Appendix A

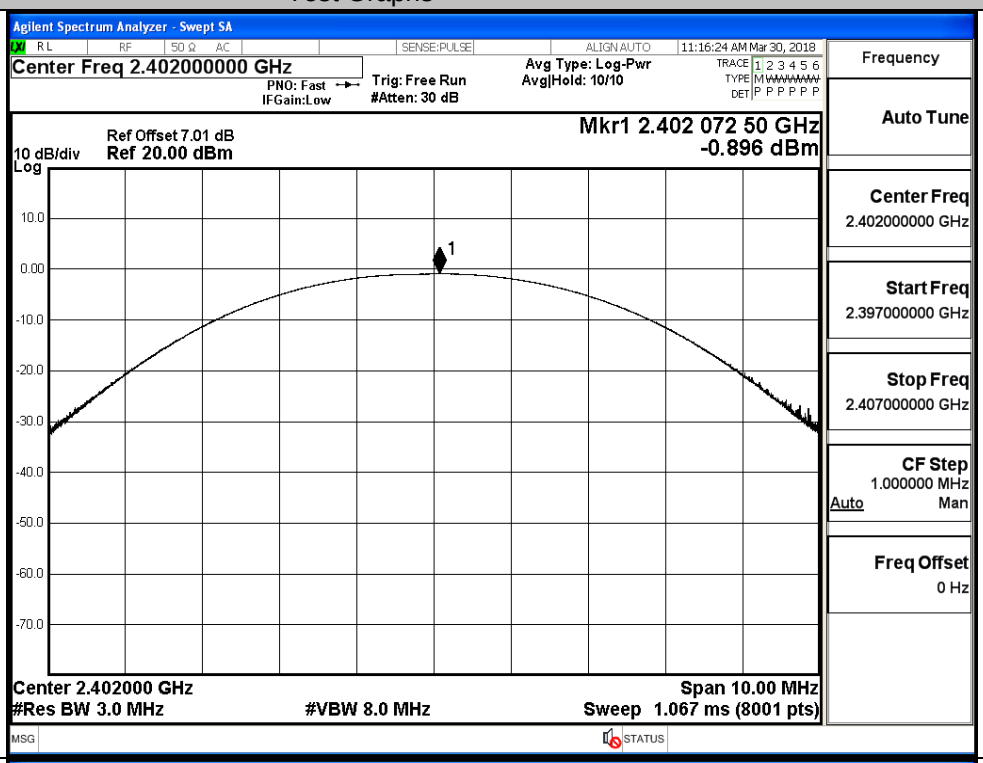
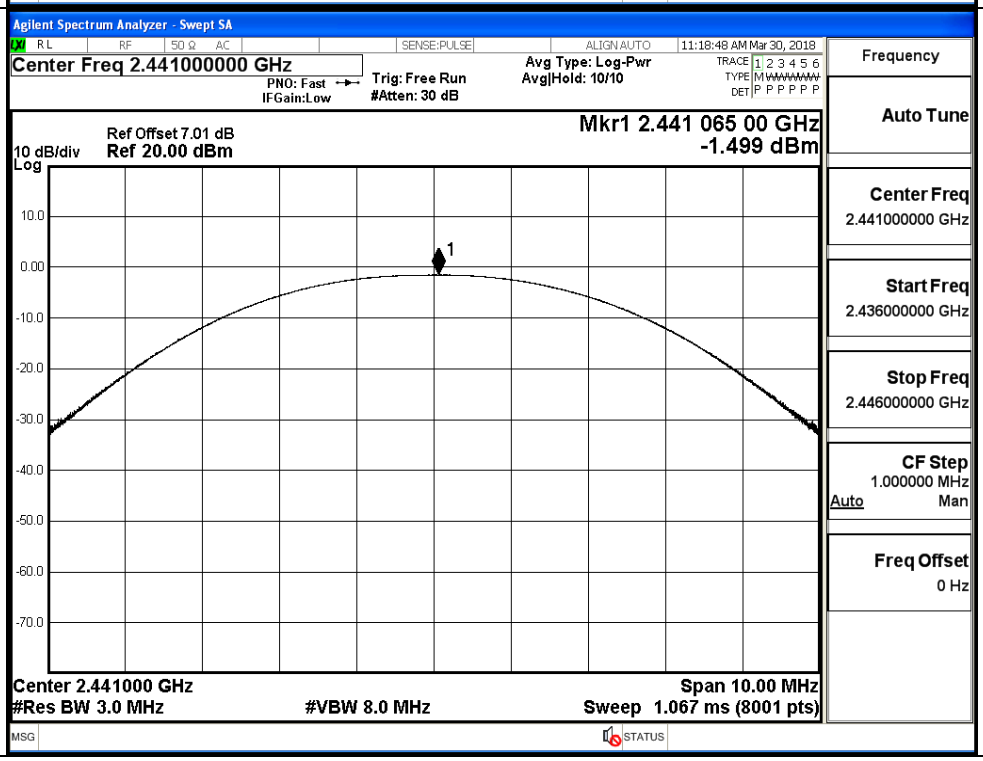
RF Test Data for BT V4.0 (BDR/EDR) (Conducted Measurement)
Product Name: Tablet PC
Trade Mark: Acer
Test Model: Acer One 7 4G

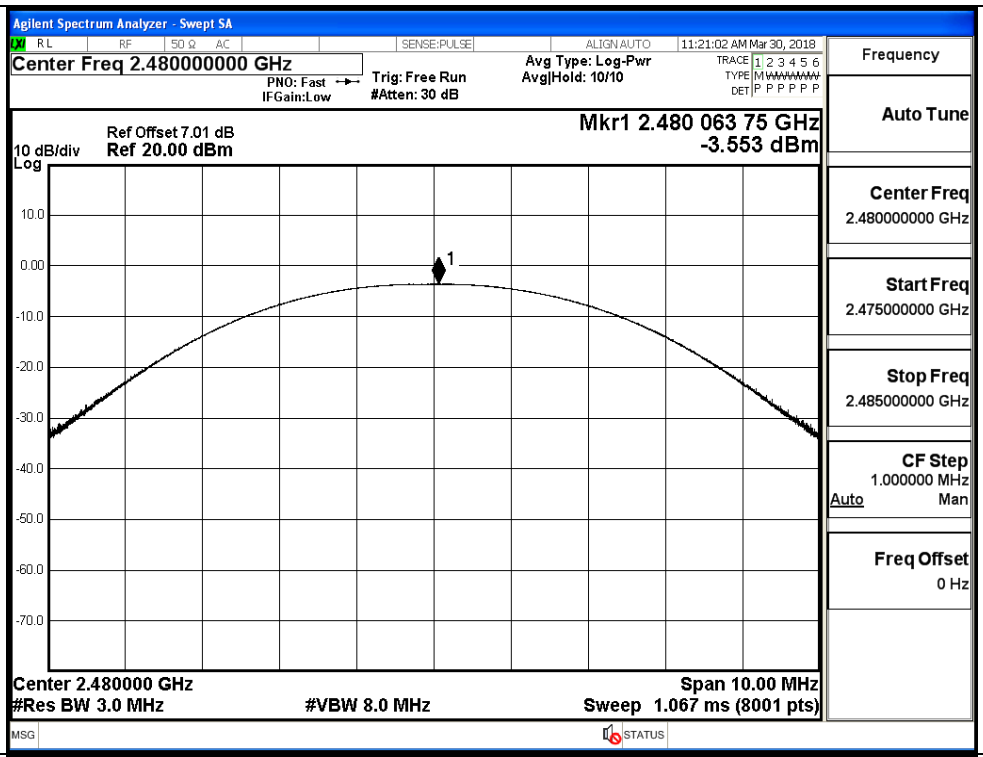
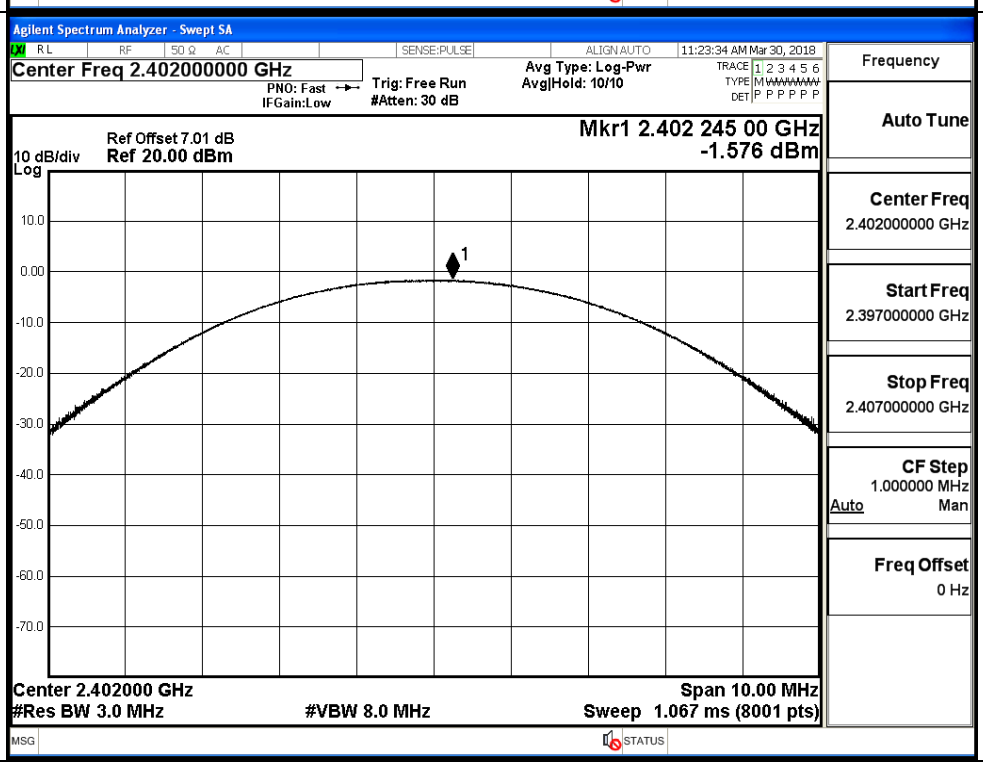
Environmental Conditions

Temperature:	22.3 ° C
Relative Humidity:	52.6%
ATM Pressure:	100.0 kPa
Test Engineer:	WILSON HONG
Supervised by:	Dick.Su

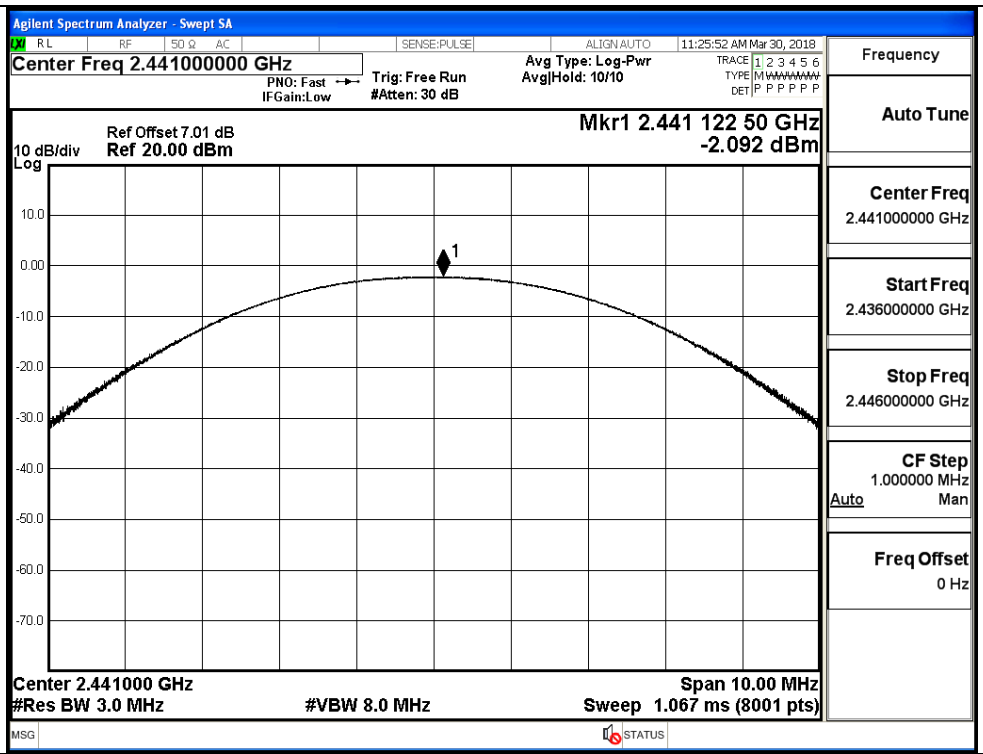
A.1 Maximum Conducted Peak Output Power

Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-0.896	30	PASS
	MCH	-1.499	30	PASS
	HCH	-3.553	30	PASS
π/4DQPSK	LCH	-1.576	21	PASS
	MCH	-2.092	21	PASS
	HCH	-4.210	21	PASS
8DPSK	LCH	-1.380	21	PASS
	MCH	-1.912	21	PASS
	HCH	-4.006	21	PASS

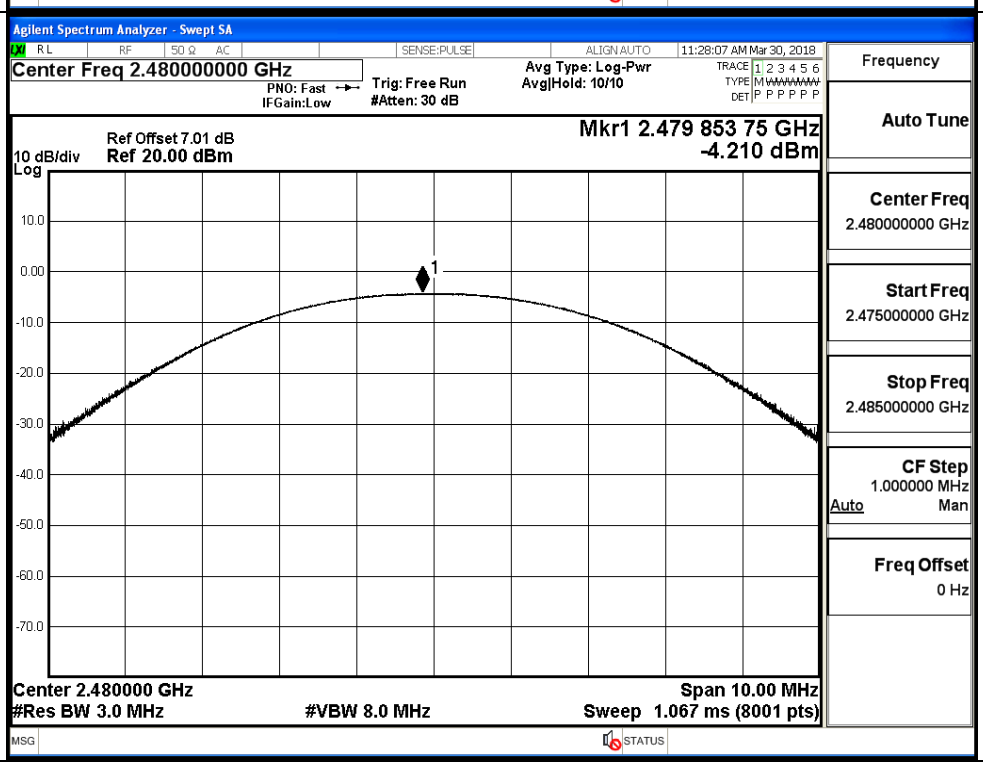
Test Graphs		
GFSK/LCH		
GFSK/MCH		

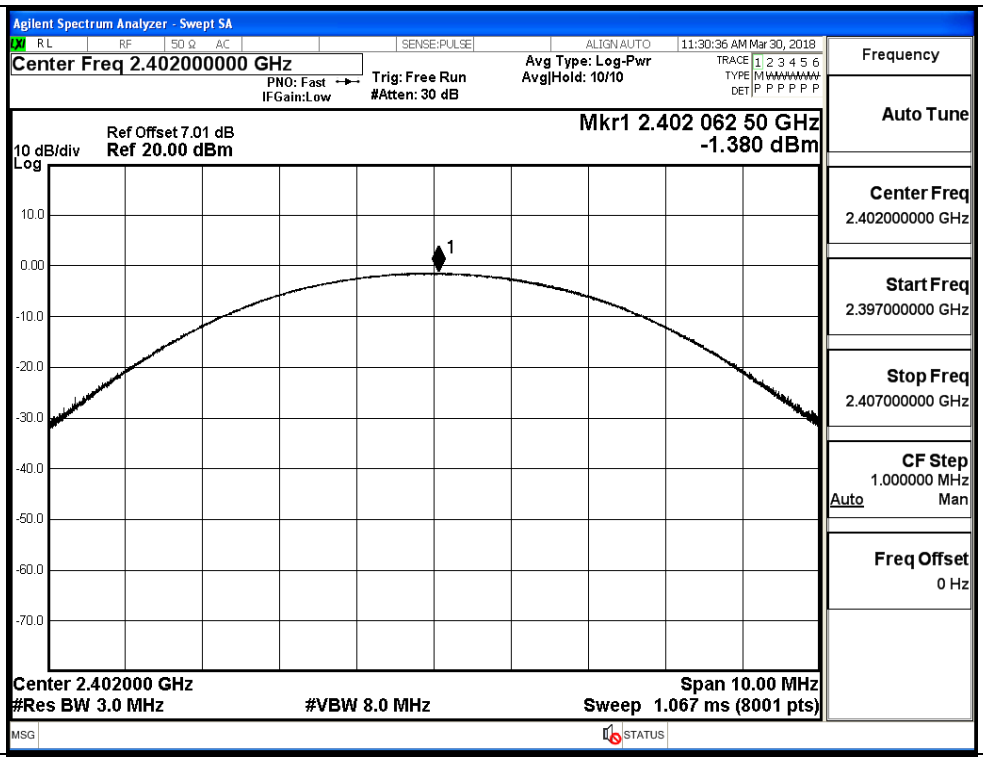
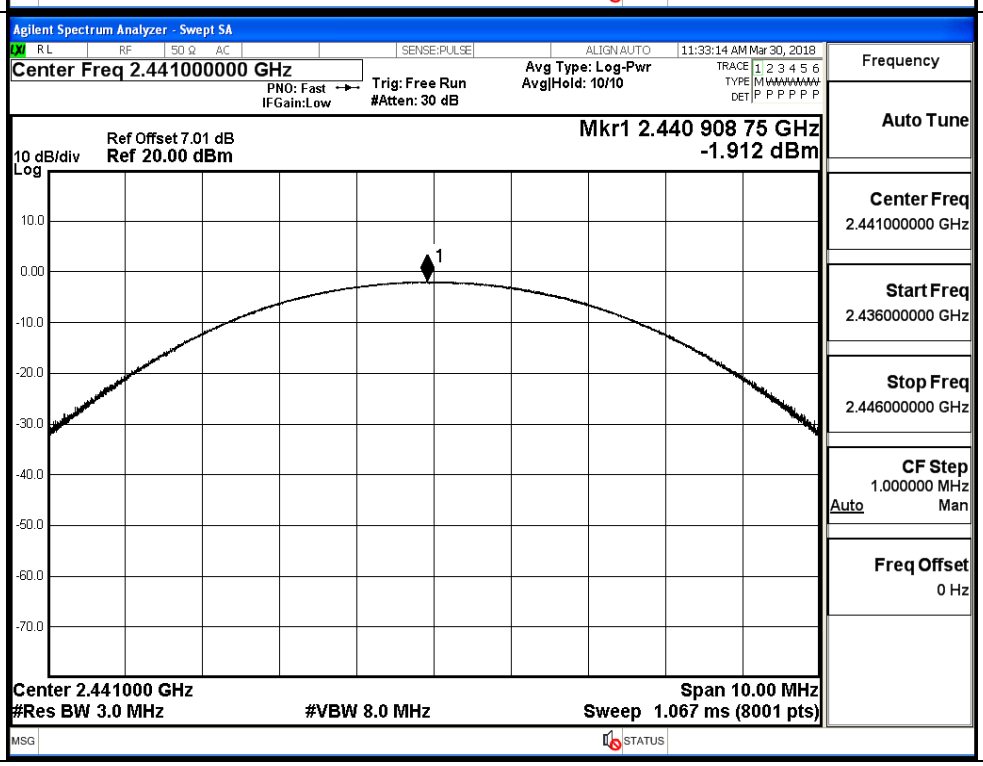
GFSK/HCH		
π/4DQPSK/LCH		

