

## Appendix A

### RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: TrackIR Series Thermal Imager

Trade Mark: Guide

Test Model: TrackIR 50mm

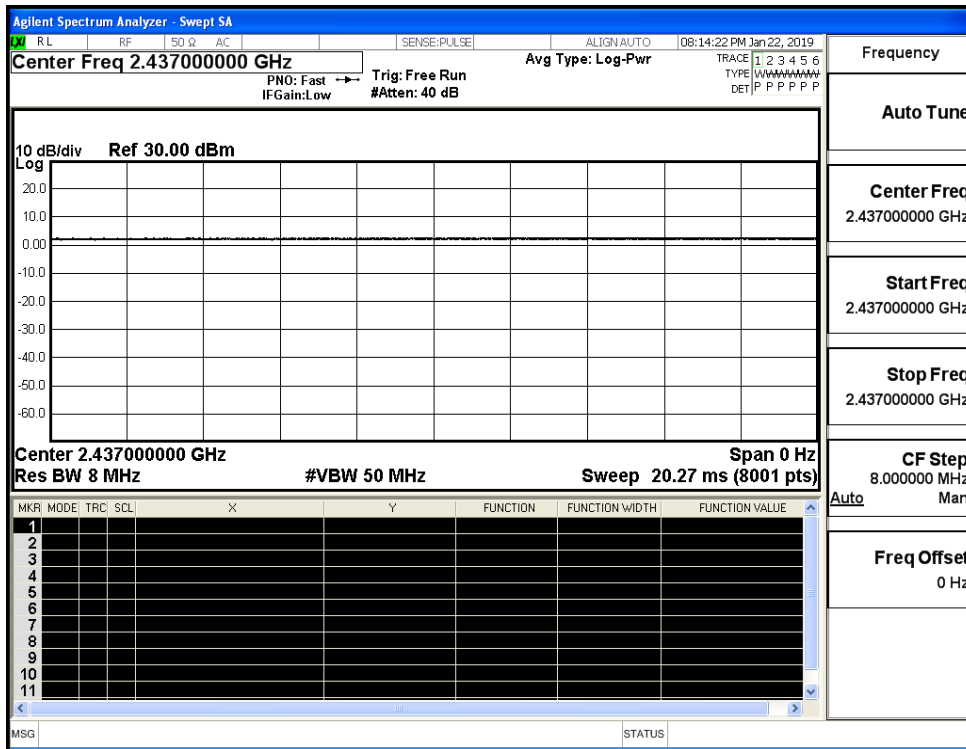
#### Environmental Conditions

Temperature:	24.2 ° C
Relative Humidity:	54.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Jerry.Zeng
Supervised by:	Jayden.Zhuo

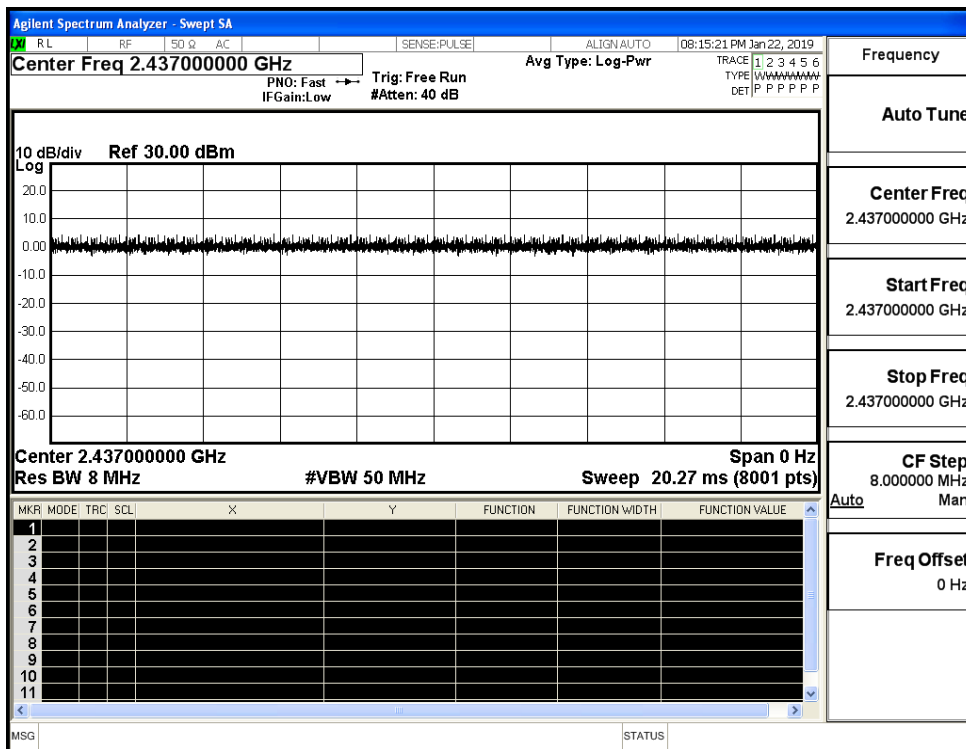
#### A.1 Duty Cycle

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

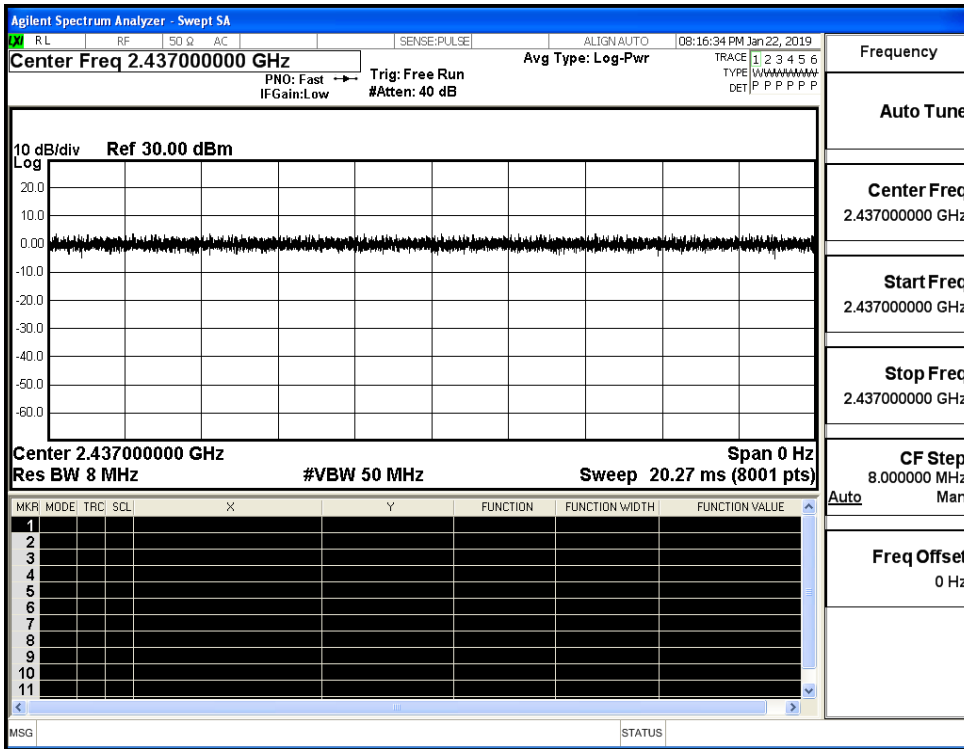
Duty Cycle\_11B\_2437\_Ant1



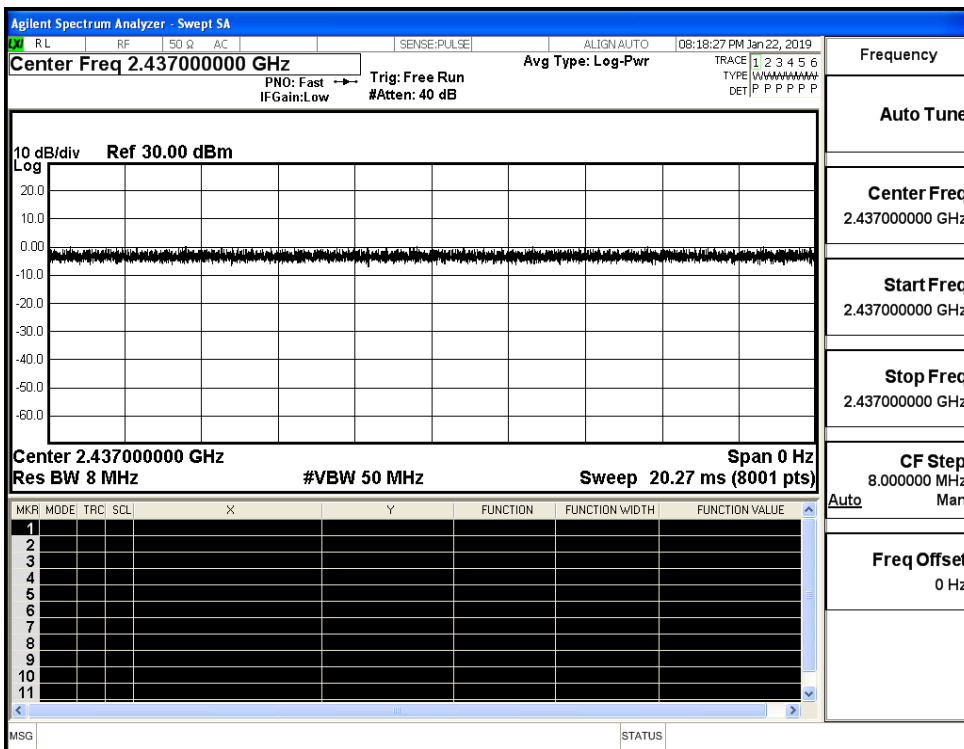
Duty Cycle\_11G\_2437\_Ant1



Duty Cycle\_11N20SISO\_2437\_Ant1



Duty Cycle\_11N40SISO\_2437\_Ant1

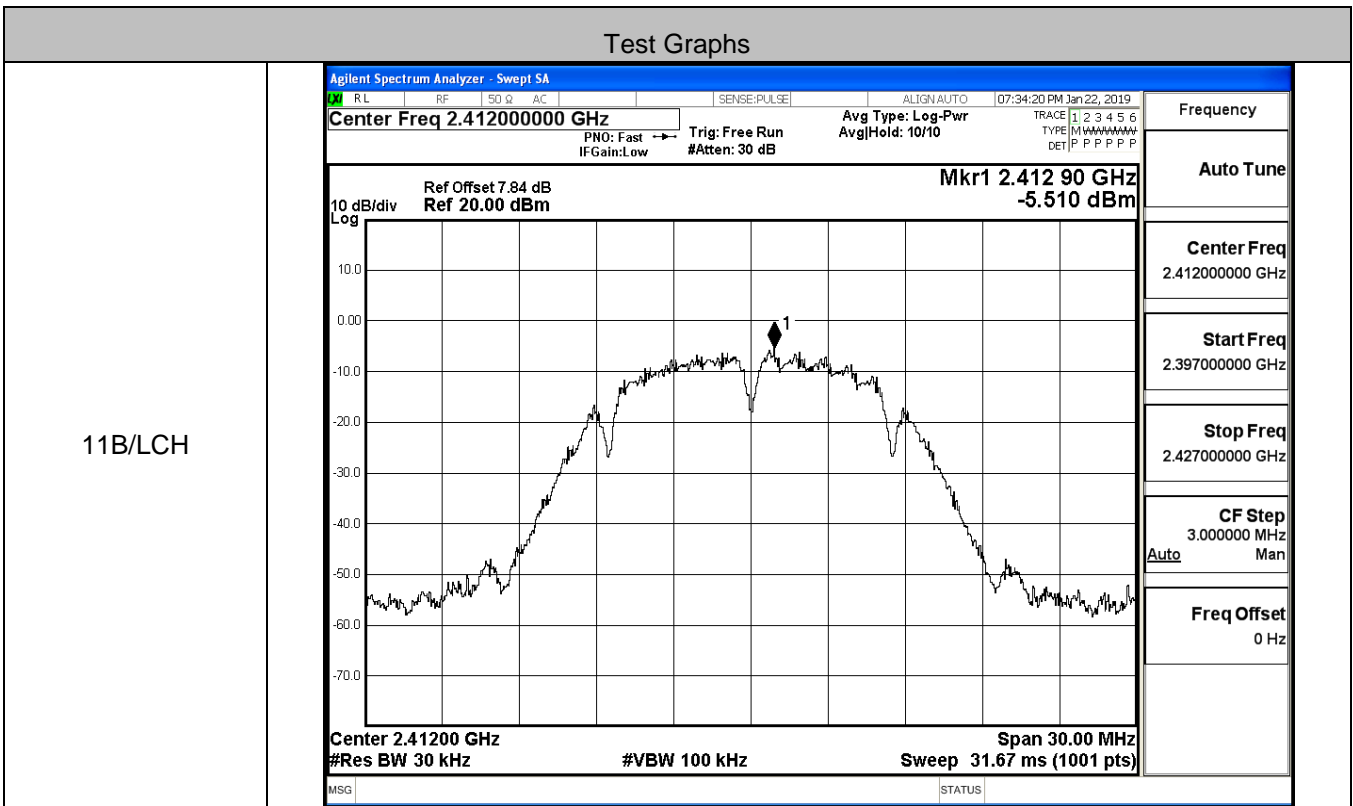


**A.2 Maximum Conducted Output Power**

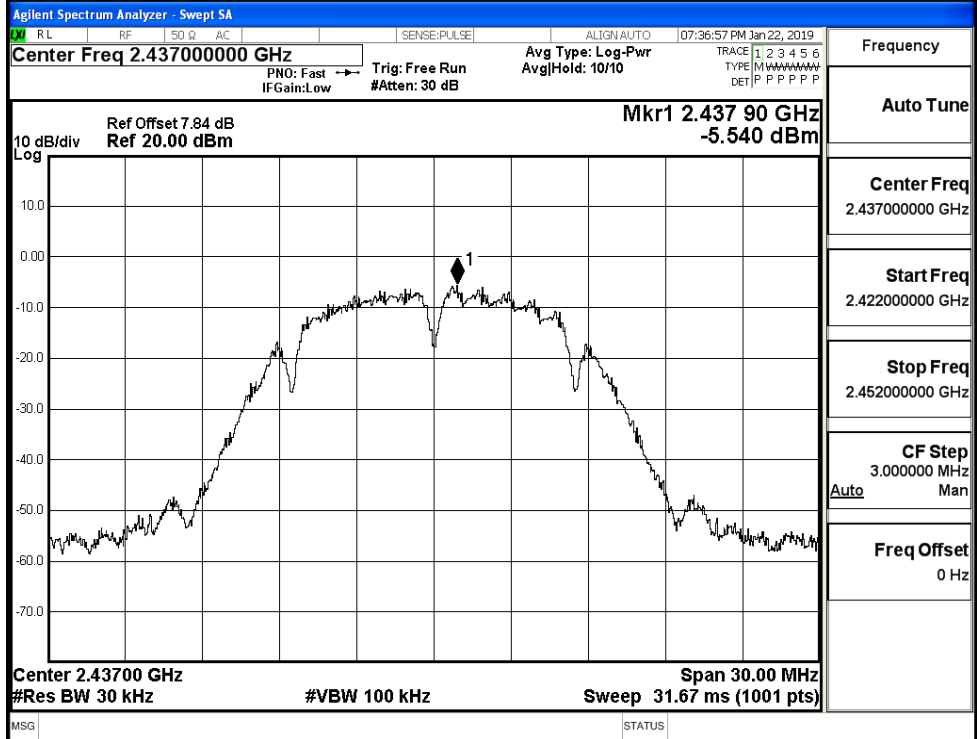
Mode	Channel	Meas.Level [dBm]	Limit [dBm]	Verdict
11B	LCH	11.30	30	PASS
	MCH	11.39	30	PASS
	HCH	10.44	30	PASS
11G	LCH	12.41	30	PASS
	MCH	12.60	30	PASS
	HCH	12.42	30	PASS
11N20SISO	LCH	12.53	30	PASS
	MCH	12.48	30	PASS
	HCH	12.47	30	PASS
11N40SISO	LCH	13.18	30	PASS
	MCH	13.13	30	PASS
	HCH	13.86	30	PASS

### A.3 Maximum Power Spectral Density

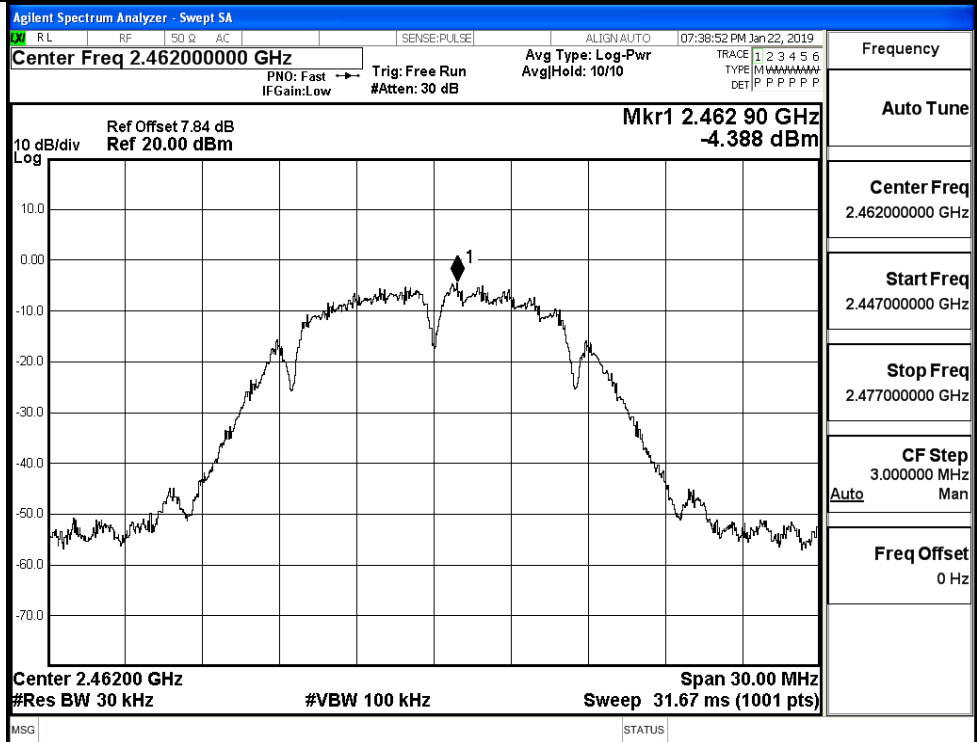
Mode	Channel	Meas.Level [dBm/30KHz]	Limit [dBm/3KHz]	Verdict
11B	LCH	-5.510	8	PASS
	MCH	-5.540	8	PASS
	HCH	-4.388	8	PASS
11G	LCH	-10.815	8	PASS
	MCH	-11.391	8	PASS
	HCH	-11.193	8	PASS
11N20SISO	LCH	-11.037	8	PASS
	MCH	-11.135	8	PASS
	HCH	-11.001	8	PASS
11N40SISO	LCH	-15.037	8	PASS
	MCH	-15.256	8	PASS
	HCH	-15.296	8	PASS



