Appendix A

RF Test Data for BT V4.2 (BDR/EDR) (Conducted Measurement)

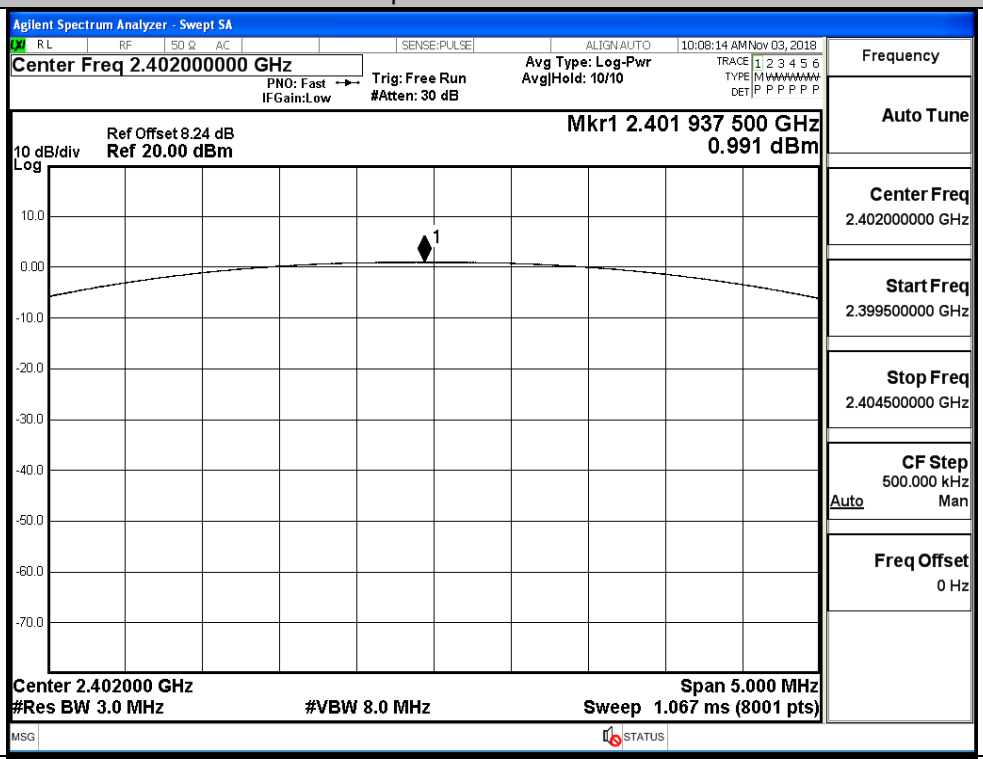
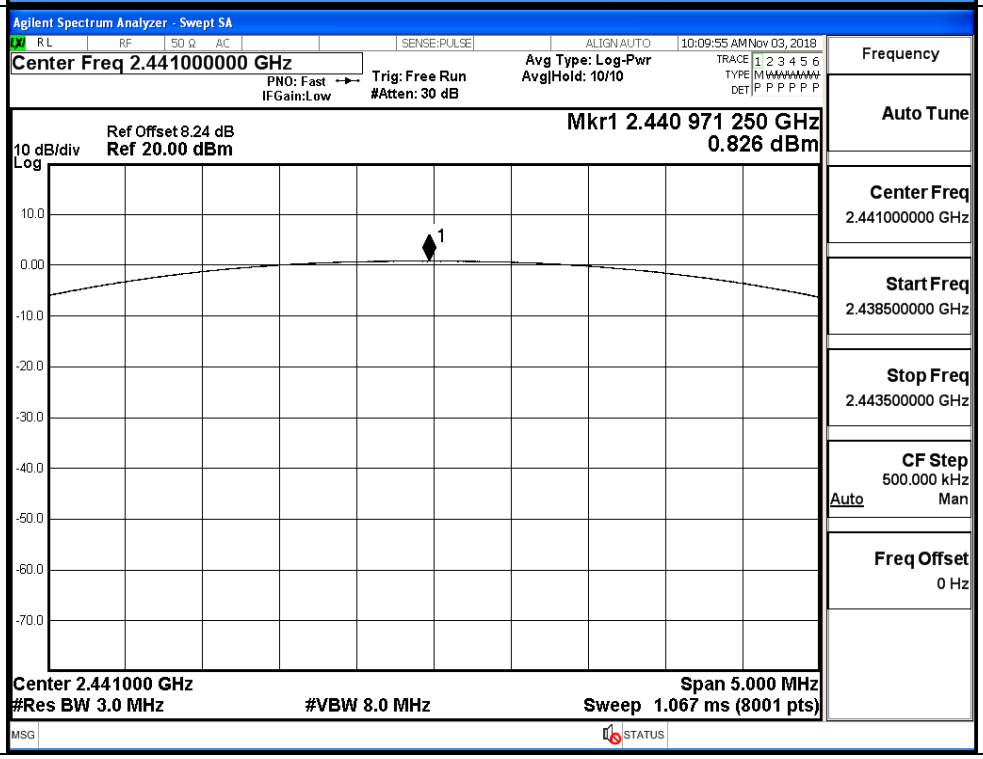
Product Name: Dash camera
Trade Mark: SCOSCHE
Test Model: NEXC1

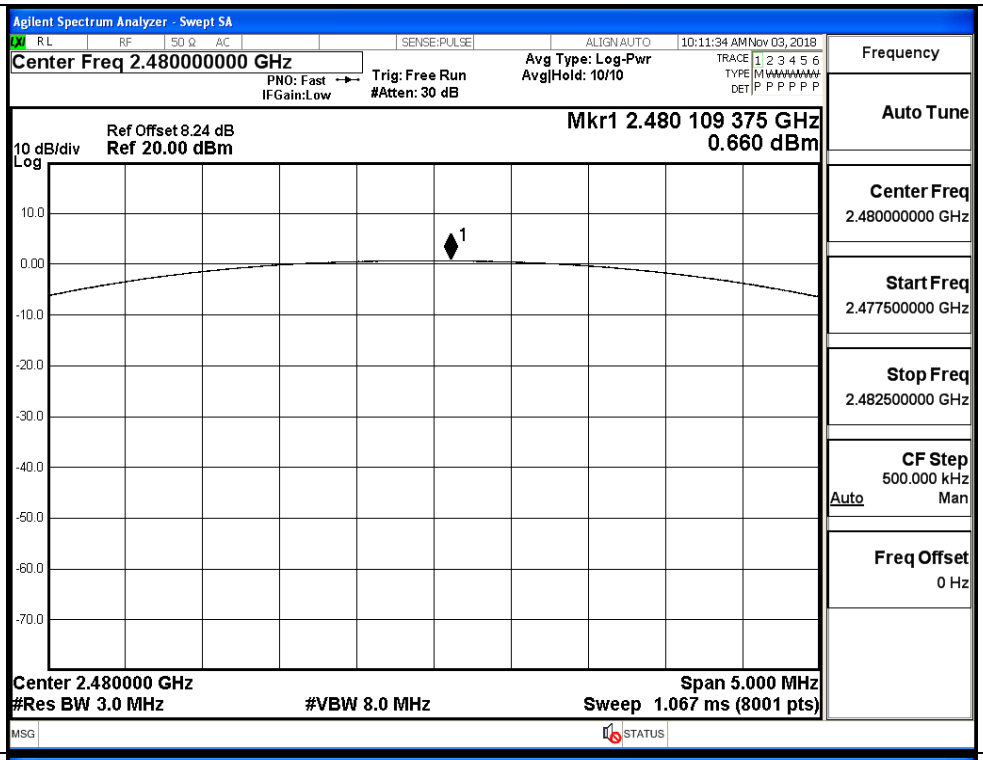
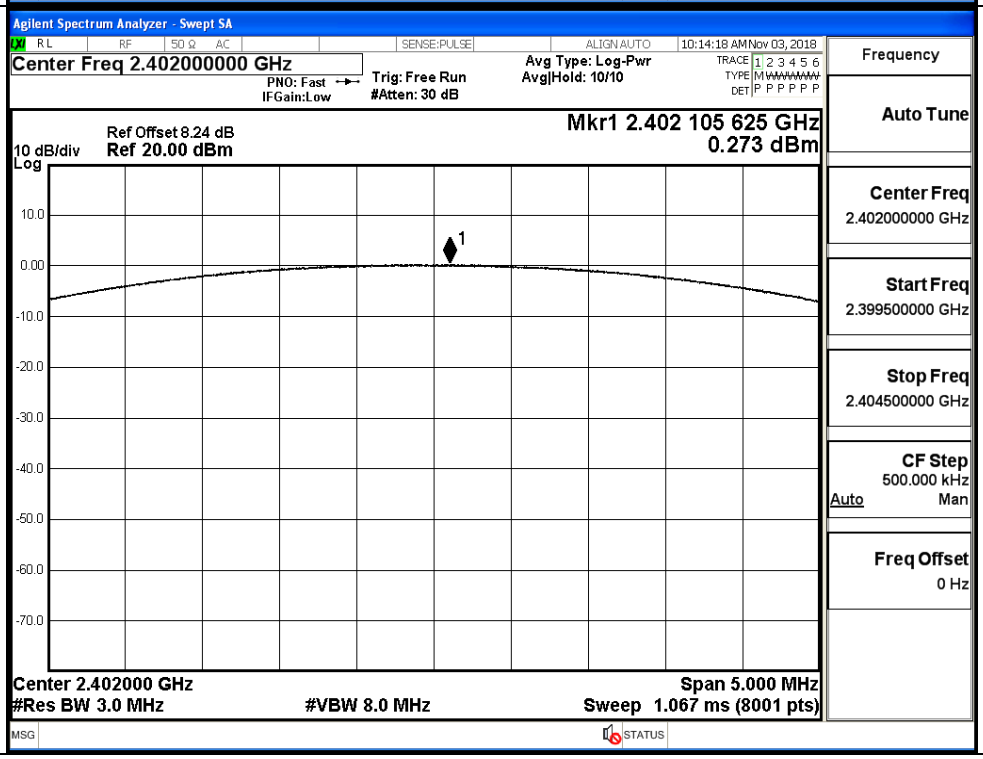
Environmental Conditions

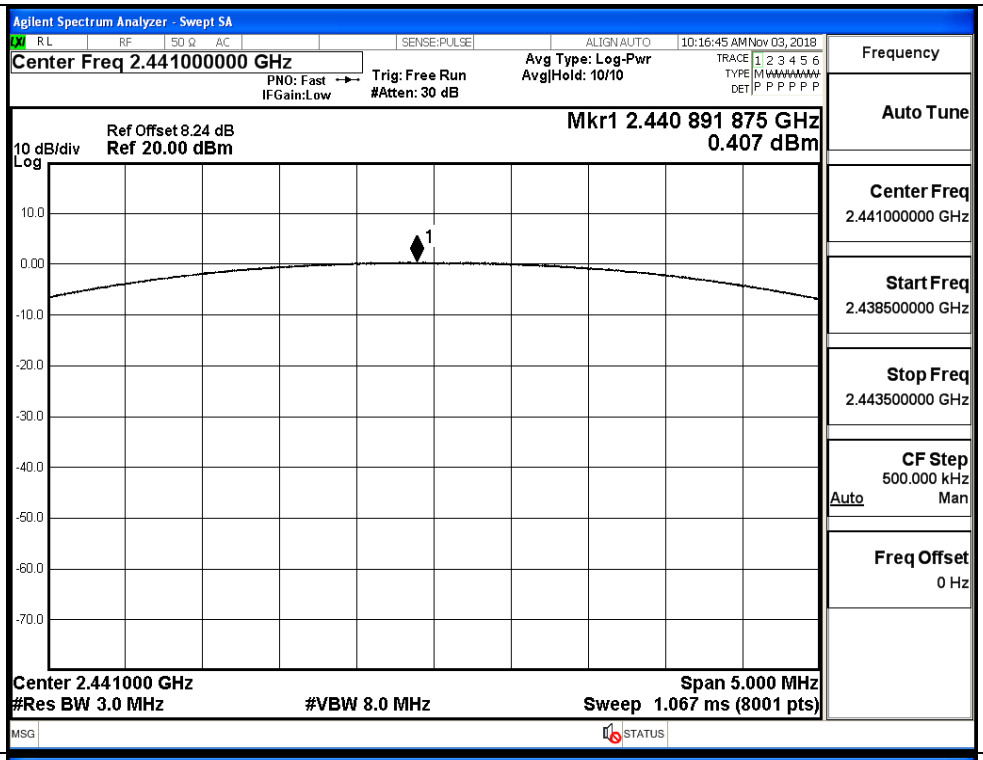
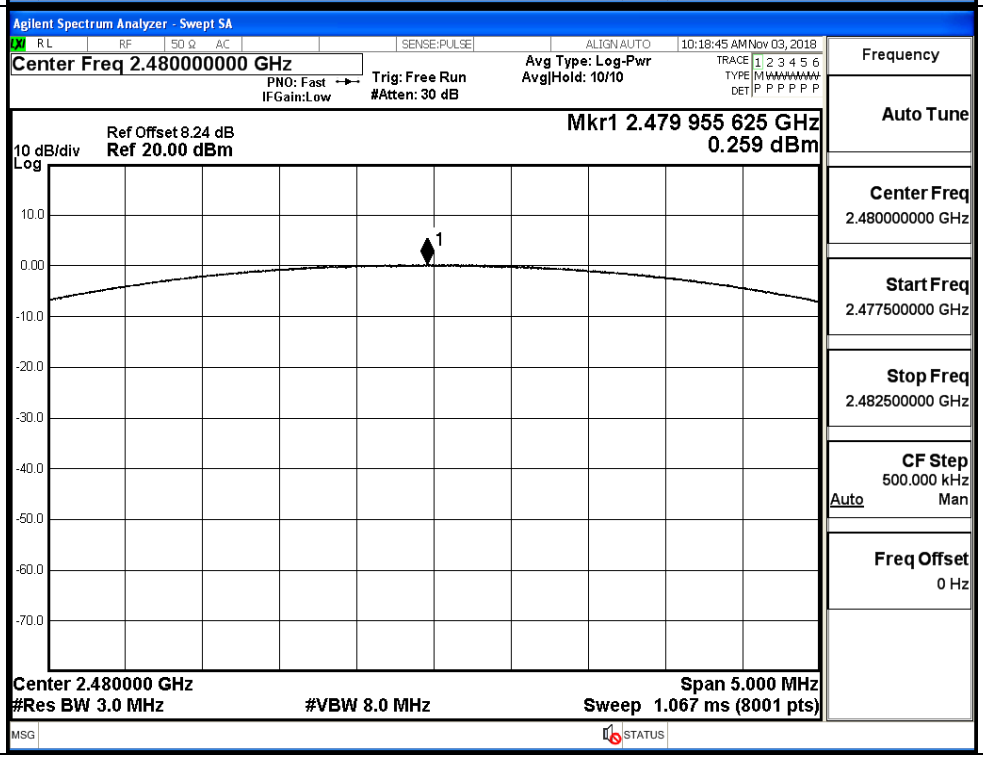
Temperature:	24.5 ° C
Relative Humidity:	54.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Mina.Xu
Supervised by:	Jayden.Zhuo

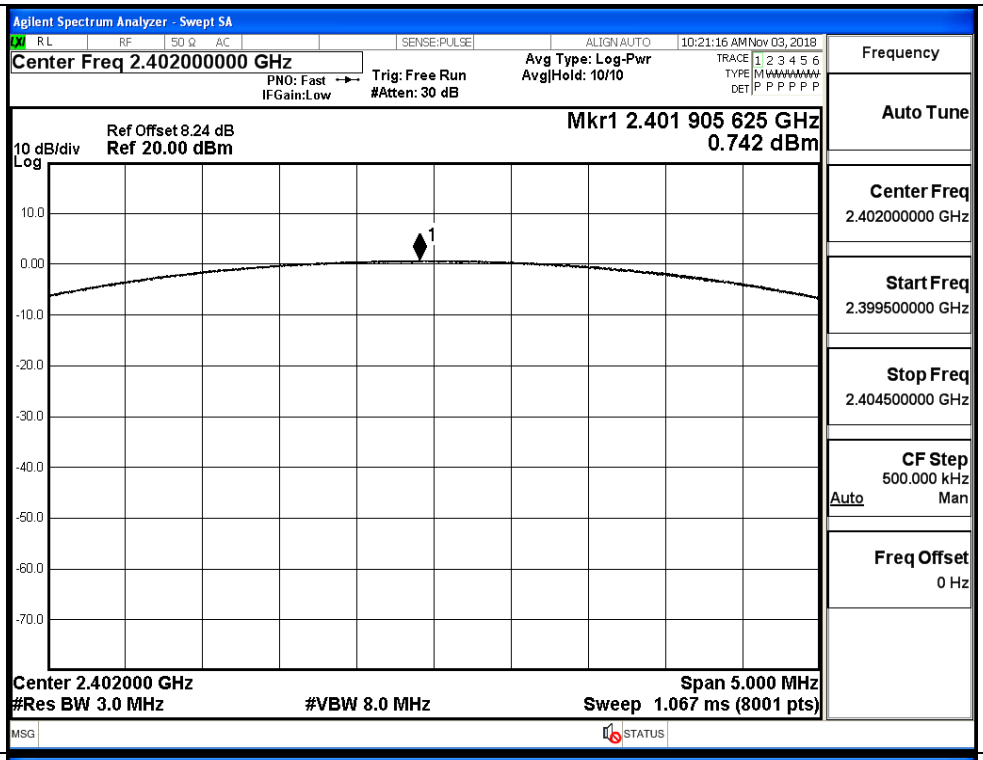
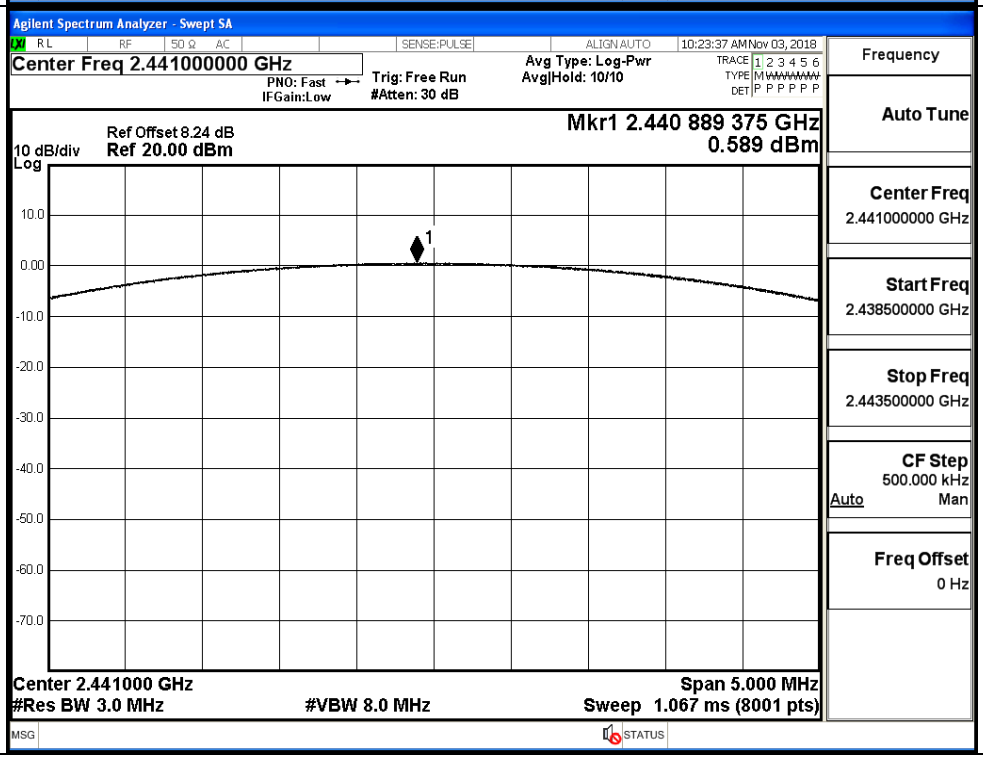
A.1 Maximum Conducted Peak Output Power

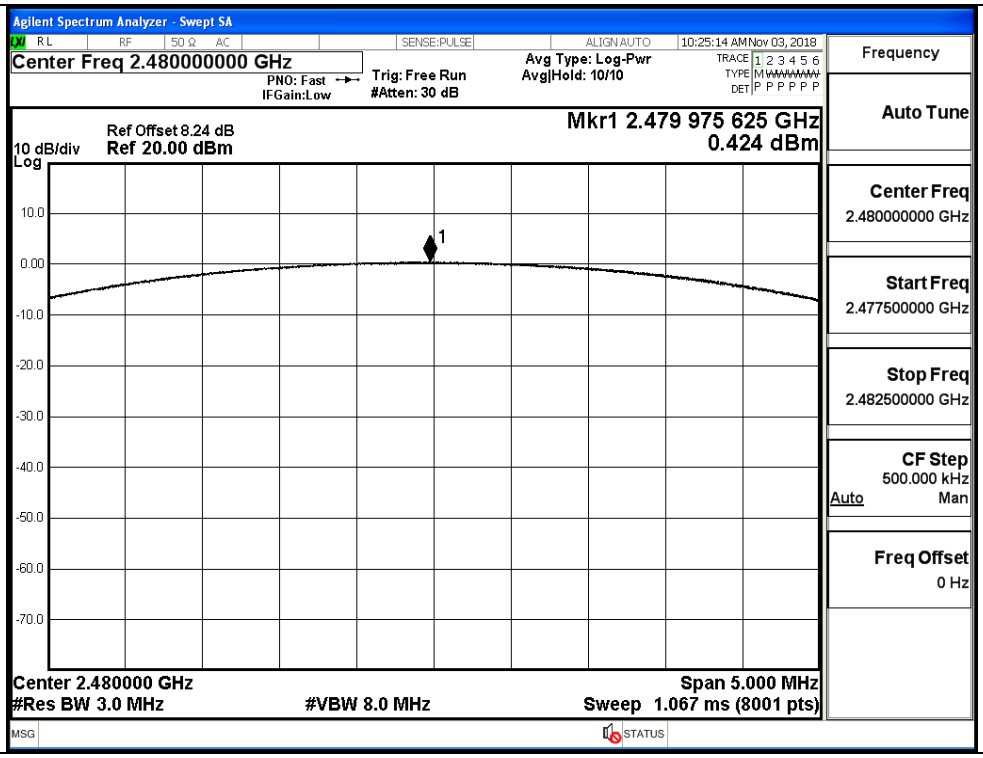
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	0.991	21	PASS
	MCH	0.826	21	PASS
	HCH	0.660	21	PASS
π/4DQPSK	LCH	0.273	21	PASS
	MCH	0.407	21	PASS
	HCH	0.259	21	PASS
8DPSK	LCH	0.742	21	PASS
	MCH	0.589	21	PASS
	HCH	0.424	21	PASS

