

Appendix A

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: WiFi IP CAMERA

Trade Mark: SECULINK

Test Model: X1

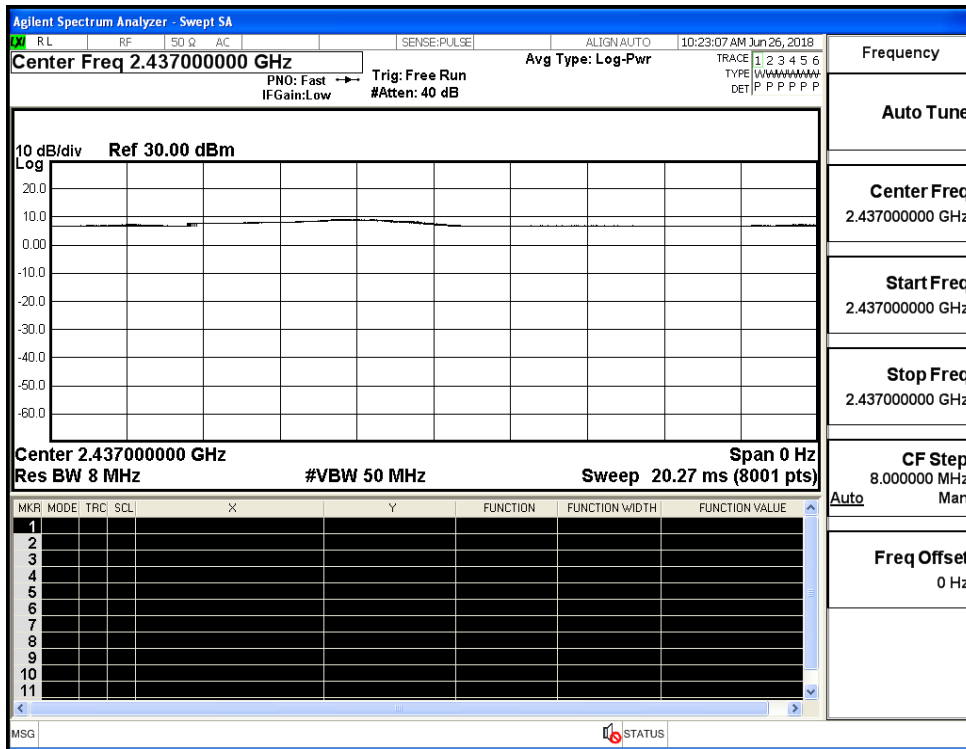
Environmental Conditions

Temperature:	23.4 ° C
Relative Humidity:	53.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Ryan.Hu
Supervised by:	Jayden.Zhuo

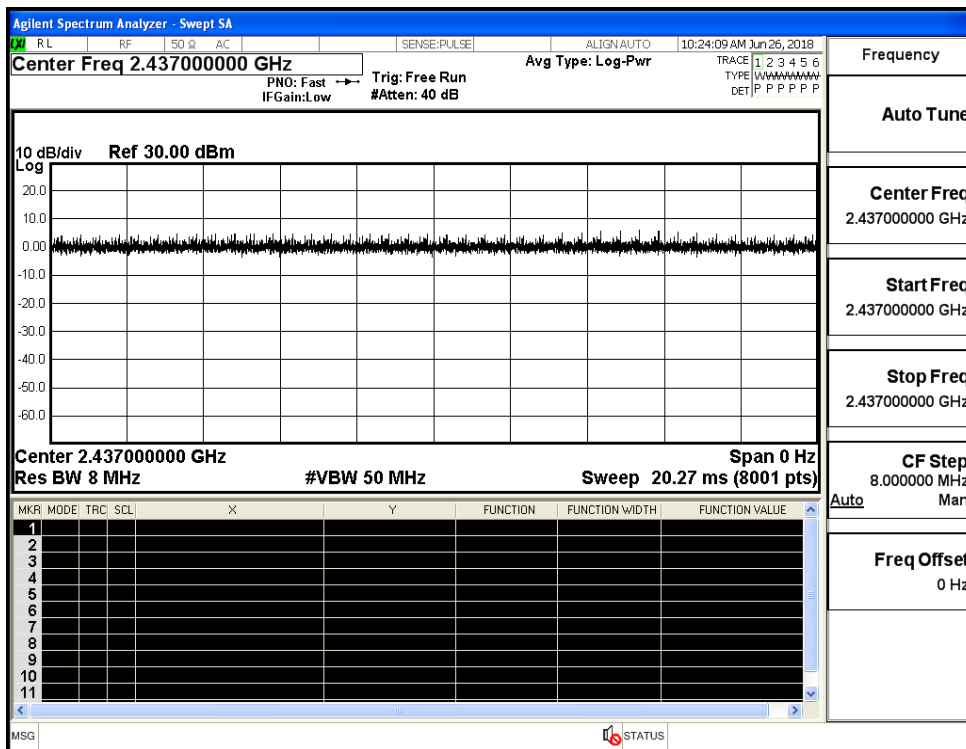
A.1 Duty Cycle

Test Mode	Test Channel	Ant	Duty Cycle[%]	Verdict
11B	2437	Ant1	100	PASS
11G	2437	Ant1	100	PASS
11N20SISO	2437	Ant1	100	PASS
11N40SISO	2437	Ant1	100	PASS

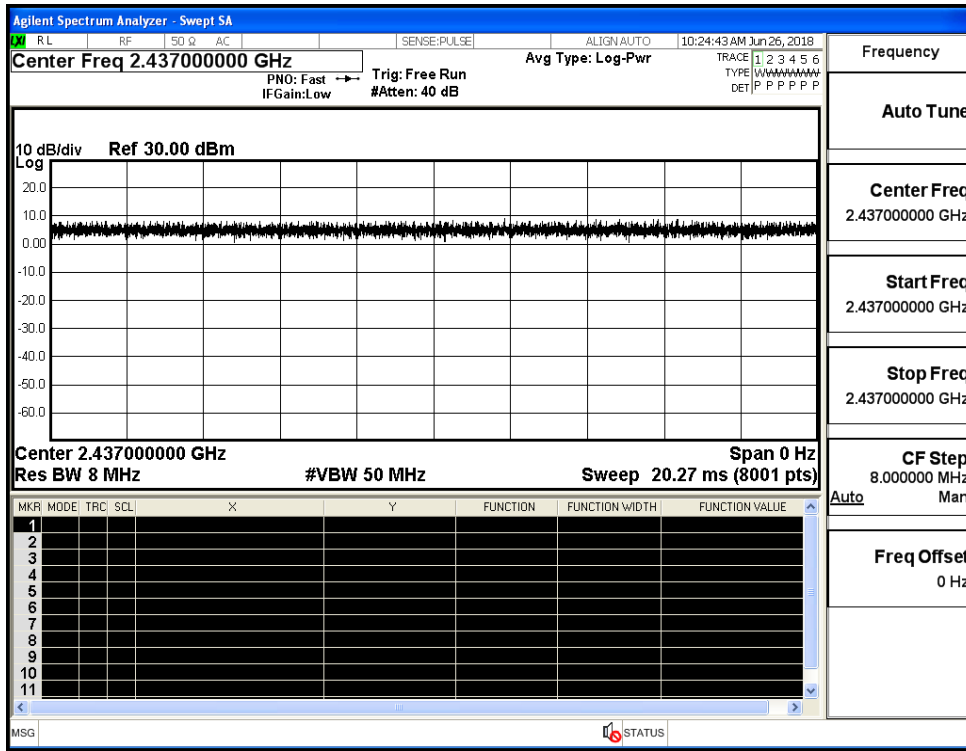
Duty Cycle_11B_2437_Ant1



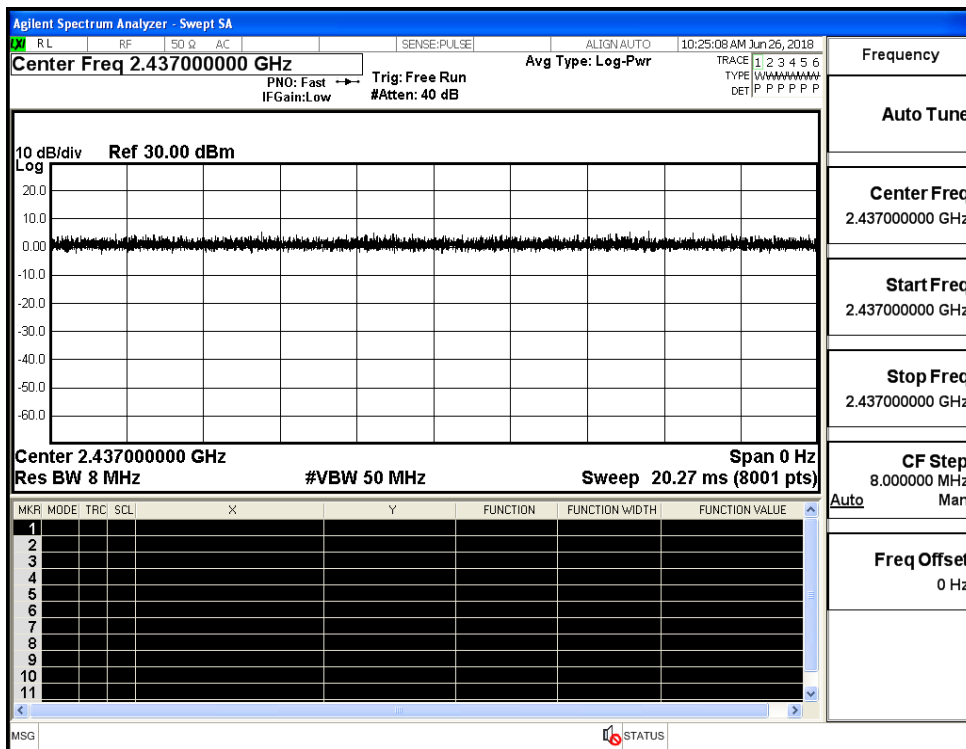
Duty Cycle_11G_2437_Ant1



Duty Cycle_11N20SISO_2437_Ant1



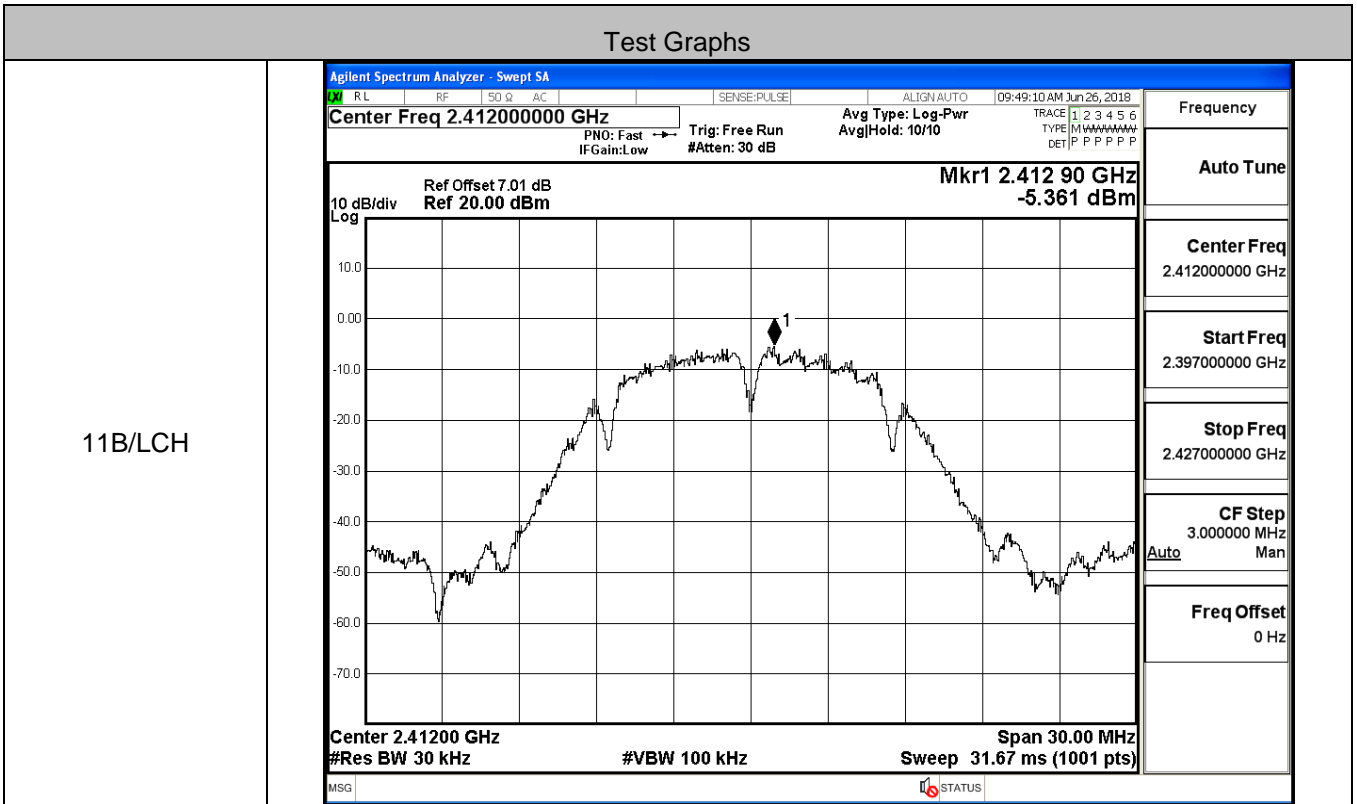
Duty Cycle_11N40SISO_2437_Ant1



A.2 Maximum Power Spectral Density

Mode	Channel	Meas.Level [dBm/30KHz]	Limit [dBm/3KHz]	Verdict
11B	LCH	-5.361	8	PASS
	MCH	-4.956	8	PASS
	HCH	-5.099	8	PASS
11G	LCH	-6.243	8	PASS
	MCH	-7.282	8	PASS
	HCH	-7.717	8	PASS
11N20SISO	LCH	-6.077	8	PASS
	MCH	-6.794	8	PASS
	HCH	-7.741	8	PASS
11N40SISO	LCH	-10.962	8	PASS
	MCH	-11.342	8	PASS
	HCH	-11.601	8	PASS

