

Appendix A

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: Star raker WIFI

Trade Mark: N/A

Test Model: CL-SRW-XXX

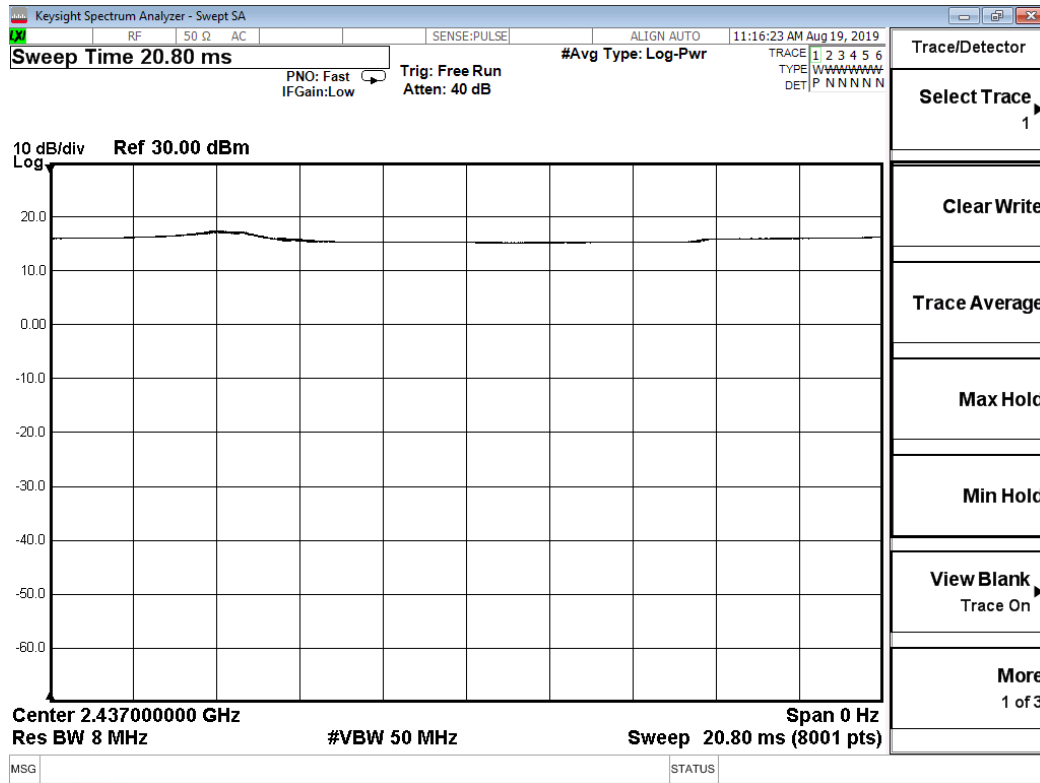
Environmental Conditions

Temperature:	23.5 ° C
Relative Humidity:	53.6%
ATM Pressure:	100.0 kPa
Test Engineer:	CHUANG WANG
Supervised by:	JAYDEN ZHUO

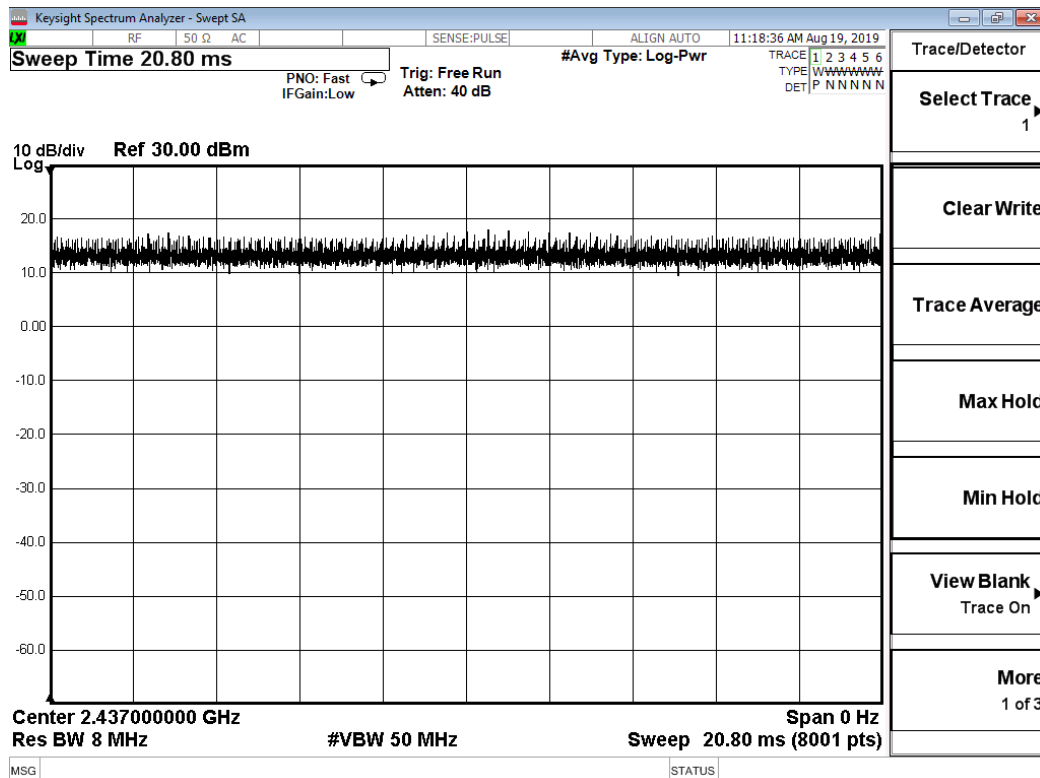
A.1 Duty Cycle

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

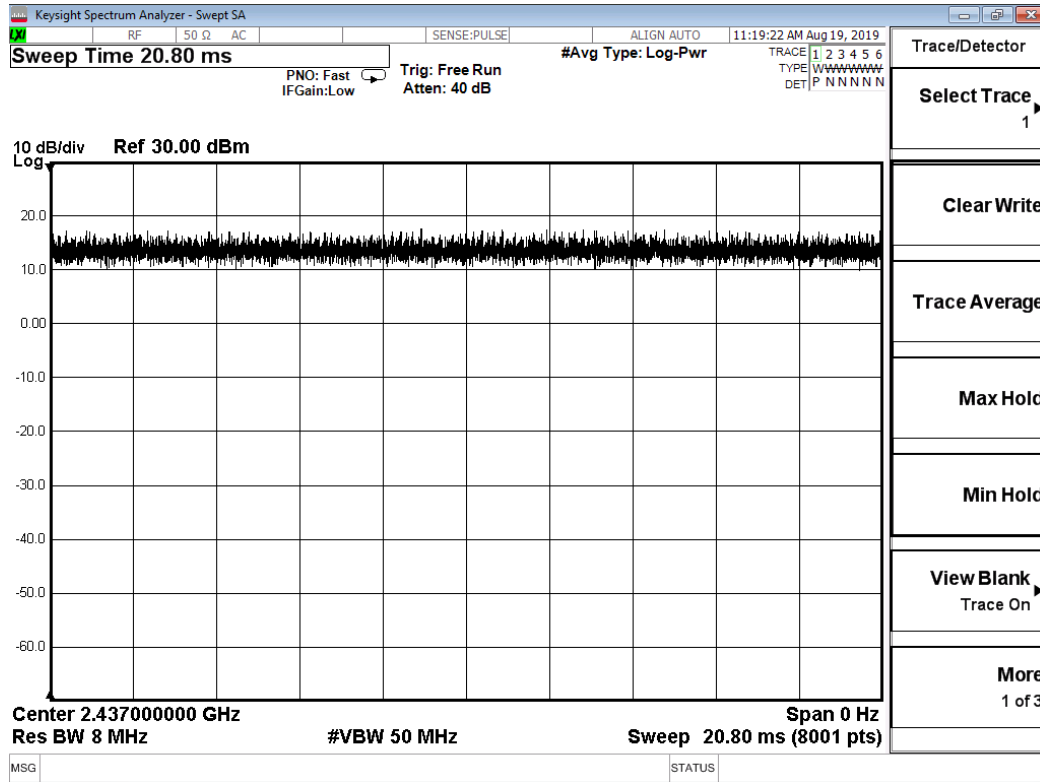
Duty Cycle_11B_2437_Ant1



Duty Cycle_11G_2437_Ant1



Duty Cycle_11N20SISO_2437_Ant1

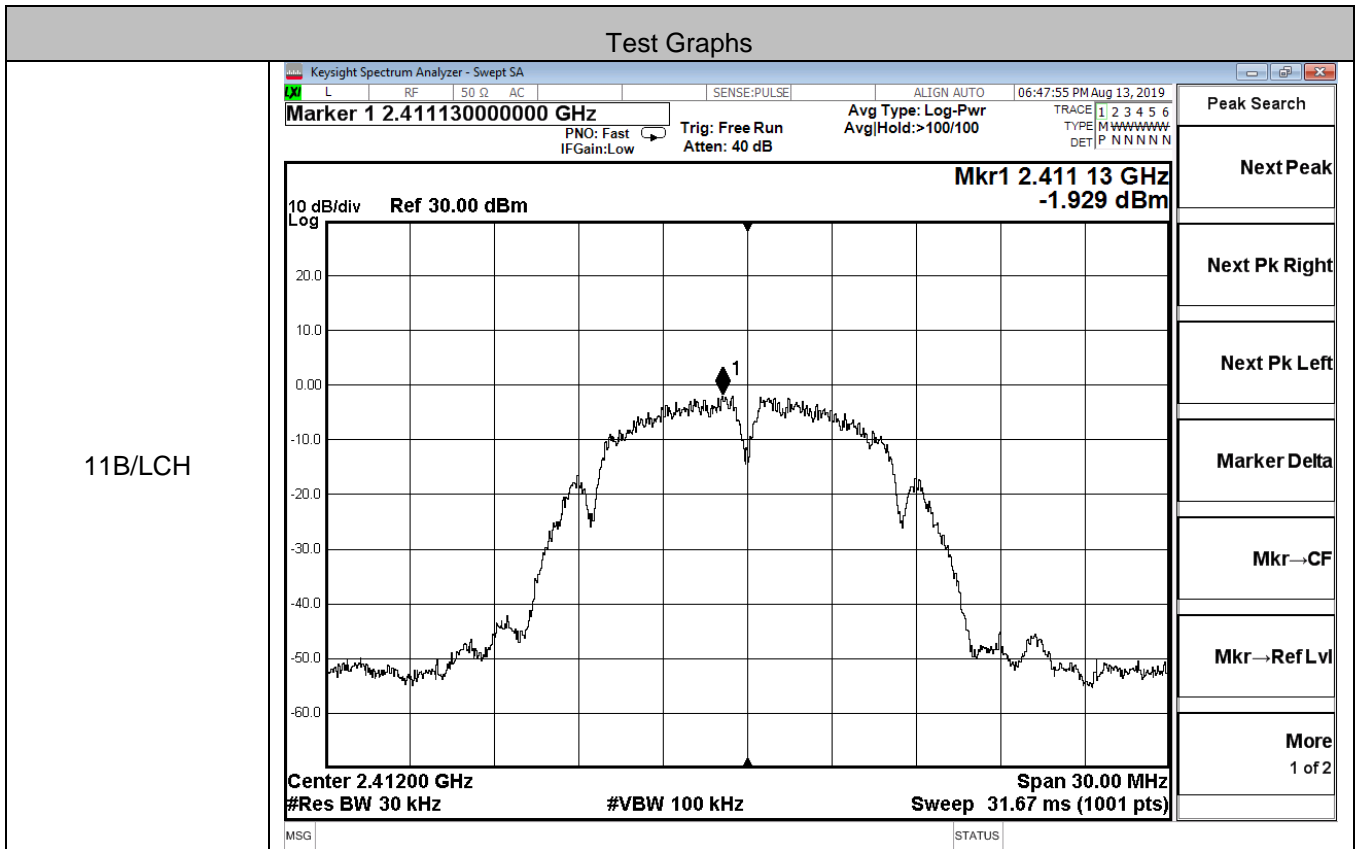


A.2 Maximum Conducted Output Power

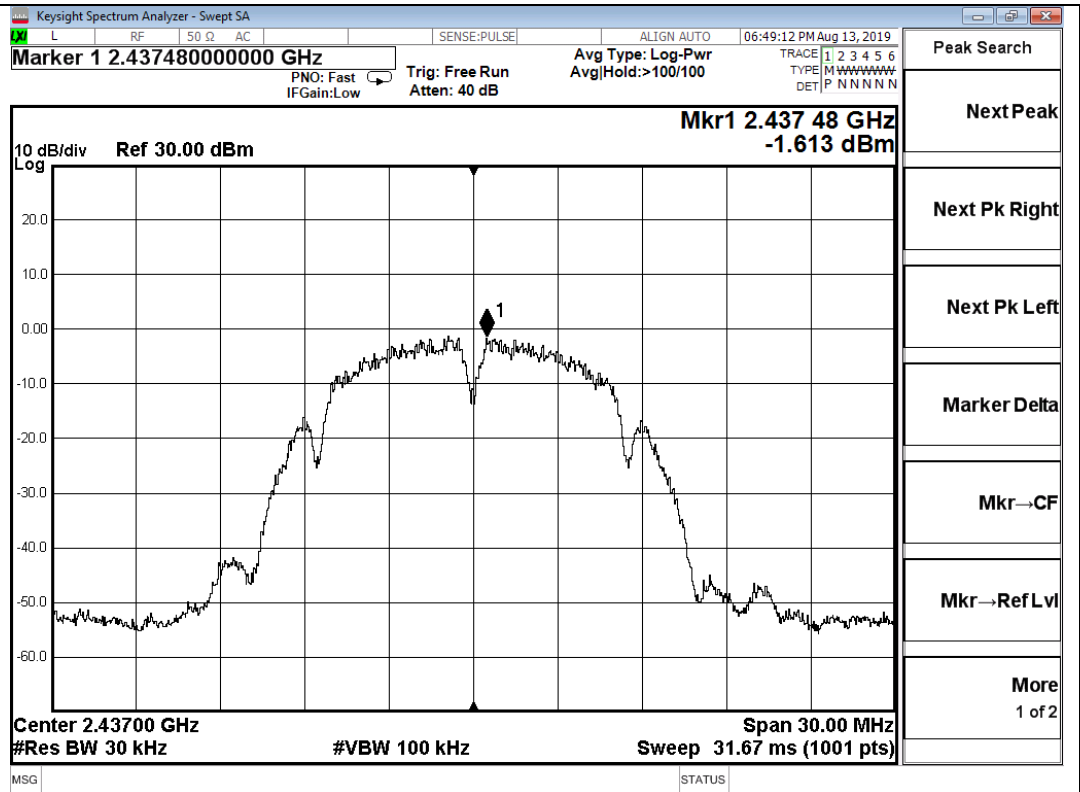
Mode	Channel	Meas. Peak Level [dBm]	Limit [dBm]	Verdict
11B	LCH	15.318	30	PASS
	MCH	16.026	30	PASS
	HCH	15.402	30	PASS
11G	LCH	17.230	30	PASS
	MCH	17.682	30	PASS
	HCH	17.087	30	PASS
11N20SISO	LCH	16.769	30	PASS
	MCH	16.568	30	PASS
	HCH	16.396	30	PASS

A.3 Maximum Power Spectral Density

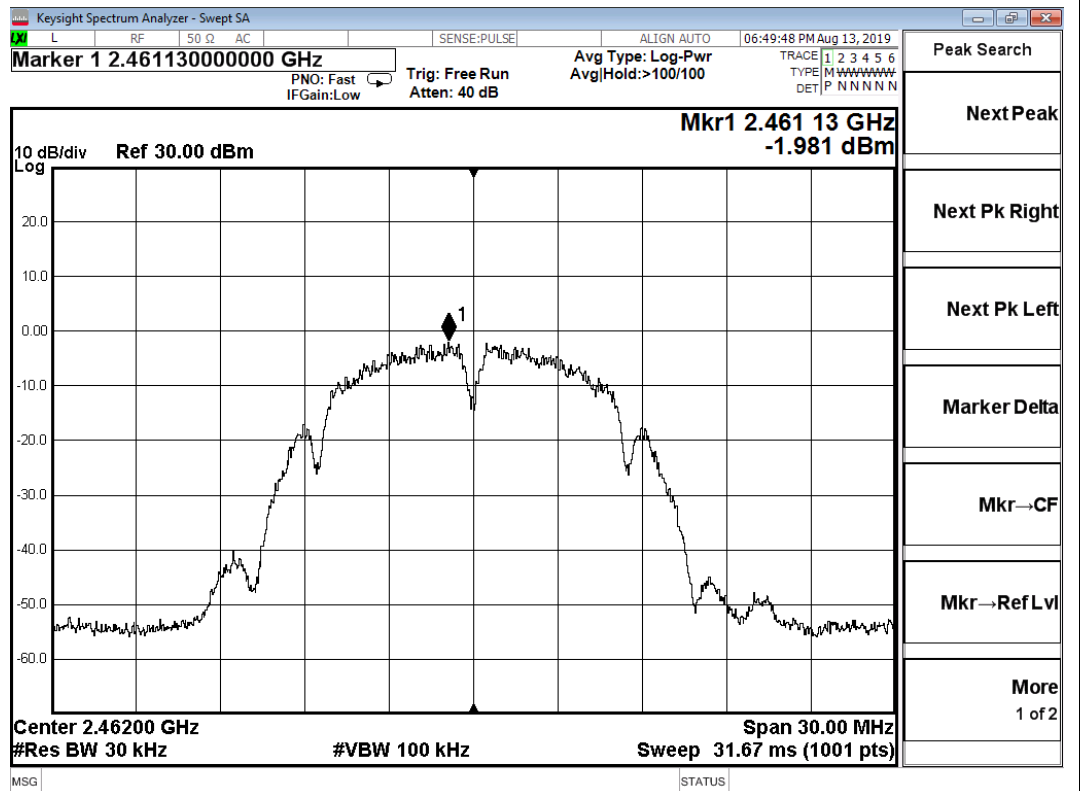
Mode	Channel	Meas.Level [dBm/30KHz]	Limit [dBm/3KHz]	Verdict
11B	LCH	-1.929	8	PASS
	MCH	-1.613	8	PASS
	HCH	-1.981	8	PASS
11G	LCH	-2.371	8	PASS
	MCH	-2.443	8	PASS
	HCH	-2.621	8	PASS
11N20SISO	LCH	-1.687	8	PASS
	MCH	-1.823	8	PASS
	HCH	-1.942	8	PASS