Test Graphs		
GFSK/LCH		
GFSK/MCH		

GFSK/HCH		
π/4DQPSK/LCH		

π/4DQPSK/MCH		
π/4DQPSK/HCH		

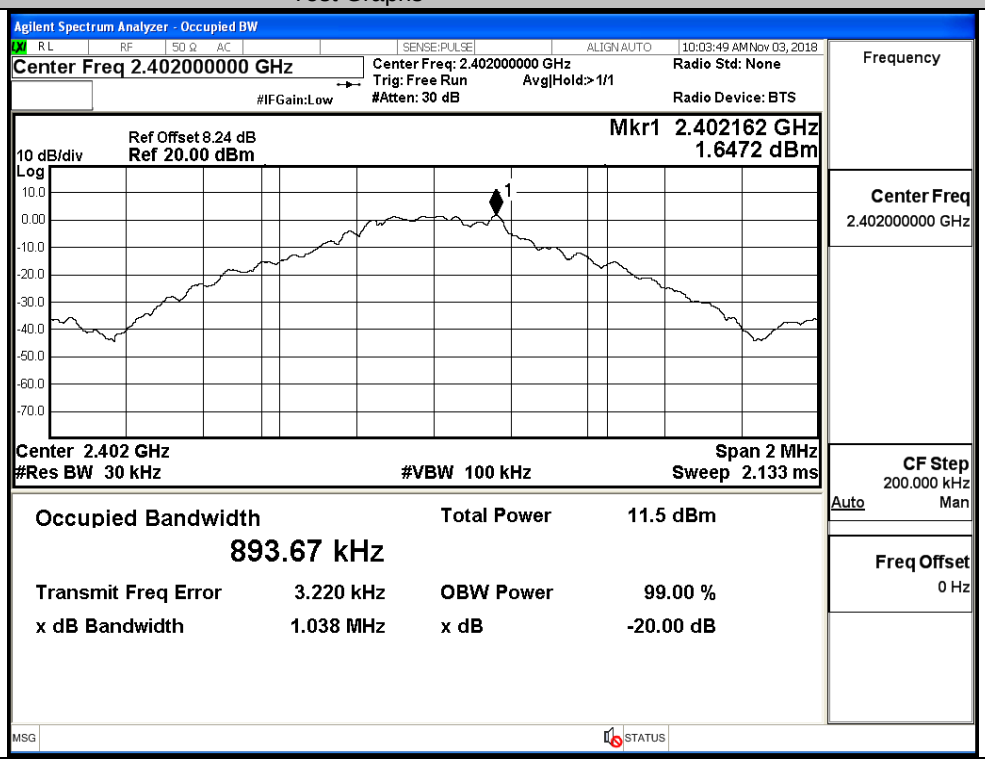
8DPSK/LCH		
8DPSK/MCH		

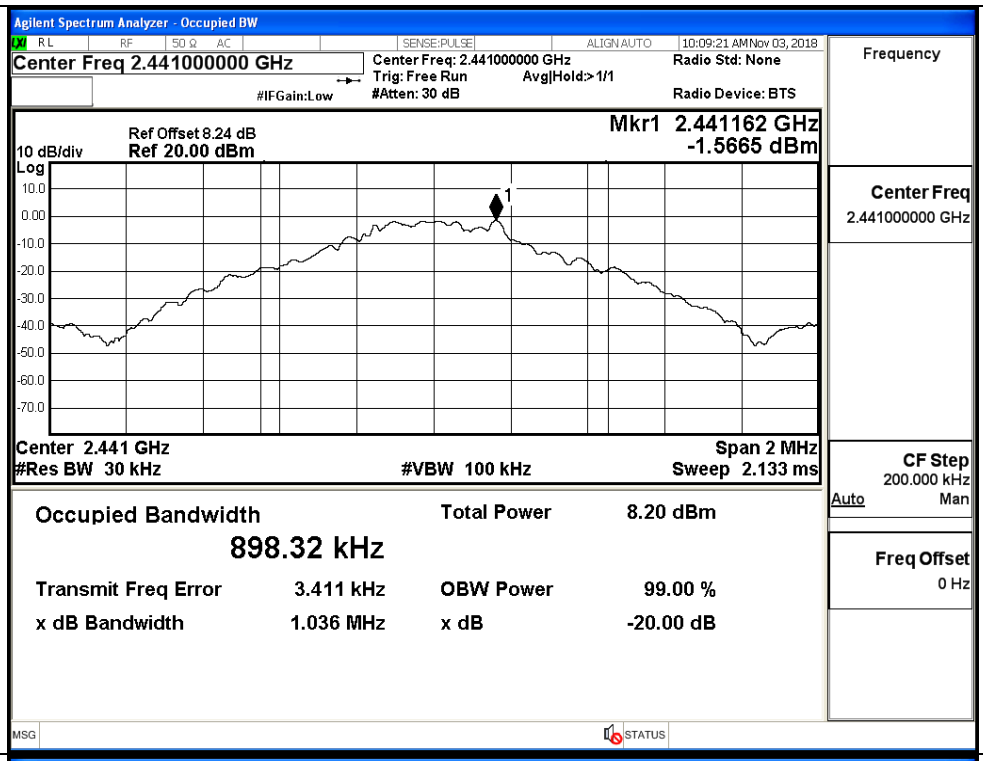
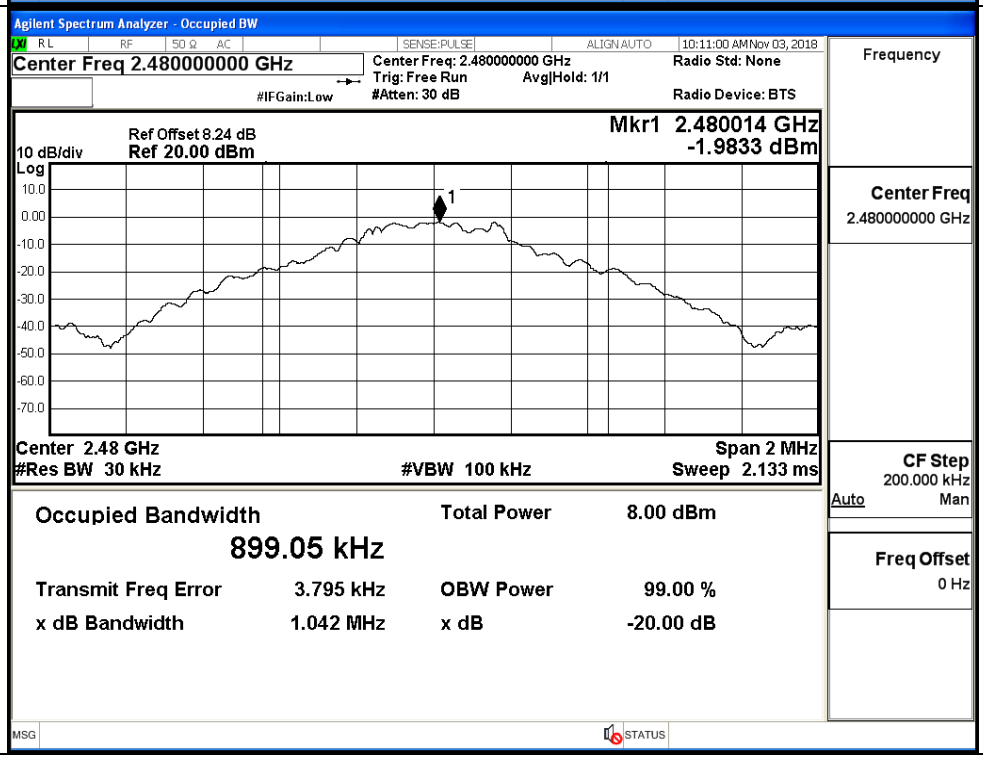
8DPSK/HCH		

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
10:25:14 AM Nov 03, 2018
Ref Offset 8.24 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 2.479 975 625 GHz
0.424 dBm
Center 2.480000 GHz
#Res BW 3.0 MHz
#VBW 8.0 MHz
Span 5.000 MHz
Sweep 1.067 ms (8001 pts)
Frequency
Auto Tune
Center Freq
2.480000000 GHz
Start Freq
2.477500000 GHz
Stop Freq
2.482500000 GHz
CF Step
500.000 kHz
Auto
Man
Freq Offset
0 Hz

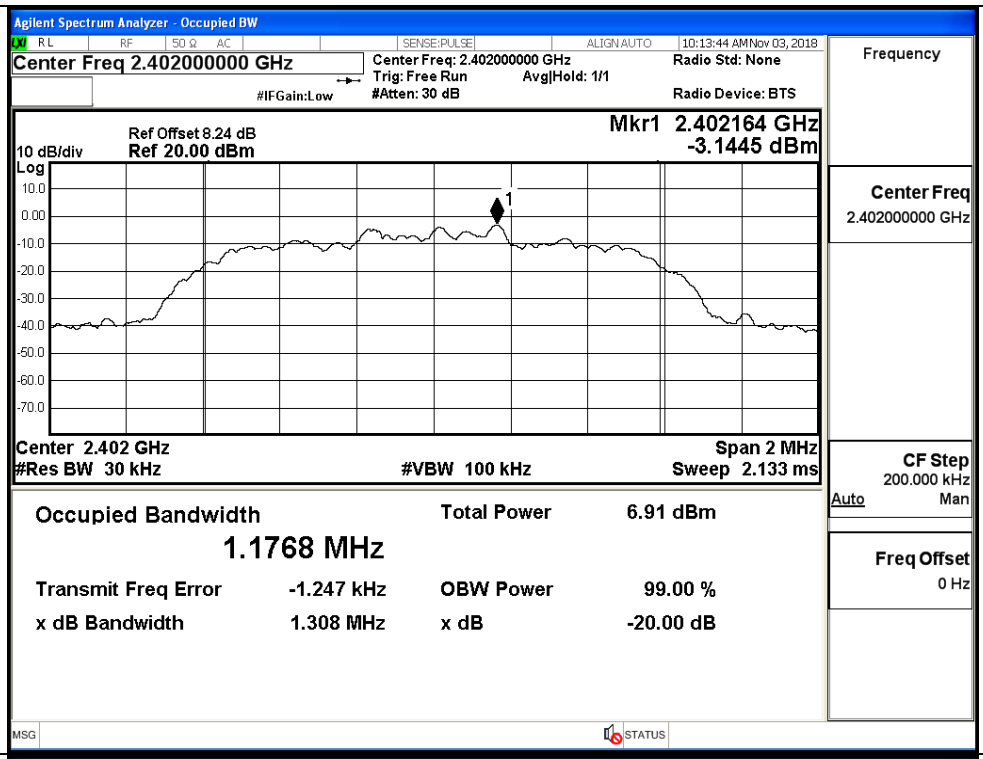
A.2 99% and 20dB Bandwidth

Mode	Channel.	99% Bandwidth [MHz]	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.89367	1.038	Not Specified	PASS
	MCH	0.89832	1.036	Not Specified	PASS
	HCH	0.89905	1.042	Not Specified	PASS
π/4DQPSK	LCH	1.1768	1.308	Not Specified	PASS
	MCH	1.1752	1.293	Not Specified	PASS
	HCH	1.1715	1.291	Not Specified	PASS
8DPSK	LCH	1.1845	1.295	Not Specified	PASS
	MCH	1.1844	1.296	Not Specified	PASS
	HCH	1.1806	1.295	Not Specified	PASS

