

Agilent Spectrum Analyzer - 092020 2.36.44355

100.000 MHz 10.000000 GHz

Center Freq 2.400000000 GHz

PRF: Fast
IF Gain: Low

TRIP: Free Run
#Atten: 36 dB

#Avg Type: RMS
Avg/Hold: 100100

102.500191MHz 25.000000 GHz

TRACE 1 2 3 4 5 6
TYPE: CHAN
RES: 100.000 kHz
DET: 1000000 Hz

Frequency

Auto Tune

Center Freq
2.400000000 GHz

Start Freq
2.350000000 GHz

Stop Freq
2.450000000 GHz

CF Stop
10.000000 MHz

Auto

Freq Offset
0 Hz

10 dB/div
Ref Offset 11.15 dB
Ref 25.00 dBm

Mkr1 2.403 9 GHz
11.617 dBm

10
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
-1.0
-2.0
-3.0
-4.0
-5.0
-6.0
-7.0
-8.0
-9.0
-10.0
-11.0
-12.0
-13.0
-14.0
-15.0
-16.0
-17.0
-18.0
-19.0
-20.0
-21.0
-22.0
-23.0
-24.0
-25.0
-26.0
-27.0
-28.0
-29.0
-30.0
-31.0
-32.0
-33.0
-34.0
-35.0
-36.0
-37.0
-38.0
-39.0
-40.0
-41.0
-42.0
-43.0
-44.0
-45.0
-46.0
-47.0
-48.0
-49.0
-50.0
-51.0
-52.0
-53.0
-54.0
-55.0

Center 2.400000 GHz
#Res BW 100 kHz

#VBW 300 kHz

Span 100.0 MHz
Sweep 3.733 MHz (1001 pts)

TRF1 MARKER TRACE RICH

TRF1	MARKER	TRACE	RICH	F	FUNCTION	FUNCTION VALUE	FUNCTION VALUE
1	N	f					
2	N	f					
3	N	f					
4	N	f					
5	N	f					
6	N	f					
7	N	f					
8	N	f					
9	N	f					
10	N	f					
11	N	f					
12	N	f					

MSO

STATUS

The screenshot displays the Agilent Spectrum Analyzer software interface. The main plot shows a frequency spectrum with a peak at 2.4037 GHz. The y-axis represents power in dBm, ranging from -50 to 20. The x-axis represents frequency in MHz, ranging from 10 to 30. The plot is titled "Mkr1 2.4037 GHz" and "9.911 dBm".

Key parameters and settings visible on the interface include:

- PRN:** Fast
- Trig:** Free Run
- Avg Type:** RMS
- Ref Offset:** 11.15 dB
- Ref:** 30.00 dBm
- Auto Tune** (button)
- Center Freq:** 13.015000000 GHz
- Start Freq:** 30.000000 MHz
- Stop Freq:** 26.000000000 GHz
- CF Step:** 2.597000000 GHz
- Auto** (button)
- Freq Offset:** 0 Hz
- Start:** 30 MHz
- #Res:** 100 kHz
- #VBW:** 300 kHz
- Sweep:** 956.0 ms (30000 pts)
- Stop:** 26.00 GHz

A table at the bottom of the interface lists the measurement results:

MN	NAME	TYPE	UNIT	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	f	Hz	2.4037 GHz		9.911 dBm
2	N	f	Hz	4.8240 GHz		-48.289 dBm
3	N	f	Hz	7.2360 GHz		-51.192 dBm
4	N	f	Hz	2.3994 GHz		-36.544 dBm

Rohde & Schwarz Spectrum Analyzer 407070 2.36.44359
 2.3500 GHz 100 kHz 25.00 dBm 100.0 MHz 3.733 ms 1001 pts
 Center Freq 2.400000000 GHz #VBW 300 kHz Span 100.0 MHz
 #Res BW 100 kHz Sweep 3.733 ms (1001 pts)
 Ref Offset 11.15 dB Ref 25.00 dBm
 Mkr1 2.4089 GHz 13.622 dBm
 PWR: Fast ECalib Low Trip: Free Run #Amen: 36 dB
 Avg Type: RMS AvgHold: 100100
 Trace 1 FREQ: 2.4089 GHz DE1: 13.622 dBm
 Auto Tun
 Center Freq 2.40000000 GHz
 Start Freq 2.35000000 GHz
 Stop Freq 2.45000000 GHz
 CF Step 10.000000 MHz
 Auto
 Freq Offset 0 Hz
 MSO STATUS

Active Spectrum Analyzer #0070.2.76.44751

PRN: Fast Trig: Free Run #Avg Type: RMS AvgHold: 10/10

Frequency

Auto Tune

Center Freq 13.015000000 GHz

Start Freq 30.000000 MHz

Stop Freq 26.000000000 GHz

CF Step 2.597000000 GHz

Auto Man

Freq Offset 0 Hz

Ref Offset 11.15 dB Ref 30.00 dBm

Mkr1 2.408 1 GHz 12.132 dBm

Start 30 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 956.0 ms (30000 pts) Stop 26.00 GHz

MARK	NAME	TRACE	DATA	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	f	2.408 1 GHz			12.132 dBm
2	N	f	4.834 0 GHz			-49.730 dBm
3	N	f	7.261 0 GHz			-49.968 dBm
4	N	f	2.388 0 GHz			-35.046 dBm

MSO1

STATUS

Rohde & Schwarz Spectrum Analyzer: #0070 1.16.00351

Center Freq 2.400000000 GHz

Ref Offset 11.15 dB
Ref 25.00 dBm

PRF: Fast
IF/Gate: Low

Trigger: Free Run
#Aver: 36 dB

Avg Type: RMS
Avg/Hold: 100/100

Trace 1: Freq (MHz) [2.4137 GHz]

Frequency

Auto Tun

Center Freq
2.400000000 GHz

Start Freq
2.350000000 GHz

Stop Freq
2.450000000 GHz

CF Stop
10.000000 MHz

Freq Offset
0 Hz

Span 100.0 MHz
Sweep 3.733 ms (1001 pts)

#VBW 300 kHz

10 dB/div
Log

2.4137 GHz
16.418 dBm

LINE	MODE	TYPE	EDGE	FREQ	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	f		2.4137 GHz			16.418 dBm
2	N	f		2.4000 GHz			-38.712 dBm
3	N	f		2.3992 GHz			-33.599 dBm

MSO

STATUS

Actual Spectrum Analyzer - AP0026-2.46.4515

PRF: Fast Trig: Free Run #Avg Type: RMS AvgHold: 10/10 TRACK 1 2 3 4 5
 IF GainLow #Meas: 30 dB TYPE: Normal det: 0.0019 Hz

Frequency Auto Tune

Center Freq 13.015000000 GHz

Start Freq 30.000000 MHz

Stop Freq 28.000000000 GHz

CF Step 2.697000000 GHz

Auto Man

Freq Offset 0 Hz

Ref Offset 11.15 dB Ref 30.00 dBm

Mkr1 2.413 GHz 15.568 dBm

Start 30 MHz Stop 26.00 GHz
 #Res BW 100 kHz #VBW 300 kHz Sweep 956.0 ms (30000 pts)

MARK	FREQ	TRACE	DB	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	f	2.413 GHz		15.568 dBm	
2	N	f	4.844 GHz		-60.200 dBm	
3	N	f	7.266 GHz		-60.339 dBm	
4	N	f	2.356 GHz		-36.593 dBm	