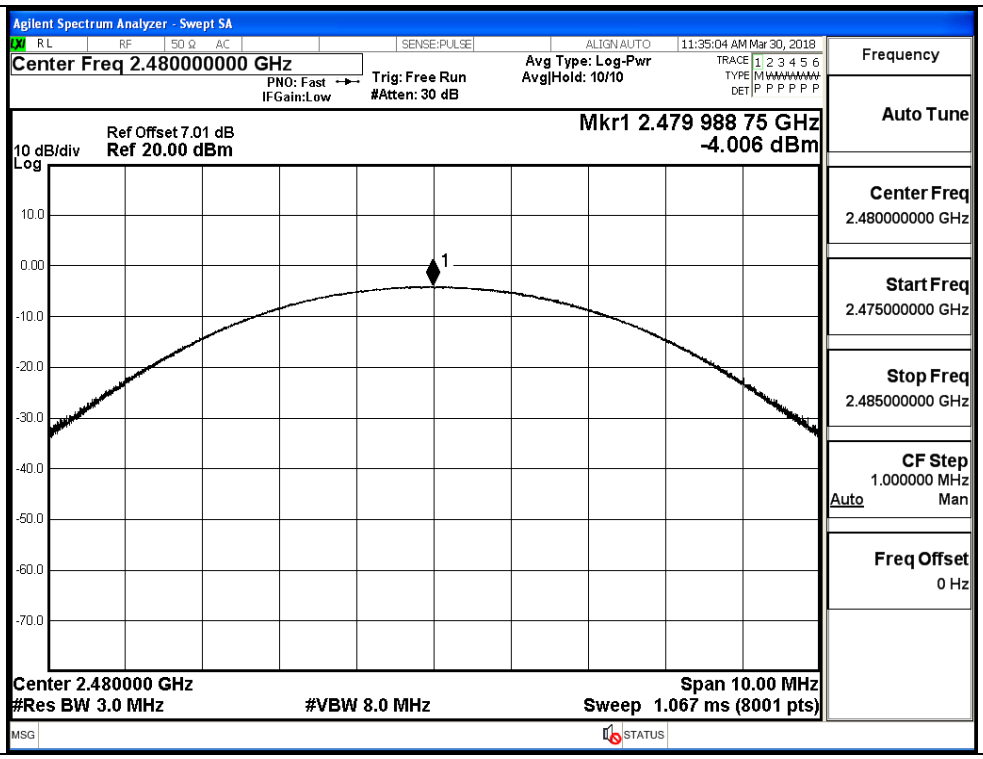
π/4DQPSK/MCH



π/4DQPSK/HCH



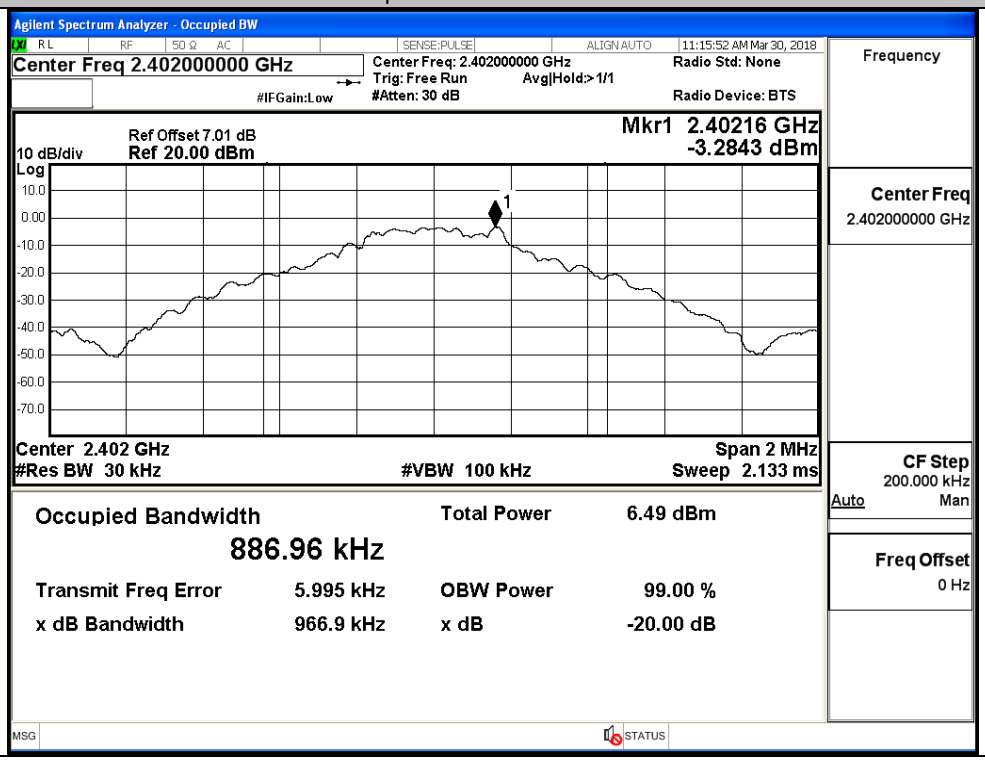
8DPSK/LCH		
8DPSK/MCH		

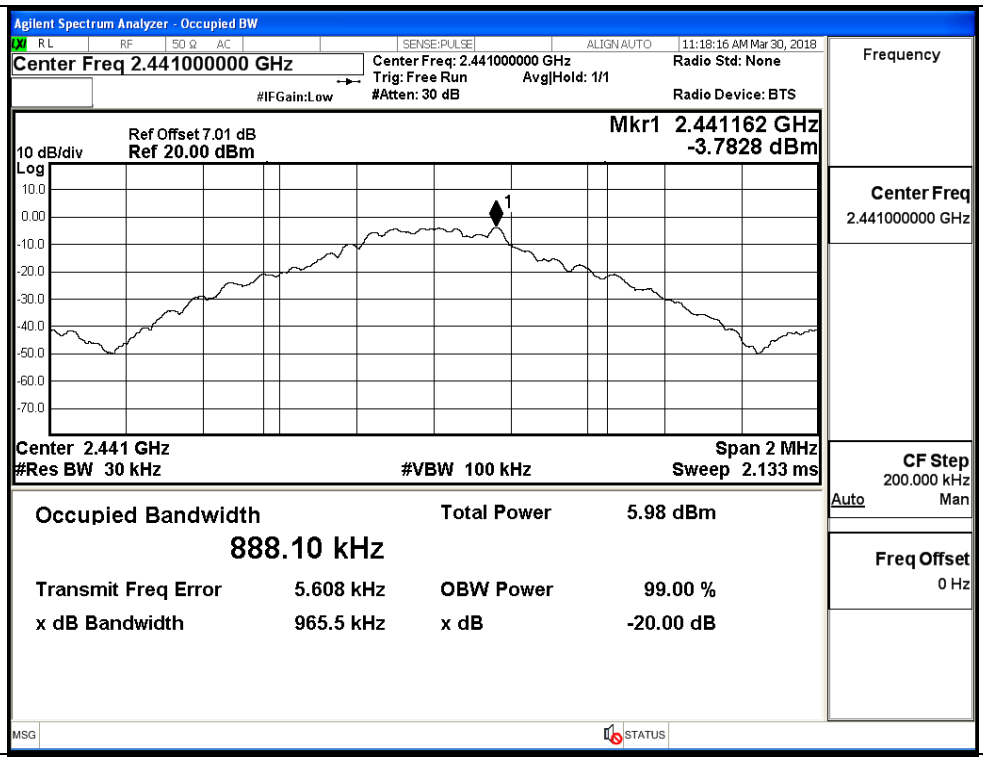
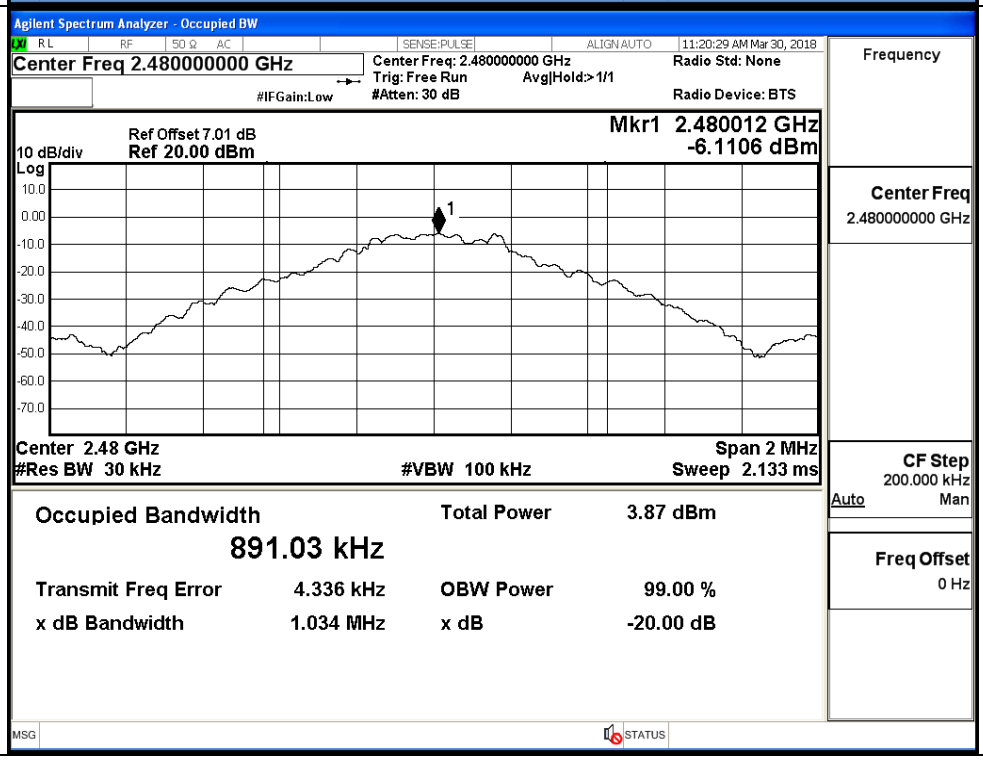
8DPSK/HCH		

Agilent Spectrum Analyzer - Swept SA
Center Freq 2.480000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 10/10
11:35:04 AM Mar 30, 2018
Ref Offset 7.01 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 2.479 988 75 GHz
-4.006 dBm
Center 2.480000 GHz
#Res BW 3.0 MHz
#VBW 8.0 MHz
Span 10.00 MHz
Sweep 1.067 ms (8001 pts)
Frequency
Auto Tune
Center Freq
2.480000000 GHz
Start Freq
2.475000000 GHz
Stop Freq
2.485000000 GHz
CF Step
1.000000 MHz
Auto
Man
Freq Offset
0 Hz

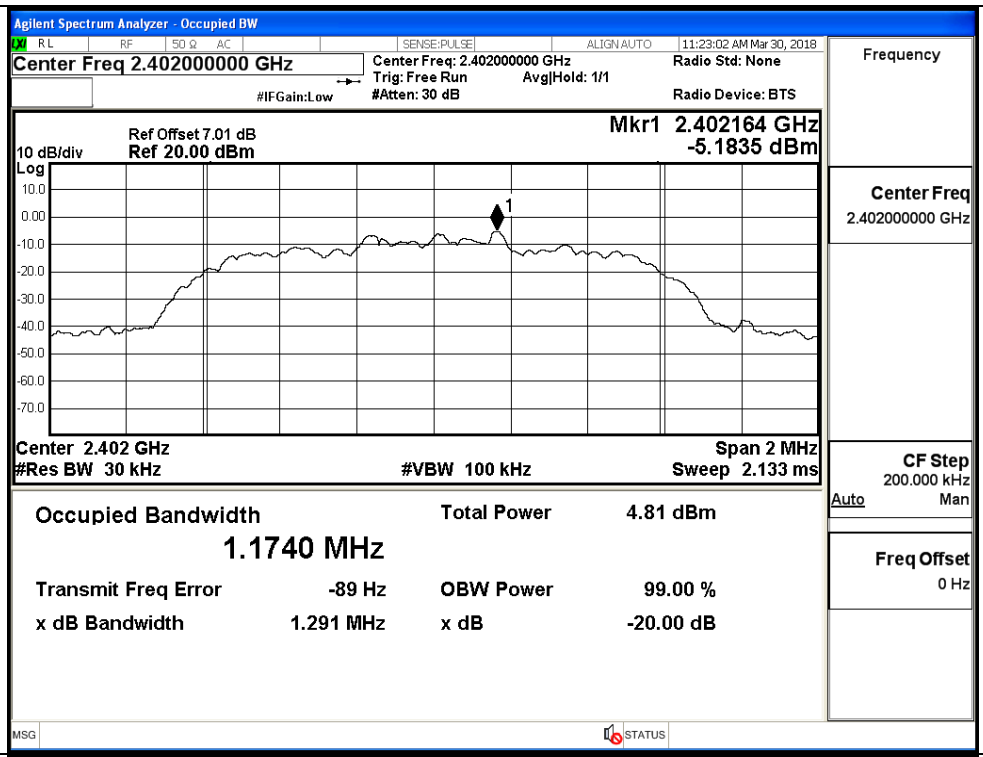
A.2 20dB Bandwidth

Mode	Channel.	99% Bandwidth [MHz]	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.88696	0.9669	Not Specified	PASS
	MCH	0.88810	0.9655	Not Specified	PASS
	HCH	0.89103	1.034	Not Specified	PASS
π/4DQPSK	LCH	1.1740	1.291	Not Specified	PASS
	MCH	1.1826	1.313	Not Specified	PASS
	HCH	1.1820	1.313	Not Specified	PASS
8DPSK	LCH	1.1822	1.293	Not Specified	PASS
	MCH	1.1918	1.300	Not Specified	PASS
	HCH	1.1919	1.301	Not Specified	PASS

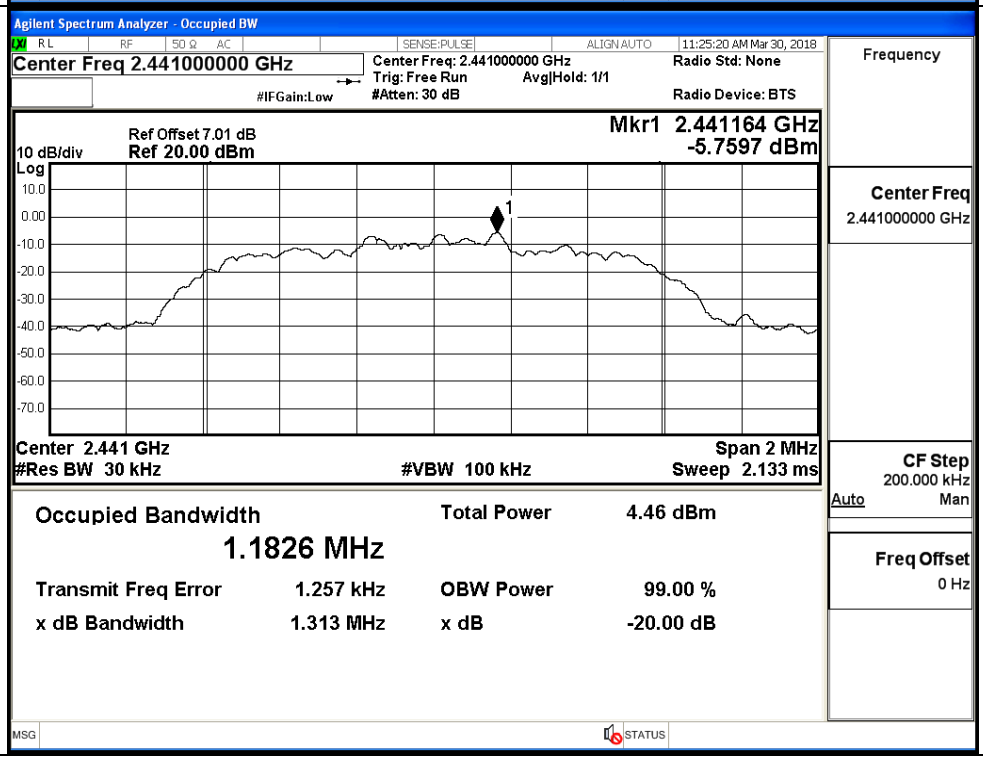
Test Graphs	
GFSK/LCH	

GFSK/MCH	
GFSK/HCH	

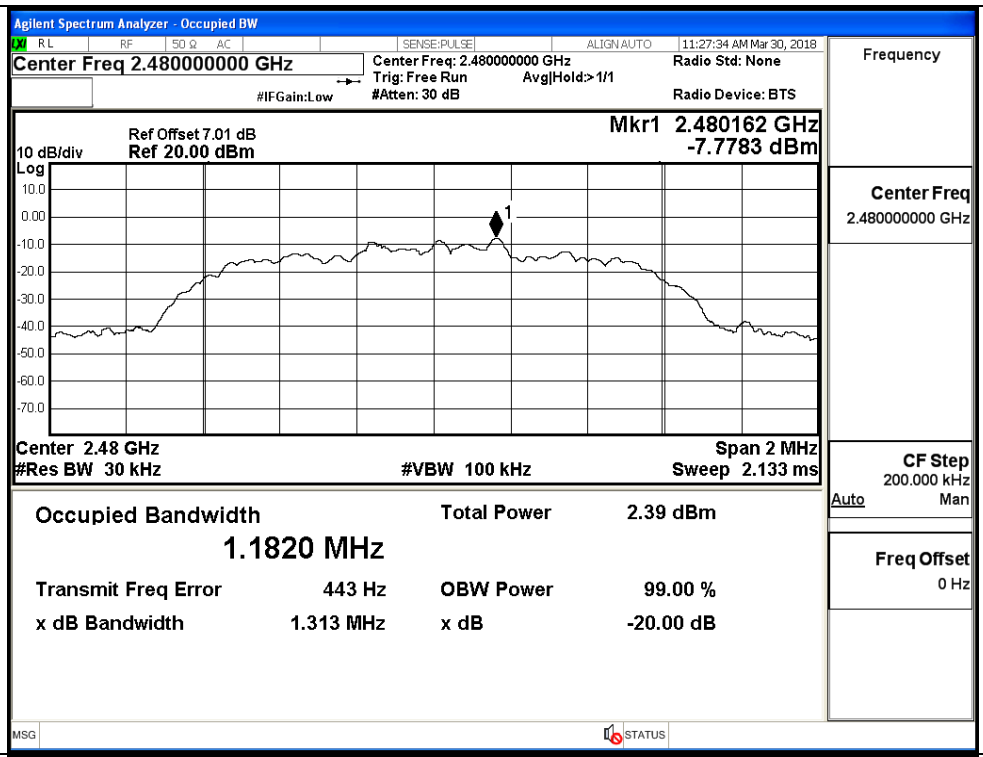
π/4DQPSK/LCH



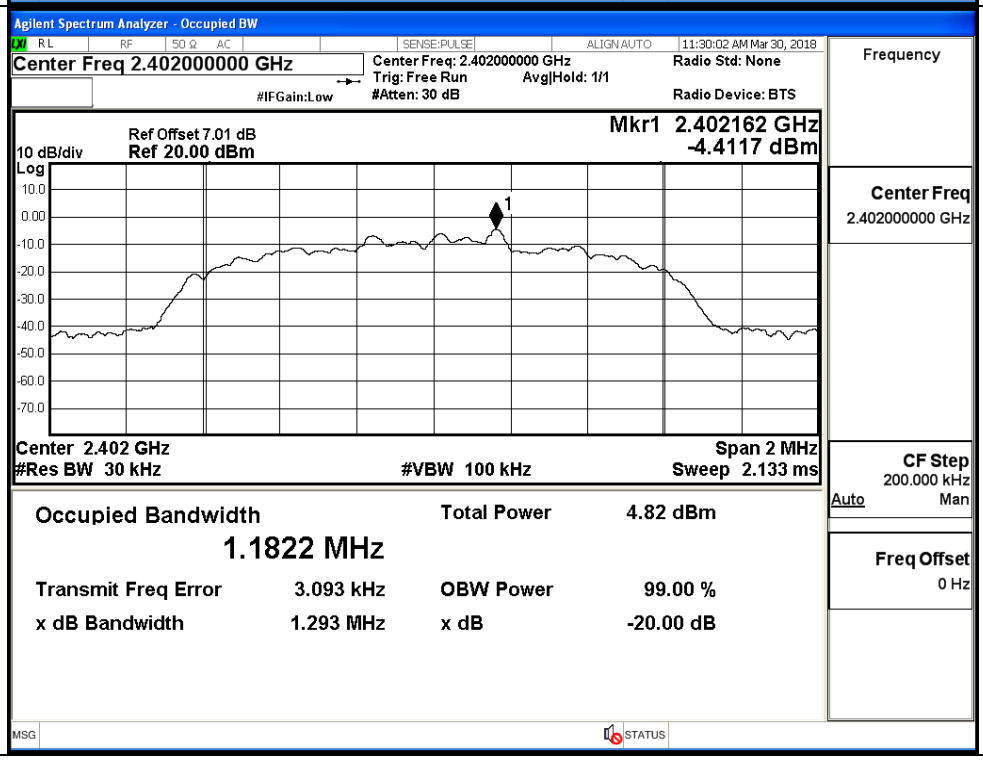
π/4DQPSK/MCH

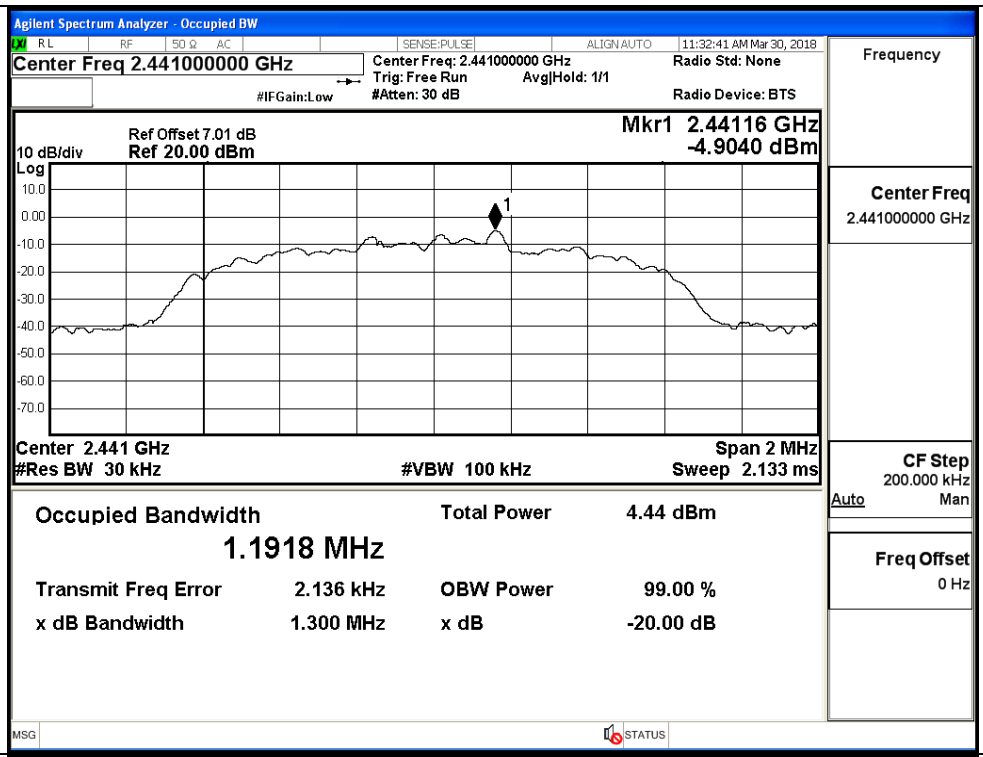
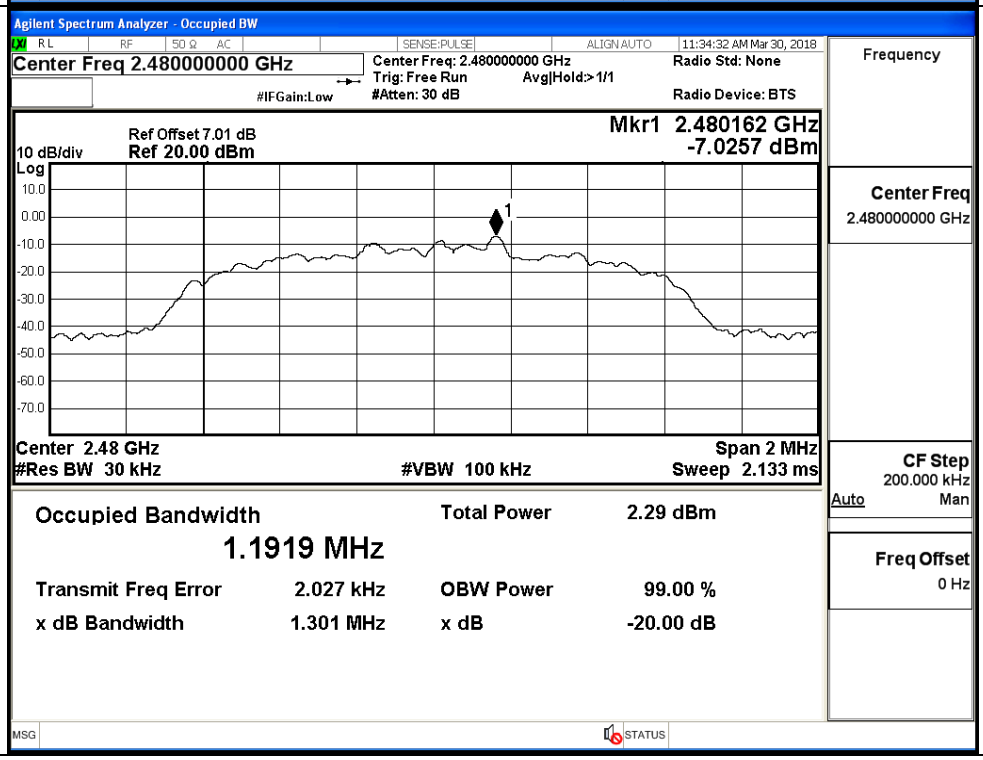


π/4DQPSK/HCH



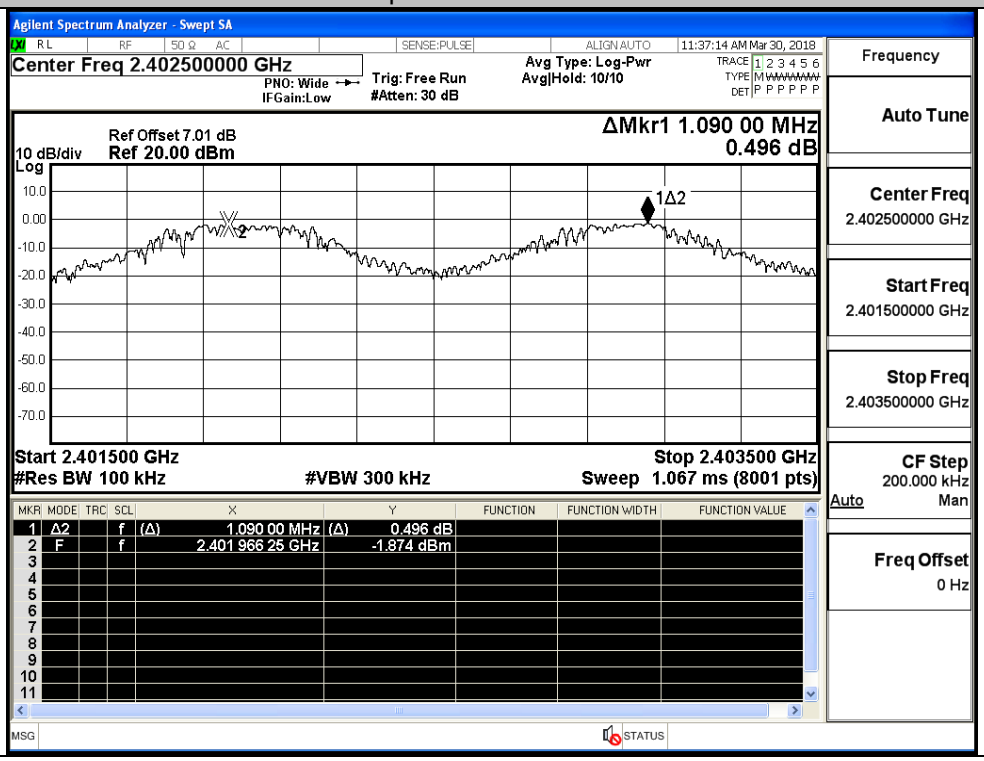
8DPSK/LCH

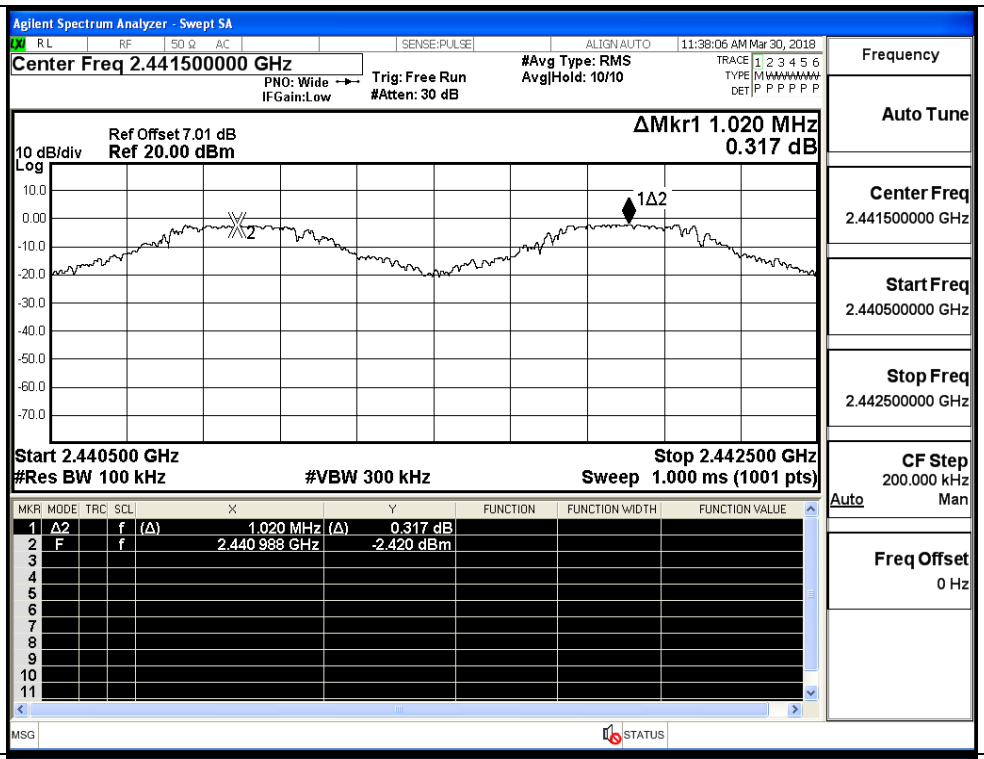
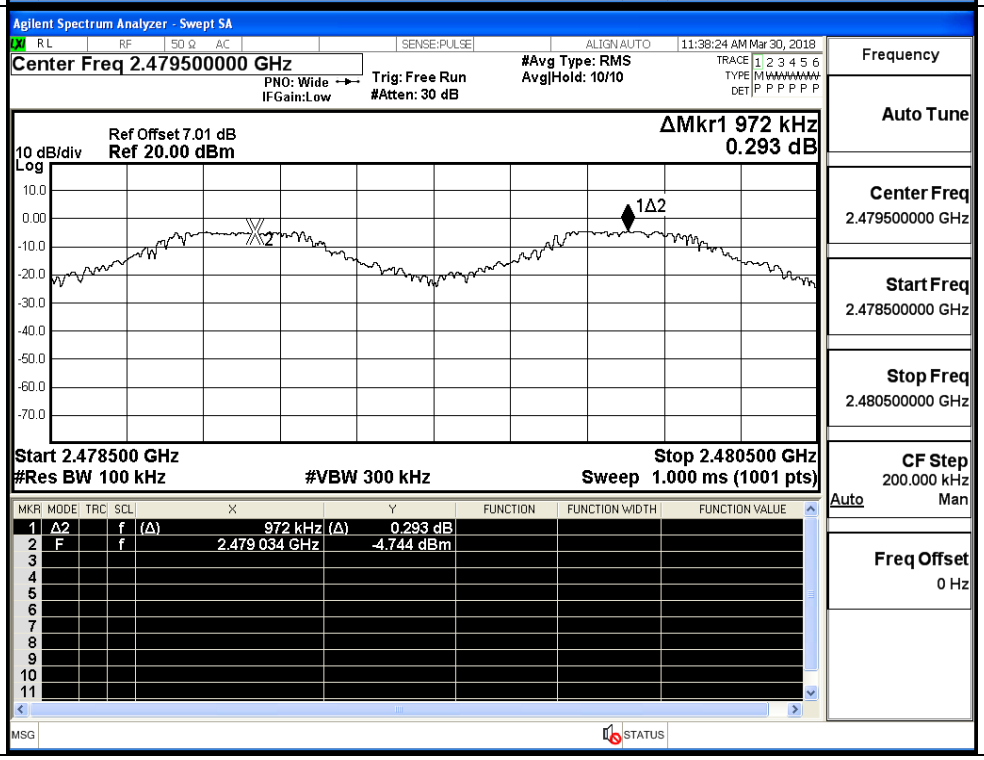