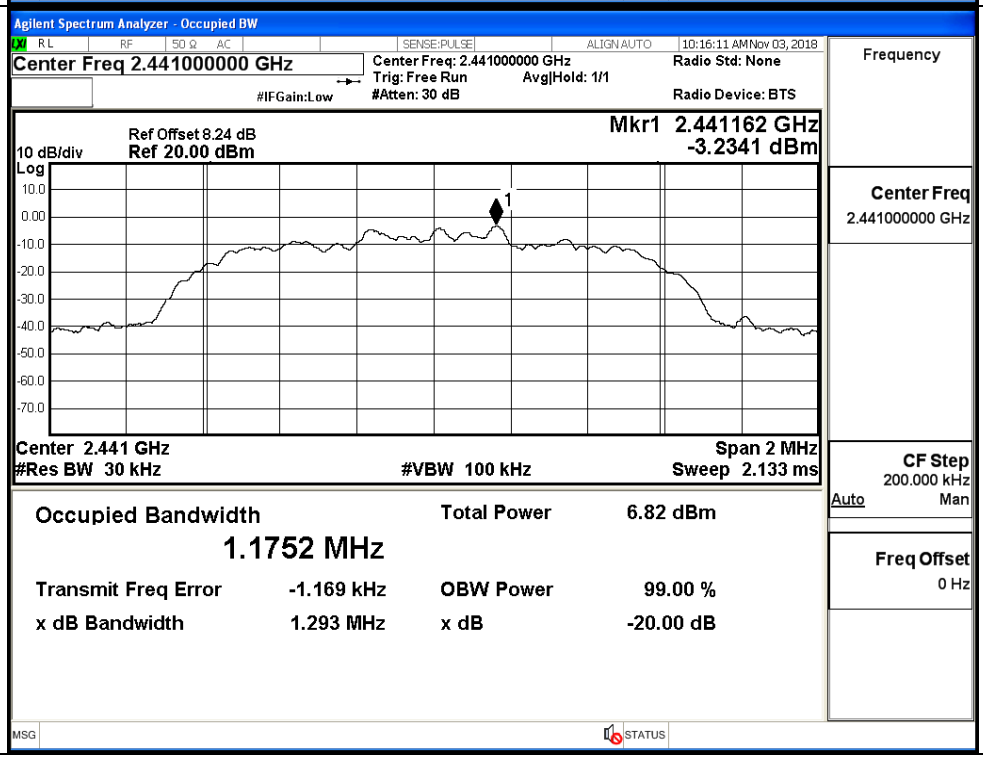
Test Graphs	
GFSK/LCH	

GFSK/MCH	
GFSK/HCH	

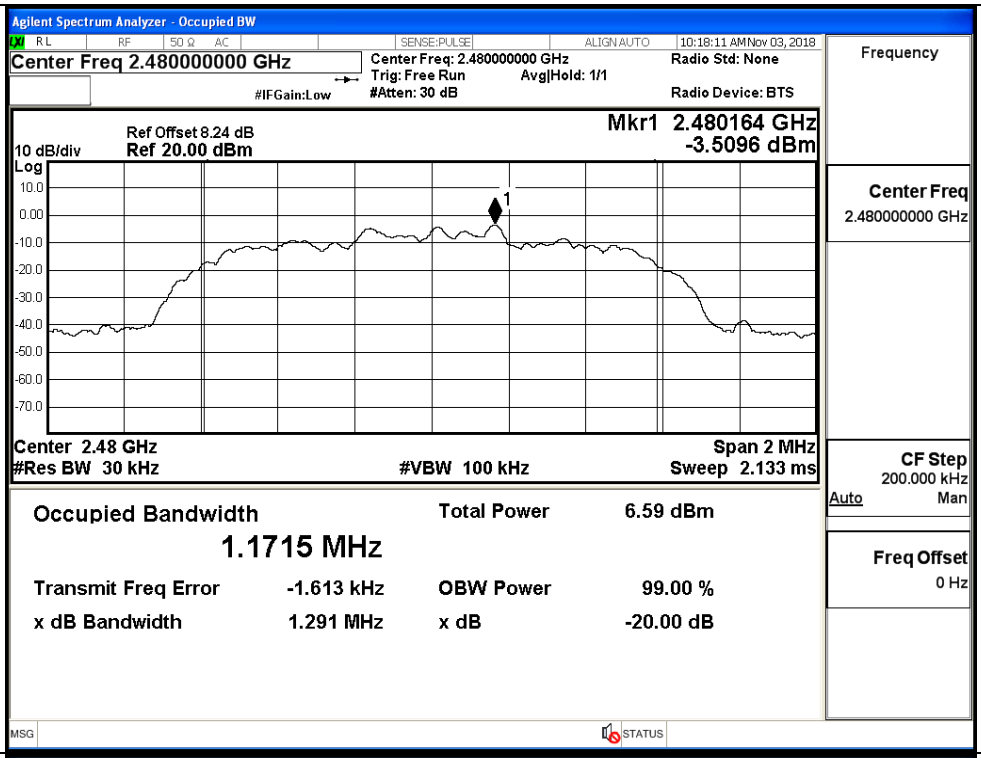
π/4DQPSK/LCH



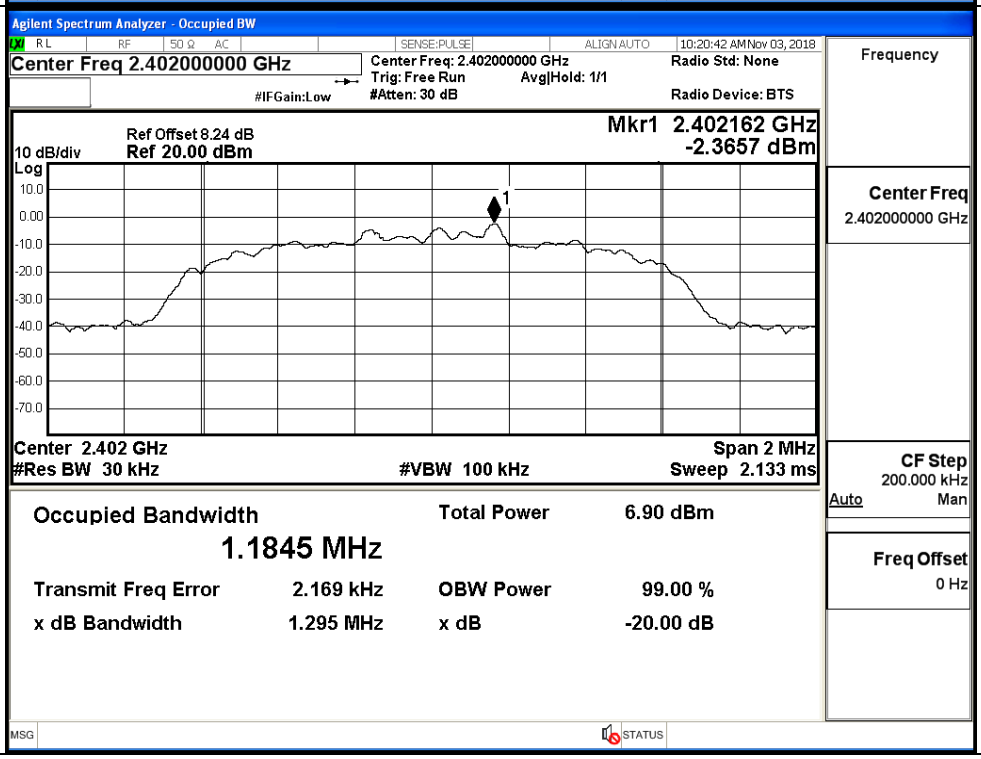
π/4DQPSK/MCH



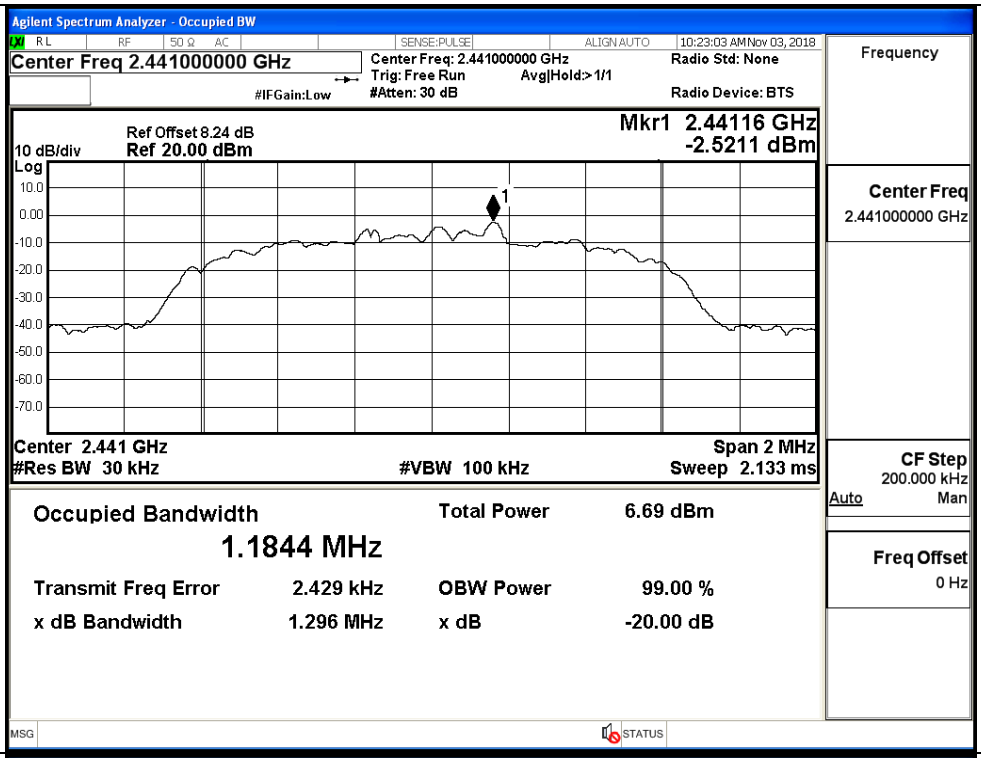
π/4DQPSK/HCH



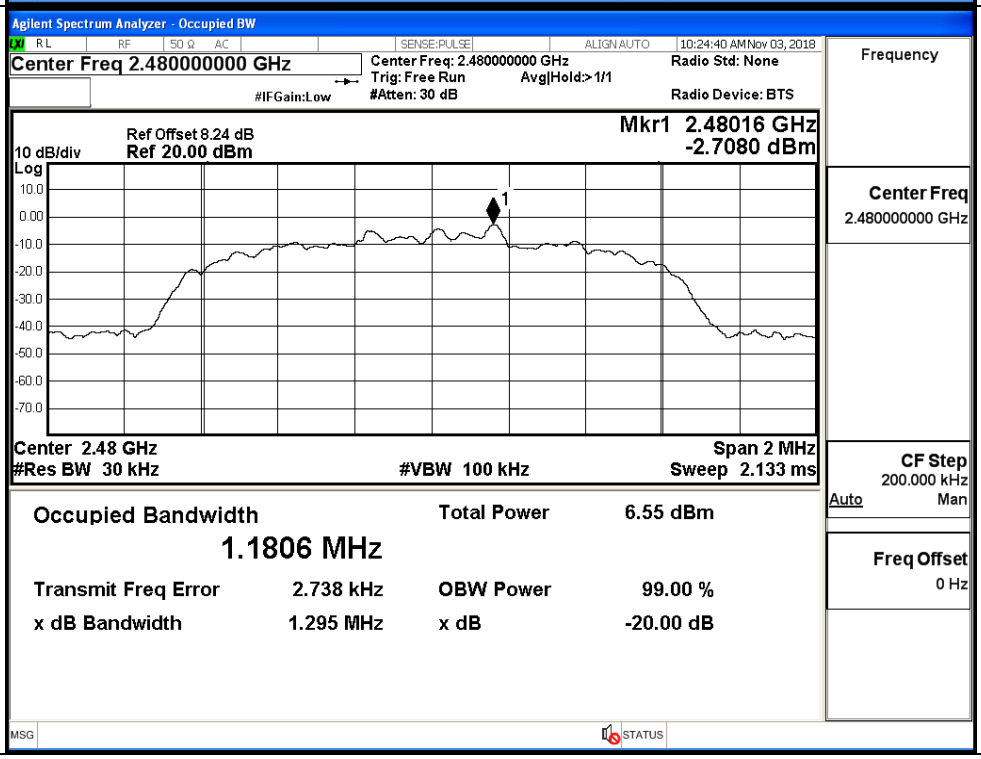
8DPSK/LCH



8DPSK/MCH

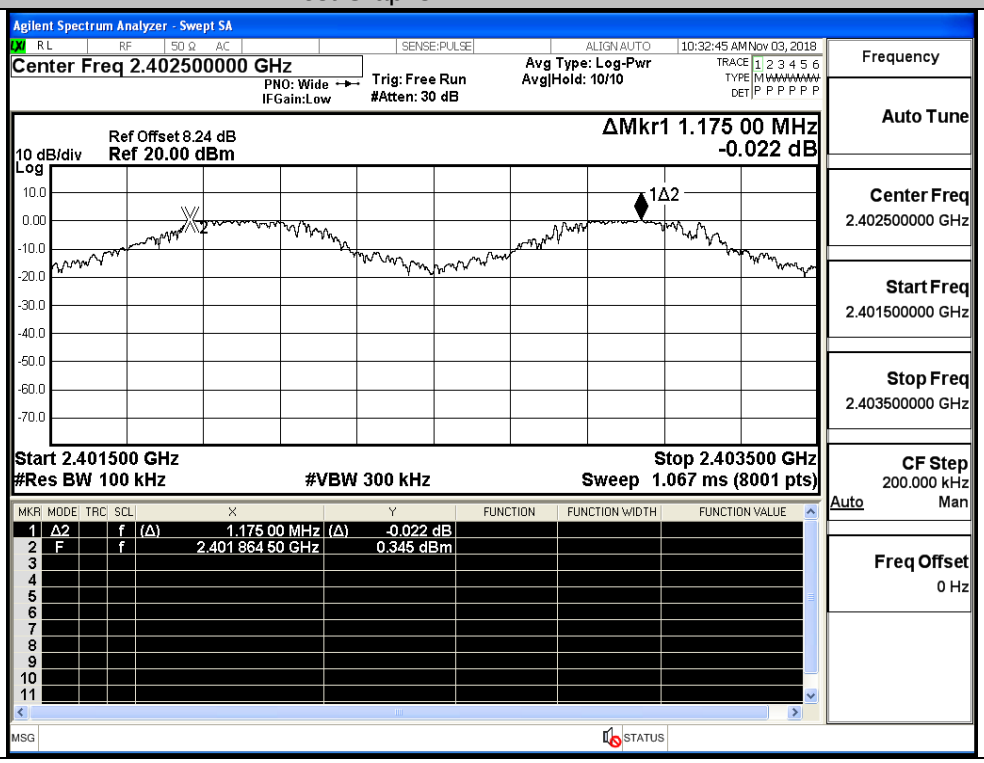


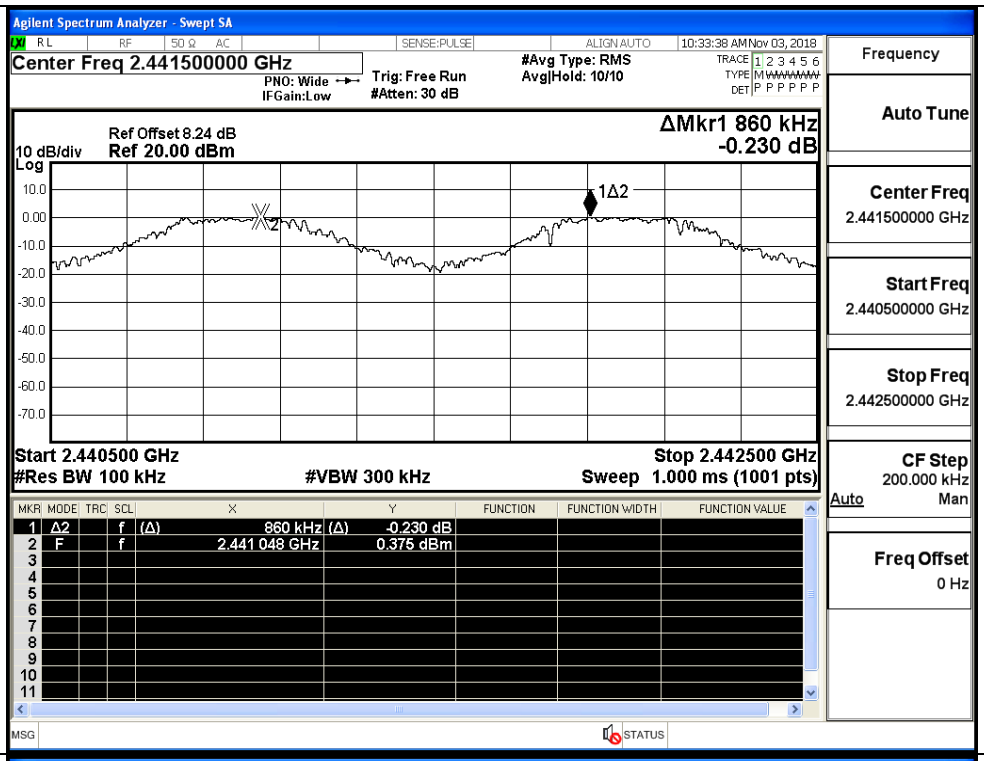
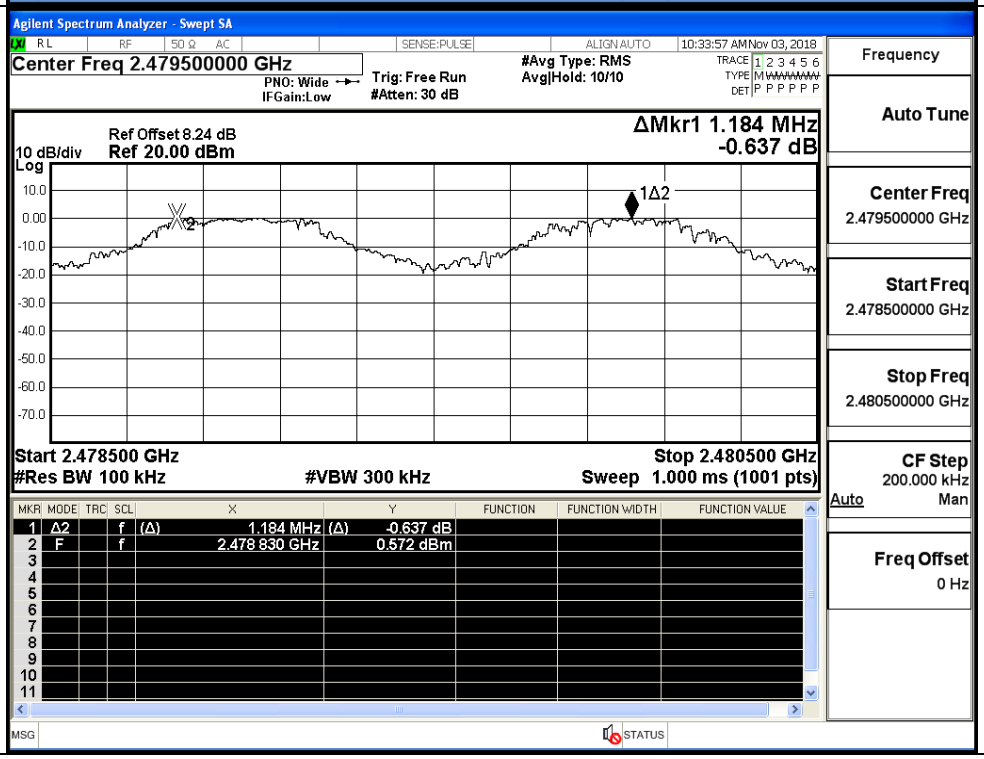
8DPSK/HCH

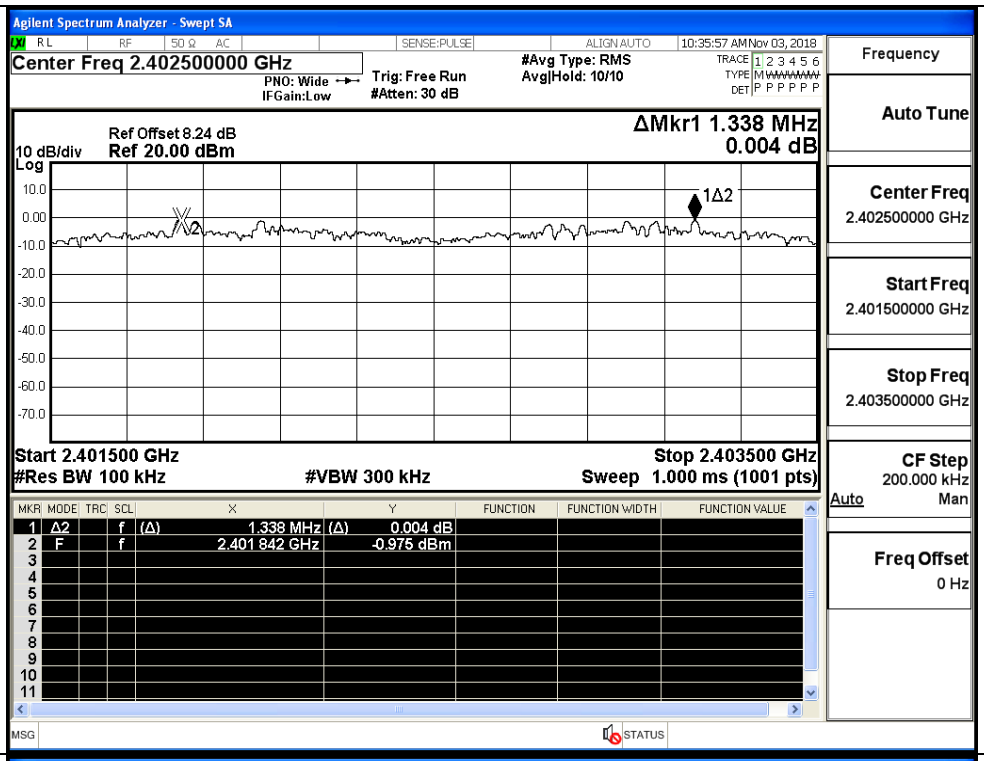
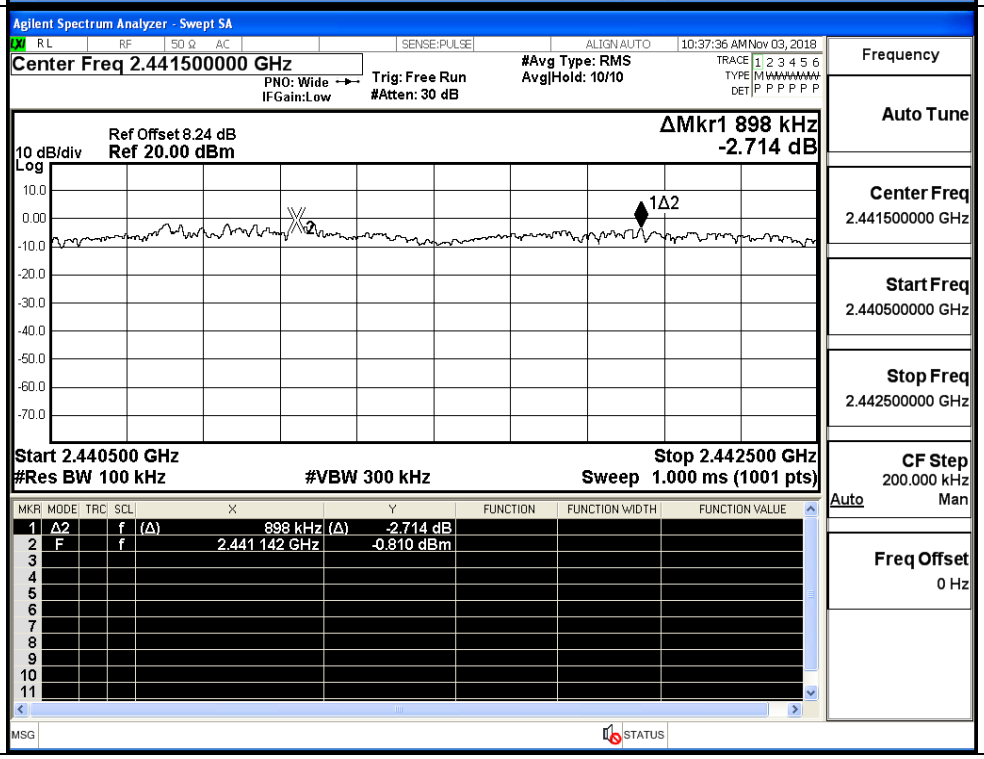


A.3 Carrier Frequency Separation

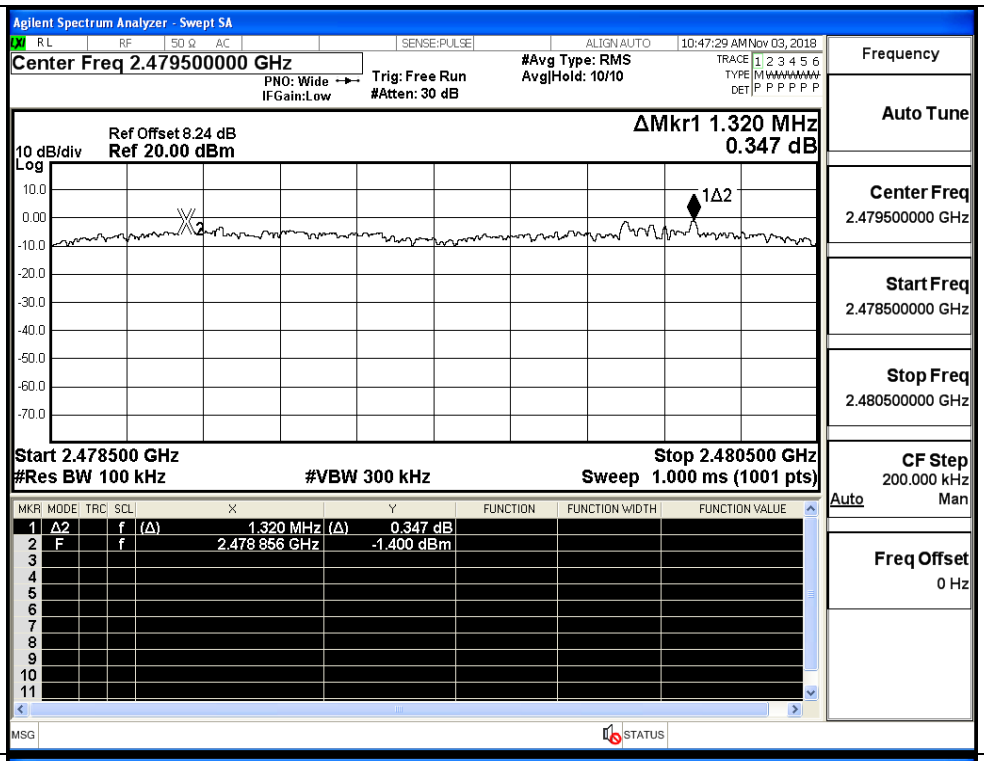
Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.175	0.695	PASS
	MCH	0.860	0.695	PASS
	HCH	1.184	0.695	PASS
π/4DQPSK	LCH	1.338	0.872	PASS
	MCH	0.898	0.872	PASS
	HCH	1.320	0.872	PASS
8DPSK	LCH	0.890	0.864	PASS
	MCH	1.000	0.864	PASS
	HCH	1.238	0.864	PASS

Test Graphs		
GFSK/LCH		

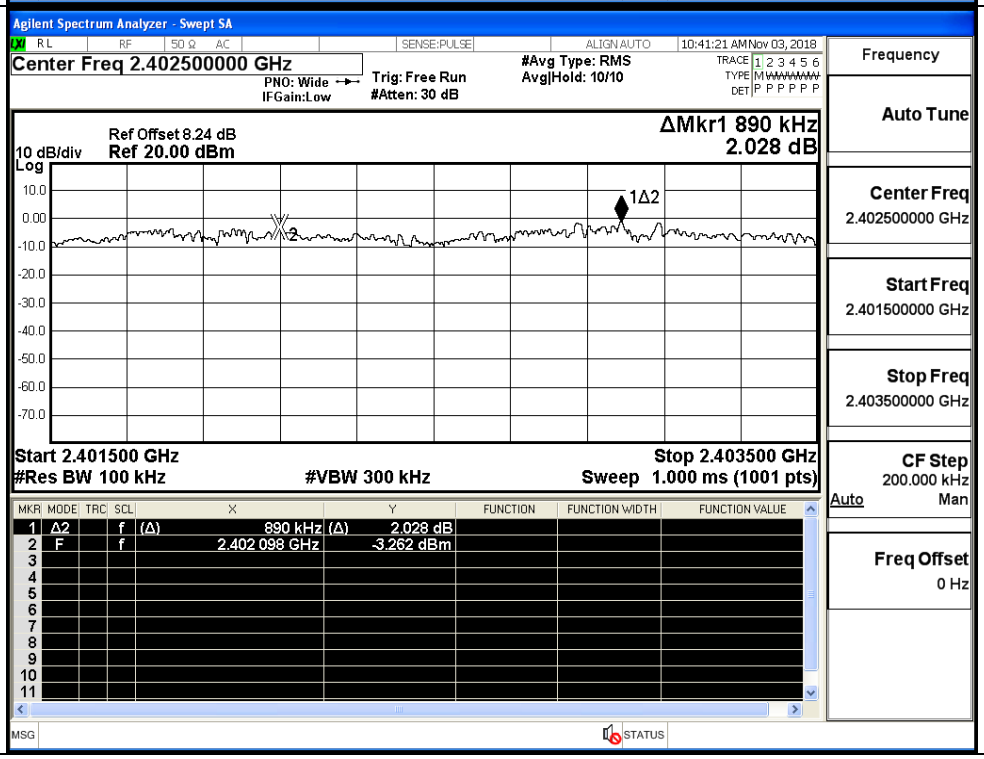
GFSK/MCH		
GFSK/HCH		

π/4DQPSK/LCH		
π/4DQPSK/MCH		

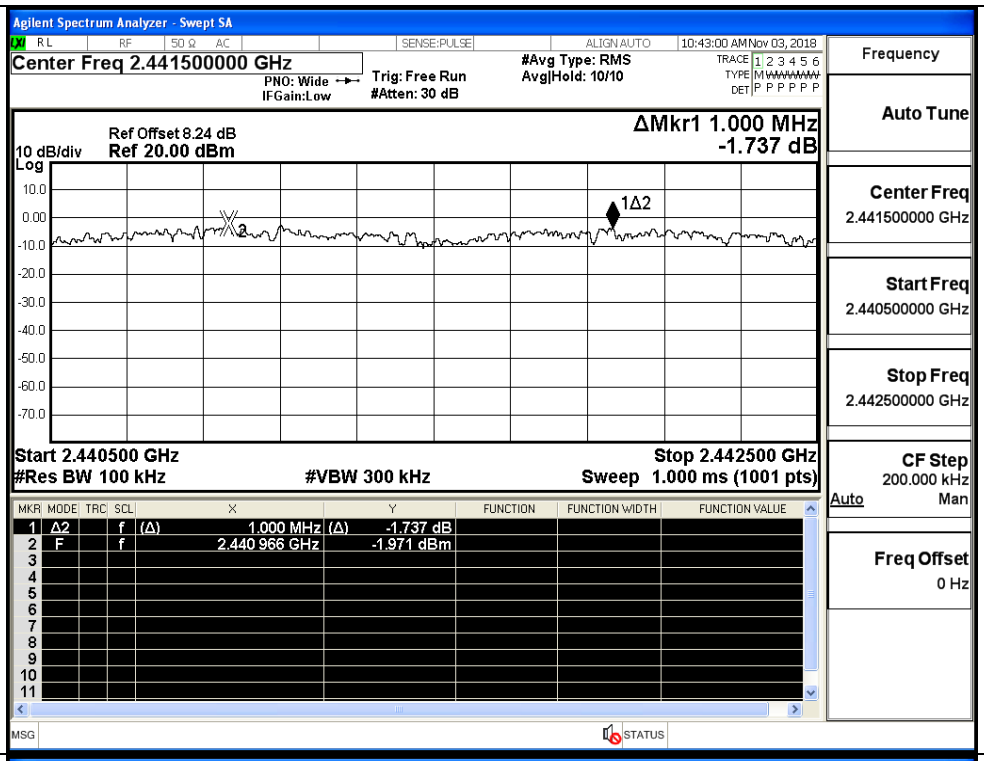
π/4DQPSK/HCH



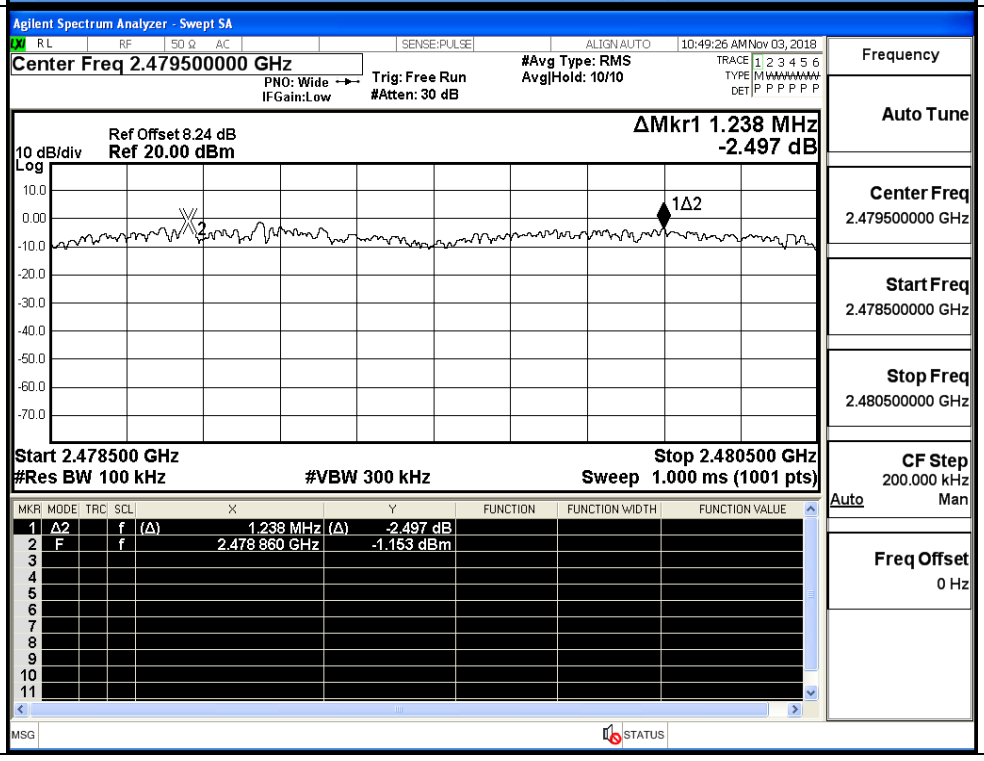
8DPSK/LCH



8DPSK/MCH

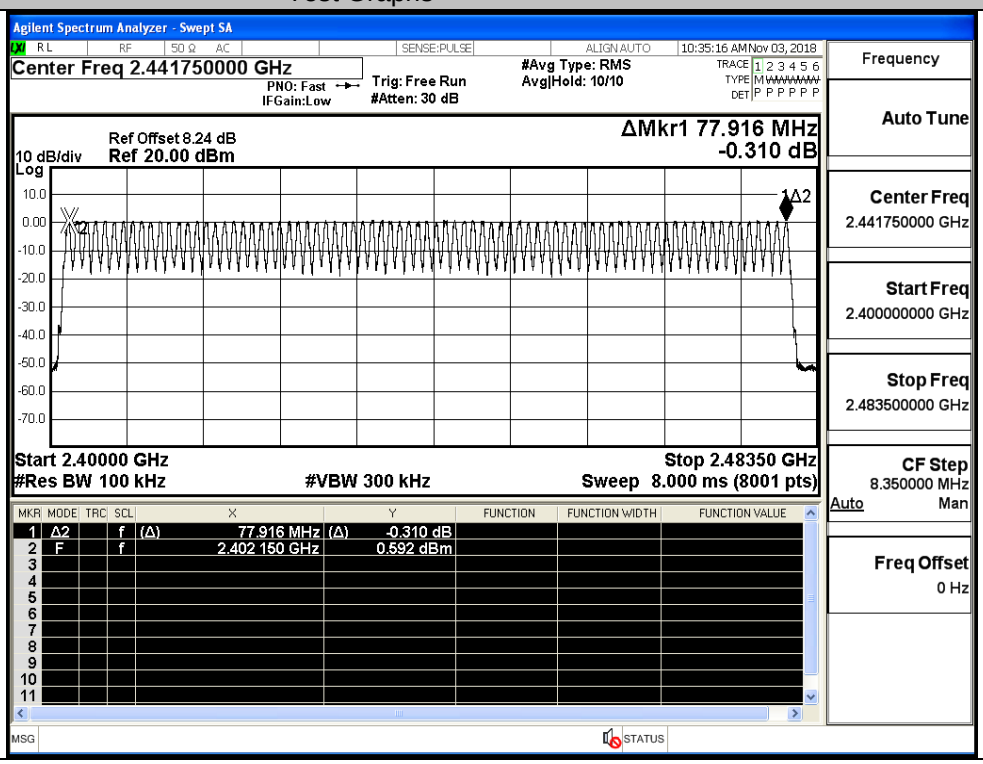


8DPSK/HCH

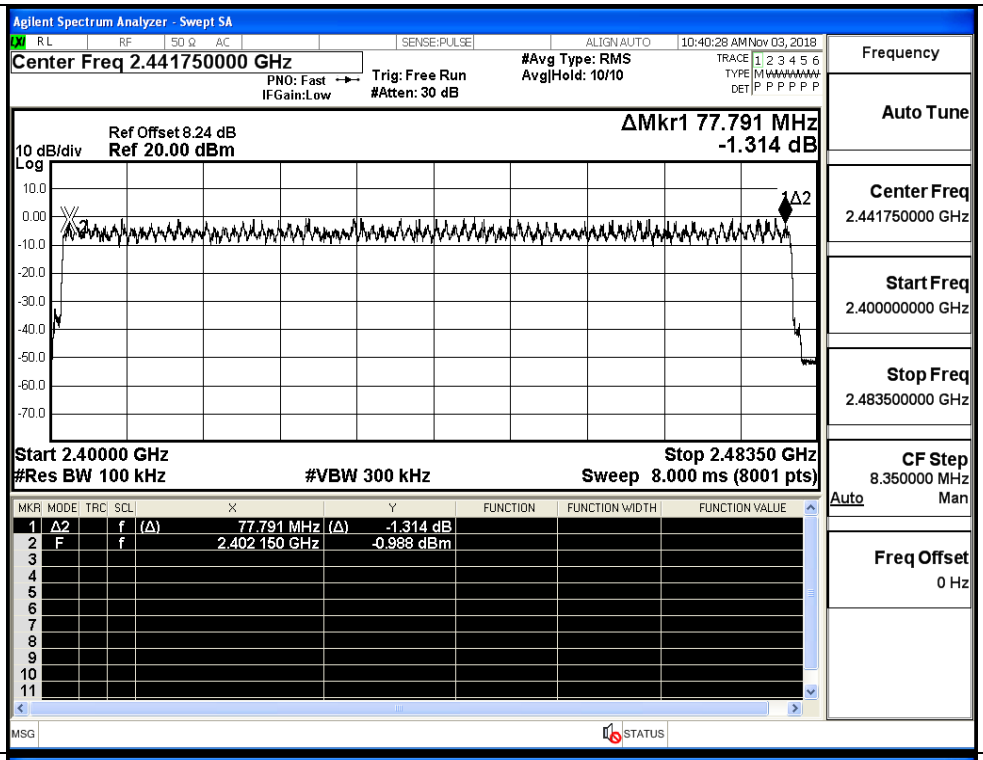


A.4 Hopping Channel Number

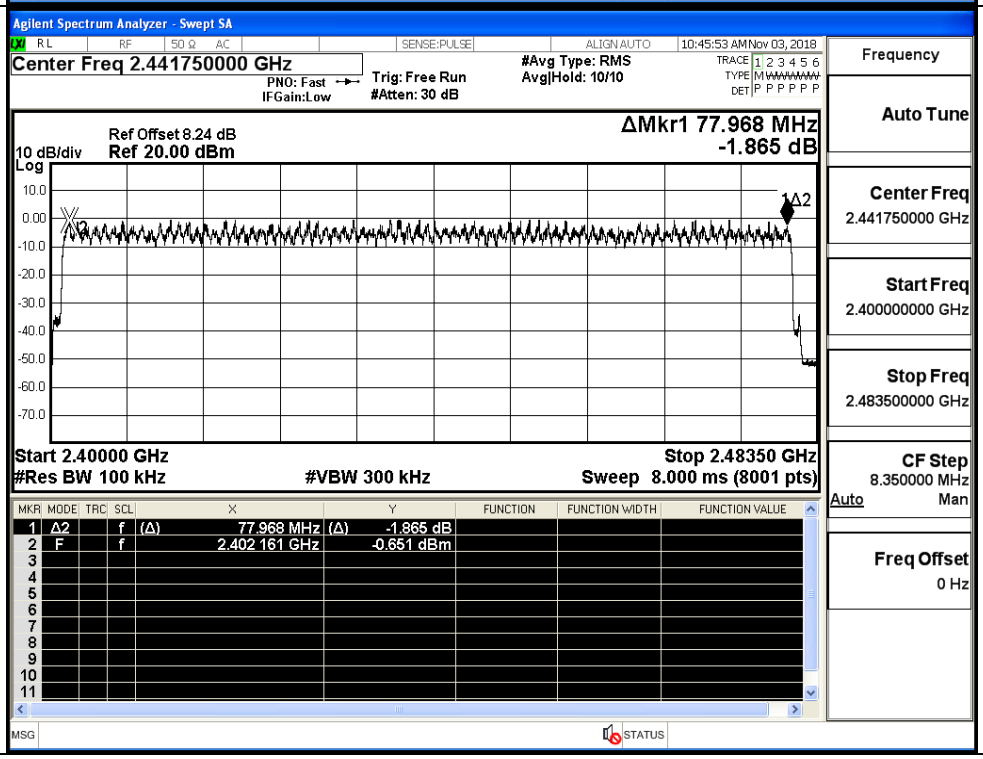
Mode	Channel.	Number of Hopping Channel [N]	Limit [N]	Verdict
GFSK	Hop	79	>=15	PASS
π/4DQPSK	Hop	79	>=15	PASS
8DPSK	Hop	79	>=15	PASS

