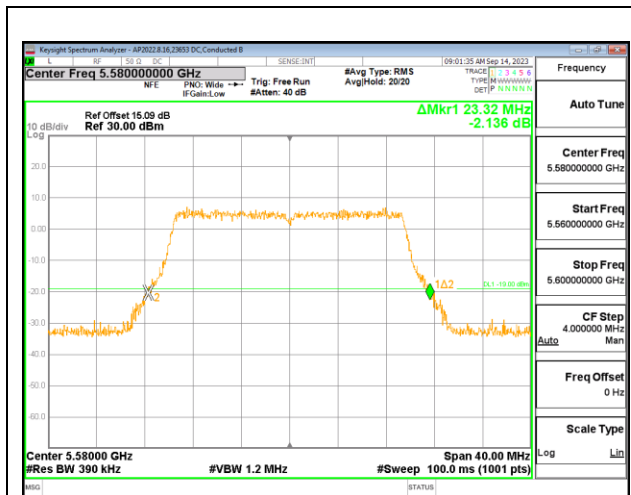
**MID CHANNEL**



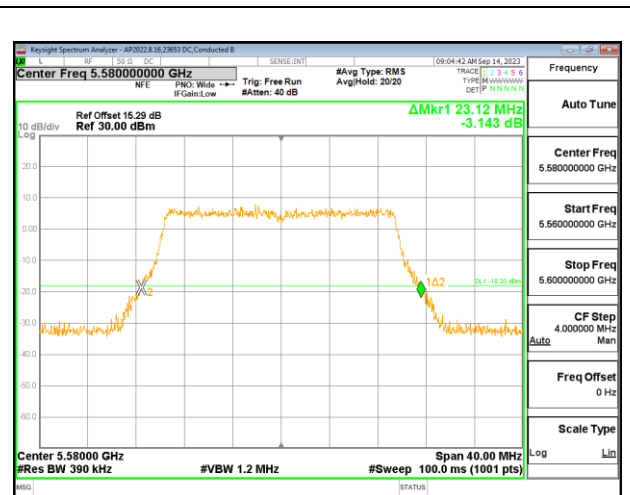
**4TX Antenna 6 + Antenna 4 + Antenna 9 + Antenna 1 CDD OFDMA MODE: 242-Tones, RU Index 61**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)	26 dB Bandwidth Antenna 4 (MHz)	26 dB Bandwidth Antenna 9 (MHz)	26 dB Bandwidth Antenna 1 (MHz)
Low	5500	23.12	23.12	23.92	23.52
Mid	5580	23.32	23.12	23.56	23.60
High	5700	23.12	23.36	23.64	23.76
144	5720	23.24	23.36	22.96	23.88