10 dB/div
 Log

20.0
 10.0
 0.0
 -10.0
 -20.0
 -30.0
 -40.0
 -50.0
 -60.0
 -70.0
 -80.0

1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11

MSO: STATUS

OUT-OF-BAND LOW CHANNEL 3



MID CHANNEL REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



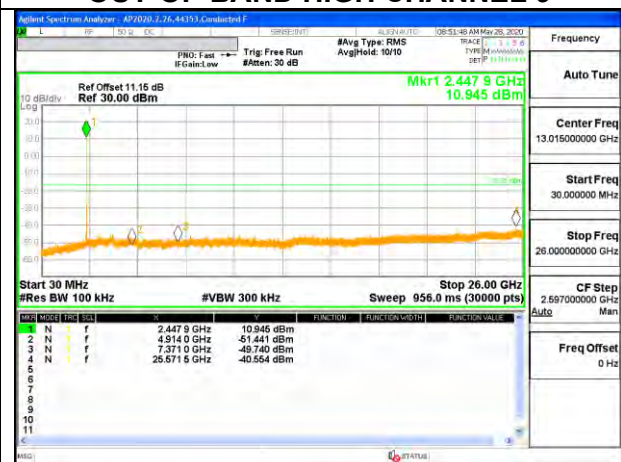
HIGH CHANNEL 9 BANDEDGE



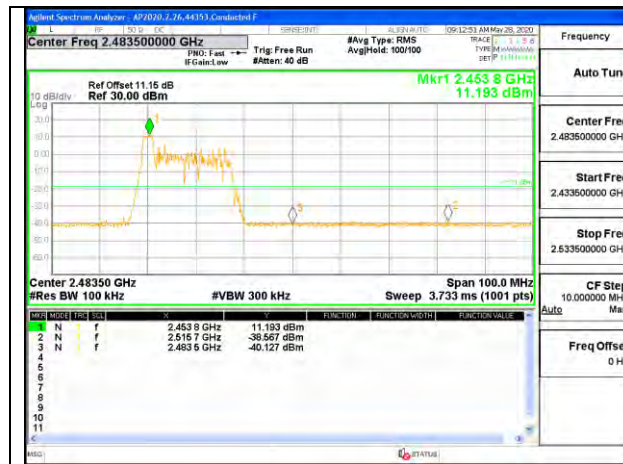
OUT-OF-BAND HIGH CHANNEL 9



HIGH CHANNEL 10 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 10



HIGH CHANNEL 11 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 11



HIGH CHANNEL 12 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 12

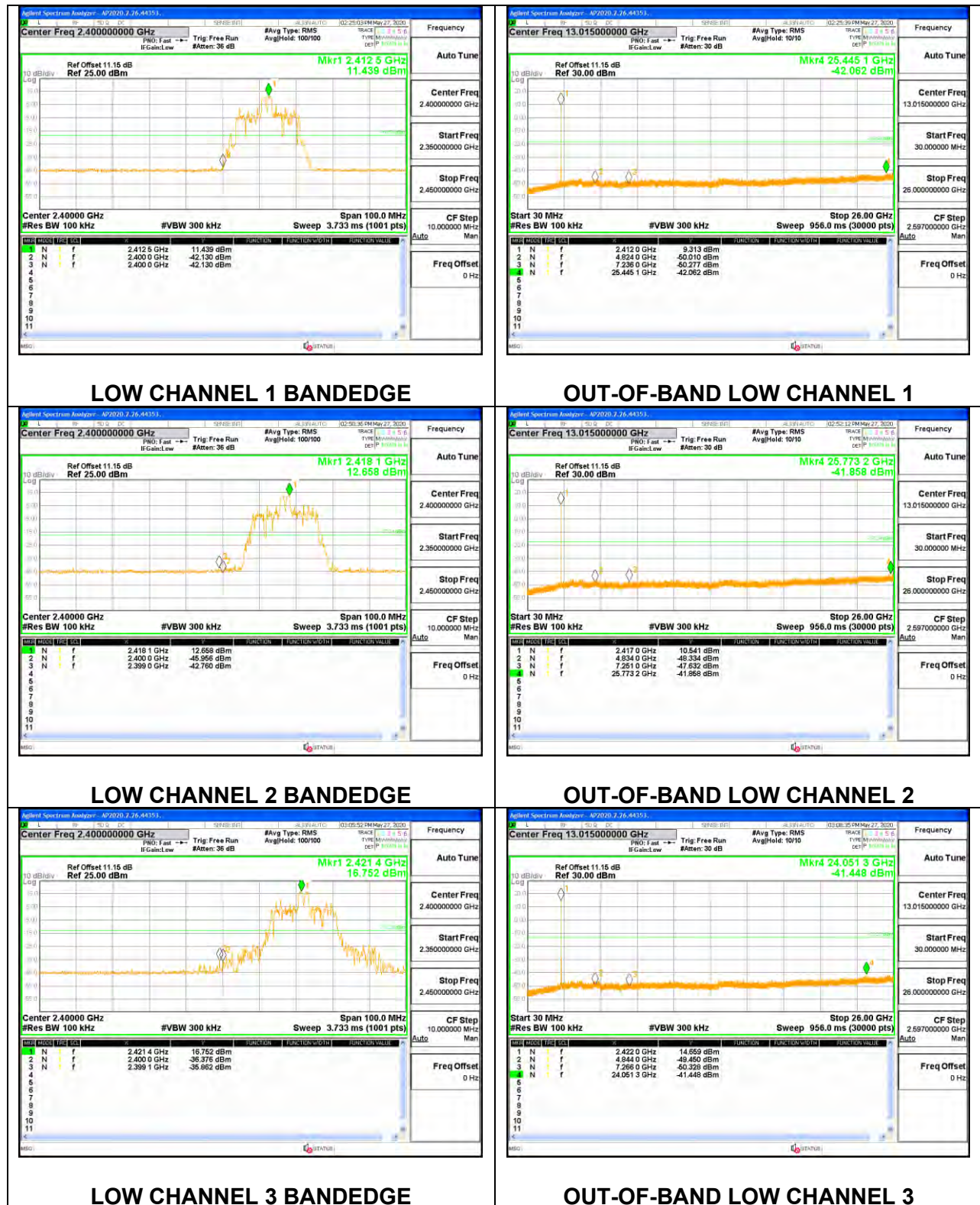


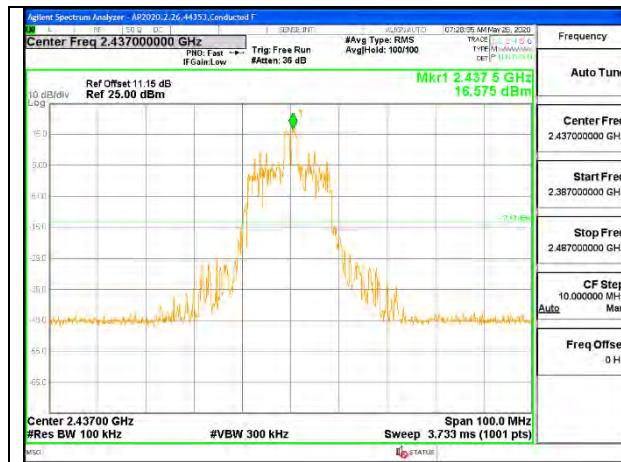
HIGH CHANNEL 13 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 13