Test Graphs	
GFSK/Hop	

π/4DQPSK/Hop

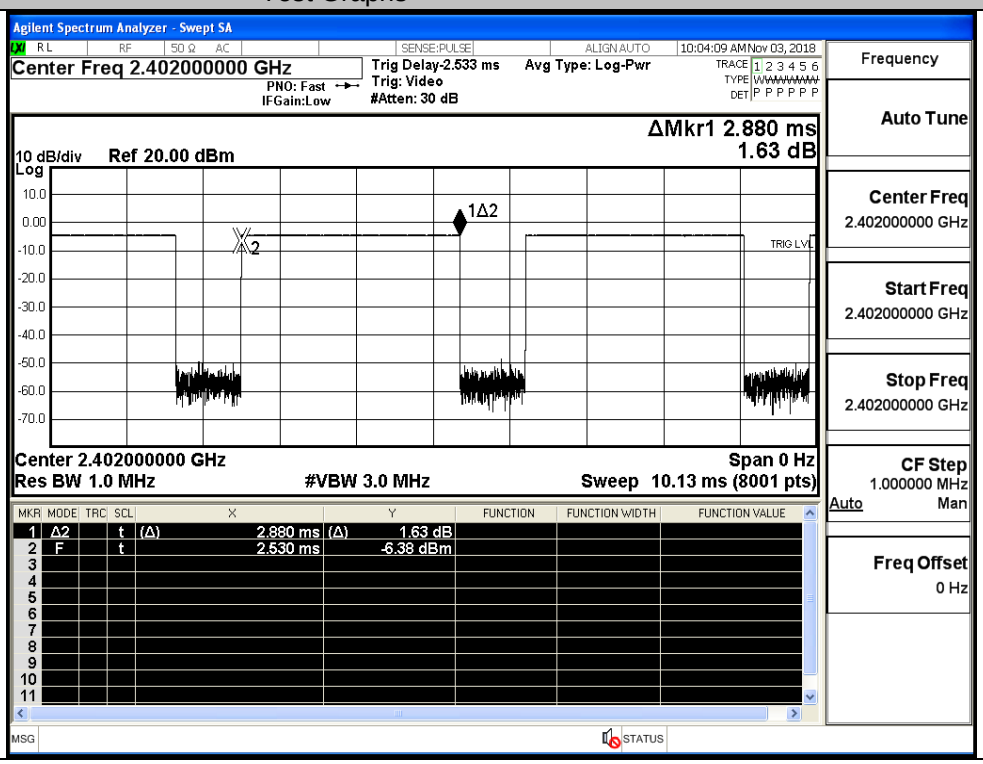


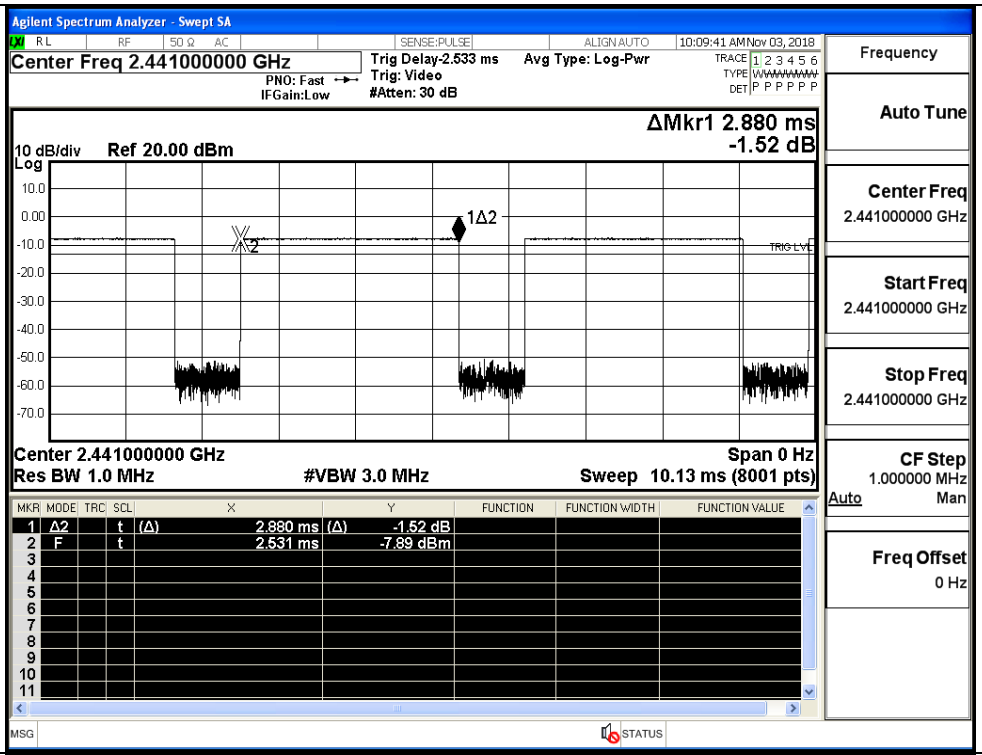
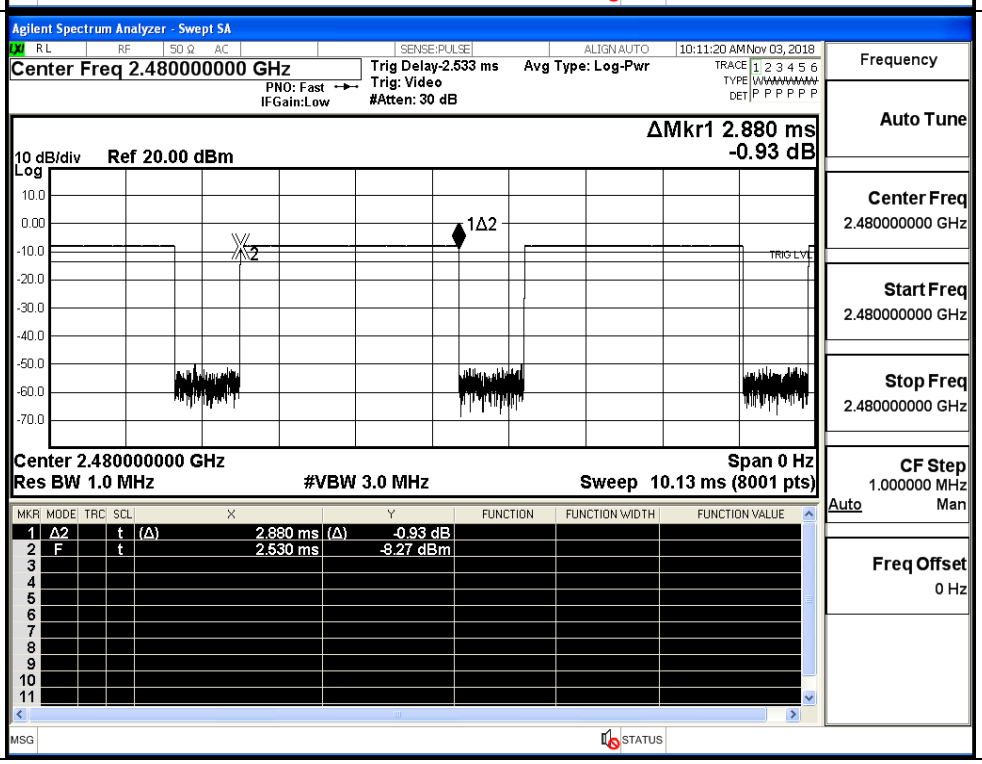
8DPSK/Hop

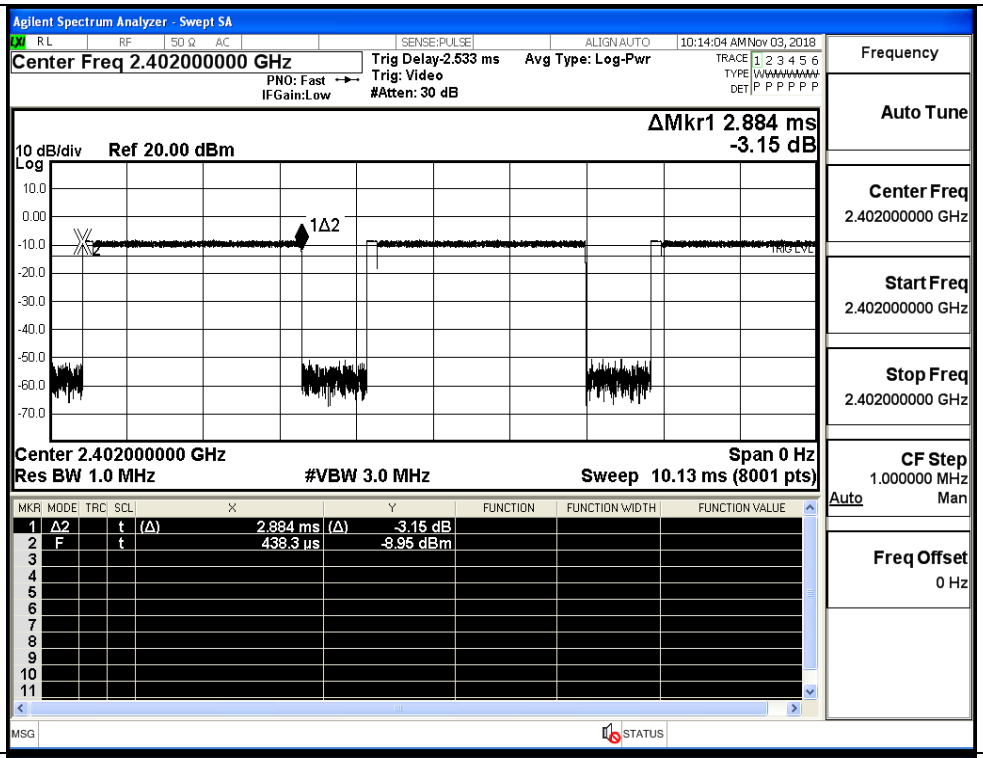
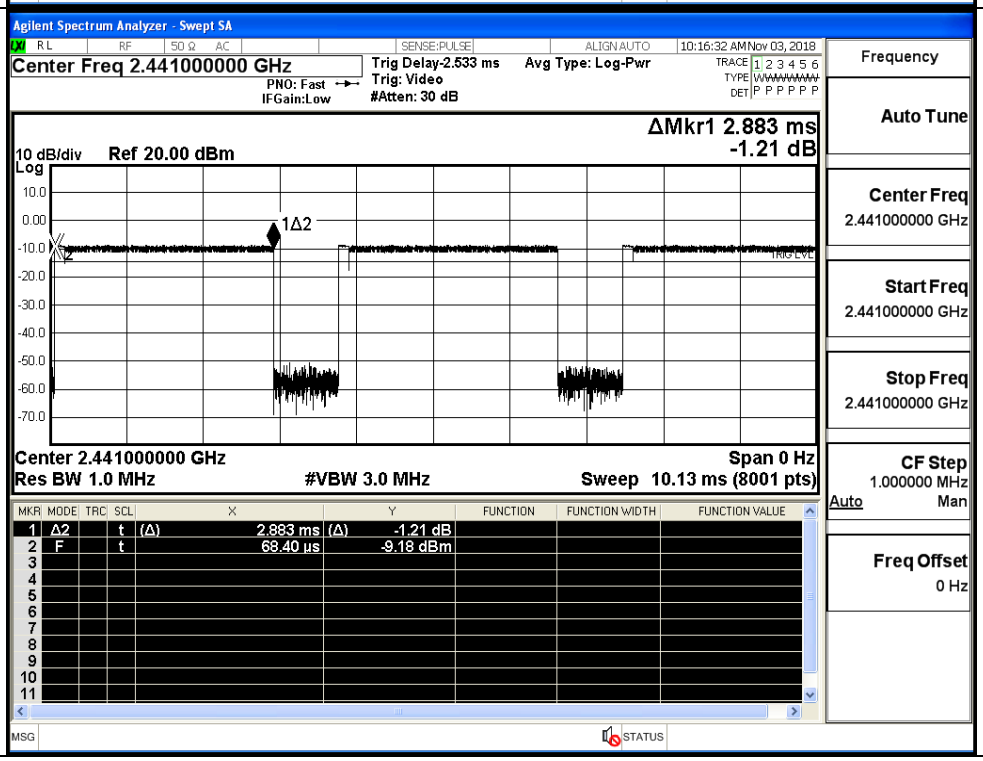


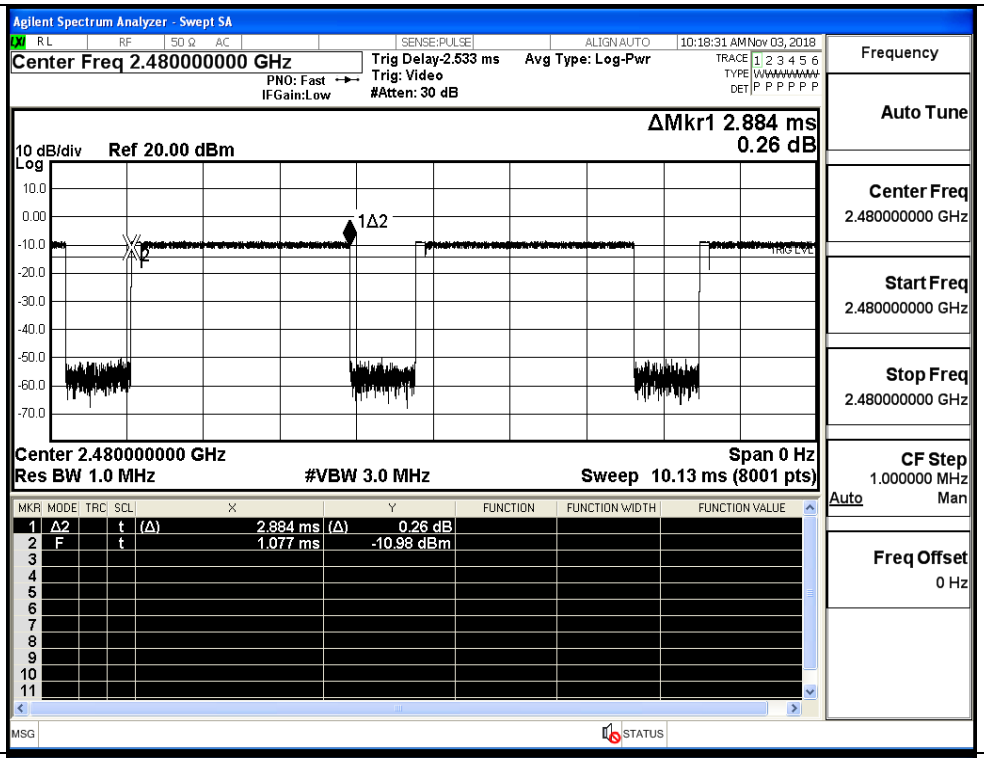
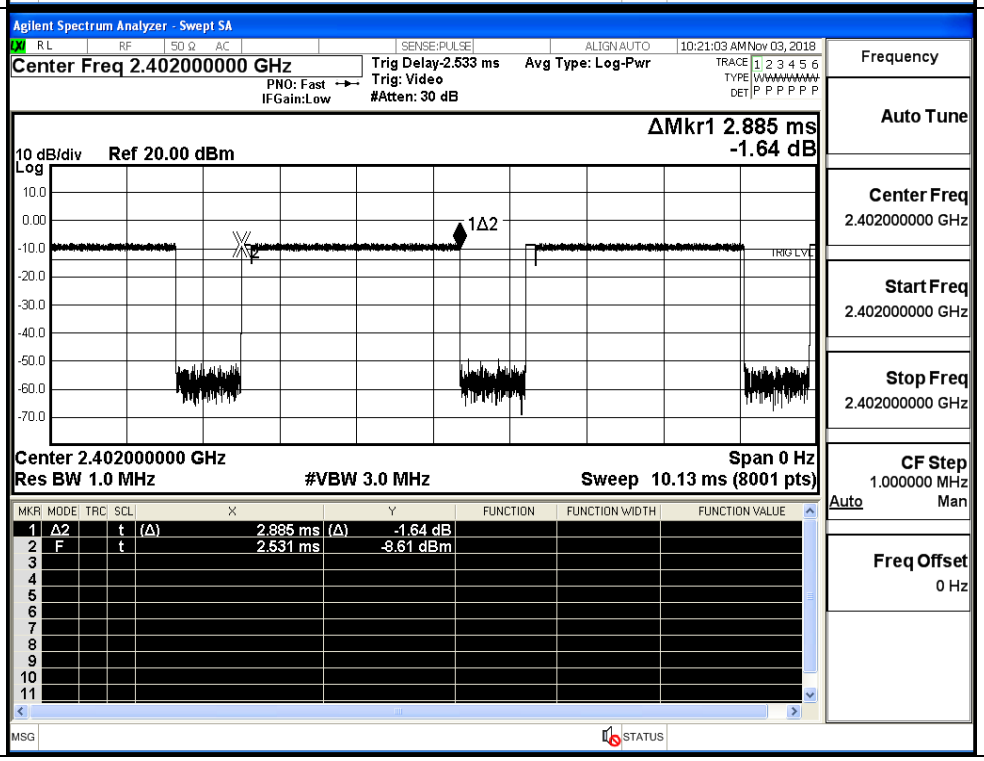
A.5 Dwell Time

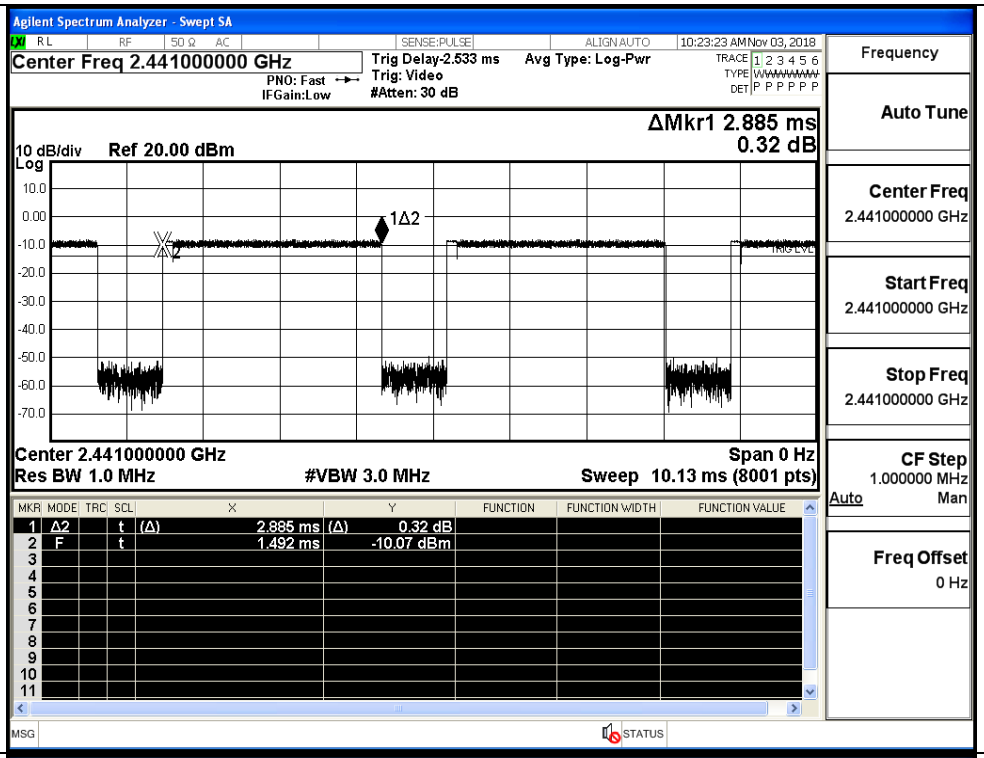
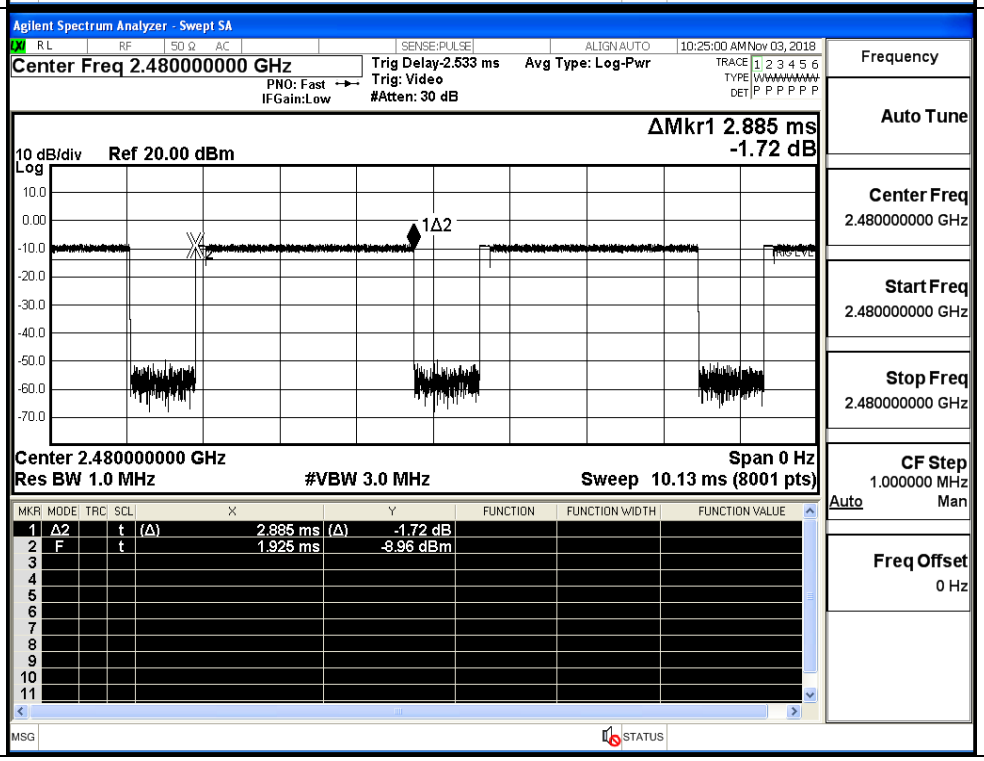
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.88	106.7	0.307	0.4	PASS
	DH5	MCH	2.88	106.7	0.307	0.4	PASS
	DH5	HCH	2.88	106.7	0.307	0.4	PASS
π/4DQPSK	2DH5	LCH	2.88	106.7	0.307	0.4	PASS
	2DH5	MCH	2.88	106.7	0.307	0.4	PASS
	2DH5	HCH	2.88	106.7	0.307	0.4	PASS
8DPSK	3DH5	LCH	2.89	106.7	0.308	0.4	PASS
	3DH5	MCH	2.89	106.7	0.308	0.4	PASS
	3DH5	HCH	2.89	106.7	0.308	0.4	PASS

