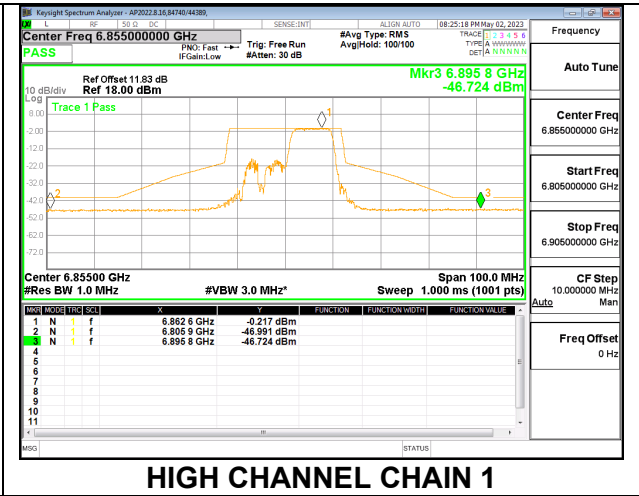
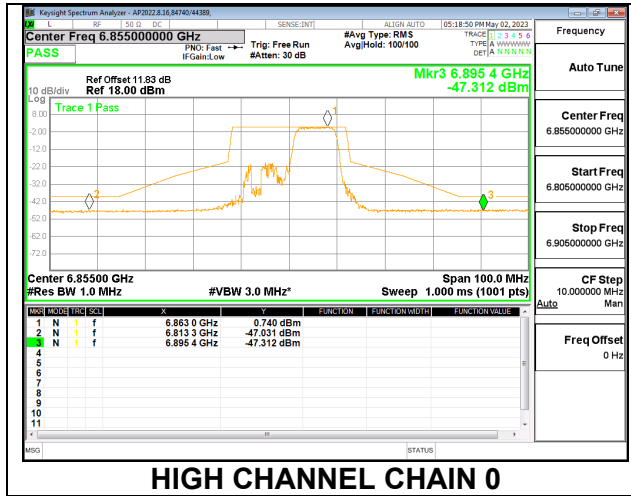
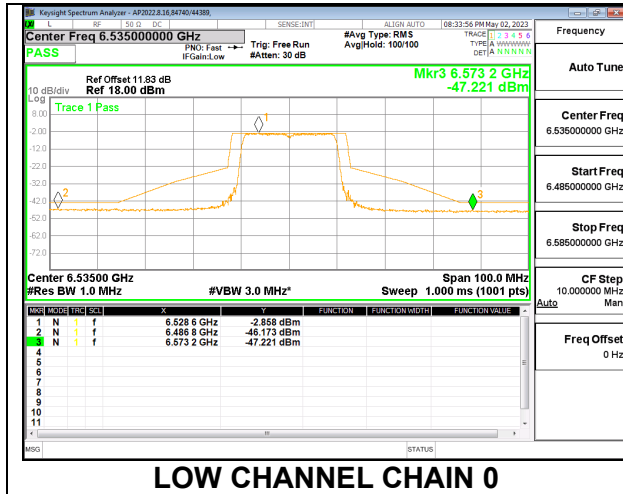


**HIGH**

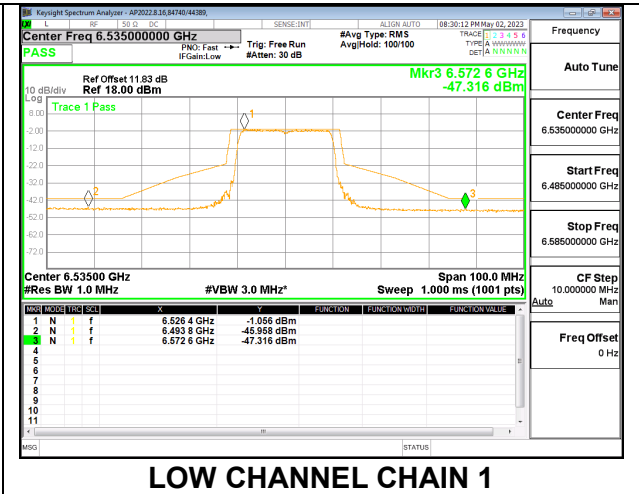


**2TX CHAIN 0 + CHAIN 1 CDD OFDMA MODE: 242T**

**LOW**

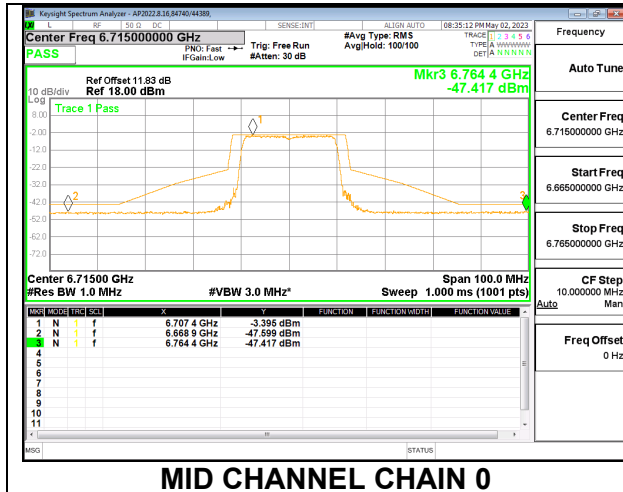


**LOW CHANNEL CHAIN 0**

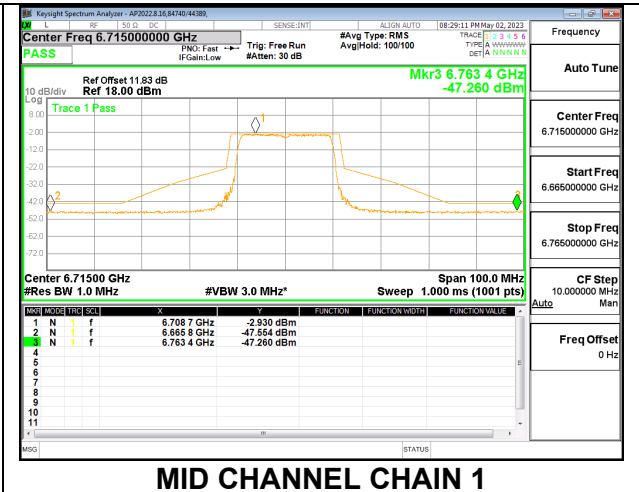


**LOW CHANNEL CHAIN 1**

**MID**

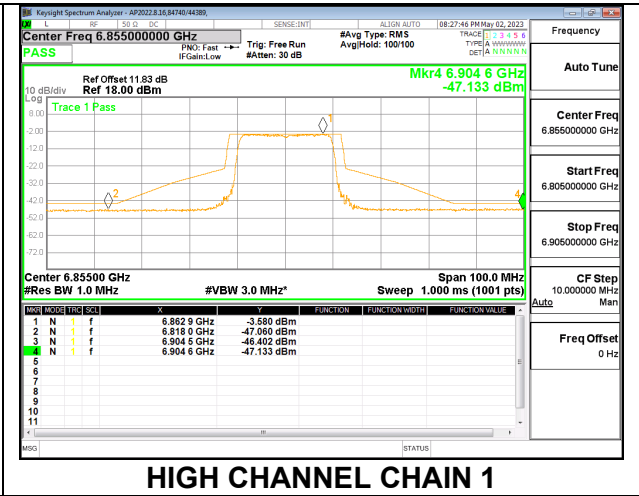
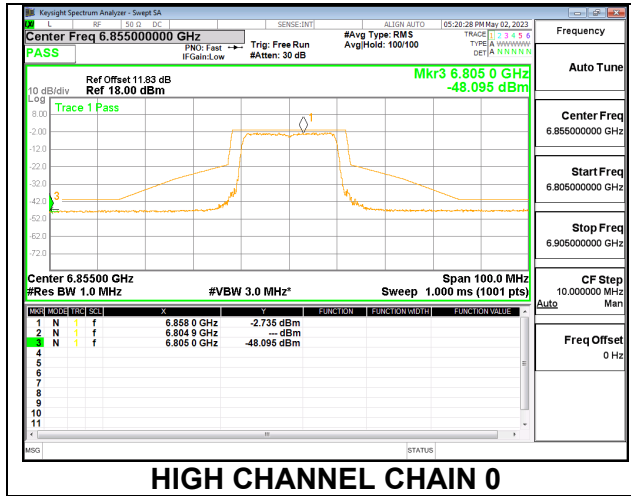


**MID CHANNEL CHAIN 0**



**MID CHANNEL CHAIN 1**

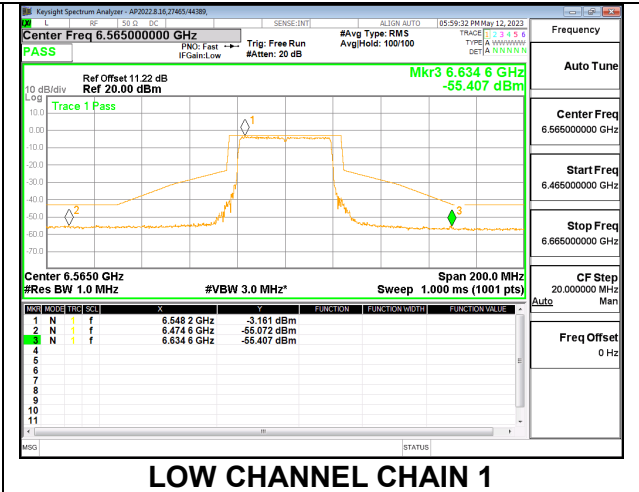
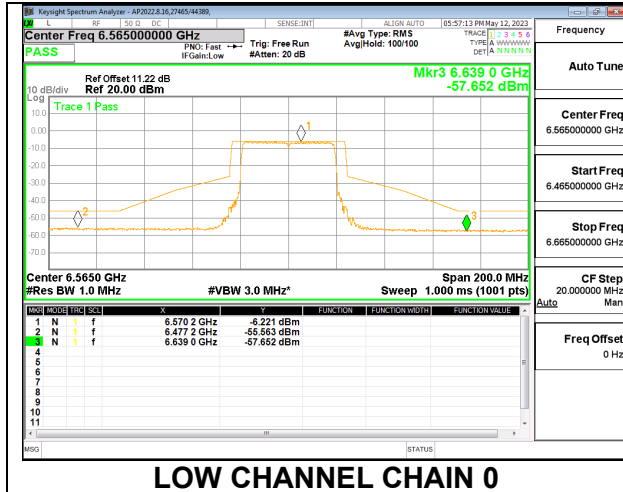
**HIGH**



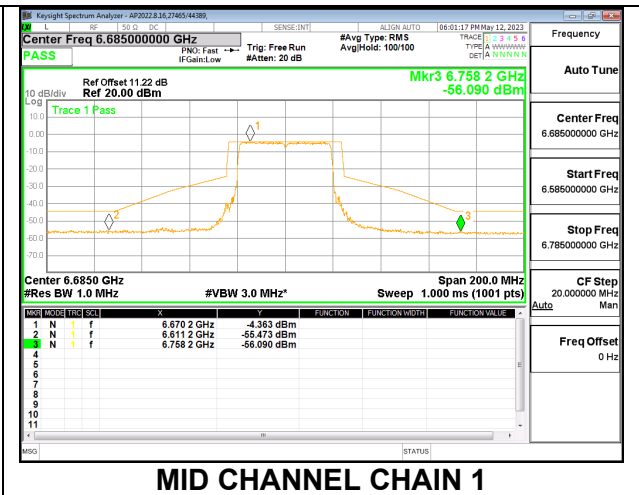
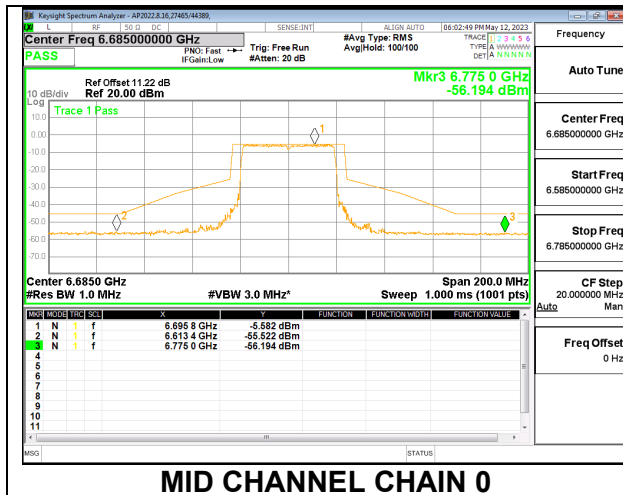
9.5.13. 802.11ax HE40 MODE 2TX IN THE UNII-7 BAND