1TX ANT 4 MODE, 26-Tone RU Index 4





MID CHANNEL REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



HIGH CHANNEL 9 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 9



HIGH CHANNEL 10 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 10



HIGH CHANNEL 11 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 11



HIGH CHANNEL 12 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 12

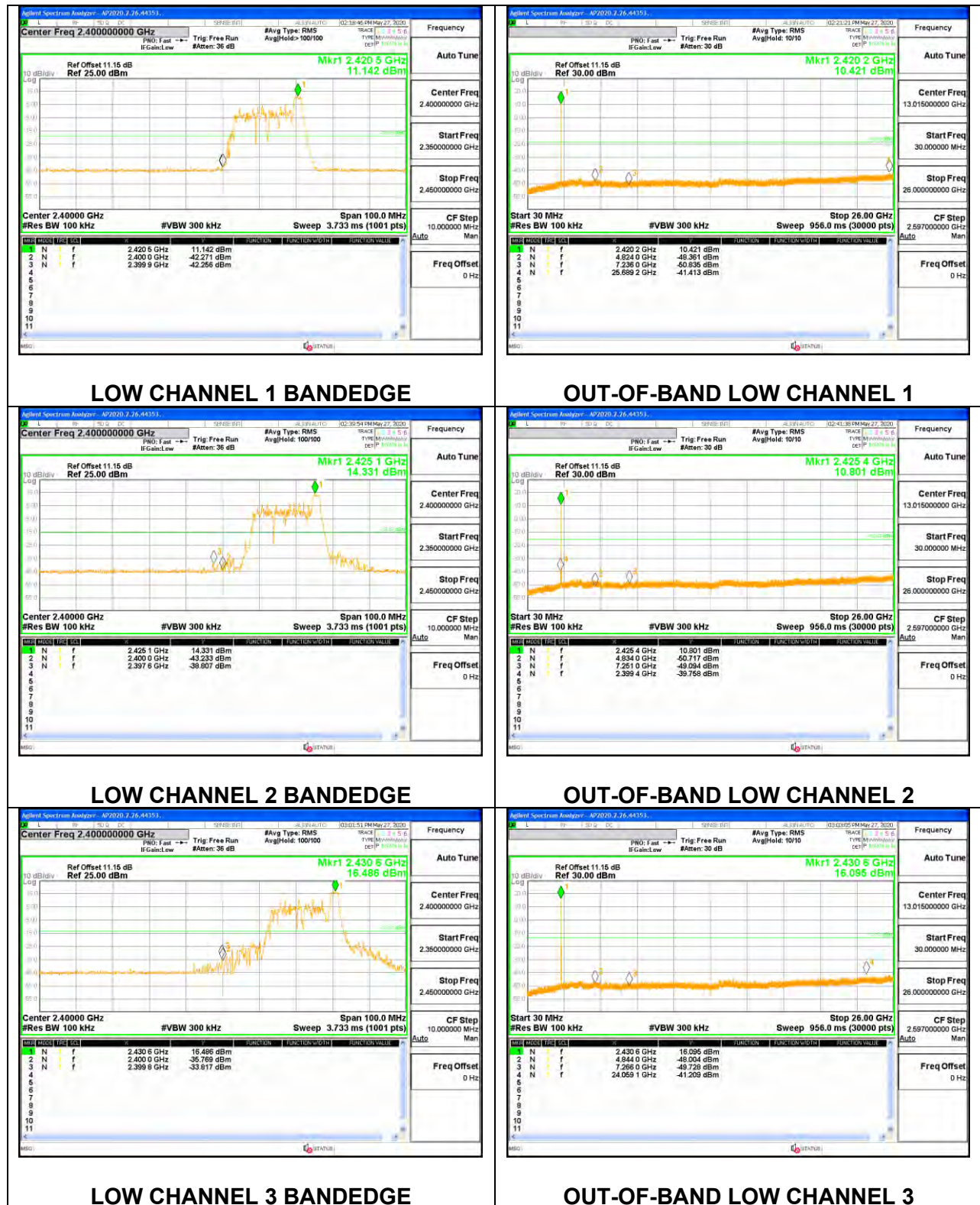


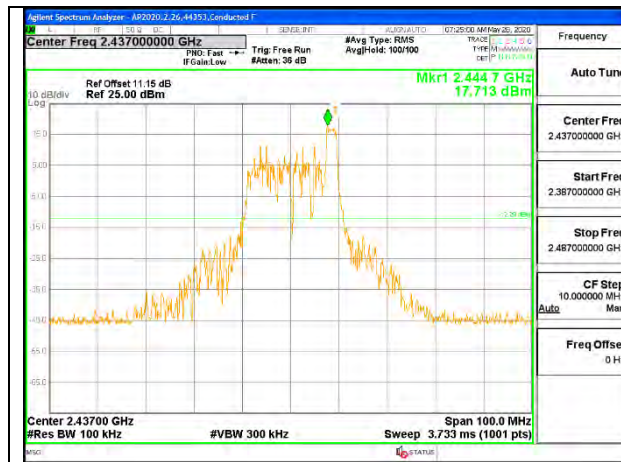
HIGH CHANNEL 13 BANDEDGE



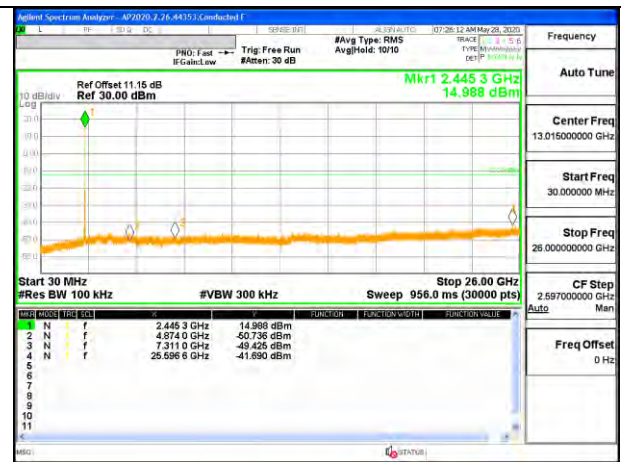
OUT-OF-BAND HIGH CHANNEL 13

1TX ANT 4 MODE, 26-Tone RU Index 8





MID CHANNEL REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



HIGH CHANNEL 9 BANDEDGE



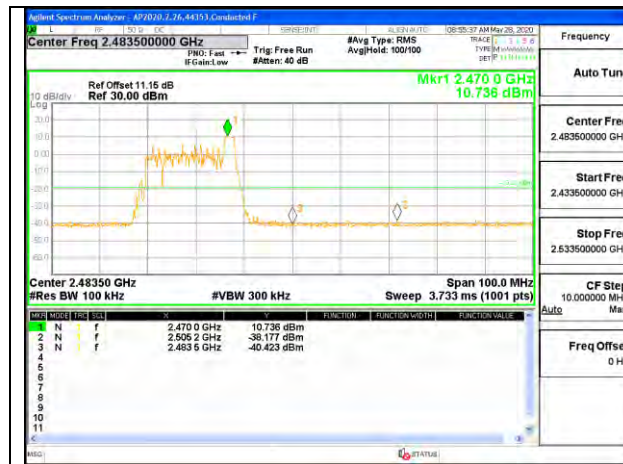
OUT-OF-BAND HIGH CHANNEL 9



HIGH CHANNEL 10 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 10



HIGH CHANNEL 11 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 11



HIGH CHANNEL 12 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 12

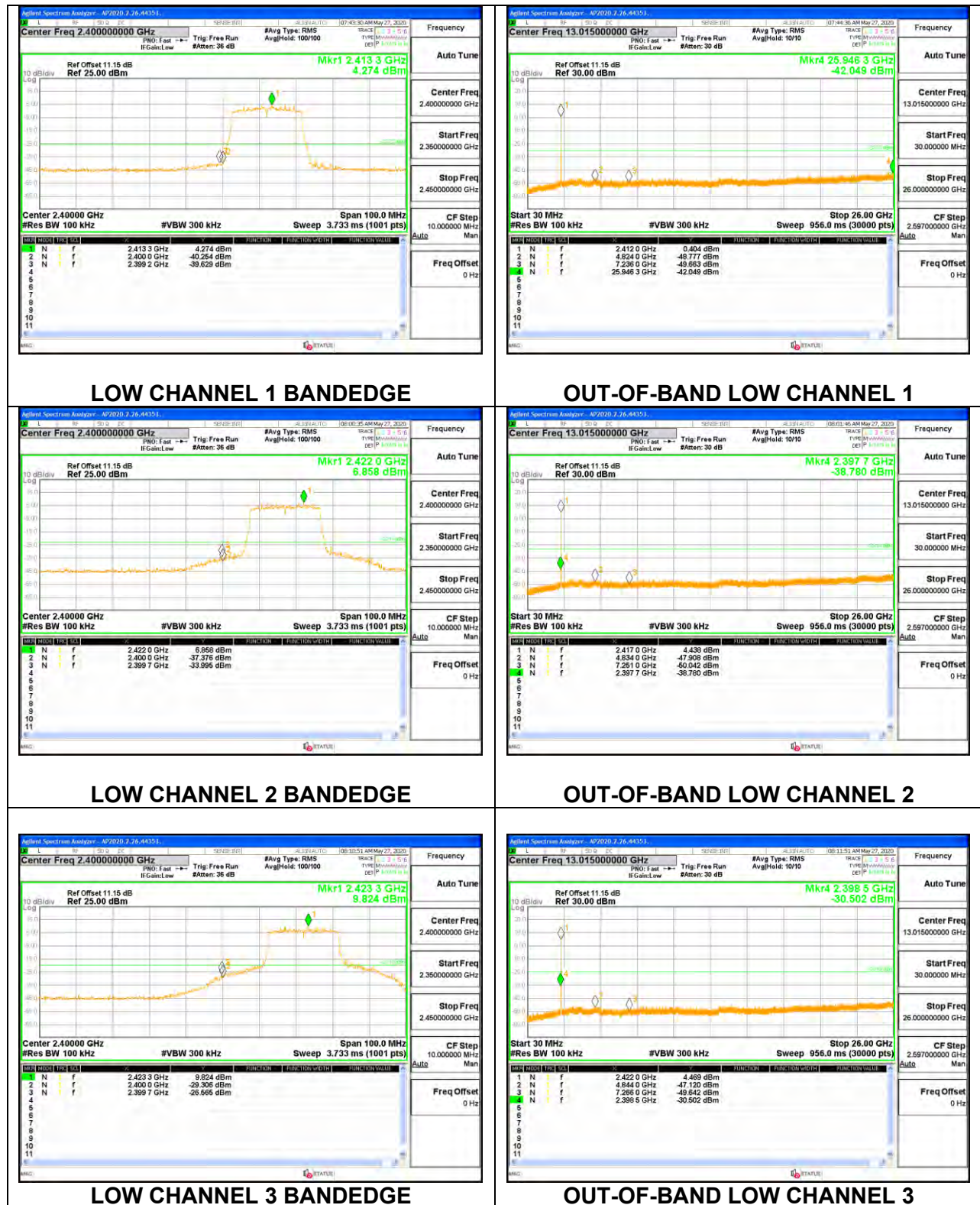


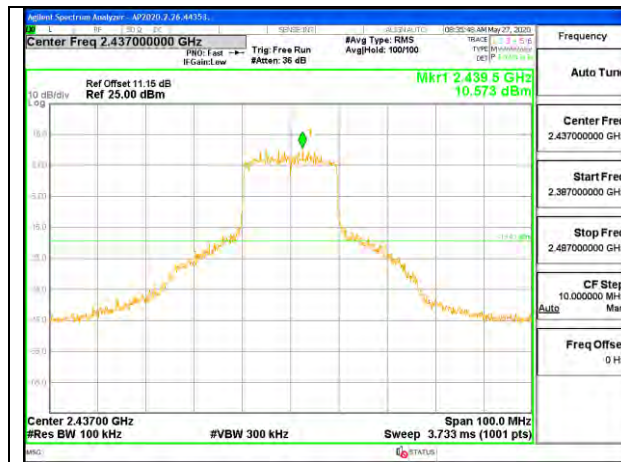
HIGH CHANNEL 13 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 13

1TX ANT 4 MODE, 242-Tone RU Index 61





MID CHANNEL REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



HIGH CHANNEL 9 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 9



HIGH CHANNEL 10 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 10



HIGH CHANNEL 11 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 11



HIGH CHANNEL 12 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 12



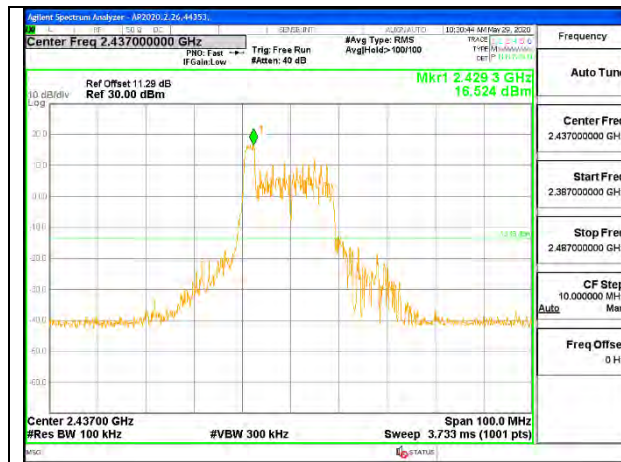
HIGH CHANNEL 13 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 13