8DPSK/MCH		
8DPSK/HCH		

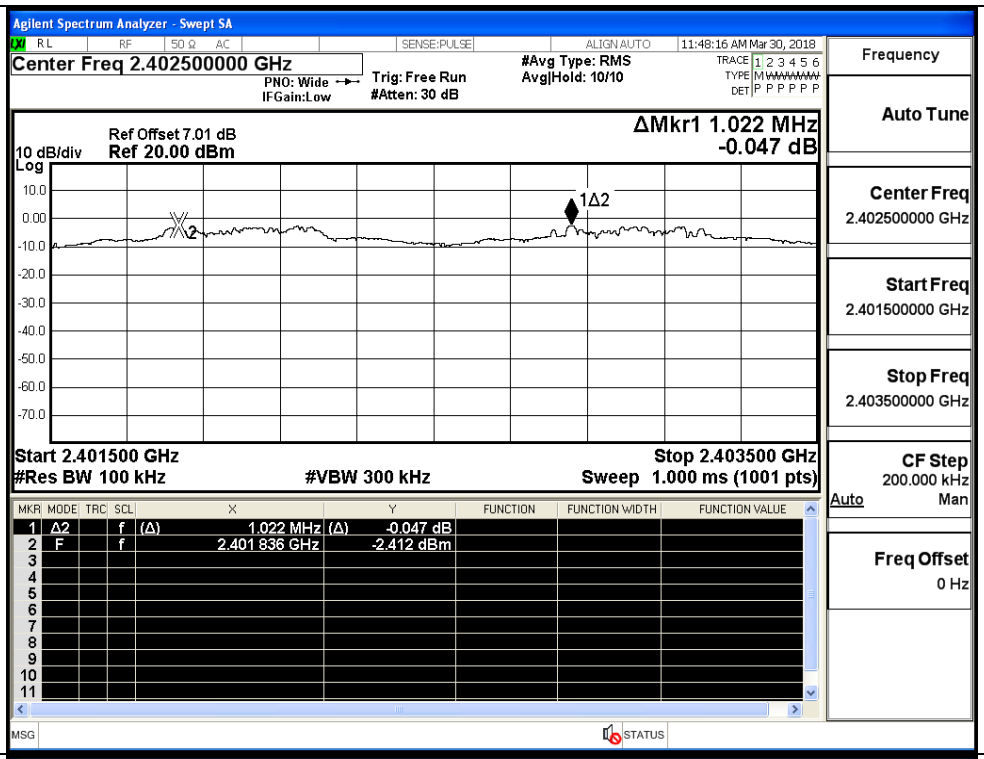
A.3 Carrier Frequency Separation

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.090	0.689	PASS
	MCH	1.020	0.689	PASS
	HCH	0.972	0.689	PASS
π/4DQPSK	LCH	1.022	0.875	PASS
	MCH	0.952	0.875	PASS
	HCH	1.018	0.875	PASS
8DPSK	LCH	1.172	0.867	PASS
	MCH	1.016	0.867	PASS
	HCH	1.068	0.867	PASS

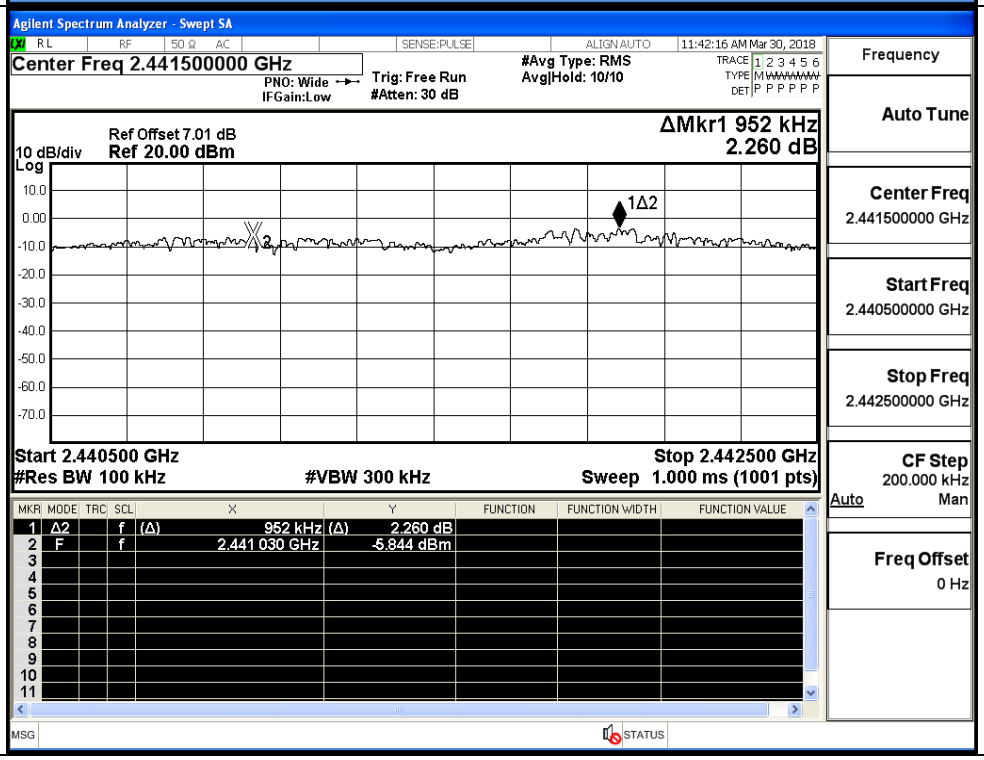
Test Graphs	
GFSK/LCH	

GFSK/MCH		
GFSK/HCH		

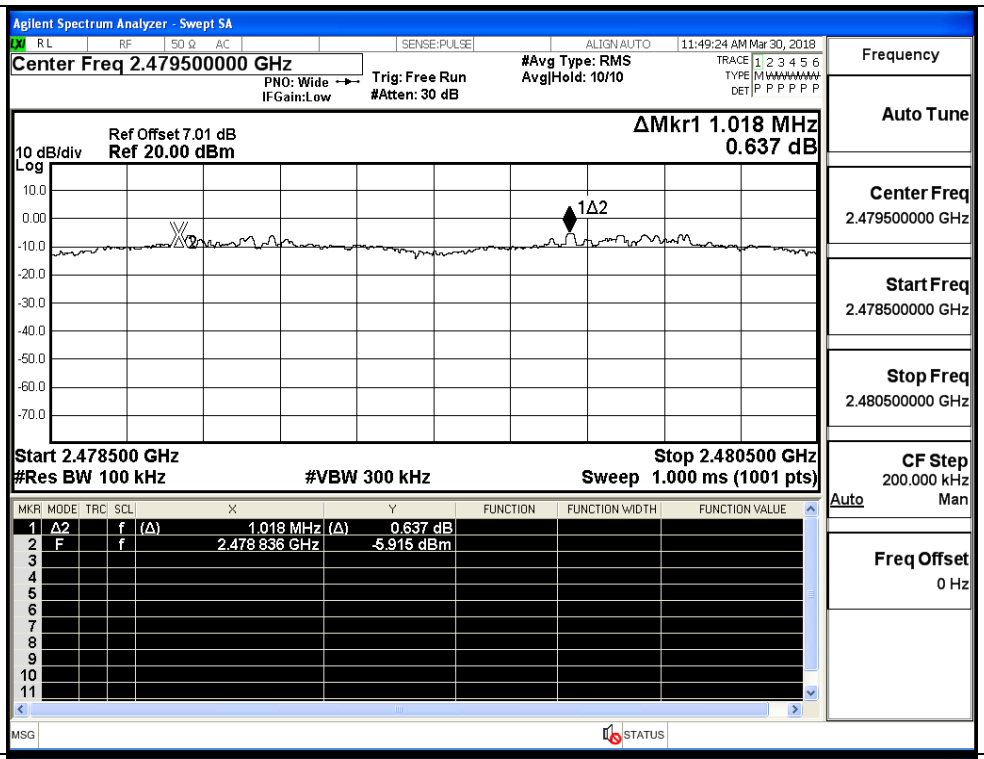
π/4DQPSK/LCH



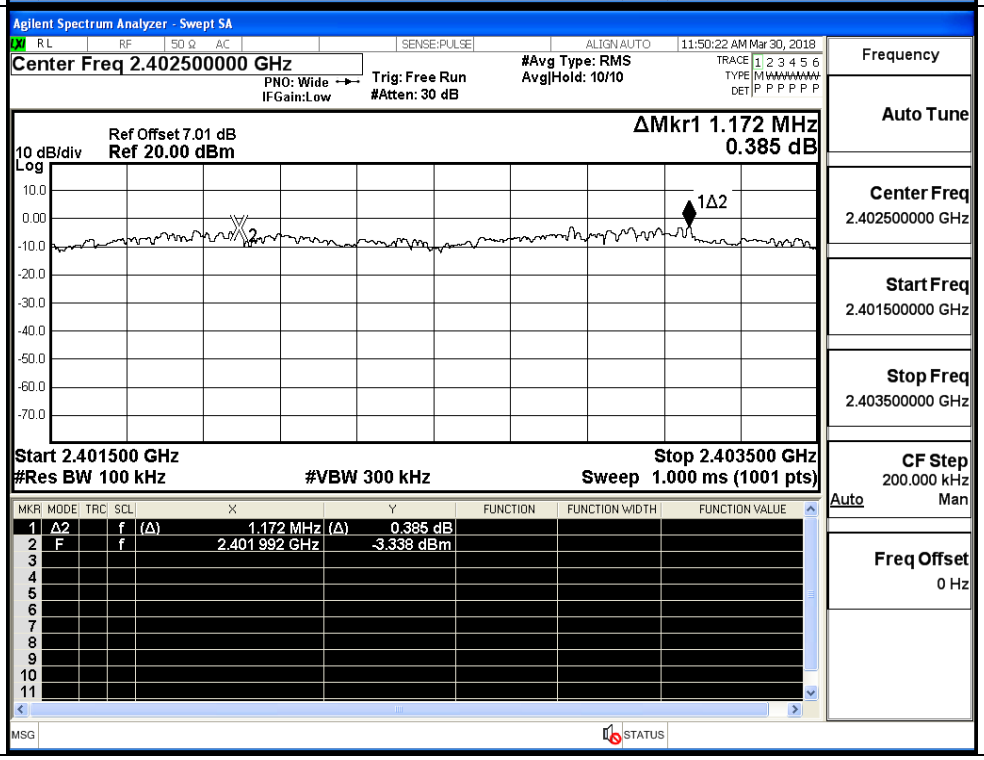
π/4DQPSK/MCH

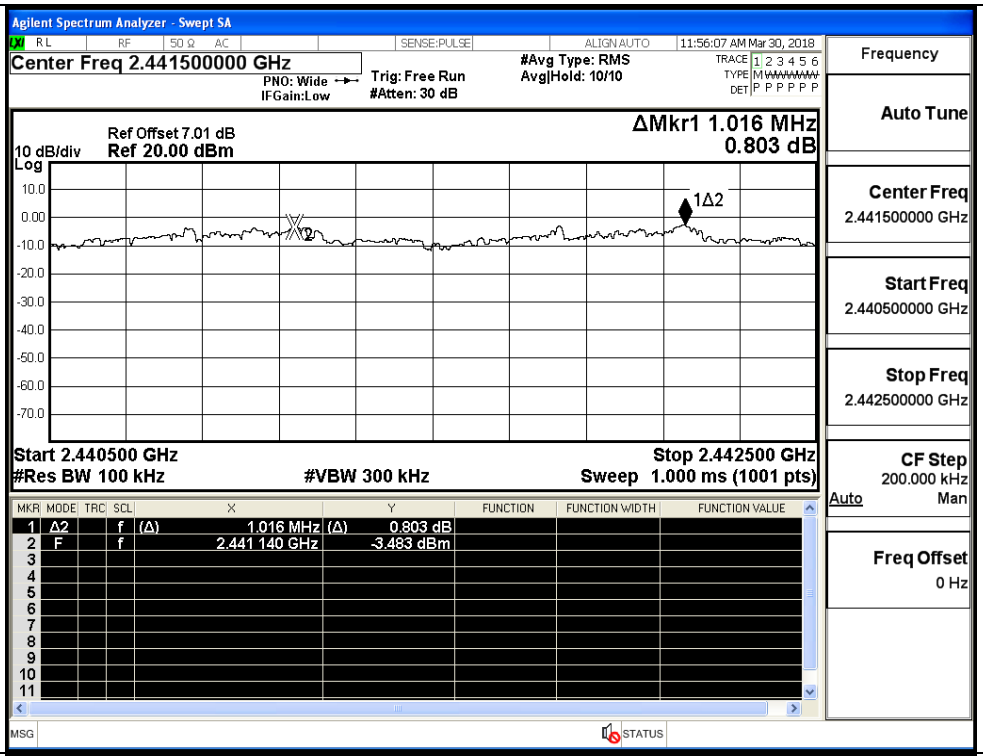
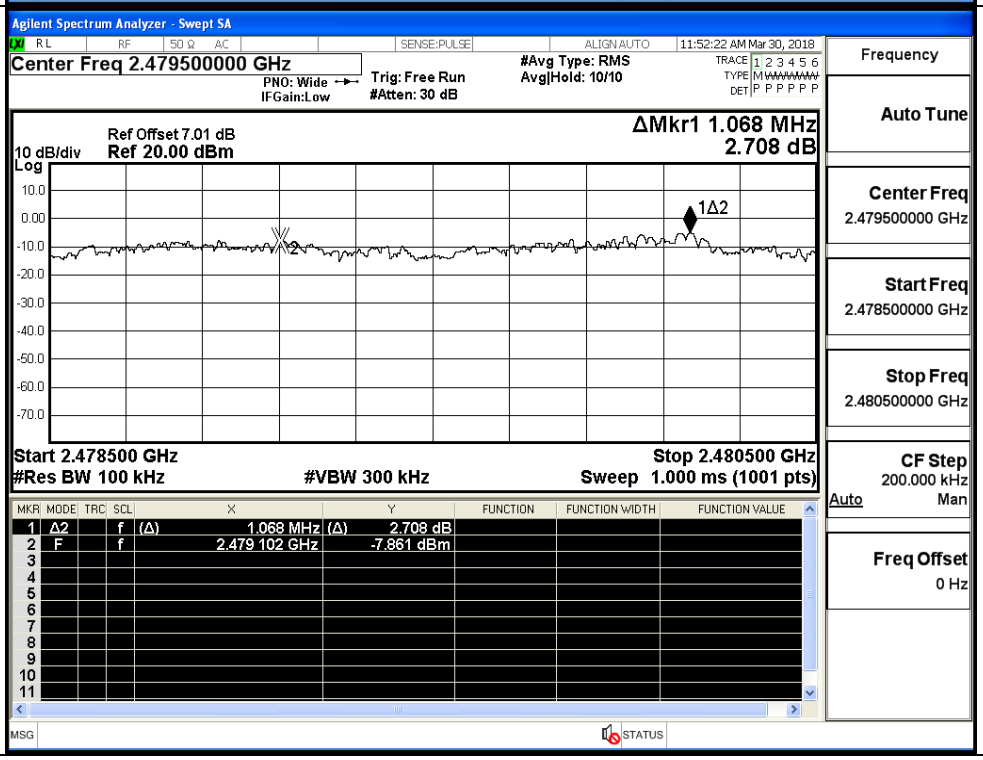


π/4DQPSK/HCH



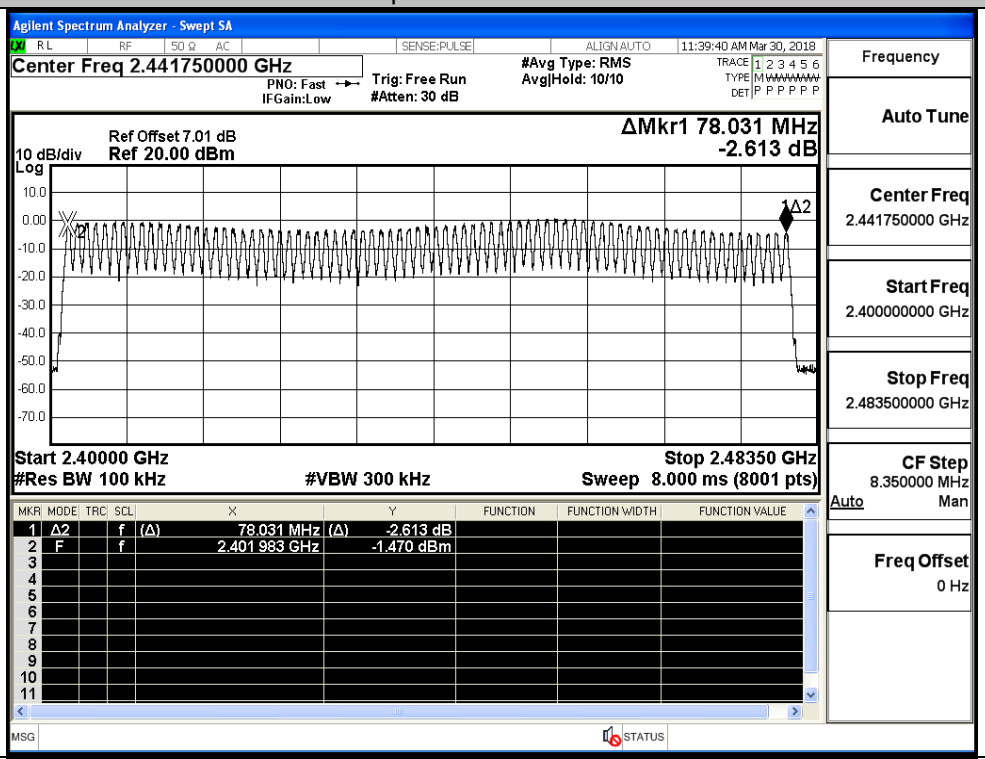
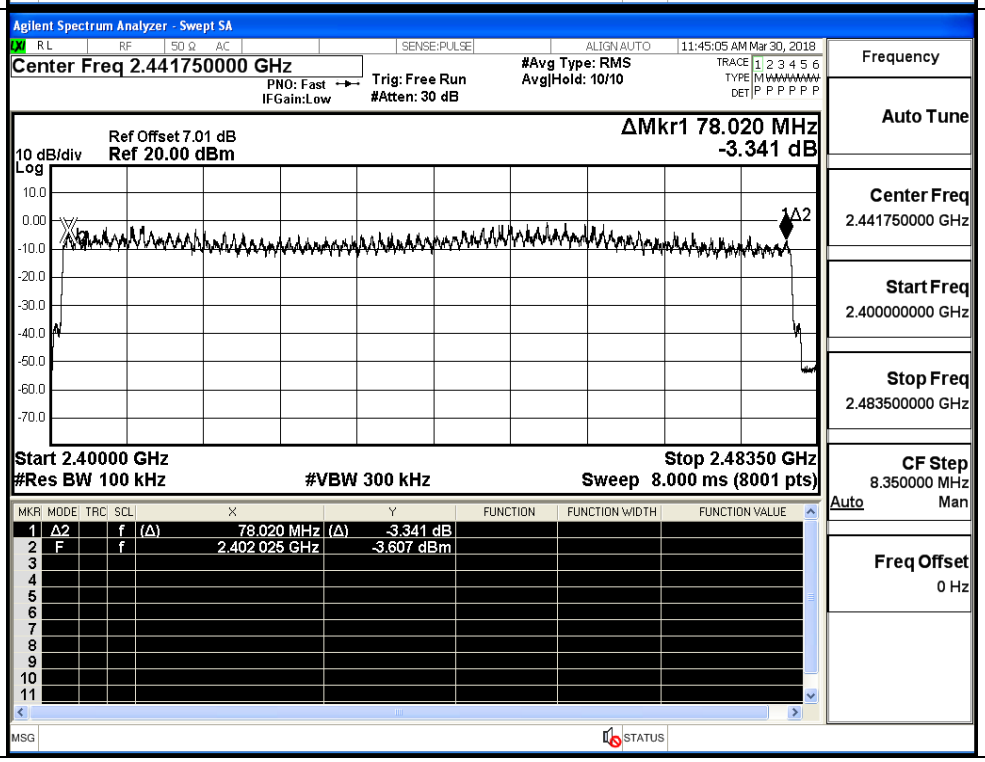
8DPSK/LCH

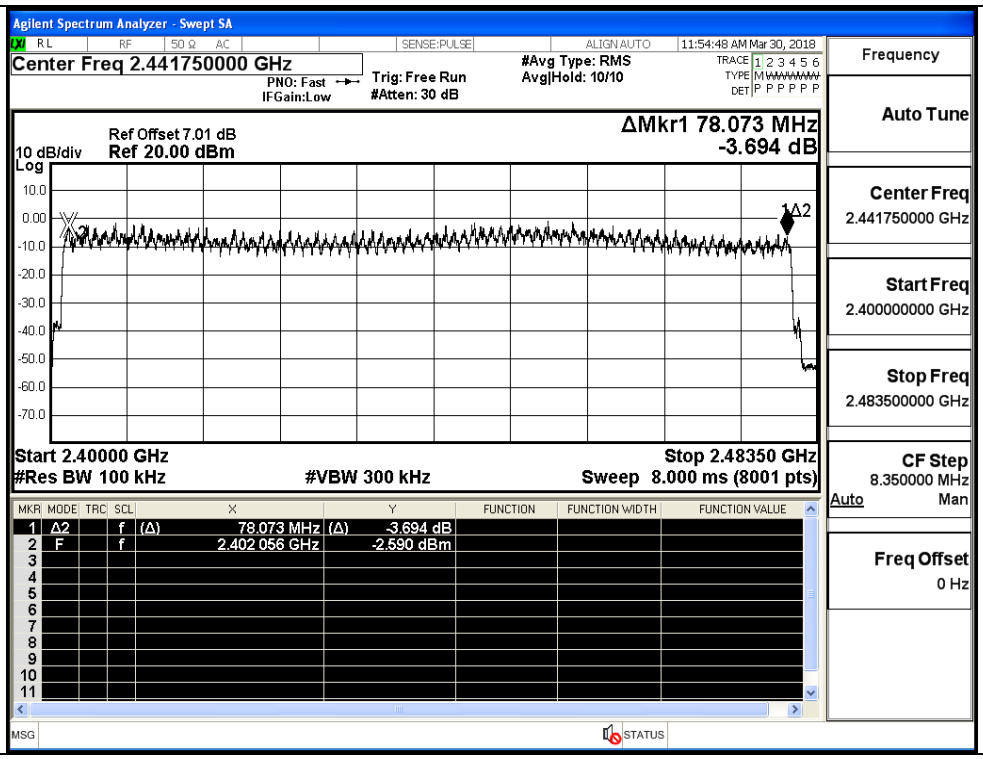


8DPSK/MCH		
8DPSK/HCH		

A.4 Hopping Channel Number

Mode	Channel.	Number of Hopping Channel [N]	Limit [N]	Verdict
GFSK	Hop	79	>=15	PASS
π/4DQPSK	Hop	79	>=15	PASS
8DPSK	Hop	79	>=15	PASS

