



Appendix C

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: Formuler Z10 Pro

Trade Mark: FORMULER

Test Model: Z10 Pro

Environmental Conditions

Temperature:	23.7° C
Relative Humidity:	51.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Jay Li
Supervised by:	Li Huan

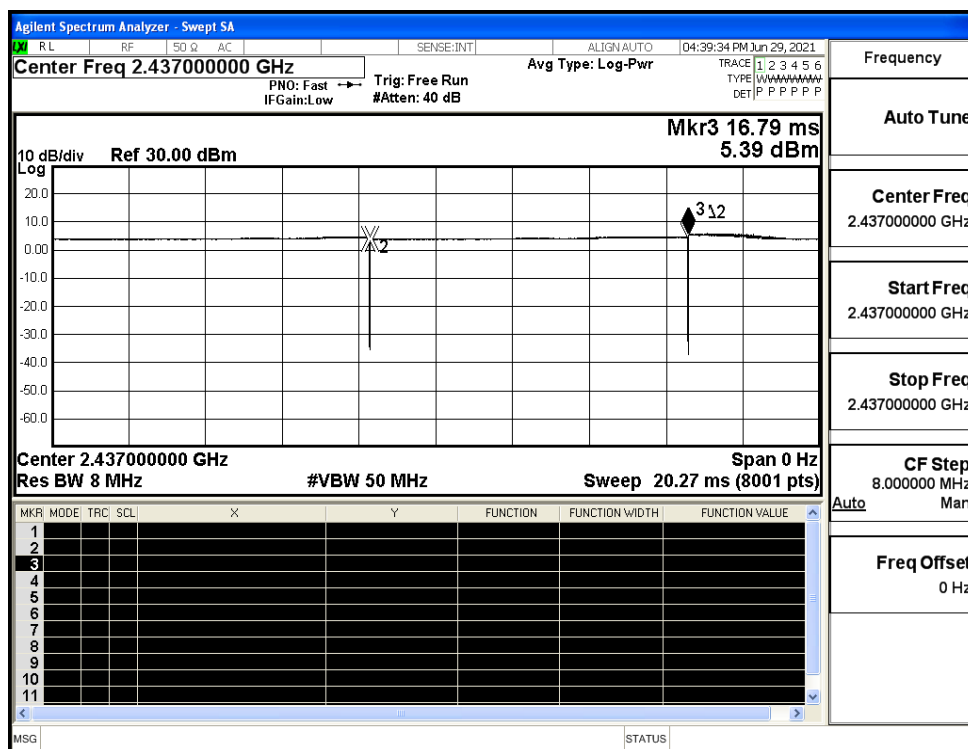
C.1 Duty Cycle

ANT0

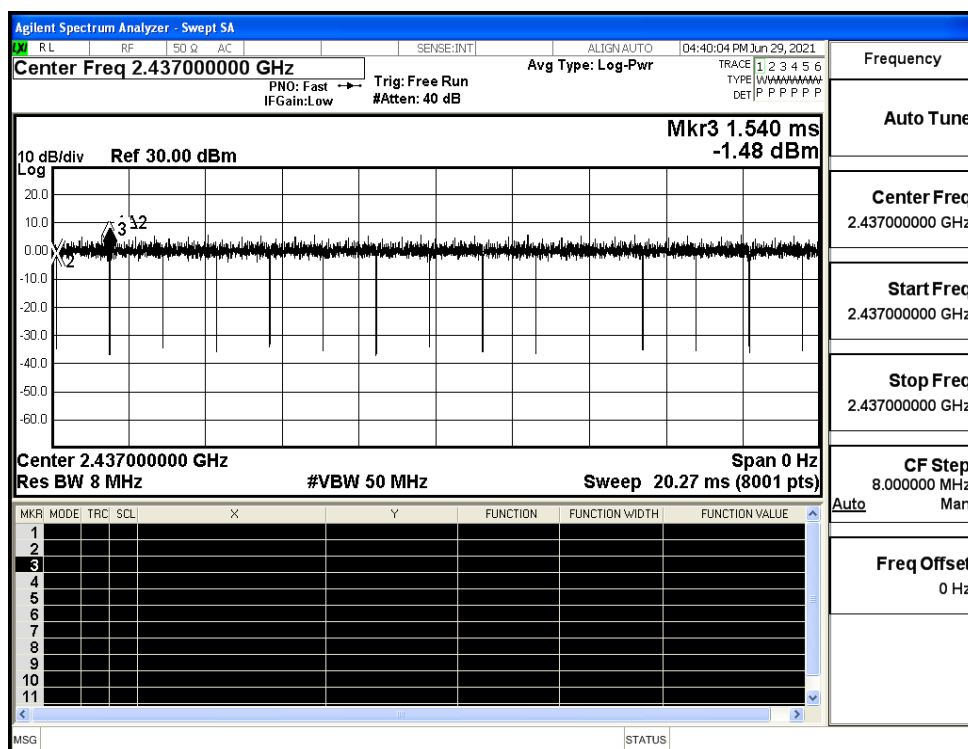
Test Mode	Test Channel	Ant	Duty Cycle[%]	Verdict
11B	2437	Ant1	99.76	PASS
11G	2437	Ant1	98.56	PASS
11N20SISO	2437	Ant1	98.65	PASS
11N40SISO	2437	Ant1	98.07	PASS



Duty Cycle_11B_2437_Ant1

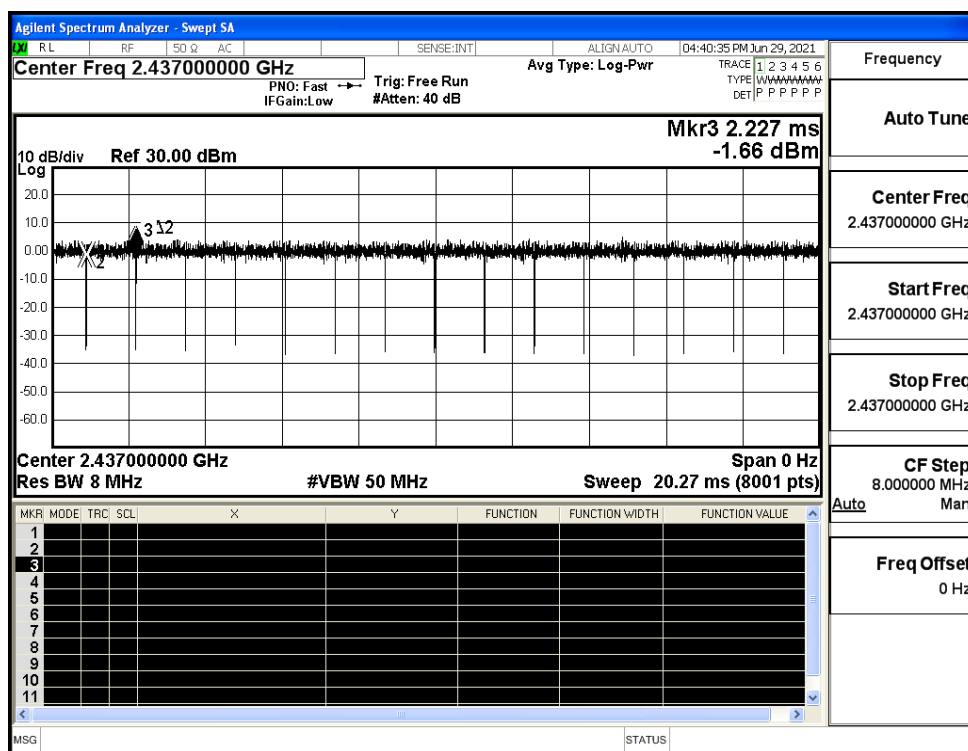


Duty Cycle_11G_2437_Ant1

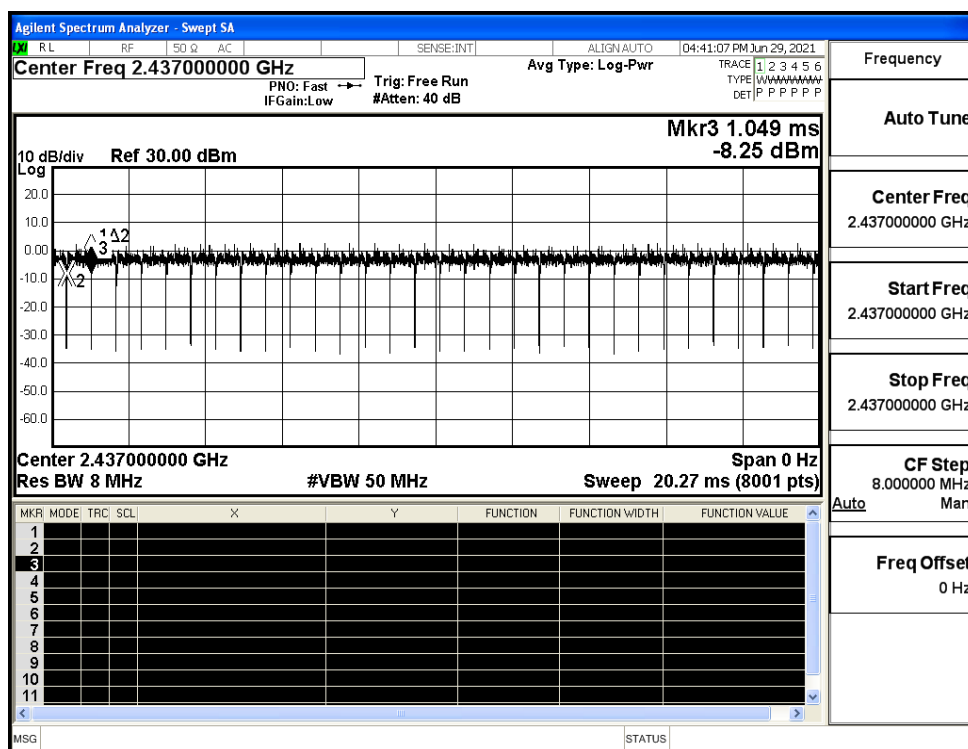




Duty Cycle_11N20SISO_2437_Ant1



Duty Cycle_11N40SISO_2437_Ant1



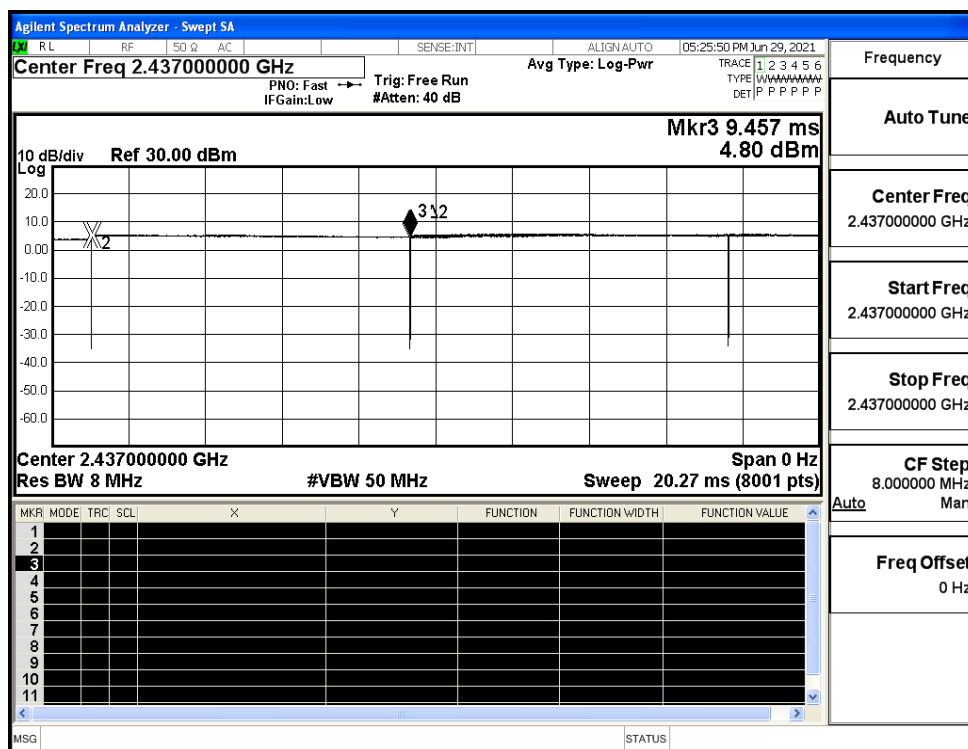


ANT1

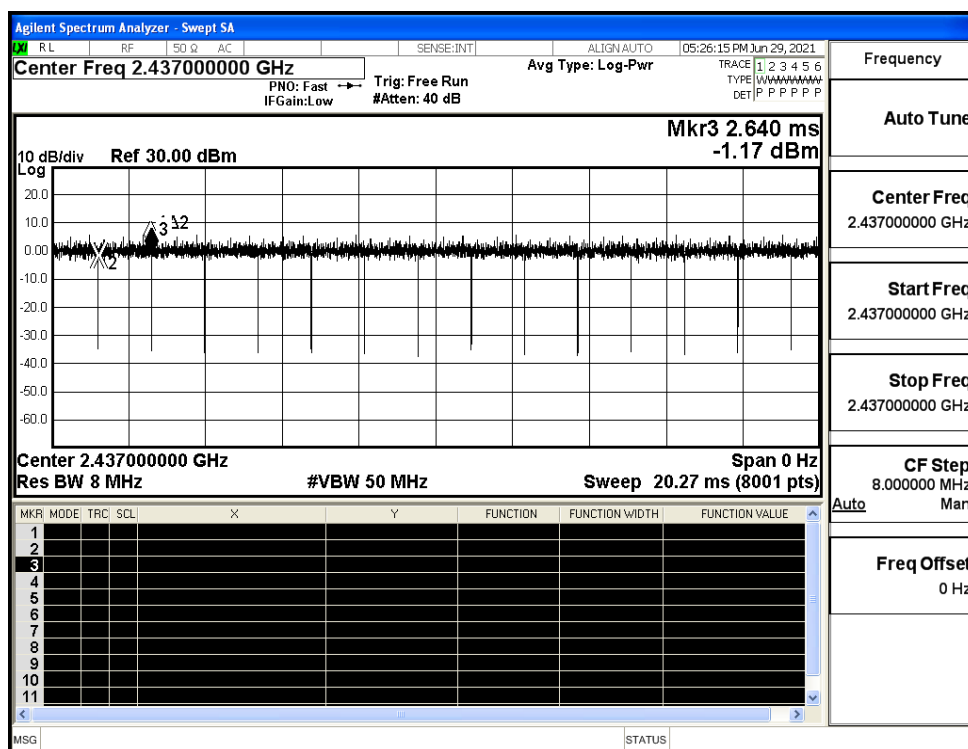
Test Mode	Test Channel	Ant	Duty Cycle[%]	Verdict
11B	2437	Ant1	99.76	PASS
11G	2437	Ant1	98.56	PASS
11N20SISO	2437	Ant1	98.65	PASS
11N40SISO	2437	Ant1	98.07	PASS



Duty Cycle_11B_2437_Ant1

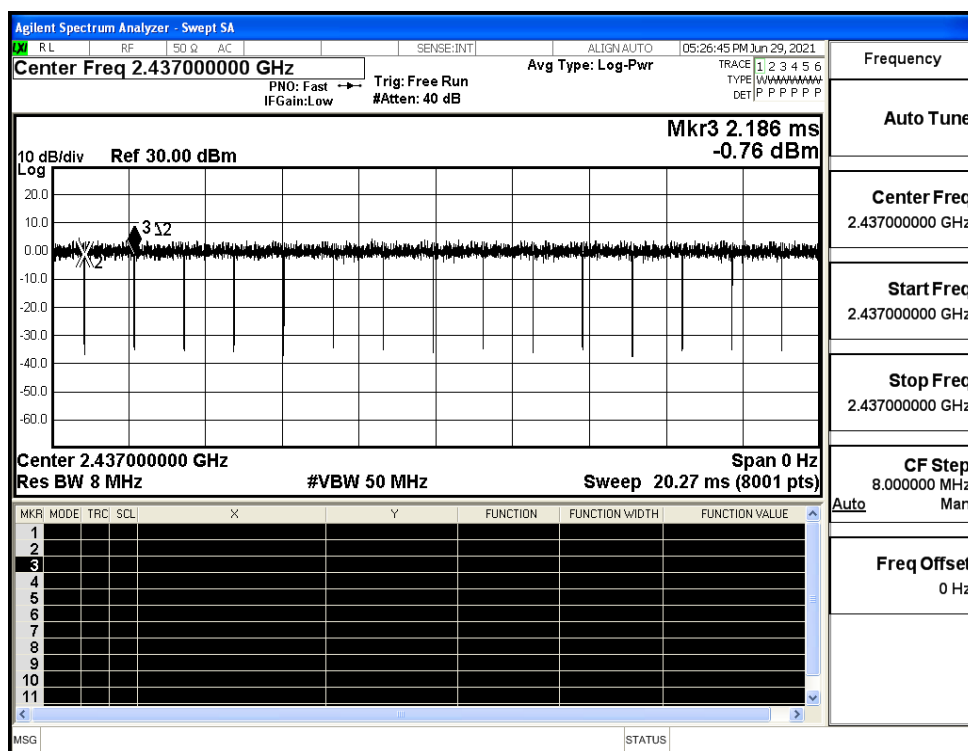


Duty Cycle_11G_2437_Ant1

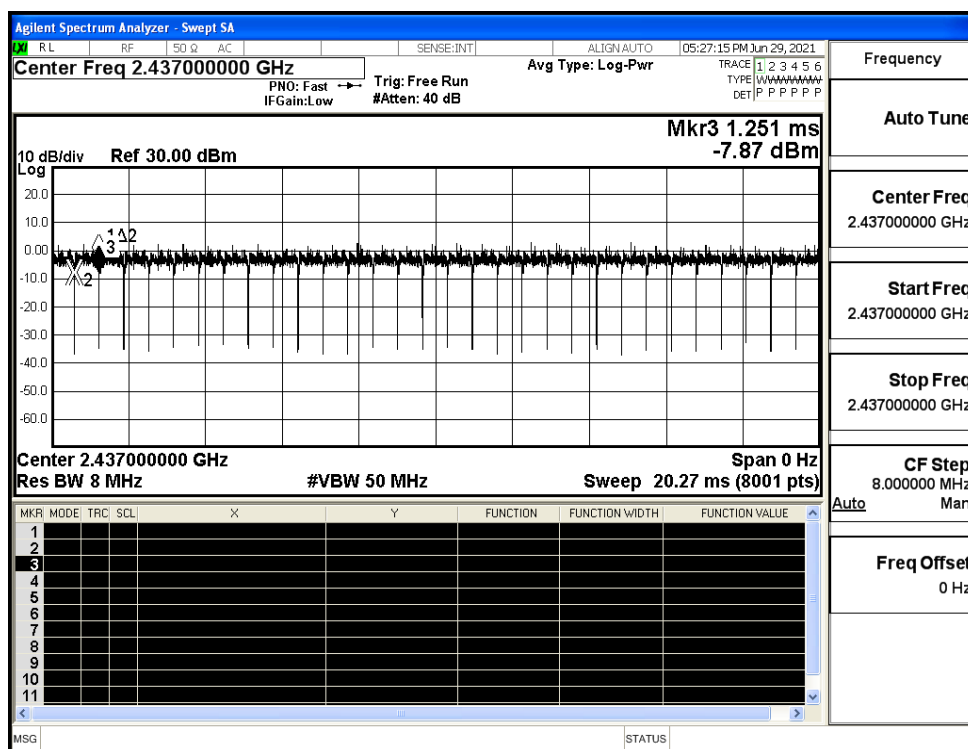




Duty Cycle_11N20SISO_2437_Ant1



Duty Cycle_11N40SISO_2437_Ant1





C.2 Maximum Conducted Output Power

ANT0

Mode	Channel	Meas.Level [dBm]	Limit [dBm]	Verdict
11B	LCH	14.54	30	PASS
	MCH	14.68	30	PASS
	HCH	14.75	30	PASS
11G	LCH	15.13	30	PASS
	MCH	15.33	30	PASS
	HCH	15.14	30	PASS
11N20SISO	LCH	15.65	30	PASS
	MCH	15.78	30	PASS
	HCH	15.83	30	PASS
11N40SISO	LCH	11.56	30	PASS
	MCH	11.19	30	PASS
	HCH	10.49	30	PASS

ANT1

Mode	Channel	Meas.Level [dBm]	Limit [dBm]	Verdict
11B	LCH	11.94	30	PASS
	MCH	11.52	30	PASS
	HCH	10.93	30	PASS
11G	LCH	11.31	30	PASS
	MCH	11.14	30	PASS
	HCH	10.19	30	PASS
11N20SISO	LCH	10.88	30	PASS
	MCH	10.31	30	PASS
	HCH	9.48	30	PASS
11N40SISO	LCH	11.19	30	PASS
	MCH	11.06	30	PASS
	HCH	10.41	30	PASS

MIMO

Mode	Channel	ANT 0 [dBm]	ANT 1 [dBm]	MIMO [dBm]	Limit [dBm]	Verdict
11N20	LCH	15.65	10.88	16.90	30	PASS
	MCH	15.78	10.31	16.86	30	PASS
	HCH	15.83	9.48	16.74	30	PASS
11N40	LCH	11.56	11.19	14.39	30	PASS
	MCH	11.19	11.06	14.14	30	PASS
	HCH	10.49	10.41	13.46	30	PASS



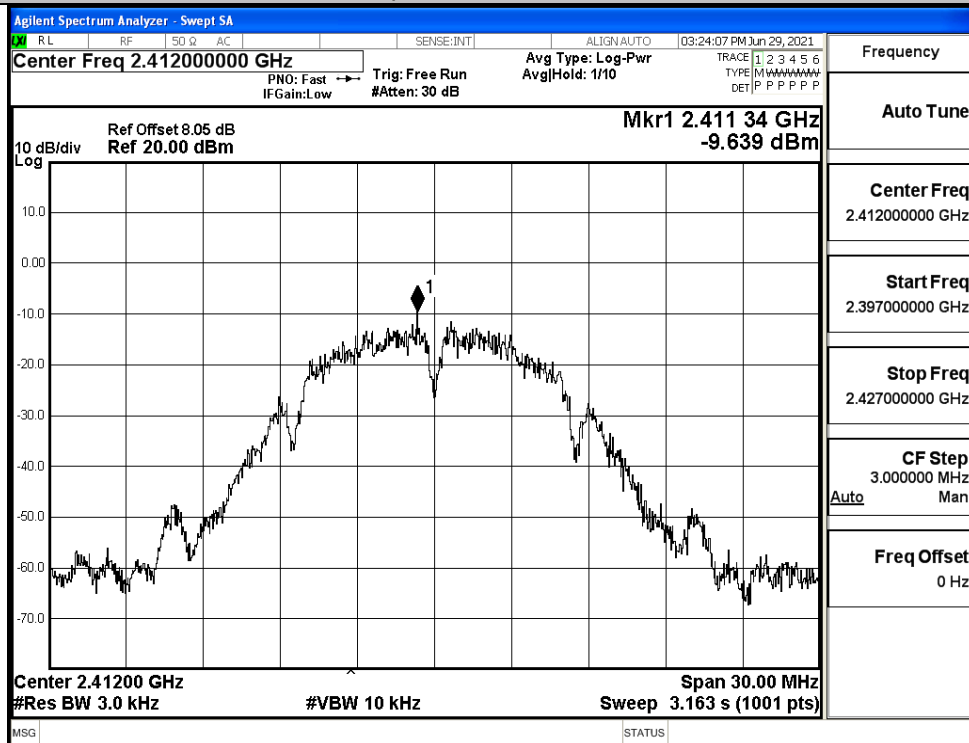
C.3 Maximum Power Spectral Density

ANT0

Mode	Channel	Meas.Level [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
11B	LCH	-9.639	8	PASS
	MCH	-10.691	8	PASS
	HCH	-10.510	8	PASS
11G	LCH	-15.460	8	PASS
	MCH	-16.505	8	PASS
	HCH	-15.546	8	PASS
11N20SISO	LCH	-15.723	8	PASS
	MCH	-15.654	8	PASS
	HCH	-16.784	8	PASS
11N40SISO	LCH	-18.631	8	PASS
	MCH	-19.997	8	PASS
	HCH	-19.865	8	PASS

Test Graphs

11B/LCH

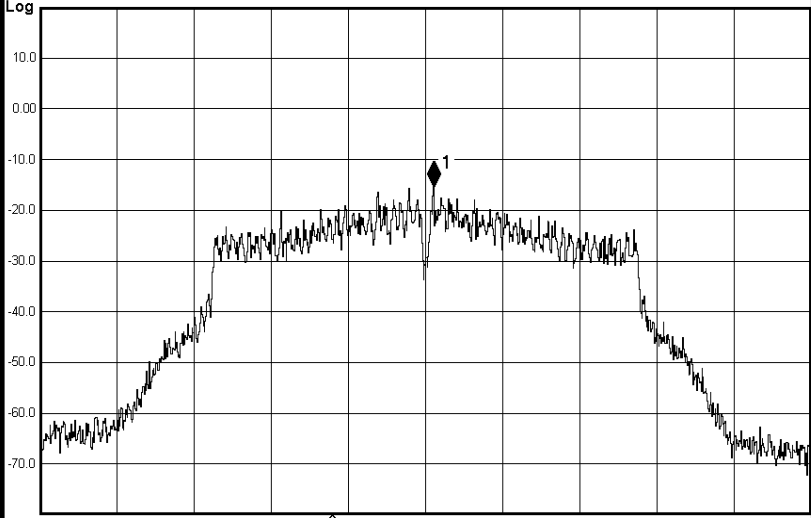
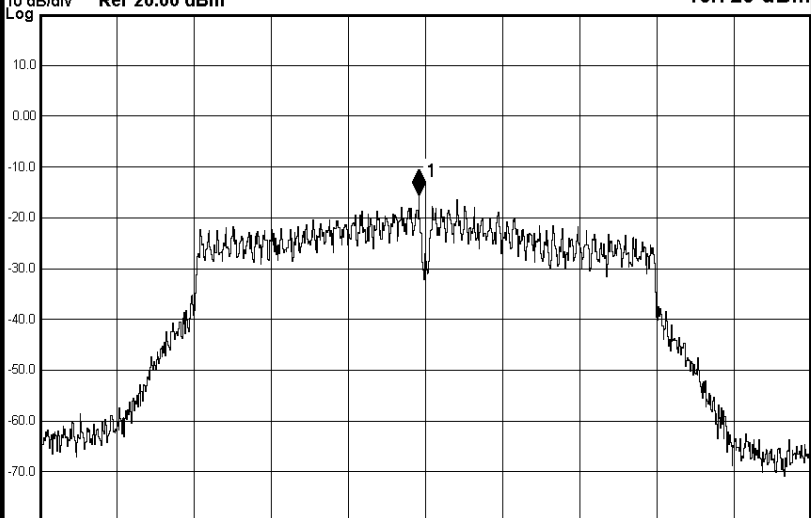


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11G/LCH	Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC SENSE:INT ALIGN:Auto 03:50:05 PM Jun 29, 2021 Center Freq 2.412000000 GHz PNO: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr Avg/Hold: 1/10 TRACE 1 2 3 4 5 6 TYPE [M] [W] [M] [M] [M] [M] DET [P] [P] [P] [P] [P] [P] Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.412 33 GHz -15.460 dBm Center 2.41200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts) MSG STATUS Frequency Auto Tune Center Freq2.412000000 GHz Start Freq2.397000000 GHz Stop Freq2.427000000 GHz CF Step3.000000 MHz AutoMan Freq Offset0 Hz
11G/MCH	Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC SENSE:INT ALIGN:Auto 03:53:35 PM Jun 29, 2021 Center Freq 2.437000000 GHz PNO: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr Avg/Hold: 1/10 TRACE 1 2 3 4 5 6 TYPE [M] [W] [M] [M] [M] [M] DET [P] [P] [P] [P] [P] [P] Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.437 33 GHz -16.505 dBm Center 2.43700 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts) MSG STATUS Frequency Auto Tune Center Freq2.437000000 GHz Start Freq2.422000000 GHz Stop Freq2.452000000 GHz CF Step3.000000 MHz AutoMan Freq Offset0 Hz



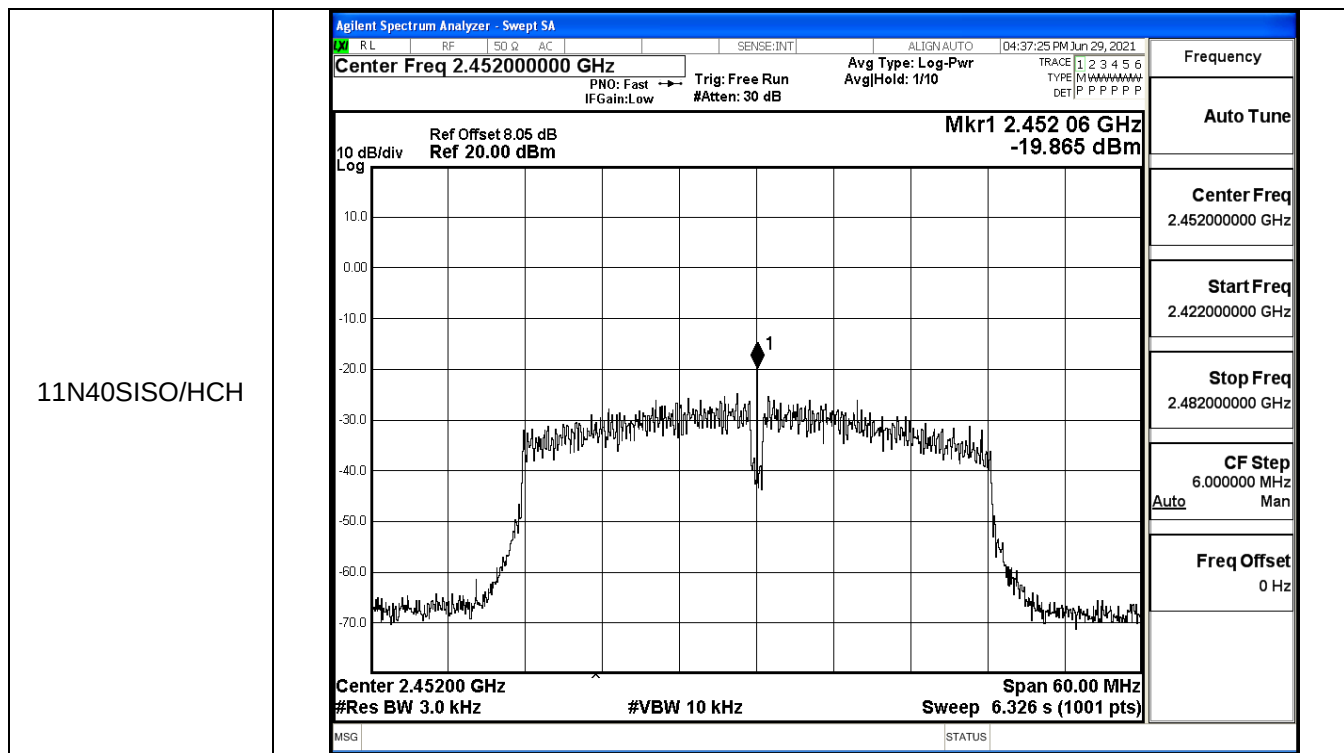
11G/HCH	Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 03:55:14 PM Jun 29, 2021 Center Freq 2.462000000 GHz PNO: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr Avg/Hold: 1/10 TRACE 1 TYPE: M W W W W W W W W W DET: P P P P P P P P Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.462 33 GHz -15.546 dBm  Center 2.46200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts) MSG STATUS Frequency Auto Tune Center Freq2.462000000 GHz Start Freq2.447000000 GHz Stop Freq2.477000000 GHz CF Step3.000000 MHz AutoMan Freq Offset0 Hz
11N20SISO/LCH	Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 03:58:01 PM Jun 29, 2021 Center Freq 2.412000000 GHz PNO: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr Avg/Hold: 1/10 TRACE 1 TYPE: M W W W W W W W W W DET: P P P P P P P P Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.411 76 GHz -15.723 dBm  Center 2.41200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts) MSG STATUS Frequency Auto Tune Center Freq2.412000000 GHz Start Freq2.397000000 GHz Stop Freq2.427000000 GHz CF Step3.000000 MHz AutoMan Freq Offset0 Hz



11N20SISO/MCH	Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC SENSE:INT ALIGN:AUTO 04:00:34 PM Jun 29, 2021 Center Freq 2.437000000 GHz PNO: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr Avg Hold: 1/10 TRACE 1 2 3 4 5 6 TYPE: M W W W W W W W W DET: P P P P P P P 10 dB/div Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.435 80 GHz -15.654 dBm Center 2.43700 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 2.437000000 GHz Start Freq 2.422000000 GHz Stop Freq 2.452000000 GHz CF Step 3.000000 MHz Auto Man Freq Offset 0 Hz
11N20SISO/HCH	Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC SENSE:INT ALIGN:AUTO 04:02:51 PM Jun 29, 2021 Center Freq 2.462000000 GHz PNO: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr Avg Hold: 1/10 TRACE 1 2 3 4 5 6 TYPE: M W W W W W W W W DET: P P P P P P P 10 dB/div Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.462 60 GHz -16.784 dBm Center 2.46200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 2.462000000 GHz Start Freq 2.447000000 GHz Stop Freq 2.477000000 GHz CF Step 3.000000 MHz Auto Man Freq Offset 0 Hz



11N40SISO/LCH	Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 04:30:57 PM Jun 29, 2021 Center Freq 2.422000000 GHz PN0: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr Avg Hold: 1/10 TRACE 1 2 3 4 5 6 TYPE [M] [W] [A] [M] [M] [M] [M] DET [P] [P] [P] [P] [P] [P] Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.422 06 GHz -18.631 dBm Center 2.42200 GHz #Res BW 3.0 kHz #VBW 10 kHz Sweep 6.326 s (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 2.422000000 GHz Start Freq 2.392000000 GHz Stop Freq 2.452000000 GHz CF Step 6.000000 MHz Auto Man Freq Offset 0 Hz
11N40SISO/MCH	Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 04:33:38 PM Jun 29, 2021 Center Freq 2.437000000 GHz PN0: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr Avg Hold: 1/10 TRACE 1 2 3 4 5 6 TYPE [M] [W] [A] [M] [M] [M] [M] DET [P] [P] [P] [P] [P] [P] Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.437 06 GHz -19.997 dBm Center 2.43700 GHz #Res BW 3.0 kHz #VBW 10 kHz Sweep 6.326 s (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 2.437000000 GHz Start Freq 2.407000000 GHz Stop Freq 2.467000000 GHz CF Step 6.000000 MHz Auto Man Freq Offset 0 Hz



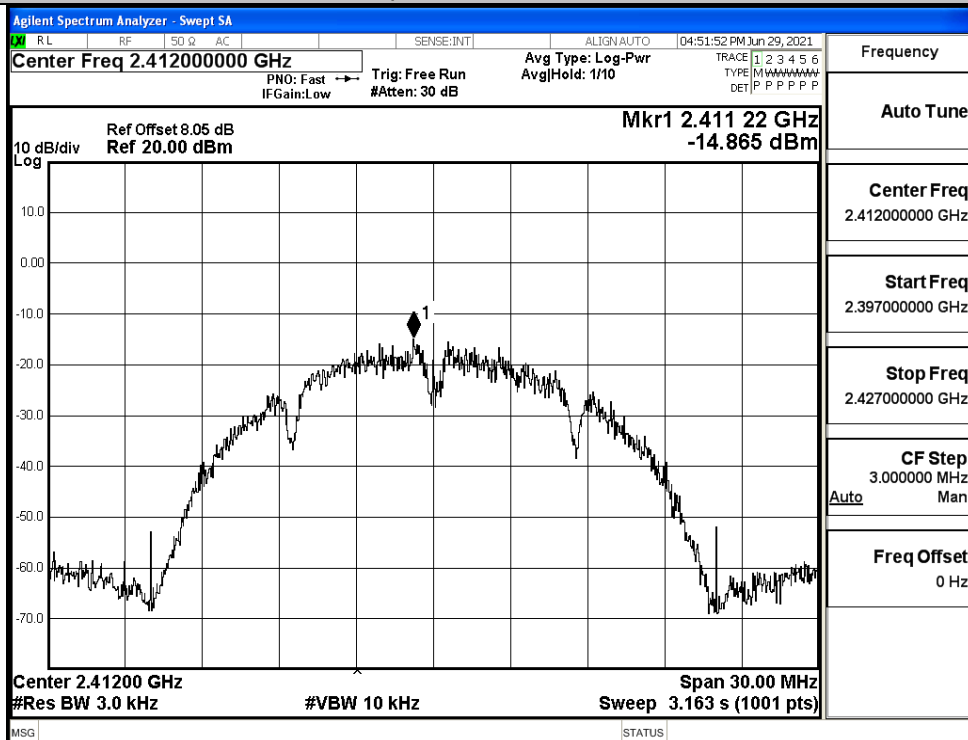
ANT1

Mode	Channel	Meas.Level [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
11B	LCH	-14.865	8	PASS
	MCH	-15.763	8	PASS
	HCH	-16.390	8	PASS
11G	LCH	-20.684	8	PASS
	MCH	-21.130	8	PASS
	HCH	-21.962	8	PASS
11N20SISO	LCH	-19.790	8	PASS
	MCH	-20.541	8	PASS
	HCH	-21.516	8	PASS
11N40SISO	LCH	-18.813	8	PASS
	MCH	-20.563	8	PASS
	HCH	-19.127	8	PASS