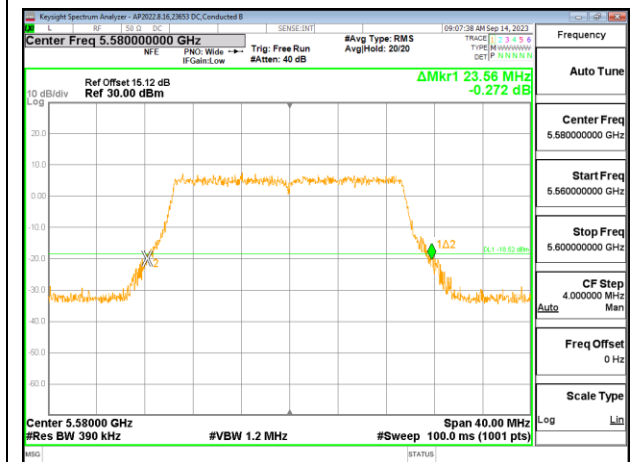
**MID CHANNEL**



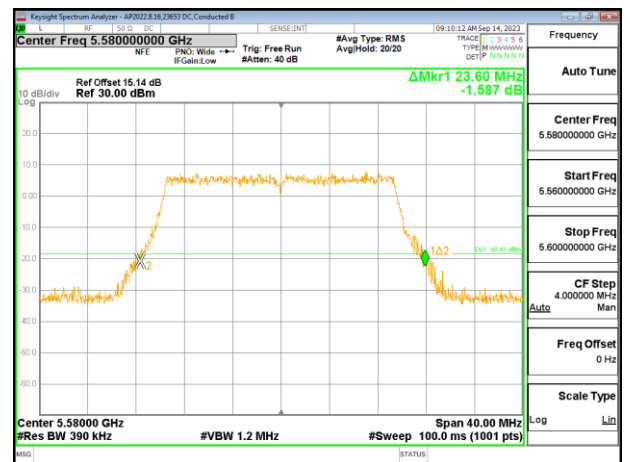
**MID CHANNEL Antenna 6**



**MID CHANNEL Antenna 4**



**MID CHANNEL Antenna 9**

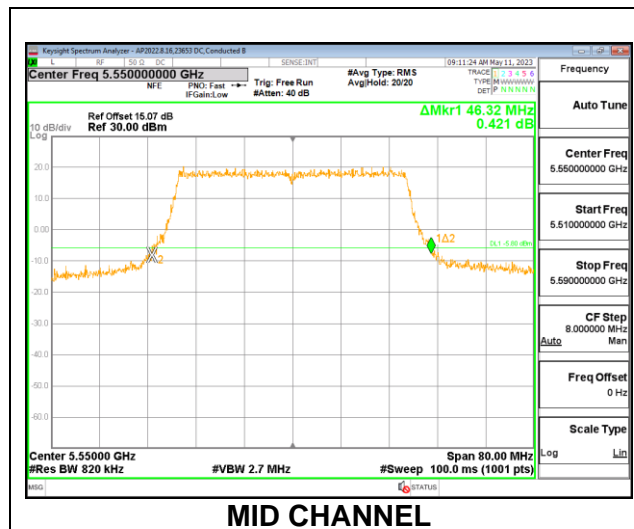


**MID CHANNEL Antenna 1**

### 9.2.11. 802.11ax HE40 MODE IN THE 5.6GHz BAND

#### 1TX Antenna 6 OFDMA MODE: 484-Tones, RU Index 65

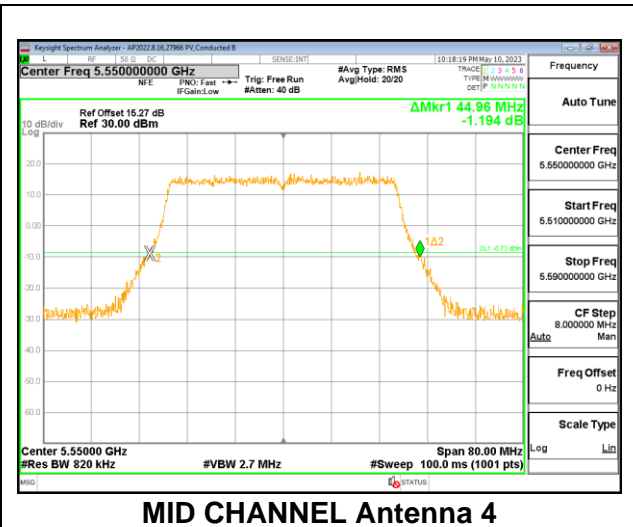
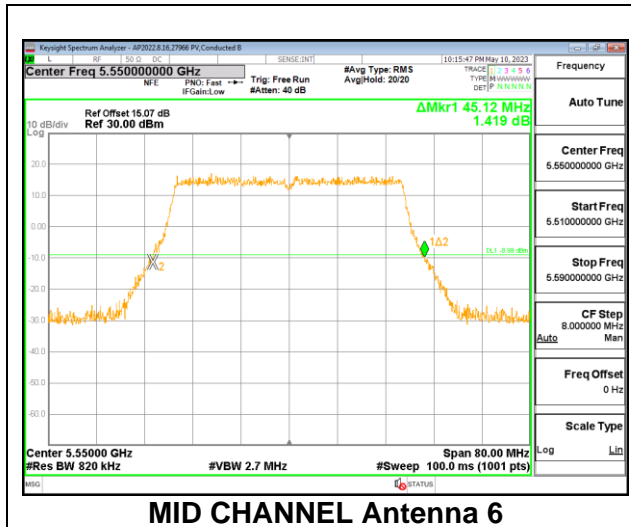
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5510	46.88
Mid	5550	46.32
High	5670	46.48
142	5710	45.92



**2TX Antenna 6 + Antenna 4 CDD OFDMA MODE: 484-Tones, RU Index 65**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)	26 dB Bandwidth Antenna 4 (MHz)
Low	5510	45.68	45.36
Mid	5550	45.12	44.96
High	5670	45.04	45.52
142	5710	45.28	44.80

