

Appendix C

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: 4G Smartphone

Trade Mark: Kenxinda, Ken mobile, KXD, E&L, EL

Test Model: T50

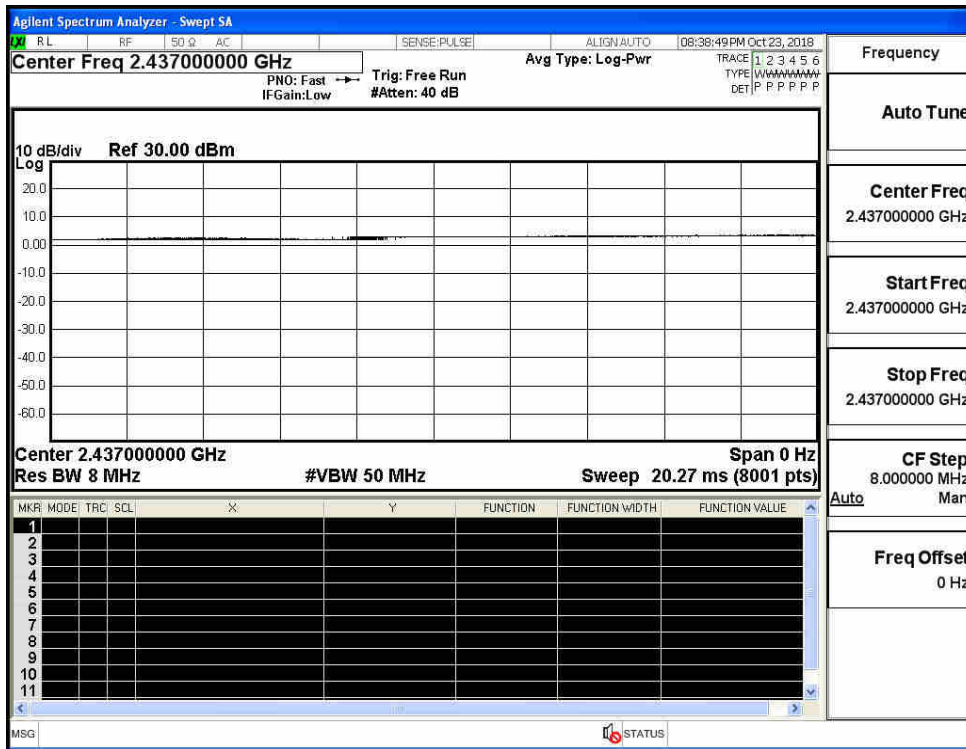
Environmental Conditions

Temperature:	23.4 ° C
Relative Humidity:	53.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Tom.Liu
Supervised by:	Jayden.Zhuo

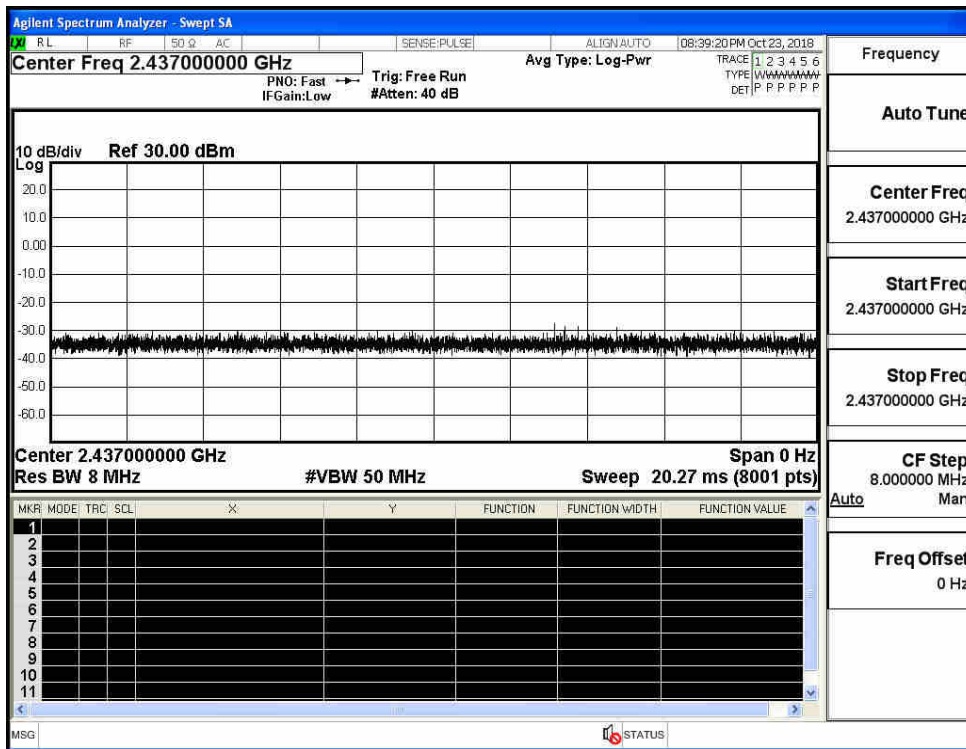
C.1 Duty Cycle

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

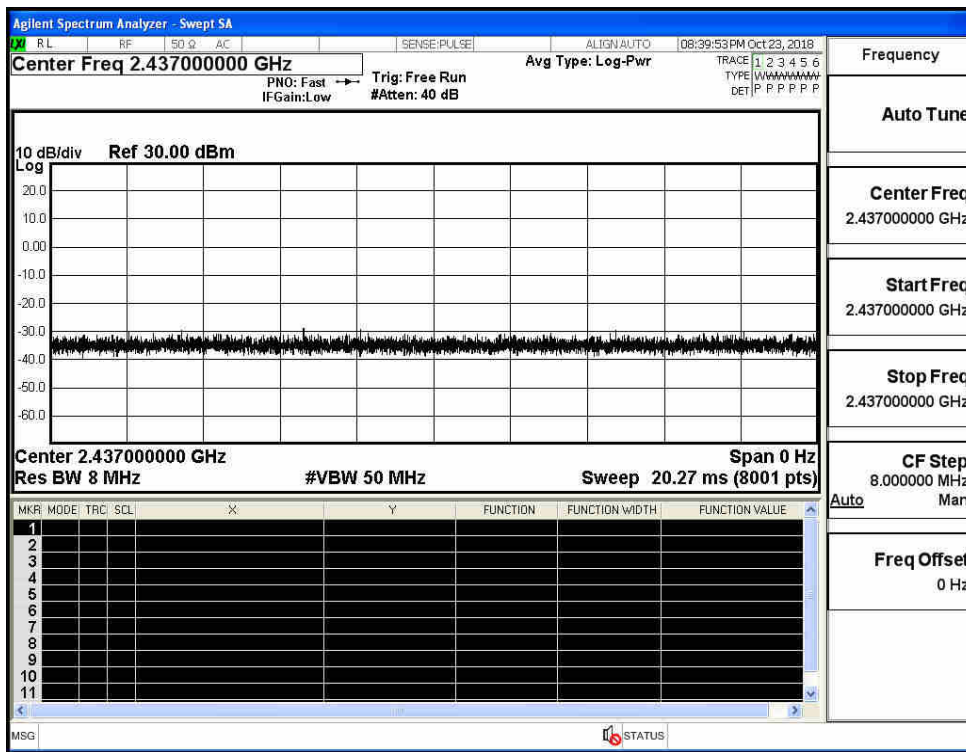
Duty Cycle_11B_2437_Ant1



Duty Cycle_11G_2437_Ant1



Duty Cycle_11N20SISO_2437_Ant1



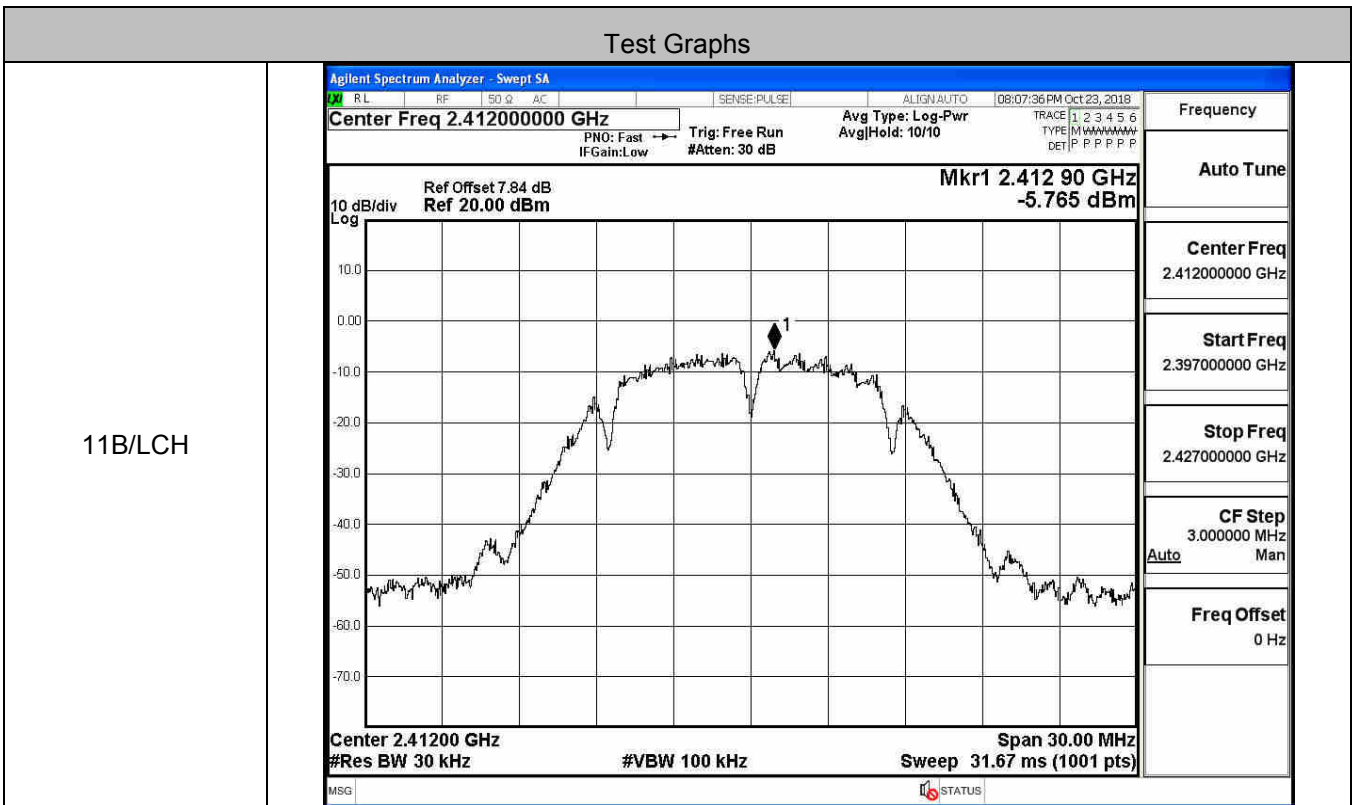
C.2 Maximum Conducted Output Power

Mode	Channel	Meas.Level [dBm]	Limit [dBm]	Verdict
11B	LCH	12.60	30	PASS
	MCH	14.39	30	PASS
	HCH	13.61	30	PASS
11G	LCH	13.74	30	PASS
	MCH	15.20	30	PASS
	HCH	14.94	30	PASS
11N20SISO	LCH	14.44	30	PASS
	MCH	15.51	30	PASS
	HCH	14.71	30	PASS

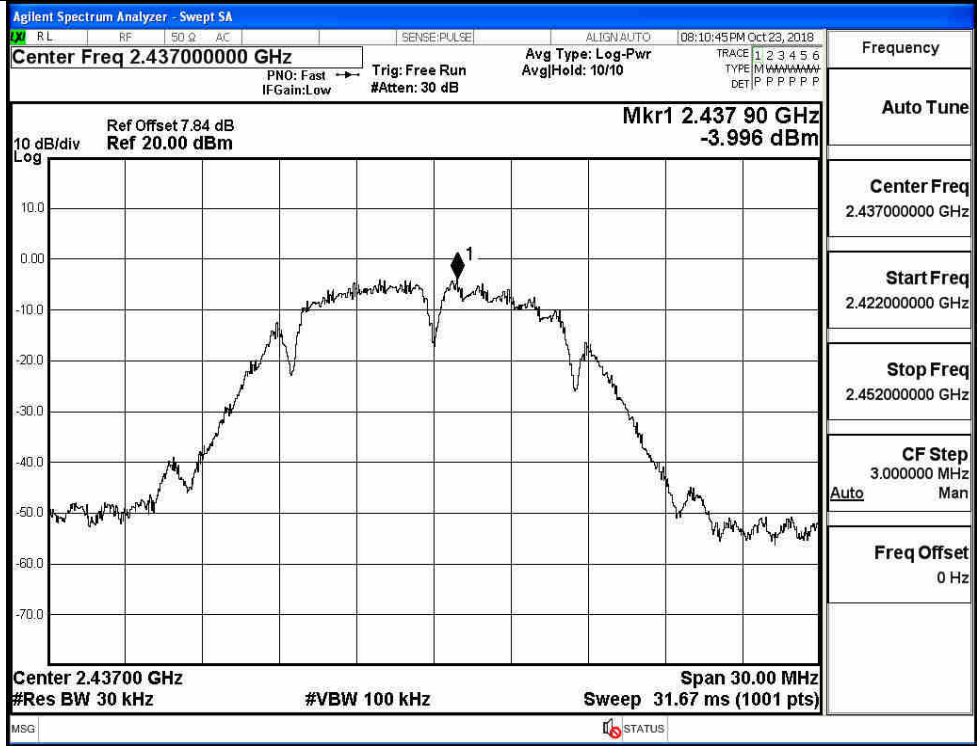
C.3 Maximum Power Spectral Density

Mode	Channel	Meas.Level [dBm/30KHz]	Limit [dBm/3KHz]	Verdict
11B	LCH	-5.765	8	PASS
	MCH	-3.996	8	PASS
	HCH	-3.973	8	PASS
11G	LCH	-10.078	8	PASS
	MCH	-8.183	8	PASS
	HCH	-8.165	8	PASS
11N20SISO	LCH	-9.640	8	PASS
	MCH	-7.910	8	PASS
	HCH	-7.727	8	PASS

