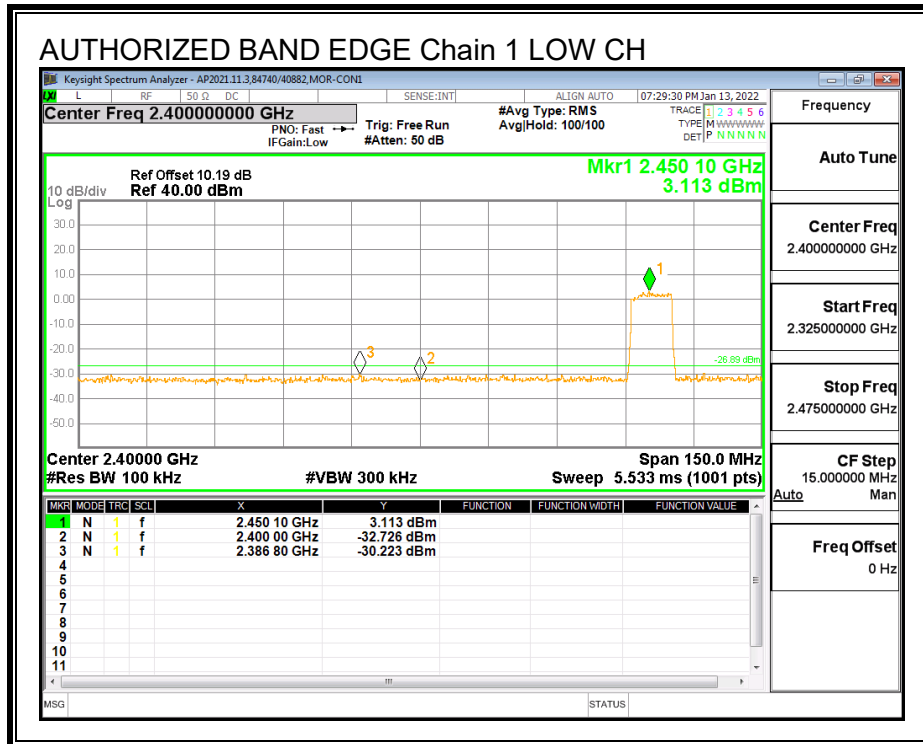
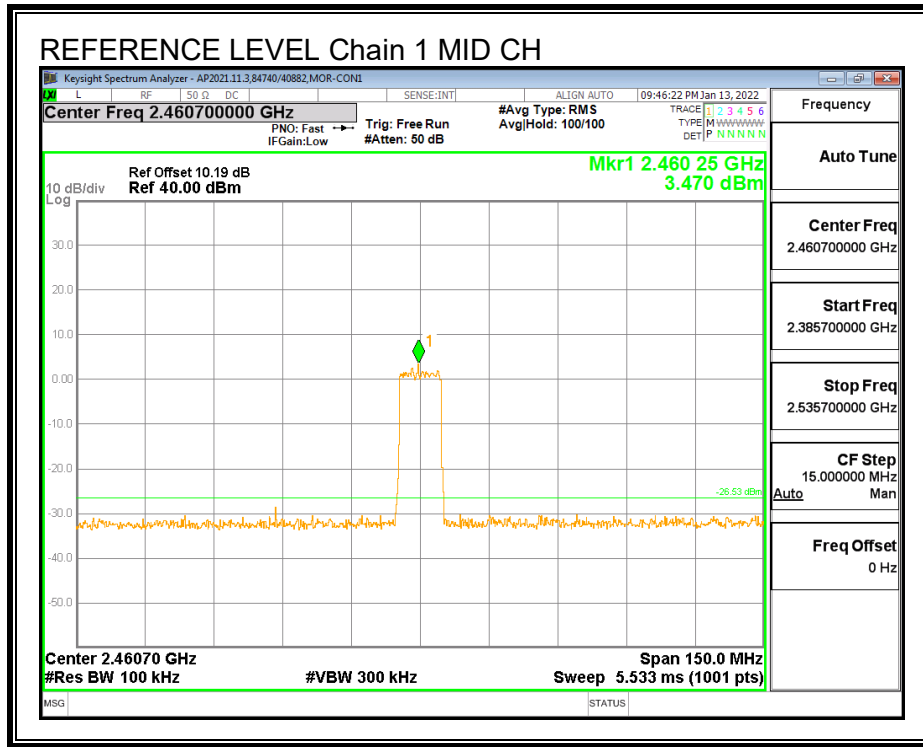
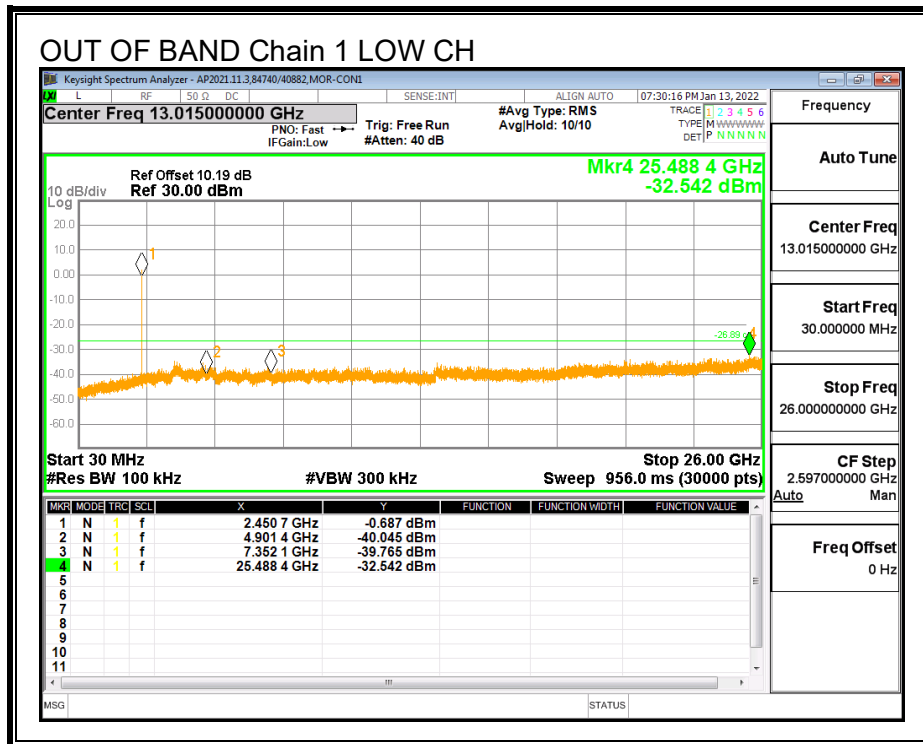
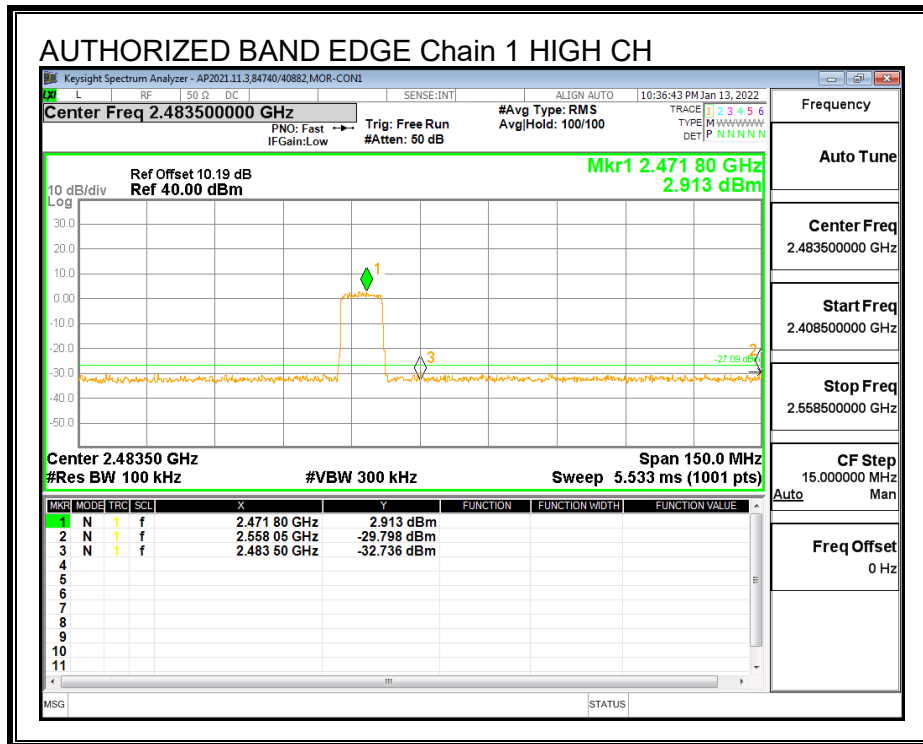
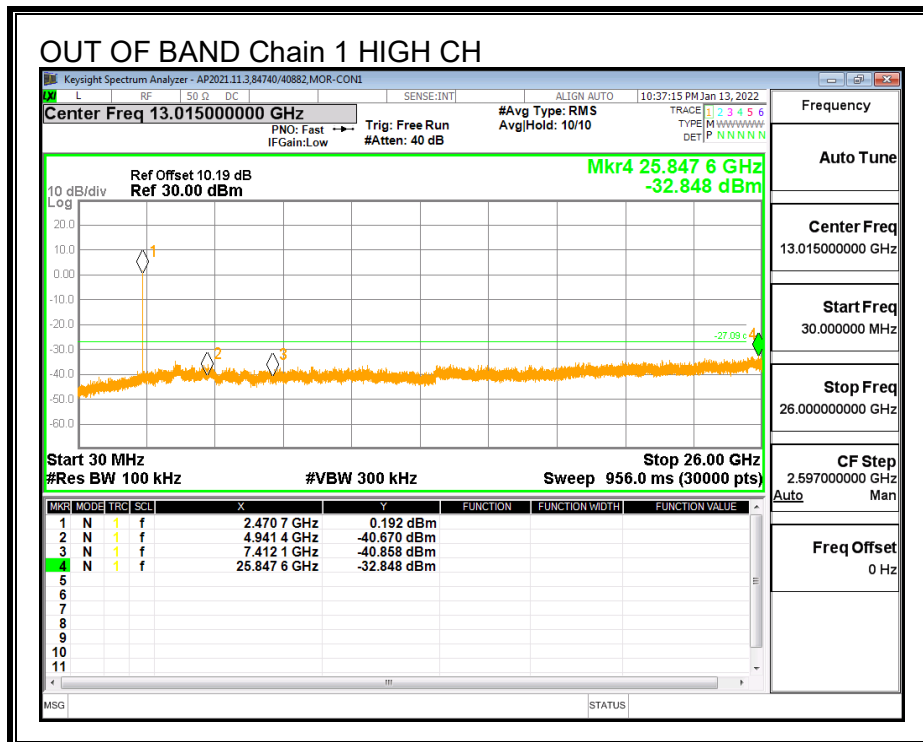
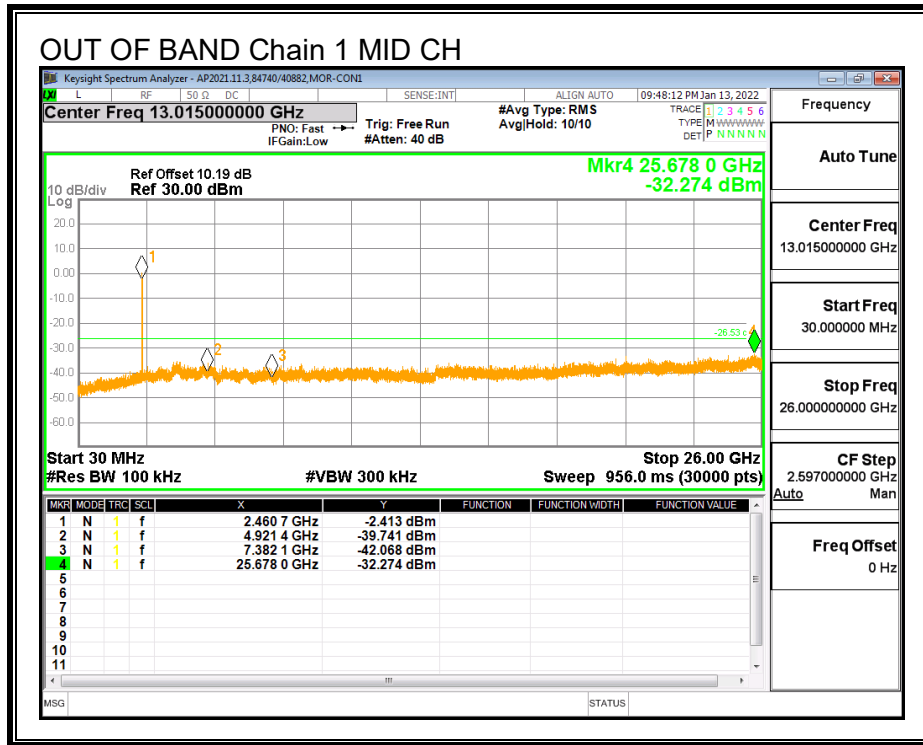
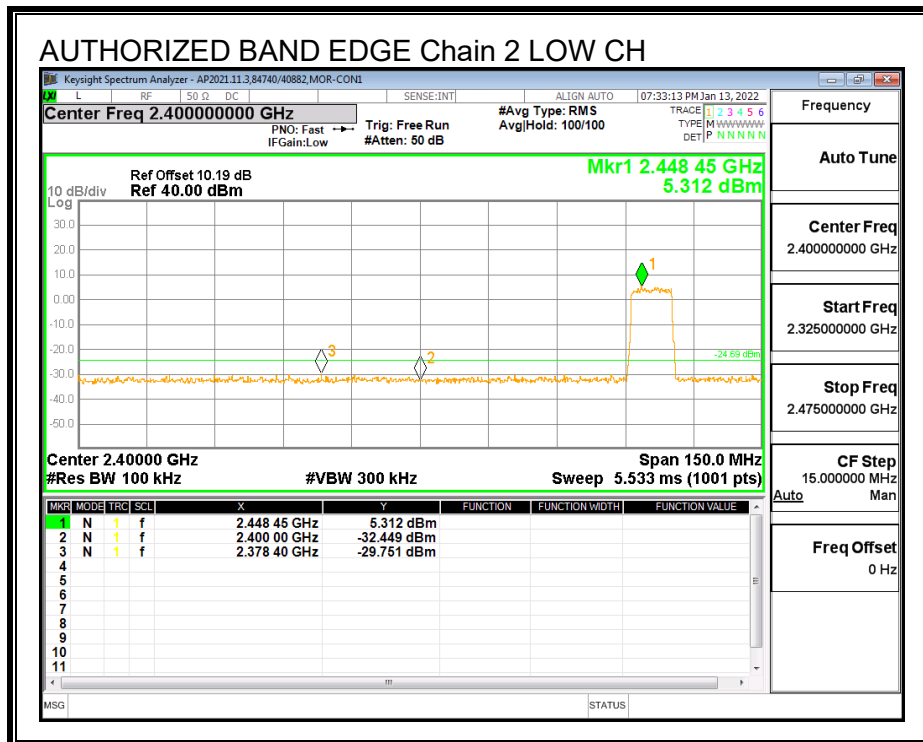
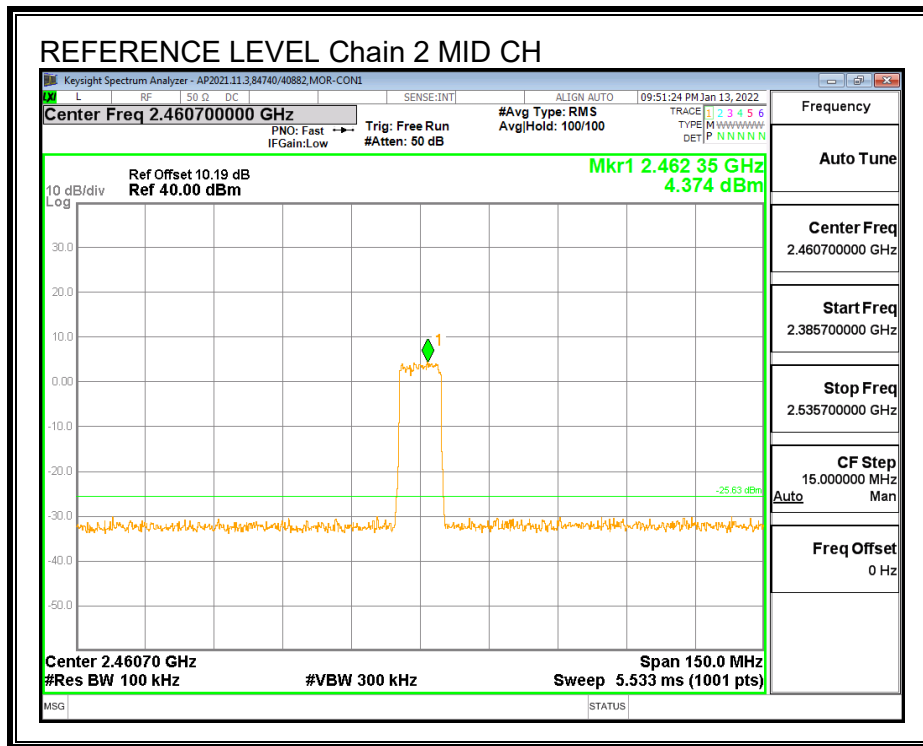