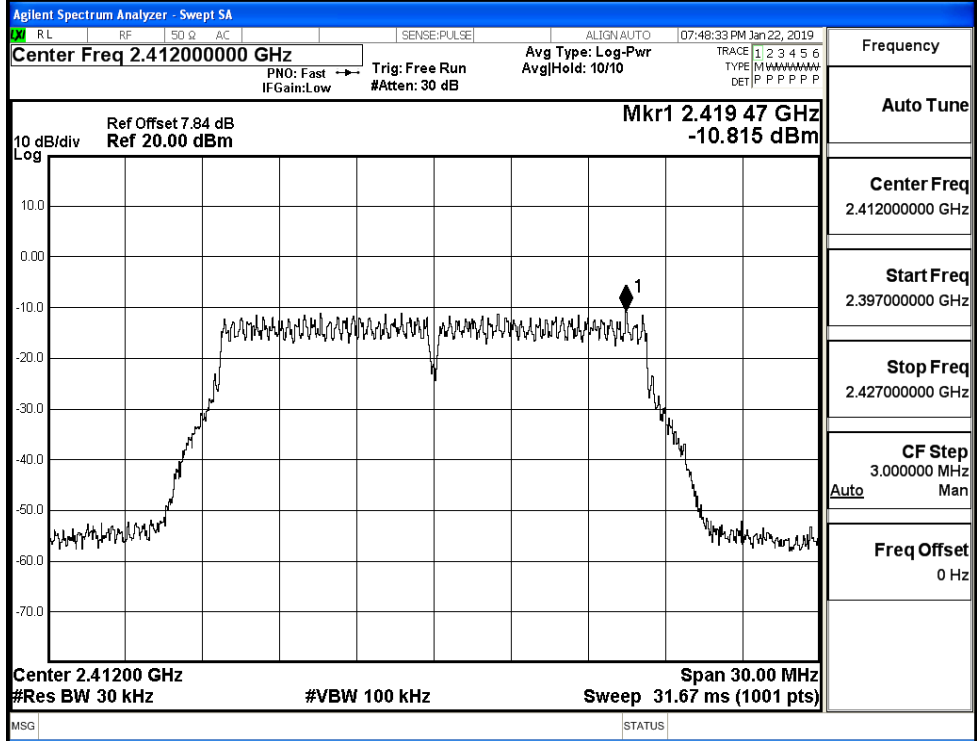
11B/MCH



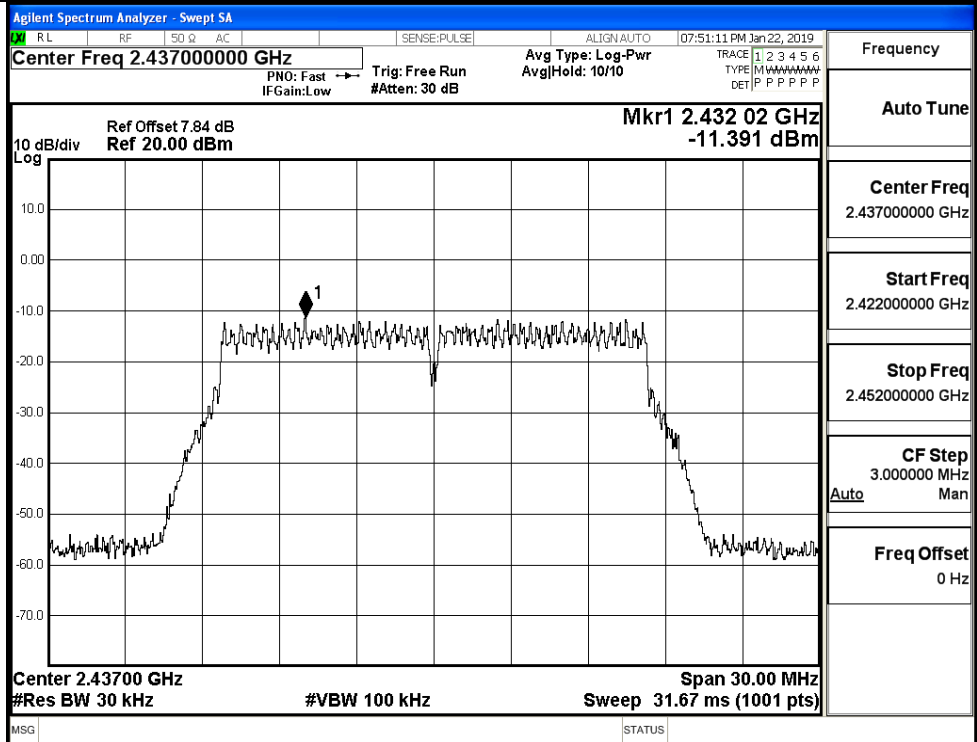
11B/HCH



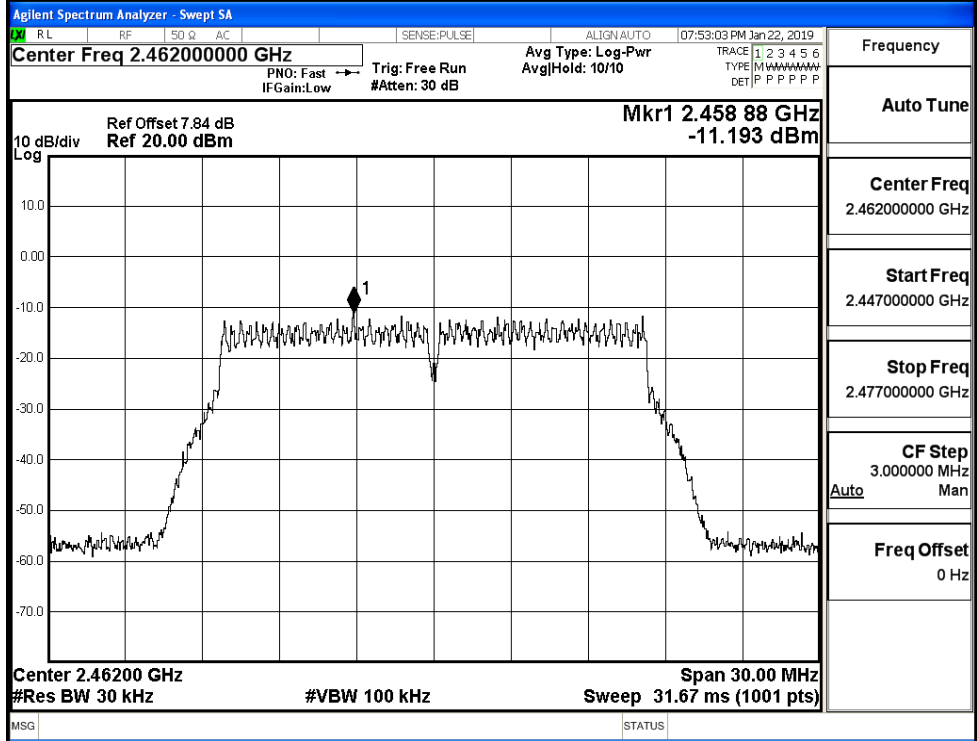
11G/LCH



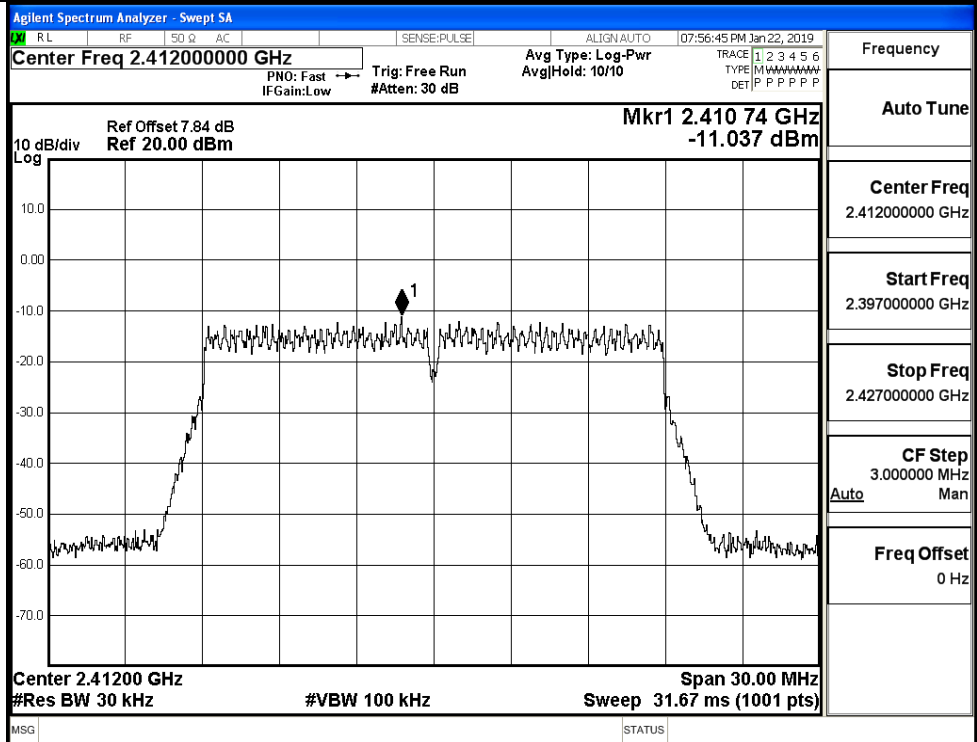
11G/MCH



11G/HCH

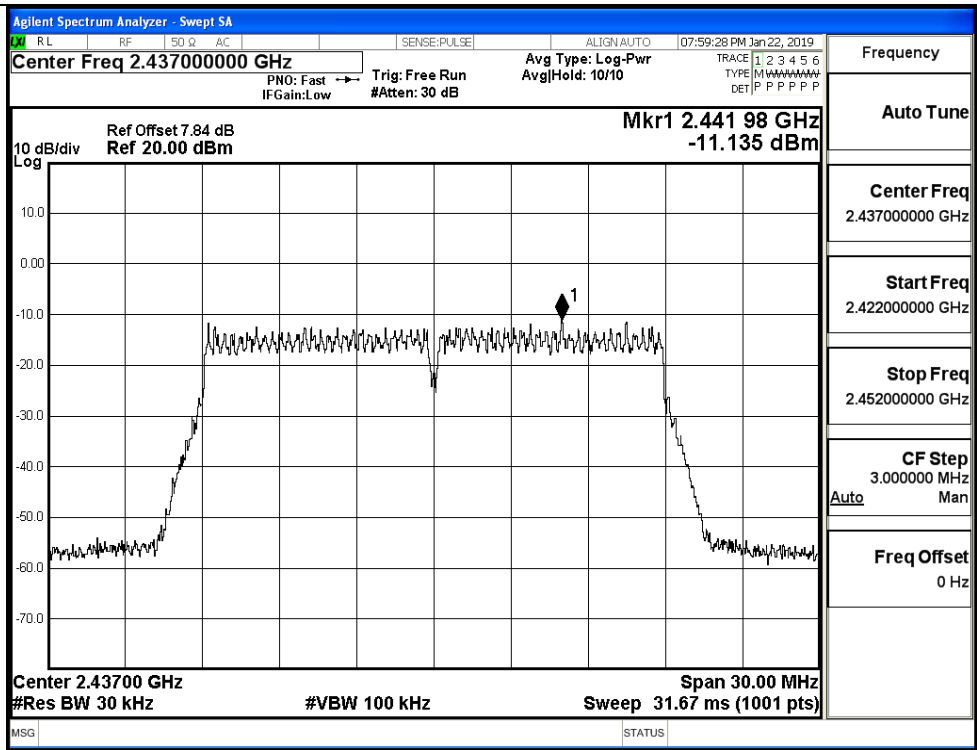


11N20SISO/LCH

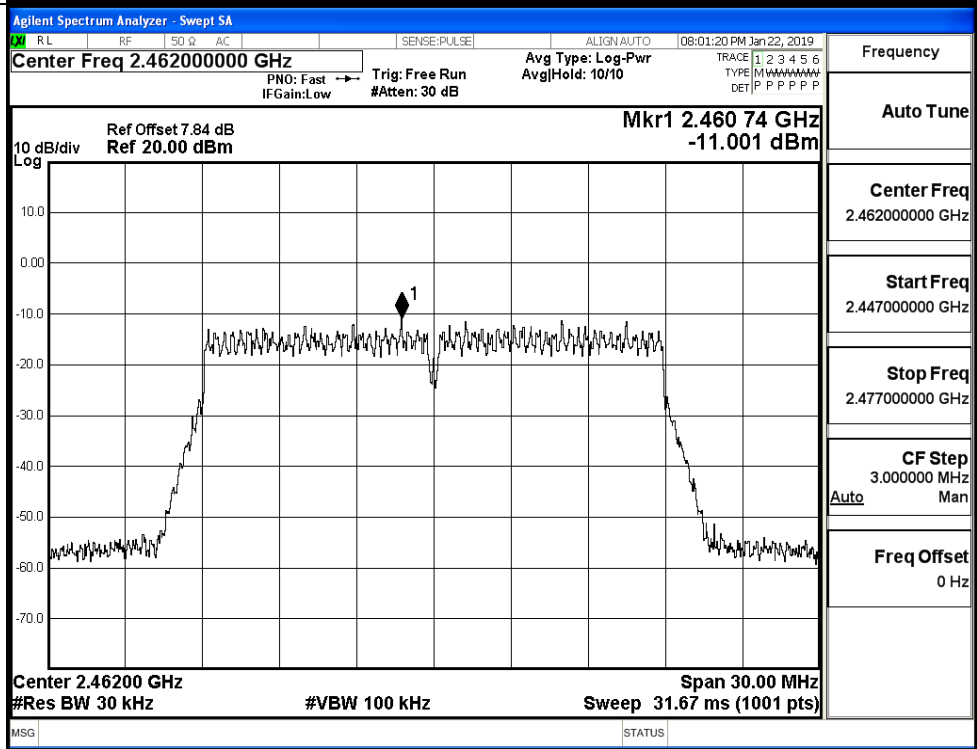




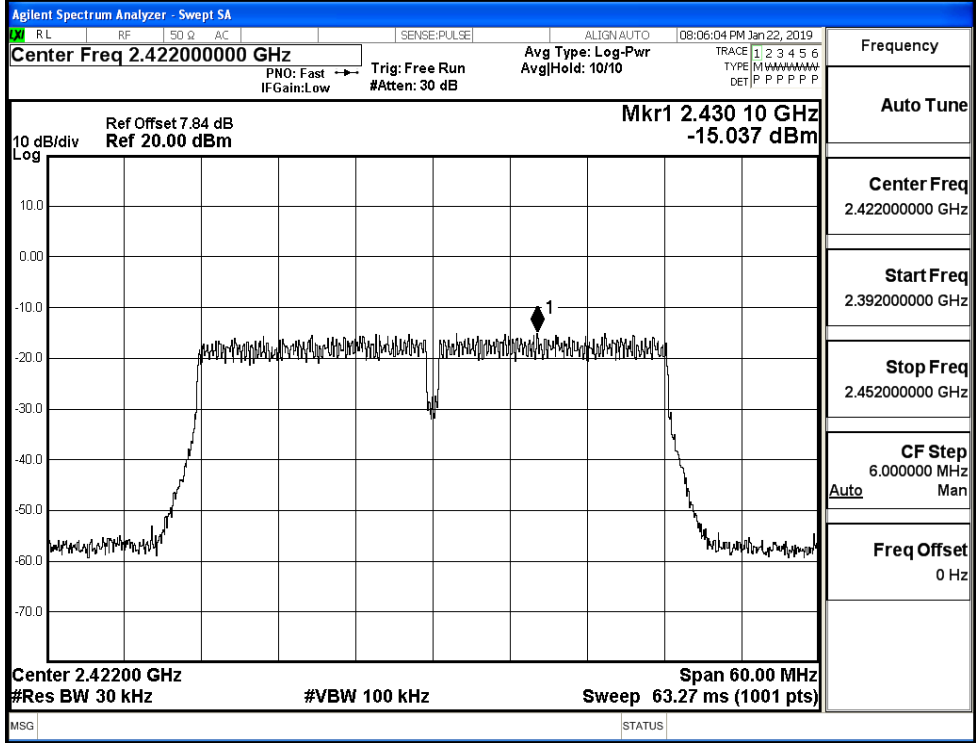
11N20SISO/MCH



11N20SISO/HCH

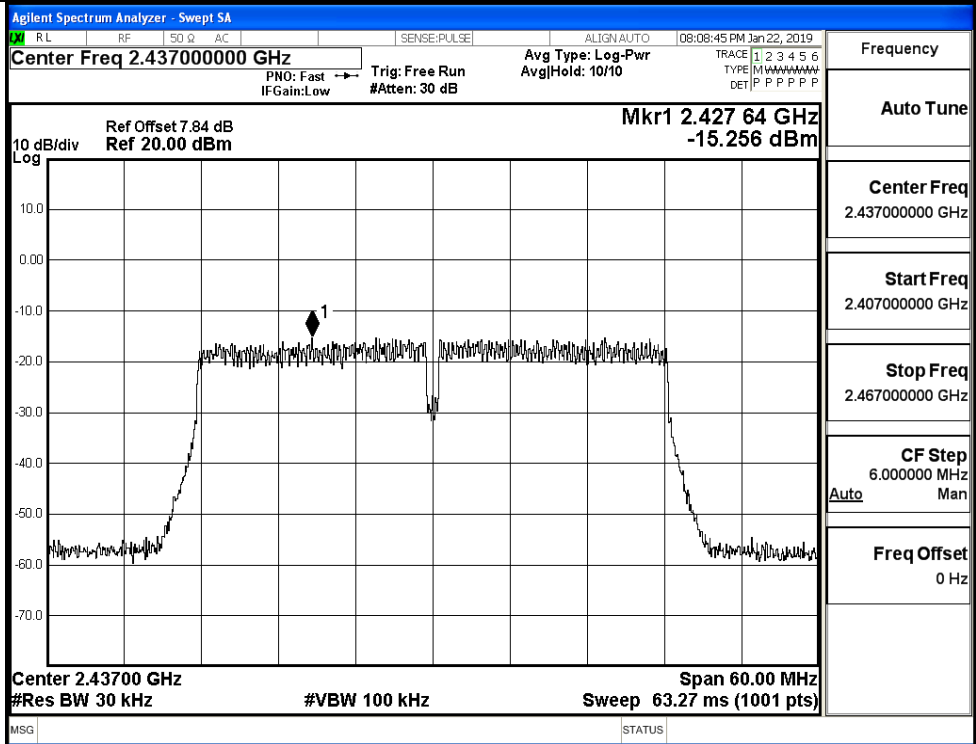


11N40SISO/LCH



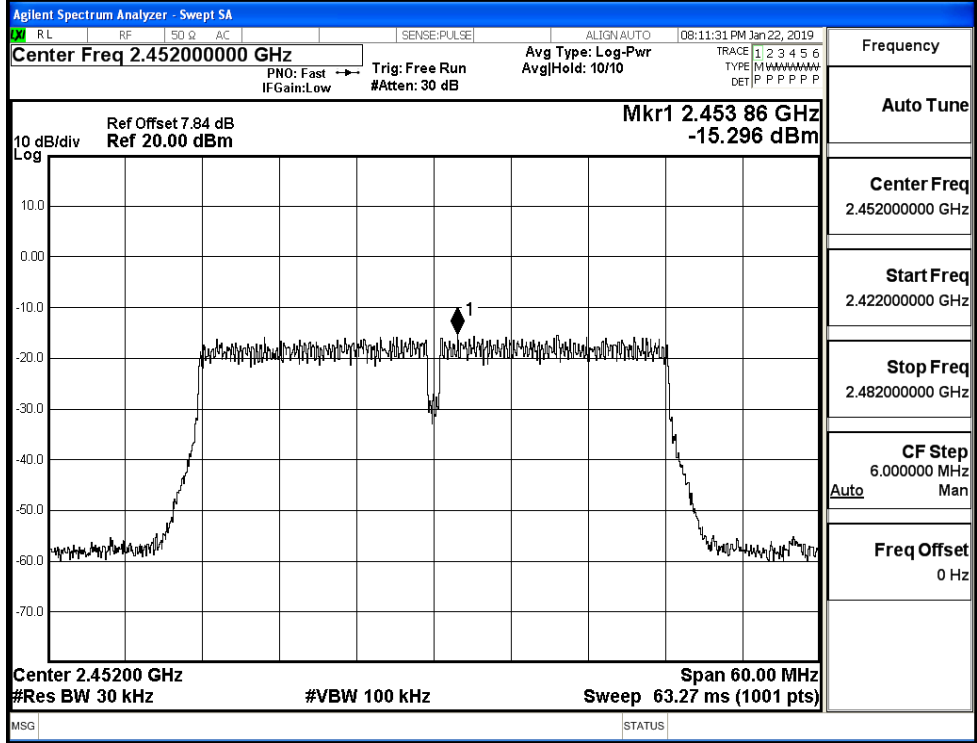
Frequency
Auto Tune
Center Freq 2.42200000 GHz
Start Freq 2.392000000 GHz
Stop Freq 2.452000000 GHz
CF Step 6.000000 MHz Auto Man
Freq Offset 0 Hz

11N40SISO/MCH



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

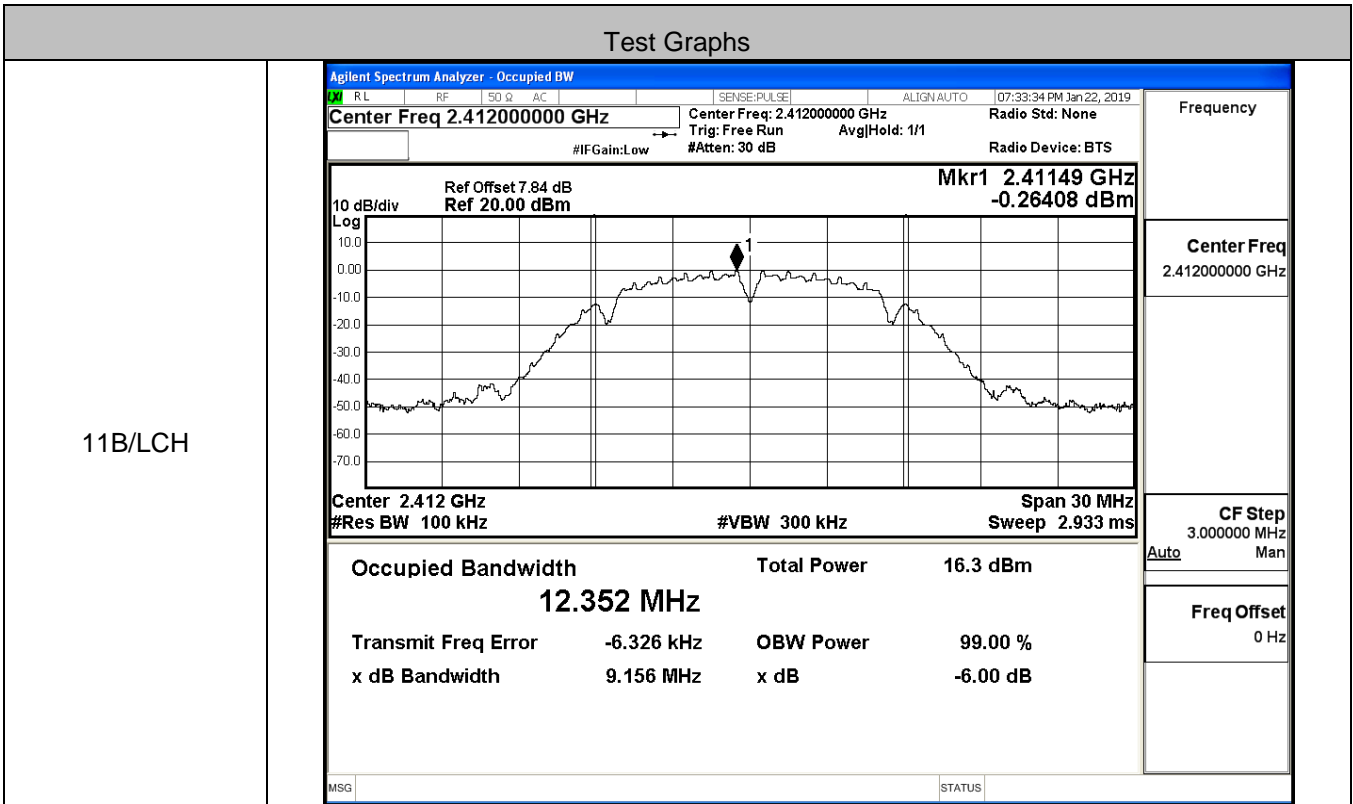
11N40SISO/HCH



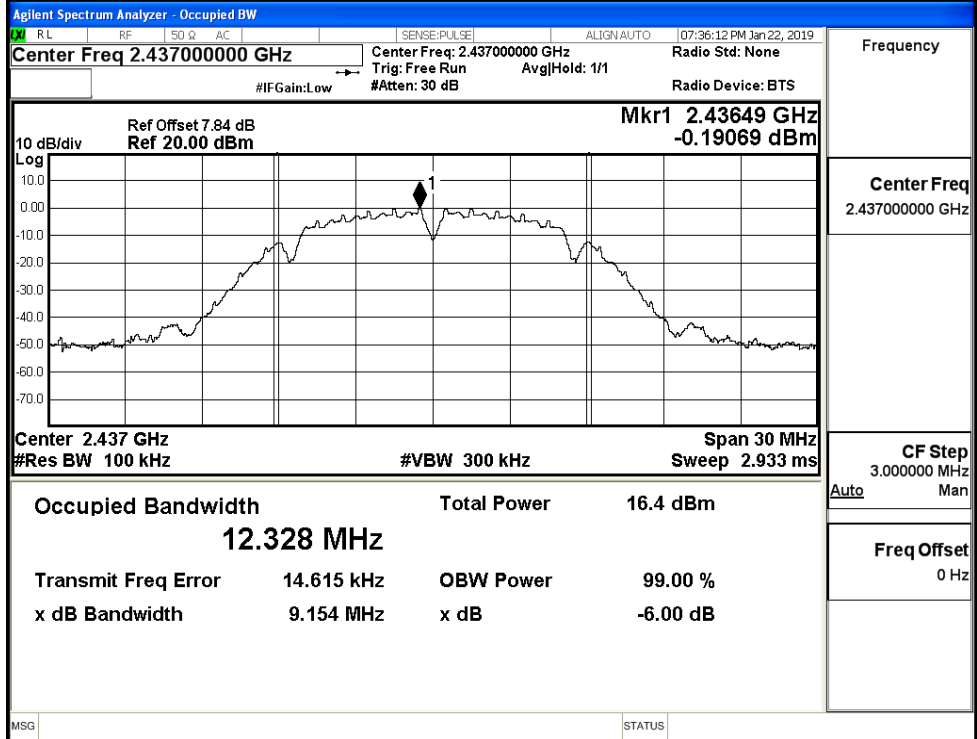
**A.4 6dB Bandwidth**

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
11B	LCH	9.156	≥0.5	PASS
	MCH	9.154	≥0.5	PASS
	HCH	9.156	≥0.5	PASS
11G	LCH	16.38	≥0.5	PASS
	MCH	16.38	≥0.5	PASS
	HCH	16.40	≥0.5	PASS
11N20SISO	LCH	17.63	≥0.5	PASS
	MCH	17.61	≥0.5	PASS
	HCH	17.62	≥0.5	PASS
11N40SISO	LCH	36.52	≥0.5	PASS
	MCH	36.50	≥0.5	PASS
	HCH	36.54	≥0.5	PASS