Test Graphs



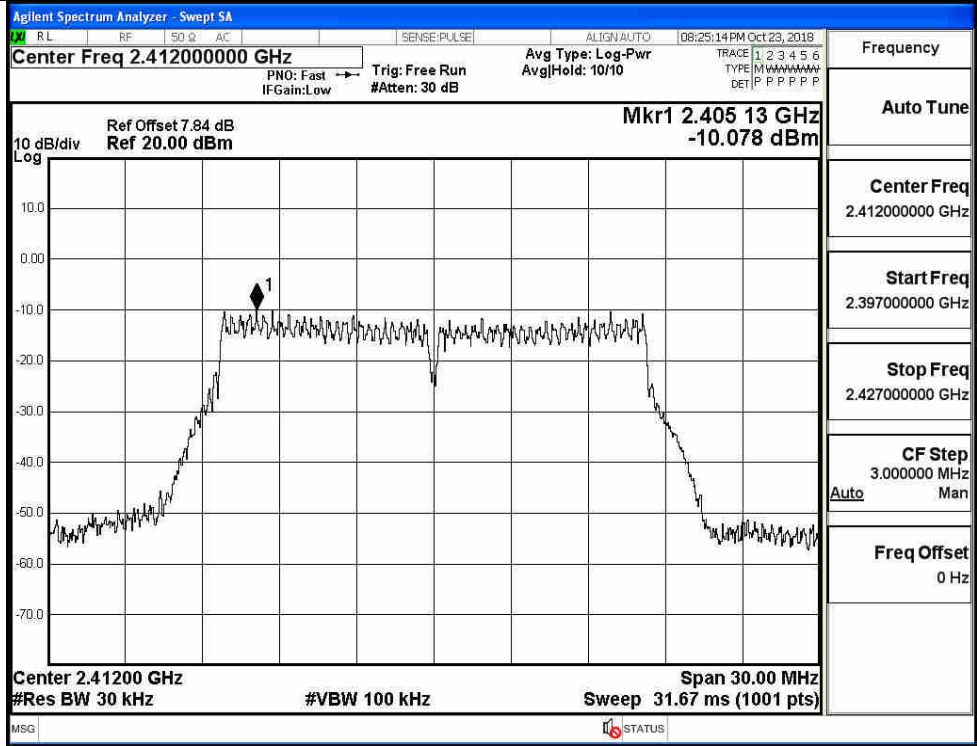
11B/MCH



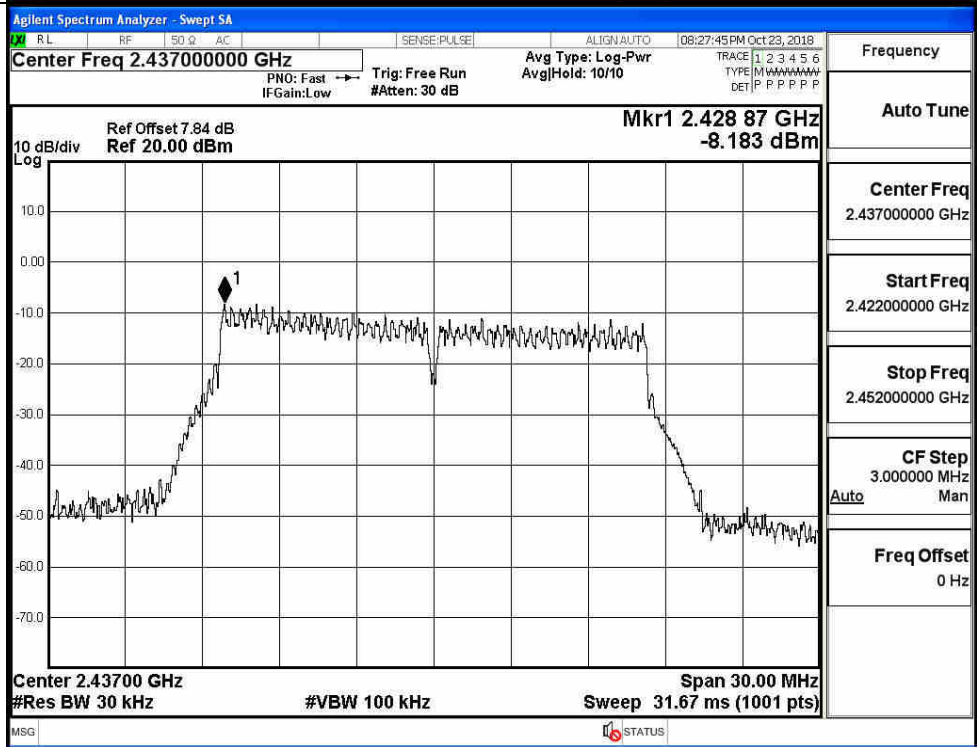
11B/HCH



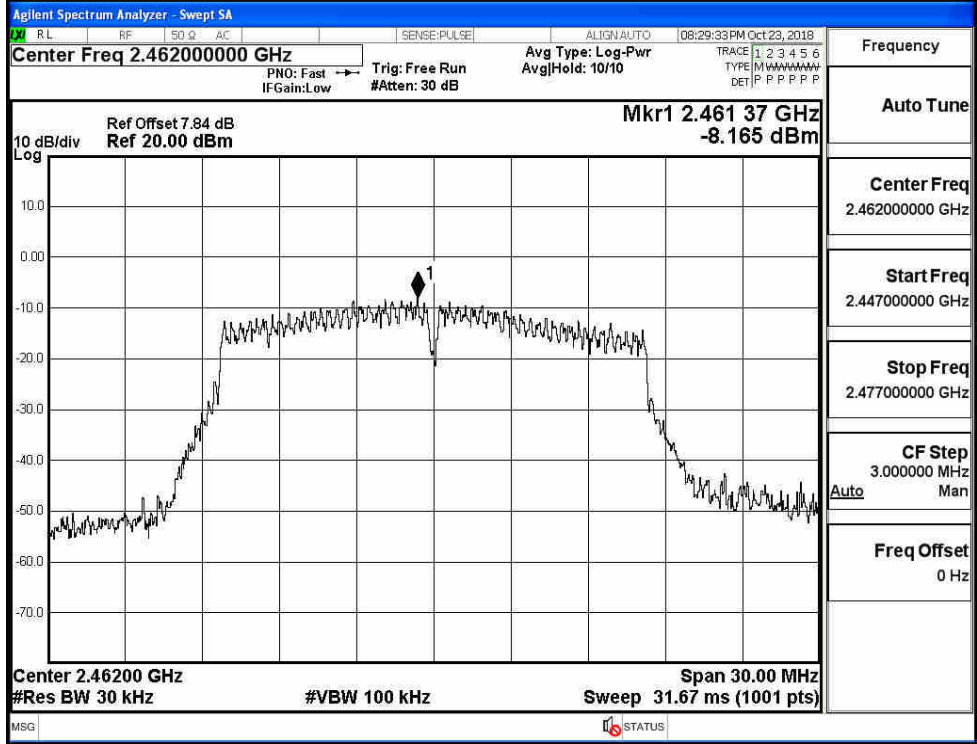
11G/LCH



11G/MCH

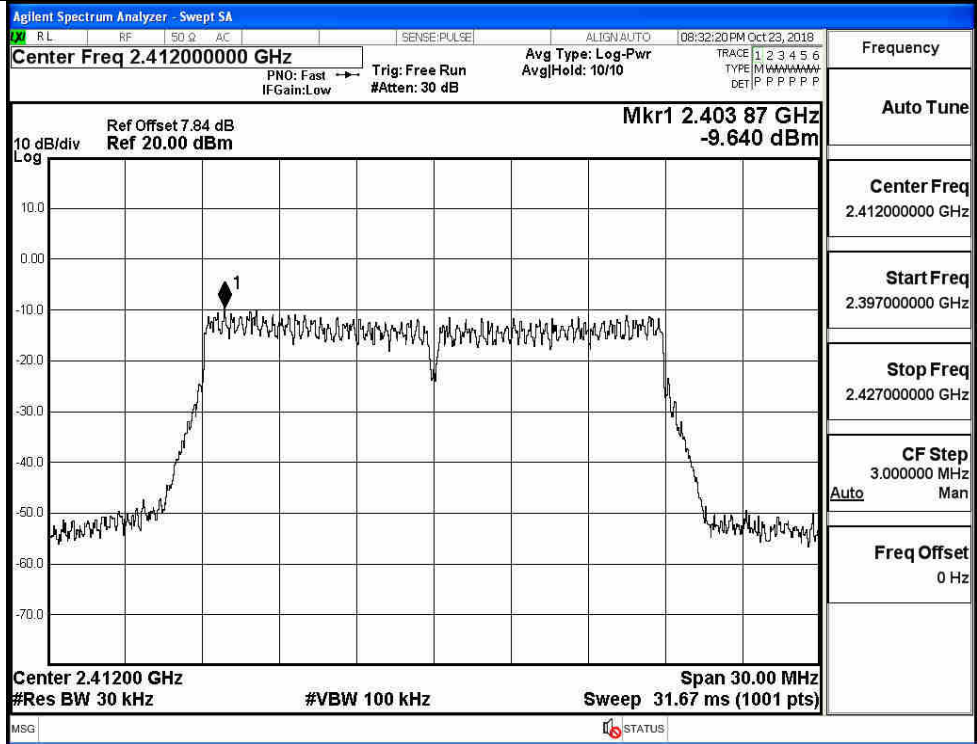


11G/HCH



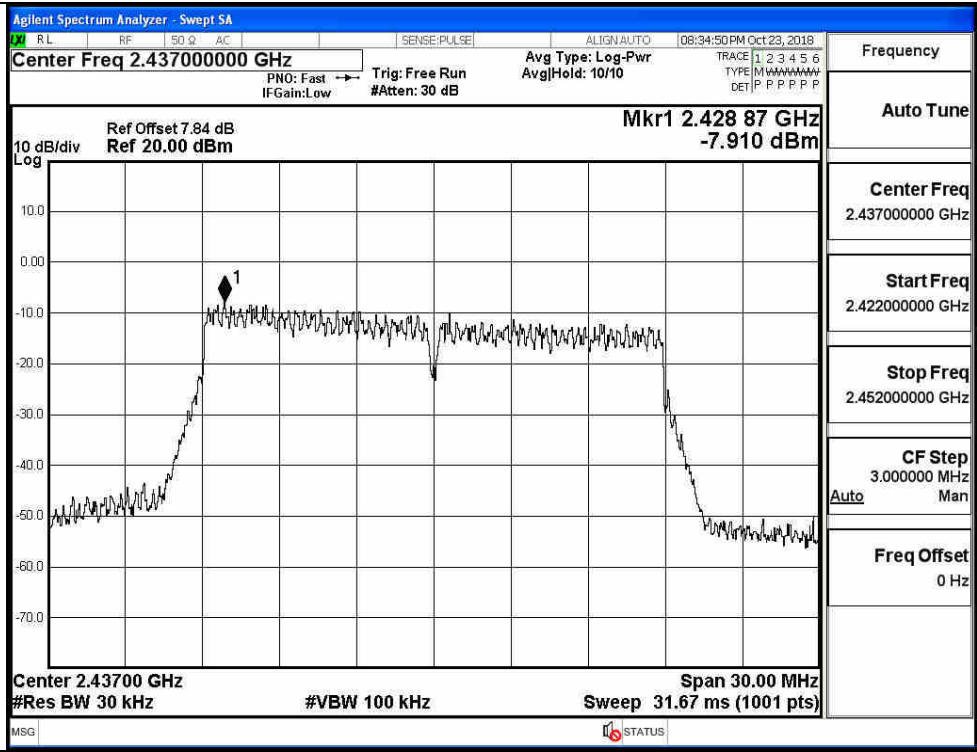
Frequency
Auto Tune
Center Freq 2.46200000 GHz
Start Freq 2.447000000 GHz
Stop Freq 2.477000000 GHz
CF Step 3.000000 MHz Auto Man
Freq Offset 0 Hz

11N20SISO/LCH

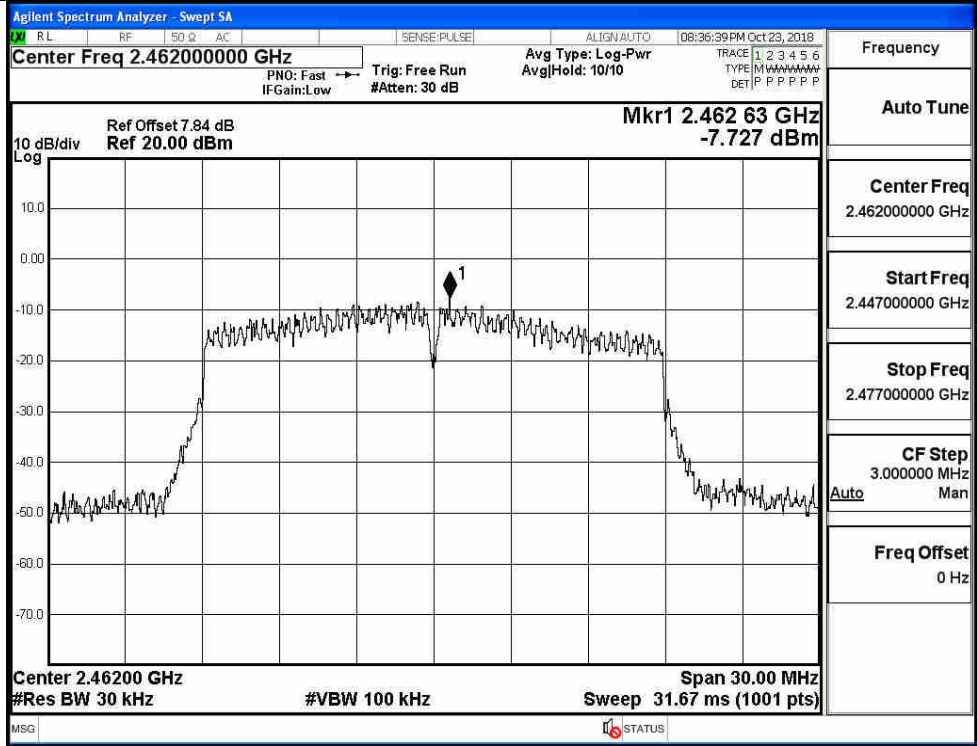


Frequency
Auto Tune
Center Freq 2.412000000 GHz
Start Freq 2.397000000 GHz
Stop Freq 2.427000000 GHz
CF Step 3.000000 MHz Auto Man
Freq Offset 0 Hz

11N20SISO/MCH



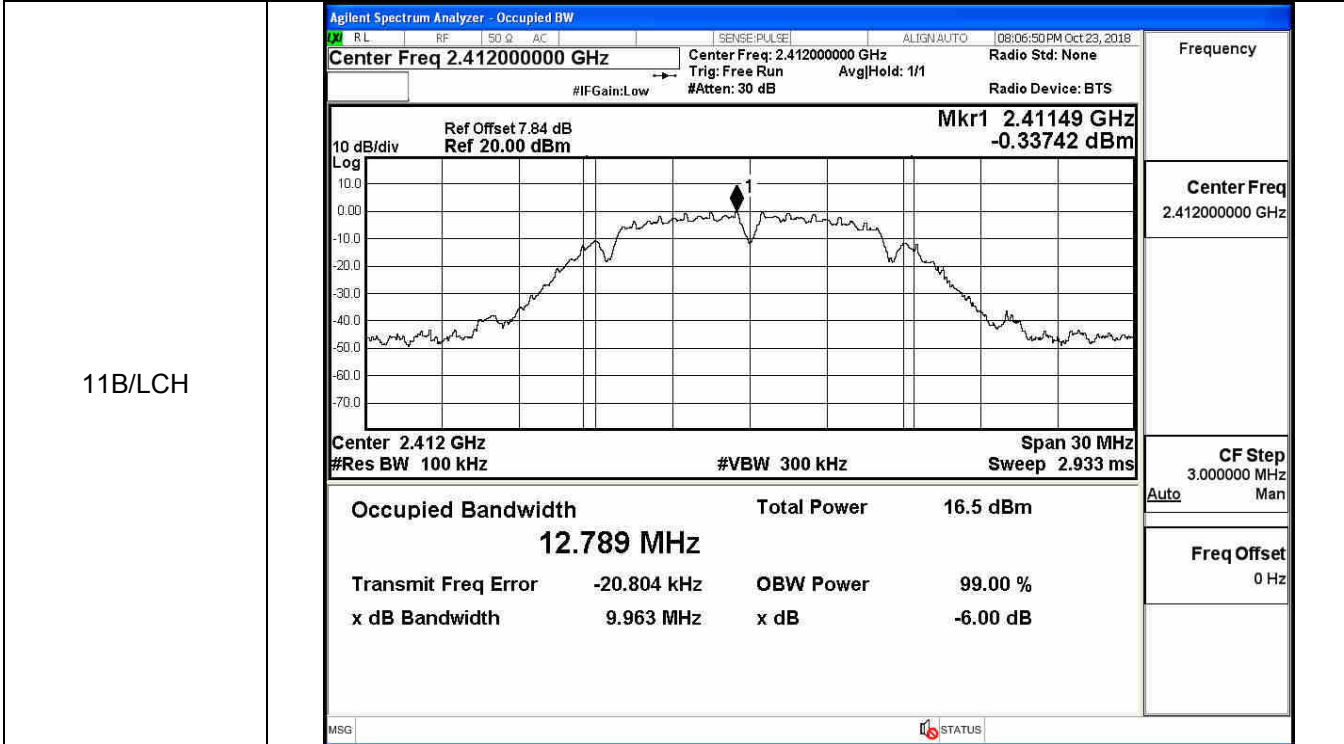
11N20SISO/HCH



C.4 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
11B	LCH	9.963	≥0.5	PASS
	MCH	9.549	≥0.5	PASS
	HCH	8.122	≥0.5	PASS
11G	LCH	16.61	≥0.5	PASS
	MCH	16.50	≥0.5	PASS
	HCH	15.95	≥0.5	PASS
11N20SISO	LCH	17.86	≥0.5	PASS
	MCH	17.74	≥0.5	PASS
	HCH	14.03	≥0.5	PASS