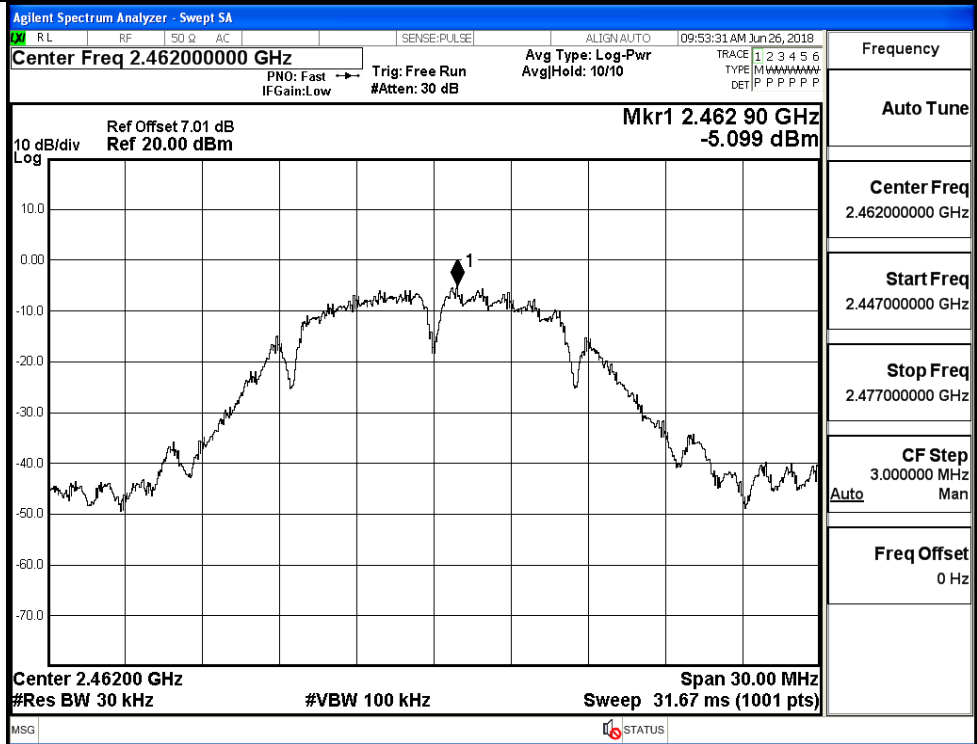
Test Graphs



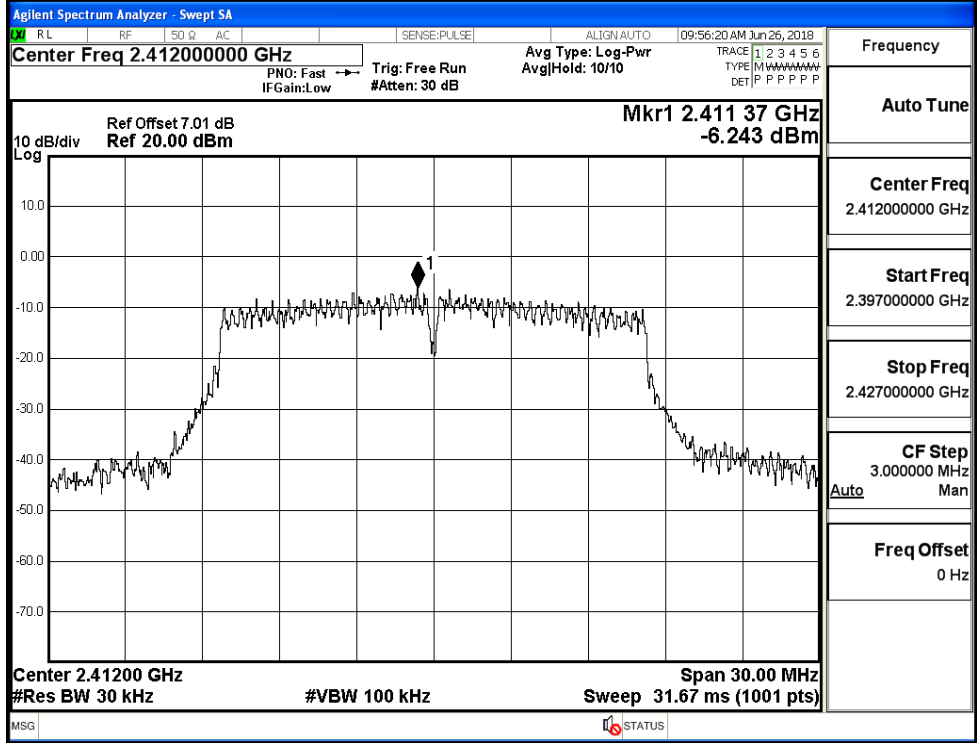
11B/MCH



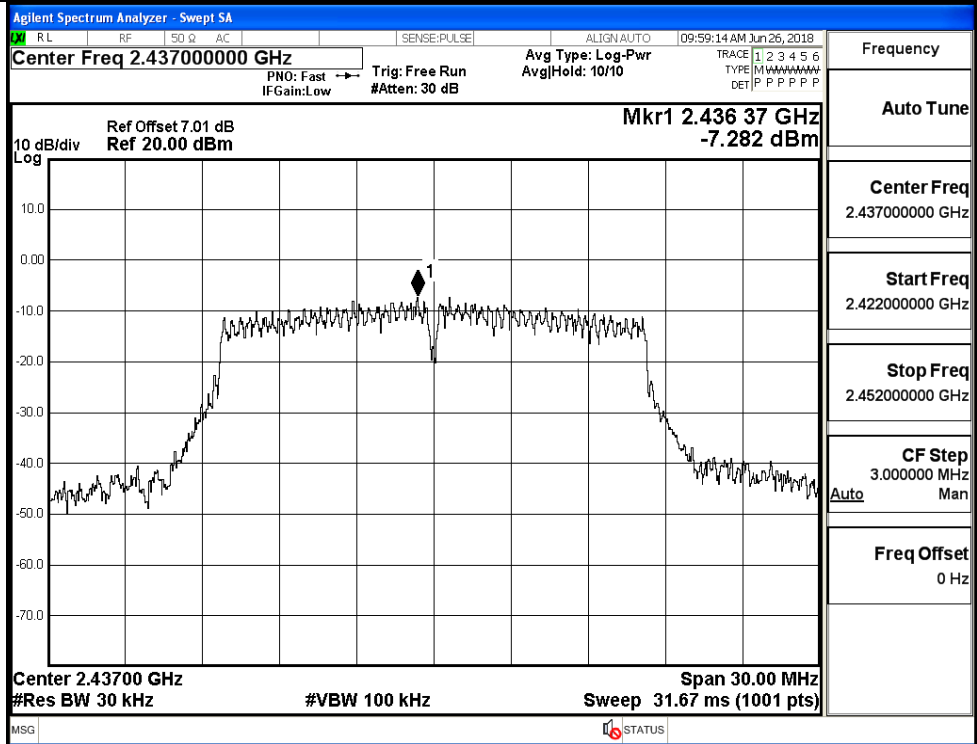
11B/HCH



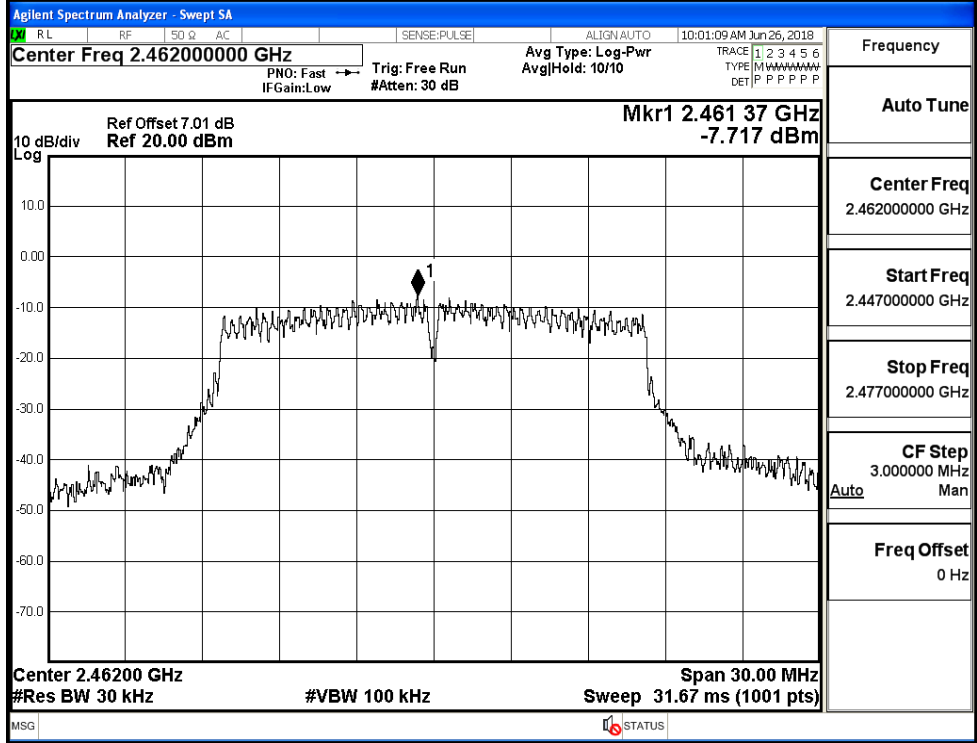
11G/LCH



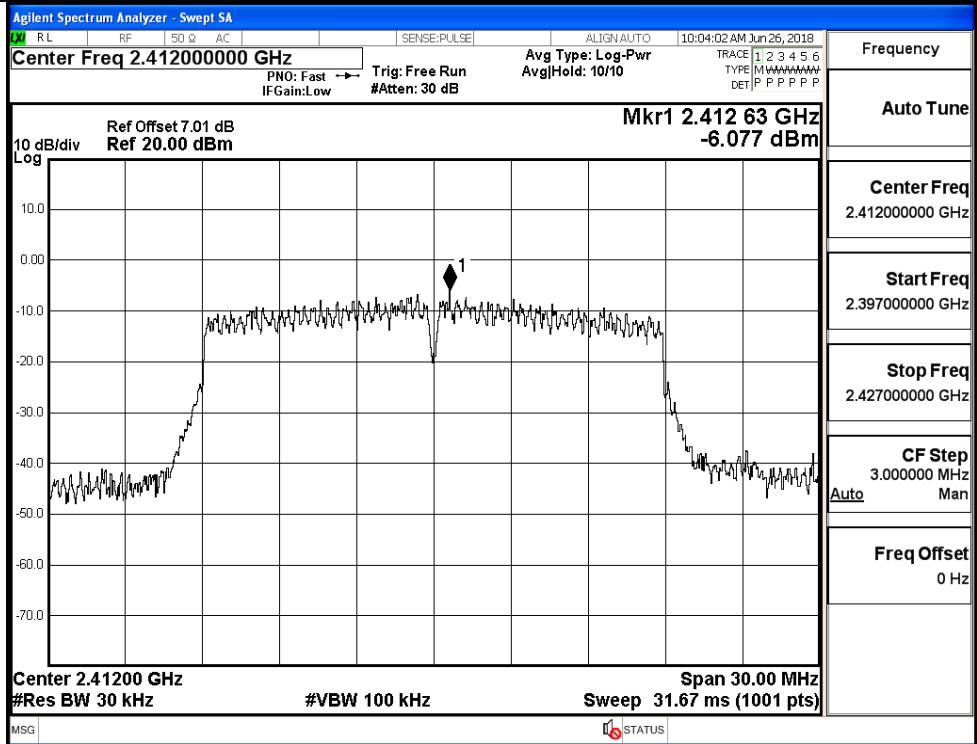
11G/MCH



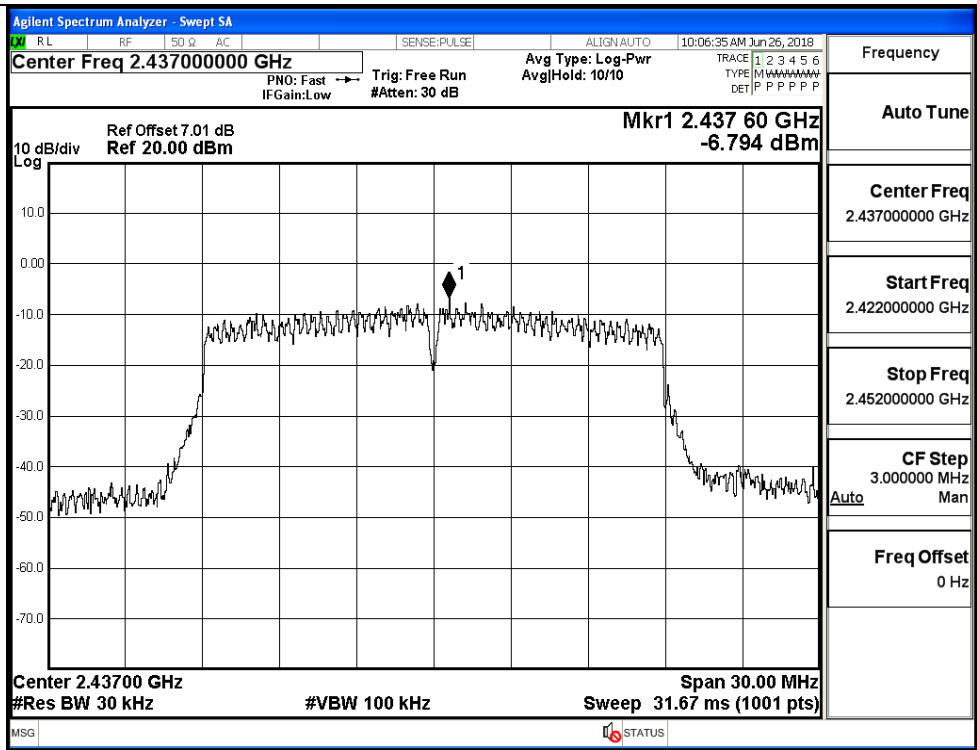
11G/HCH



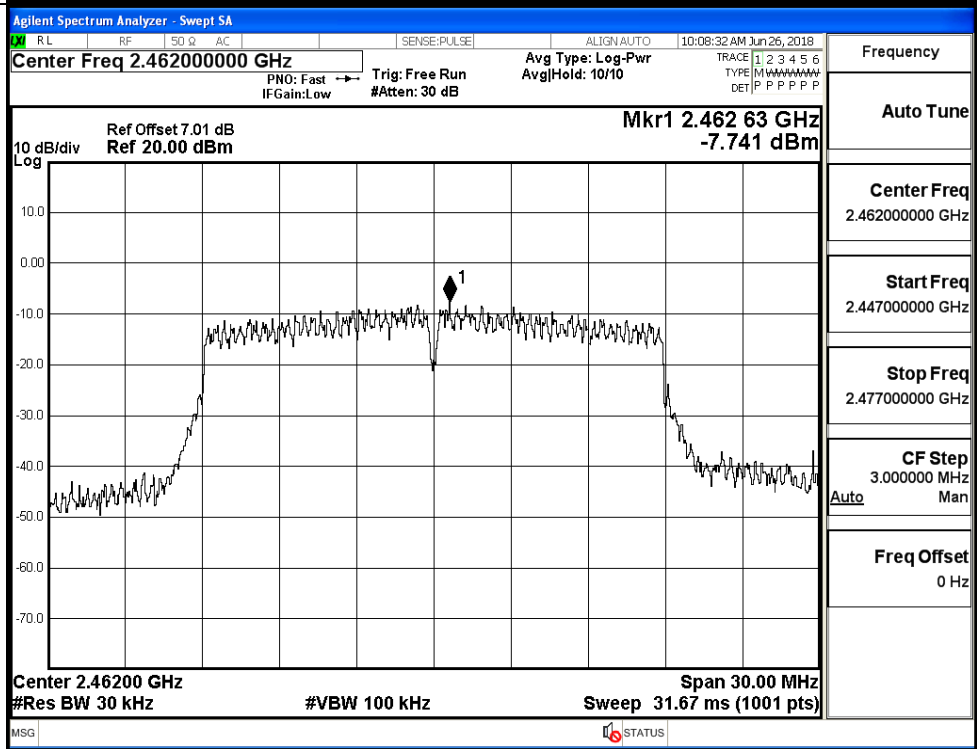
11N20SISO/LCH



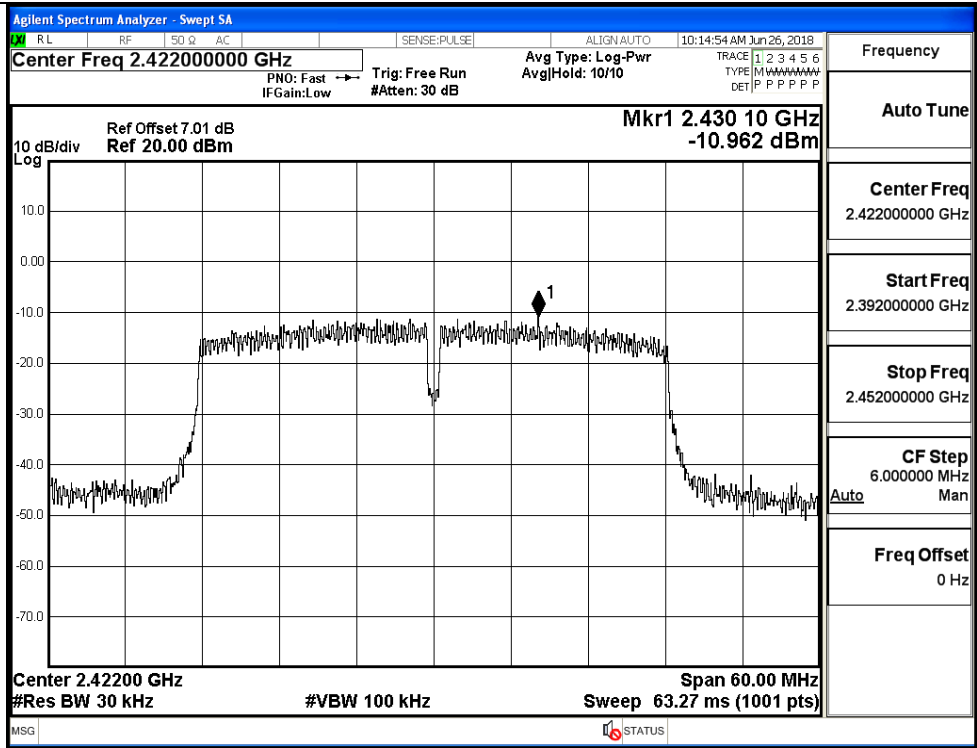
11N20SISO/MCH



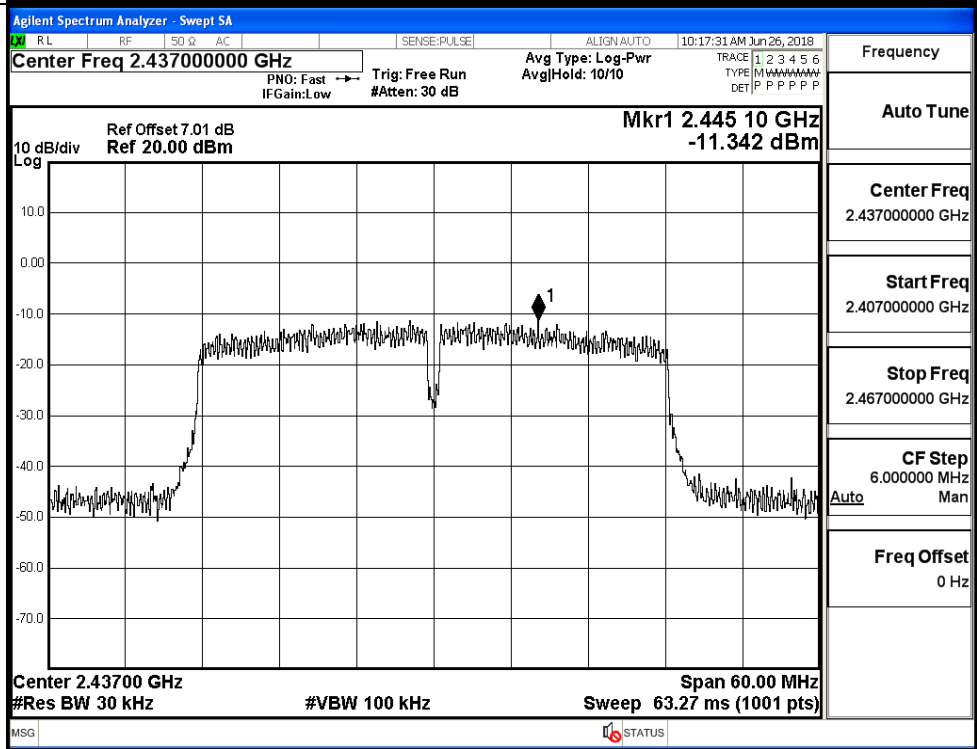
11N20SISO/HCH



11N40SISO/LCH

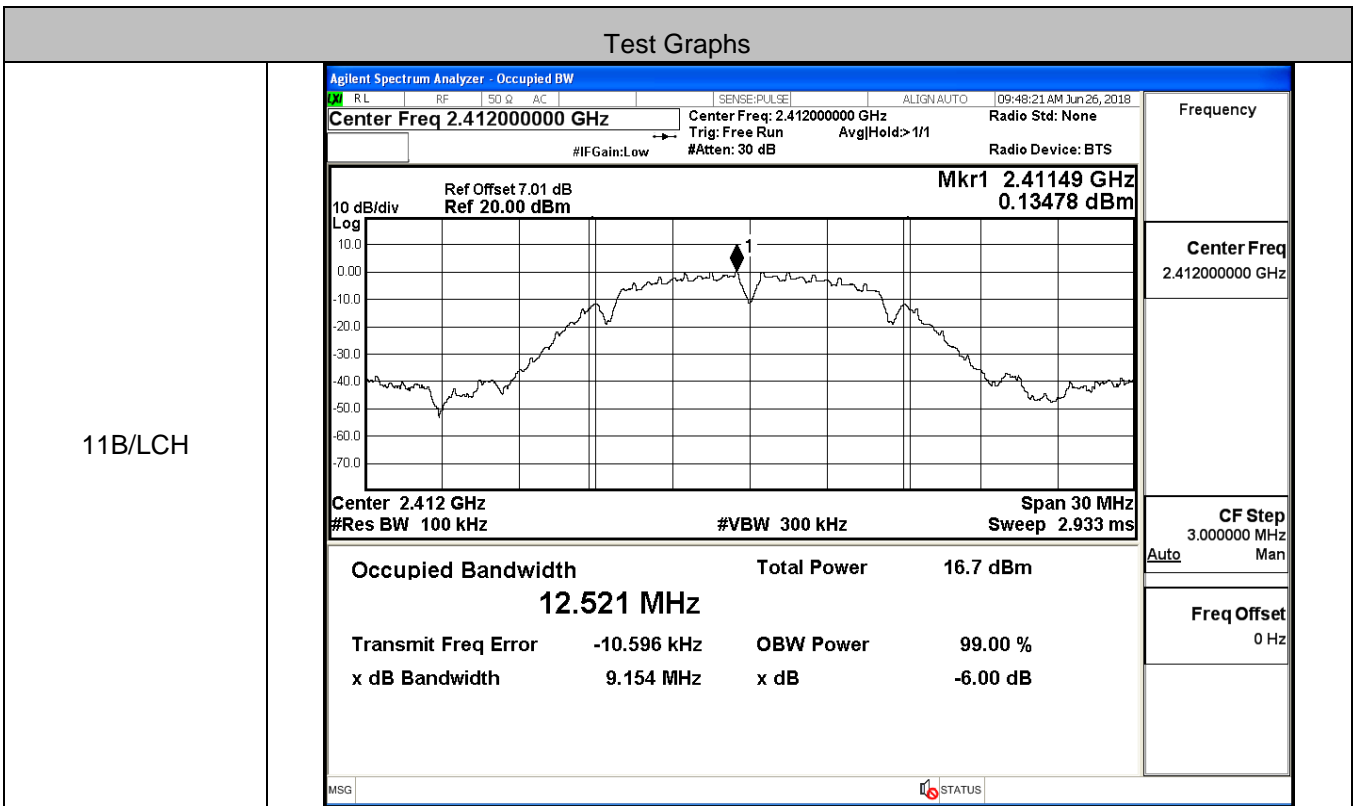


11N40SISO/MCH

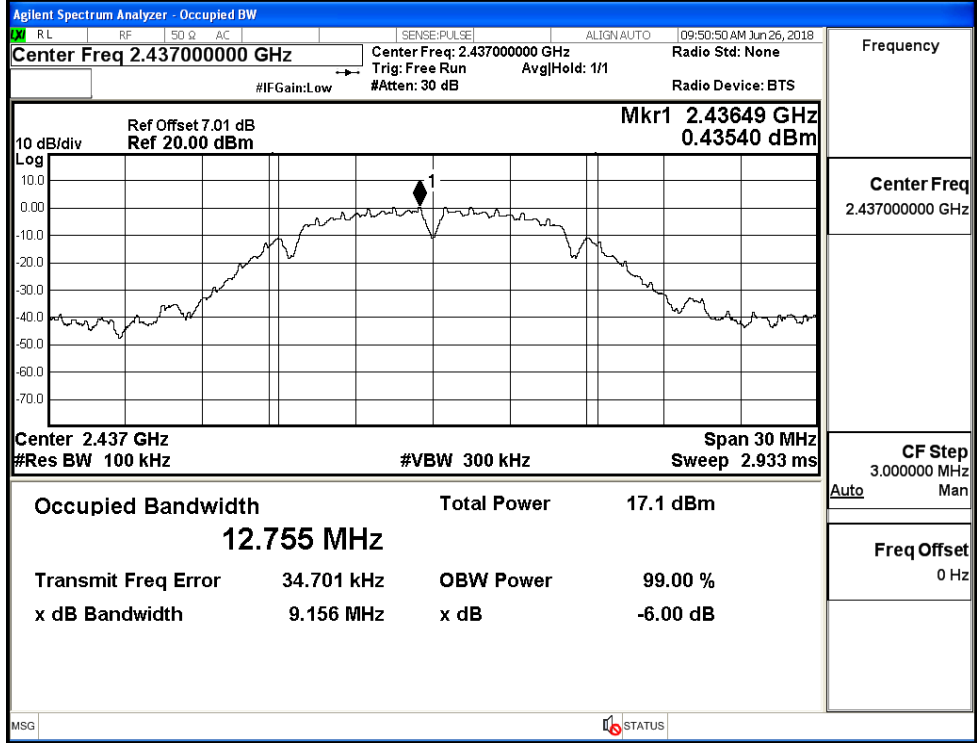


A.3 6dB Bandwidth

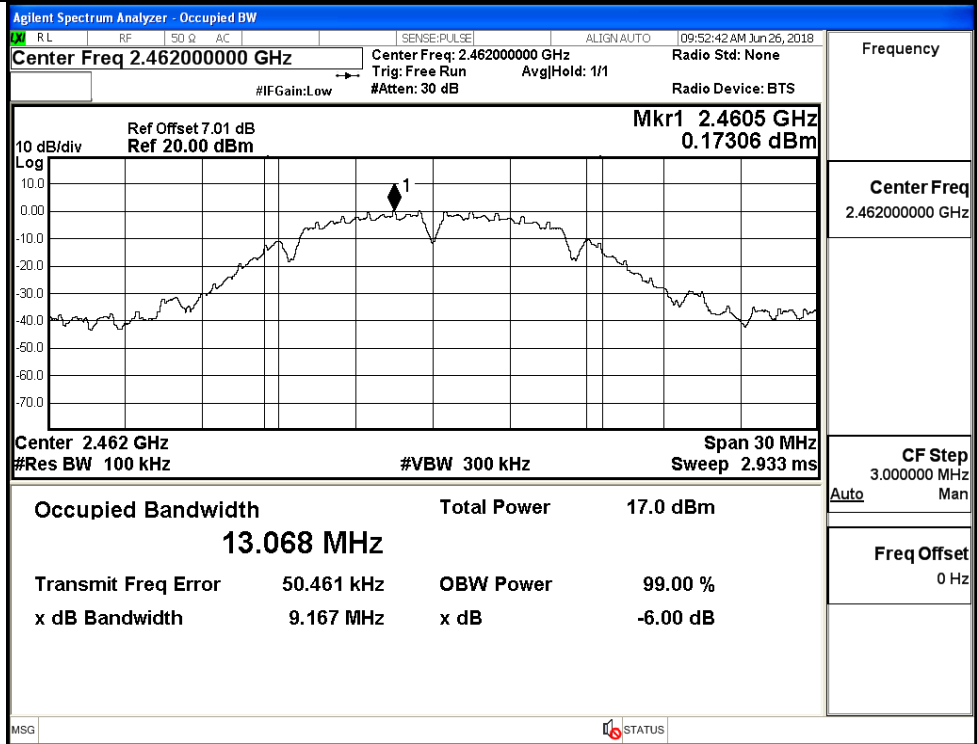
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
11B	LCH	9.154	≥0.5	PASS
	MCH	9.156	≥0.5	PASS
	HCH	9.167	≥0.5	PASS
11G	LCH	16.42	≥0.5	PASS
	MCH	16.40	≥0.5	PASS
	HCH	16.41	≥0.5	PASS
11N20SISO	LCH	17.62	≥0.5	PASS
	MCH	17.61	≥0.5	PASS
	HCH	17.63	≥0.5	PASS
11N40SISO	LCH	36.34	≥0.5	PASS
	MCH	36.33	≥0.5	PASS
	HCH	36.31	≥0.5	PASS