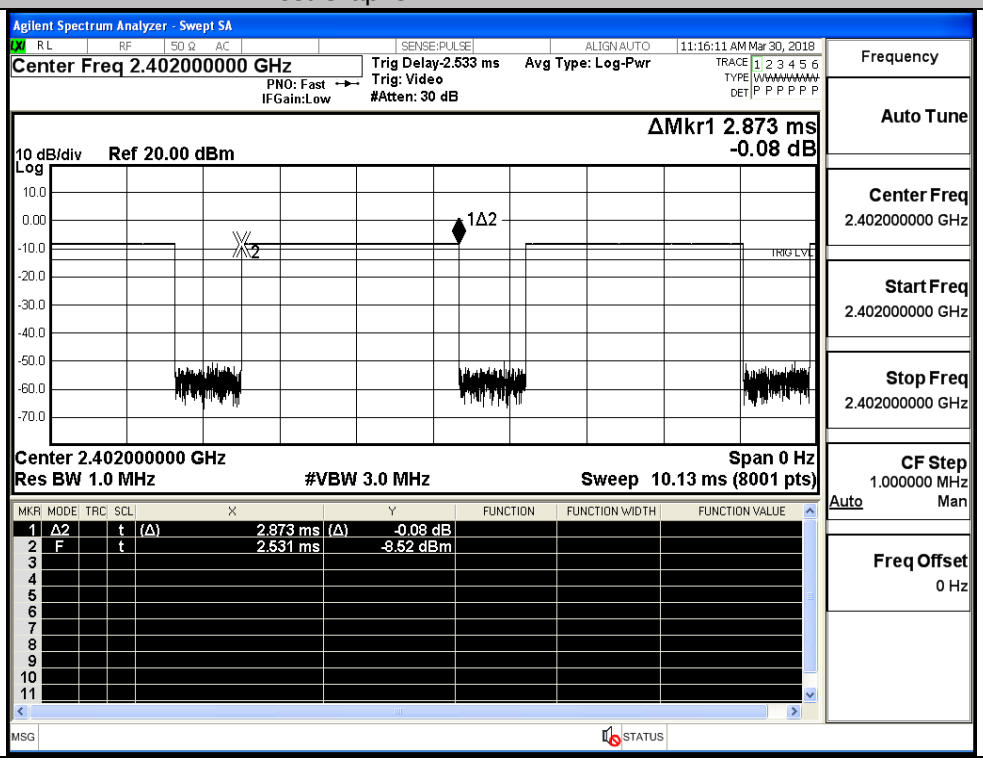
Test Graphs		
GFSK/Hop		
π/4DQPSK/Hop		

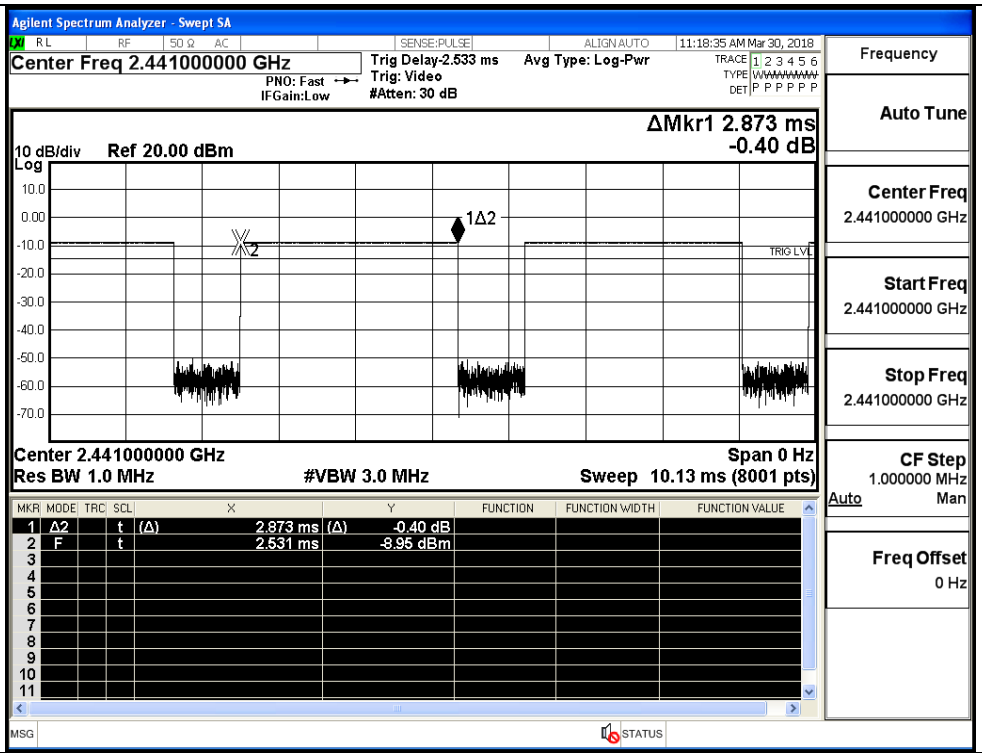
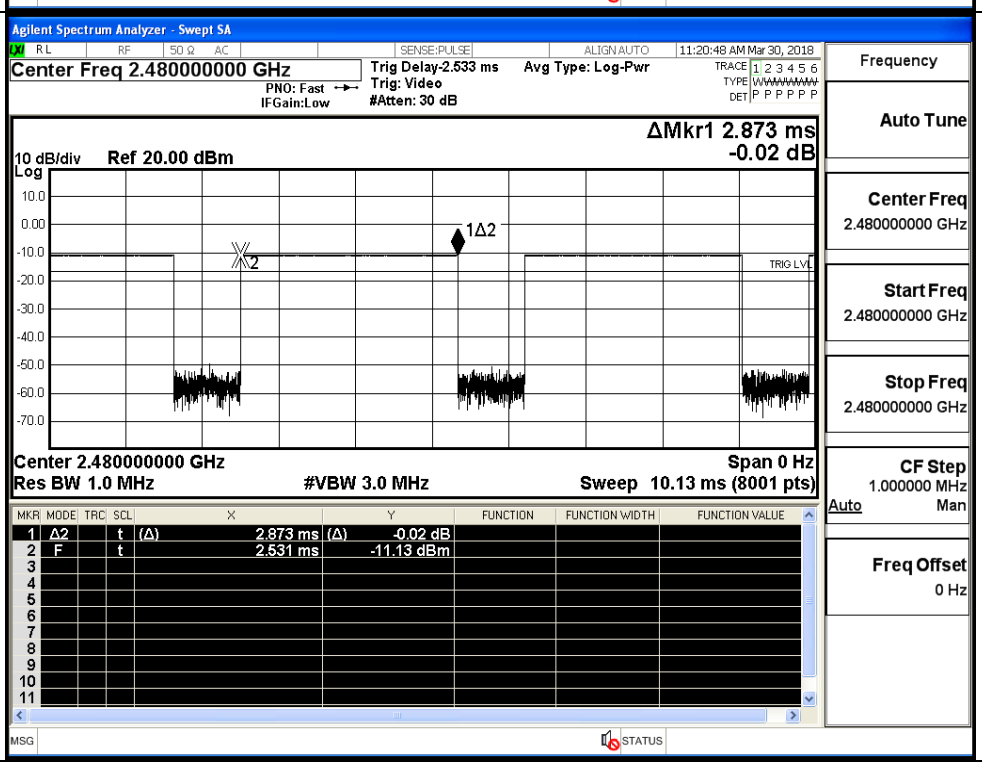
8DPSK/Hop	

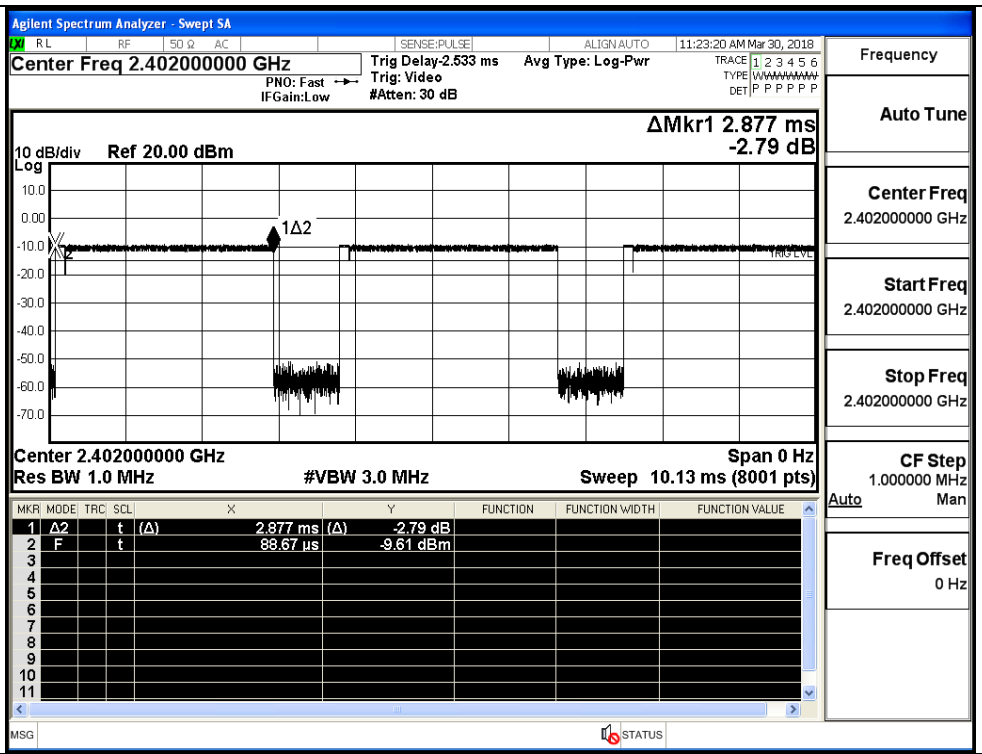
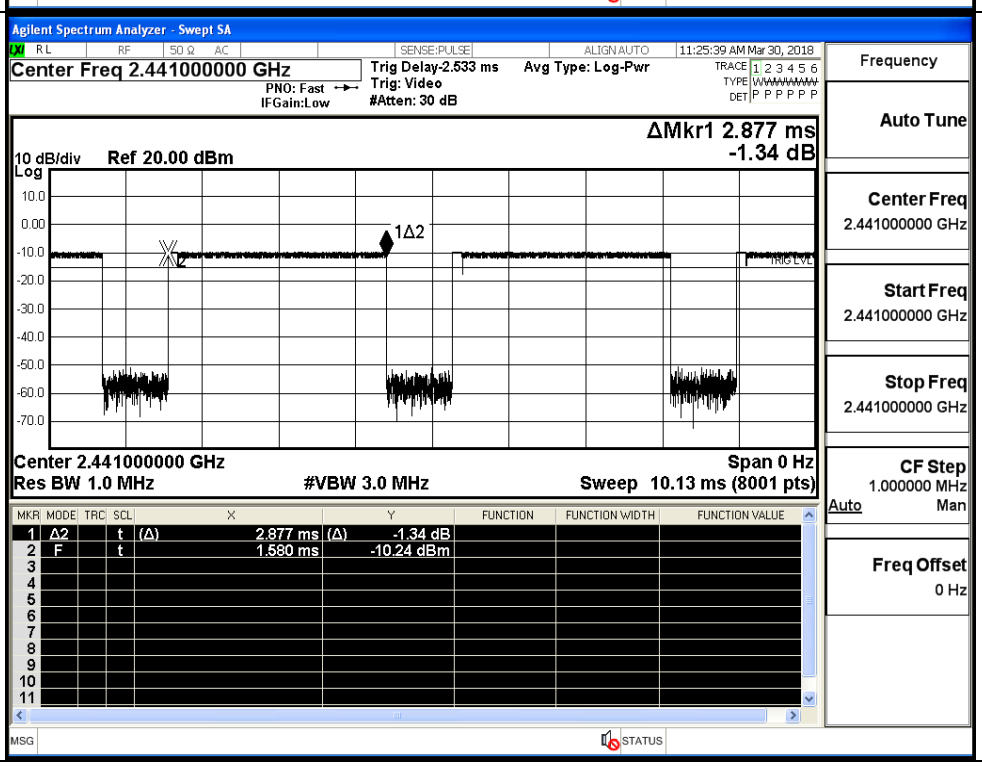
Agilent Spectrum Analyzer - Swept SA
Center Freq 2.441750000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 10/10
11:54:48 AM Mar 30, 2018
Ref Offset 7.01 dB
10 dB/div
Ref 20.00 dBm
Log
ΔMkr1 78.073 MHz
-3.694 dB
Start 2.40000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.48350 GHz
Sweep 8.000 ms (8001 pts)
1 Δ2 f (Δ) 78.073 MHz (Δ) -3.694 dB
2 F f 2.402 056 GHz -2.590 dBm
Frequency
Auto Tune
Center Freq
2.441750000 GHz
Start Freq
2.400000000 GHz
Stop Freq
2.483500000 GHz
CF Step
8.350000 MHz
Auto Man
Freq Offset
0 Hz

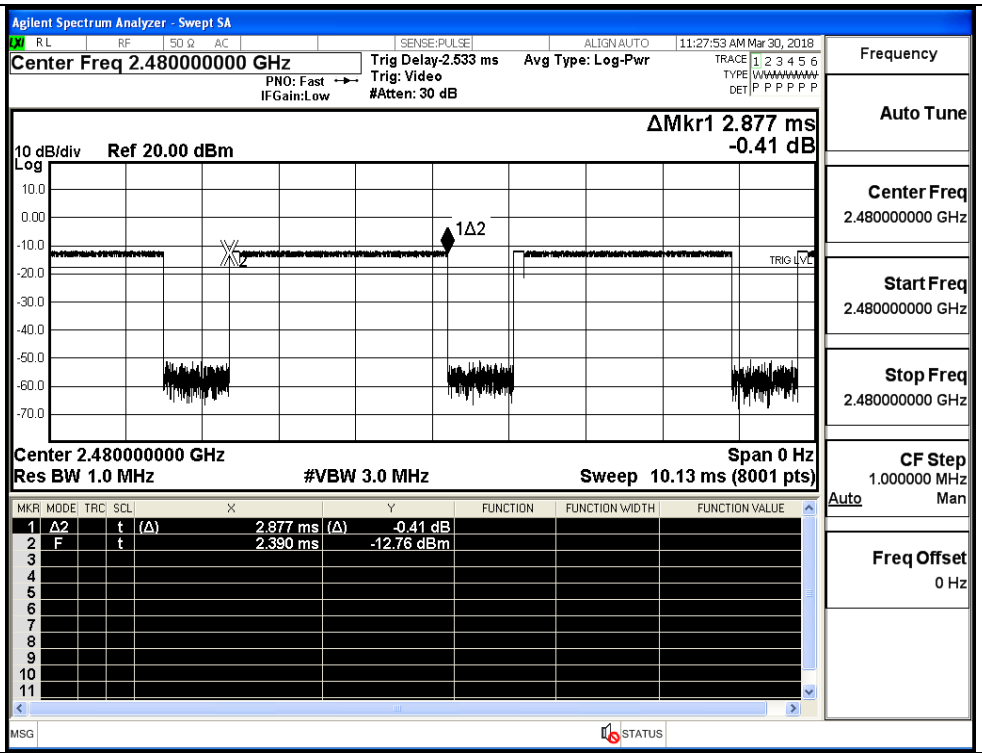
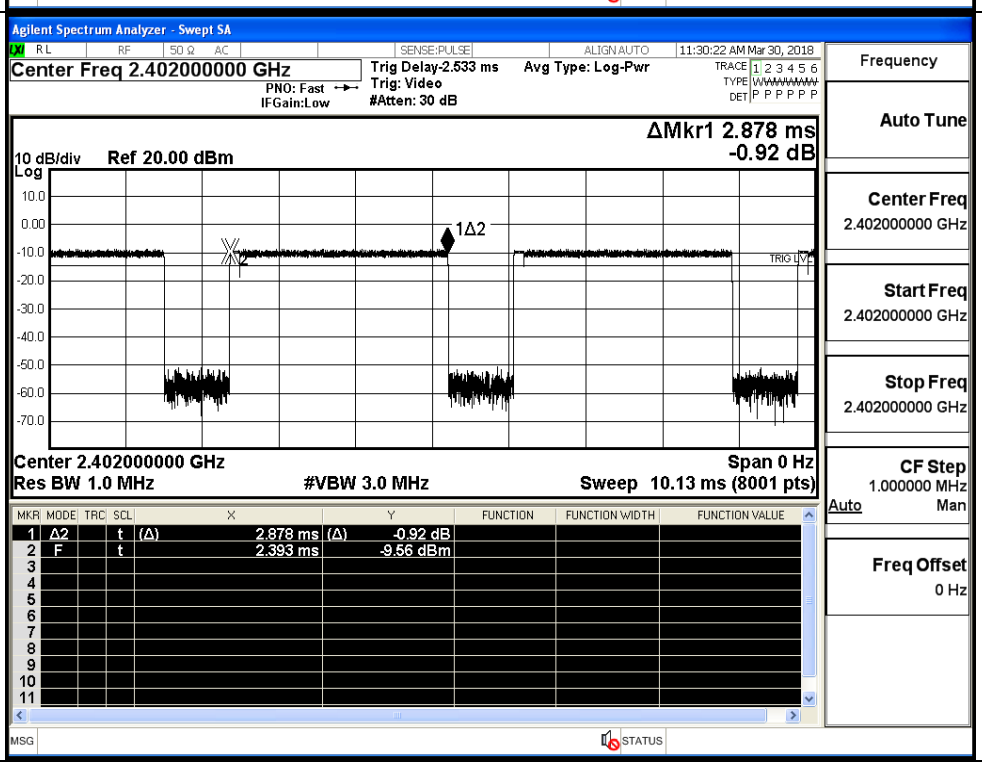
A.5 Dwell Time

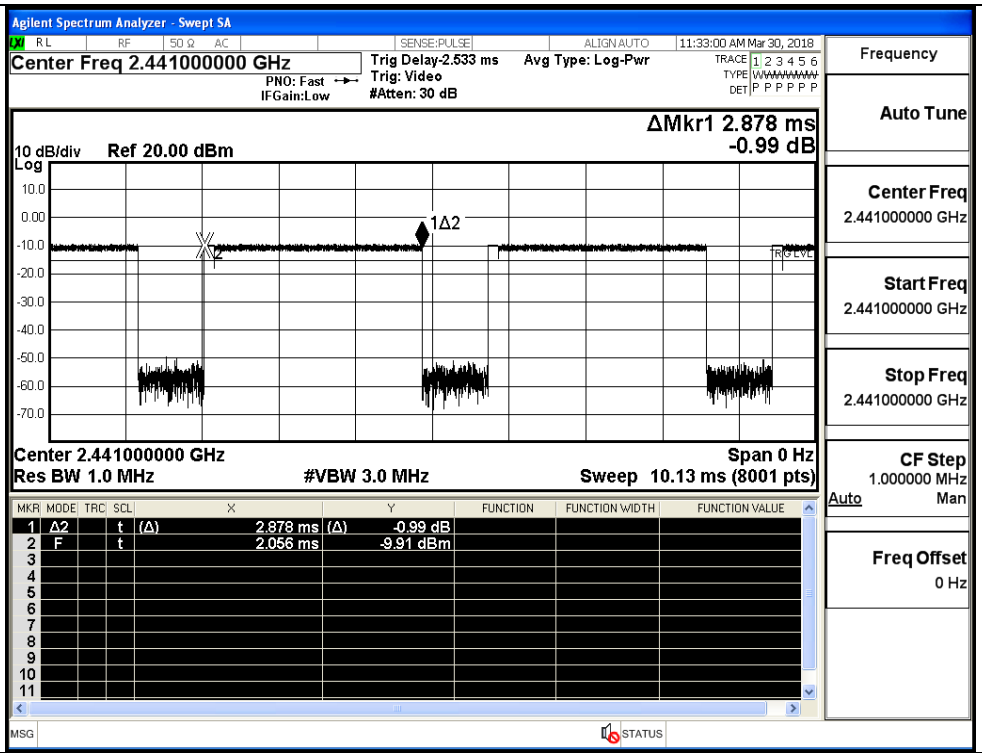
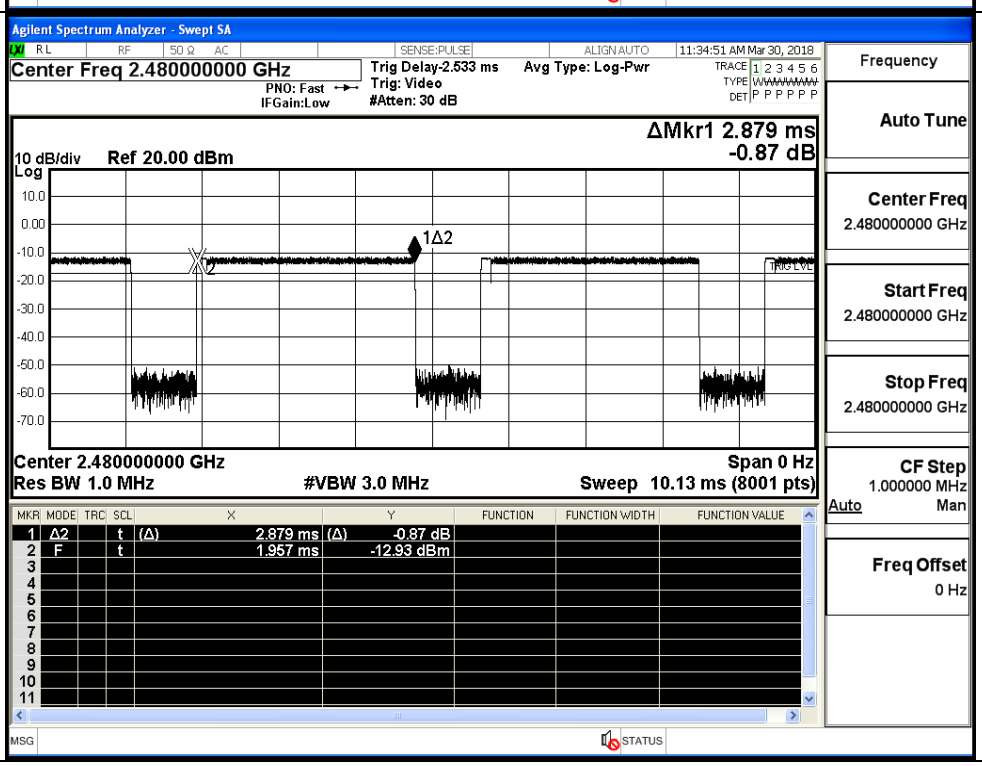
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.873	106.7	0.306	0.4	PASS
	DH5	MCH	2.873	106.7	0.306	0.4	PASS
	DH5	HCH	2.873	106.7	0.306	0.4	PASS
π/4DQPSK	2DH5	LCH	2.877	106.7	0.307	0.4	PASS
	2DH5	MCH	2.877	106.7	0.307	0.4	PASS
	2DH5	HCH	2.877	106.7	0.307	0.4	PASS
8DPSK	3DH5	LCH	2.878	106.7	0.307	0.4	PASS
	3DH5	MCH	2.878	106.7	0.307	0.4	PASS
	3DH5	HCH	2.879	106.7	0.307	0.4	PASS