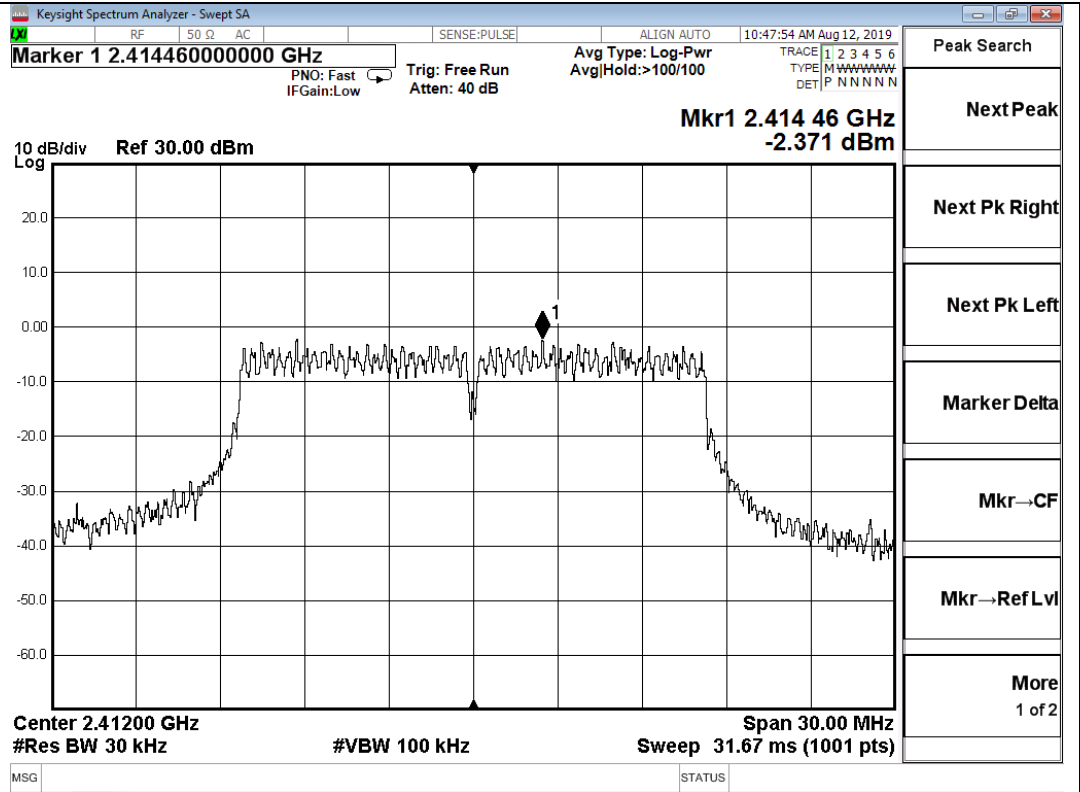
11B/MCH



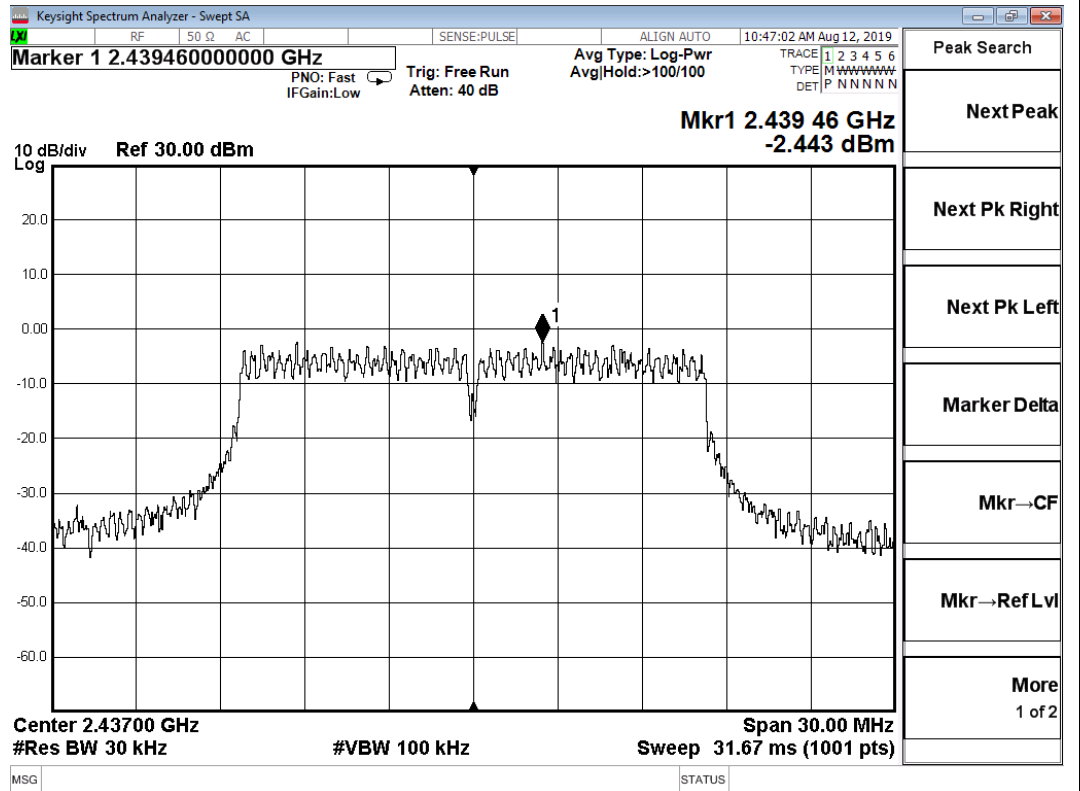
11B/HCH



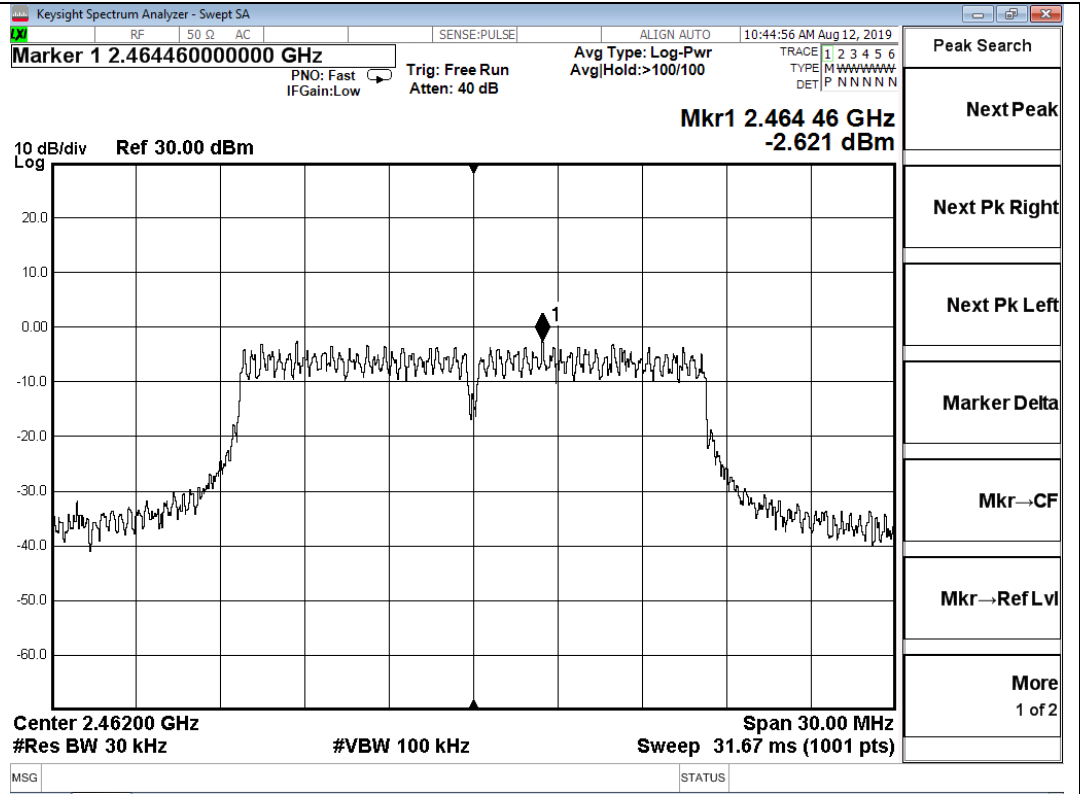
11G/LCH



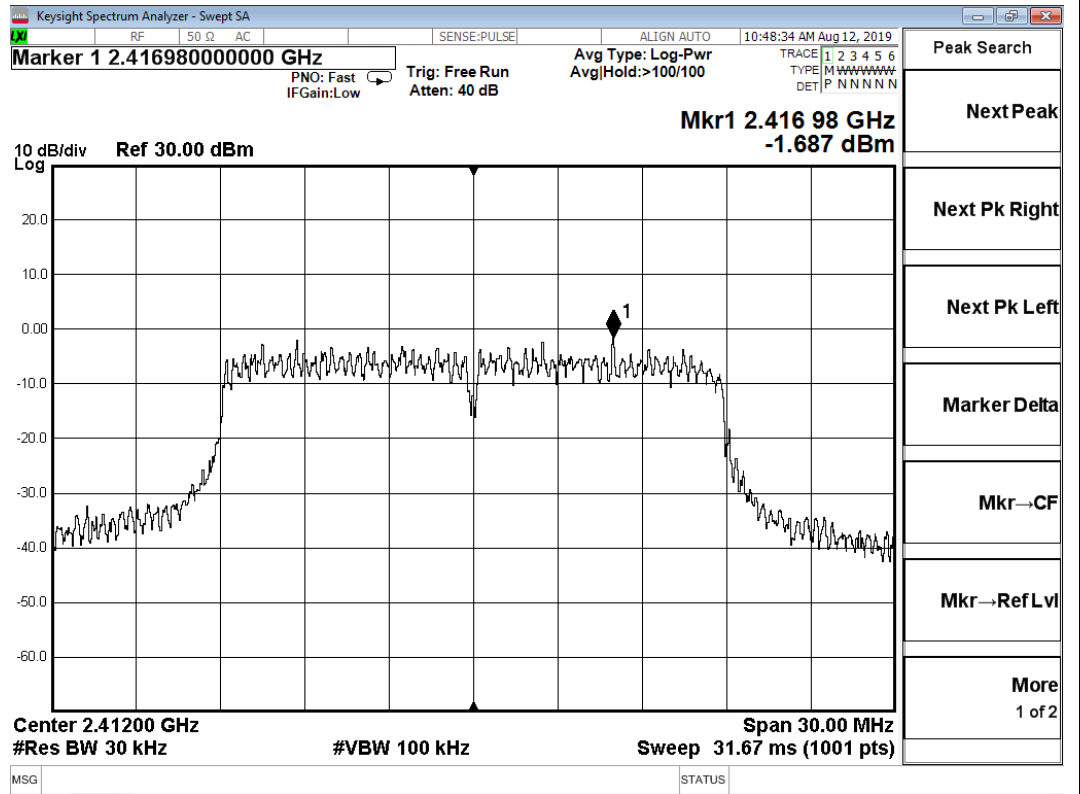
11G/MCH



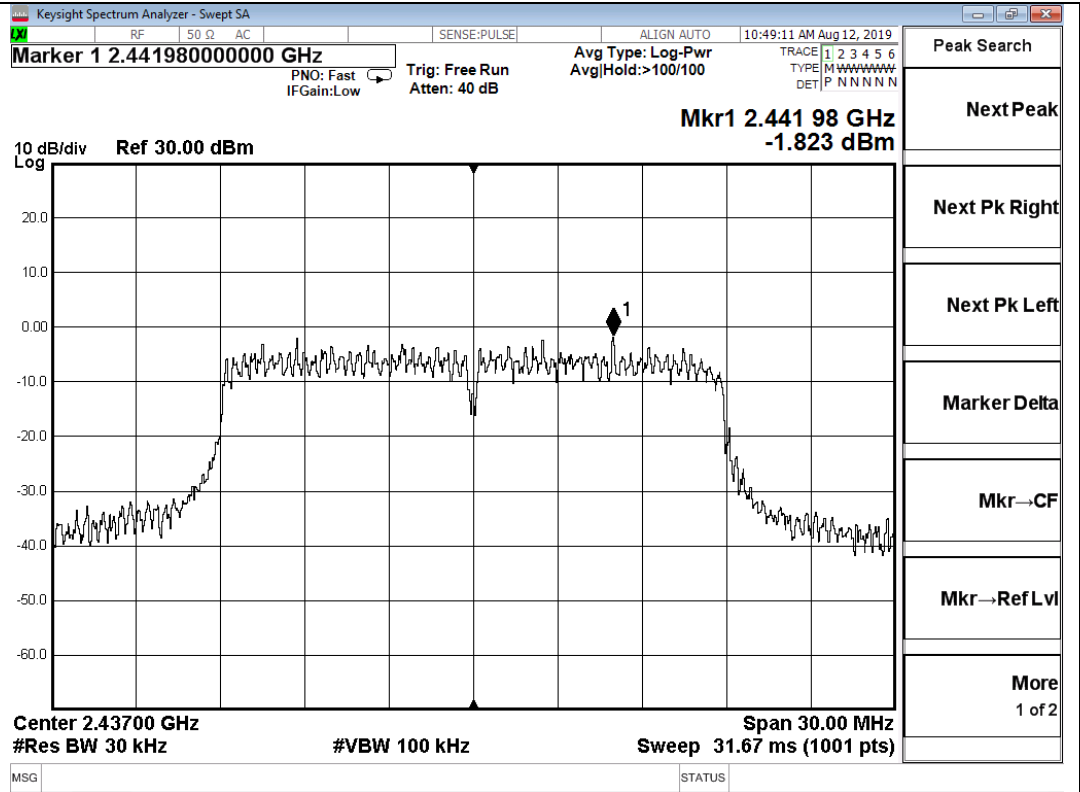
11G/HCH



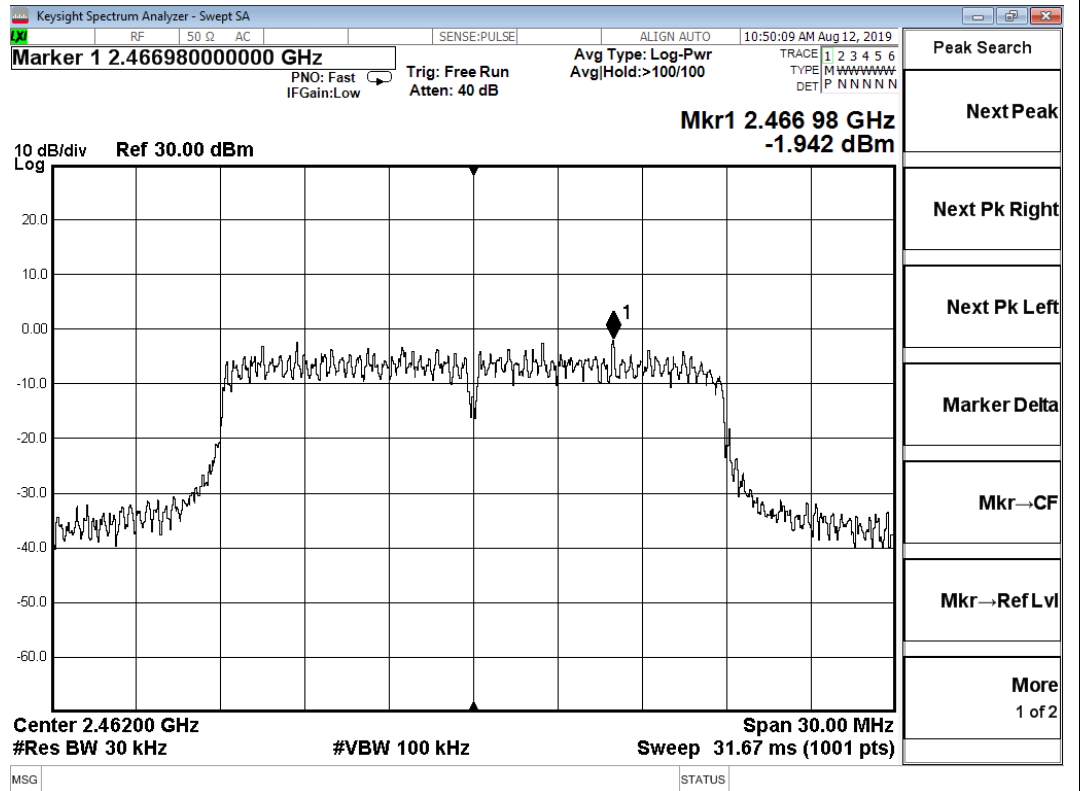
11N20SISO/LCH



11N20SISO/MCH

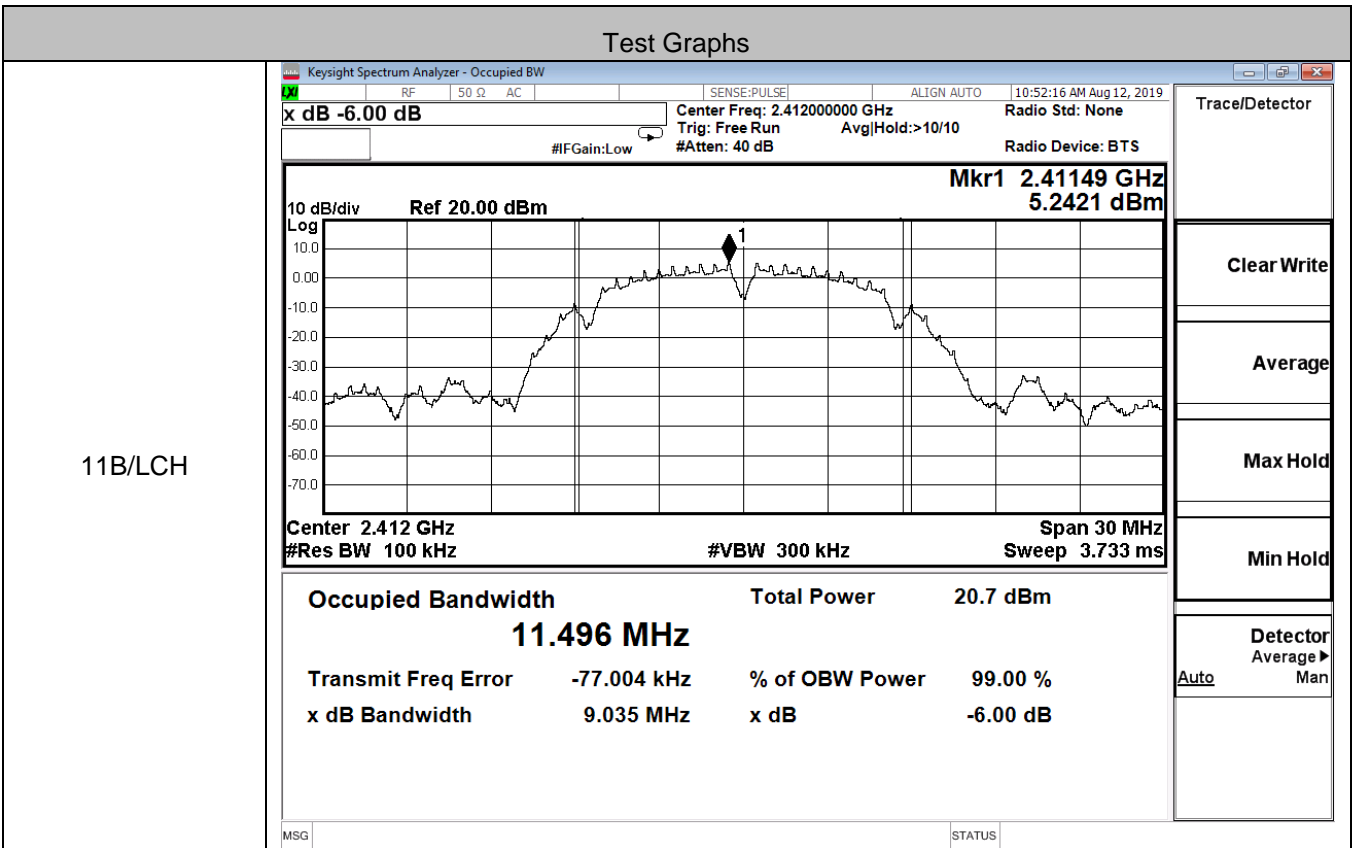


11N20SISO/HCH

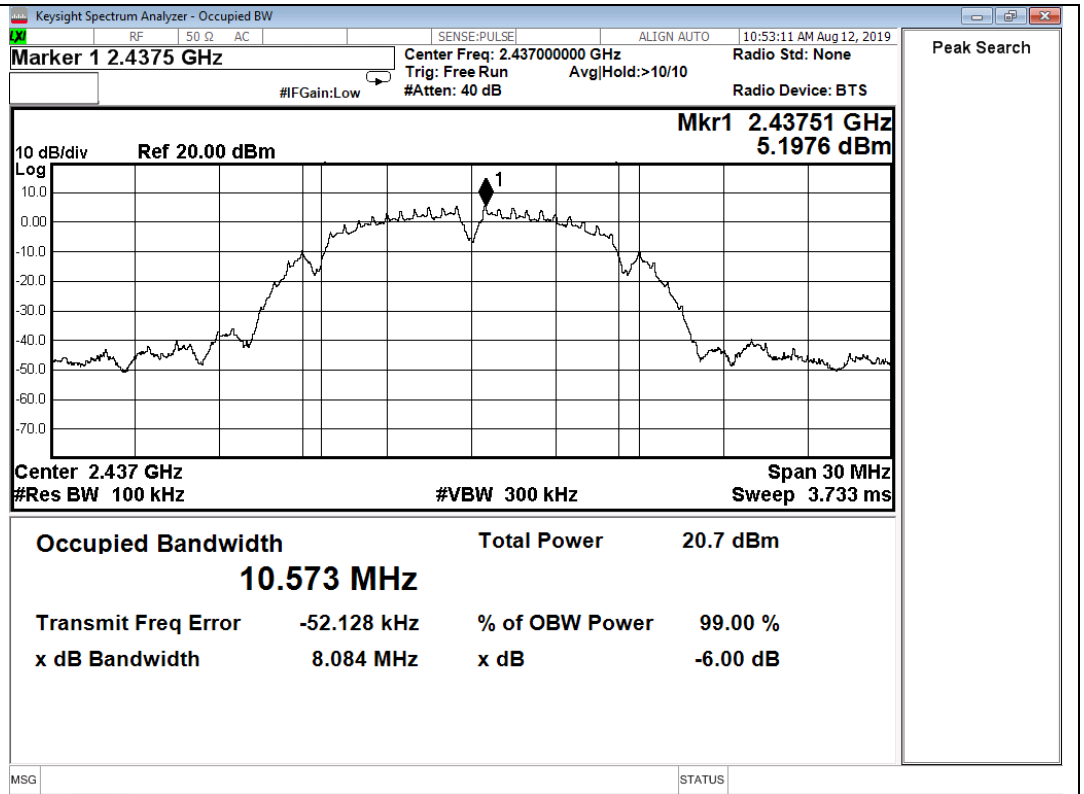


A.4 6dB Bandwidth

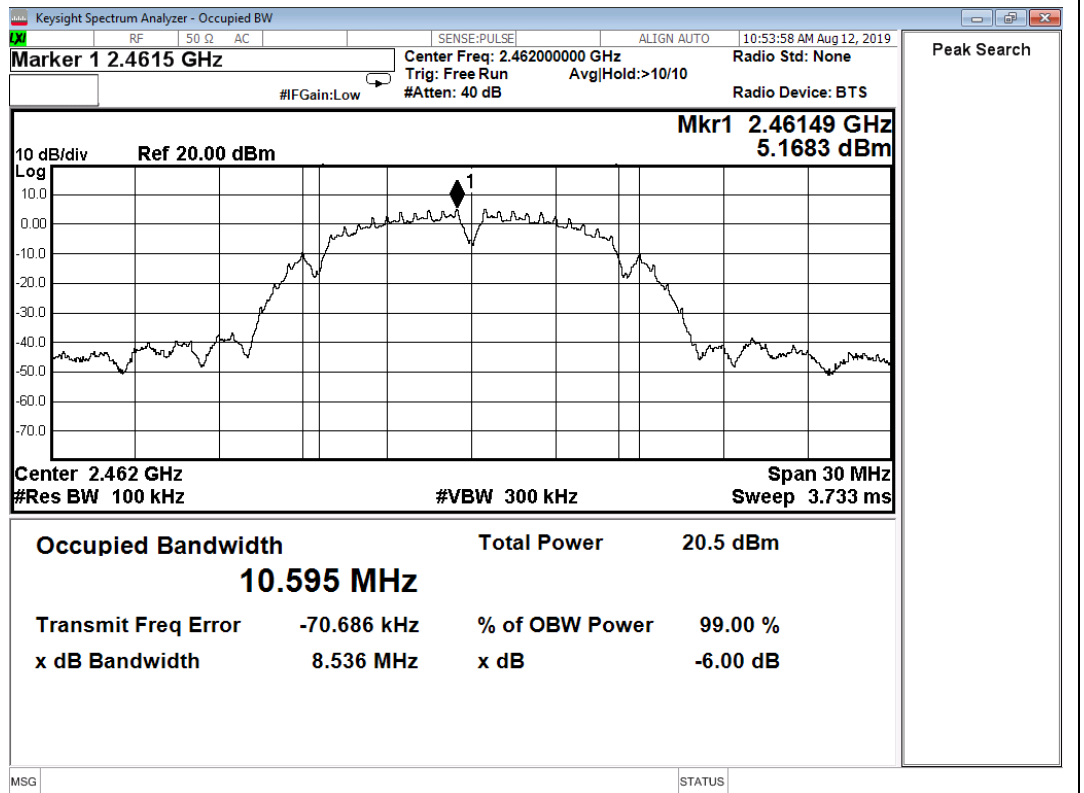
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
11B	LCH	9.035	≥0.5	PASS
	MCH	8.084	≥0.5	PASS
	HCH	8.536	≥0.5	PASS
11G	LCH	16.31	≥0.5	PASS
	MCH	16.32	≥0.5	PASS
	HCH	16.31	≥0.5	PASS
11N20SISO	LCH	16.66	≥0.5	PASS
	MCH	16.65	≥0.5	PASS
	HCH	16.65	≥0.5	PASS