2TX CHAIN 0 + CHAIN 1 CDD OFDMA MODE: 484T

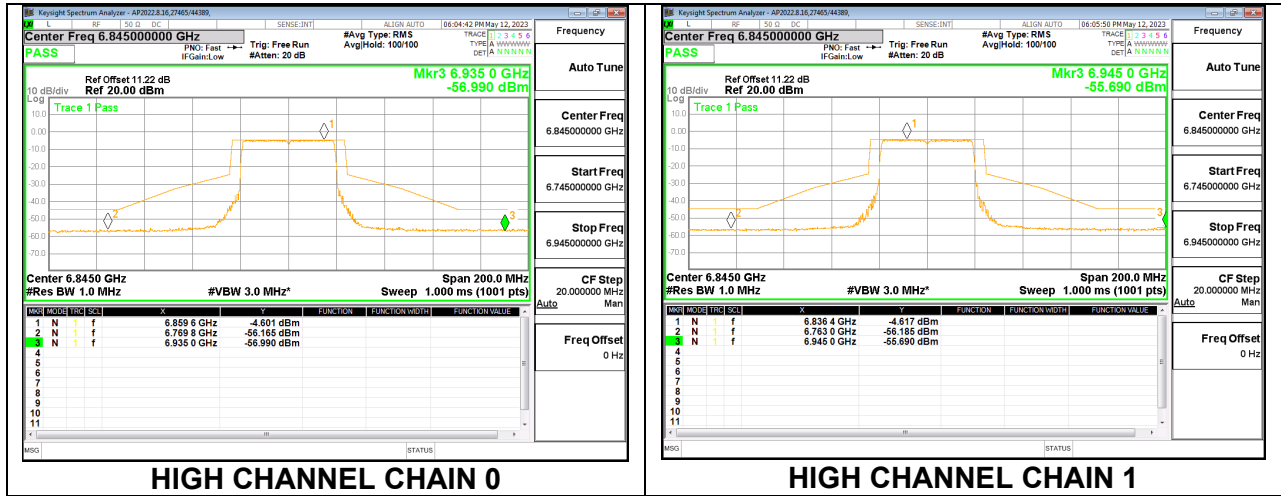
LOW



MID



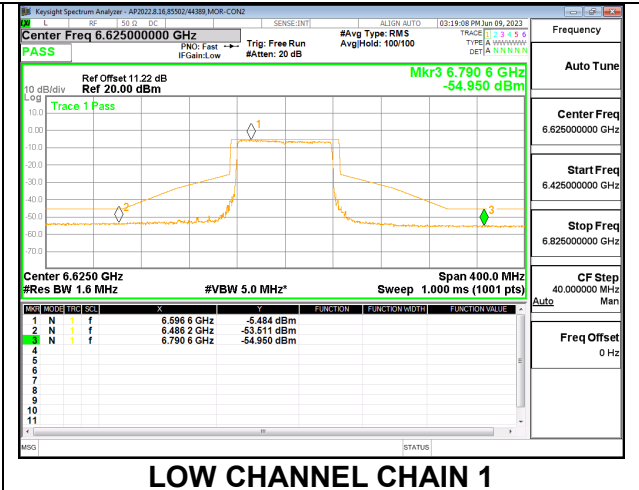
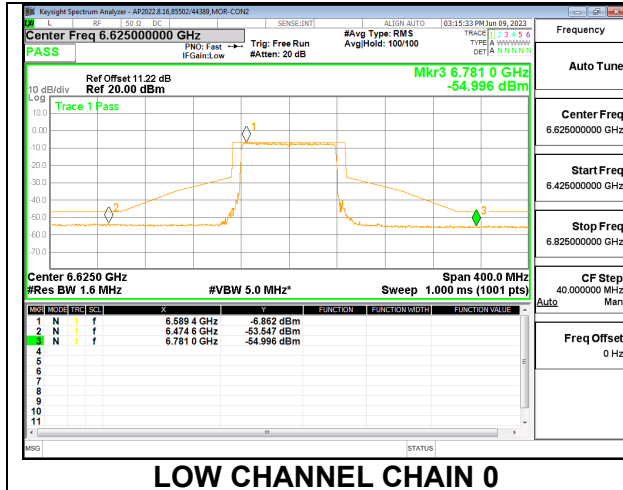
**HIGH**



9.5.14. 802.11ax HE80 MODE 2TX IN THE UNII-7 BAND

2TX CHAIN 0 + CHAIN 1 CDD OFDMA MODE: 996T

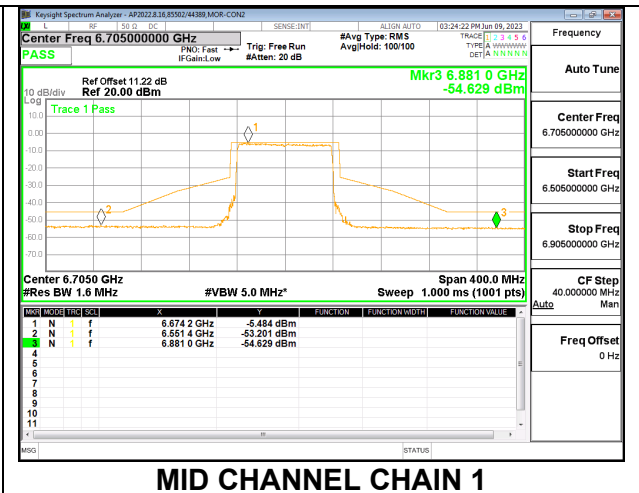
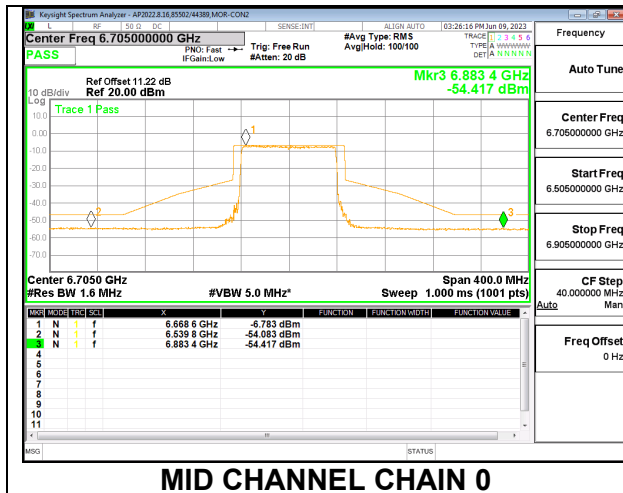
LOW



LOW CHANNEL CHAIN 0

LOW CHANNEL CHAIN 1

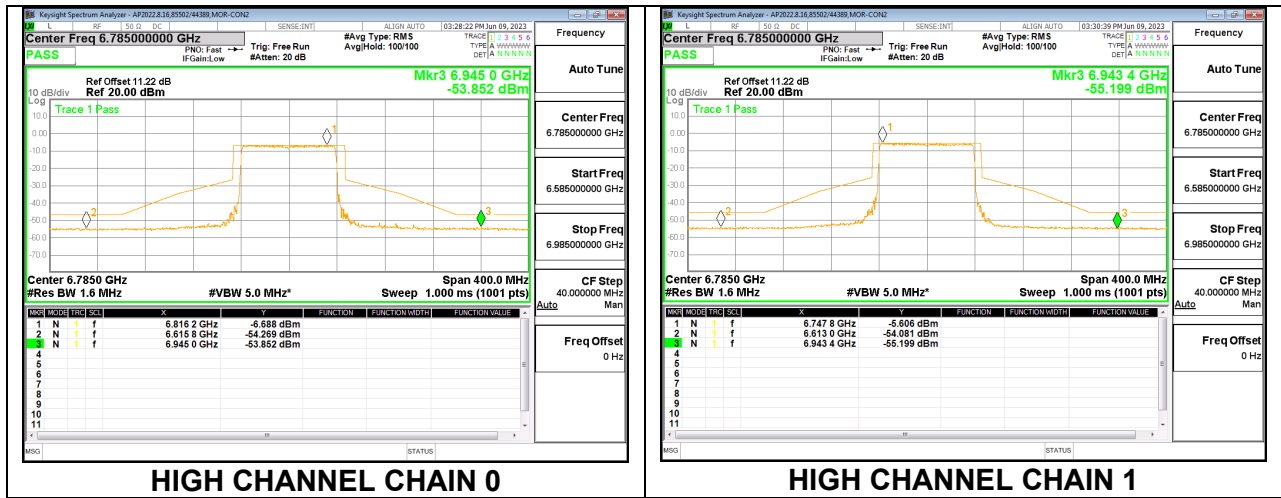
MID



MID CHANNEL CHAIN 0

MID CHANNEL CHAIN 1

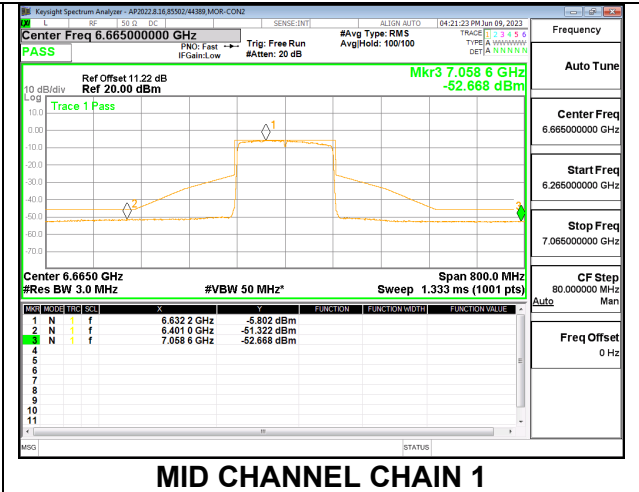
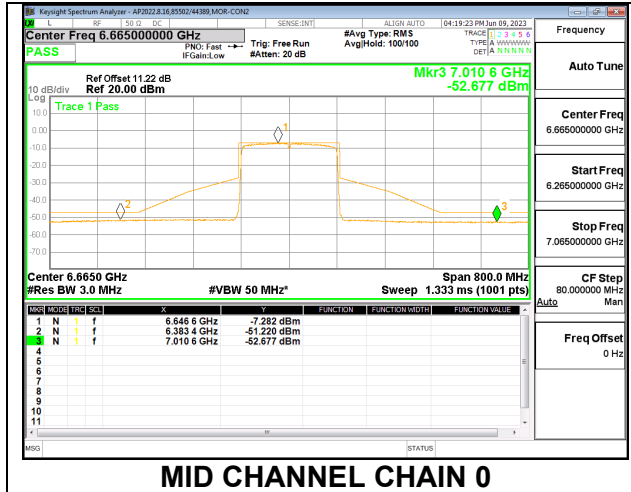
**HIGH**



9.5.15. 802.11ax HE160 MODE 2TX IN THE UNII-7 BAND

2TX CHAIN 0 + CHAIN 1 CDD OFDMA MODE: 2x996T

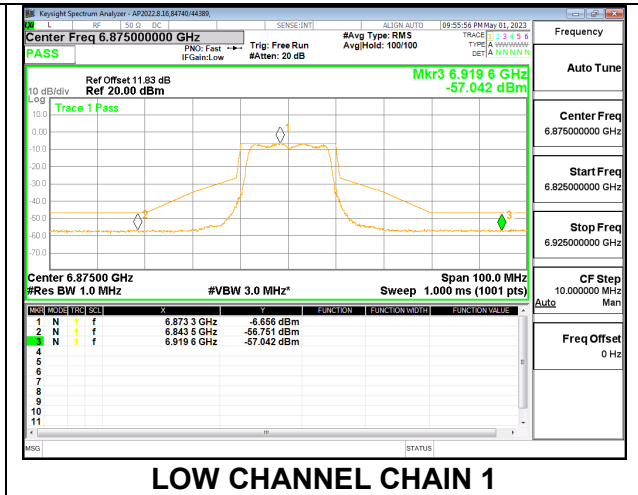
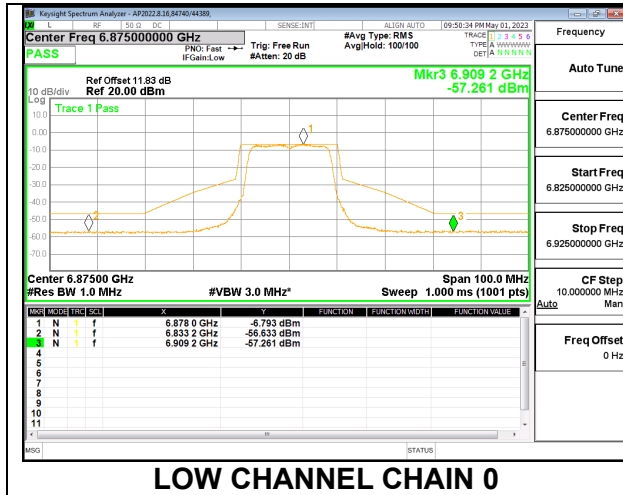
MID



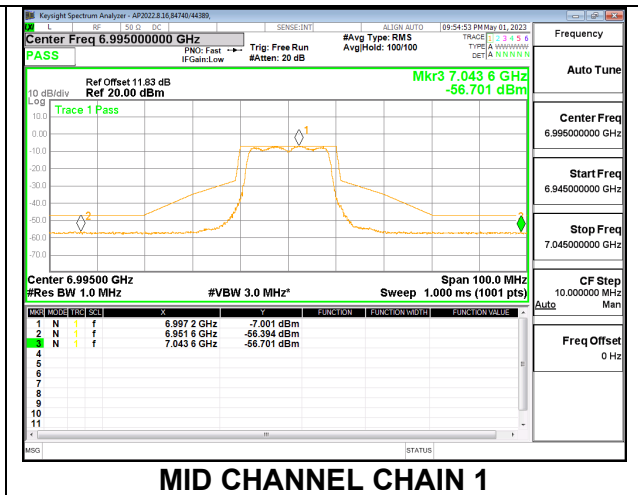
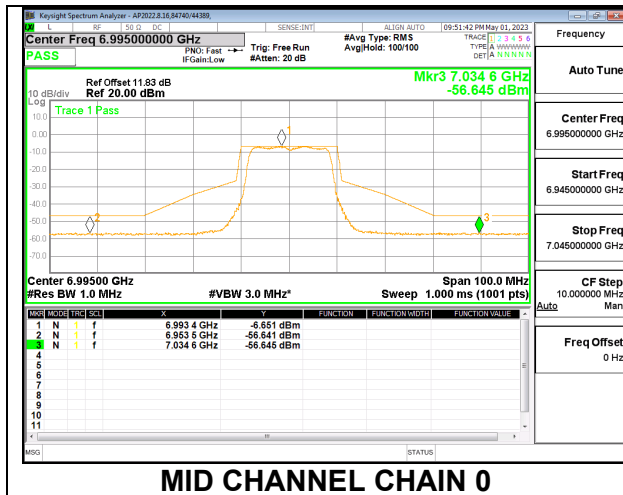


9.5.16. 802.11a MODE 2TX IN THE UNII-8 BAND

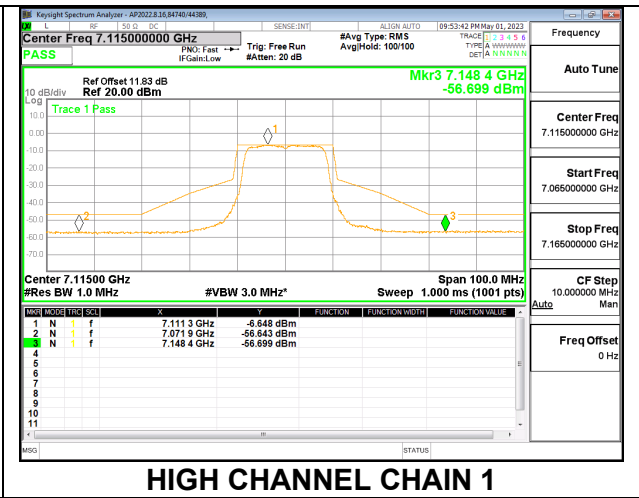
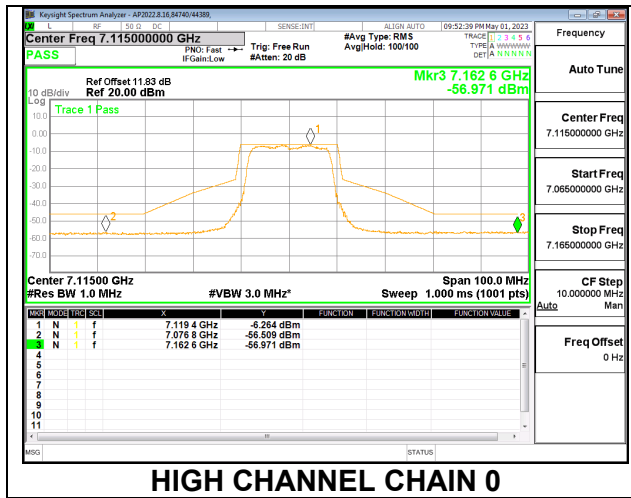
LOW