Test Graphs	
GFSK_DH5/LCH	

GFSK_DH5/MCH	
GFSK_DH5/HCH	

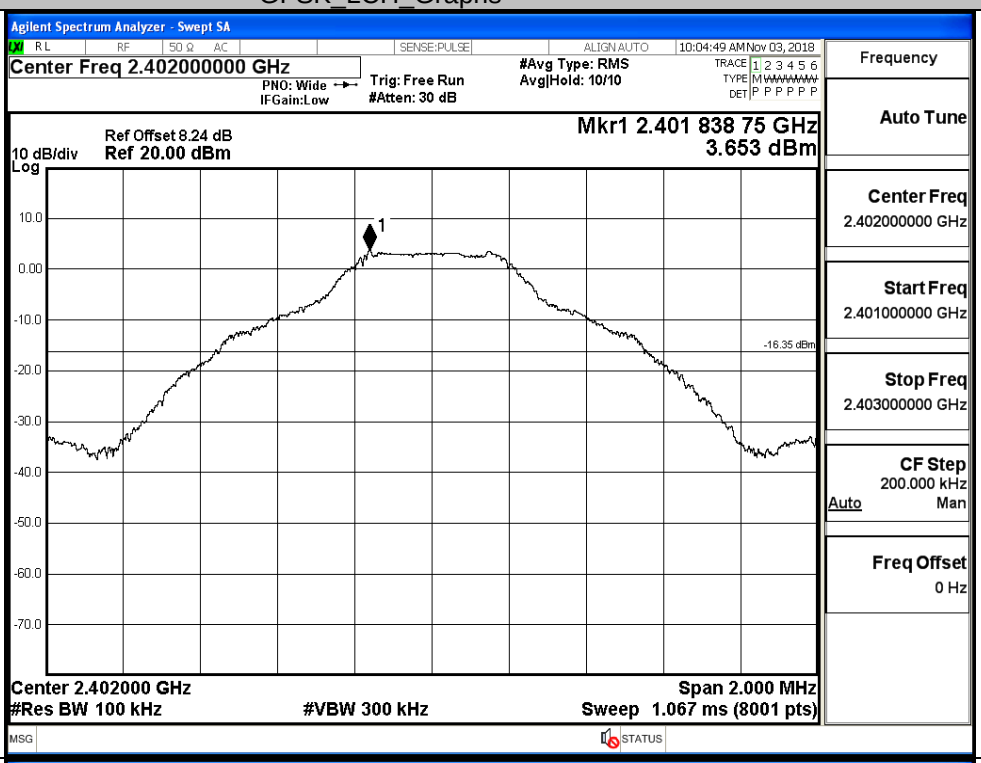
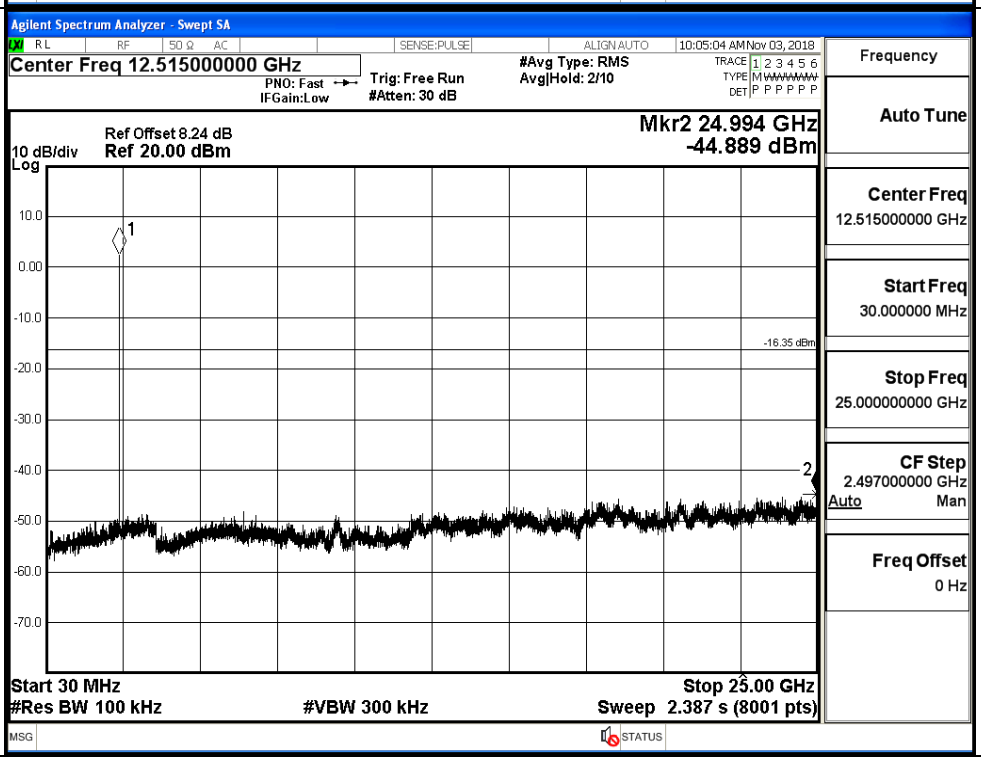
π/4DQPSK _2DH5/LCH	
π/4DQPSK _2DH5/MCH	

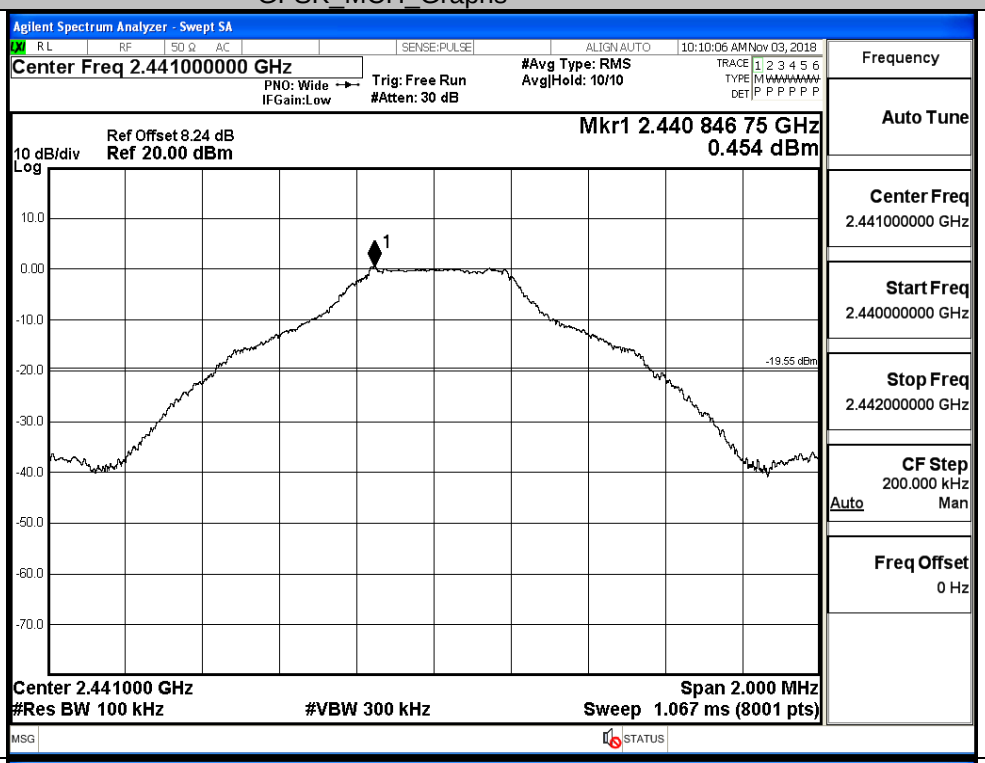
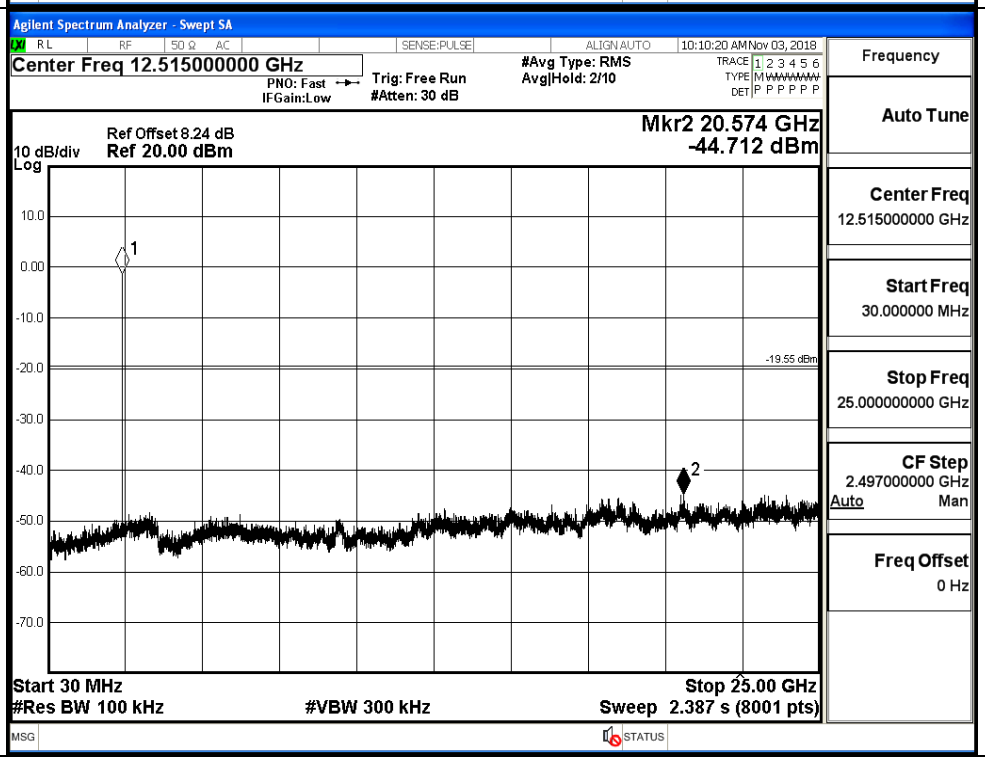
π/4DQPSK _2DH5/HCH	
8DPSK _3DH5/LCH	

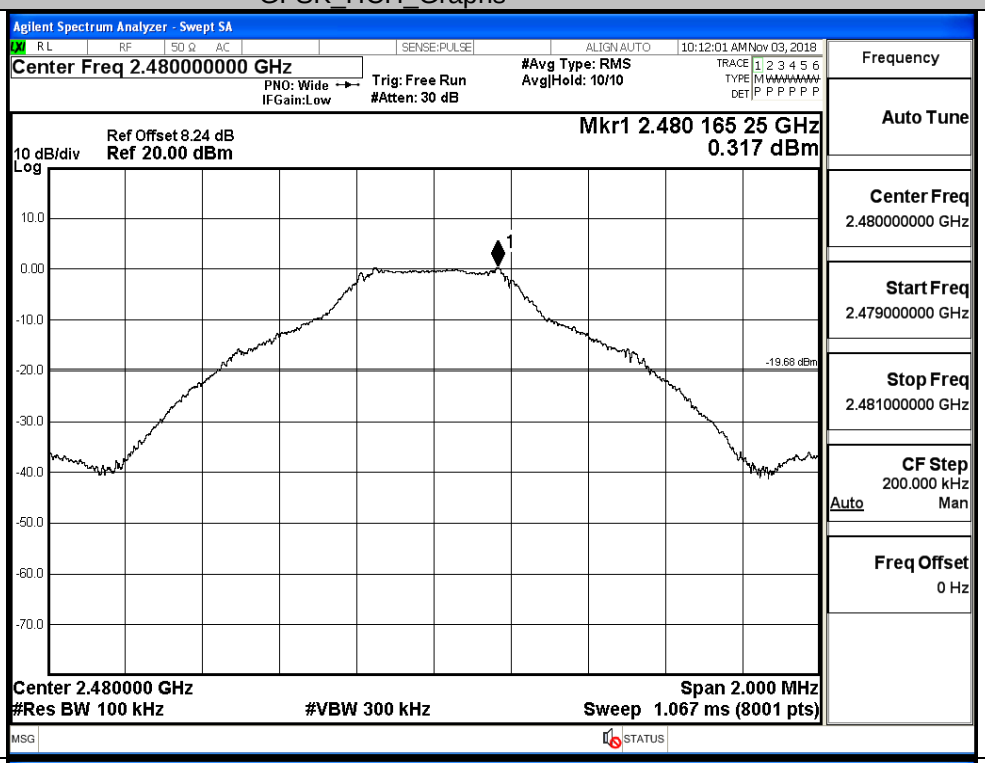
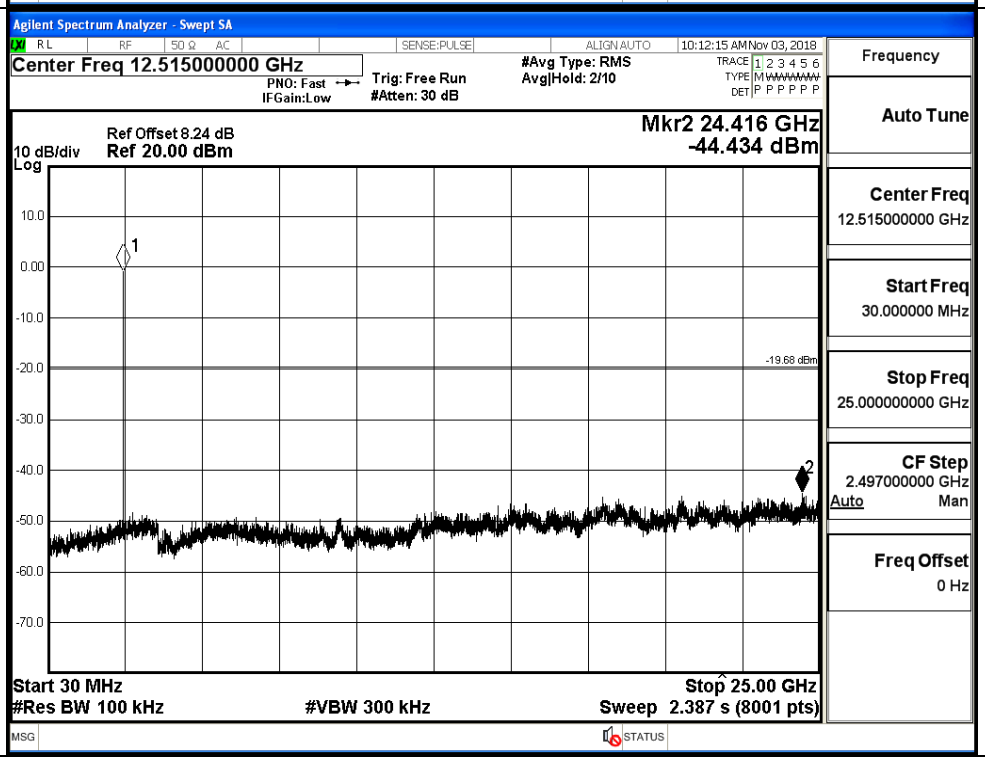
8DPSK _3DH5/MCH	
8DPSK _3DH5/HCH	

A.7 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	3.653	-44.889	-16.347	PASS
	MCH	0.454	-44.712	-19.546	PASS
	HCH	0.317	-44.434	-19.683	PASS
π/4DQPSK	LCH	-0.614	-43.407	-20.614	PASS
	MCH	-0.685	-44.702	-20.685	PASS
	HCH	-0.68	-43.296	-20.680	PASS
8DPSK	LCH	-0.271	-44.962	-20.271	PASS
	MCH	-0.434	-44.614	-20.434	PASS
	HCH	-0.745	-44.503	-20.745	PASS

GFSK_LCH_Graphs		
Pref		
Puw		

GFSK_MCH_Graphs		
Pref		
Puw		

GFSK_HCH_Graphs		
Pref		
Puw		

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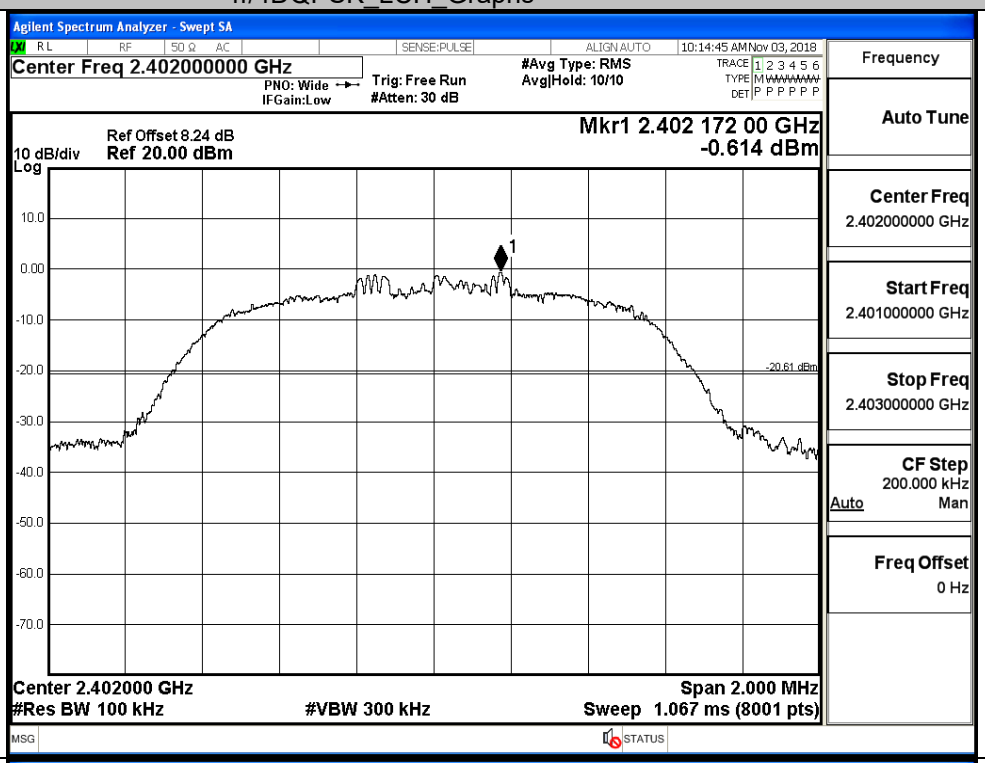
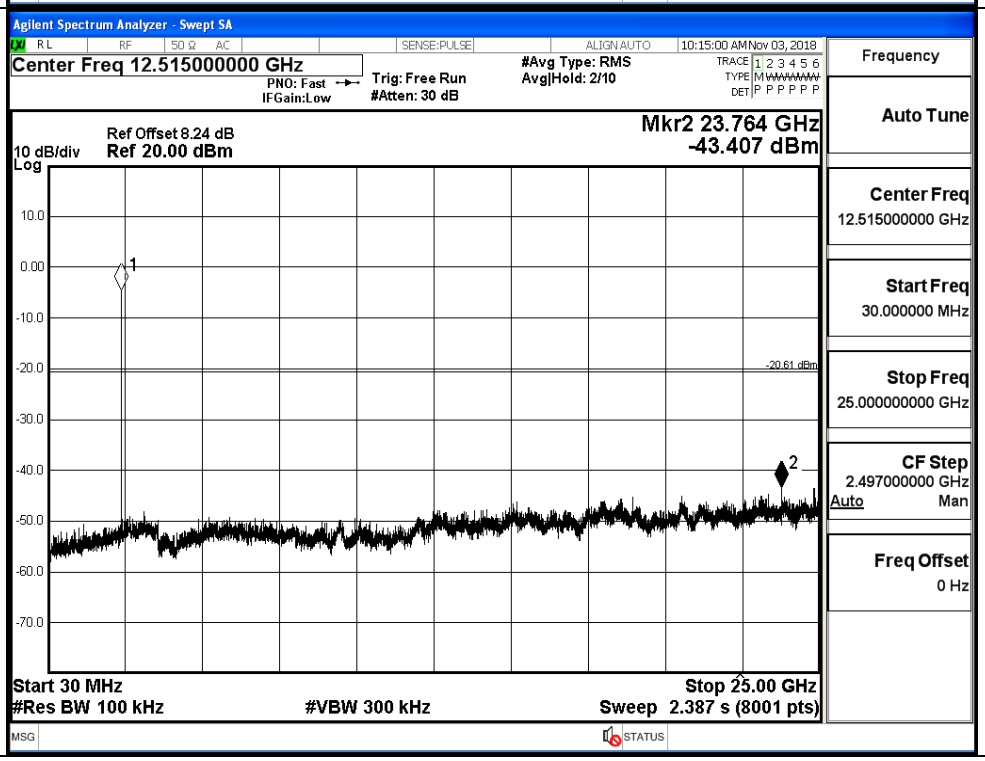
Pref		
Puw		

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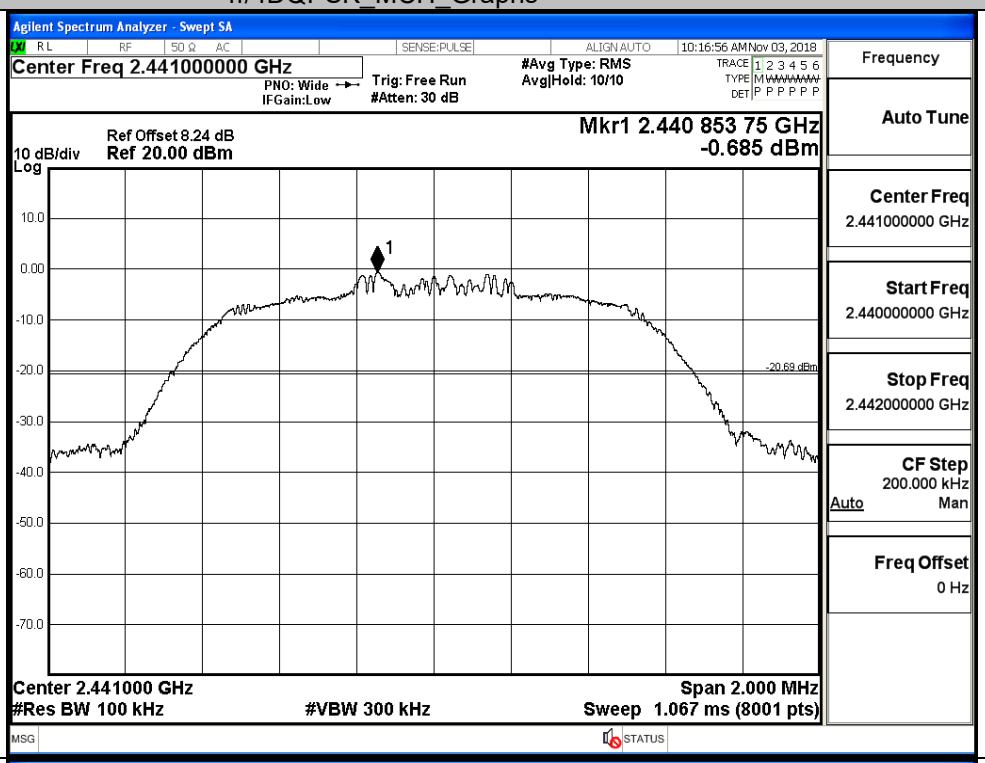
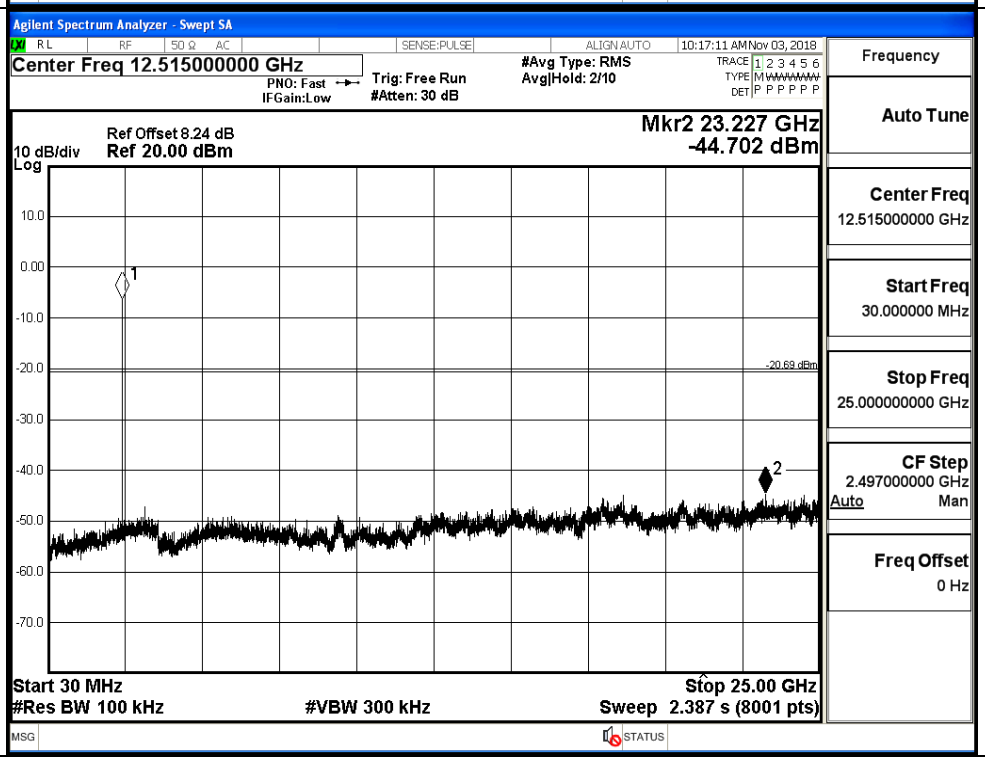
Pref		
Puw		