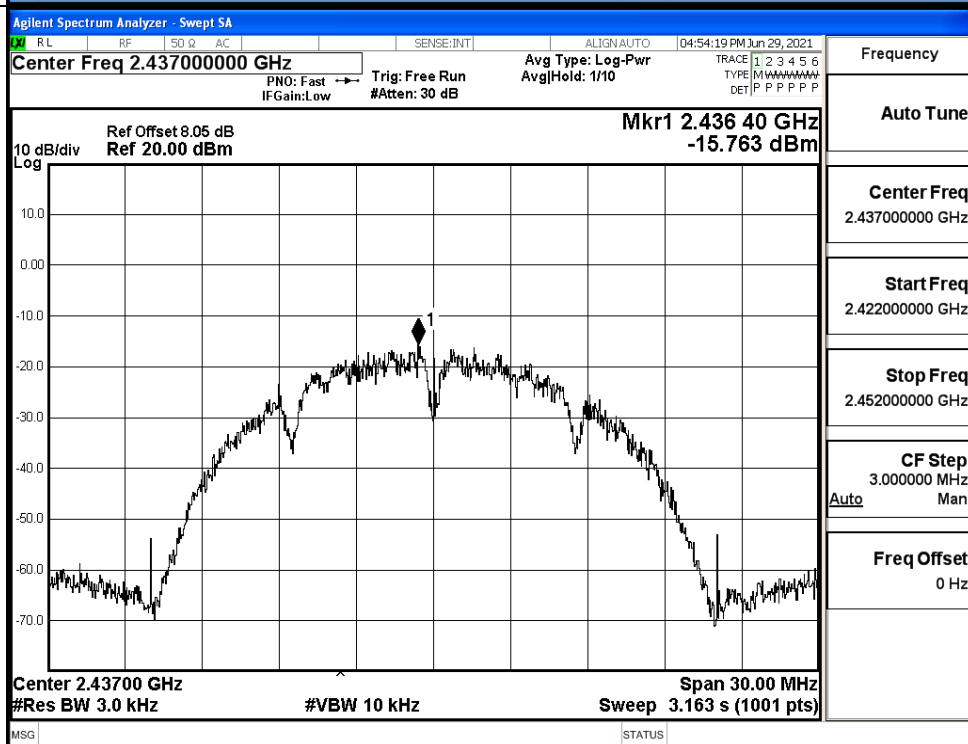


Test Graphs

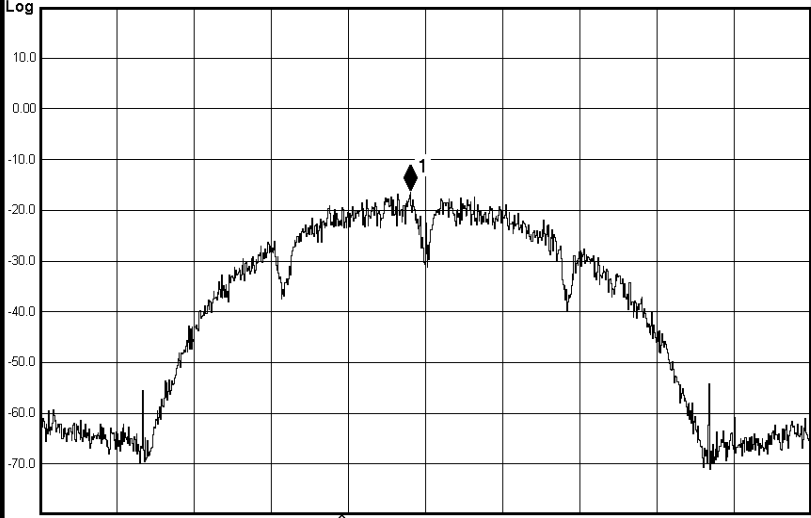
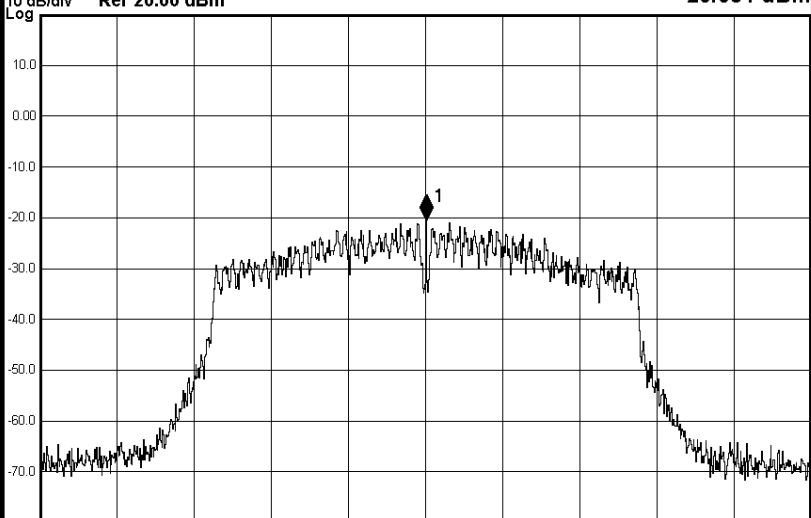
11B/LCH



11B/MCH



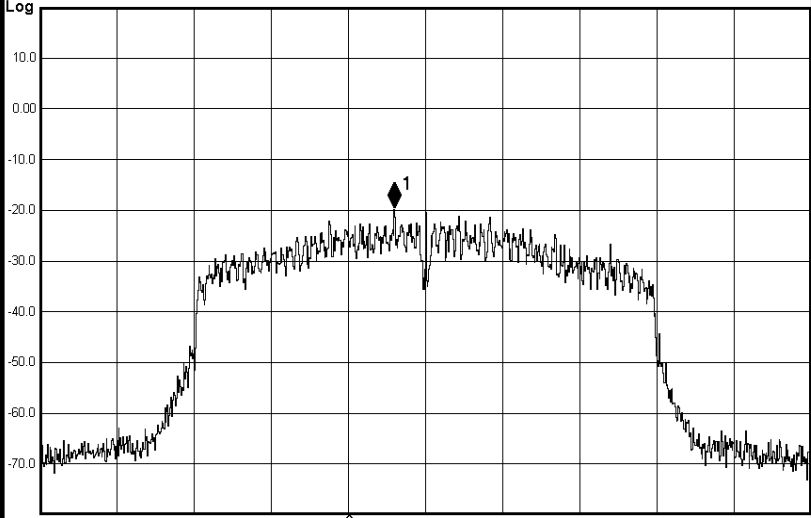
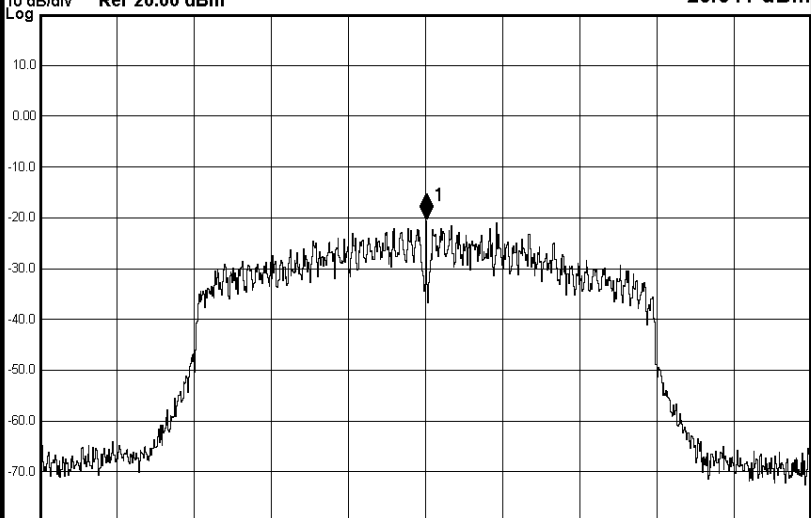


11B/HCH	Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 04:56:05 PM Jun 29, 2021 Center Freq 2.462000000 GHz PNO: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr Avg/Hold: 1/10 TRACE 1 TYPE: M DET: P Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.461 43 GHz -16.390 dBm  Center 2.46200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts) MSG STATUS Frequency Auto Tune Center Freq2.462000000 GHz Start Freq2.447000000 GHz Stop Freq2.477000000 GHz CF Step3.000000 MHz AutoMan Freq Offset0 Hz
11G/LCH	Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 04:58:39 PM Jun 29, 2021 Center Freq 2.412000000 GHz PNO: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr Avg/Hold: 1/10 TRACE 1 TYPE: M DET: P Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.412 03 GHz -20.684 dBm  Center 2.41200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts) MSG STATUS Frequency Auto Tune Center Freq2.412000000 GHz Start Freq2.397000000 GHz Stop Freq2.427000000 GHz CF Step3.000000 MHz AutoMan Freq Offset0 Hz

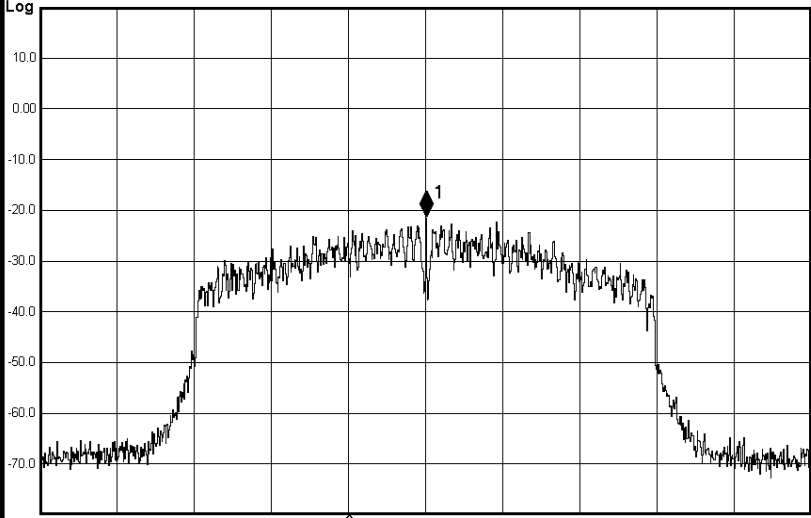
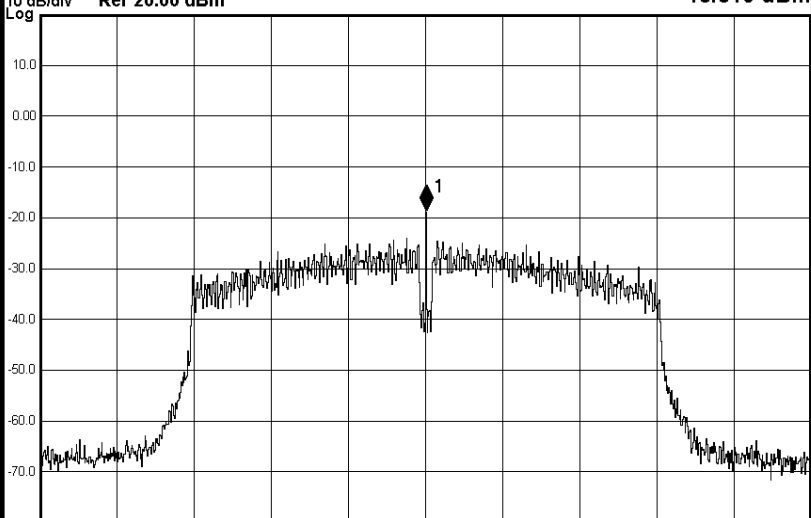


11G/MCH	Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 05:01:08 PM Jun 29, 2021 Center Freq 2.437000000 GHz PNO: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr Avg/Hold: 1/10 TRACE 1 2 3 4 5 6 TYPE: M W W W W W W W W DET: P P P P P P P Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.436 10 GHz -21.130 dBm Center 2.43700 GHz #Res BW 3.0 kHz #VBW 10 kHz Sweep 3.163 s (1001 pts) MSG STATUS Frequency Auto Tune Center Freq2.437000000 GHz Start Freq2.422000000 GHz Stop Freq2.452000000 GHz CF Step3.000000 MHz AutoMan Freq Offset0 Hz
11G/HCH	Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 05:03:45 PM Jun 29, 2021 Center Freq 2.462000000 GHz PNO: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr Avg/Hold: 1/10 TRACE 1 2 3 4 5 6 TYPE: M W W W W W W W W DET: P P P P P P P Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.459 21 GHz -21.962 dBm Center 2.46200 GHz #Res BW 3.0 kHz #VBW 10 kHz Sweep 3.163 s (1001 pts) MSG STATUS Frequency Auto Tune Center Freq2.462000000 GHz Start Freq2.447000000 GHz Stop Freq2.477000000 GHz CF Step3.000000 MHz AutoMan Freq Offset0 Hz



11N20SISO/LCH	Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 05:06:16 PM Jun 29, 2021 Center Freq 2.412000000 GHz PNO: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr Avg Hold: 1/10 TRACE 1 2 3 4 5 6 TYPE [M] [W] [M] [M] [M] [M] DET [P] [P] [P] [P] [P] [P] Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.410 80 GHz -19.790 dBm  Center 2.41200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 2.412000000 GHz Start Freq 2.397000000 GHz Stop Freq 2.427000000 GHz CF Step 3.000000 MHz Auto Man Freq Offset 0 Hz
11N20SISO/MCH	Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 05:08:41 PM Jun 29, 2021 Center Freq 2.437000000 GHz PNO: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr Avg Hold: 1/10 TRACE 1 2 3 4 5 6 TYPE [M] [W] [M] [M] [M] [M] DET [P] [P] [P] [P] [P] [P] Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.437 03 GHz -20.541 dBm  Center 2.43700 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts) MSG STATUS Frequency Auto Tune Center Freq 2.437000000 GHz Start Freq 2.422000000 GHz Stop Freq 2.452000000 GHz CF Step 3.000000 MHz Auto Man Freq Offset 0 Hz



11N20SISO/HCH	Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 05:10:39 PM Jun 29, 2021 Center Freq 2.462000000 GHz PNO: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr Avg/Hold: 1/10 TRACE 1 TYPE: M DET: P Frequency Auto Tune Center Freq2.462000000 GHz Start Freq2.447000000 GHz Stop Freq2.477000000 GHz CF Step3.000000 MHz AutoMan Freq Offset0 Hz 10 dB/div Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.462 03 GHz-21.516 dBm  Center 2.46200 GHz#Res BW 3.0 kHz#VBW 10 kHzSweep 3.163 s (1001 pts) MSGSTATUS
11N40SISO/LCH	Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 05:18:05 PM Jun 29, 2021 Center Freq 2.422000000 GHz PNO: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr Avg/Hold: 1/10 TRACE 1 TYPE: M DET: P Frequency Auto Tune Center Freq2.422000000 GHz Start Freq2.392000000 GHz Stop Freq2.452000000 GHz CF Step6.000000 MHz AutoMan Freq Offset0 Hz 10 dB/div Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.422 06 GHz-18.813 dBm  Center 2.42200 GHz#Res BW 3.0 kHz#VBW 10 kHzSweep 6.326 s (1001 pts) MSGSTATUS



11N40SISO/MCH	Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 05:20:36 PM Jun 29, 2021 Center Freq 2.437000000 GHz PN0: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr Avg Hold: 1/10 TRACE 1 TYPE [M] W [W] W [W] W [W] W [W] W [W] DET [P] P [P] P [P] P [P] P [P] Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.437 06 GHz -20.563 dBm Center 2.43700 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 60.00 MHz Sweep 6.326 s (1001 pts) MSG STATUS Frequency Auto Tune Center Freq2.437000000 GHz Start Freq2.407000000 GHz Stop Freq2.467000000 GHz CF Step6.000000 MHz AutoMan Freq Offset0 Hz
11N40SISO/HCH	Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 05:24:01 PM Jun 29, 2021 Center Freq 2.452000000 GHz PN0: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr Avg Hold: 1/10 TRACE 1 TYPE [M] W [W] W [W] W [W] W [W] W [W] DET [P] P [P] P [P] P [P] P [P] Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.452 06 GHz -19.127 dBm Center 2.45200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 60.00 MHz Sweep 6.326 s (1001 pts) MSG STATUS Frequency Auto Tune Center Freq2.452000000 GHz Start Freq2.422000000 GHz Stop Freq2.482000000 GHz CF Step6.000000 MHz AutoMan Freq Offset0 Hz



MIMO

Mode	Channel	ANT 0 [dBm/3KHz]	ANT 1 [dBm/3KHz]	MIMO [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
11N20	LCH	-15.723	-19.790	-14.29	8.0	PASS
	MCH	-15.654	-20.541	-14.43	8.0	PASS
	HCH	-16.784	-21.516	-15.52	8.0	PASS
11N40	LCH	-18.631	-18.813	-15.71	8.0	PASS
	MCH	-19.997	-20.563	-17.26	8.0	PASS
	HCH	-19.865	-19.127	-16.47	8.0	PASS



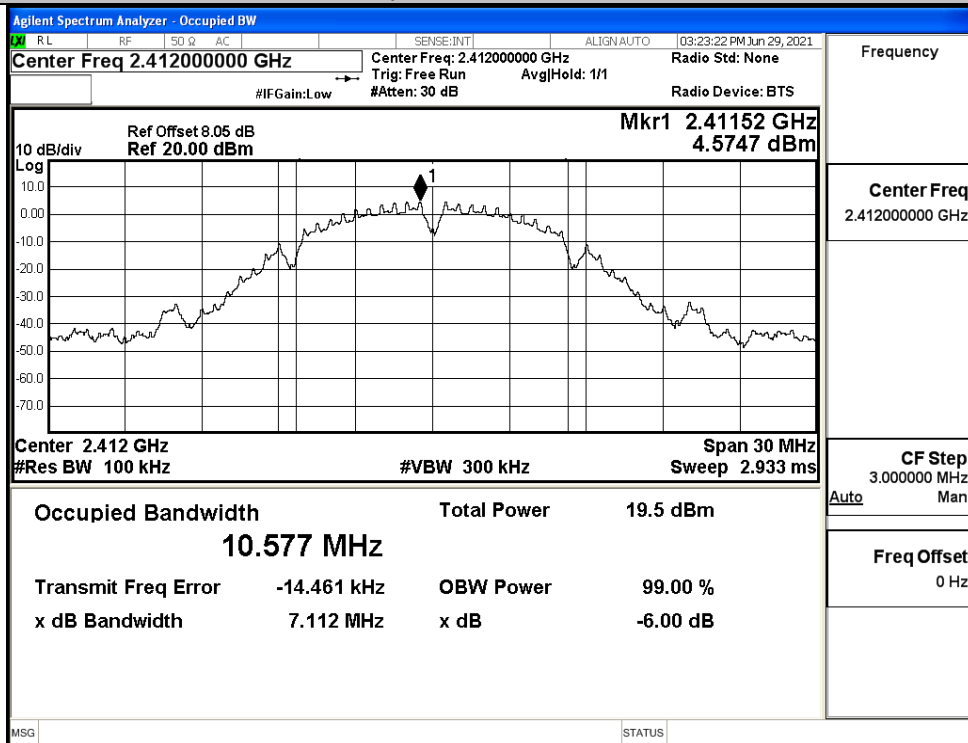
C.4 6dB Bandwidth

ANT0

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
11B	LCH	7.112	≥ 0.5	PASS
	MCH	7.581	≥ 0.5	PASS
	HCH	8.046	≥ 0.5	PASS
11G	LCH	15.44	≥ 0.5	PASS
	MCH	15.21	≥ 0.5	PASS
	HCH	15.20	≥ 0.5	PASS
11N20SISO	LCH	15.21	≥ 0.5	PASS
	MCH	15.18	≥ 0.5	PASS
	HCH	15.20	≥ 0.5	PASS
11N40SISO	LCH	35.88	≥ 0.5	PASS
	MCH	31.29	≥ 0.5	PASS
	HCH	32.53	≥ 0.5	PASS

Test Graphs

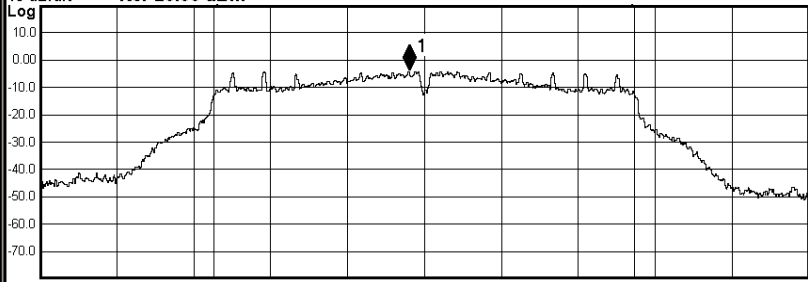
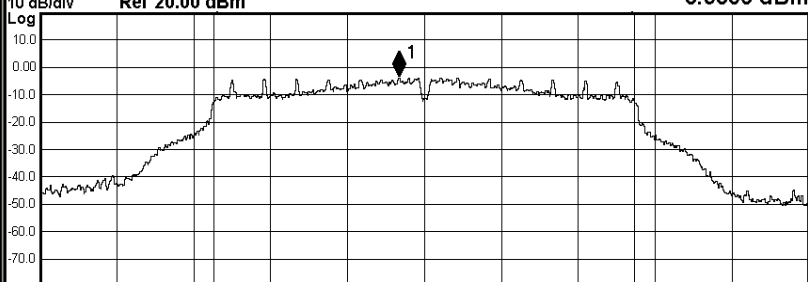
11B/LCH





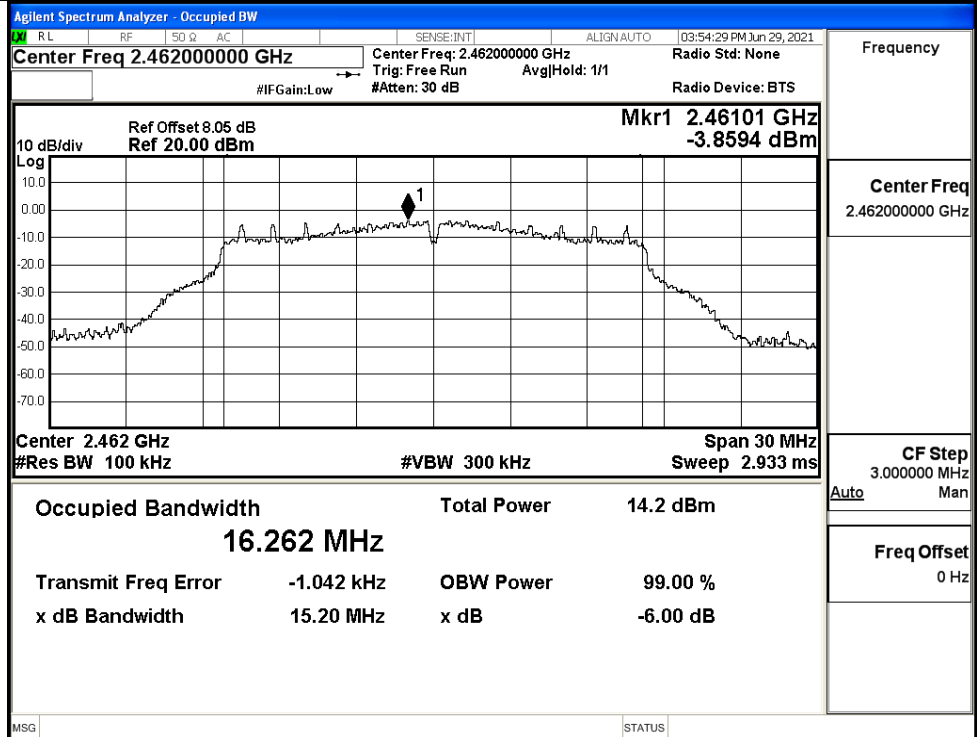
11B/MCH	Agilent Spectrum Analyzer - Occupied BW RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 03:25:46 PM Jun 29, 2021 Center Freq 2.437000000 GHz Center Freq: 2.437000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS #IF Gain: Low #Atten: 30 dB Frequency Center Freq 2.437000000 GHz CF Step 3.000000 MHz Auto Man Freq Offset 0 Hz 10 dB/div Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.43802 GHz 4.3202 dBm Center 2.437 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth Total Power 19.6 dBm 10.694 MHz Transmit Freq Error -58.065 kHz OBW Power 99.00 % x dB Bandwidth 7.581 MHz x dB -6.00 dB MSG STATUS
11B/HCH	Agilent Spectrum Analyzer - Occupied BW RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 03:38:35 PM Jun 29, 2021 Sweep Time 2.93 ms Center Freq: 2.462000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS #IF Gain: Low #Atten: 30 dB Sweep/Control Sweep Time 2.93 ms Auto Man Sweep Setup▶ Pause Gate [Off, LO]▶ Points 1001 10 dB/div Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.46104 GHz 4.3435 dBm Center 2.462 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth Total Power 19.5 dBm 11.076 MHz Transmit Freq Error -195.99 kHz OBW Power 99.00 % x dB Bandwidth 8.046 MHz x dB -6.00 dB MSG STATUS



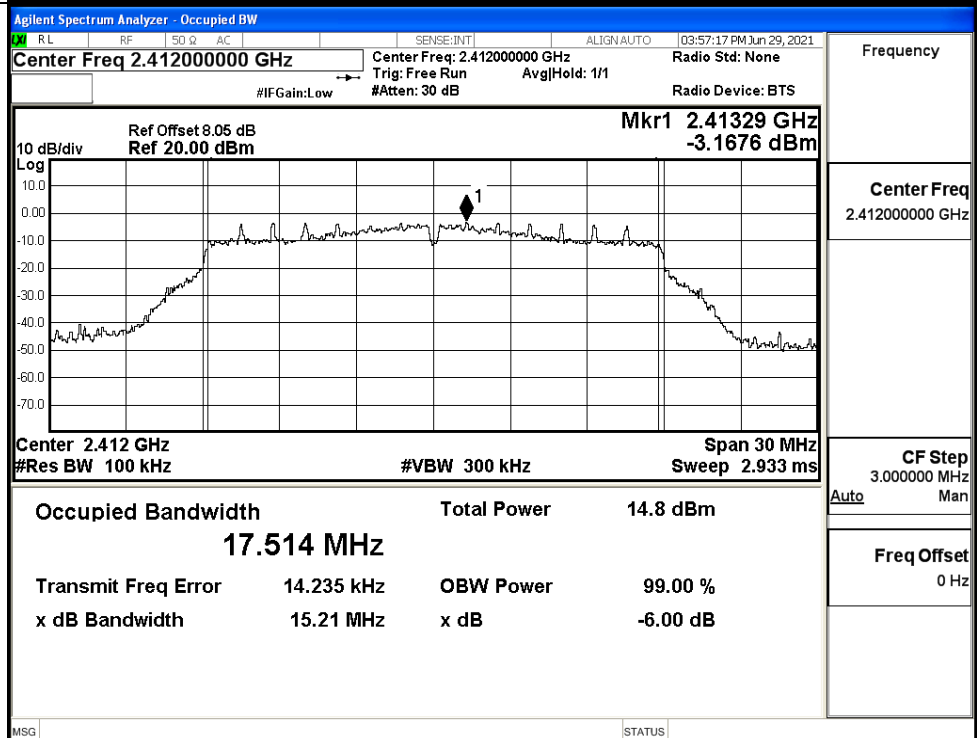
11G/LCH	Agilent Spectrum Analyzer - Occupied BW RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 03:49:20 PM Jun 29, 2021 Center Freq 2.412000000 GHz Center Freq: 2.412000000 GHz Trig: Free Run Avg Hold: 1/1 Radio Std: None #IF Gain: Low #Atten: 30 dB Radio Device: BTS 10 dB/div Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.4114 GHz -4.1804 dBm Log  Center 2.412 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth Total Power 14.2 dBm 16.311 MHz Transmit Freq Error 5.376 kHz OBW Power 99.00 % x dB Bandwidth 15.44 MHz x dB -6.00 dB MSG STATUS	Frequency Center Freq 2.412000000 GHz CF Step 3.000000 MHz Auto Man Freq Offset 0 Hz
11G/MCH	Agilent Spectrum Analyzer - Occupied BW RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 03:52:50 PM Jun 29, 2021 Center Freq 2.437000000 GHz Center Freq: 2.437000000 GHz Trig: Free Run Avg Hold: 1/1 Radio Std: None #IF Gain: Low #Atten: 30 dB Radio Device: BTS 10 dB/div Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.43601 GHz -3.9356 dBm Log  Center 2.437 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth Total Power 14.4 dBm 16.324 MHz Transmit Freq Error 3.118 kHz OBW Power 99.00 % x dB Bandwidth 15.21 MHz x dB -6.00 dB MSG STATUS	Frequency Center Freq 2.437000000 GHz CF Step 3.000000 MHz Auto Man Freq Offset 0 Hz



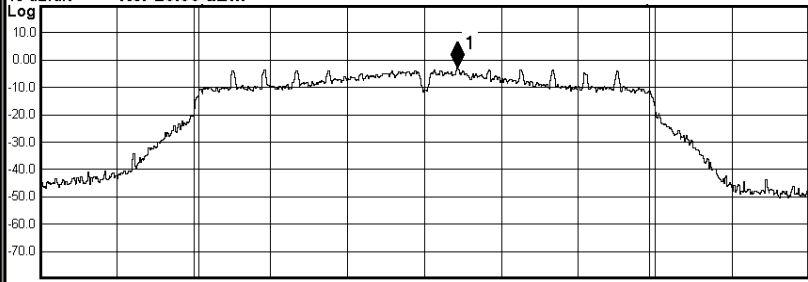
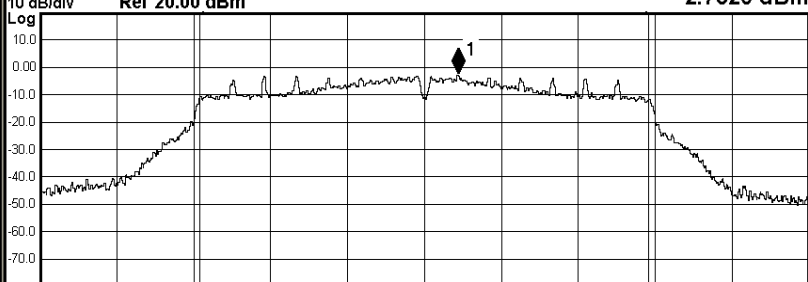
11G/HCH



11N20SISO/LCH





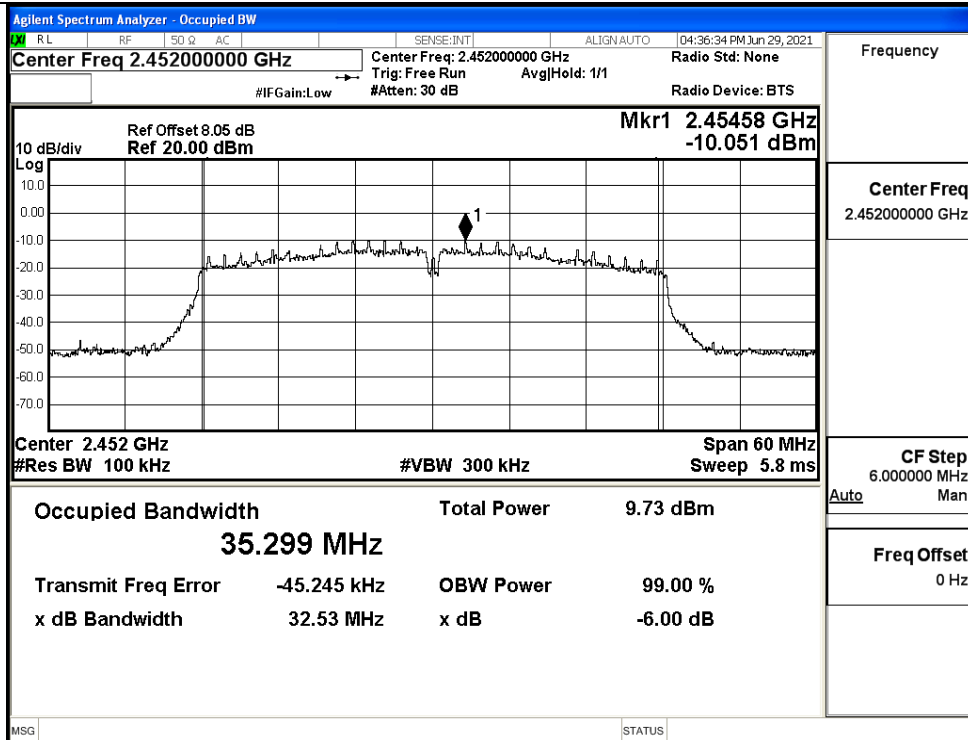
11N20SISO/MCH	Agilent Spectrum Analyzer - Occupied BW RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:59:49 PM Jun 29, 2021 Center Freq 2.437000000 GHz Center Freq: 2.437000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None #IF Gain: Low #Atten: 30 dB Radio Device: BTS 10 dB/div Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.43829 GHz -3.0555 dBm Log  Center 2.437 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth Total Power 15.0 dBm 17.501 MHz Transmit Freq Error 10.778 kHz OBW Power 99.00 % x dB Bandwidth 15.18 MHz x dB -6.00 dB MSG STATUS Frequency Center Freq 2.437000000 GHz CF Step 3.000000 MHz Auto Man Freq Offset 0 Hz
11N20SISO/HCH	Agilent Spectrum Analyzer - Occupied BW RL RF 50 Ω AC SENSE:INT ALIGN AUTO 04:02:06 PM Jun 29, 2021 Center Freq 2.462000000 GHz Center Freq: 2.462000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None #IF Gain: Low #Atten: 30 dB Radio Device: BTS 10 dB/div Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.46332 GHz -2.7320 dBm Log  Center 2.462 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth Total Power 15.1 dBm 17.446 MHz Transmit Freq Error 4.544 kHz OBW Power 99.00 % x dB Bandwidth 15.20 MHz x dB -6.00 dB MSG STATUS Frequency Center Freq 2.462000000 GHz CF Step 3.000000 MHz Auto Man Freq Offset 0 Hz



11N40SISO/LCH	Agilent Spectrum Analyzer - Occupied BW RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 10:07:51 AM Jun 29, 2021 Center Freq 2.422000000 GHz Center Freq: 2.422000000 GHz Trig: Free Run Avg Hold: 1/1 Radio Std: None #IFGain: Low #Atten: 30 dB Radio Device: BTS 10 dB/div Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.43952 GHz -8.8231 dBm Log 10.0 0.00 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 -70.0 Center 2.422 GHz #Res BW 100 kHz #VBW 300 kHz Span 60 MHz Sweep 5.8 ms Occupied Bandwidth 36.078 MHz Total Power 11.6 dBm Transmit Freq Error 86.148 kHz OBW Power 99.00 % x dB Bandwidth 35.88 MHz x dB -6.00 dB MSG STATUS	Frequency Center Freq 2.422000000 GHz CF Step 6.000000 MHz Auto Man Freq Offset 0 Hz
11N40SISO/MCH	Agilent Spectrum Analyzer - Occupied BW RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 04:32:42 PM Jun 29, 2021 Center Freq 2.437000000 GHz Center Freq: 2.437000000 GHz Trig: Free Run Avg Hold: 1/1 Radio Std: None #IFGain: Low #Atten: 30 dB Radio Device: BTS 10 dB/div Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.43448 GHz -8.8849 dBm Log 10.0 0.00 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 -70.0 Center 2.437 GHz #Res BW 100 kHz #VBW 300 kHz Span 60 MHz Sweep 5.8 ms Occupied Bandwidth 35.276 MHz Total Power 10.8 dBm Transmit Freq Error -53.131 kHz OBW Power 99.00 % x dB Bandwidth 31.29 MHz x dB -6.00 dB MSG STATUS	Frequency Center Freq 2.437000000 GHz CF Step 6.000000 MHz Auto Man Freq Offset 0 Hz



11N40SISO/HCH



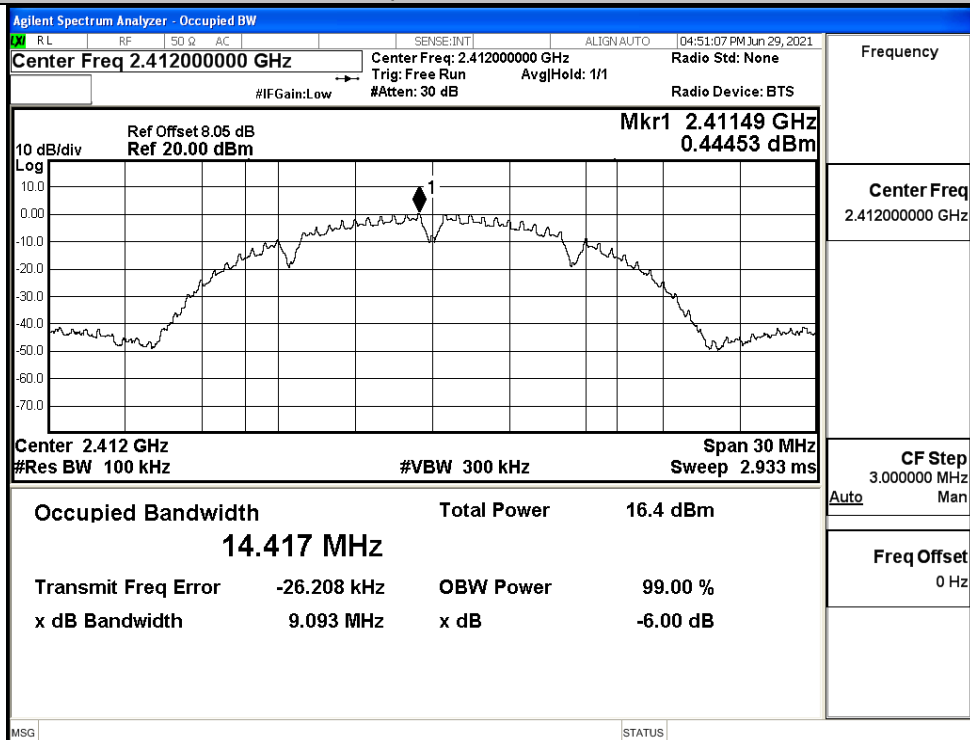


ANT1

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
11B	LCH	9.093	≥ 0.5	PASS
	MCH	9.086	≥ 0.5	PASS
	HCH	9.069	≥ 0.5	PASS
11G	LCH	10.03	≥ 0.5	PASS
	MCH	11.30	≥ 0.5	PASS
	HCH	12.58	≥ 0.5	PASS
11N20SISO	LCH	10.09	≥ 0.5	PASS
	MCH	10.10	≥ 0.5	PASS
	HCH	11.35	≥ 0.5	PASS
11N40SISO	LCH	31.33	≥ 0.5	PASS
	MCH	31.31	≥ 0.5	PASS
	HCH	30.08	≥ 0.5	PASS

Test Graphs

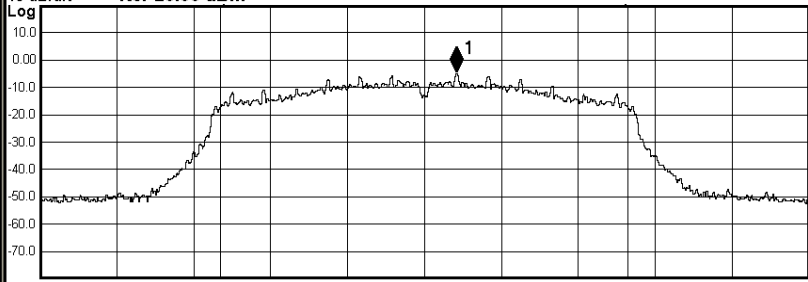
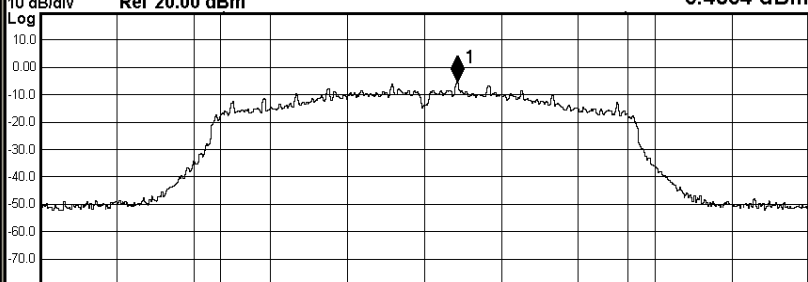
11B/LCH