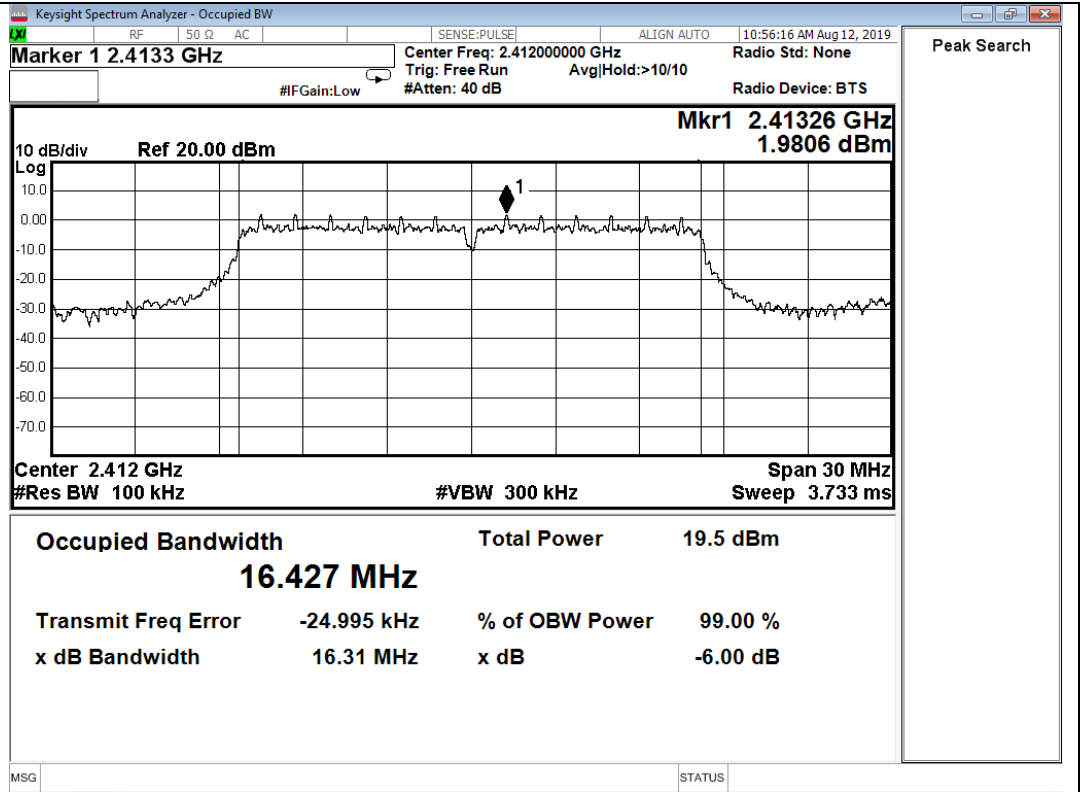
11B/MCH



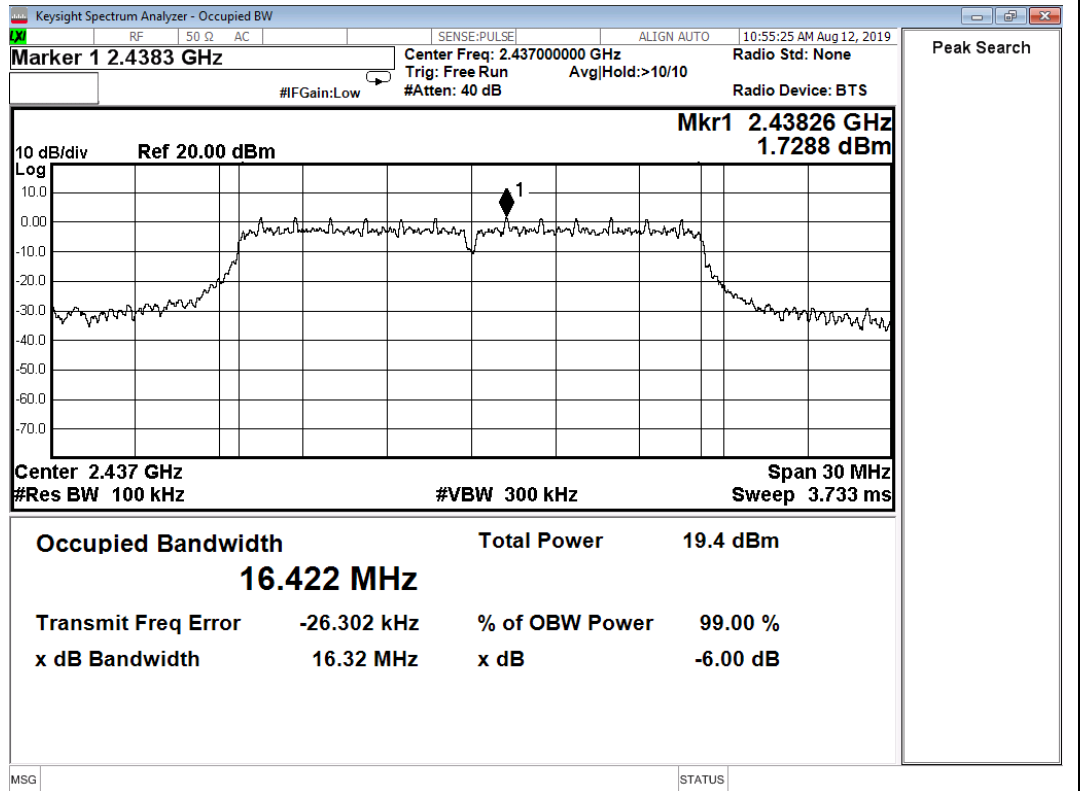
11B/HCH



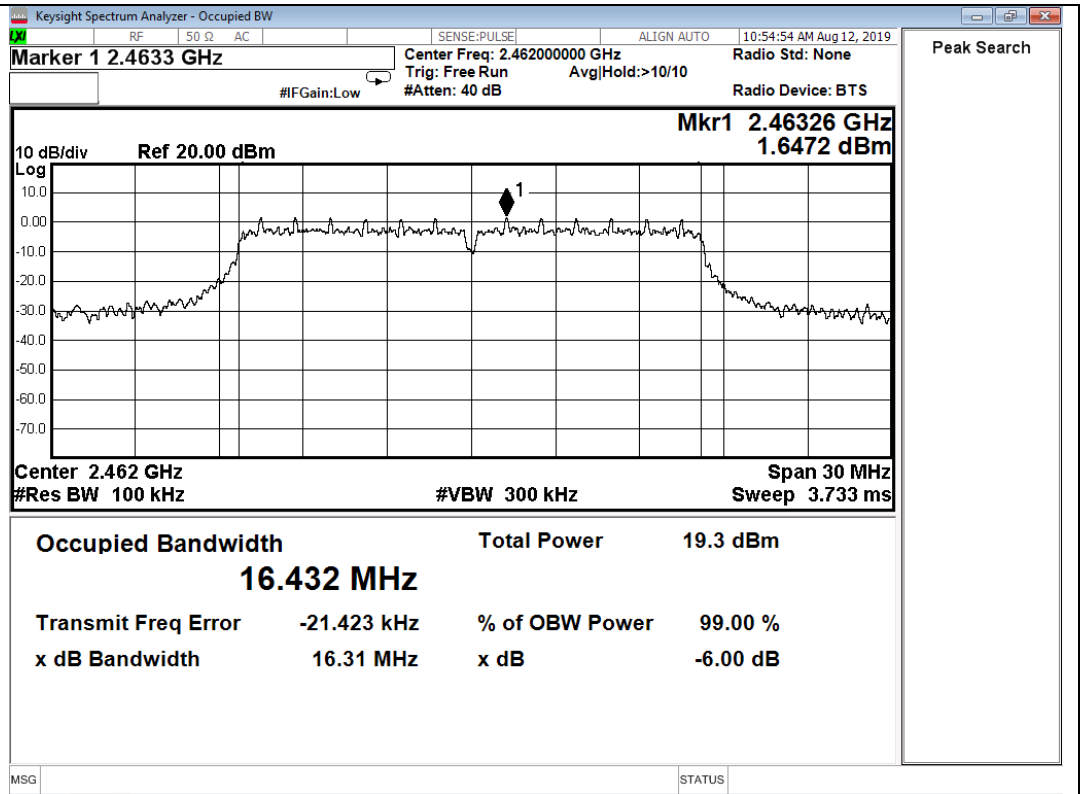
11G/LCH



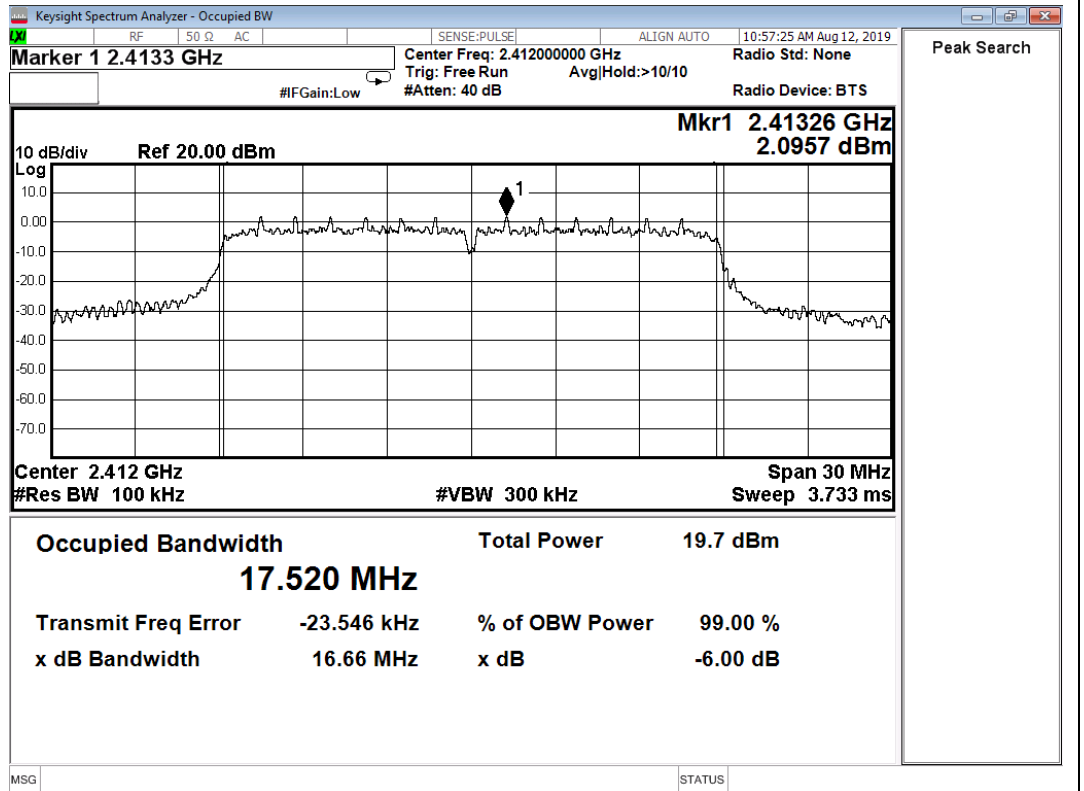
11G/MCH



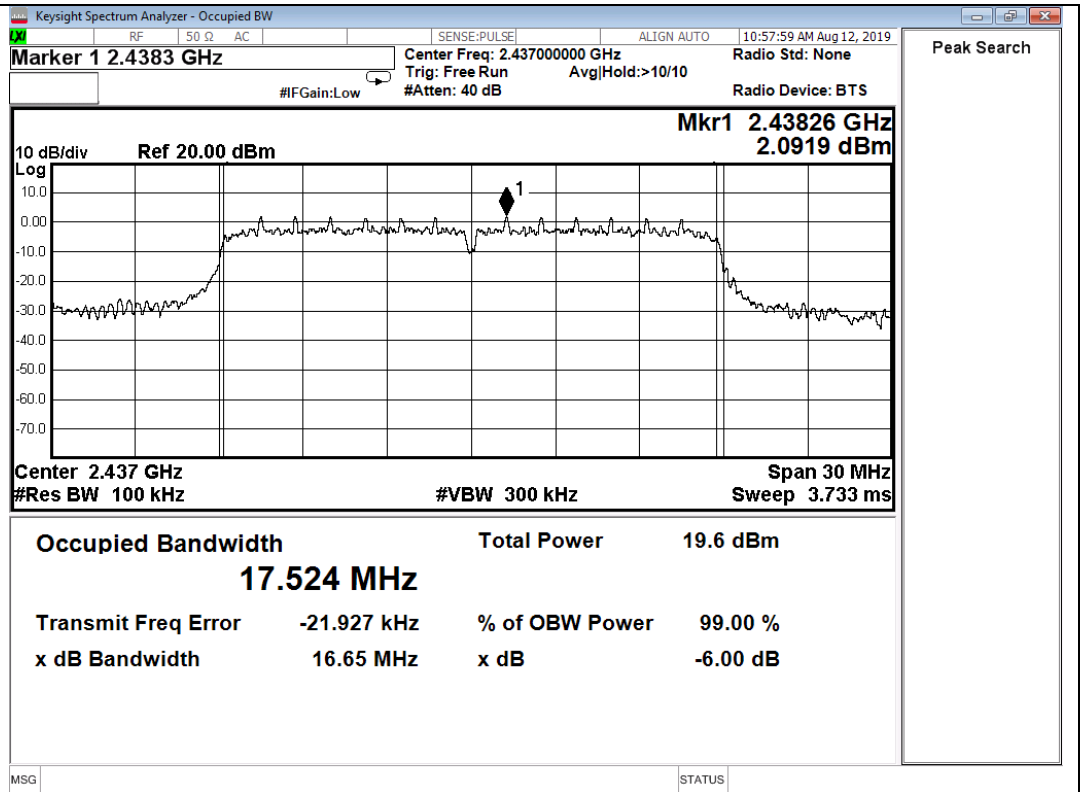
11G/HCH



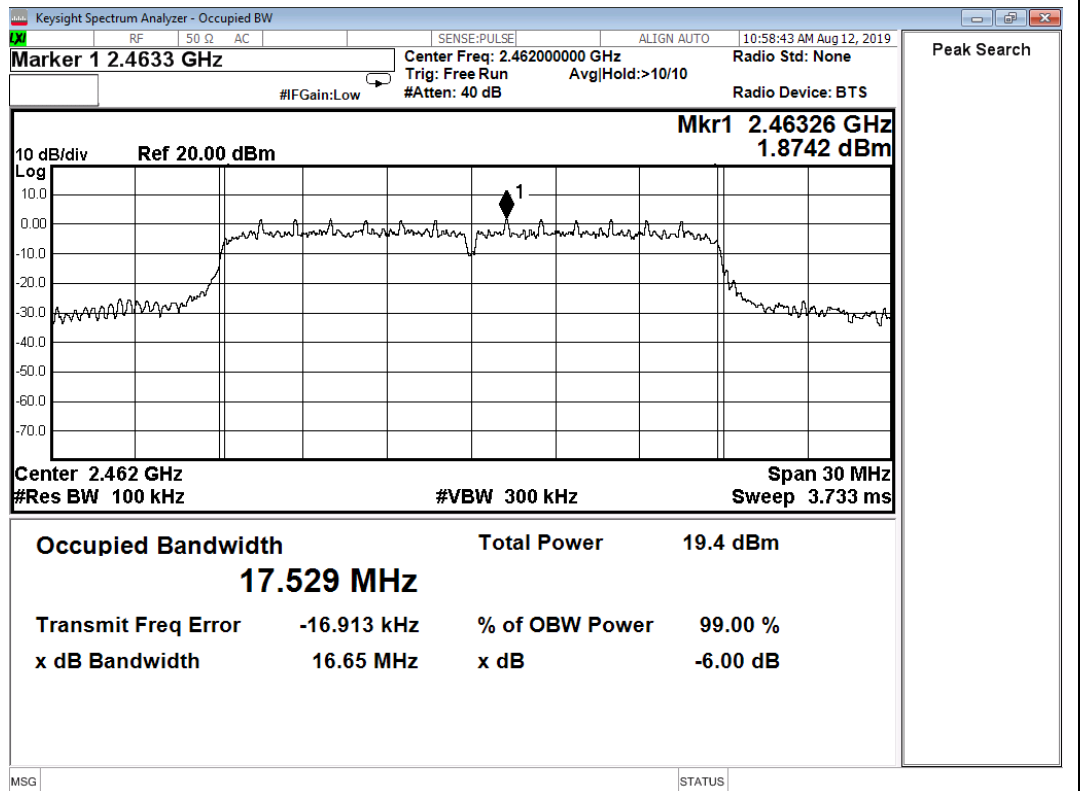
11N20SISO/LCH



11N20SISO/MCH

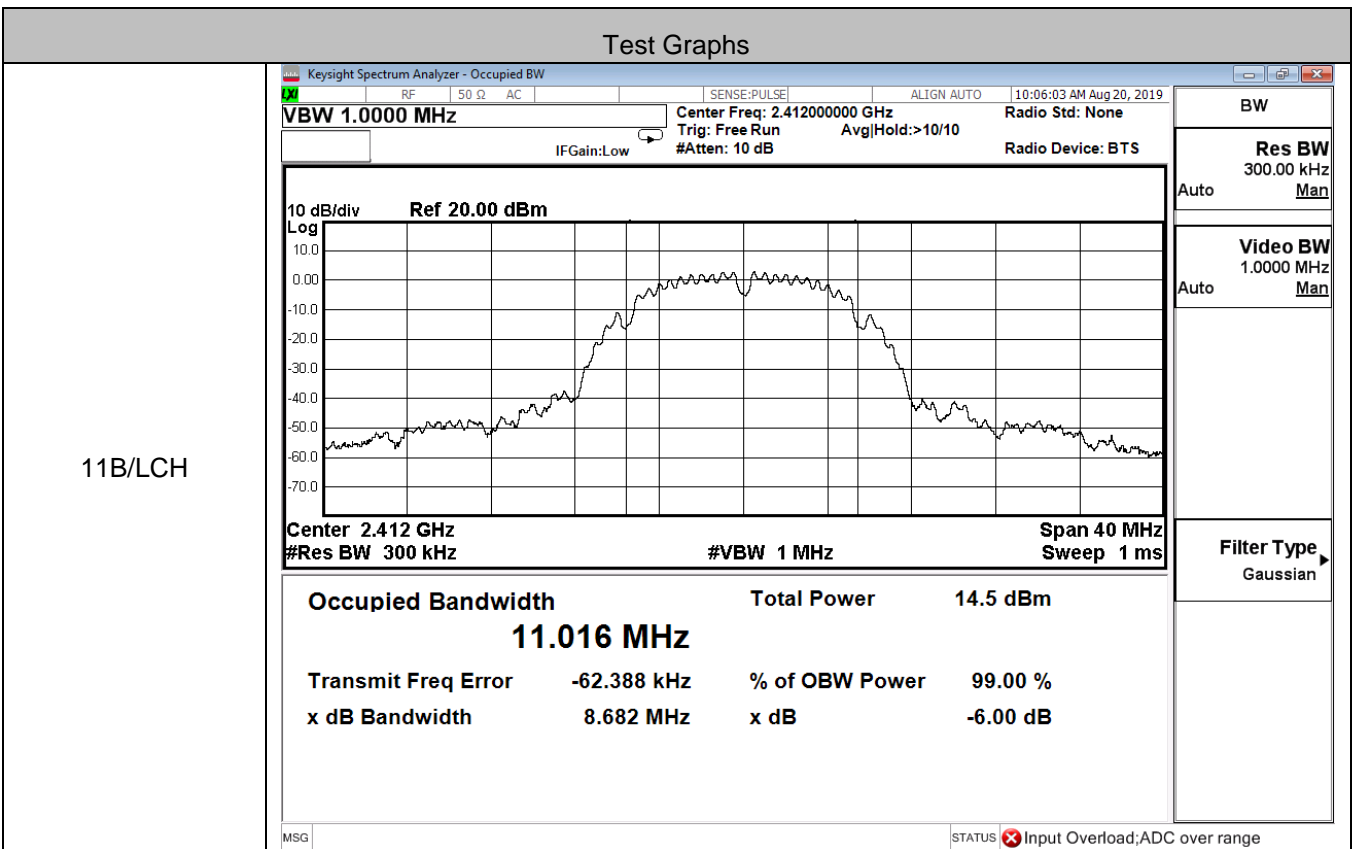


11N20SISO/HCH

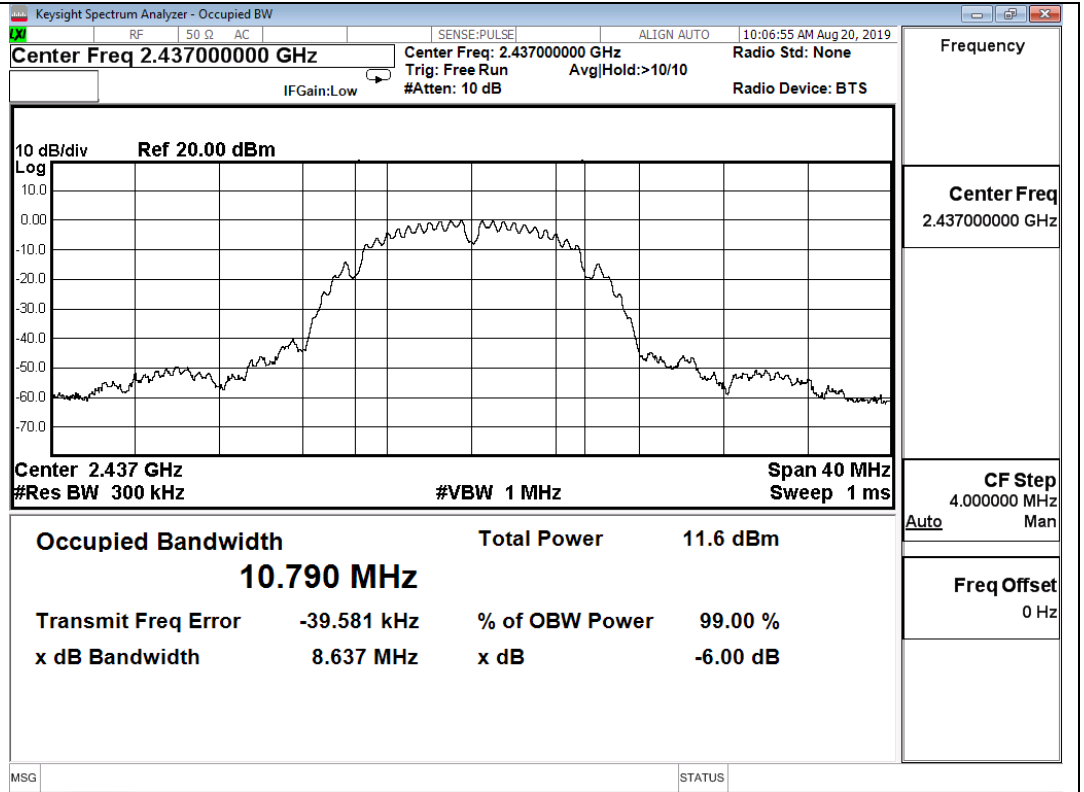


A.5 Occupied Bandwidth

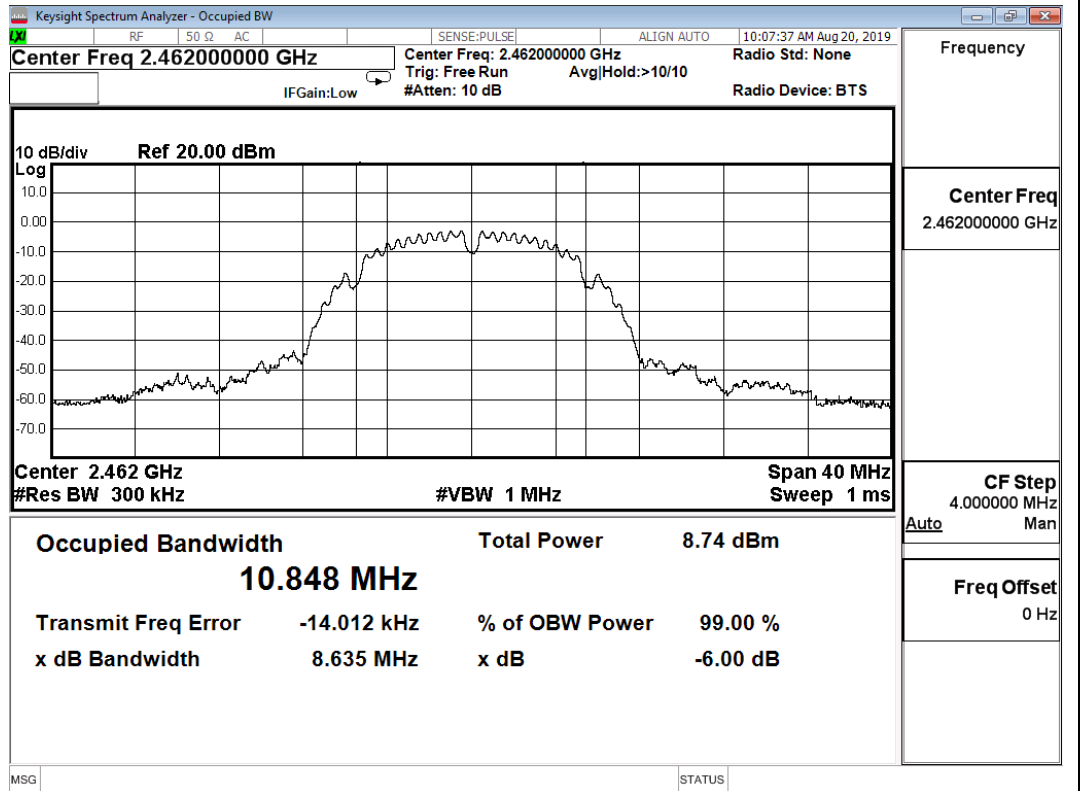
Mode	Channel	Occupied Bandwidth[MHz]	Limit [MHz]	Verdict
11B	LCH	11.016	No Limited	PASS
	MCH	10.790	No Limited	PASS
	HCH	10.848	No Limited	PASS
11G	LCH	17.210	No Limited	PASS
	MCH	17.023	No Limited	PASS
	HCH	17.032	No Limited	PASS
11N20SISO	LCH	18.267	No Limited	PASS
	MCH	18.197	No Limited	PASS
	HCH	18.208	No Limited	PASS