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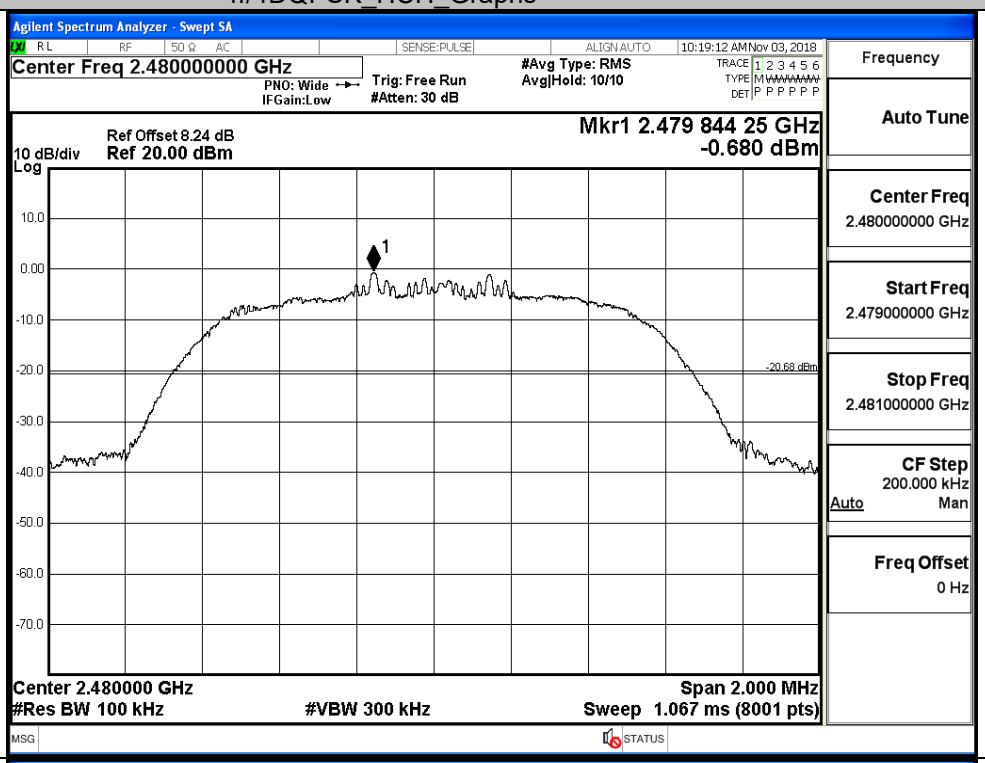
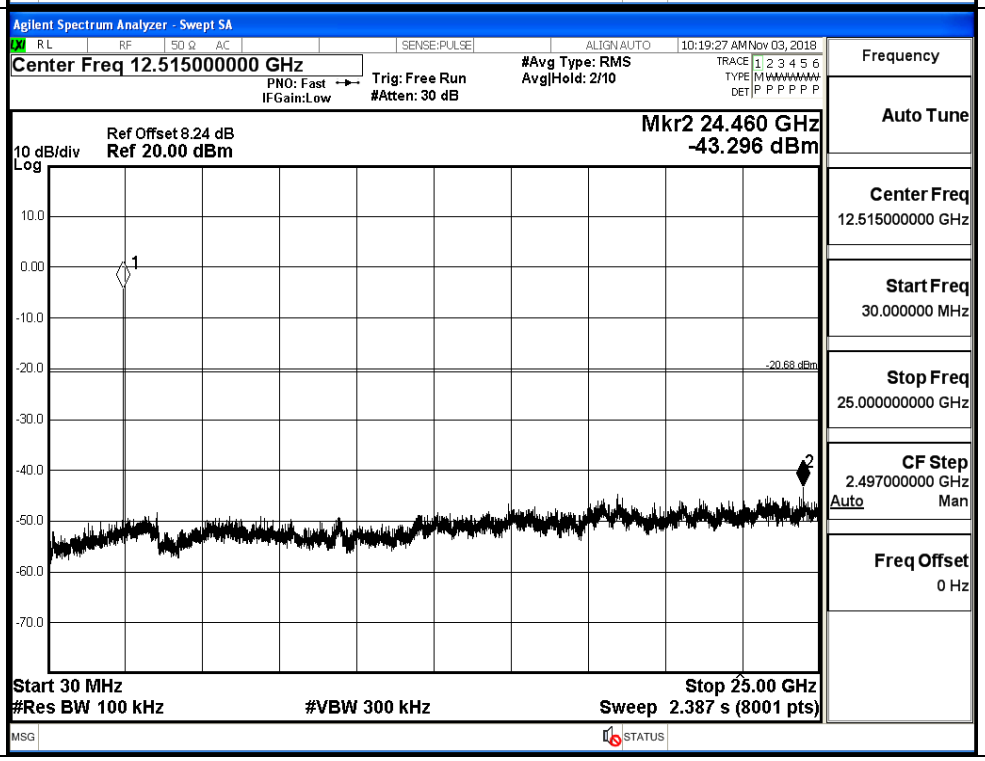
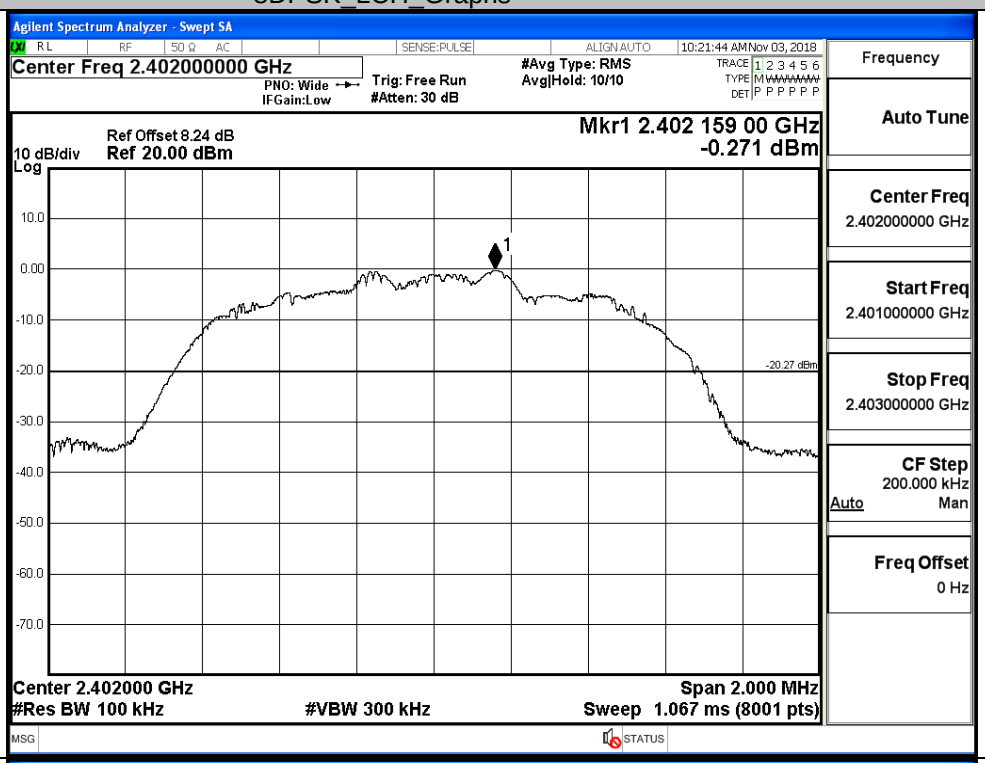
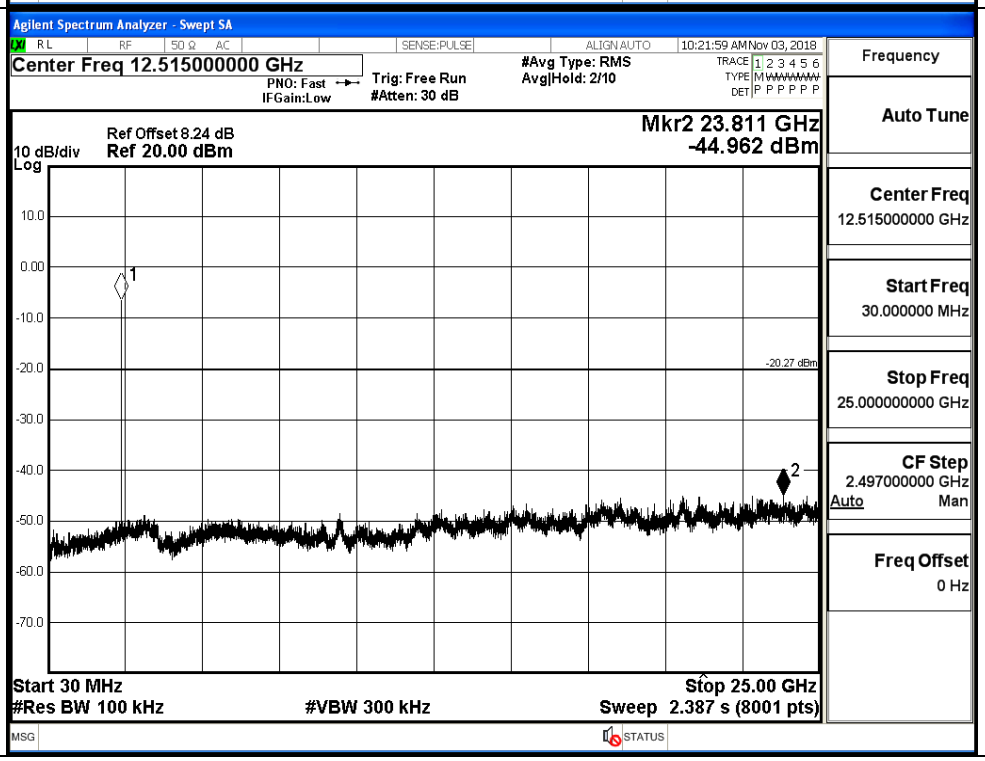
Pref		
Puw		

8DPSK_LCH_Graphs		
Pref		
Puw		

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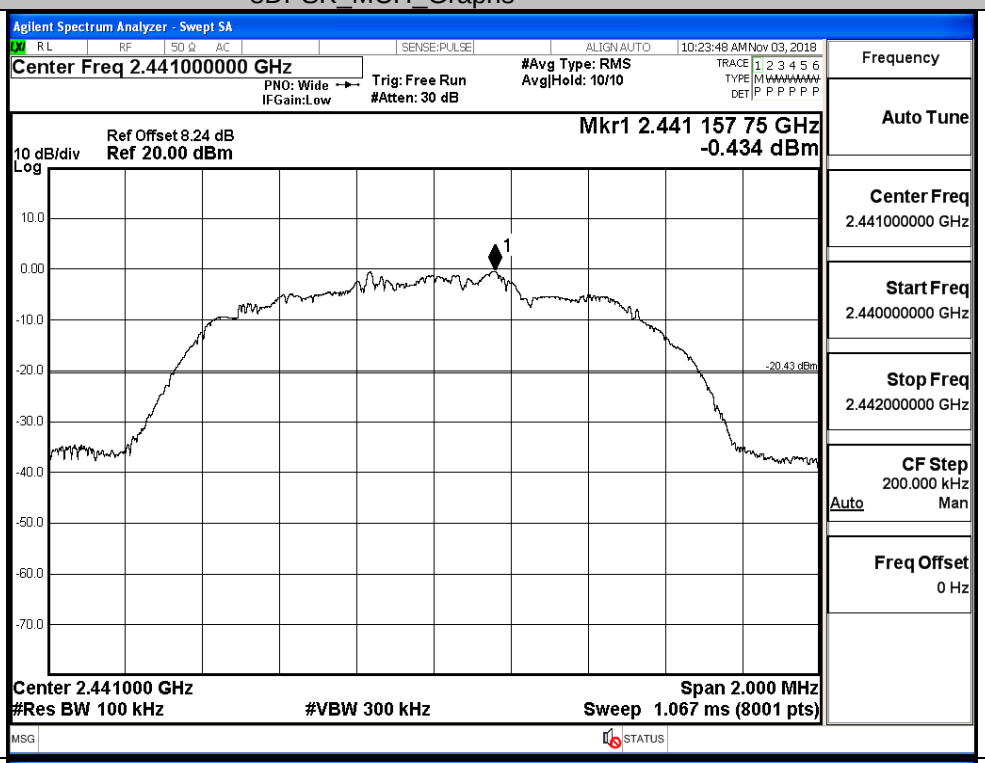
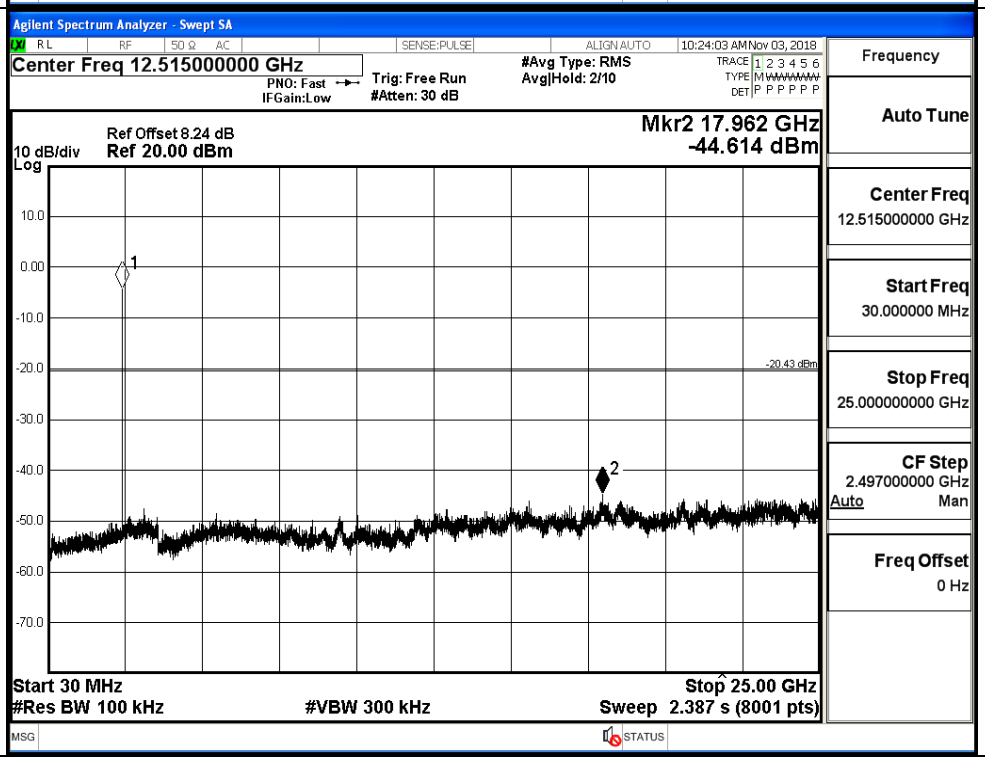
Pref		
Puw		