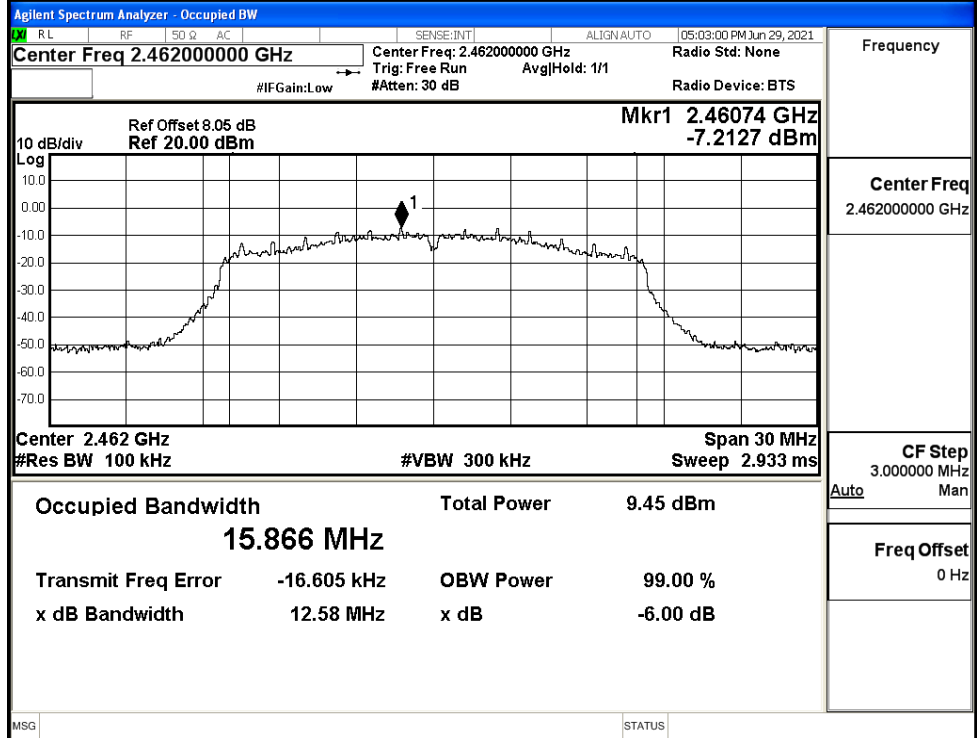
11B/MCH	Agilent Spectrum Analyzer - Occupied BW RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 04:53:35 PM Jun 29, 2021 Center Freq 2.437000000 GHz Center Freq: 2.437000000 GHz Trig: Free Run Avg Hold: 1/1 Radio Std: None #IF Gain: Low #Atten: 30 dB Radio Device: BTS 10 dB/div Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.43601 GHz -0.19462 dBm Center 2.437 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth Total Power 15.8 dBm 14.347 MHz Transmit Freq Error 5.516 kHz OBW Power 99.00 % x dB Bandwidth 9.086 MHz x dB -6.00 dB MSG STATUS Frequency Center Freq 2.437000000 GHz CF Step 3.000000 MHz Auto Man Freq Offset 0 Hz
11B/HCH	Agilent Spectrum Analyzer - Occupied BW RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 04:55:20 PM Jun 29, 2021 Center Freq 2.462000000 GHz Center Freq: 2.462000000 GHz Trig: Free Run Avg Hold: 1/1 Radio Std: None #IF Gain: Low #Atten: 30 dB Radio Device: BTS 10 dB/div Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.46251 GHz -0.81382 dBm Center 2.462 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth Total Power 15.3 dBm 14.321 MHz Transmit Freq Error -49.638 kHz OBW Power 99.00 % x dB Bandwidth 9.069 MHz x dB -6.00 dB MSG STATUS Frequency Center Freq 2.462000000 GHz CF Step 3.000000 MHz Auto Man Freq Offset 0 Hz



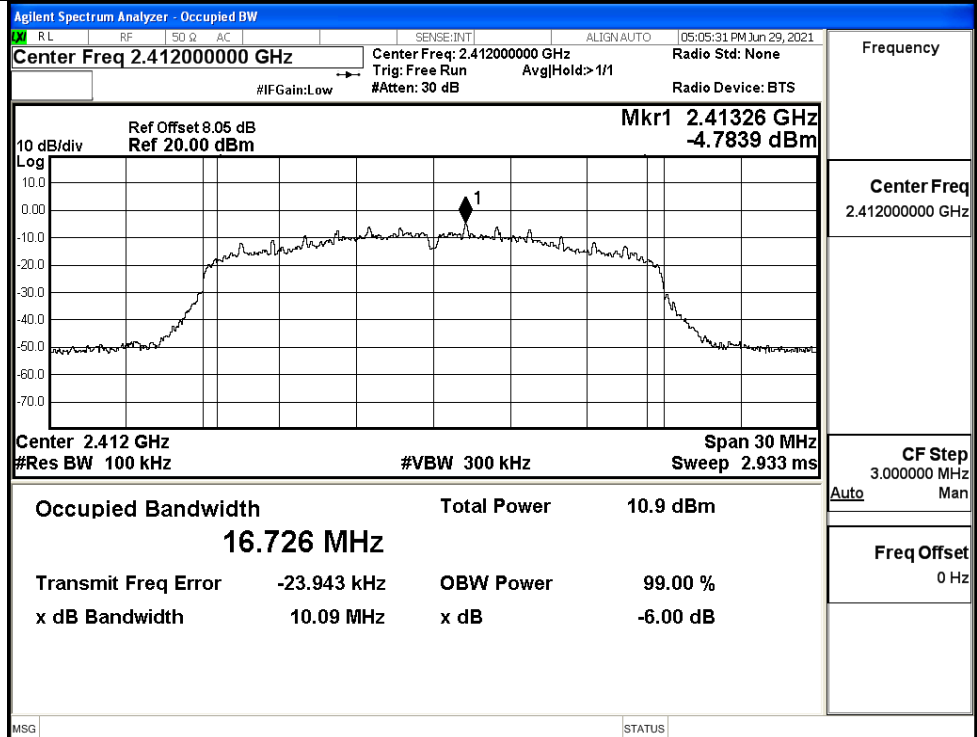
11G/LCH	Agilent Spectrum Analyzer - Occupied BW RL RF 50 Ω AC SENSE:INT ALIGN:Auto 04:57:55 PM Jun 29, 2021 Center Freq 2.41200000 GHz Center Freq: 2.412000000 GHz Trig: Free Run Avg Hold: 1/1 Radio Std: None #IF Gain: Low #Atten: 30 dB Radio Device: BTS 10 dB/div Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.41326 GHz -4.9247 dBm  Center 2.412 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth Total Power 11.0 dBm 15.848 MHz Transmit Freq Error -8.031 kHz OBW Power 99.00 % x dB Bandwidth 10.03 MHz x dB -6.00 dB MSG STATUS Frequency Center Freq 2.41200000 GHz CF Step 3.000000 MHz Auto Man Freq Offset 0 Hz
11G/MCH	Agilent Spectrum Analyzer - Occupied BW RL RF 50 Ω AC SENSE:INT ALIGN:Auto 05:00:23 PM Jun 29, 2021 Center Freq 2.43700000 GHz Center Freq: 2.437000000 GHz Trig: Free Run Avg Hold: 1/1 Radio Std: None #IF Gain: Low #Atten: 30 dB Radio Device: BTS 10 dB/div Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.43829 GHz -5.4854 dBm  Center 2.437 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth Total Power 10.5 dBm 15.850 MHz Transmit Freq Error 5.126 kHz OBW Power 99.00 % x dB Bandwidth 11.30 MHz x dB -6.00 dB MSG STATUS Frequency Center Freq 2.43700000 GHz CF Step 3.000000 MHz Auto Man Freq Offset 0 Hz



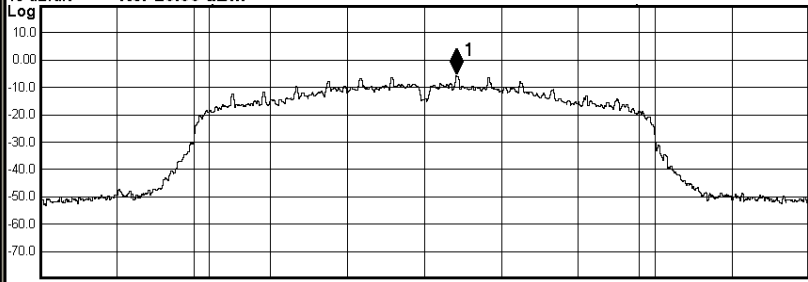
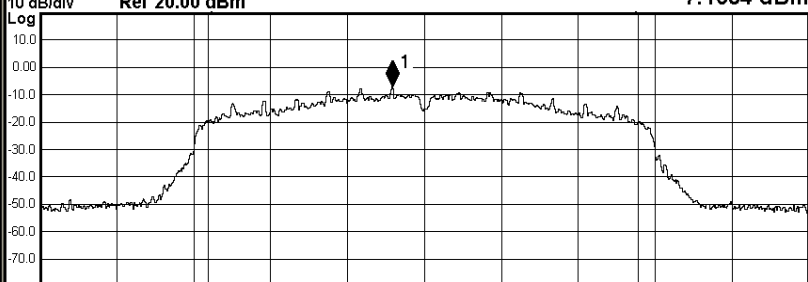
11G/HCH



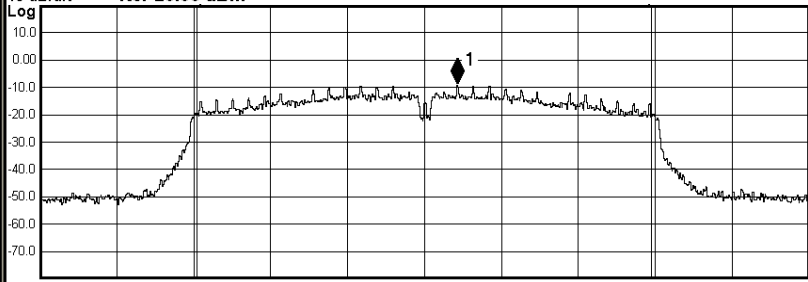
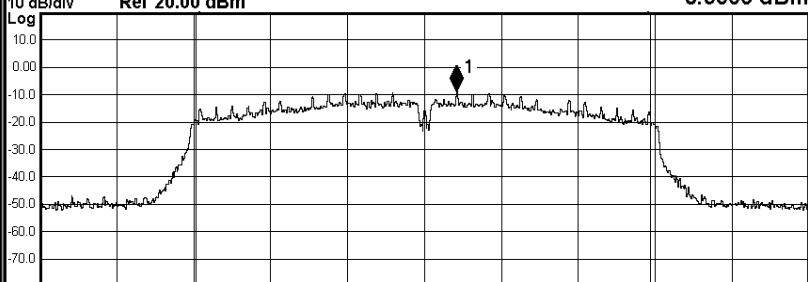
11N20SISO/LCH

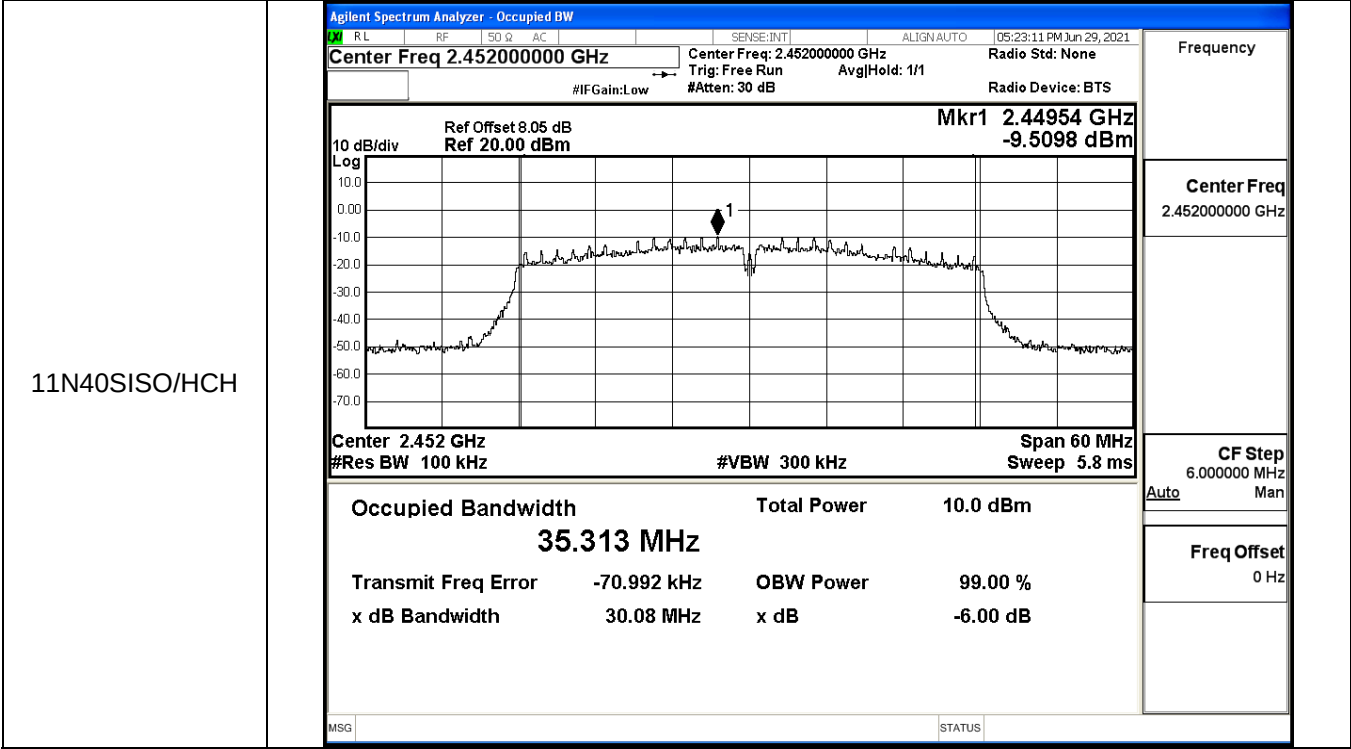




11N20SISO/MCH	Agilent Spectrum Analyzer - Occupied BW RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 05:07:56 PM Jun 29, 2021 Center Freq 2.437000000 GHz Center Freq: 2.437000000 GHz Trig: Free Run #Atten: 30 dB Radio Std: None Avg Hold: 1/1 Radio Device: BTS 10 dB/div Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.43826 GHz -5.5794 dBm  Center 2.437 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth Total Power 10.3 dBm 16.713 MHz Transmit Freq Error -4.957 kHz OBW Power 99.00 % x dB Bandwidth 10.10 MHz x dB -6.00 dB MSG STATUS Frequency Center Freq 2.437000000 GHz CF Step 3.000000 MHz Auto Man Freq Offset 0 Hz
11N20SISO/HCH	Agilent Spectrum Analyzer - Occupied BW RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 05:09:55 PM Jun 29, 2021 Center Freq 2.462000000 GHz Center Freq: 2.462000000 GHz Trig: Free Run #Atten: 30 dB Radio Std: None Avg Hold: 1/1 Radio Device: BTS 10 dB/div Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.46074 GHz -7.1684 dBm  Center 2.462 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth Total Power 9.11 dBm 16.739 MHz Transmit Freq Error -32.746 kHz OBW Power 99.00 % x dB Bandwidth 11.35 MHz x dB -6.00 dB MSG STATUS Frequency Center Freq 2.462000000 GHz CF Step 3.000000 MHz Auto Man Freq Offset 0 Hz



11N40SISO/LCH	Agilent Spectrum Analyzer - Occupied BW RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 05:17:17 PM Jun 29, 2021 Center Freq 2.422000000 GHz Center Freq: 2.422000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None #IF Gain: Low #Atten: 30 dB Radio Device: BTS 10 dB/div Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.42458 GHz -9.1536 dBm Log  Center 2.422 GHz #Res BW 100 kHz #VBW 300 kHz Span 60 MHz Sweep 5.8 ms Occupied Bandwidth 35.304 MHz Total Power 10.6 dBm Transmit Freq Error 7.807 kHz OBW Power 99.00 % x dB Bandwidth 31.33 MHz x dB -6.00 dB MSG STATUS	Frequency Center Freq 2.422000000 GHz CF Step 6.000000 MHz Auto Man Freq Offset 0 Hz
11N40SISO/MCH	Agilent Spectrum Analyzer - Occupied BW RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 05:19:47 PM Jun 29, 2021 Center Freq 2.437000000 GHz Center Freq: 2.437000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None #IF Gain: Low #Atten: 30 dB Radio Device: BTS 10 dB/div Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.43952 GHz -8.9506 dBm Log  Center 2.437 GHz #Res BW 100 kHz #VBW 300 kHz Span 60 MHz Sweep 5.8 ms Occupied Bandwidth 35.281 MHz Total Power 10.7 dBm Transmit Freq Error -57.036 kHz OBW Power 99.00 % x dB Bandwidth 31.31 MHz x dB -6.00 dB MSG STATUS	Frequency Center Freq 2.437000000 GHz CF Step 6.000000 MHz Auto Man Freq Offset 0 Hz





C.5 RF Conducted Spurious Emissions

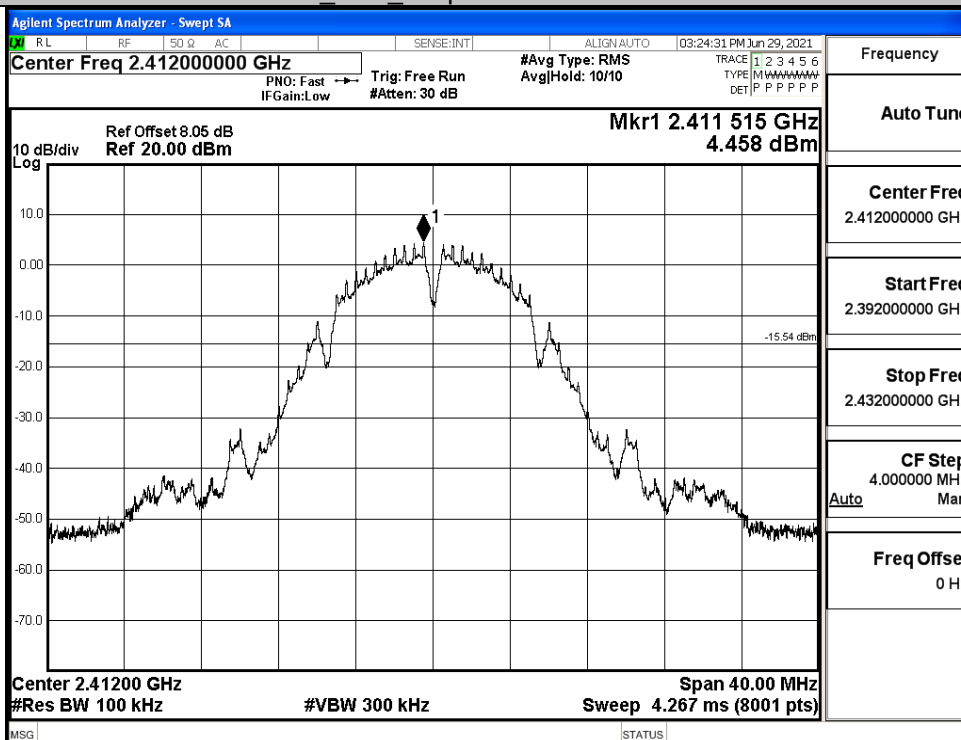
ANT0

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
11B	LCH	4.458	-38.732	-15.542	PASS
	MCH	4.049	-37.797	-15.951	PASS
	HCH	4.227	-38.860	-15.773	PASS
11G	LCH	-4.184	-37.716	-24.184	PASS
	MCH	-4.051	-37.765	-24.051	PASS
	HCH	-4.11	-37.508	-24.110	PASS
11N20 SISO	LCH	-3.274	-38.514	-23.274	PASS
	MCH	-3.038	-35.844	-23.038	PASS
	HCH	-3.154	-38.366	-23.154	PASS
11N40 SISO	LCH	-8.956	-36.937	-28.956	PASS
	MCH	-9.314	-37.892	-29.314	PASS
	HCH	-9.921	-37.781	-29.921	PASS