MID



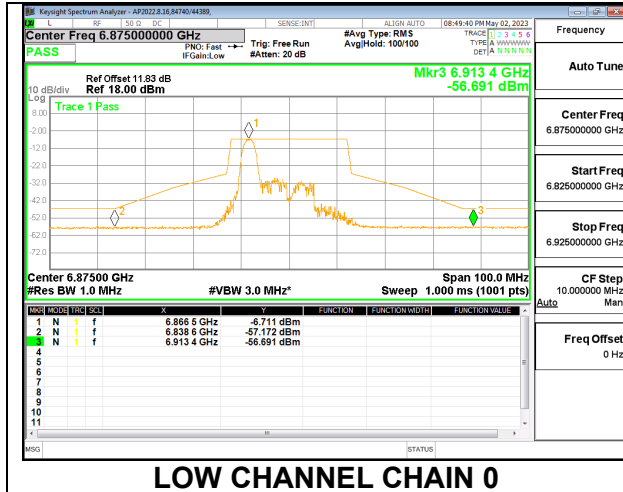
**HIGH**



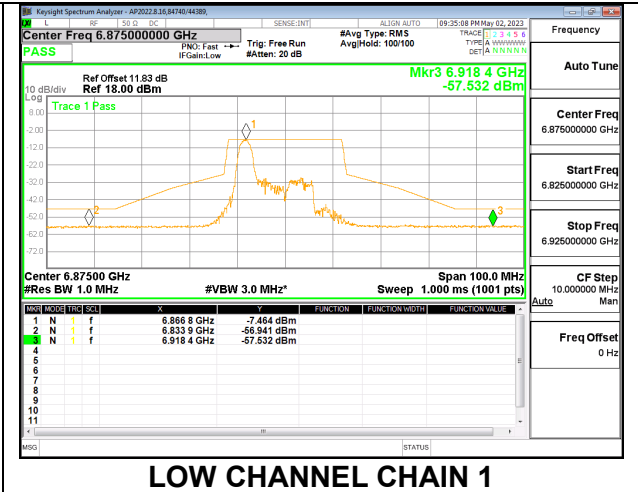
### 9.5.17. 802.11ax HE20 MODE 2TX IN THE UNII-8 BAND

#### 2TX CHAIN 0 + CHAIN 1 CDD OFDMA MODE: 26T

#### LOW

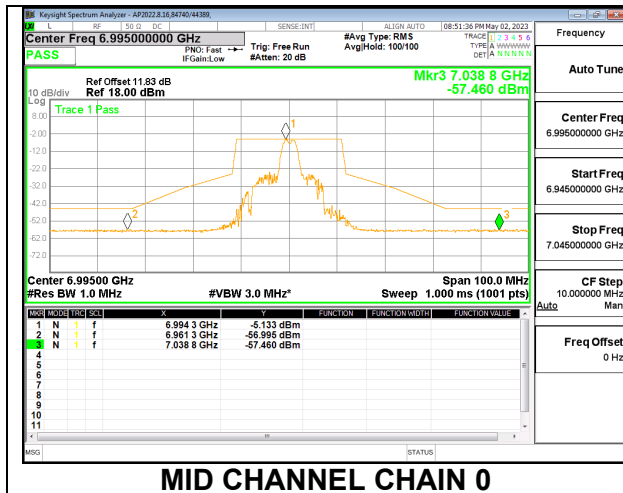


LOW CHANNEL CHAIN 0

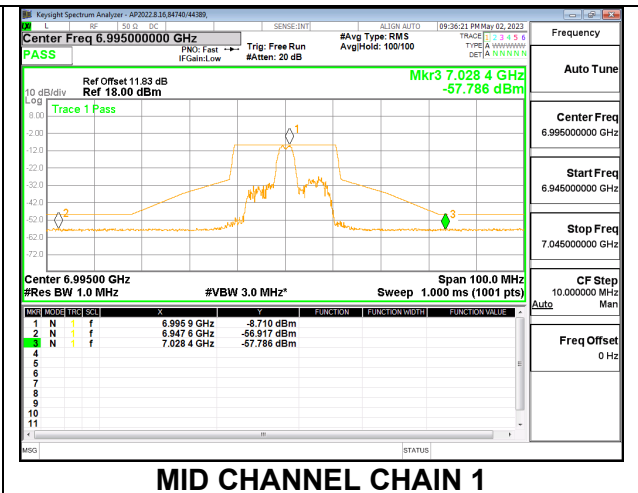


LOW CHANNEL CHAIN 1

#### MID

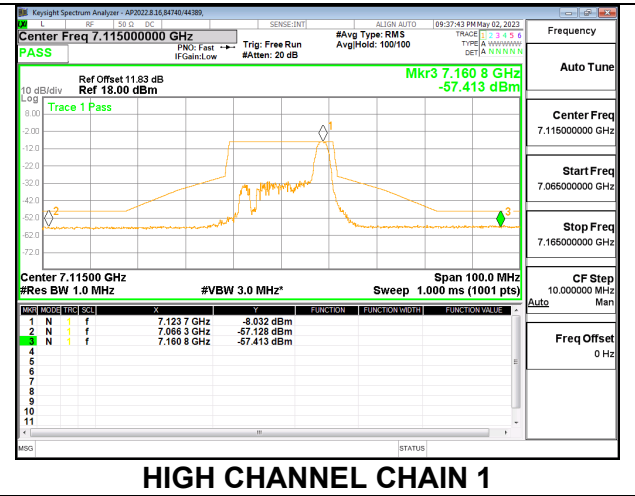
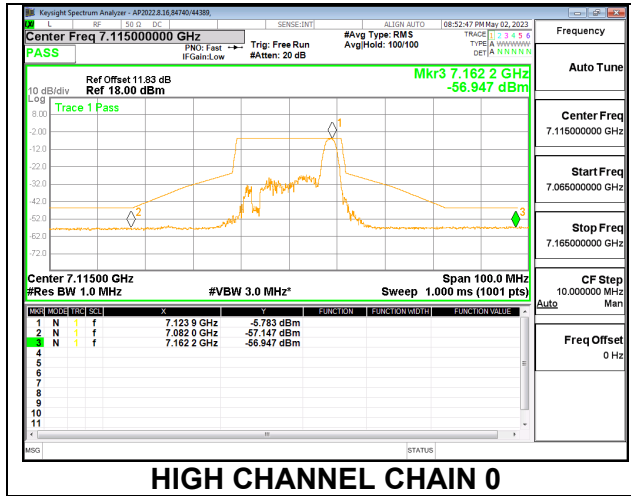


MID CHANNEL CHAIN 0



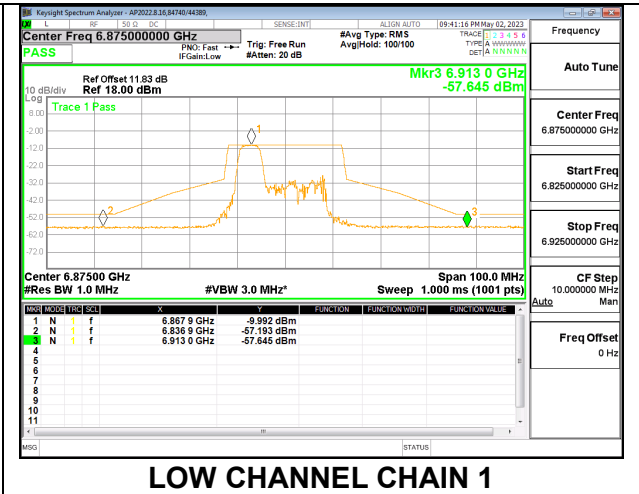
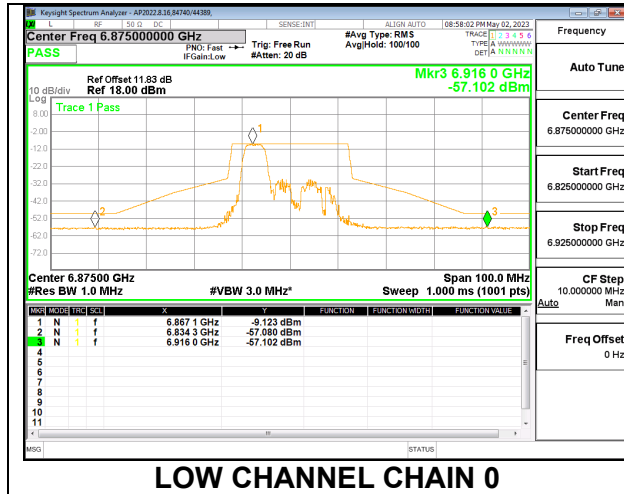
MID CHANNEL CHAIN 1

**HIGH**

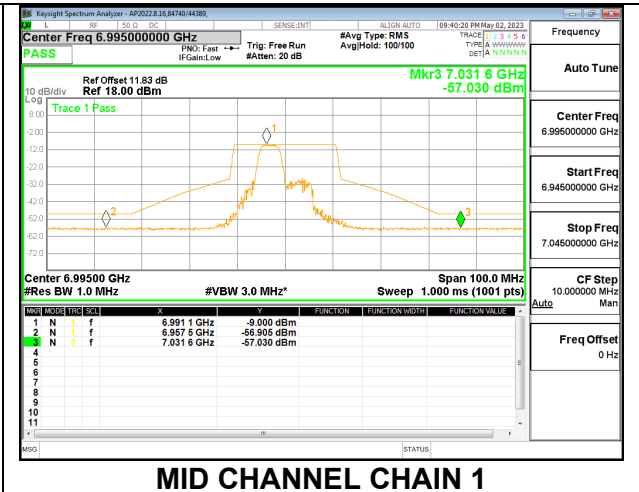
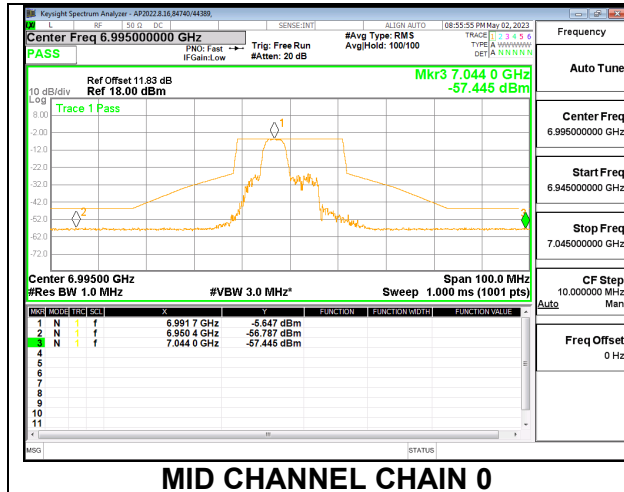


**2TX CHAIN 0 + CHAIN 1 CDD OFDMA MODE: 52T**

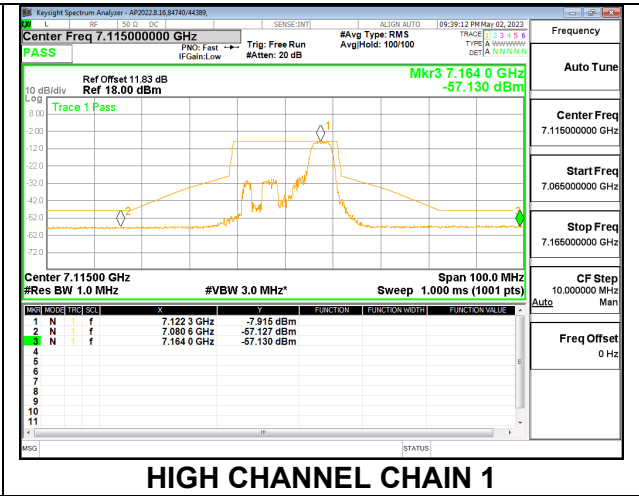
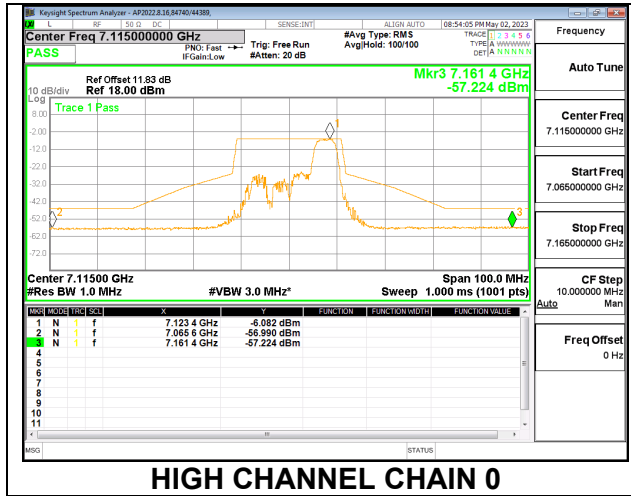
**LOW**



**MID**

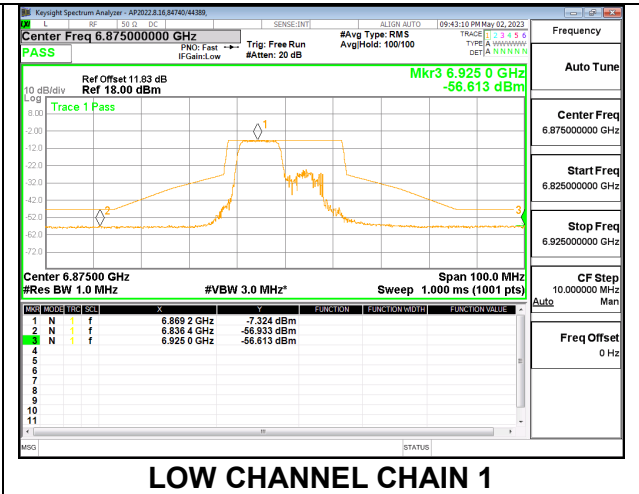
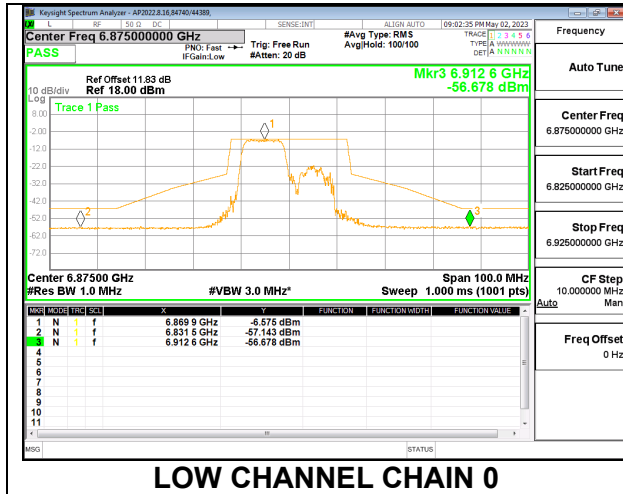