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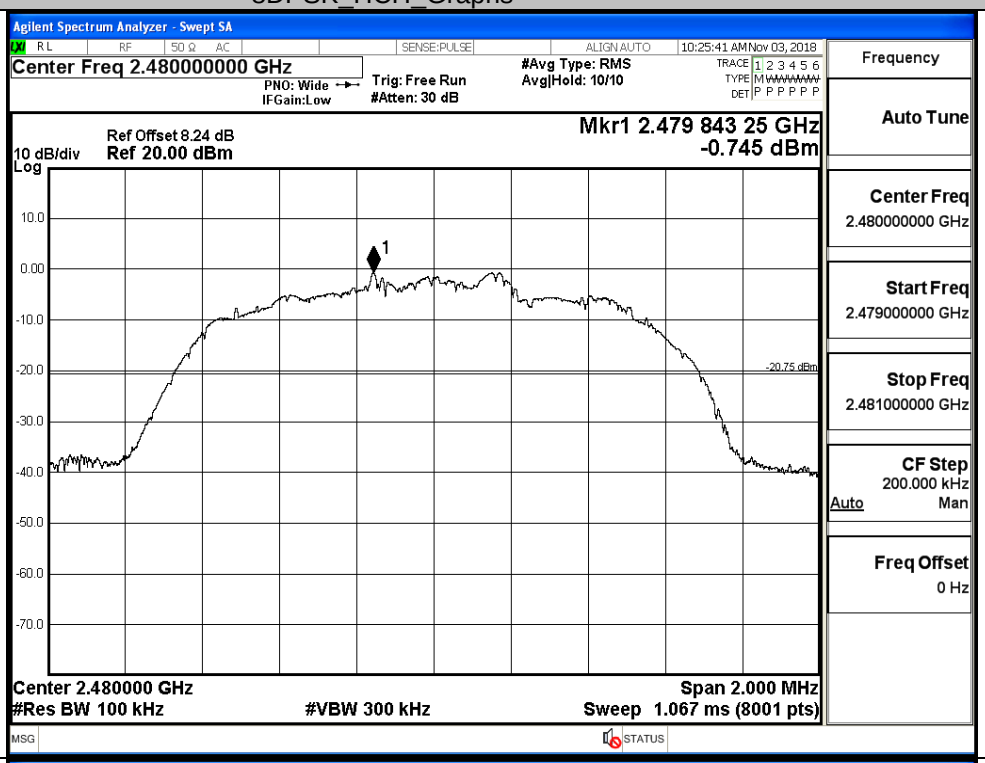
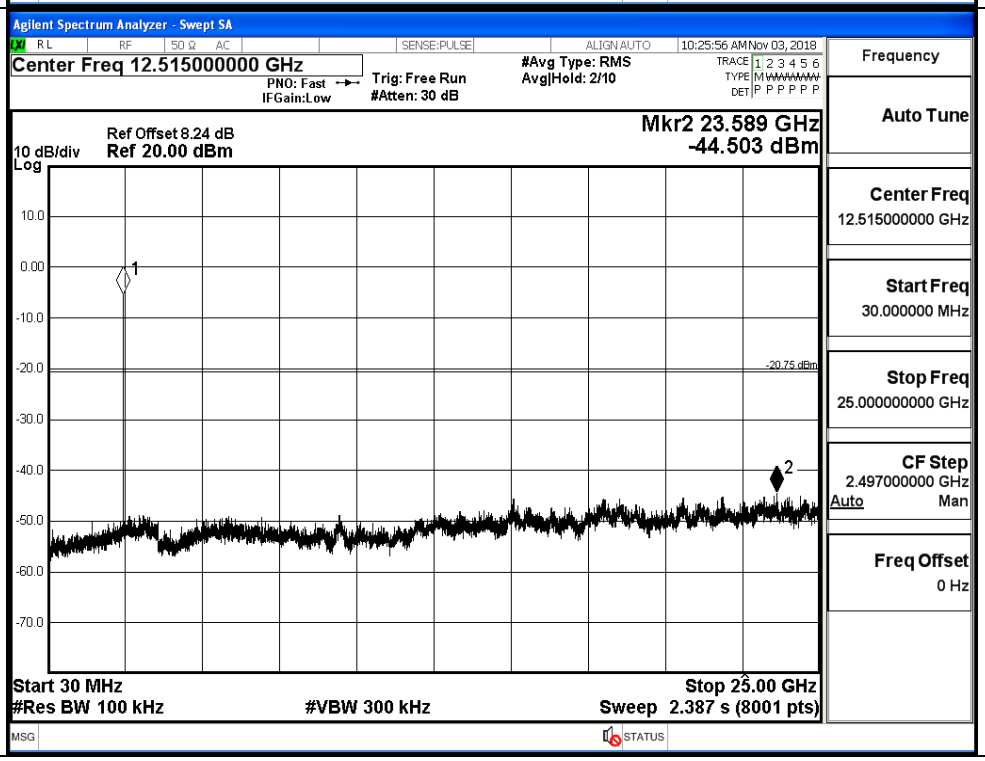
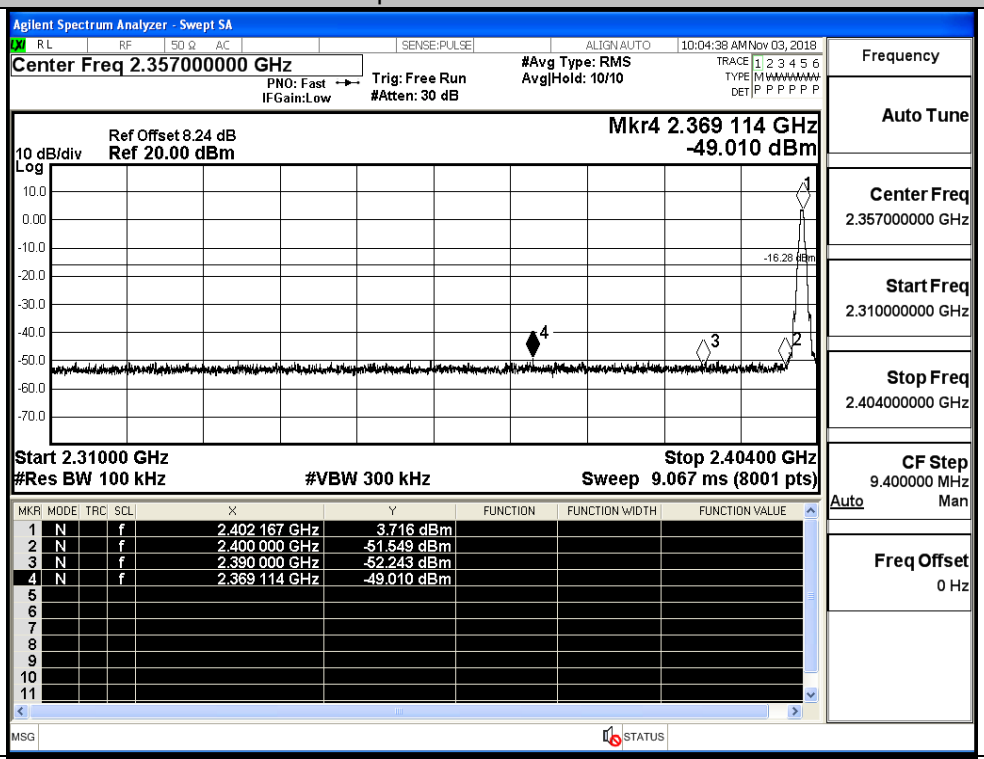
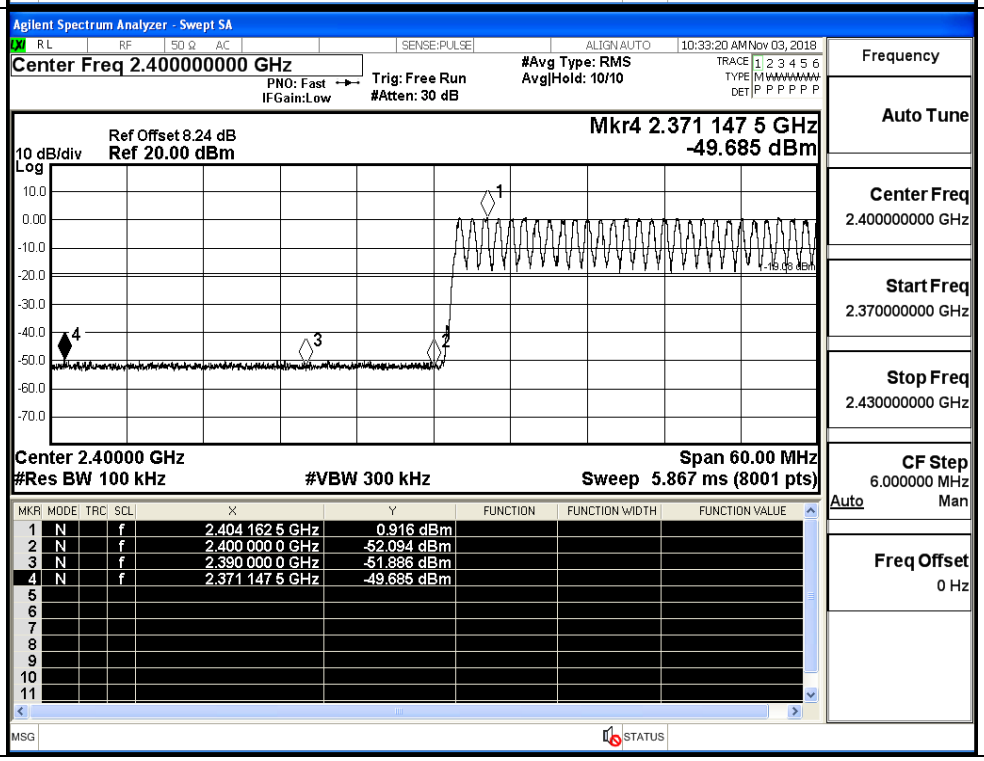
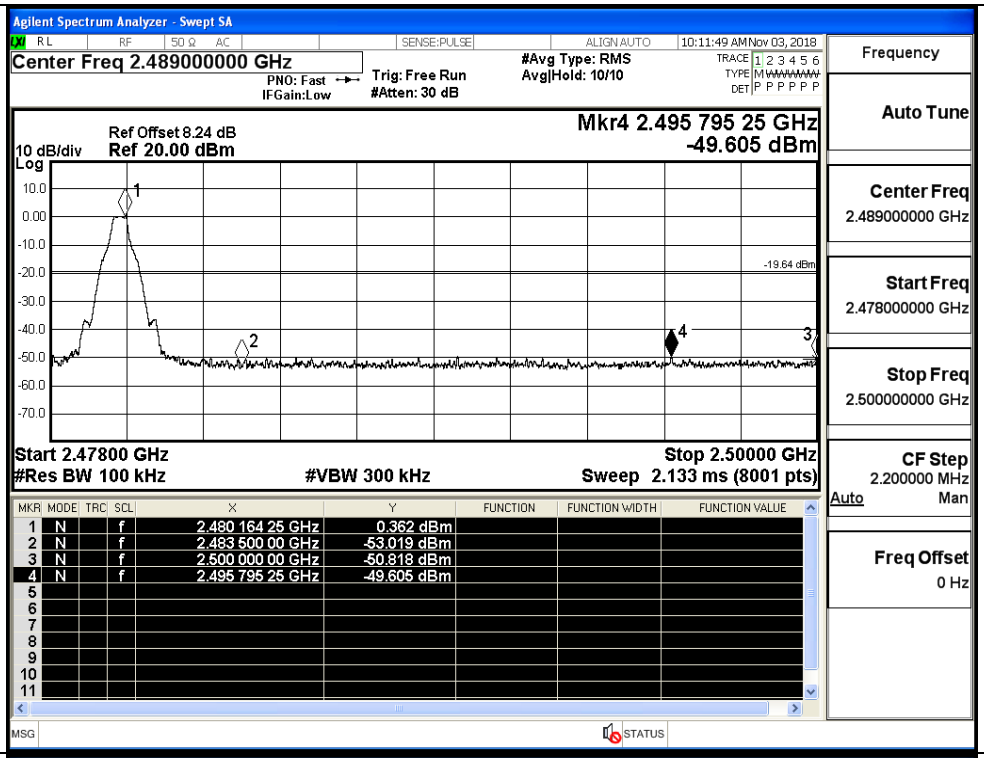
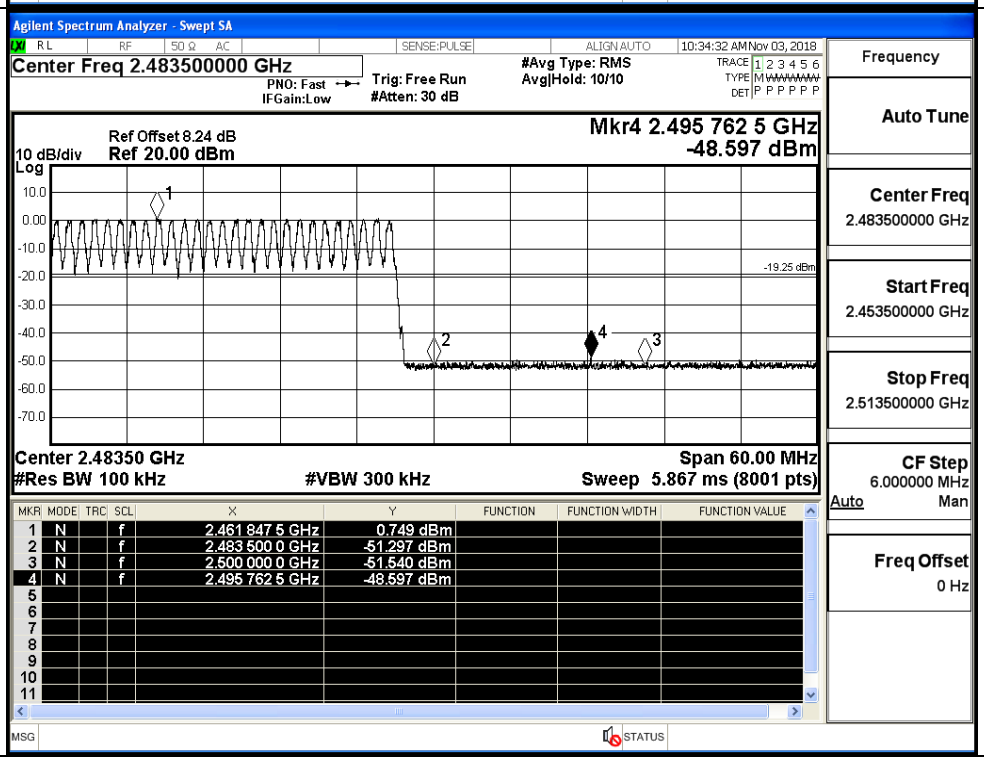
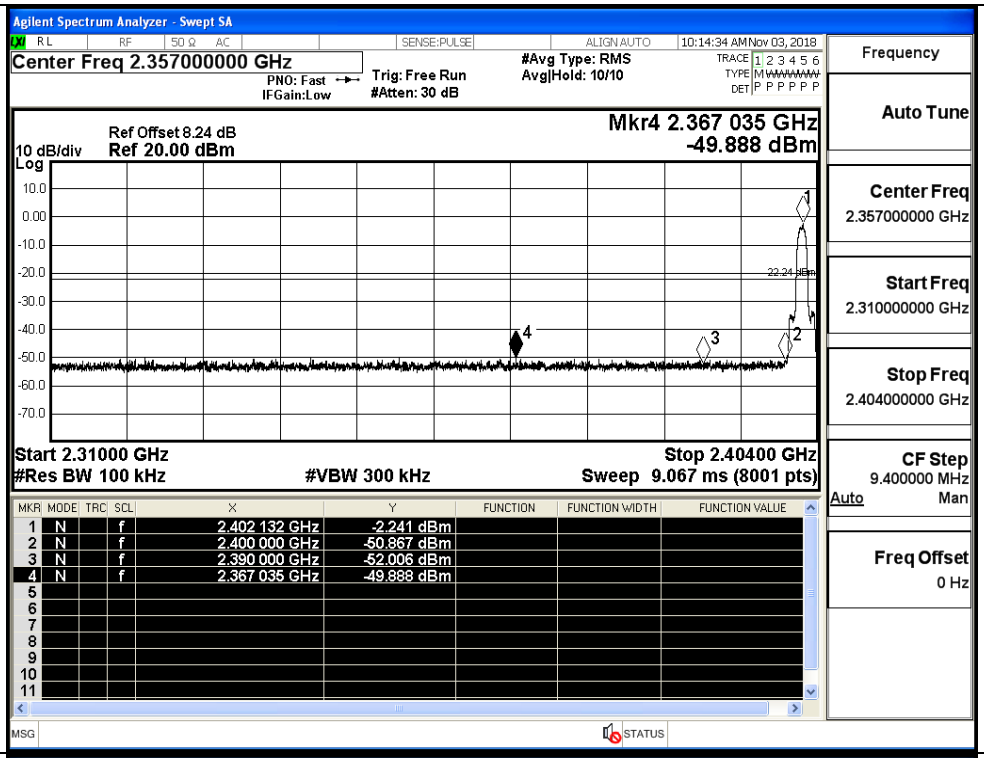
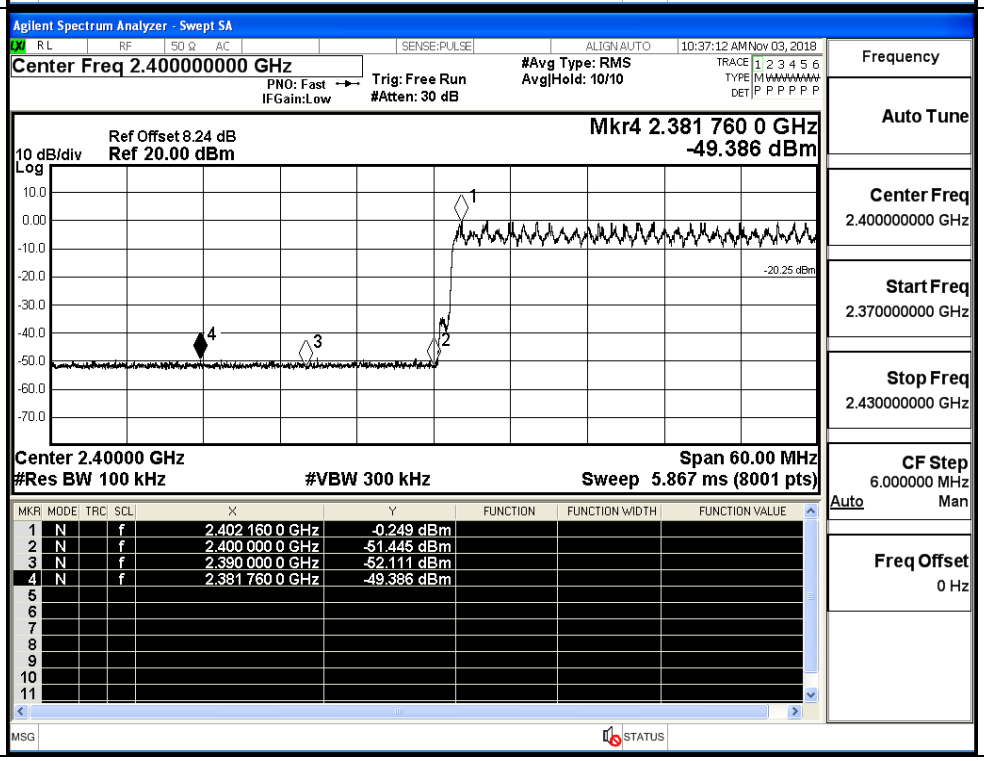
Pref		
Puw		

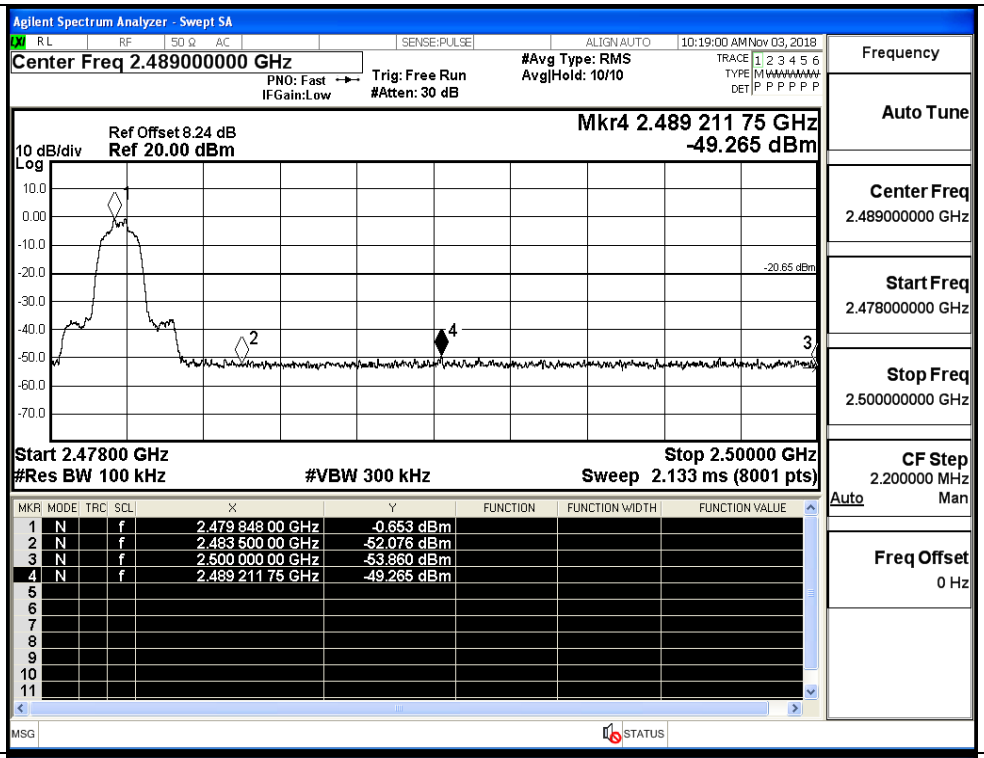
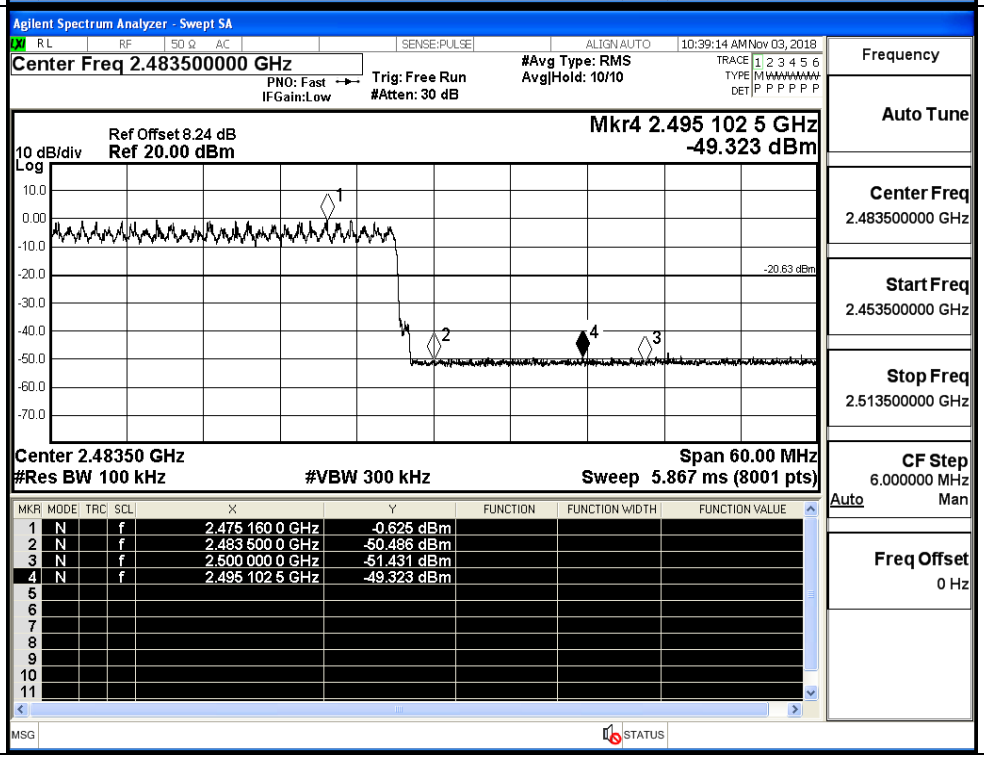
A.7 Band-edge for RF Conducted Emissions

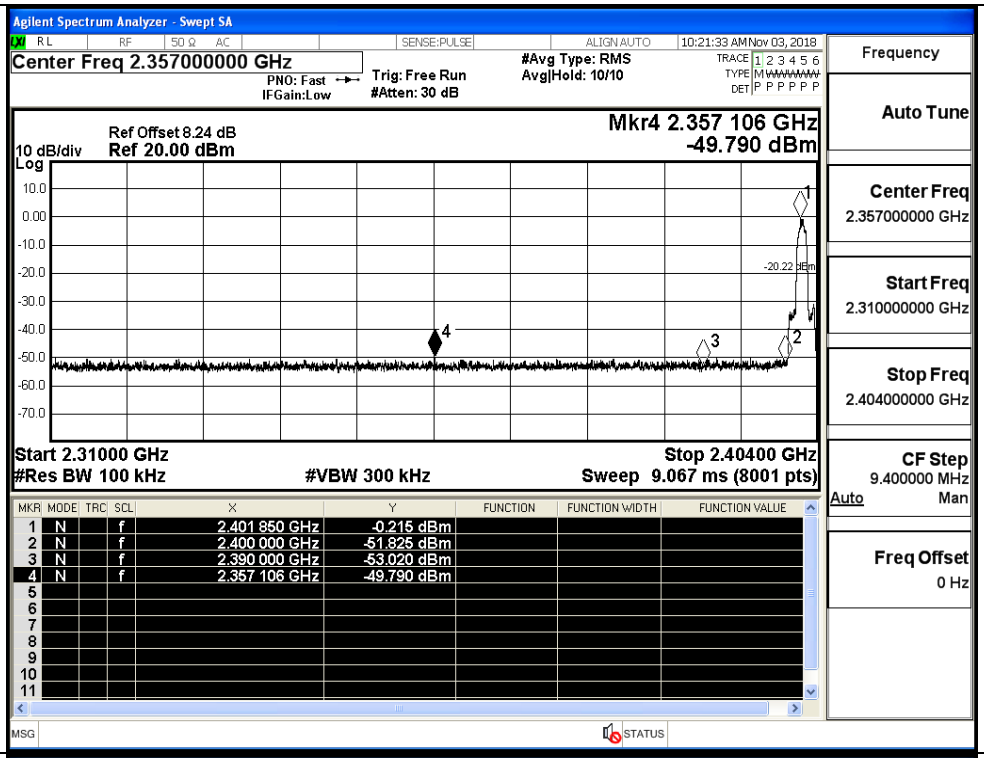
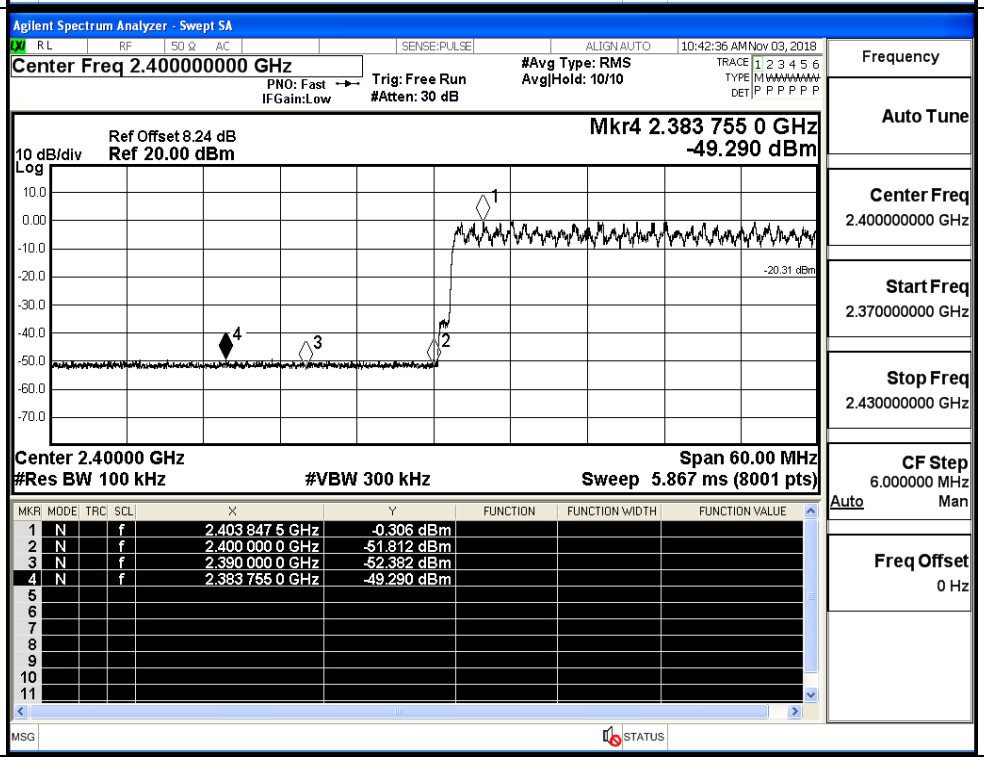
Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	3.716	Off	-49.010	-16.28	PASS
			0.916	On	-49.685	-19.08	PASS
	HCH	2480	0.362	Off	-49.605	-19.64	PASS
			0.749	On	-48.597	-19.25	PASS
π/4DQPSK	LCH	2402	-2.241	Off	-49.888	-22.24	PASS
			-0.249	On	-49.386	-20.25	PASS
	HCH	2480	-0.653	Off	-49.265	-20.65	PASS
			-0.625	On	-49.323	-20.63	PASS
8DPSK	LCH	2402	-0.215	Off	-49.790	-20.22	PASS
			-0.306	On	-49.290	-20.31	PASS
	HCH	2480	-0.588	Off	-48.923	-20.59	PASS
			-0.596	On	-49.185	-20.6	PASS

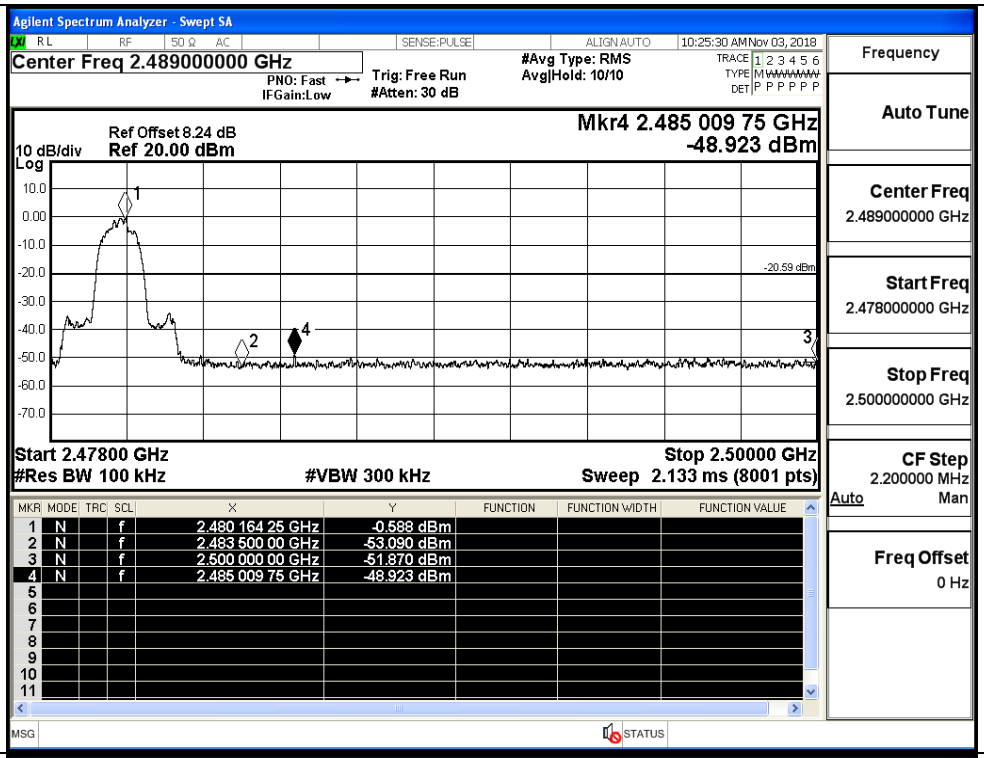
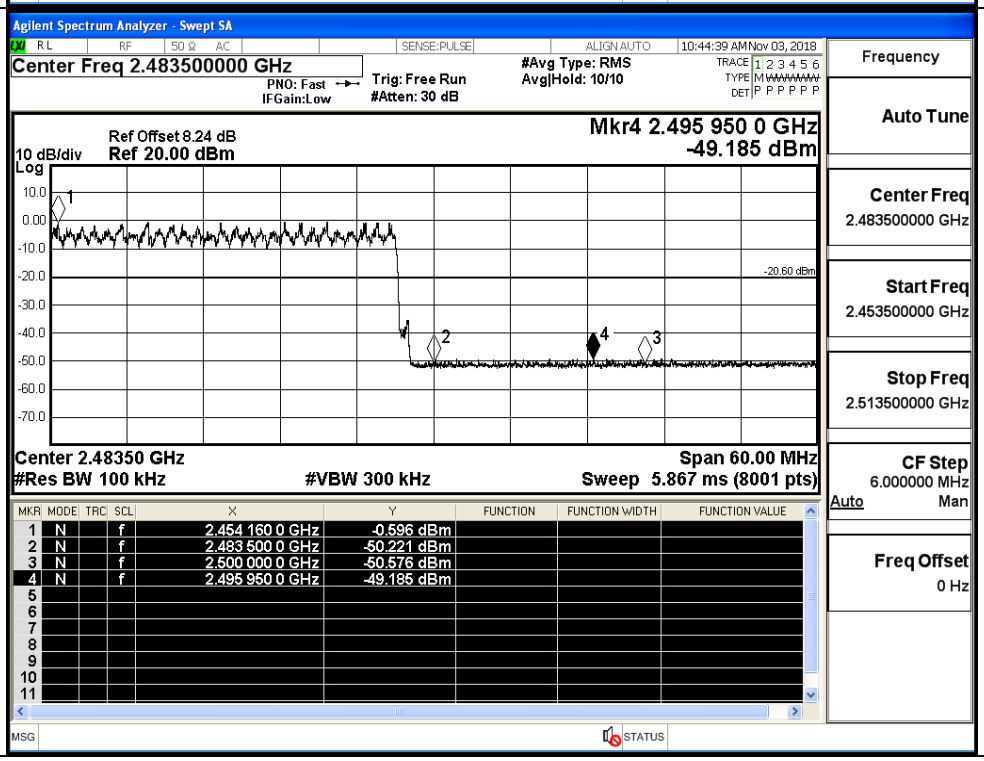
Test Graphs	
GFSK/LCH/No Hop	
GFSK/LCH/Hop	