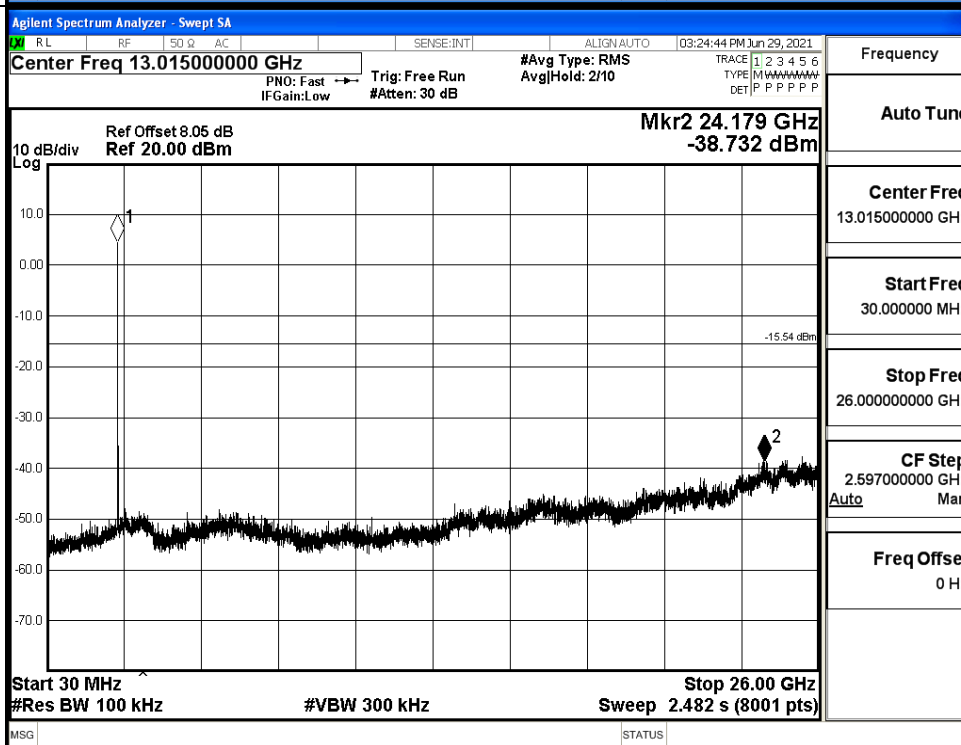


11B LCH Graphs

Pref/11B/LCH



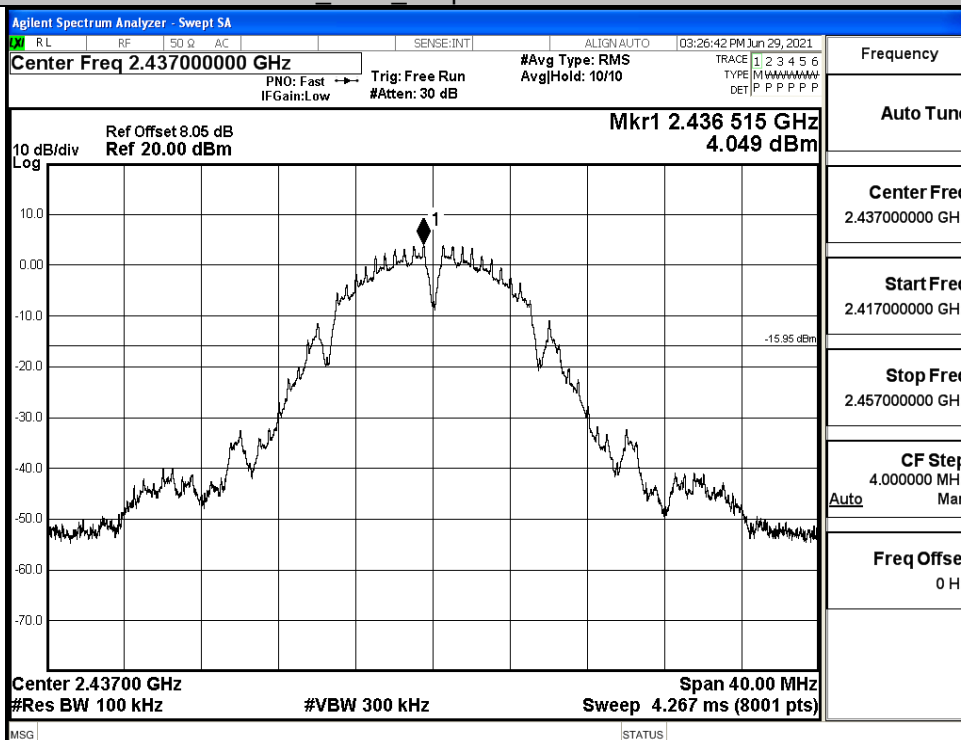
Puw/11B/LCH



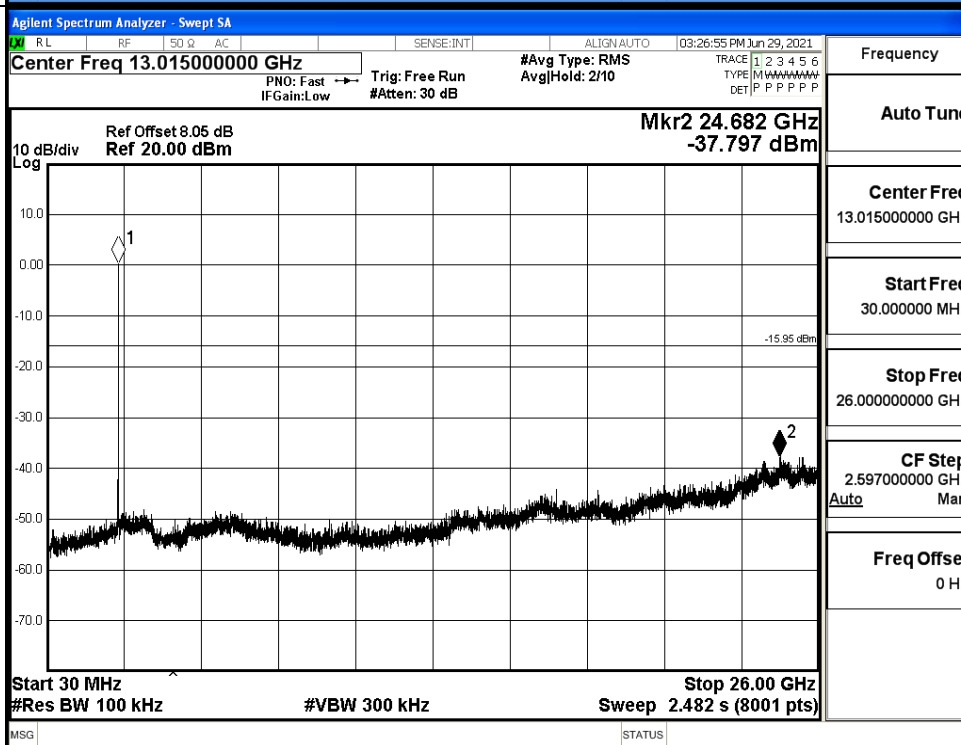


11B MCH Graphs

Pref/11B/MCH



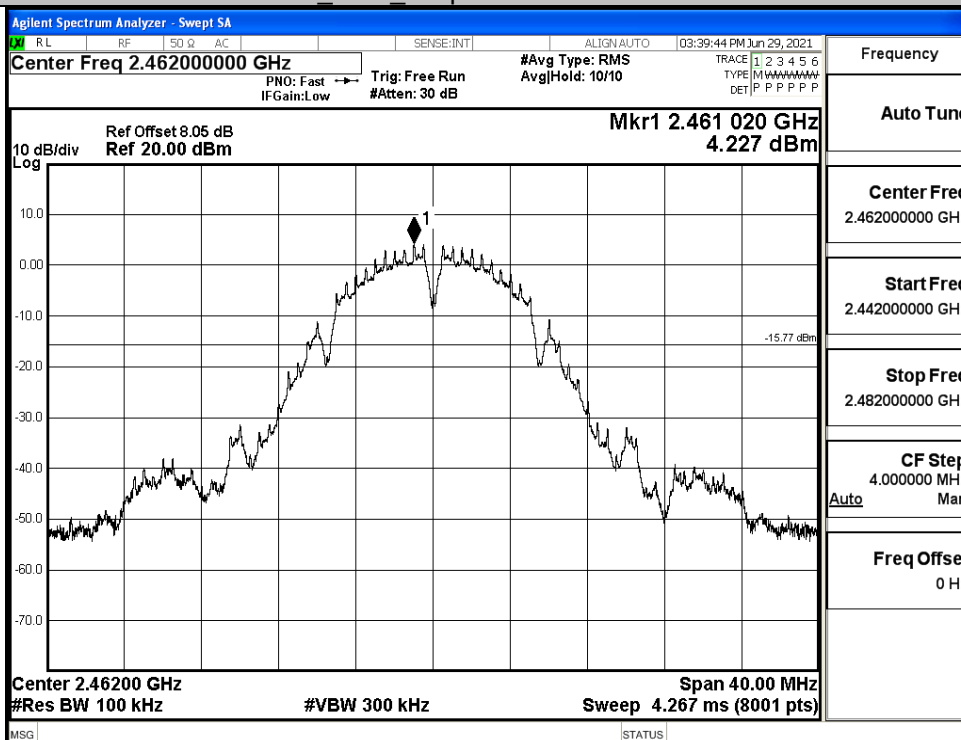
Puw/11B/MCH



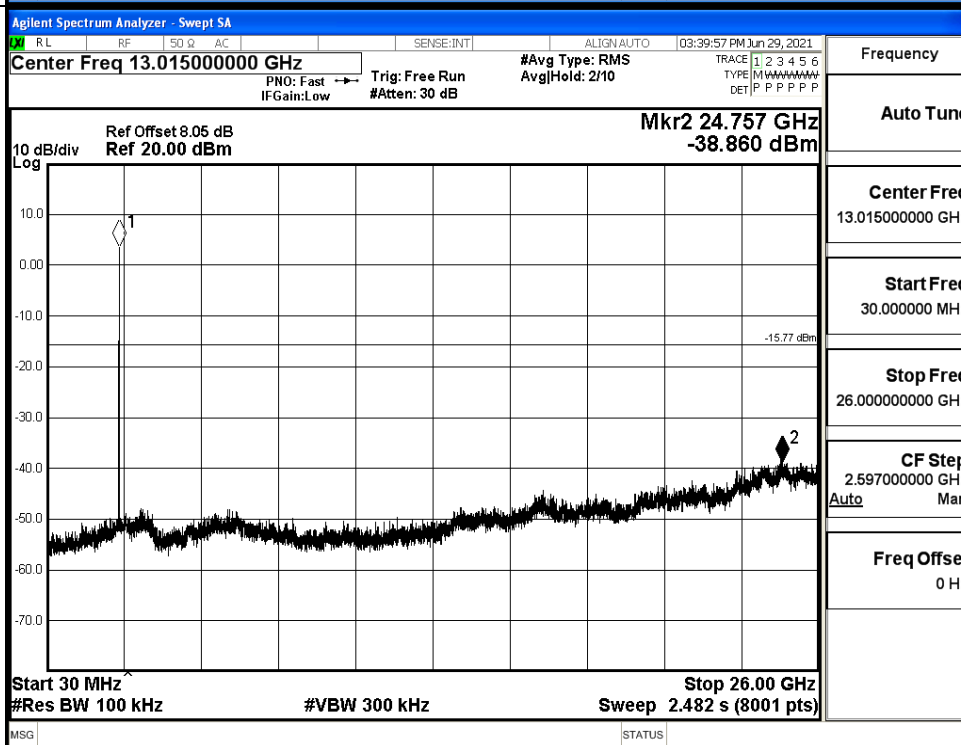


11B HCH Graphs

Pref/11B/HCH



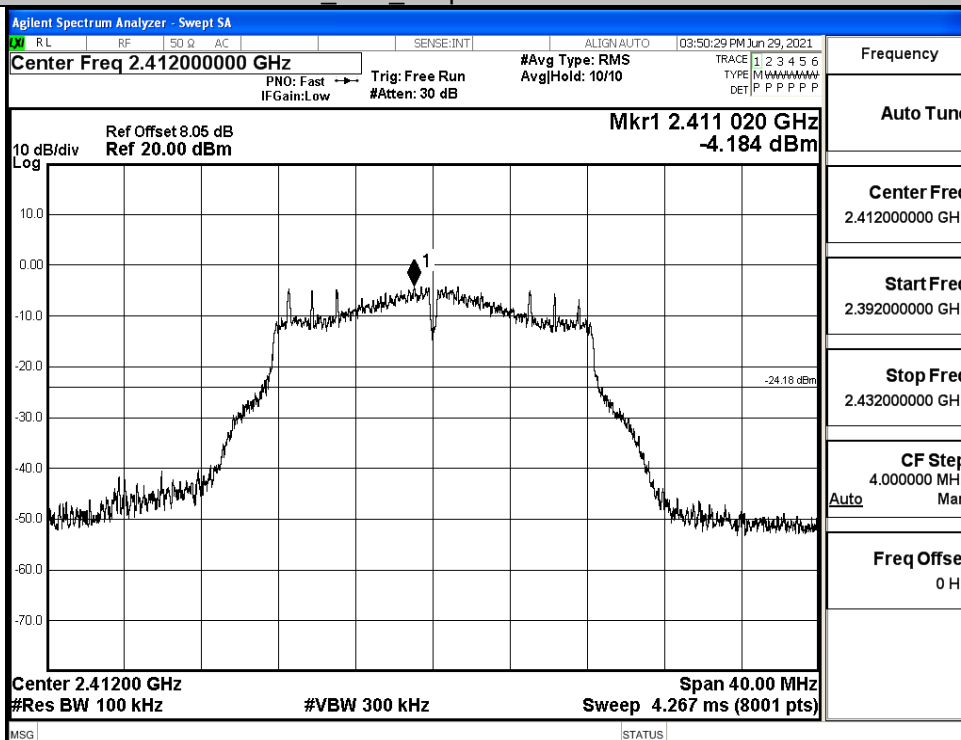
Puw/11B/HCH



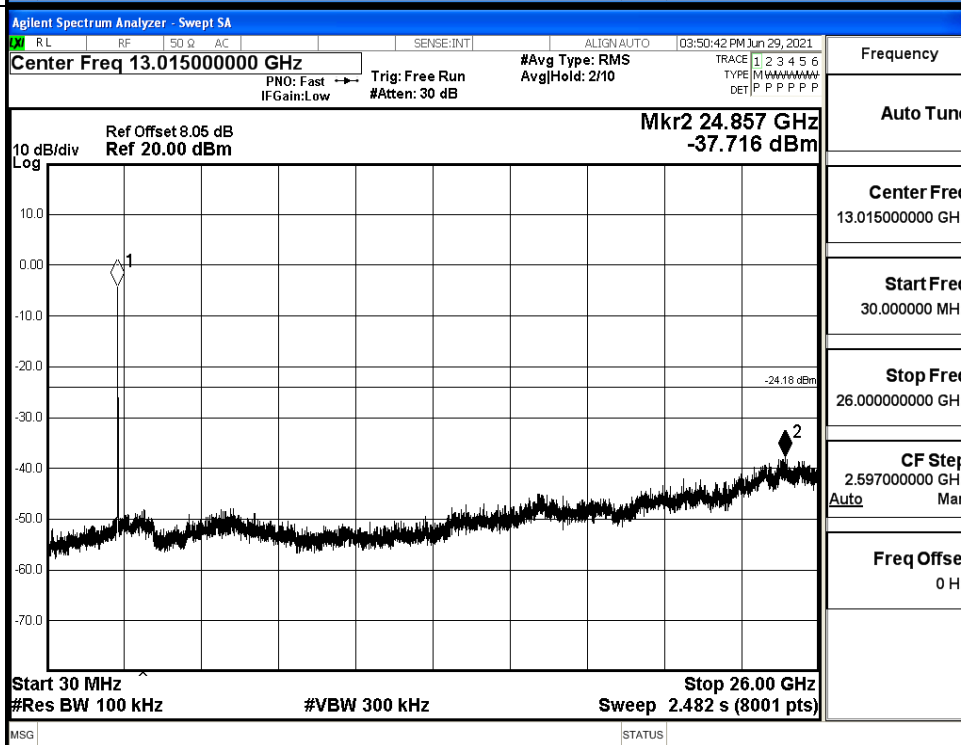


11G LCH Graphs

Pref/11G/LCH



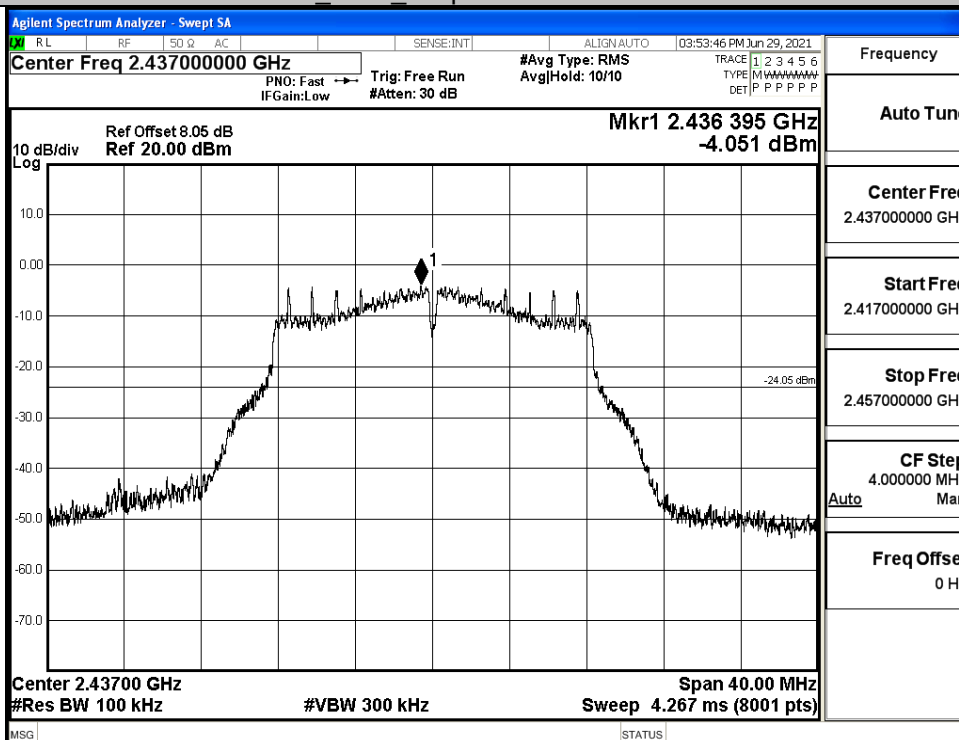
Puw/11G/LCH



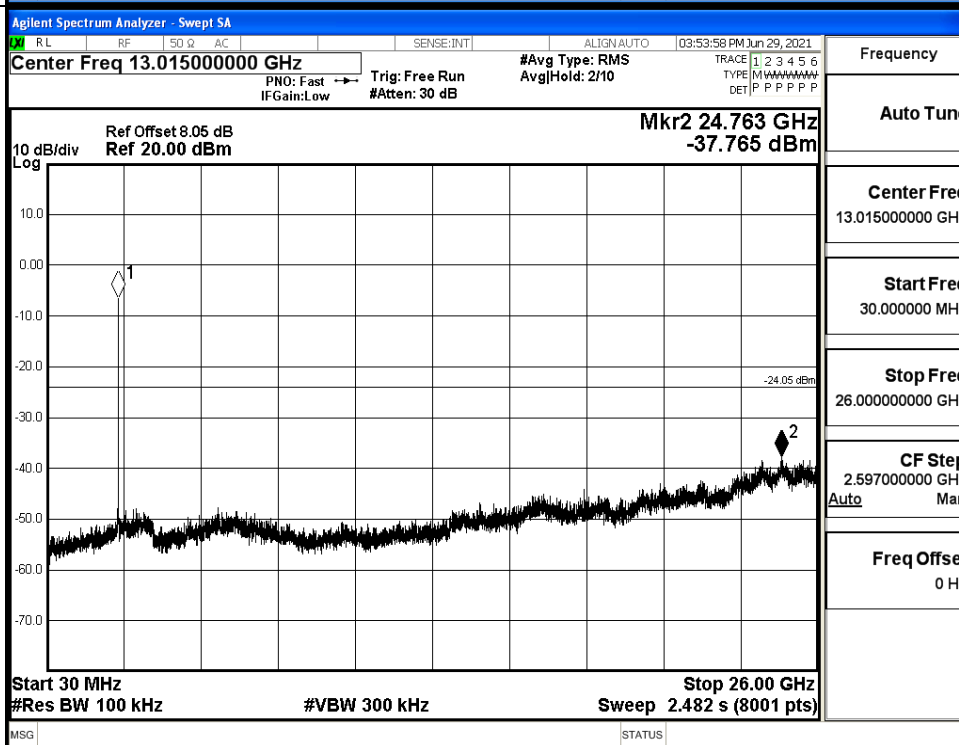


11G MCH Graphs

Pref/11G/MCH



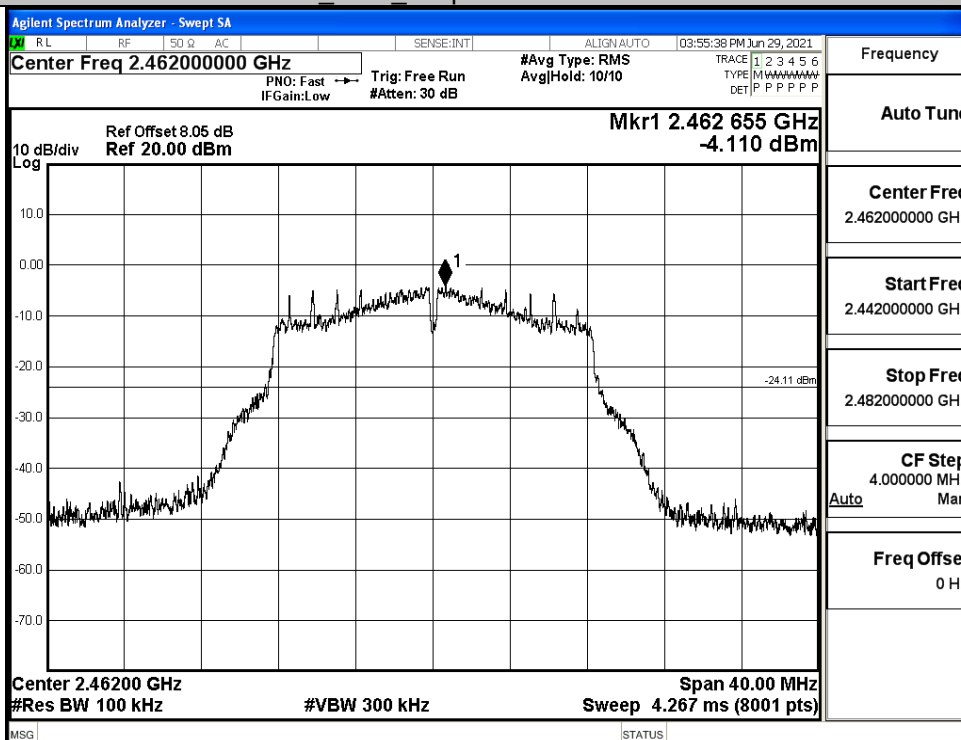
Puw/11G/MCH



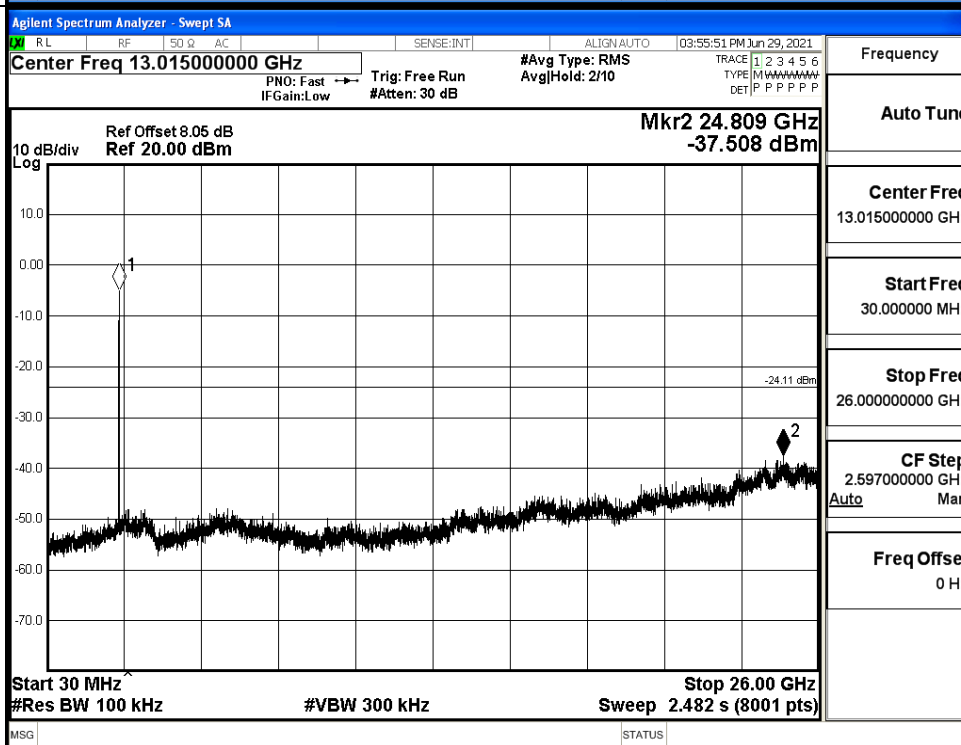


11G HCH Graphs

Pref/11G/HCH

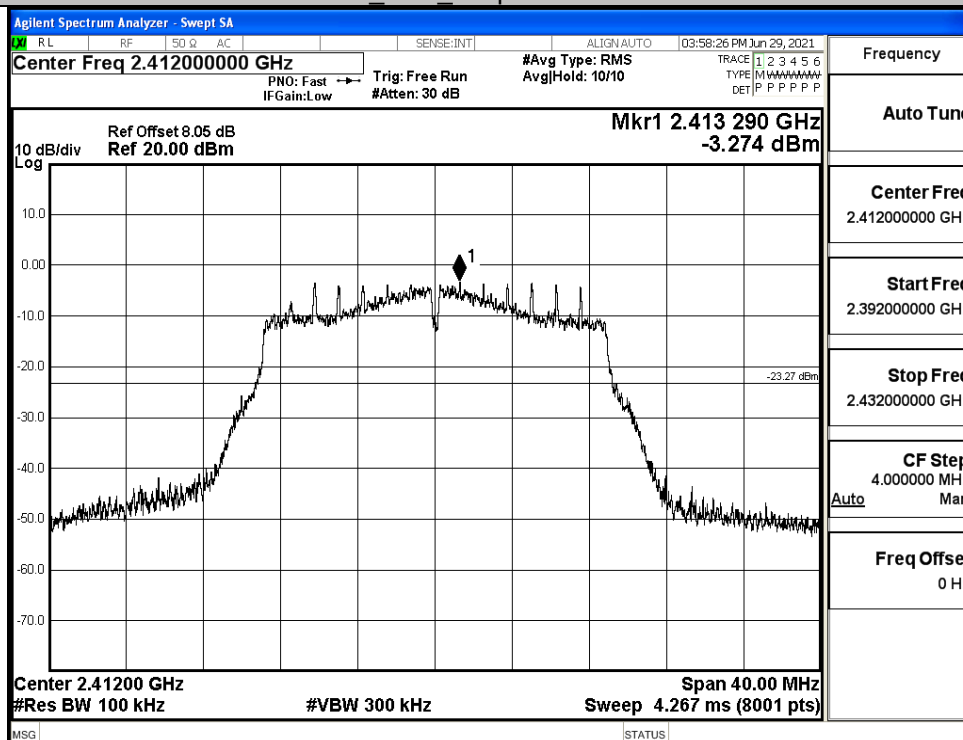
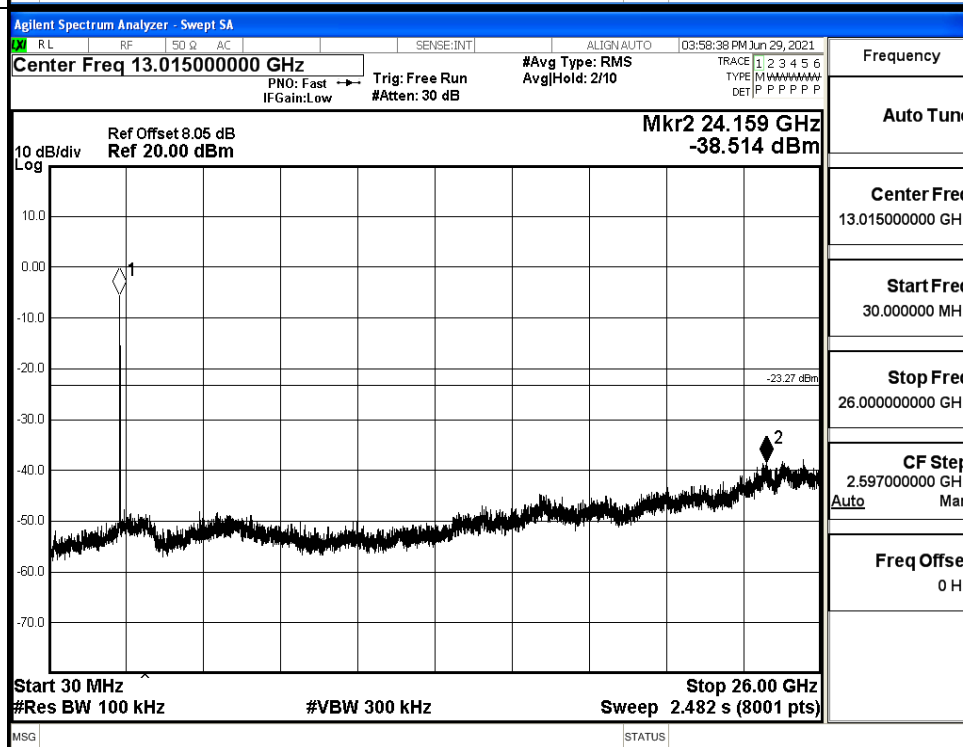


Puw/11G/HCH



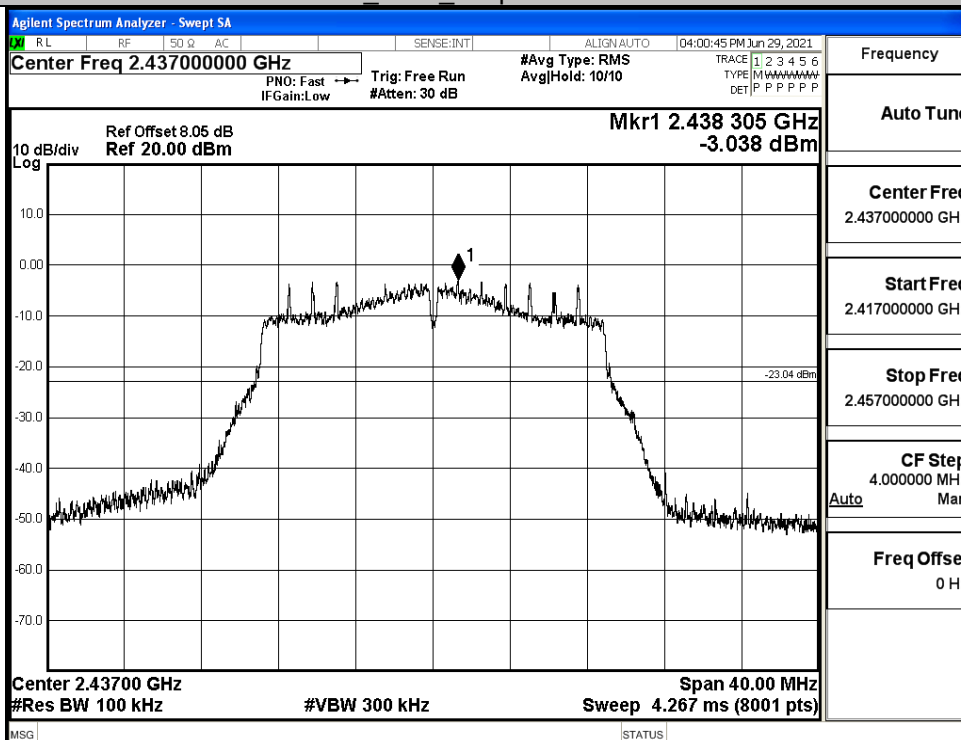
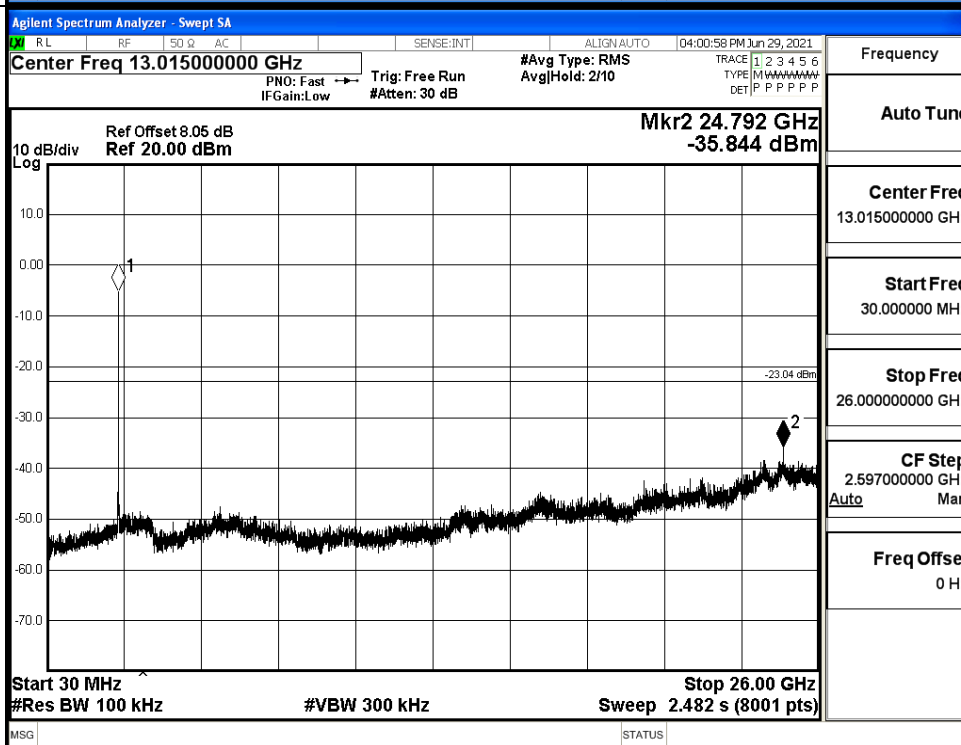


11N20SISO LCH Graphs

Pref/11N20SIS
O/LCHPuW/11N20
SISO/LCH

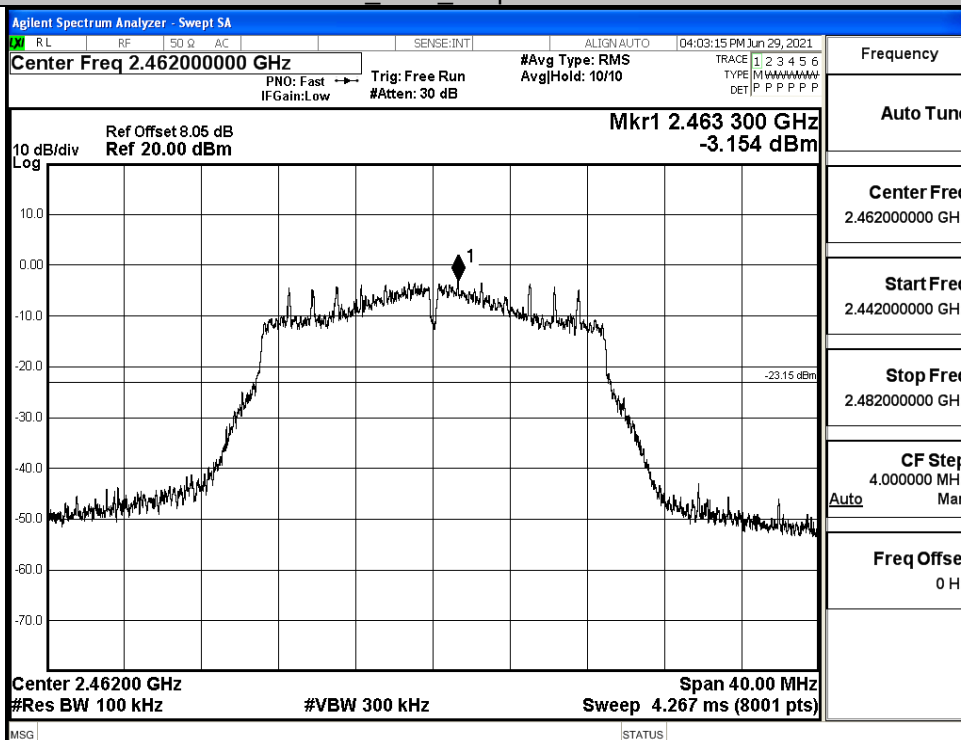
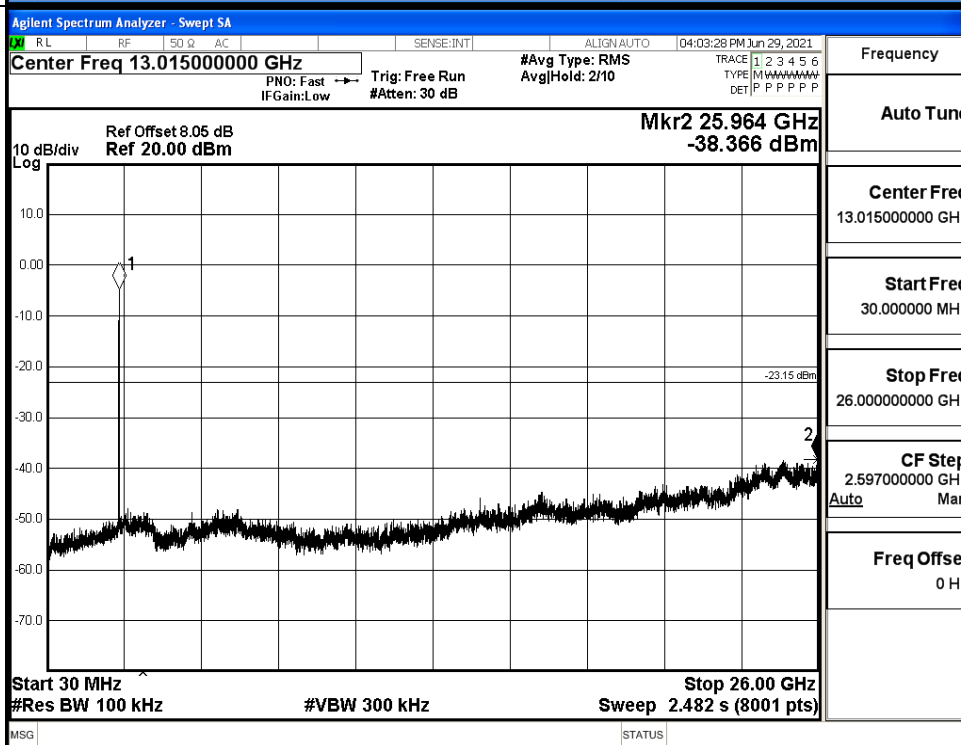


11N20SISO MCH Graphs

Pref/11N20
SISO/MCHPuw/11N20
SISO/MCH

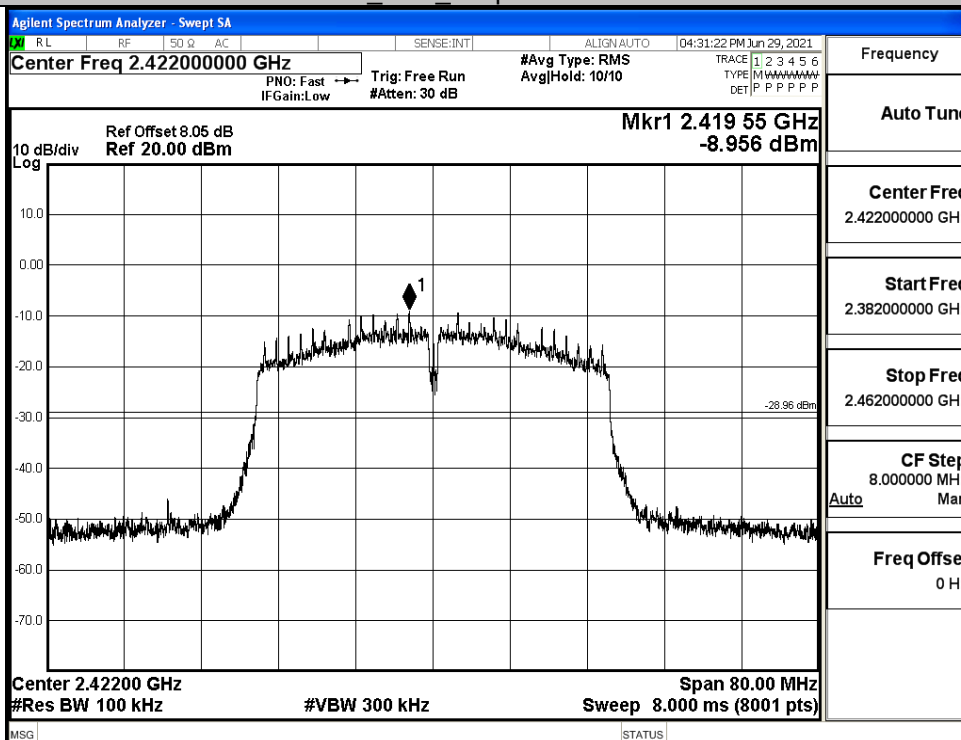
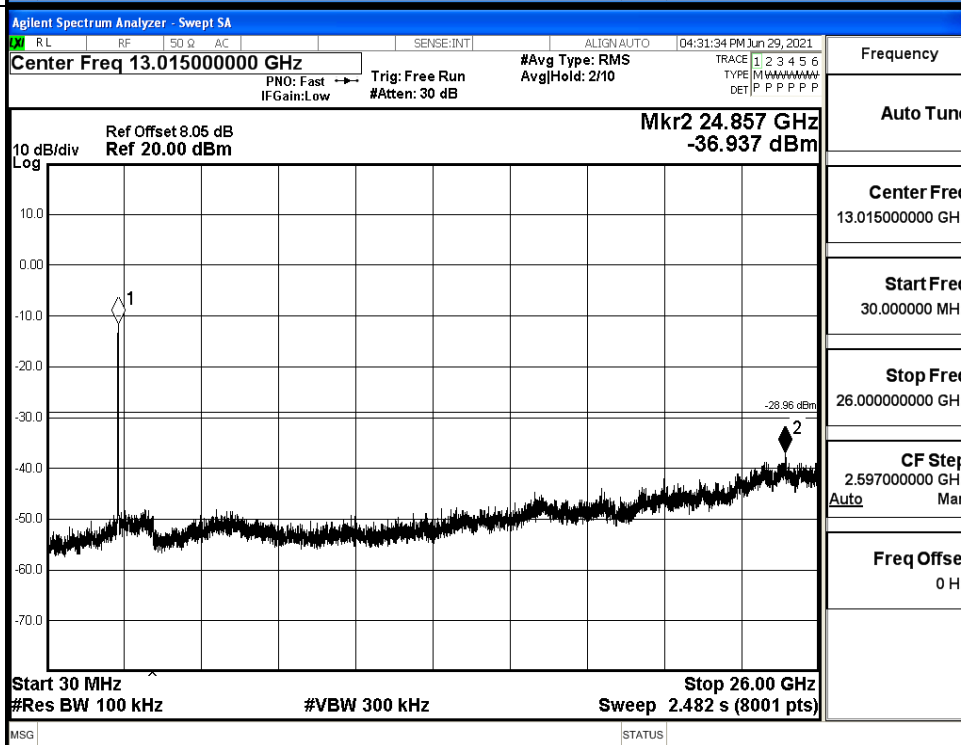


11N20SISO HCH Graphs

Pref/11N20
SISO/HCHPuw/11N20
SISO/HCH

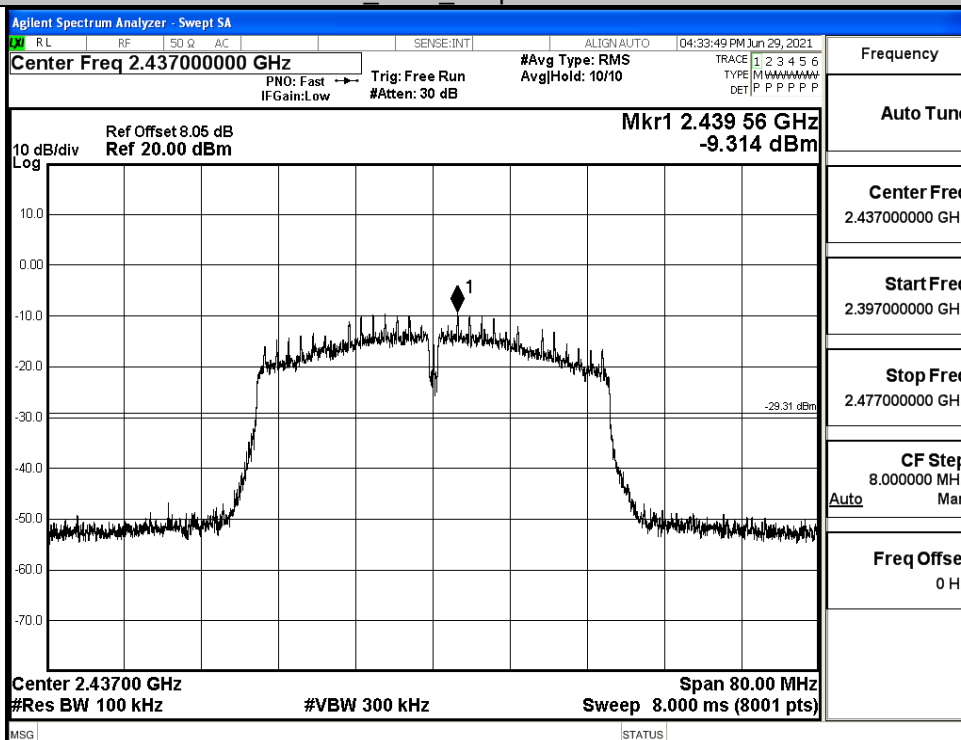
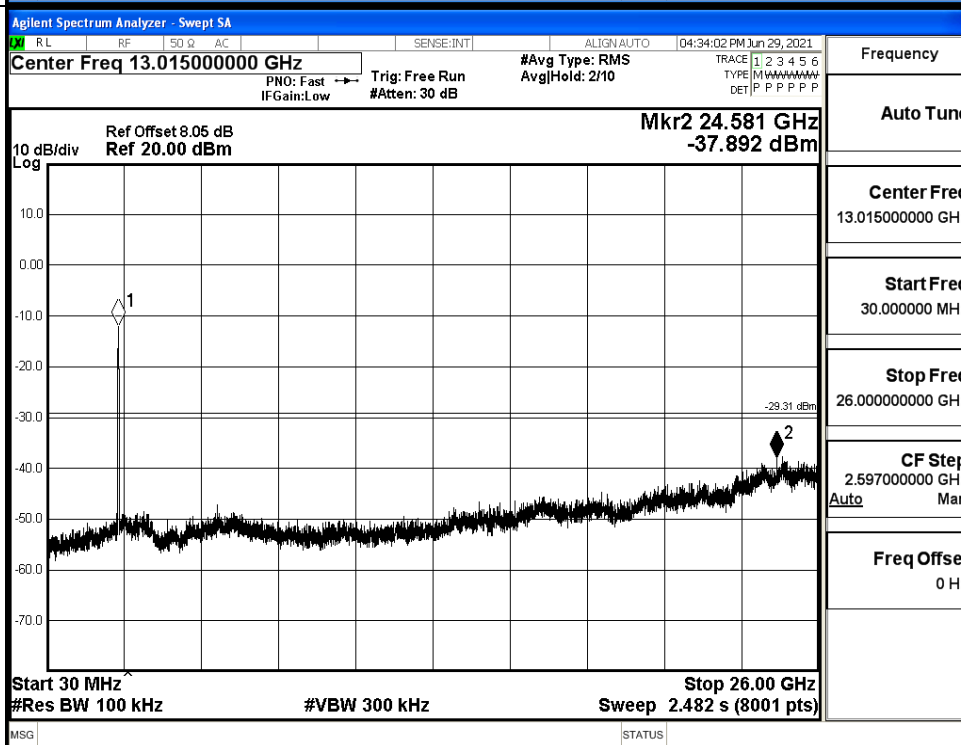


11N40SISO LCH Graphs

Pref/11N40
SISO/LCHPuw/11N40
SISO/LCH

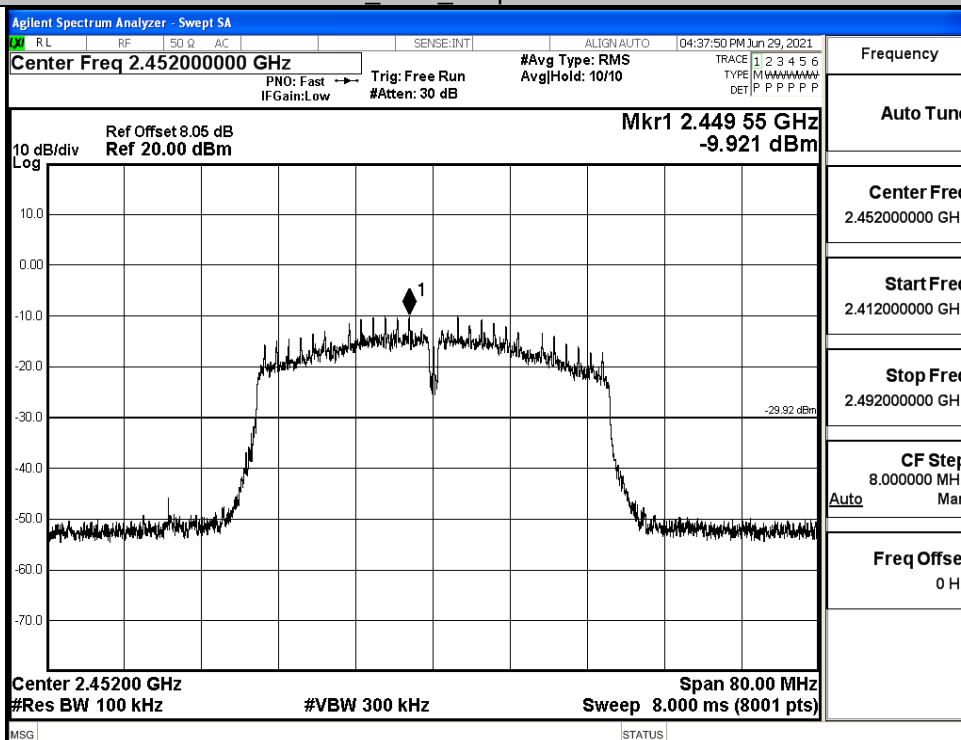
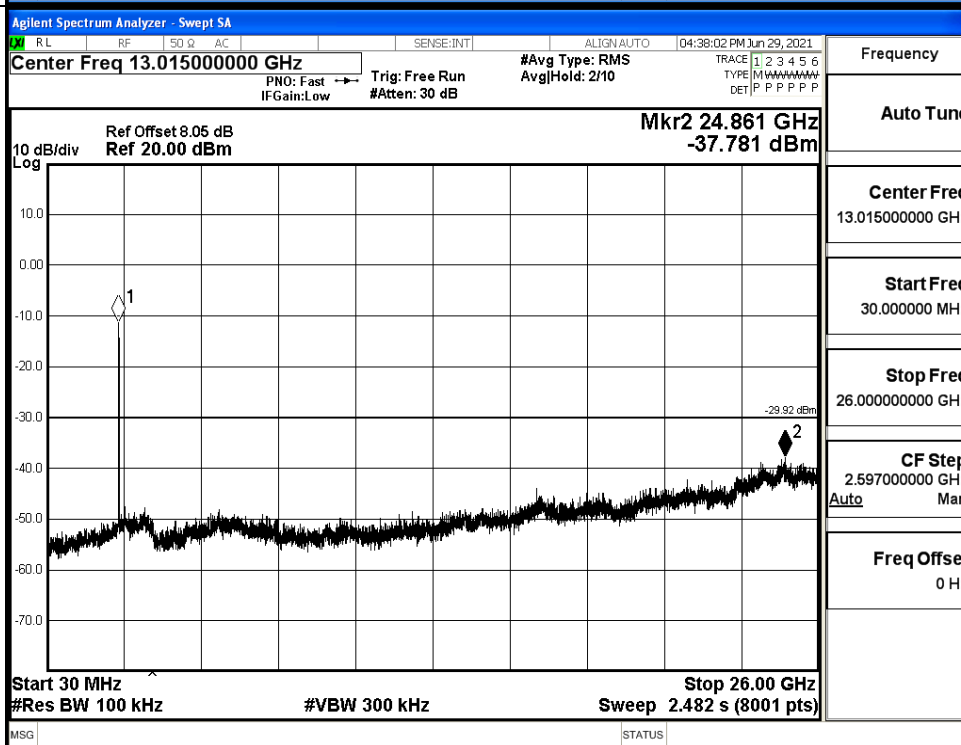


11N40SISO MCH Graphs

Pref/11N40
SISO/MCHPuw/11N40
SISO/MCH



11N40SISO HCH Graphs

Pref/11N40
SISO/HCHPuw/11N40
SISO/HCH



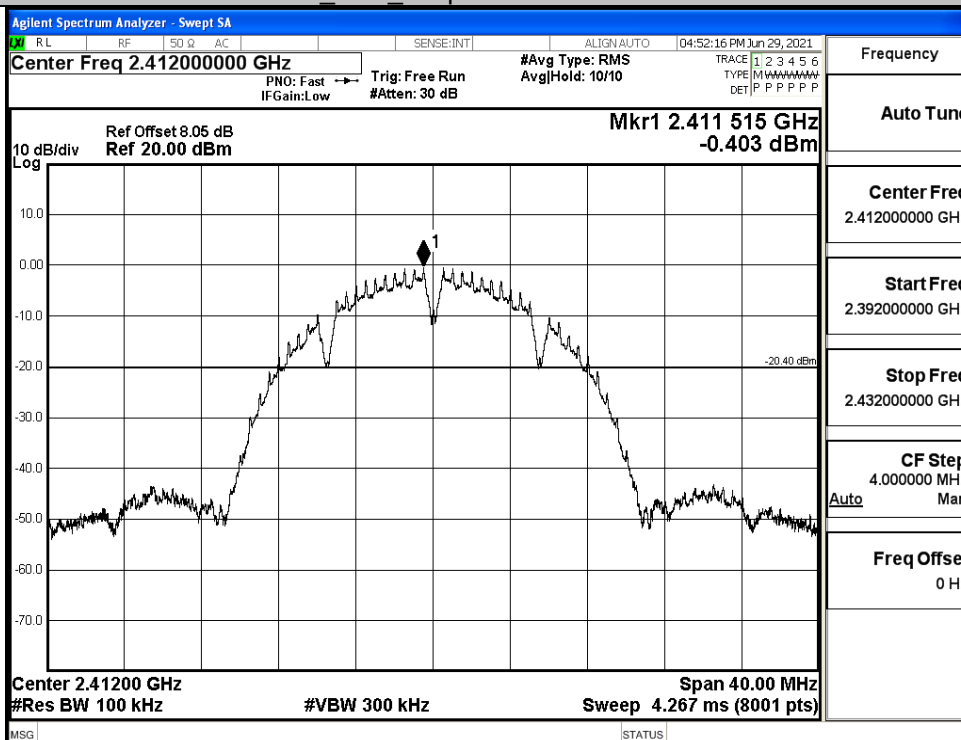
ANT1

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
11B	LCH	-0.403	-37.407	-20.403	PASS
	MCH	-0.508	-38.087	-20.508	PASS
	HCH	-1.198	-37.692	-21.198	PASS
11G	LCH	-5.249	-38.088	-25.249	PASS
	MCH	-6.317	-38.063	-26.317	PASS
	HCH	-7.381	-37.634	-27.381	PASS
11N20 SISO	LCH	-6.038	-38.188	-26.038	PASS
	MCH	-6.388	-38.311	-26.388	PASS
	HCH	-6.888	-38.756	-26.888	PASS
11N40 SISO	LCH	-9.128	-37.316	-29.128	PASS
	MCH	-9.415	-38.092	-29.415	PASS
	HCH	-9.804	-38.126	-29.804	PASS