**HIGH**

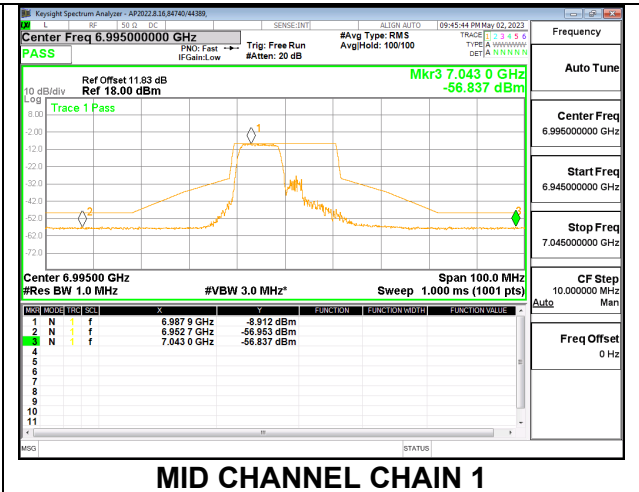
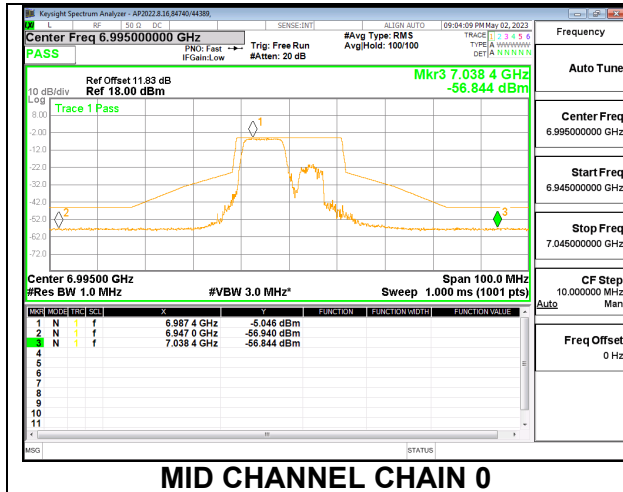


**2TX CHAIN 0 + CHAIN 1 CDD OFDMA MODE: 106T**

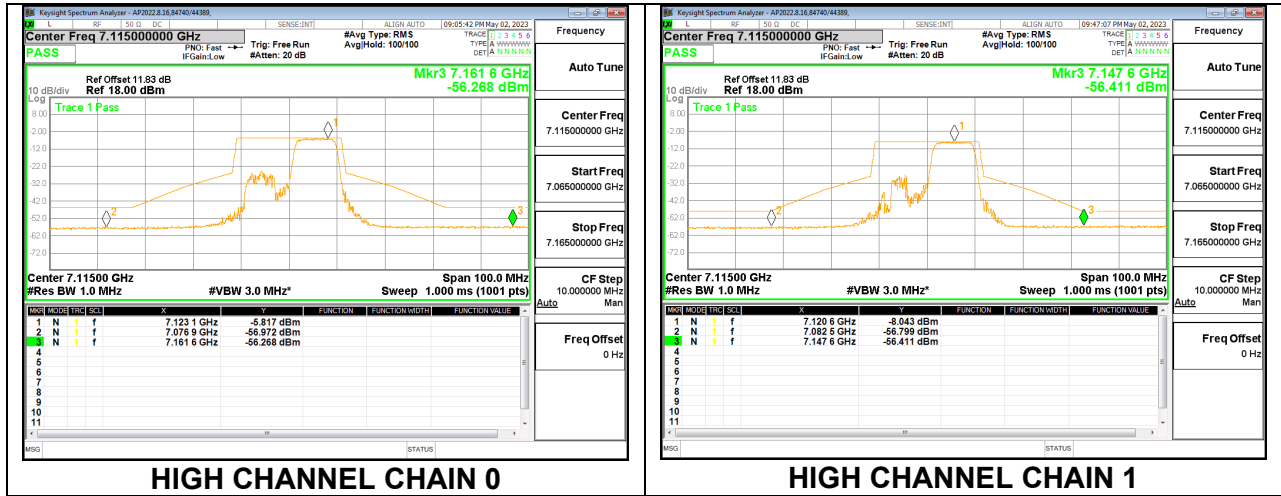
**LOW**



**MID**



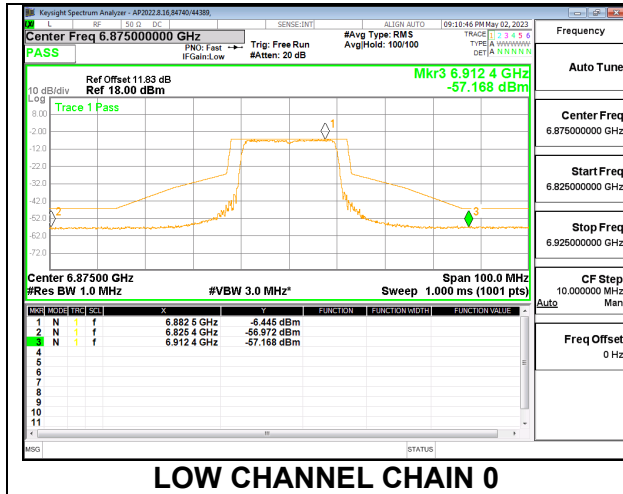
**HIGH**



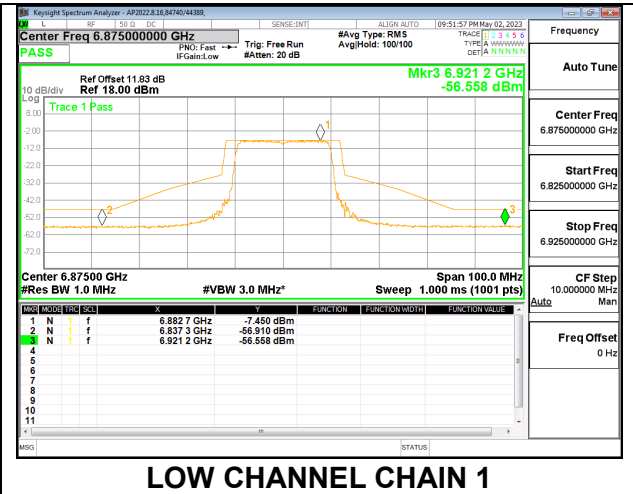


**2TX CHAIN 0 + CHAIN 1 CDD OFDMA MODE: 242T**

**LOW**

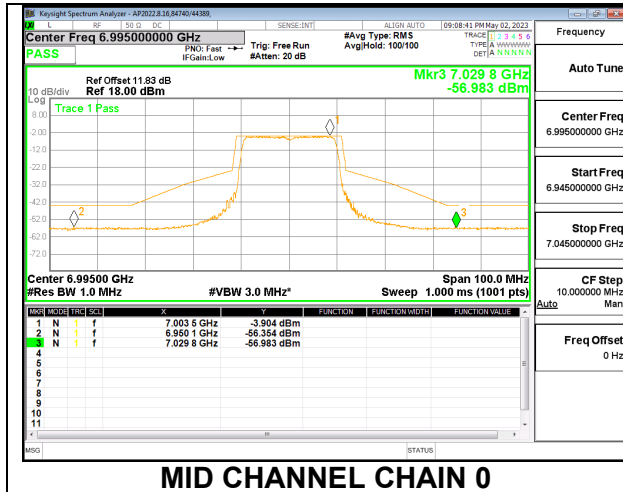


**LOW CHANNEL CHAIN 0**

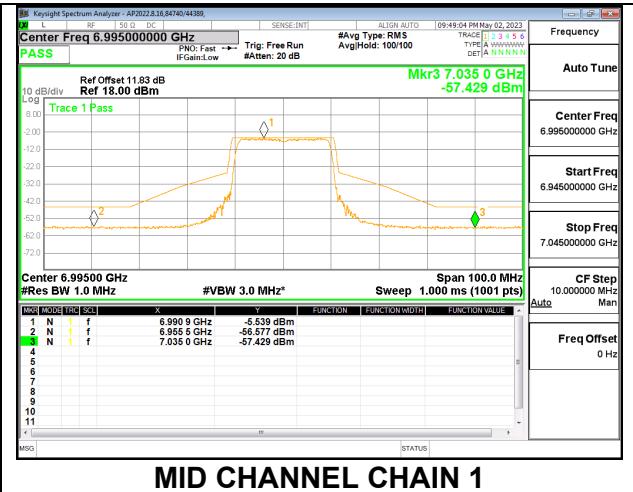


**LOW CHANNEL CHAIN 1**

**MID**

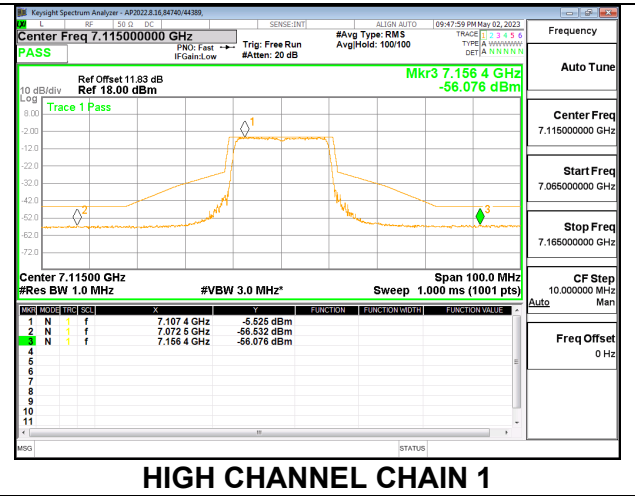
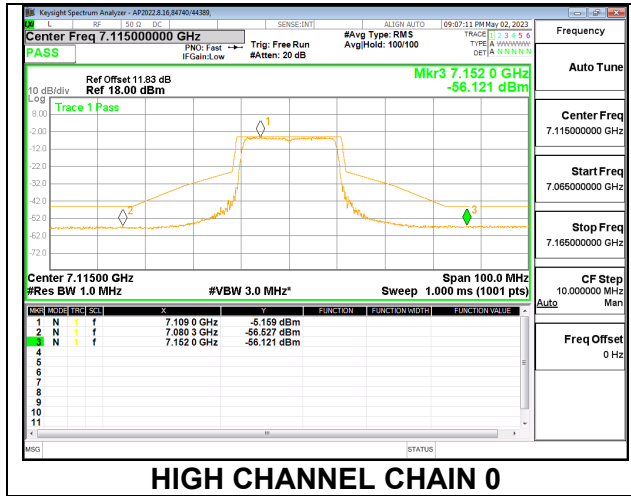


**MID CHANNEL CHAIN 0**



**MID CHANNEL CHAIN 1**

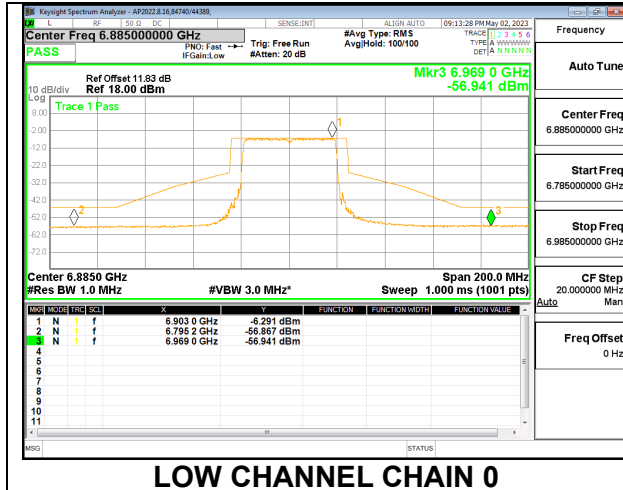
**HIGH**



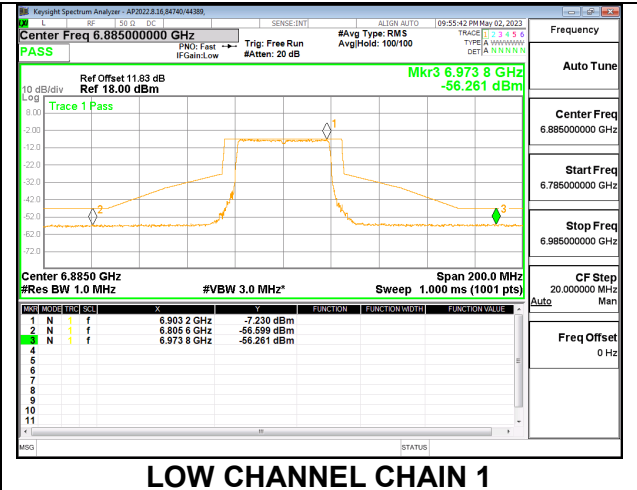
9.5.18. 802.11ax HE40 MODE 2TX IN THE UNII-8 BAND