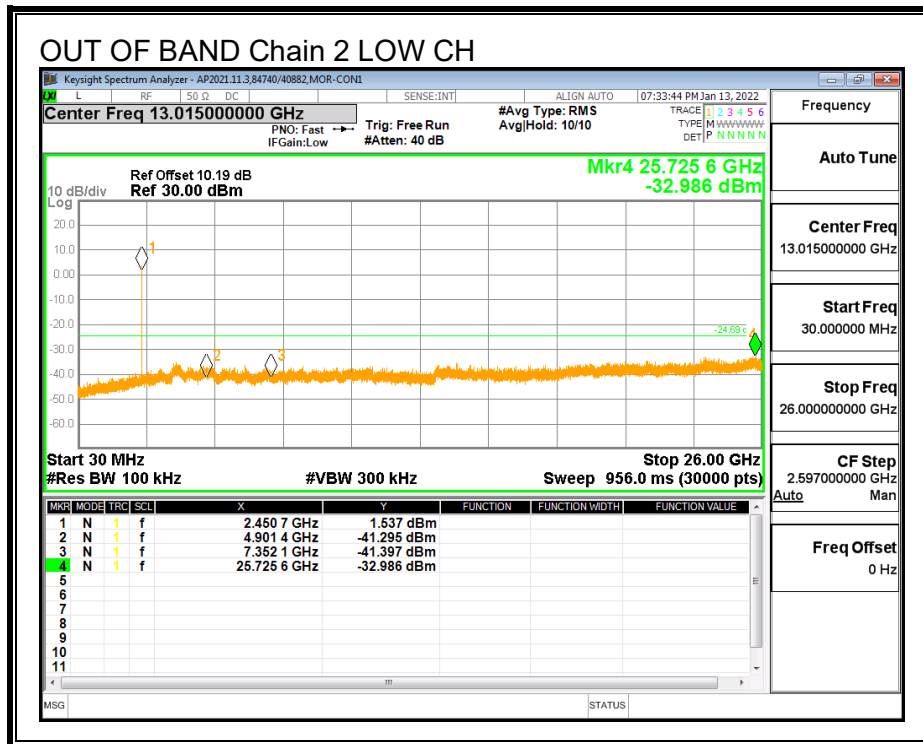
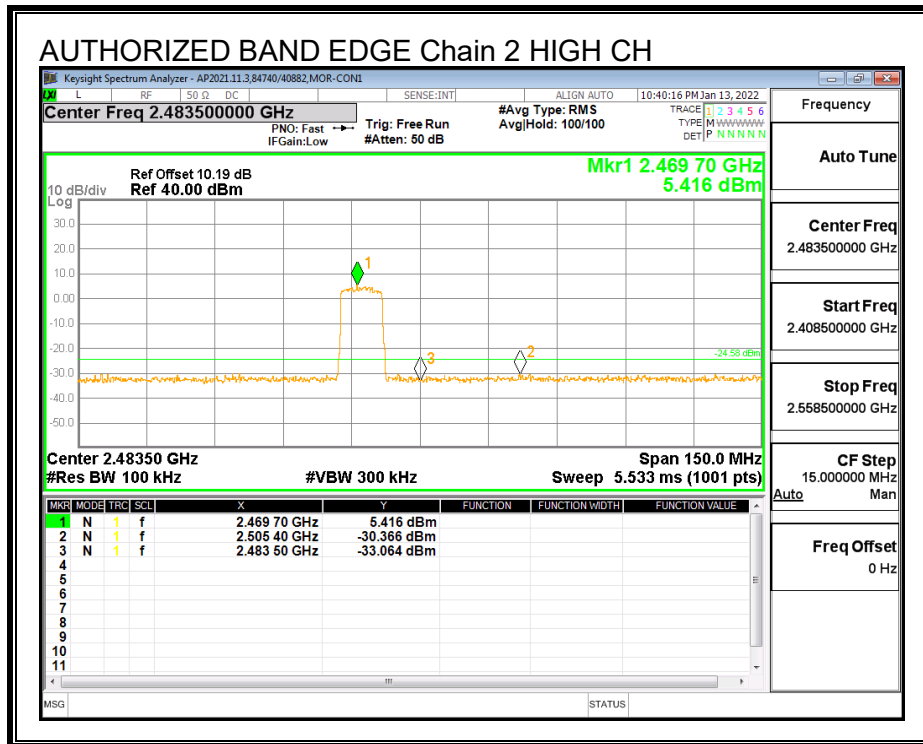
RESULTS – 16-QAM

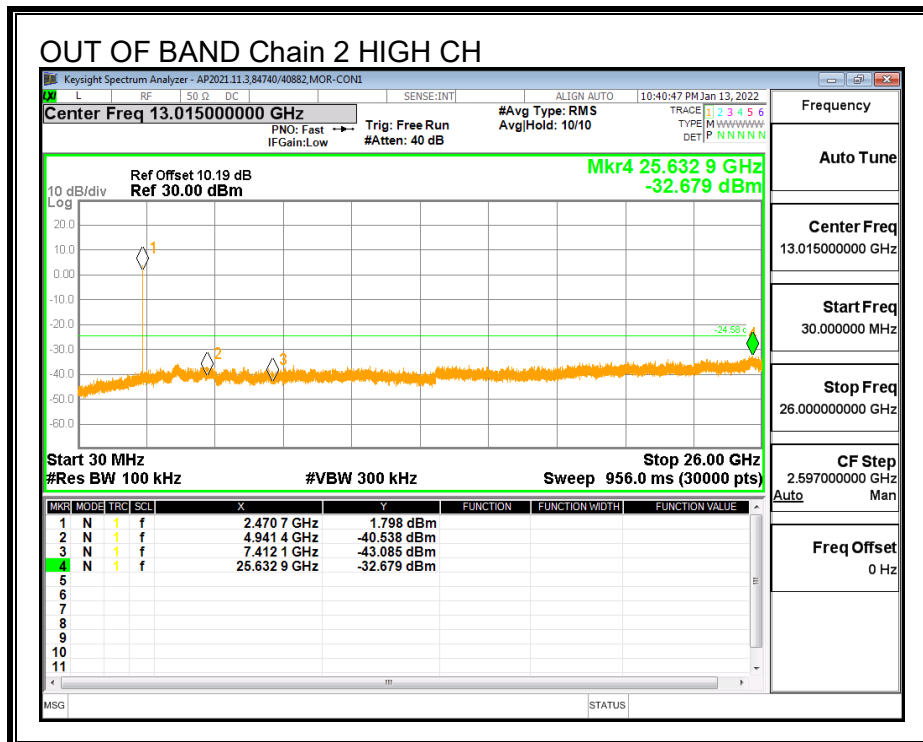
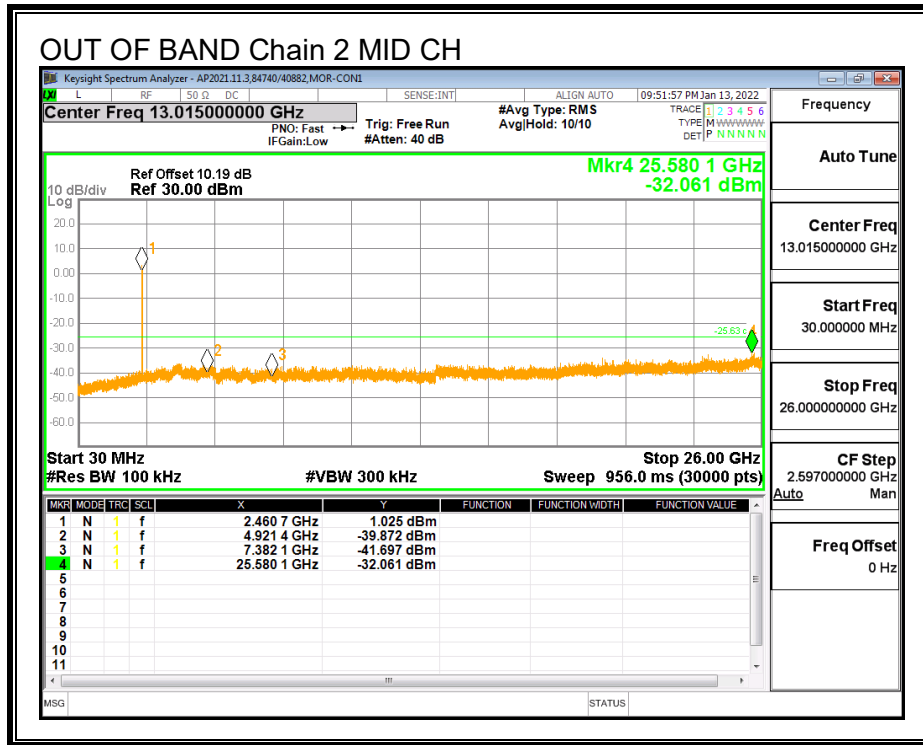


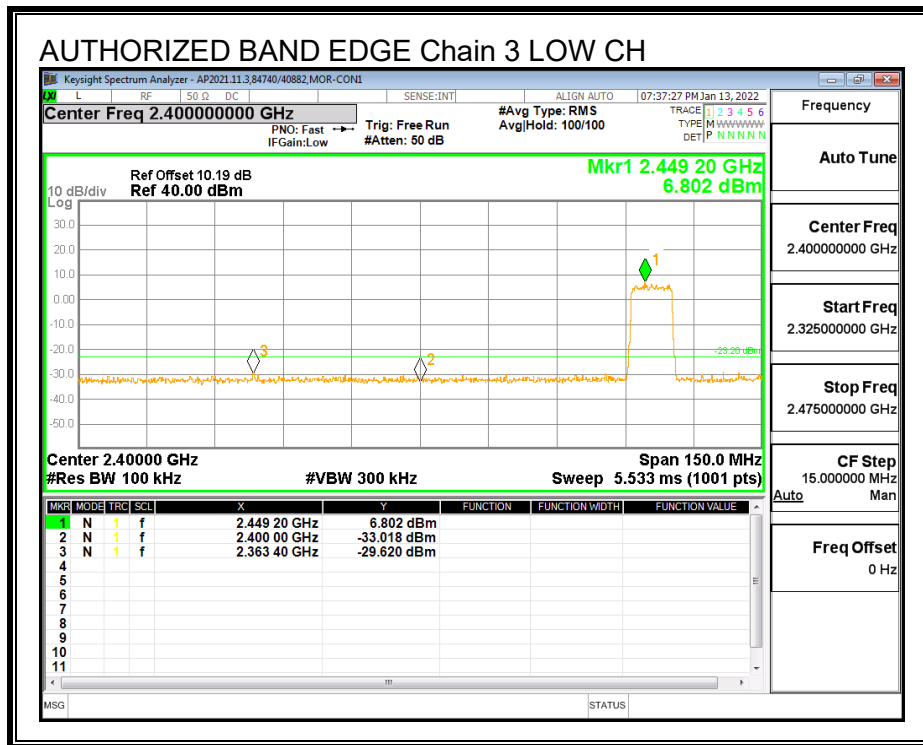
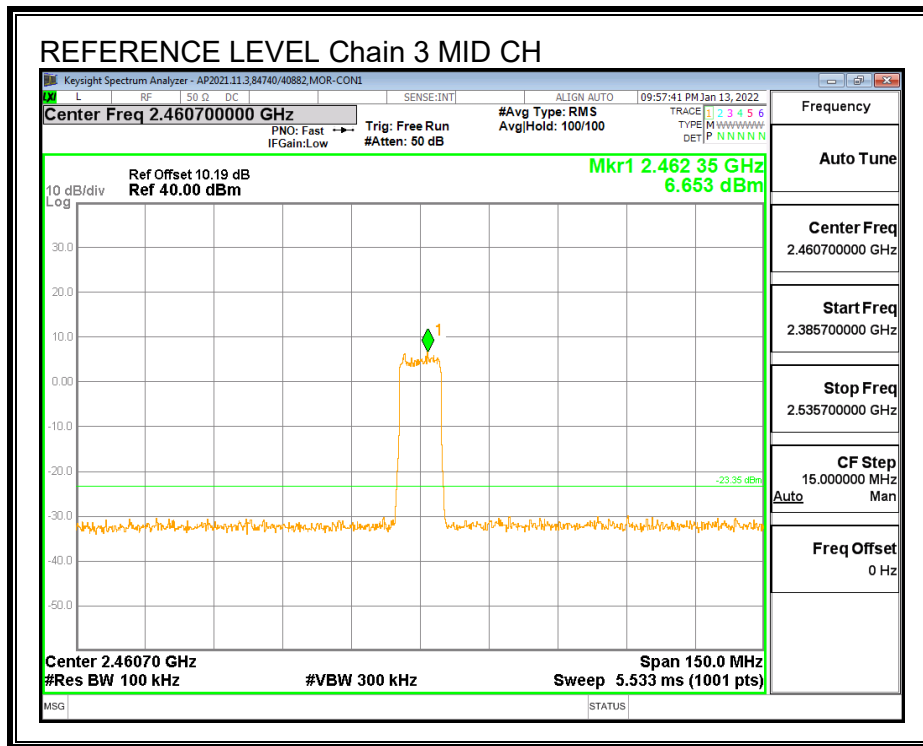


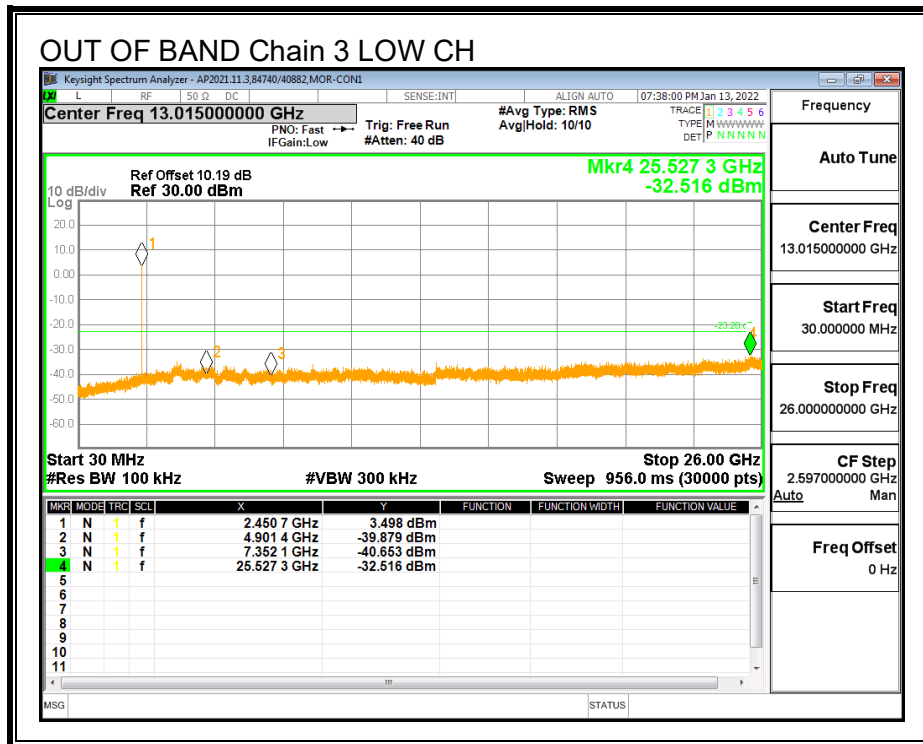
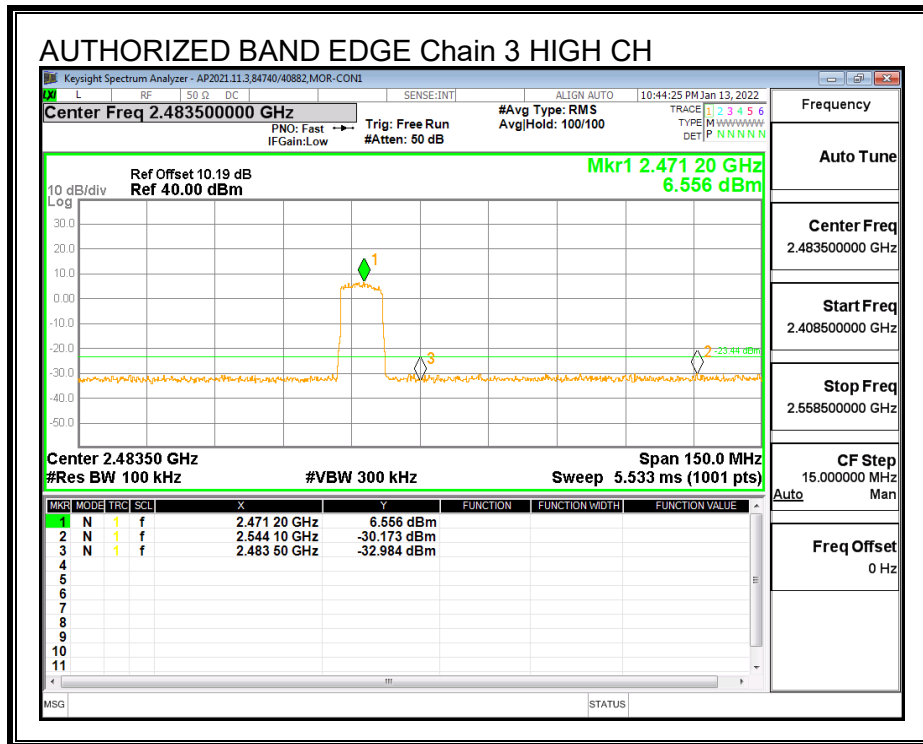