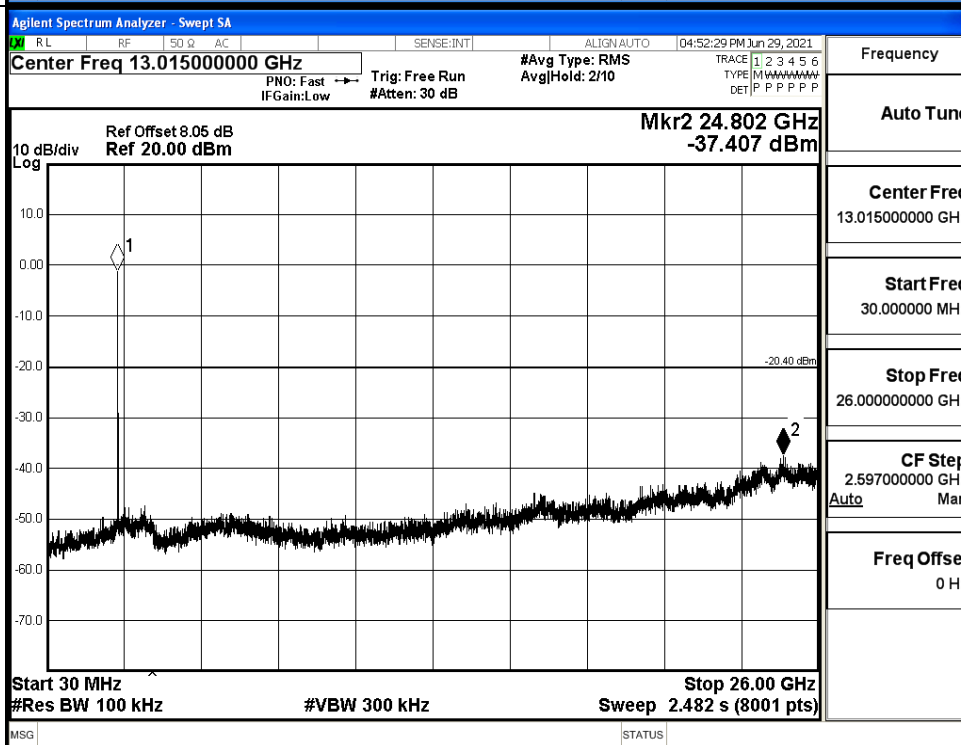


11B LCH Graphs

Pref/11B/LCH



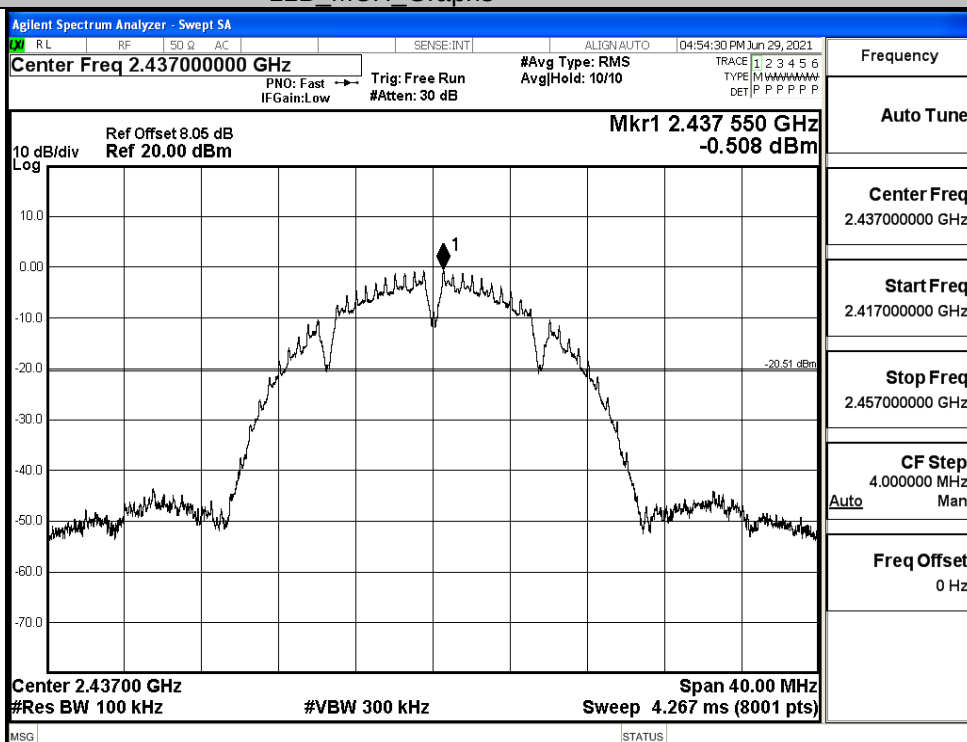
Puw/11B/LCH



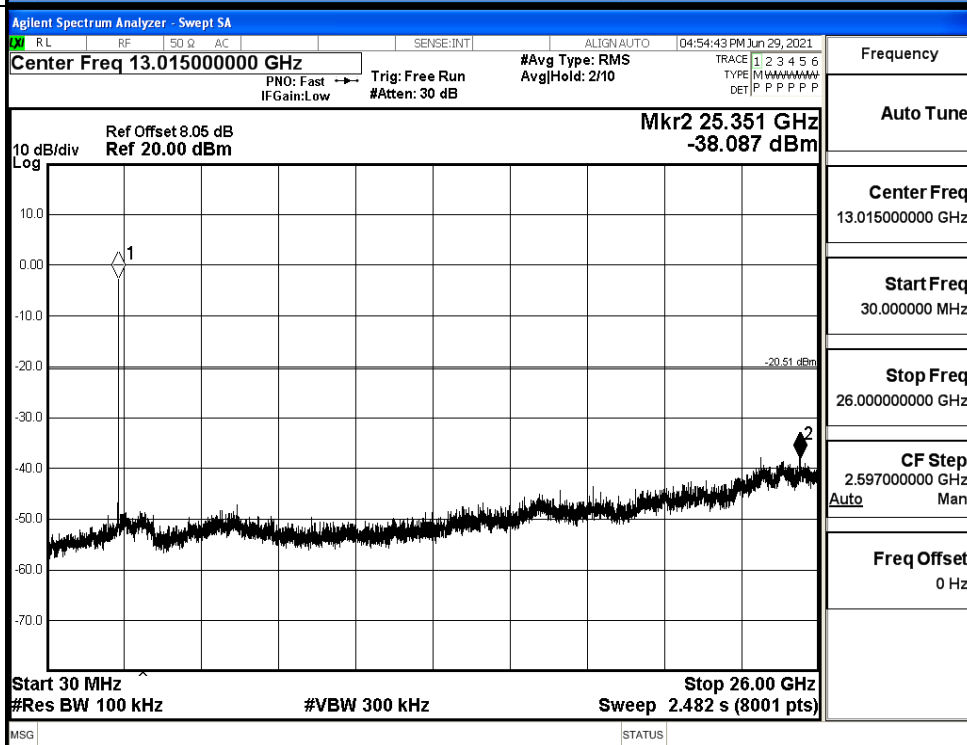


11B MCH Graphs

Pref/11B/MCH



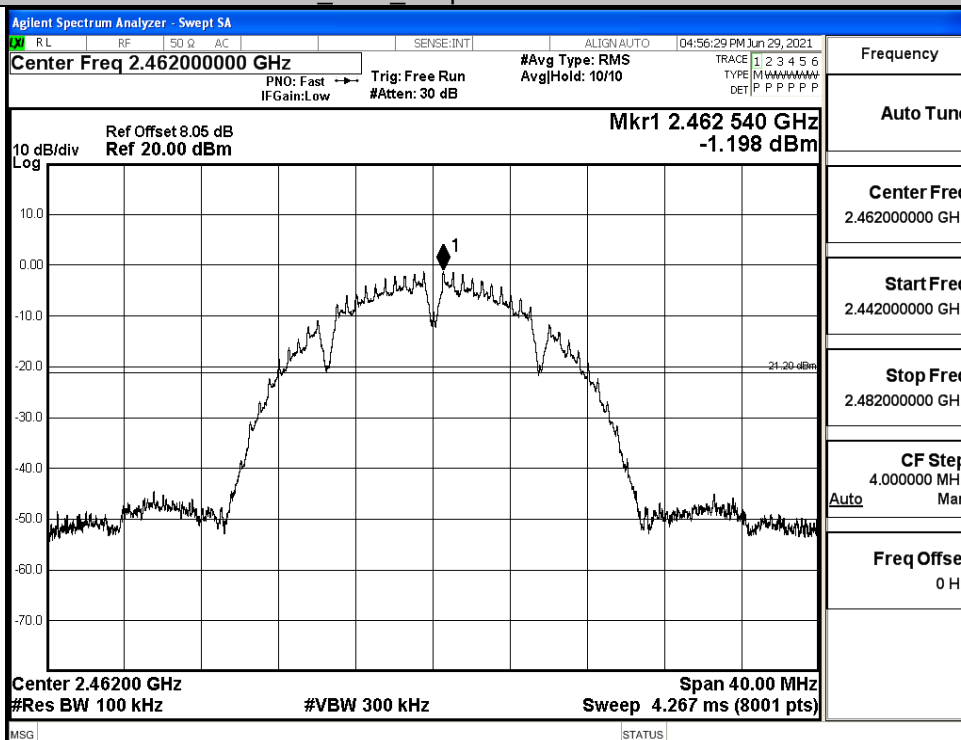
Puw/11B/MCH



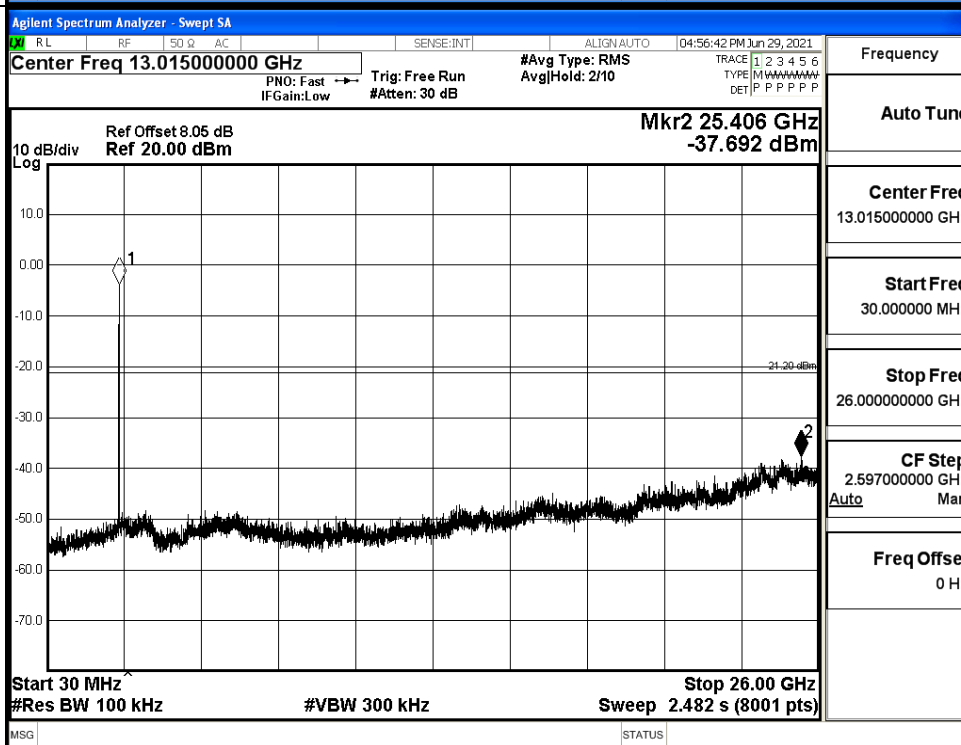


11B HCH Graphs

Pref/11B/HCH



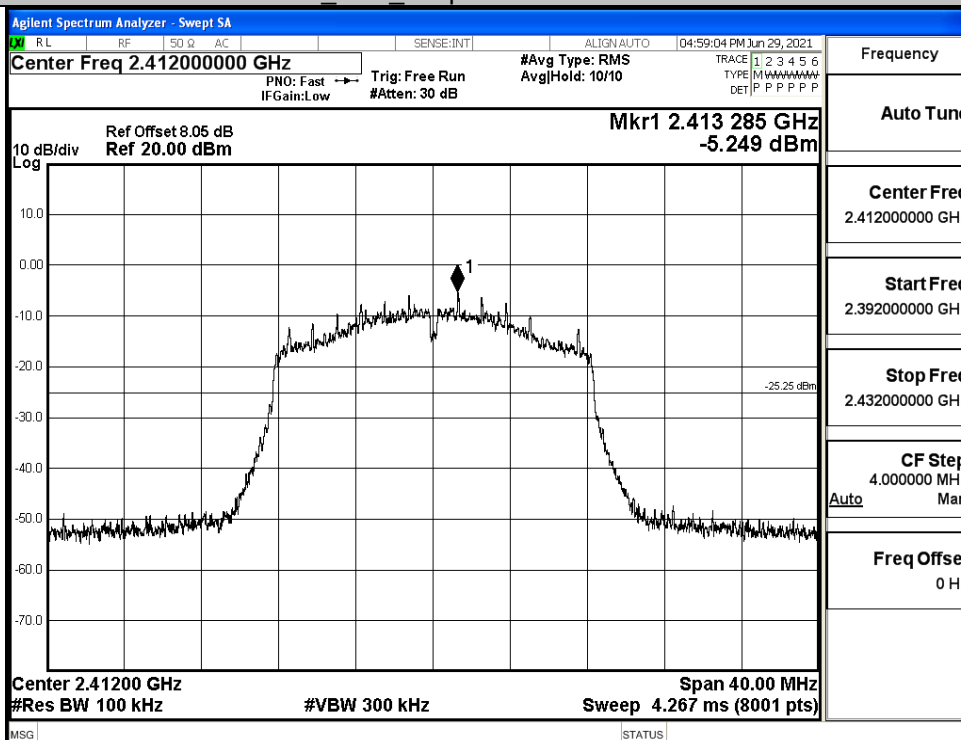
Puw/11B/HCH



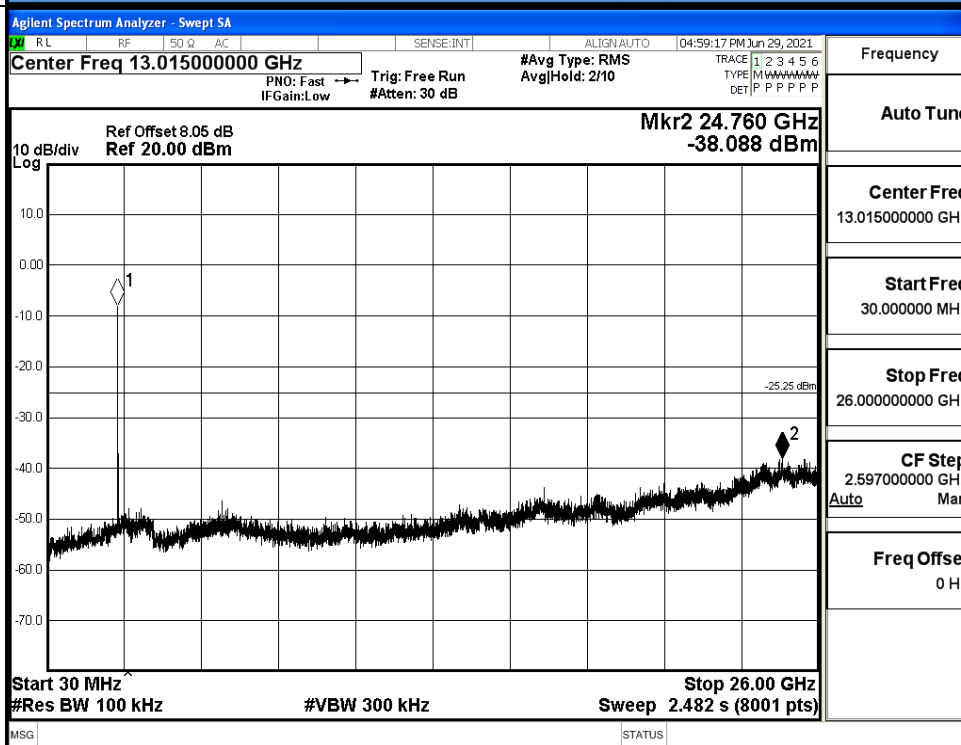


11G LCH Graphs

Pref/11G/LCH



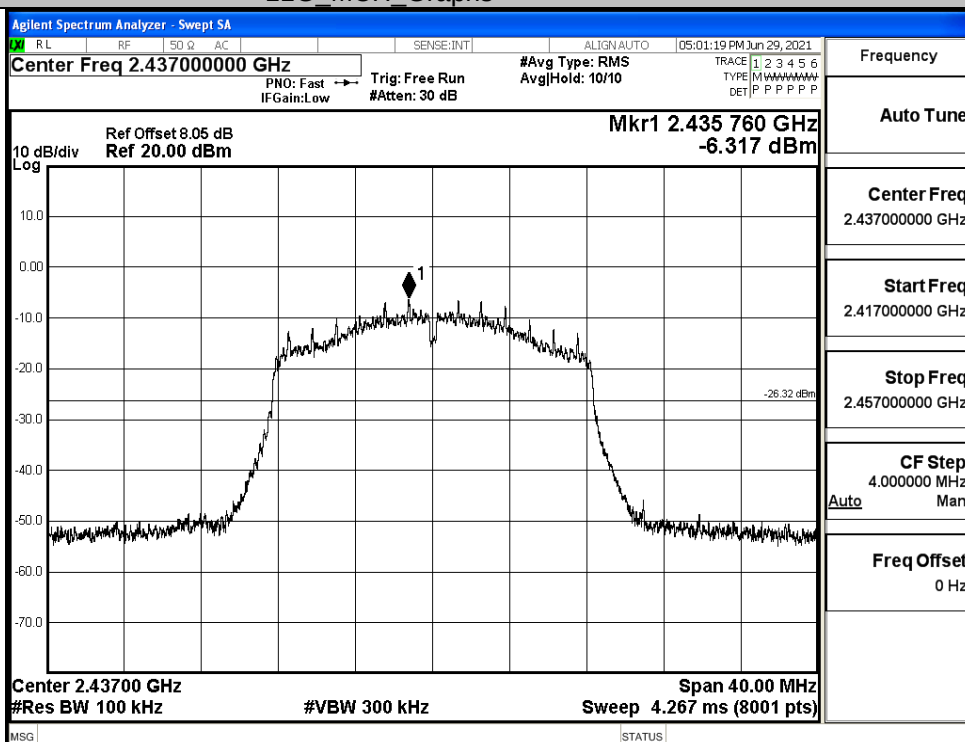
Puw/11G/LCH



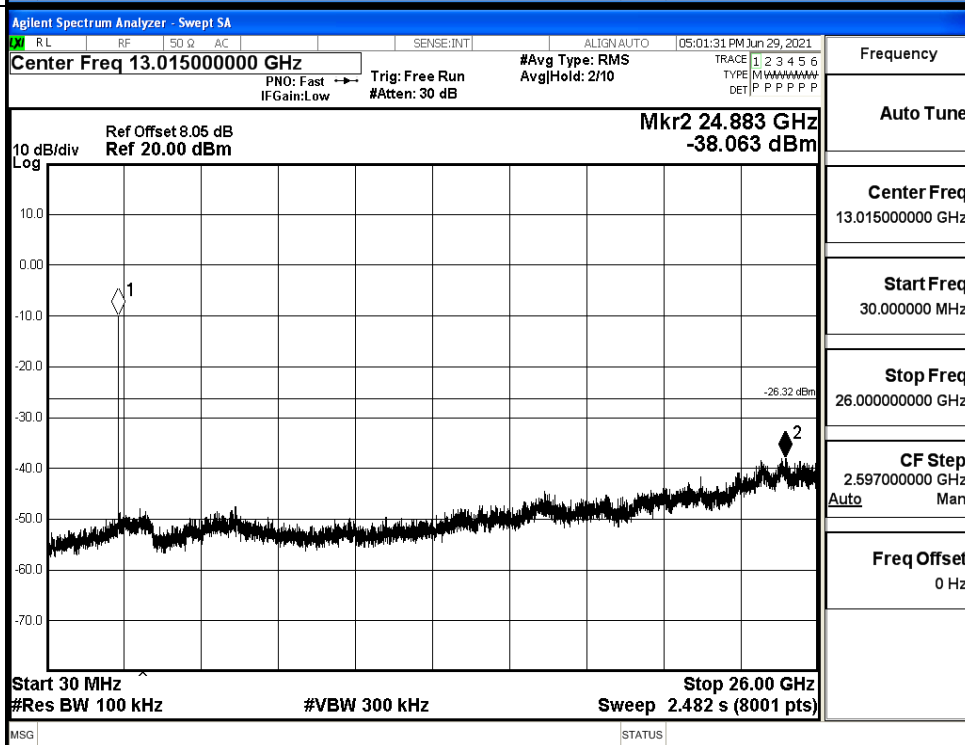


11G MCH Graphs

Pref/11G/MCH



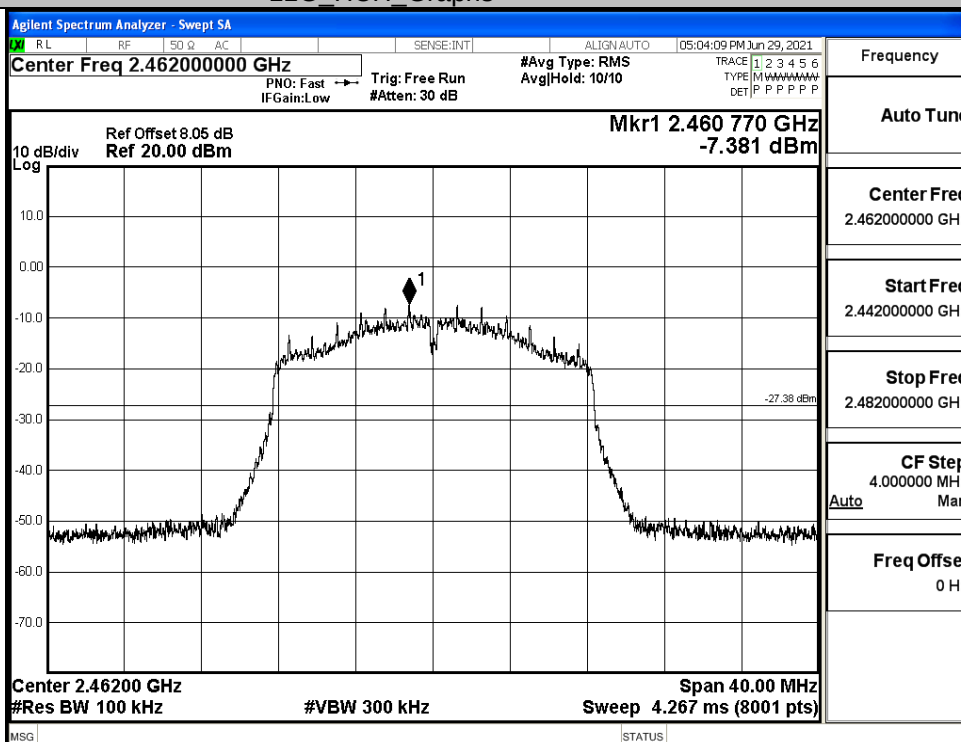
Puw/11G/MCH



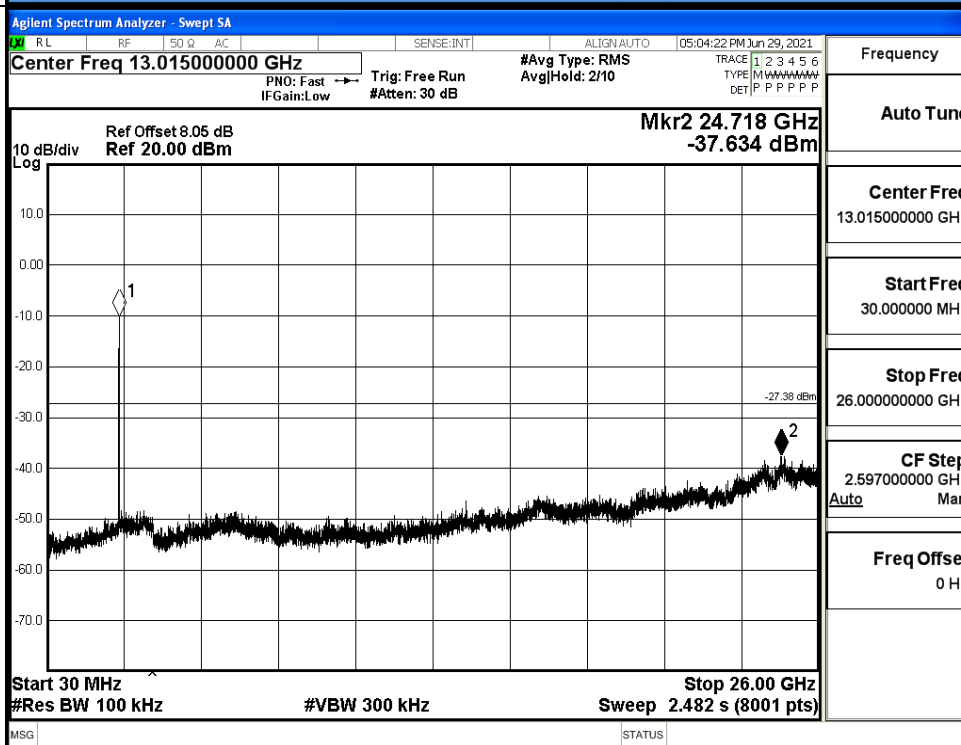


11G HCH Graphs

Pref/11G/HCH

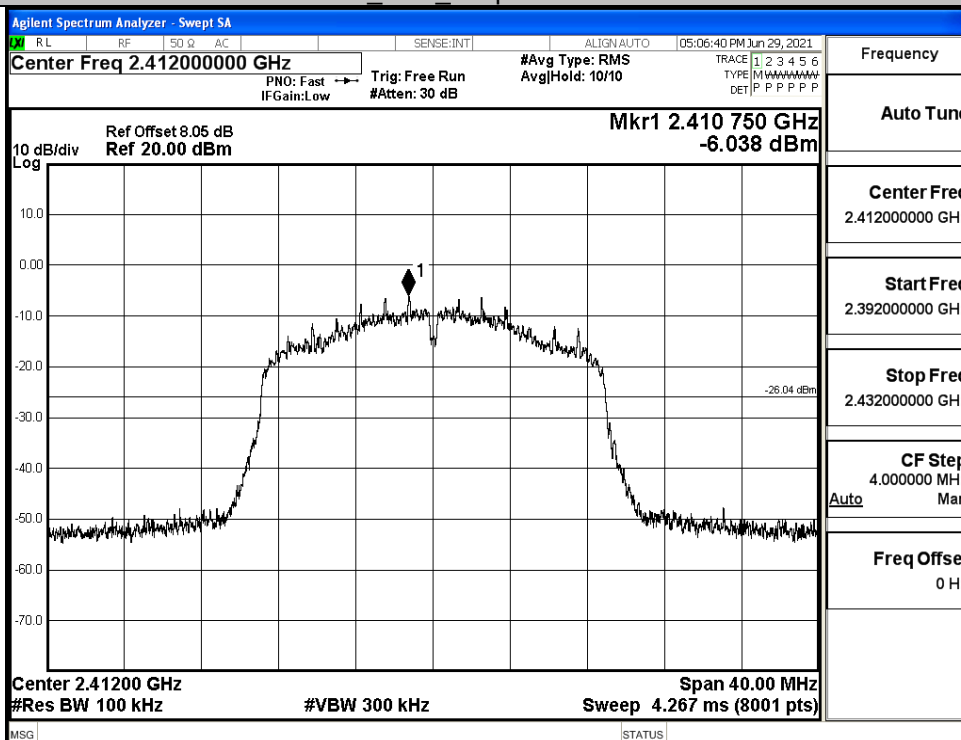
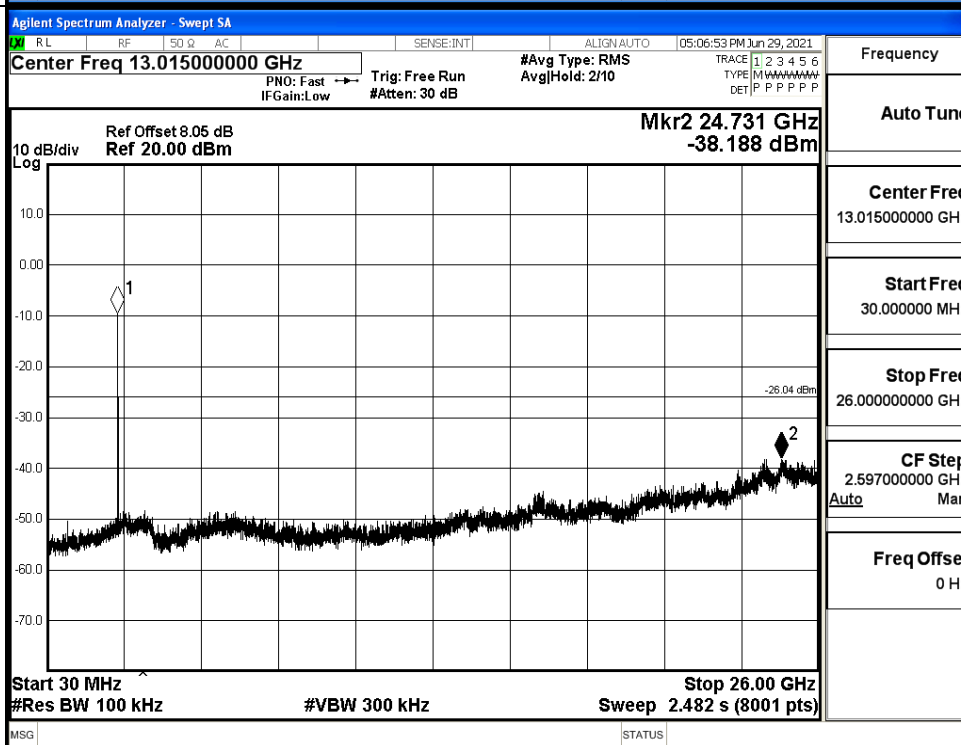


Puw/11G/HCH



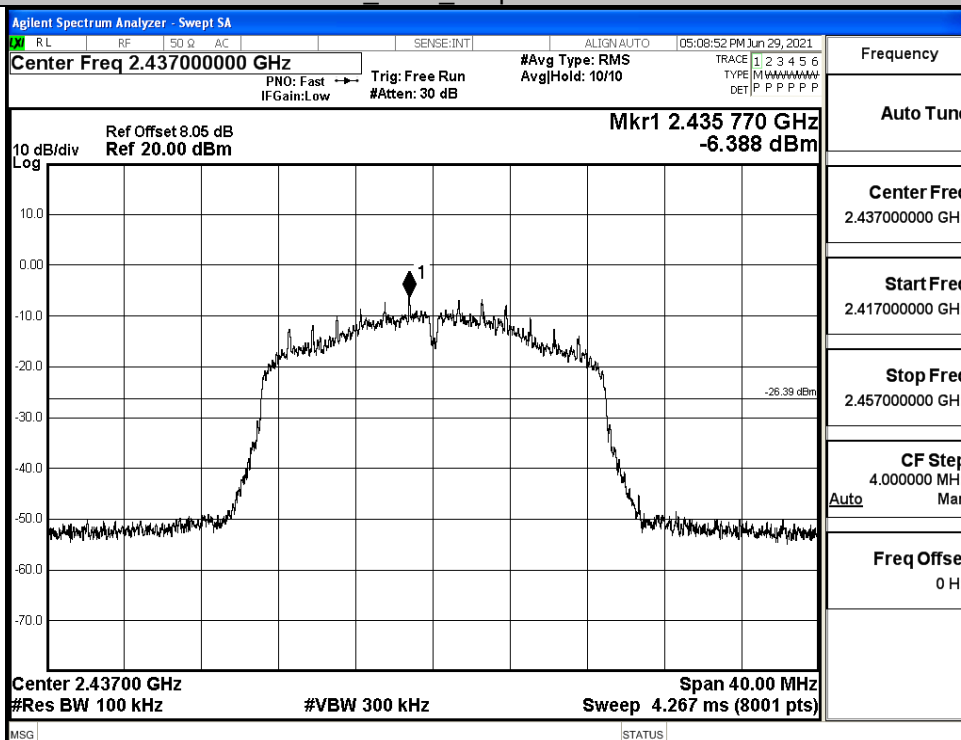
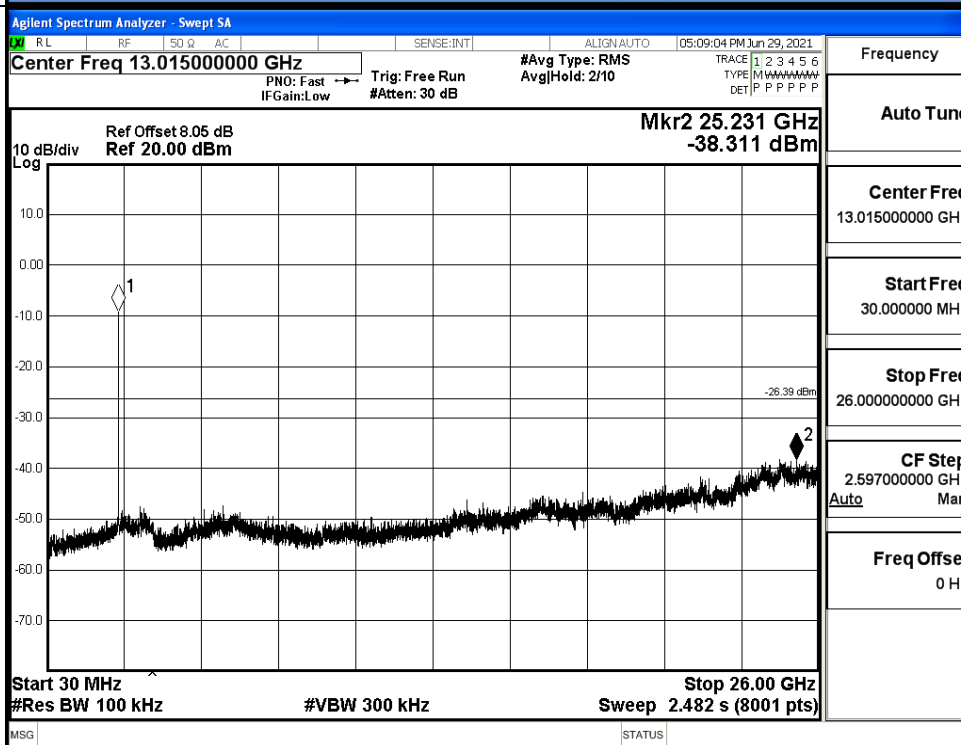


11N20SISO LCH Graphs

Pref/11N20SIS
O/LCHPuw/11N20
SISO/LCH

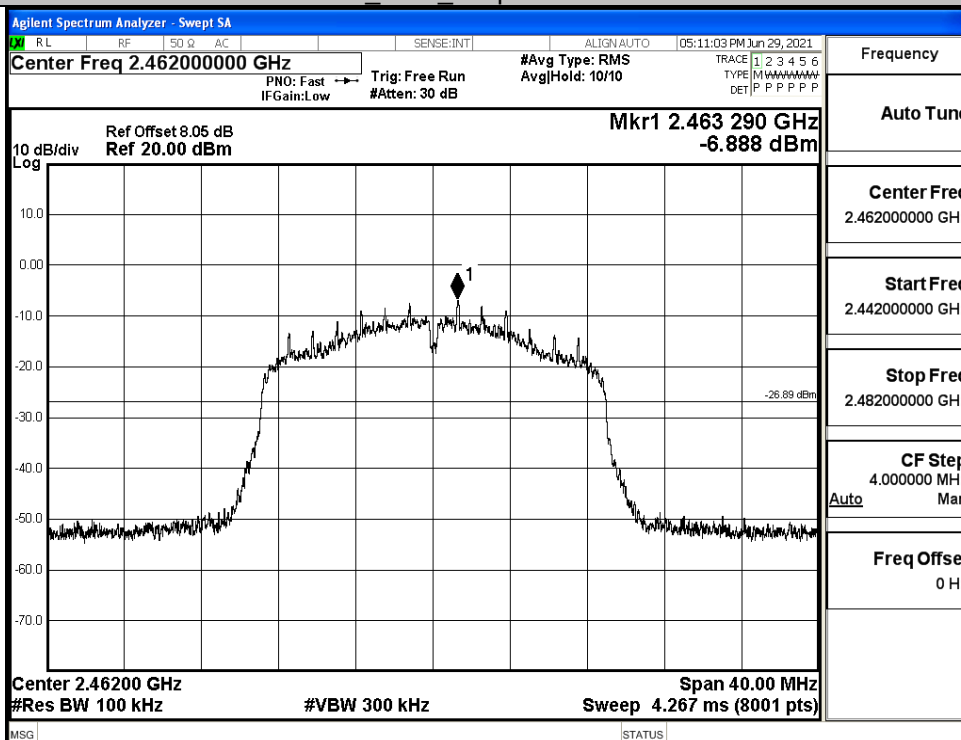
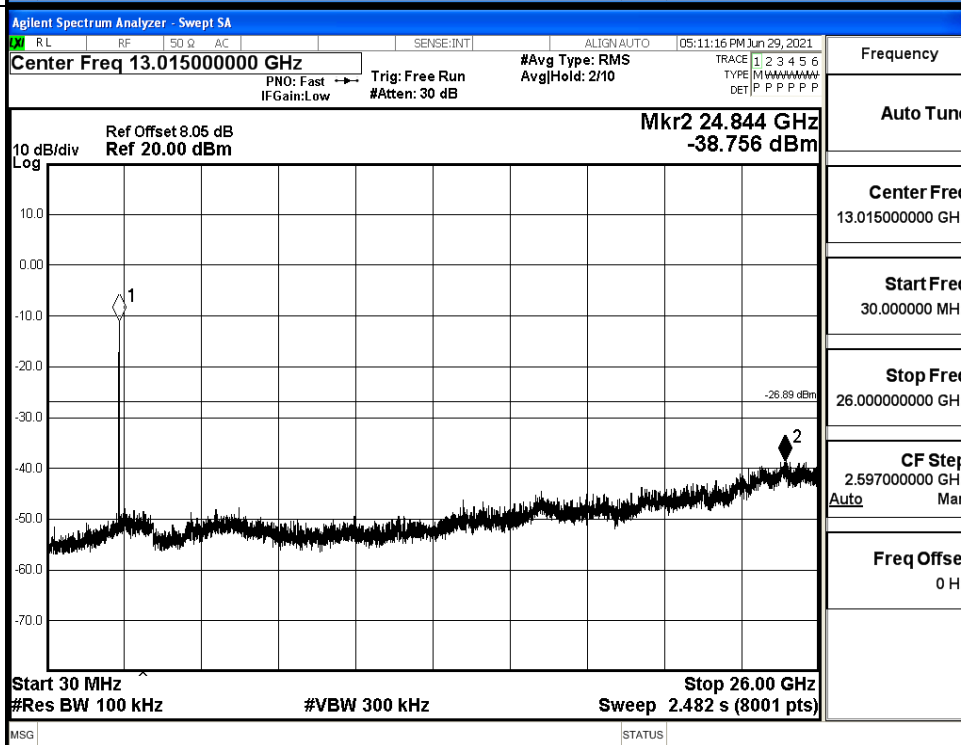


11N20SISO MCH Graphs

Pref/11N20
SISO/MCHPuw/11N20
SISO/MCH

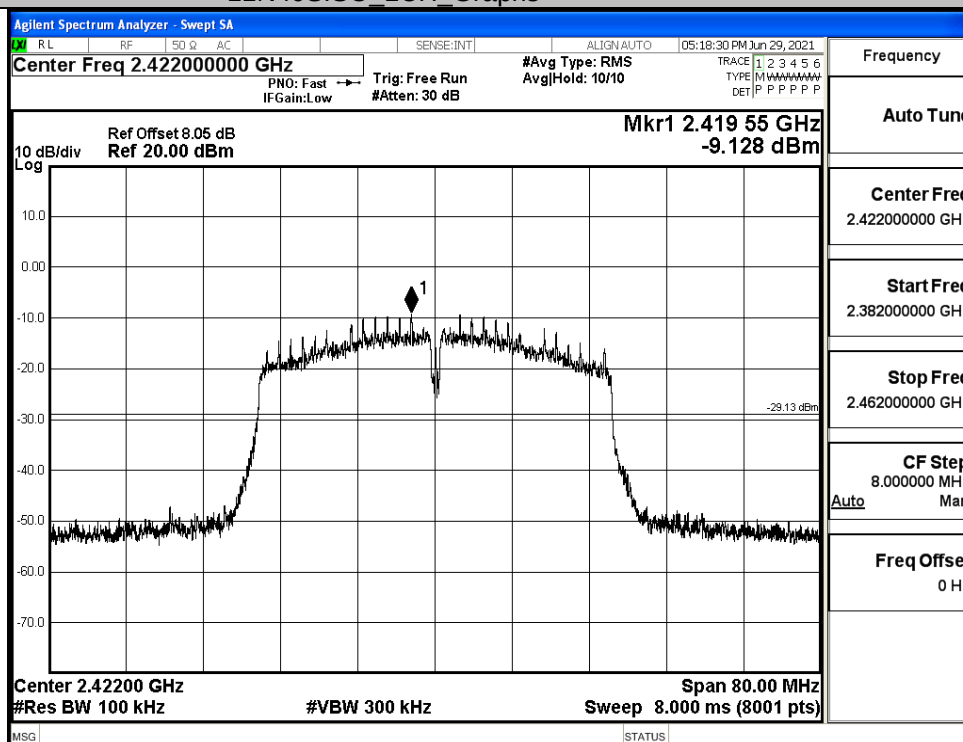
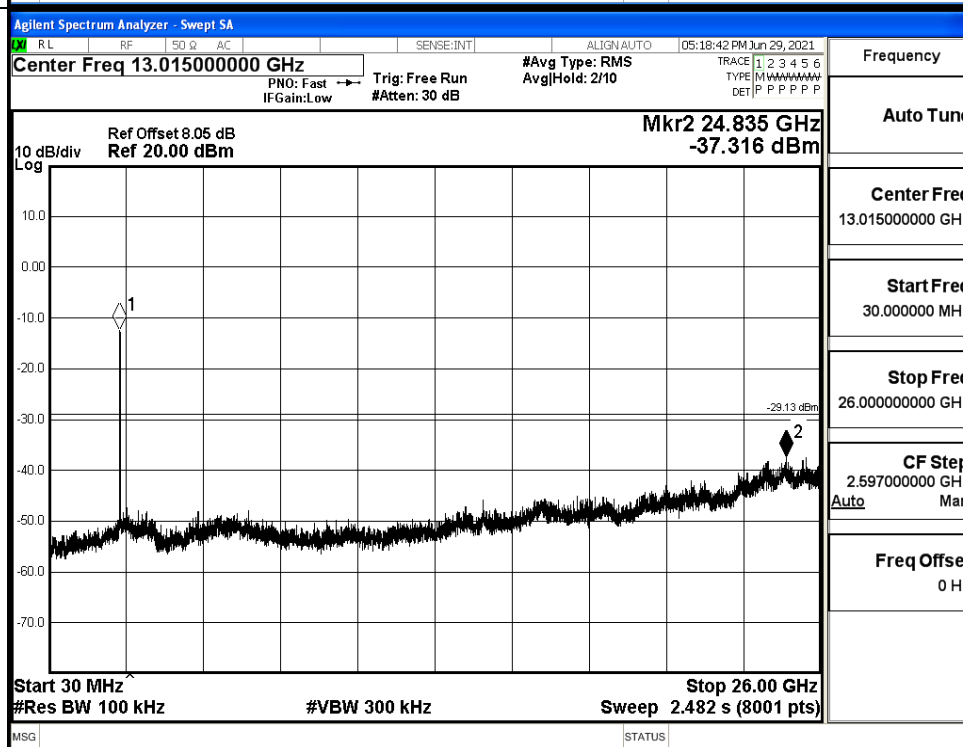