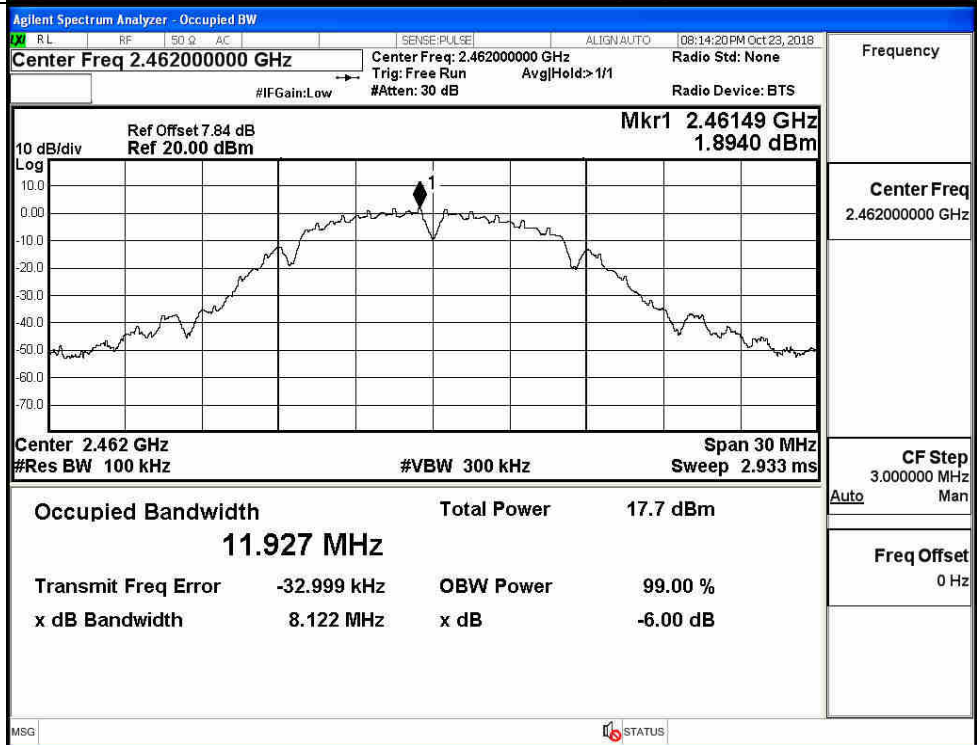
Test Graphs



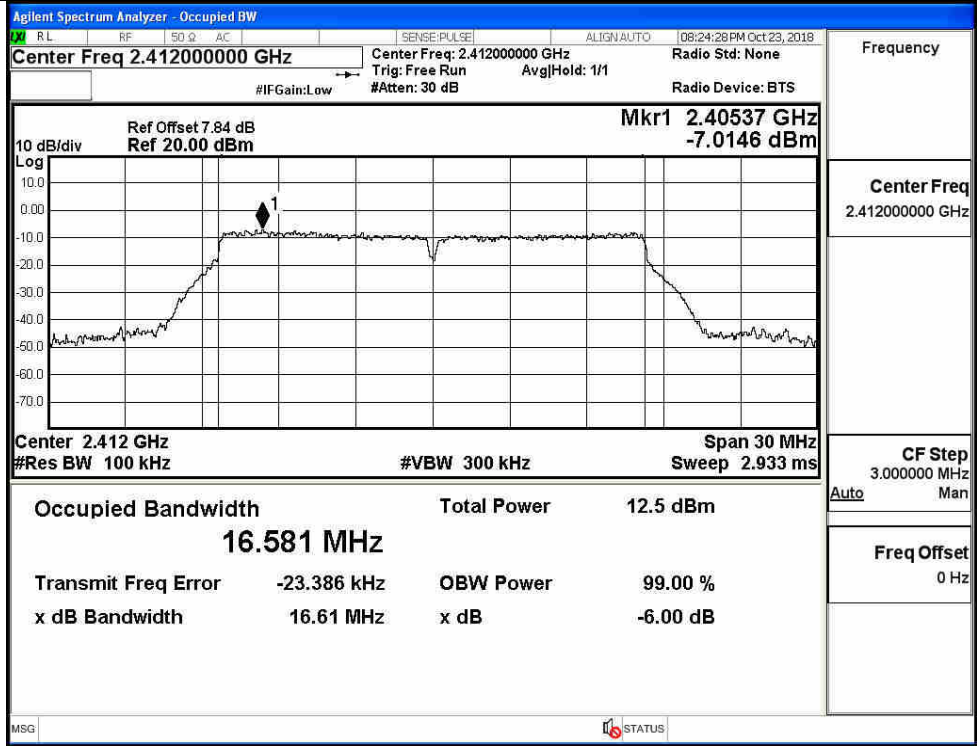
11B/MCH



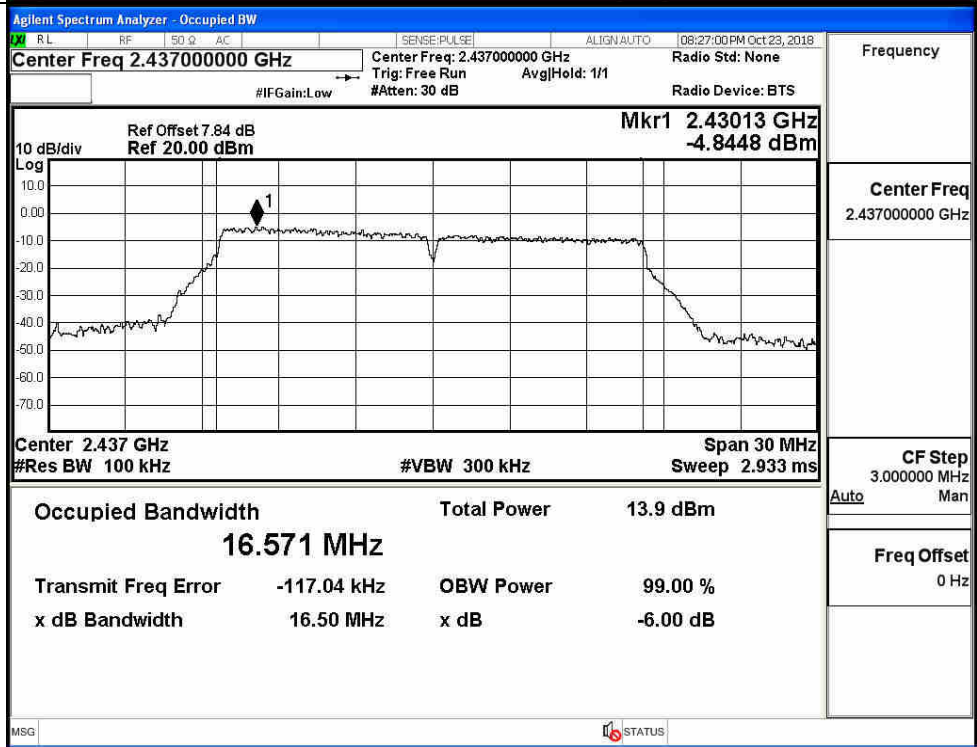
11B/HCH



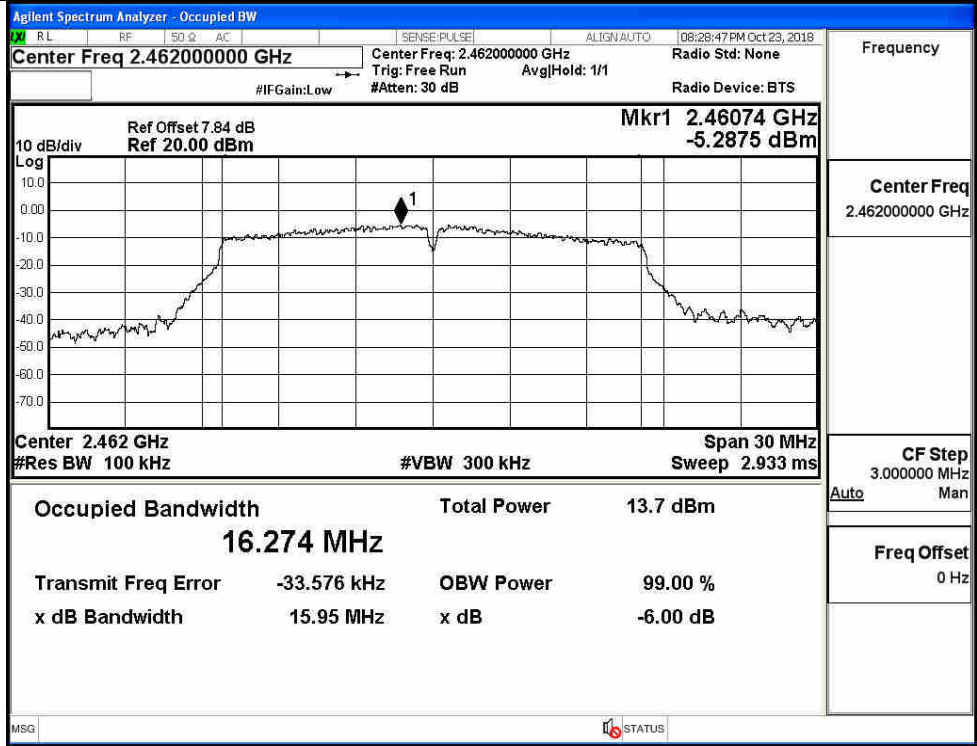
11G/LCH



11G/MCH

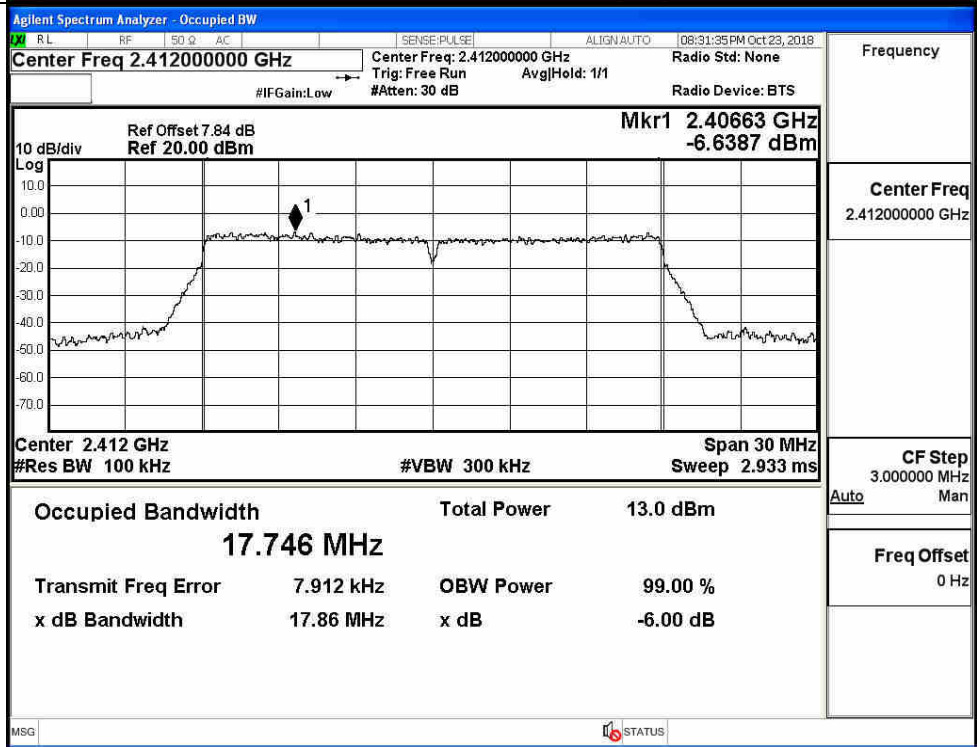


11G/HCH



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

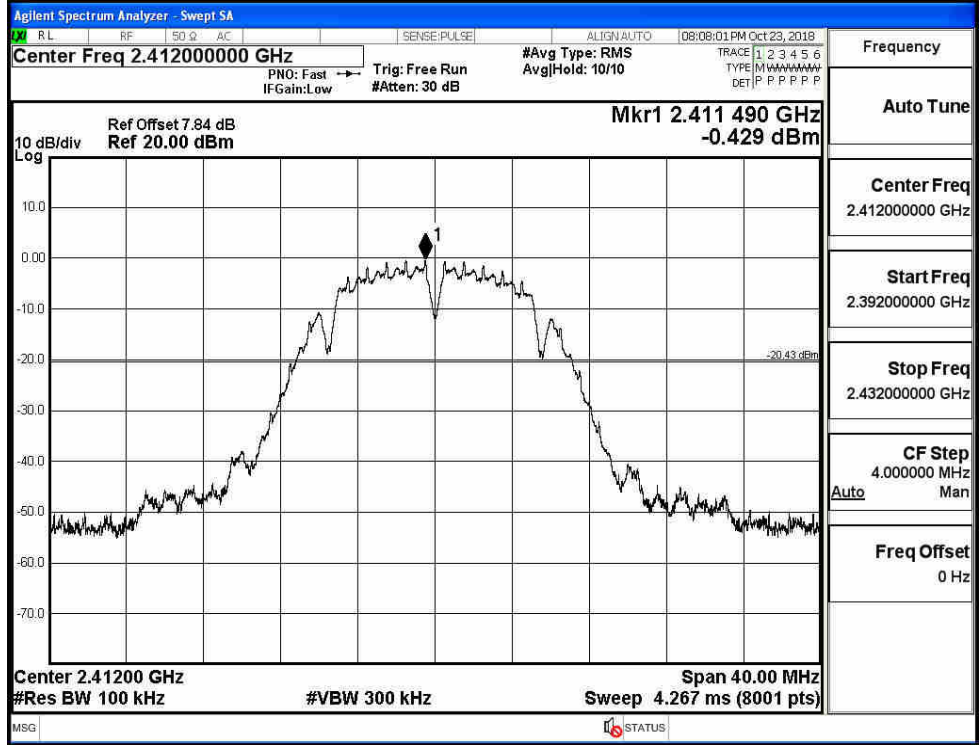
<p>11N20SISO/MCH</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.43700000 GHz</p> <p>Center Freq: 2.43700000 GHz</p> <p>Trig: Free Run</p> <p>AvgHold: 1/1</p> <p>Radio Std: None</p> <p>Radio Device: BTS</p> <p>Ref Offset 7.84 dB</p> <p>Ref 20.00 dBm</p> <p>Mkr1 2.43052 GHz</p> <p>-5.2485 dBm</p> <p>10 dB/div</p> <p>Log</p> <p>Center 2.437 GHz</p> <p>#Res BW 100 kHz</p> <p>#VBW 300 kHz</p> <p>Span 30 MHz</p> <p>Sweep 2.933 ms</p> <p>Occupied Bandwidth</p> <p>Total Power</p> <p>13.9 dBm</p> <p>17.694 MHz</p> <p>Transmit Freq Error</p> <p>-62.504 kHz</p> <p>OBW Power</p> <p>99.00 %</p> <p>x dB Bandwidth</p> <p>17.74 MHz</p> <p>x dB</p> <p>-6.00 dB</p> <p>MSG</p> <p>STATUS</p>	<p>Frequency</p> <p>Center Freq</p> <p>2.43700000 GHz</p> <p>CF Step</p> <p>3.000000 MHz</p> <p>Auto</p> <p>Man</p> <p>Freq Offset</p> <p>0 Hz</p>
<p>11N20SISO/HCH</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.46200000 GHz</p> <p>Center Freq: 2.46200000 GHz</p> <p>Trig: Free Run</p> <p>AvgHold: 1/1</p> <p>Radio Std: None</p> <p>Radio Device: BTS</p> <p>Ref Offset 7.84 dB</p> <p>Ref 20.00 dBm</p> <p>Mkr1 2.45912 GHz</p> <p>-4.3793 dBm</p> <p>10 dB/div</p> <p>Log</p> <p>Center 2.462 GHz</p> <p>#Res BW 100 kHz</p> <p>#VBW 300 kHz</p> <p>Span 30 MHz</p> <p>Sweep 2.933 ms</p> <p>Occupied Bandwidth</p> <p>Total Power</p> <p>13.9 dBm</p> <p>17.441 MHz</p> <p>Transmit Freq Error</p> <p>-44.827 kHz</p> <p>OBW Power</p> <p>99.00 %</p> <p>x dB Bandwidth</p> <p>14.03 MHz</p> <p>x dB</p> <p>-6.00 dB</p> <p>MSG</p> <p>STATUS</p>	<p>Frequency</p> <p>Center Freq</p> <p>2.46200000 GHz</p> <p>CF Step</p> <p>3.000000 MHz</p> <p>Auto</p> <p>Man</p> <p>Freq Offset</p> <p>0 Hz</p>

C.5 RF Conducted Spurious Emissions

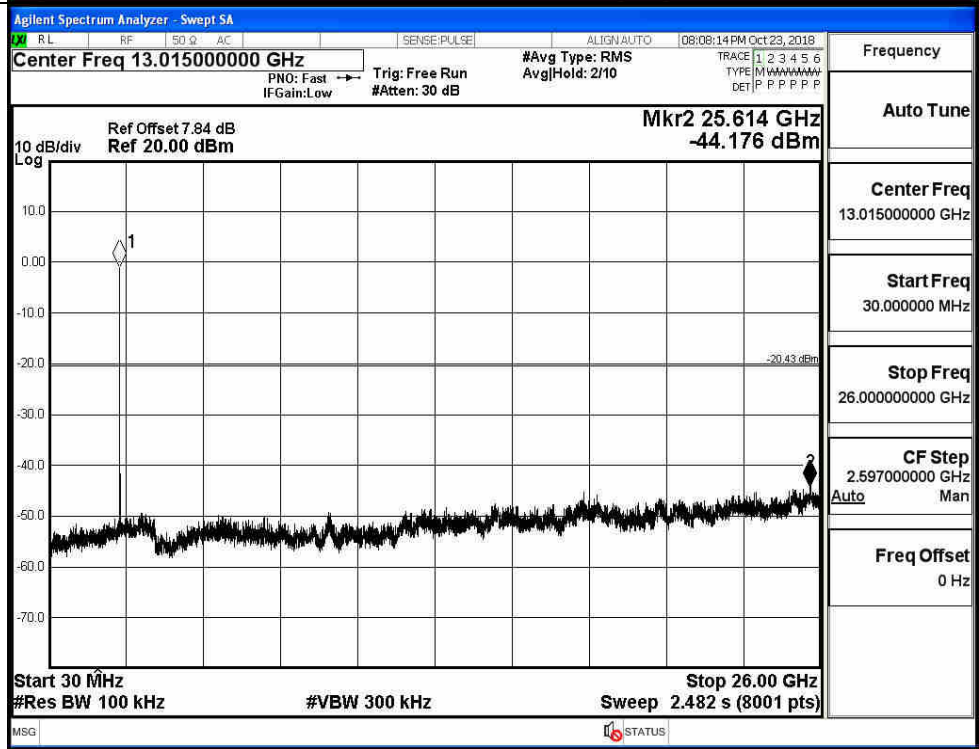
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
11B	LCH	-0.429	-44.176	-20.429	PASS
	MCH	1.816	-43.398	-18.184	PASS
	HCH	1.83	-42.814	-18.170	PASS
11G	LCH	-7.106	-44.339	-27.106	PASS
	MCH	-5.487	-44.192	-25.487	PASS
	HCH	-5.515	-43.555	-25.515	PASS
11N20 SISO	LCH	-7.273	-43.207	-27.273	PASS
	MCH	-5.102	-43.895	-25.102	PASS
	HCH	-5.013	-44.003	-25.013	PASS