2TX CHAIN 0 + CHAIN 1 CDD OFDMA MODE: 484T

LOW

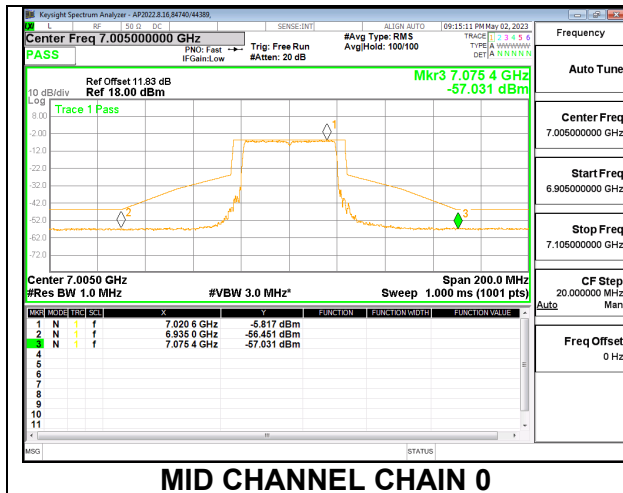


LOW CHANNEL CHAIN 0

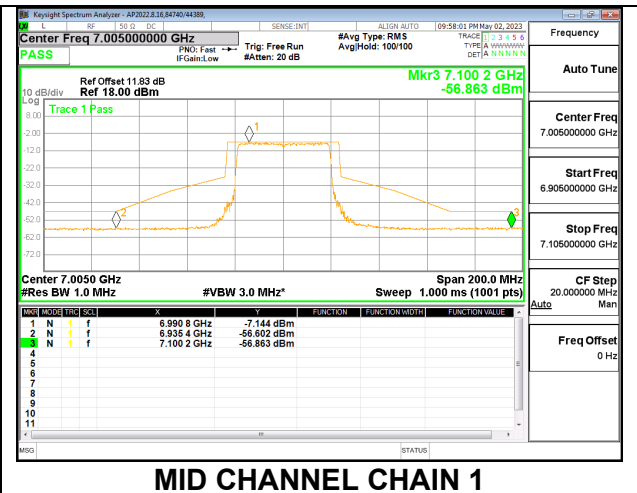


LOW CHANNEL CHAIN 1

MID

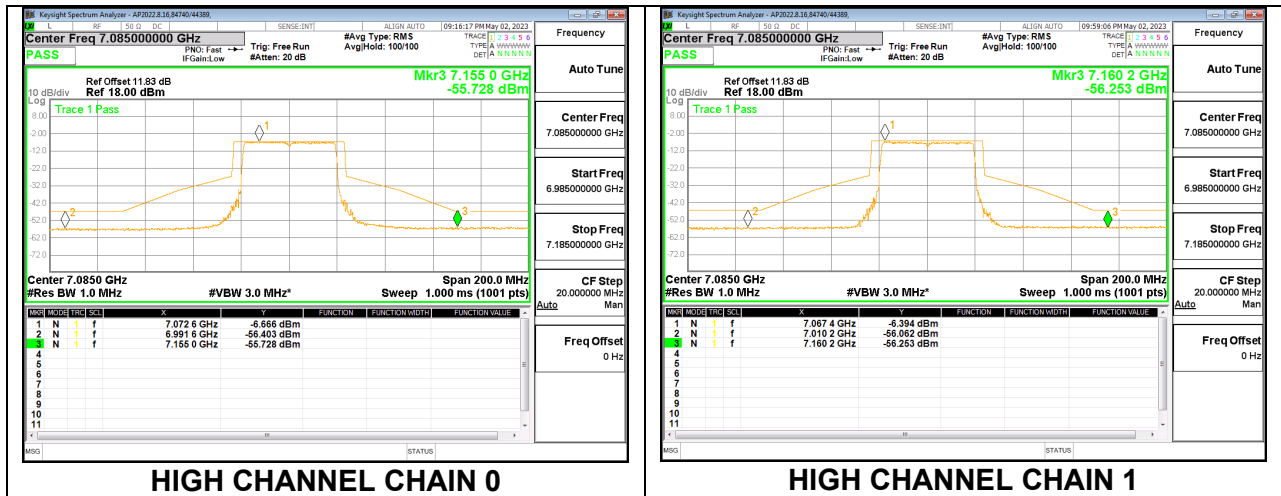


MID CHANNEL CHAIN 0



MID CHANNEL CHAIN 1

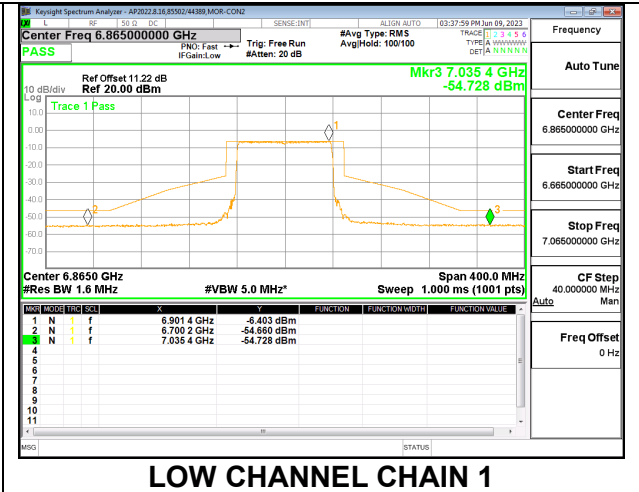
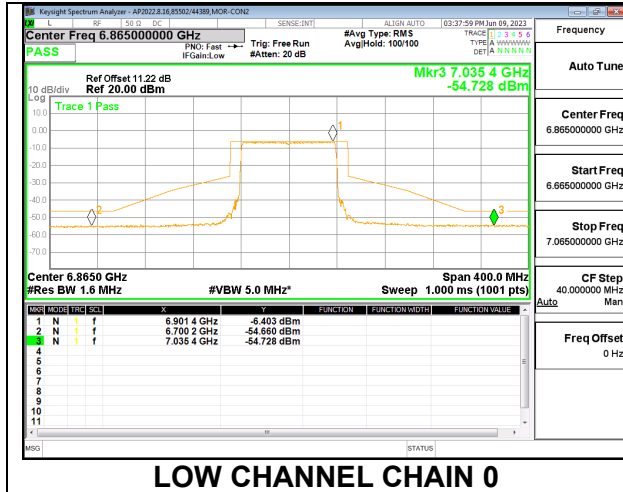
**HIGH**



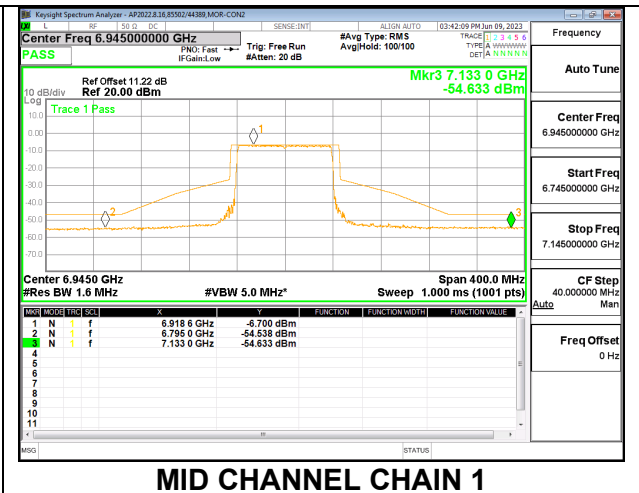
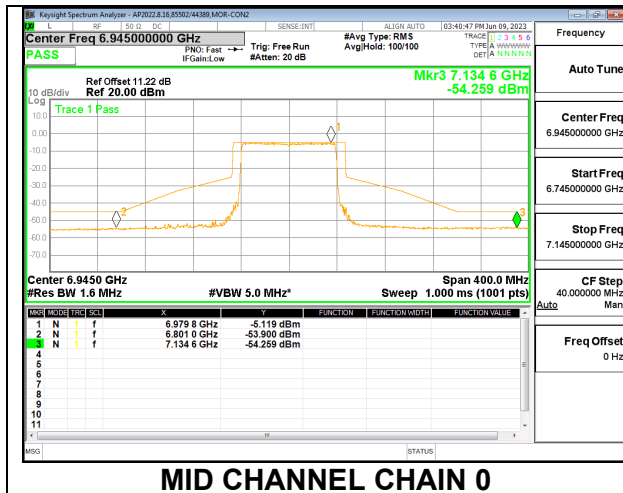
### 9.5.19. 802.11ax HE80 MODE 2TX IN THE UNII-8 BAND

#### 2TX CHAIN 0 + CHAIN 1 CDD OFDMA MODE: 996T

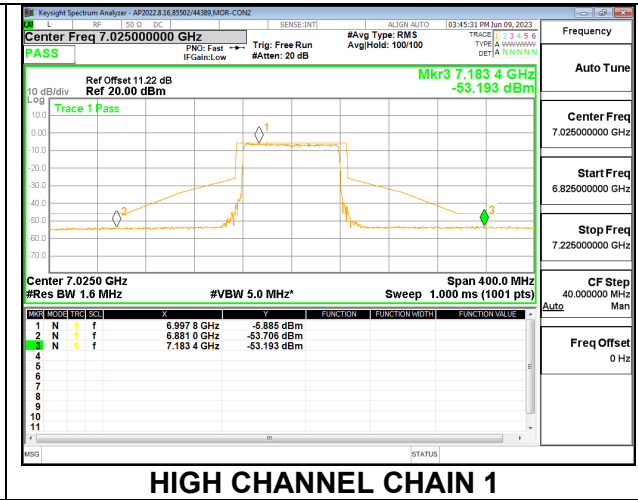
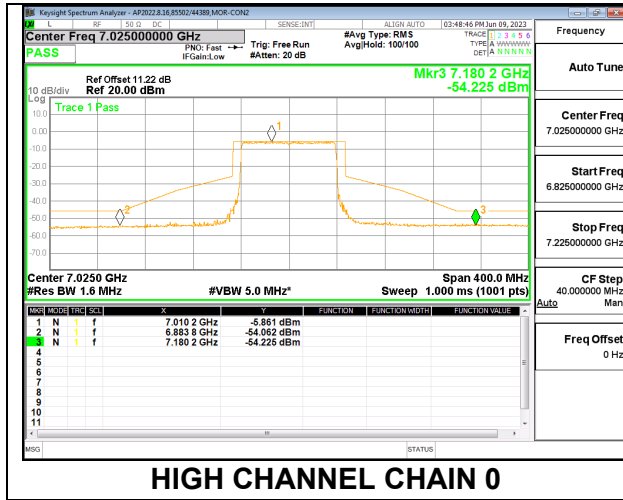
#### LOW



#### MID



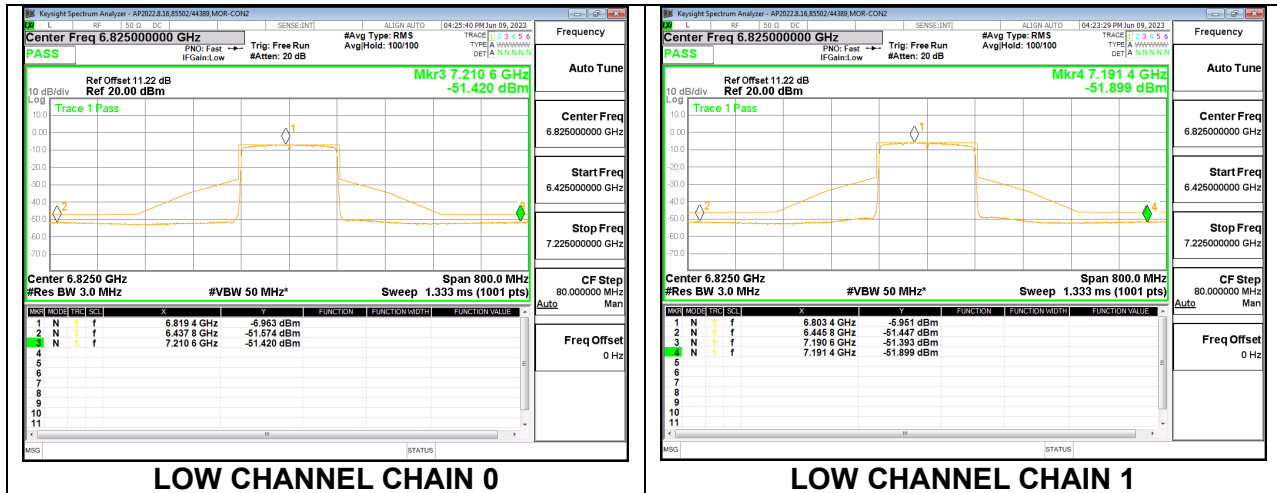
HIGH



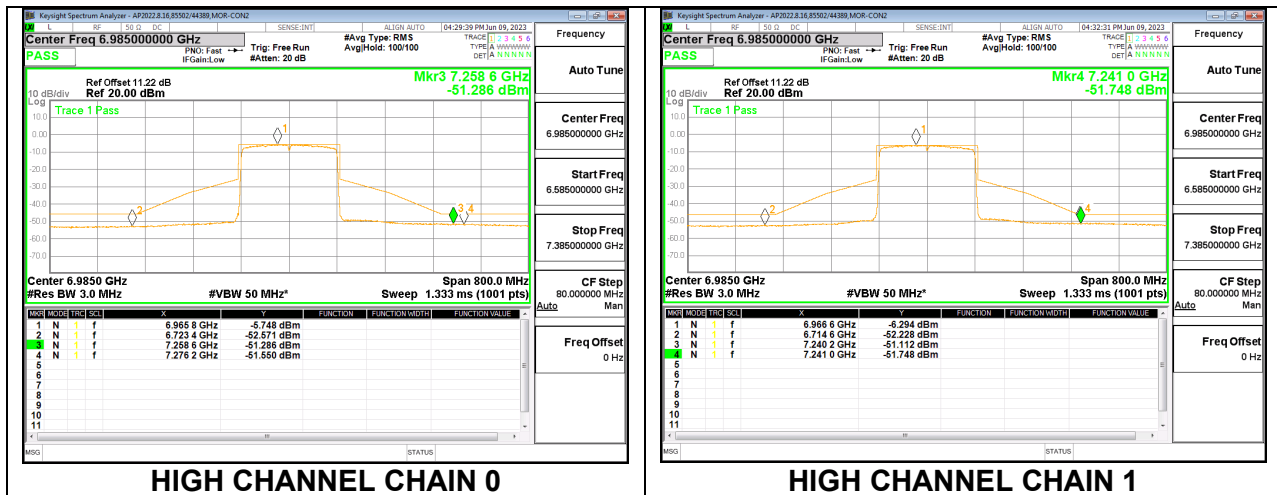
### 9.5.20. 802.11ax HE160 MODE 2TX IN THE UNII-8 BAND

#### 2TX CHAIN 0 + CHAIN 1 CDD OFDMA MODE: 2x996T

LOW



HIGH



## 10. RADIATED TEST RESULTS

### LIMITS

FCC §15.205 Restricted bands  
FCC §15.209 and FCC §15.407(b)(6) – Unrestricted bands  
RSS-248 4.6.2 (a)  
RSS-GEN 8.9, 8.10

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

### TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for measurement below 1GHz; 1.5 m above the ground plane for measurement above 1GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For pre-scans above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 30 KHz for peak measurements.

For final measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and as applicable for average measurements.

The spectrum from 30 MHz to 1GHz and 18GHz to 40 GHz is investigated with the transmitter set to transmit at the channel with highest output power as worst-case scenario. 1GHz to 18GHz was set to the lowest, middle, and highest channels in the 5 GHz bands.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

NOTE: The limits in CFR 47, Part 15, Subpart C, paragraph 15.209(a), are identical to those in RSS-Gen section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as reported in the table), using the free space impedance of 377 Ohms. For example the measurement at frequency X kHz resulted in a level of Y dBuV/m, which is equivalent to  $Y - 51.5 = Z$  dBuA/m, which has the same margin, W dB, to the corresponding RSS-Gen Table 6 limit as it has to 15.209(a) limit.