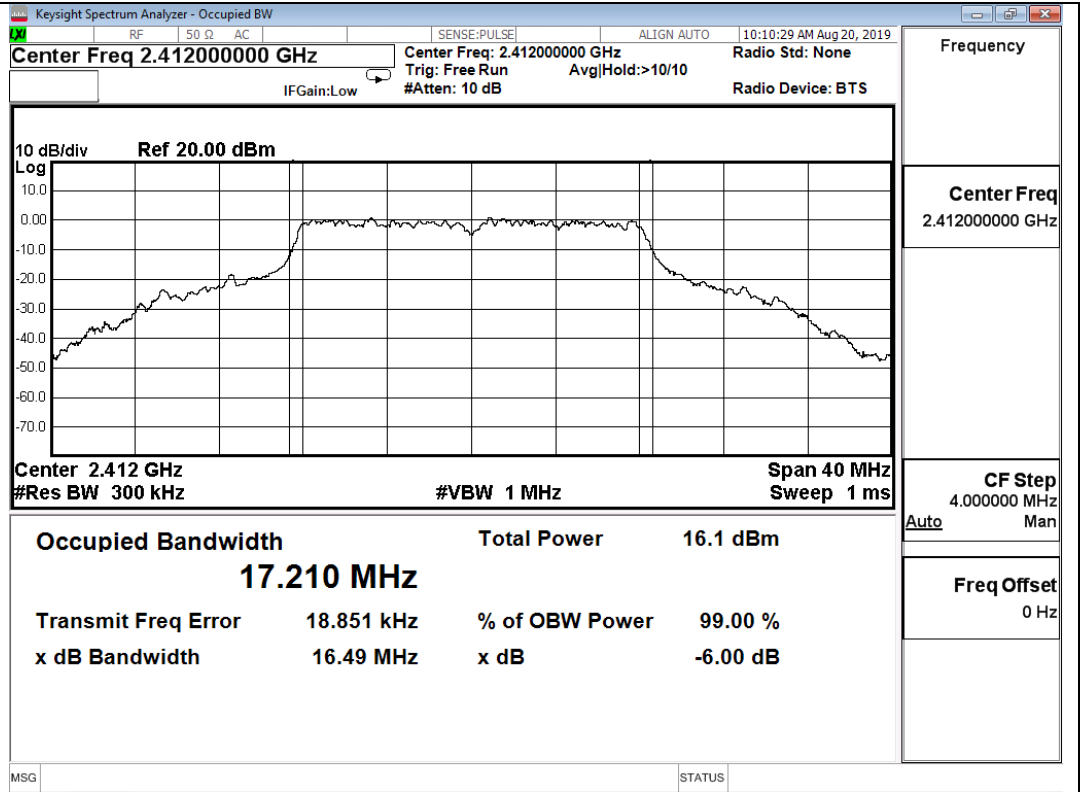
11B/MCH



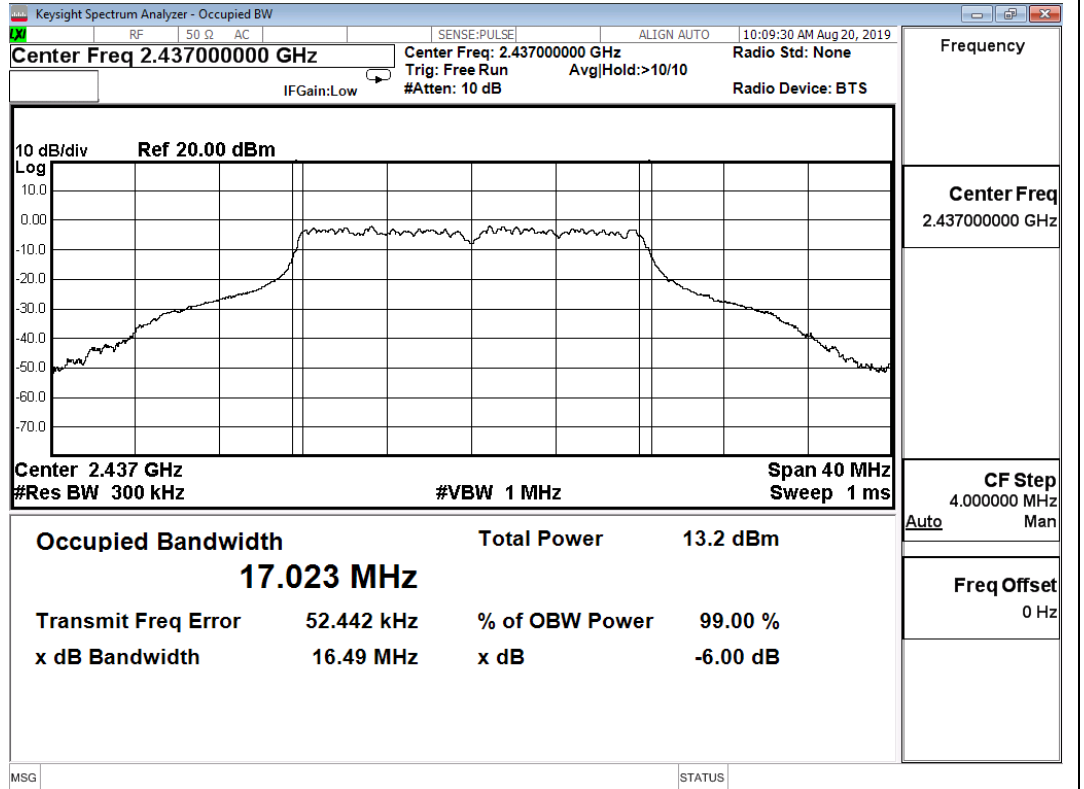
11B/HCH



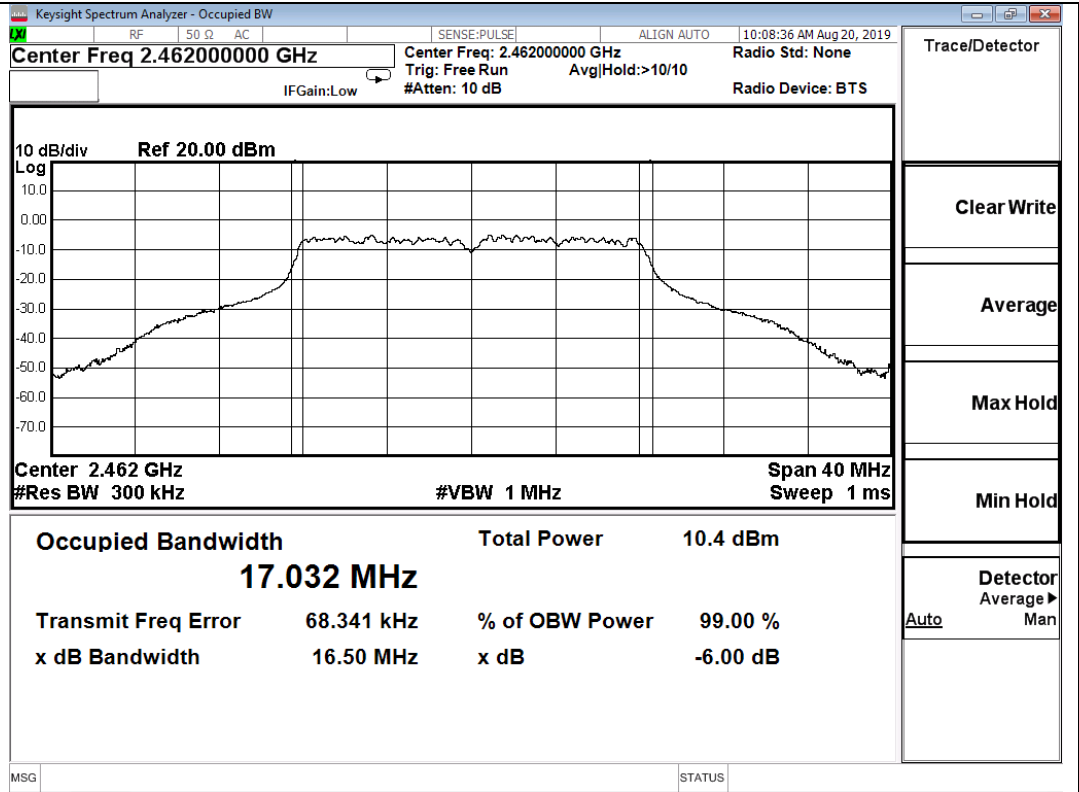
11G/LCH



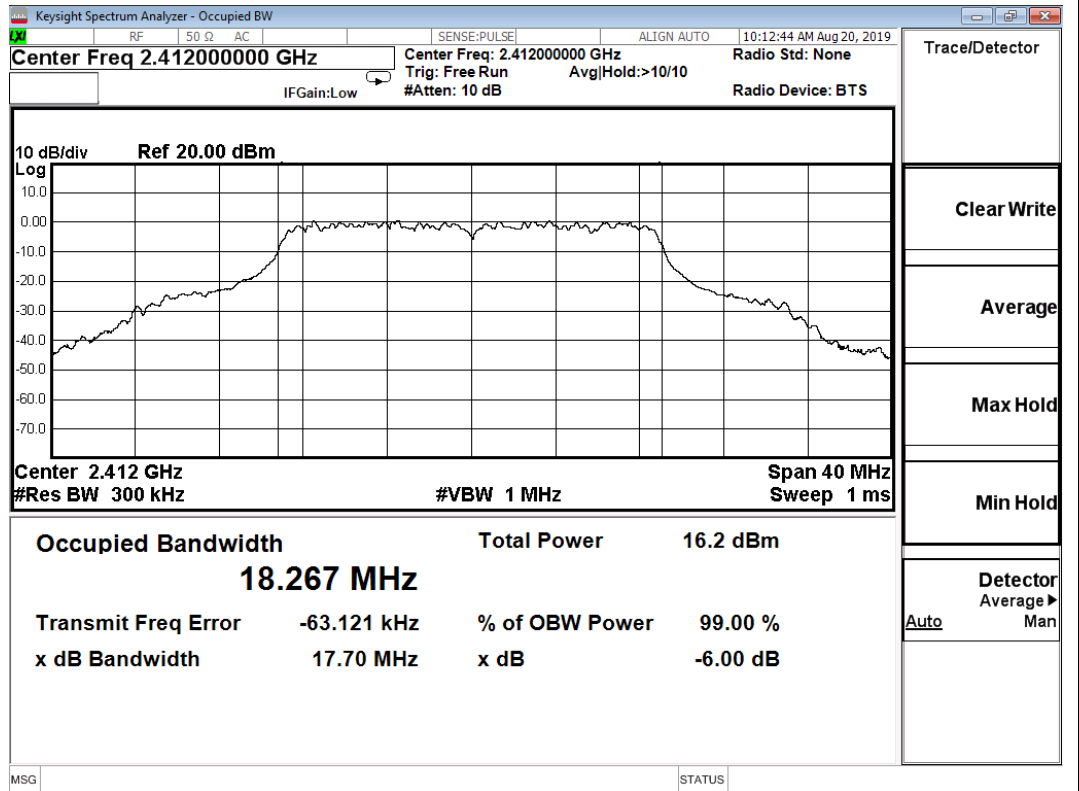
11G/MCH



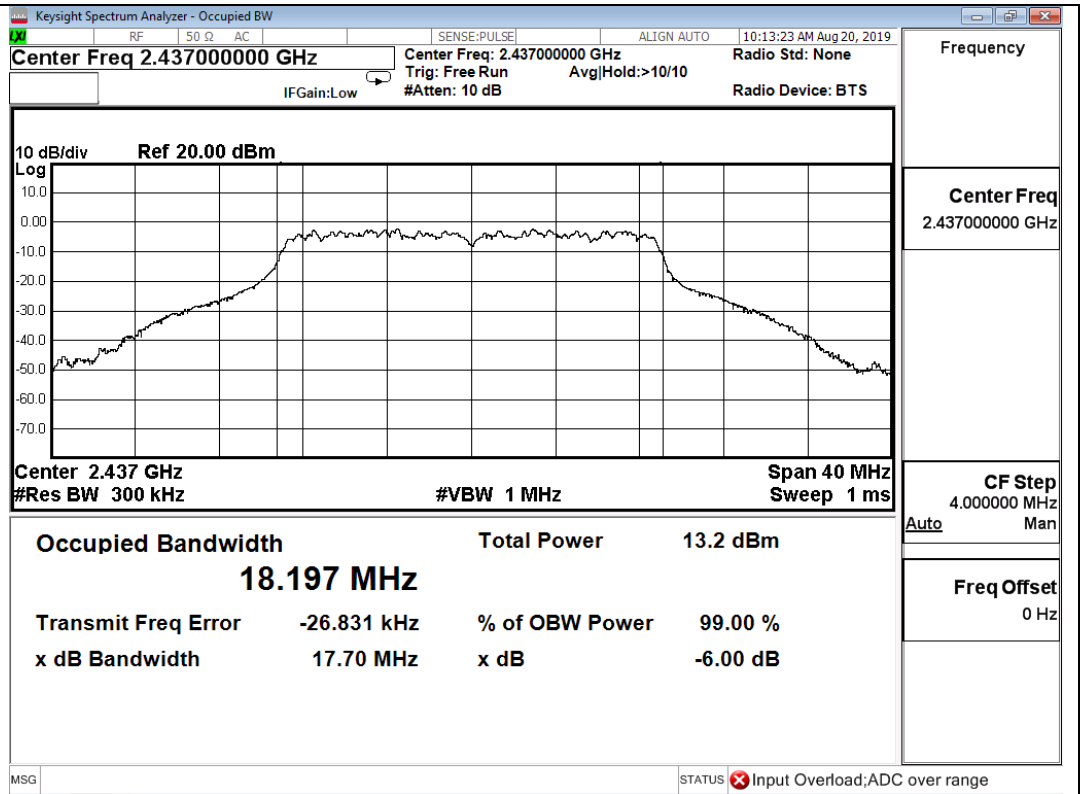
11G/HCH



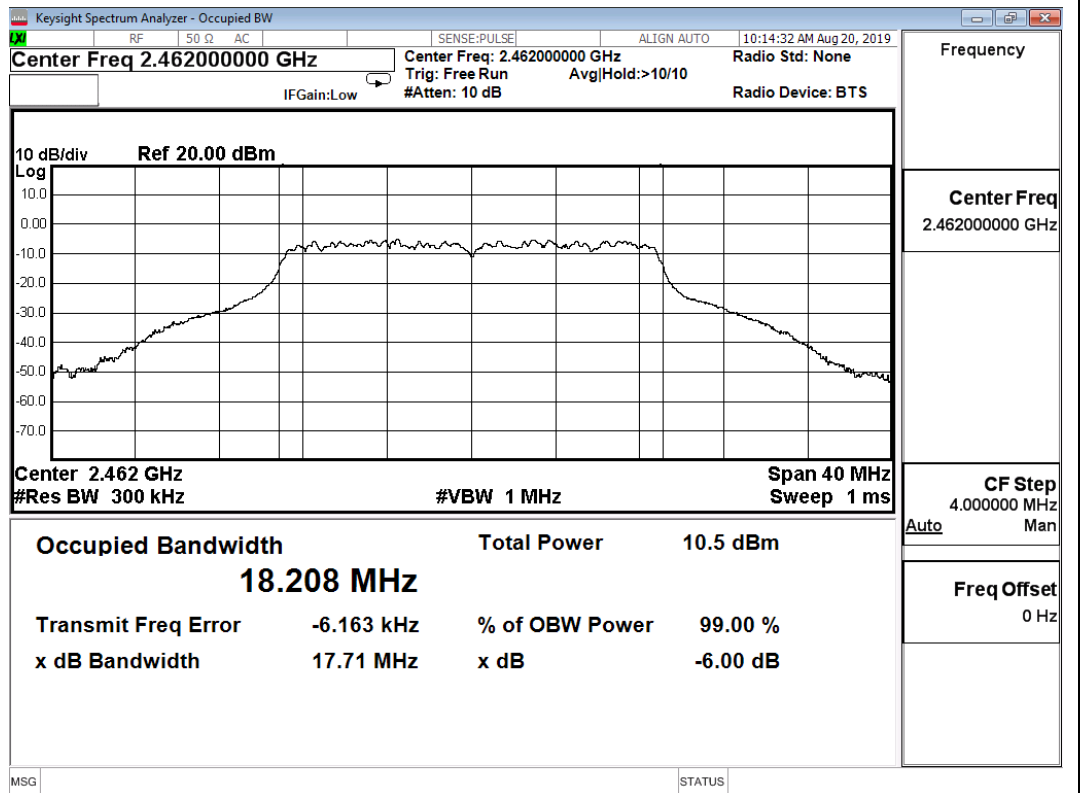
11N20SISO/LCH



11N20SISO/MCH



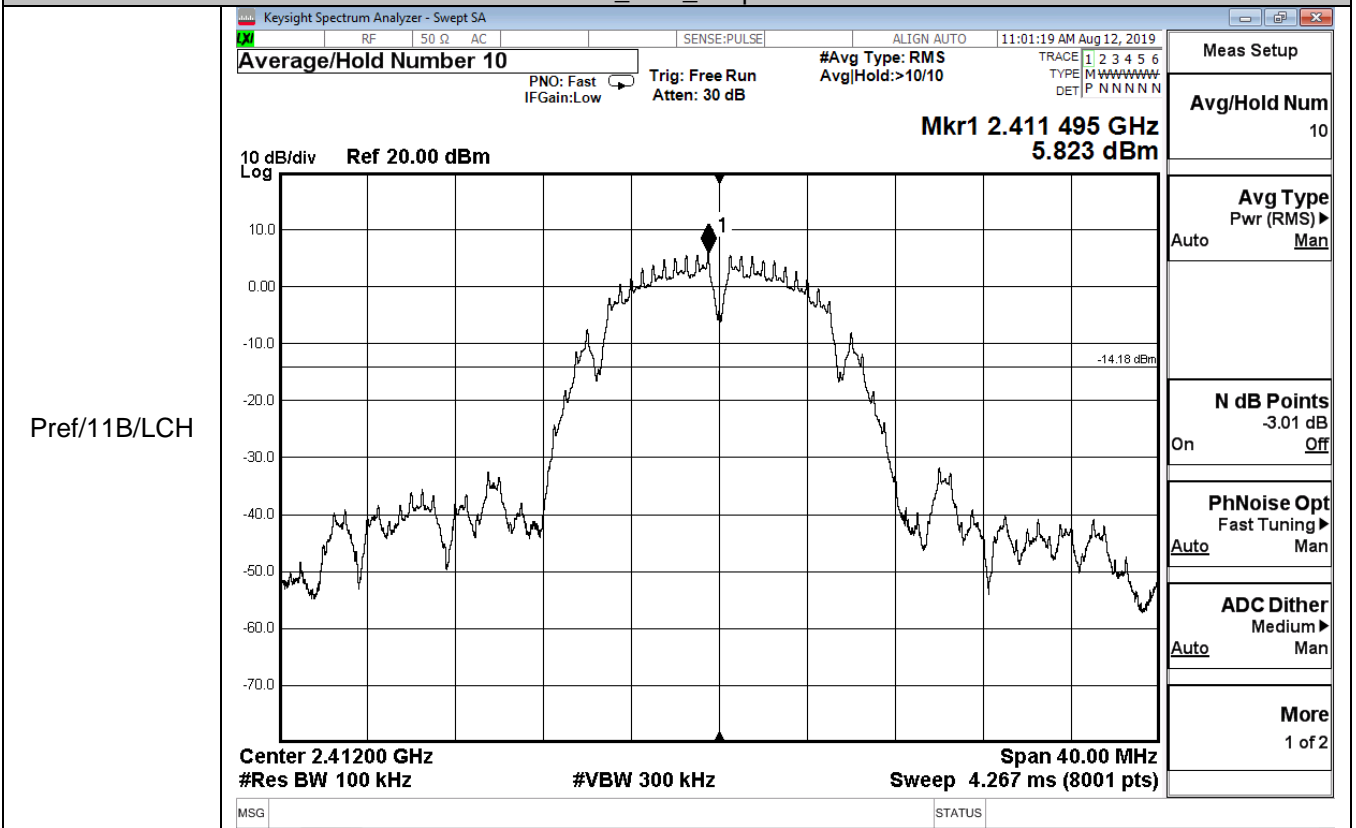
11N20SISO/HCH



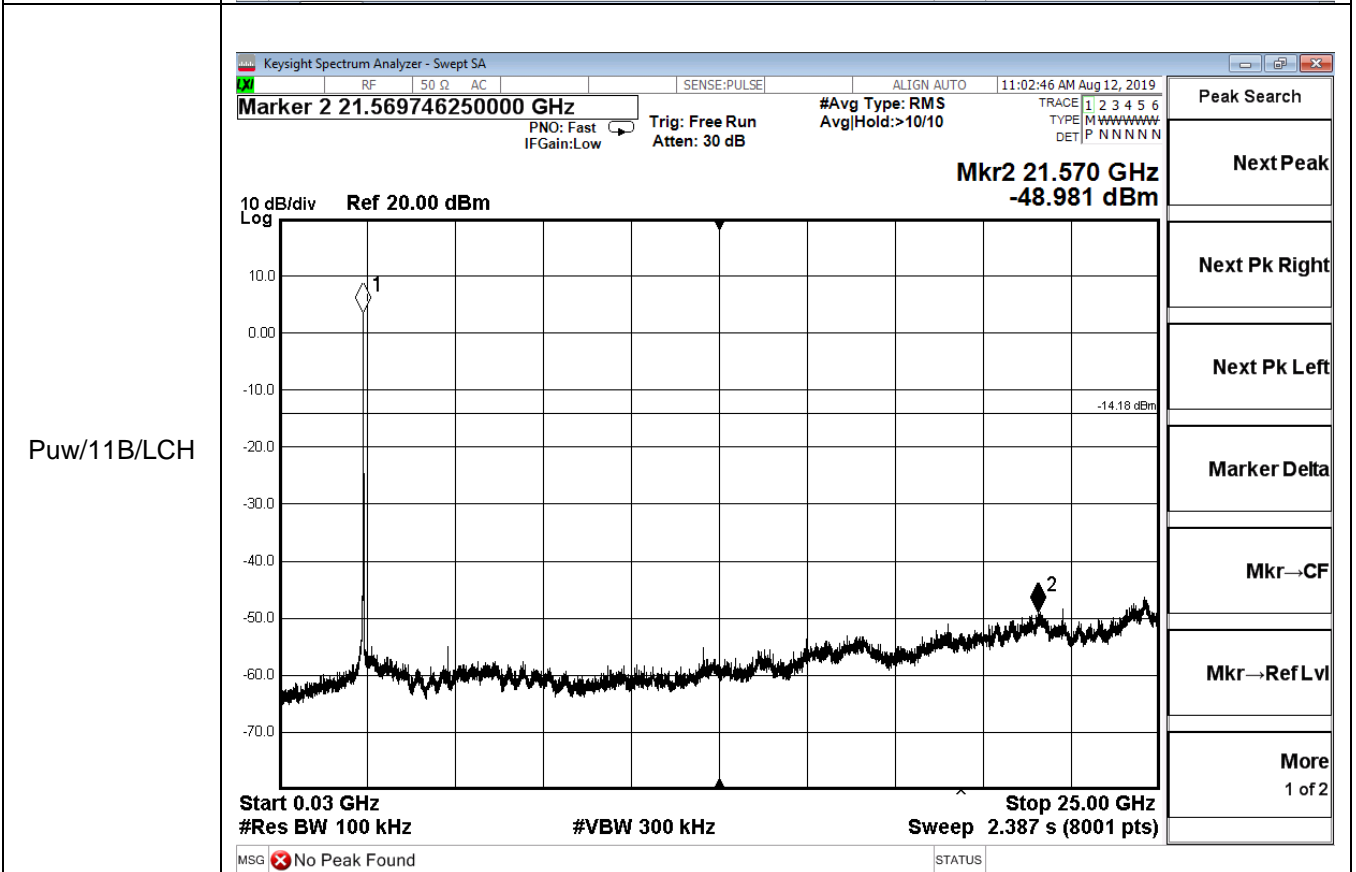
A.6 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
11B	LCH	5.823	-48.981	-14.18	PASS
	MCH	5.778	-46.101	-14.22	PASS
	HCH	5.788	-49.040	-14.21	PASS
11G	LCH	2.987	-45.847	-17.01	PASS
	MCH	2.782	-45.604	-17.22	PASS
	HCH	2.565	-46.245	-17.44	PASS
11N20 SISO	LCH	3.037	-48.033	-16.96	PASS
	MCH	2.886	-48.527	-17.11	PASS
	HCH	2.781	-48.470	-17.22	PASS