11B LCH Graphs

Pref/11B/LCH

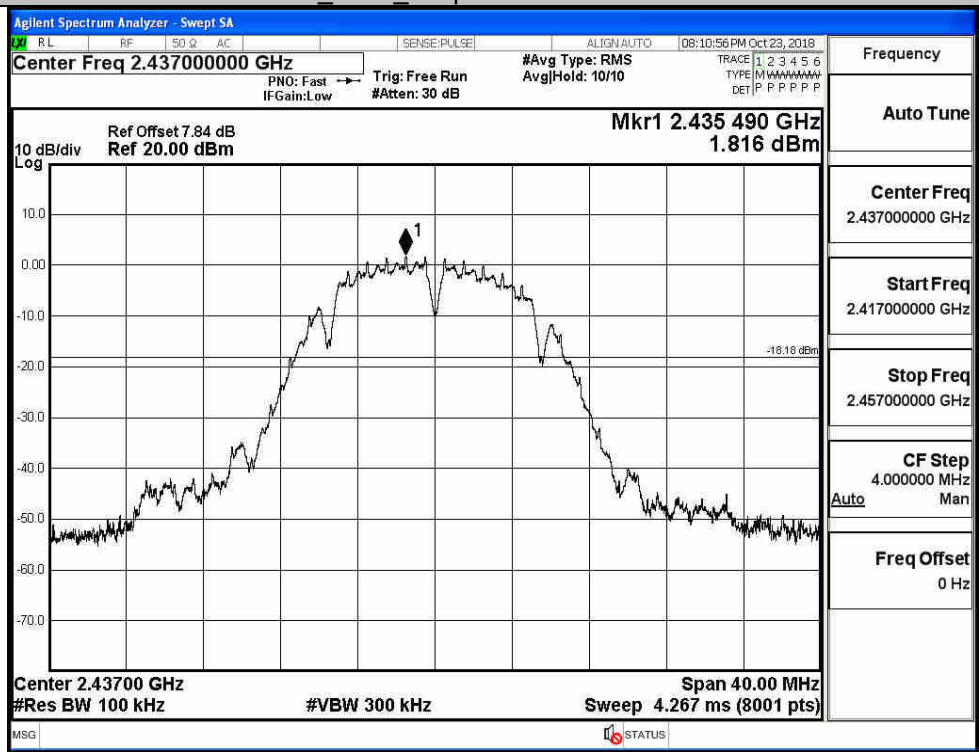


Puw/11B/LCH

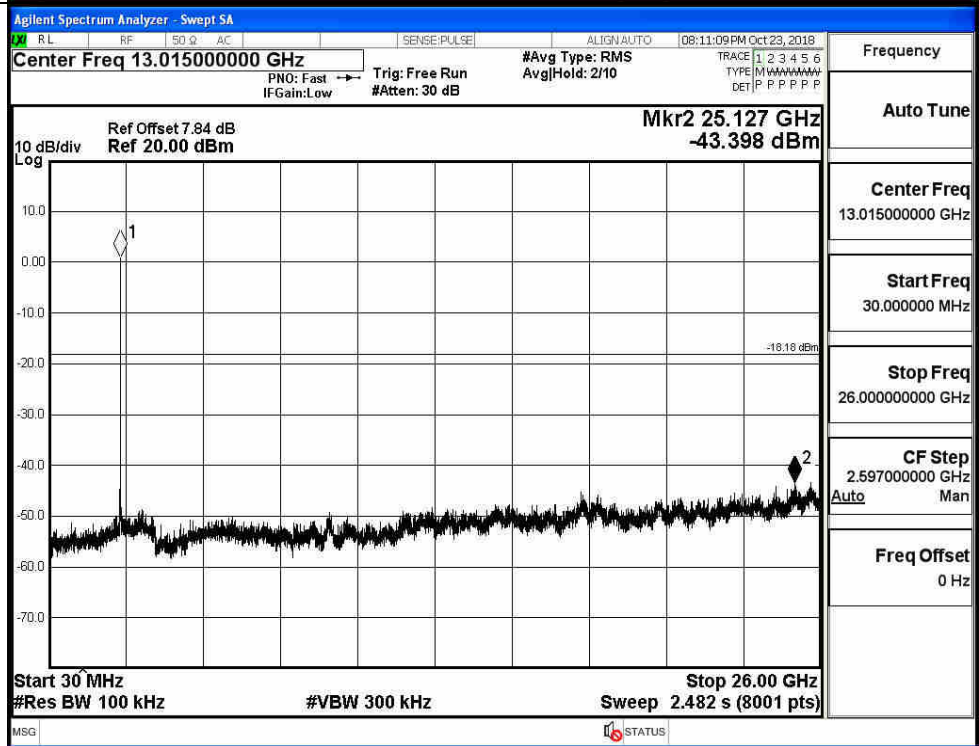


11B_MCH_Graphs

Pref/11B/MCH

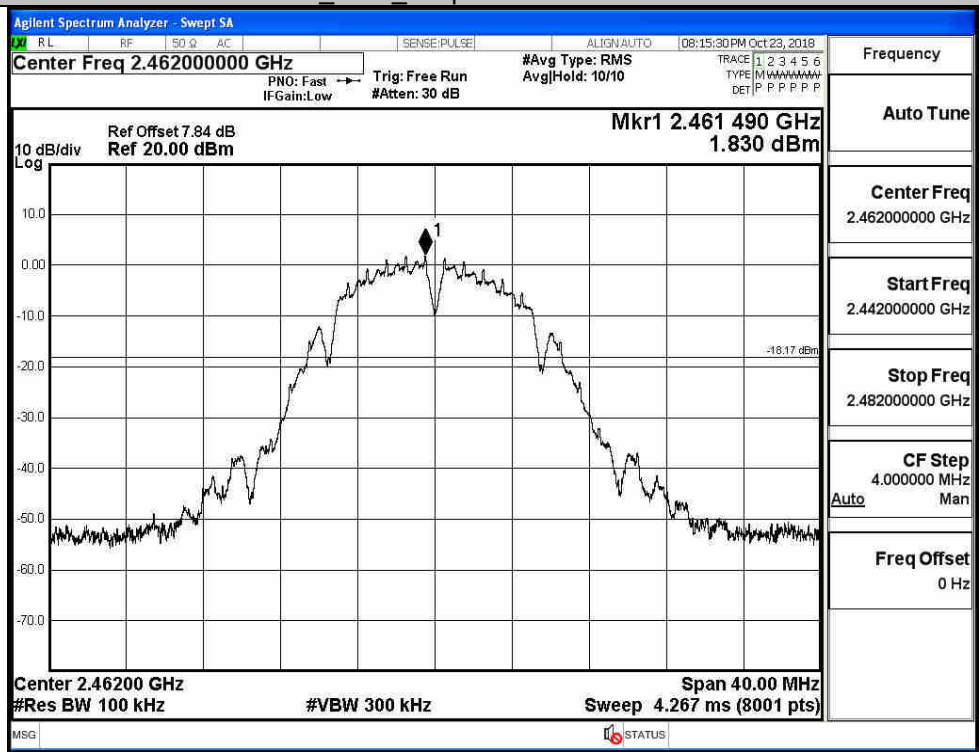


Puw/11B/MCH

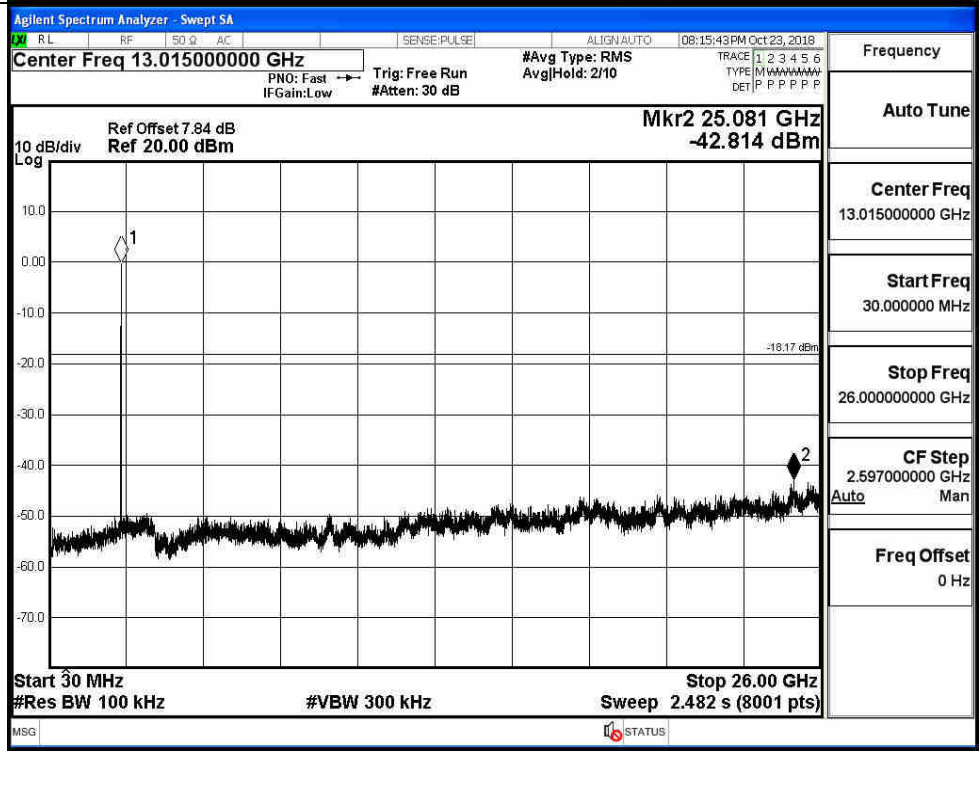


11B HCH Graphs

Pref/11B/HCH

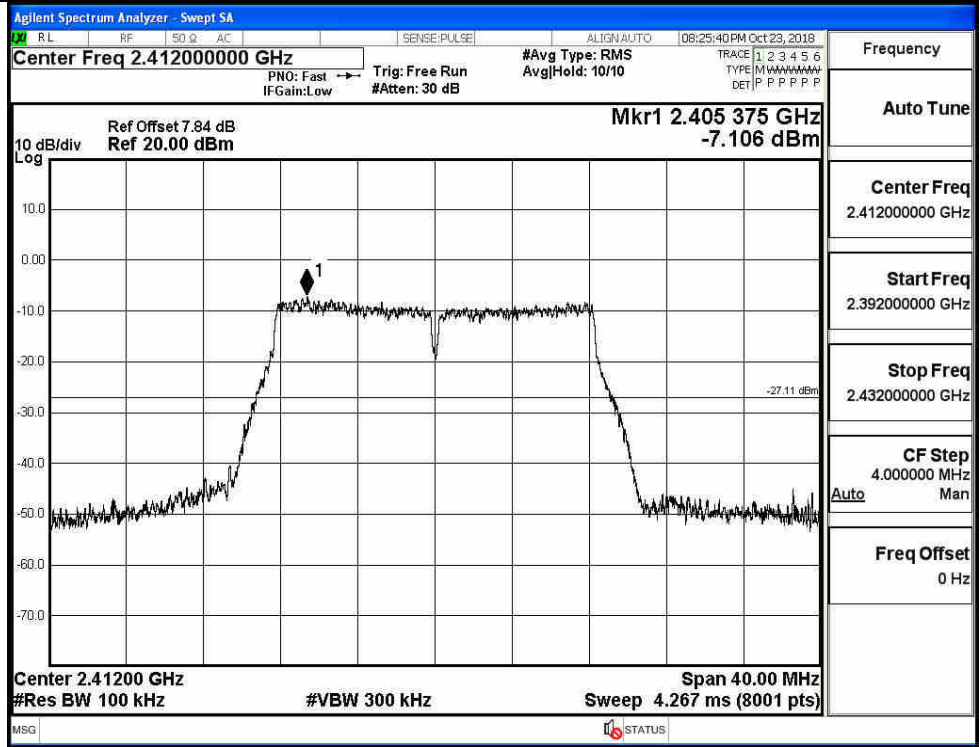


Puw/11B/HCH

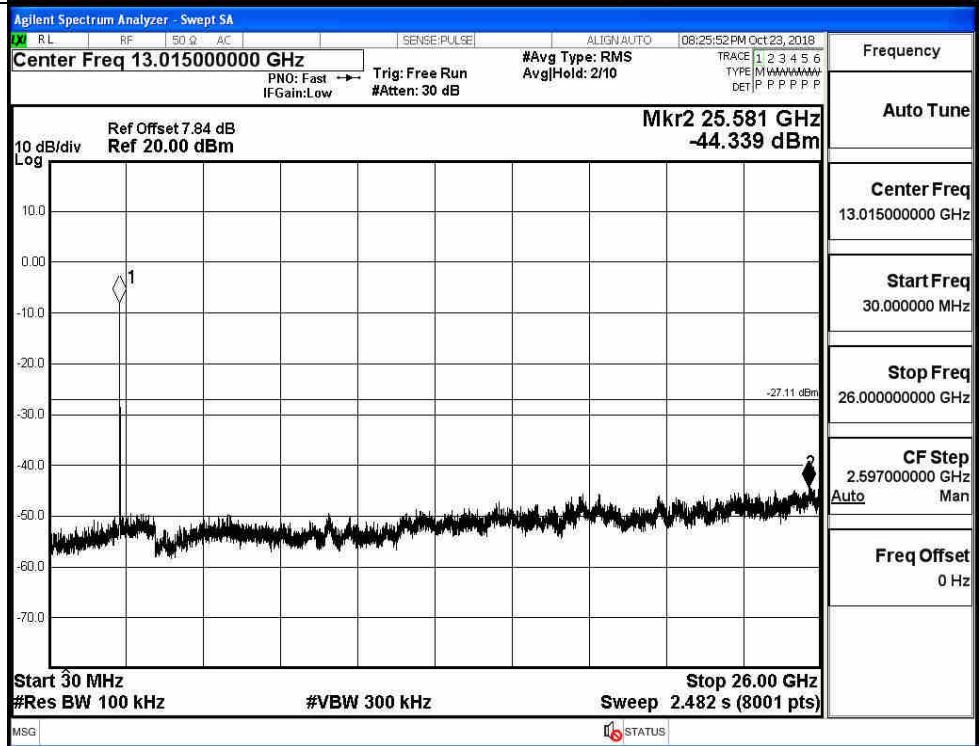


11G_LCH_Graphs

Pref/11G/LCH

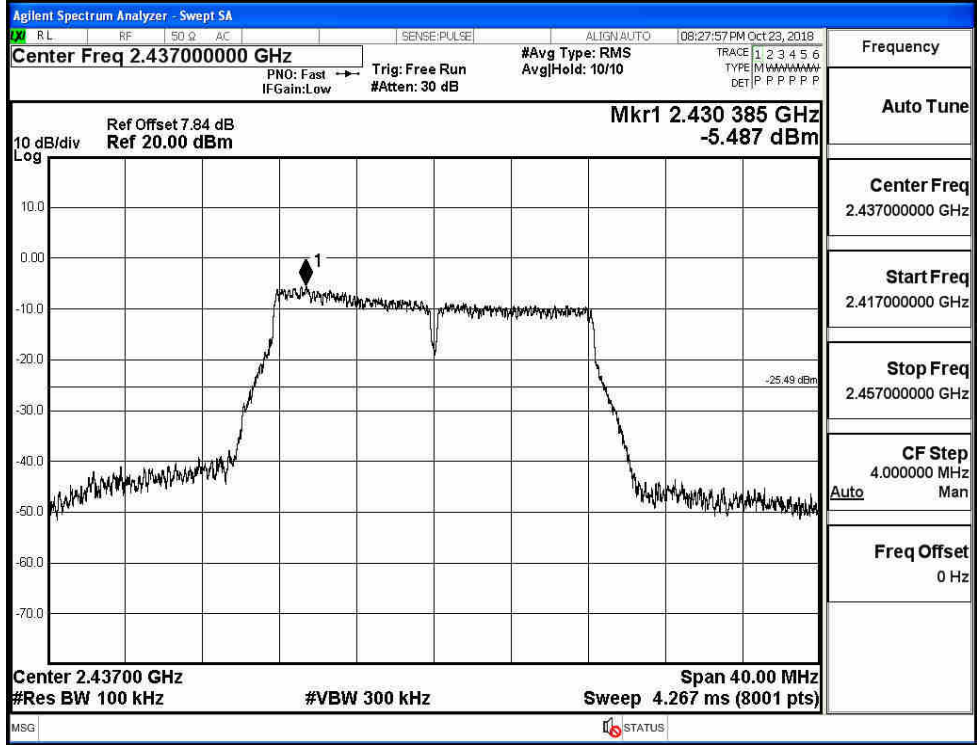


Puw/11G/LCH

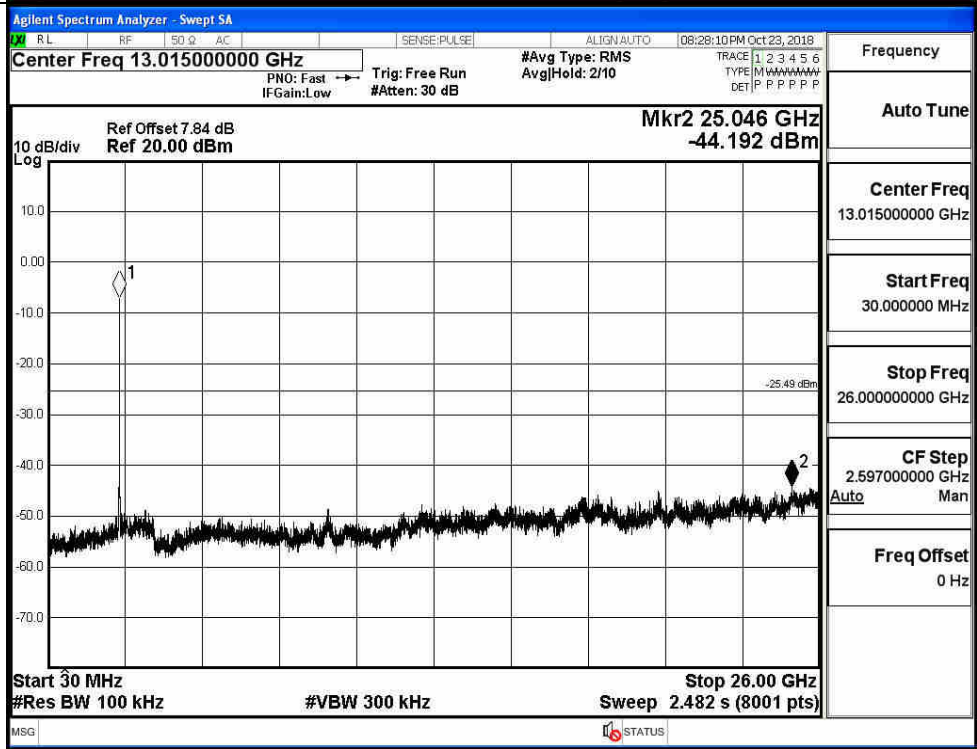