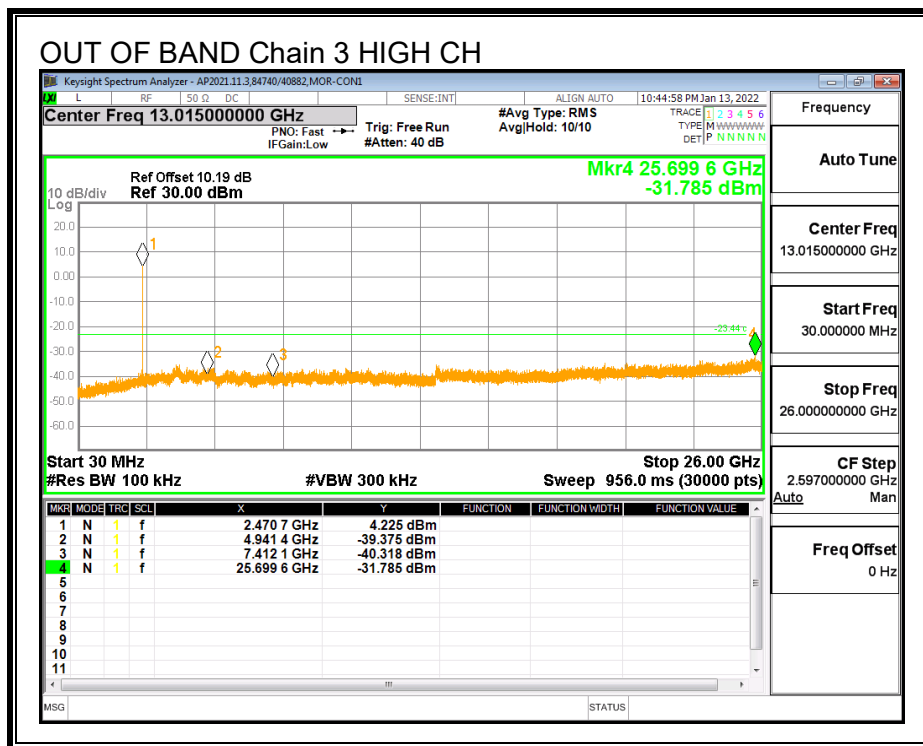
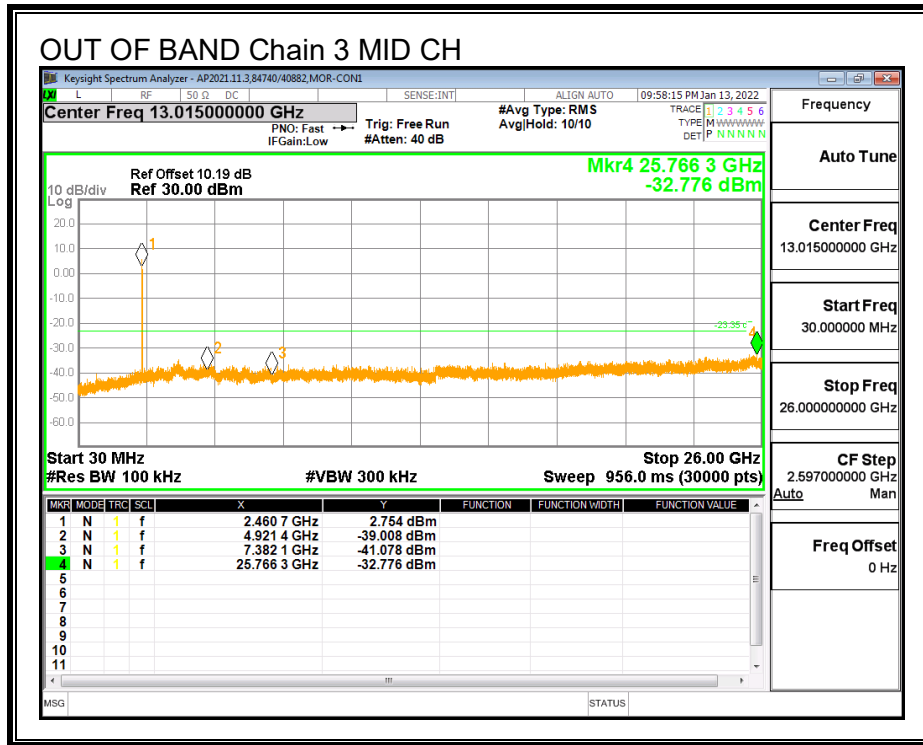


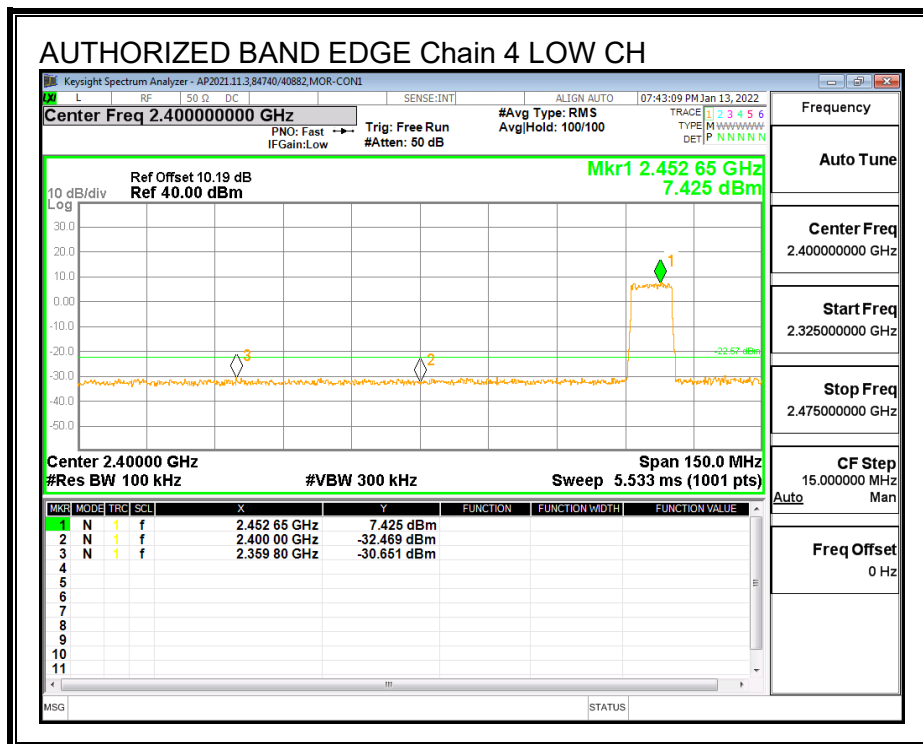
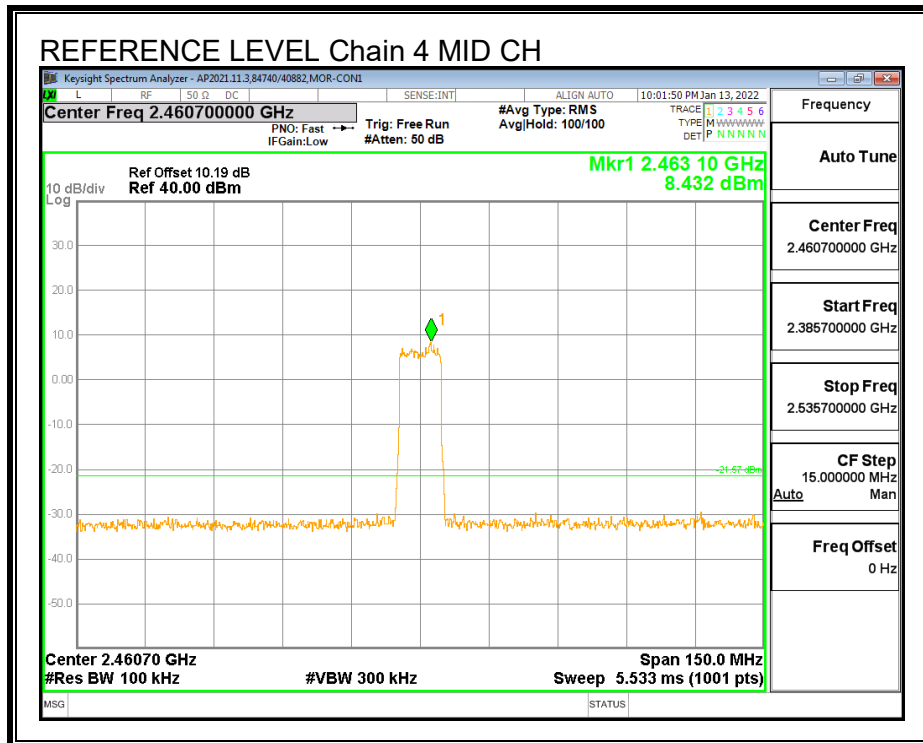


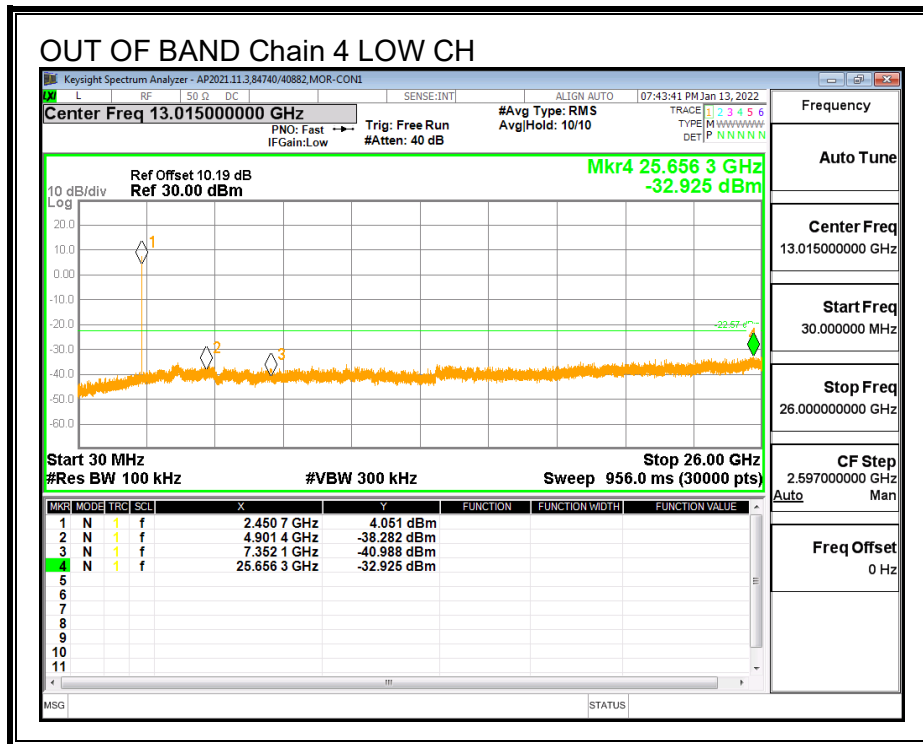
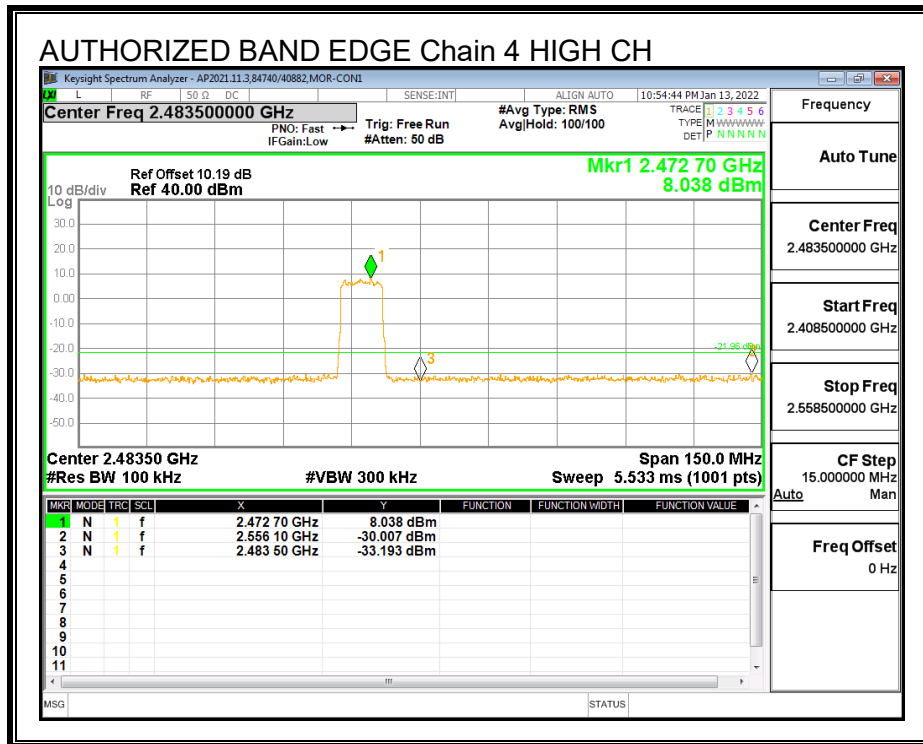


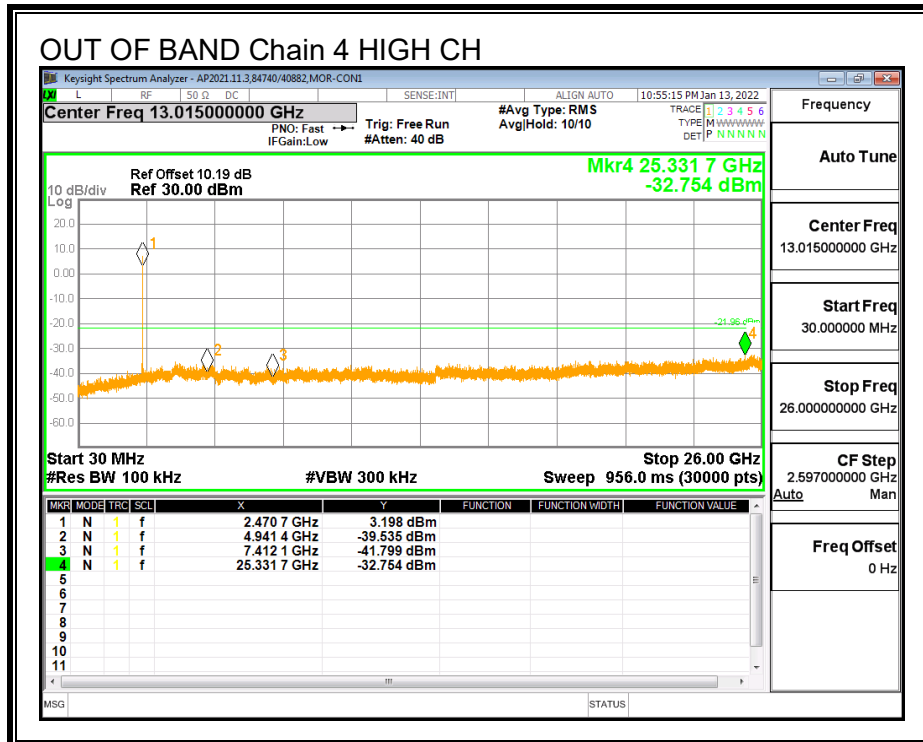
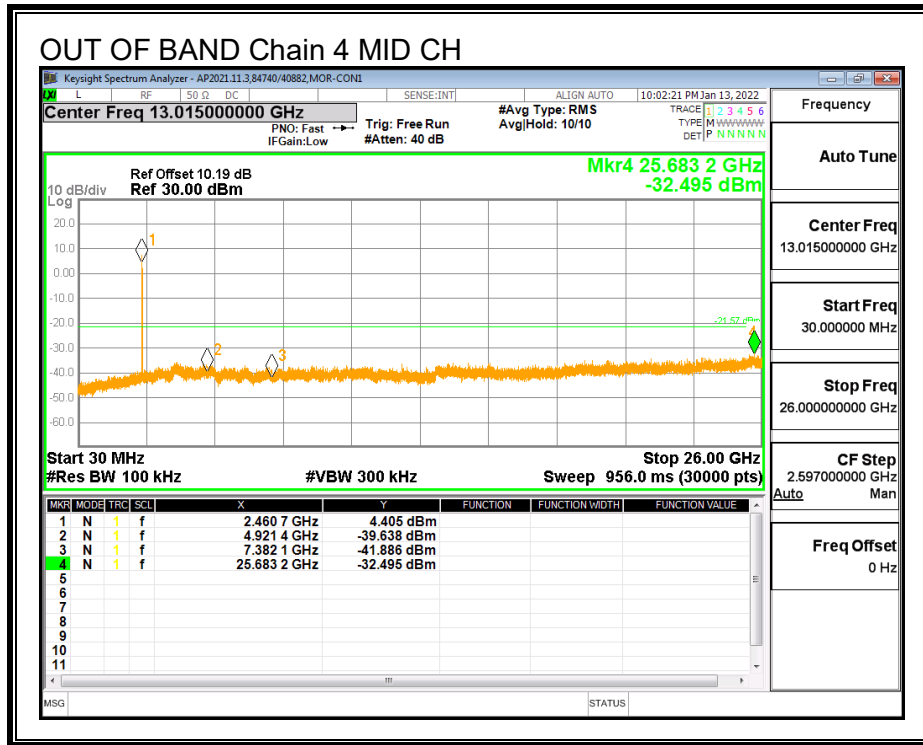