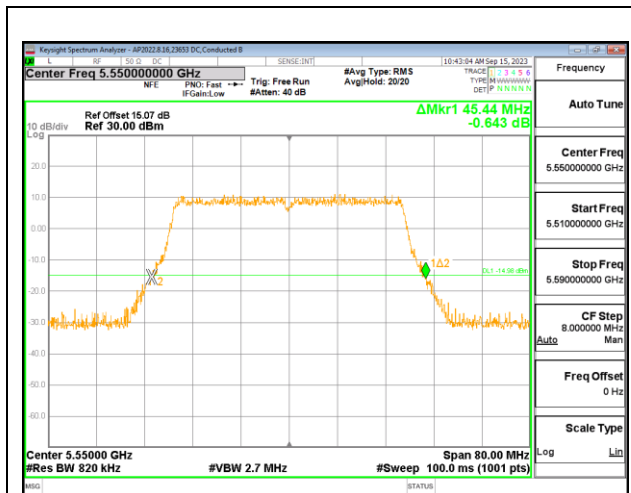
**MID CHANNEL**



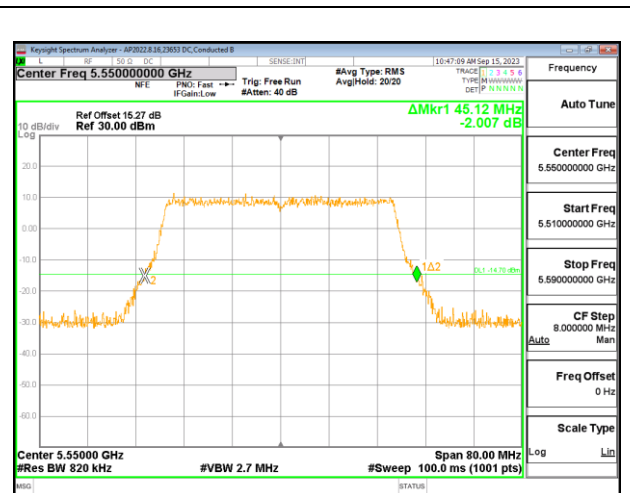
**4TX Antenna 6 + Antenna 4 + Antenna 9 + Antenna 1 CDD OFDMA MODE: 484-Tones, RU Index 65**

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)	26 dB Bandwidth Antenna 4 (MHz)	26 dB Bandwidth Antenna 9 (MHz)	26 dB Bandwidth Antenna 1 (MHz)
Low	5510	45.44	45.36	45.04	44.96
Mid	5550	45.44	45.12	45.04	45.36
High	5670	45.52	45.28	45.36	45.20
142	5710	45.68	44.96	45.60	45.12

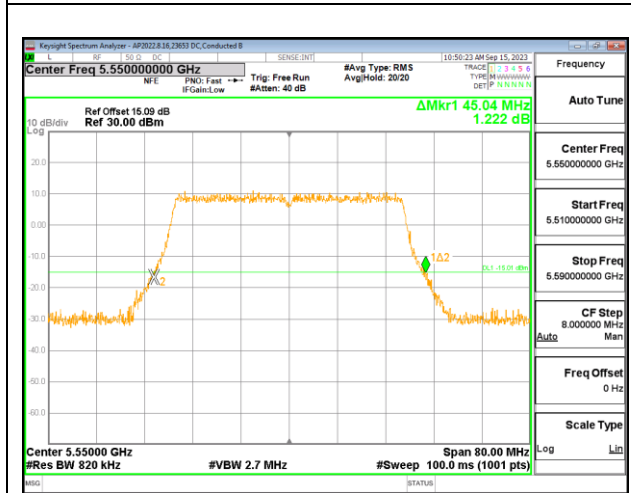
**MID CHANNEL**



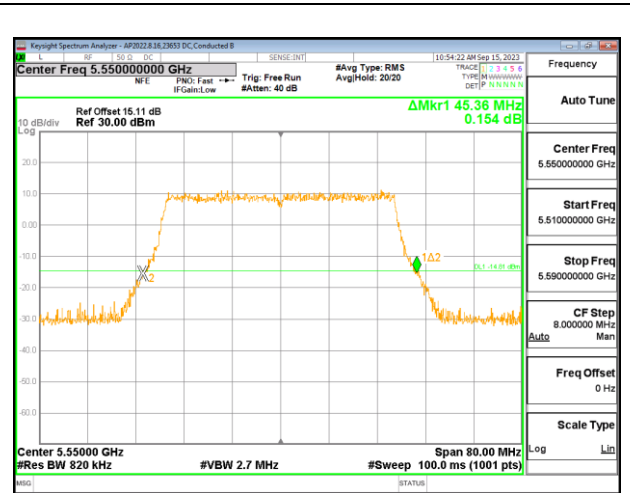
**MID CHANNEL Antenna 6**



**MID CHANNEL Antenna 4**



**MID CHANNEL Antenna 9**



**MID CHANNEL Antenna 1**



### 9.2.12. 802.11be EHT40 MODE IN THE 5.6GHz BAND

#### 1TX Antenna 6 OFDMA MODE: 484-Tones, RU Index 65

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5510	44.96
Mid	5550	45.60
High	5670	44.88
142	5710	45.68