11G MCH Graphs

Pref/11G/MCH

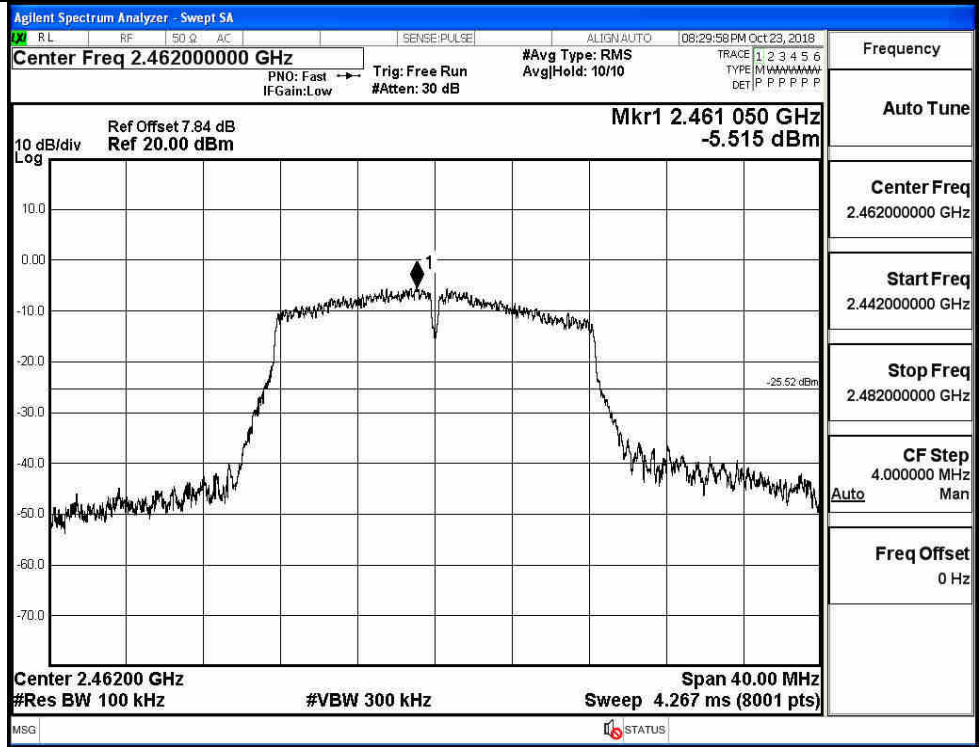


Puw/11G/MCH

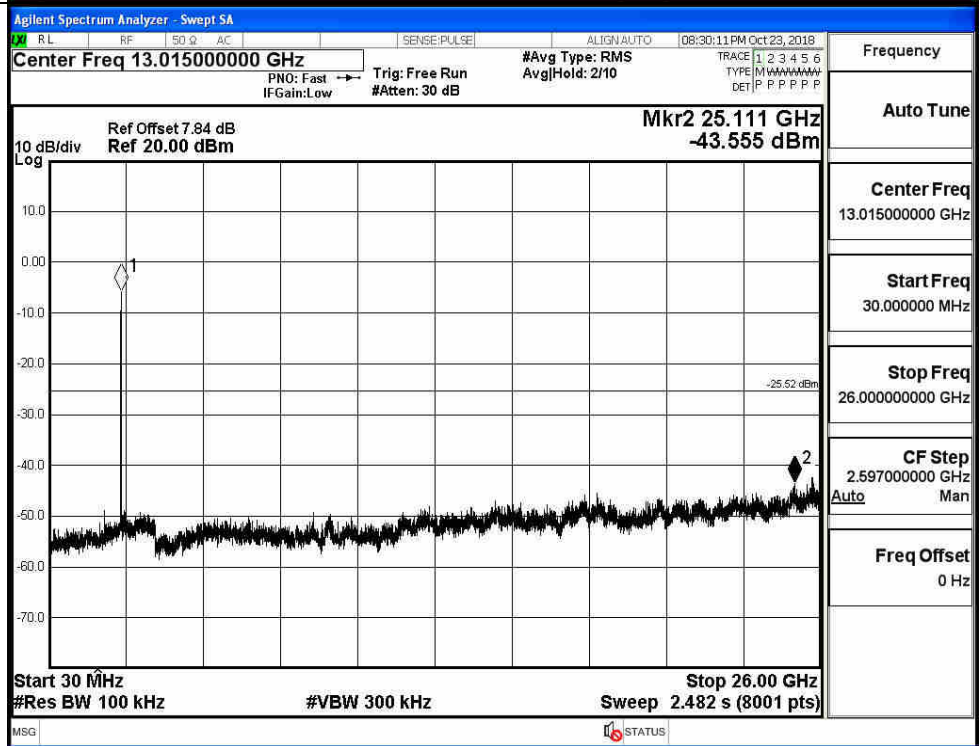


11G HCH Graphs

Pref/11G/HCH

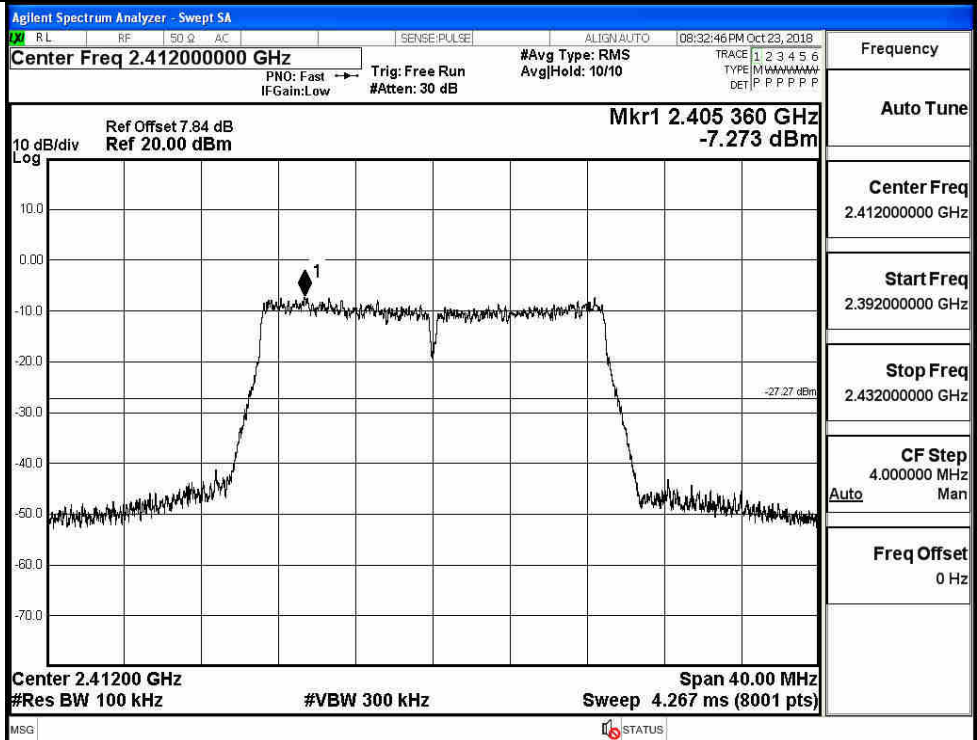


Puw/11G/HCH

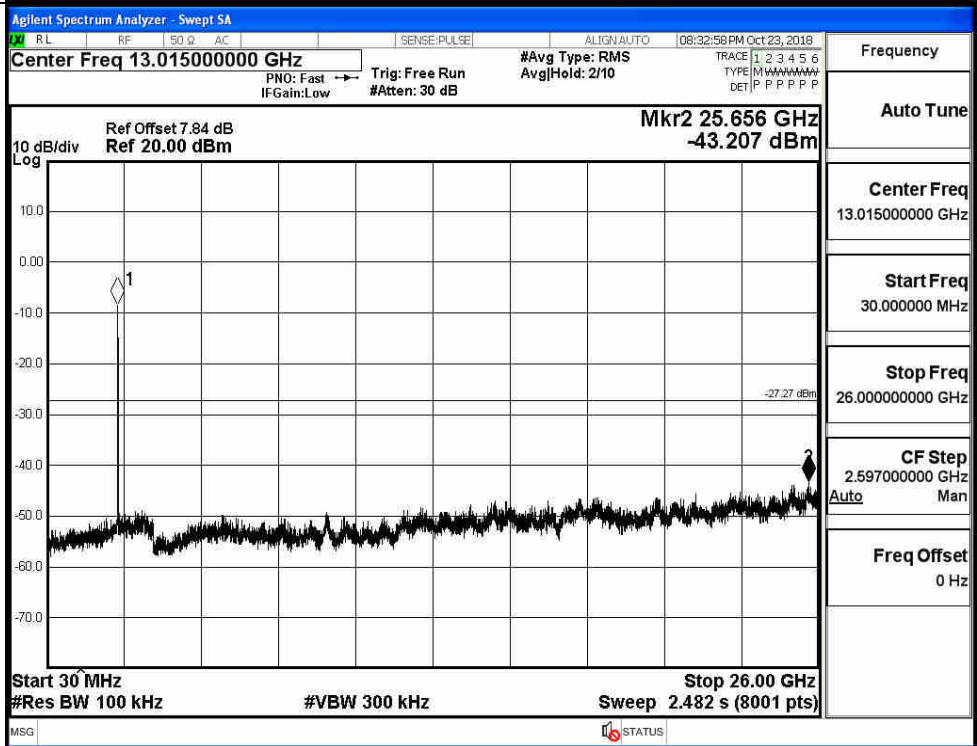


11N20SISO LCH_Graphs

Pref/11N20SIS
O/LCH

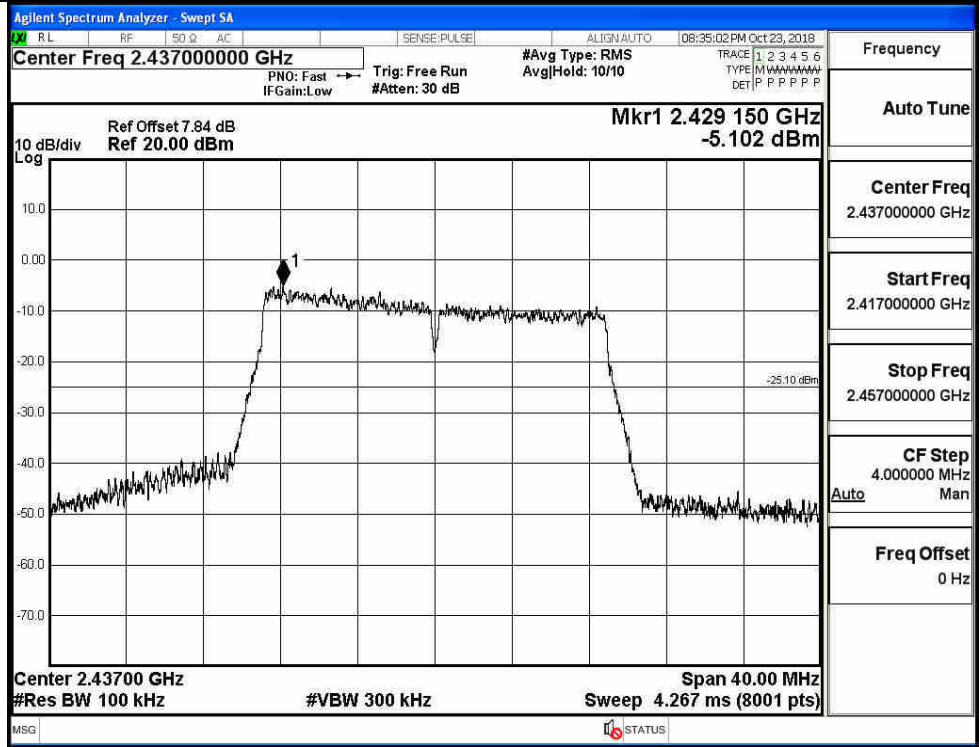


Puw/11N20
SISO/LCH

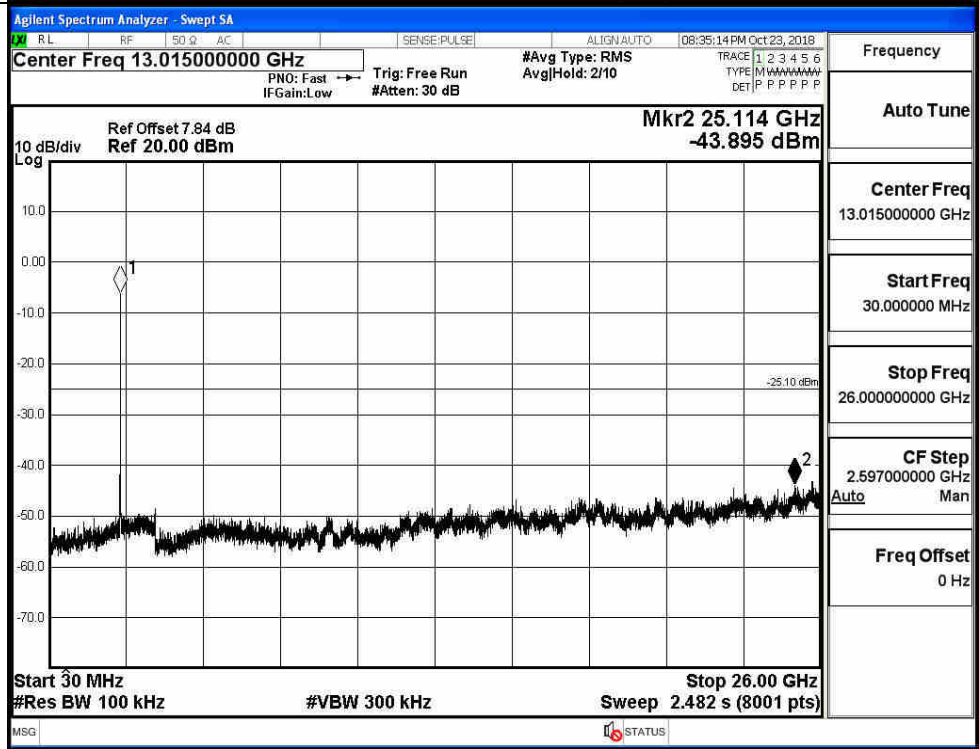


11N20SISO_MCH_Graphs

Pref/11N20
SISO/MCH

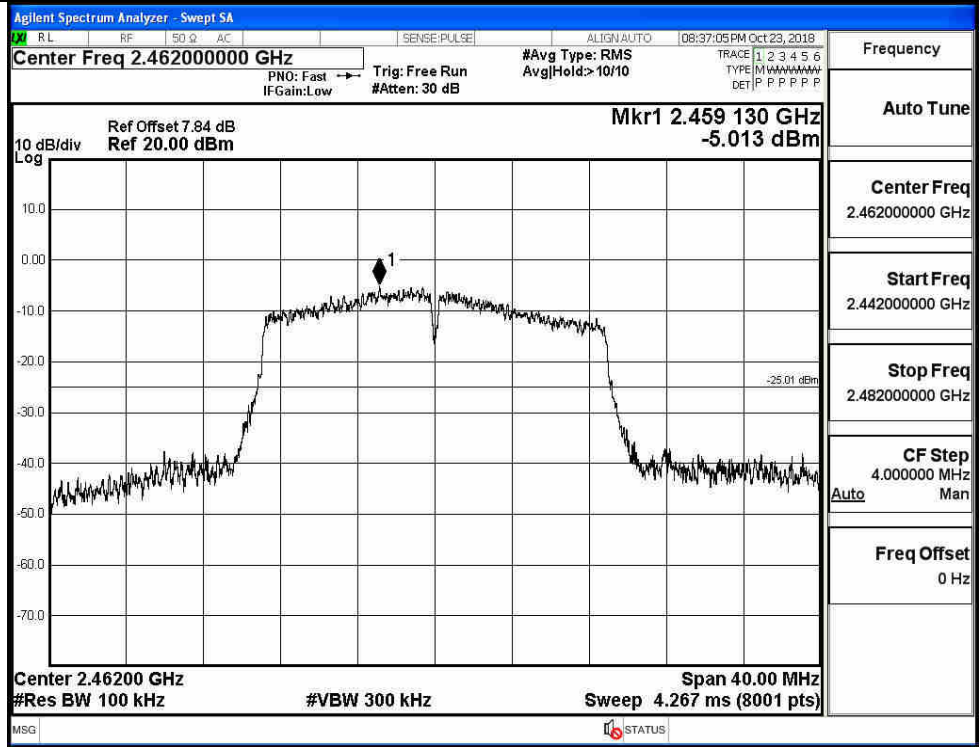