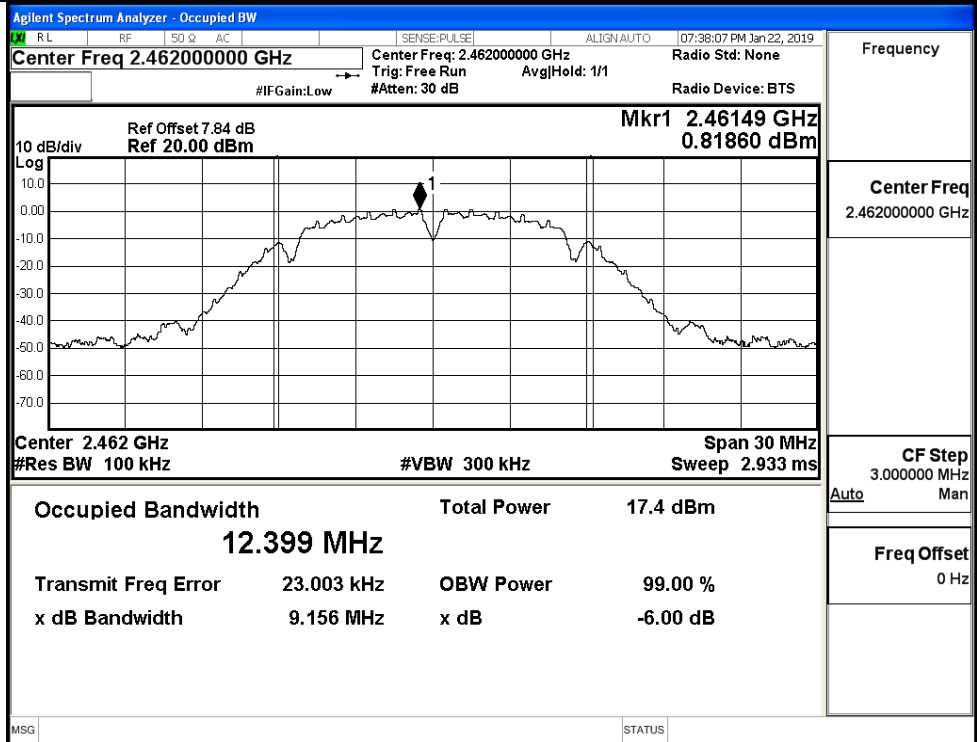
**Test Graphs**



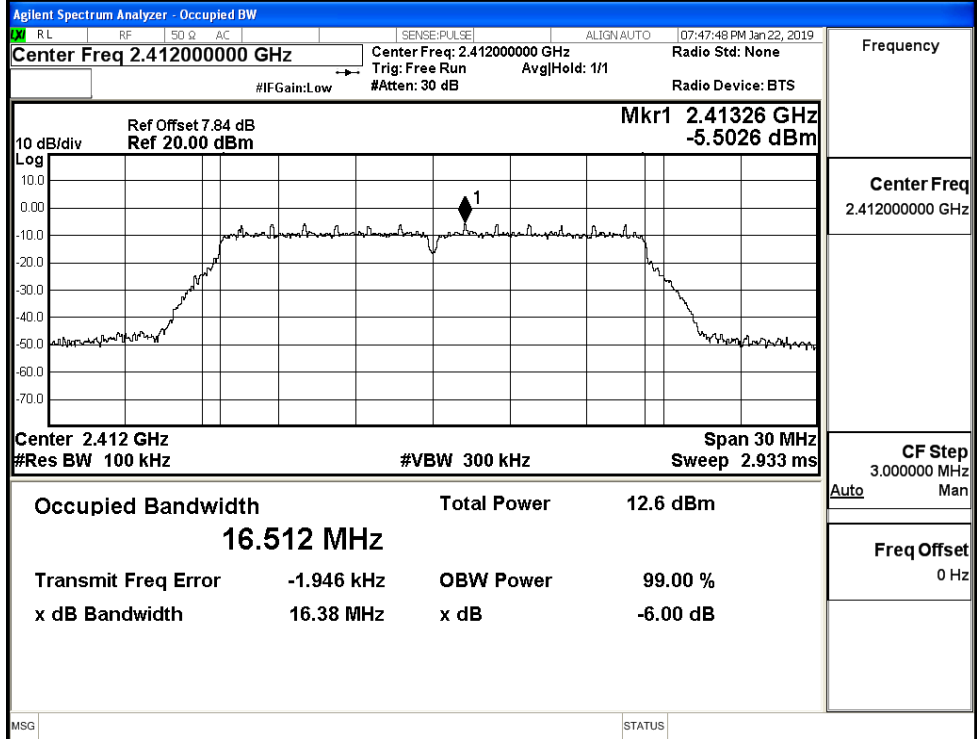
11B/MCH



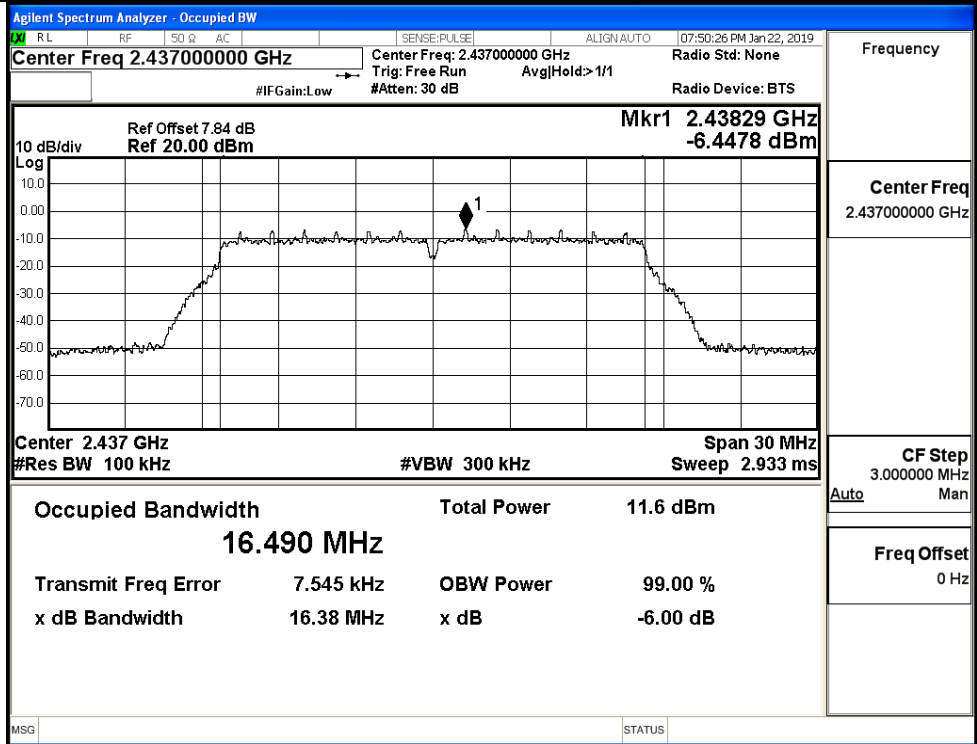
11B/HCH



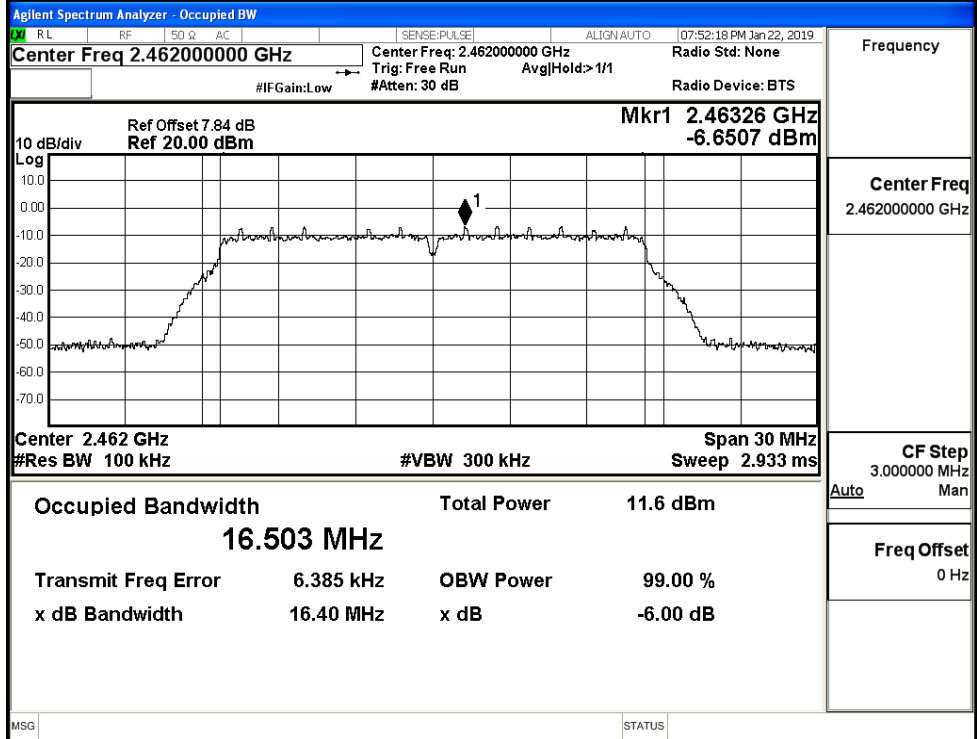
11G/LCH



11G/MCH

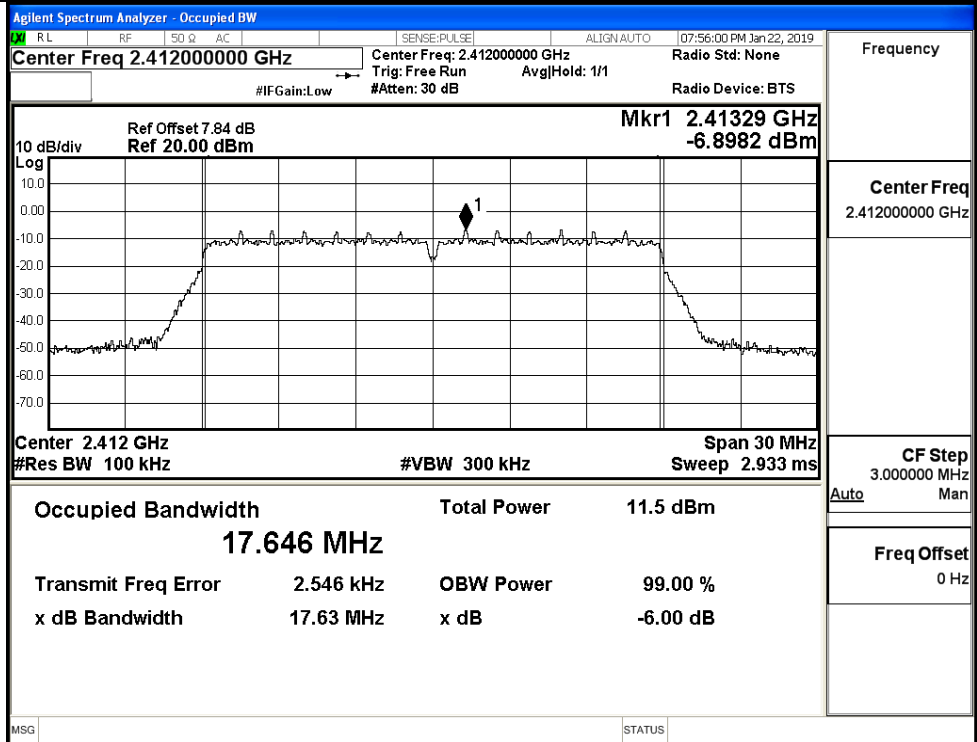


11G/HCH

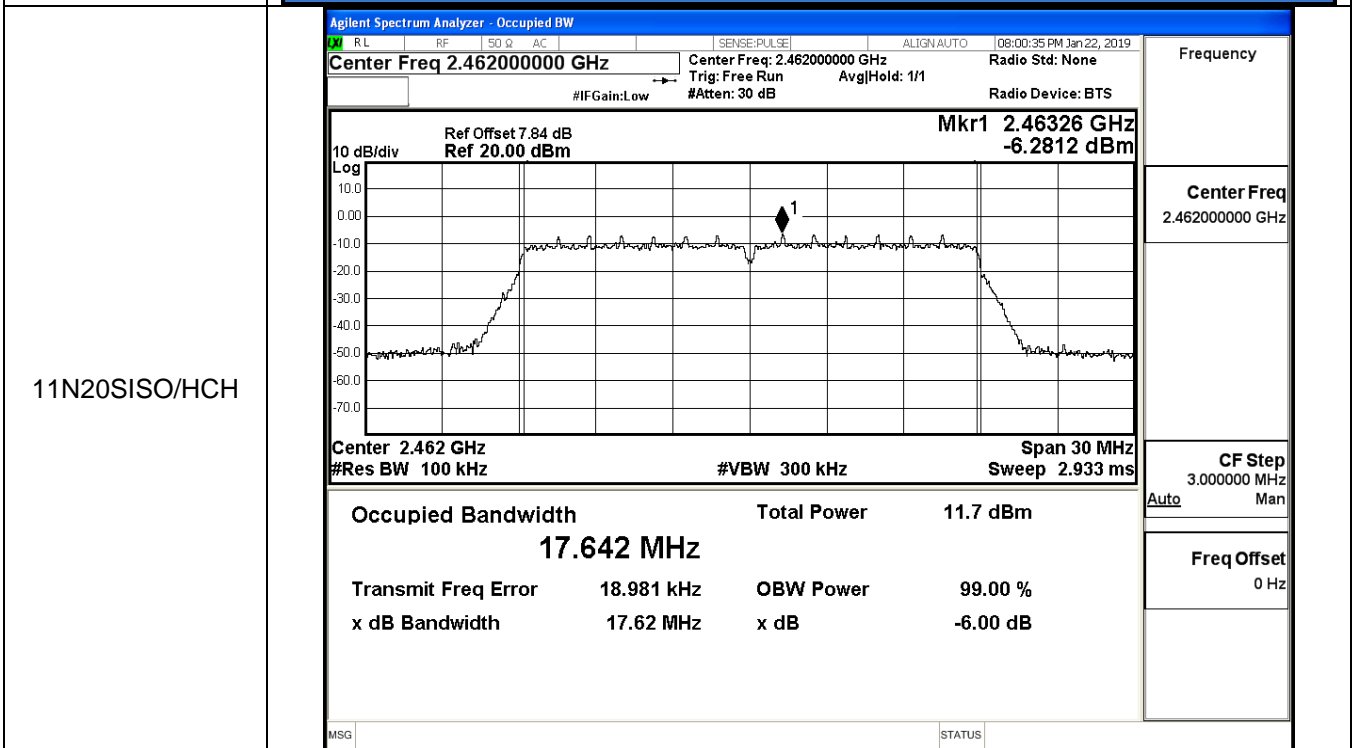
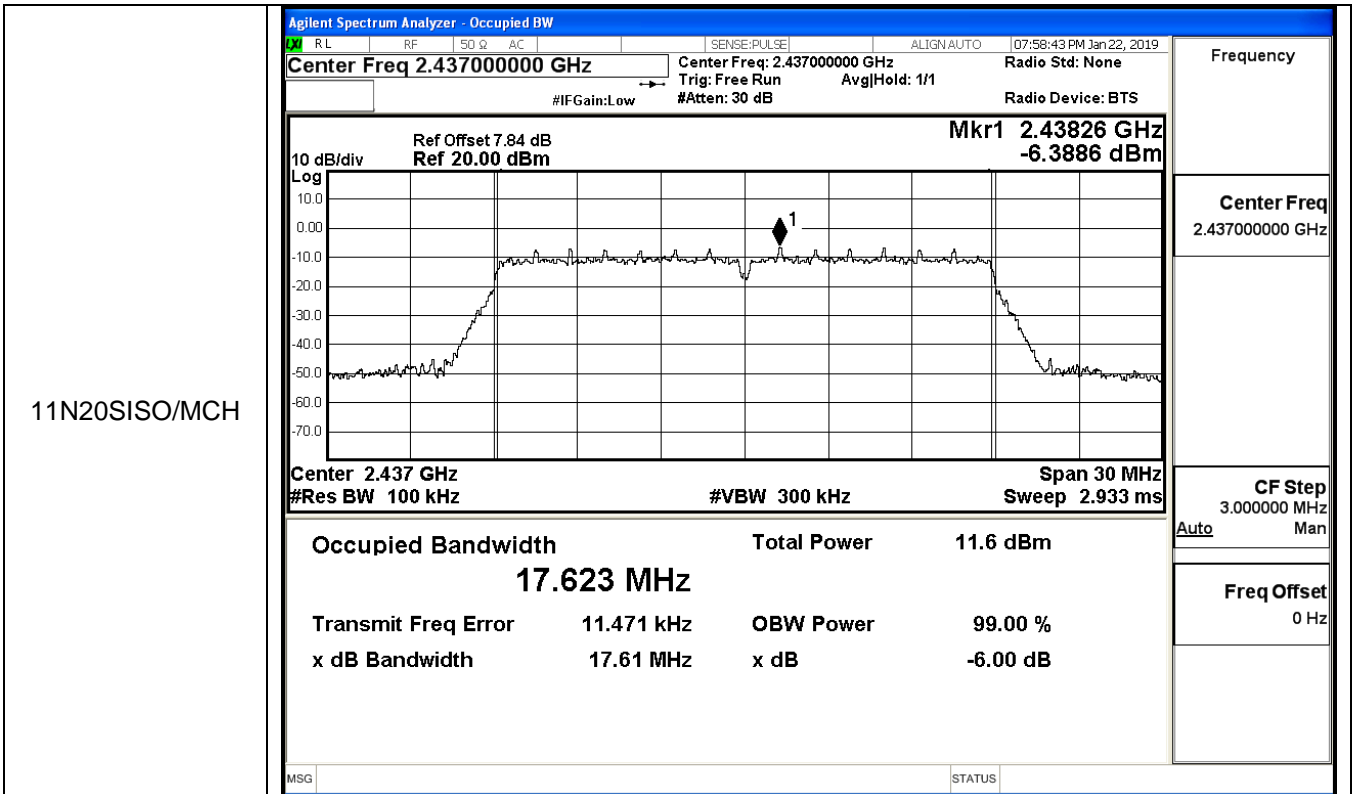


Frequency	2.46200000 GHz
Center Freq	2.46200000 GHz
CF Step	3.000000 MHz
Auto	Man
Freq Offset	0 Hz

11N20SISO/LCH

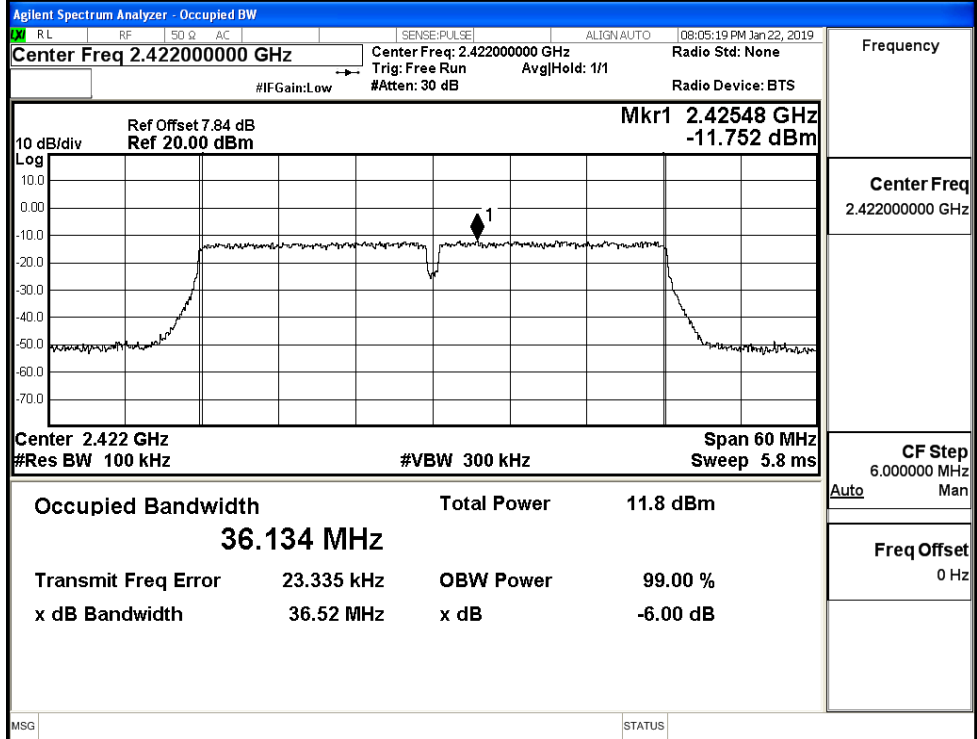


Frequency	2.41200000 GHz
Center Freq	2.41200000 GHz
CF Step	3.000000 MHz
Auto	Man
Freq Offset	0 Hz