11B_LCH_Graphs



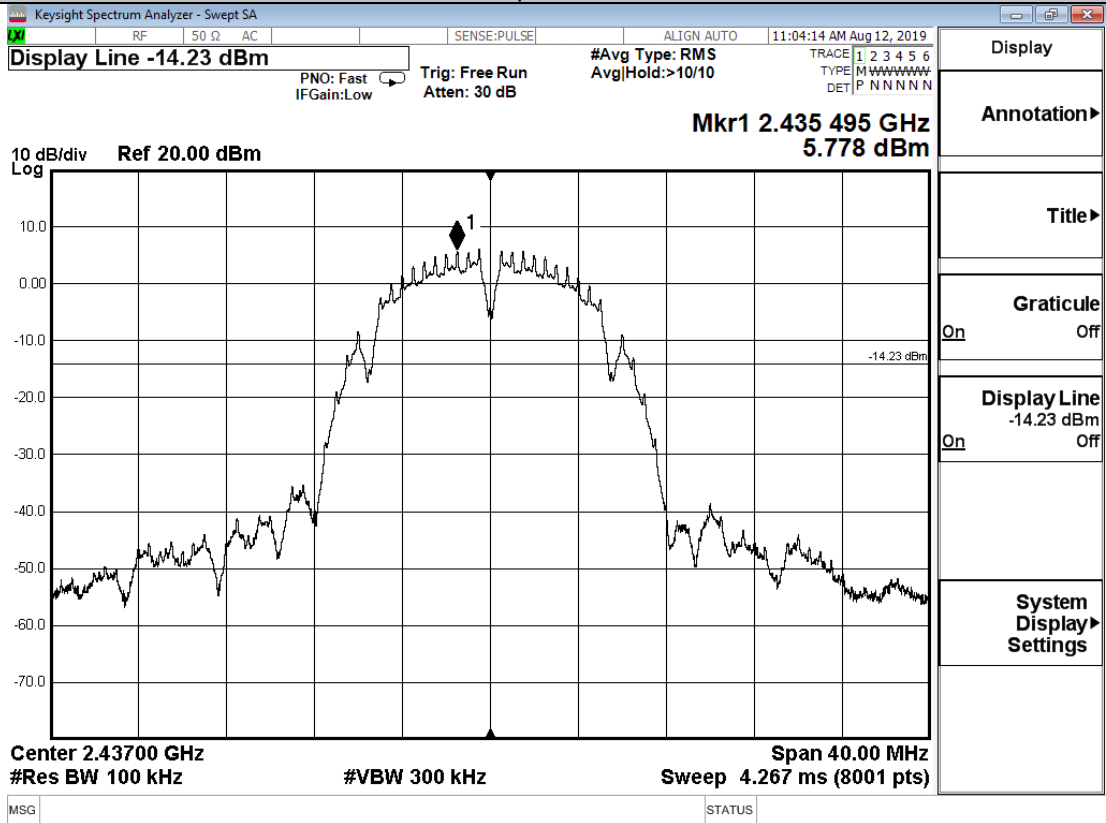
Pref/11B/LCH



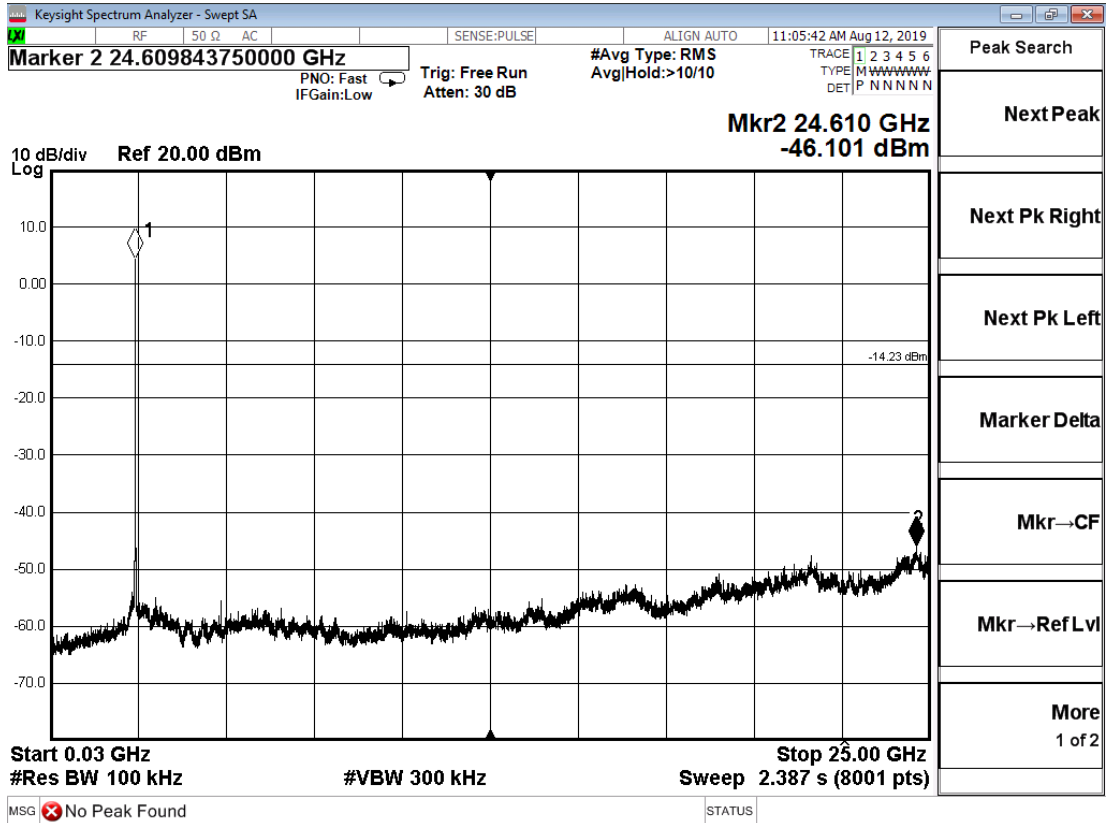
Puw/11B/LCH

11B_MCH_Graphs

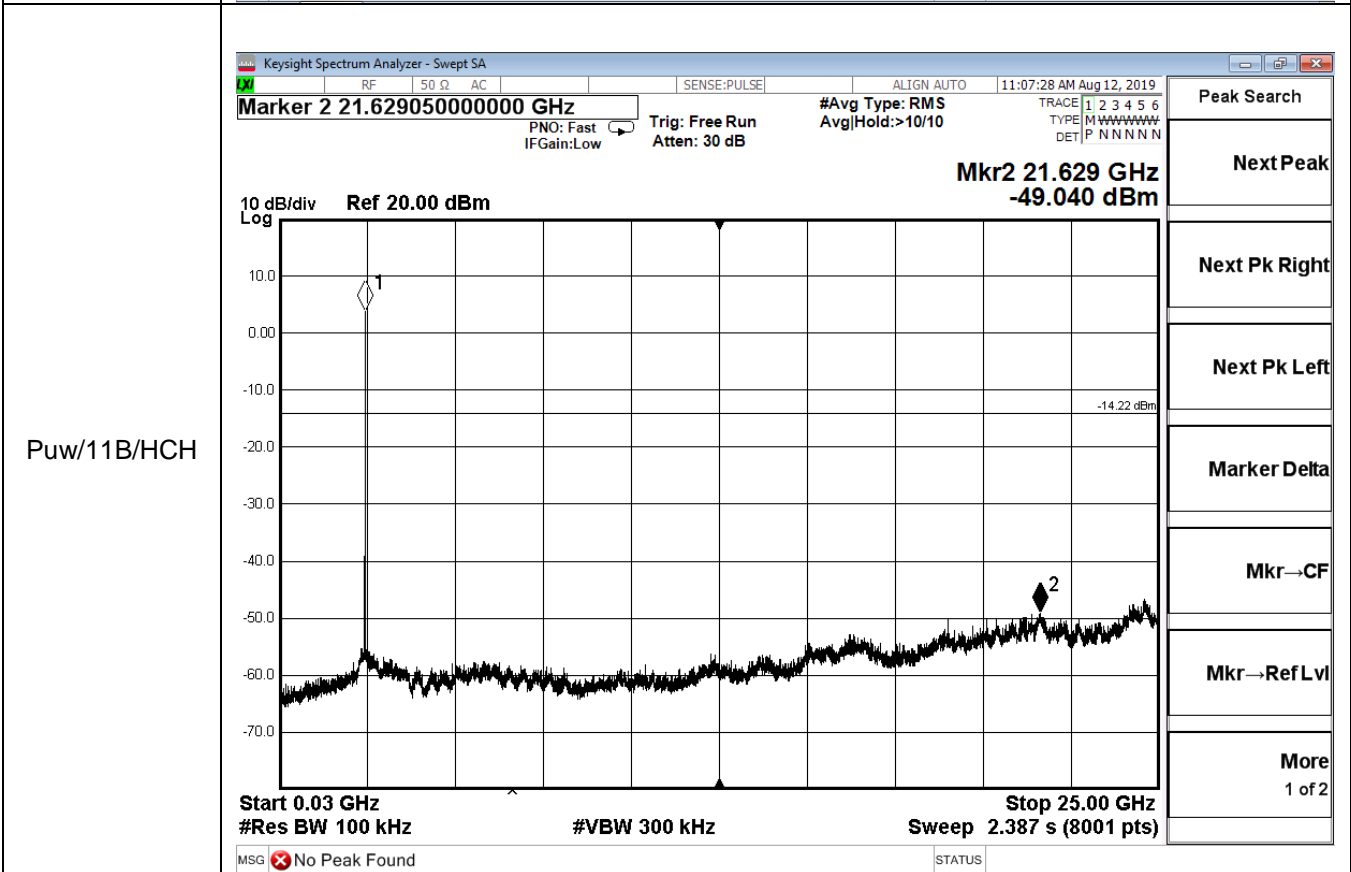
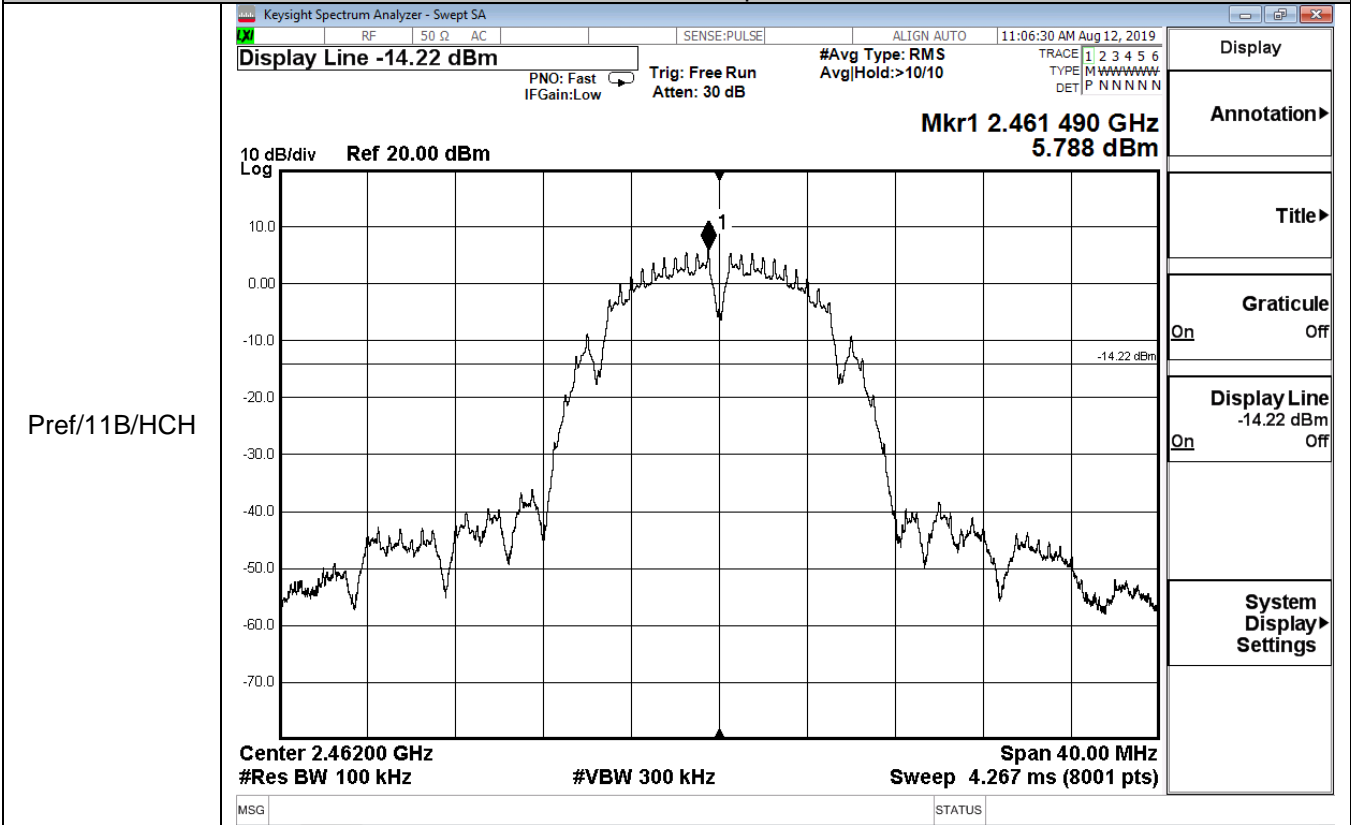
Pref/11B/MCH