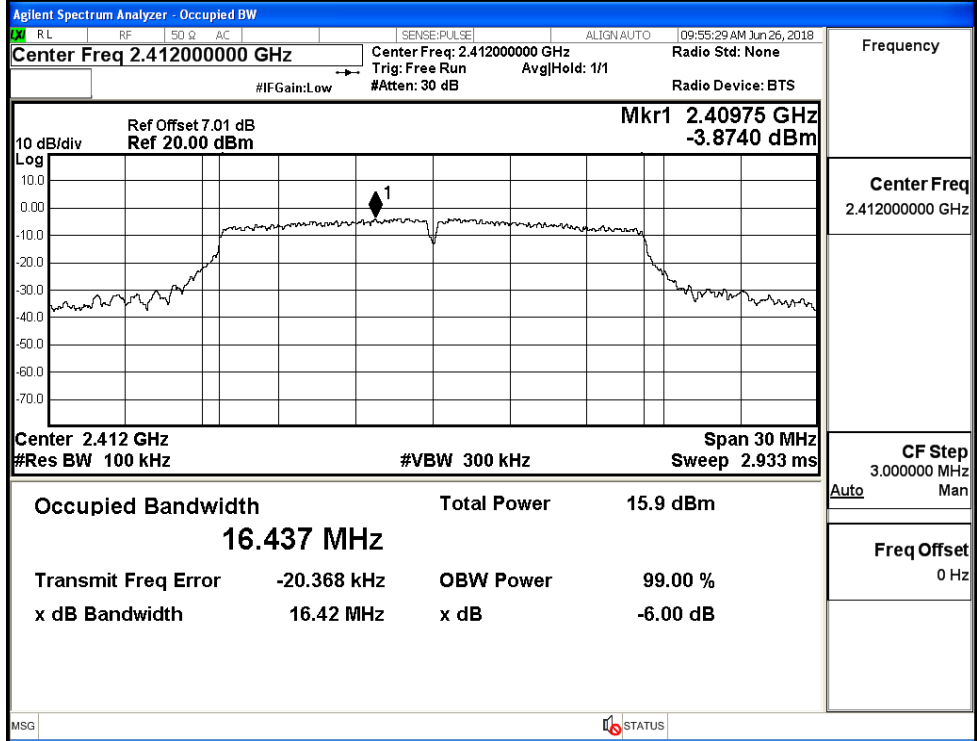
11B/MCH



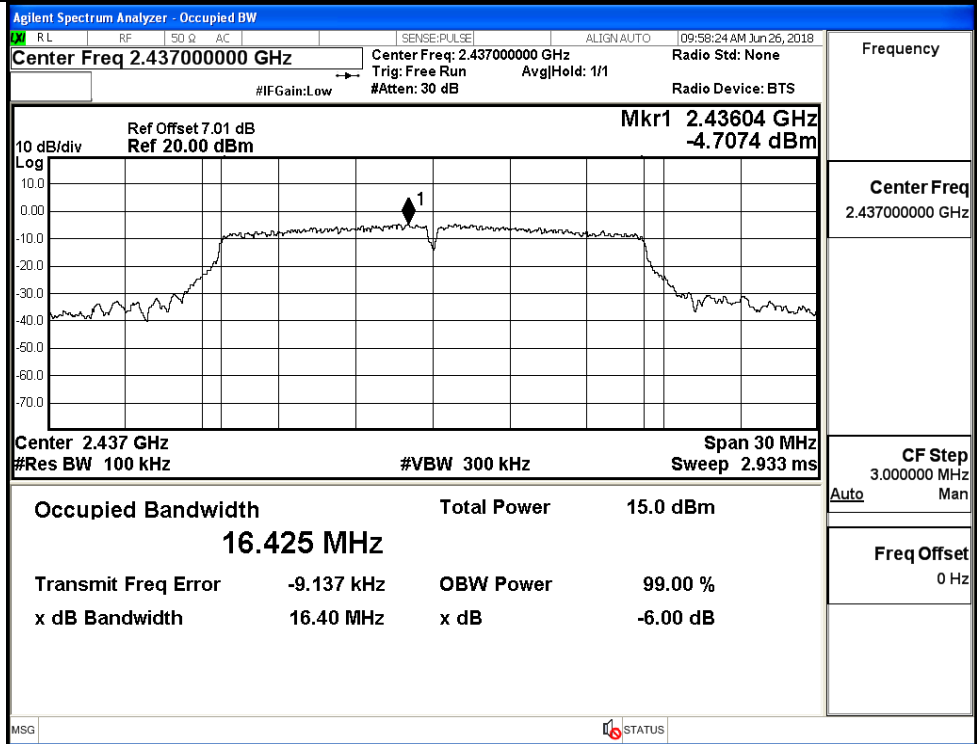
11B/HCH



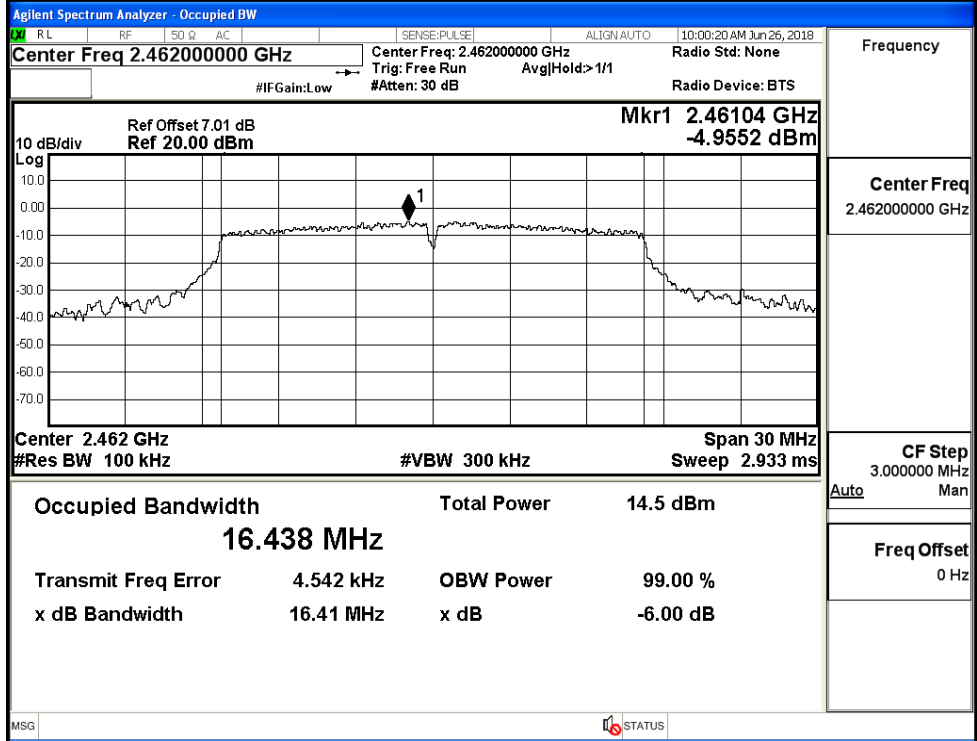
11G/LCH



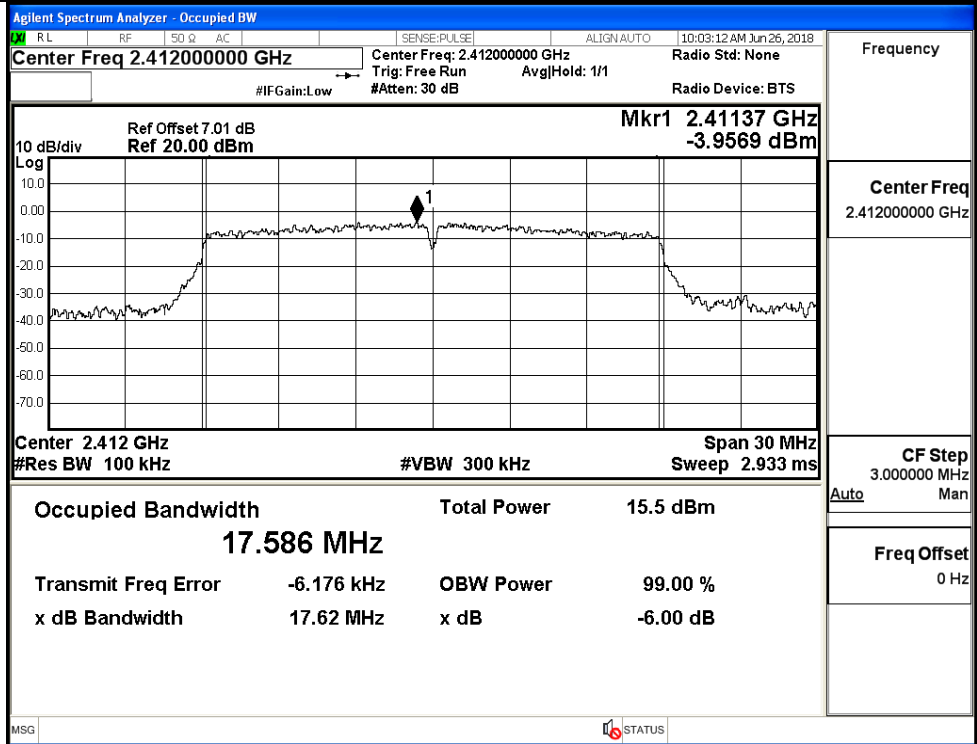
11G/MCH



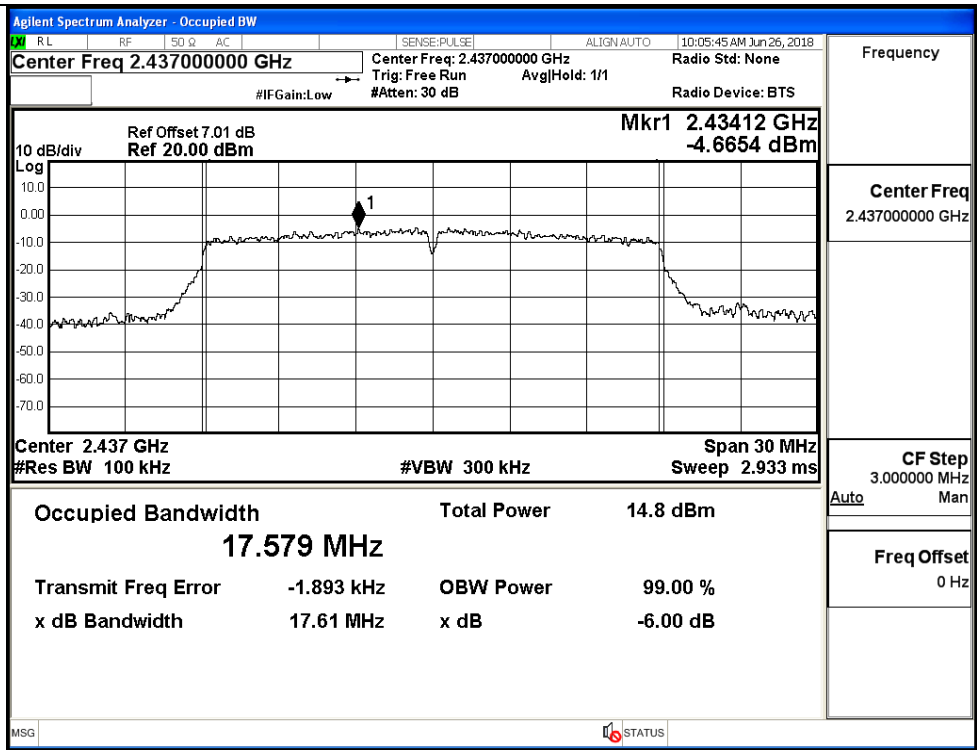
11G/HCH



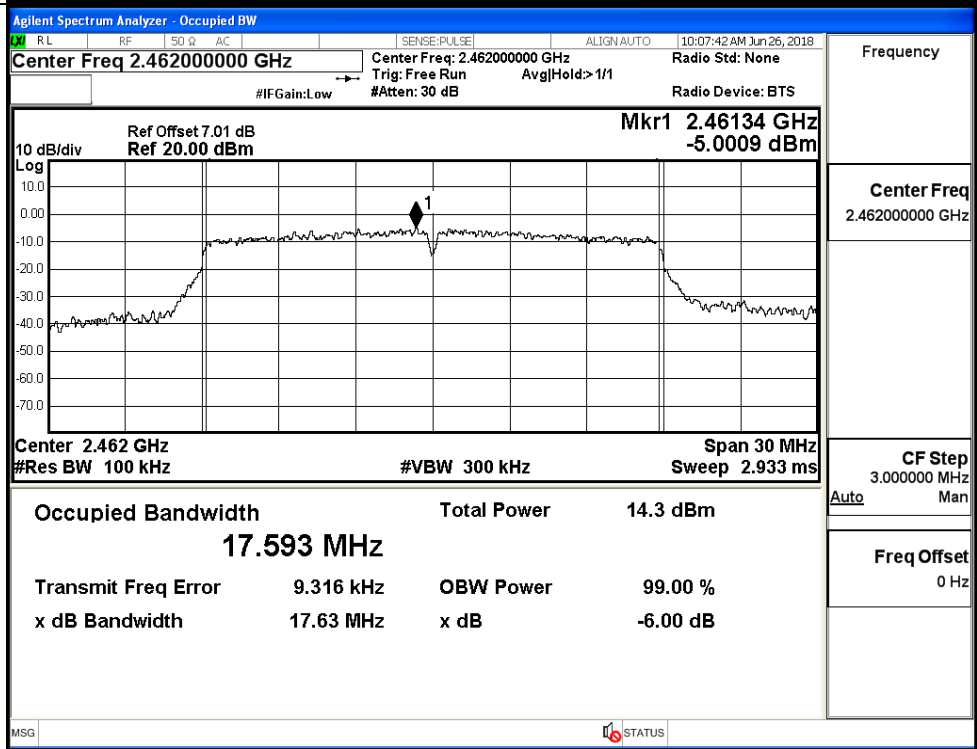
11N20SISO/LCH



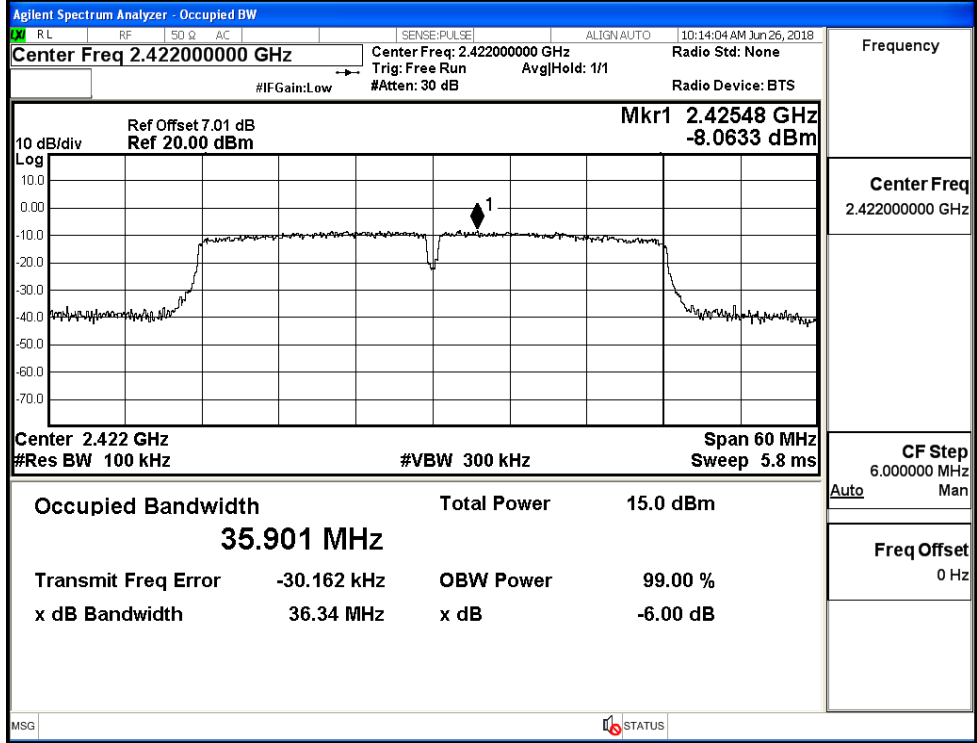
11N20SISO/MCH



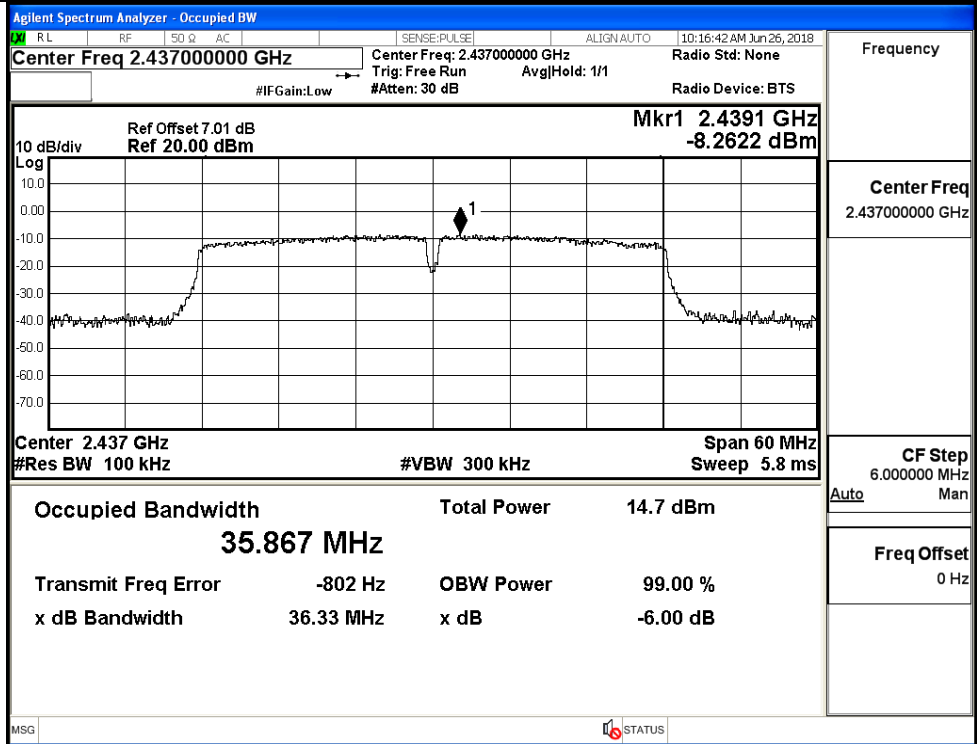
11N20SISO/HCH



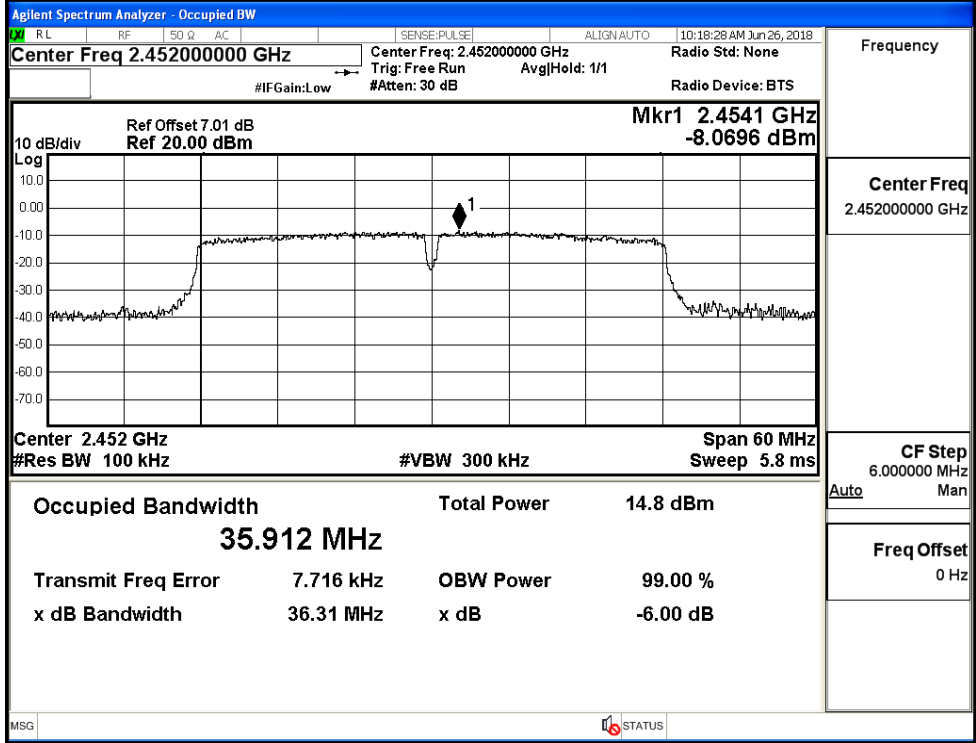
11N40SISO/LCH



11N40SISO/MCH



11N40SISO/HCH

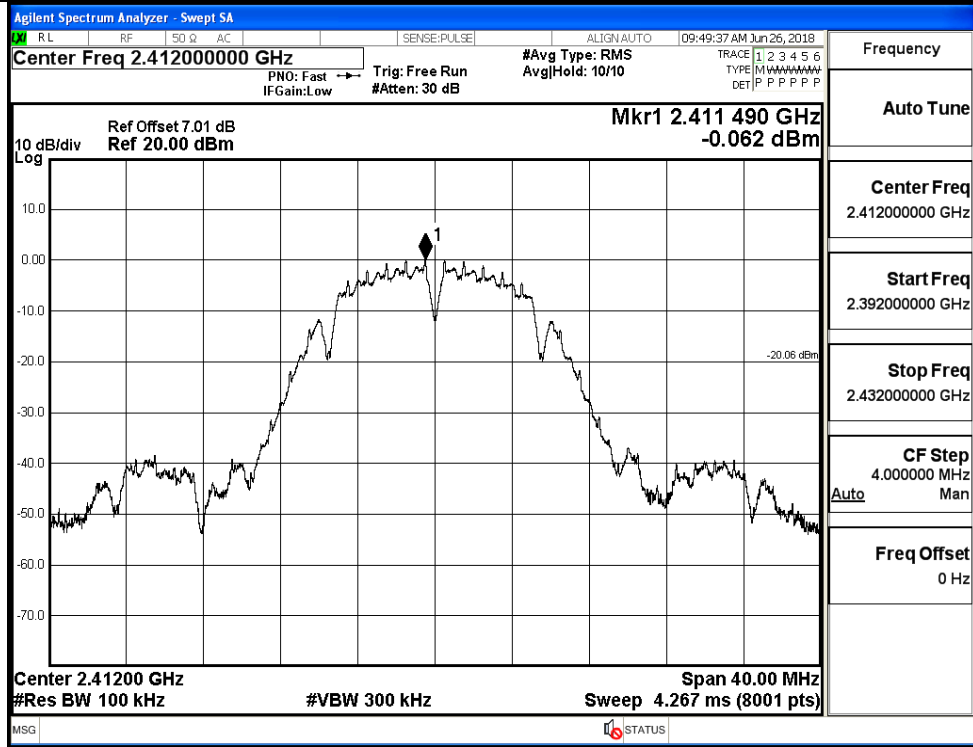


A.4 RF Conducted Spurious Emissions

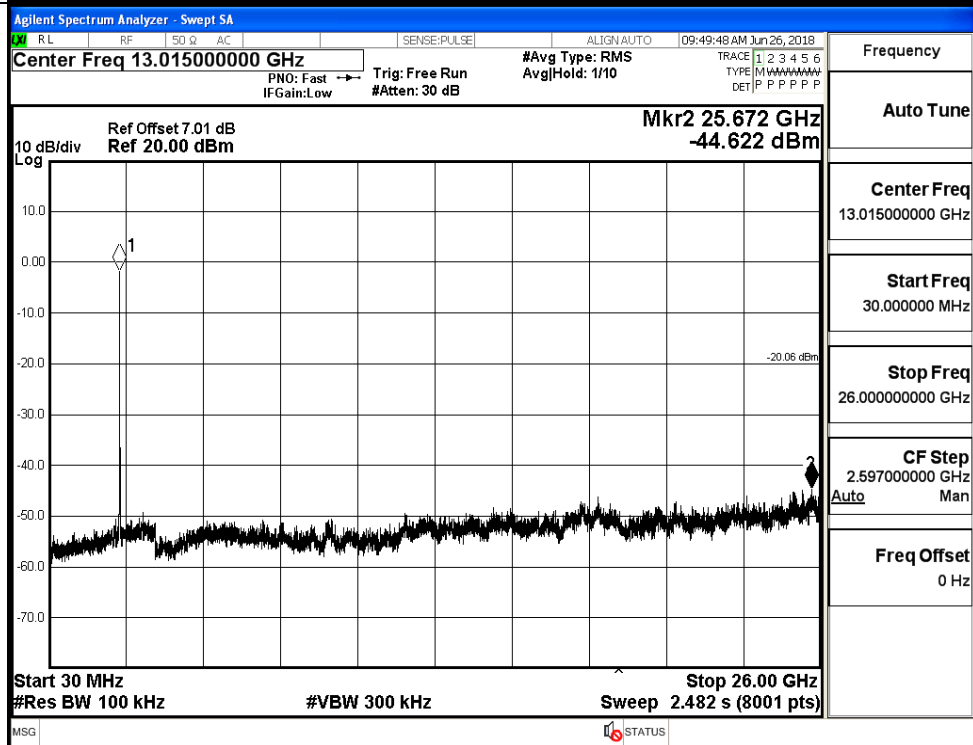
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
11B	LCH	-0.062	-44.622	-20.062	PASS
	MCH	0.311	-44.398	-19.689	PASS
	HCH	0.12	-44.788	-19.880	PASS
11G	LCH	-3.945	-44.960	-23.945	PASS
	MCH	-4.886	-33.917	-24.886	PASS
	HCH	-5.004	-44.327	-25.004	PASS
11N20 SISO	LCH	-3.97	-44.881	-23.970	PASS
	MCH	-4.804	-40.617	-24.804	PASS
	HCH	-5.15	-36.143	-25.150	PASS
11N40 SISO	LCH	-8.134	-44.419	-28.134	PASS
	MCH	-8.195	-37.310	-28.195	PASS
	HCH	-8.163	-35.329	-28.163	PASS