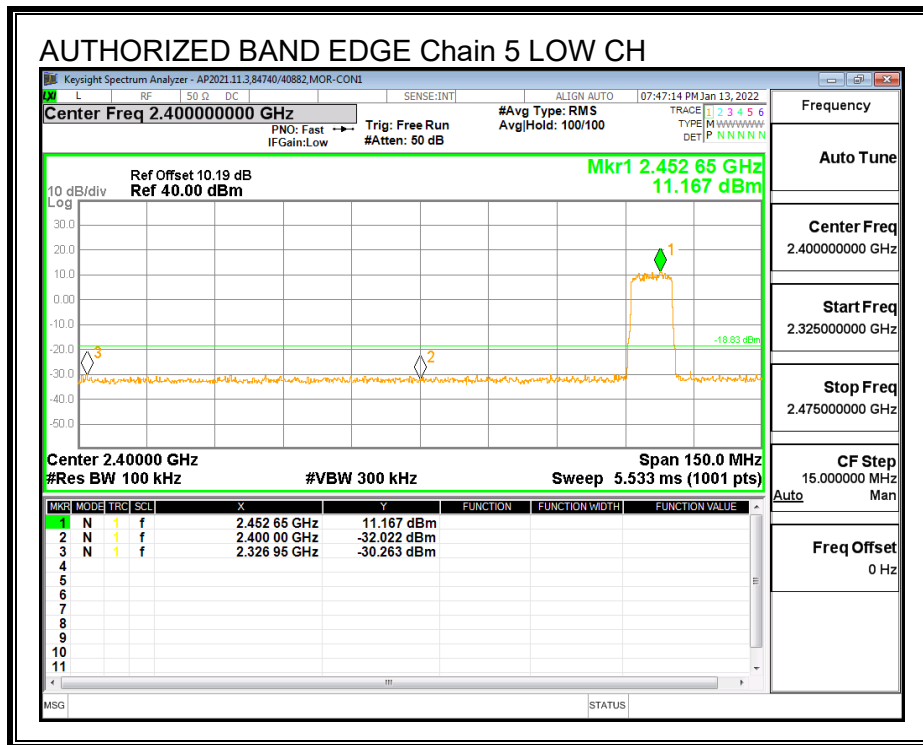
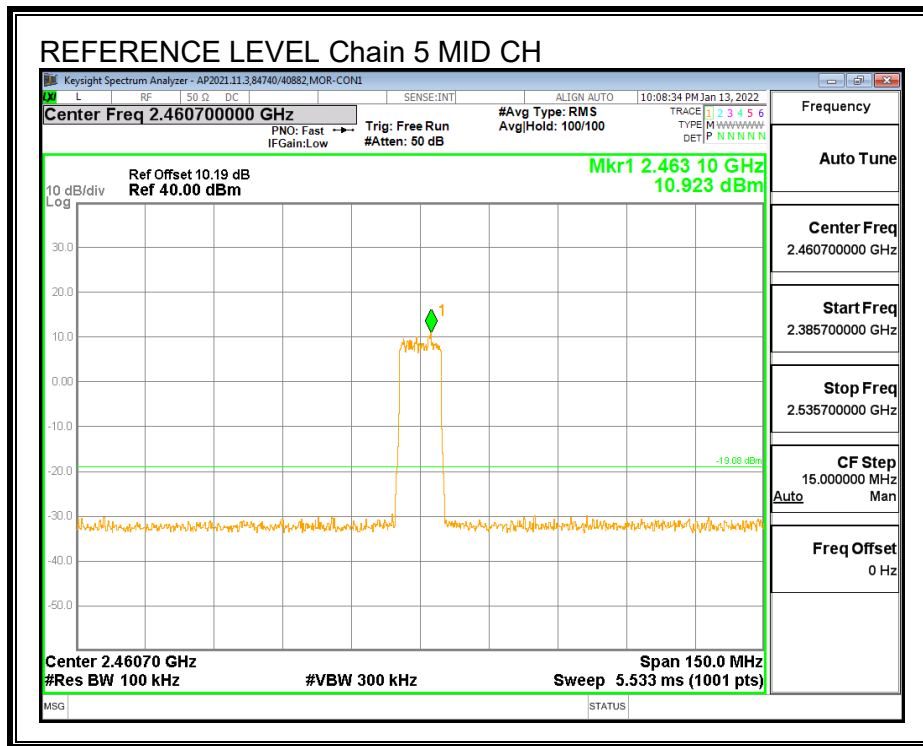


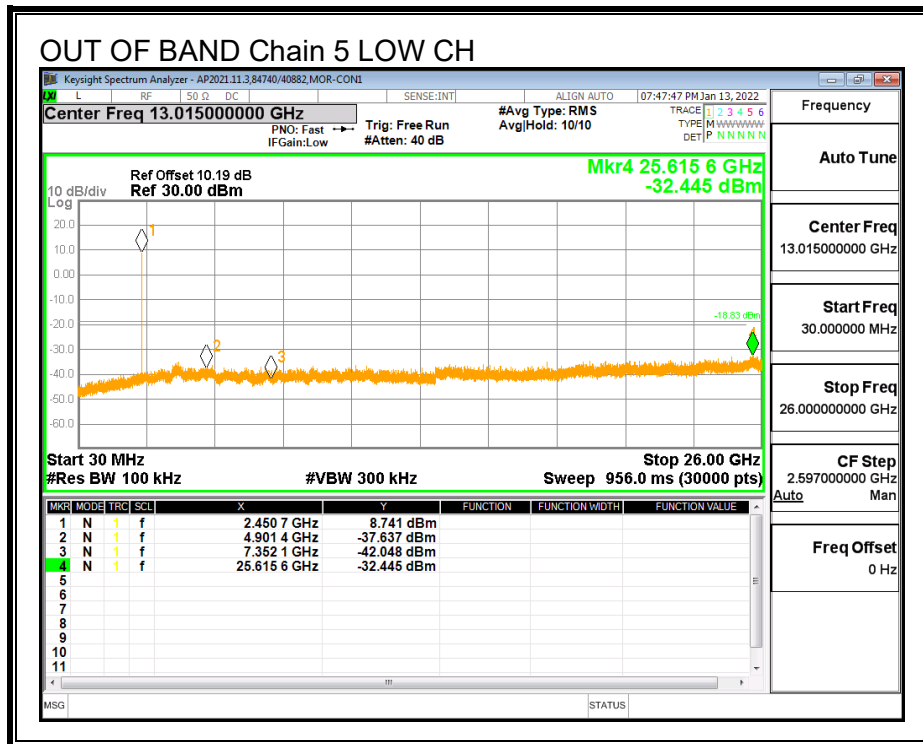
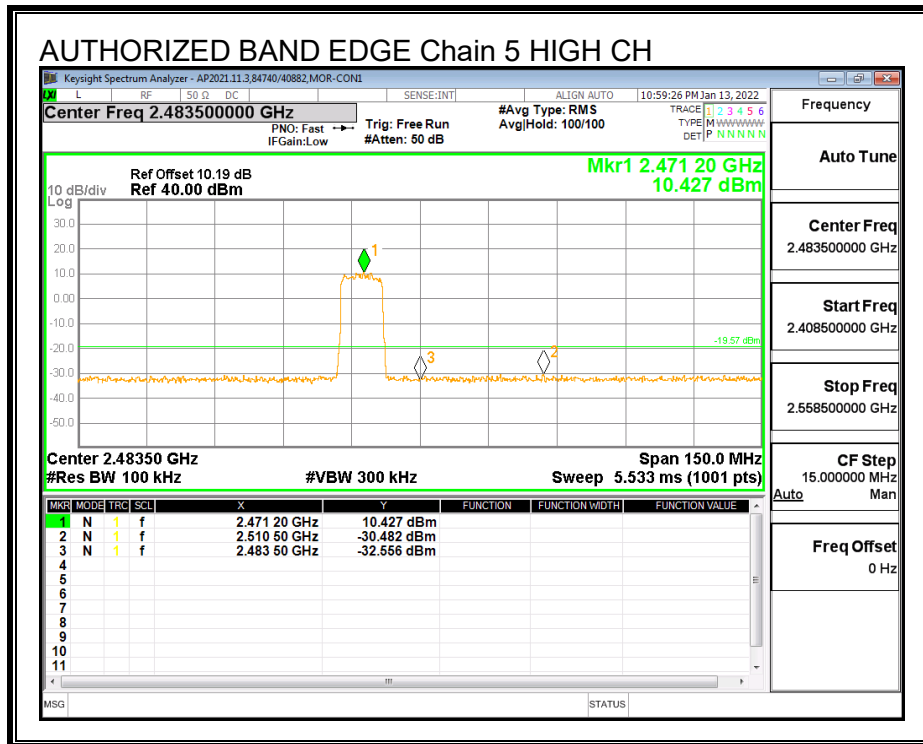


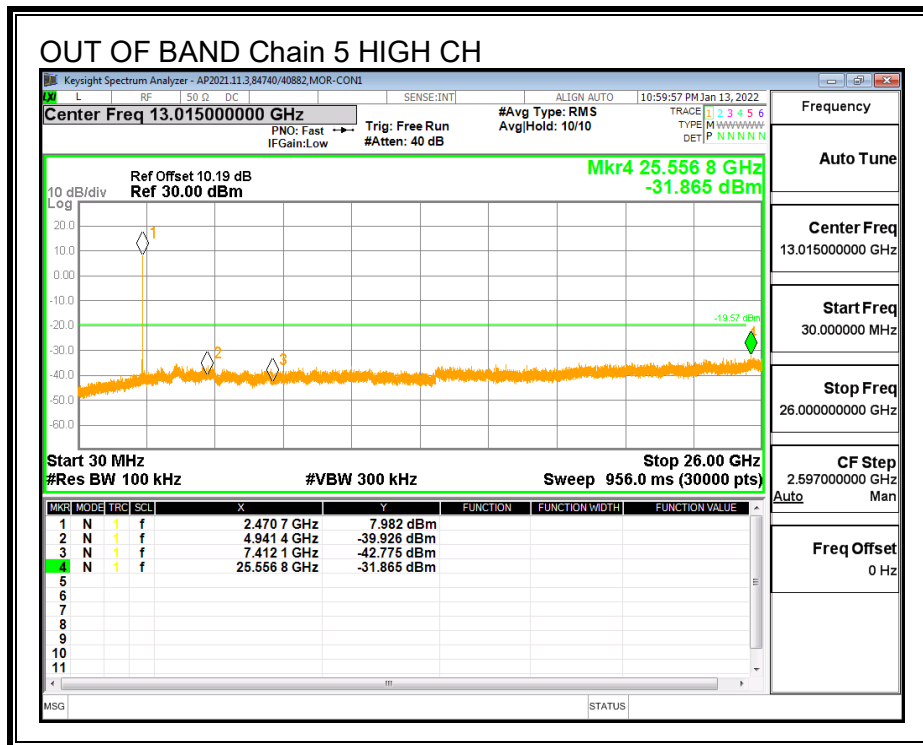
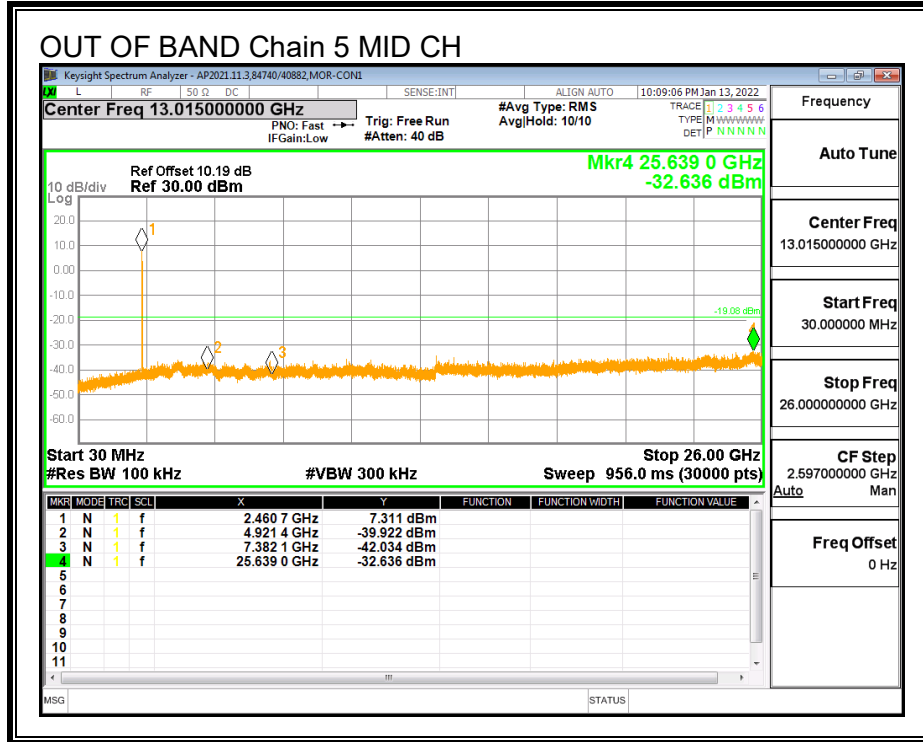


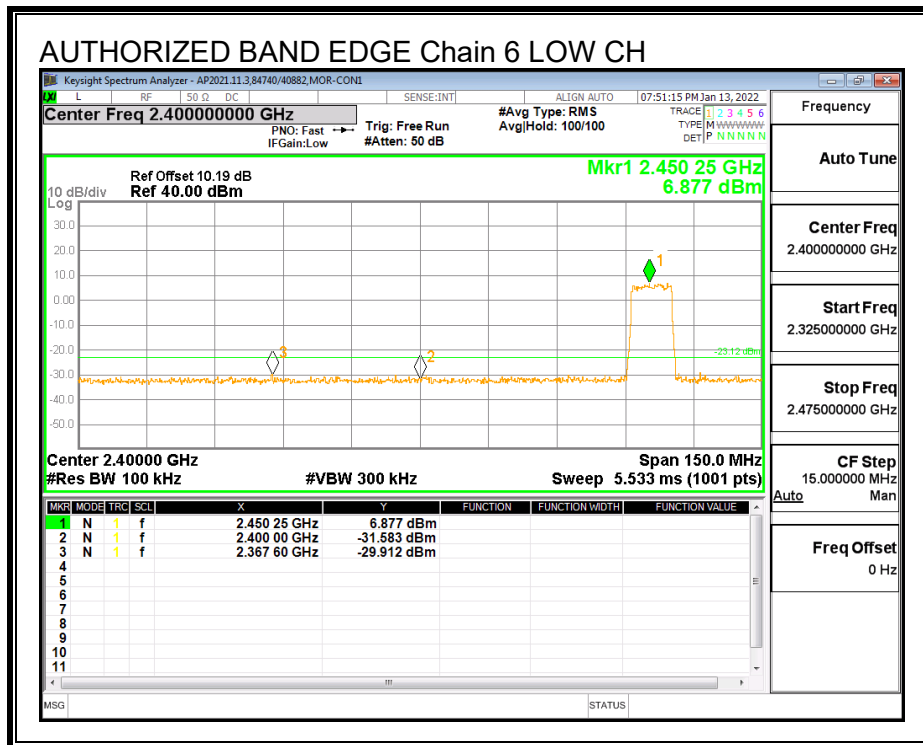
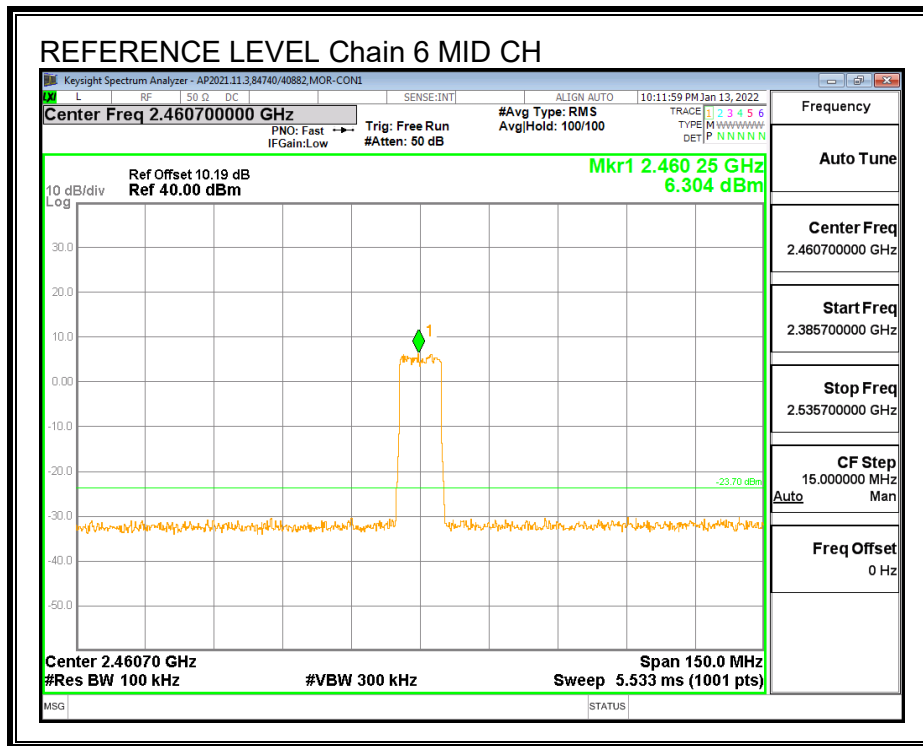