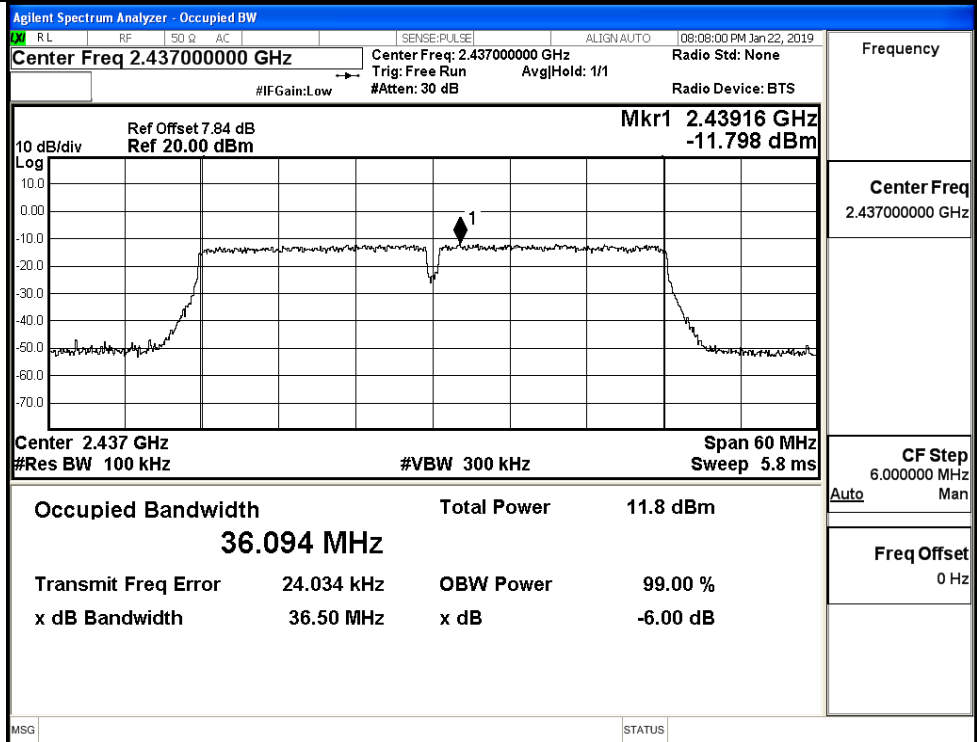




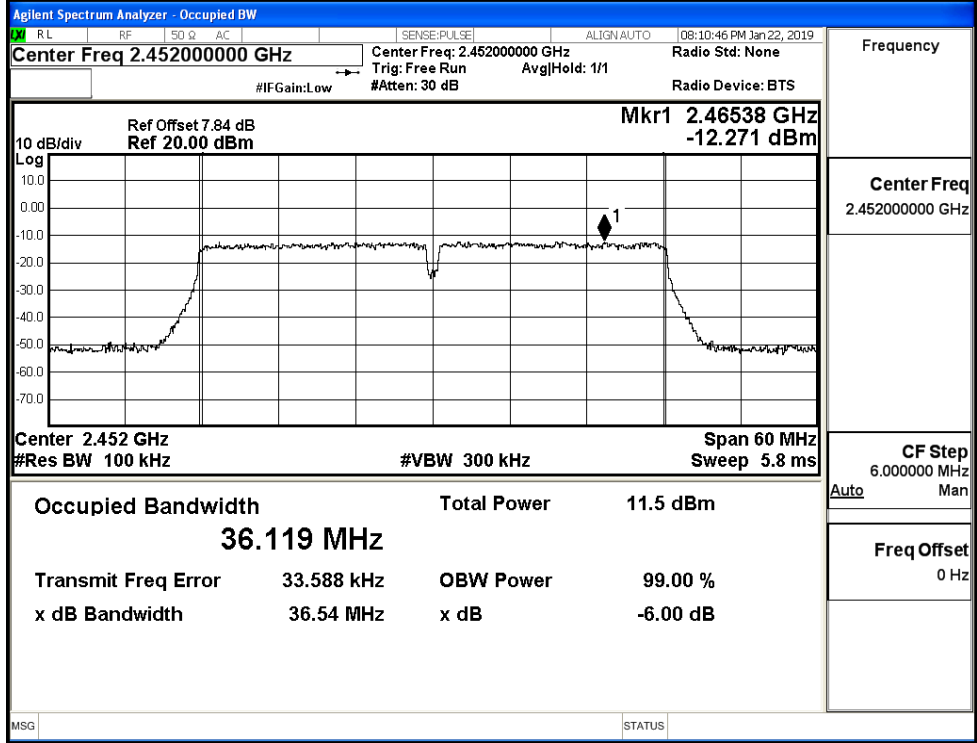
11N40SISO/LCH



11N40SISO/MCH



11N40SISO/HCH



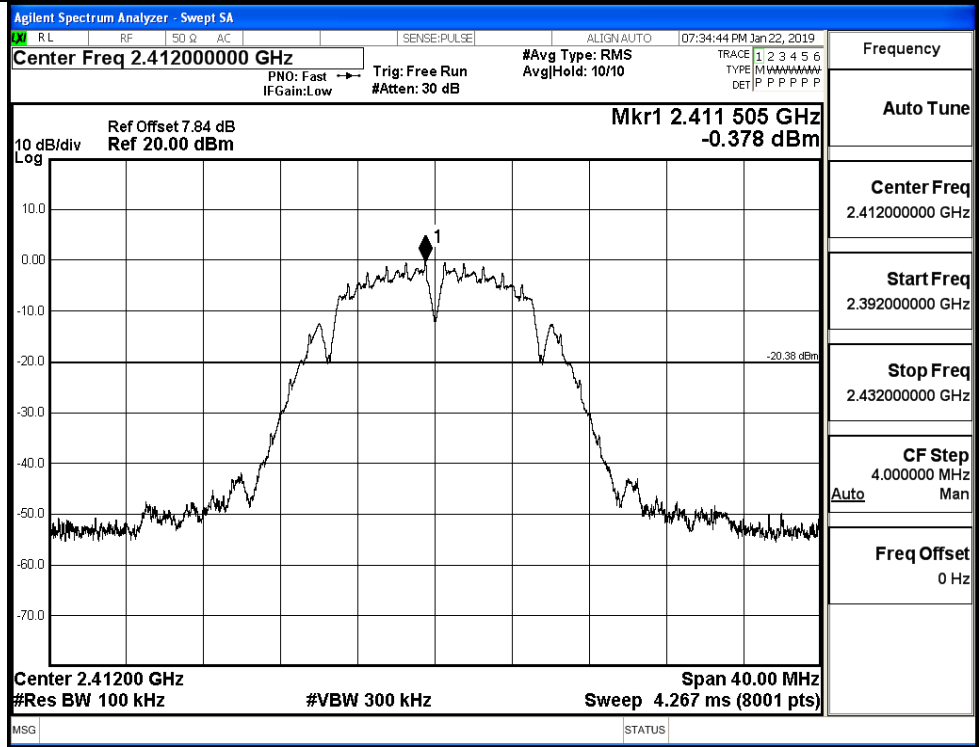
Frequency	Center Freq 2.45200000 GHz
CF Step	6.000000 MHz Auto Man
Freq Offset	0 Hz

**A.5 RF Conducted Spurious Emissions**

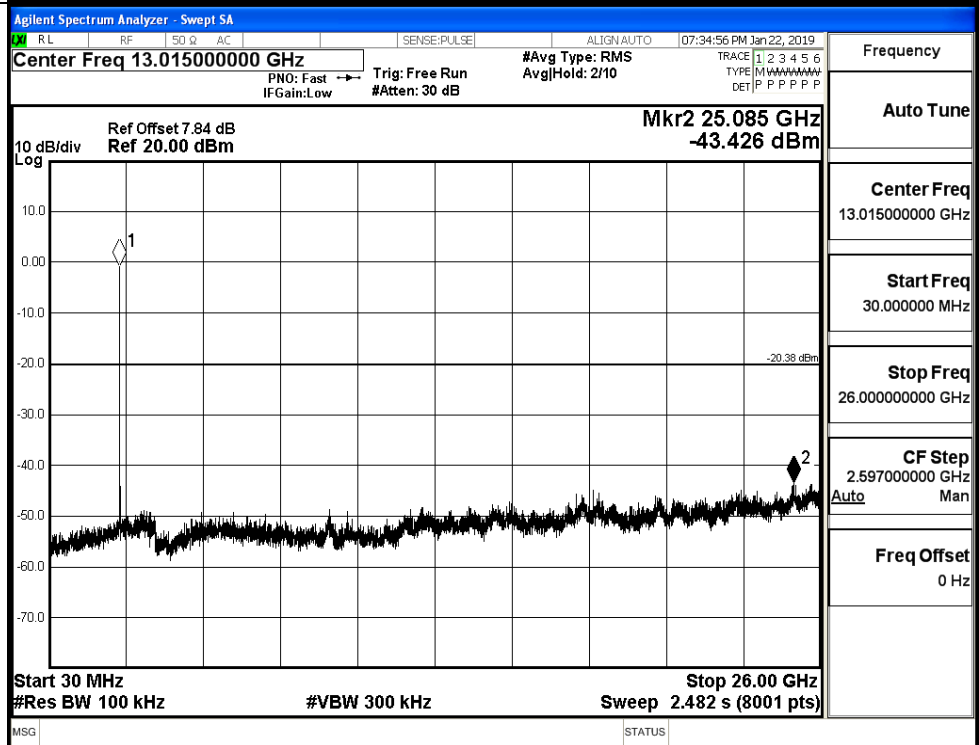
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
11B	LCH	-0.378	-43.426	-20.378	PASS
	MCH	-0.262	-43.017	-20.262	PASS
	HCH	0.745	-43.660	-19.255	PASS
11G	LCH	-5.581	-44.840	-25.581	PASS
	MCH	-6.535	-44.019	-26.535	PASS
	HCH	-6.483	-44.581	-26.483	PASS
11N20SISO	LCH	-6.499	-42.615	-26.499	PASS
	MCH	-6.558	-43.927	-26.558	PASS
	HCH	-6.823	-44.092	-26.823	PASS
11N40SISO	LCH	-11.729	-43.575	-31.729	PASS
	MCH	-11.683	-44.562	-31.683	PASS
	HCH	-12.38	-43.951	-32.380	PASS