11B_LCH_Graphs

Pref/11B/LCH

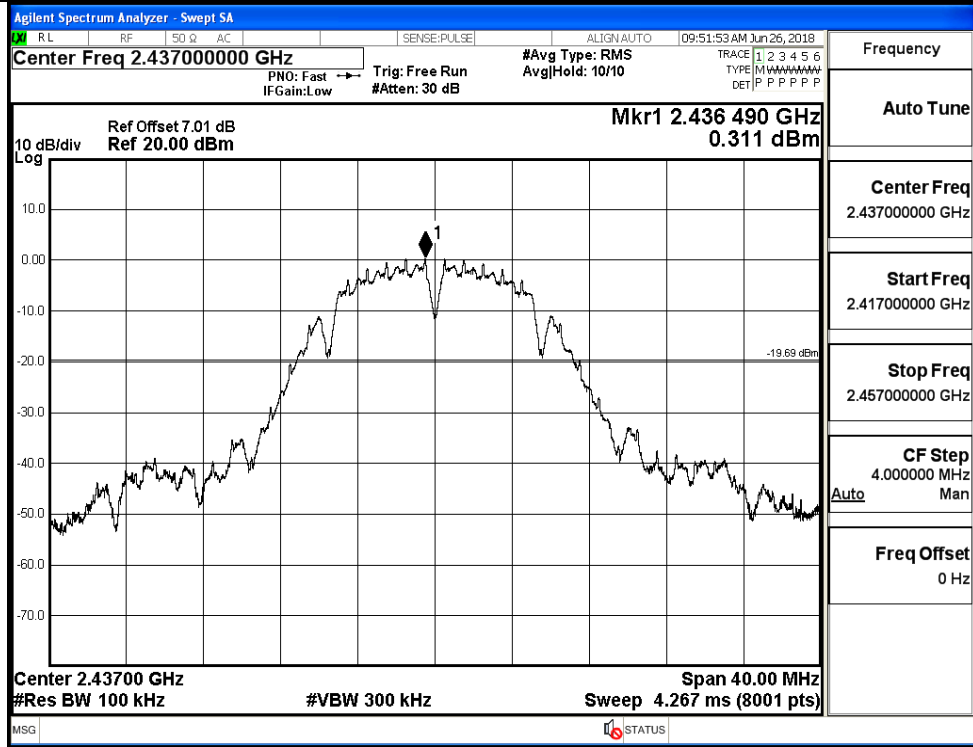


Puw/11B/LCH

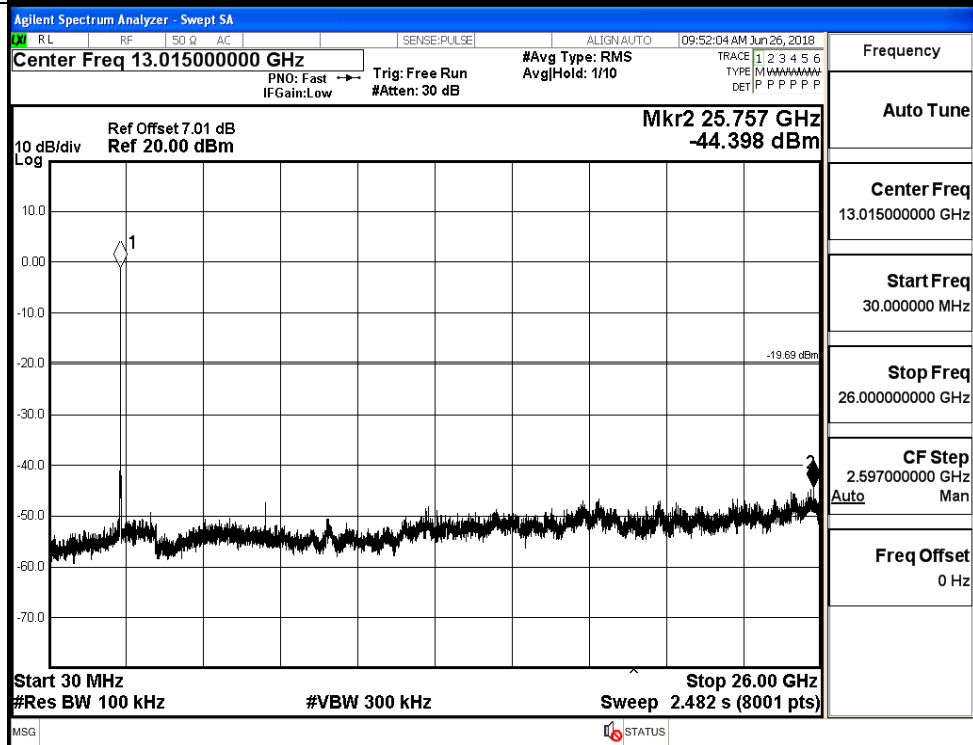


11B_MCH_Graphs

Pref/11B/MCH

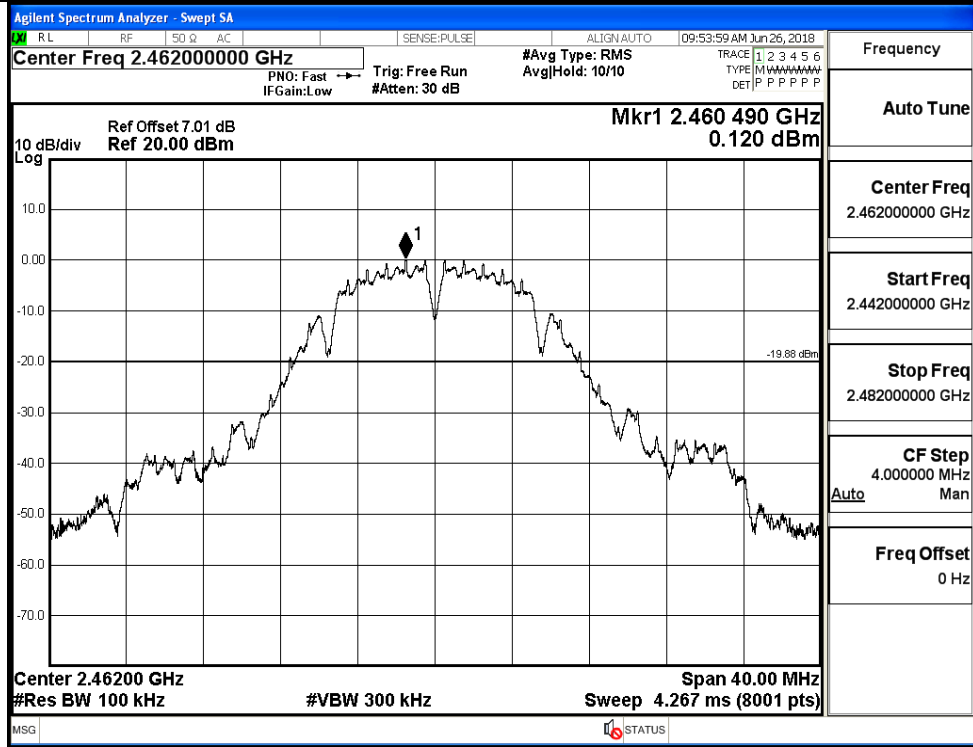


Puw/11B/MCH

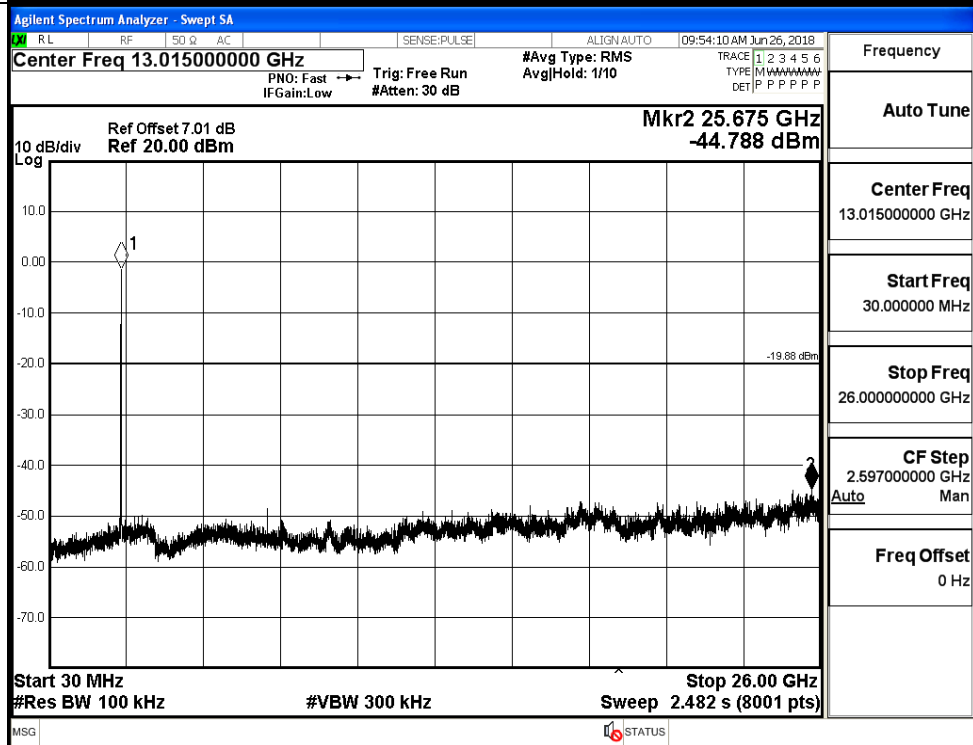


11B_HCH_Graphs

Pref/11B/HCH

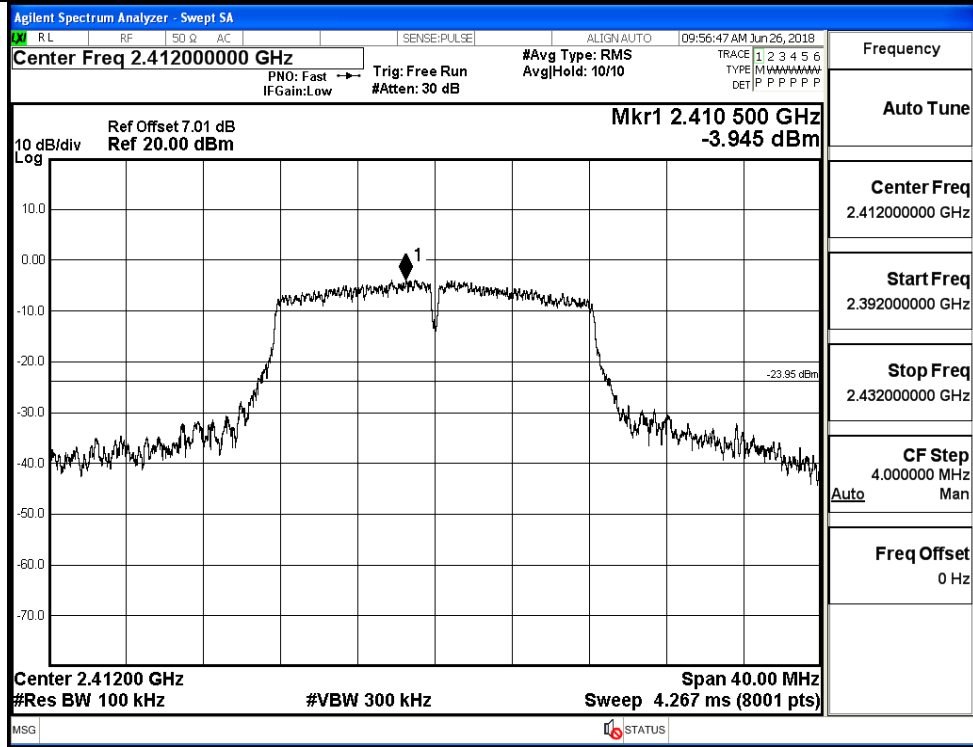


Puw/11B/HCH

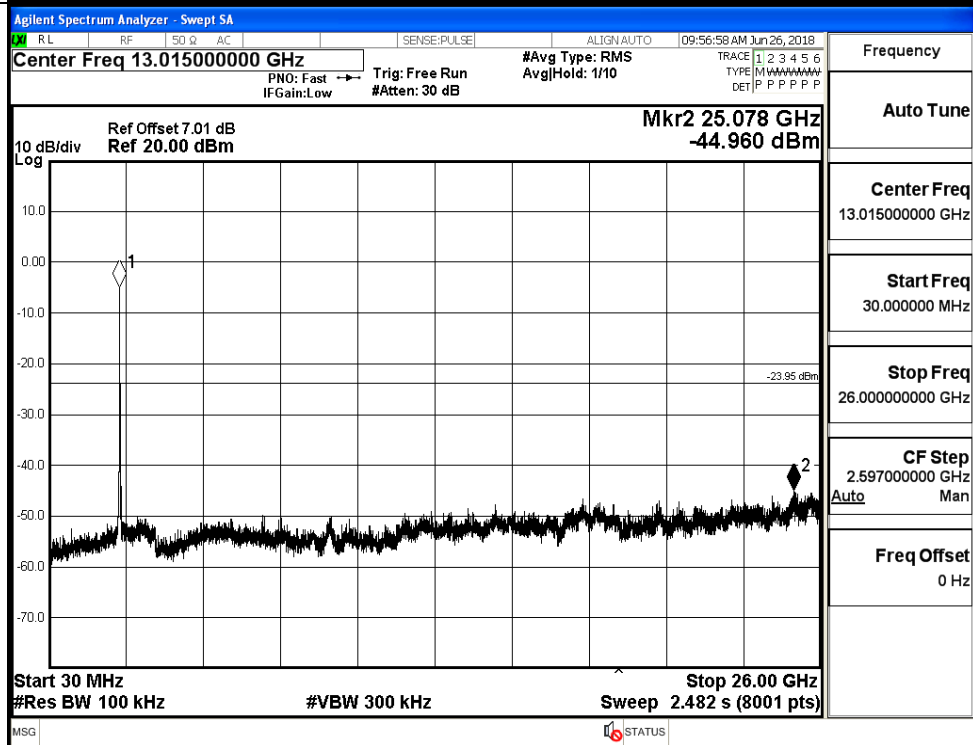


11G_LCH_Graphs

Pref/11G/LCH

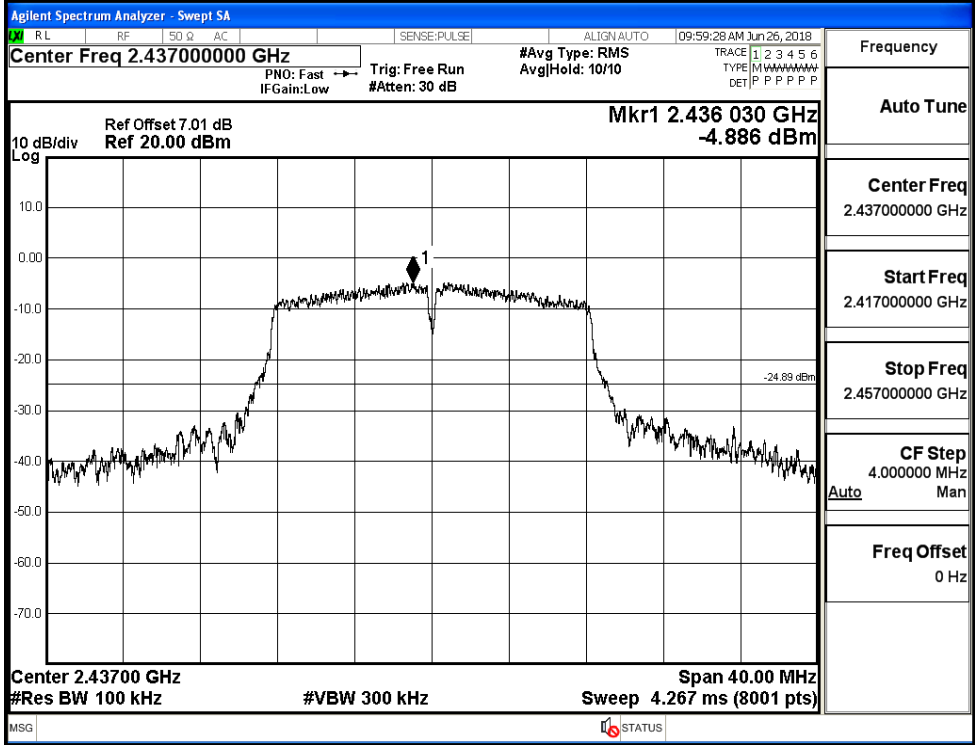


Puw/11G/LCH

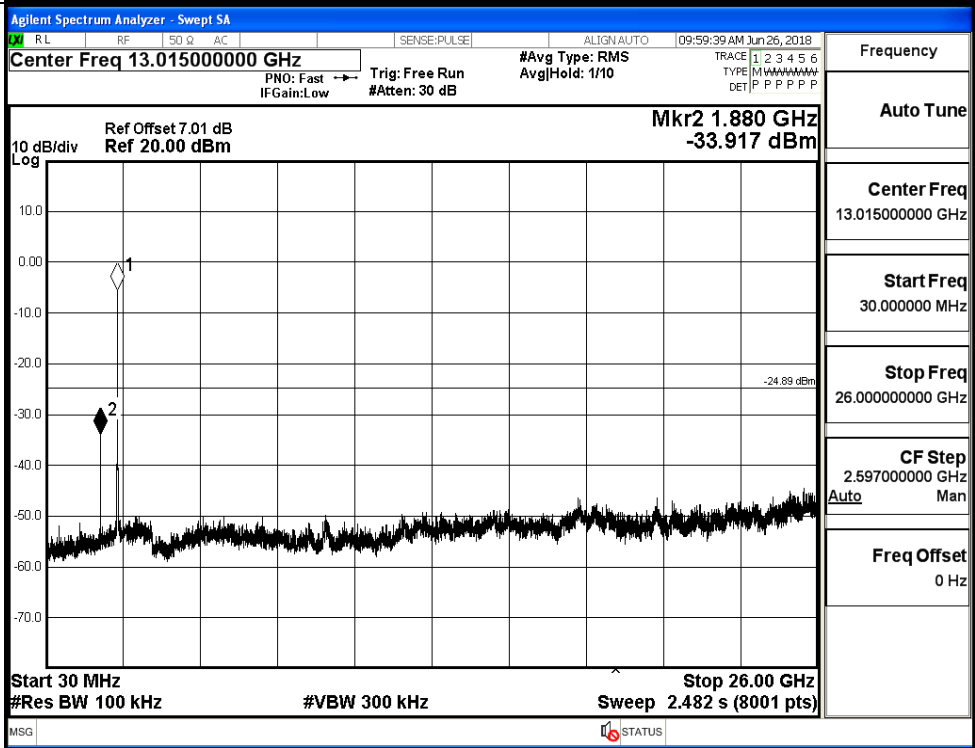


11G_MCH_Graphs

Pref/11G/MCH

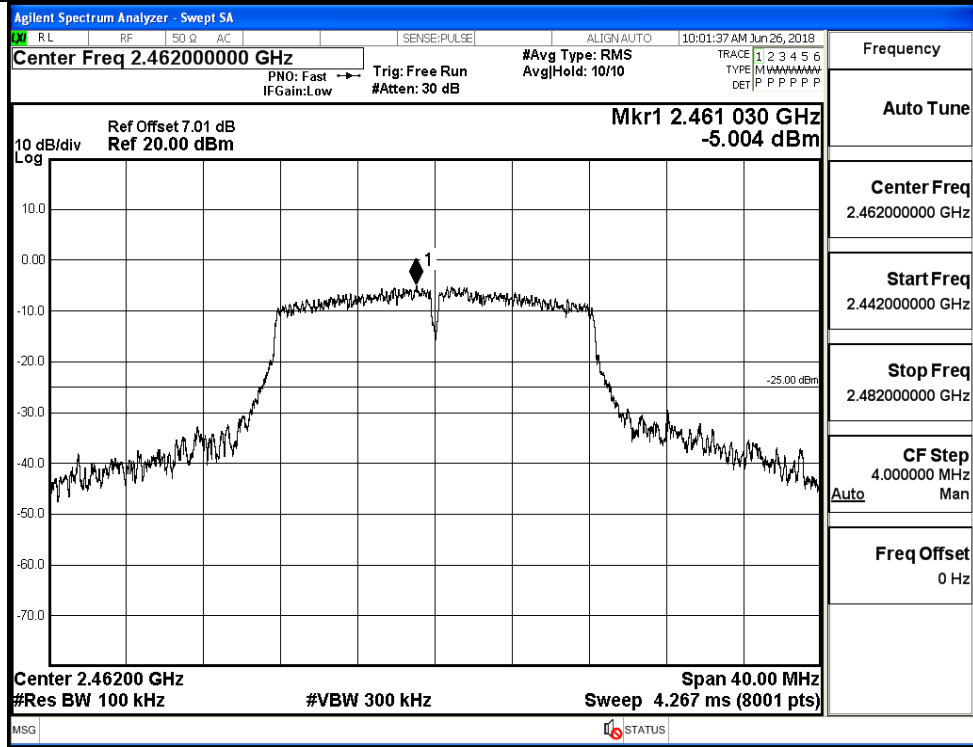


Puw/11G/MCH

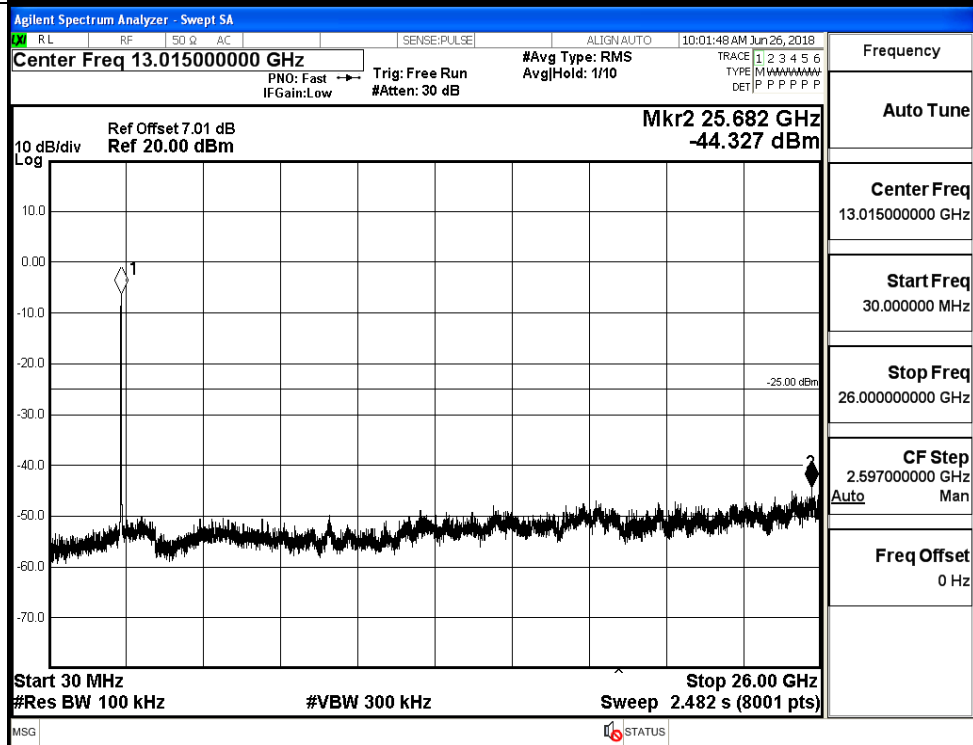


11G_HCH_Graphs

Pref/11G/HCH

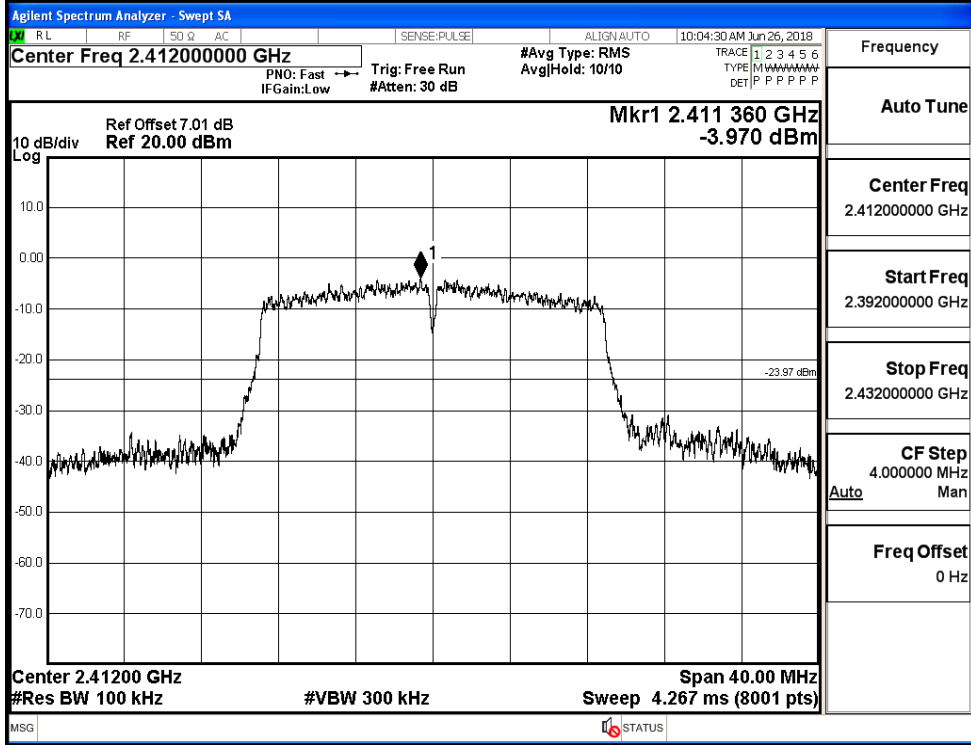


Puw/11G/HCH

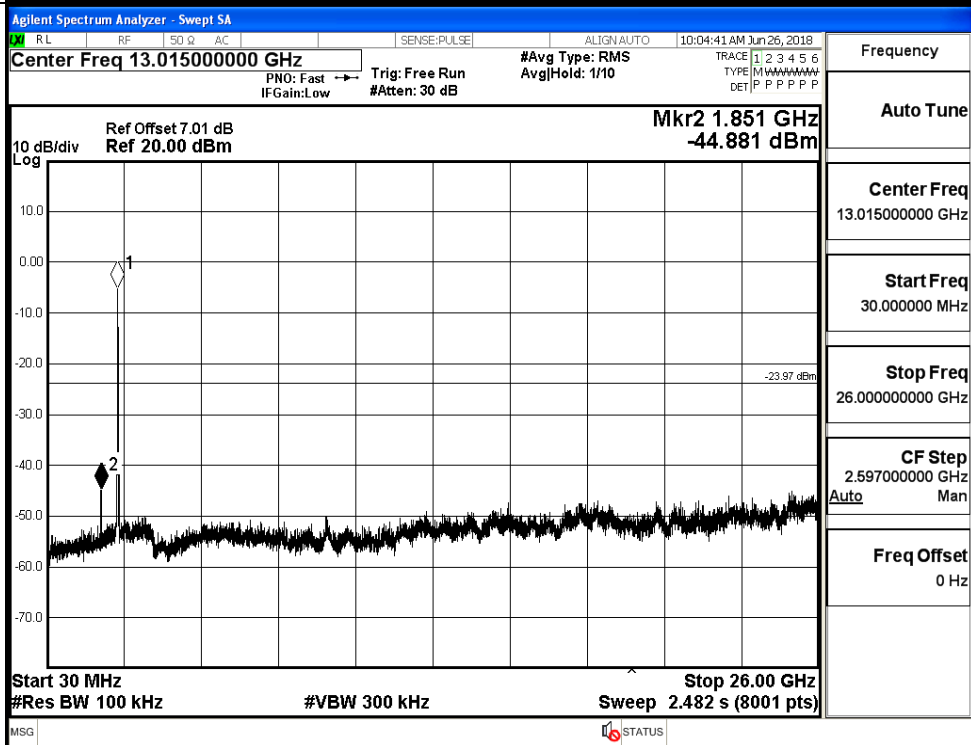


11N20SISO_LCH_Graphs

Pref/11N20SIS