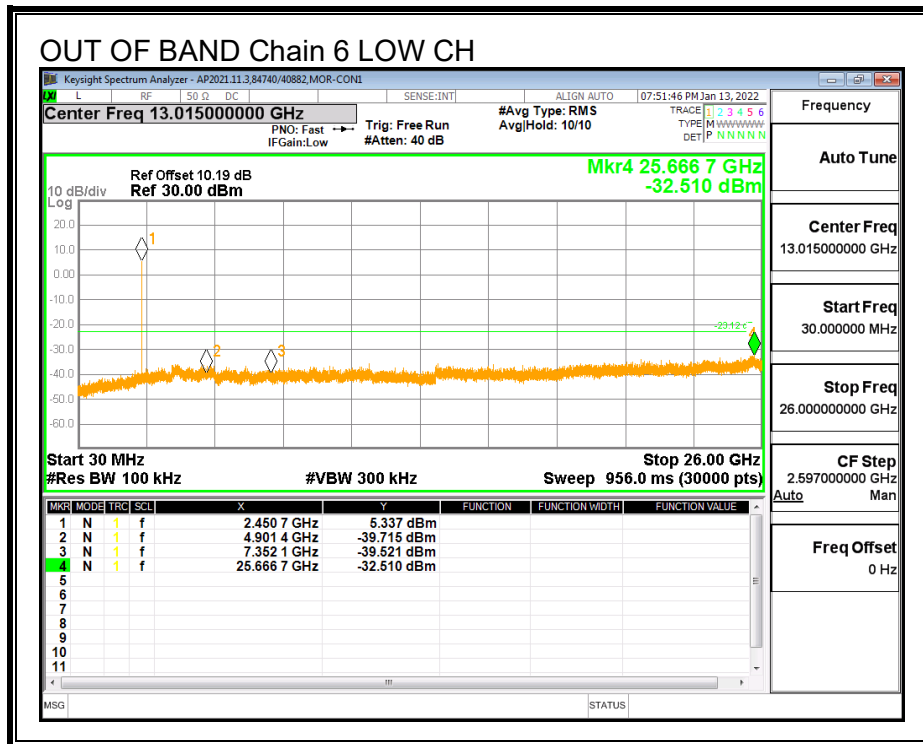
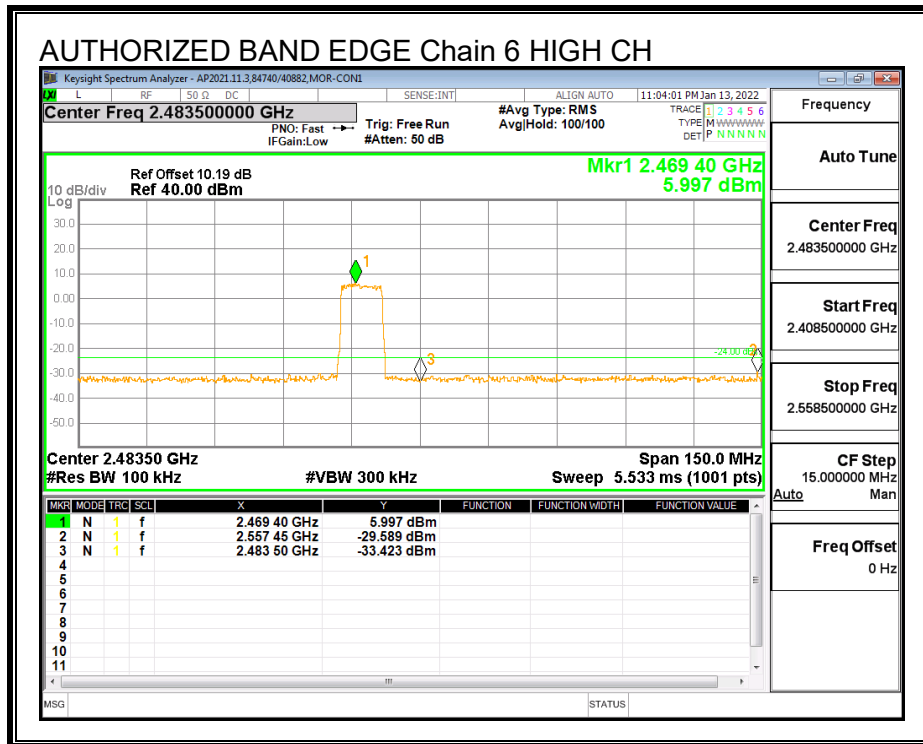


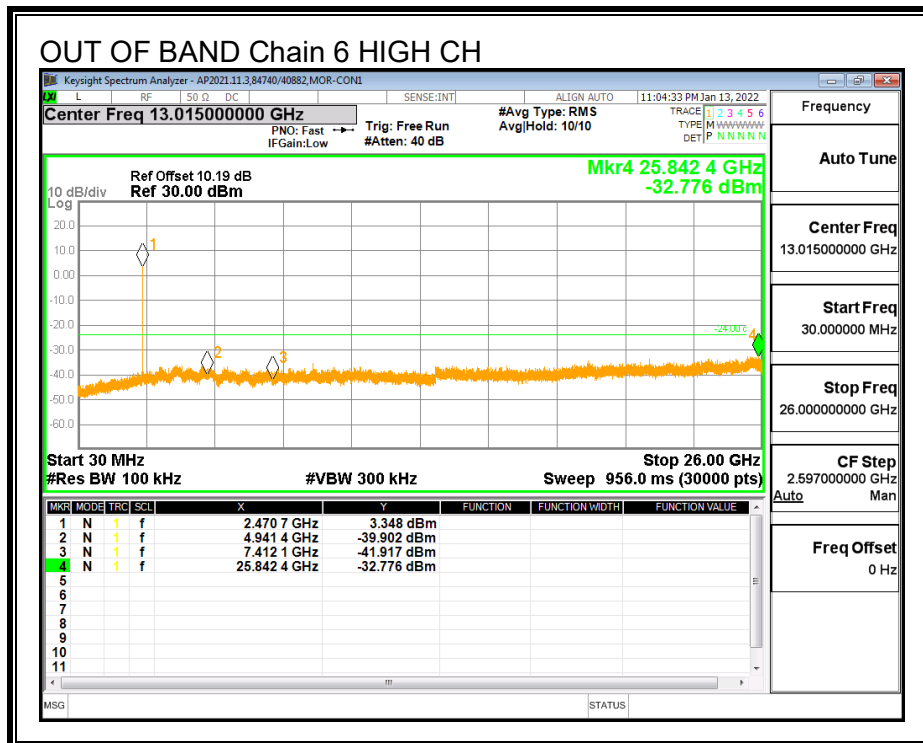
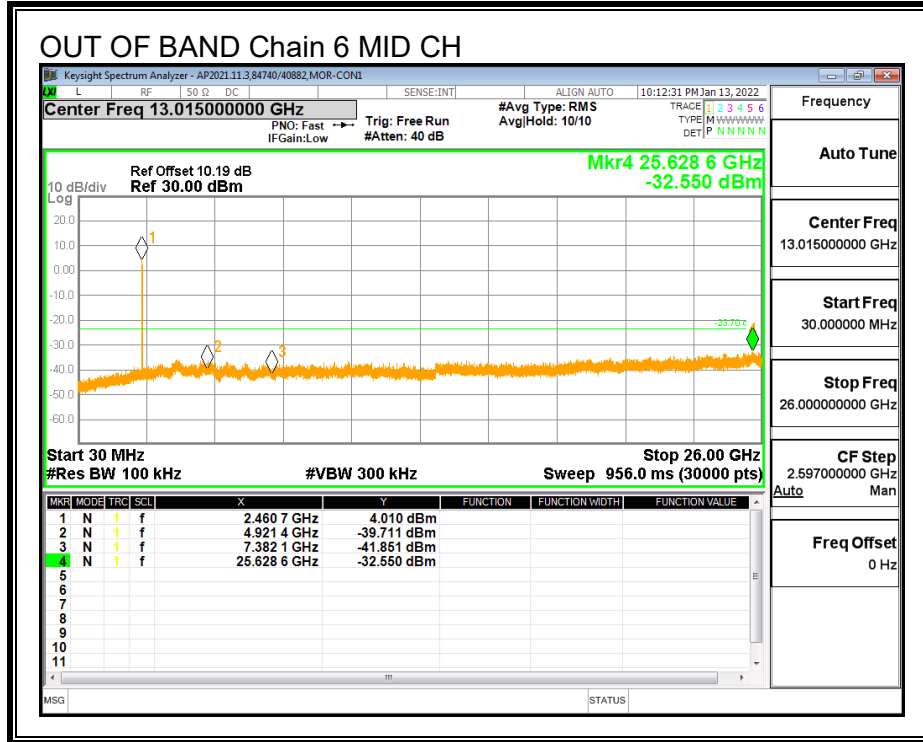


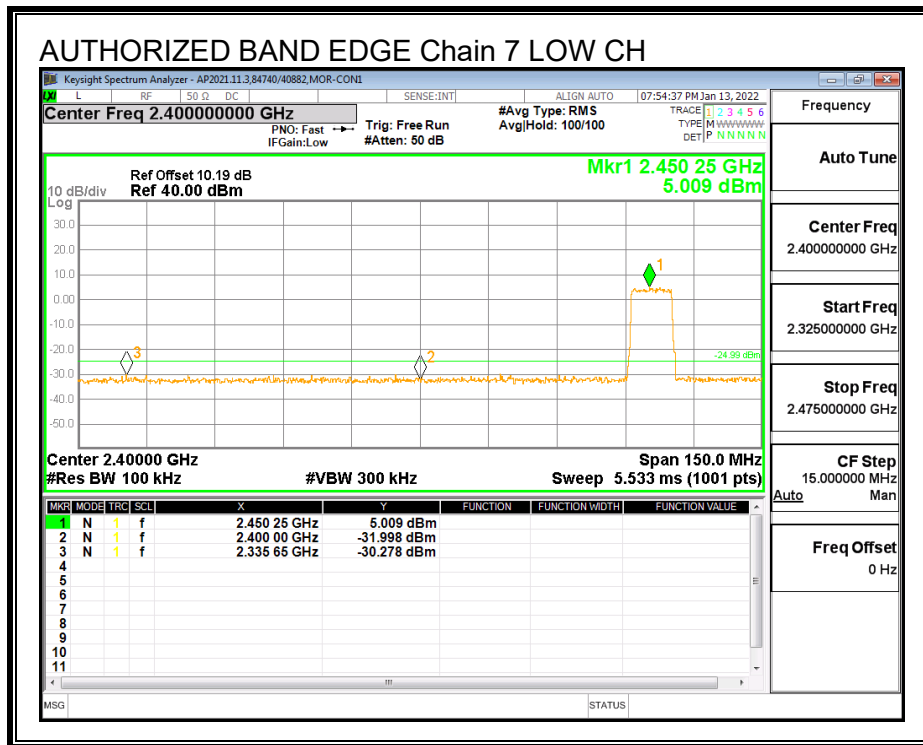
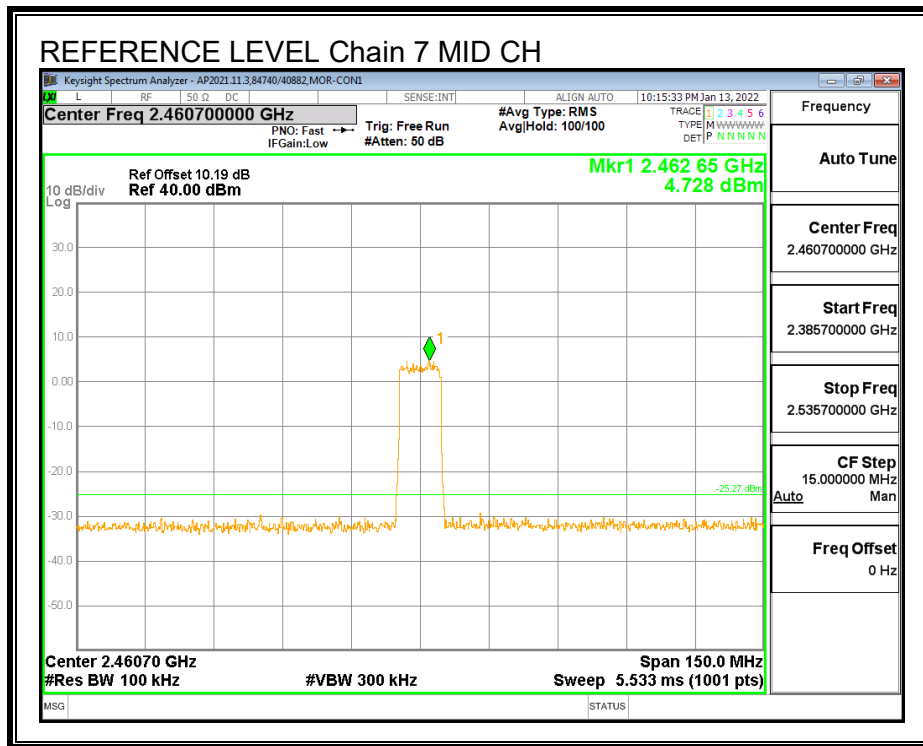


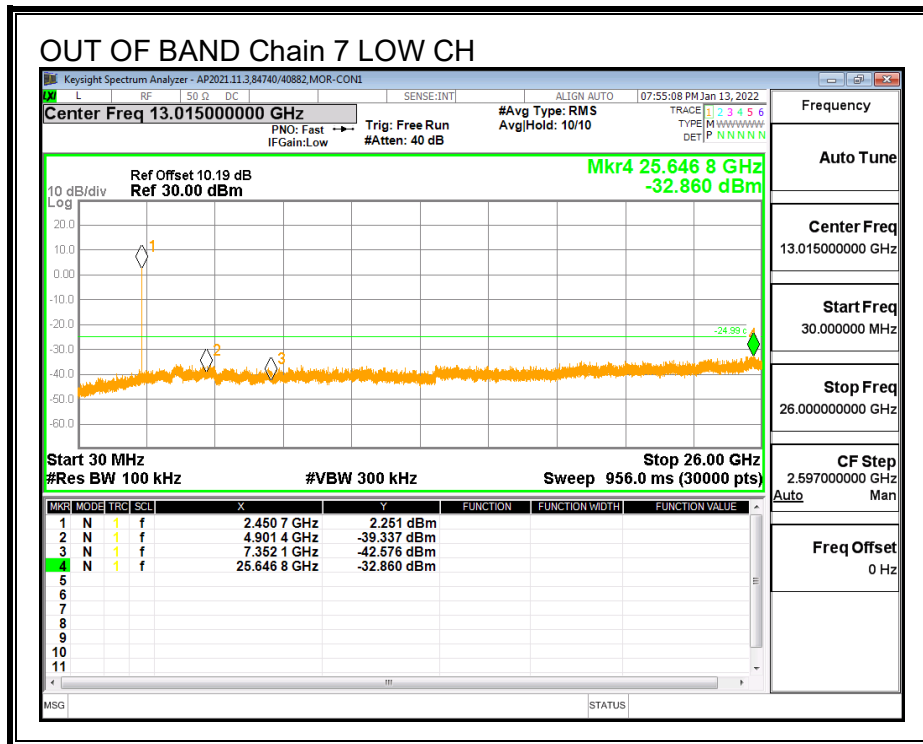
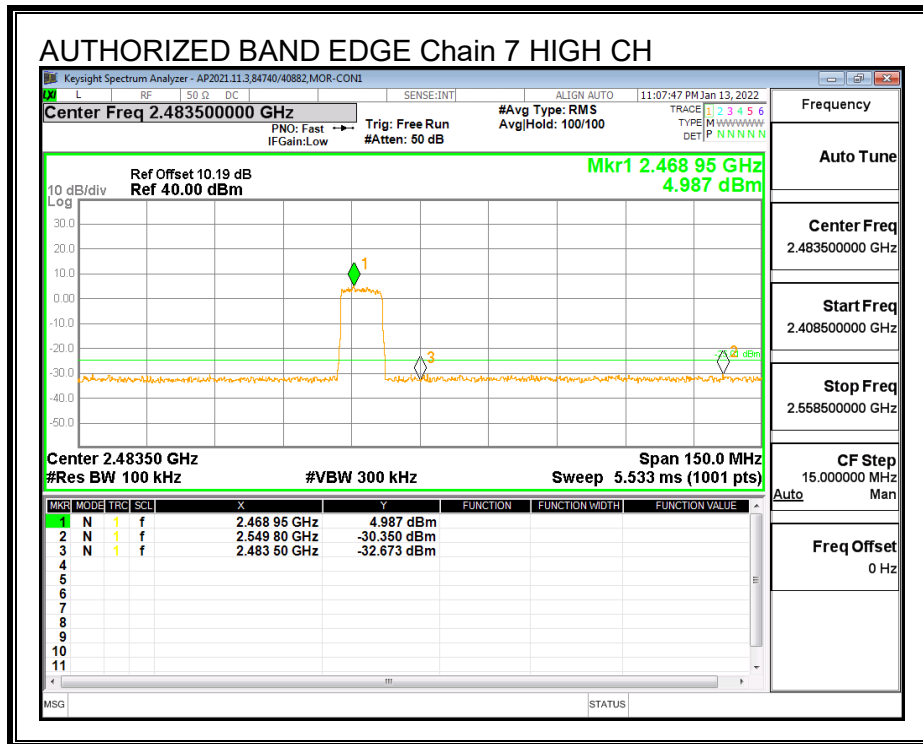