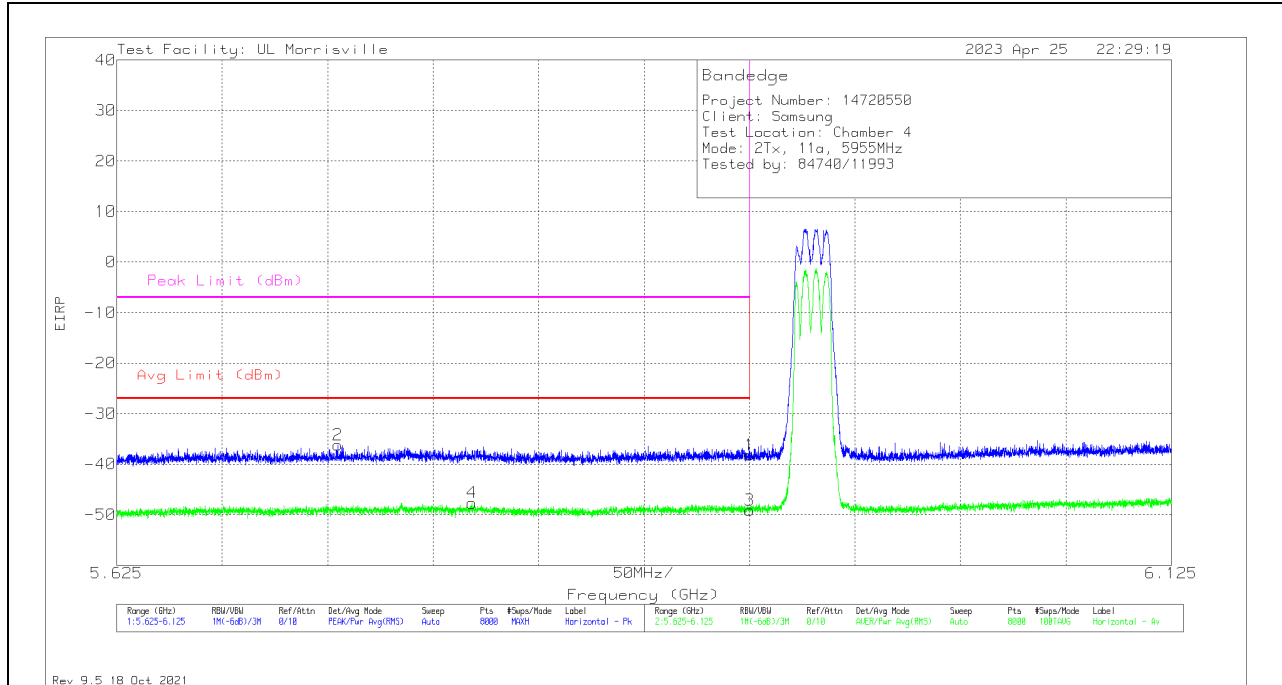


## 10.1. TRANSMITTER OUTSIDE 5.925-7.125 GHz , 1-18GHz

### 10.1.1. TX ABOVE 1 GHz 802.11a MODE IN THE UNII-5 BAND

#### BANDEDGE (LOW CHANNEL)

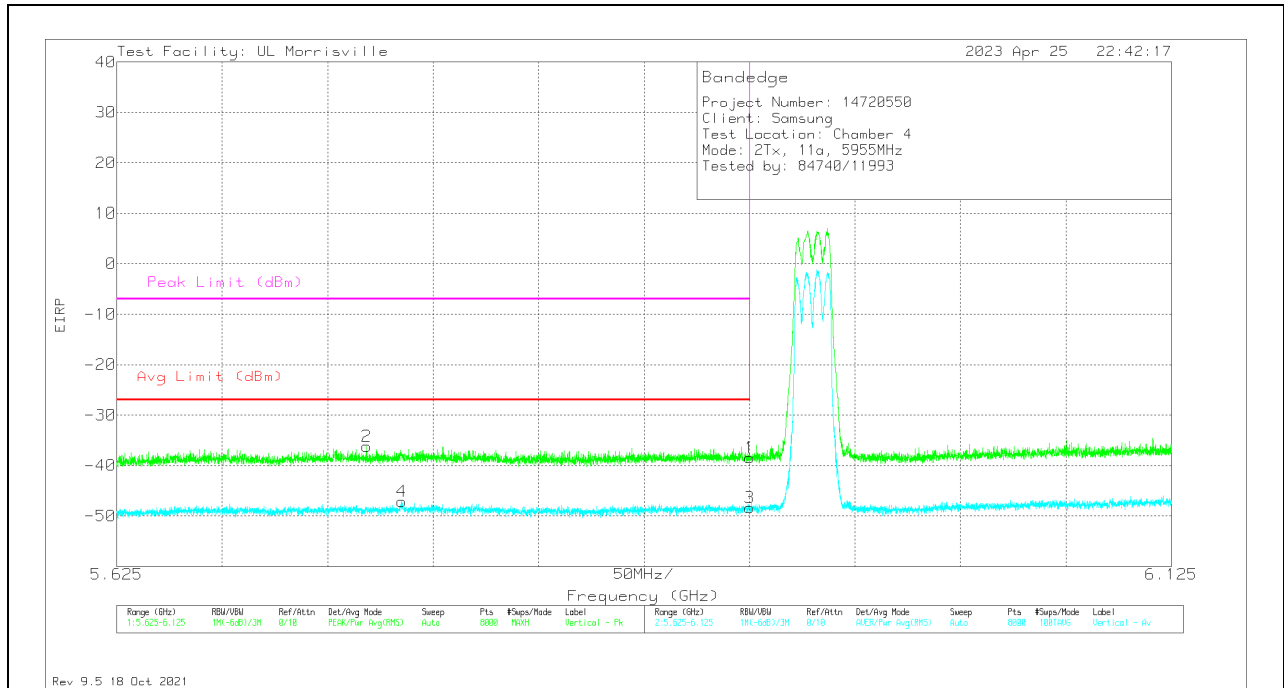
#### HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	86408 (dB/m)	Gain/Loss (dB)	DC Corr (dB)	Corrected Reading EIRP	Avg Limit (dBm)	Margin (dB)	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.92498	-76.22	Pk	35.1	2.9	0	-38.22	-	-	-7	-31.22	276	187	H
2	5.72976	-73.73	Pk	34.8	2.7	0	-36.23	-	-	-7	-29.23	276	187	H
3	5.92498	-87.43	RMS	35.1	3.18	0.19	-48.96	-27	-21.96	-	-	276	187	V
4	5.79333	-85.66	RMS	34.9	3.08	0.19	-47.49	-27	-20.49	-	-	276	187	V

Pk - Peak detector  
 RMS - RMS detection

**VERTICAL RESULT**



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	86408 (dB/m)	Gain/Loss (dB)	DC Corr (dB)	Corrected Reading EIRP	Avg Limit (dBm)	Margin (dB)	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.92498	-76.44	Pk	35.1	2.9	0	-38.44	-	-	-7	-31.44	308	137	V
2	5.74339	-73.45	Pk	34.8	2.5	0	-36.15	-	-	-7	-29.15	308	137	V
3	5.92498	-86.7	RMS	35.1	3.18	0.19	-48.23	-27	-21.23	-	-	308	137	V
4	5.76002	-84.78	RMS	34.8	2.88	0.19	-46.91	-27	-19.91	-	-	308	137	V

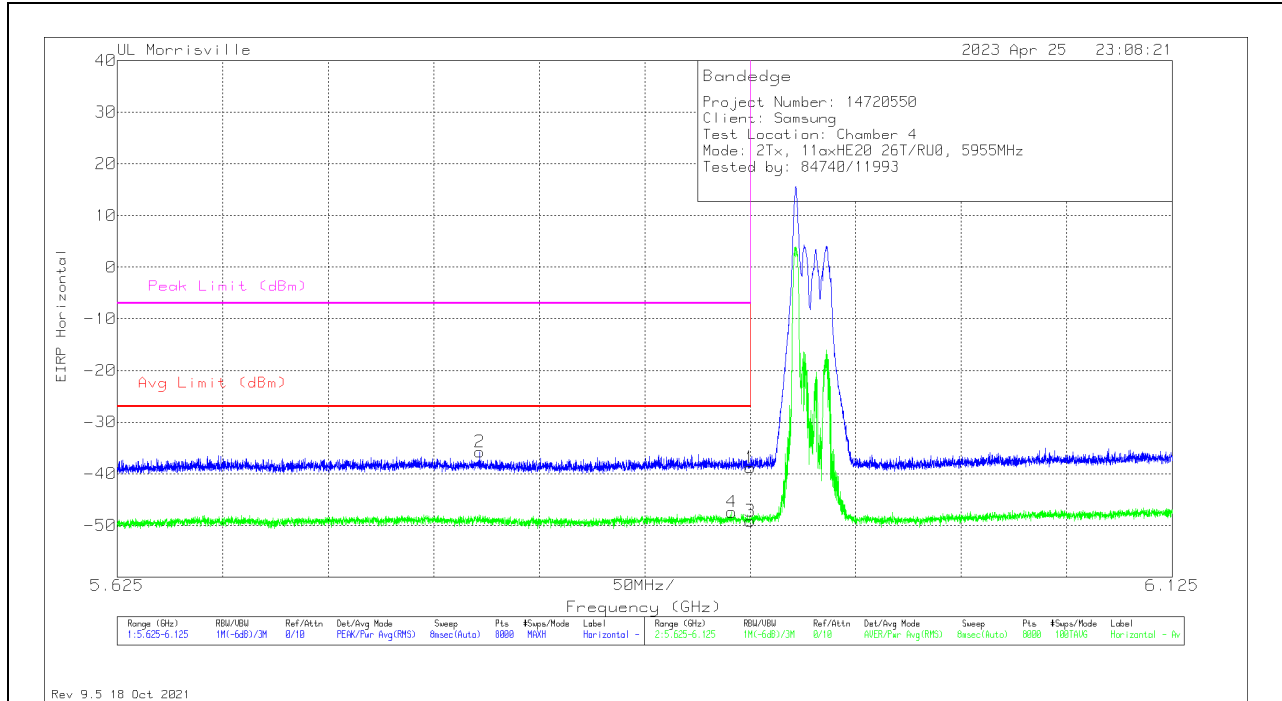
Pk - Peak detector  
 RMS - RMS detection

### 10.1.2. TX ABOVE 1 GHz 802.11ax HE20 MODE IN THE UNII-5 BAND

#### 2TX CHAIN 0 + CHAIN 1 OFDMA MODE: 26T

#### BANDEDGE (LOW CHANNEL)

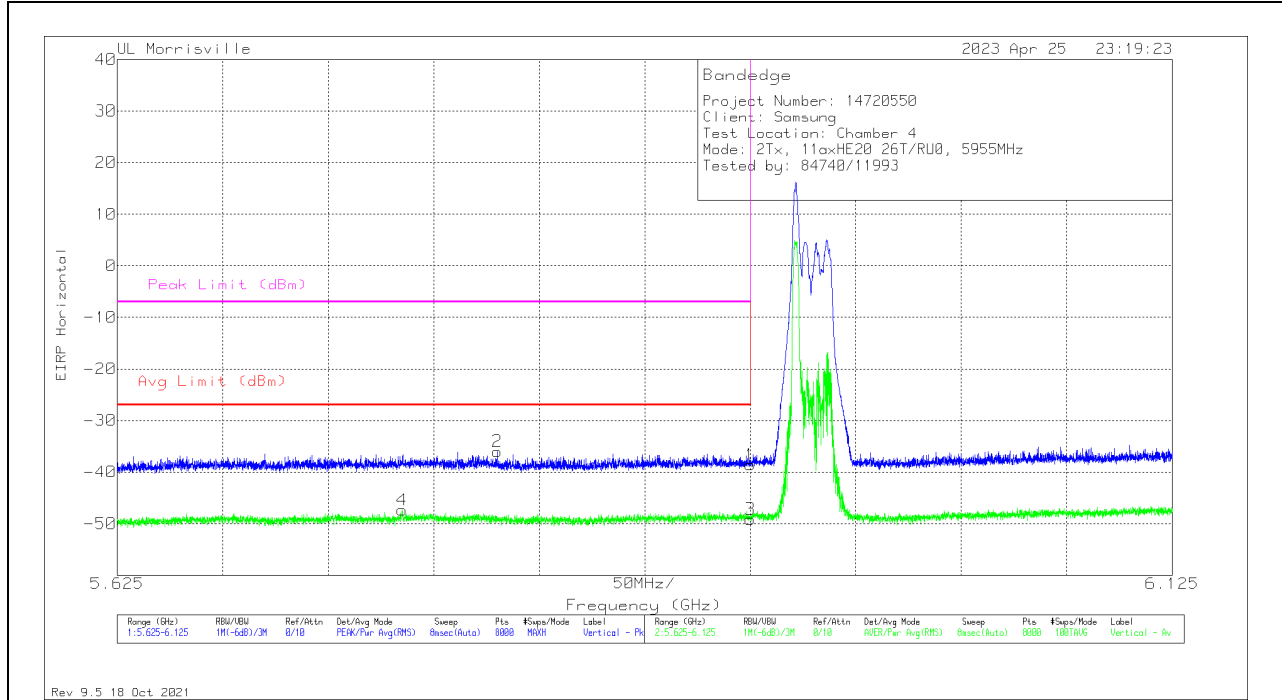
#### HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	86408 (dB/m)	Gain/Loss (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Avg Limit (dBm)	PK Margin (dB)	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.79677	-73.46	Pk	34.9	-9	11.8	-35.76	-27	-8.76	-7	-28.76	321	153	H
4	5.91616	-85.29	RMS	35.1	-9	11.8	-47.39	-	-	-	-	321	153	H
1	5.92498	-76.81	Pk	35.1	-8.9	11.8	-38.81	-27	-11.81	-7	-31.81	321	153	H
3	5.92498	-87.17	RMS	35.1	-8.9	11.8	-49.17	-	-	-	-	321	153	H