O/LCH

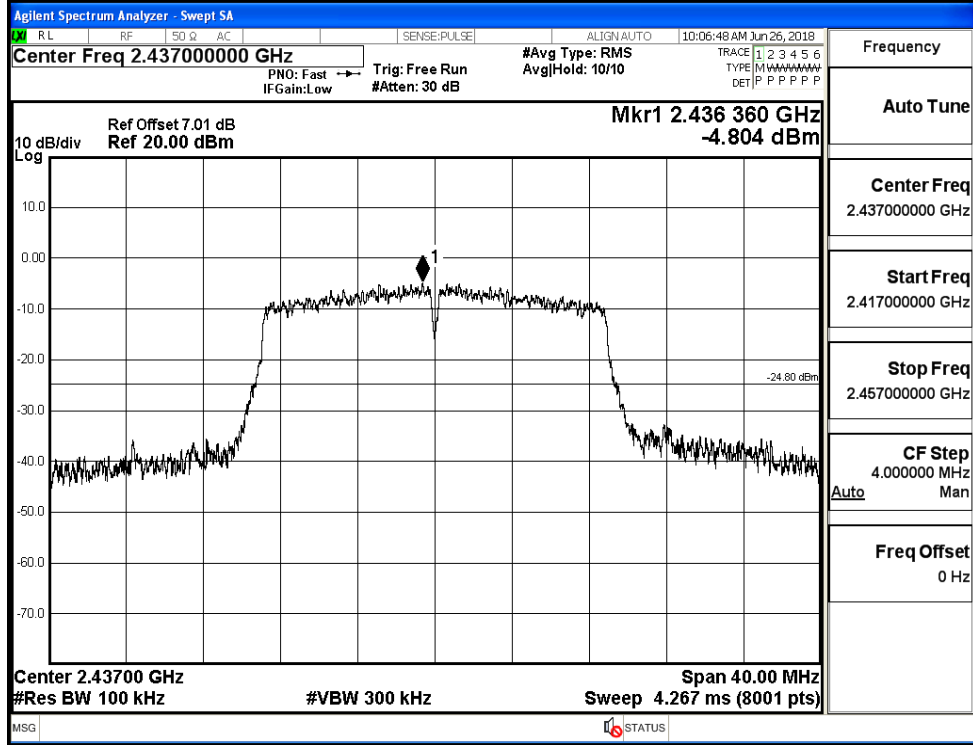


Puw/11N20
SISO/LCH

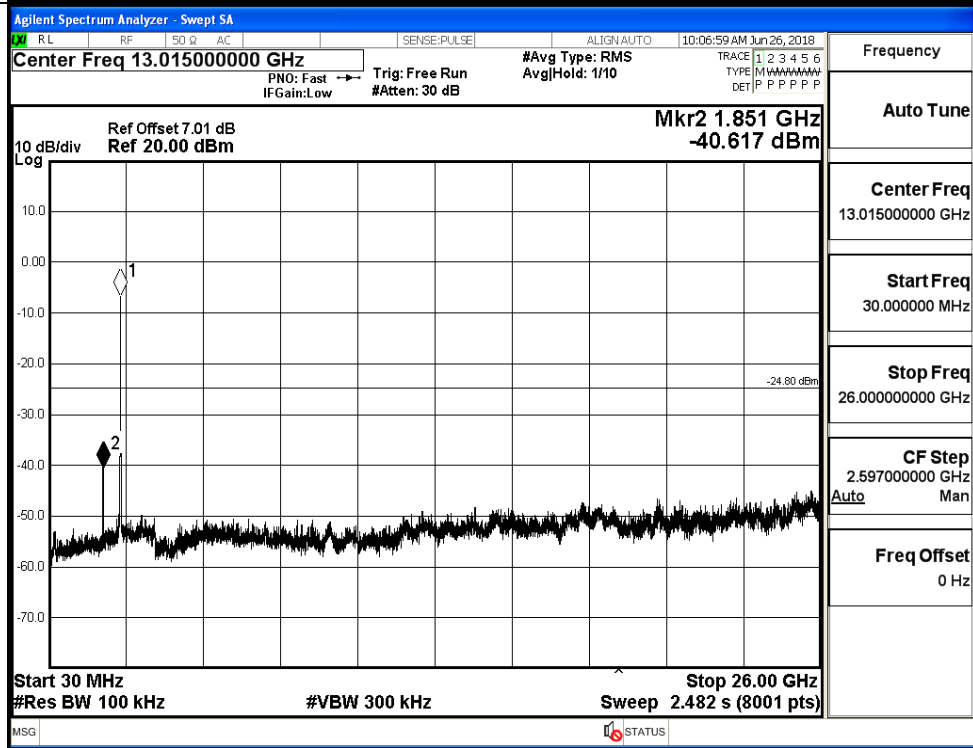


11N20SISO_MCH_Graphs

Pref/11N20
SISO/MCH

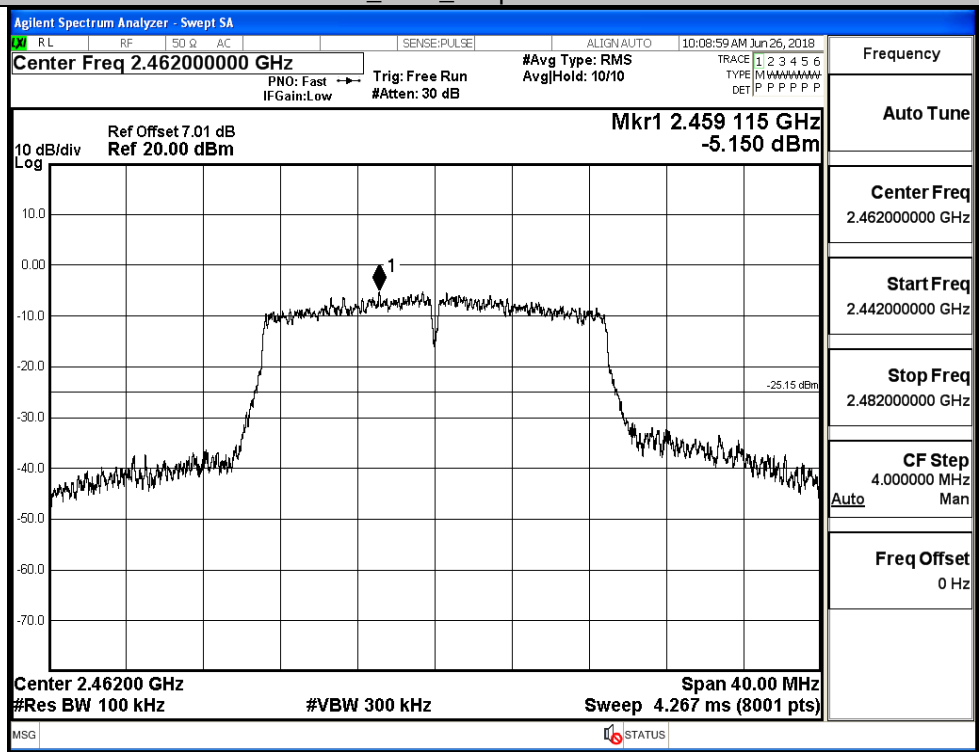


Puw/11N20
SISO/MCH

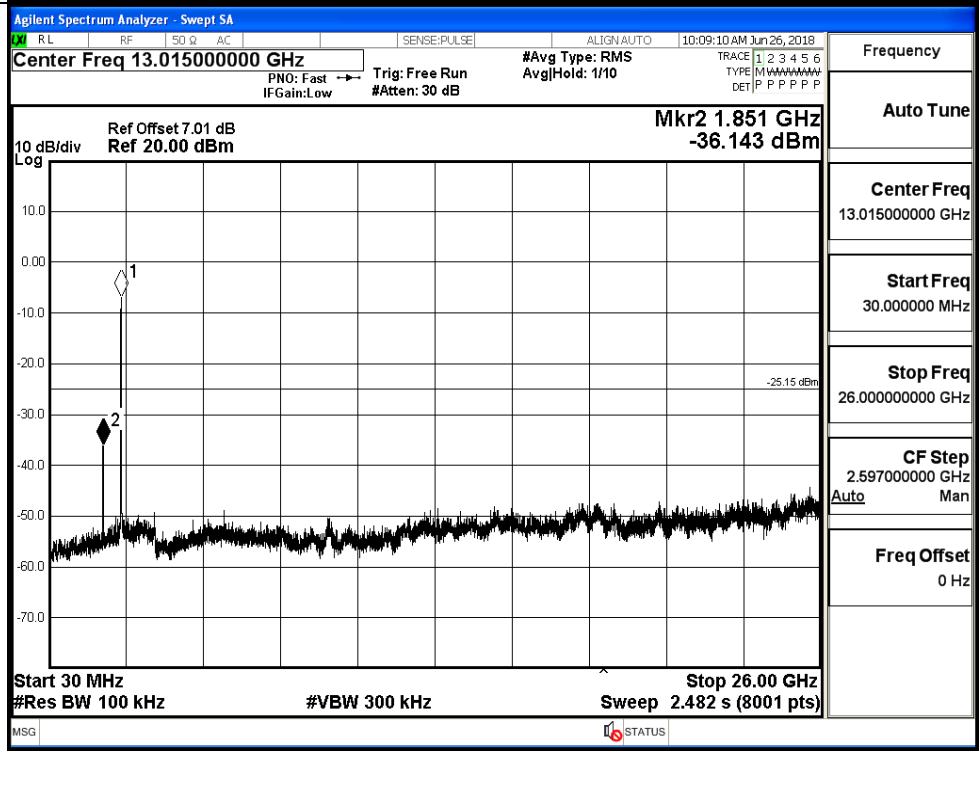


11N20SISO_HCH_Graphs

Pref/11N20
SISO/HCH

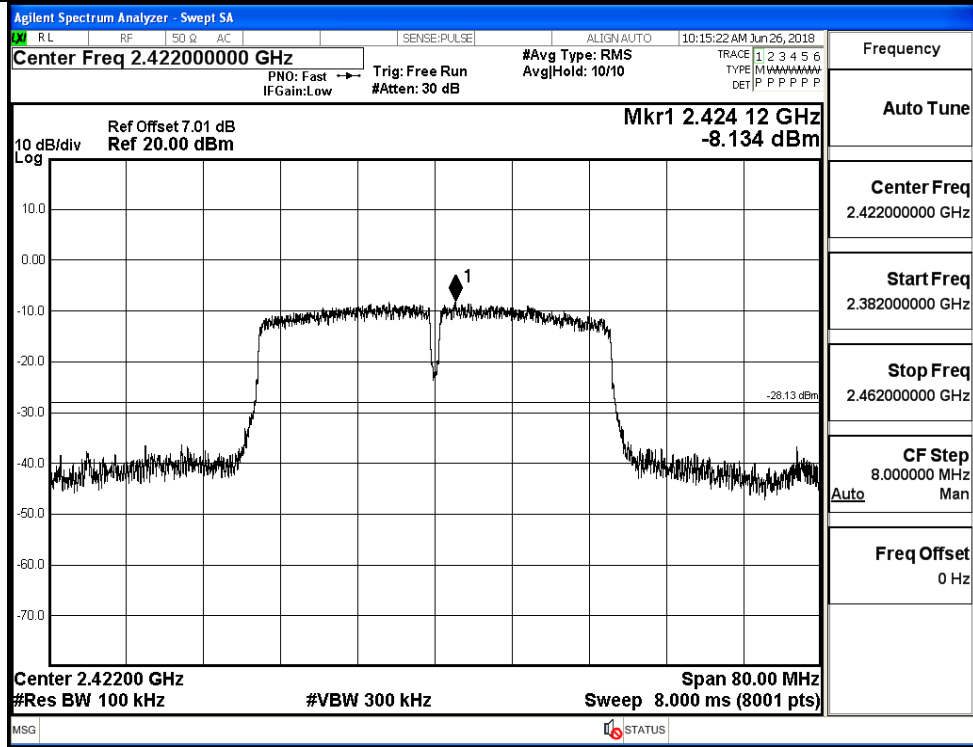


Puw/11N20
SISO/HCH

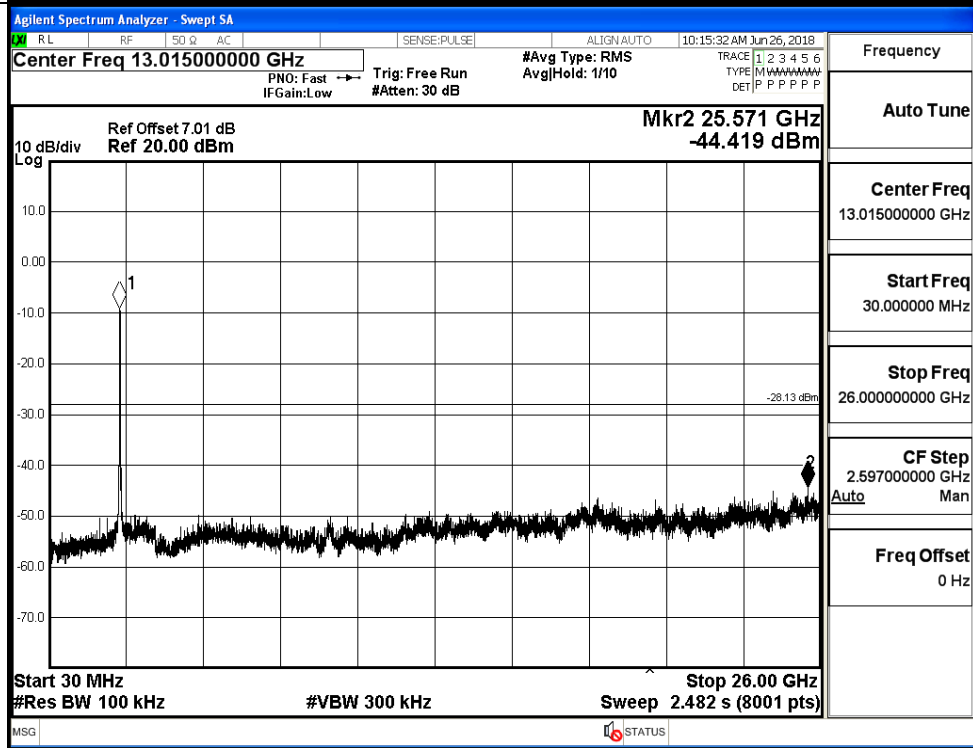


11N40SISO_LCH_Graphs

Pref/11N40
SISO/LCH

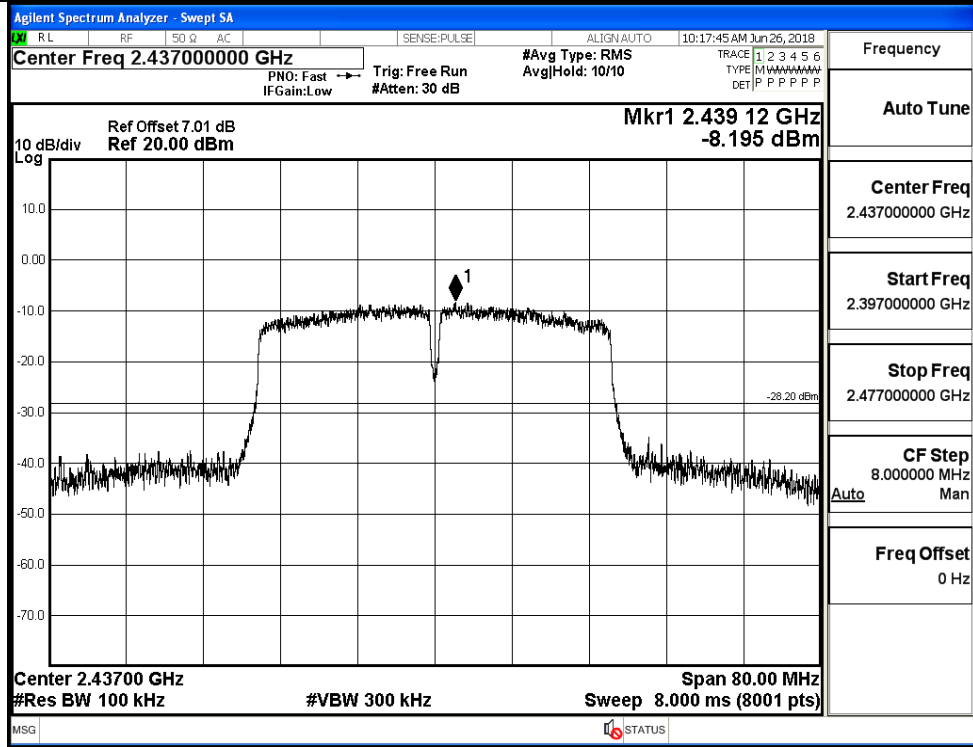


Puw/11N40
SISO/LCH

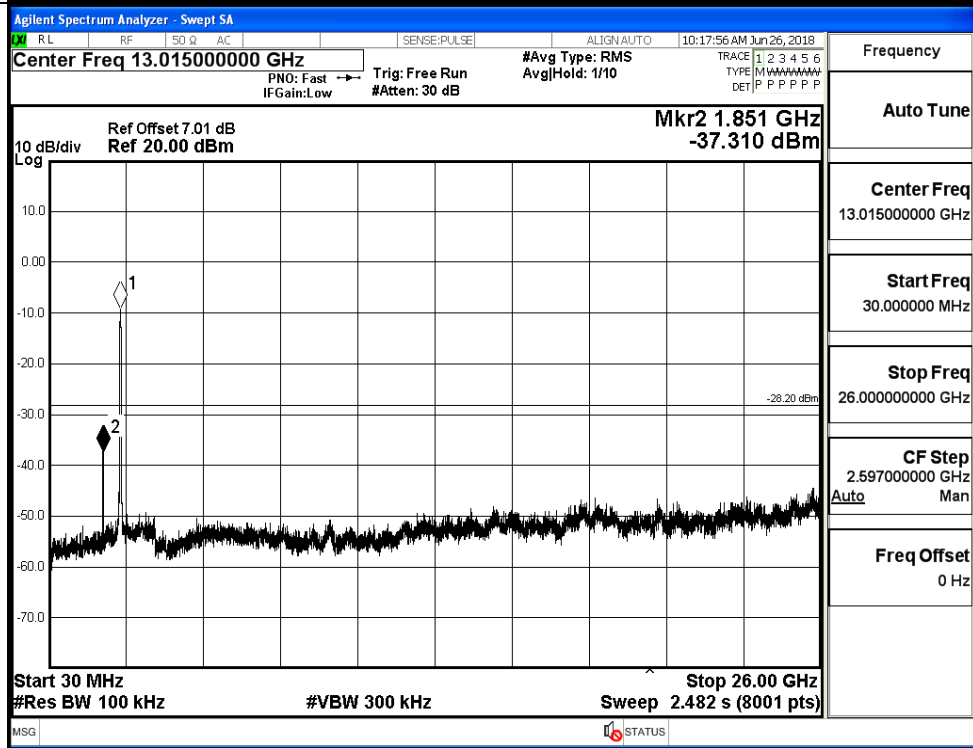


11N40SISO_MCH_Graphs

Pref/11N40
SISO/MCH

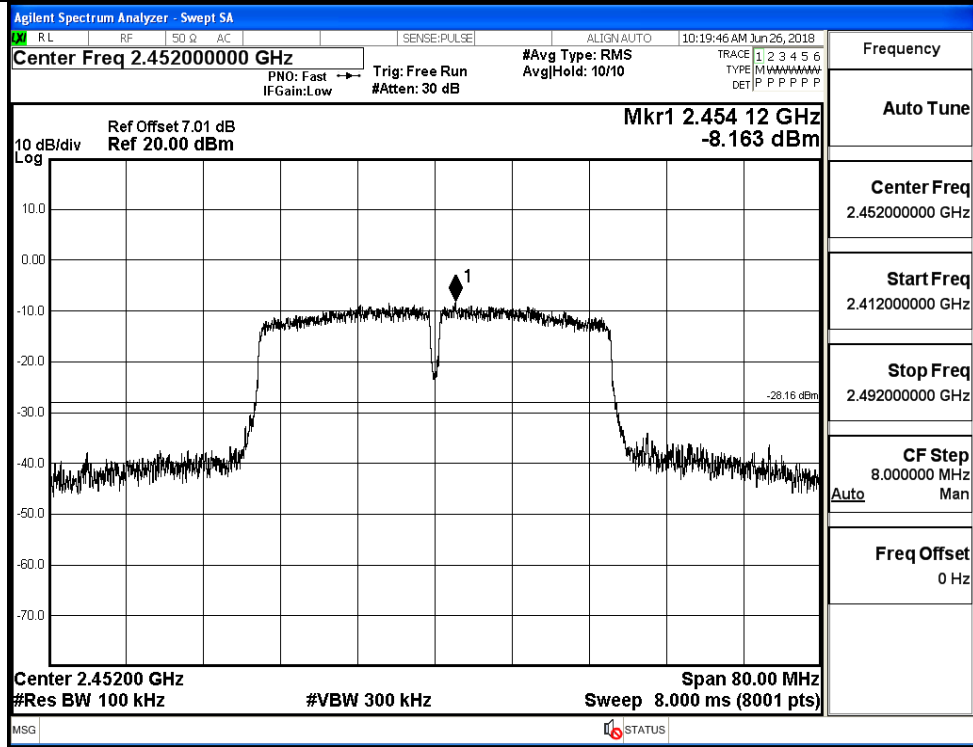


Puw/11N40
SISO/MCH

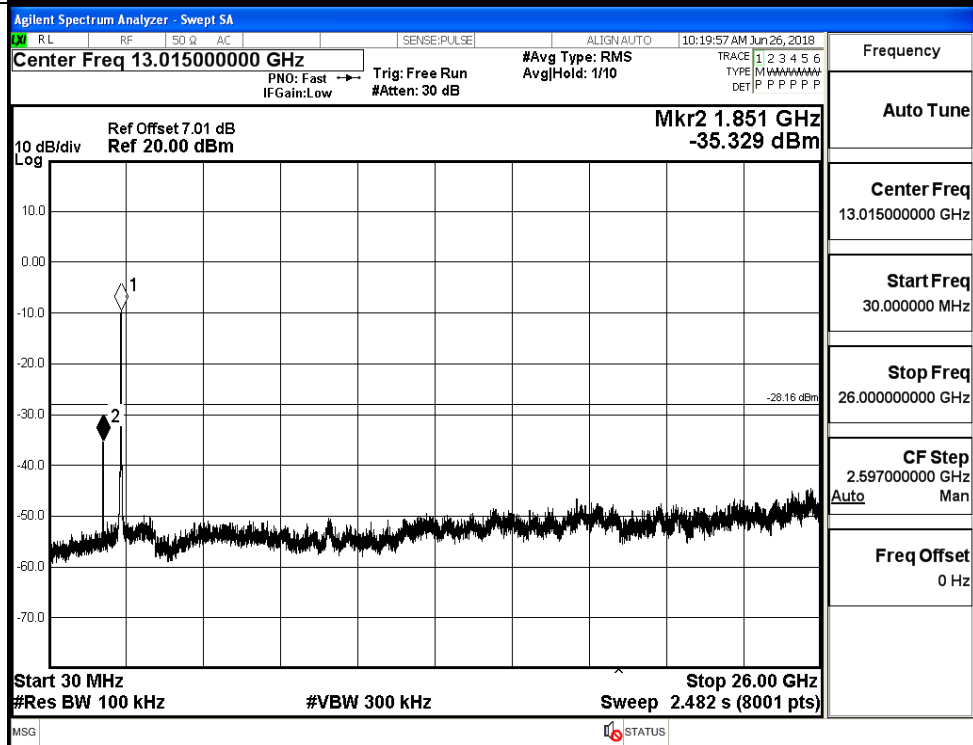


11N40SISO_HCH_Graphs

Pref/11N40
SISO/HCH

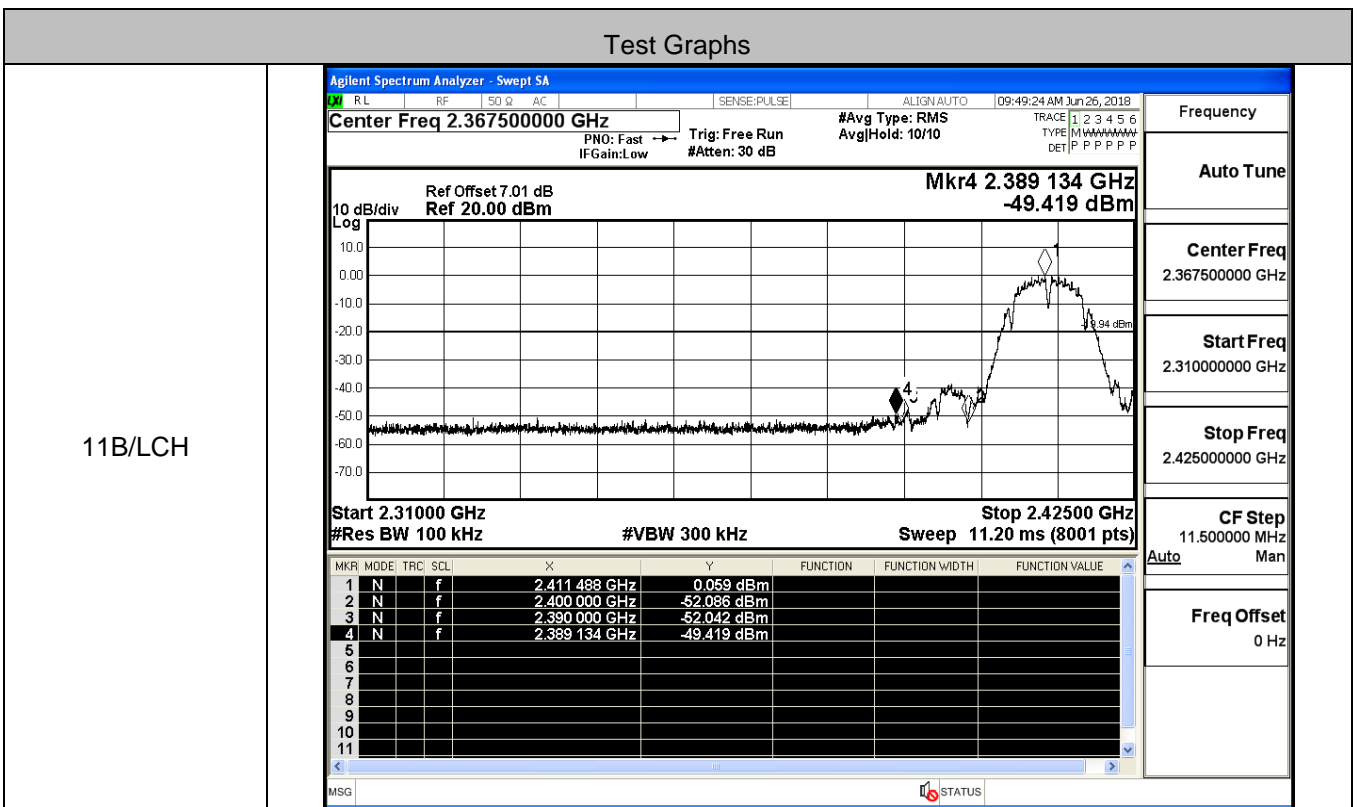


Puw/11N40