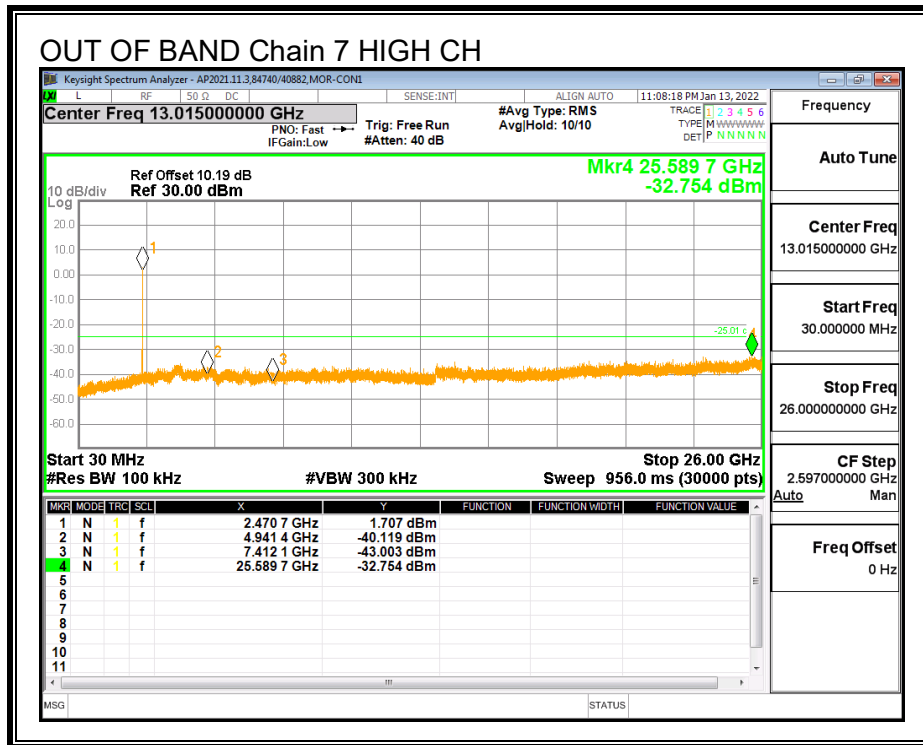
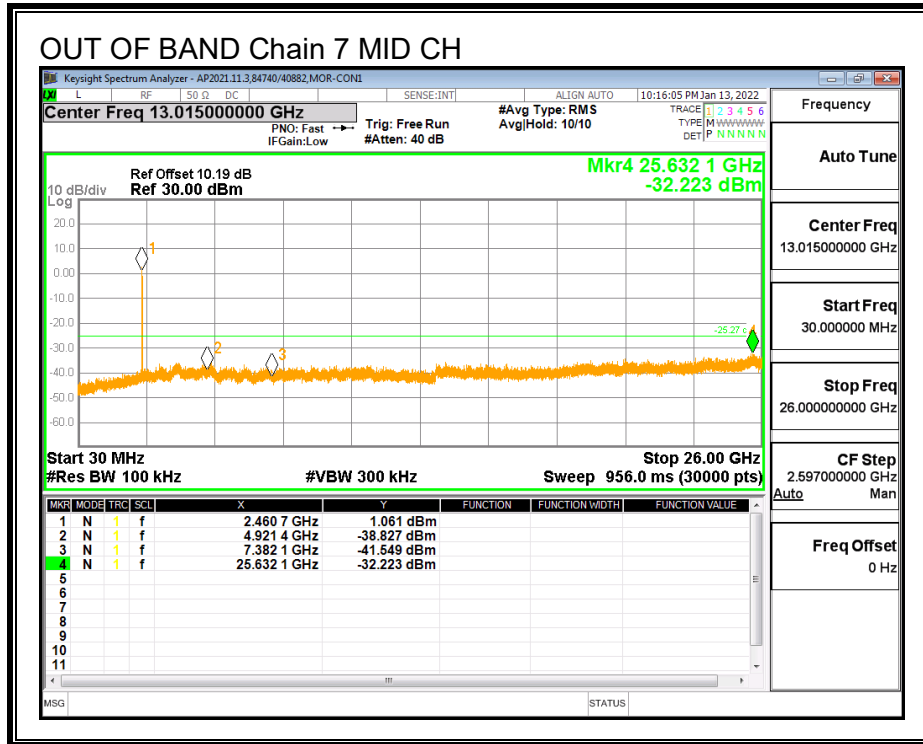


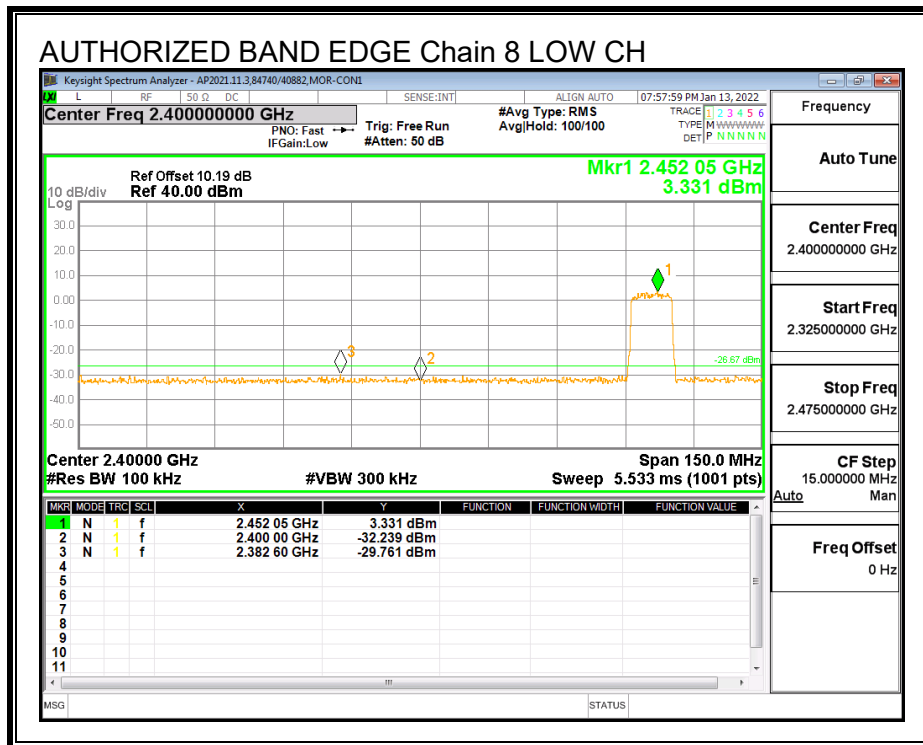
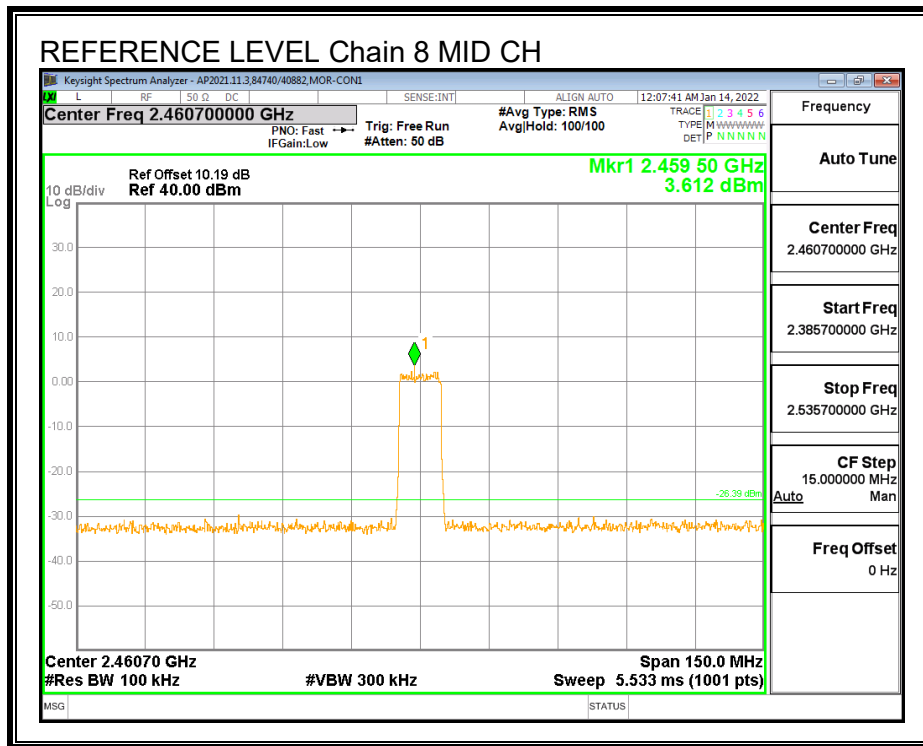


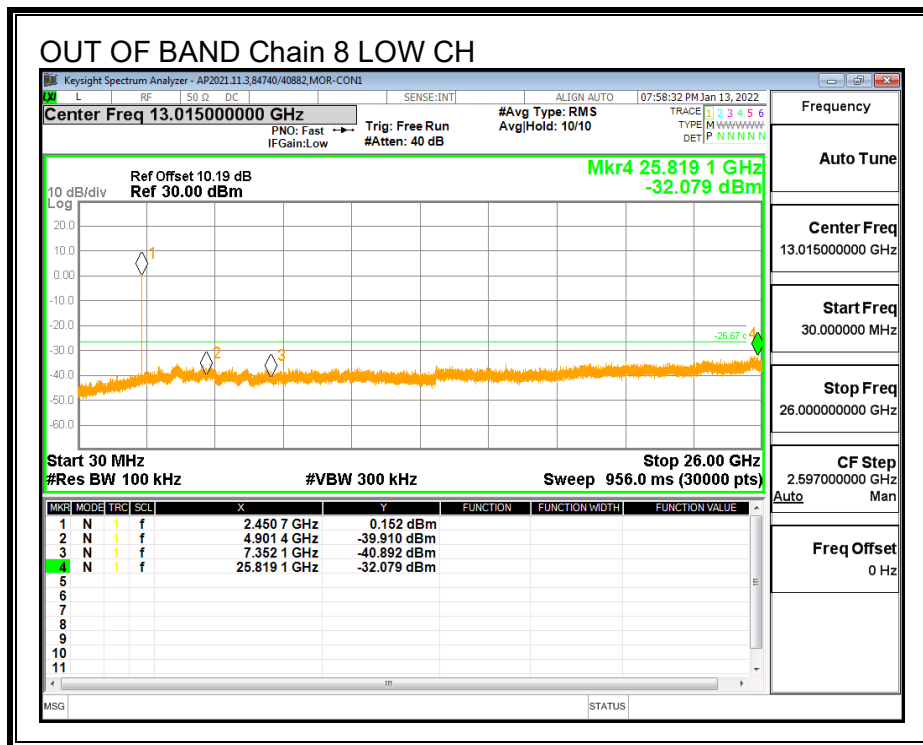
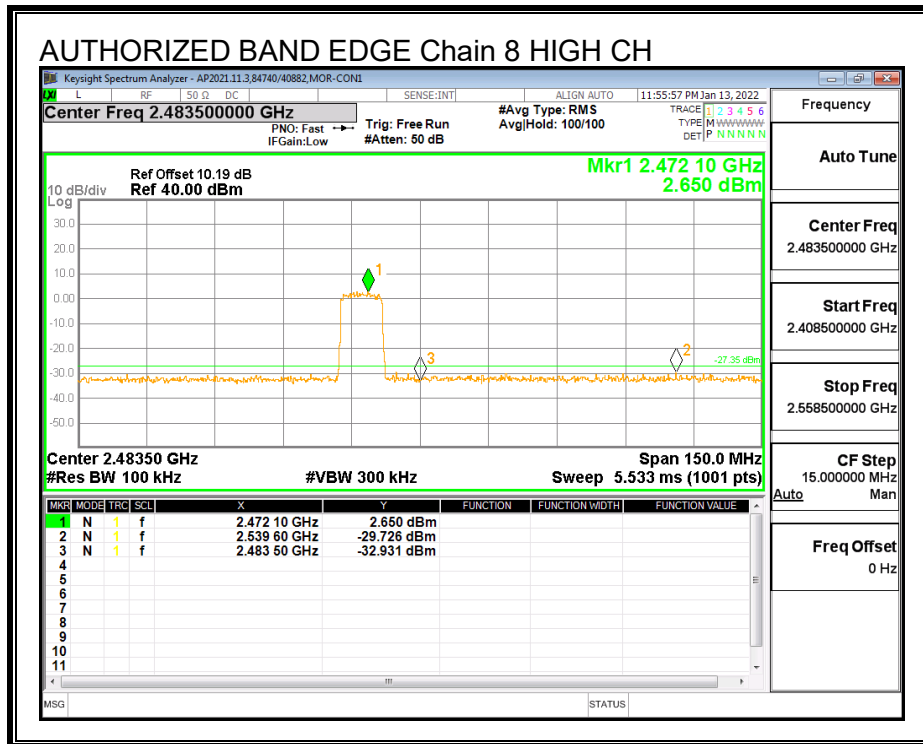


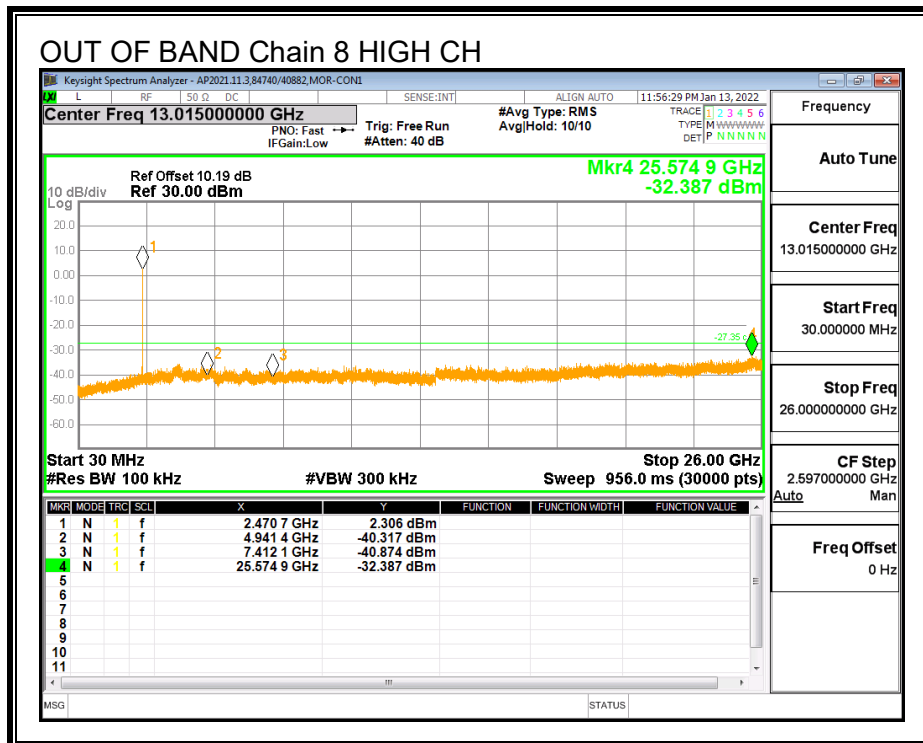
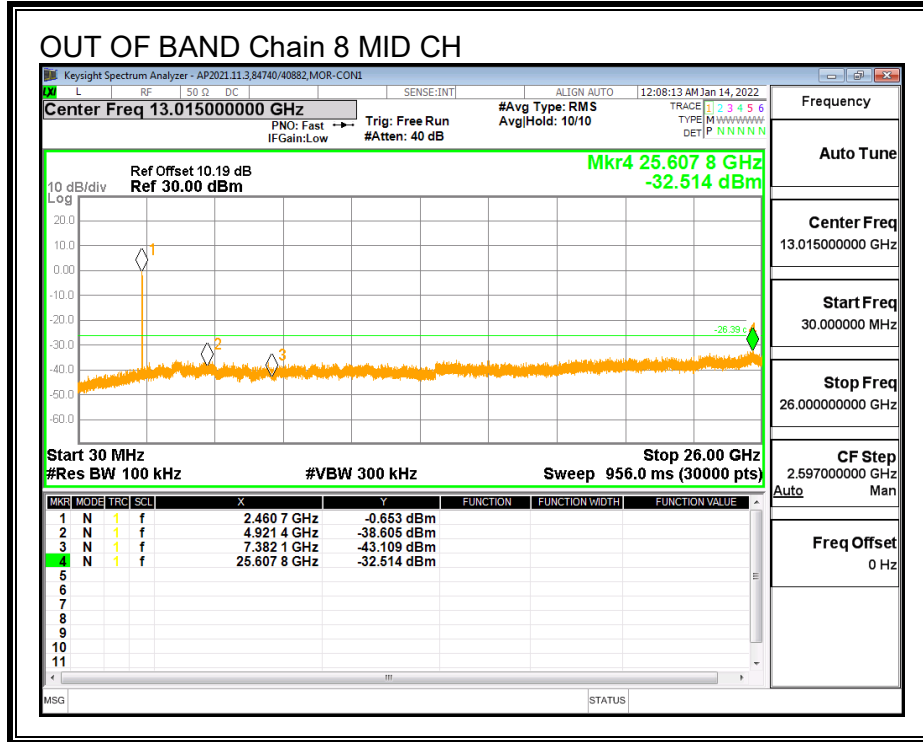












11. ANTENNA PORT RESTRICTED BAND LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

Frequency Range (MHz)	Field Strength (dBuV/m)	Measurement Distance (m)
0.009 - 0.490	$20 \cdot \log[2400/F(\text{kHz})]$	300
0.490 - 1.705	$20 \cdot \log[24000/F(\text{kHz})]$	30
1.705 - 30	29.5	30
30 - 88	40	3
88 - 216	43.5	3
216 - 960	46	3
Above 960	54	3

TEST PROCEDURE

The conducted measurements were made for this test.