Puw/11N20
SISO/MCH

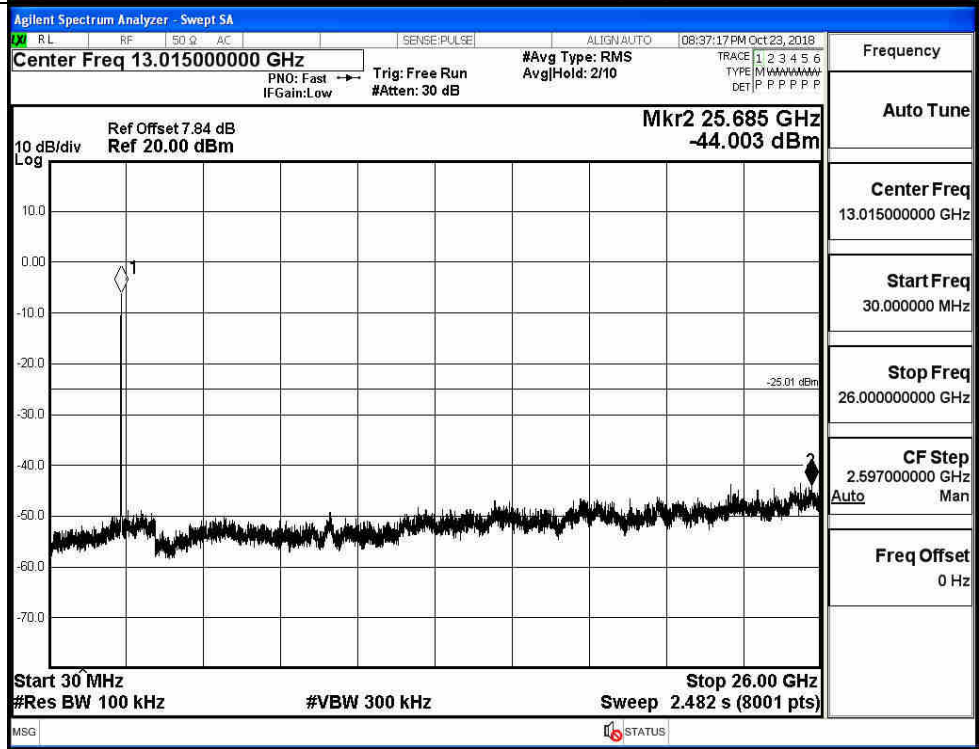


11N20SISO HCH_Graphs

Pref/11N20
SISO/HCH



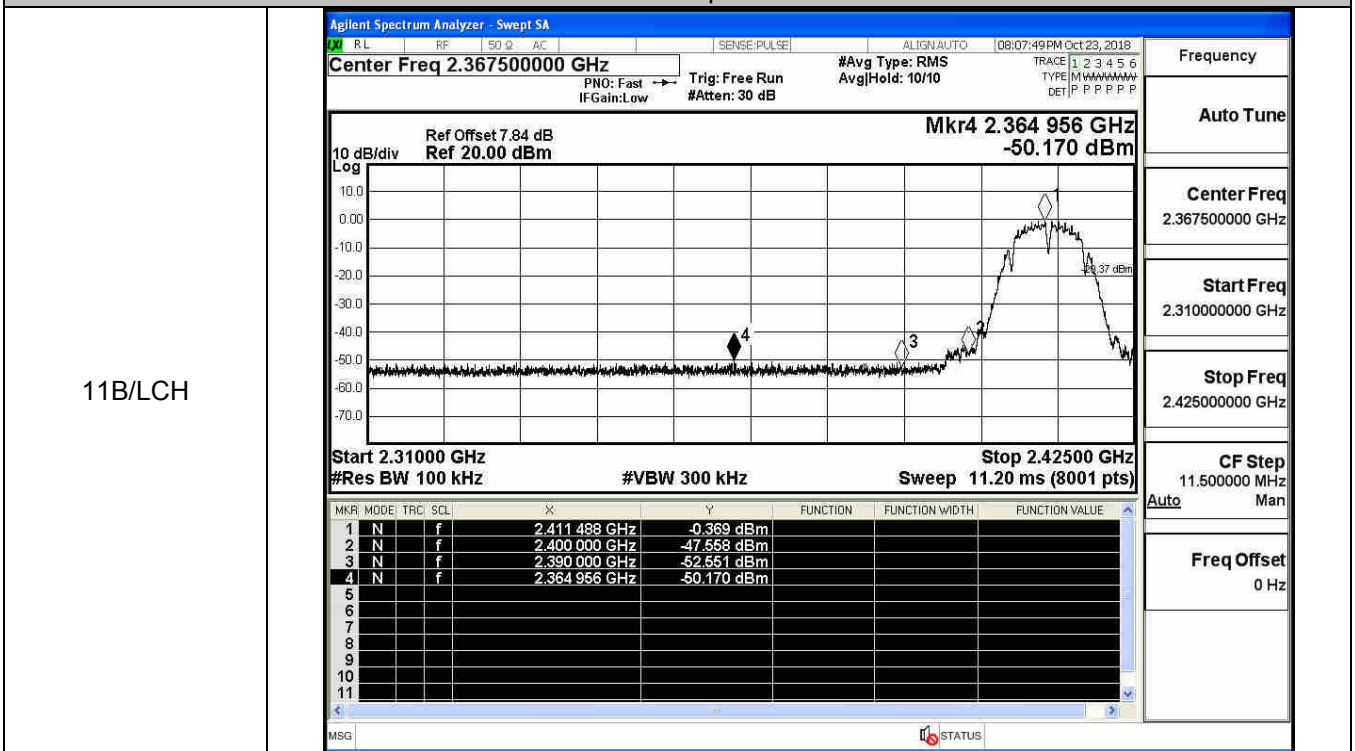
Puw/11N20
SISO/HCH



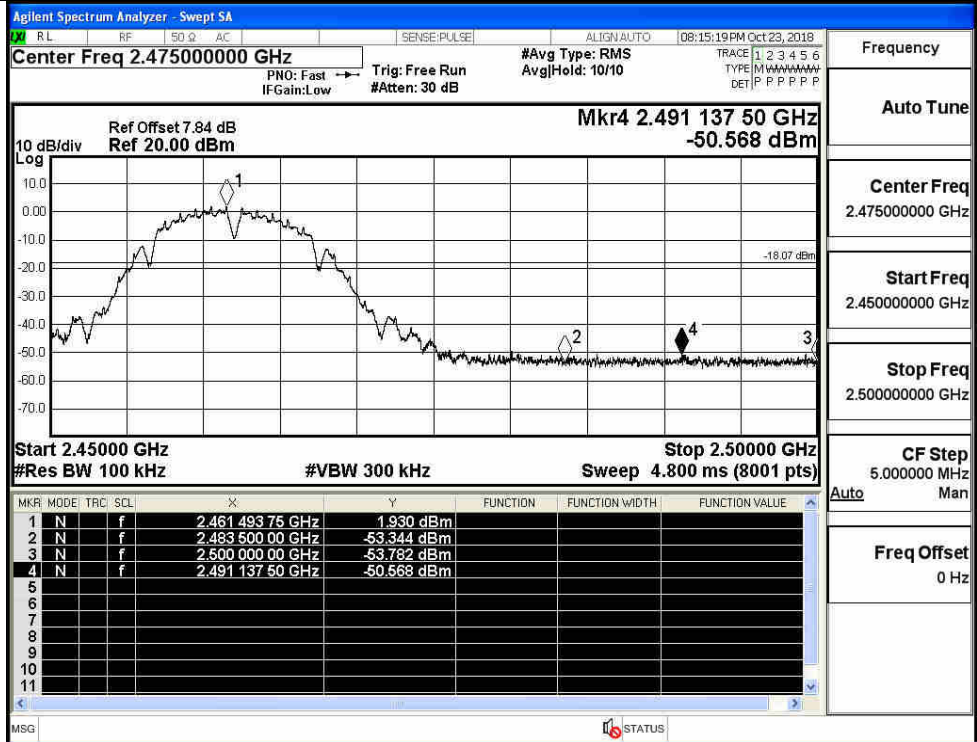
C.6 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
11B	LCH	-0.369	-50.170	-20.37	PASS
	HCH	1.930	-50.568	-18.07	PASS
11G	LCH	-7.448	-50.508	-27.45	PASS
	HCH	-5.384	-46.516	-25.38	PASS
11N20SISO	LCH	-7.099	-49.664	-27.1	PASS
	HCH	-5.047	-44.167	-25.05	PASS