Puw/11B/MCH

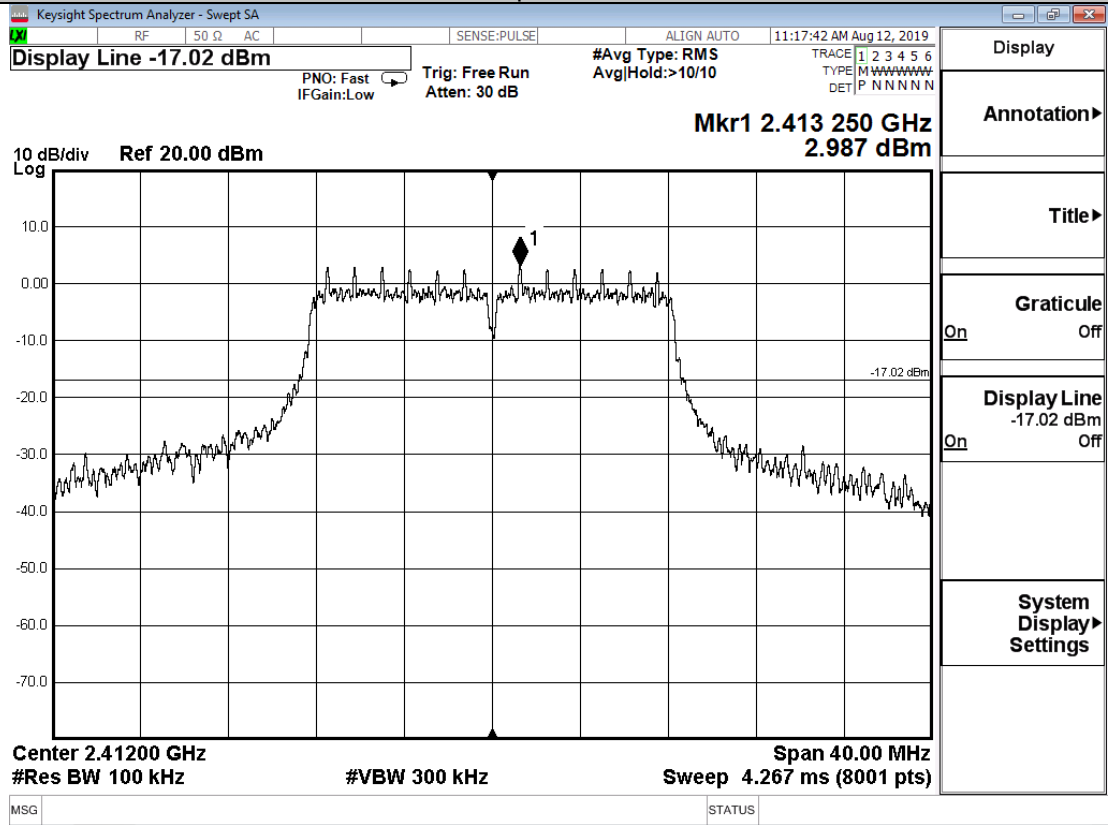


11B_HCH_Graphs

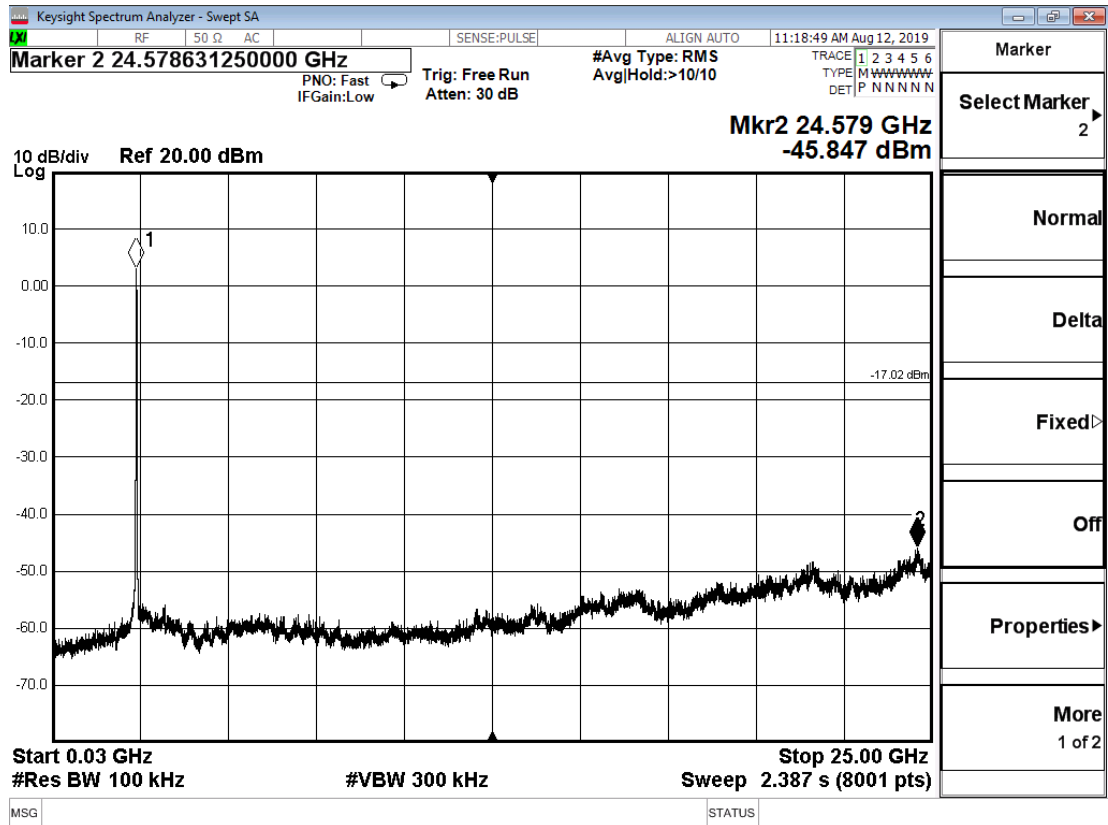


11G_LCH_Graphs

Pref/11G/LCH

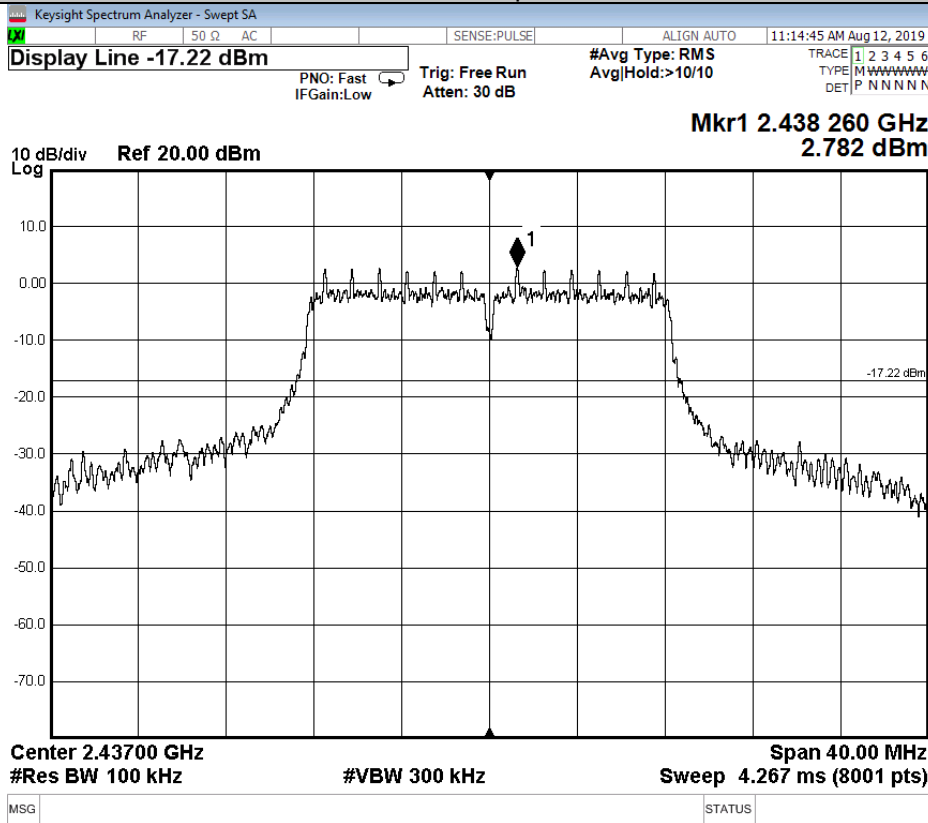


Puw/11G/LCH



11G_MCH_Graphs

Pref/11G/MCH



Display

Annotation ▶

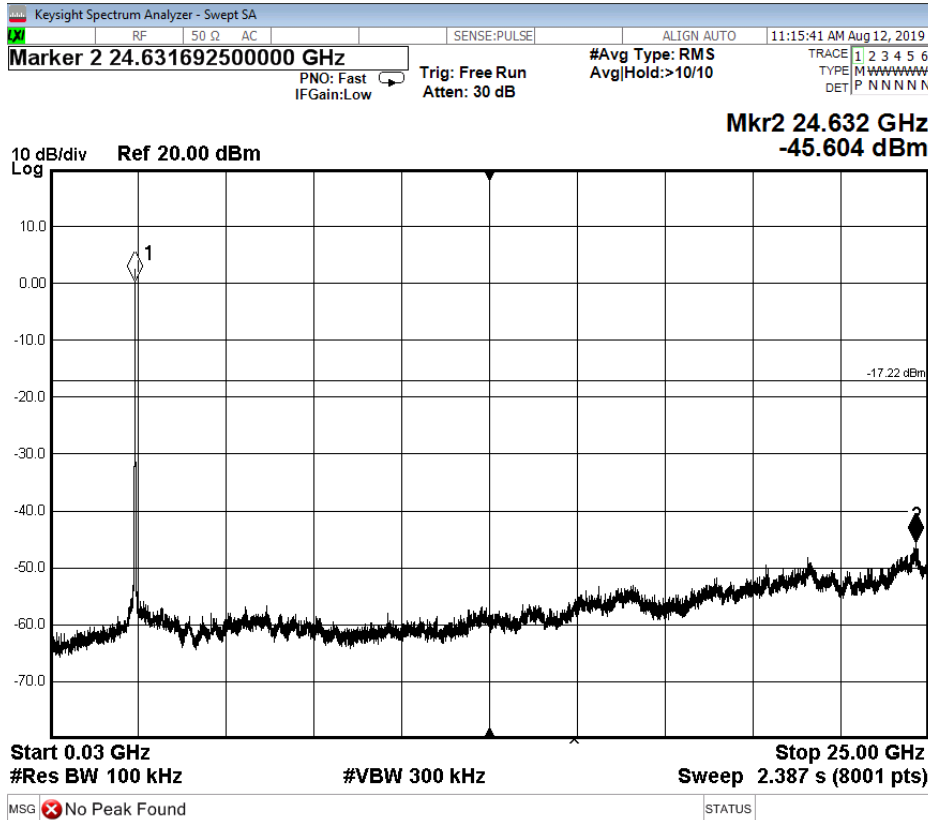
Title ▶

Graticule On Off

Display Line -17.22 dBm On Off

System Display ▶ Settings

Puw/11G/MCH



Peak Search

Next Peak

Next Pk Right

Next Pk Left

Marker Delta

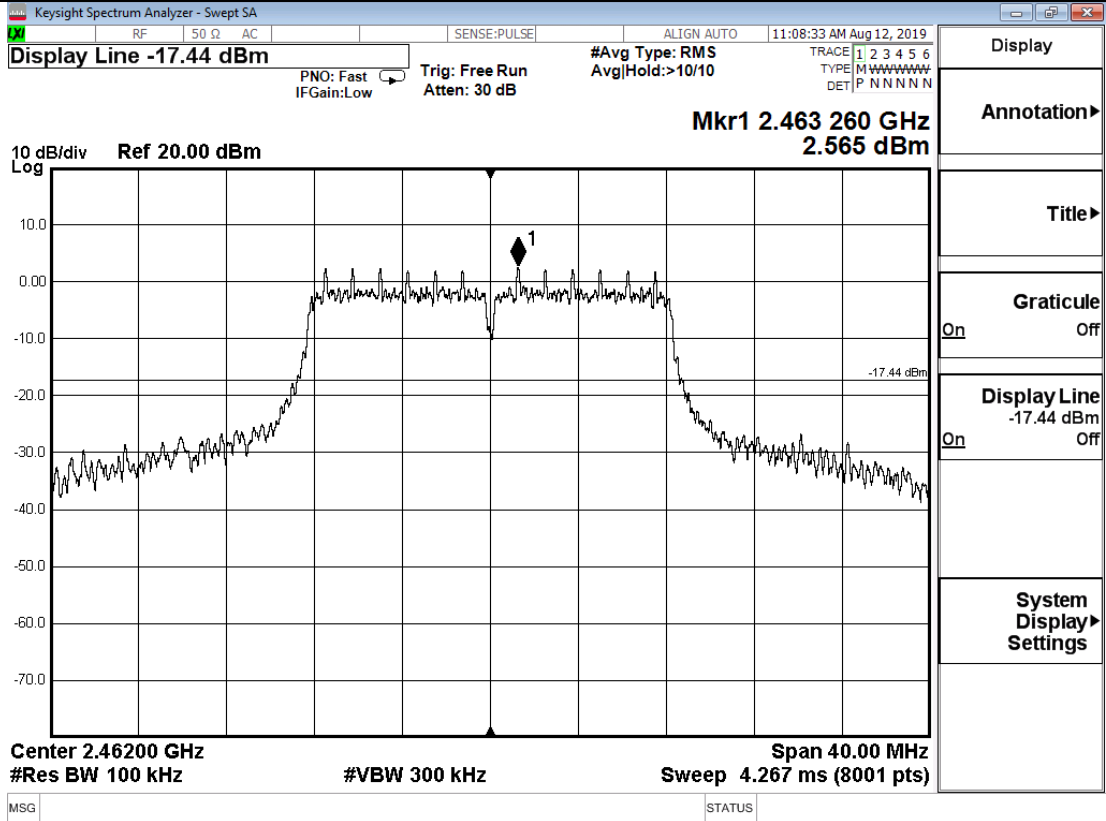
Mkr→CF

Mkr→Ref Lvl

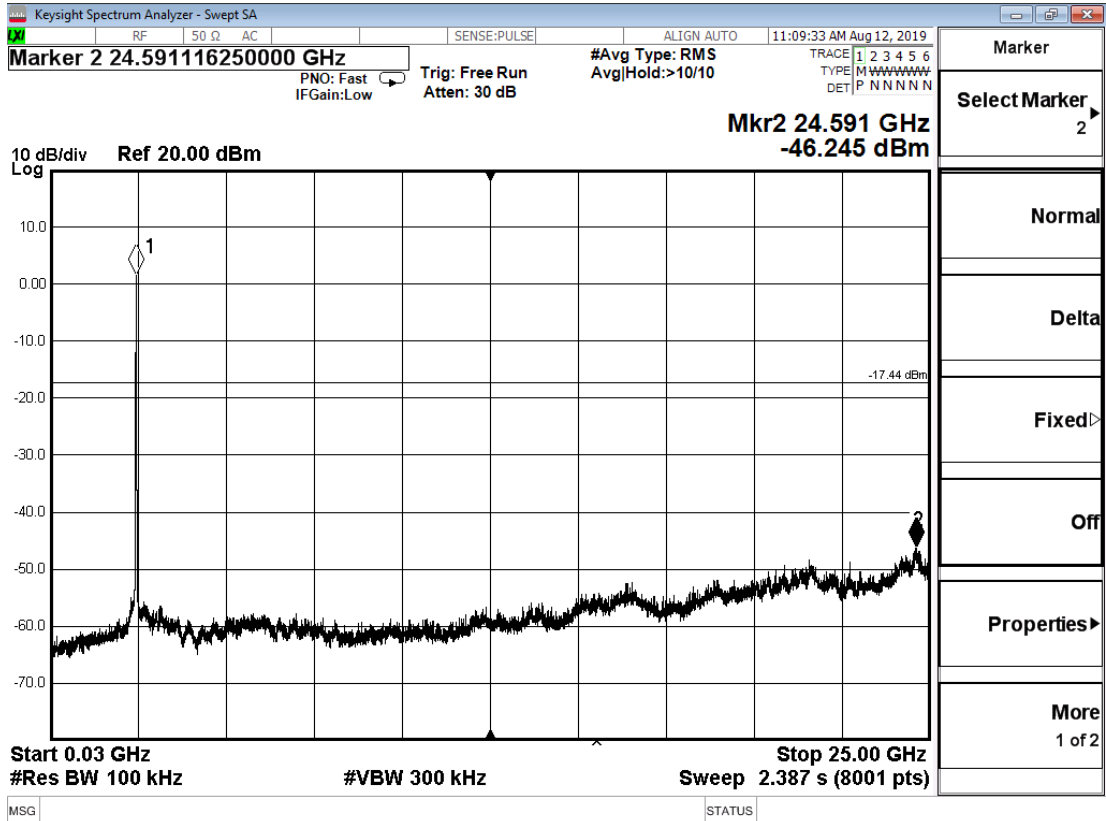
More 1 of 2

11G_HCH_Graphs

Pref/11G/HCH

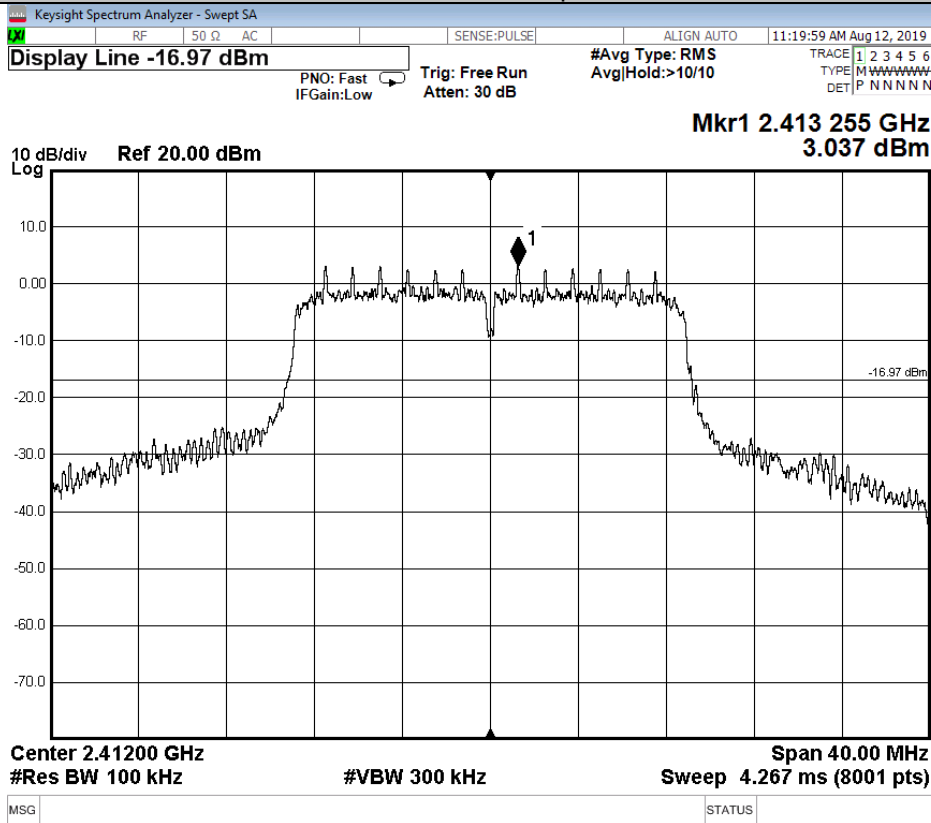


Puw/11G/HCH



11N20SISO_LCH_Graphs

Pref/11N20SIS
O/LCH



Display

Annotation ▶

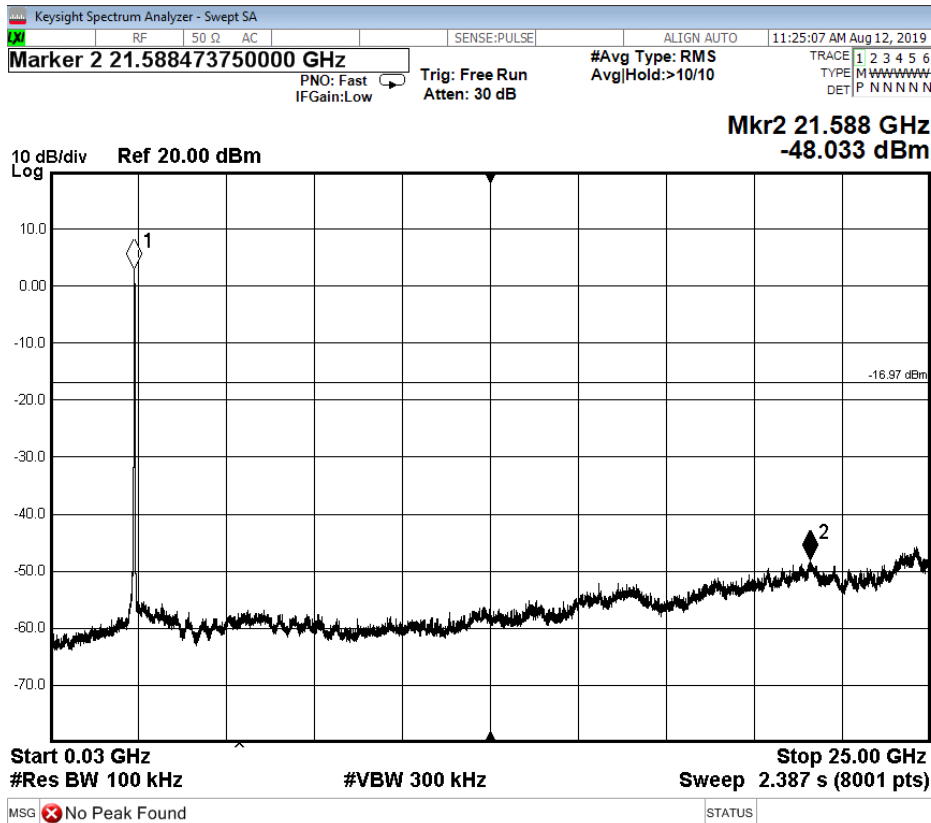
Title ▶

Graticule On Off

Display Line -16.97 dBm On Off

System Display Settings ▶

Puw/11N20
SISO/LCH



Peak Search

Next Peak

Next Pk Right

Next Pk Left

Marker Delta

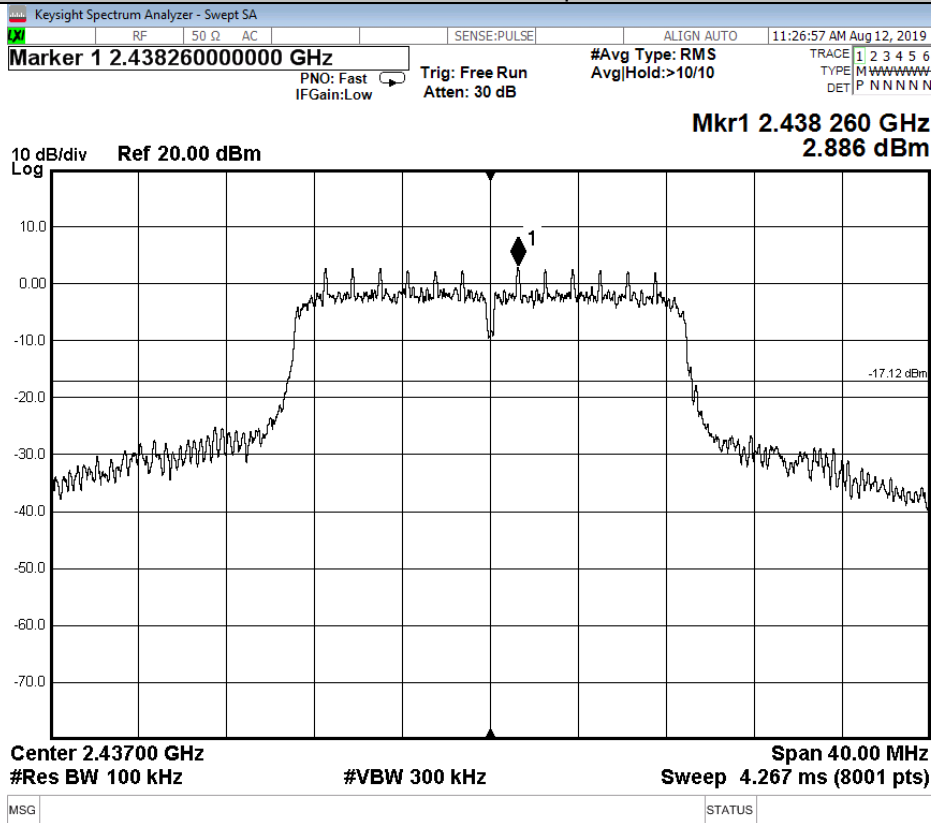
Mkr→CF

Mkr→Ref Lvl

More 1 of 2

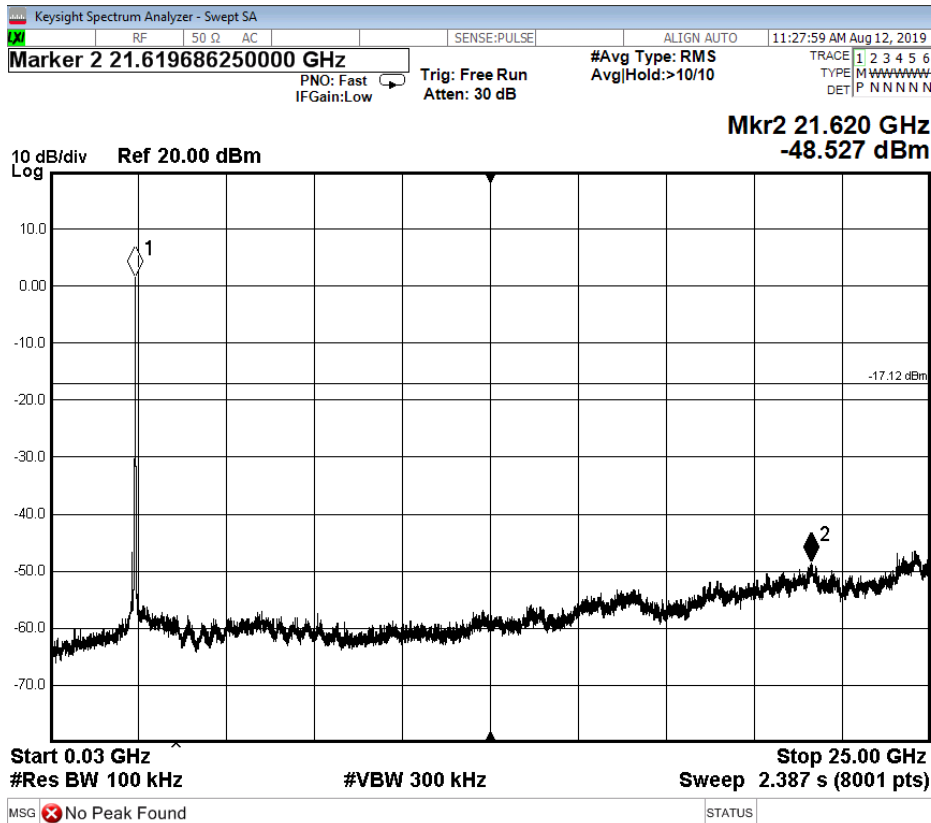
11N20SISO_MCH_Graphs

Pref/11N20
SISO/MCH



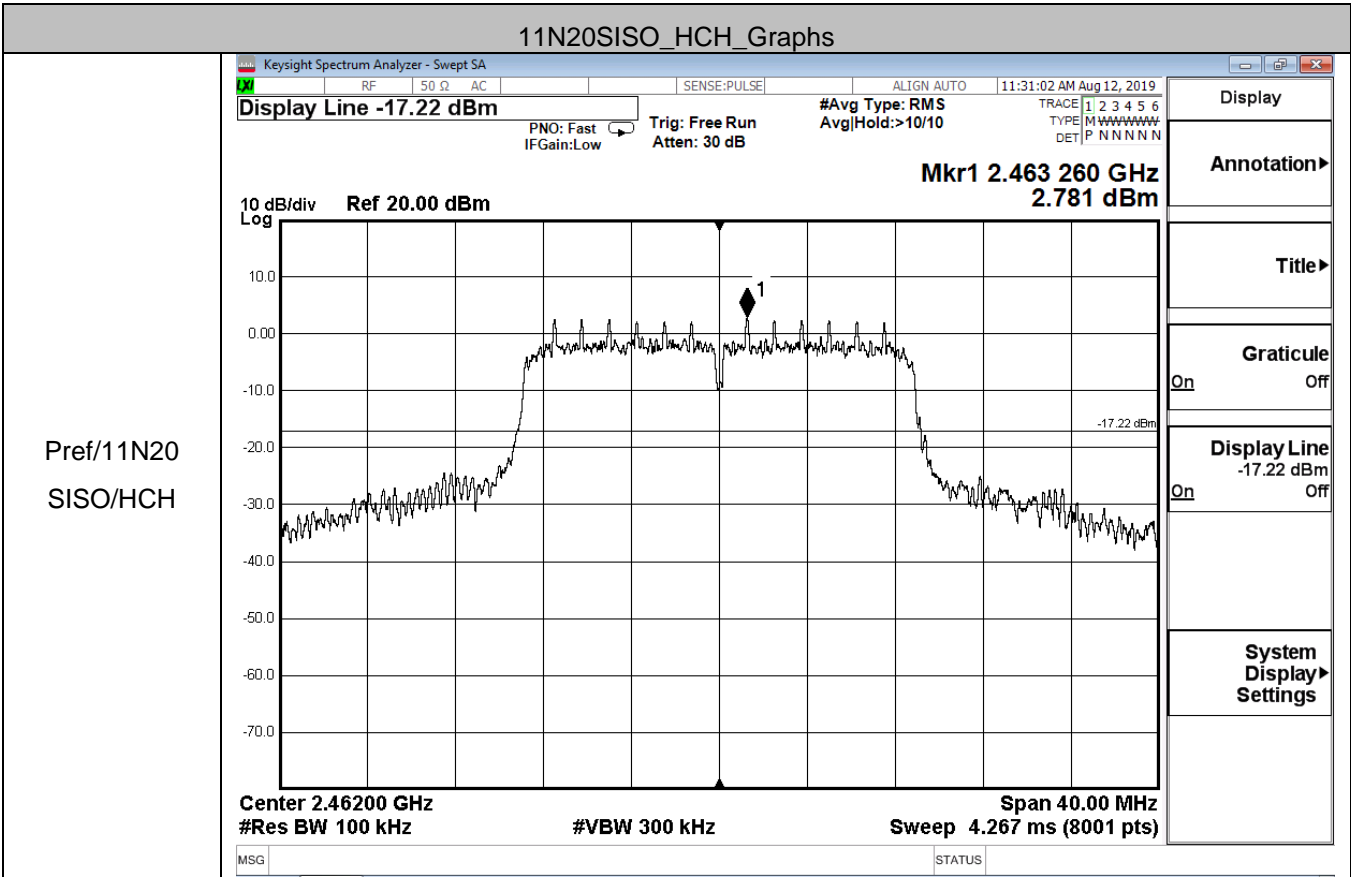
- Peak Search
- Next Peak
- Next Pk Right
- Next Pk Left
- Marker Delta
- Mkr→CF
- Mkr→Ref Lvl
- More 1 of 2

Puw/11N20
SISO/MCH

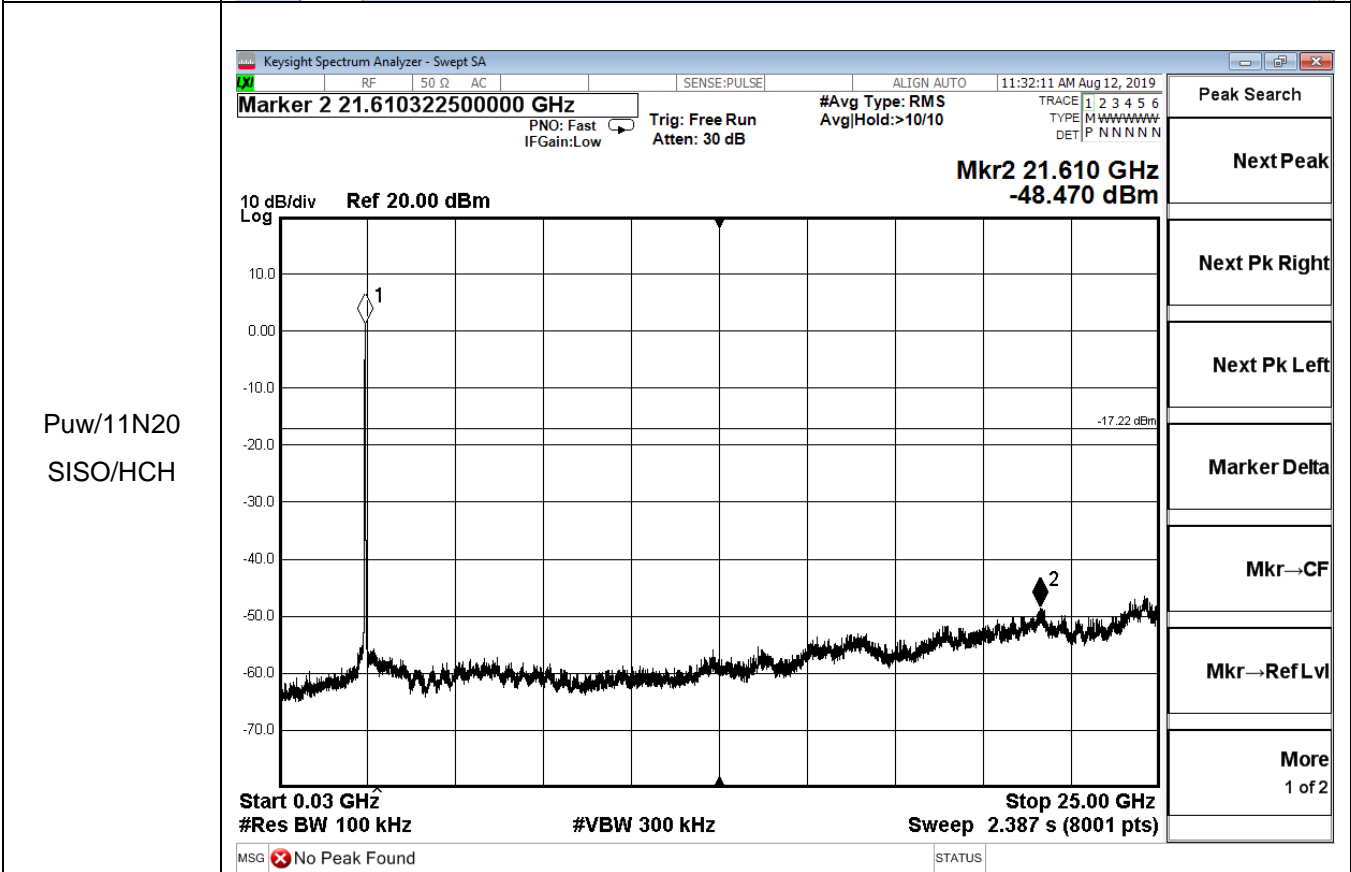


- Peak Search
- Next Peak
- Next Pk Right
- Next Pk Left
- Marker Delta
- Mkr→CF
- Mkr→Ref Lvl
- More 1 of 2