Test Graphs	
GFSK_DH5/LCH	

GFSK_DH5/MCH	
GFSK_DH5/HCH	

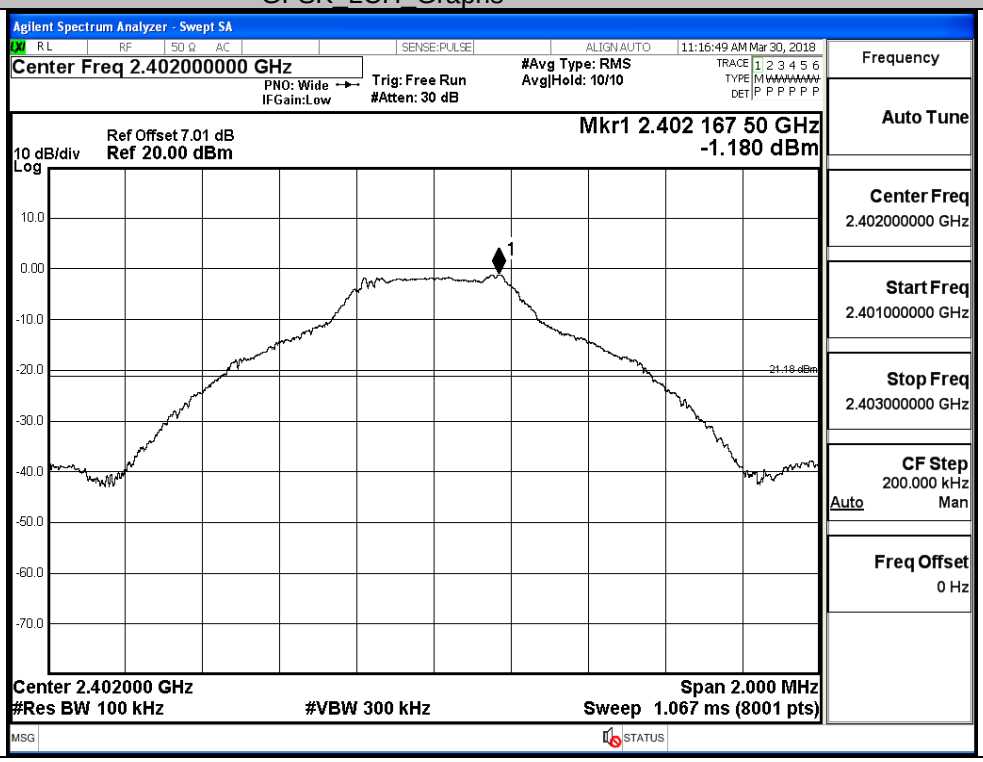
π/4DQPSK _2DH5/LCH	
π/4DQPSK _2DH5/MCH	

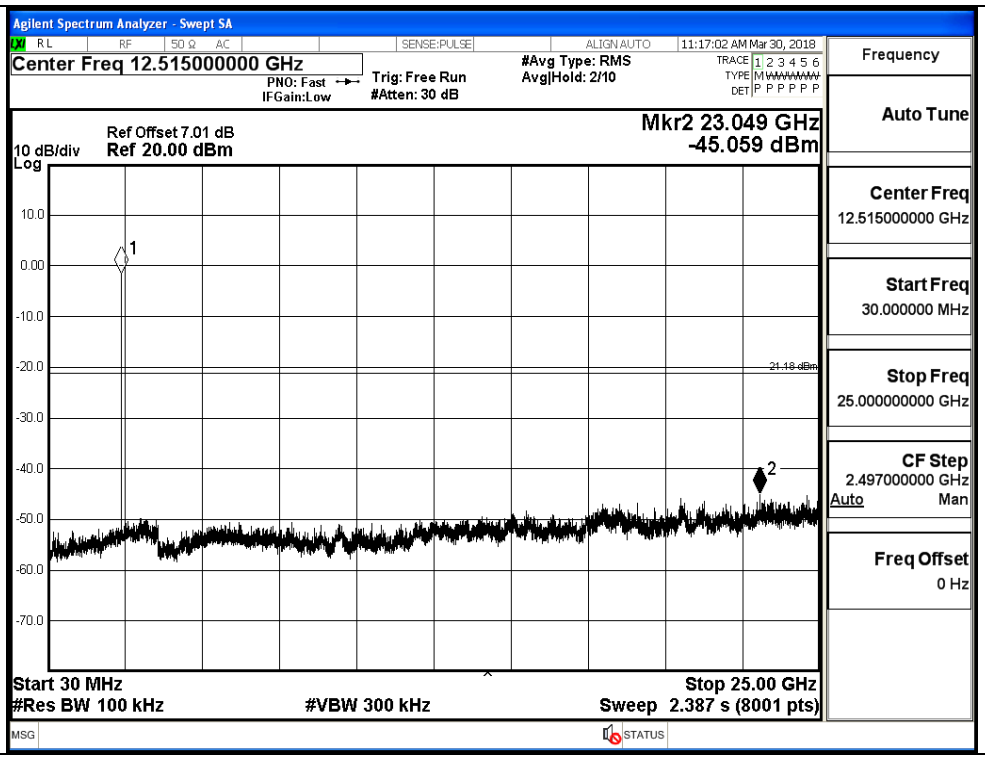
π/4DQPSK _2DH5/HCH	
8DPSK _3DH5/LCH	

8DPSK _3DH5/MCH	
8DPSK _3DH5/HCH	

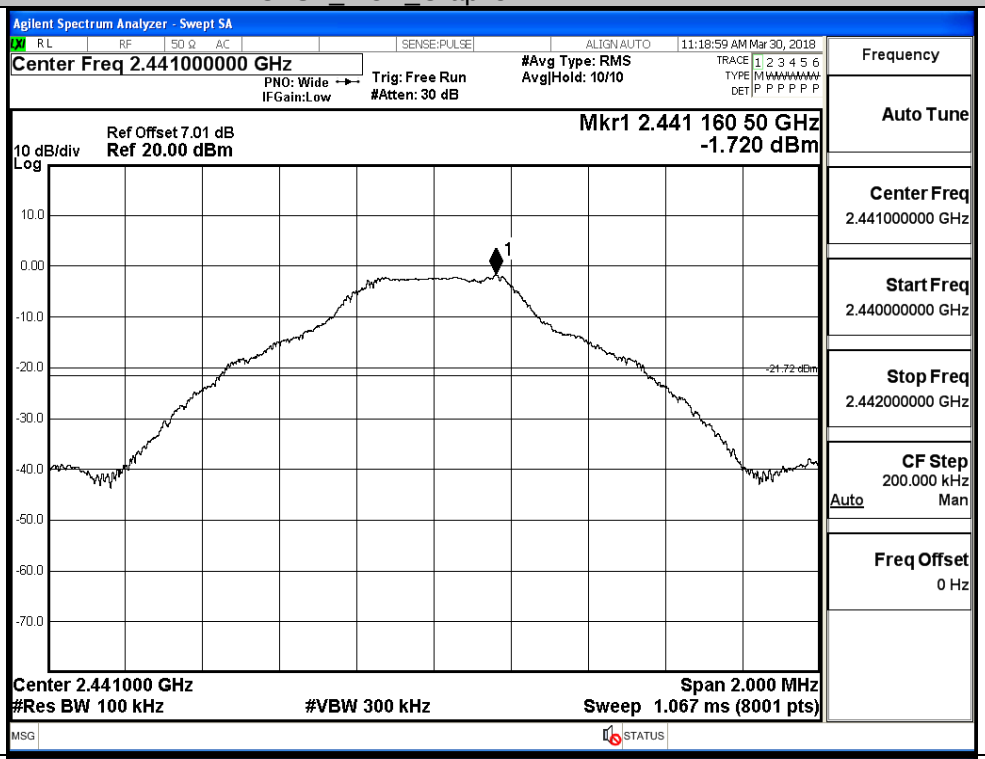
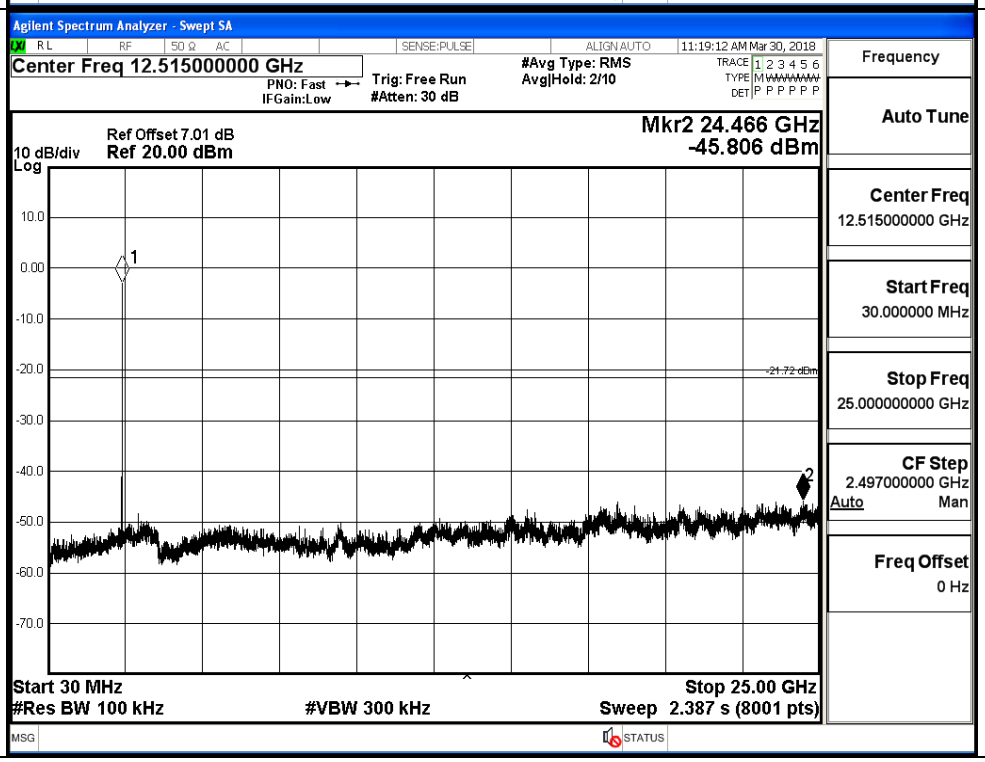
A.6 RF Conducted Spurious Emissions

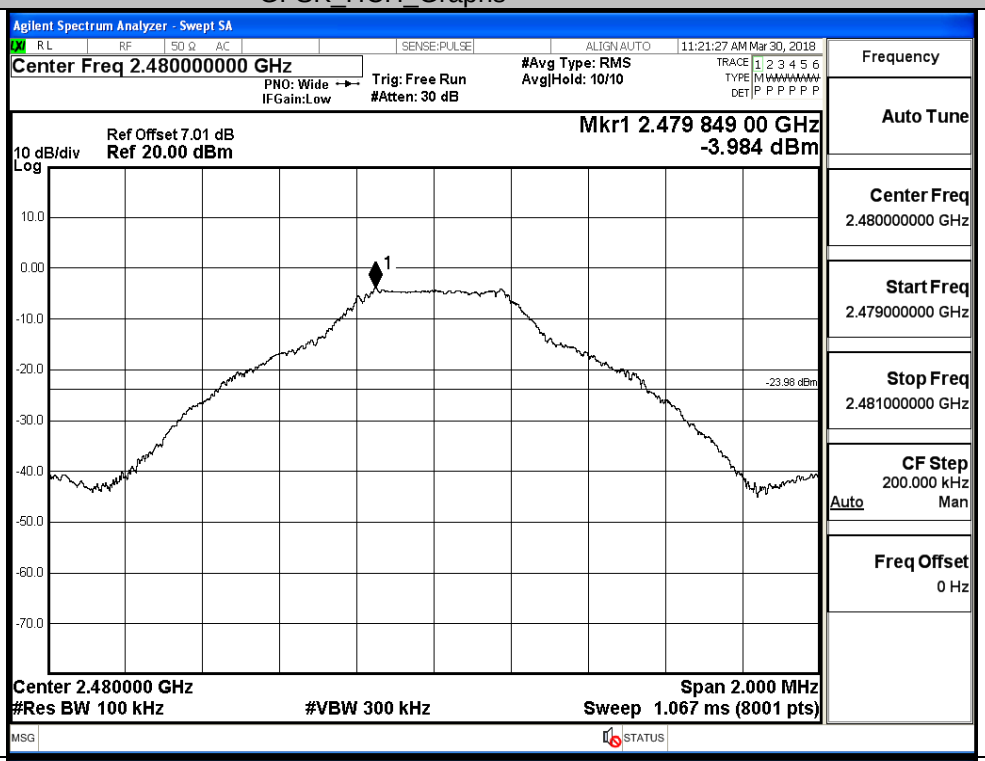
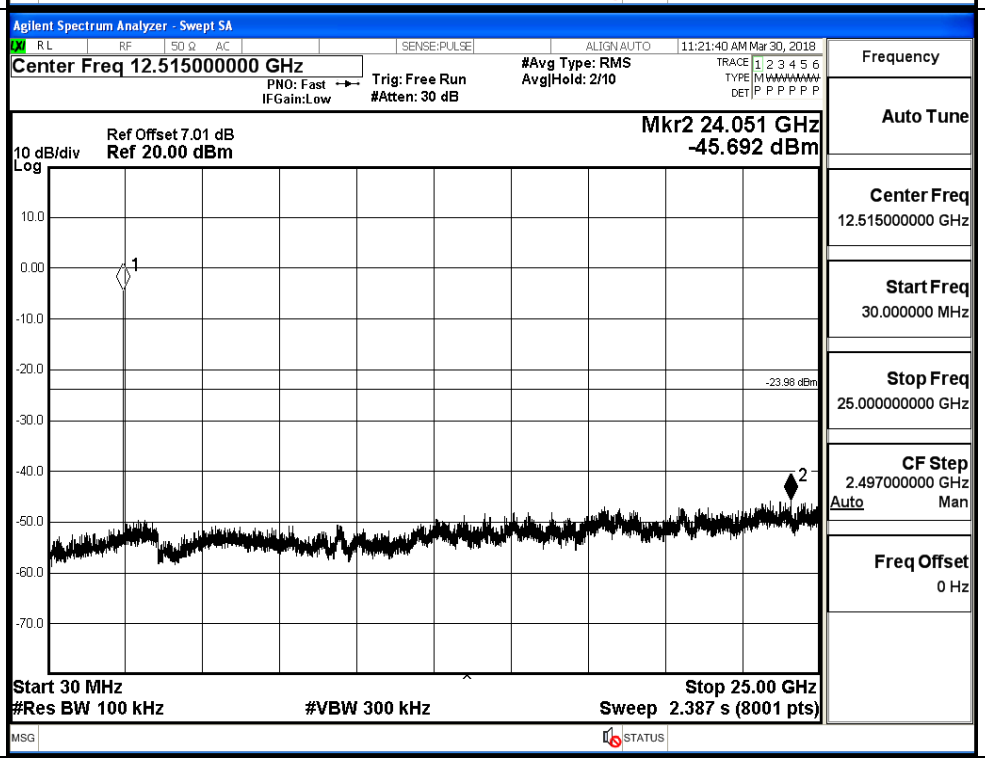
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-1.18	-45.059	-21.180	PASS
	MCH	-1.72	-45.806	-21.720	PASS
	HCH	-3.984	-45.692	-23.984	PASS
π/4DQPSK	LCH	-2.499	-45.556	-22.499	PASS
	MCH	-2.872	-45.153	-22.872	PASS
	HCH	-5.053	-45.517	-25.053	PASS
8DPSK	LCH	-2.347	-45.109	-22.347	PASS
	MCH	-2.768	-44.110	-22.768	PASS
	HCH	-5.079	-32.810	-25.079	PASS

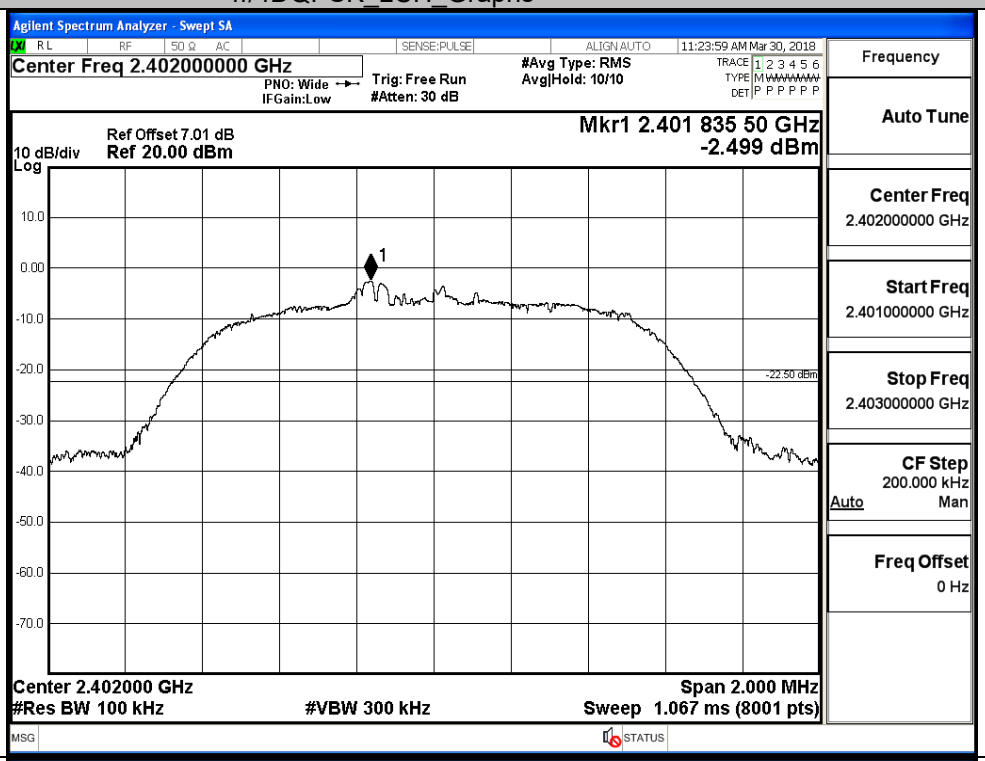
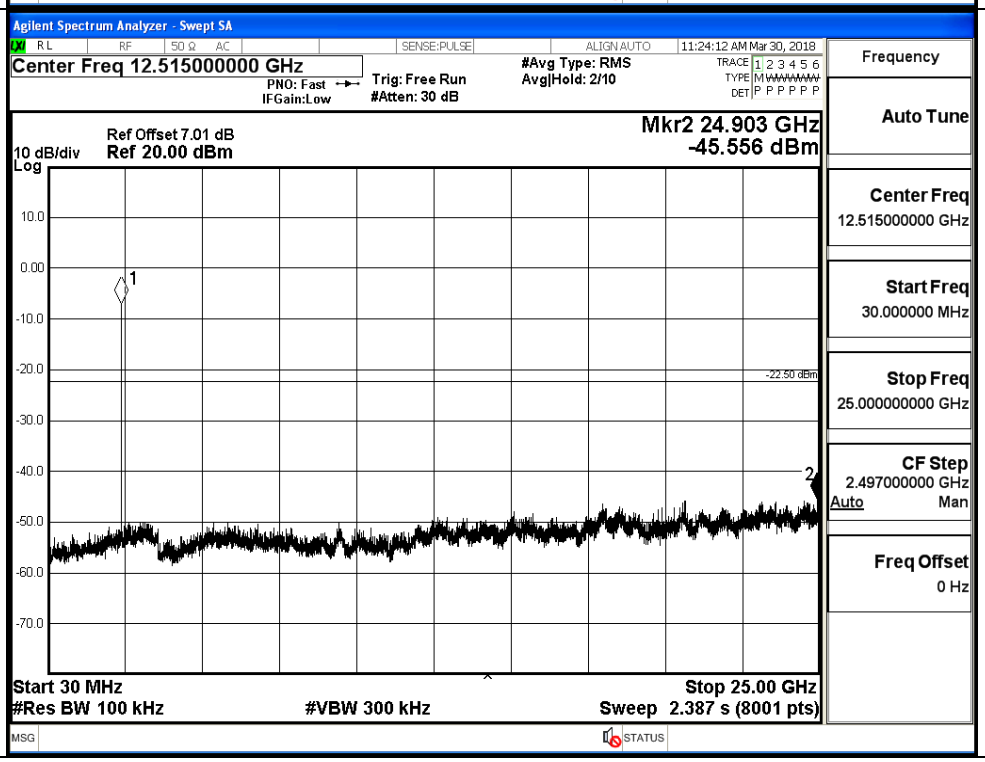
GFSK_LCH_Graphs	
Pref	

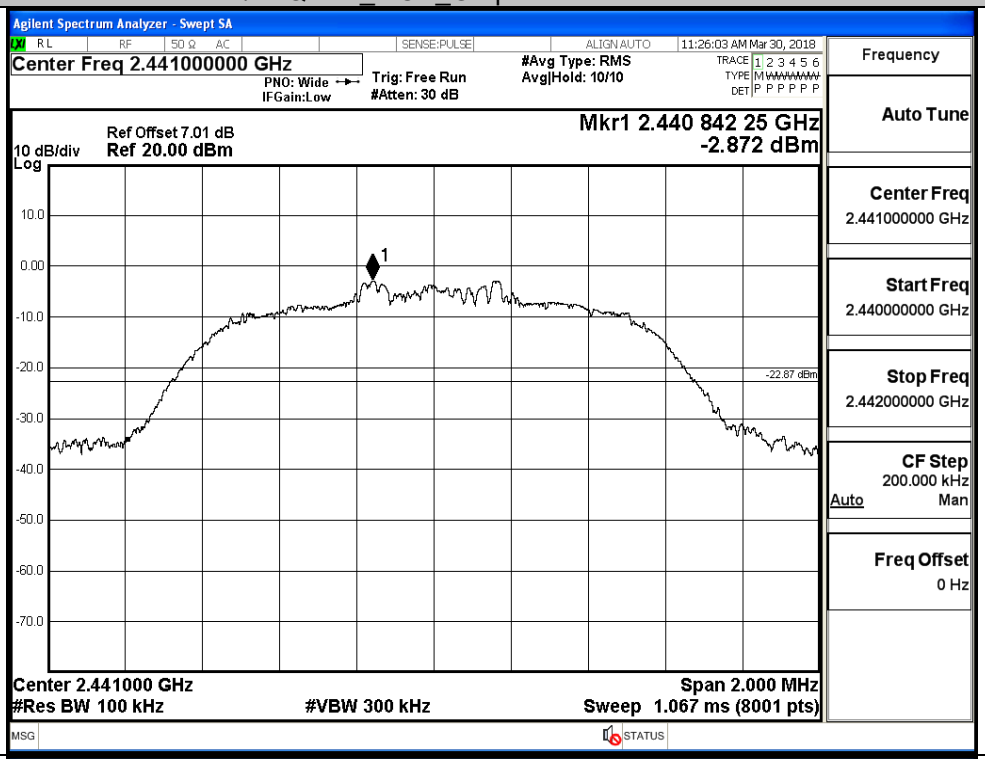
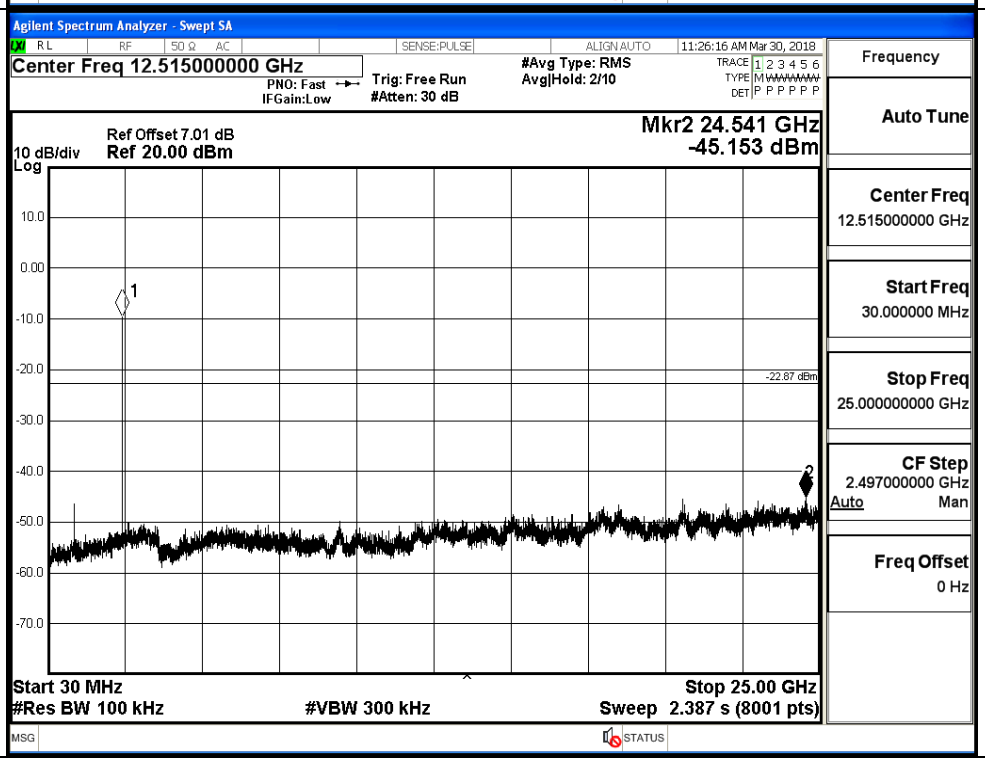
Puw		

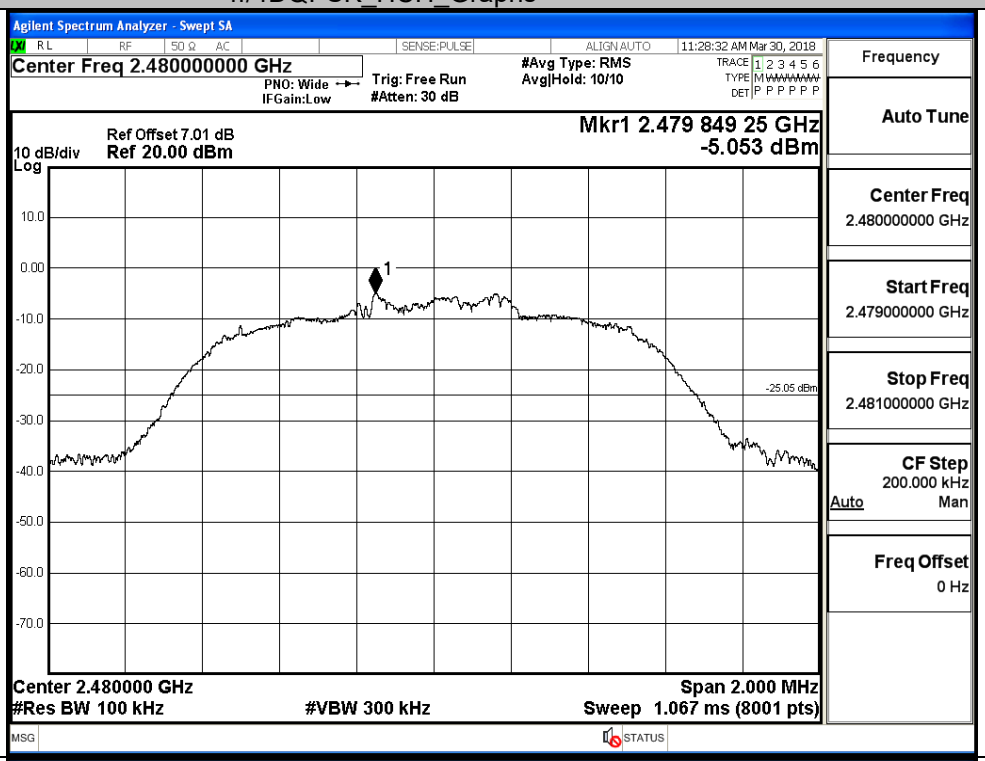
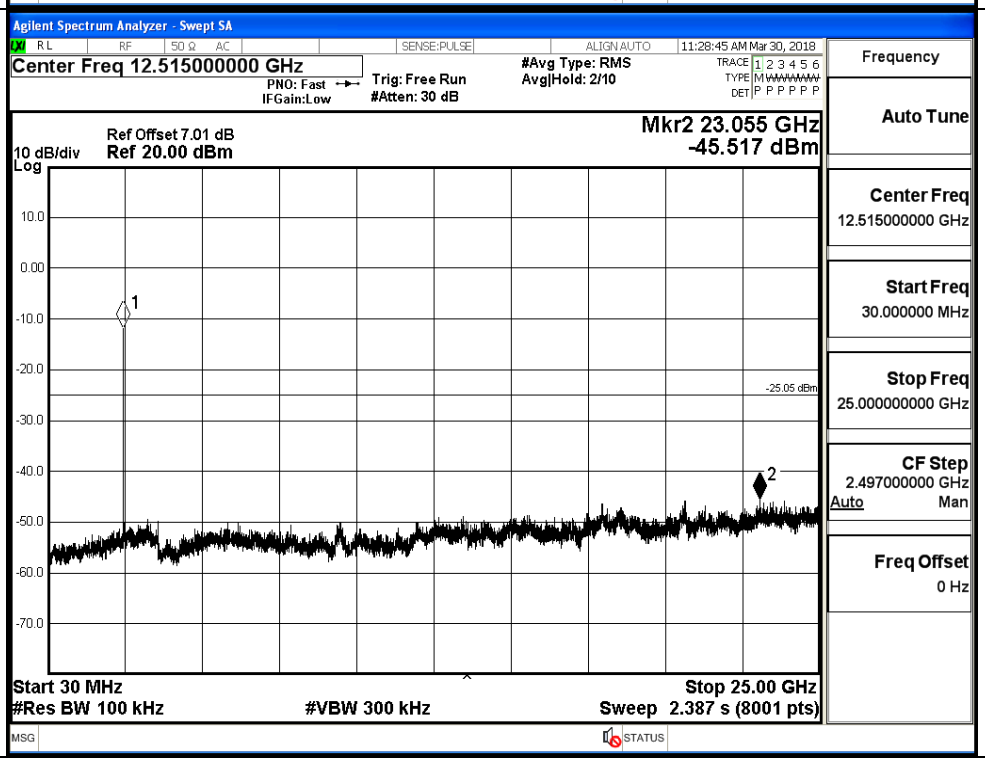
Agilent Spectrum Analyzer - Swept SA
Center Freq 12.515000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 2/10
11:17:02 AM Mar 30, 2018
Ref Offset 7.01 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr2 23.049 GHz
-45.059 dBm
21.18 dBm
Start 30 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.00 GHz
Sweep 2.387 s (8001 pts)
Frequency
Auto Tune
Center Freq
12.515000000 GHz
Start Freq
30.000000 MHz
Stop Freq
25.000000000 GHz
CF Step
2.497000000 GHz
Auto
Man
Freq Offset
0 Hz