Test Graphs



11B/HCH



Frequency

Auto Tune

Center Freq
2.47500000 GHz

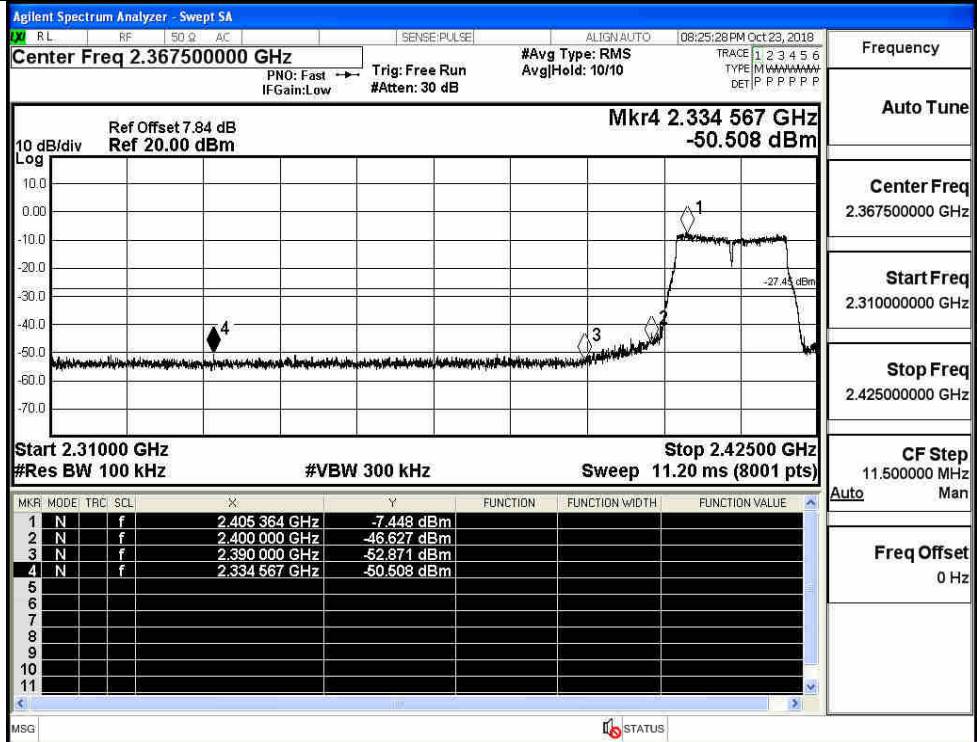
Start Freq
2.45000000 GHz

Stop Freq
2.50000000 GHz

CF Step
5.000000 MHz

Freq Offset
0 Hz

11G/LCH



Frequency

Auto Tune

Center Freq
2.36750000 GHz

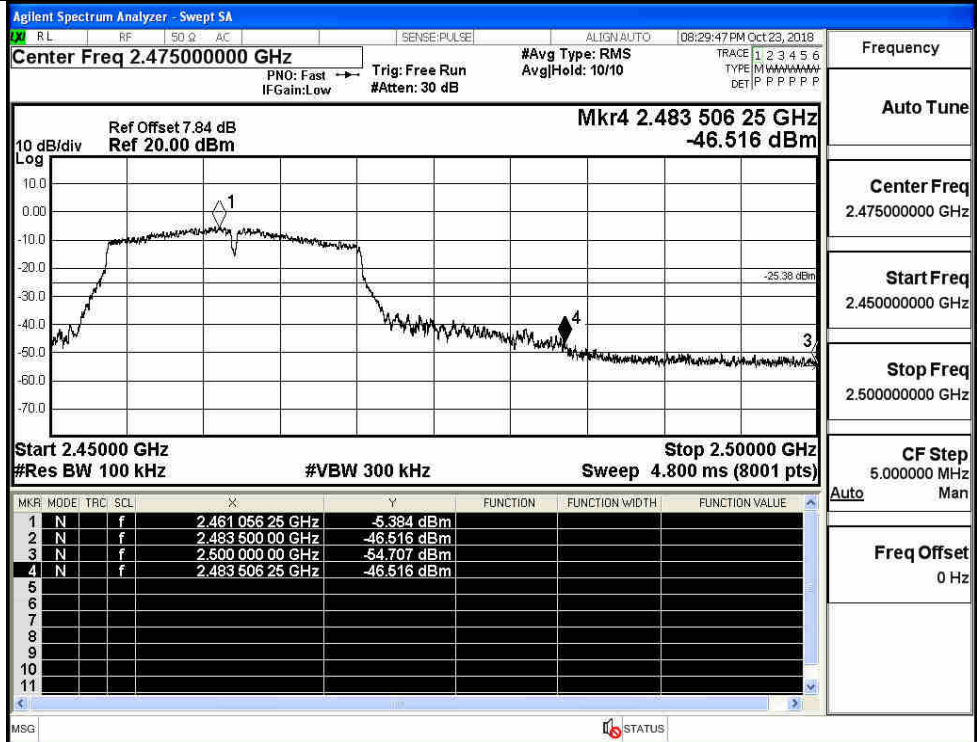
Start Freq
2.31000000 GHz

Stop Freq
2.42500000 GHz

CF Step
11.500000 MHz

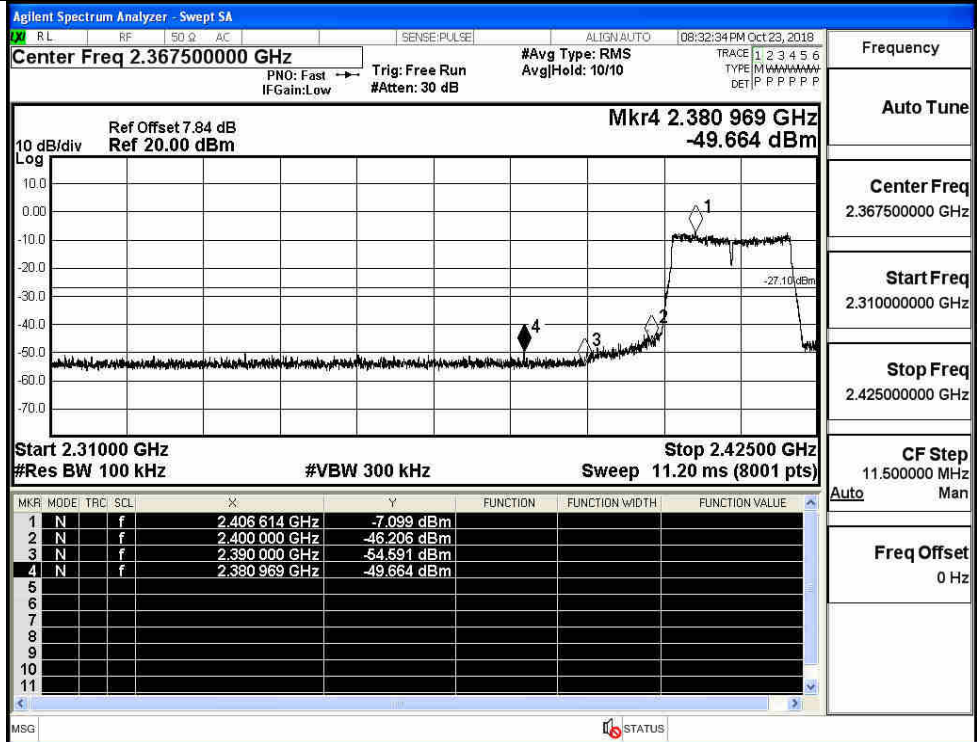
Freq Offset
0 Hz

11G/HCH

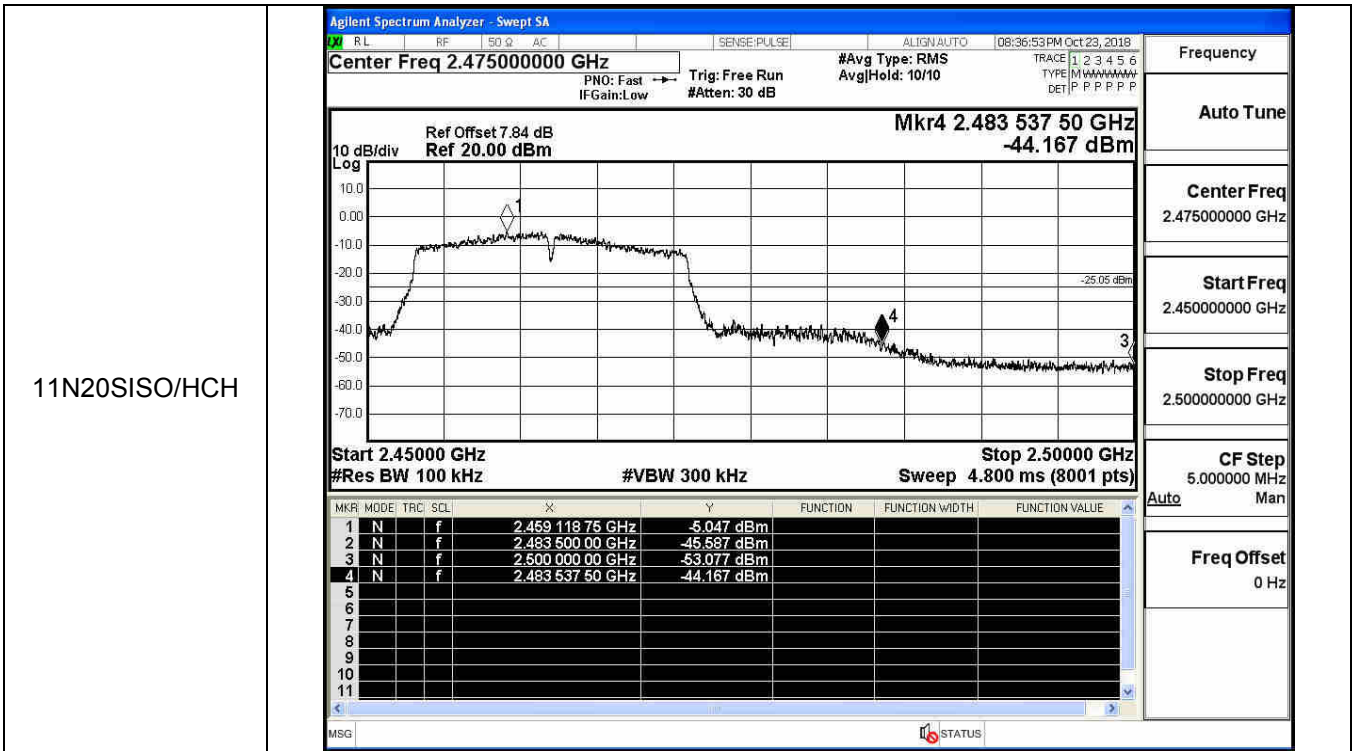


Frequency	
Auto Tune	
Center Freq	2.475000000 GHz
Start Freq	2.450000000 GHz
Stop Freq	2.500000000 GHz
CF Step	5.000000 MHz
Freq Offset	0 Hz

11N20SISO/LCH



Frequency	
Auto Tune	
Center Freq	2.367500000 GHz
Start Freq	2.310000000 GHz
Stop Freq	2.425000000 GHz
CF Step	11.500000 MHz
Freq Offset	0 Hz

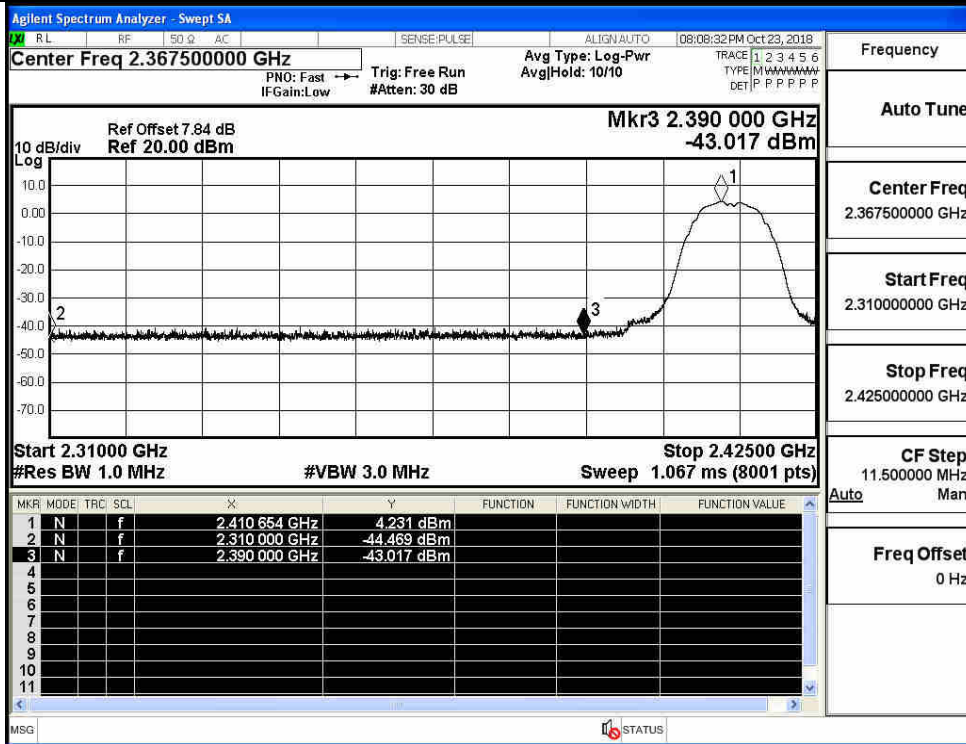


C.7 Restrict-band band-edge measurements

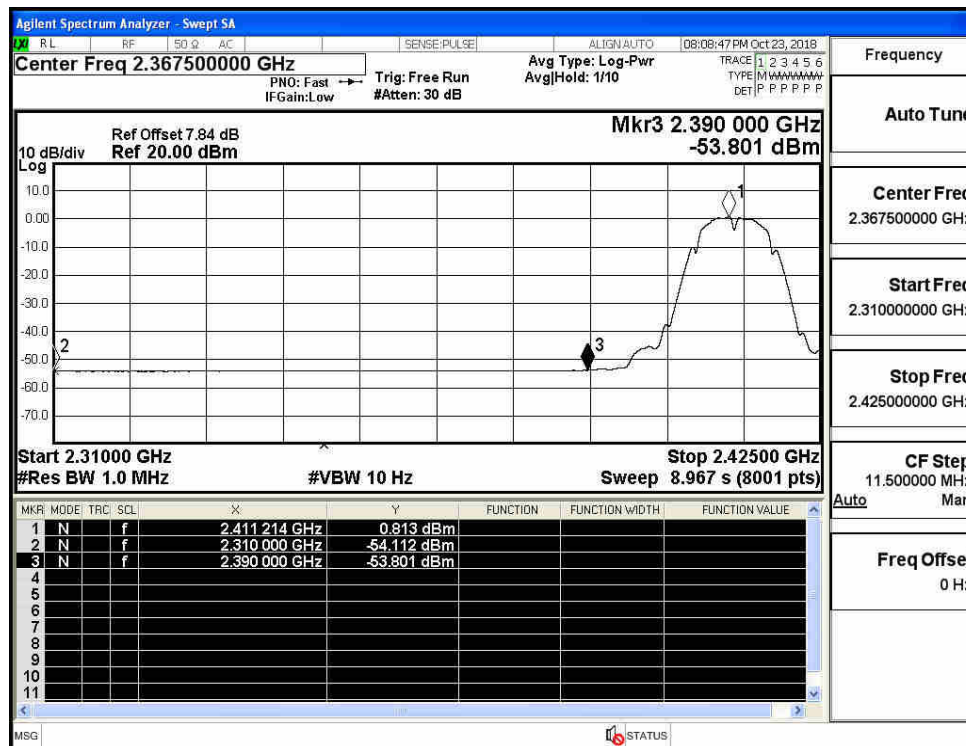
Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBu V/m]	Verdict
11B	2412	Ant1	2310.0	-44.47	2.0	0	52.76	PEAK	74	PASS
	2412	Ant1	2310.0	-54.11	2.0	0	43.12	AV	54	PASS
	2412	Ant1	2390.0	-43.02	2.0	0	54.21	PEAK	74	PASS
	2412	Ant1	2390.0	-53.80	2.0	0	43.43	AV	54	PASS
	2462	Ant1	2483.5	-42.23	2.0	0	55.00	PEAK	74	PASS
	2462	Ant1	2483.5	-53.30	2.0	0	43.93	AV	54	PASS
	2462	Ant1	2500.0	-42.99	2.0	0	54.24	PEAK	74	PASS
	2462	Ant1	2500.0	-53.52	2.0	0	43.71	AV	54	PASS
11G	2412	Ant1	2310.0	-43.76	2.0	0	53.47	PEAK	74	PASS
	2412	Ant1	2310.0	-54.11	2.0	0	43.12	AV	54	PASS
	2412	Ant1	2390.0	-42.01	2.0	0	55.22	PEAK	74	PASS
	2412	Ant1	2390.0	-53.37	2.0	0	43.86	AV	54	PASS
	2462	Ant1	2483.5	-33.73	2.0	0	63.50	PEAK	74	PASS
	2462	Ant1	2483.5	-50.26	2.0	0	46.97	AV	54	PASS

	2462	Ant1	2500.0	-42.50	2.0	0	54.73	PEAK	74	PASS
	2462	Ant1	2500.0	-53.48	2.0	0	43.75	AV	54	PASS
11N20 SISO	2412	Ant1	2310.0	-44.27	2.0	0	52.96	PEAK	74	PASS
	2412	Ant1	2310.0	-54.21	2.0	0	43.02	AV	54	PASS
	2412	Ant1	2390.0	-41.49	2.0	0	55.74	PEAK	74	PASS
	2412	Ant1	2390.0	-53.34	2.0	0	43.89	AV	54	PASS
	2462	Ant1	2483.5	-30.94	2.0	0	66.29	PEAK	74	PASS
	2462	Ant1	2483.5	-48.35	2.0	0	48.88	AV	54	PASS
	2462	Ant1	2500.0	-42.21	2.0	0	55.02	PEAK	74	PASS
	2462	Ant1	2500.0	-53.59	2.0	0	43.64	AV	54	PASS

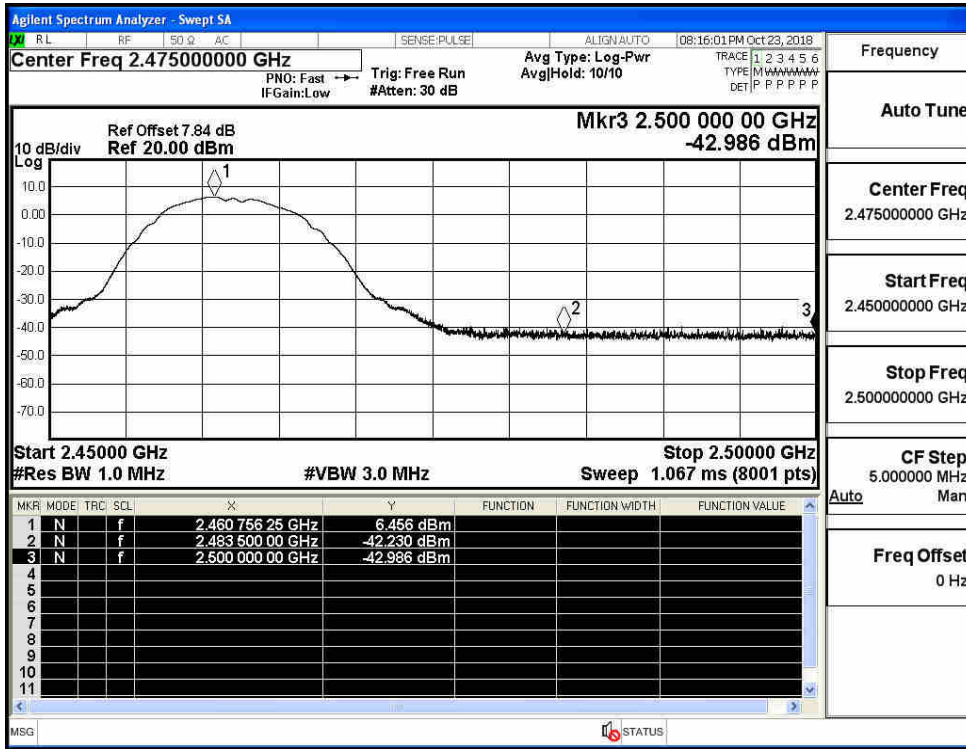
Restrict-band band-edge measurements_11B_2412_Ant1_PEAK



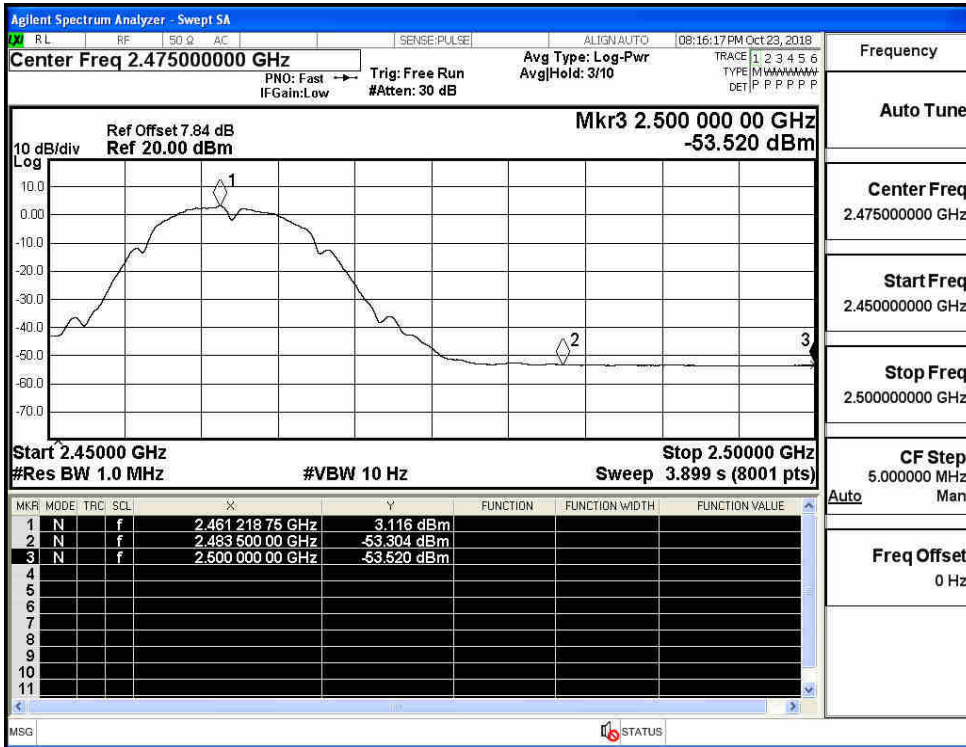
Restrict-band band-edge measurements_11B_2412_Ant1_AV