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 in the 30-1000MHz range, 9kHz for peak and/or quasi-peak detection measurements in the 0.15-30MHz range and 200Hz for peak and/or quasi-peak detection measurements in the 9 to 150kHz range. Peak detection is used unless otherwise noted as quasi-peak or average (9-90kHz and 110-490kHz).

For peak measurements above 1 GHz, the resolution bandwidth is set to 1 MHz and the video bandwidth is set to 3 MHz. For average measurements above 1GHz, the resolution bandwidth and video bandwidth are set as described in ANSI C63.10: 2013 for the applicable measurement.

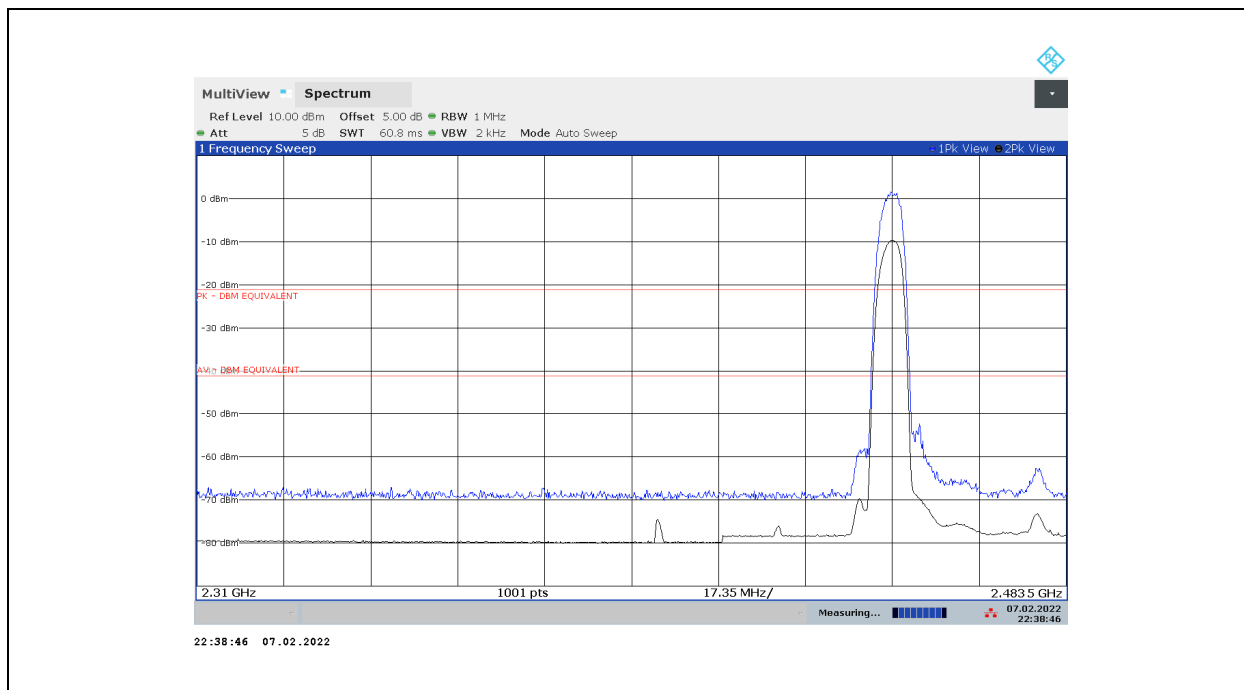
For this evaluation, Reduced Video Bandwidth Averaging was used as duty cycles that are not constant. For spurious testing, the worse-case minimum VBW for 3RB mode (20kHz) and FRB mode (10kHz) was utilized. For Bandedge testing, the VBW utilized for each mode was the minimum required as defined in Section 9.1 and 10.1.

The spectrum from 9 kHz to 26 GHz is investigated with the transmitter set to the channels/modes as described in Section 6.5.

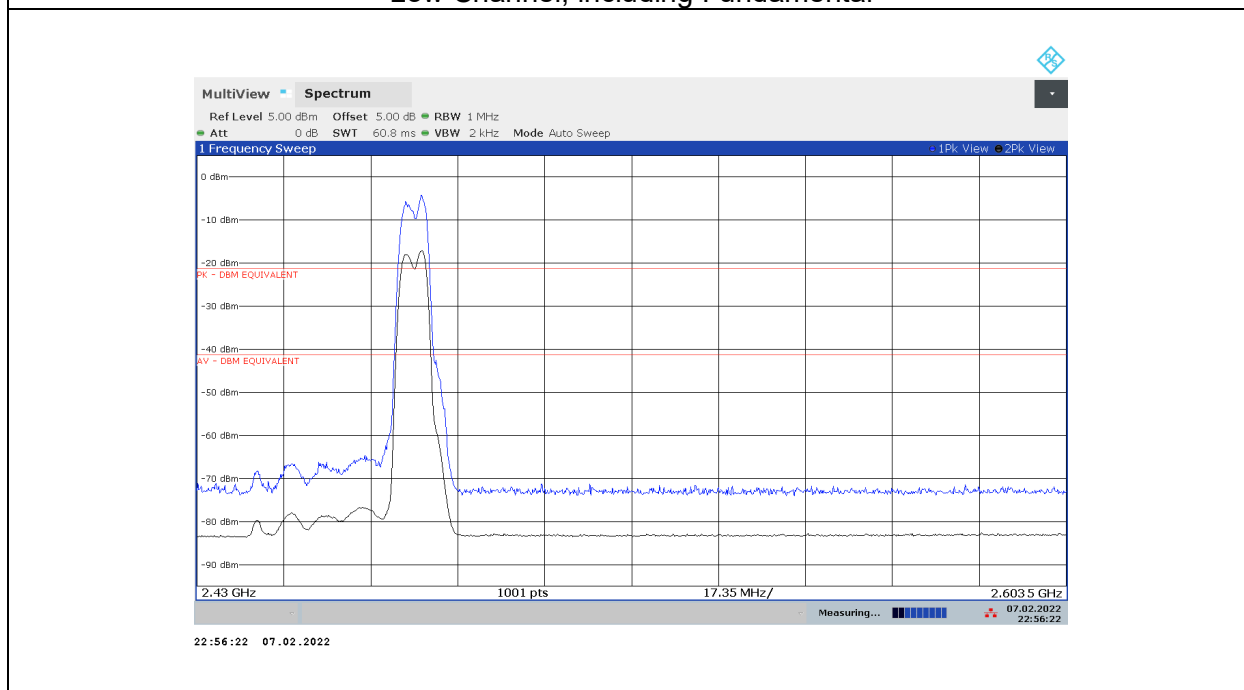
All 8 antenna ports were measured individually and then the ports and their associated antenna gained were summed as described in ANSI C63.10: 2013, Section 11.12.2.2.

No emissions detected below 30MHz.

REPRESENTATIVE RESTRICTED BANDEDGE PLOTS



Low Channel, including Fundamental



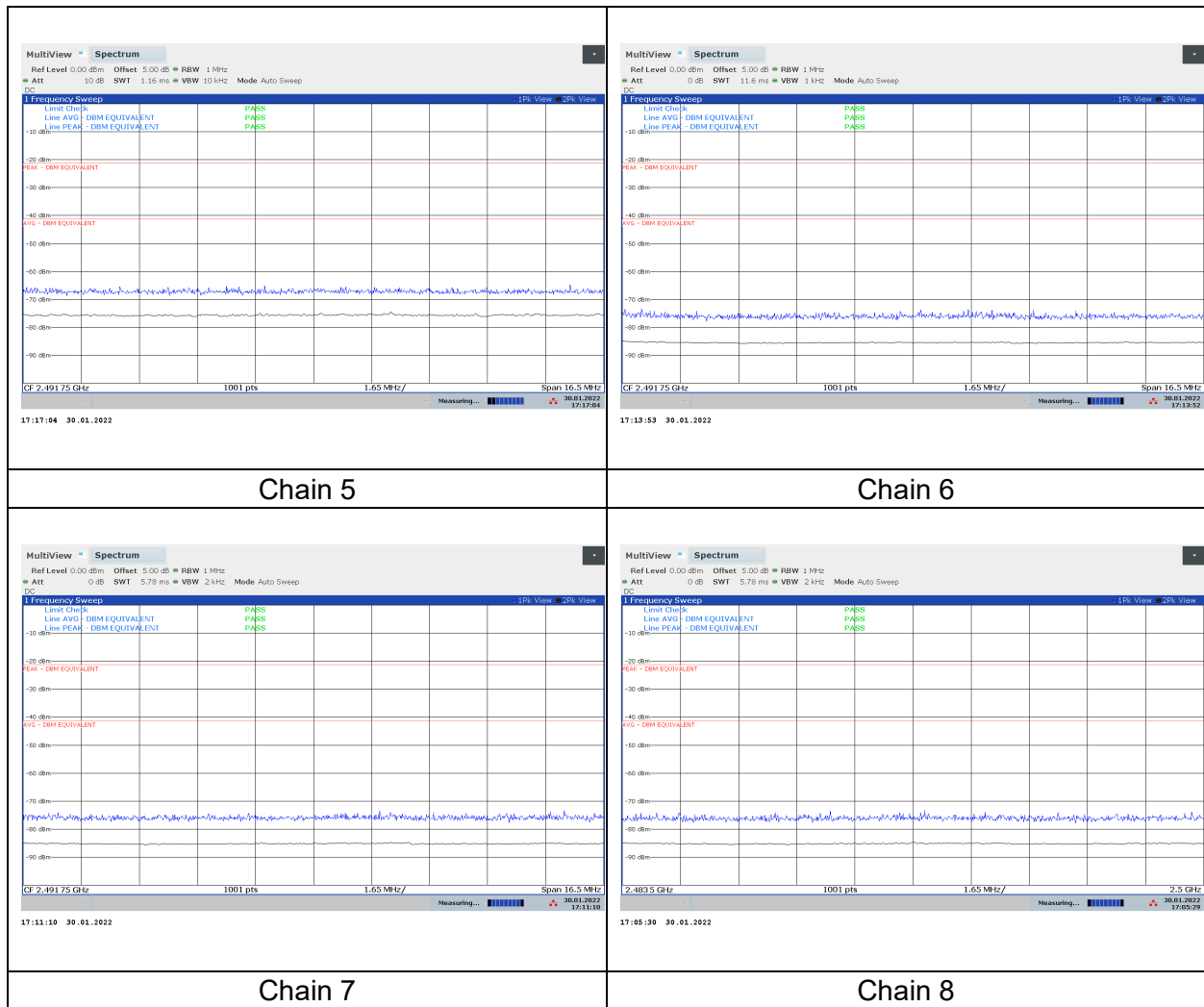
High Channel, including Fundamental

Note: Initially, all Bandedge plots were taken without the fundamental included in the plot. The above Bandedge measurements were taken with the fundamental included to show the fundamental was present during all testing.

11.1. 3RB, 4.5MHz BW, QPSK MODE, TX IN THE 2.4 GHz BAND

11.1.1. LOW CHANNEL RESTRICTED BAND EDGE

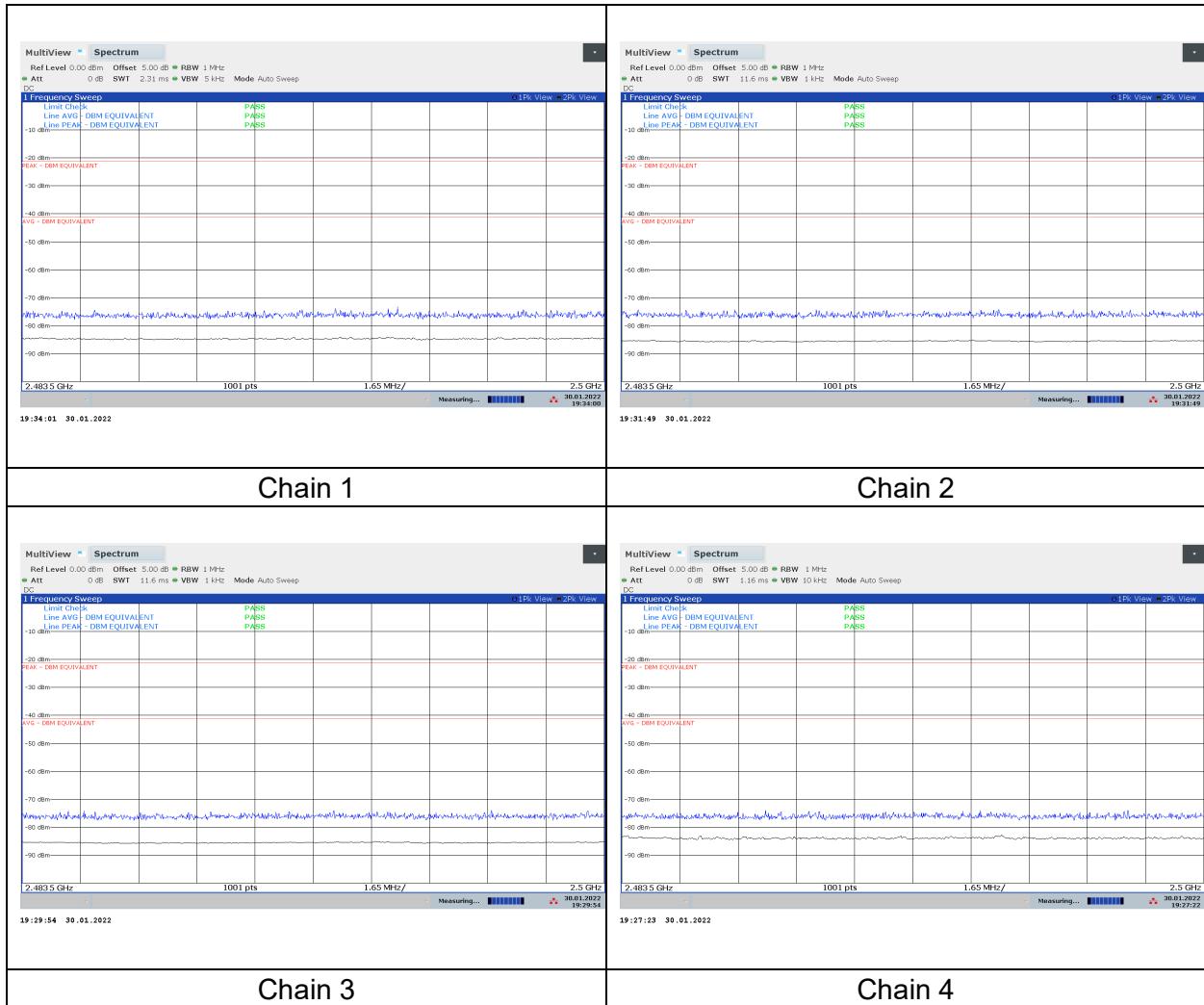


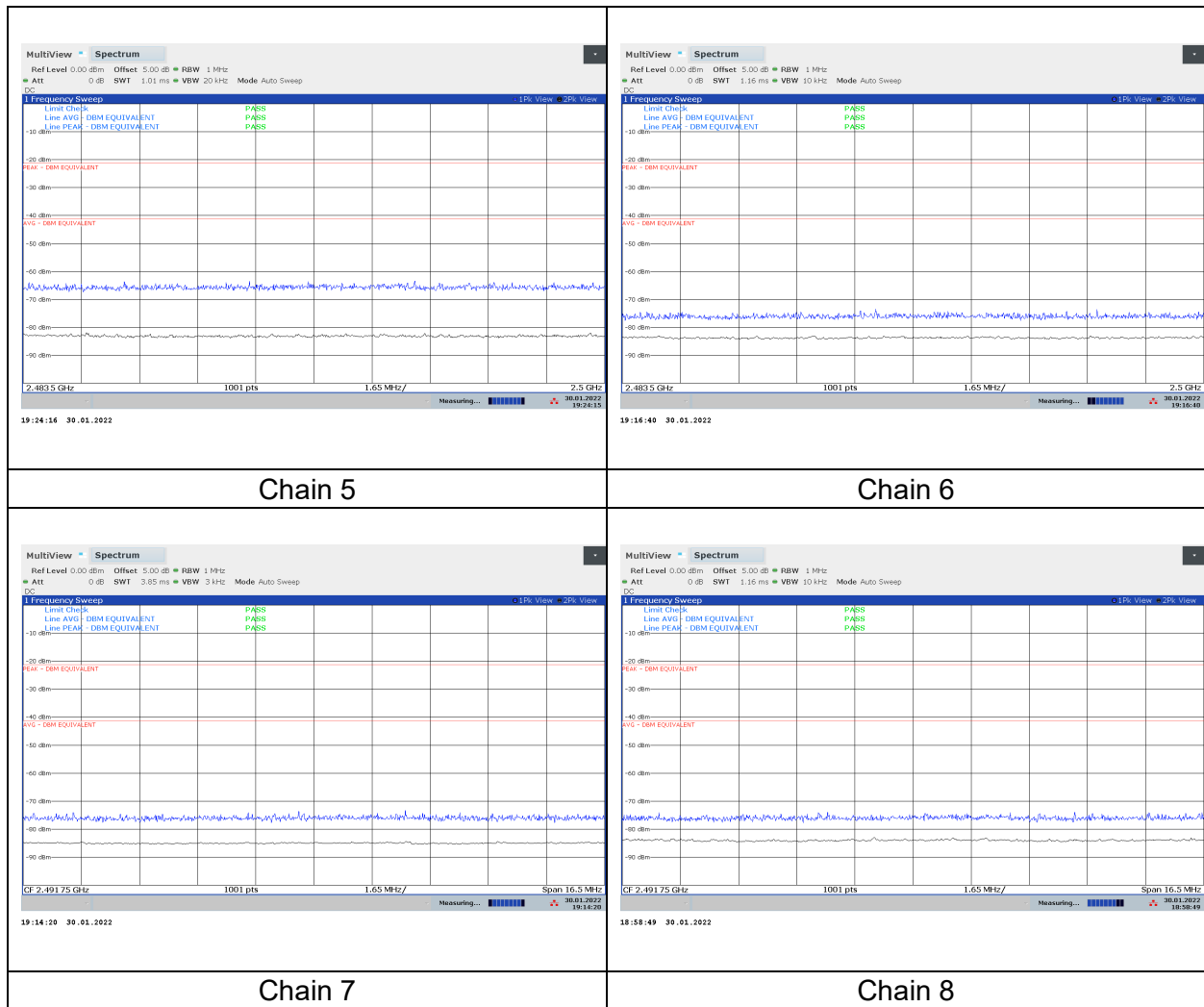


Restricted Band (Low Channel) Tabular Summed Data, Worse-case Frequency:

Chain	0	1	2	3	4	5	6	7		Declared Array Gain	GRB (dB)	Meas. Dist (m)
Gain (dBi)	0	0	0	0	0	0	0	0		26.8	0	3
Frequency (GHz)	PK Value Chain 0 (dBm)	PK Value Chain 1 (dBm)	PK Value Chain 2 (dBm)	PK Value Chain 3 (dBm)	PK Value Chain 4 (dBm)	PK Value Chain 5 (dBm)	PK Value Chain 6 (dBm)	PK Value Chain 7 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	PK E-field Limit (dBuV/m)	PK E-field Margin (dB)
2.385	-75.56	-76.92	-76.11	-75.52	-64.77	-76.50	-75.48	-75.98	-36.13	59.13	74	-14.87
Frequency (GHz)	AV Value Chain 0 (dBm)	AV Value Chain 1 (dBm)	AV Value Chain 2 (dBm)	AV Value Chain 3 (dBm)	AV Value Chain 4 (dBm)	AV Value Chain 5 (dBm)	AV Value Chain 6 (dBm)	AV Value Chain 7 (dBm)	AV EIRP (dBm)	AV E-field (dBuV/m)	AV E-field Limit (dBuV/m)	AV E-field Margin (dB)
2.361	-85.15	-84.89	-85.10	-85.29	-74.49	-85.37	-84.84	-85.09	-45.63	49.63	54	-4.37

11.1.2. HIGH CHANNEL RESTRICTED BAND EDGE

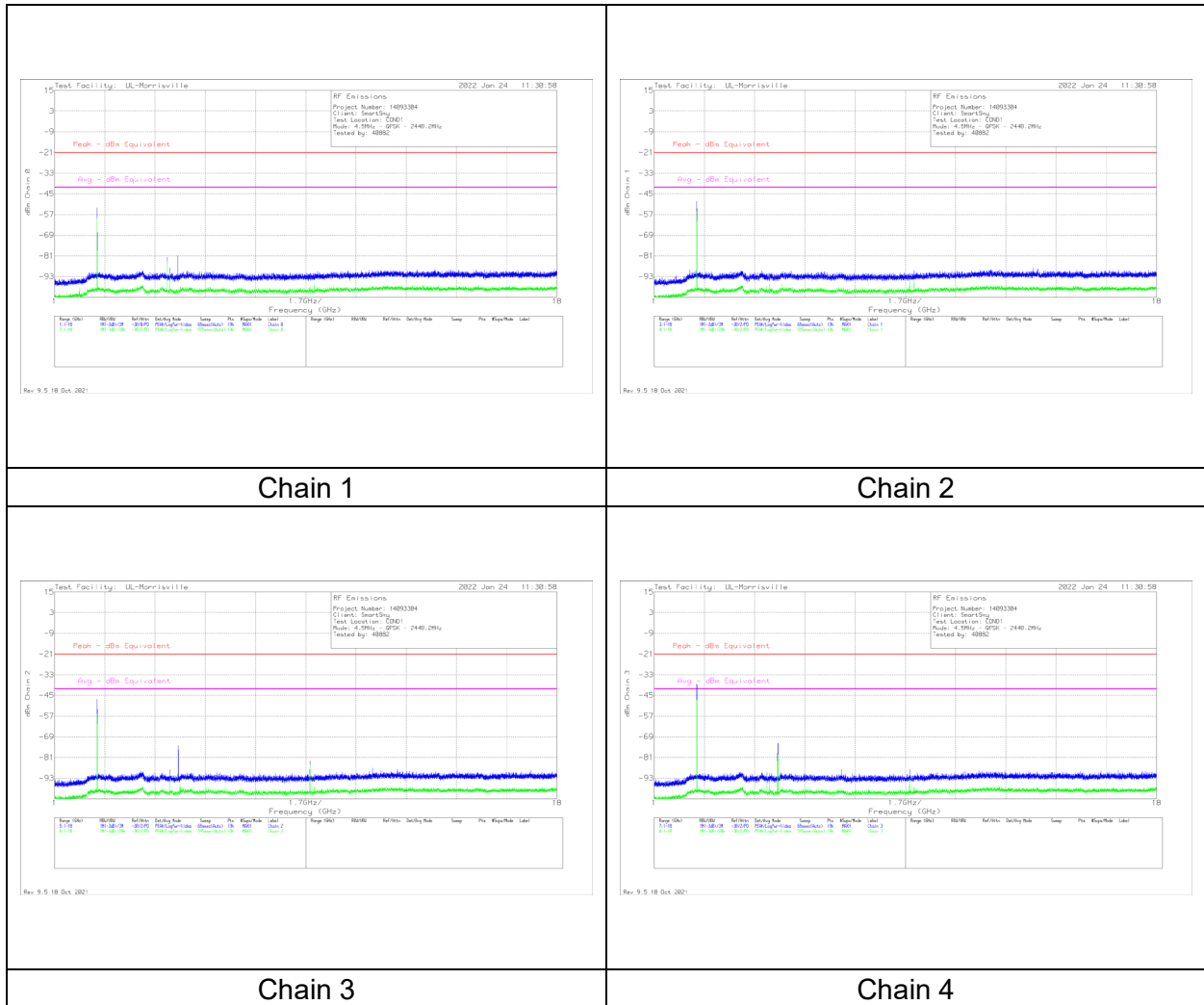


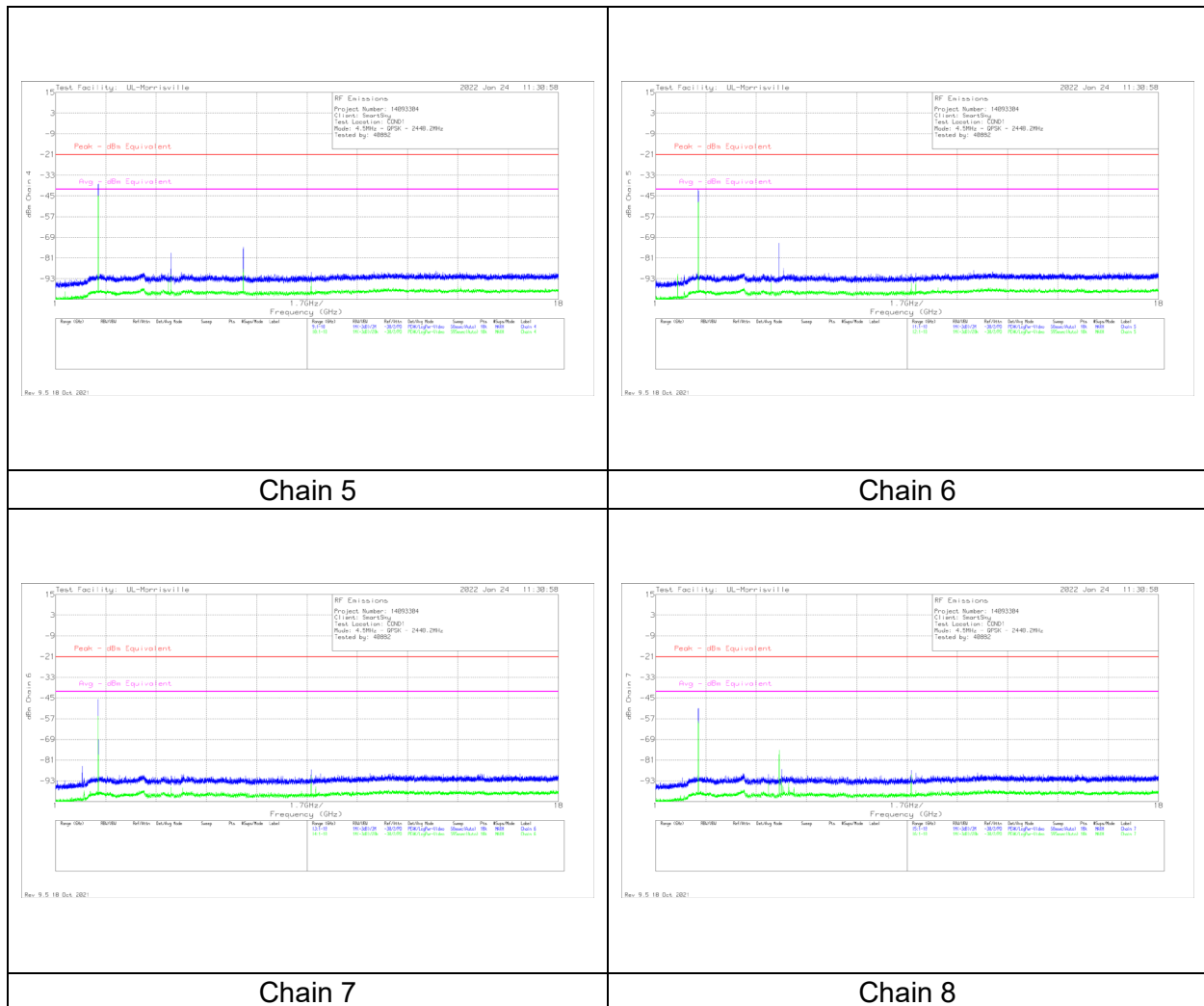


Restricted Band (High Channel) Tabular Summed Data, Worse-case Frequency:

Chain	0	1	2	3	4	5	6	7		Declared Array Gain	GRB (dB)	Meas. Dist (m)
Gain (dBi)	0	0	0	0	0	0	0	0		26.8	0	3
Frequency (GHz)	PK Value Chain 0 (dBm)	PK Value Chain 1 (dBm)	PK Value Chain 2 (dBm)	PK Value Chain 3 (dBm)	PK Value Chain 4 (dBm)	PK Value Chain 5 (dBm)	PK Value Chain 6 (dBm)	PK Value Chain 7 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	PK E-field Limit (dBuV/m)	PK E-field Margin (dB)
2.49	-76.10	-76.46	-76.94	-75.57	-63.57	-74.78	-75.83	-76.02	-35.29	59.97	74	-14.03
Frequency (GHz)	AV Value Chain 0 (dBm)	AV Value Chain 1 (dBm)	AV Value Chain 2 (dBm)	AV Value Chain 3 (dBm)	AV Value Chain 4 (dBm)	AV Value Chain 5 (dBm)	AV Value Chain 6 (dBm)	AV Value Chain 7 (dBm)	AV EIRP (dBm)	AV E-field (dBuV/m)	AV E-field Limit (dBuV/m)	AV E-field Margin (dB)
2.49	-84.24	-85.44	-85.35	-83.20	-82.71	-83.57	-84.78	-83.47	-48.16	47.10	54	-6.90

11.1.1. LOW CHANNEL SPURIOUS: 1-18 GHz

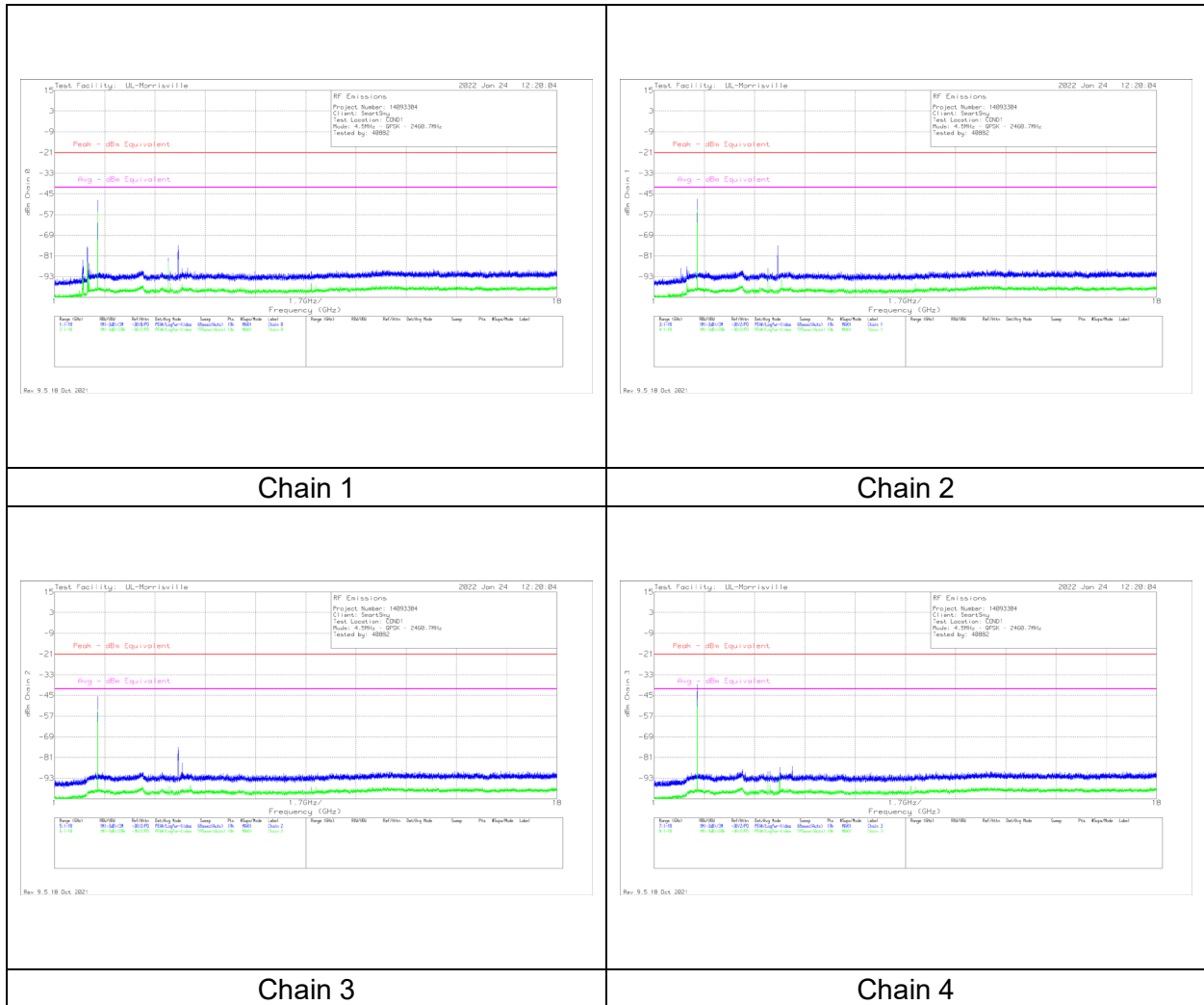




Spurious Low Channel Tabular Summed Data, Worse-case Frequency:

Chain	0	1	2	3	4	5	6	7		Declared Array Gain	GRB (dB)	Meas. Dist (m)
Gain (dBi)	0	0	0	0	0	0	0	0		26.8	0	3
Frequency (GHz)	PK Value Chain 0 (dBm)	PK Value Chain 1 (dBm)	PK Value Chain 2 (dBm)	PK Value Chain 3 (dBm)	PK Value Chain 4 (dBm)	PK Value Chain 5 (dBm)	PK Value Chain 6 (dBm)	PK Value Chain 7 (dBm)	PK EIRP (dBm)	PK E-field (dBuV/m)	PK E-field Limit (dBuV/m)	PK E-field Margin (dB)
5.17	-81.08	-91.89	-90.49	-78.61	-95.18	-72.31	-94.2	-93.76	-44.01	51.25	74	-22.75
Frequency (GHz)	AV Value Chain 0 (dBm)	AV Value Chain 1 (dBm)	AV Value Chain 2 (dBm)	AV Value Chain 3 (dBm)	AV Value Chain 4 (dBm)	AV Value Chain 5 (dBm)	AV Value Chain 6 (dBm)	AV Value Chain 7 (dBm)	AV EIRP (dBm)	AV E-field (dBuV/m)	AV E-field Limit (dBuV/m)	AV E-field Margin (dB)
5.18	-102.05	-102.1	-102.23	-79.57	-102.04	-101.85	-101.54	-75.26	-47.05	48.21	54	-5.79

11.1.2. MID CHANNEL SPURIOUS: 1-18 GHz



Chain 1

Chain 2

Chain 3

Chain 4