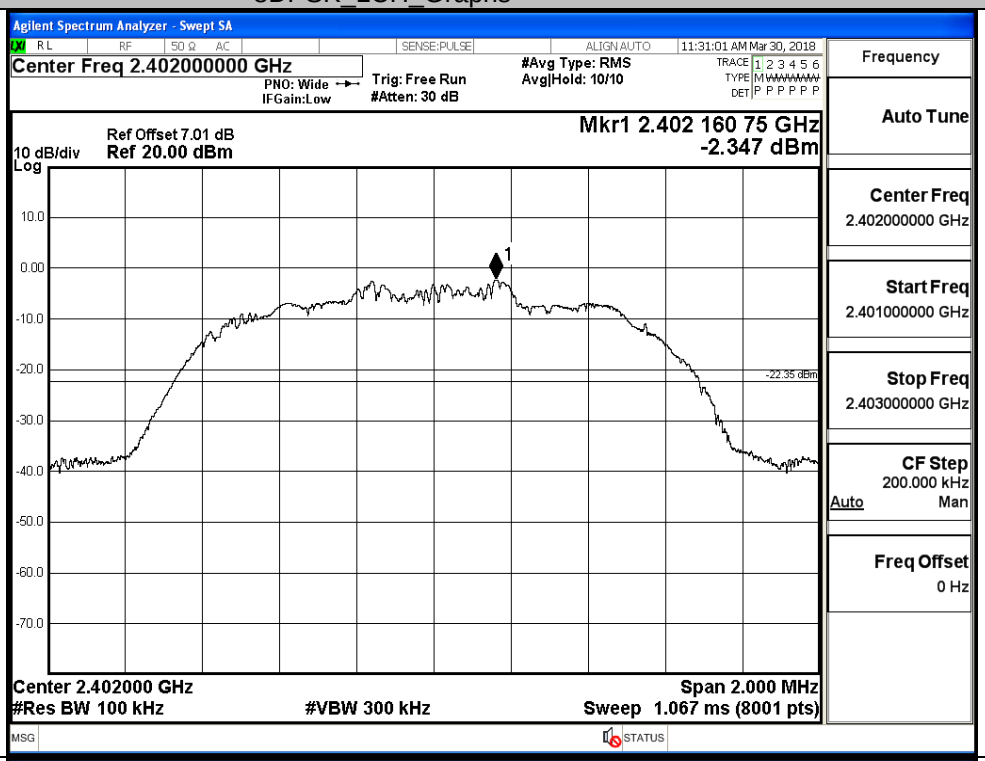
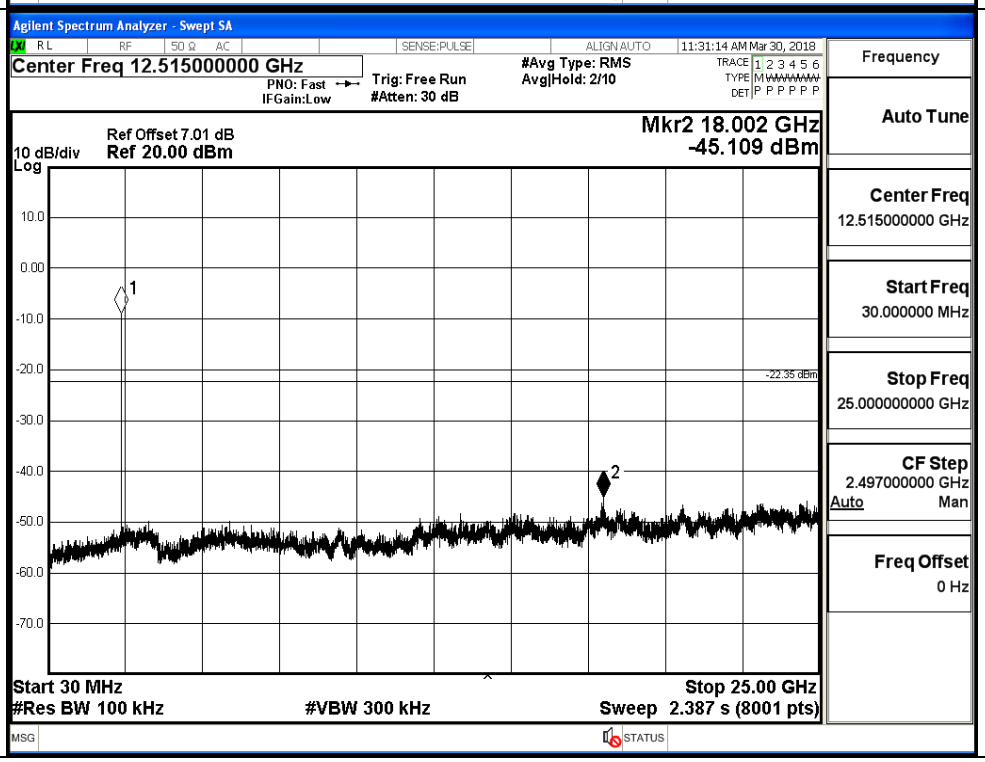
GFSK_MCH_Graphs			
Pref			
Puw			

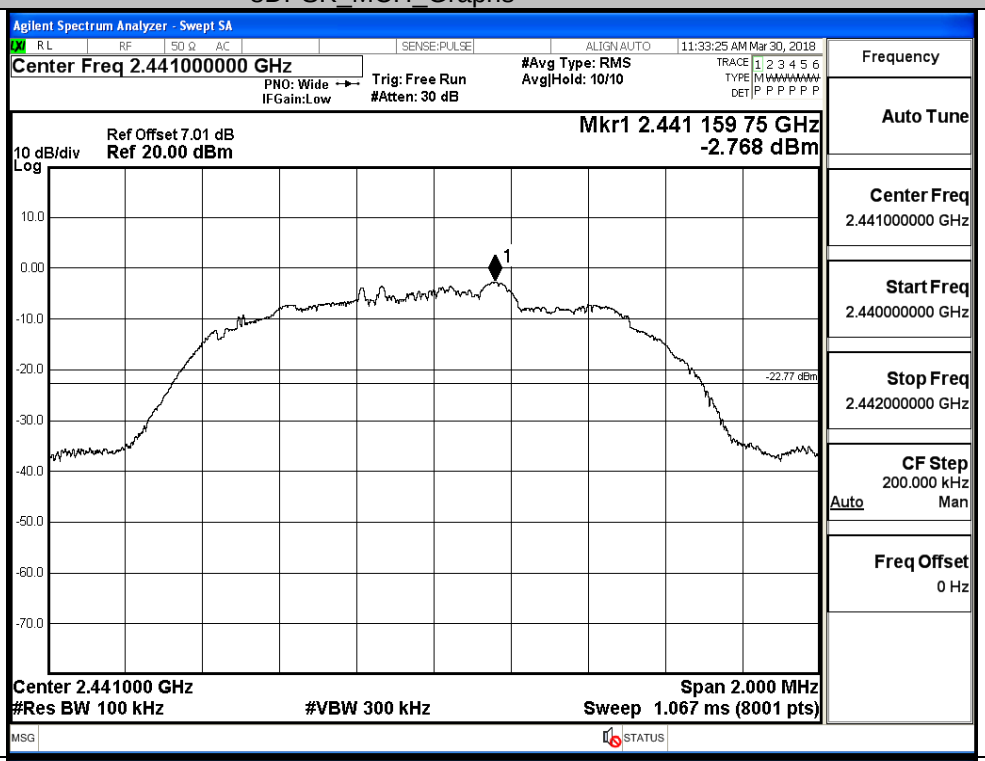
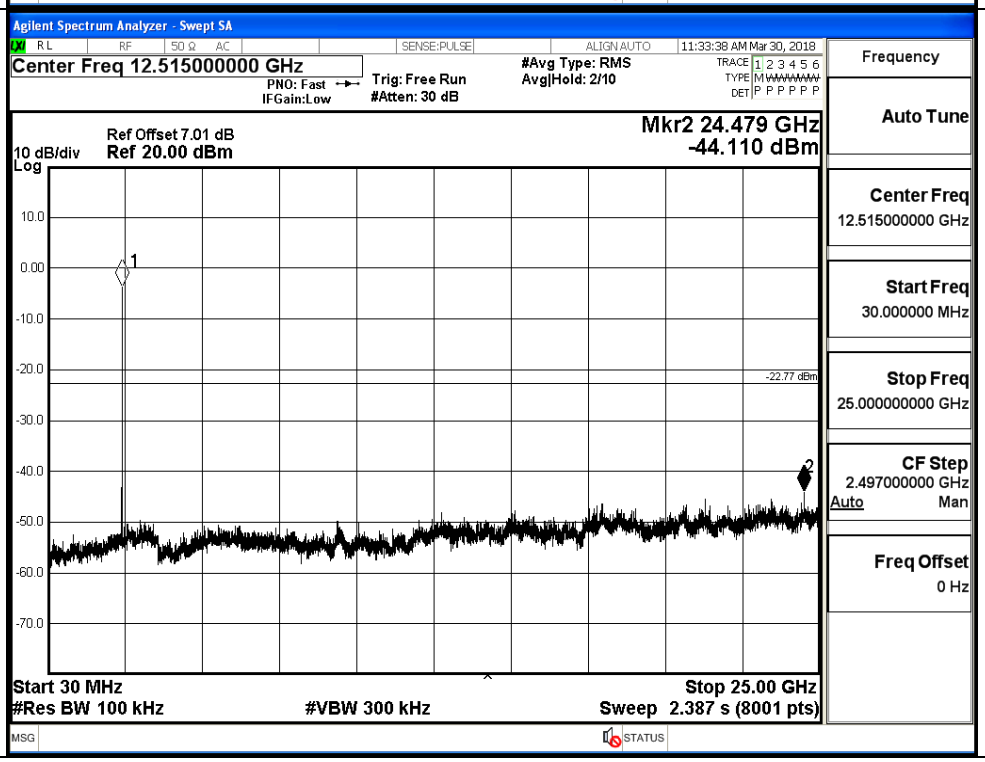
GFSK_HCH_Graphs		
Pref		
Puw		

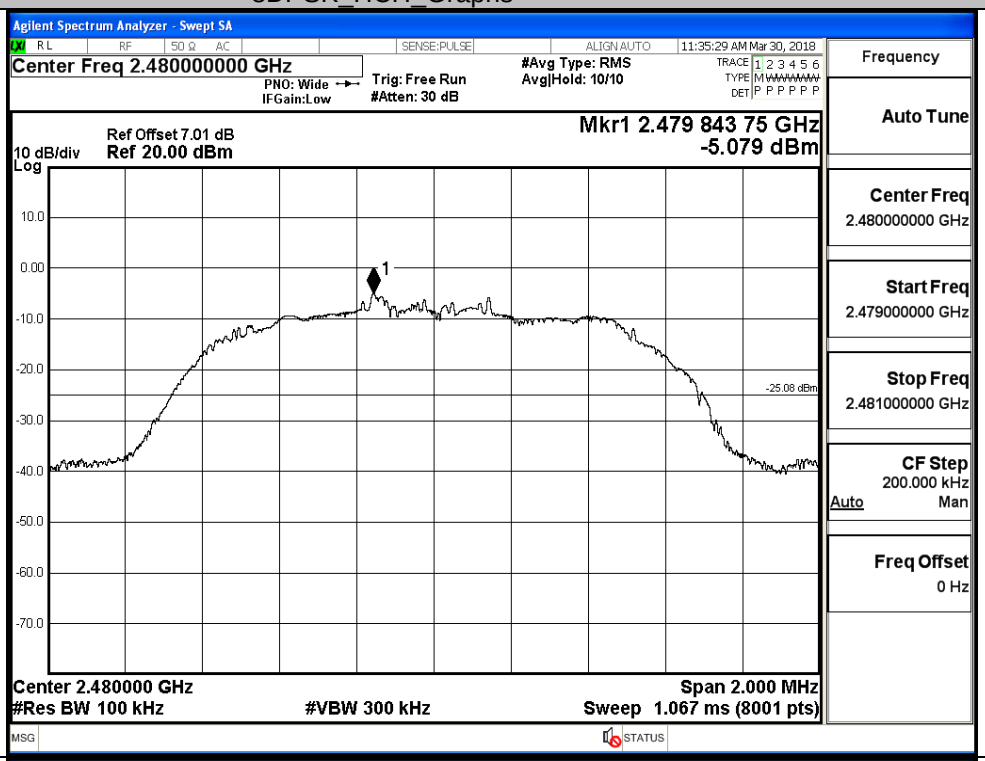
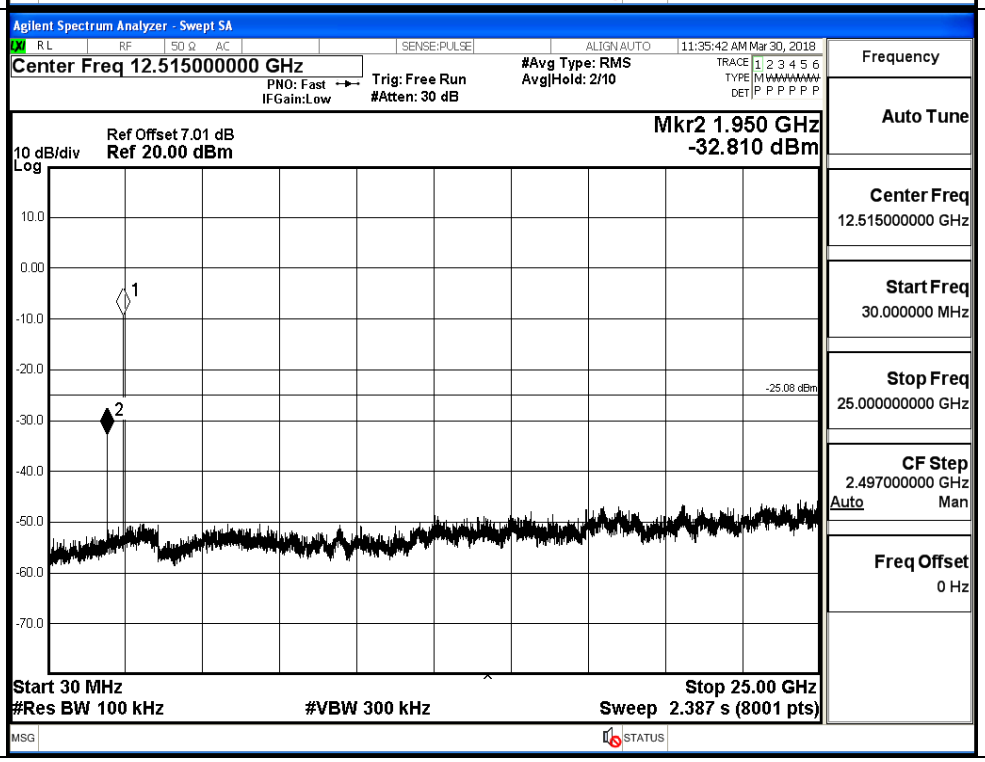
π/4DQPSK_LCH_Graphs		
Pref		
Puw		

π/4DQPSK_MCH_Graphs		
Pref		
Puw		

π/4DQPSK_HCH_Graphs		
Pref		
Puw		

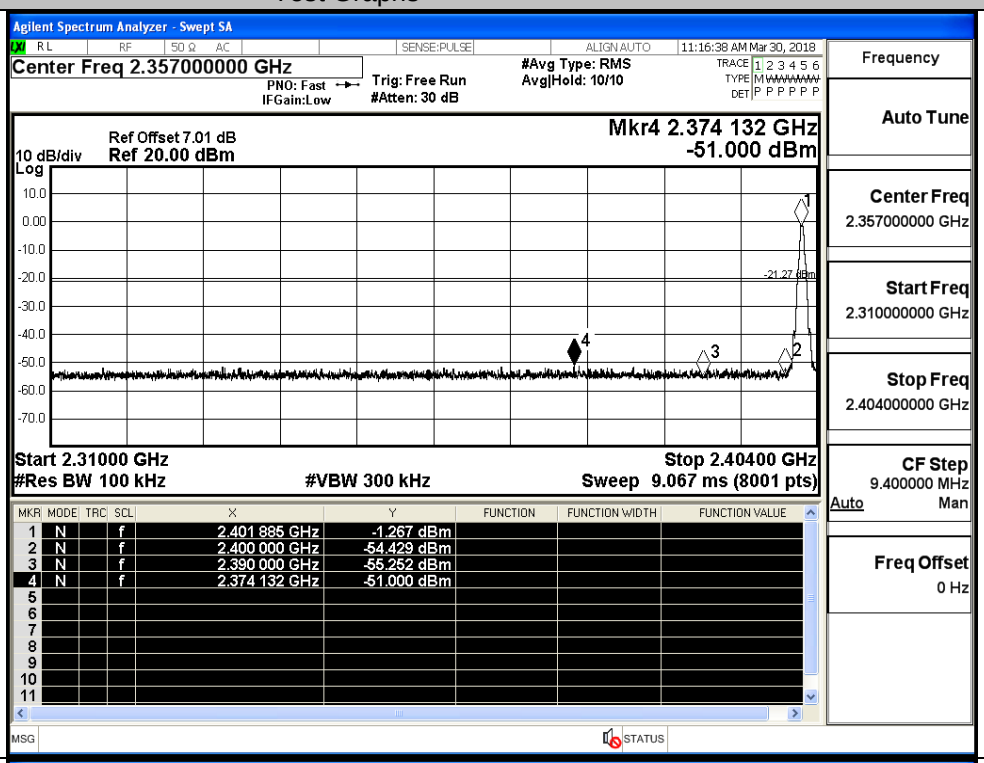
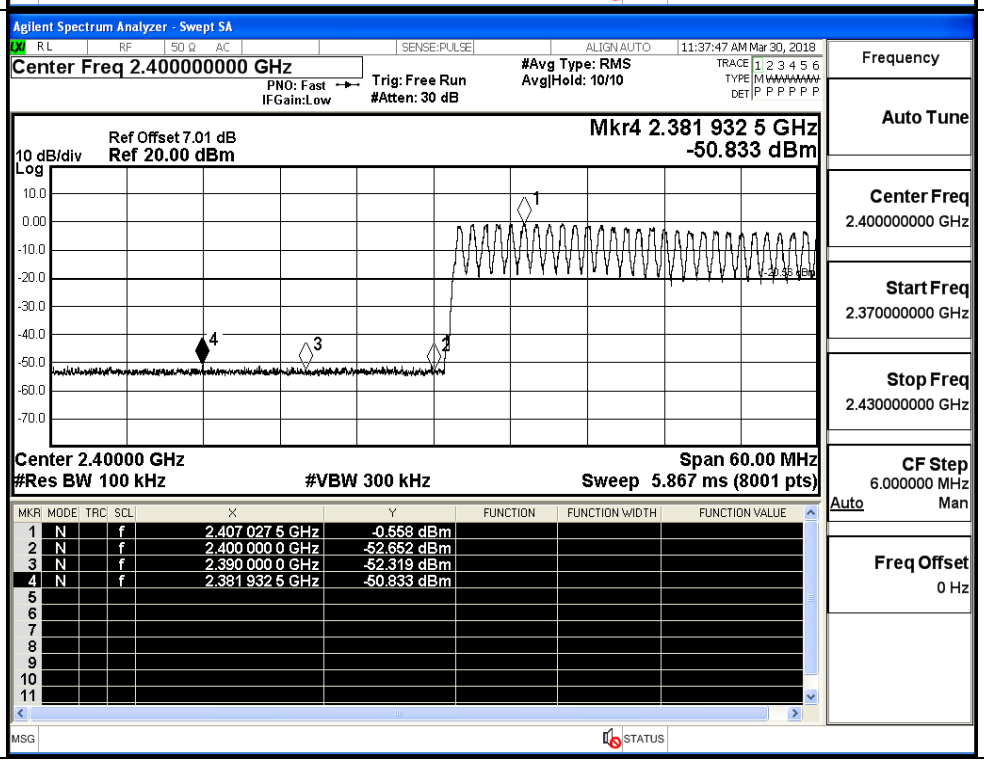
8DPSK_LCH_Graphs		
Pref		
Puw		

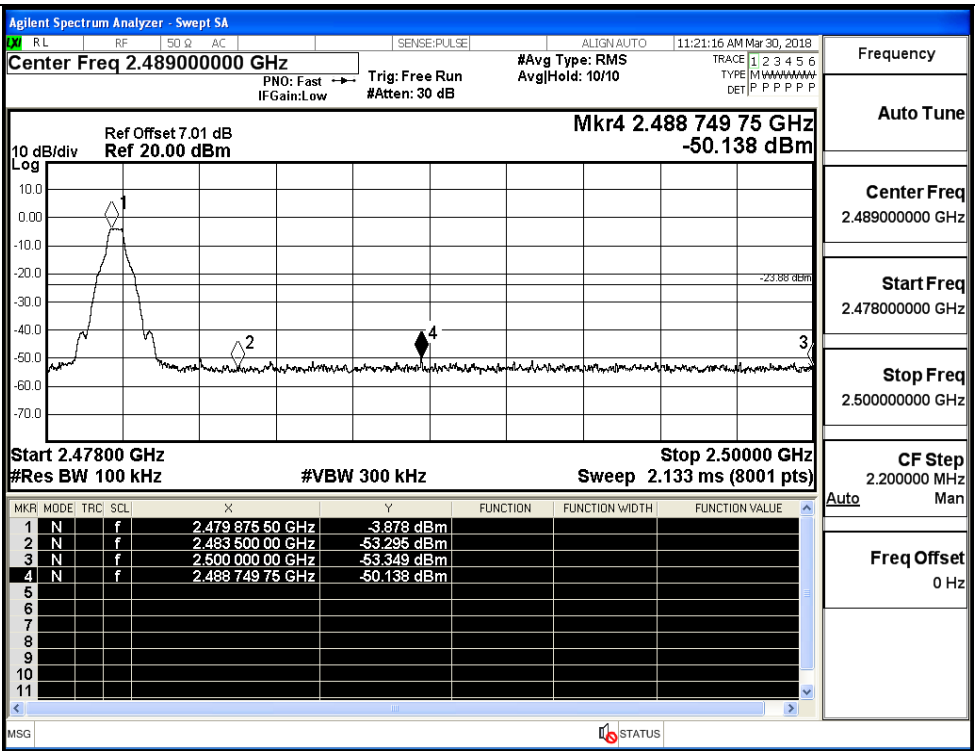
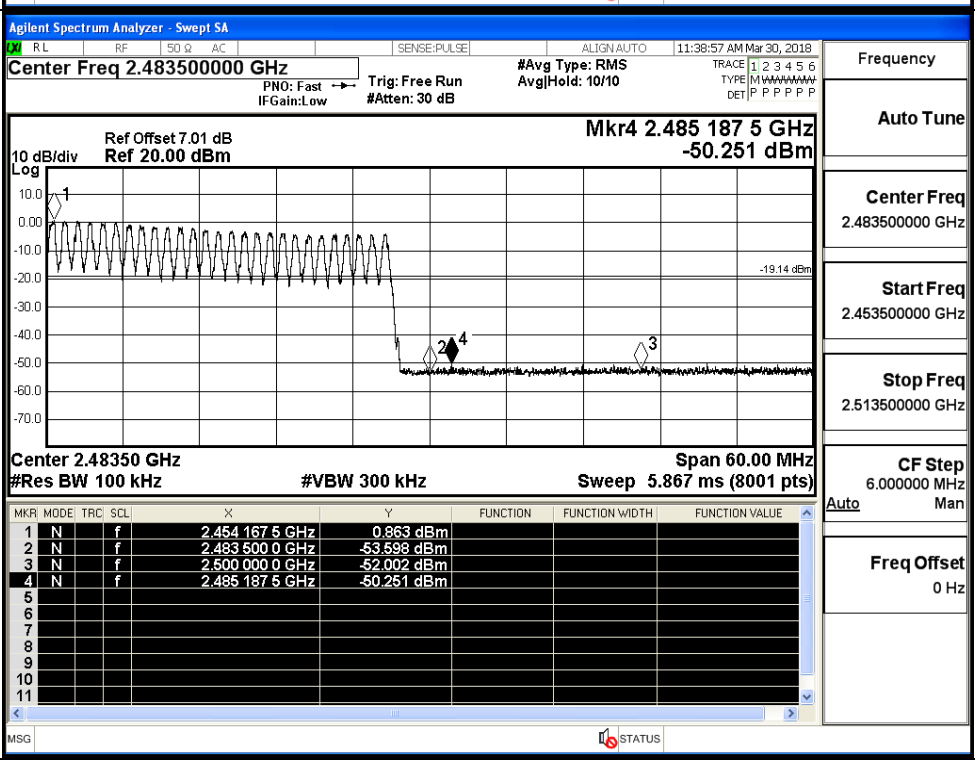
8DPSK_MCH_Graphs		
Pref		
Puw		