1TX ANT 3 MODE, 26-Tone RU Index 0





MID CHANNEL REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



HIGH CHANNEL 9 BANDEDGE



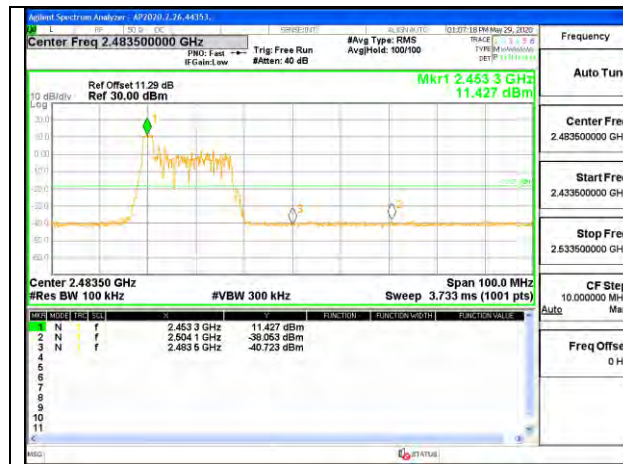
OUT-OF-BAND HIGH CHANNEL 9



HIGH CHANNEL 10 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 10



HIGH CHANNEL 11 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 11



HIGH CHANNEL 12 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 12



HIGH CHANNEL 13 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 13

1TX ANT 3 MODE, 26-Tone RU Index 4



LOW CHANNEL 1 BANDEDGE



OUT-OF-BAND LOW CHANNEL 1



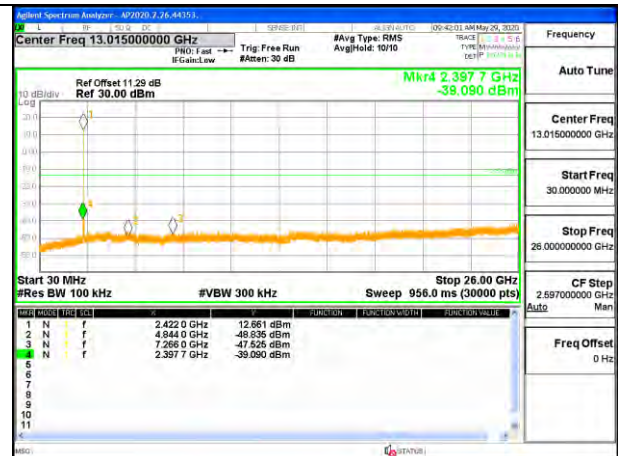
LOW CHANNEL 2 BANDEDGE



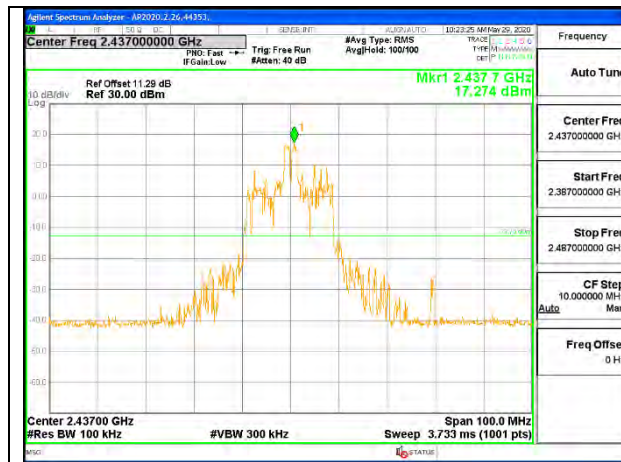
OUT-OF-BAND LOW CHANNEL 2



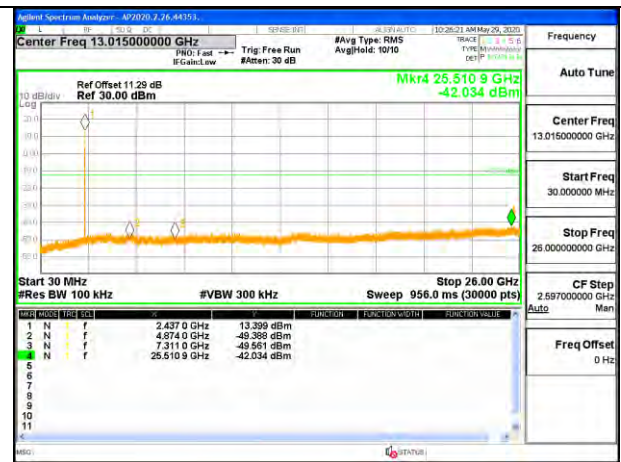
LOW CHANNEL 3 BANDEDGE



OUT-OF-BAND LOW CHANNEL 3



MID CHANNEL REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



HIGH CHANNEL 9 BANDEDGE



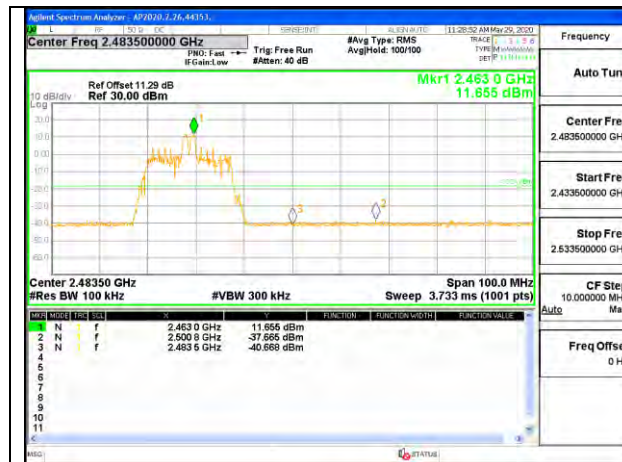
OUT-OF-BAND HIGH CHANNEL 9