Pk - Peak detector  
 RMS - RMS detection

**VERTICAL RESULT**

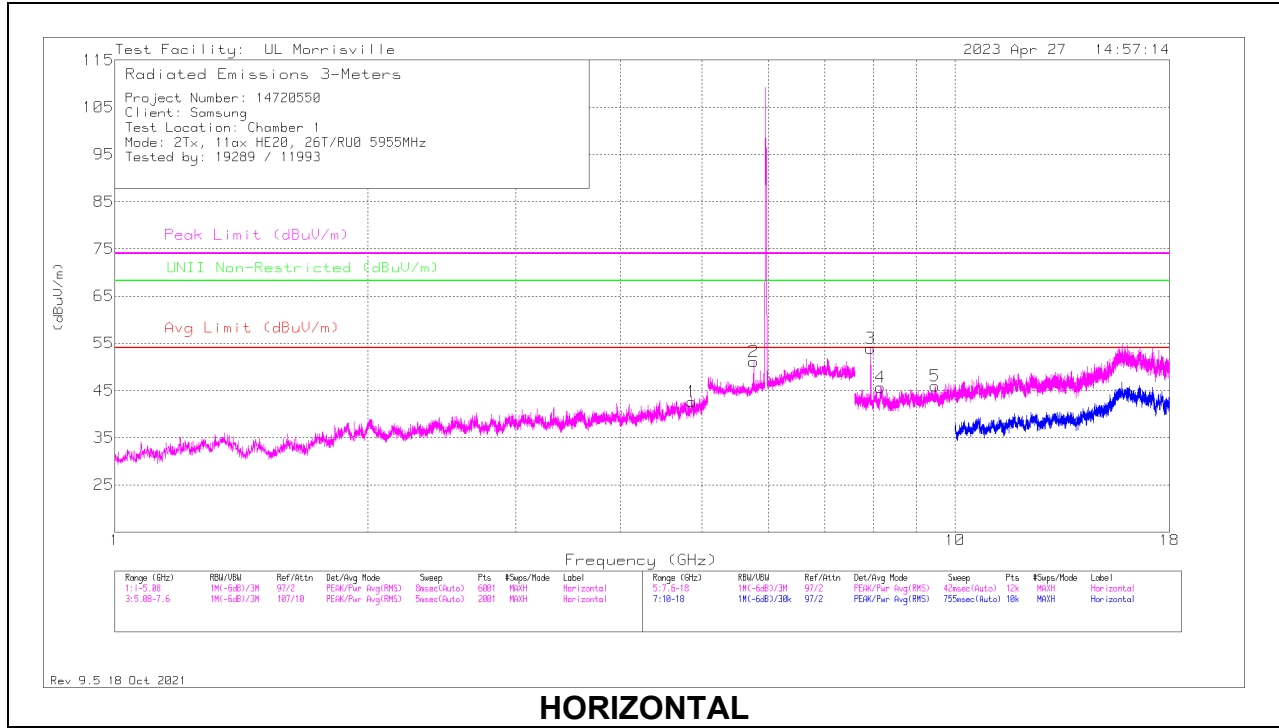


Marker	Frequency (GHz)	Meter Reading (dBm)	Det	86408 (dB/m)	Gain/Loss (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Avg Limit (dBm)	PK Margin (dB)	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	5.76002	-84.75	RMS	34.8	-9.2	11.8	-47.35	-	-	-	-	304	125	V
2	5.80502	-73.61	Pk	34.9	-9.1	11.8	-36.01	-27	-9.01	-7	-29.01	304	125	V
1	5.92498	-76.6	Pk	35.1	-8.9	11.8	-38.6	-27	-11.6	-7	-31.6	304	125	V
3	5.92498	-87.16	RMS	35.1	-8.9	11.8	-49.16	-	-	-	-	304	125	V

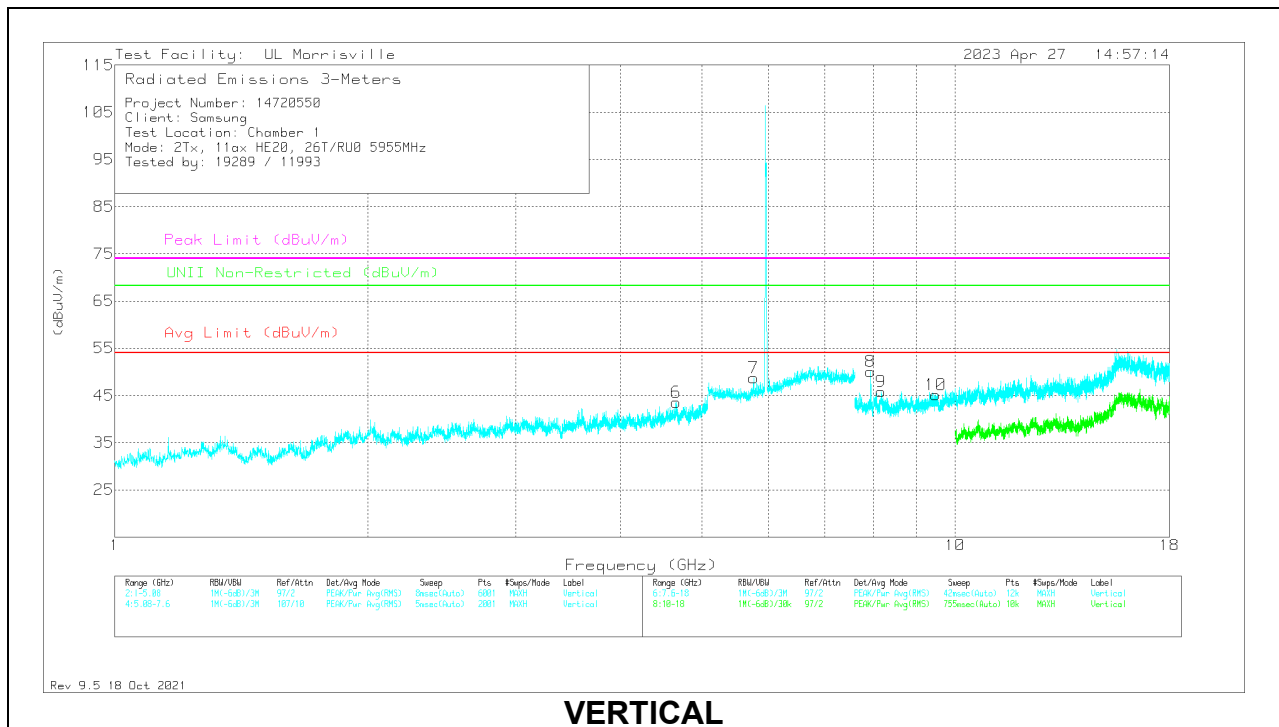
Pk - Peak detector  
 RMS - RMS detection

# HARMONICS AND SPURIOUS EMISSIONS

**LOW**



**HORIZONTAL**



**VERTICAL**

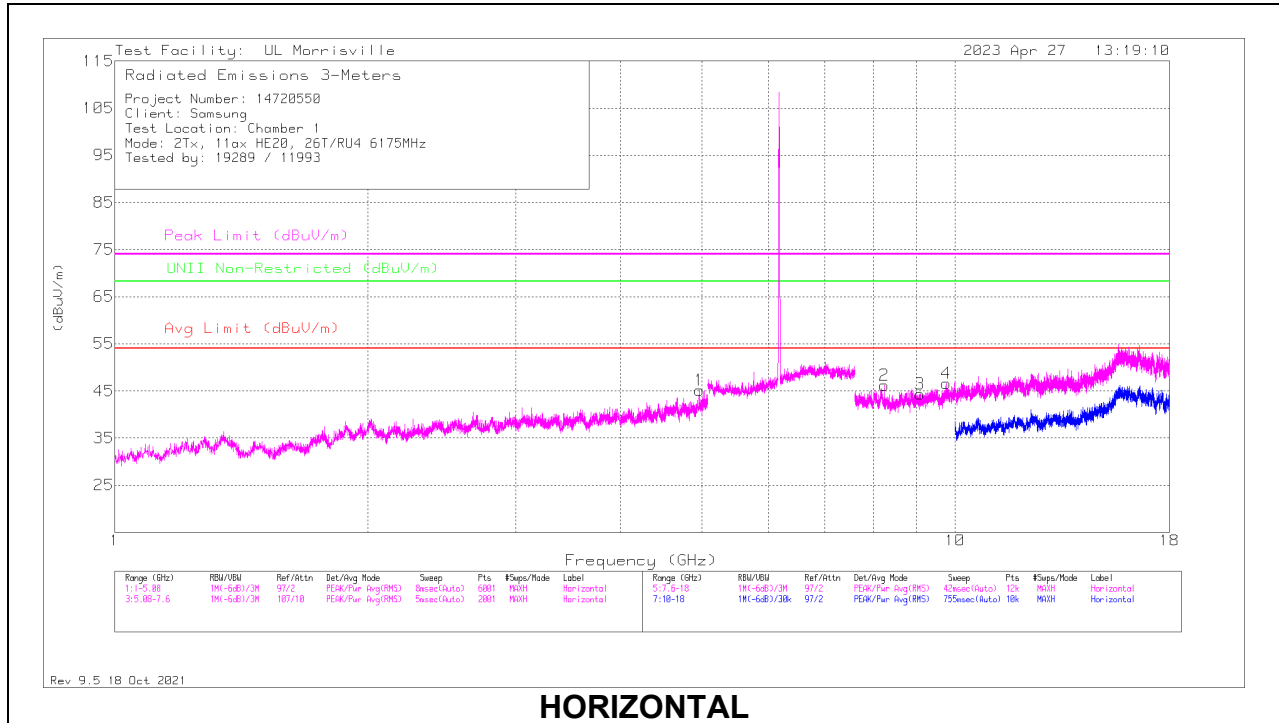
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	89509 (dB/m)	Gain/Loss (dB)	Filter (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6	*** 4.65568	39.39	Pk	34.1	-29.9	0	43.59	54	-10.41	74	-30.41	-	-	0-360	200	V
1	*** 4.86444	39.68	Pk	34.1	-31.2	0	42.58	54	-11.42	74	-31.42	-	-	0-360	101	H
4	*** 8.15987	38.72	Pk	35.8	-29.7	.9	45.72	54	-8.28	74	-28.28	-	-	0-360	200	H
9	*** 8.16507	38.8	Pk	35.8	-29.7	.9	45.8	54	-8.2	74	-28.2	-	-	0-360	200	V
5	*** 9.47373	37.73	Pk	36.7	-28.9	.4	45.93	54	-8.07	74	-28.07	-	-	0-360	101	H
10	*** 9.4798	36.95	Pk	36.7	-28.9	.4	45.15	54	-8.85	74	-28.85	-	-	0-360	200	V
2	5.75914	38.46	Pk	34.7	-22	0	51.16	-	-	-	-	68.2	-17.04	0-360	200	H
7	5.75914	36.04	Pk	34.7	-22	0	48.74	-	-	-	-	68.2	-19.46	0-360	200	V
3	7.93973	47.06	Pk	35.8	-29.8	.8	53.86	-	-	-	-	68.2	-14.34	0-360	101	H
8	7.93973	43.23	Pk	35.8	-29.8	.8	50.03	-	-	-	-	68.2	-18.17	0-360	200	V

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

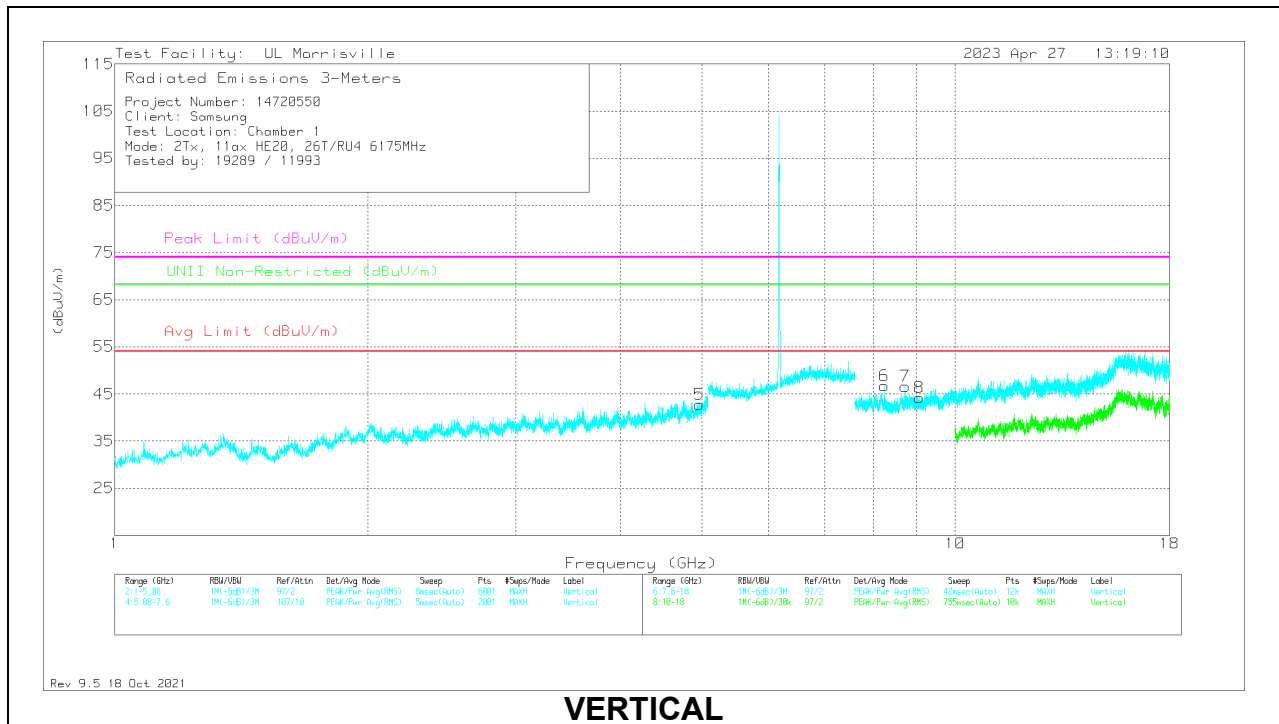
\*\* - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

**MID**



**HORIZONTAL**



**VERTICAL**

RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	89509 (dB/m)	Gain/Loss (dB)	Filter (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*** 4.96032	41.81	Pk	34	-30.7	0	45.11	54	-8.89	74	-28.89	-	-	0-360	100	H
5	*** 4.96644	39.2	Pk	34.1	-30.6	0	42.7	54	-11.3	74	-31.3	-	-	0-360	200	V
6	*** 8.23267	40.57	Pk	35.8	-30.2	.6	46.77	54	-7.23	74	-27.23	-	-	0-360	200	V
2	*** 8.23353	40.04	Pk	35.8	-30.2	.6	46.24	54	-7.76	74	-27.76	-	-	0-360	200	H
8	*** 9.0768	36.97	Pk	36.2	-29.3	.3	44.17	54	-9.83	74	-29.83	-	-	0-360	100	V
3	*** 9.08547	36.96	Pk	36.3	-29.1	.2	44.36	54	-9.64	74	-29.64	-	-	0-360	101	H
7	8.72667	39.85	Pk	36	-29.8	.5	46.55	-	-	-	-	68.2	-21.65	0-360	100	V
4	9.75887	37.71	Pk	36.8	-28.3	.4	46.61	-	-	-	-	68.2	-21.59	0-360	101	H