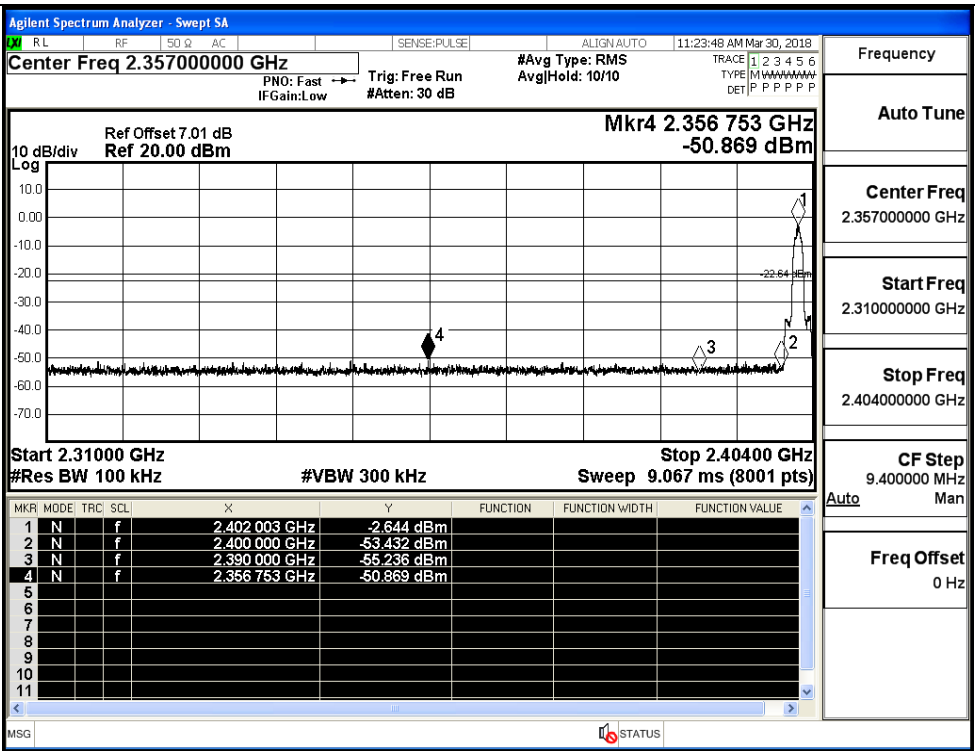
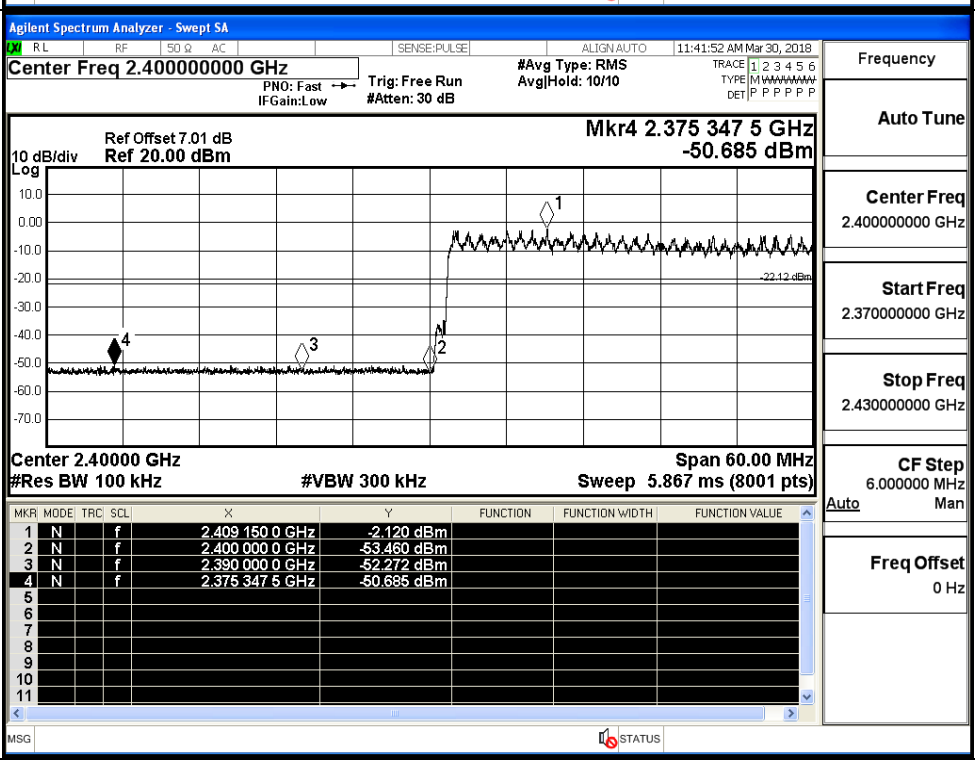
8DPSK_HCH_Graphs		
Pref		
Puw		

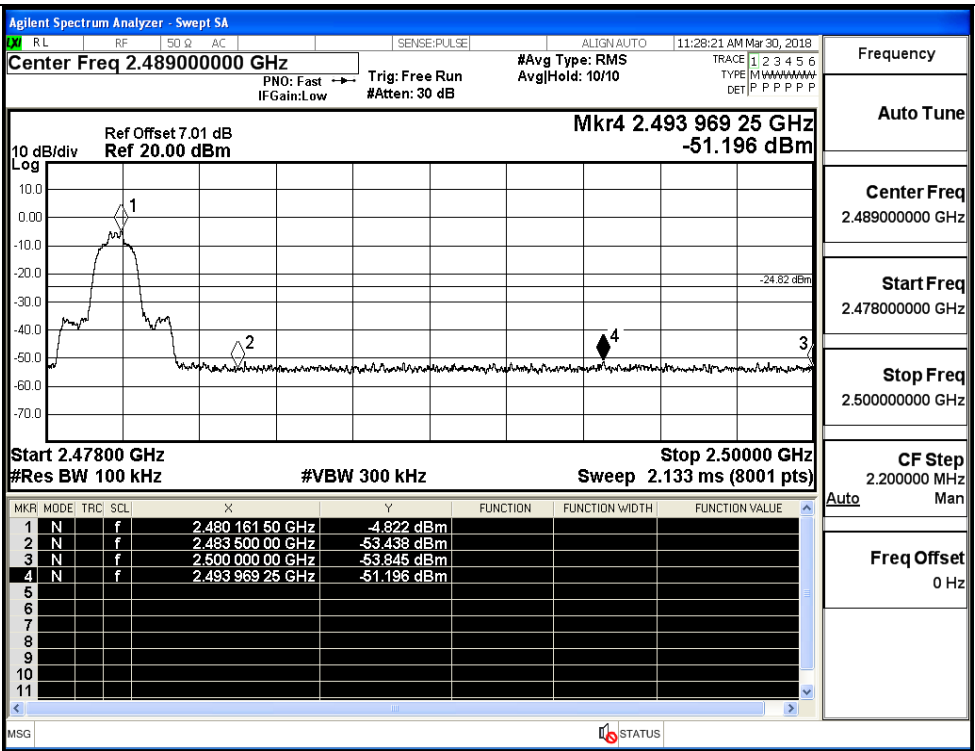
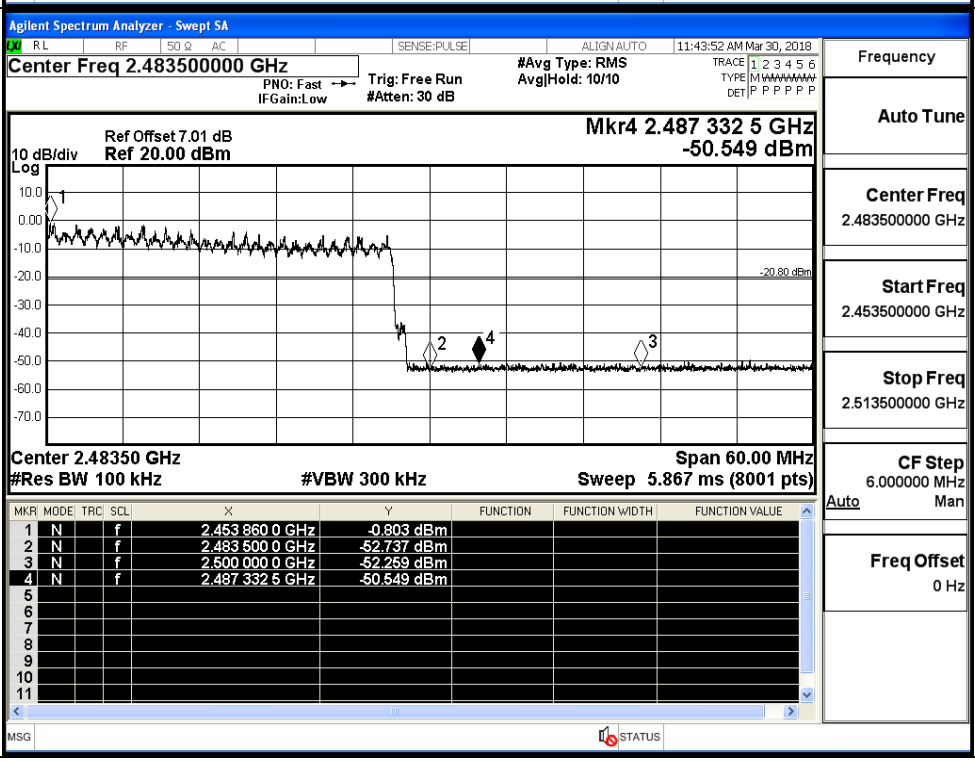
A.7 Band-edge for RF Conducted Emissions

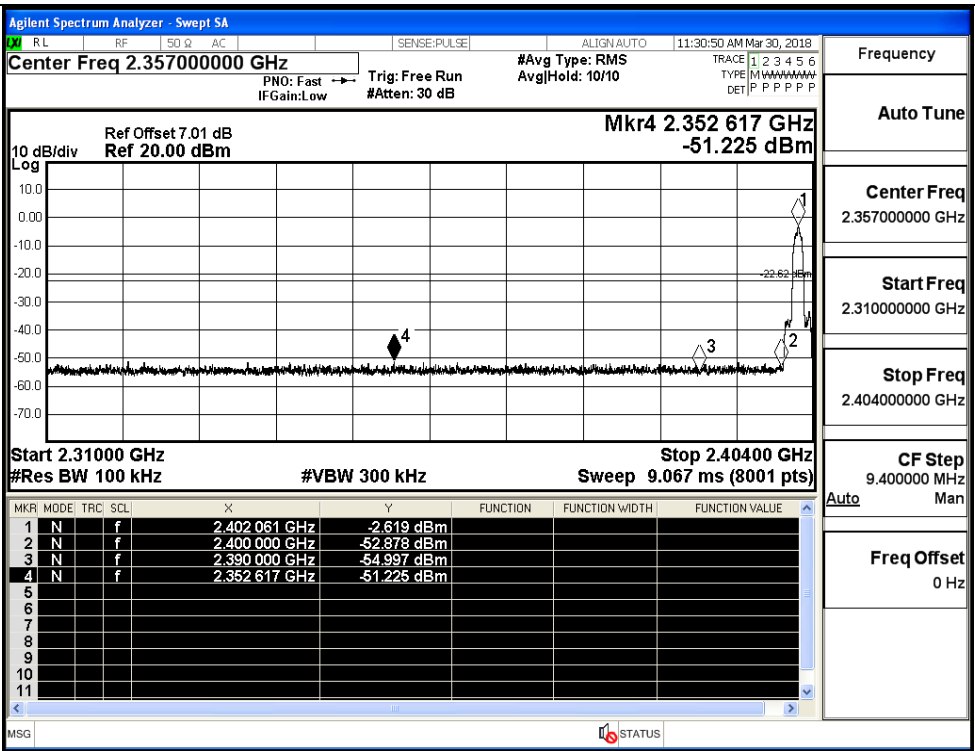
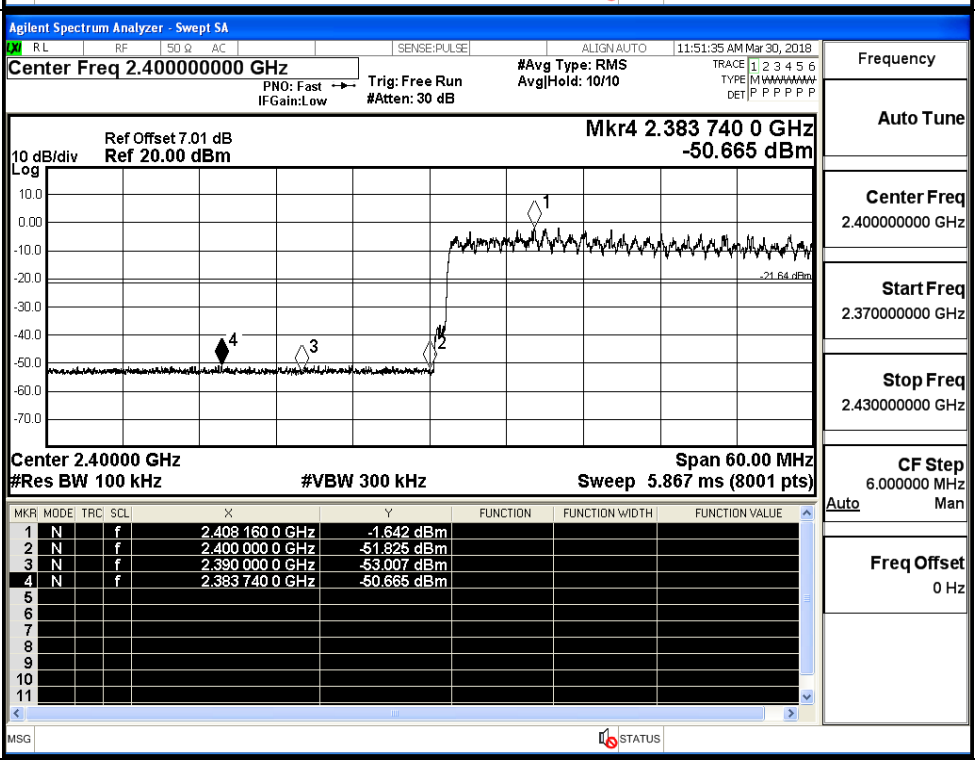
Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	-1.267	Off	-51.000	-21.27	PASS
			-0.558	On	-50.833	-20.56	PASS
	HCH	2480	-3.878	Off	-50.138	-23.88	PASS
			0.863	On	-50.251	-19.14	PASS
π/4DQPSK	LCH	2402	-2.644	Off	-50.869	-22.64	PASS
			-2.120	On	-50.685	-22.12	PASS
	HCH	2480	-4.822	Off	-51.196	-24.82	PASS
			-0.803	On	-50.549	-20.8	PASS
8DPSK	LCH	2402	-2.619	Off	-51.225	-22.62	PASS
			-1.642	On	-50.665	-21.64	PASS
	HCH	2480	-4.900	Off	-50.796	-24.9	PASS
			-0.635	On	-49.862	-20.64	PASS

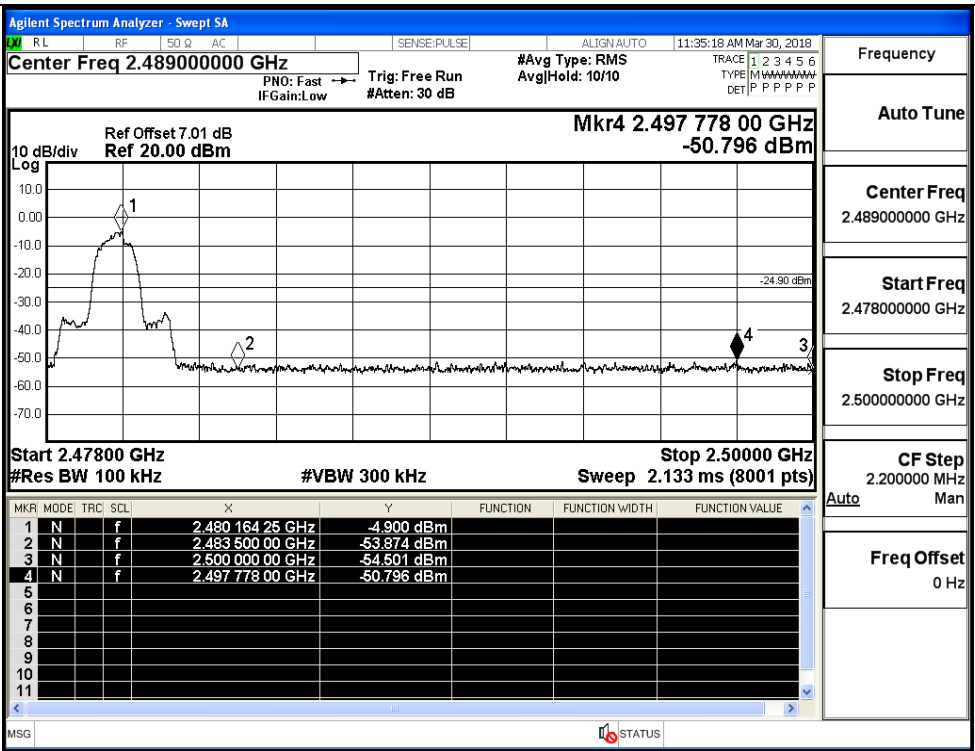
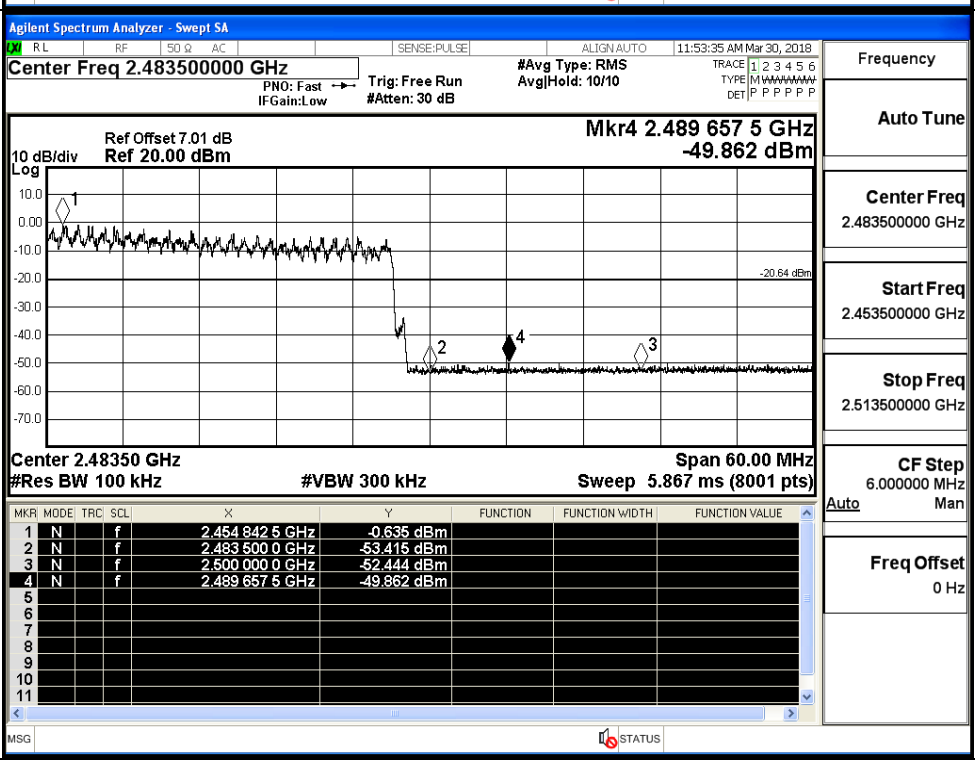
Test Graphs	
GFSK/LCH/No Hop	
GFSK/LCH/Hop	

GFSK/HCH/No Hop	
GFSK/HCH/Hop	

π/4DQPSK/LCH/No Hop	
π/4DQPSK/LCH/Hop	

π/4DQPSK/HCH/No Hop	
π/4DQPSK/HCH/Hop	

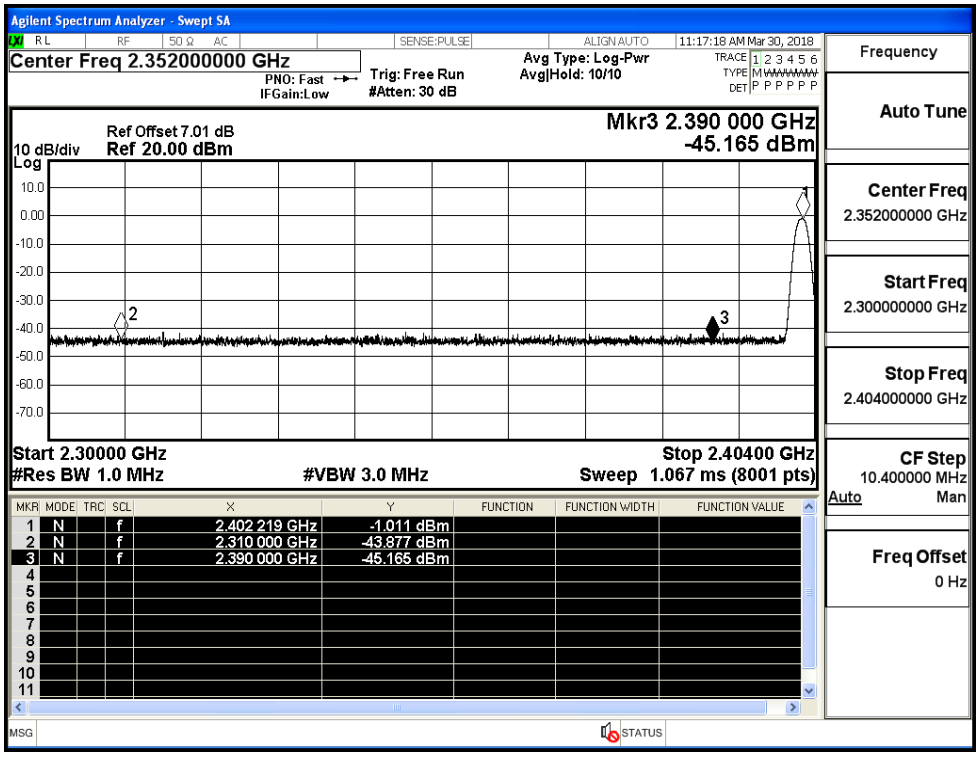
8DPSK/LCH/No Hop	
8DPSK/LCH/Hop	

8DPSK/HCH/No Hop	
8DPSK/HCH/Hop	

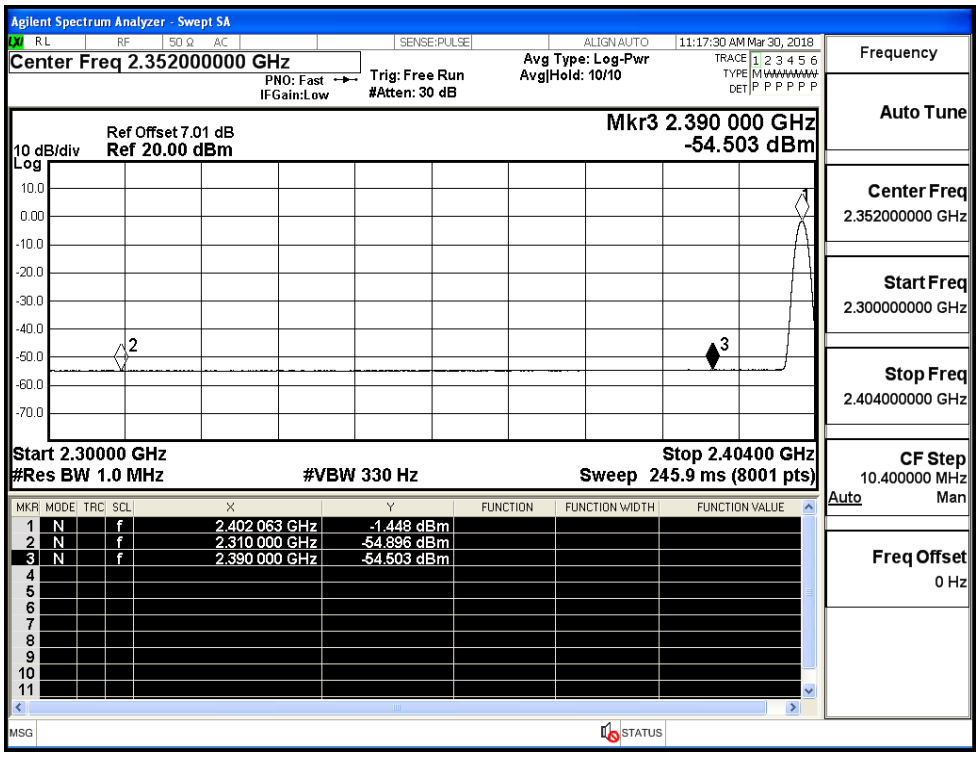
A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-43.88	2.0	0	53.32	PEAK	74	PASS
	Off	2310.0	-54.90	2.0	0	42.30	AV	54	PASS
	Off	2390.0	-45.17	2.0	0	52.03	PEAK	74	PASS
	Off	2390.0	-54.50	2.0	0	42.70	AV	54	PASS
	Off	2483.5	-45.51	2.0	0	51.69	PEAK	74	PASS
	Off	2483.5	-54.37	2.0	0	42.83	AV	54	PASS
	Off	2500.0	-44.25	2.0	0	52.95	PEAK	74	PASS
	Off	2500.0	-54.29	2.0	0	42.91	AV	54	PASS
π/4DQPSK	Off	2310.0	-44.22	2.0	0	52.98	PEAK	74	PASS
	Off	2310.0	-54.93	2.0	0	42.27	AV	54	PASS
	Off	2390.0	-44.55	2.0	0	52.65	PEAK	74	PASS
	Off	2390.0	-54.60	2.0	0	42.60	AV	54	PASS
	Off	2483.5	-43.33	2.0	0	53.87	PEAK	74	PASS
	Off	2483.5	-54.31	2.0	0	42.89	AV	54	PASS
	Off	2500.0	-44.97	2.0	0	52.23	PEAK	74	PASS
	Off	2500.0	-54.16	2.0	0	43.04	AV	54	PASS
8DPSK	Off	2310.0	-45.78	2.0	0	51.42	PEAK	74	PASS
	Off	2310.0	-54.91	2.0	0	42.29	AV	54	PASS
	Off	2390.0	-43.69	2.0	0	53.51	PEAK	74	PASS
	Off	2390.0	-54.60	2.0	0	42.60	AV	54	PASS
	Off	2483.5	-44.13	2.0	0	53.07	PEAK	74	PASS
	Off	2483.5	-54.27	2.0	0	42.93	AV	54	PASS
	Off	2500.0	-44.35	2.0	0	52.85	PEAK	74	PASS
	Off	2500.0	-54.26	2.0	0	42.94	AV	54	PASS