HIGH CHANNEL 10 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 10



HIGH CHANNEL 11 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 11



HIGH CHANNEL 12 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 12

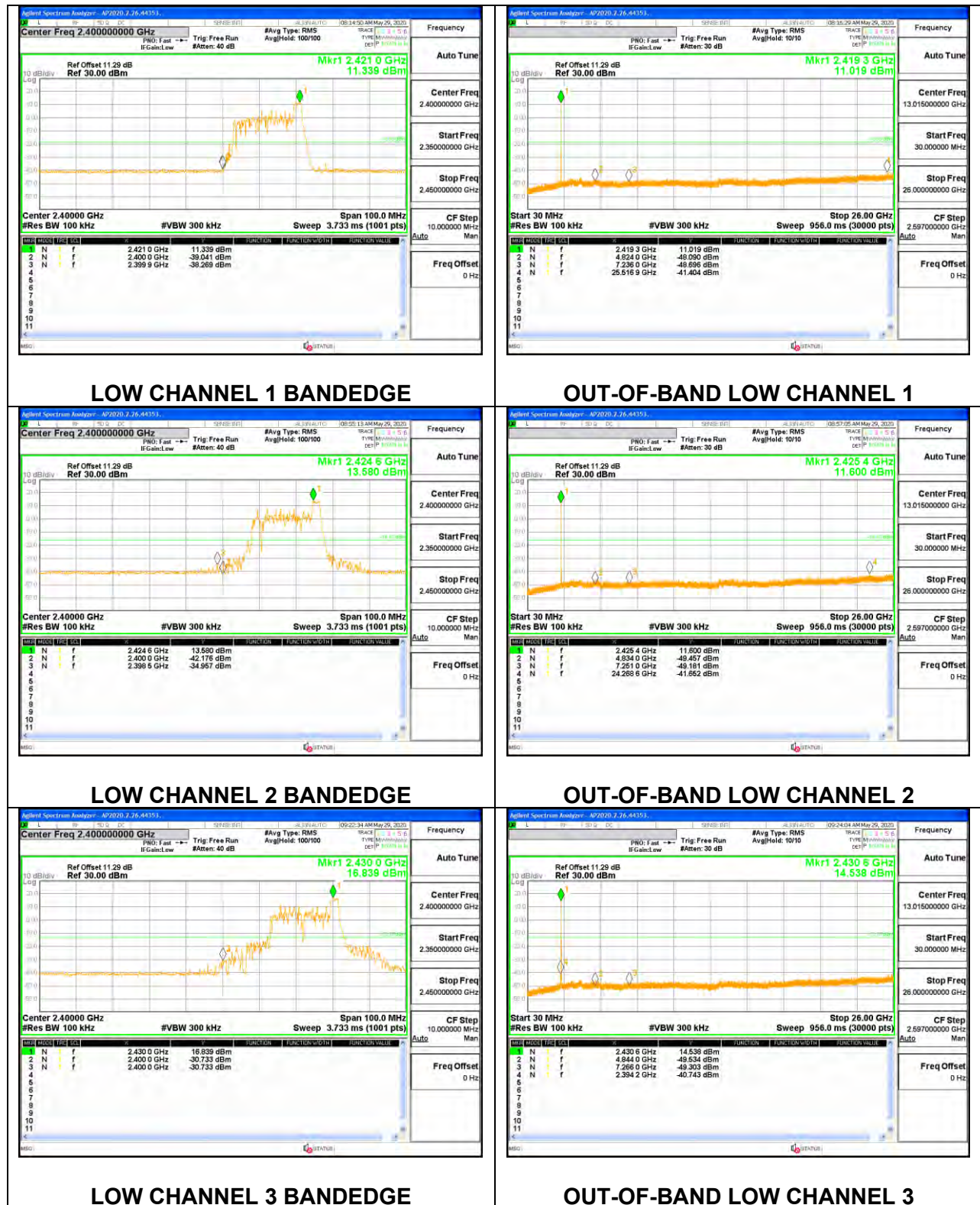


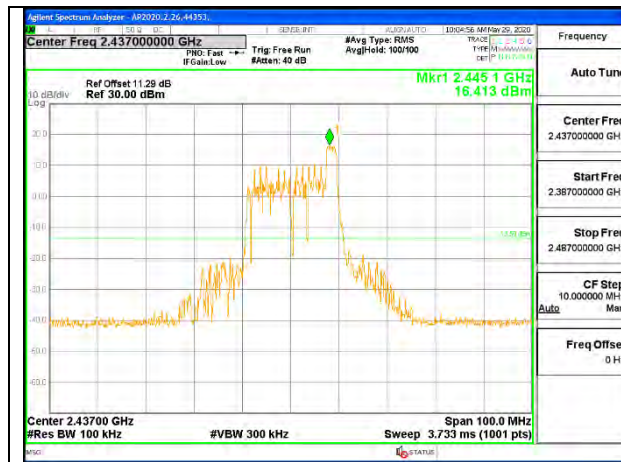
HIGH CHANNEL 13 BANDEDGE



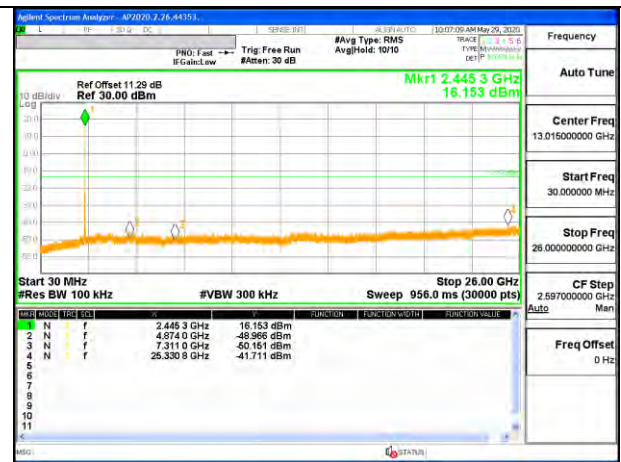
OUT-OF-BAND HIGH CHANNEL 13

1TX ANT 3 MODE, 26-Tone RU Index 8





MID CHANNEL REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



HIGH CHANNEL 9 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 9



HIGH CHANNEL 10 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 10



HIGH CHANNEL 11 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 11



HIGH CHANNEL 12 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 12

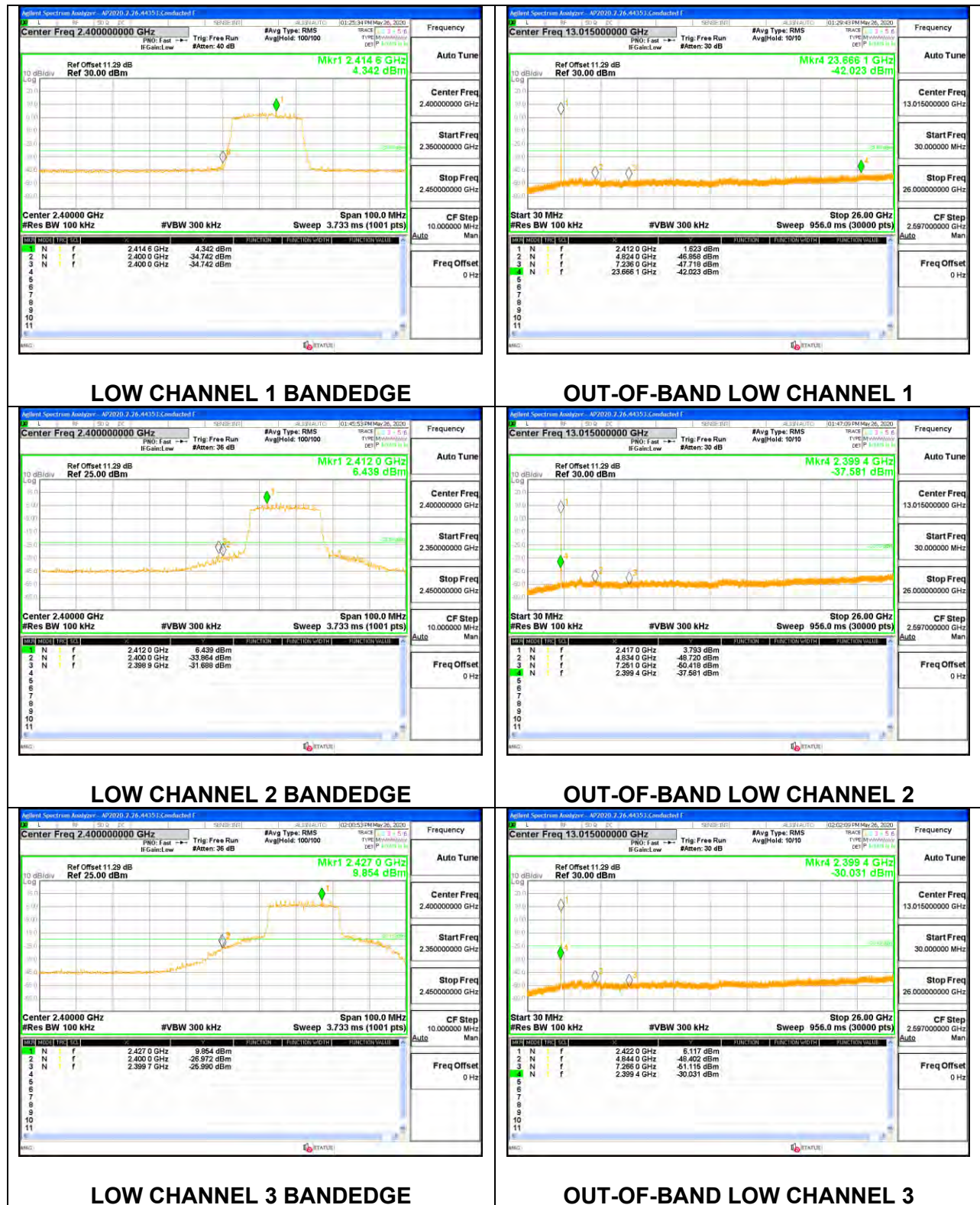


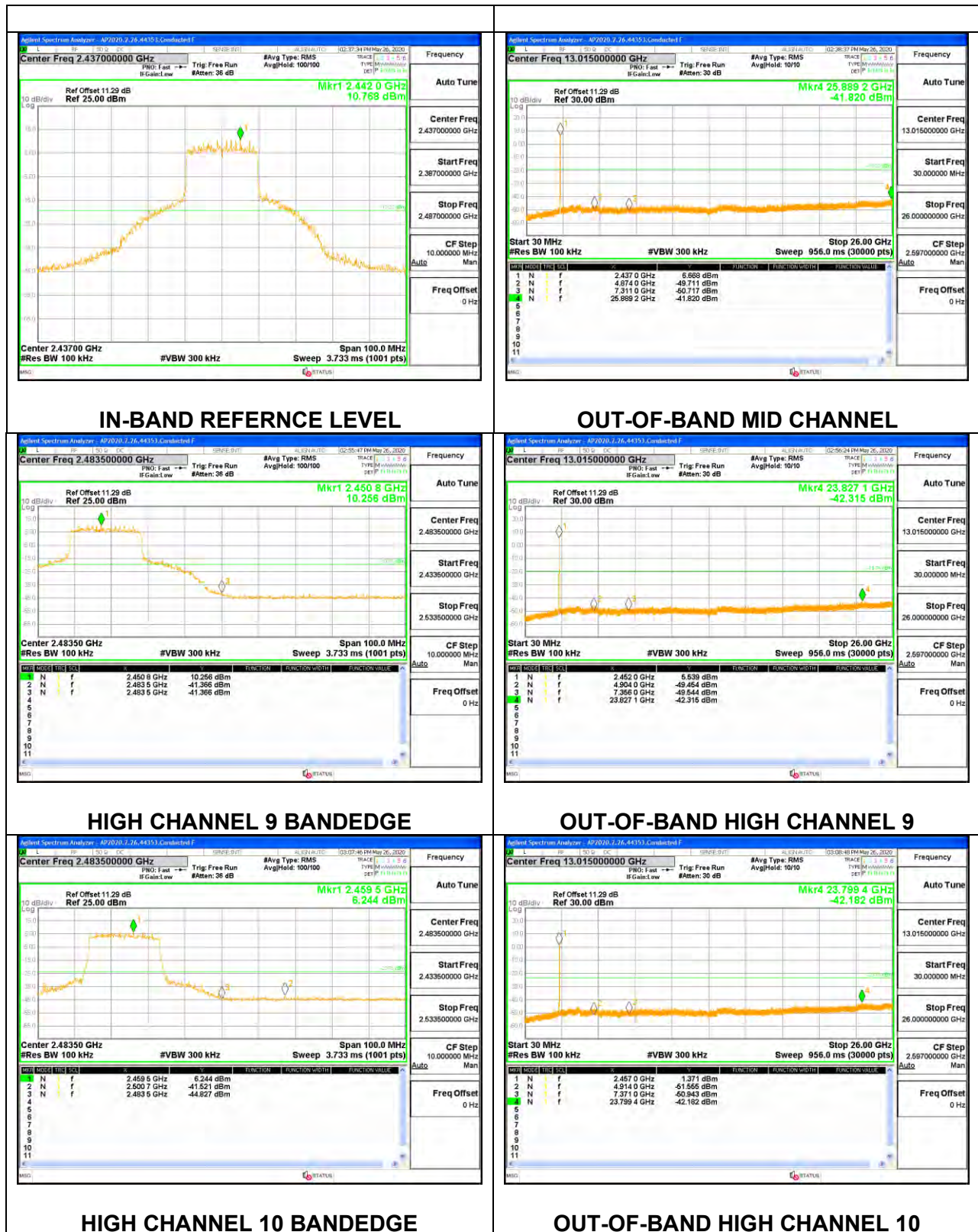
HIGH CHANNEL 13 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 13