11B\_LCH\_Graphs

Pref/11B/LCH

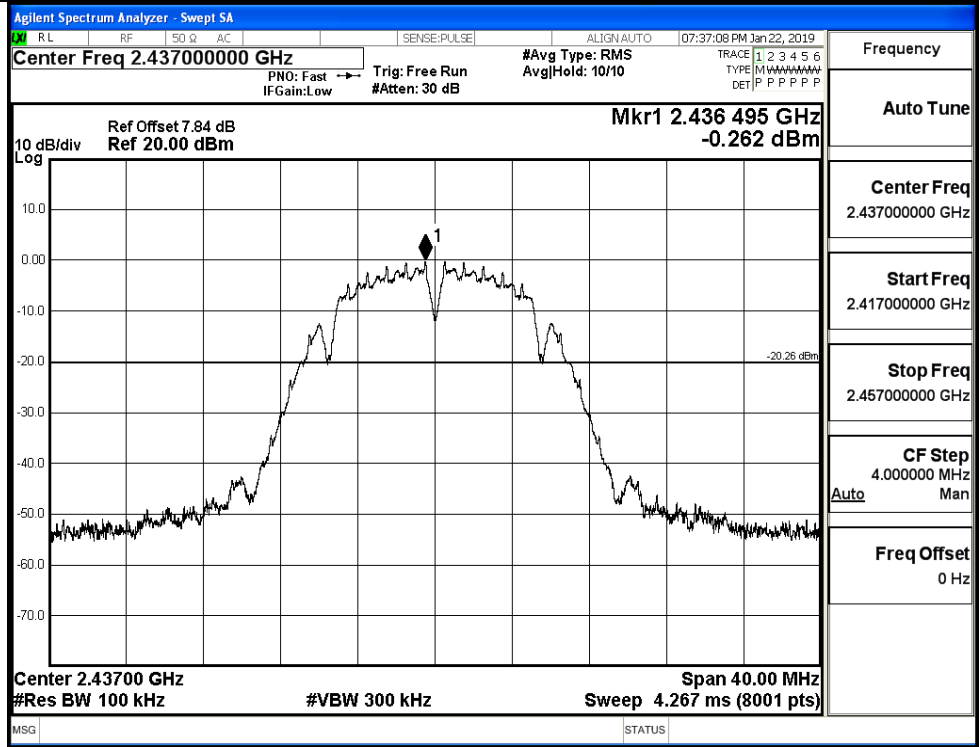


Puw/11B/LCH

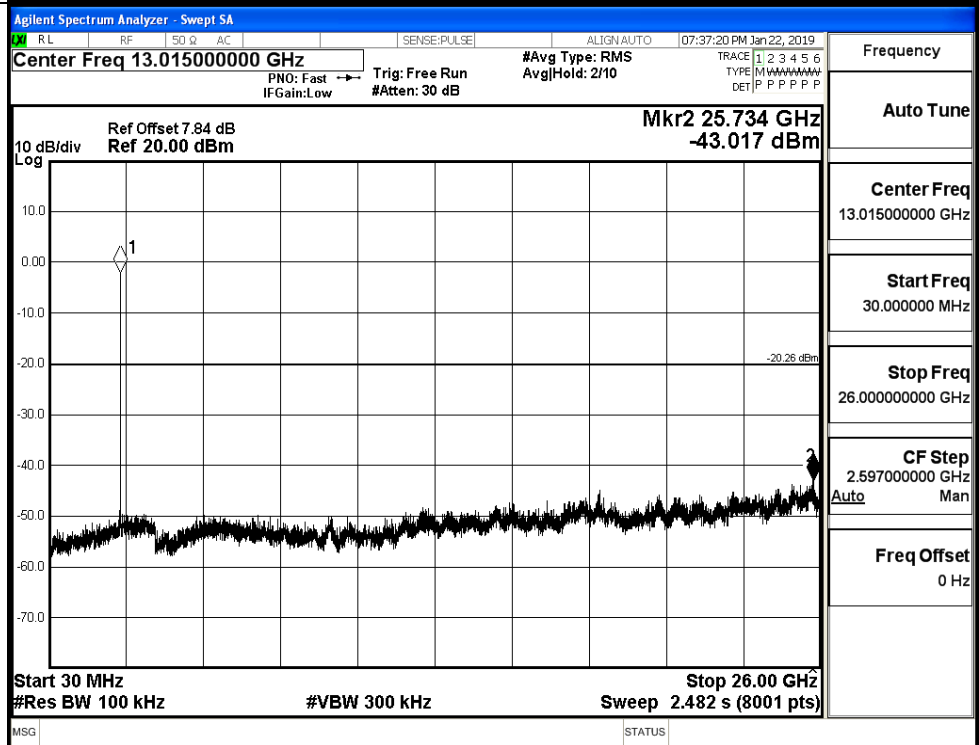


11B\_MCH\_Graphs

Pref/11B/MCH

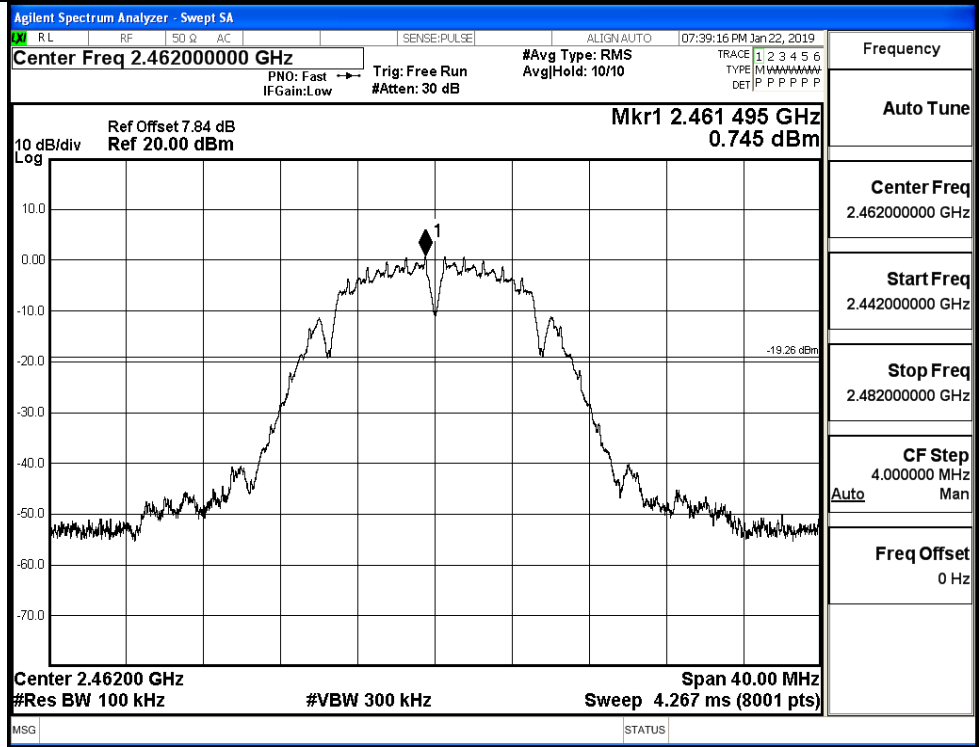


Puw/11B/MCH

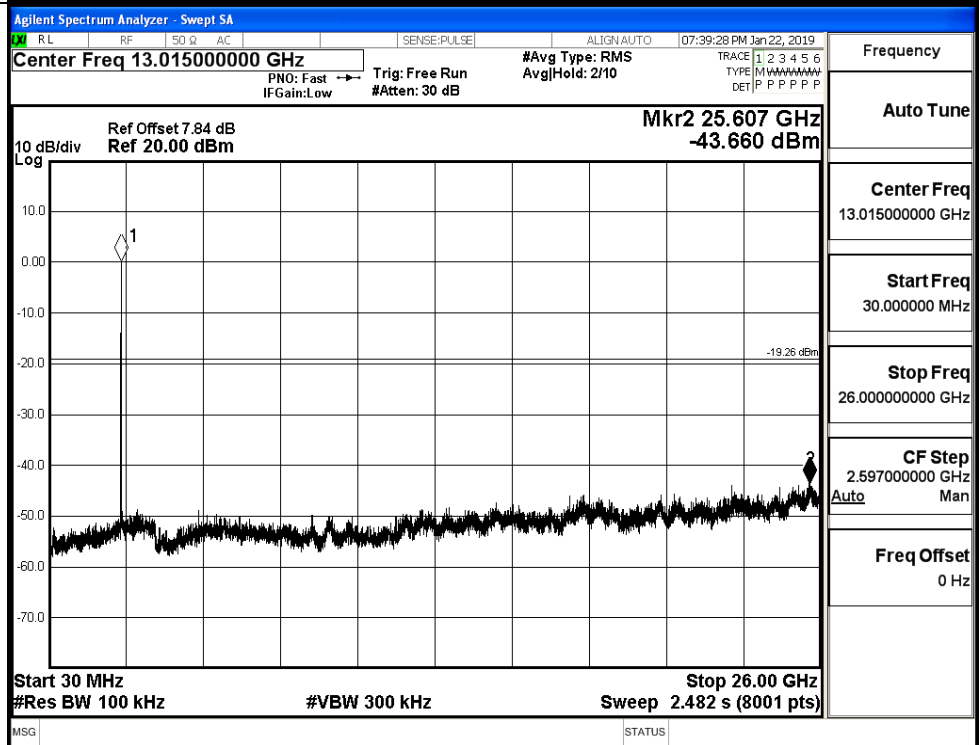


11B\_HCH\_Graphs

Pref/11B/HCH

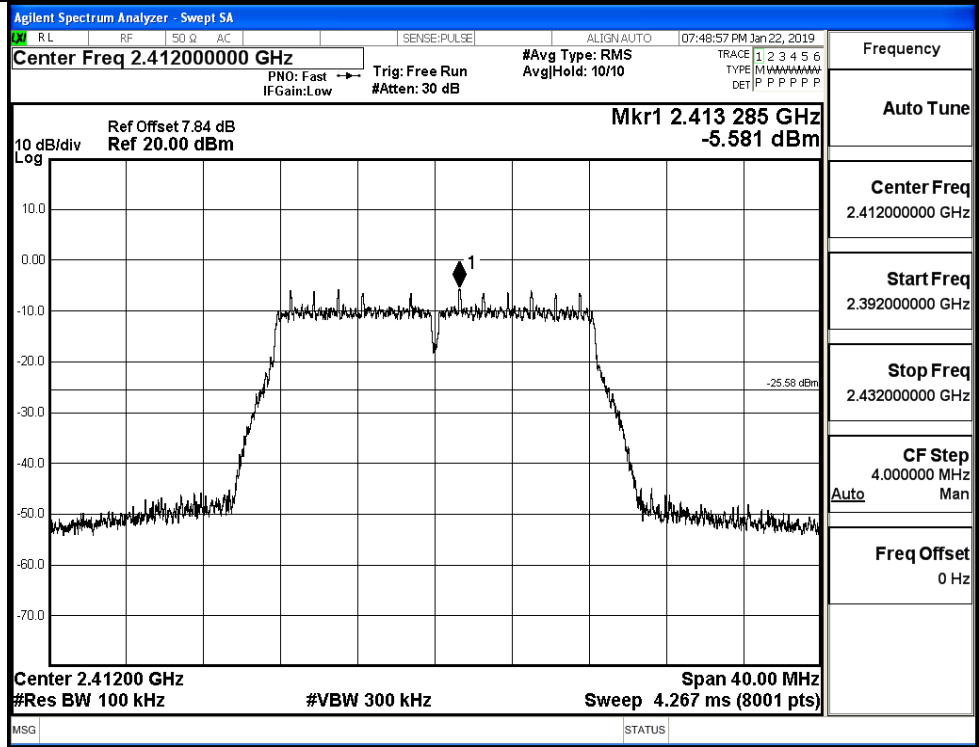


Puw/11B/HCH

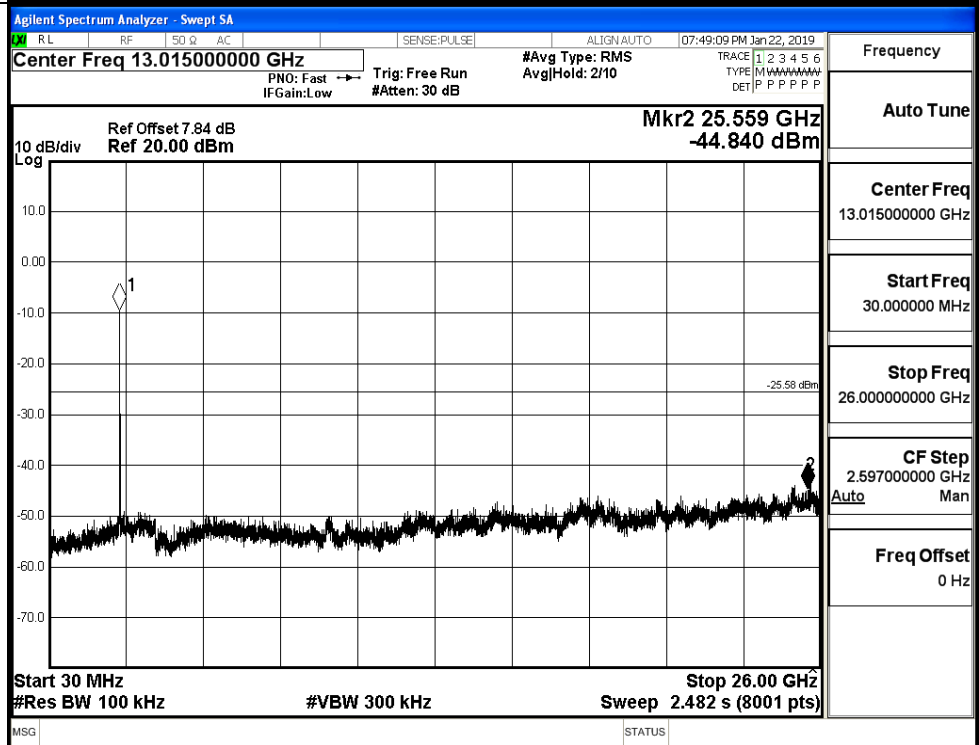


11G\_LCH\_Graphs

Pref/11G/LCH

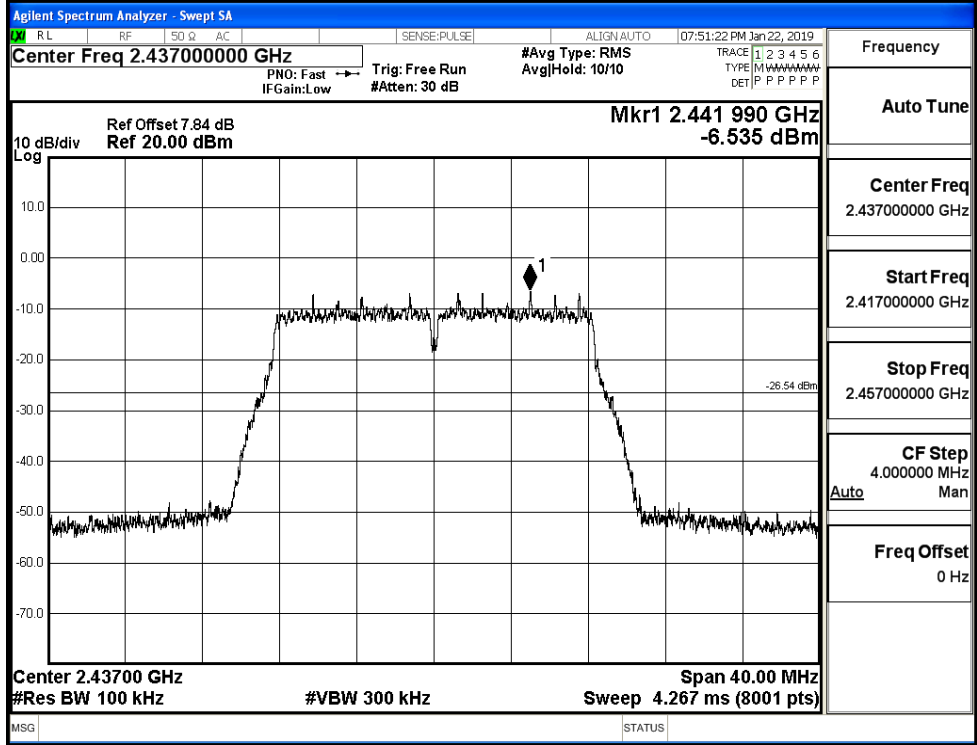


Puw/11G/LCH

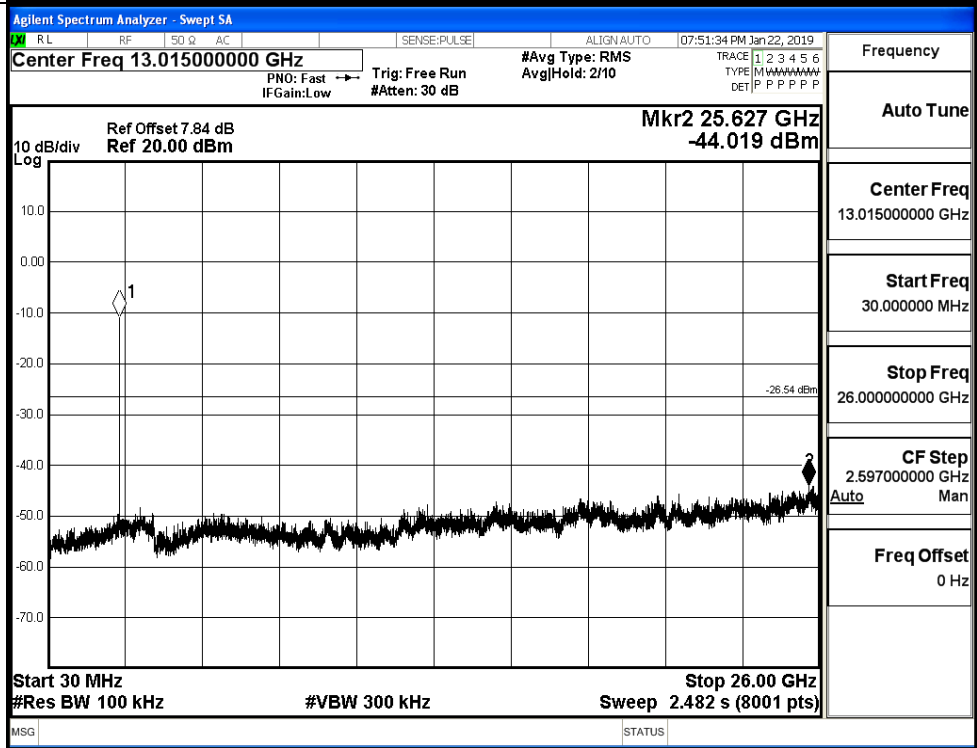


11G\_MCH\_Graphs

Pref/11G/MCH



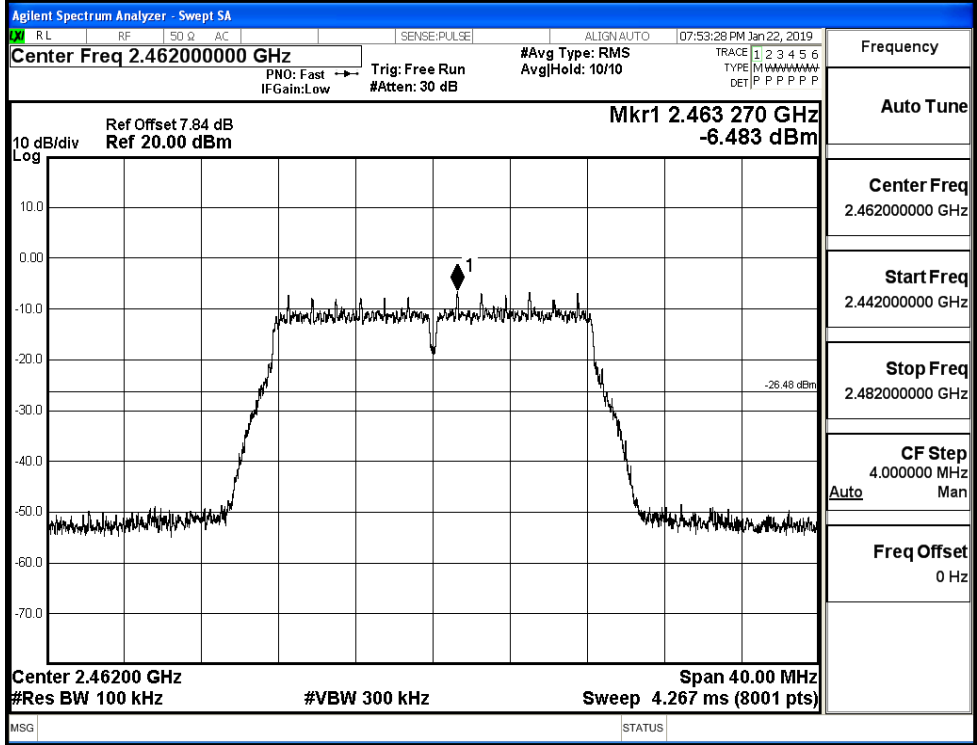
Puw/11G/MCH



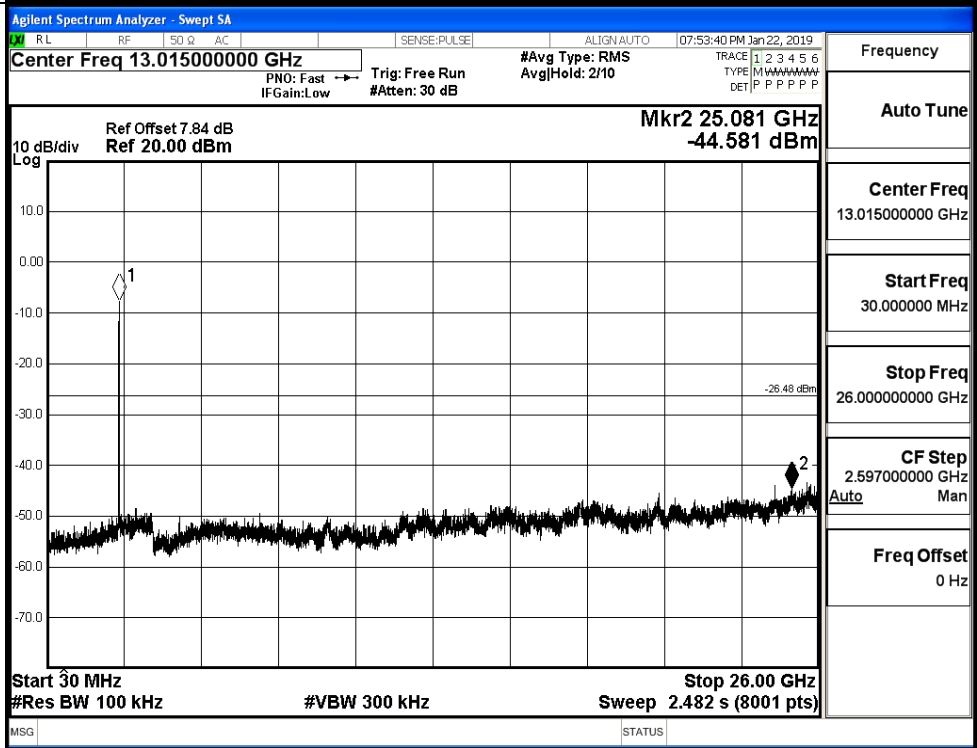


11G\_HCH\_Graphs

Pref/11G/HCH

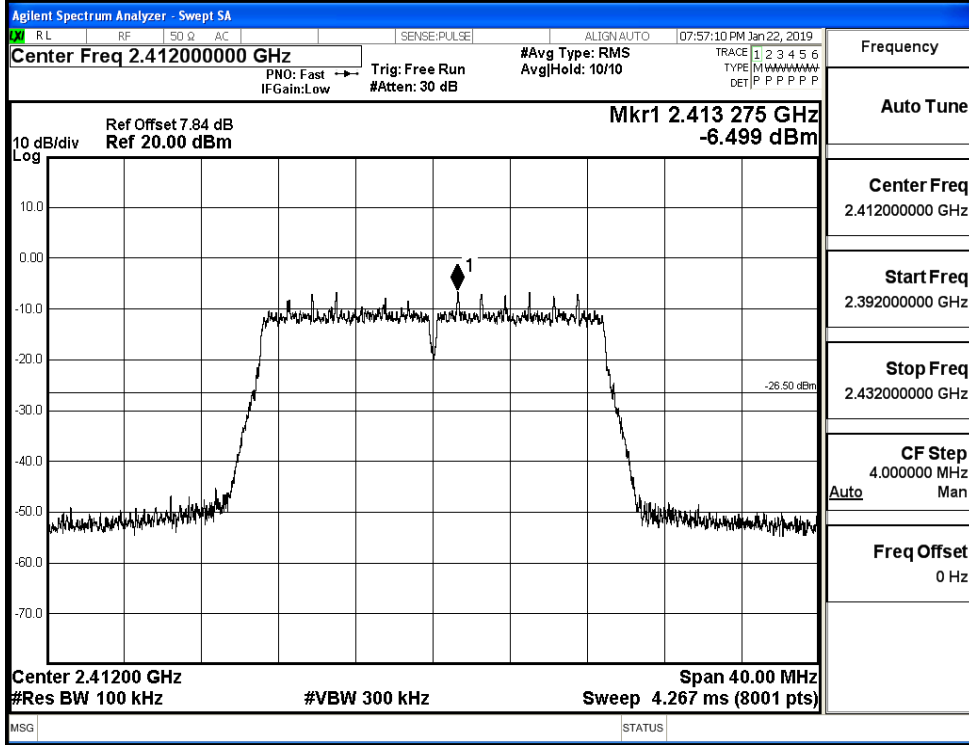


Puw/11G/HCH

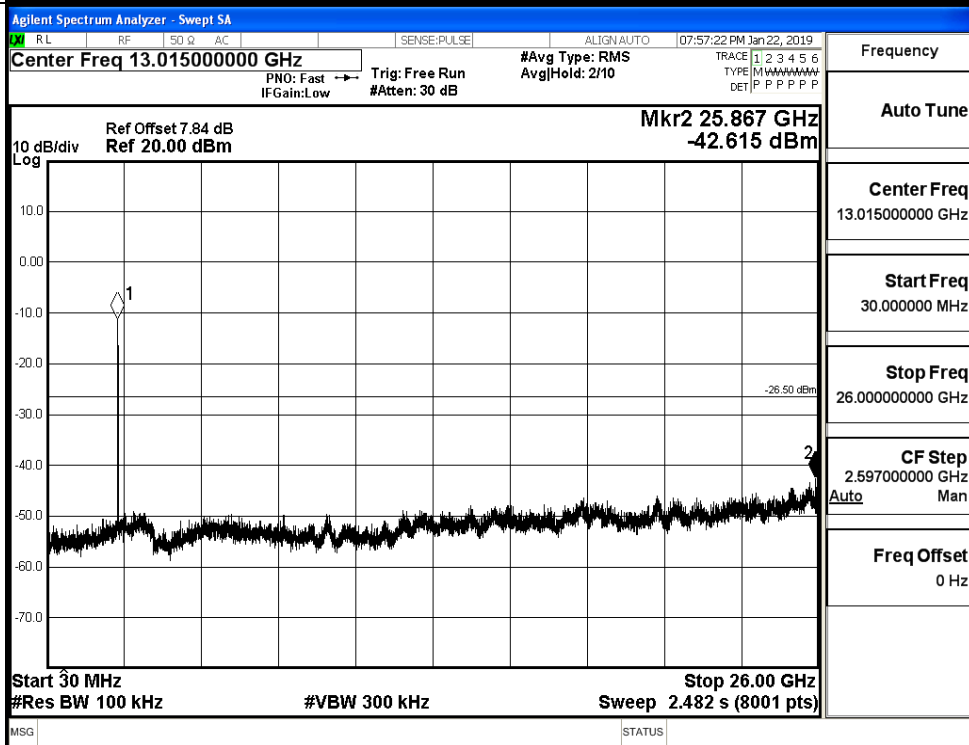


11N20SISO\_LCH\_Graphs

Pref/11N20SIS  
O/LCH

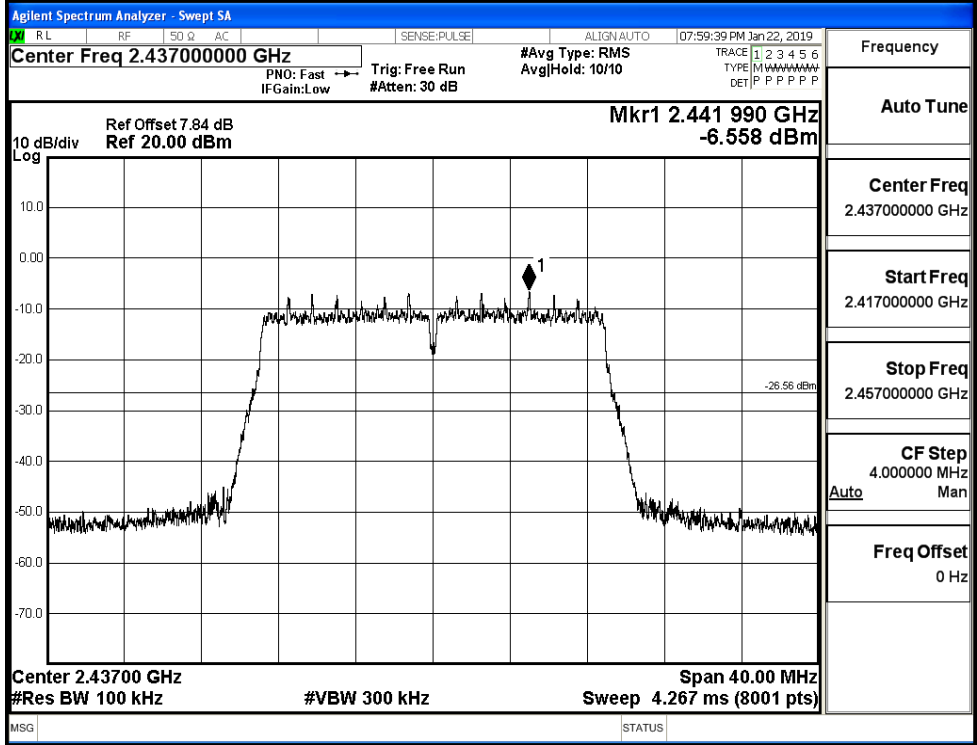


Puw/11N20  
SISO/LCH

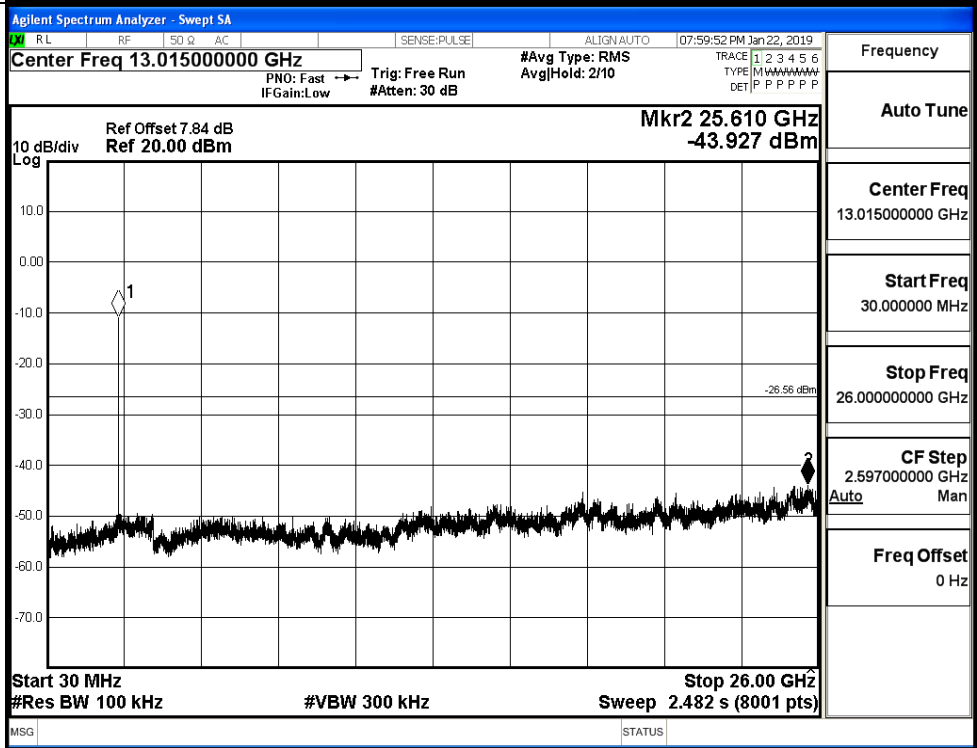


11N20SISO\_MCH\_Graphs

Pref/11N20  
SISO/MCH

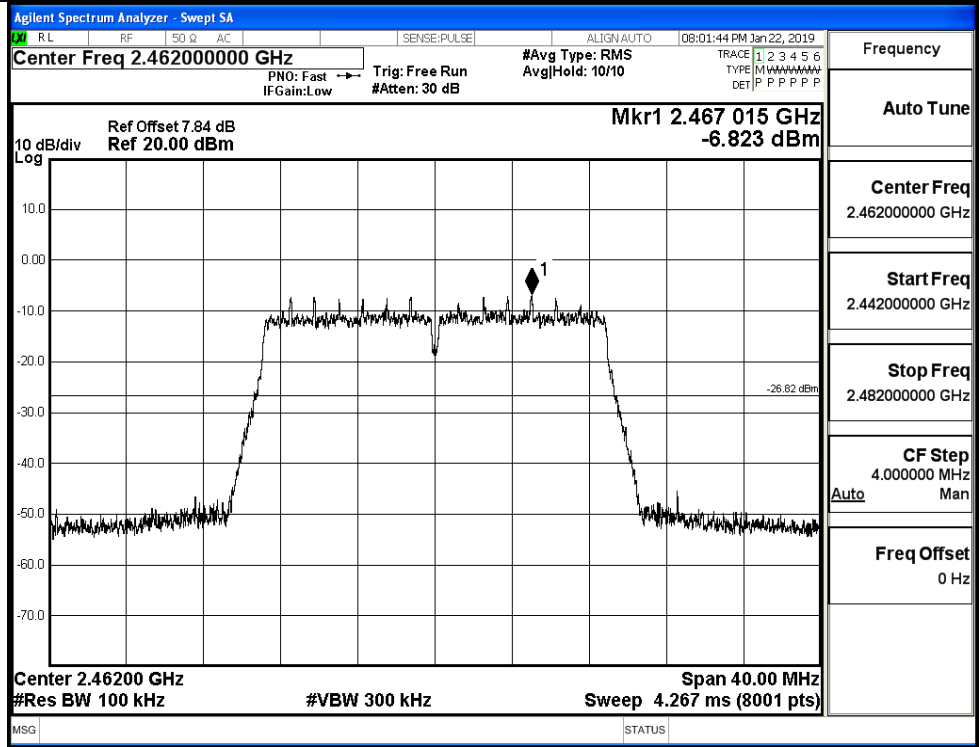


Puw/11N20  
SISO/MCH

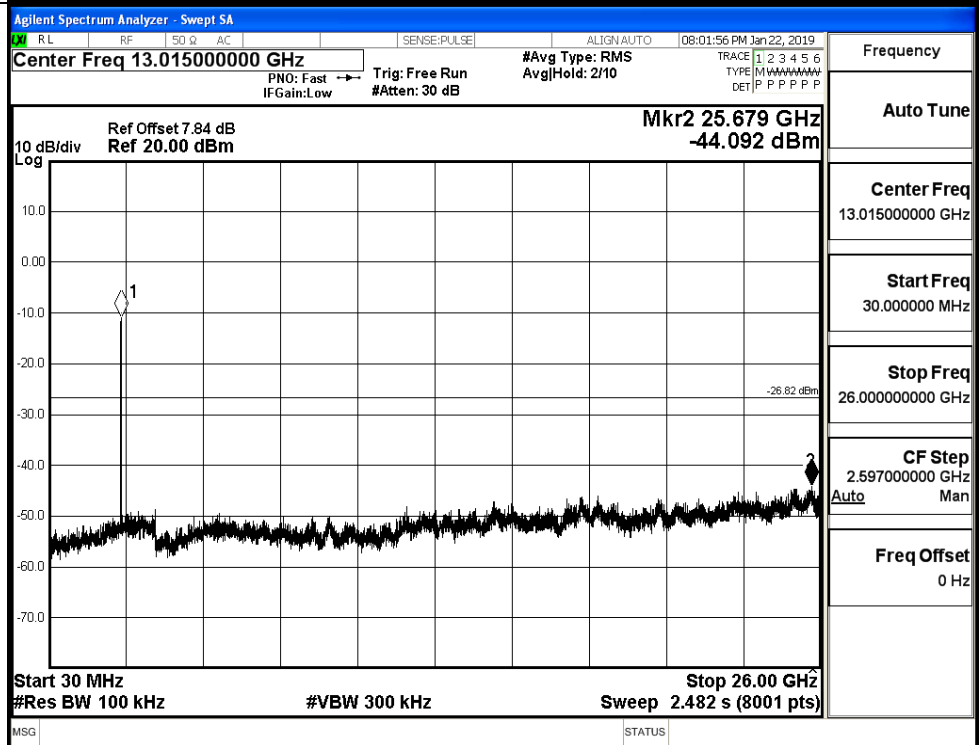


11N20SISO\_HCH\_Graphs

Pref/11N20  
SISO/HCH