11N20SISO HCH Graphs

Pref/11N20
SISO/HCHPuw/11N20
SISO/HCH

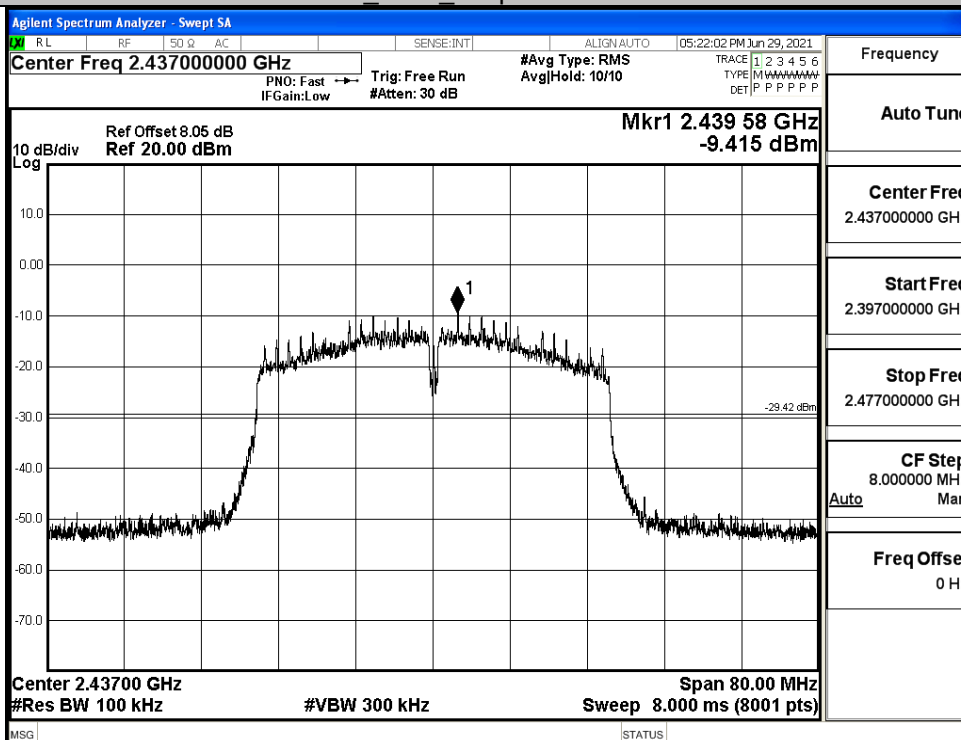
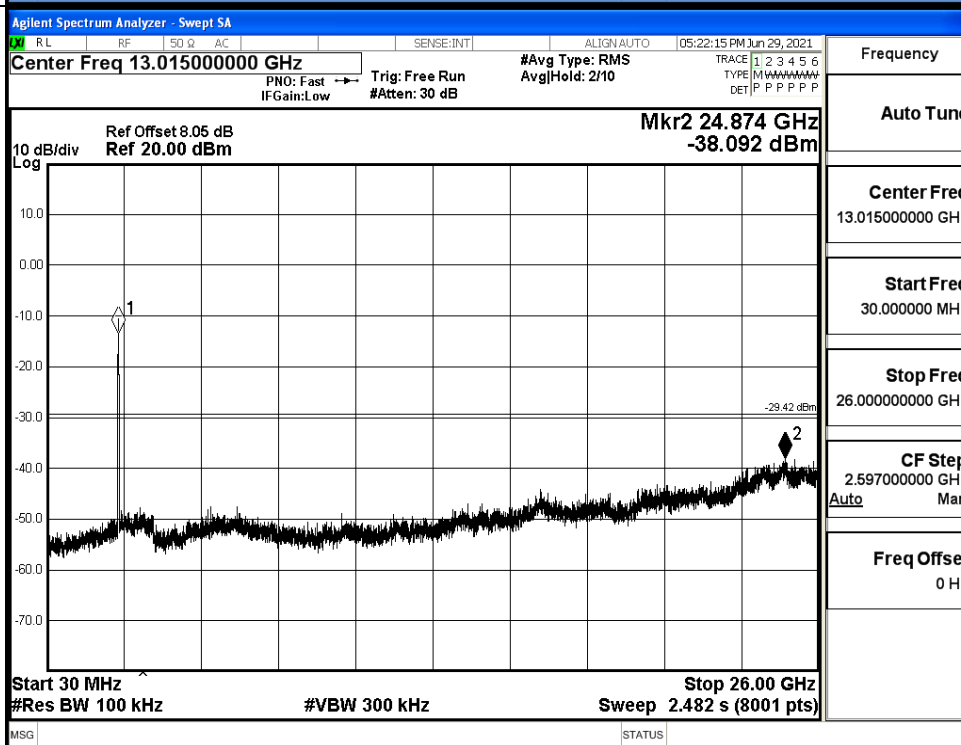


11N40SISO LCH Graphs

Pref/11N40
SISO/LCHPuw/11N40
SISO/LCH

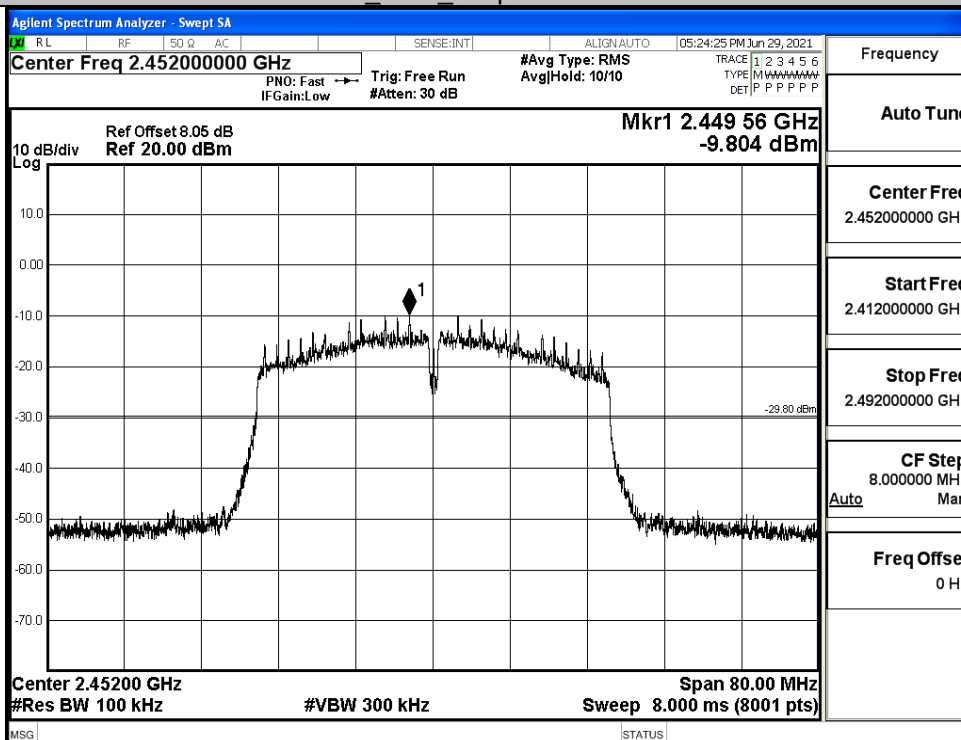
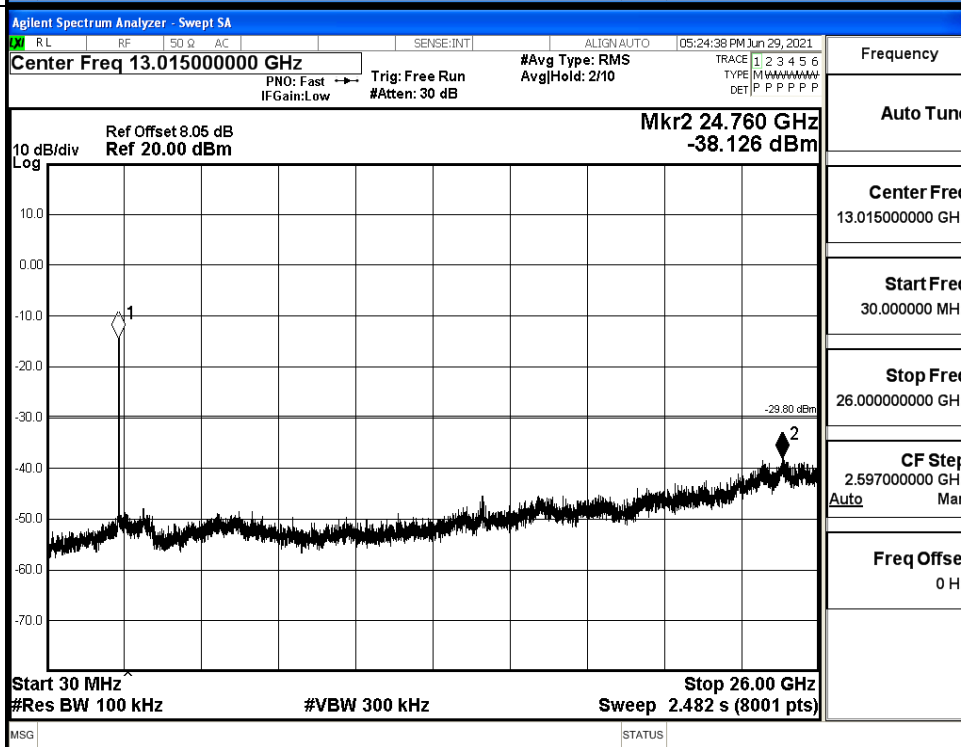


11N40SISO MCH Graphs

Pref/11N40
SISO/MCHPuw/11N40
SISO/MCH



11N40SISO HCH Graphs

Pref/11N40
SISO/HCHPuw/11N40
SISO/HCH

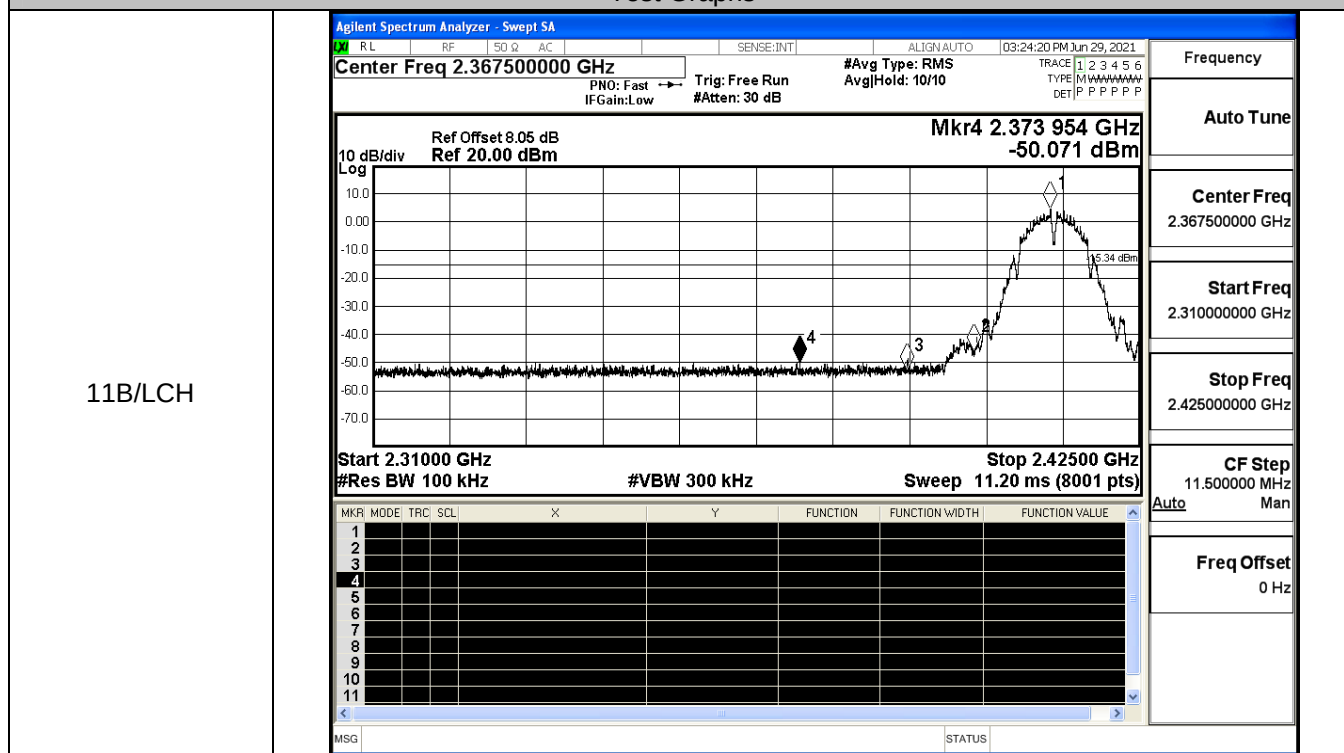


C.6 Band-edge for RF Conducted Emissions

ANT0

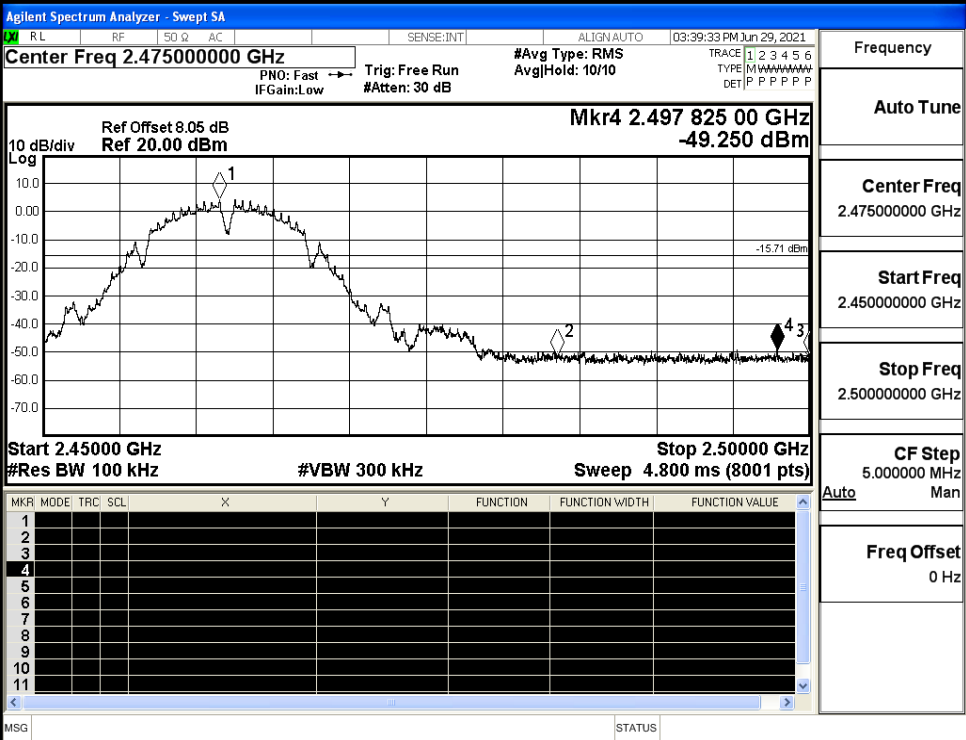
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
11B	LCH	4.664	-50.071	-15.34	PASS
	HCH	4.290	-49.250	-15.71	PASS
11G	LCH	-4.144	-49.486	-24.14	PASS
	HCH	-3.981	-49.356	-23.98	PASS
11N20SISO	LCH	-3.640	-48.666	-23.64	PASS
	HCH	-3.249	-48.548	-23.25	PASS
11N40SISO	LCH	-9.436	-49.537	-29.44	PASS
	HCH	-9.796	-48.851	-29.8	PASS

Test Graphs

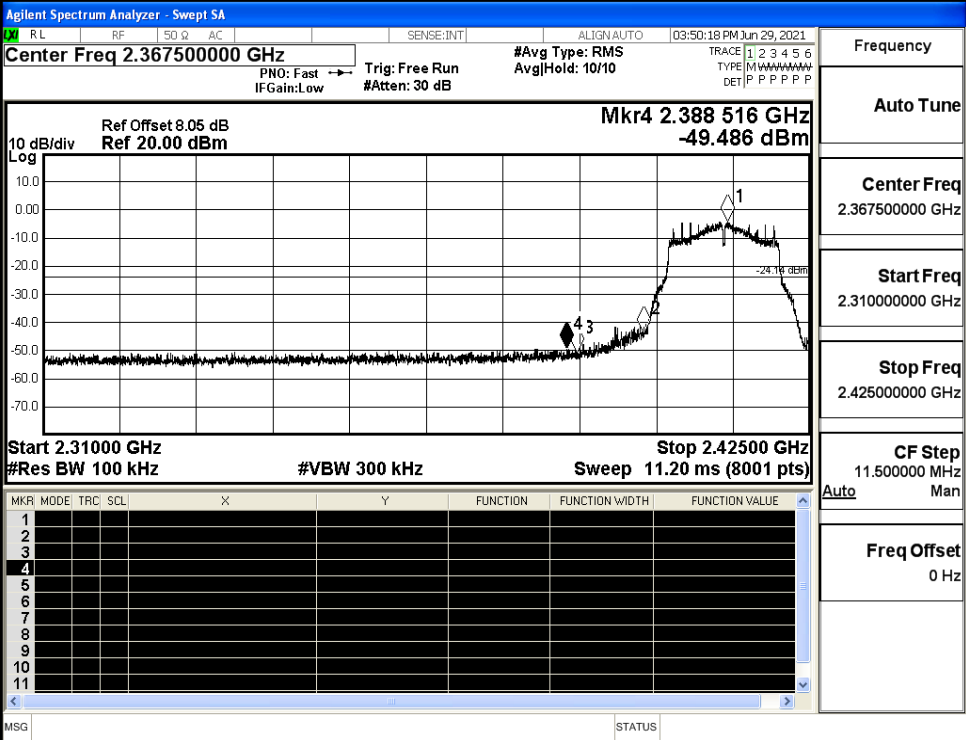




11B/HCH

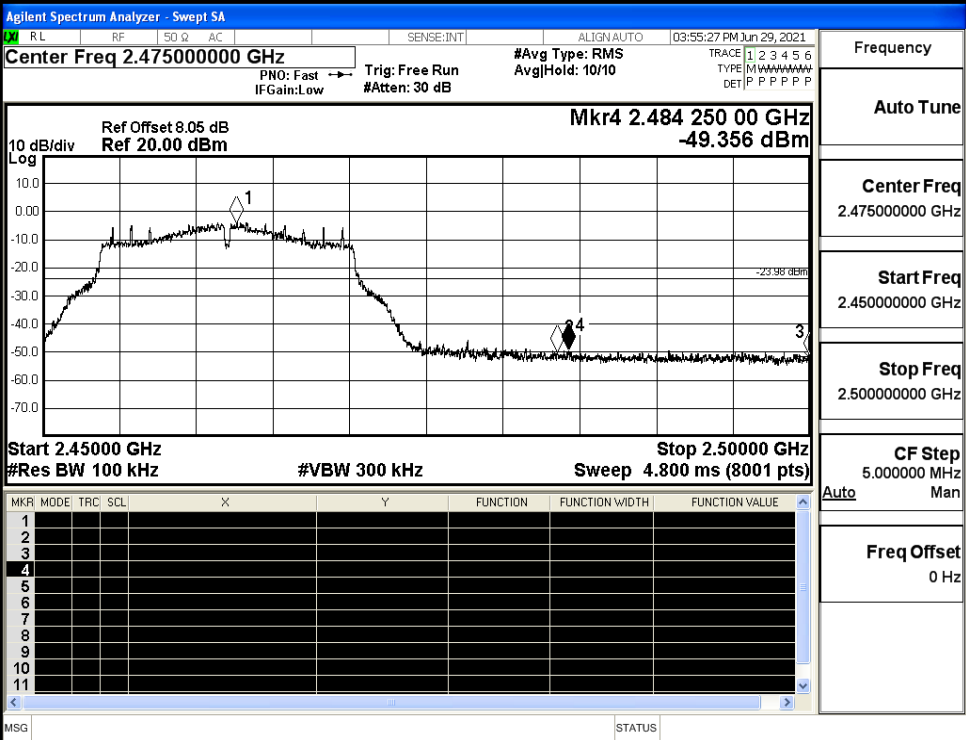


11G/LCH

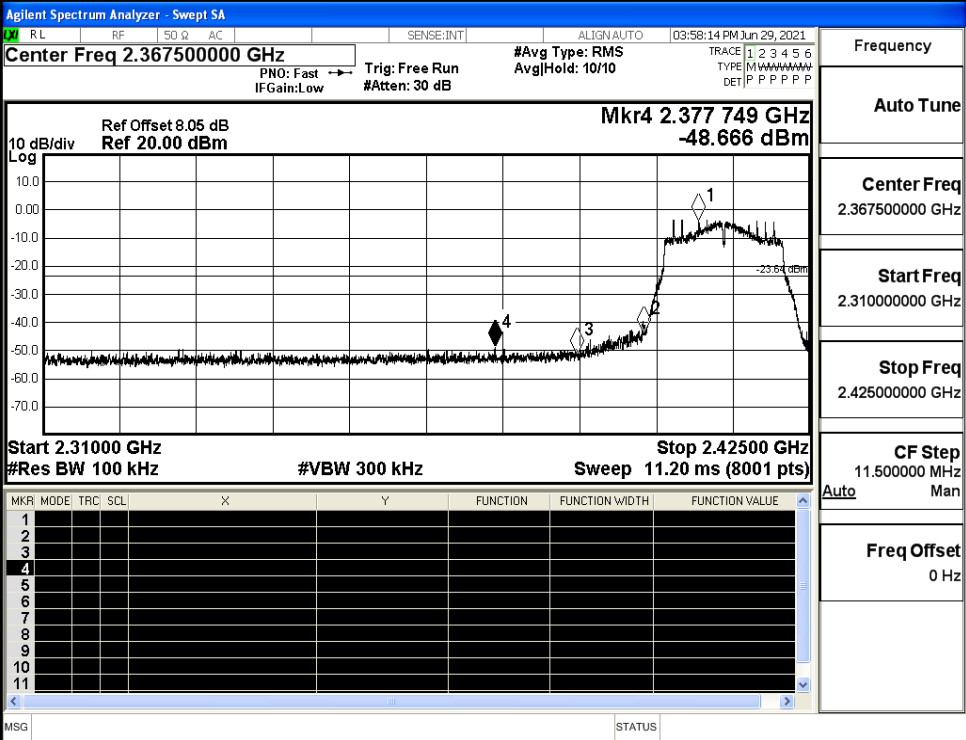




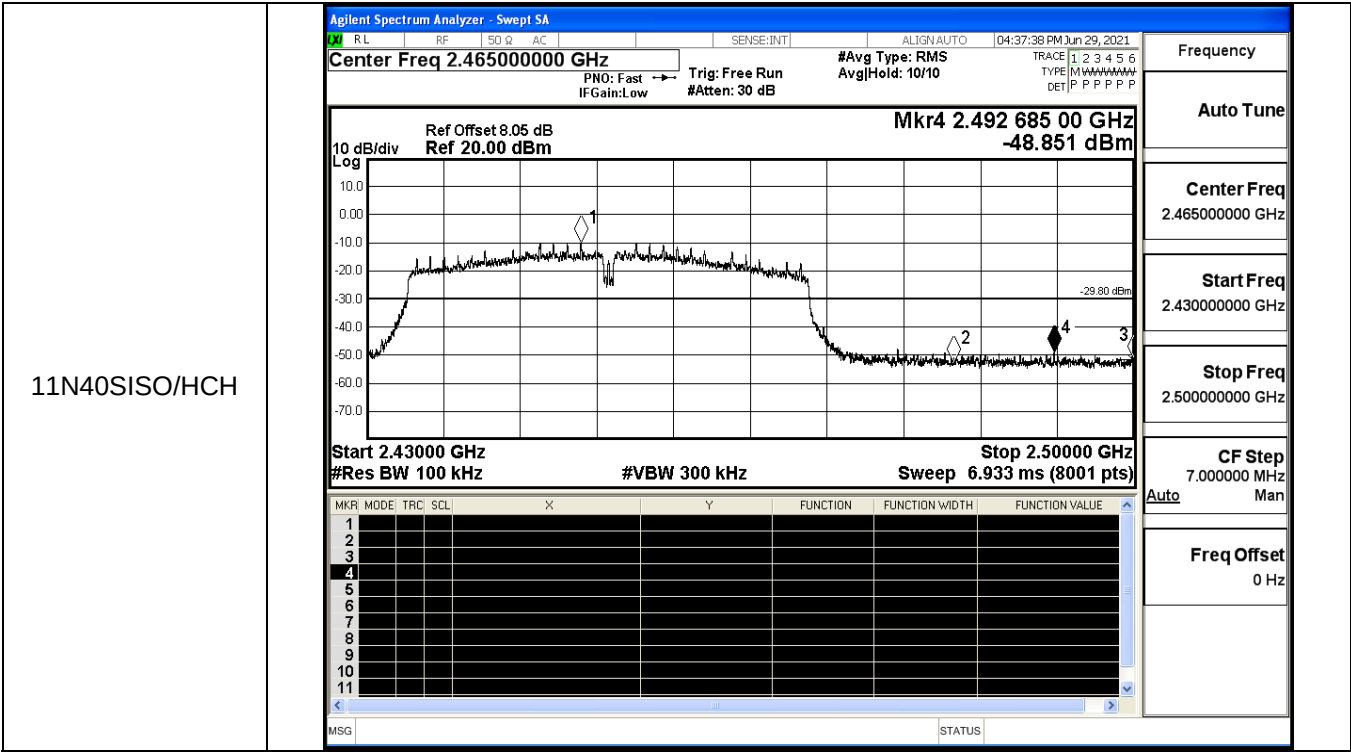
11G/HCH



11N20SISO/LCH



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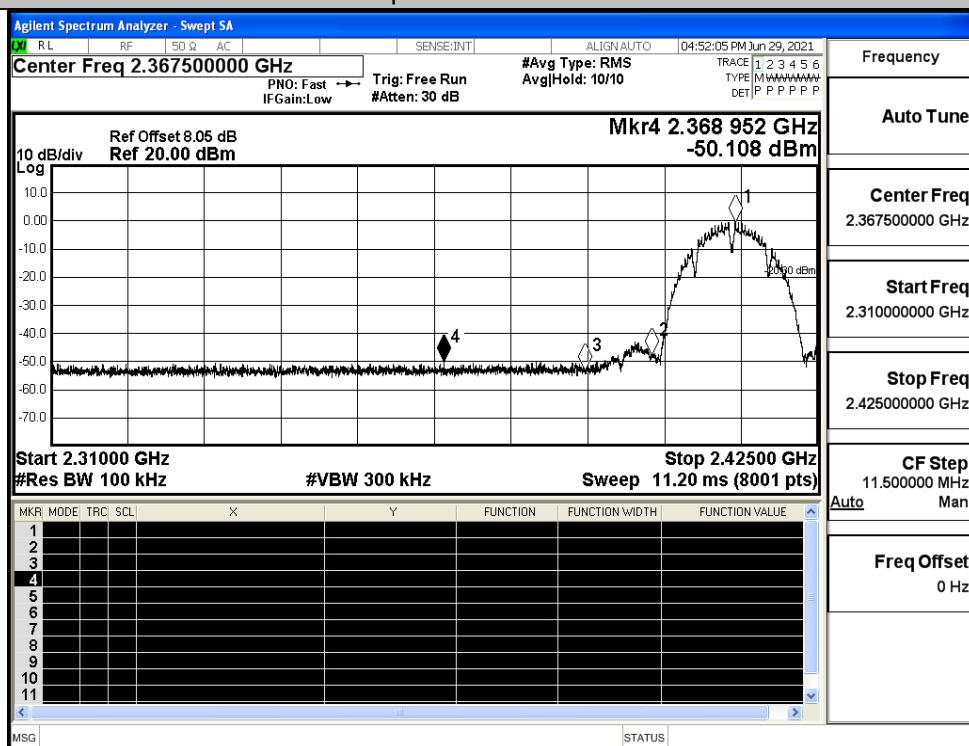


ANT1

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
11B	LCH	-0.304	-50.108	-20.3	PASS
	HCH	-1.293	-49.792	-21.29	PASS
11G	LCH	-5.539	-49.272	-25.54	PASS
	HCH	-6.924	-48.488	-26.92	PASS
11N20SISO	LCH	-6.240	-48.828	-26.24	PASS
	HCH	-6.756	-49.309	-26.76	PASS
11N40SISO	LCH	-9.100	-49.266	-29.1	PASS
	HCH	-10.007	-49.089	-30.01	PASS

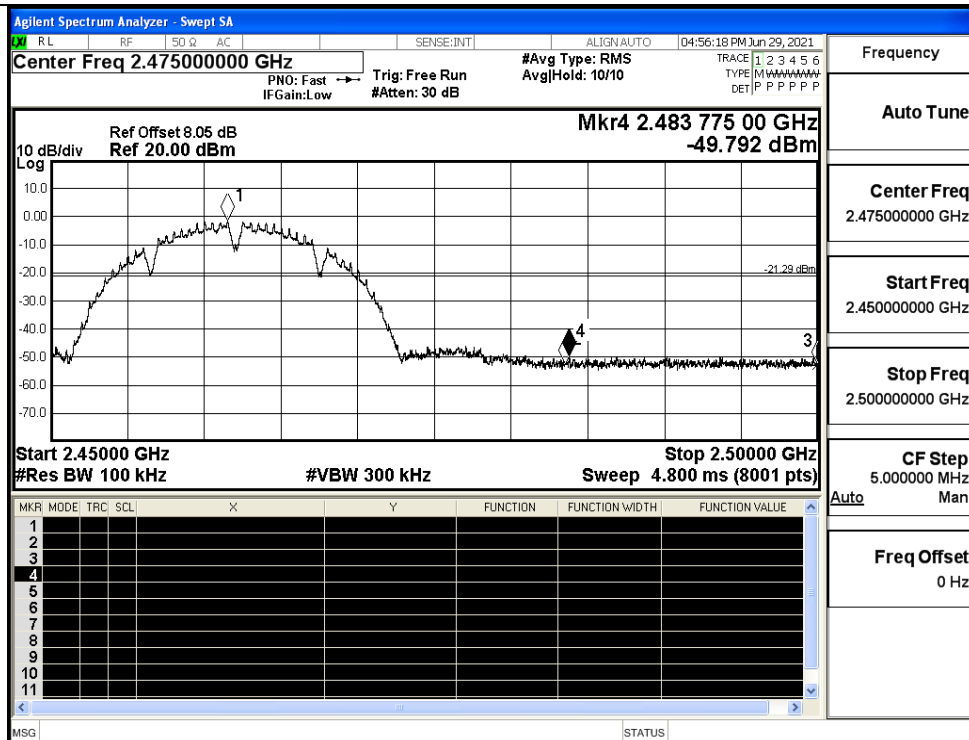
Test Graphs

11B/LCH

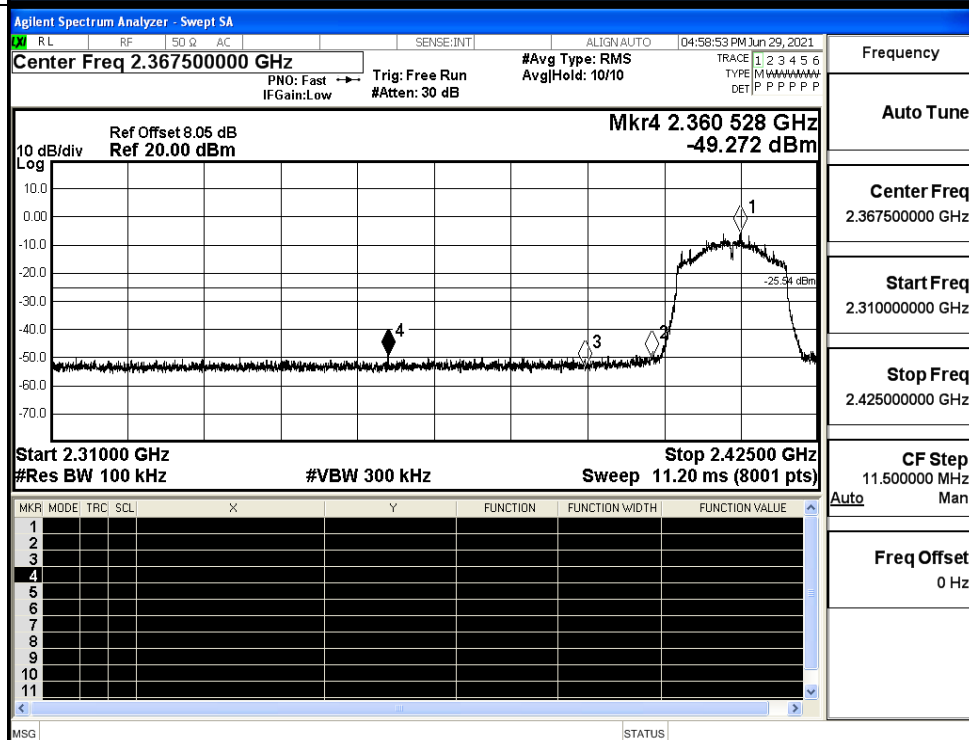




11B/HCH



11G/LCH





11G/HCH

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.475000000 GHz

Ref Offset 8.05 dB
Ref 20.00 dBm

Mkr4 2.492 562 50 GHz
-48.488 dBm

10 dB/div
Log

Start 2.45000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.50000 GHz
Sweep 4.800 ms (8001 pts)

1 2 3 4 5 6 7 8 9 10 11

MSG STATUS

Frequency

Auto Tune

Center Freq
2.475000000 GHz

Start Freq
2.450000000 GHz

Stop Freq
2.500000000 GHz

CF Step
5.000000 MHz

Auto

Man

Freq Offset
0 Hz

11N20SISO/LCH

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.367500000 GHz

Ref Offset 8.05 dB
Ref 20.00 dBm

Mkr4 2.363 676 GHz
-48.828 dBm

10 dB/div
Log

Start 2.31000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.42500 GHz
Sweep 11.20 ms (8001 pts)

1 2 3 4 5 6 7 8 9 10 11

MSG STATUS

Frequency

Auto Tune

Center Freq
2.367500000 GHz

Start Freq
2.310000000 GHz

Stop Freq
2.425000000 GHz

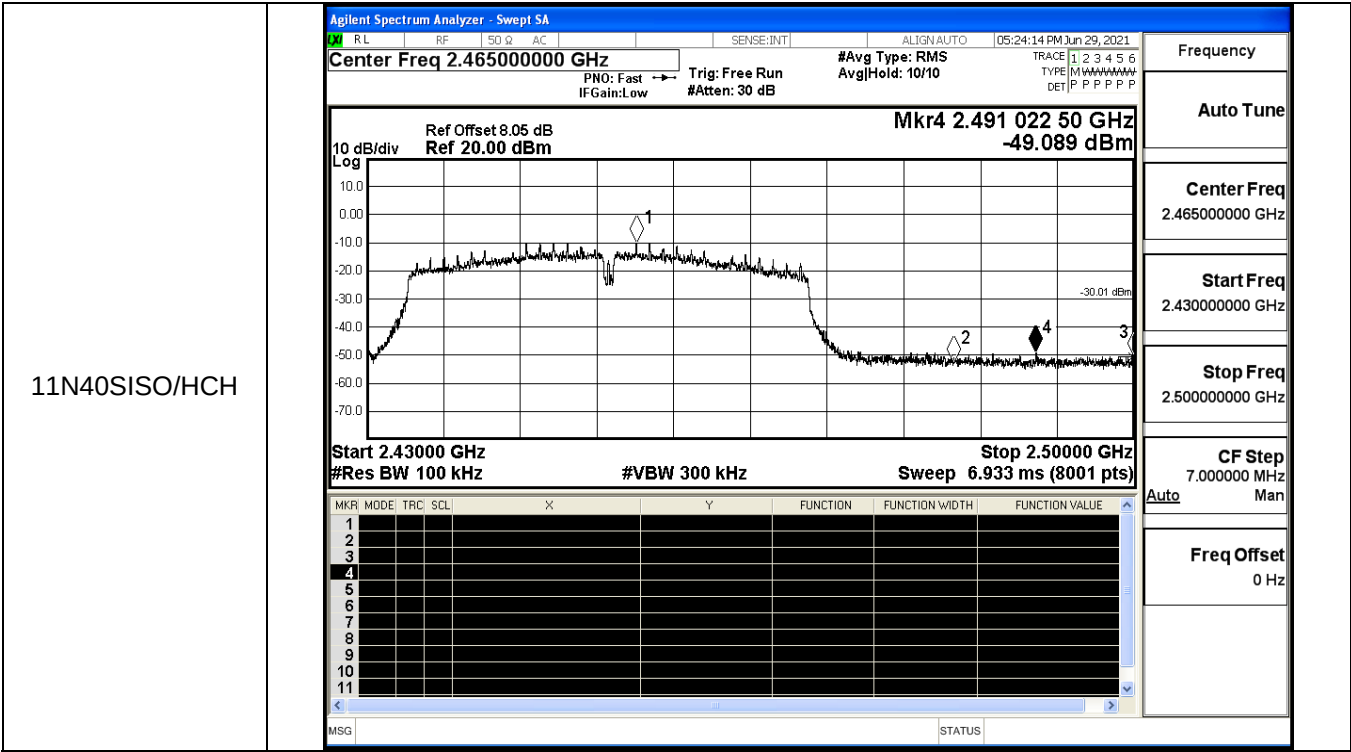
CF Step
11.500000 MHz

Auto

Man

Freq Offset
0 Hz

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C.7 Restrict-band band-edge measurements