1TX ANT 3 MODE, 242-Tone RU Index 61







HIGH CHANNEL 11 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 11



HIGH CHANNEL 12 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 12

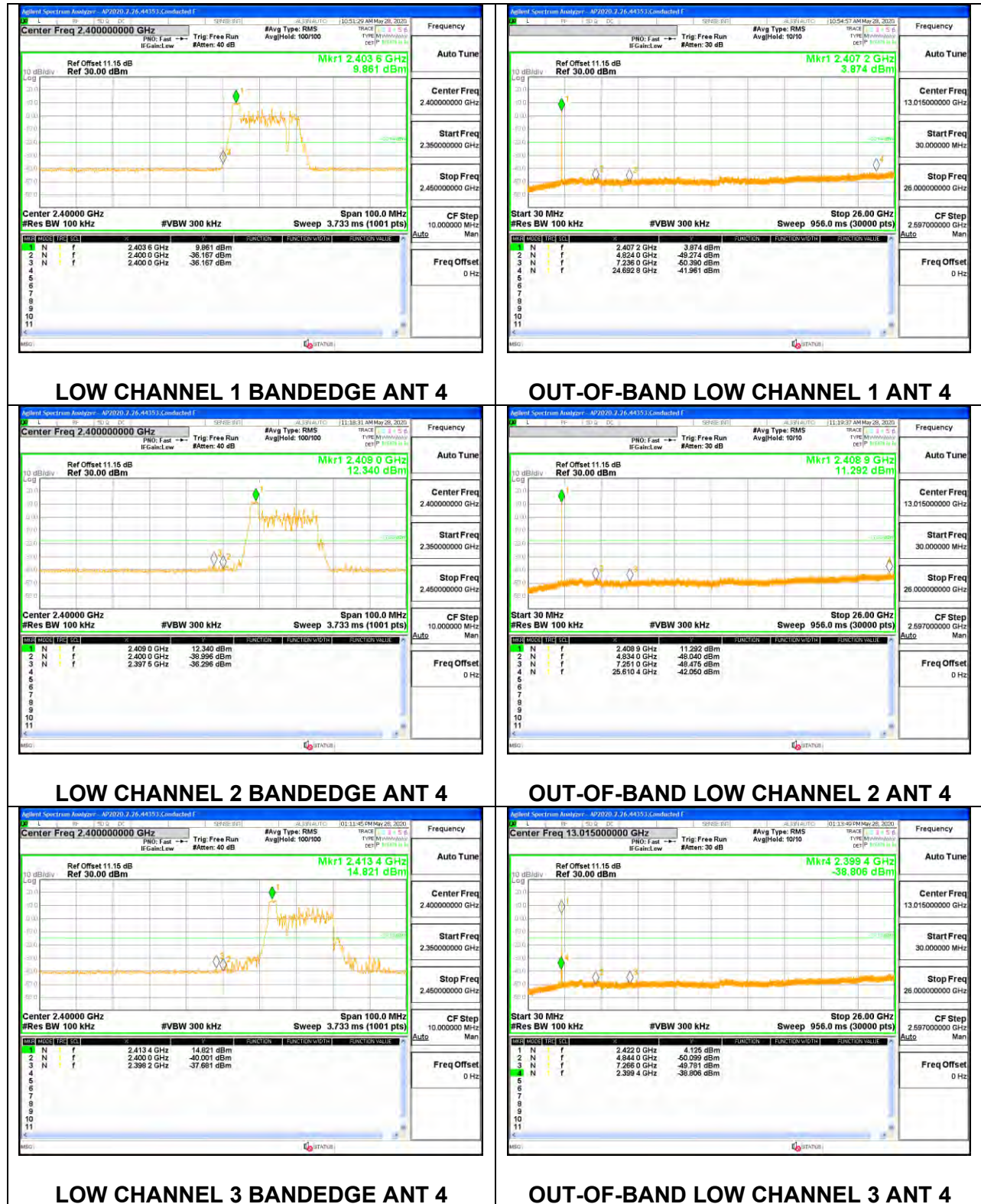


HIGH CHANNEL 13 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 13

9.6.5. 802.11ax HE20 OFDMA MODE 2TX
ANT 4 + ANT 3 2TX MODE, 26-Tones, RU Index 0





MID CHANNEL REFERENCE LEVEL ANT 4



OUT-OF-BAND MID CHANNEL ANT 4



HIGH CHANNEL 9 BANDEDGE ANT 4



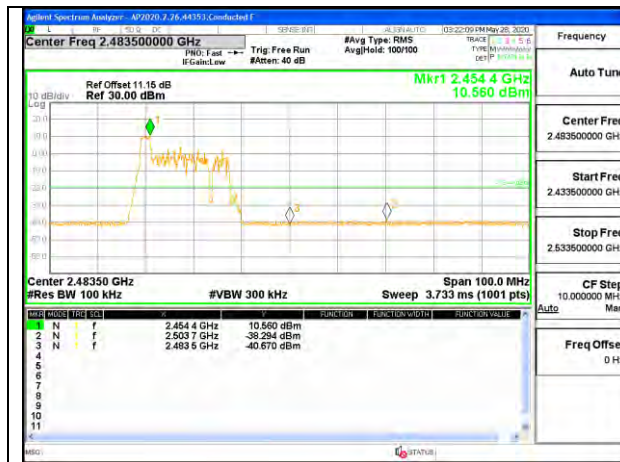
OUT-OF-BAND HIGH CHANNEL 9 ANT 4



HIGH CHANNEL 10 BANDEDGE ANT 4



OUT-OF-BAND HIGH CHANNEL 10 ANT 4



HIGH CHANNEL 11 BANDEDGE ANT 4



OUT-OF-BAND HIGH CHANNEL 11 ANT 4



HIGH CHANNEL 12 BANDEDGE ANT 4



OUT-OF-BAND HIGH CHANNEL 12 ANT 4



HIGH CHANNEL 13 BANDEDGE ANT 4



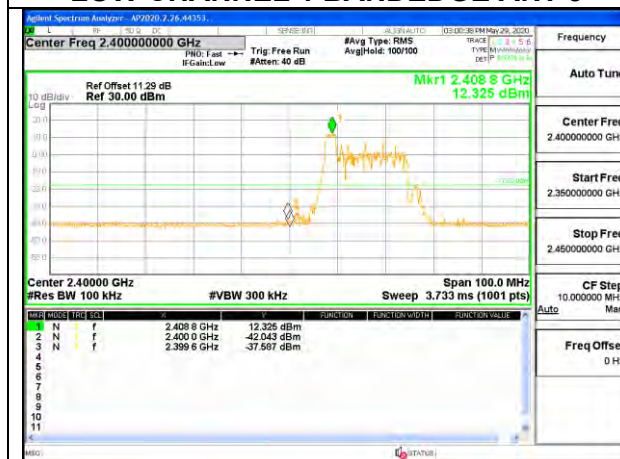
OUT-OF-BAND HIGH CHANNEL 13 ANT 4