SISO/HCH

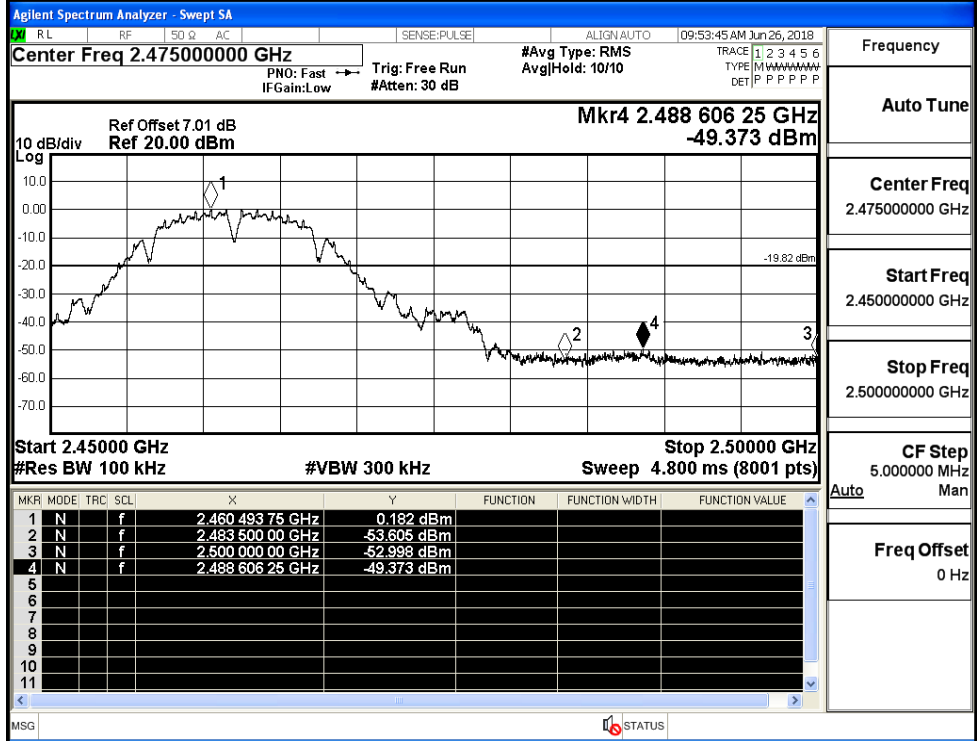


A.5 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
11B	LCH	0.059	-49.419	-19.94	PASS
	HCH	0.182	-49.373	-19.82	PASS
11G	LCH	-3.887	-38.924	-23.89	PASS
	HCH	-5.012	-44.535	-25.01	PASS
11N20SISO	LCH	-4.115	-39.518	-24.12	PASS
	HCH	-5.231	-41.411	-25.23	PASS
11N40SISO	LCH	-8.397	-38.409	-28.4	PASS
	HCH	-8.343	-37.804	-28.34	PASS

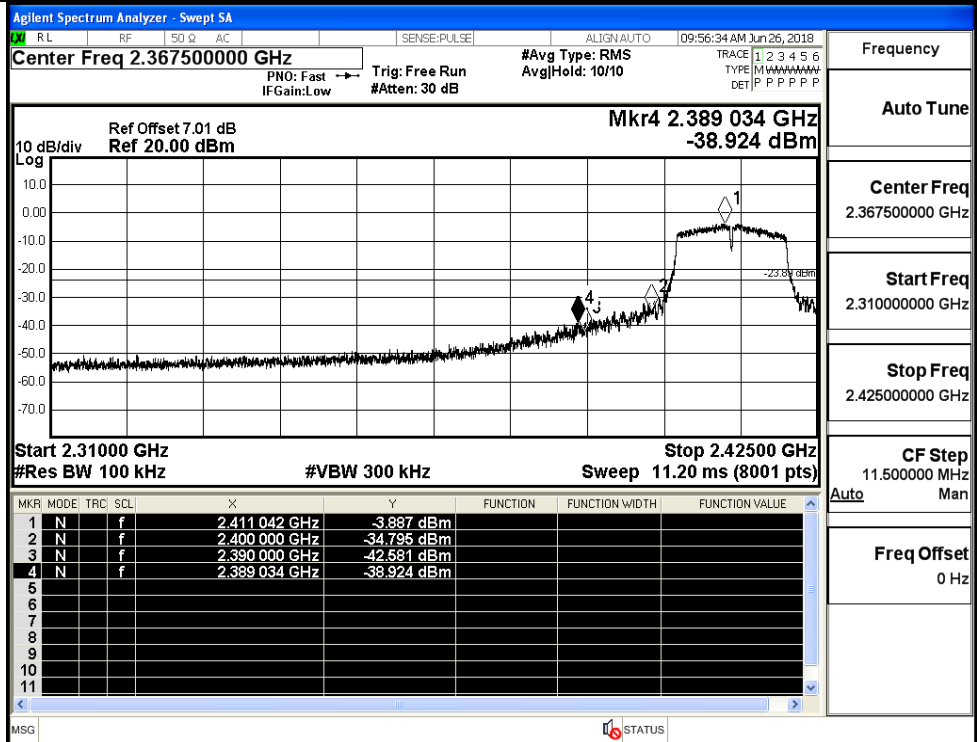


11B/HCH



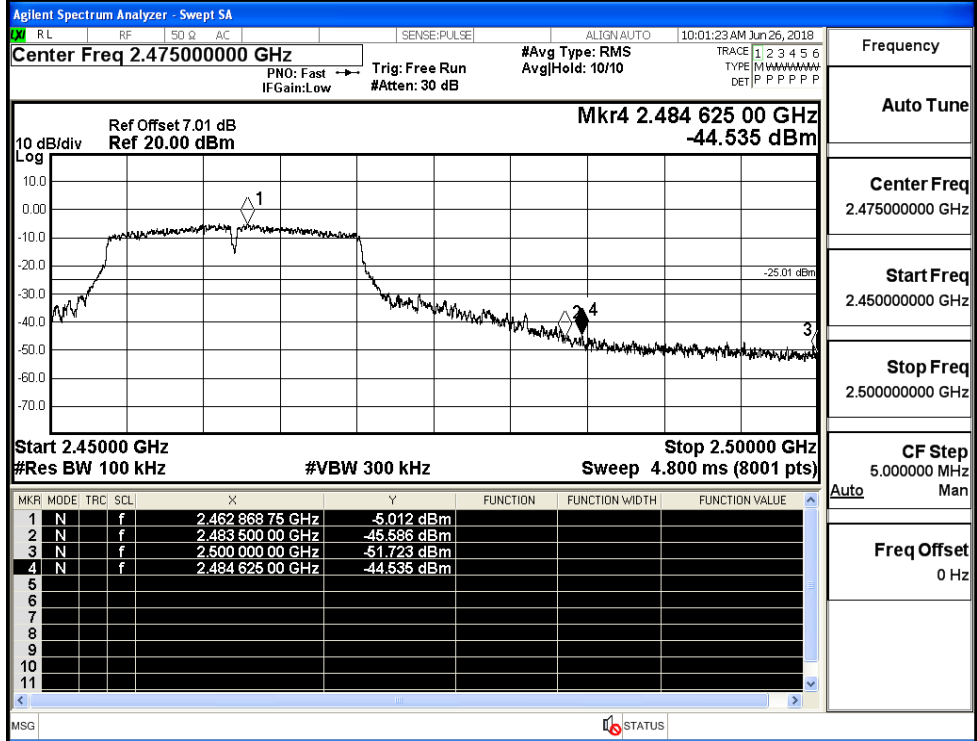
Frequency	
Auto Tune	
Center Freq	2.47500000 GHz
Start Freq	2.45000000 GHz
Stop Freq	2.50000000 GHz
CF Step	5.000000 MHz
Freq Offset	0 Hz

11G/LCH

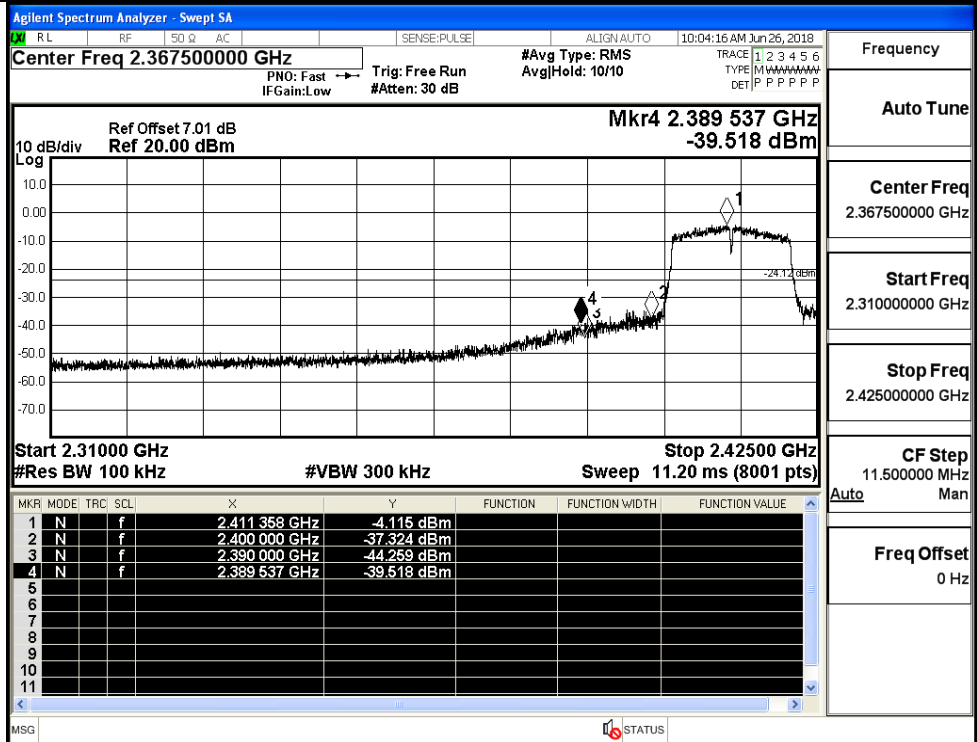


Frequency	
Auto Tune	
Center Freq	2.36750000 GHz
Start Freq	2.31000000 GHz
Stop Freq	2.42500000 GHz
CF Step	11.500000 MHz
Freq Offset	0 Hz