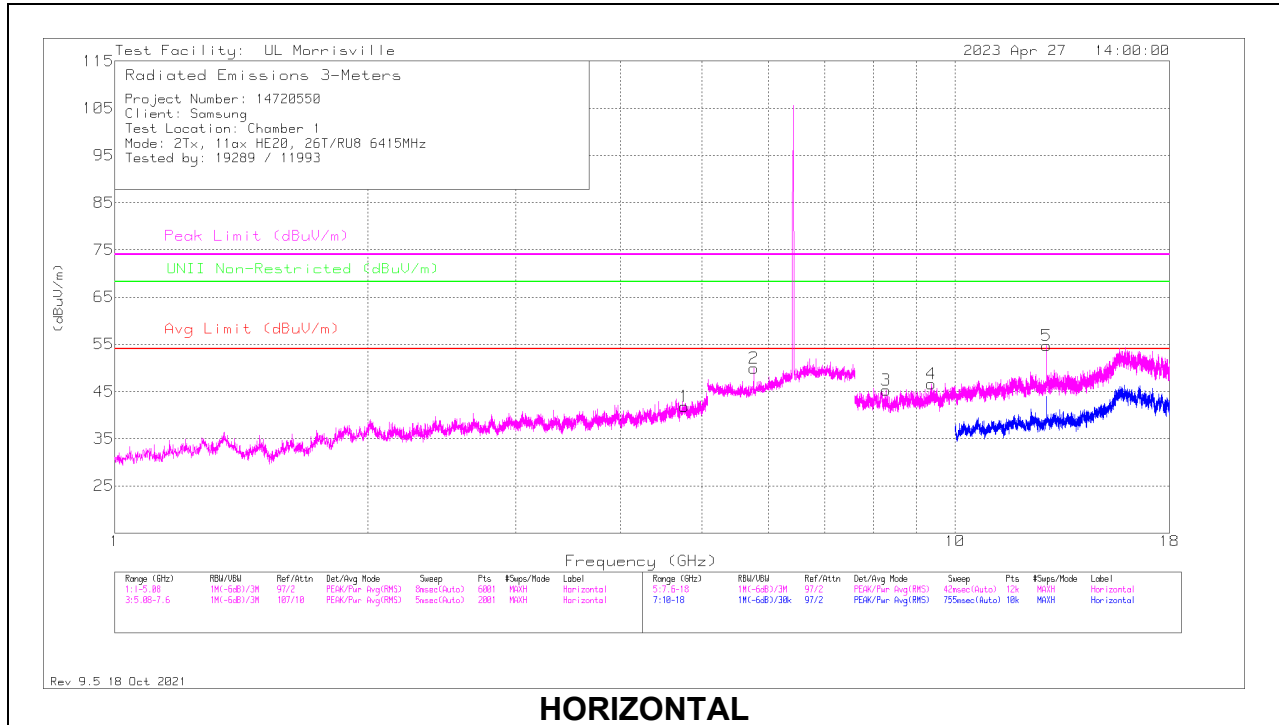
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

\*\* - indicates frequency in Taiwan NCC LP0002 Restricted Band

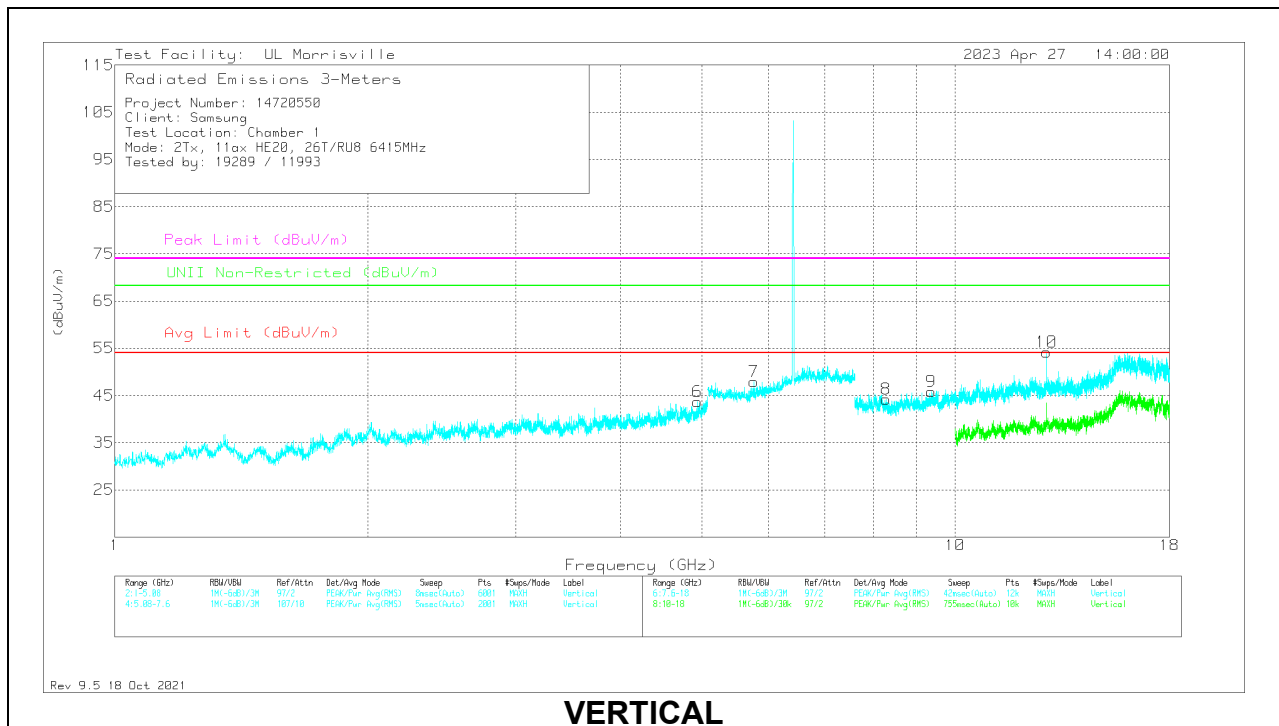
Pk - Peak detector



**HIGH**



**HORIZONTAL**



**VERTICAL**

RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	89509 (dB/m)	Gain/Loss (dB)	Filter (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*** 4.76108	38.36	Pk	34	-30.6	0	41.76	54	-12.24	74	-32.24	-	-	0-360	101	H
6	*** 4.93788	40.17	Pk	34	-30.5	0	43.67	54	-10.33	74	-30.33	-	-	0-360	200	V
3	* ** 8.2864	38.53	Pk	35.8	-29.8	.7	45.23	54	-8.77	74	-28.77	-	-	0-360	101	H
8	* ** 8.28813	37.49	Pk	35.8	-29.8	.7	44.19	54	-9.81	74	-29.81	-	-	0-360	101	V
4	*** 9.36973	39.59	Pk	36.6	-30	.4	46.59	54	-7.41	74	-27.41	-	-	0-360	200	H
9	*** 9.37407	38.71	Pk	36.6	-29.9	.4	45.81	54	-8.19	74	-28.19	-	-	0-360	101	V
5	12.8468	43.64	Pk	39.2	-28.3	.2	54.74	-	-	-	-	68.2	-13.46	0-360	200	H
10	12.8468	43.07	Pk	39.2	-28.3	.2	54.17	-	-	-	-	68.2	-14.03	0-360	101	V
2	5.7604	37.2	Pk	34.7	-22	0	49.9	-	-	-	-	68.2	-18.3	0-360	200	H
7	5.7604	35.28	Pk	34.7	-22	0	47.98	-	-	-	-	68.2	-20.22	0-360	200	V

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

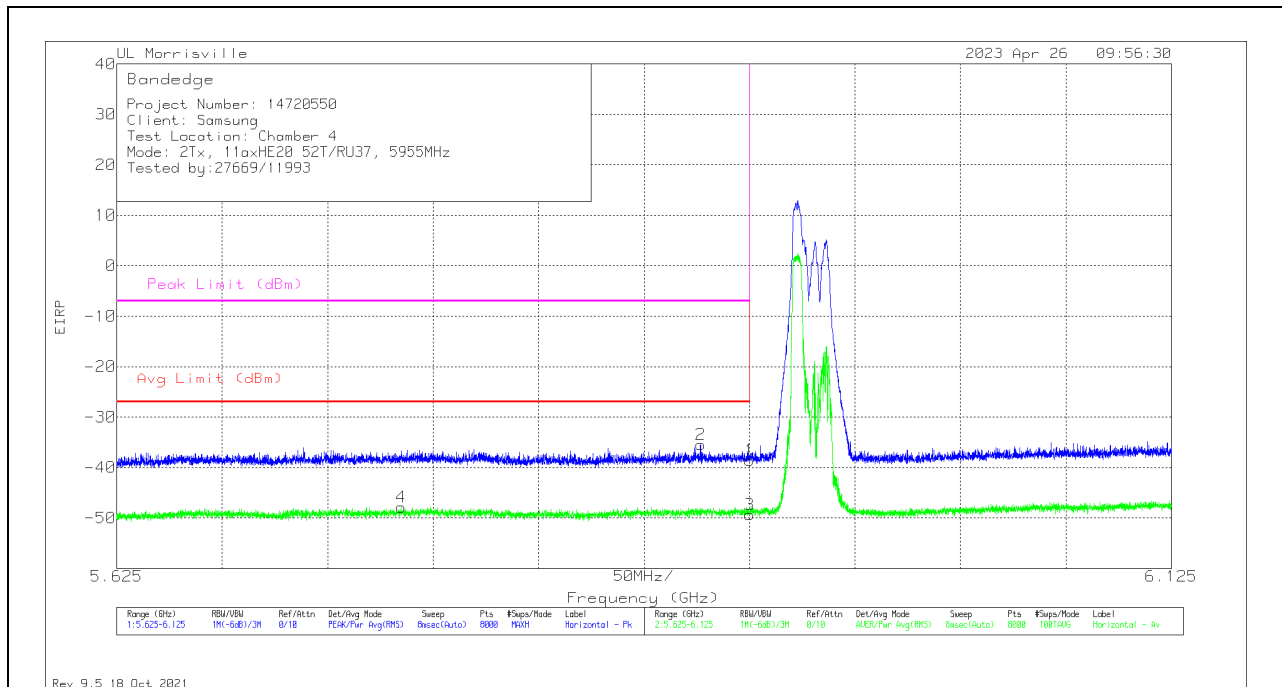
\*\* - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

**2TX CHAIN 0 + CHAIN 1 OFDMA MODE: 52T**

**BANDEDGE (LOW CHANNEL)**

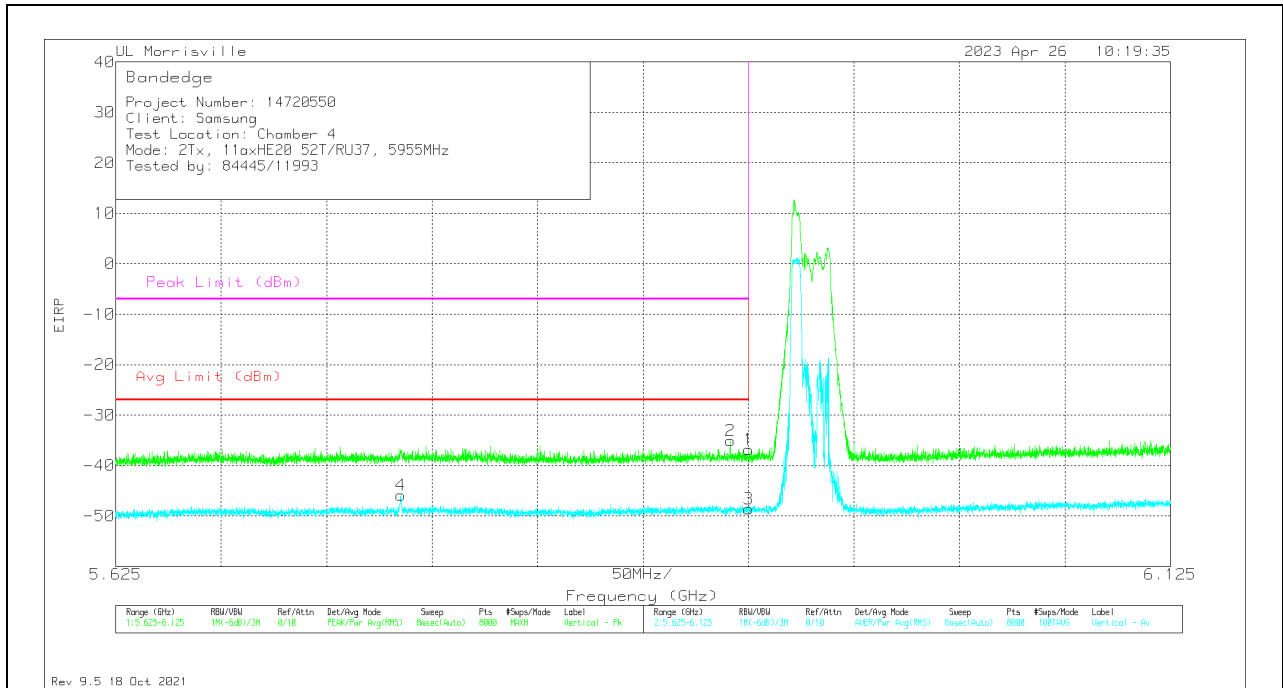
**HORIZONTAL RESULT**



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	86408 (dB/m)	Gain/Loss (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Avg Limit (dBm)	RMS Margin (dB)	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	5.75989	-85.23	RMS	34.8	-9.2	11.8	-47.83	-27	-20.83	-	-	276	167	H
2	5.90172	-73.42	Pk	35.1	-8.9	11.8	-35.42	-	-	-7	-28.42	276	167	H
1	5.92498	-76.6	Pk	35.1	-8.9	11.8	-38.6	-	-	-7	-31.6	276	167	H
3	5.92498	-87.34	RMS	35.1	-8.9	11.8	-49.34	-27	-22.34	-	-	276	167	H

Pk - Peak detector  
 RMS - RMS detection

**VERTICAL RESULT**



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	86408 (dB/m)	Gain/Loss (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Avg Limit (dBm)	Margin (dB)	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.92498	-74.78	Pk	35.1	-8.9	11.8	-36.78	-	-	-7	-29.78	300	239	V
2	5.91629	-73.02	Pk	35.1	-9	11.8	-35.12	-	-	-7	-28.12	300	239	V
3	5.92498	-86.57	RMS	35.1	-8.9	11.8	-48.57	-27	-21.57	-	-	300	239	V
4	5.76008	-83.27	RMS	34.8	-9.2	11.8	-45.87	-27	-18.87	-	-	300	239	V

Pk - Peak detector  
 RMS - RMS detection