11N20SISO_HCH_Graphs



Pref/11N20
SISO/HCH



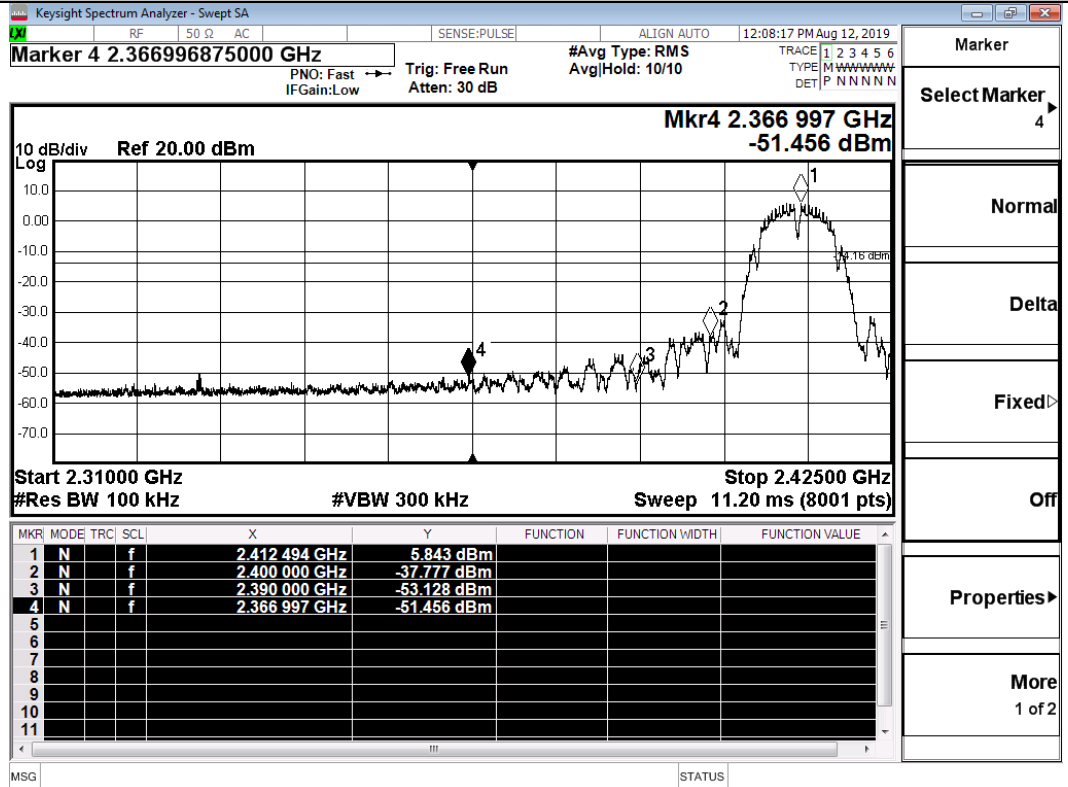
Puw/11N20
SISO/HCH

A.7 Band-edge for RF Conducted Emissions

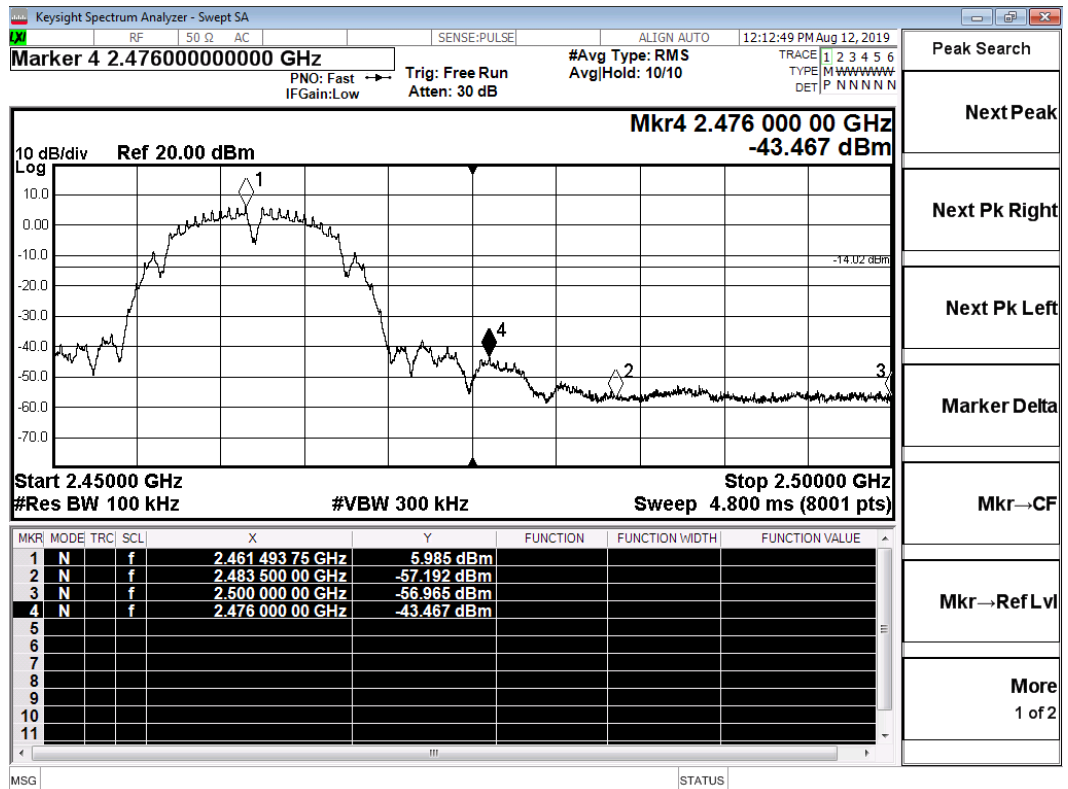
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
11B	LCH	5.843	-37.777	-14.16	PASS
	HCH	5.985	-57.192	-14.02	PASS
11G	LCH	1.688	-35.807	-18.31	PASS
	HCH	2.759	-37.681	-17.24	PASS
11N20SISO	LCH	1.082	-33.970	-18.92	PASS
	HCH	2.788	-38.234	-17.21	PASS

Test Graphs

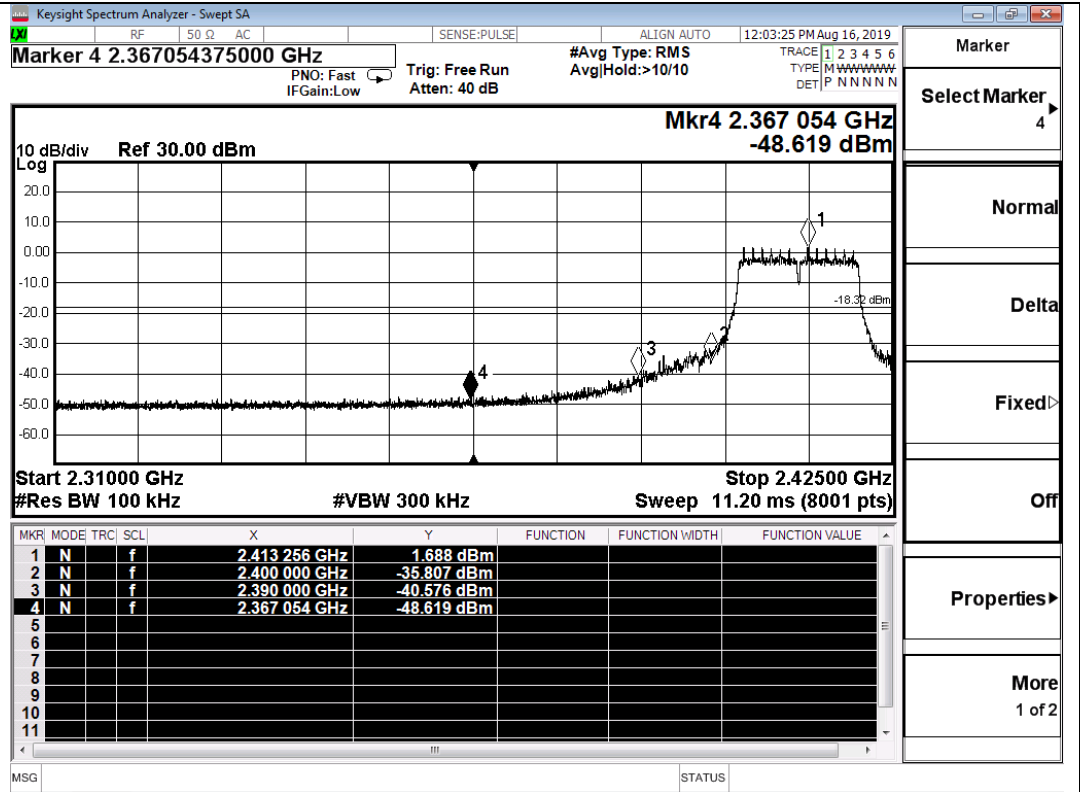
11B/LCH



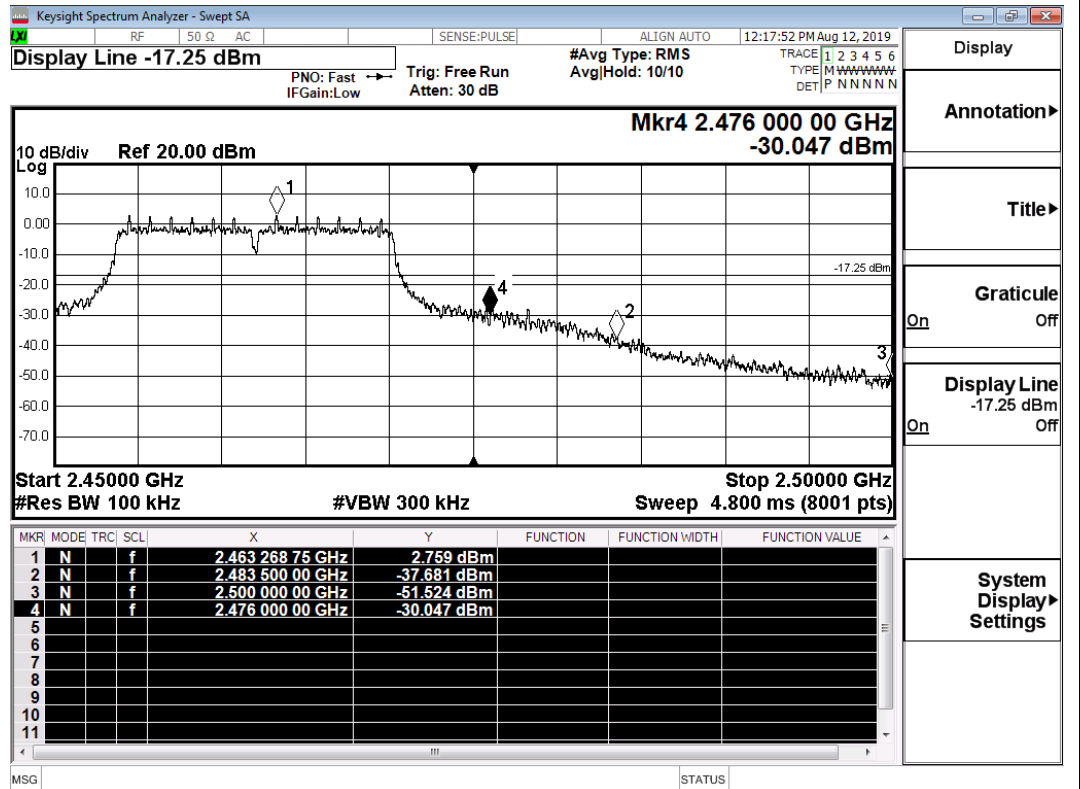
11B/HCH



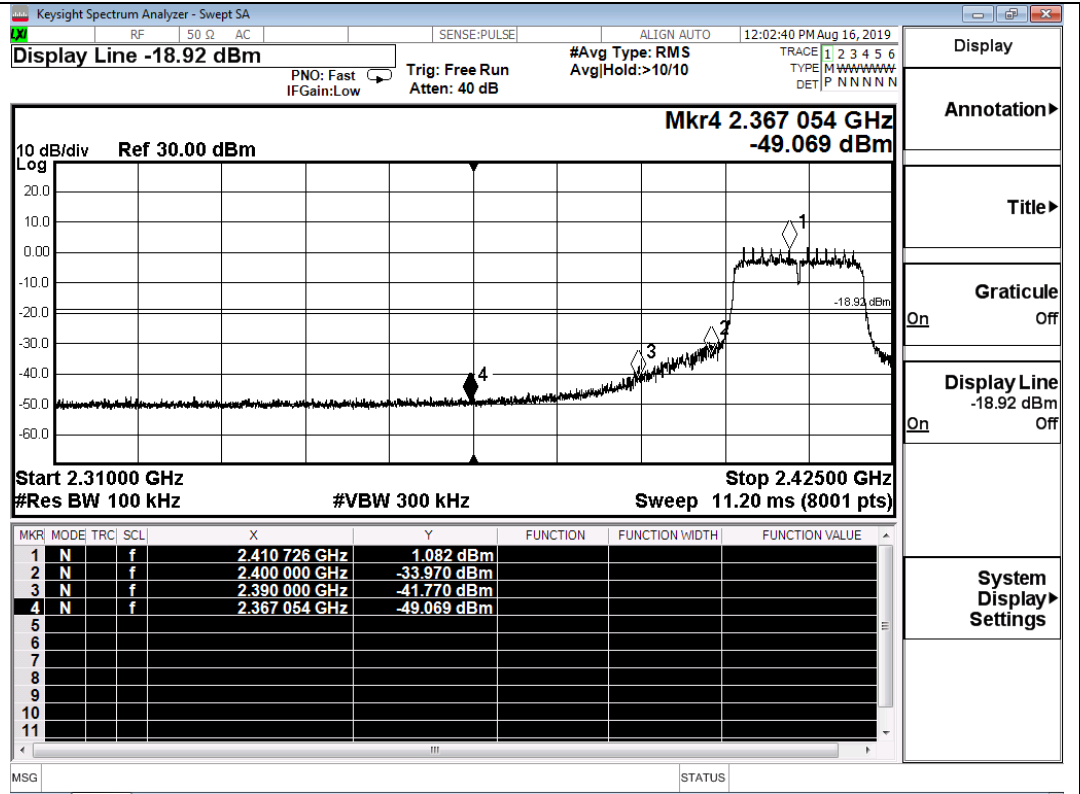
11G/LCH



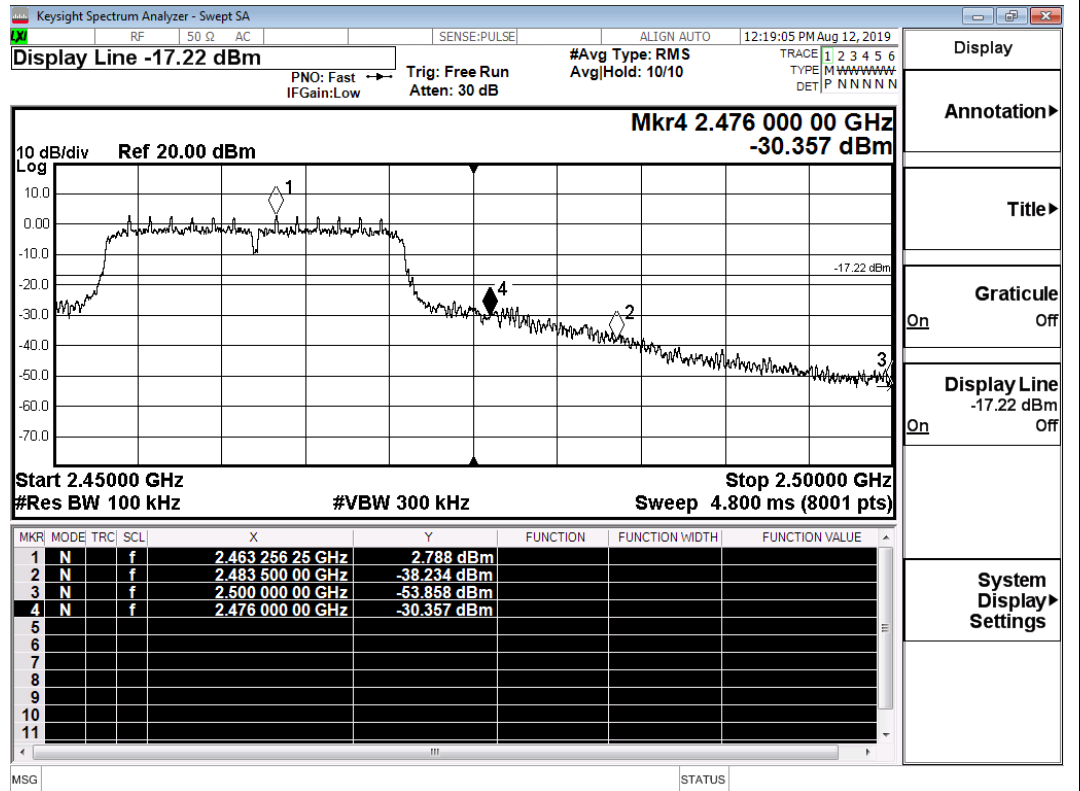
11G/HCH



11N20SISO/LCH



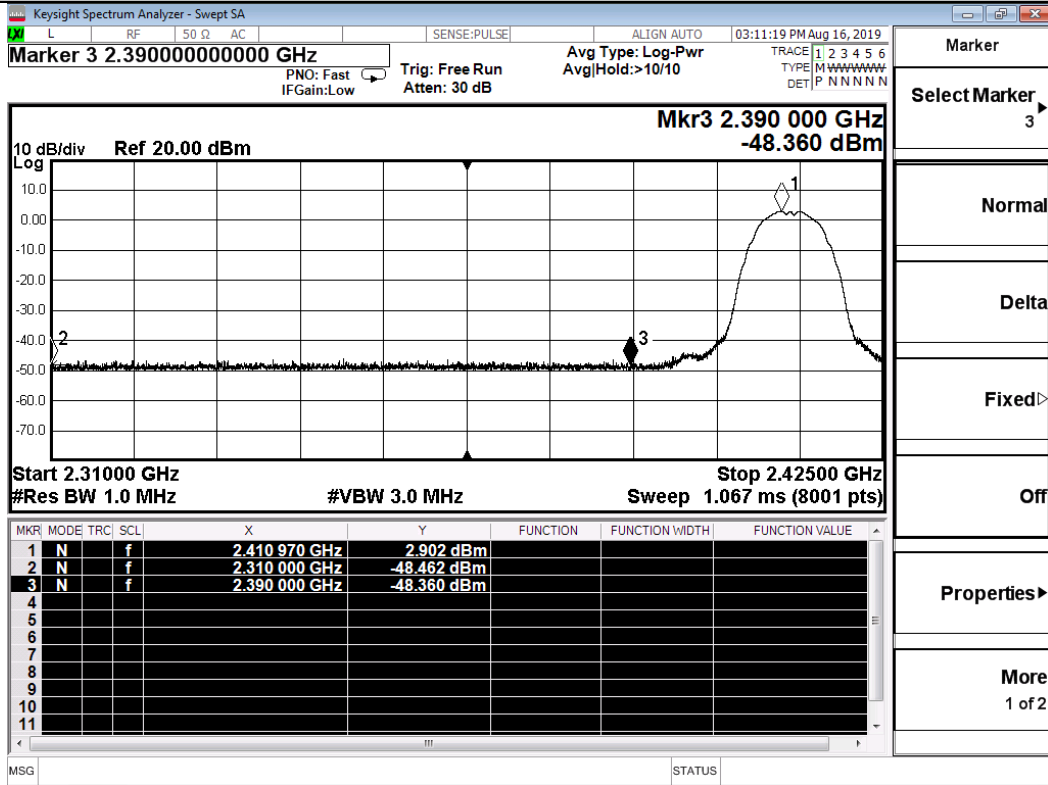
11N20SISO/HCH



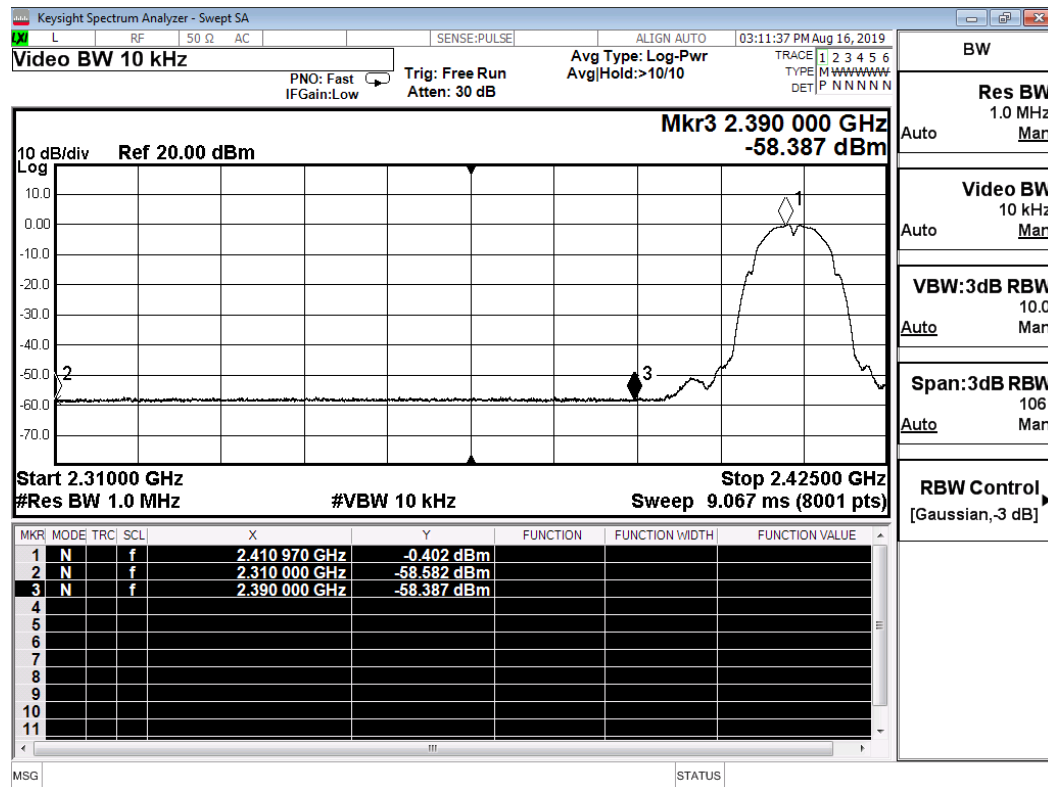
A.8 Restrict-band band-edge measurements

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	-48.462	2.5	0	49.27	PEAK	74	PASS
	2412	Ant1	2310.0	-58.582	2.5	0	39.15	AV	54	PASS
	2412	Ant1	2390.0	-48.360	2.5	0	49.37	PEAK	74	PASS
	2412	Ant1	2390.0	-58.387	2.5	0	39.34	AV	54	PASS
	2462	Ant1	2483.5	-49.580	2.5	0	48.15	PEAK	74	PASS
	2462	Ant1	2483.5	-58.502	2.5	0	39.23	AV	54	PASS
	2462	Ant1	2500.0	-48.558	2.5	0	49.17	PEAK	74	PASS
	2462	Ant1	2500.0	-58.636	2.5	0	39.09	AV	54	PASS
11G	2412	Ant1	2310.0	-48.977	2.5	0	48.75	PEAK	74	PASS
	2412	Ant1	2310.0	-58.485	2.5	0	39.25	AV	54	PASS
	2412	Ant1	2390.0	-45.392	2.5	0	52.34	PEAK	74	PASS
	2412	Ant1	2390.0	-54.341	2.5	0	43.39	AV	54	PASS
	2462	Ant1	2483.5	-49.517	2.5	0	48.21	PEAK	74	PASS
	2462	Ant1	2483.5	-58.049	2.5	0	39.68	AV	54	PASS
	2462	Ant1	2500.0	-48.867	2.5	0	48.86	PEAK	74	PASS
	2462	Ant1	2500.0	-59.088	2.5	0	38.64	AV	54	PASS
11N20 SISO	2412	Ant1	2310.0	-48.480	2.5	0	49.25	PEAK	74	PASS
	2412	Ant1	2310.0	-58.570	2.5	0	39.16	AV	54	PASS
	2412	Ant1	2390.0	-43.631	2.5	0	54.10	PEAK	74	PASS
	2412	Ant1	2390.0	-53.566	2.5	0	44.16	AV	54	PASS
	2462	Ant1	2483.5	-47.713	2.5	0	50.02	PEAK	74	PASS
	2462	Ant1	2483.5	-58.018	2.5	0	39.71	AV	54	PASS
	2462	Ant1	2500.0	-48.816	2.5	0	48.91	PEAK	74	PASS
	2462	Ant1	2500.0	-58.106	2.5	0	39.62	AV	54	PASS