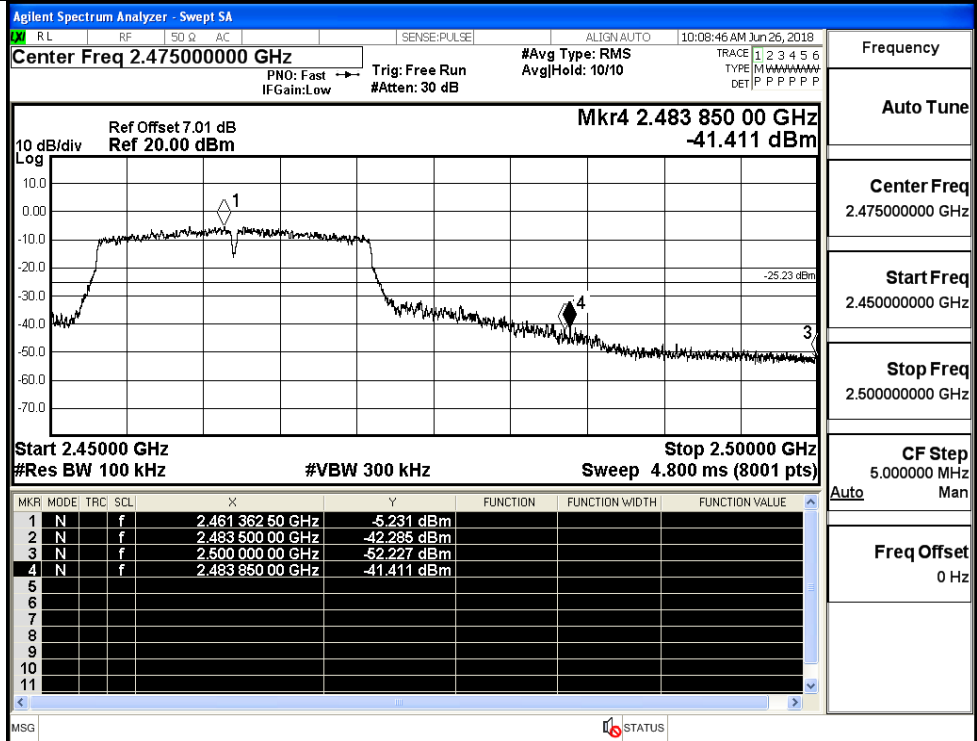
11G/HCH



11N20SISO/LCH

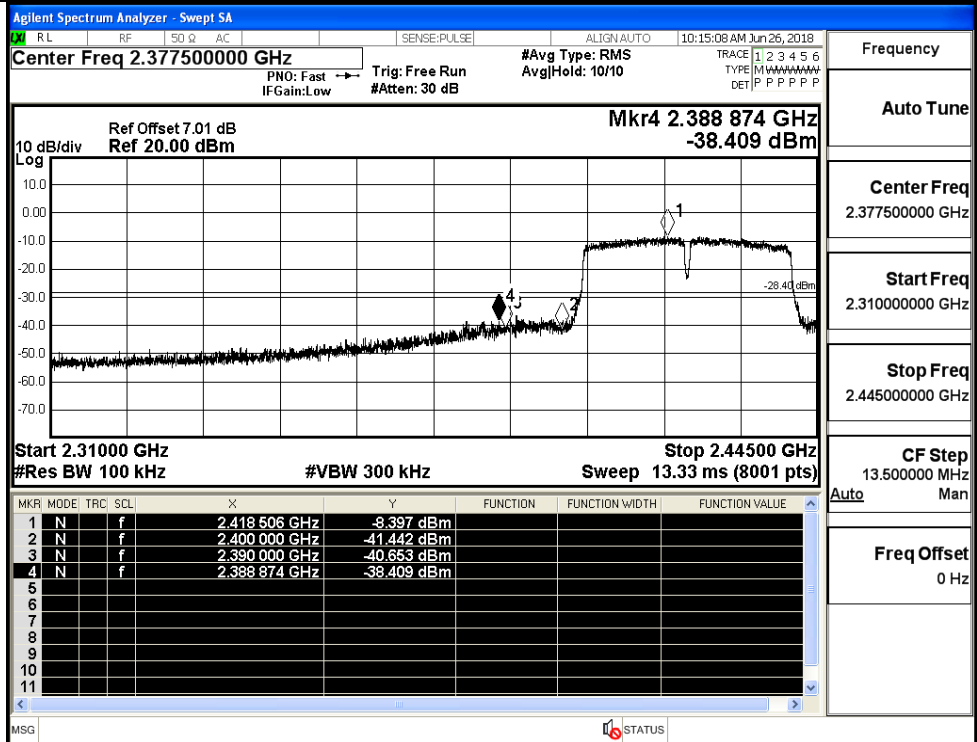


11N20SISO/HCH



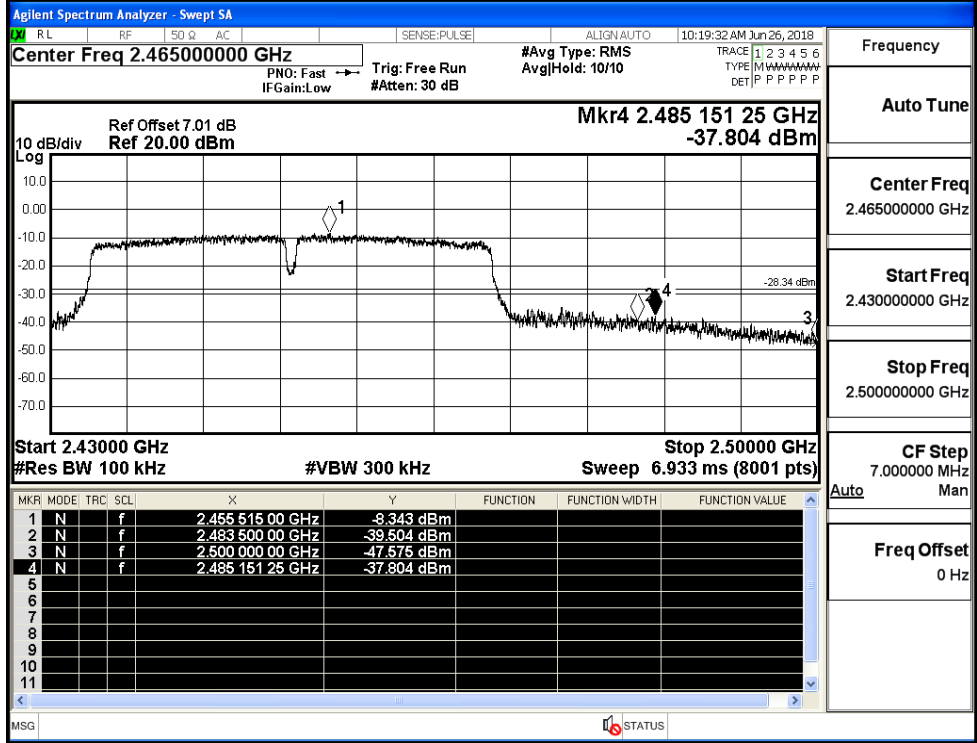
Frequency	
Auto Tune	
Center Freq	2.475000000 GHz
Start Freq	2.450000000 GHz
Stop Freq	2.500000000 GHz
CF Step	5.000000 MHz
Freq Offset	0 Hz

11N40SISO/LCH



Frequency	
Auto Tune	
Center Freq	2.377500000 GHz
Start Freq	2.310000000 GHz
Stop Freq	2.445000000 GHz
CF Step	13.500000 MHz
Freq Offset	0 Hz

11N40SISO/HCH

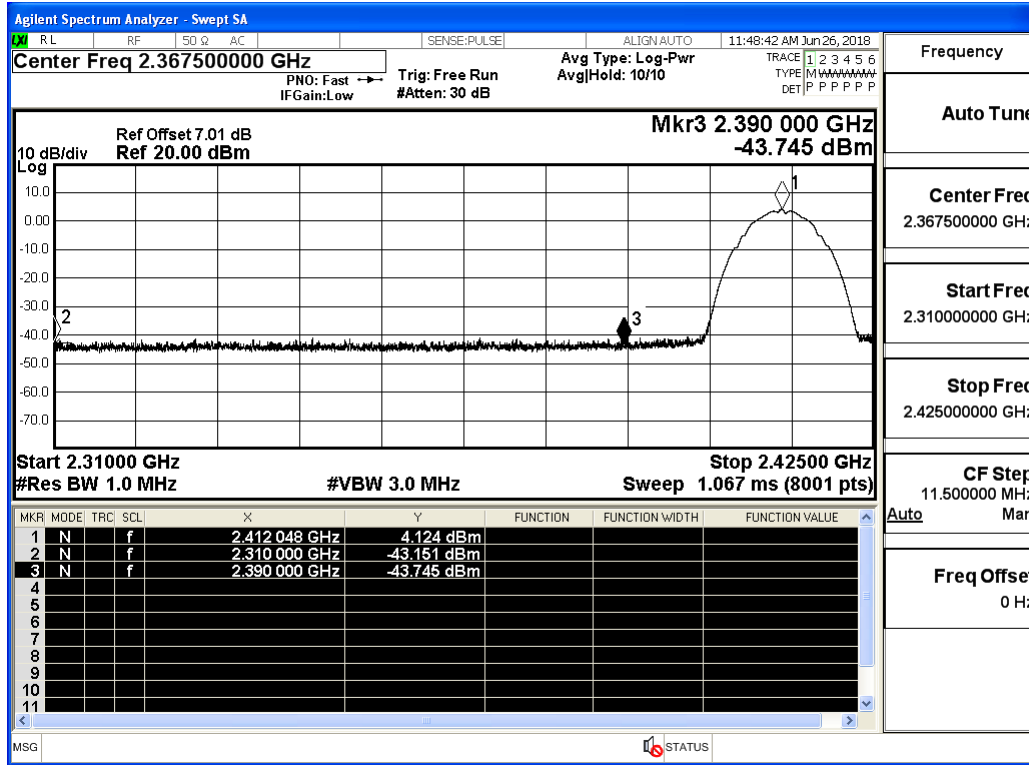


A.6 Restrict-band band-edge measurements

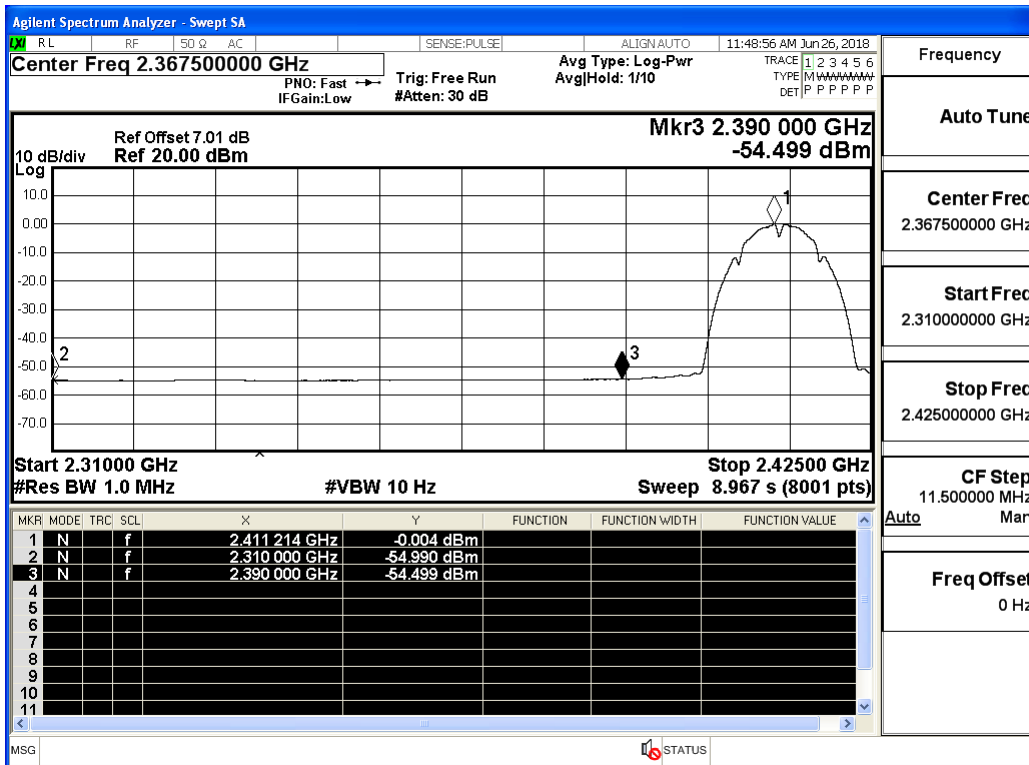
Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBu V/m]	Verdict
11B	2412	Ant1	2310.0	-43.15	3.5	0	55.55	PEAK	74	PASS
	2412	Ant1	2310.0	-54.99	3.5	0	43.71	AV	54	PASS
	2412	Ant1	2390.0	-43.75	3.5	0	54.95	PEAK	74	PASS
	2412	Ant1	2390.0	-54.50	3.5	0	44.20	AV	54	PASS
	2462	Ant1	2483.5	-44.43	3.5	0	54.27	PEAK	74	PASS
	2462	Ant1	2483.5	-54.38	3.5	0	44.32	AV	54	PASS
	2462	Ant1	2500.0	-43.56	3.5	0	55.14	PEAK	74	PASS
	2462	Ant1	2500.0	-54.35	3.5	0	44.35	AV	54	PASS
11G	2412	Ant1	2310.0	-44.66	3.5	0	54.04	PEAK	74	PASS
	2412	Ant1	2310.0	-54.99	3.5	0	43.71	AV	54	PASS
	2412	Ant1	2390.0	-40.83	3.5	0	57.87	PEAK	74	PASS
	2412	Ant1	2390.0	-53.84	3.5	0	44.86	AV	54	PASS
	2462	Ant1	2483.5	-41.18	3.5	0	57.52	PEAK	74	PASS
	2462	Ant1	2483.5	-53.06	3.5	0	45.64	AV	54	PASS
	2462	Ant1	2500.0	-43.08	3.5	0	55.62	PEAK	74	PASS
	2462	Ant1	2500.0	-54.18	3.5	0	44.52	AV	54	PASS
11N20 SISO	2412	Ant1	2310.0	-44.22	3.5	0	54.48	PEAK	74	PASS
	2412	Ant1	2310.0	-54.96	3.5	0	43.74	AV	54	PASS
	2412	Ant1	2390.0	-34.14	3.5	0	64.56	PEAK	74	PASS
	2412	Ant1	2390.0	-49.84	3.5	0	48.86	AV	54	PASS
	2462	Ant1	2483.5	-36.89	3.5	0	61.81	PEAK	74	PASS
	2462	Ant1	2483.5	-51.44	3.5	0	47.26	AV	54	PASS
	2462	Ant1	2500.0	-44.80	3.5	0	53.90	PEAK	74	PASS
	2462	Ant1	2500.0	-53.96	3.5	0	44.74	AV	54	PASS
11N40 SISO	2422	Ant1	2310.0	-45.38	3.5	0	53.32	PEAK	74	PASS
	2422	Ant1	2310.0	-54.96	3.5	0	43.74	AV	54	PASS

	2422	Ant1	2390.0	-43.04	3.5	0	55.66	PEAK	74	PASS
	2422	Ant1	2390.0	-53.74	3.5	0	44.96	AV	54	PASS
	2452	Ant1	2483.5	-42.52	3.5	0	56.18	PEAK	74	PASS
	2452	Ant1	2483.5	-53.21	3.5	0	45.49	AV	54	PASS
	2452	Ant1	2500.0	-42.80	3.5	0	55.90	PEAK	74	PASS
	2452	Ant1	2500.0	-54.06	3.5	0	44.64	AV	54	PASS

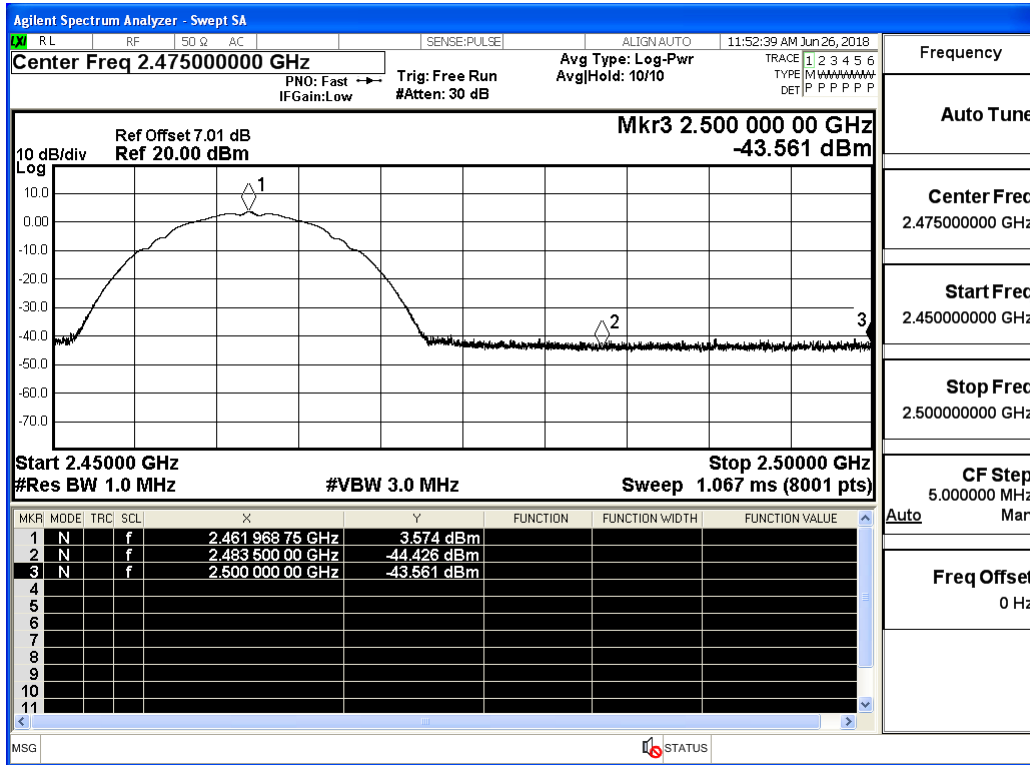
Restrict-band band-edge measurements_11B_2412_Ant1_PEAK