LOW CHANNEL 1 BANDEDGE ANT 3



OUT-OF-BAND LOW CHANNEL 1 ANT 3



LOW CHANNEL 2 BANDEDGE ANT 3



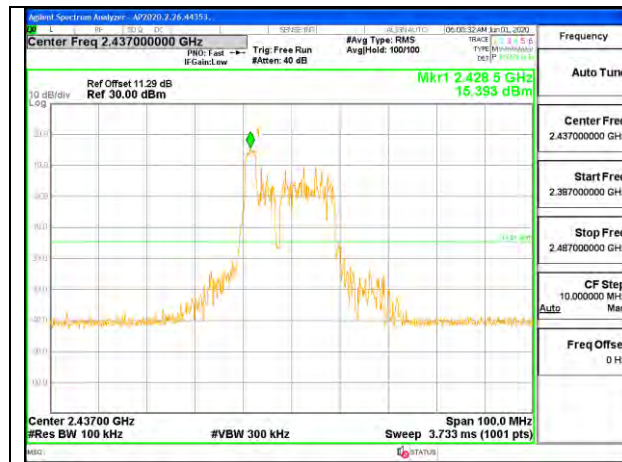
OUT-OF-BAND LOW CHANNEL 2 ANT 3



LOW CHANNEL 3 BANDEDGE ANT 3



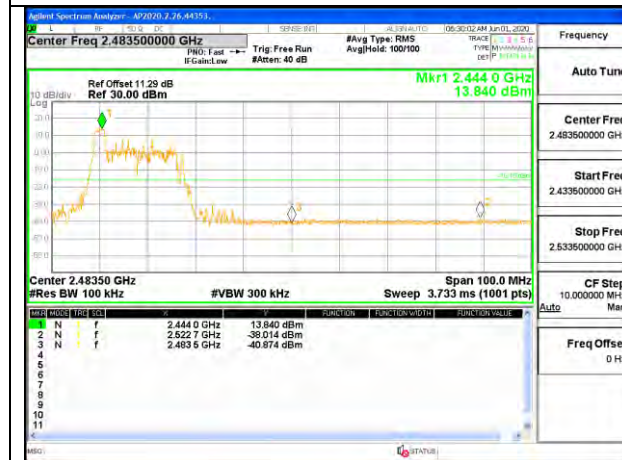
OUT-OF-BAND LOW CHANNEL 3 ANT 3



MID CHANNEL REFERENCE LEVEL ANT 3



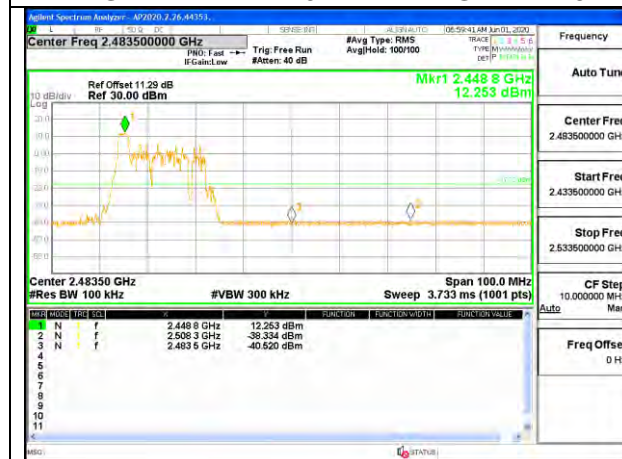
OUT-OF-BAND MID CHANNEL ANT 3



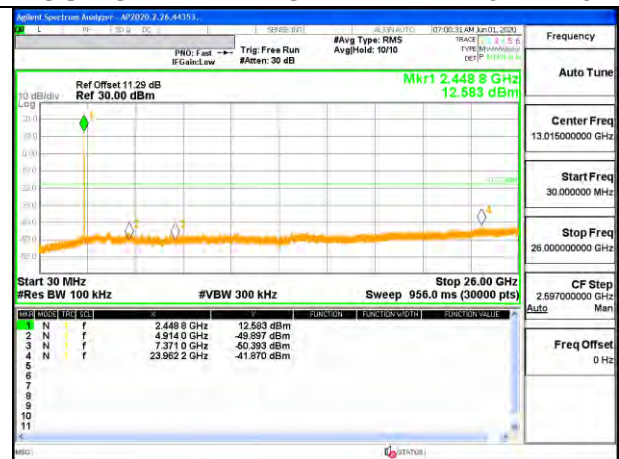
HIGH CHANNEL 9 BANDEDGE ANT 3



OUT-OF-BAND HIGH CHANNEL 9 ANT 3



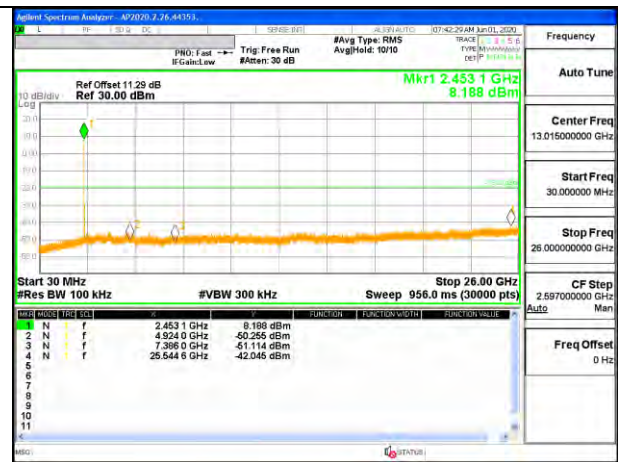
HIGH CHANNEL 10 BANDEDGE ANT 3



OUT-OF-BAND HIGH CHANNEL 10 ANT 3



HIGH CHANNEL 11 BANDEDGE ANT 3



OUT-OF-BAND HIGH CHANNEL 11 ANT 3



HIGH CHANNEL 12 BANDEDGE ANT 3



OUT-OF-BAND HIGH CHANNEL 12 ANT 3

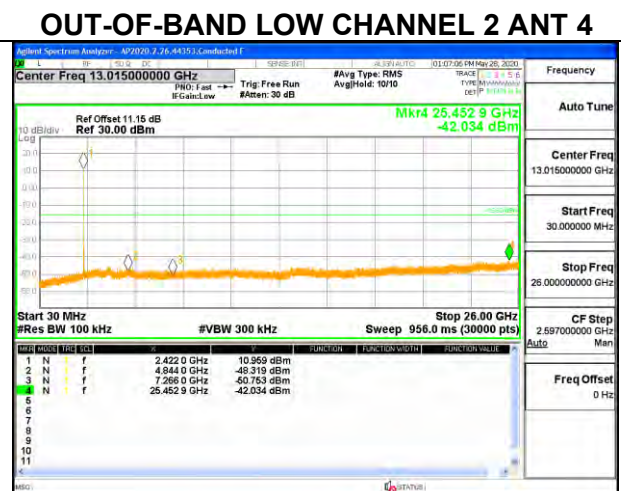
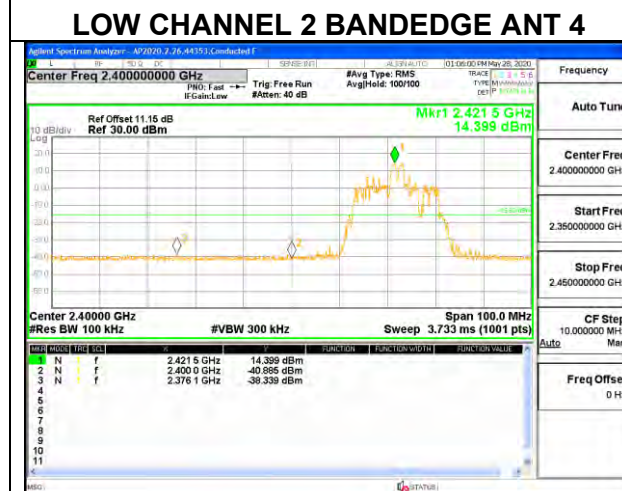
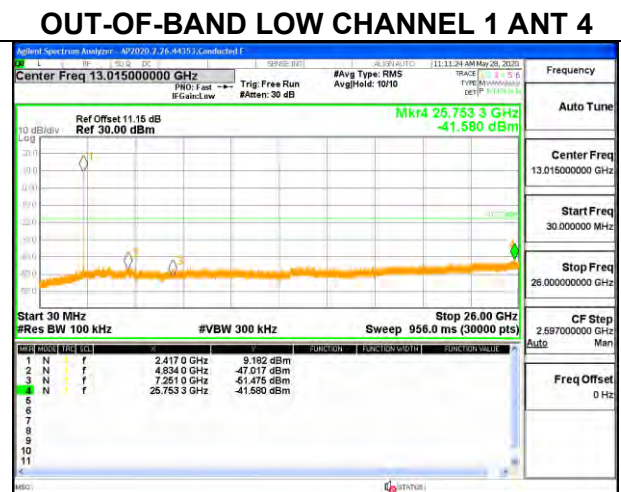
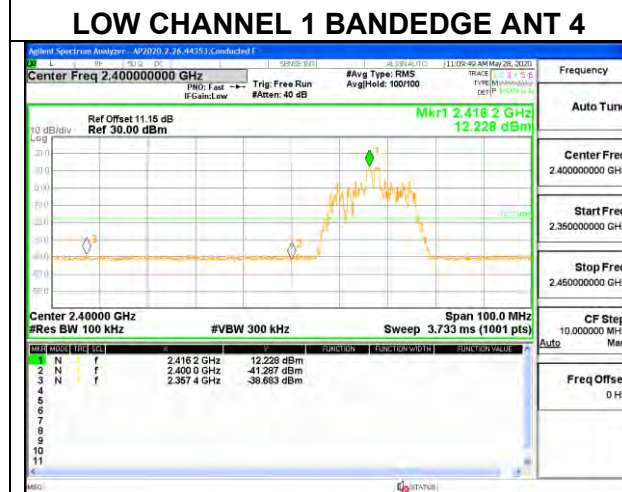