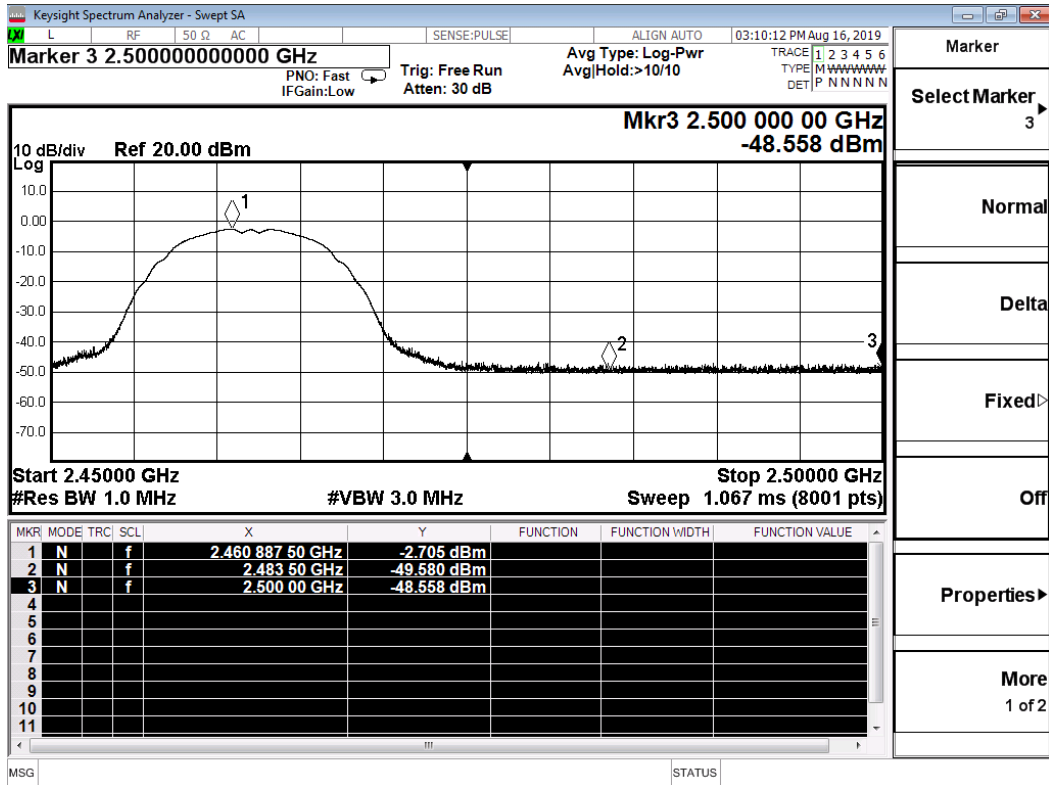
Restrict-band band-edge measurements_11B_2412_Ant1_PEAK



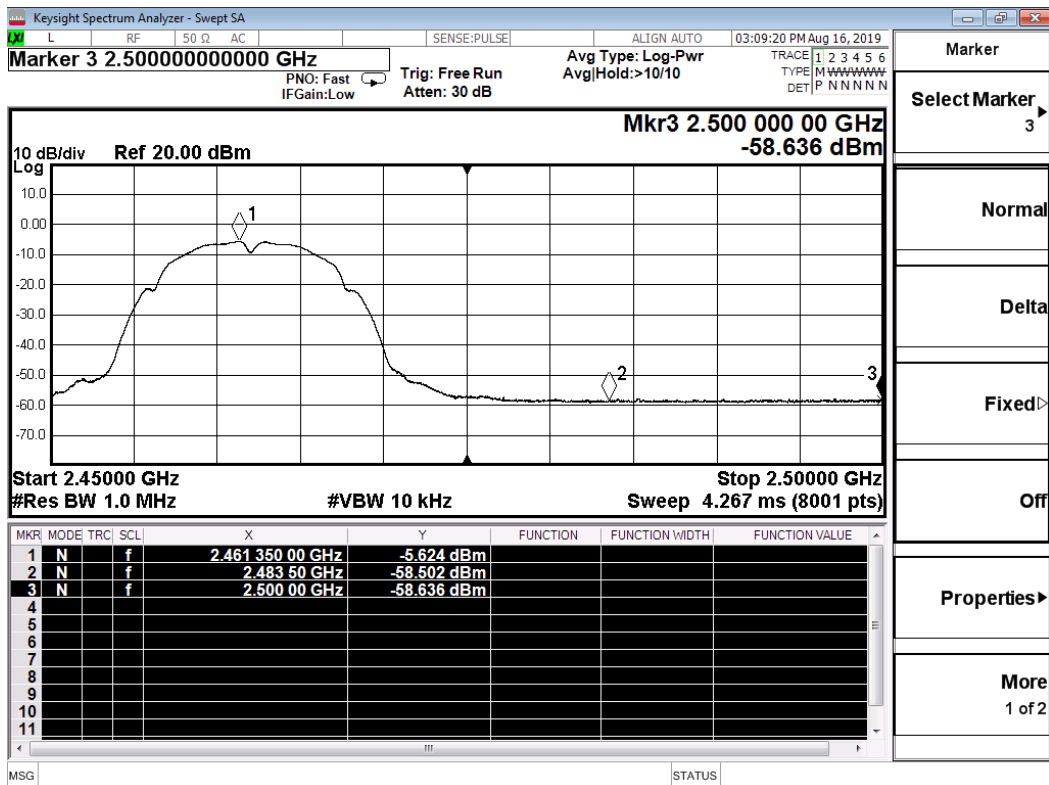
Restrict-band band-edge measurements_11B_2412_Ant1_AV



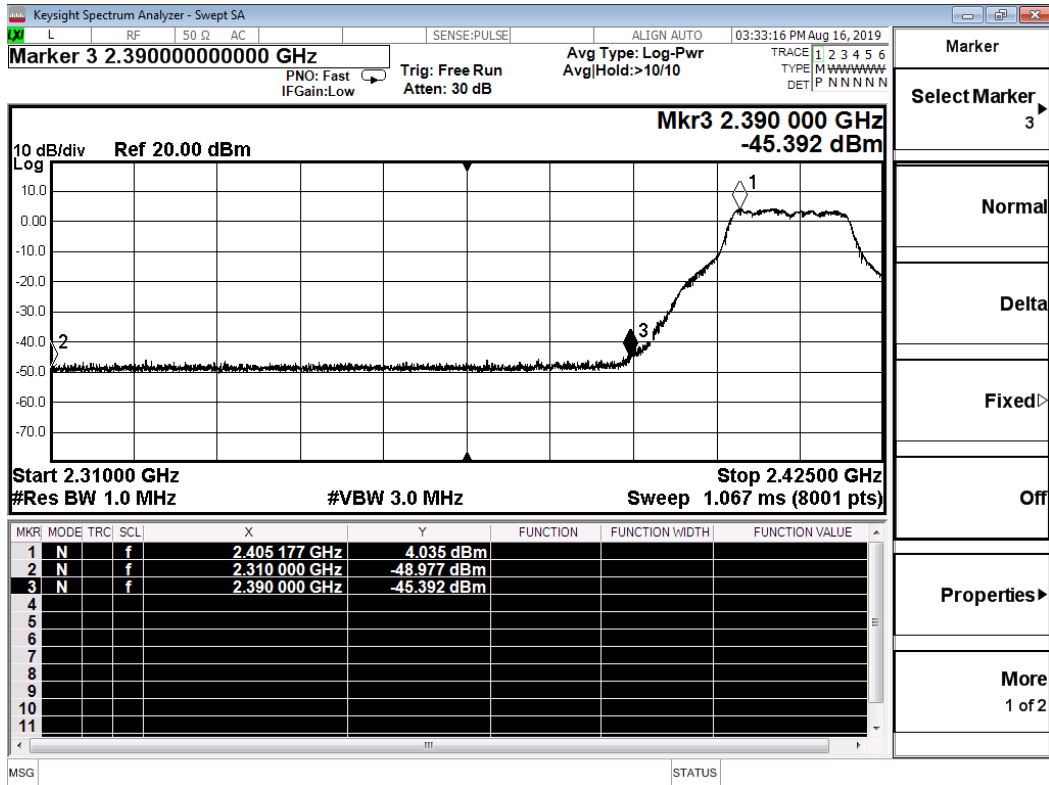
Restrict-band band-edge measurements_11B_2462_Ant1_PEAK



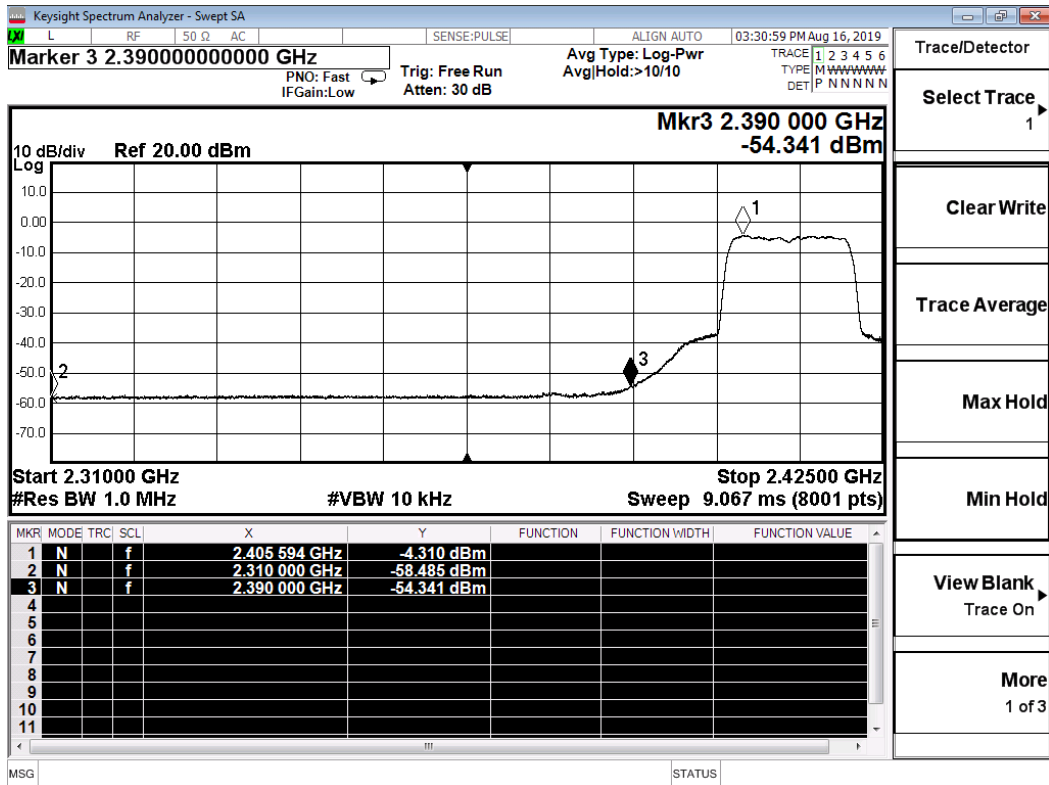
Restrict-band band-edge measurements_11B_2462_Ant1_AV



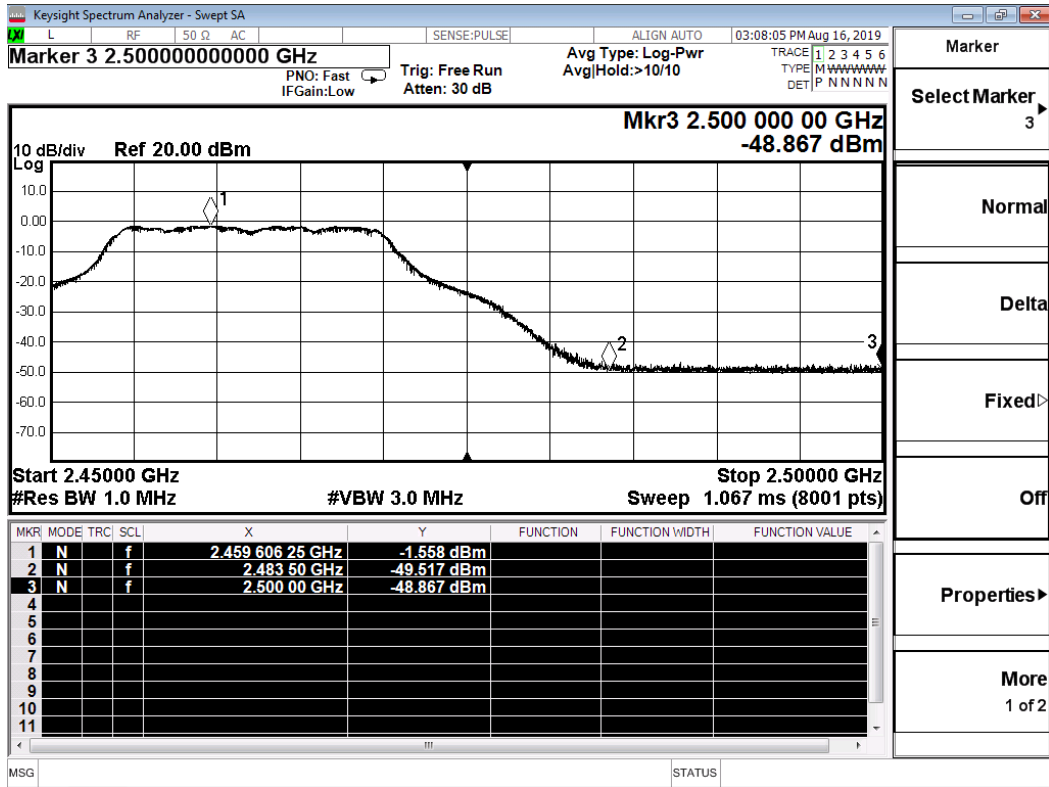
Restrict-band band-edge measurements_11G_2412_Ant1_PEAK



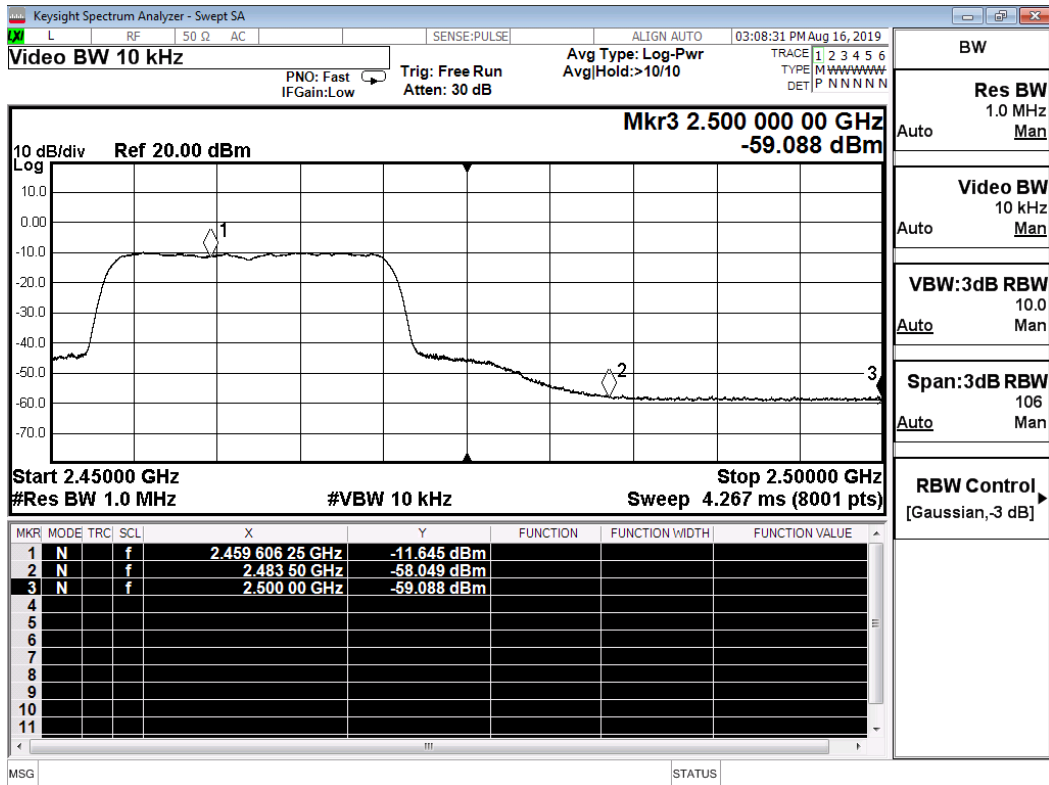
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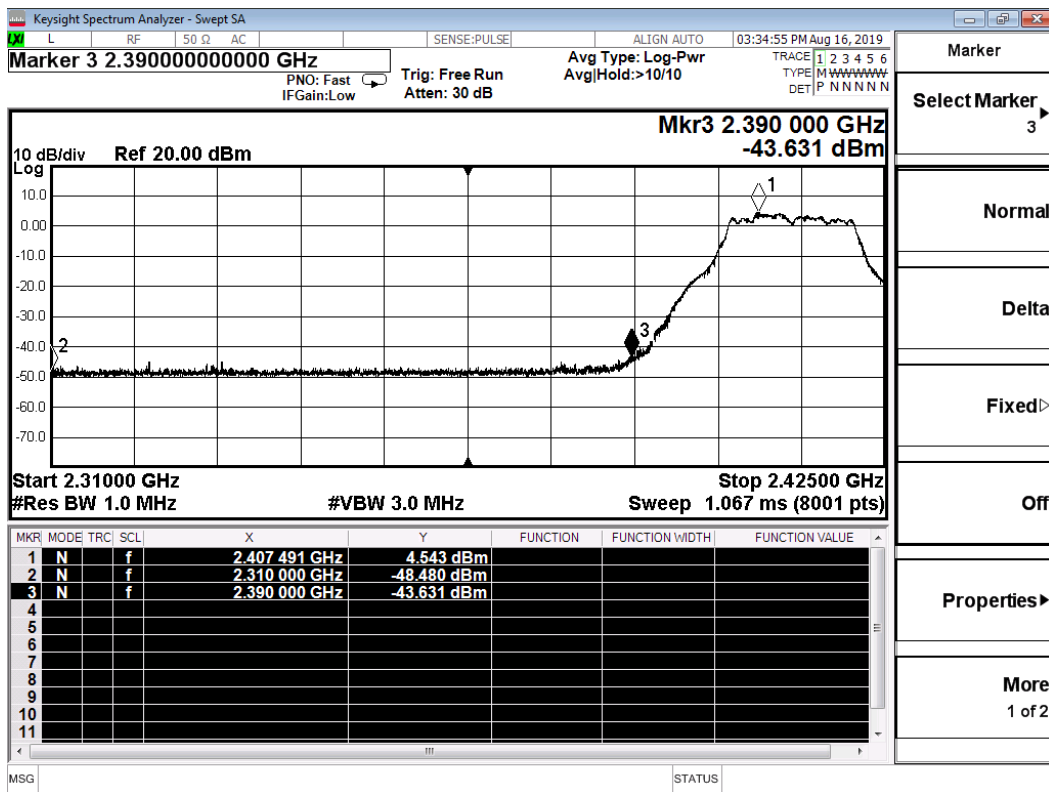
Restrict-band band-edge measurements_11G_2462_Ant1_PEAK



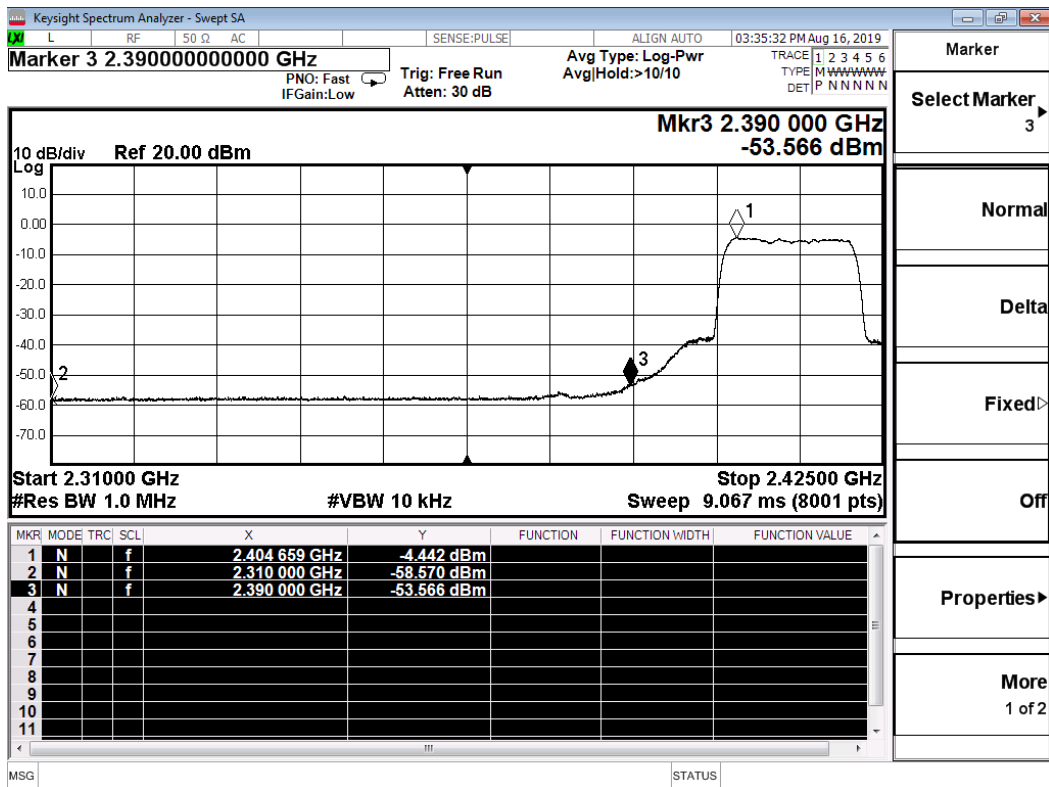
Restrict-band band-edge measurements_11G_2462_Ant1_AV



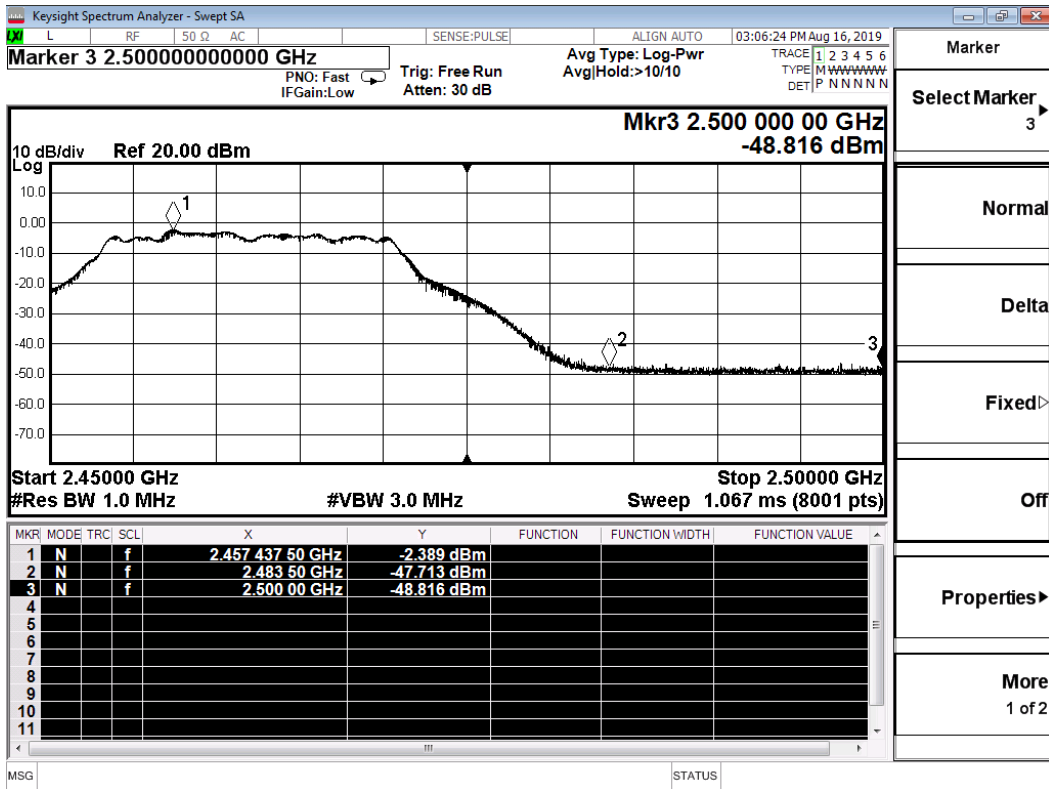
Restrict-band band-edge measurements_11N20SISO_2412_Ant1_PEAK



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