ANT0

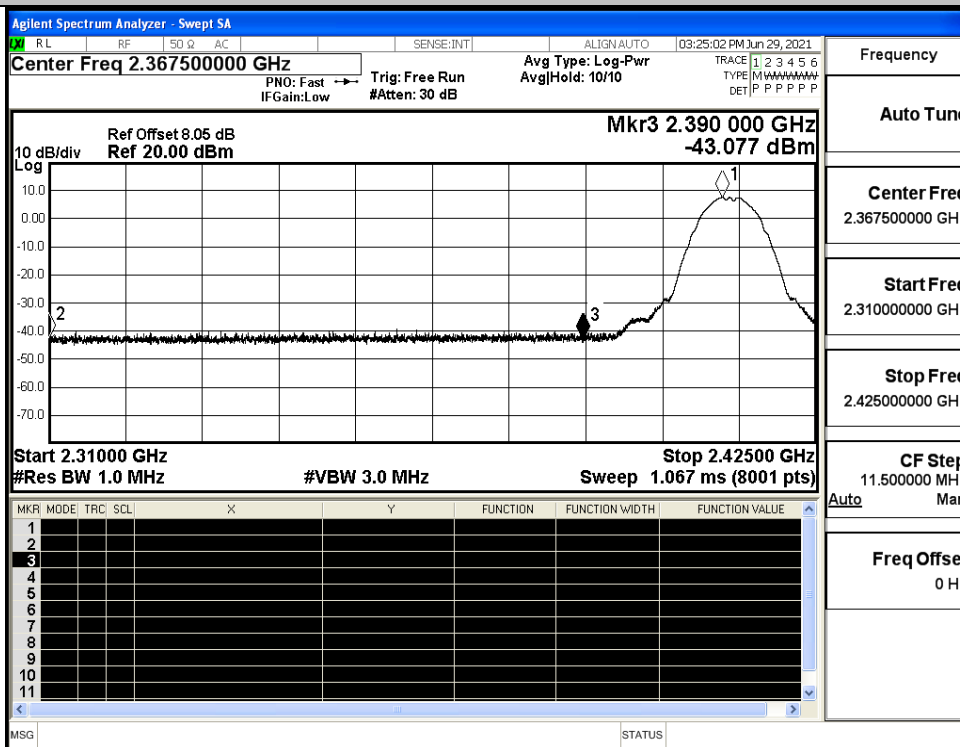
Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
11B	2412	Ant1	2310.0	-42.68	2.0	0	54.55	PEAK	74	PASS
	2412	Ant1	2310.0	-53.60	2.0	0	43.63	AV	54	PASS
	2412	Ant1	2390.0	-43.08	2.0	0	54.15	PEAK	74	PASS
	2412	Ant1	2390.0	-52.90	2.0	0	44.33	AV	54	PASS
	2462	Ant1	2483.5	-41.57	2.0	0	55.66	PEAK	74	PASS
	2462	Ant1	2483.5	-52.33	2.0	0	44.90	AV	54	PASS
	2462	Ant1	2500.0	-42.08	2.0	0	55.15	PEAK	74	PASS
	2462	Ant1	2500.0	-52.49	2.0	0	44.74	AV	54	PASS
11G	2412	Ant1	2310.0	-43.61	2.0	0	53.62	PEAK	74	PASS
	2412	Ant1	2310.0	-53.66	2.0	0	43.57	AV	54	PASS
	2412	Ant1	2390.0	-37.81	2.0	0	59.42	PEAK	74	PASS
	2412	Ant1	2390.0	-51.99	2.0	0	45.24	AV	54	PASS
	2462	Ant1	2483.5	-40.52	2.0	0	56.71	PEAK	74	PASS
	2462	Ant1	2483.5	-51.95	2.0	0	45.28	AV	54	PASS
	2462	Ant1	2500.0	-42.18	2.0	0	55.05	PEAK	74	PASS
	2462	Ant1	2500.0	-52.65	2.0	0	44.58	AV	54	PASS
11N20 SISO	2412	Ant1	2310.0	-42.40	2.0	0	54.83	PEAK	74	PASS
	2412	Ant1	2310.0	-53.66	2.0	0	43.57	AV	54	PASS
	2412	Ant1	2390.0	-39.68	2.0	0	57.55	PEAK	74	PASS
	2412	Ant1	2390.0	-51.76	2.0	0	45.47	AV	54	PASS
	2462	Ant1	2483.5	-41.71	2.0	0	55.52	PEAK	74	PASS
	2462	Ant1	2483.5	-52.05	2.0	0	45.18	AV	54	PASS
	2462	Ant1	2500.0	-42.46	2.0	0	54.77	PEAK	74	PASS
	2462	Ant1	2500.0	-52.59	2.0	0	44.64	AV	54	PASS
11N40 SISO	2422	Ant1	2310.0	-43.28	2.0	0	53.95	PEAK	74	PASS
	2422	Ant1	2310.0	-53.41	2.0	0	43.82	AV	54	PASS



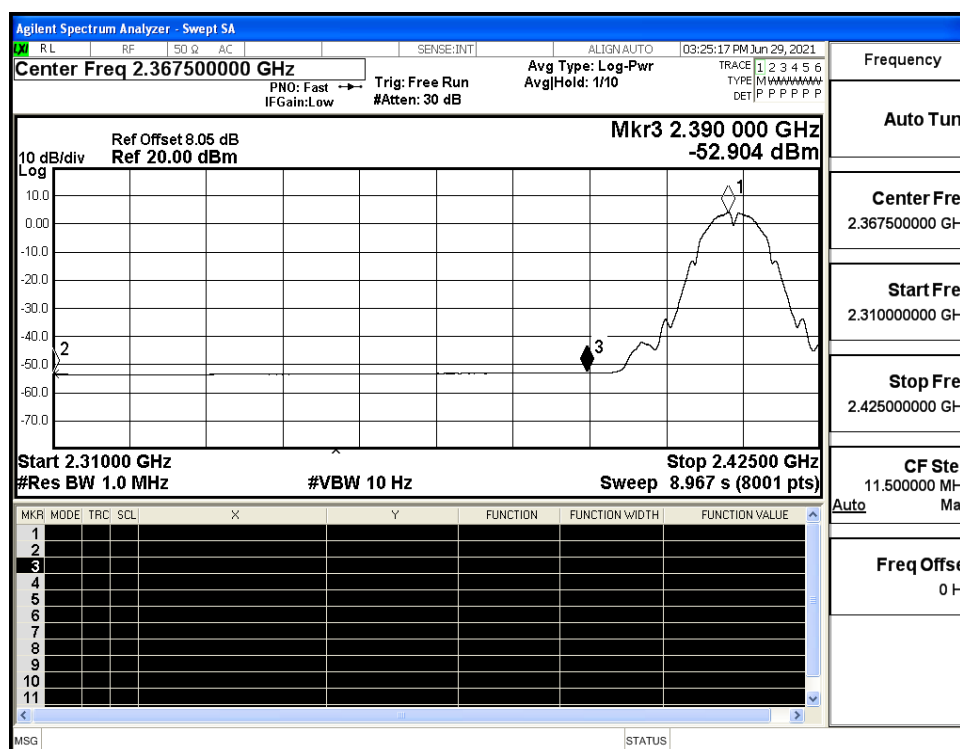
	2422	Ant1	2390.0	-41.94	2.0	0	55.29	PEAK	74	PASS
	2422	Ant1	2390.0	-52.11	2.0	0	45.12	AV	54	PASS
	2452	Ant1	2483.5	-42.24	2.0	0	54.99	PEAK	74	PASS
	2452	Ant1	2483.5	-52.28	2.0	0	44.95	AV	54	PASS
	2452	Ant1	2500.0	-40.83	2.0	0	56.40	PEAK	74	PASS
	2452	Ant1	2500.0	-52.55	2.0	0	44.68	AV	54	PASS



Restrict-band band-edge measurements_11B_2412_Ant1_PEAK

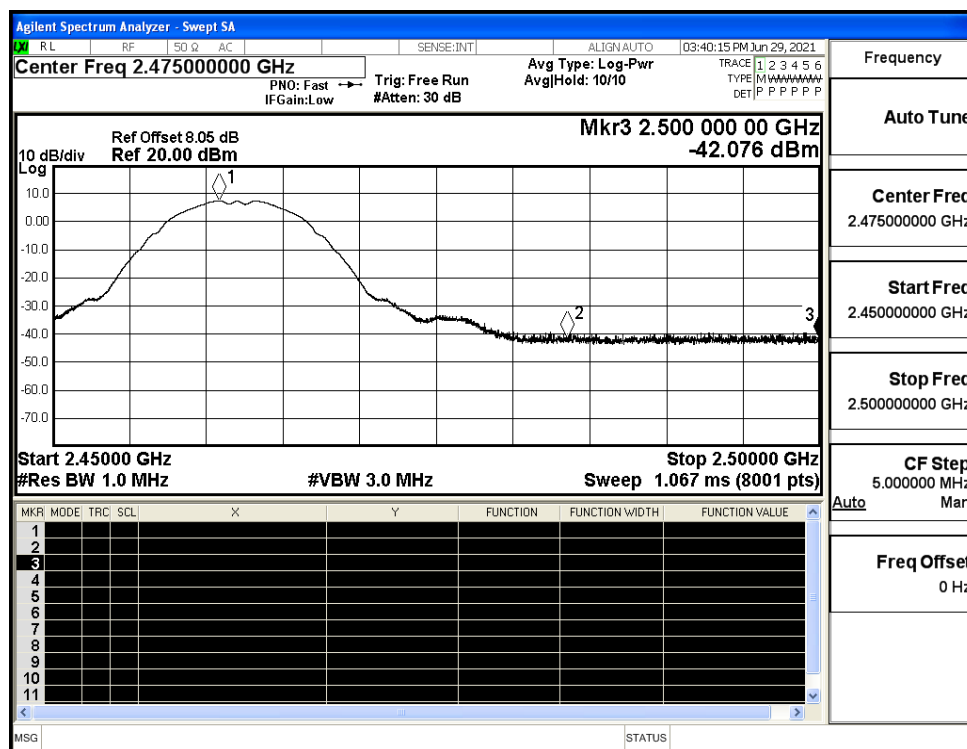


Restrict-band band-edge measurements_11B_2412_Ant1_AV

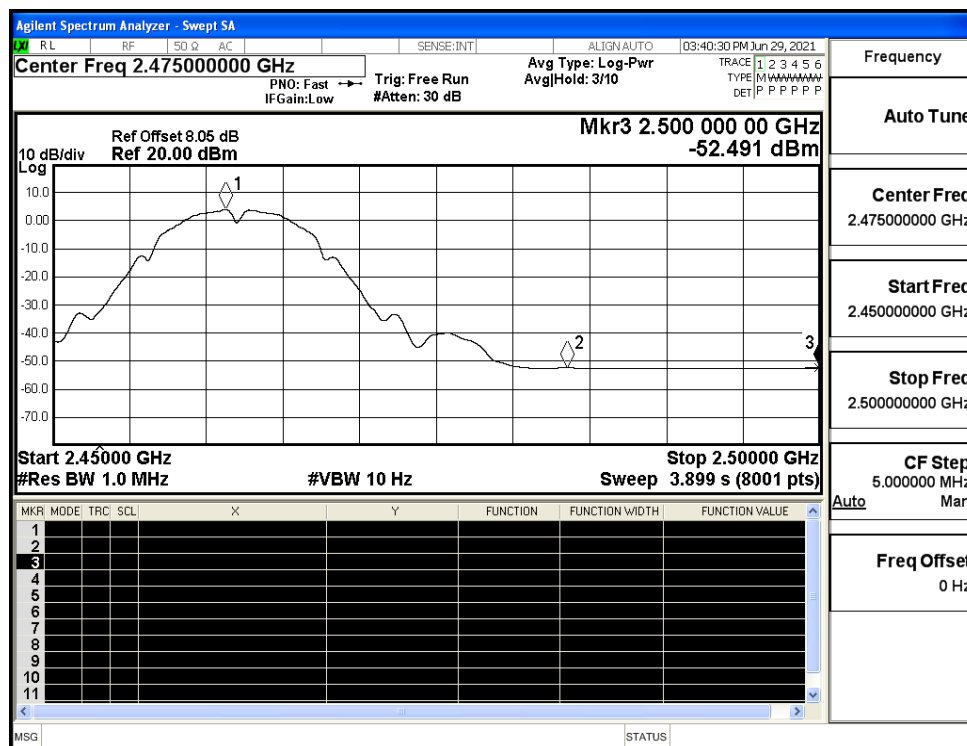




Restrict-band band-edge measurements_11B_2462_Ant1_PEAK

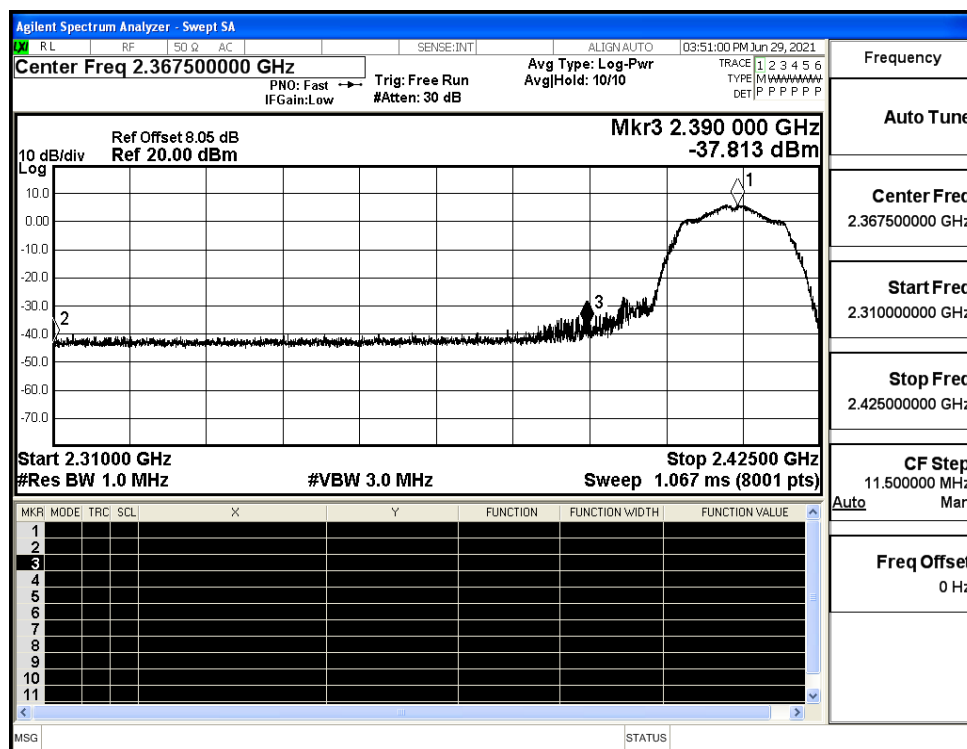


Restrict-band band-edge measurements_11B_2462_Ant1_AV

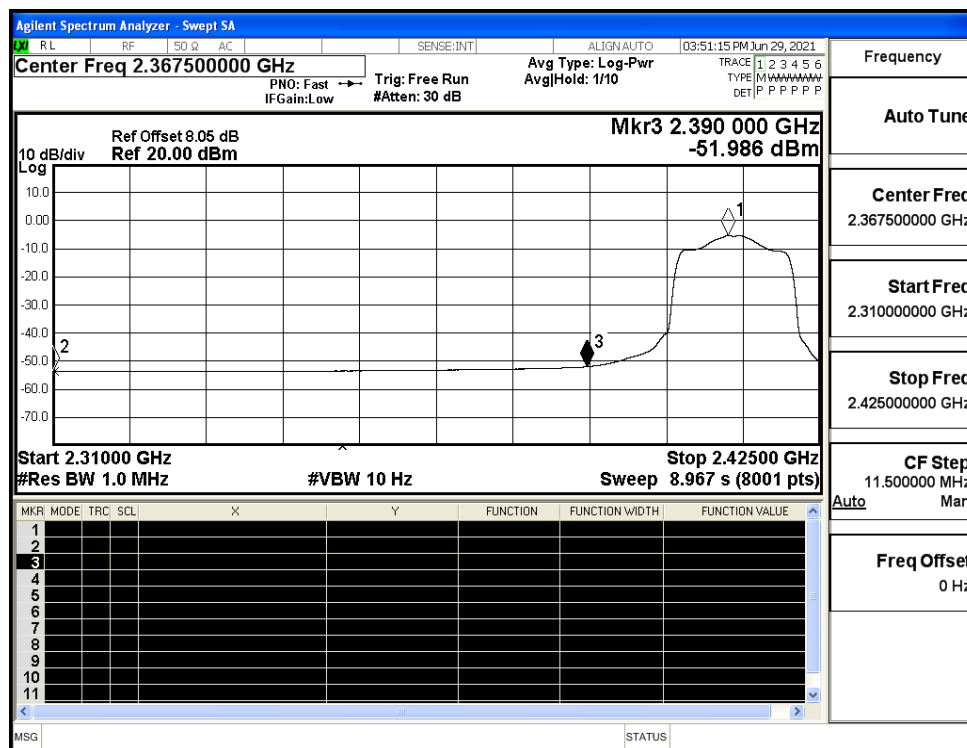




Restrict-band band-edge measurements_11G_2412_Ant1_PEAK

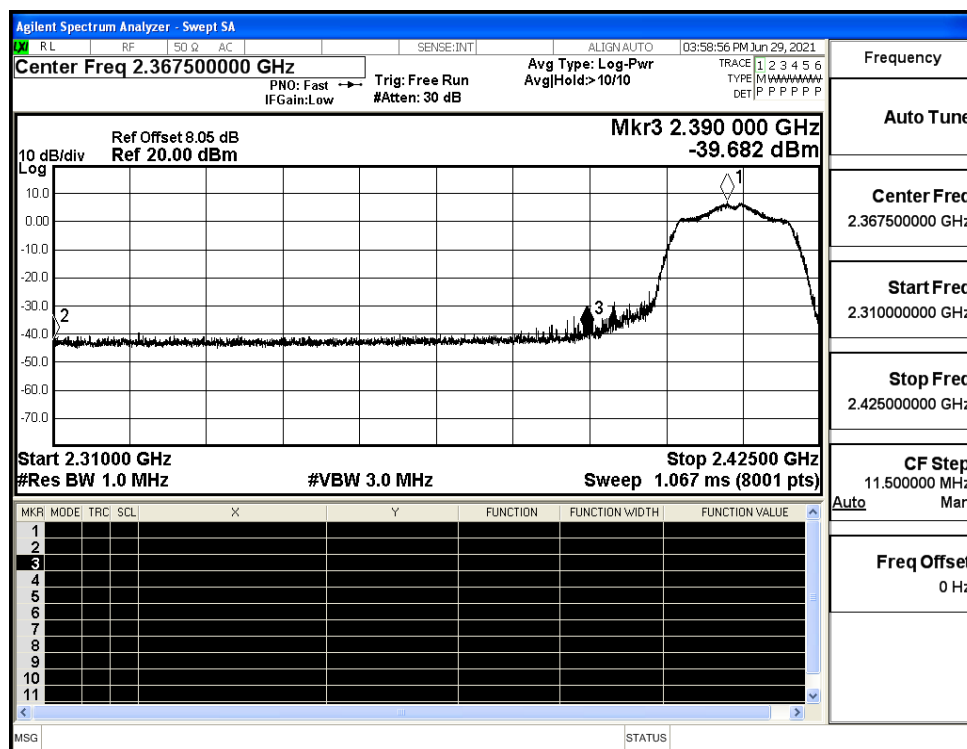


Restrict-band band-edge measurements_11G_2412_Ant1_AV

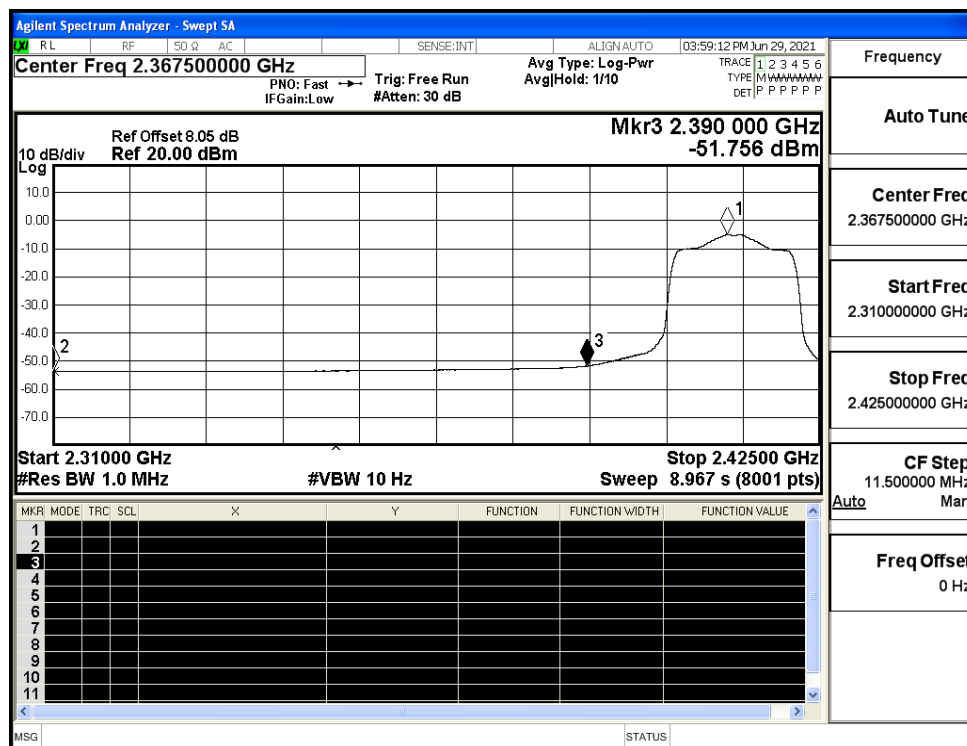




Restrict-band band-edge measurements_11N20SISO_2412_Ant1_PEAK

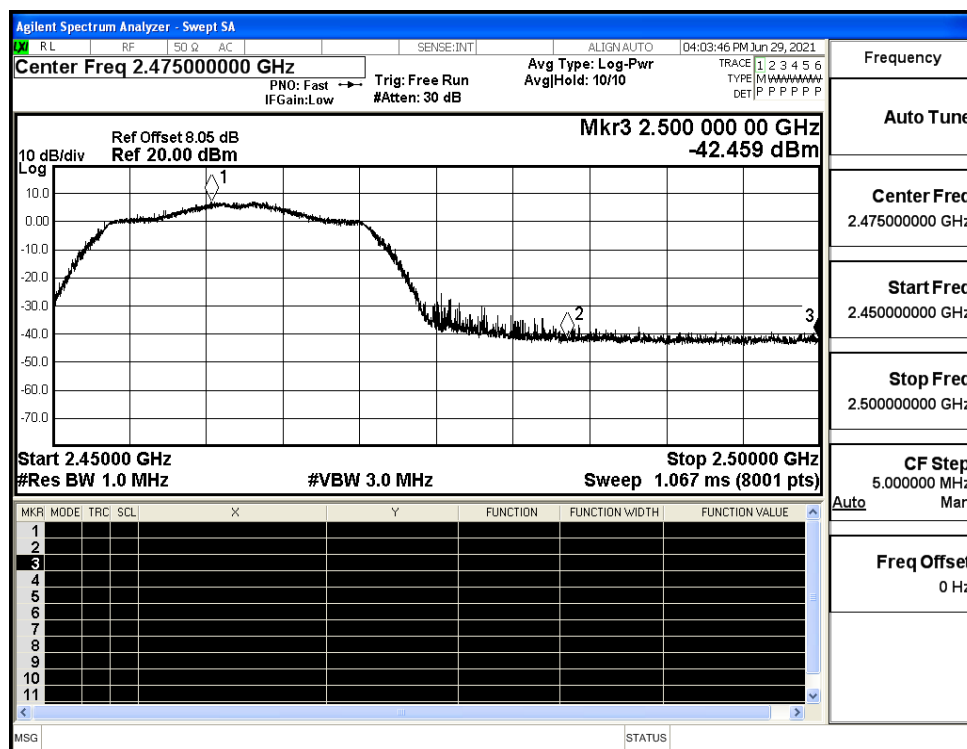


Restrict-band band-edge measurements_11N20SISO_2412_Ant1_AV

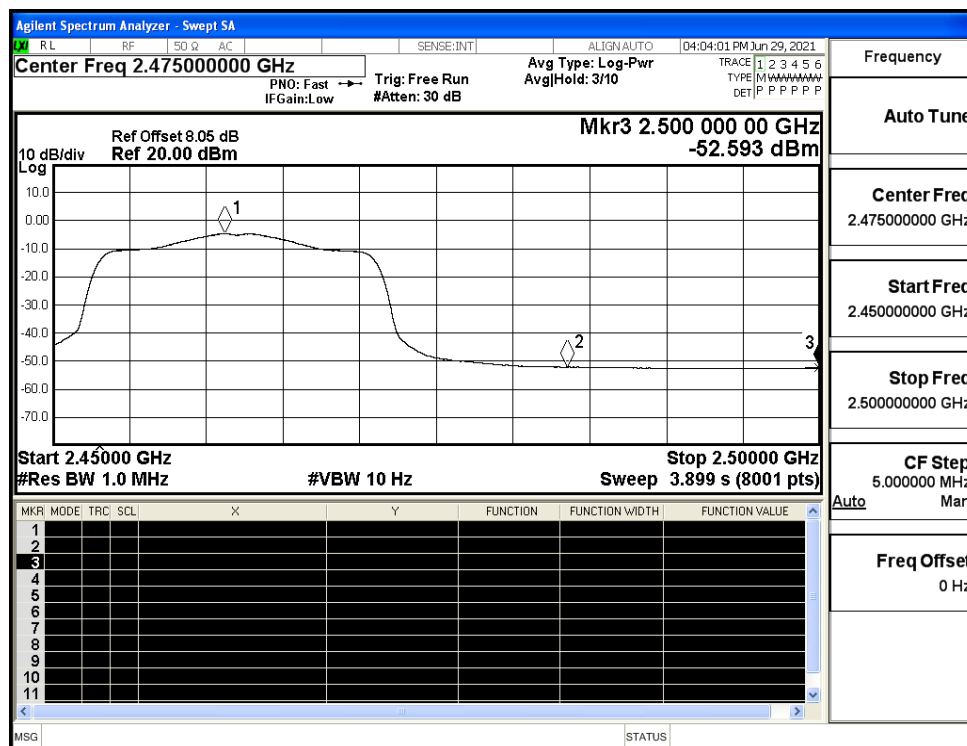




Restrict-band band-edge measurements_11N20SISO_2462_Ant1_PEAK

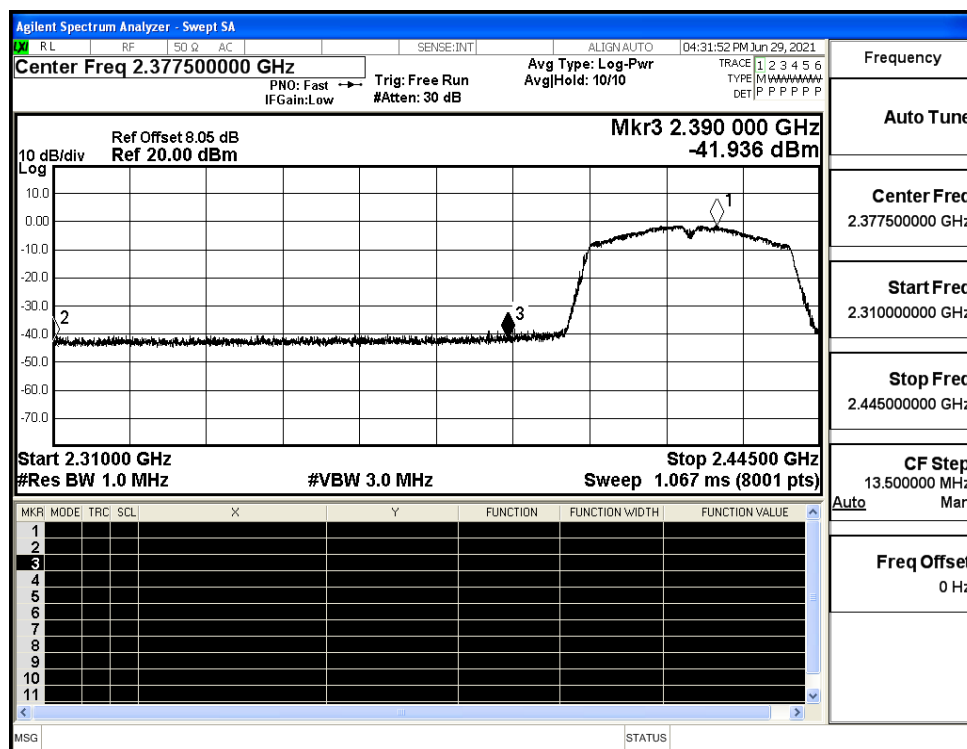


Restrict-band band-edge measurements_11N20SISO_2462_Ant1_AV

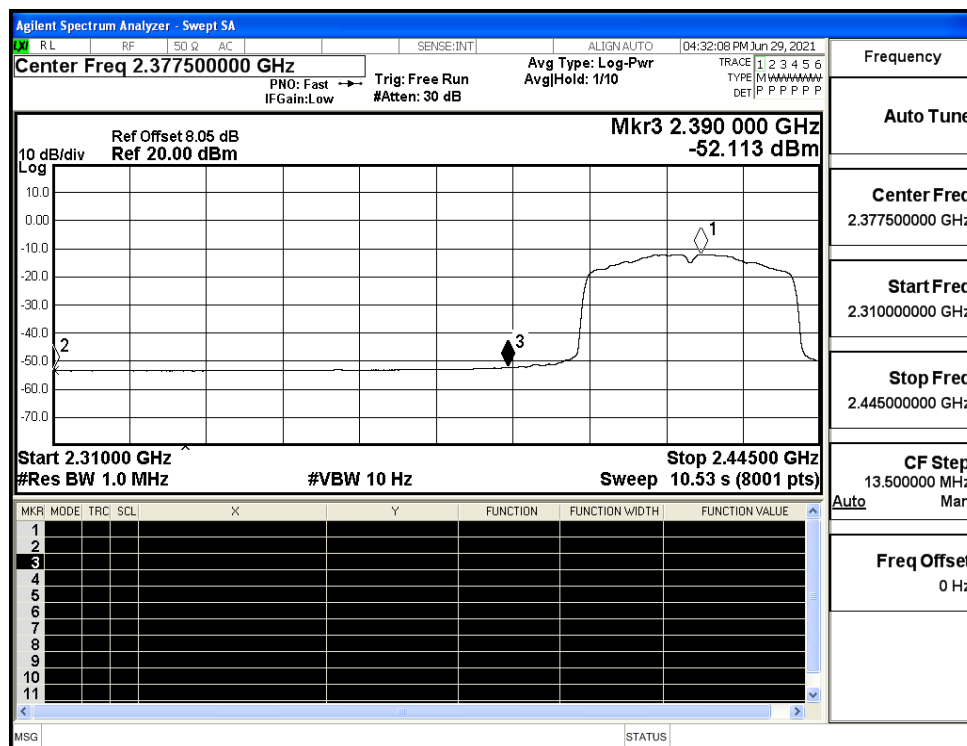




Restrict-band band-edge measurements_11N40SISO_2422_Ant1_PEAK

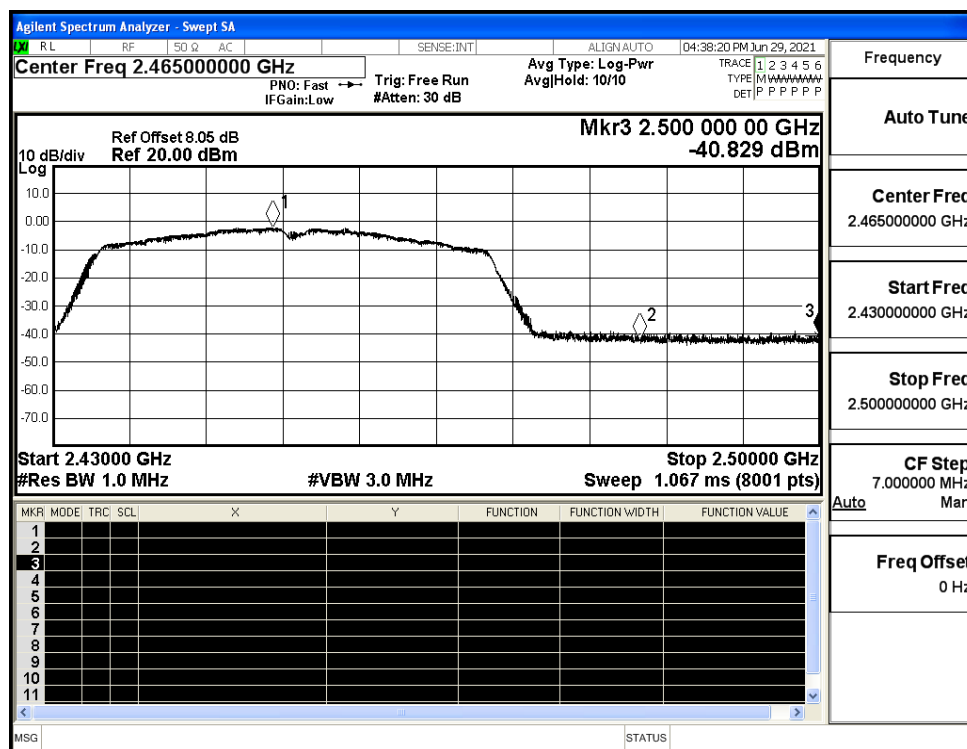


Restrict-band band-edge measurements_11N40SISO_2422_Ant1_AV

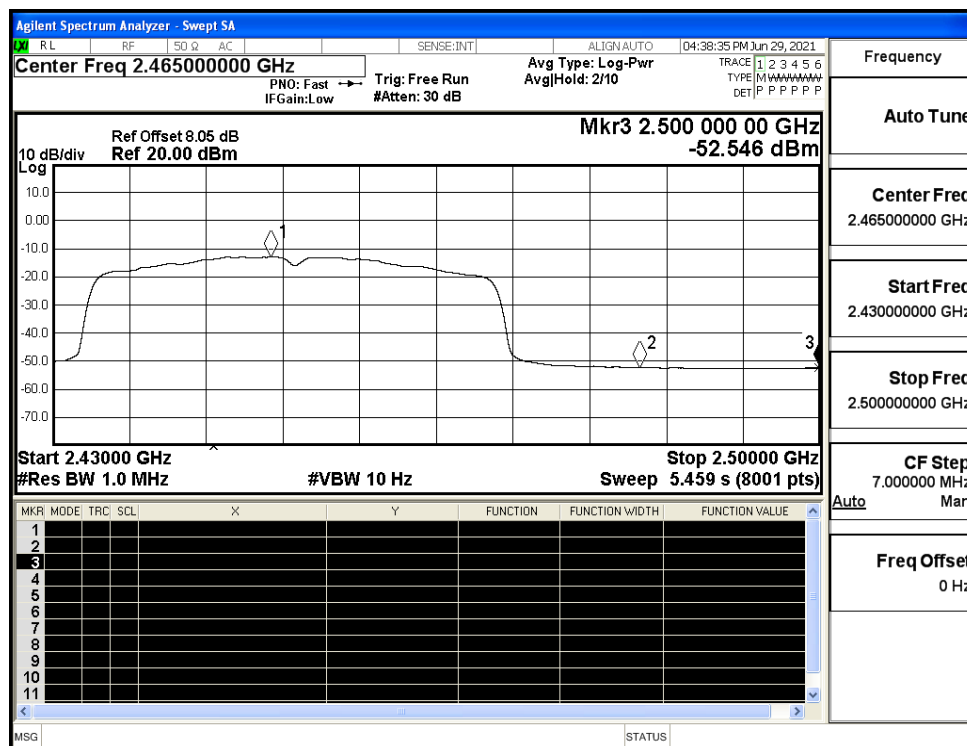




Restrict-band band-edge measurements_11N40SISO_2452_Ant1_PEAK



Restrict-band band-edge measurements_11N40SISO_2452_Ant1_AV



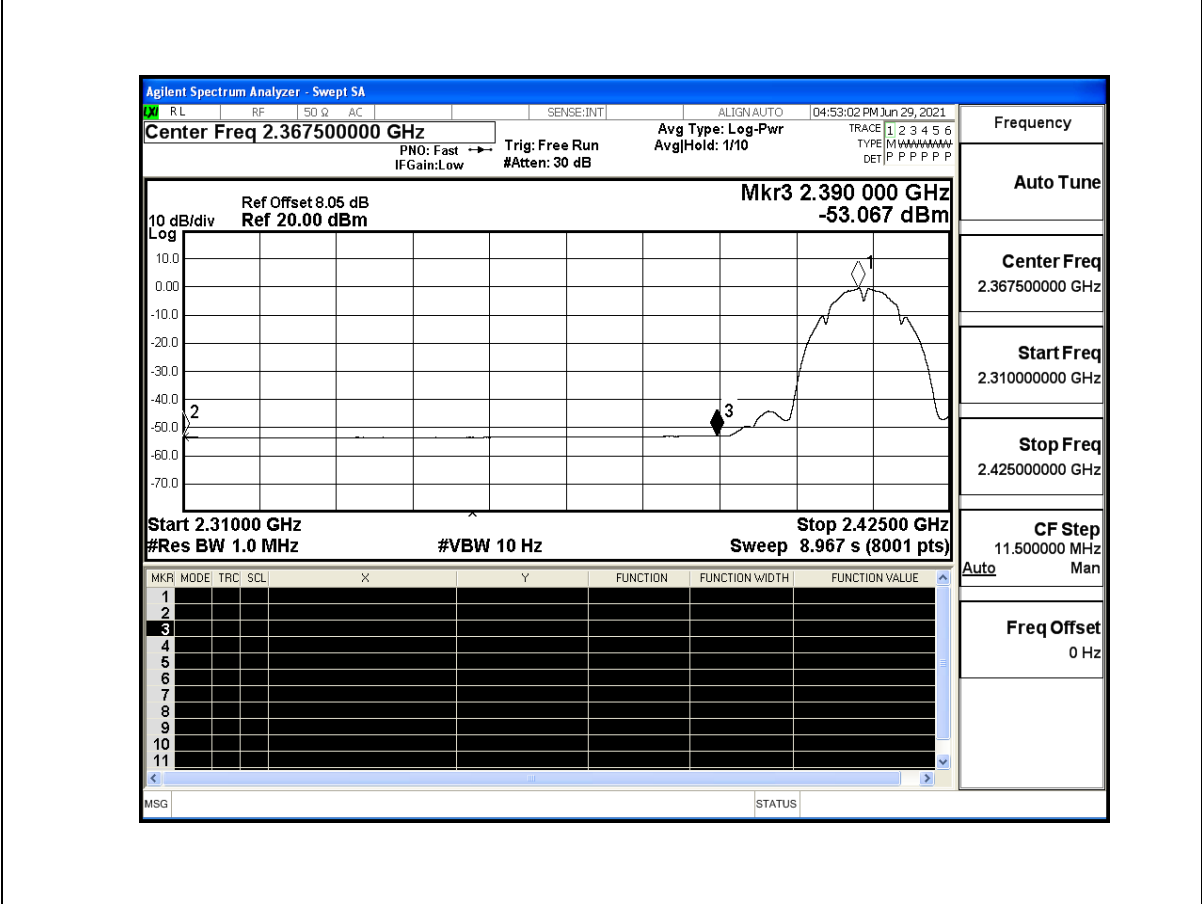
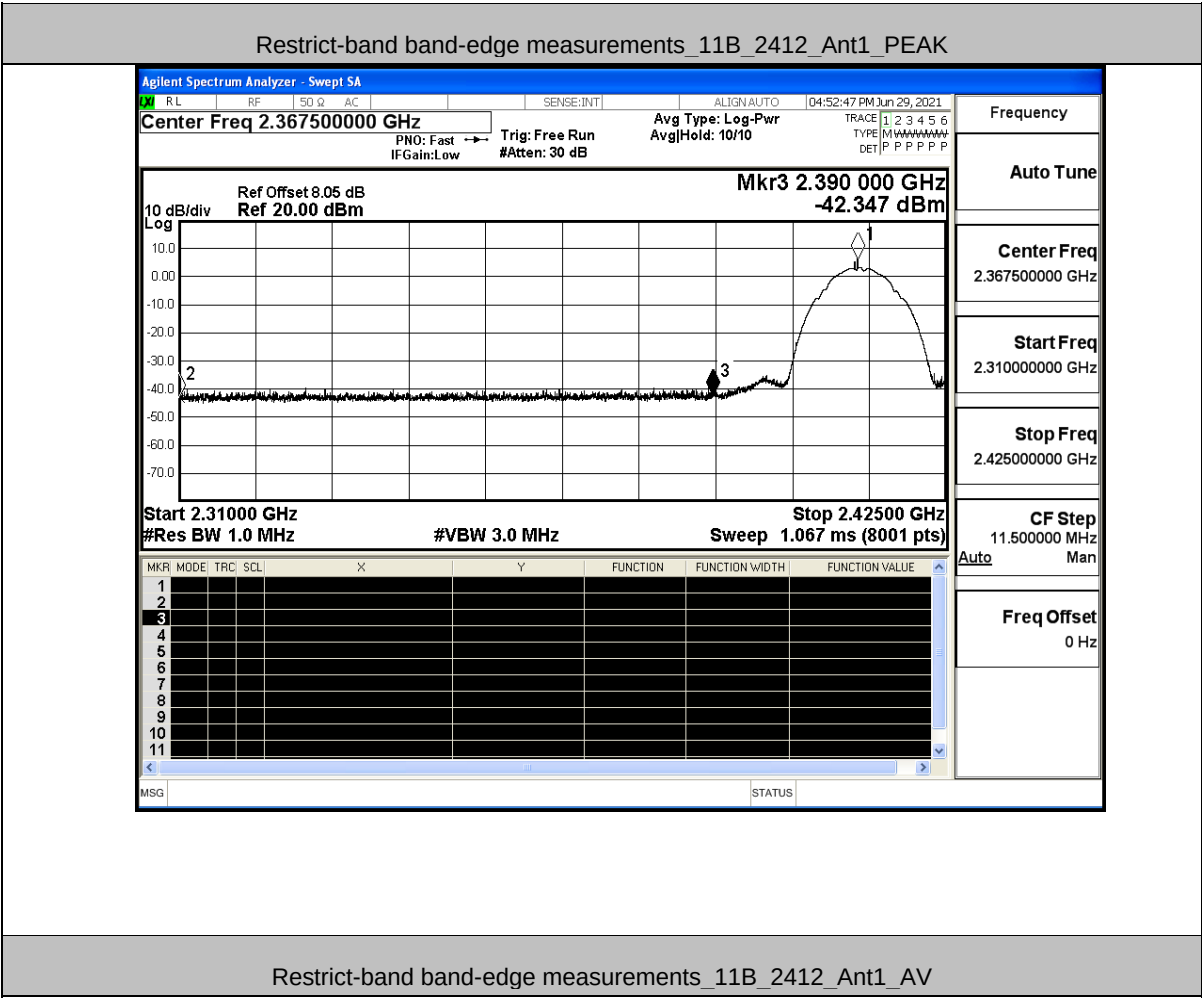