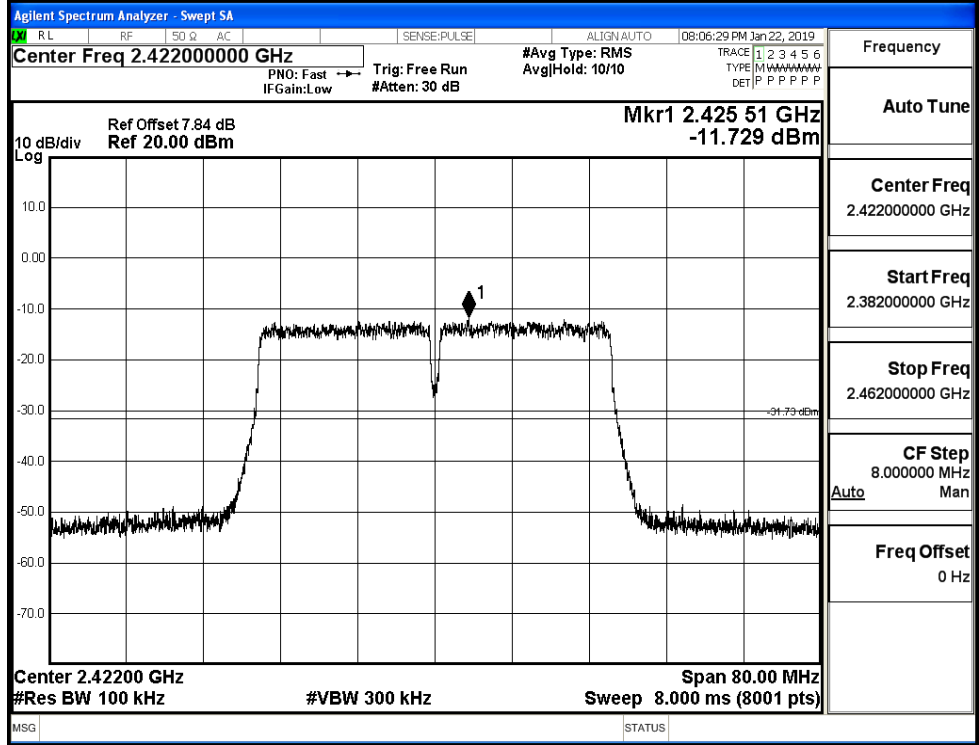


Puw/11N20  
SISO/HCH

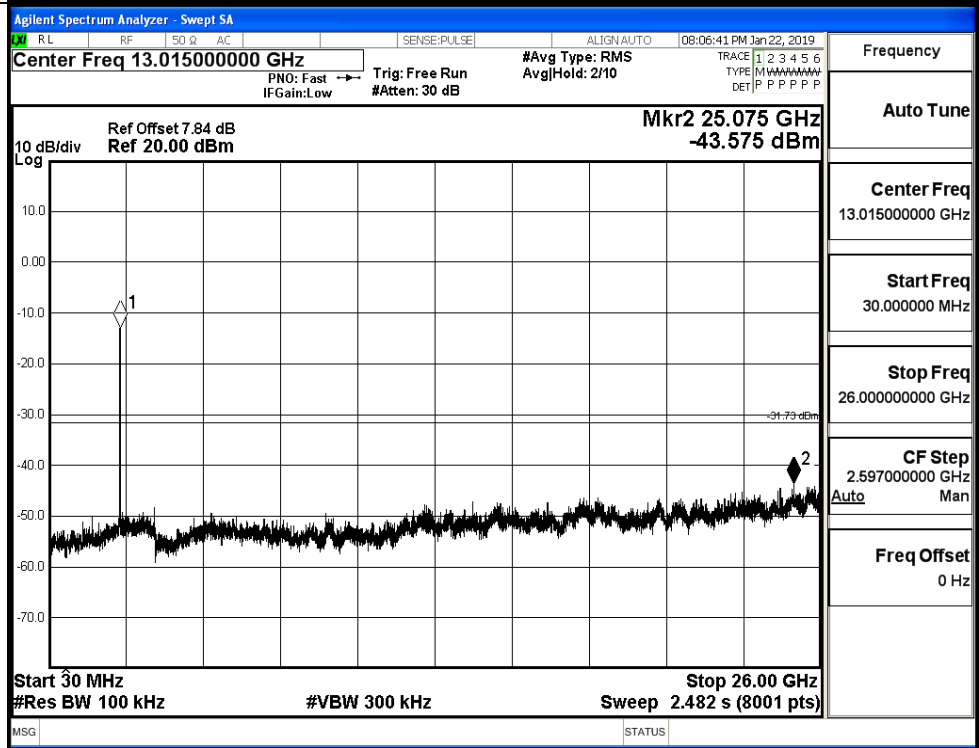


11N40SISO\_LCH\_Graphs

Pref/11N40  
SISO/LCH

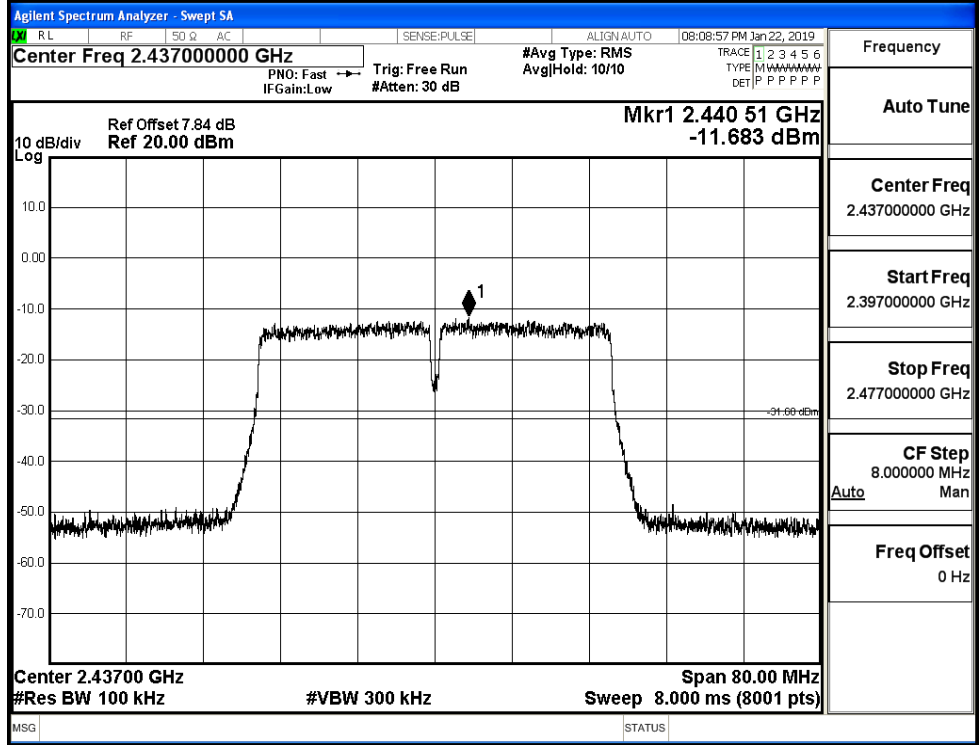


Puw/11N40  
SISO/LCH

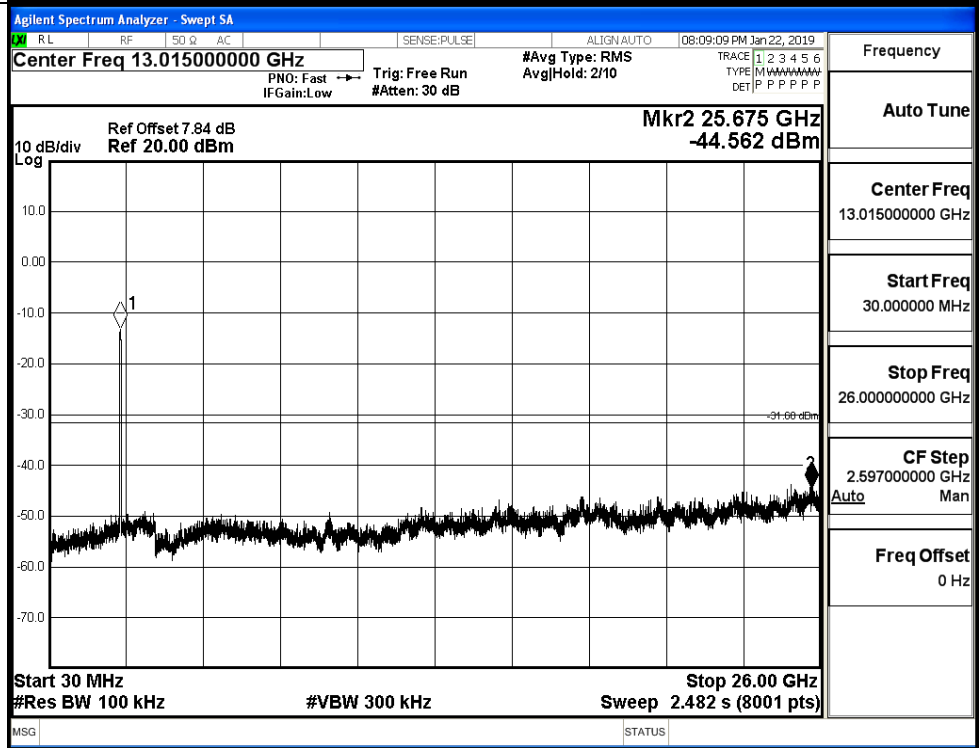


11N40SISO\_MCH\_Graphs

Pref/11N40  
SISO/MCH

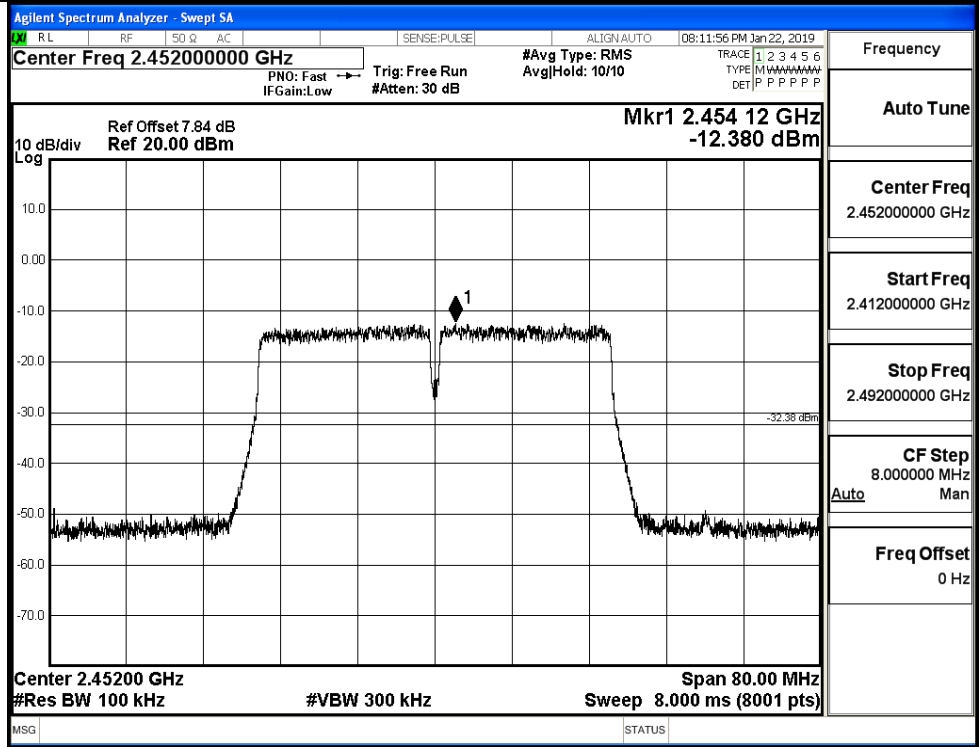


Puw/11N40  
SISO/MCH

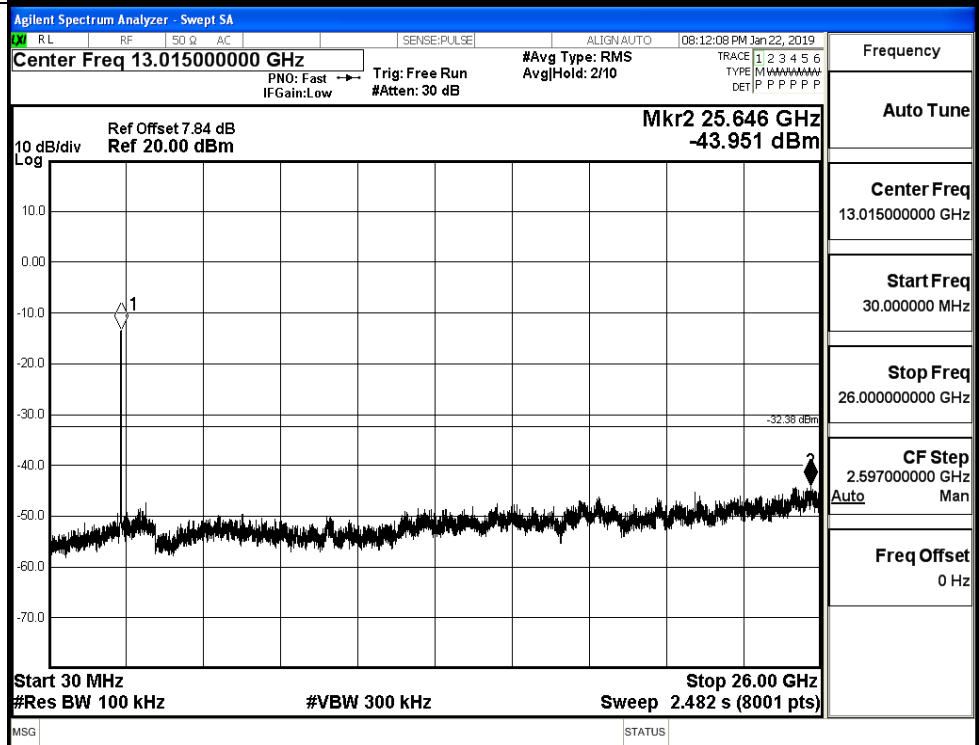


11N40SISO\_HCH\_Graphs

Pref/11N40  
SISO/HCH

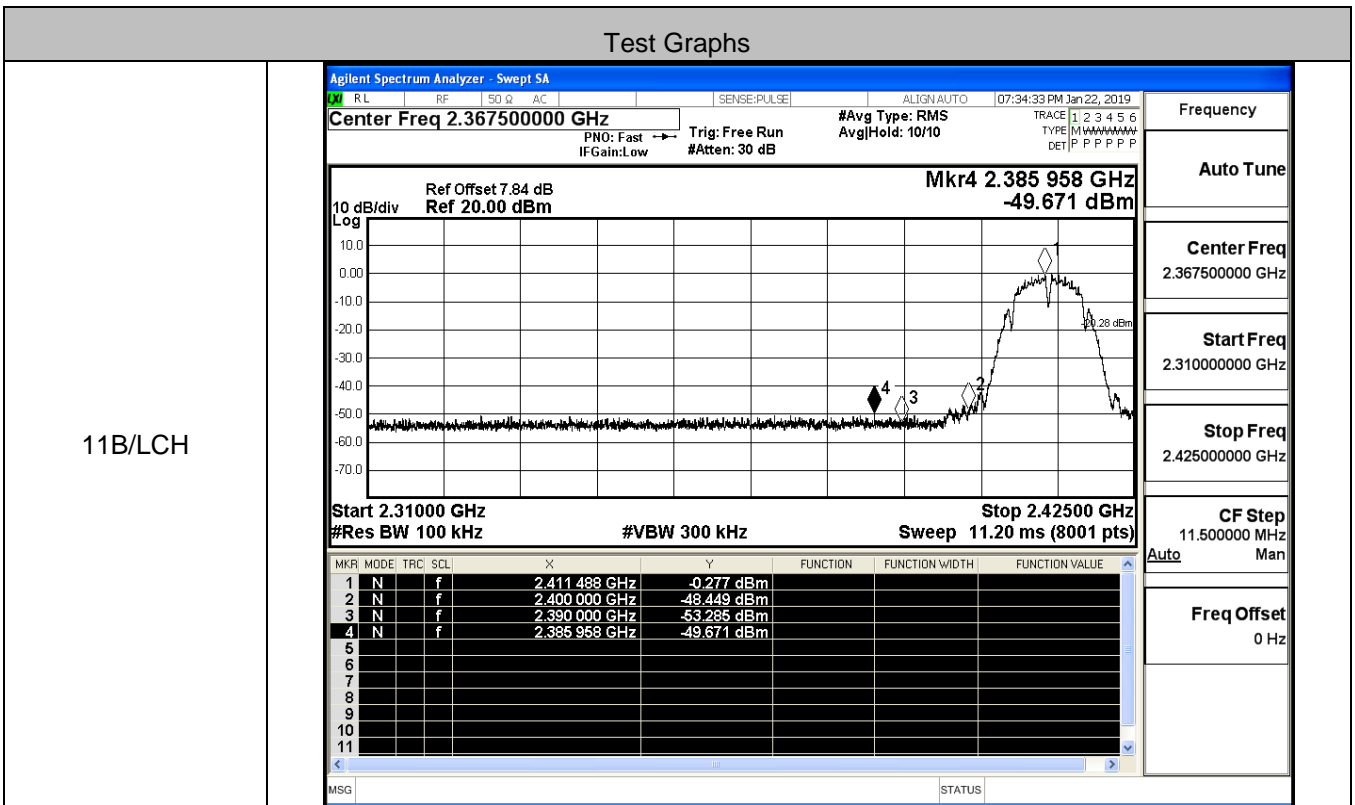


Puw/11N40  
SISO/HCH



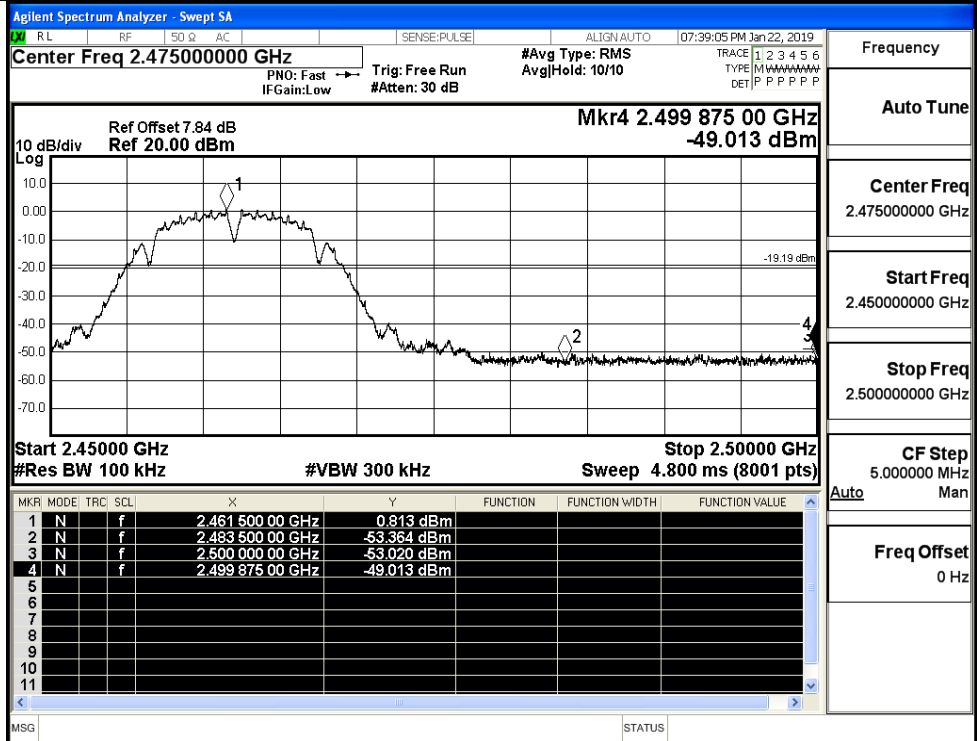
### A.6 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
11B	LCH	-0.277	-49.671	-20.28	PASS
	HCH	0.813	-49.013	-19.19	PASS
11G	LCH	-5.813	-49.730	-25.81	PASS
	HCH	-6.481	-49.436	-26.48	PASS
11N20SISO	LCH	-6.780	-49.361	-26.78	PASS
	HCH	-6.789	-50.151	-26.79	PASS
11N40SISO	LCH	-12.130	-50.159	-32.13	PASS
	HCH	-12.585	-49.962	-32.59	PASS



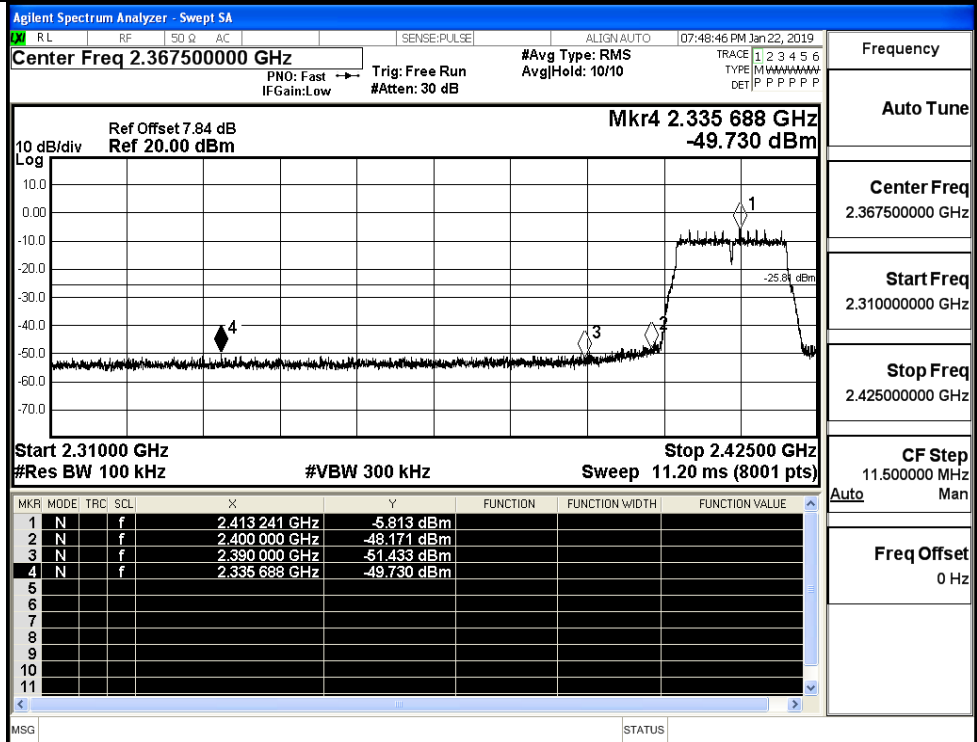


11B/HCH



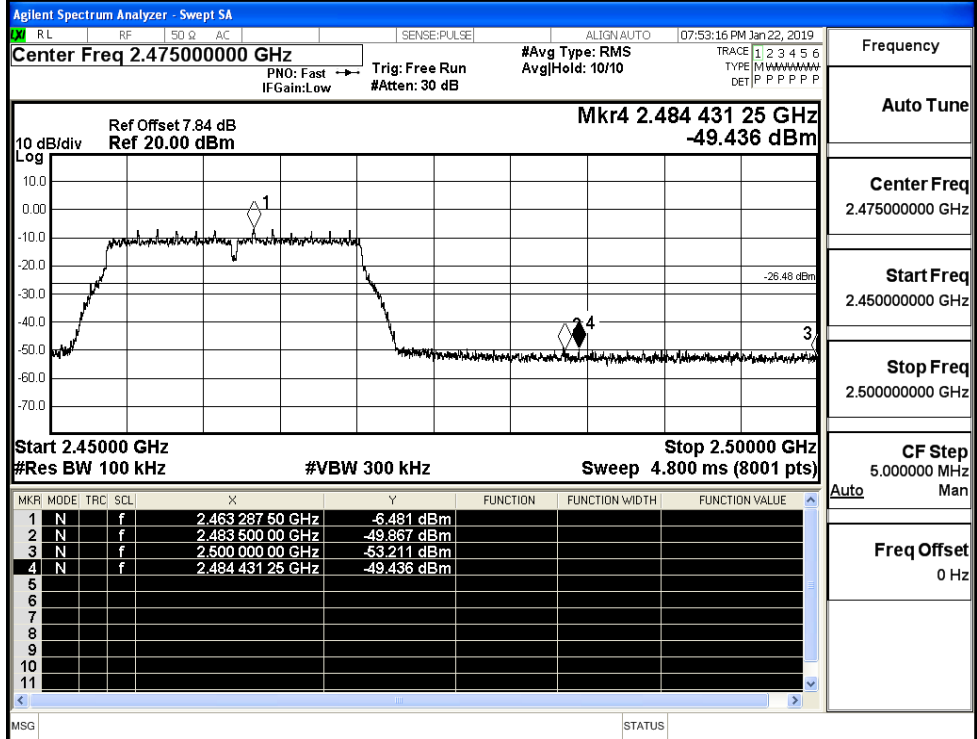
Frequency	
Auto Tune	
Center Freq	2.47500000 GHz
Start Freq	2.45000000 GHz
Stop Freq	2.50000000 GHz
CF Step	5.000000 MHz
Freq Offset	0 Hz