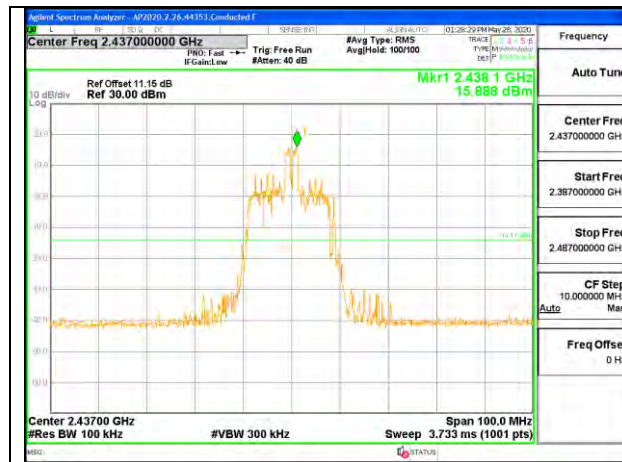
HIGH CHANNEL 13 BANDEDGE ANT 3



OUT-OF-BAND HIGH CHANNEL 13 ANT 3

ANT 4 + ANT 3 2TX MODE: 26-Tones, RU Index 4





MID CHANNEL REFERENCE LEVEL ANT 4



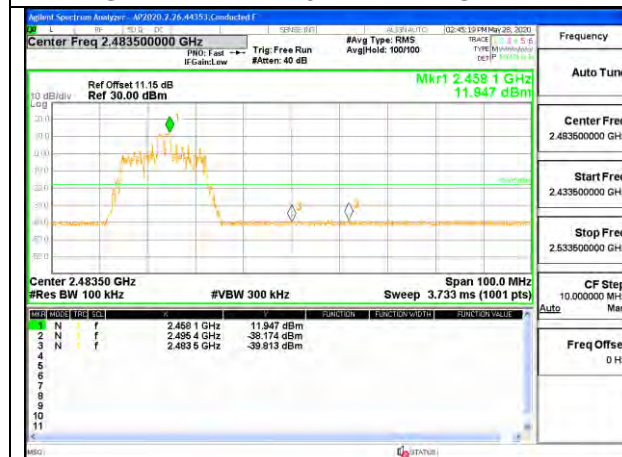
OUT-OF-BAND MID CHANNEL ANT 4



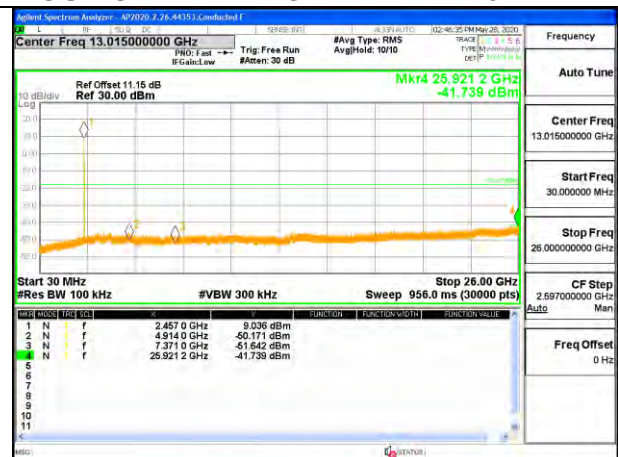
HIGH CHANNEL 9 BANDEDGE ANT 4



OUT-OF-BAND HIGH CHANNEL 9 ANT 4



HIGH CHANNEL 10 BANDEDGE ANT 4



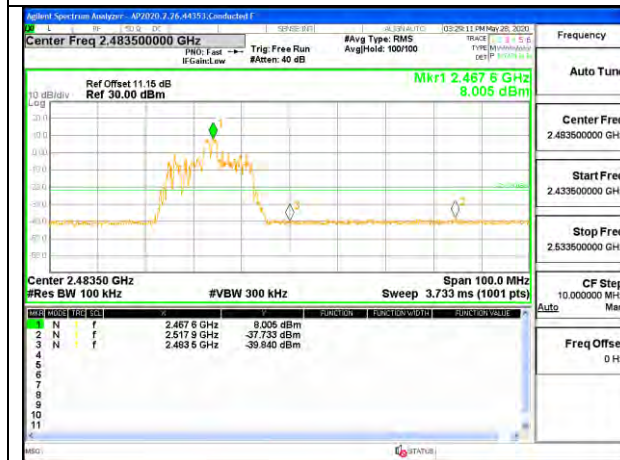
OUT-OF-BAND HIGH CHANNEL 10 ANT 4



HIGH CHANNEL 11 BANDEDGE ANT 4



OUT-OF-BAND HIGH CHANNEL 11 ANT 4



HIGH CHANNEL 12 BANDEDGE ANT 4



OUT-OF-BAND HIGH CHANNEL 12 ANT 4



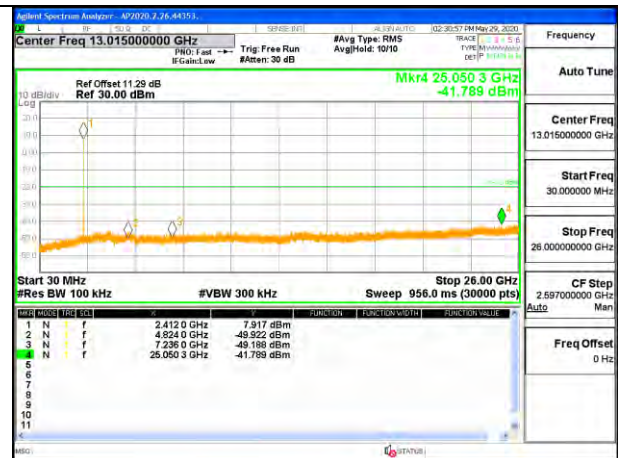
HIGH CHANNEL 13 BANDEDGE ANT 4



OUT-OF-BAND HIGH CHANNEL 13 ANT 4



LOW CHANNEL 1 BANDEDGE ANT 3



OUT-OF-BAND LOW CHANNEL 1 ANT 3



LOW CHANNEL 2 BANDEDGE ANT 3



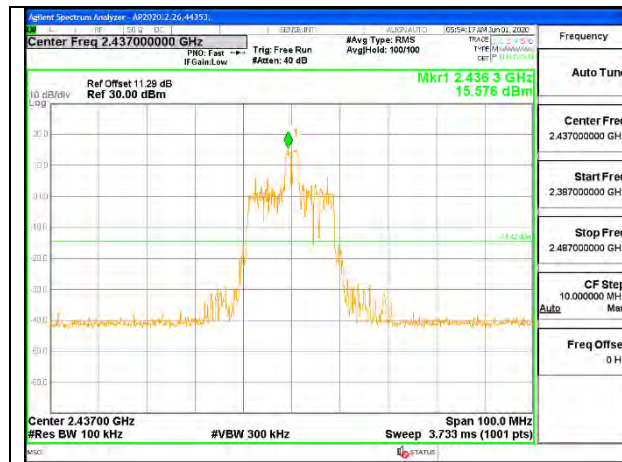
OUT-OF-BAND LOW CHANNEL 2 ANT 3



LOW CHANNEL 3 BANDEDGE ANT 3



OUT-OF-BAND LOW CHANNEL 3 ANT 3



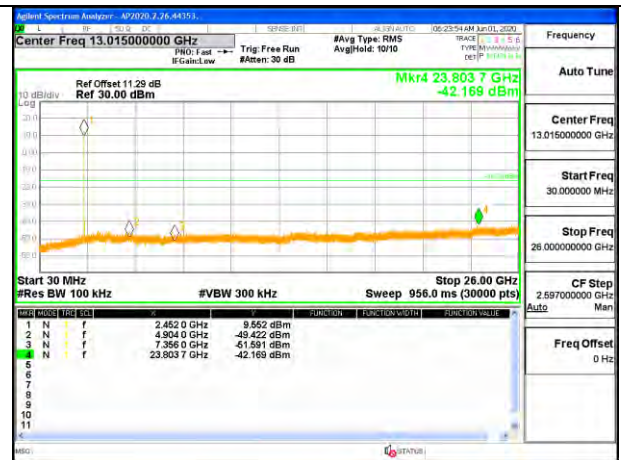
MID CHANNEL REFERENCE LEVEL ANT 3



OUT-OF-BAND MID CHANNEL ANT 3



HIGH CHANNEL 9 BANDEDGE ANT 3



OUT-OF-BAND HIGH CHANNEL 9 ANT 3



HIGH CHANNEL 10 BANDEDGE ANT 3



OUT-OF-BAND HIGH CHANNEL 10 ANT 3



HIGH CHANNEL 11 BANDEDGE ANT 3



OUT-OF-BAND HIGH CHANNEL 11 ANT 3



HIGH CHANNEL 12 BANDEDGE ANT 3



OUT-OF-BAND HIGH CHANNEL 12 ANT 3



HIGH CHANNEL 13 BANDEDGE ANT 3



OUT-OF-BAND HIGH CHANNEL 13 ANT 3

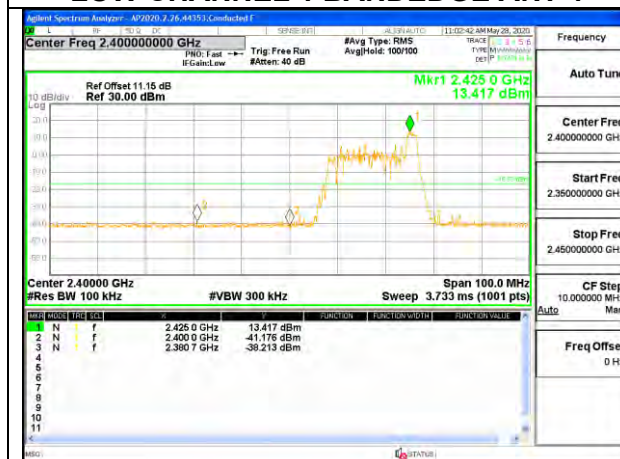
ANT 4 + ANT 3 2TX MODE: 26-Tones, RU Index 8



LOW CHANNEL 1 BANDEDGE ANT 4



OUT-OF-BAND LOW CHANNEL 1 ANT 4



LOW CHANNEL 2 BANDEDGE ANT 4



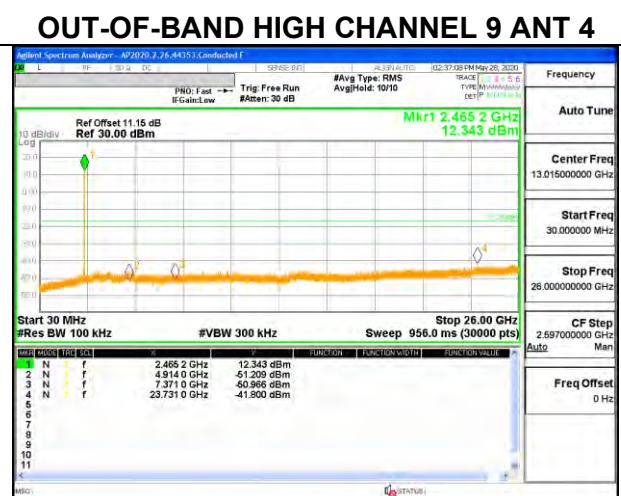
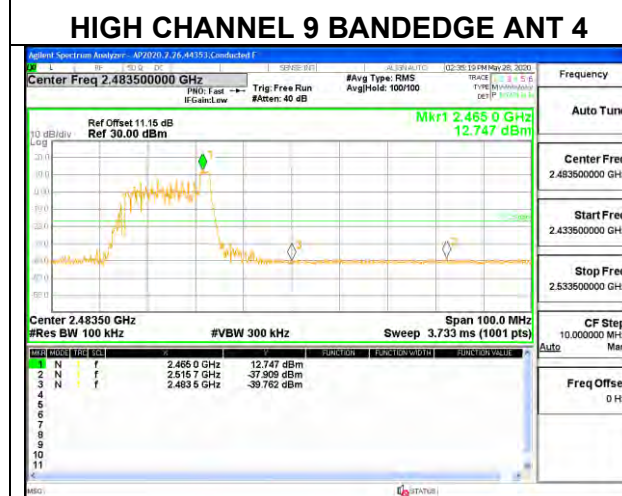
OUT-OF-BAND LOW CHANNEL 2 ANT 4



LOW CHANNEL 3 BANDEDGE ANT 4

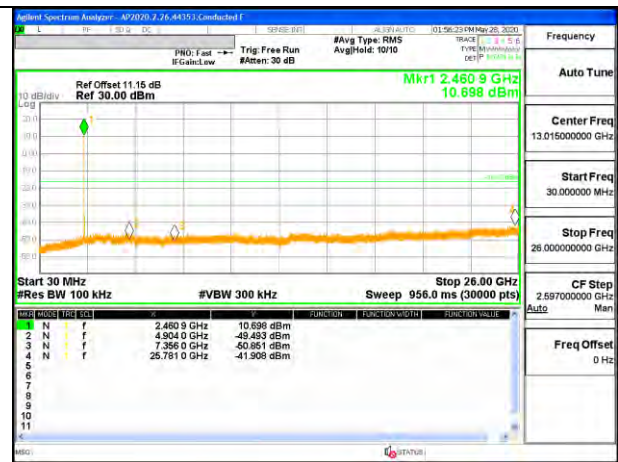


OUT-OF-BAND LOW CHANNEL 3 ANT 4





HIGH CHANNEL 11 BANDEDGE ANT 4



OUT-OF-BAND HIGH CHANNEL 11 ANT 4



HIGH CHANNEL 12 BANDEDGE ANT 4



OUT-OF-BAND HIGH CHANNEL 12 ANT 4



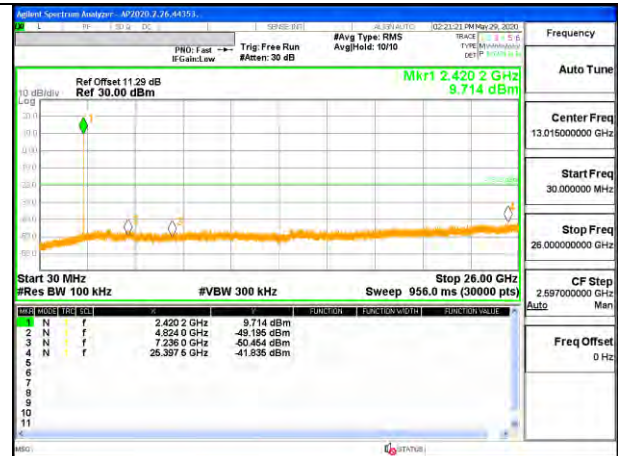
HIGH CHANNEL 13 BANDEDGE ANT 4



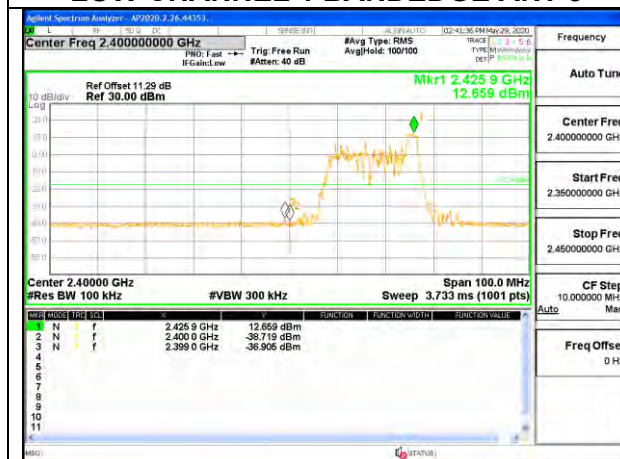
OUT-OF-BAND HIGH CHANNEL 13 ANT 4



LOW CHANNEL 1 BANDEDGE ANT 3



OUT-OF-BAND LOW CHANNEL 1 ANT 3



LOW CHANNEL 2 BANDEDGE ANT 3



OUT-OF-BAND LOW CHANNEL 2 ANT 3



LOW CHANNEL 3 BANDEDGE ANT 3



OUT-OF-BAND LOW CHANNEL 3 ANT 3