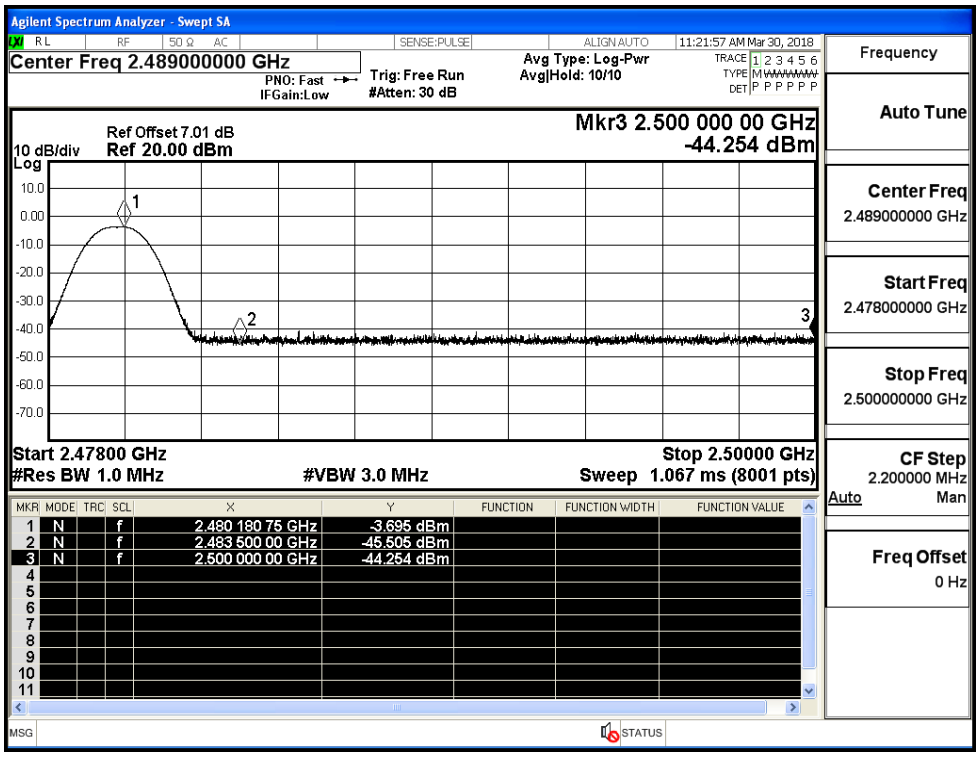
Restrict-band band-edge measurements_Hopping Off_ GFSK_PEAK (Low Channel)



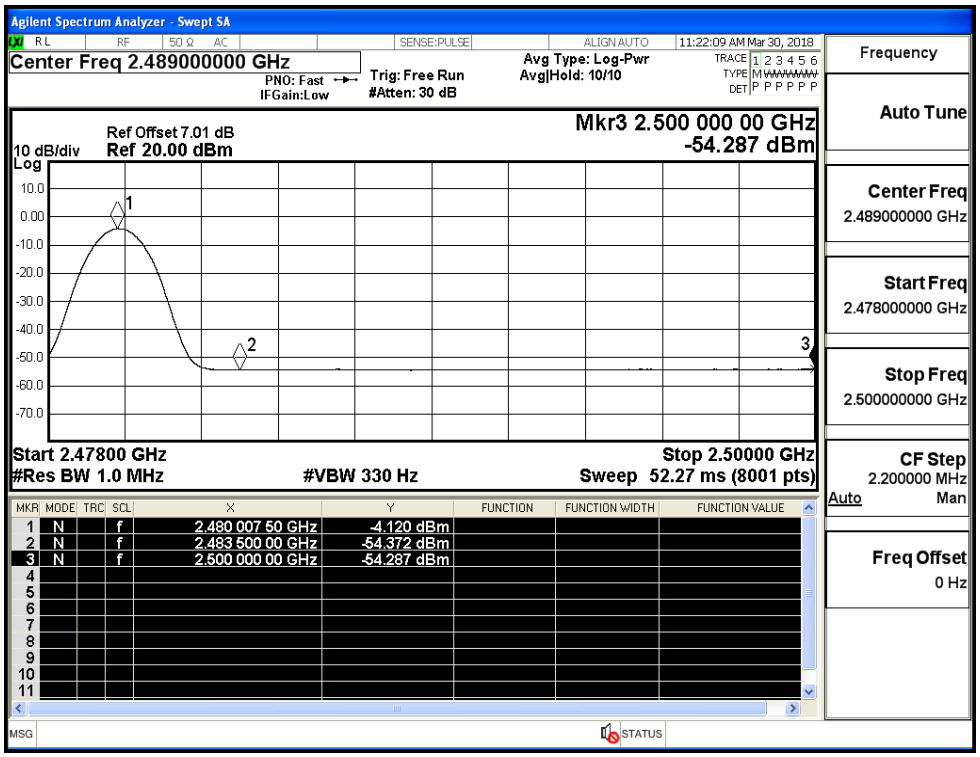
Restrict-band band-edge measurements_Hopping Off_ GFSK_Average (Low Channel)



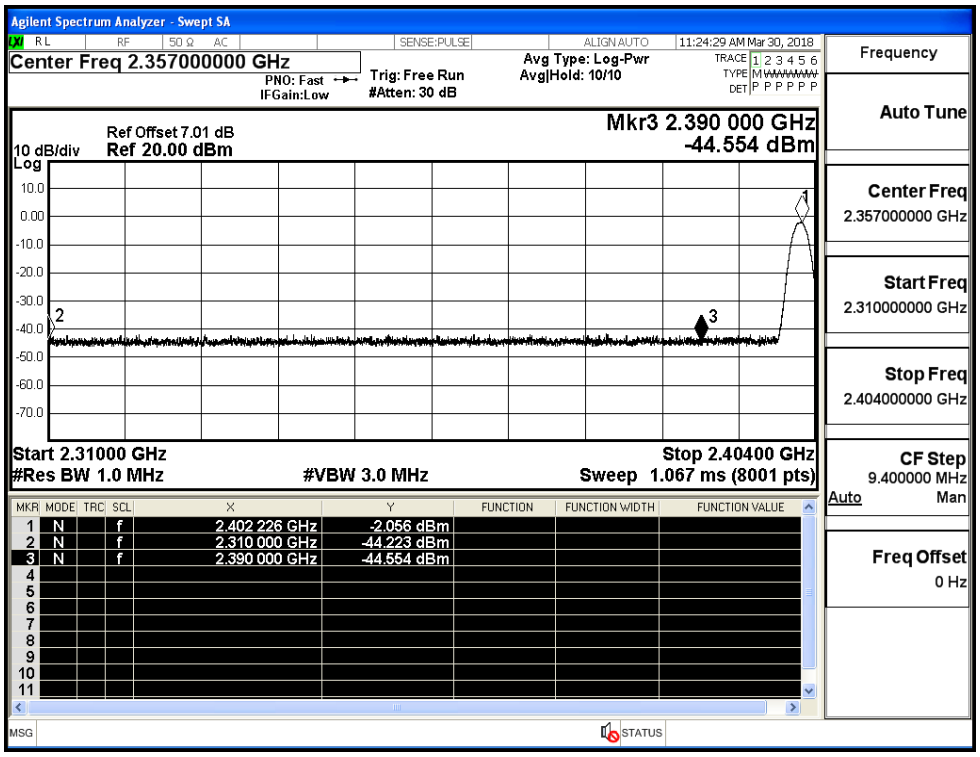
Restrict-band band-edge measurements_Hopping Off_ GFSK_PEAK (High Channel)



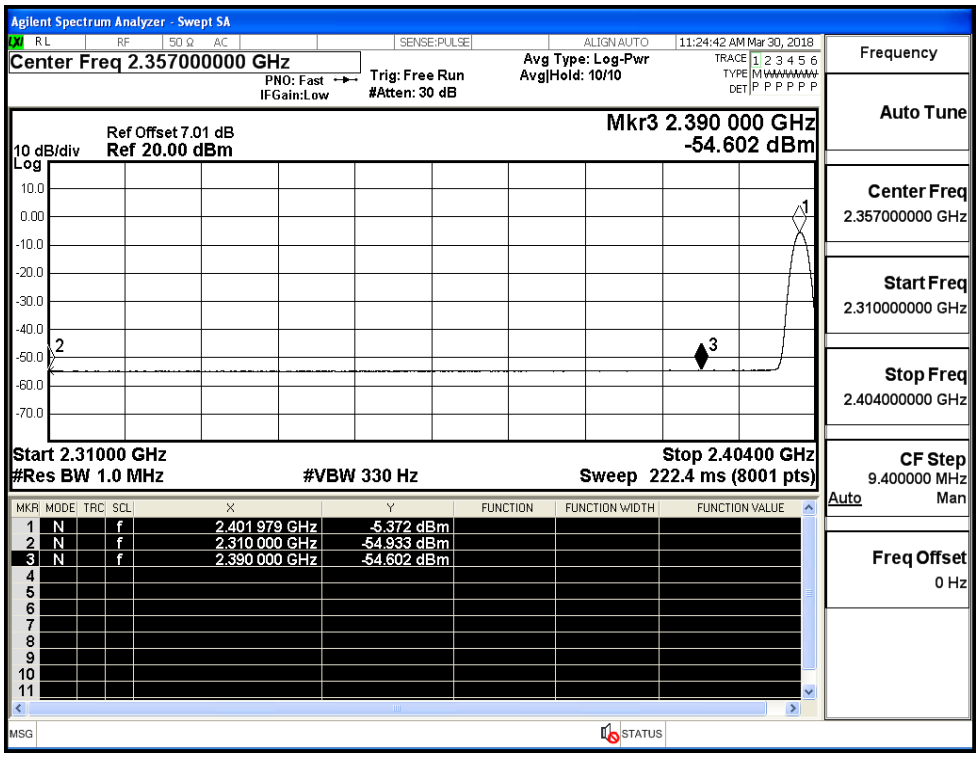
Restrict-band band-edge measurements_Hopping Off_ GFSK_Average (High Channel)



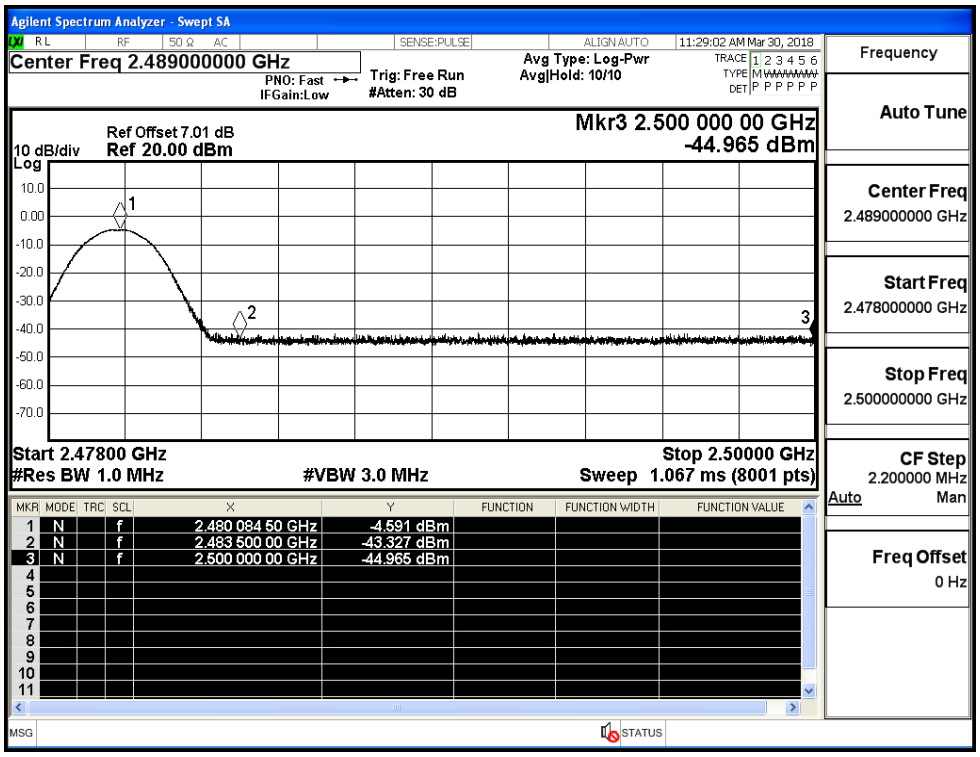
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_PEAK (Low Channel)



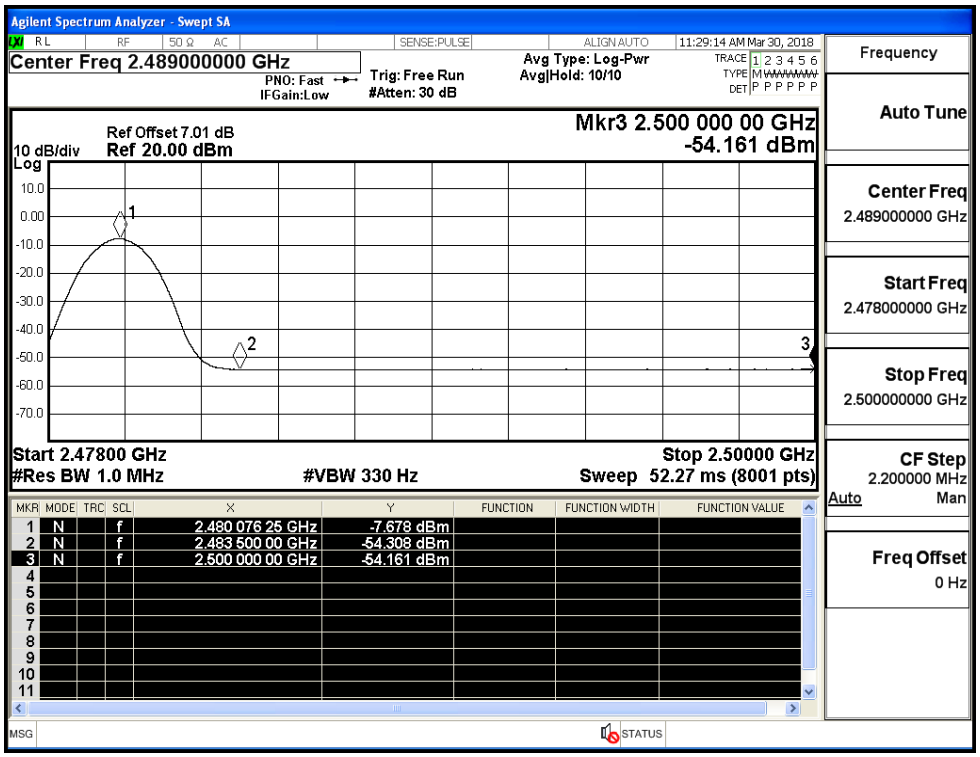
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_Average (Low Channel)



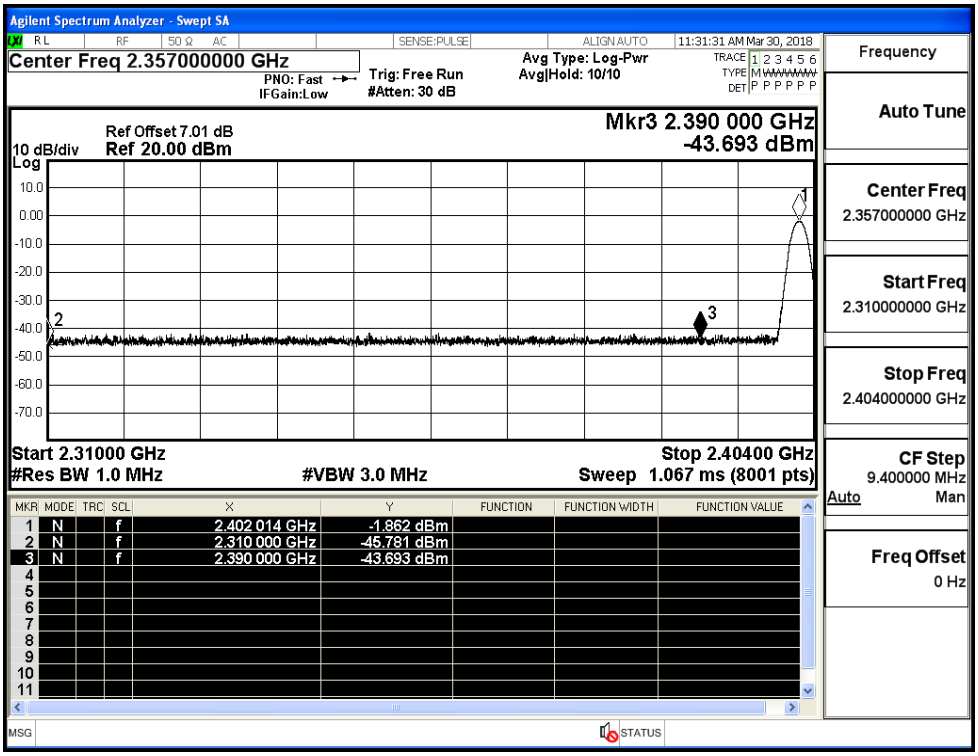
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_PEAK (High Channel)



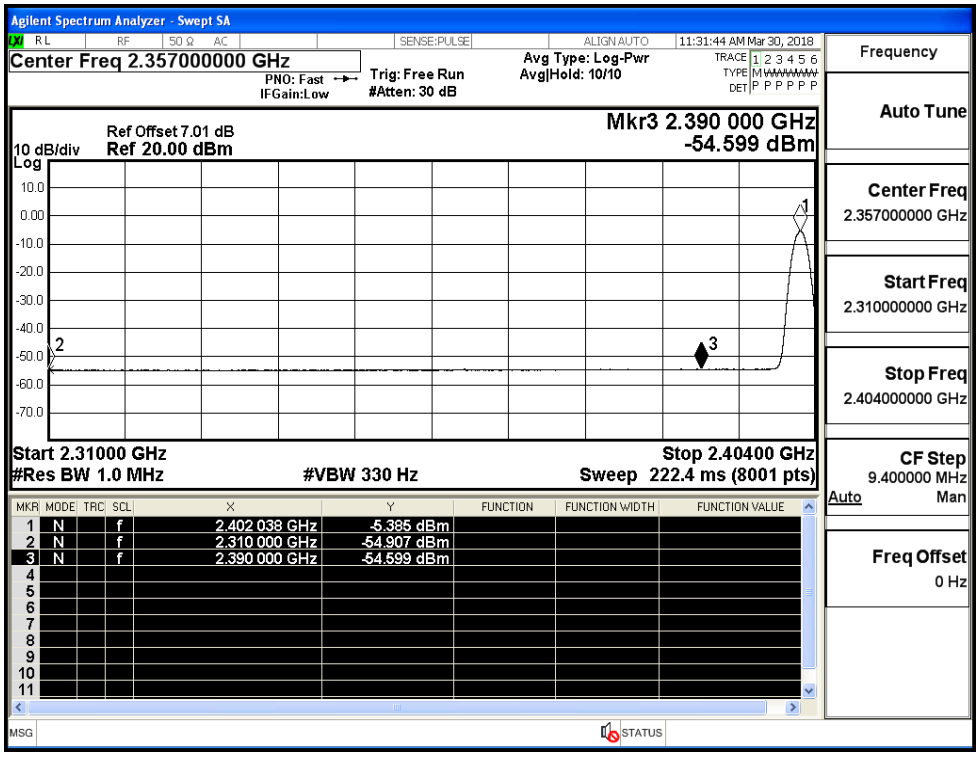
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_Average (High Channel)



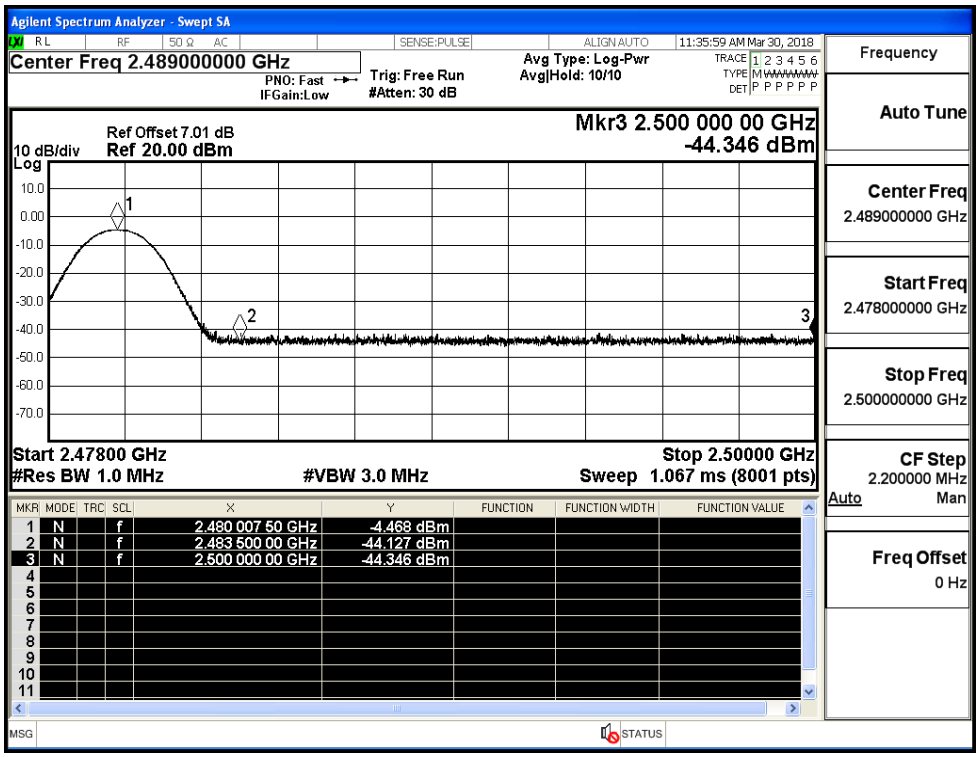
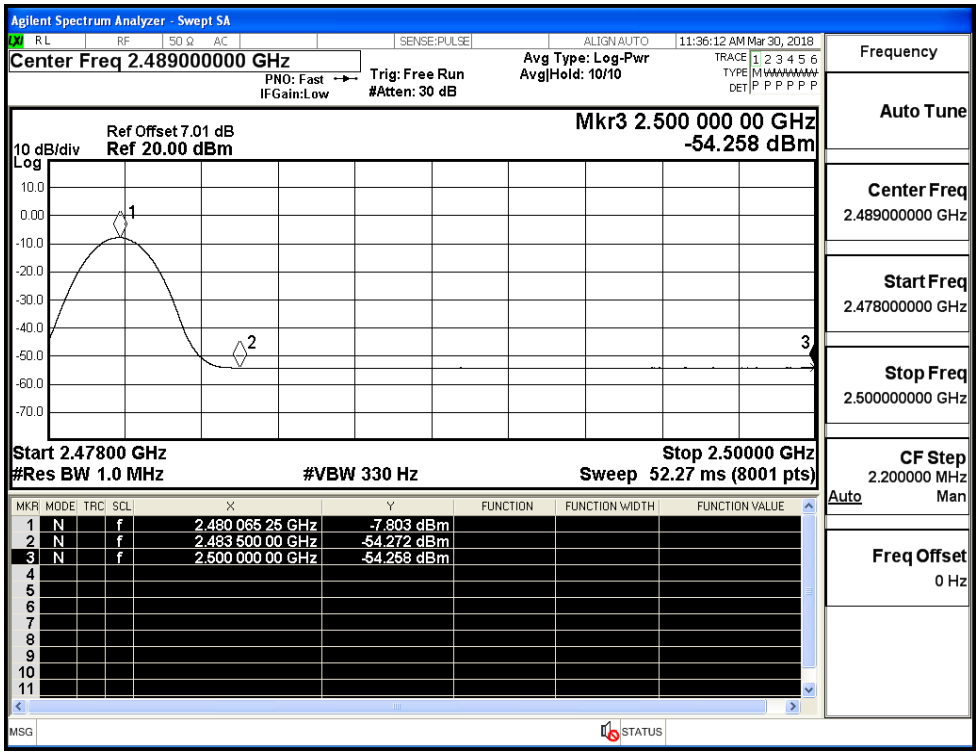
Restrict-band band-edge measurements_Hopping Off_8DPSK_PEAK (Low Channel)



Restrict-band band-edge measurements_Hopping Off_8DPSK_Average (Low Channel)



Restrict-band band-edge measurements_Hopping Off_8DPSK_PEAK (High Channel)



Restrict-band band-edge measurements_Hopping Off_8DPSK_Average (High Channel)