11G/LCH



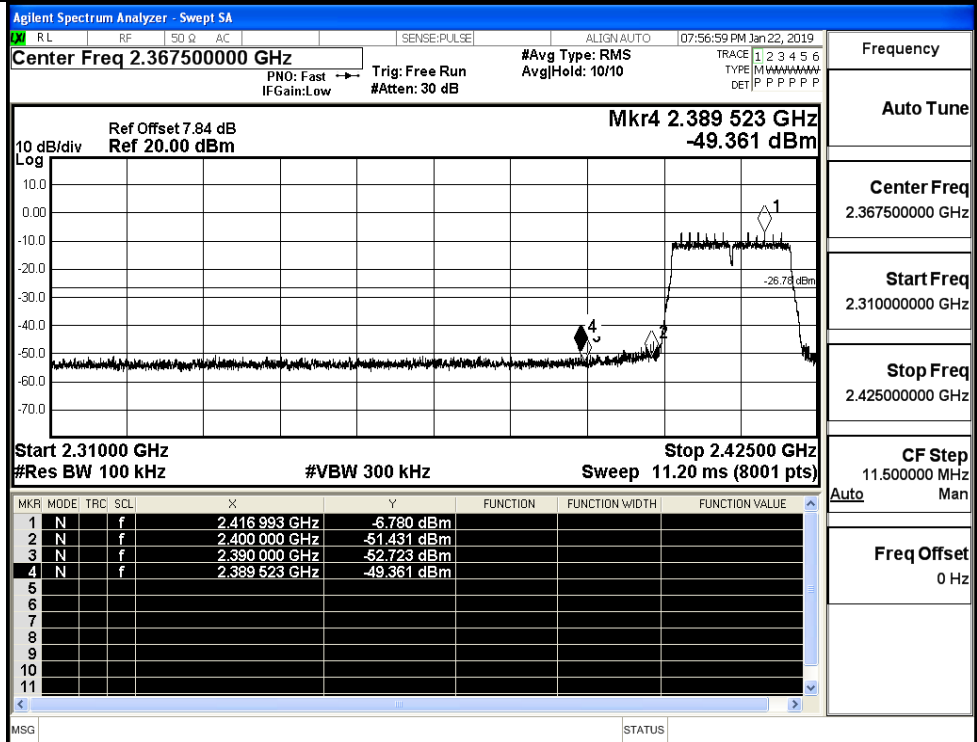
Frequency	
Auto Tune	
Center Freq	2.36750000 GHz
Start Freq	2.31000000 GHz
Stop Freq	2.42500000 GHz
CF Step	11.500000 MHz
Freq Offset	0 Hz

11G/HCH



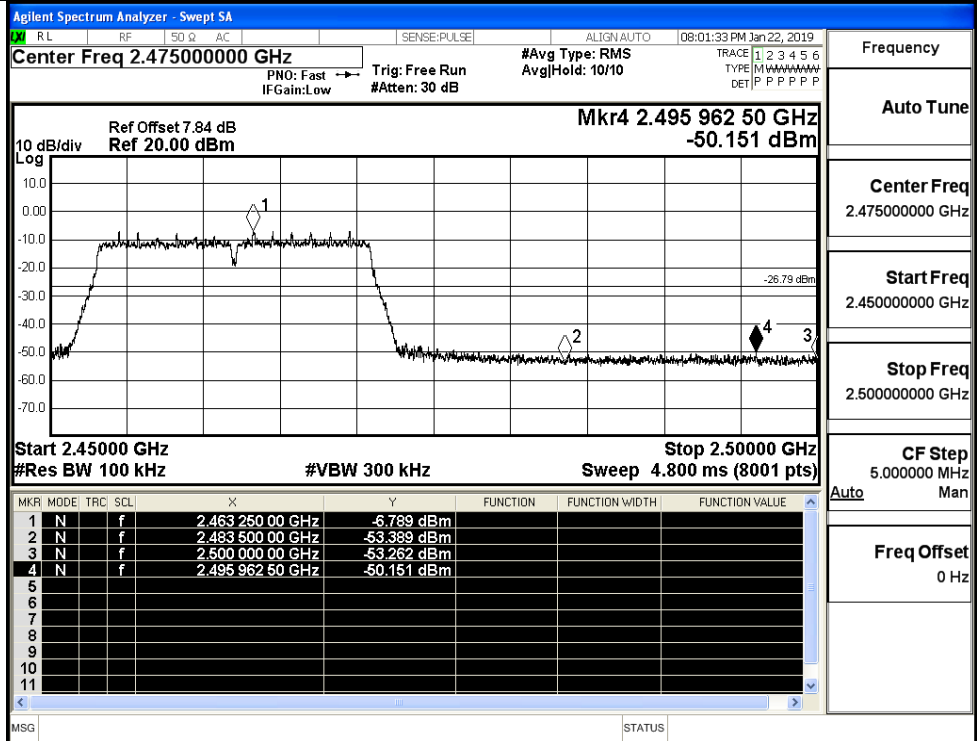
Frequency	
Auto Tune	
Center Freq	2.47500000 GHz
Start Freq	2.45000000 GHz
Stop Freq	2.50000000 GHz
CF Step	5.000000 MHz
Freq Offset	0 Hz

11N20SISO/LCH

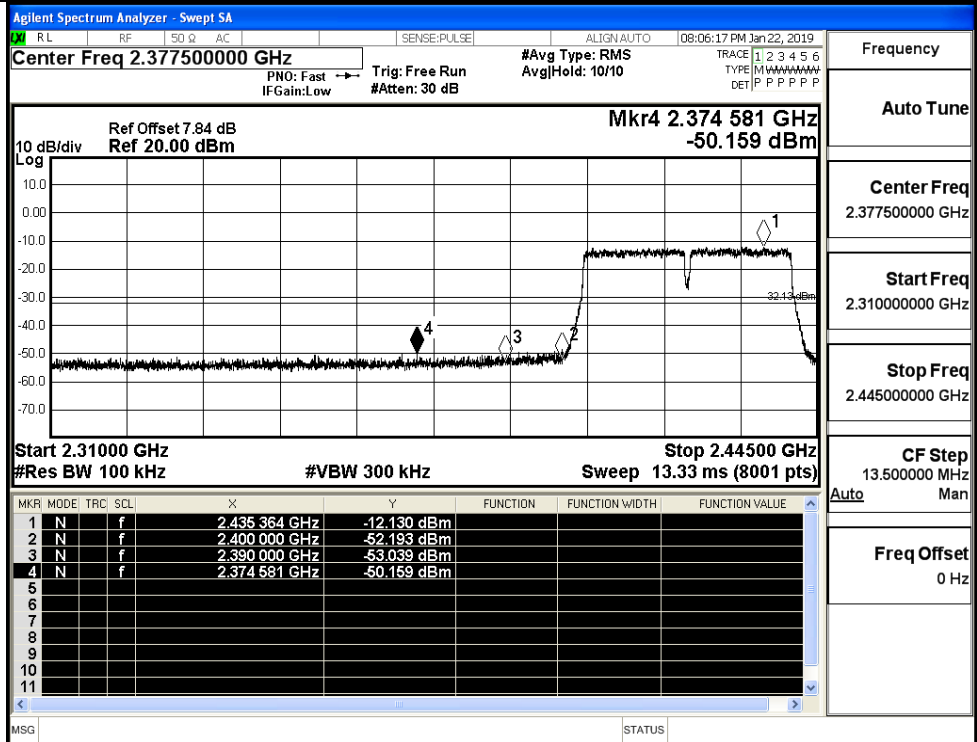


Frequency	
Auto Tune	
Center Freq	2.36750000 GHz
Start Freq	2.31000000 GHz
Stop Freq	2.42500000 GHz
CF Step	11.500000 MHz
Freq Offset	0 Hz

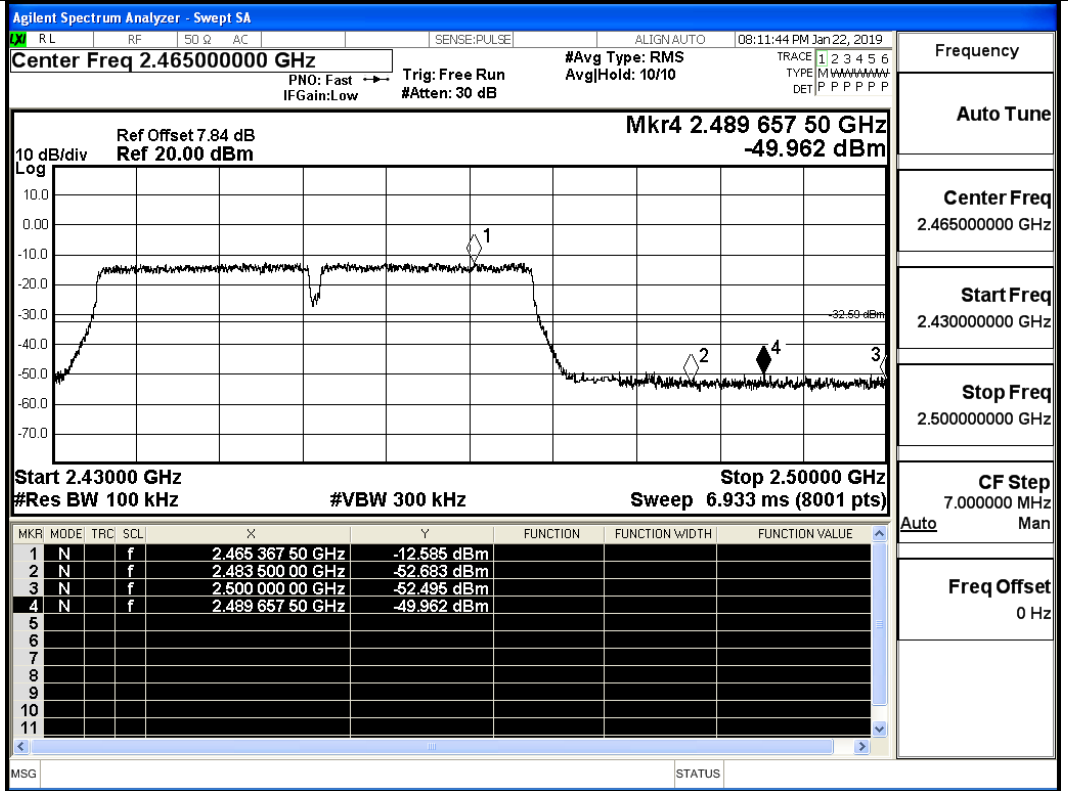
11N20SISO/HCH



11N40SISO/LCH



11N40SISO/HCH

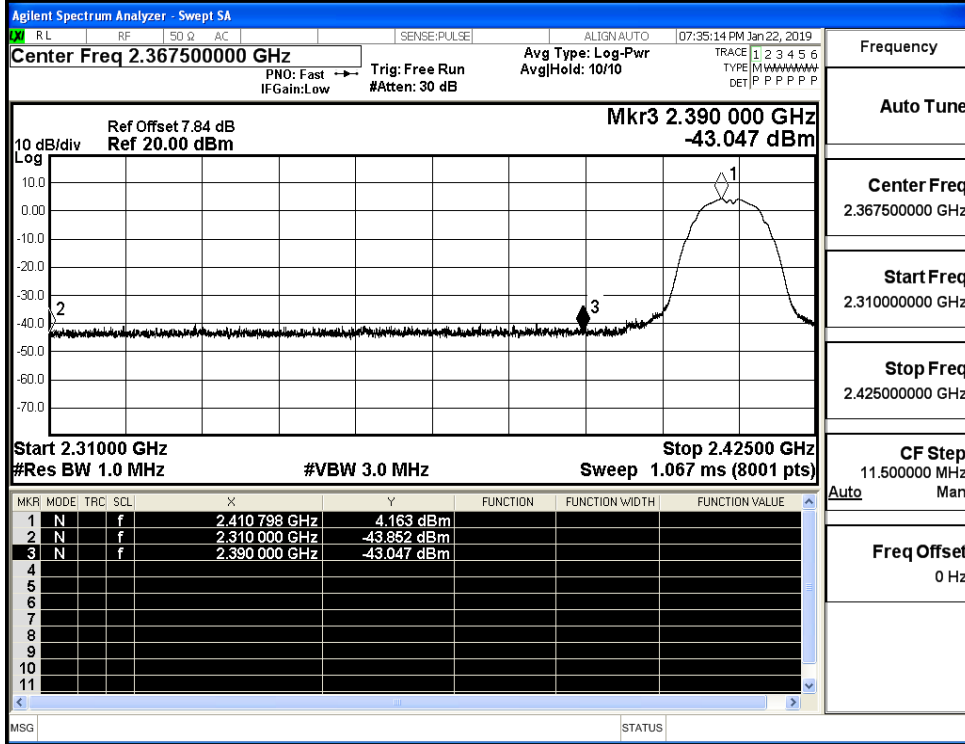


## A.7 Restrict-band band-edge measurements

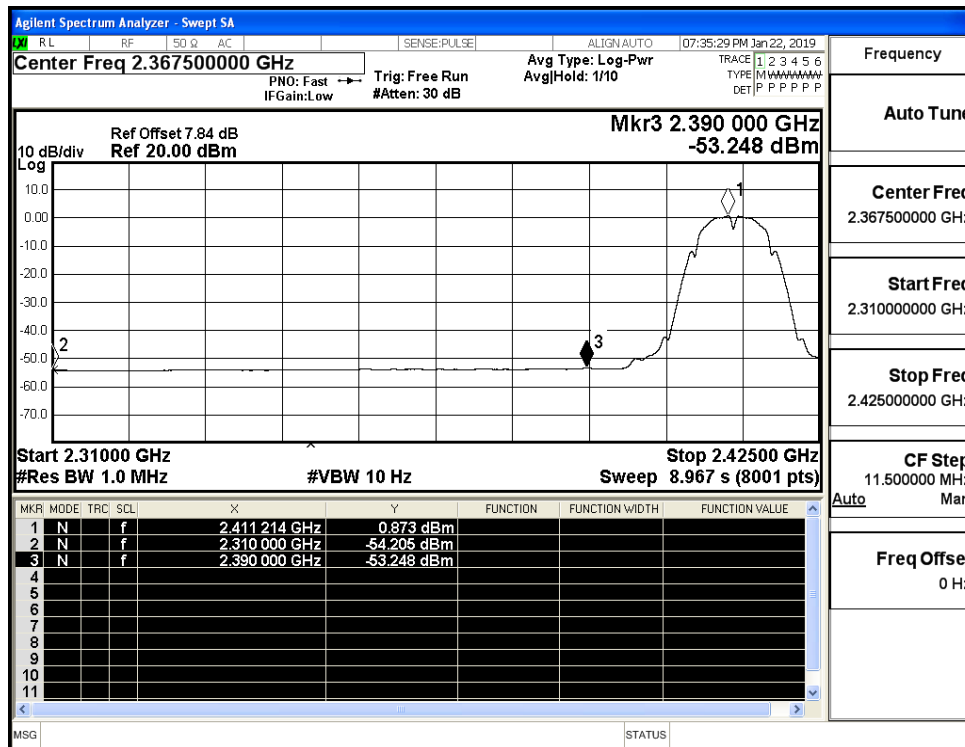
Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBu V/m]	Verdict
11B	2412	Ant1	2310.0	-43.852	3.00	0	54.376	PEAK	74	PASS
	2412	Ant1	2310.0	-54.205	3.00	0	44.023	AV	54	PASS
	2412	Ant1	2390.0	-43.047	3.00	0	55.181	PEAK	74	PASS
	2412	Ant1	2390.0	-53.248	3.00	0	44.980	AV	54	PASS
	2462	Ant1	2483.5	-42.315	3.00	0	55.913	PEAK	74	PASS
	2462	Ant1	2483.5	-53.259	3.00	0	44.969	AV	54	PASS
	2462	Ant1	2500.0	-43.469	3.00	0	54.759	PEAK	74	PASS
	2462	Ant1	2500.0	-53.386	3.00	0	44.842	AV	54	PASS
11G	2412	Ant1	2310.0	-43.437	3.00	0	54.791	PEAK	74	PASS
	2412	Ant1	2310.0	-54.242	3.00	0	43.986	AV	54	PASS
	2412	Ant1	2390.0	-42.953	3.00	0	55.275	PEAK	74	PASS
	2412	Ant1	2390.0	-53.053	3.00	0	45.175	AV	54	PASS
	2462	Ant1	2483.5	-42.085	3.00	0	56.143	PEAK	74	PASS
	2462	Ant1	2483.5	-54.205	3.00	0	44.023	AV	54	PASS
	2462	Ant1	2500.0	-43.047	3.00	0	55.181	PEAK	74	PASS
	2462	Ant1	2500.0	-53.248	3.00	0	44.980	AV	54	PASS
11N20 SISO	2412	Ant1	2310.0	-42.315	3.00	0	55.913	PEAK	74	PASS
	2412	Ant1	2310.0	-53.259	3.00	0	44.969	AV	54	PASS
	2412	Ant1	2390.0	-43.469	3.00	0	54.759	PEAK	74	PASS
	2412	Ant1	2390.0	-53.386	3.00	0	44.842	AV	54	PASS
	2462	Ant1	2483.5	-43.437	3.00	0	54.791	PEAK	74	PASS
	2462	Ant1	2483.5	-54.242	3.00	0	43.986	AV	54	PASS
	2462	Ant1	2500.0	-42.953	3.00	0	55.275	PEAK	74	PASS
	2462	Ant1	2500.0	-53.053	3.00	0	45.175	AV	54	PASS
11N40 SISO	2422	Ant1	2310.0	-42.085	3.00	0	56.143	PEAK	74	PASS
	2422	Ant1	2310.0	-53.144	3.00	0	45.084	AV	54	PASS

	2422	Ant1	2390.0	-41.796	3.00	0	56.432	PEAK	74	PASS
	2422	Ant1	2390.0	-53.216	3.00	0	45.012	AV	54	PASS
	2452	Ant1	2483.5	-44.502	3.00	0	53.726	PEAK	74	PASS
	2452	Ant1	2483.5	-54.256	3.00	0	43.972	AV	54	PASS
	2452	Ant1	2500.0	-43.248	3.00	0	54.980	PEAK	74	PASS
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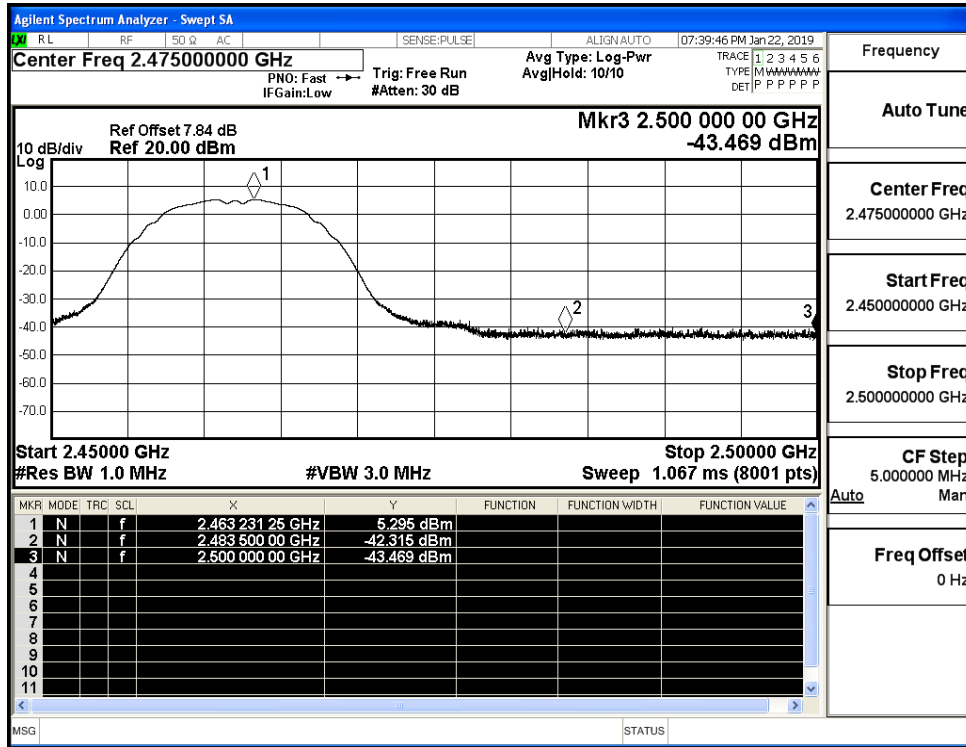
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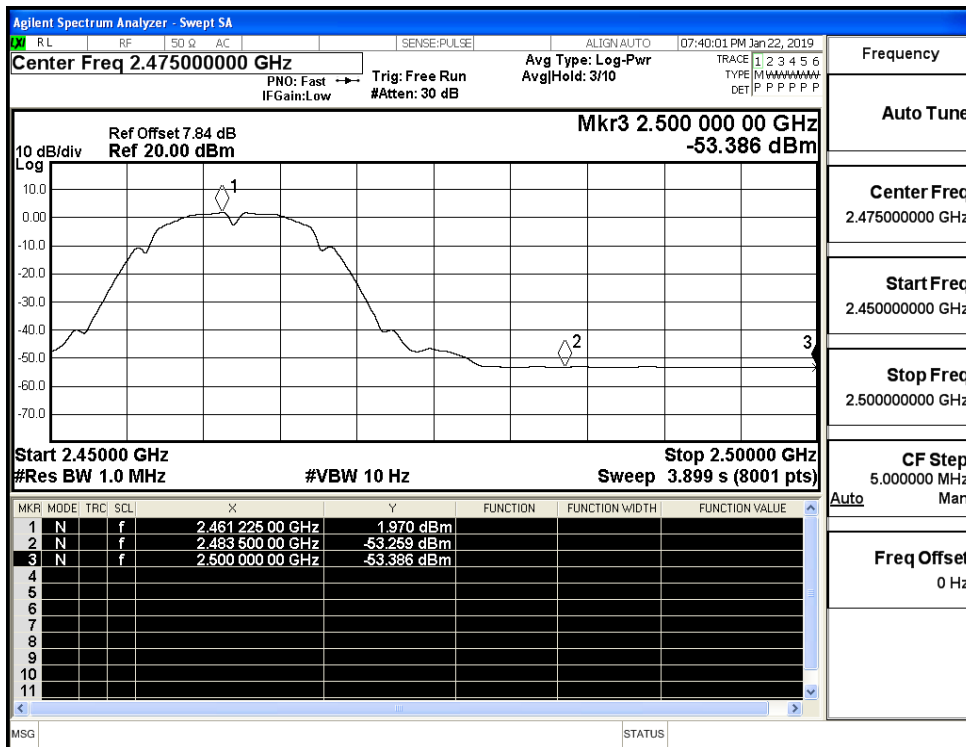
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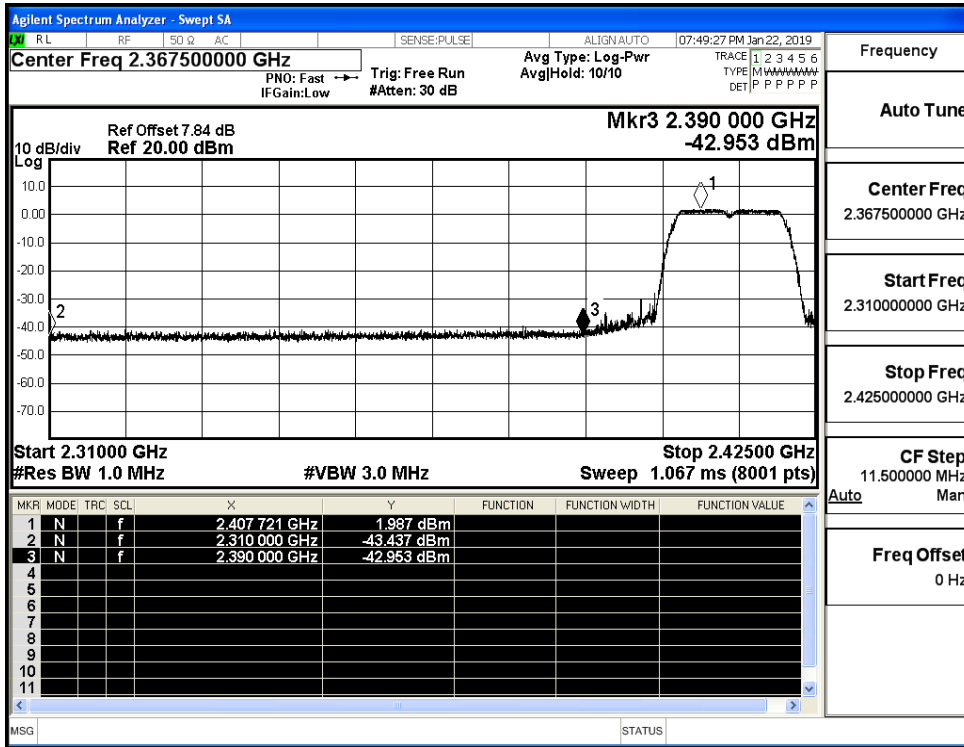