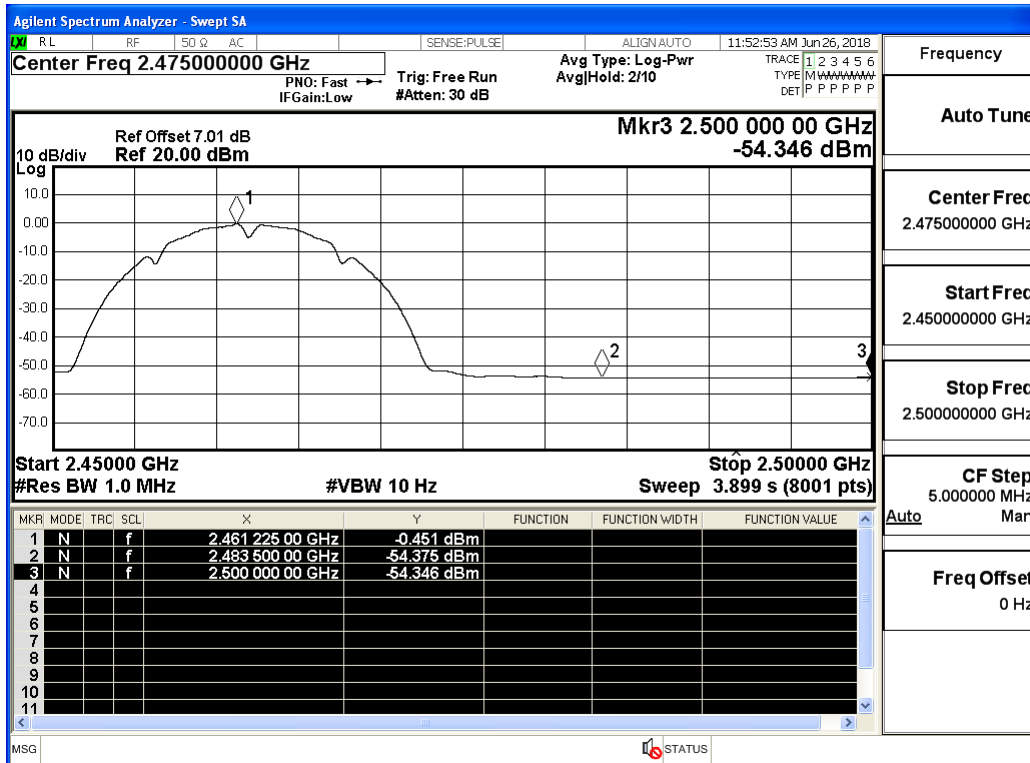
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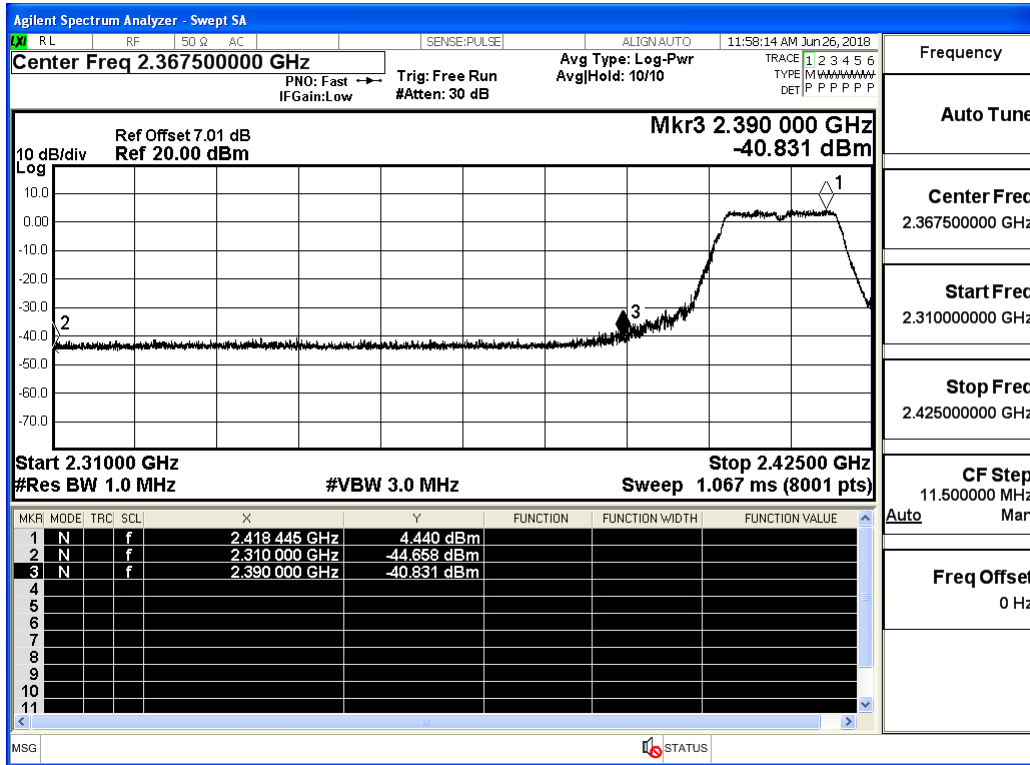
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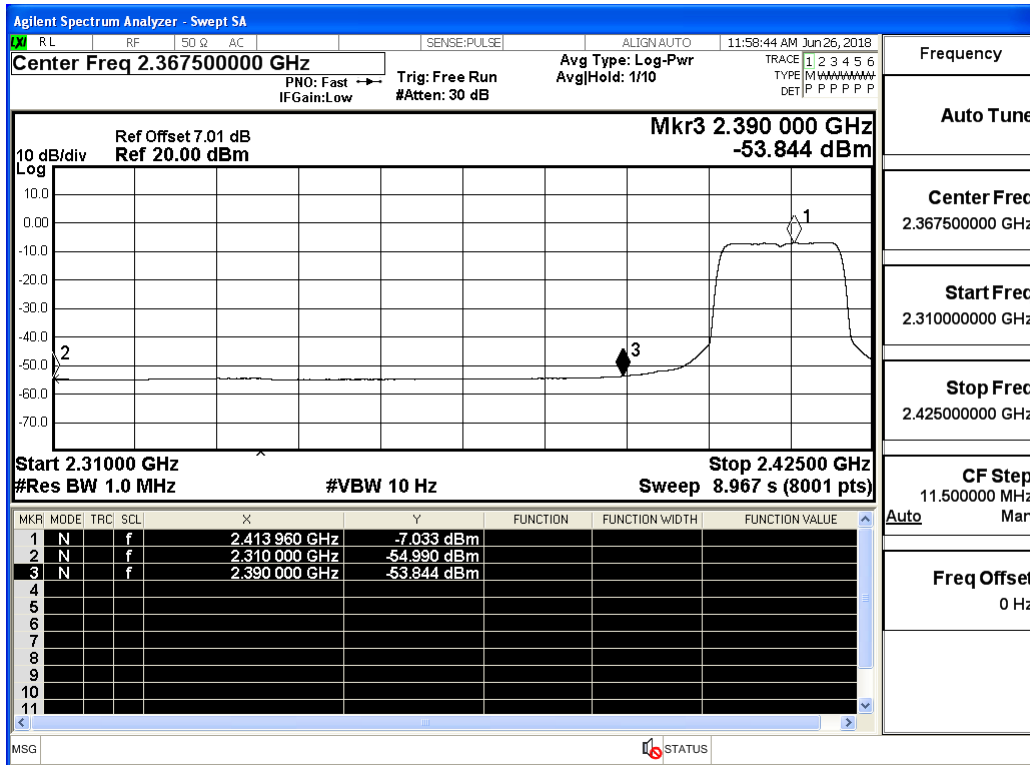
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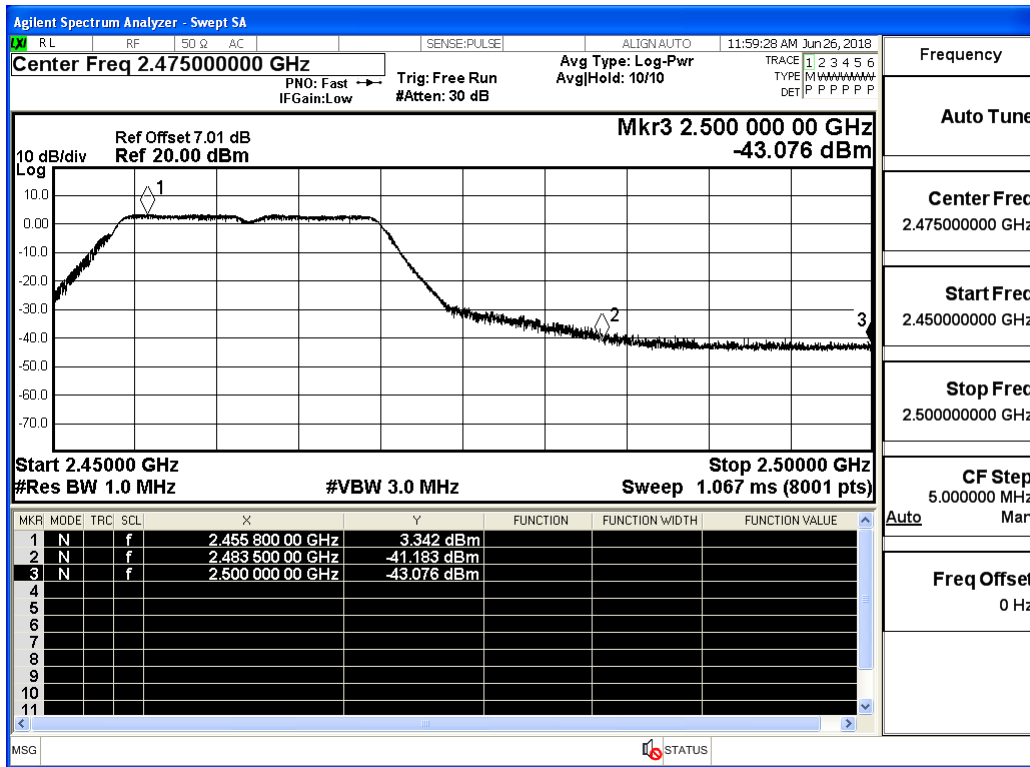
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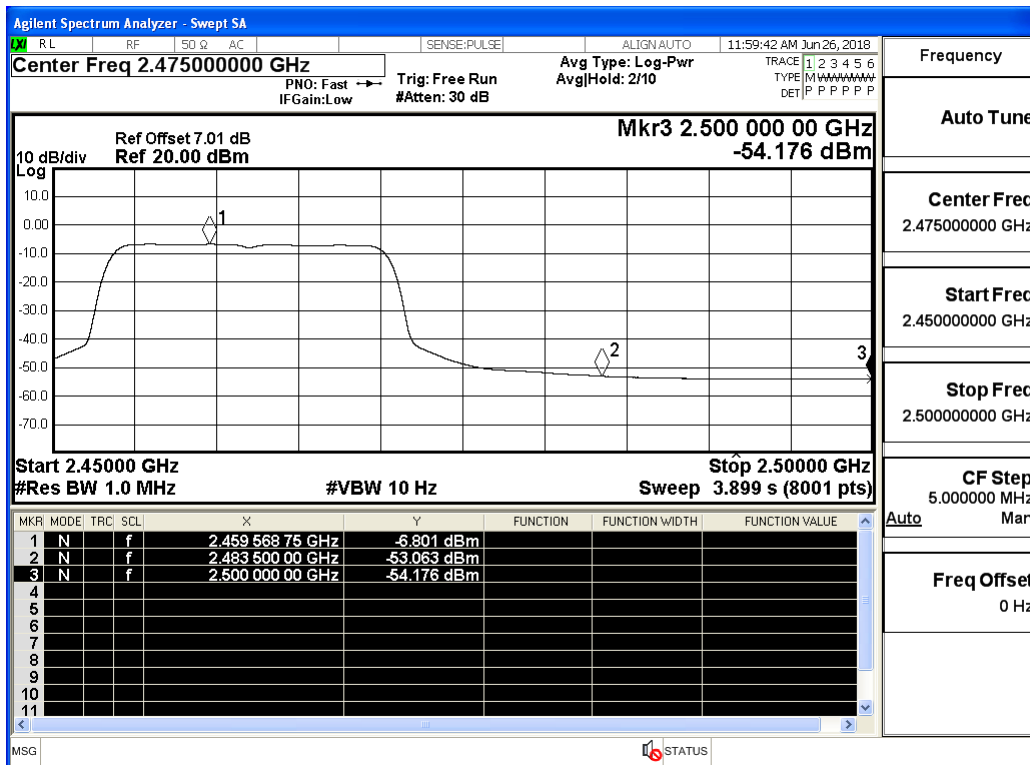
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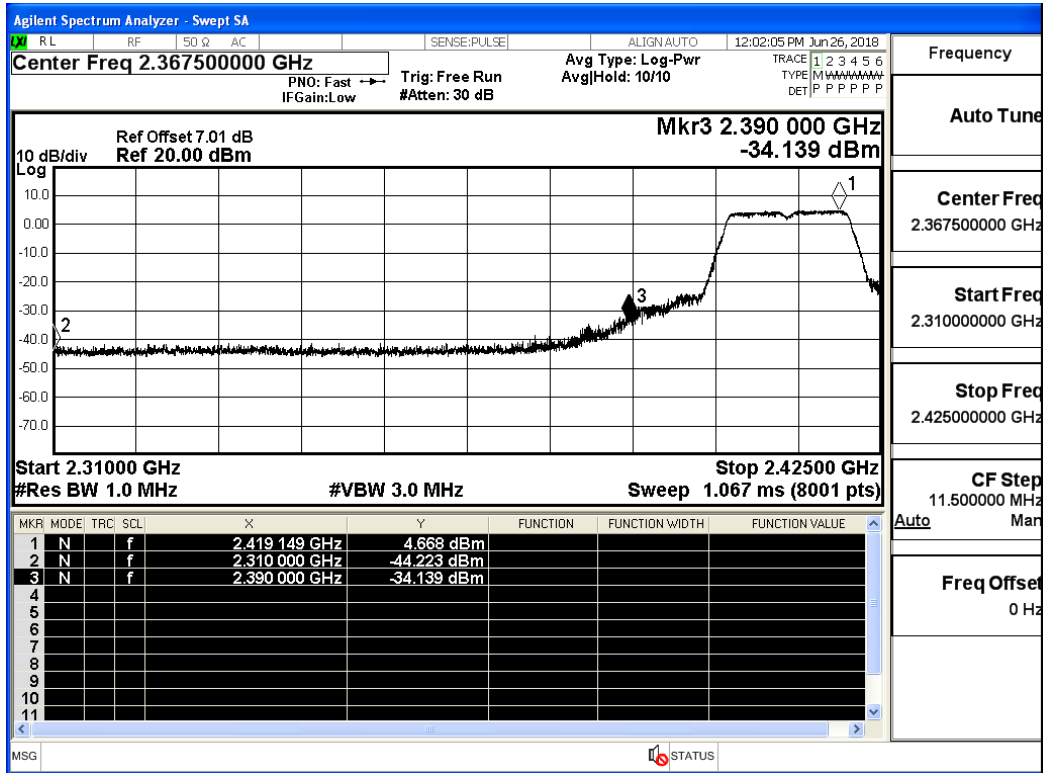
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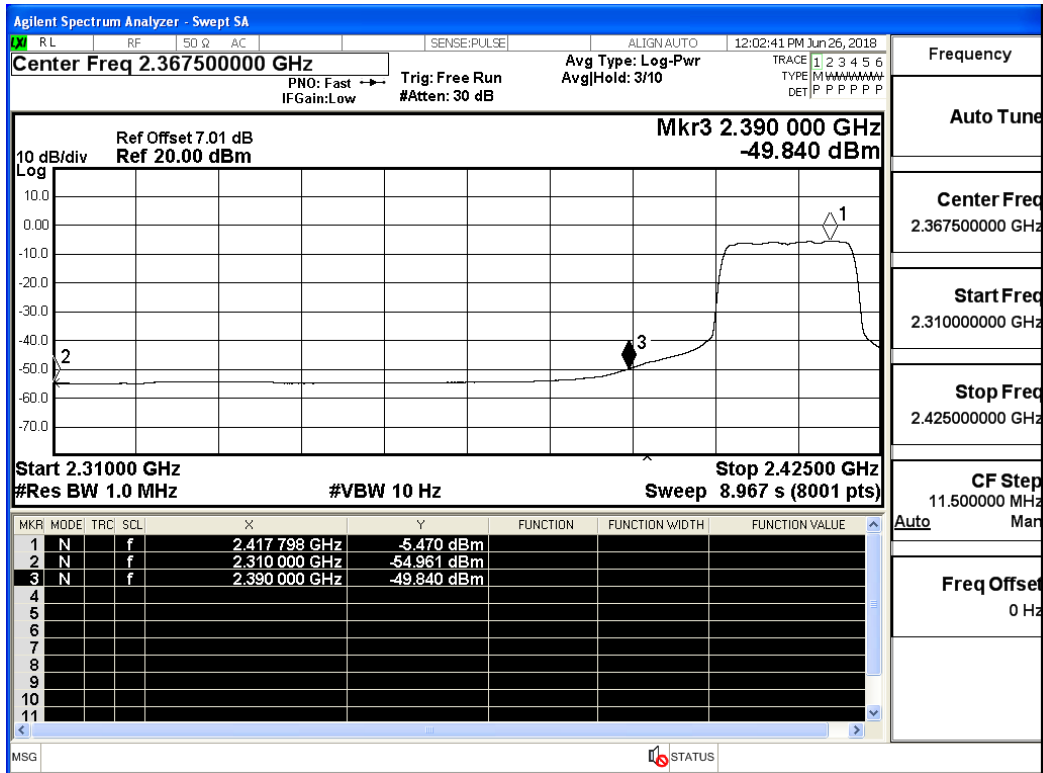
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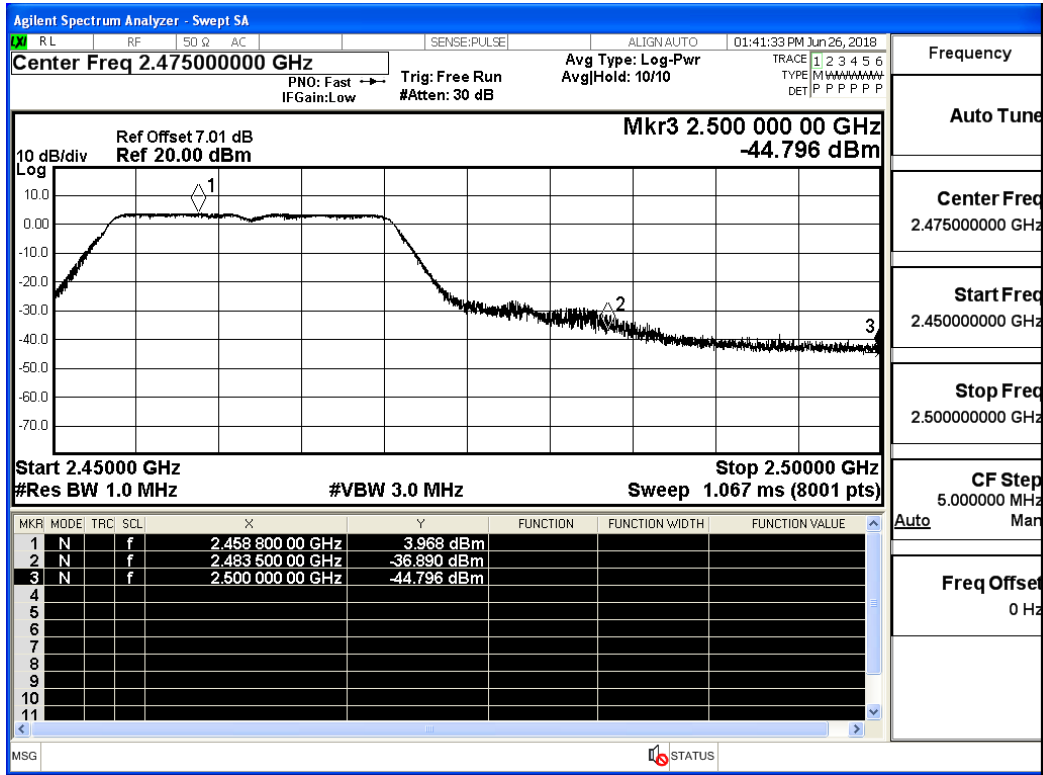
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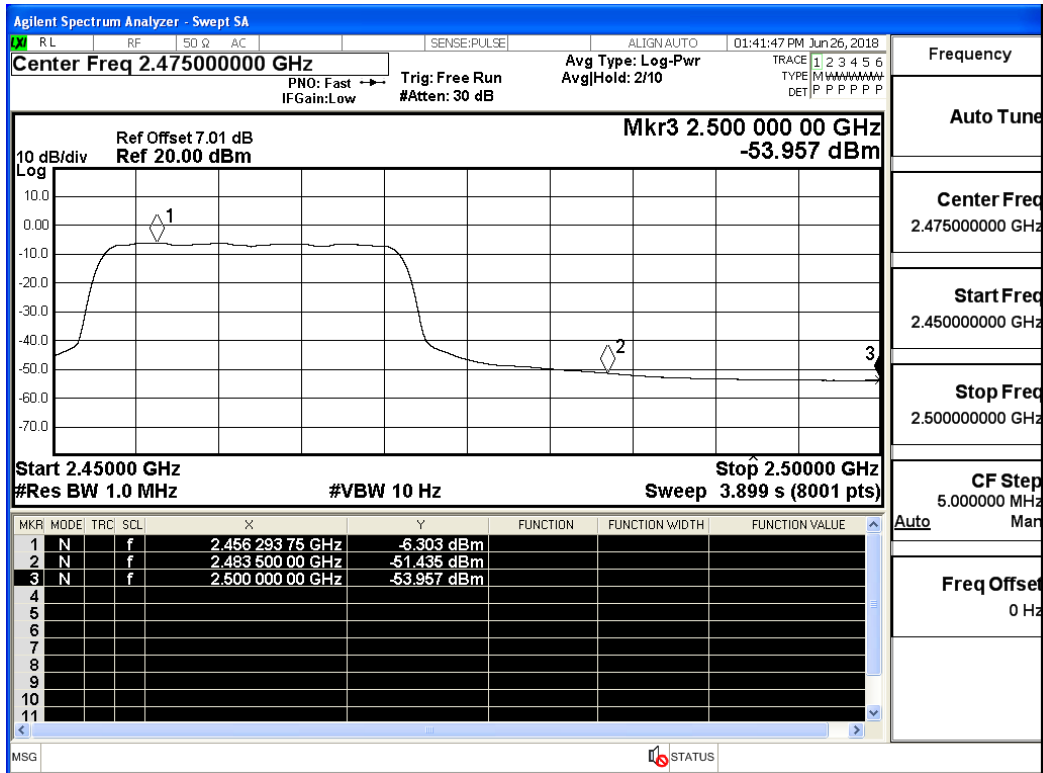
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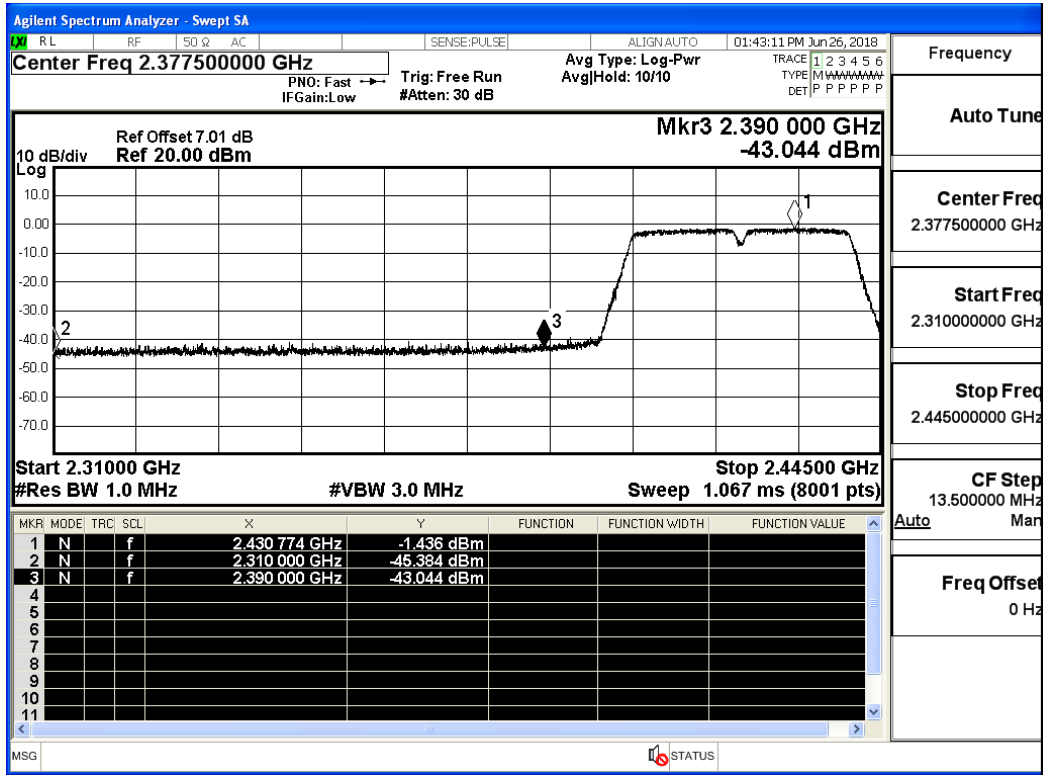
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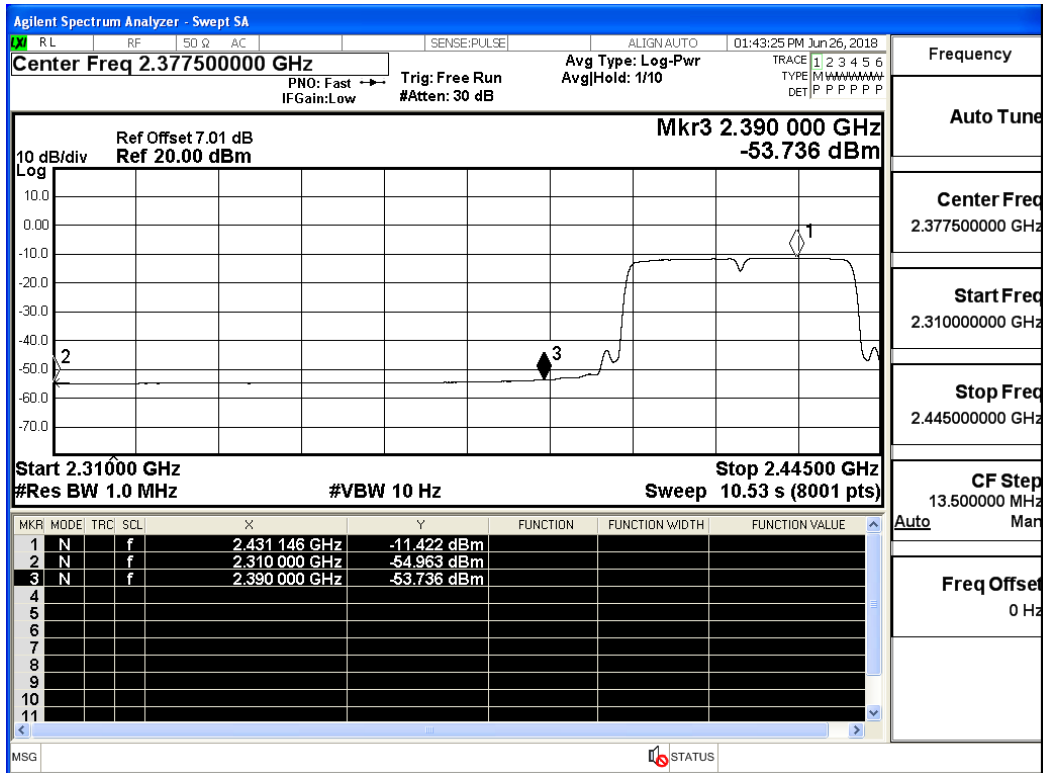
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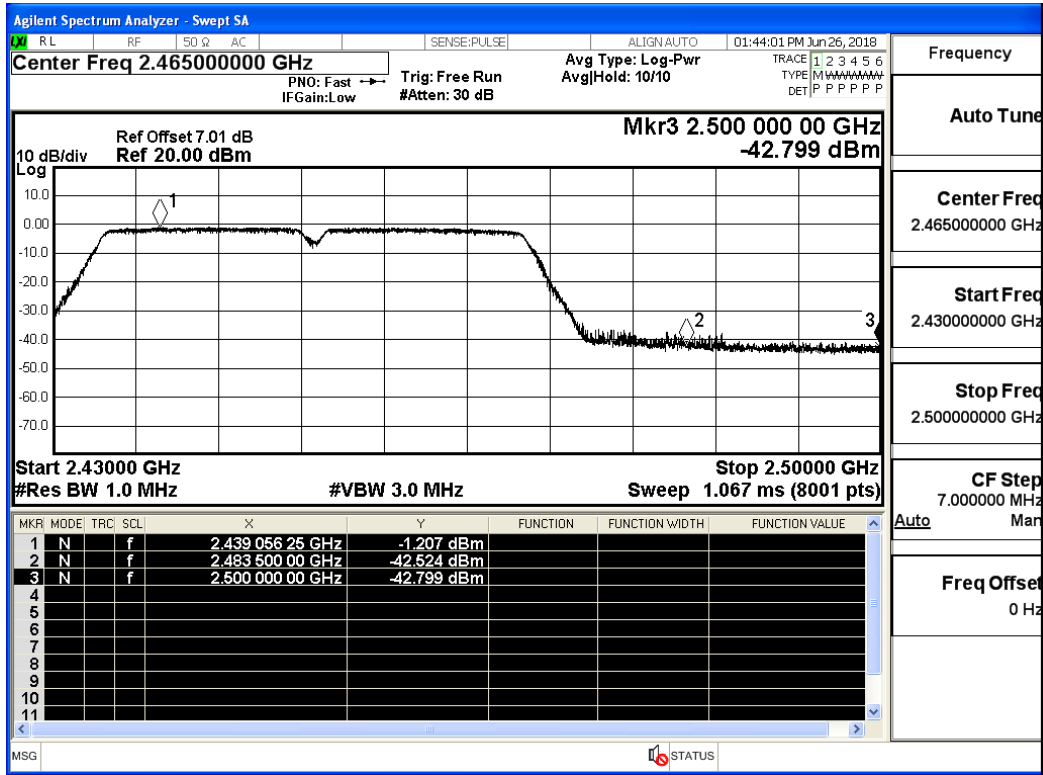
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Restrict-band band-edge measurements_11N40SISO_2422_Ant1_AV



Restrict-band band-edge measurements_11N40SISO_2452_Ant1_PEAK



Restrict-band band-edge measurements_11N40SISO_2452_Ant1_AV