ANT1

Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
11B	2412	Ant1	2310.0	-43.52	2.0	0	53.71	PEAK	74	PASS
	2412	Ant1	2310.0	-53.52	2.0	0	43.71	AV	54	PASS
	2412	Ant1	2390.0	-42.35	2.0	0	54.88	PEAK	74	PASS
	2412	Ant1	2390.0	-53.07	2.0	0	44.16	AV	54	PASS
	2462	Ant1	2483.5	-43.01	2.0	0	54.22	PEAK	74	PASS
	2462	Ant1	2483.5	-52.78	2.0	0	44.45	AV	54	PASS
	2462	Ant1	2500.0	-43.28	2.0	0	53.95	PEAK	74	PASS
	2462	Ant1	2500.0	-52.62	2.0	0	44.61	AV	54	PASS
11G	2412	Ant1	2310.0	-42.35	2.0	0	54.88	PEAK	74	PASS
	2412	Ant1	2310.0	-53.44	2.0	0	43.79	AV	54	PASS
	2412	Ant1	2390.0	-42.70	2.0	0	54.53	PEAK	74	PASS
	2412	Ant1	2390.0	-52.99	2.0	0	44.24	AV	54	PASS
	2462	Ant1	2483.5	-42.51	2.0	0	54.72	PEAK	74	PASS
	2462	Ant1	2483.5	-52.77	2.0	0	44.46	AV	54	PASS
	2462	Ant1	2500.0	-42.52	2.0	0	54.71	PEAK	74	PASS
	2462	Ant1	2500.0	-52.50	2.0	0	44.73	AV	54	PASS
11N20 SISO	2412	Ant1	2310.0	-42.55	2.0	0	54.68	PEAK	74	PASS
	2412	Ant1	2310.0	-53.41	2.0	0	43.82	AV	54	PASS
	2412	Ant1	2390.0	-43.66	2.0	0	53.57	PEAK	74	PASS
	2412	Ant1	2390.0	-52.98	2.0	0	44.25	AV	54	PASS
	2462	Ant1	2483.5	-41.76	2.0	0	55.47	PEAK	74	PASS
	2462	Ant1	2483.5	-52.76	2.0	0	44.47	AV	54	PASS
	2462	Ant1	2500.0	-41.84	2.0	0	55.39	PEAK	74	PASS
	2462	Ant1	2500.0	-52.52	2.0	0	44.71	AV	54	PASS
11N40 SISO	2422	Ant1	2310.0	-43.63	2.0	0	53.60	PEAK	74	PASS
	2422	Ant1	2310.0	-53.39	2.0	0	43.84	AV	54	PASS
	2422	Ant1	2390.0	-41.65	2.0	0	55.58	PEAK	74	PASS
	2422	Ant1	2390.0	-52.13	2.0	0	45.10	AV	54	PASS

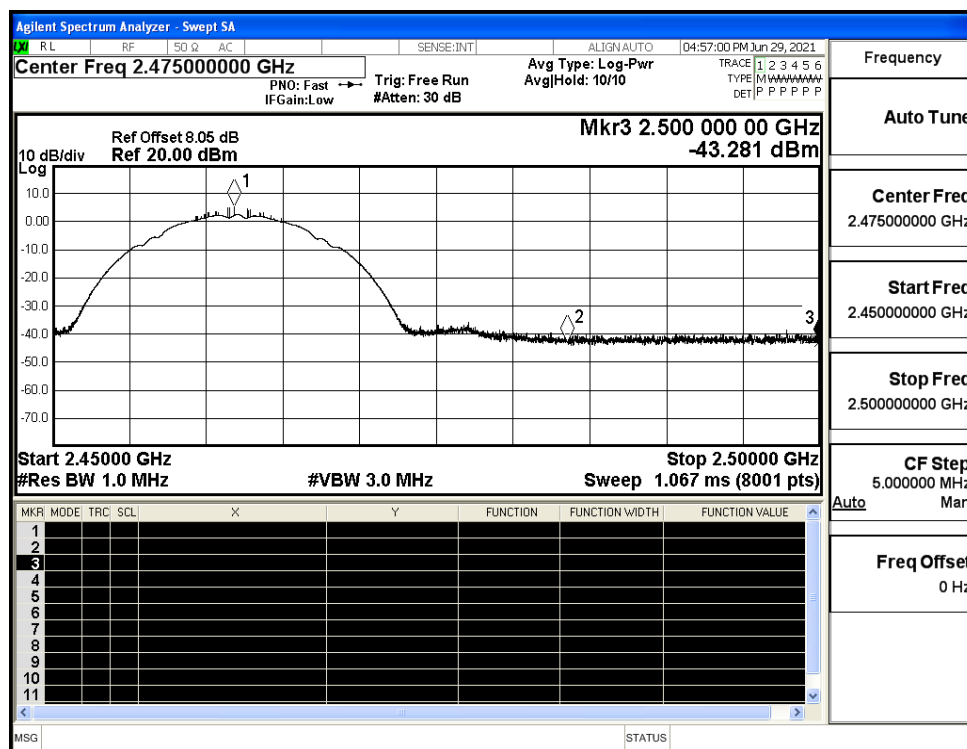


	2452	Ant1	2483.5	-42.42	2.0	0	54.81	PEAK	74	PASS
	2452	Ant1	2483.5	-52.26	2.0	0	44.97	AV	54	PASS
	2452	Ant1	2500.0	-42.16	2.0	0	55.07	PEAK	74	PASS
	2452	Ant1	2500.0	-52.52	2.0	0	44.71	AV	54	PASS

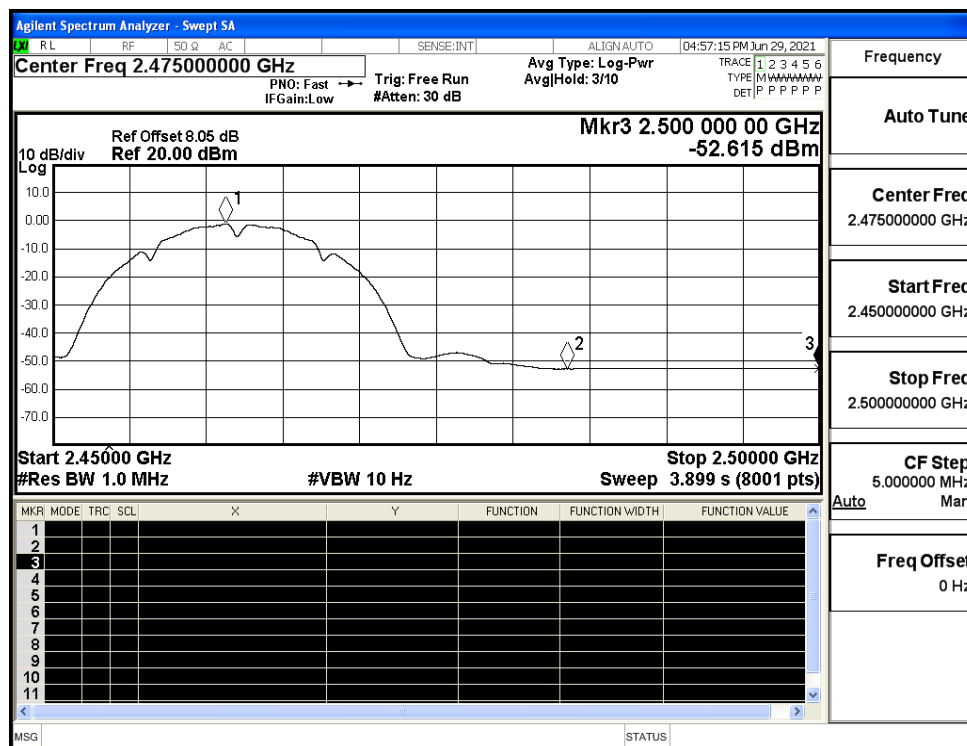




Restrict-band band-edge measurements_11B_2462_Ant1_PEAK

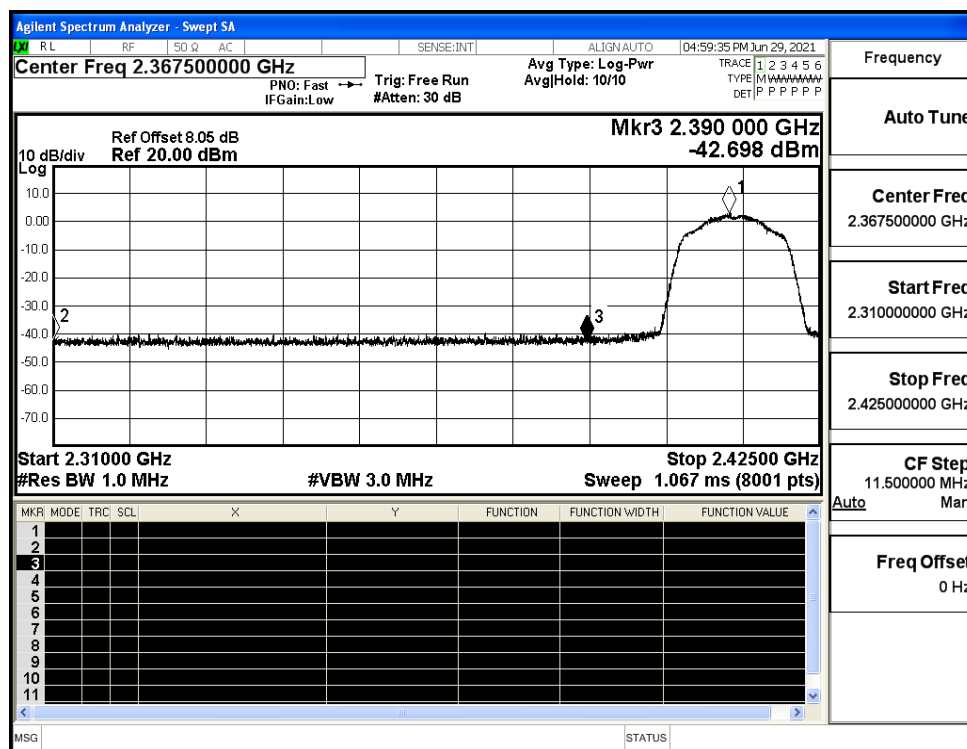


Restrict-band band-edge measurements_11B_2462_Ant1_AV

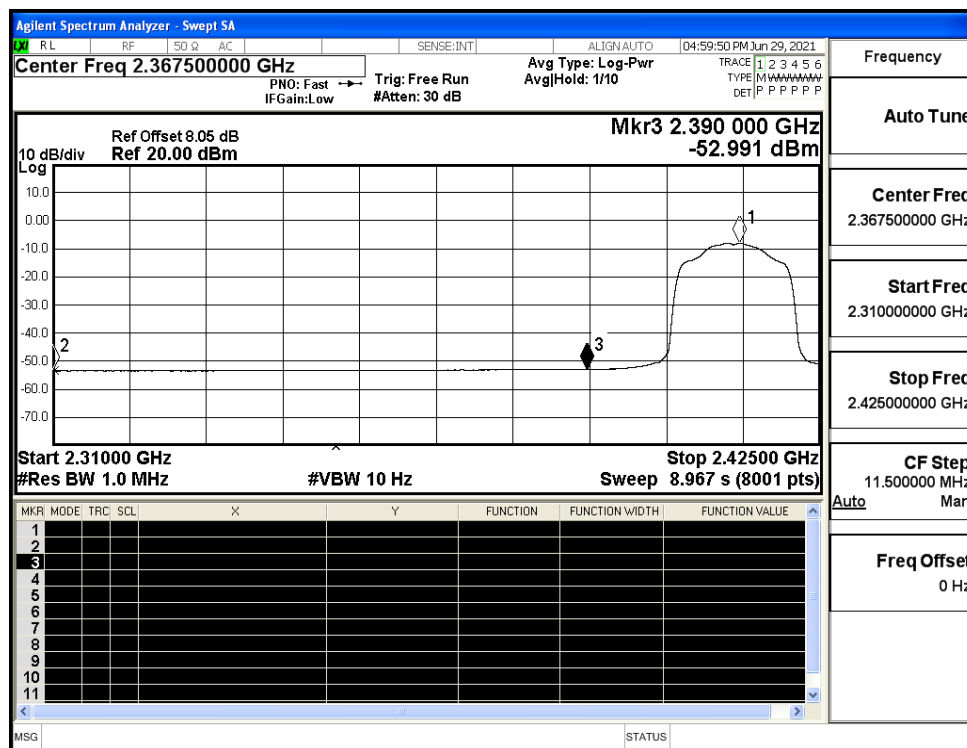




Restrict-band band-edge measurements_11G_2412_Ant1_PEAK

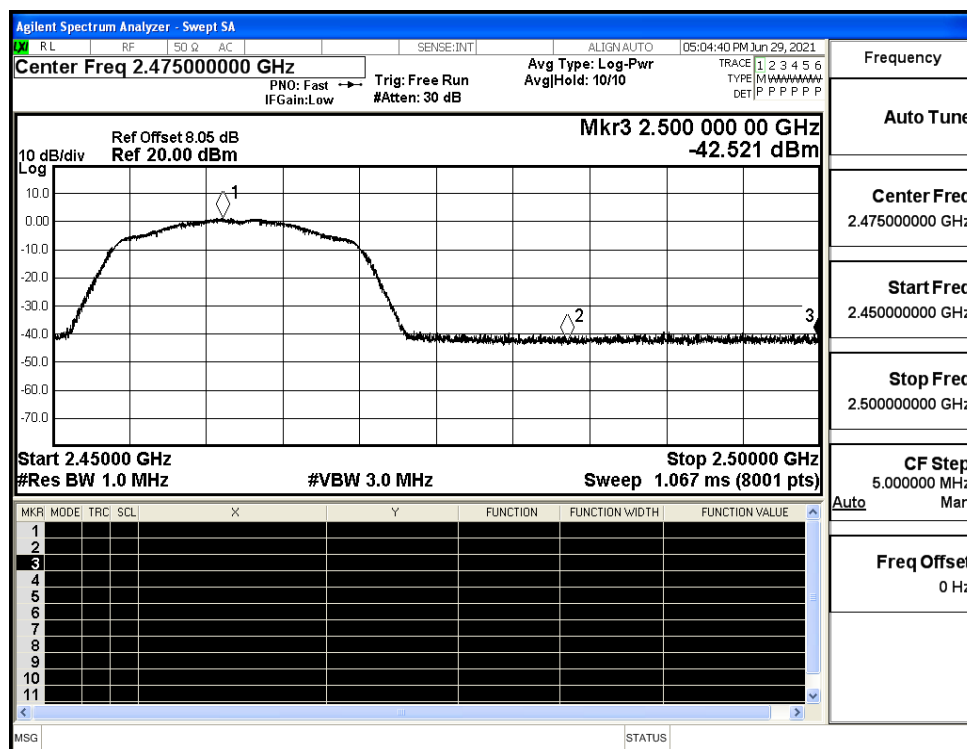


Restrict-band band-edge measurements_11G_2412_Ant1_AV

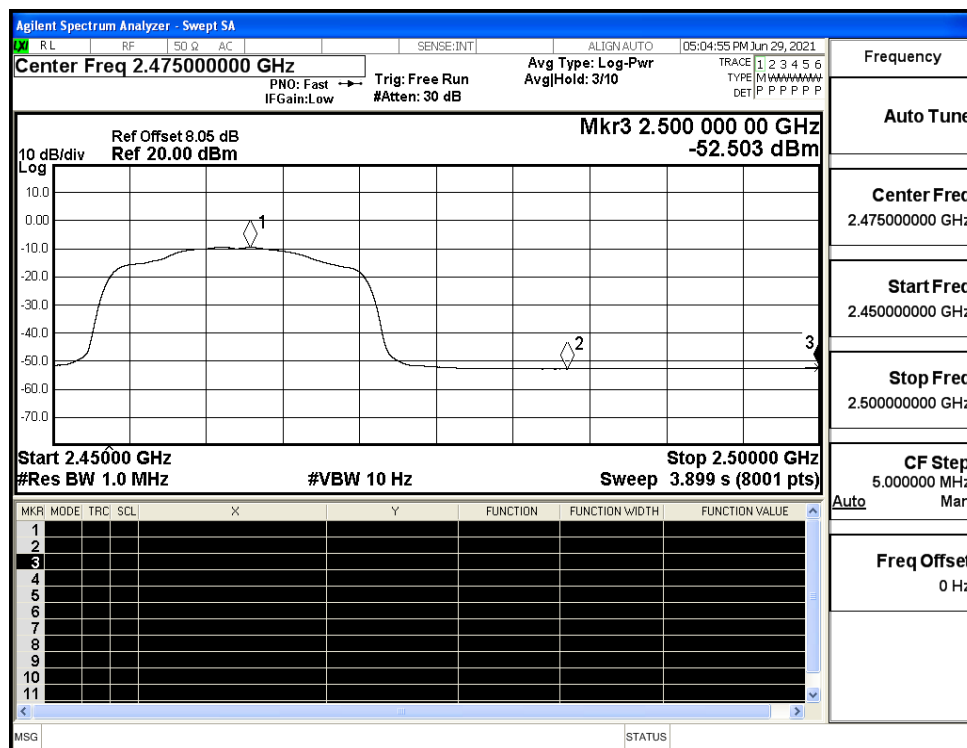




Restrict-band band-edge measurements_11G_2462_Ant1_PEAK

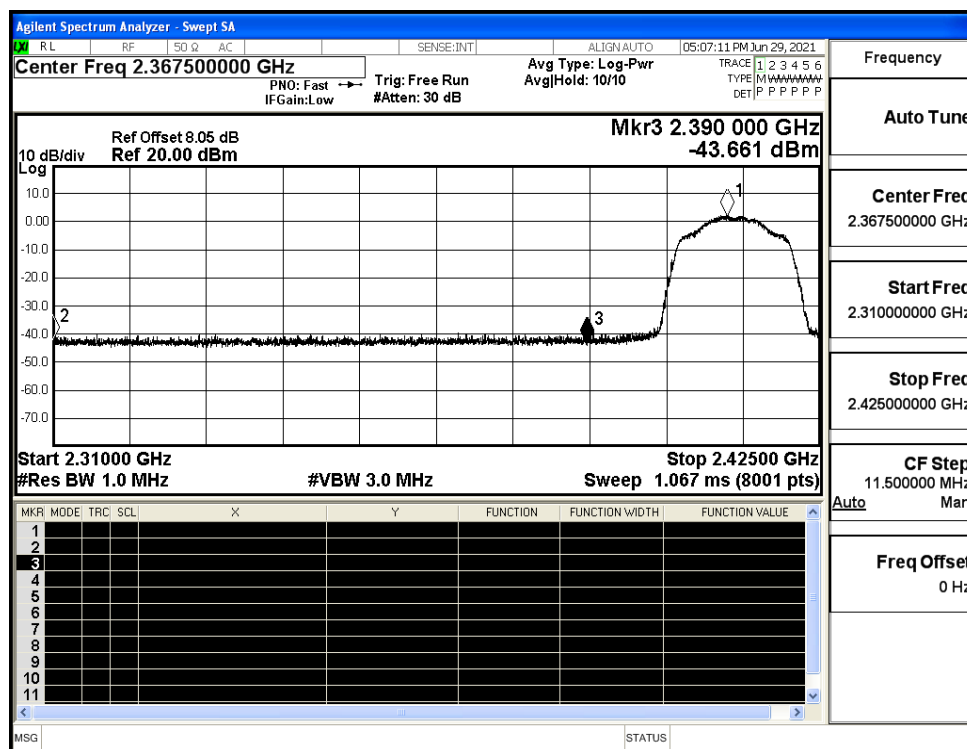


Restrict-band band-edge measurements_11G_2462_Ant1_AV

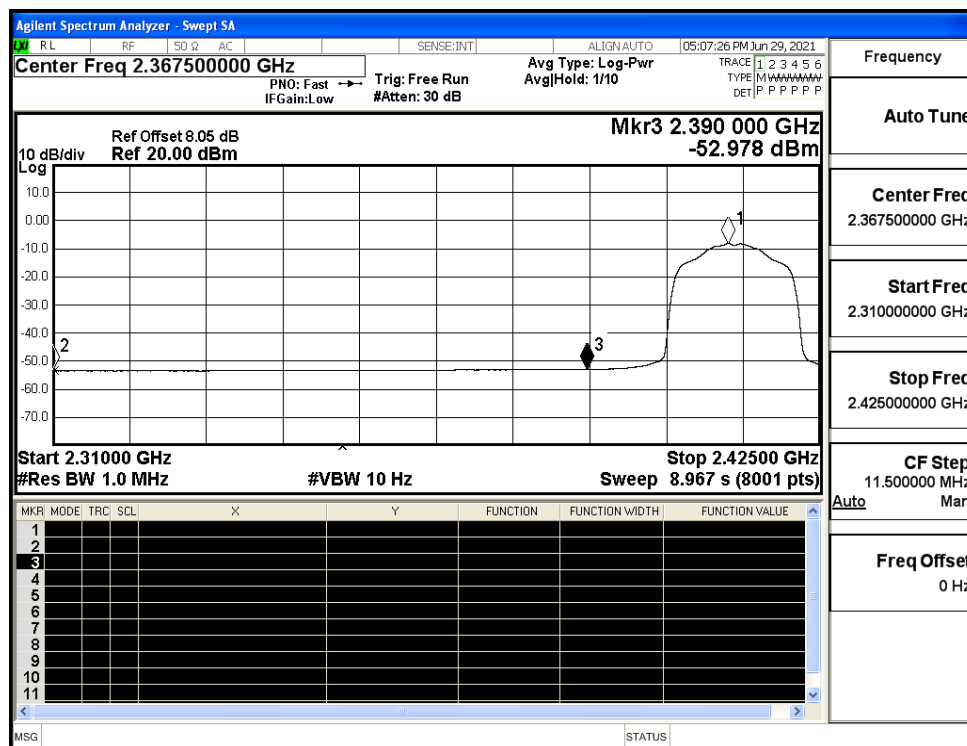




Restrict-band band-edge measurements_11N20SISO_2412_Ant1_PEAK

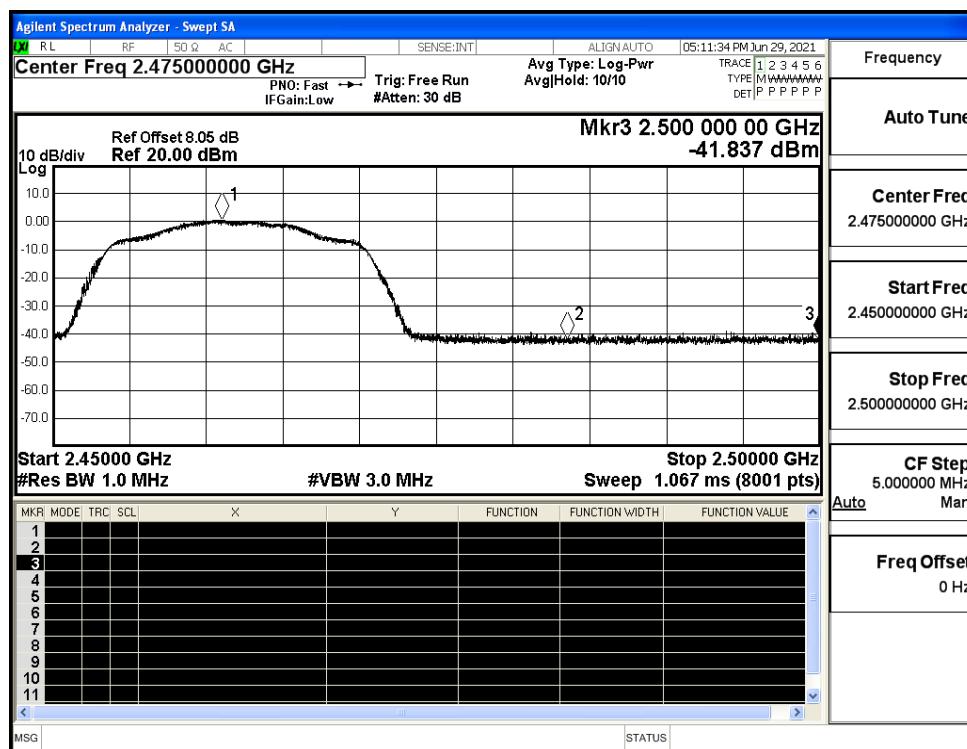


Restrict-band band-edge measurements_11N20SISO_2412_Ant1_AV

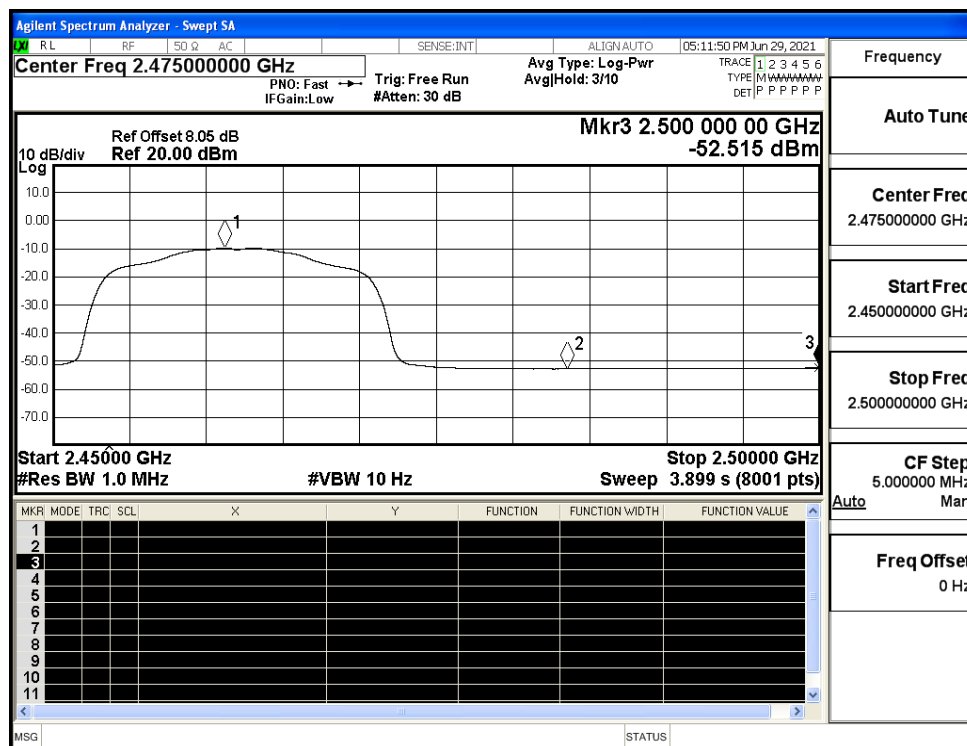




Restrict-band band-edge measurements_11N20SISO_2462_Ant1_PEAK

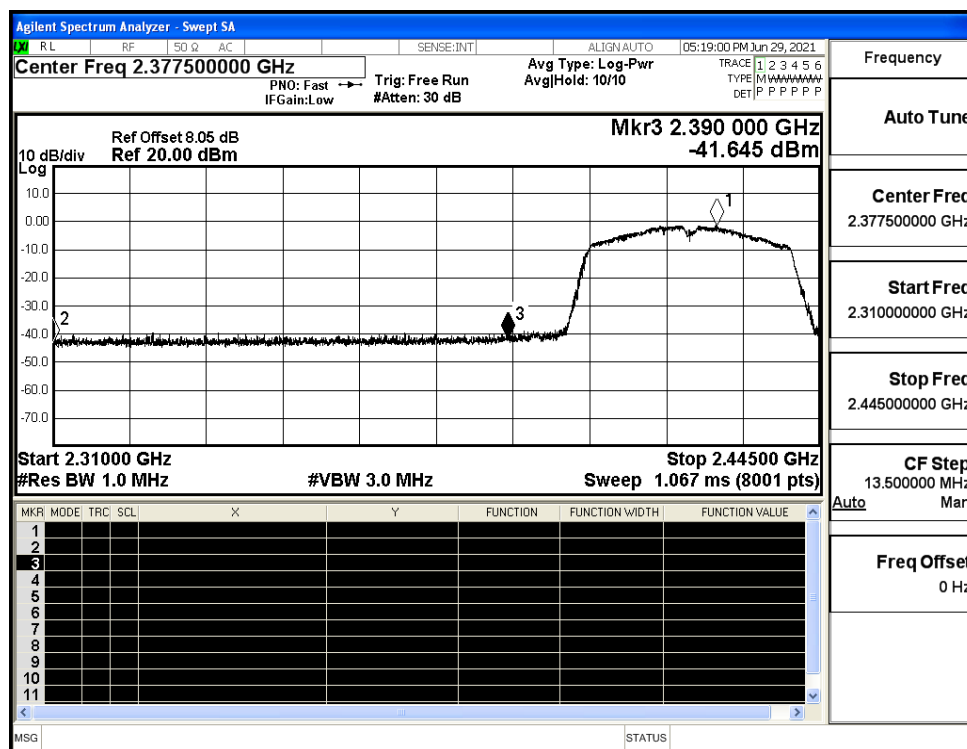


Restrict-band band-edge measurements_11N20SISO_2462_Ant1_AV

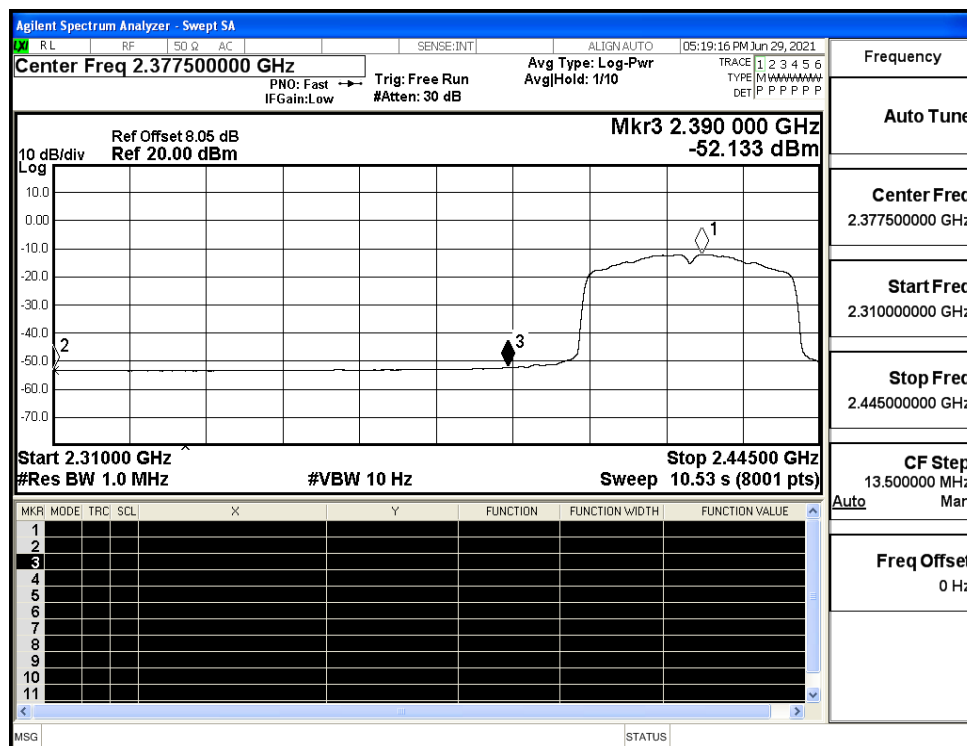




Restrict-band band-edge measurements_11N40SISO_2422_Ant1_PEAK

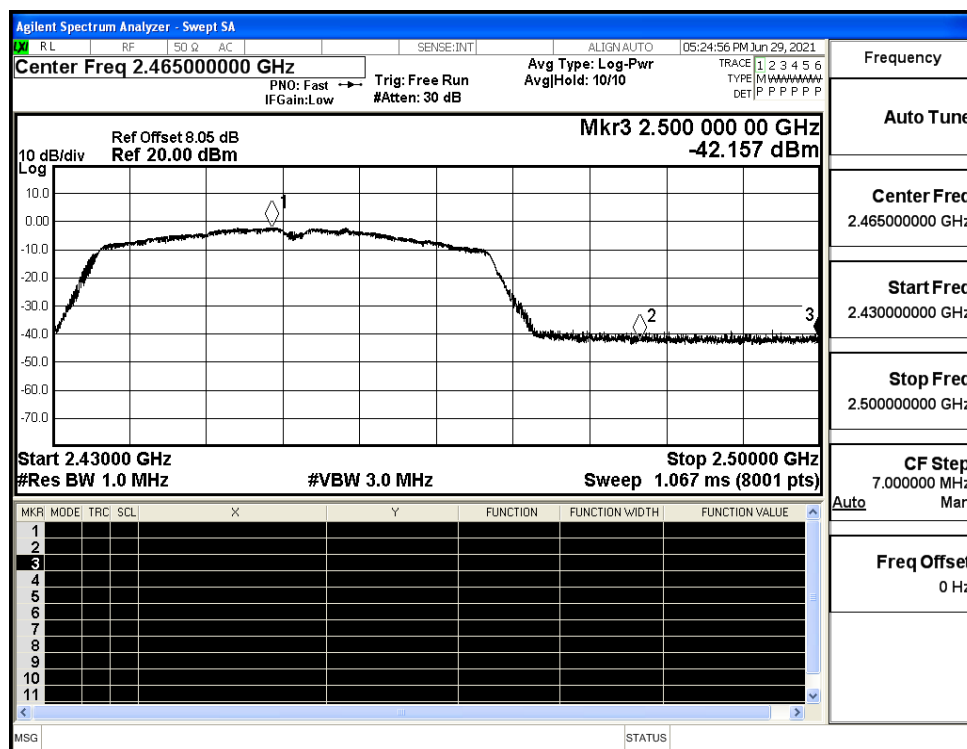


Restrict-band band-edge measurements_11N40SISO_2422_Ant1_AV

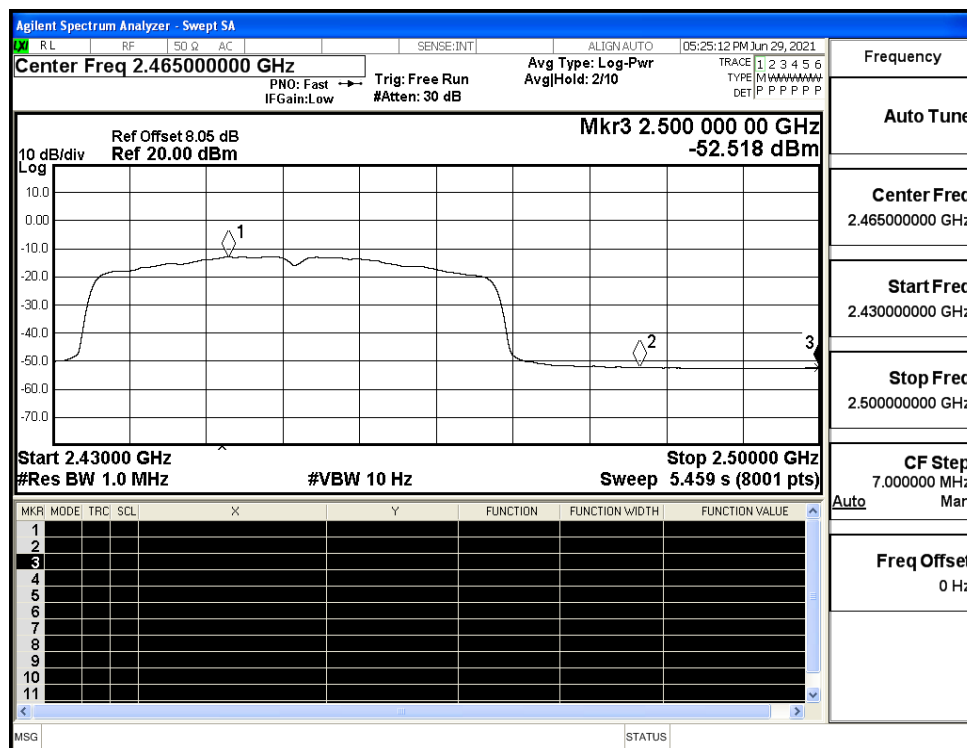




Restrict-band band-edge measurements_11N40SISO_2452_Ant1_PEAK



Restrict-band band-edge measurements_11N40SISO_2452_Ant1_AV





MIMO

Test Mode	Test Channel	Freq.	ANT 0 Power [dBm]	ANT 1 Power [dBm]	MIMO Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
11N20	2412	2310.0	-42.40	-42.55	-42.40	5.01	0	54.83	PEAK	74	PASS
	2412	2310.0	-53.66	-53.41	-53.66	5.01	0	43.57	AV	54	PASS
	2412	2390.0	-39.68	-43.66	-39.68	5.01	0	57.55	PEAK	74	PASS
	2412	2390.0	-51.76	-52.98	-51.76	5.01	0	45.47	AV	54	PASS
	2462	2483.5	-41.71	-41.76	-41.71	5.01	0	55.52	PEAK	74	PASS
	2462	2483.5	-52.05	-52.76	-52.05	5.01	0	45.18	AV	54	PASS
	2462	2500.0	-42.46	-41.84	-39.13	5.01	0	58.10	PEAK	74	PASS
	2462	2500.0	-52.59	-52.52	-49.54	5.01	0	47.69	AV	54	PASS
	2422	2310.0	-43.28	-43.63	-40.44	5.01	0	56.79	PEAK	74	PASS
	2422	2310.0	-53.41	-53.39	-50.39	5.01	0	46.84	AV	54	PASS
11N40	2422	2390.0	-41.94	-41.65	-38.78	5.01	0	58.45	PEAK	74	PASS
	2422	2390.0	-52.11	-52.13	-49.11	5.01	0	48.12	AV	54	PASS
	2452	2483.5	-42.24	-42.42	-39.32	5.01	0	57.91	PEAK	74	PASS
	2452	2483.5	-52.28	-52.26	-49.26	5.01	0	47.97	AV	54	PASS
	2452	2500.0	-40.83	-42.16	-38.43	5.01	0	58.80	PEAK	74	PASS
	2452	2500.0	-52.55	-52.52	-49.52	5.01	0	47.71	AV	54	PASS

The upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands or 2 dBi, whichever is greater