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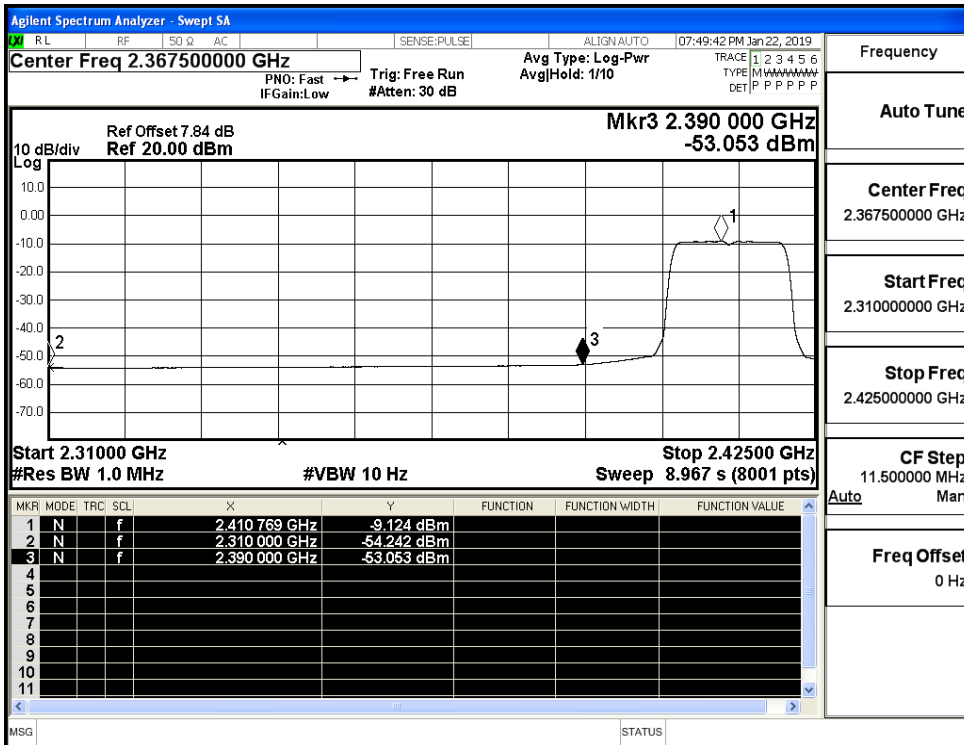




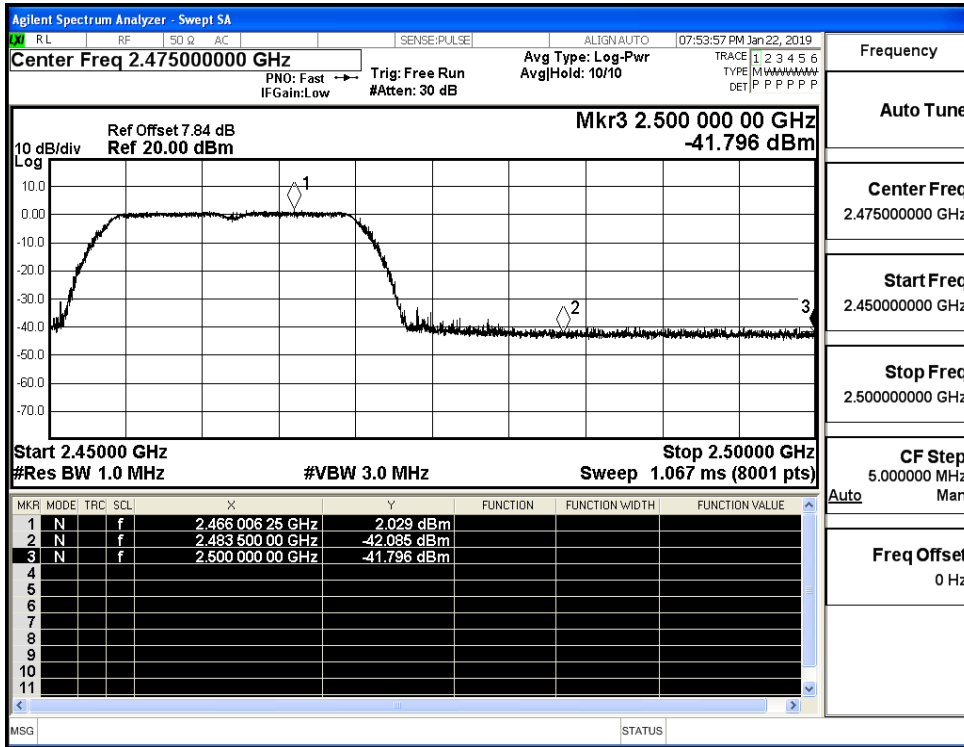
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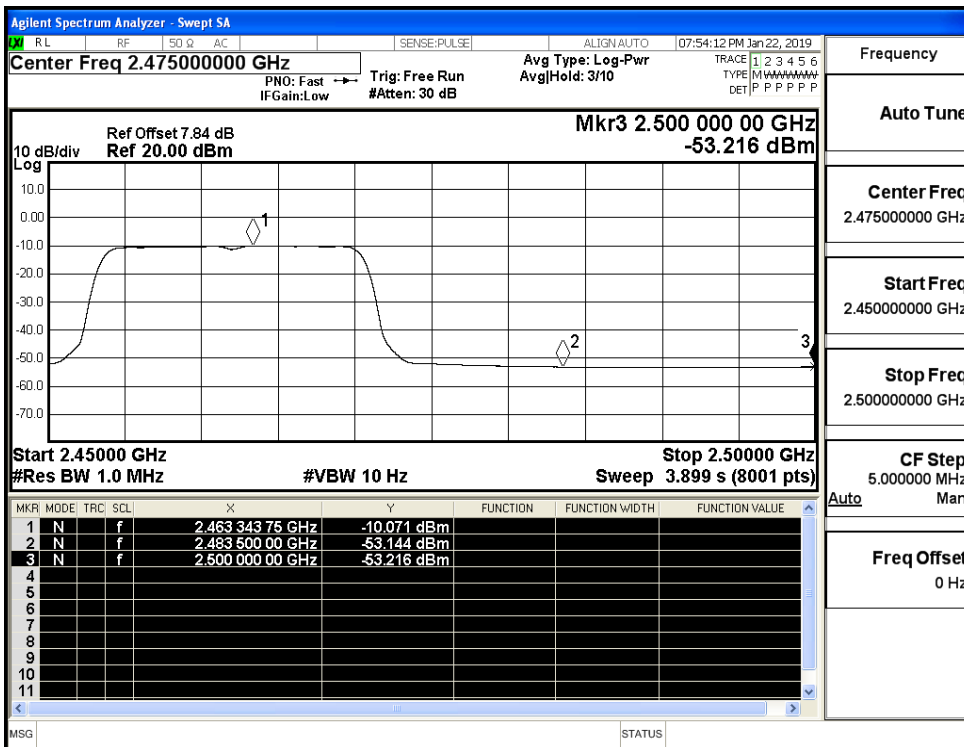
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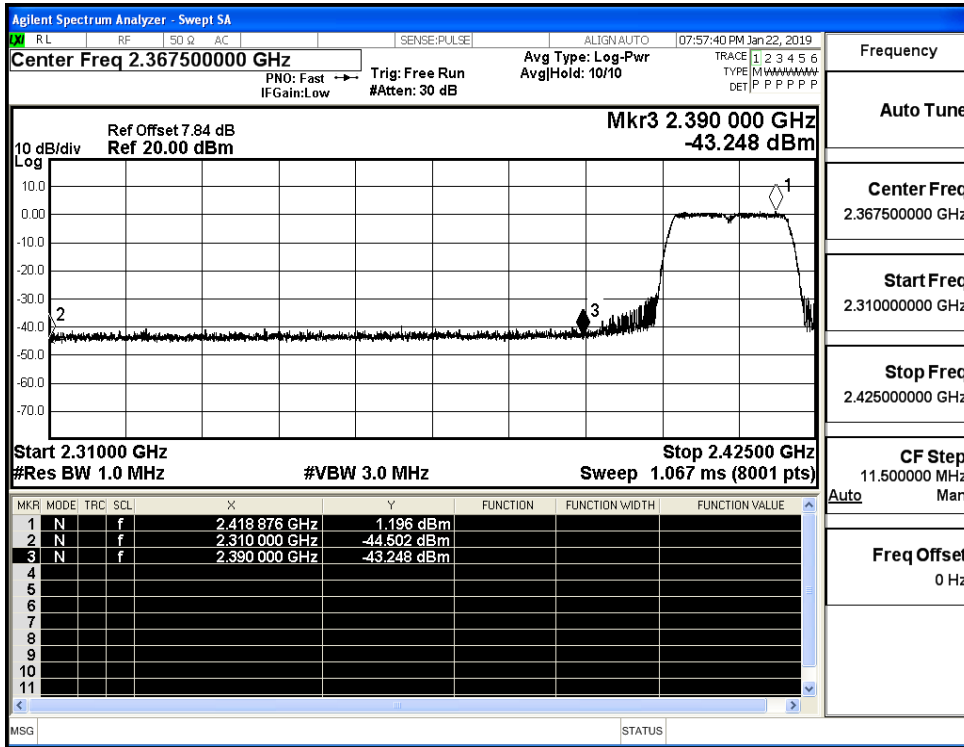
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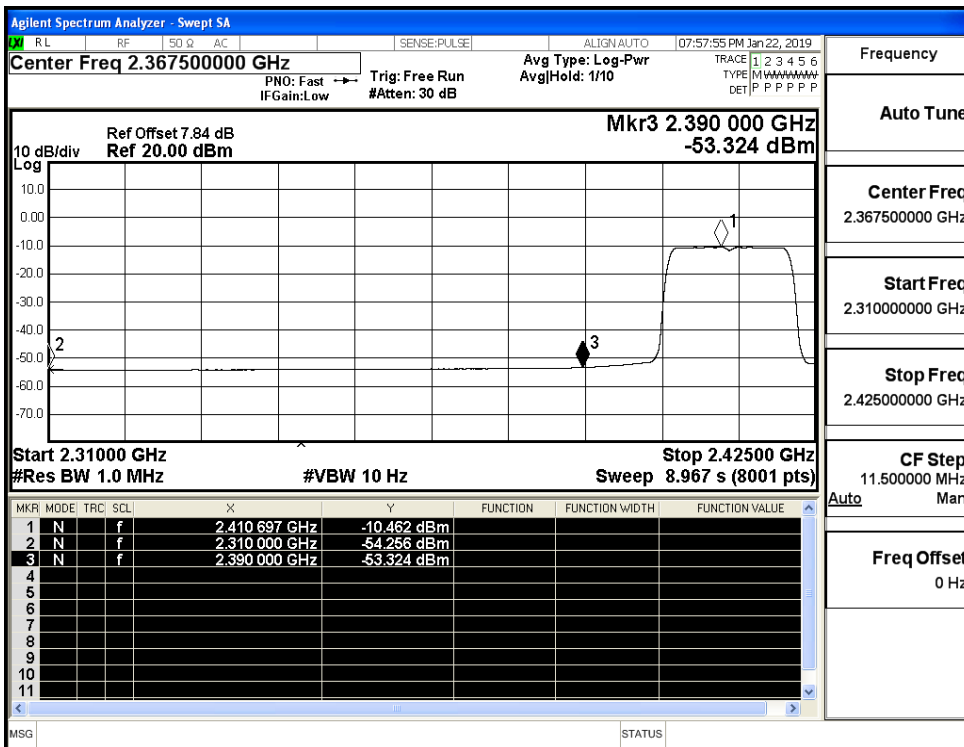
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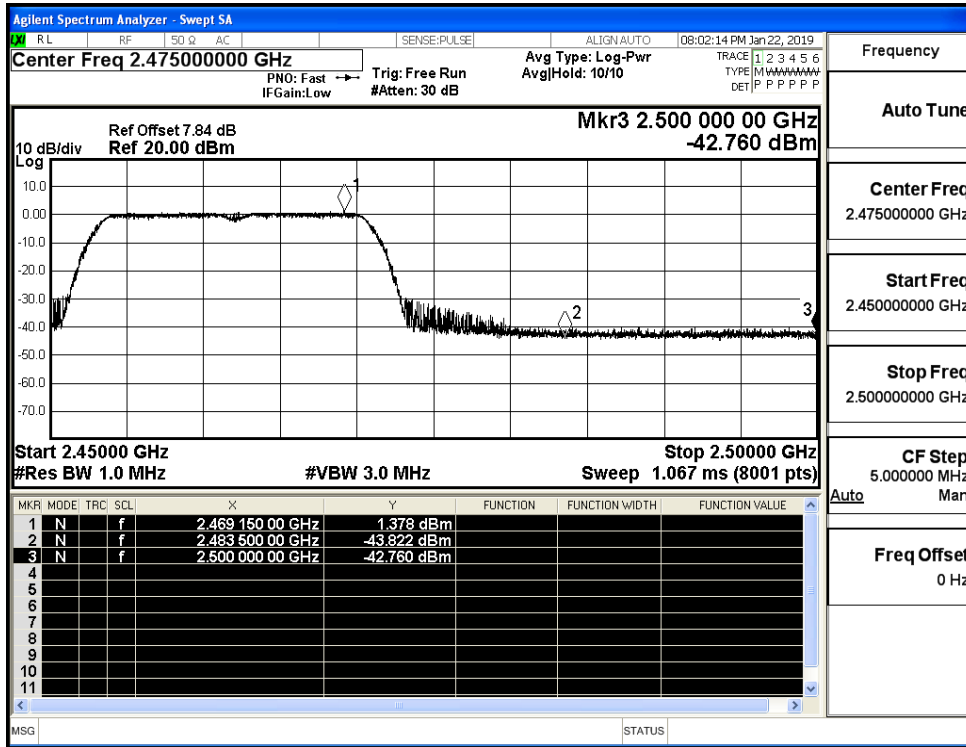
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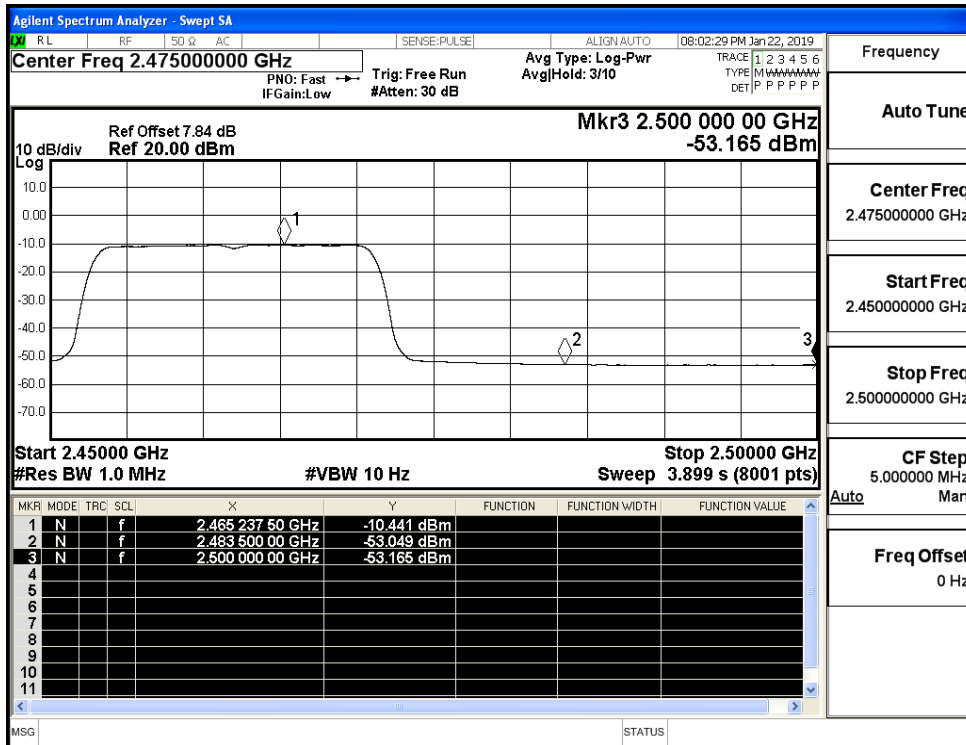
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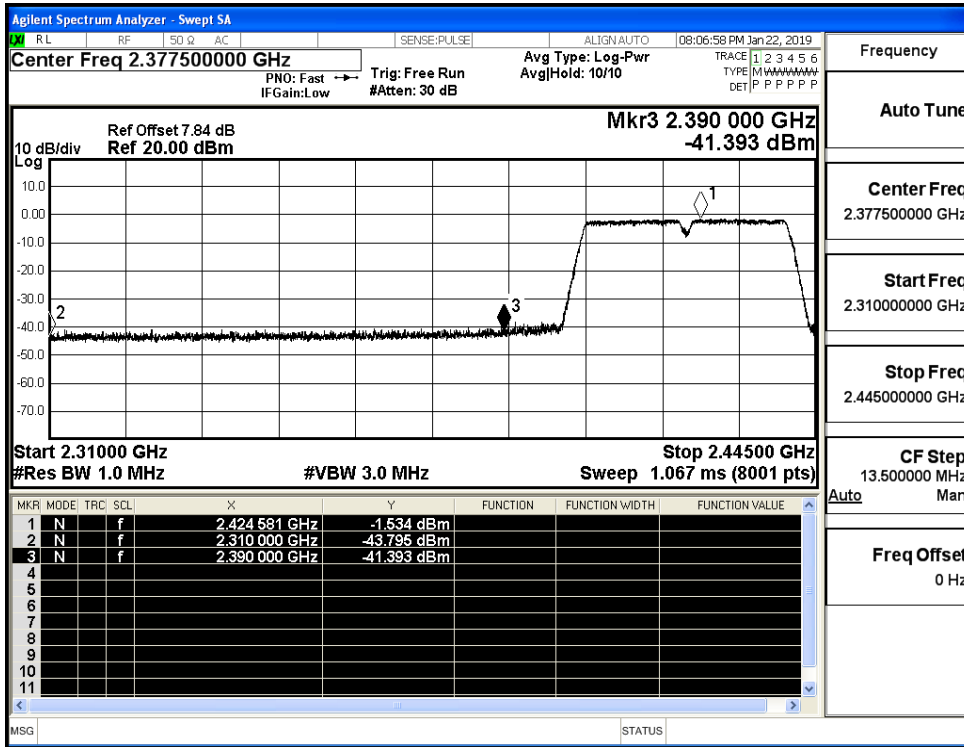
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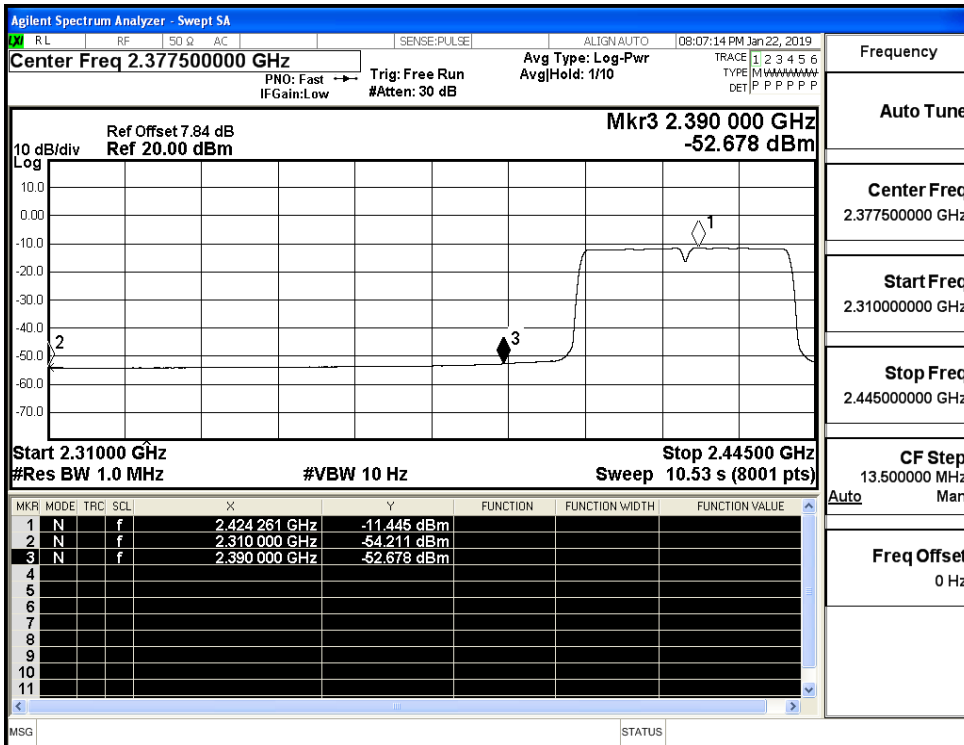
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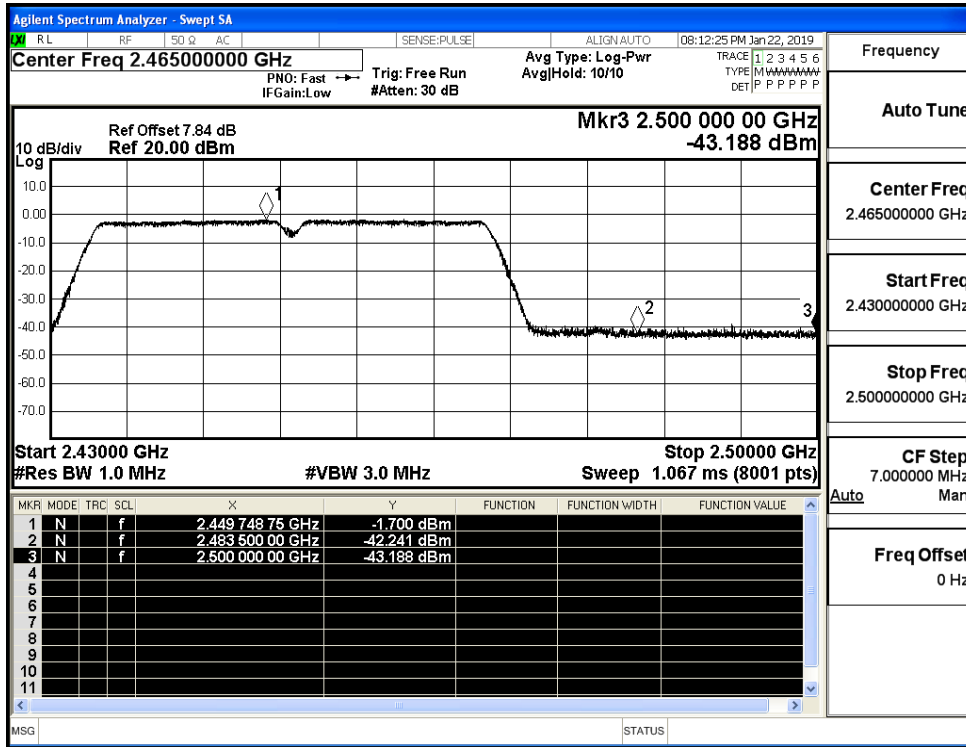
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Restrict-band band-edge measurements\_11N40SISO\_2422\_Ant1\_AV



Restrict-band band-edge measurements\_11N40SISO\_2452\_Ant1\_PEAK



Restrict-band band-edge measurements\_11N40SISO\_2452\_Ant1\_AV