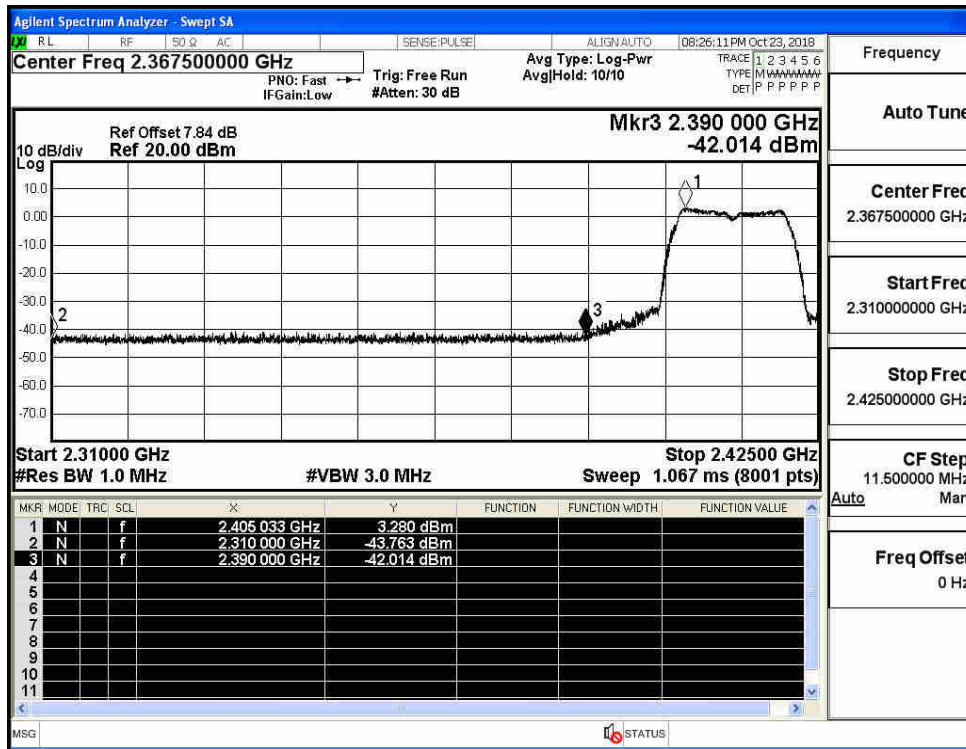
Restrict-band band-edge measurements_11B_2462_Ant1_PEAK



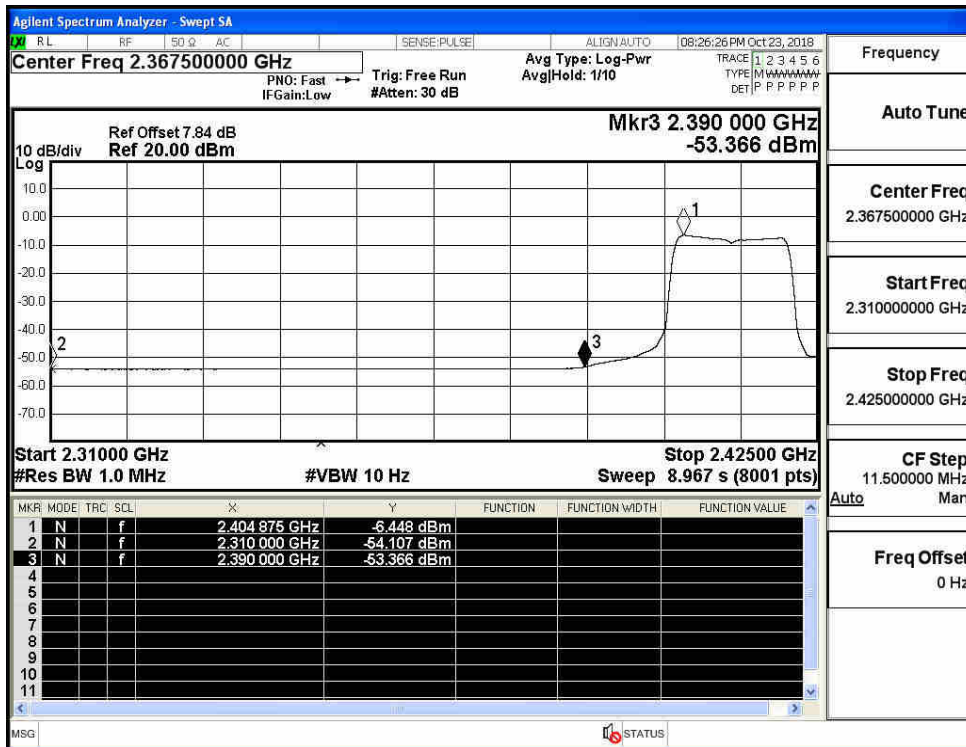
Restrict-band band-edge measurements_11B_2462_Ant1_AV



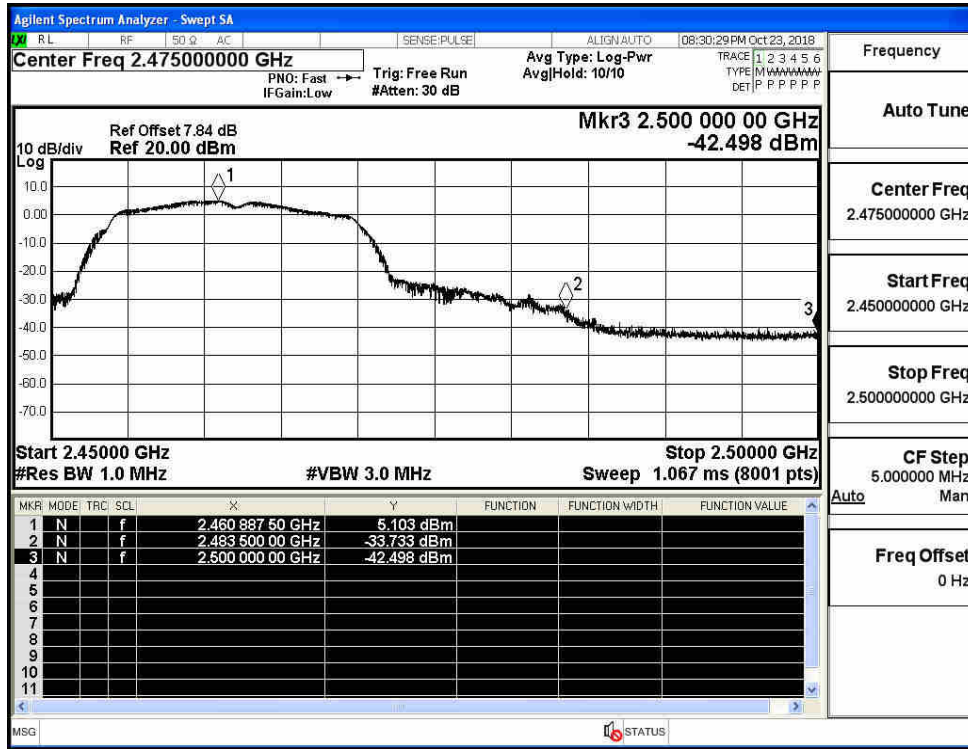
Restrict-band band-edge measurements_11G_2412_Ant1_PEAK



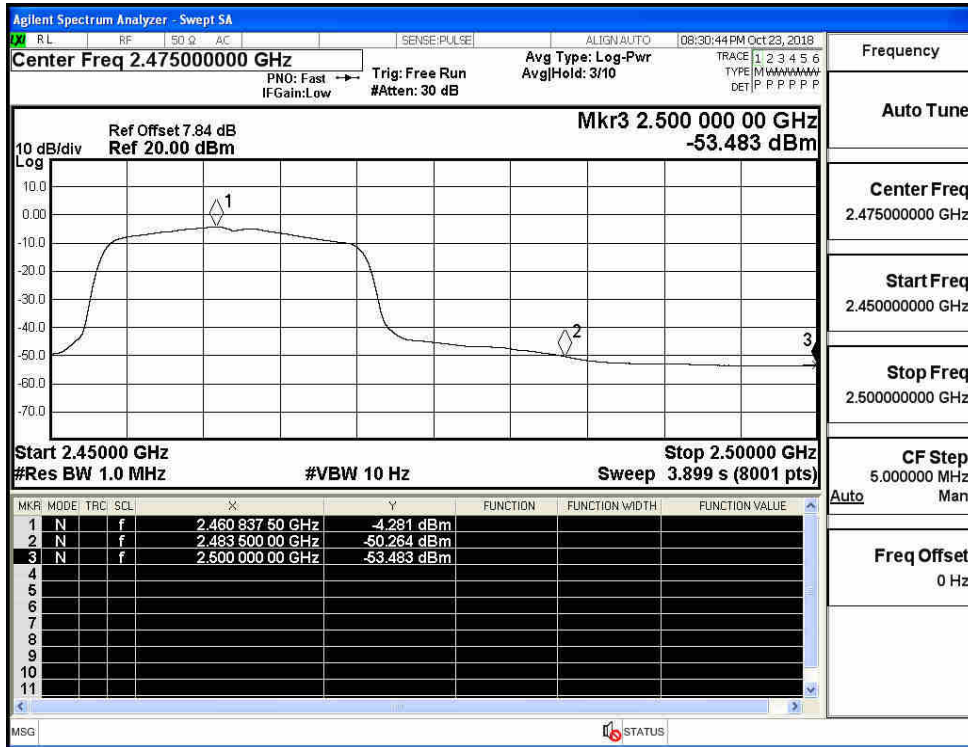
Restrict-band band-edge measurements_11G_2412_Ant1_AV



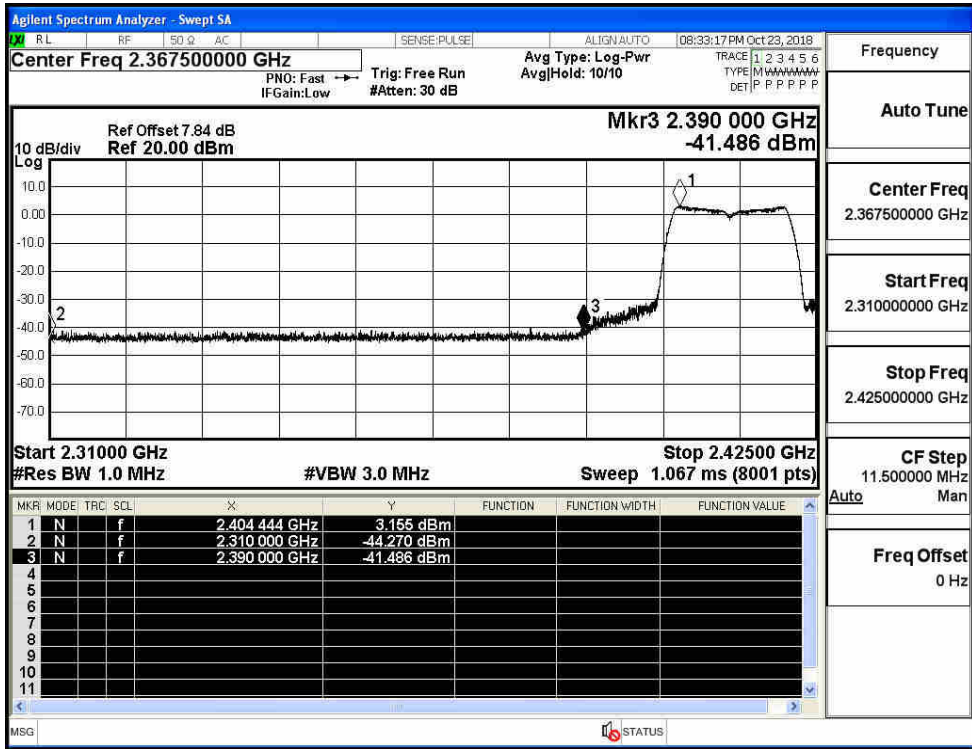
Restrict-band band-edge measurements_11G_2462_Ant1_PEAK



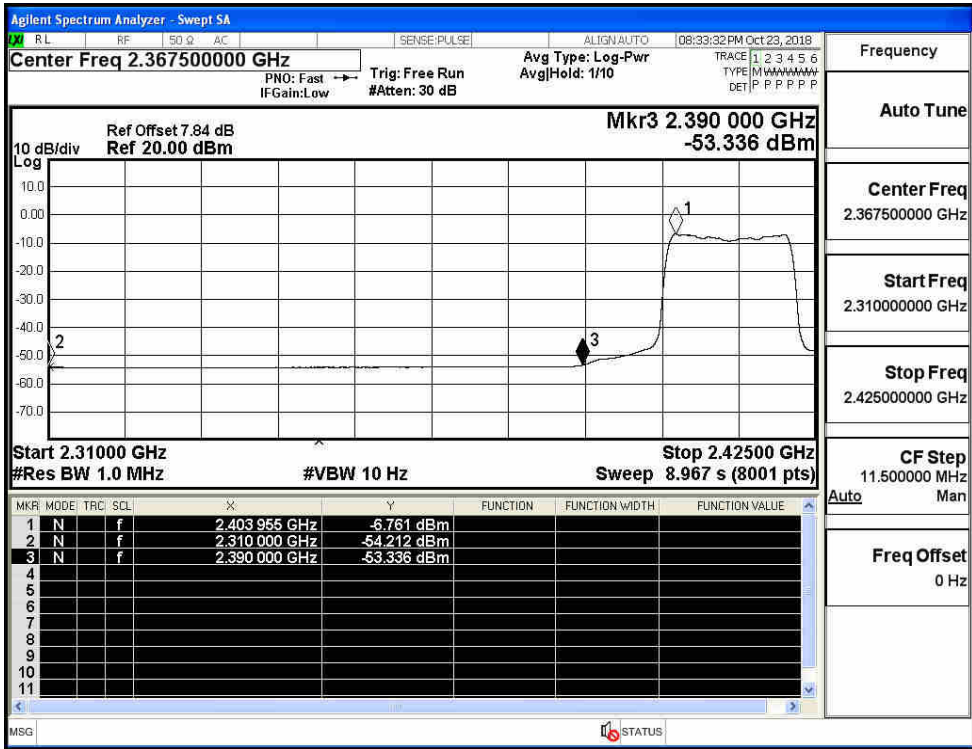
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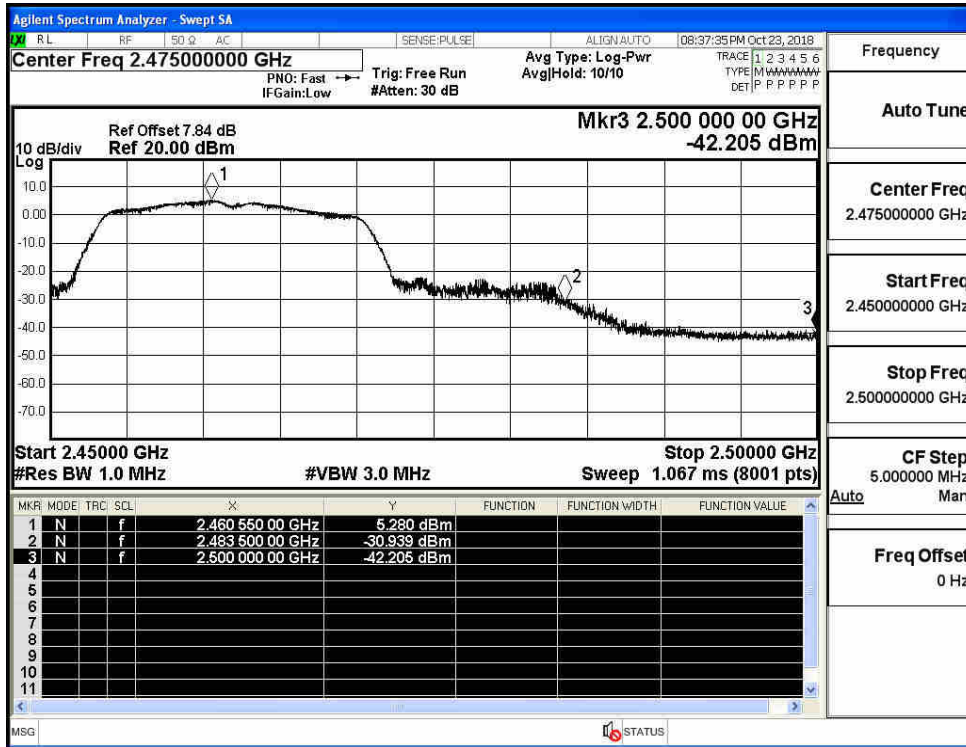
Restrict-band band-edge measurements_11N20SISO_2412_Ant1_PEAK



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