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	

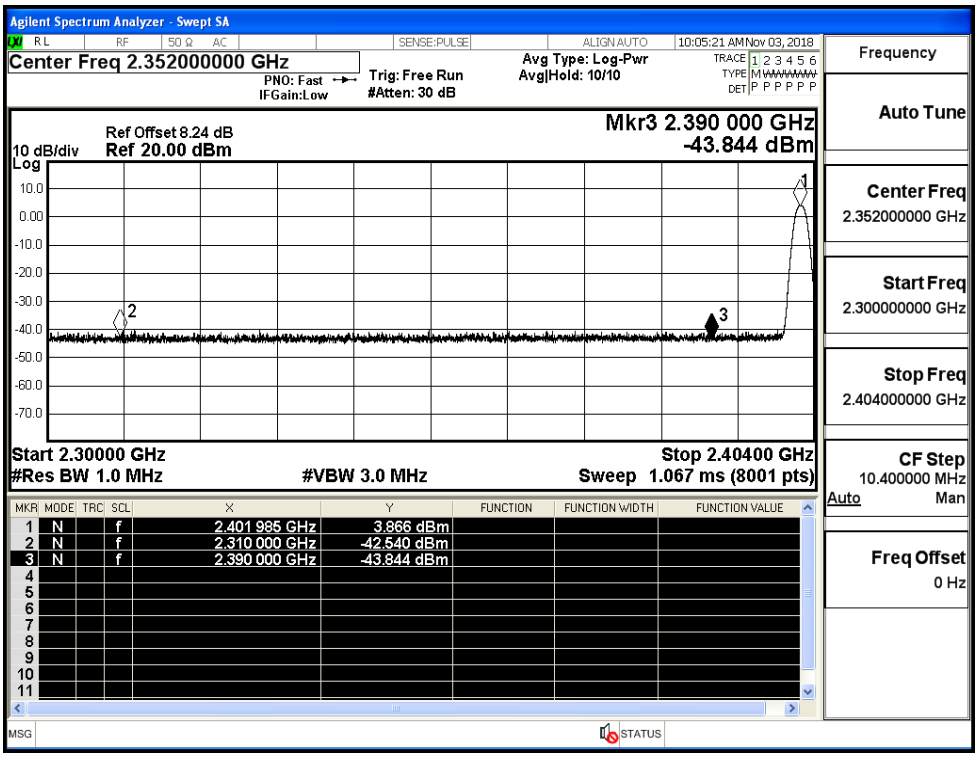
8DPSK/LCH/No Hop	
8DPSK/LCH/Hop	

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

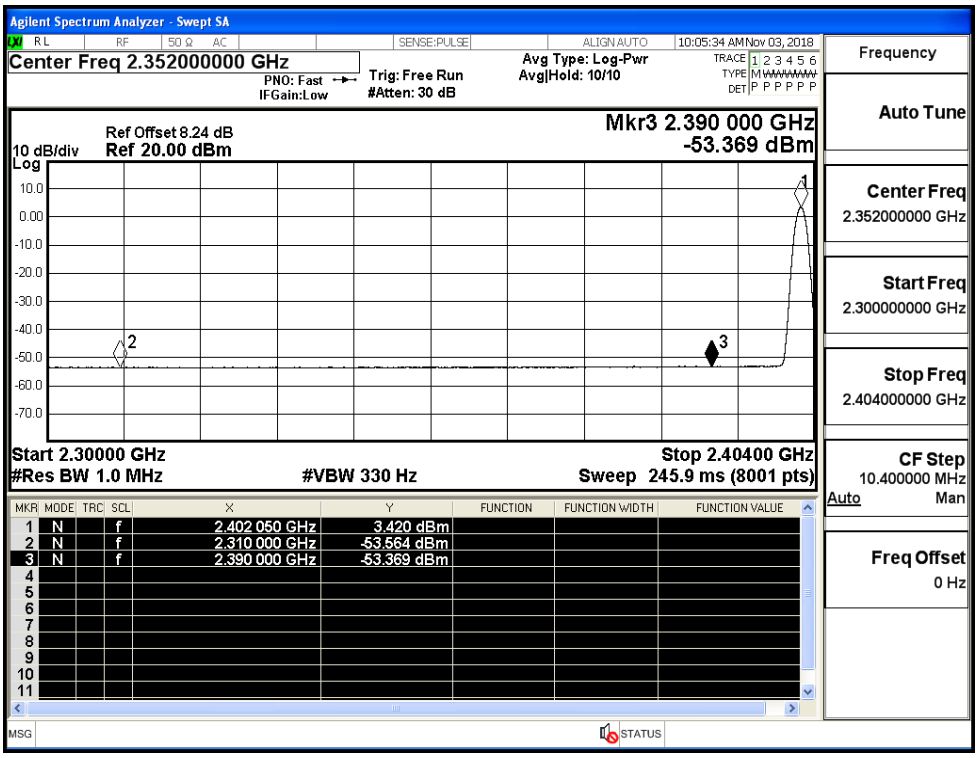
A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-42.54	2.6	0	55.26	PEAK	74	PASS
	Off	2310.0	-53.56	2.6	0	44.24	AV	54	PASS
	Off	2390.0	-43.84	2.6	0	53.96	PEAK	74	PASS
	Off	2390.0	-53.37	2.6	0	44.43	AV	54	PASS
	Off	2483.5	-42.69	2.6	0	55.11	PEAK	74	PASS
	Off	2483.5	-52.96	2.6	0	44.84	AV	54	PASS
	Off	2500.0	-42.74	2.6	0	55.06	PEAK	74	PASS
	Off	2500.0	-52.80	2.6	0	45.00	AV	54	PASS
π/4DQPSK	Off	2310.0	-43.19	2.6	0	54.61	PEAK	74	PASS
	Off	2310.0	-53.62	2.6	0	44.18	AV	54	PASS
	Off	2390.0	-42.34	2.6	0	55.46	PEAK	74	PASS
	Off	2390.0	-53.27	2.6	0	44.53	AV	54	PASS
	Off	2483.5	-41.73	2.6	0	56.07	PEAK	74	PASS
	Off	2483.5	-52.97	2.6	0	44.83	AV	54	PASS
	Off	2500.0	-43.02	2.6	0	54.78	PEAK	74	PASS
	Off	2500.0	-52.86	2.6	0	44.94	AV	54	PASS
8DPSK	Off	2310.0	-43.58	2.6	0	54.22	PEAK	74	PASS
	Off	2310.0	-53.48	2.6	0	44.32	AV	54	PASS
	Off	2390.0	-43.63	2.6	0	54.17	PEAK	74	PASS
	Off	2390.0	-53.30	2.6	0	44.50	AV	54	PASS
	Off	2483.5	-43.71	2.6	0	54.09	PEAK	74	PASS
	Off	2483.5	-52.91	2.6	0	44.89	AV	54	PASS
	Off	2500.0	-43.14	2.6	0	54.66	PEAK	74	PASS
	Off	2500.0	-52.92	2.6	0	44.88	AV	54	PASS

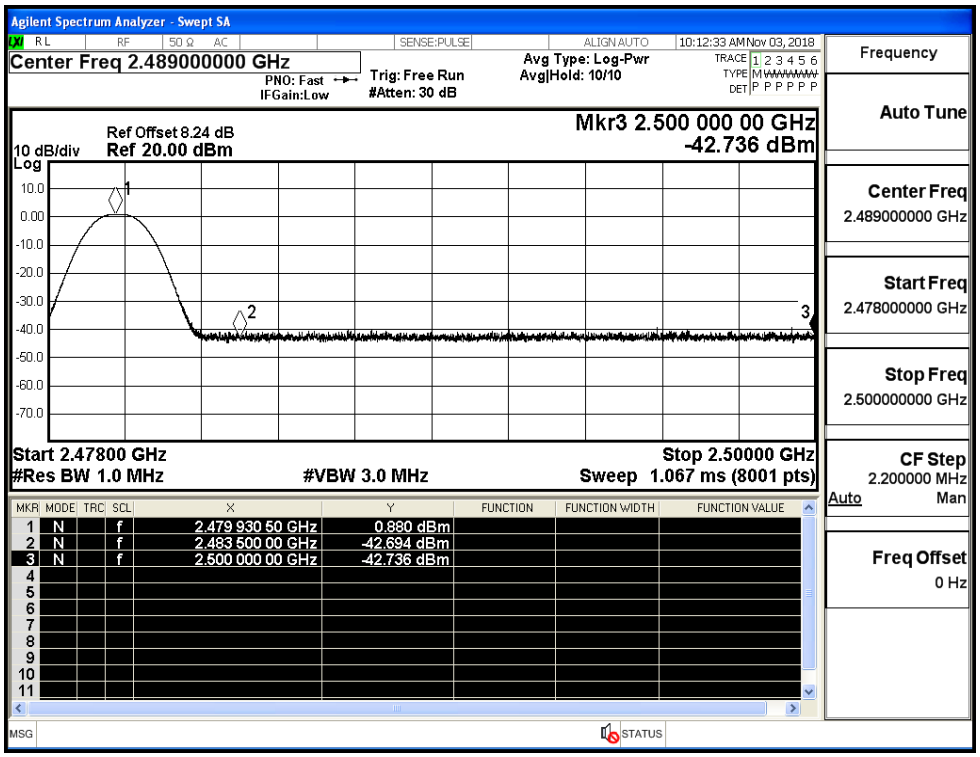
Restrict-band band-edge measurements_Hopping Off_ GFSK_PEAK (Low Channel)



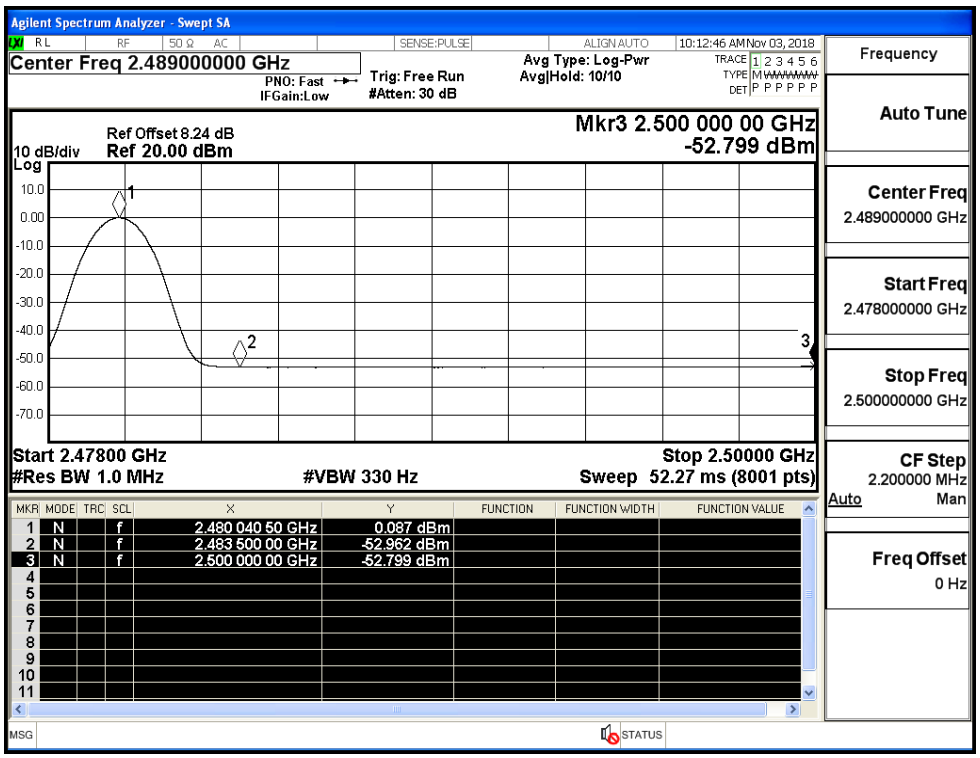
Restrict-band band-edge measurements_Hopping Off_ GFSK_Average (Low Channel)



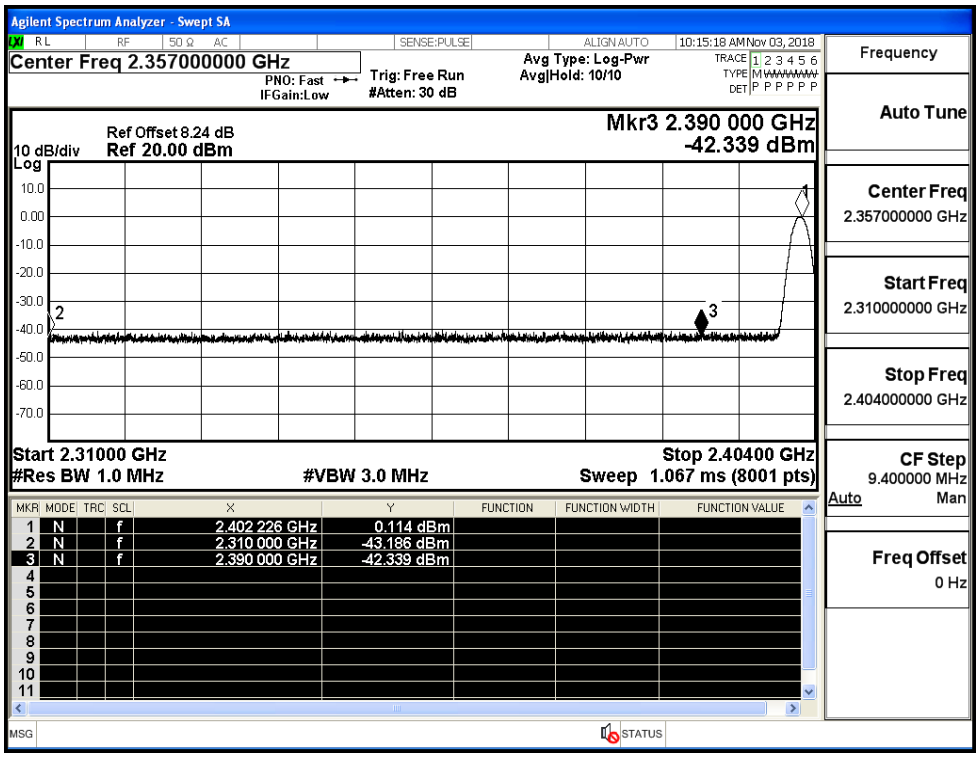
Restrict-band band-edge measurements_Hopping Off_ GFSK_PEAK (High Channel)



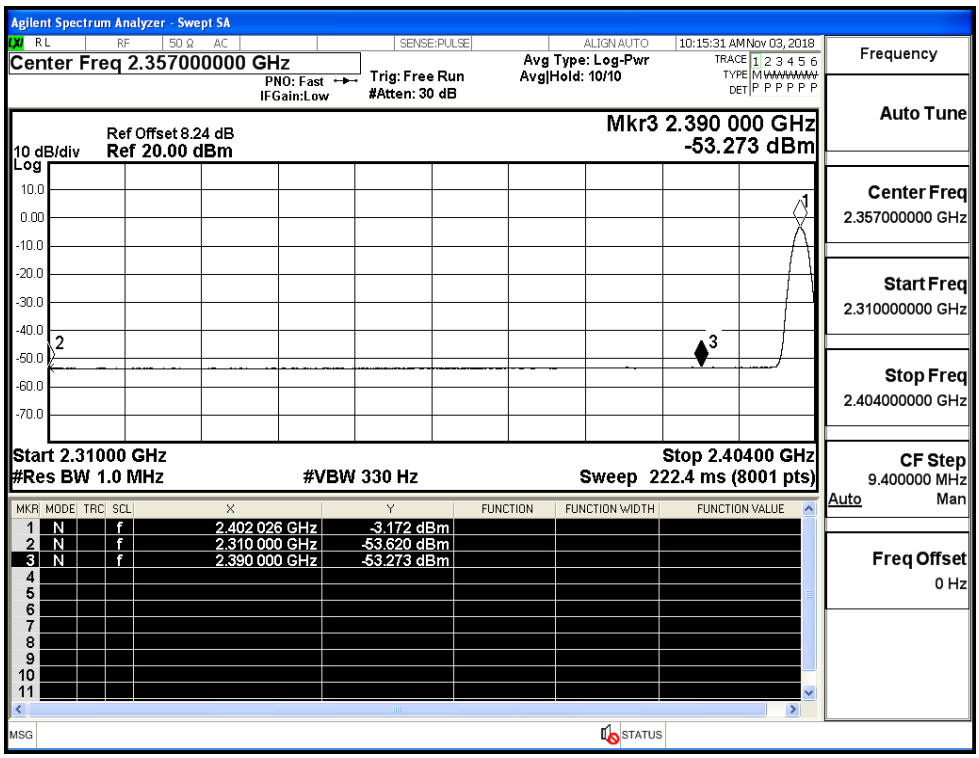
Restrict-band band-edge measurements_Hopping Off_ GFSK_Average (High Channel)



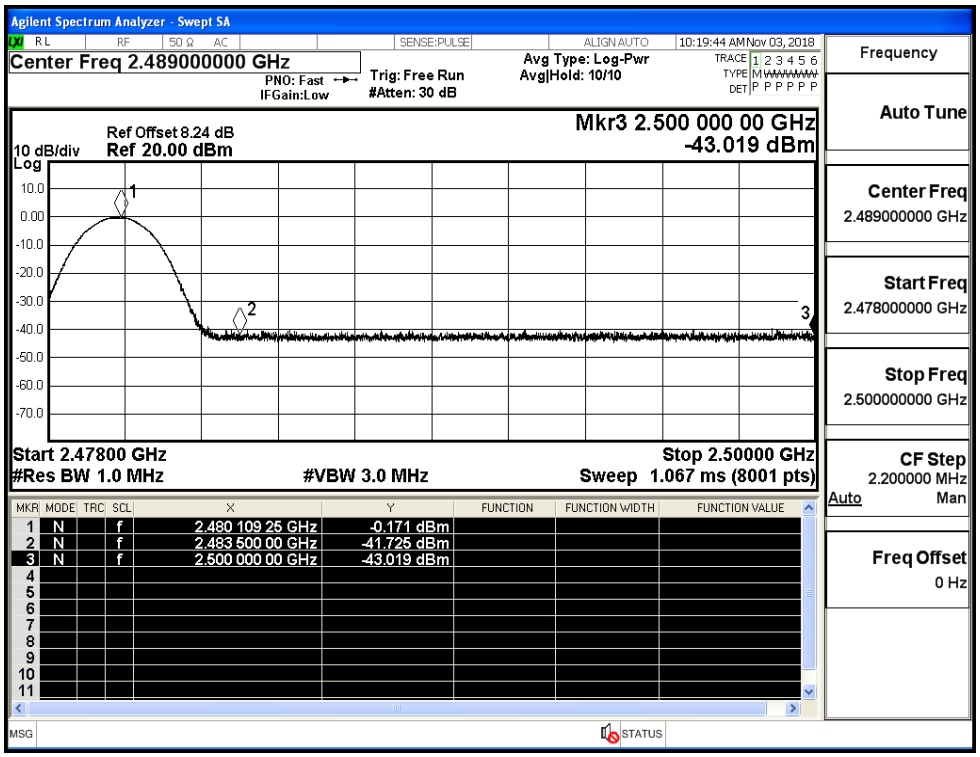
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_PEAK (Low Channel)



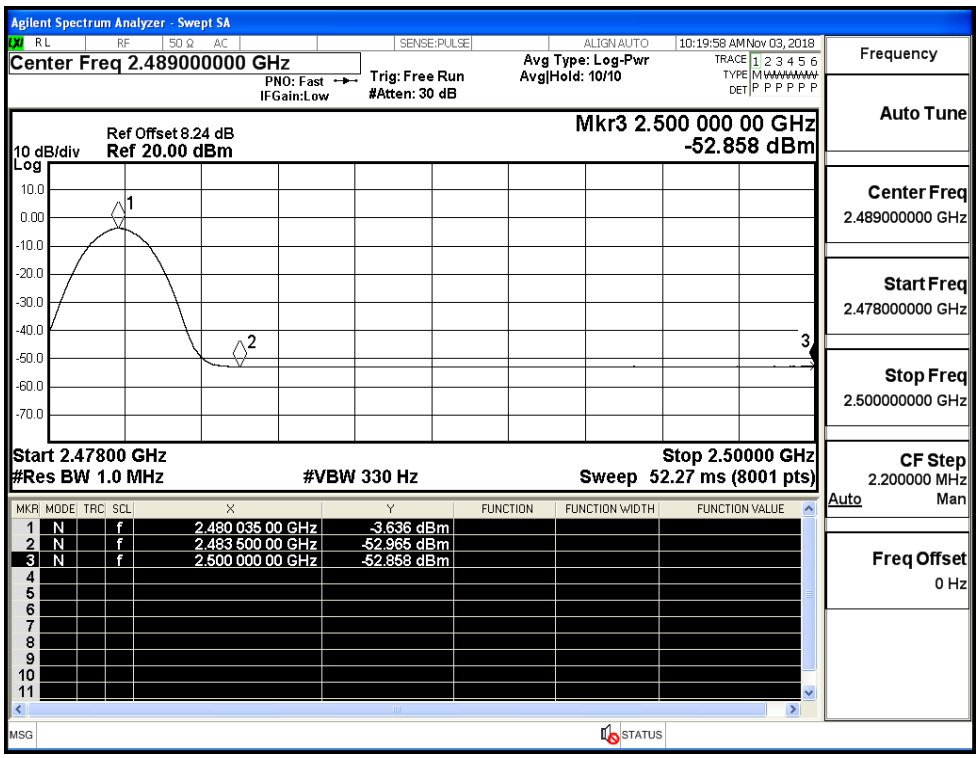
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_Average (Low Channel)



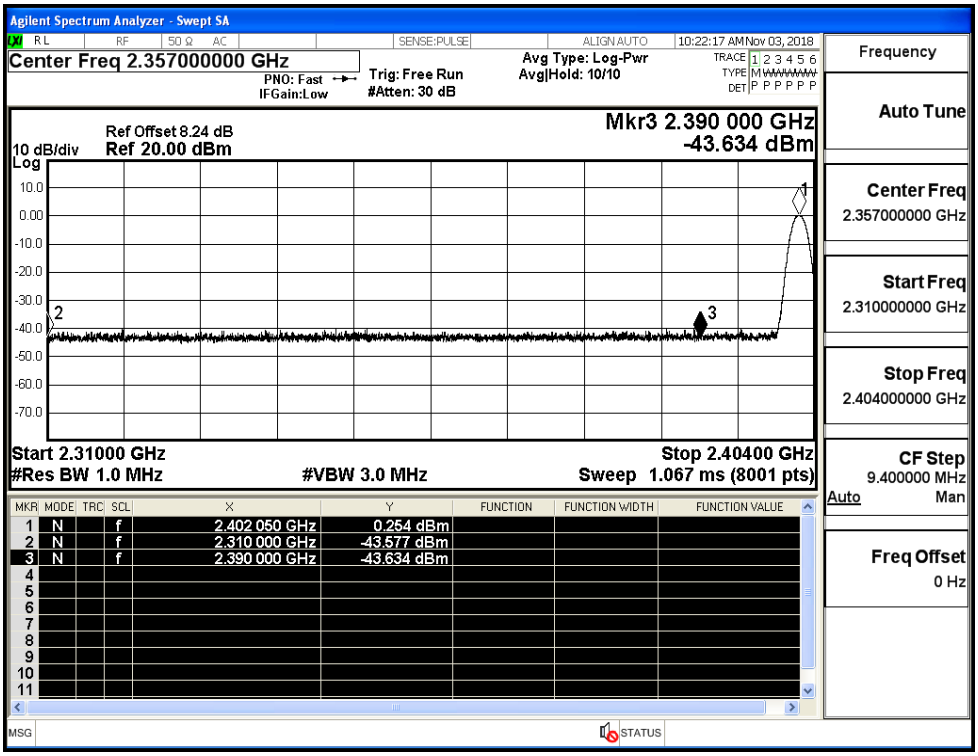
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_PEAK (High Channel)



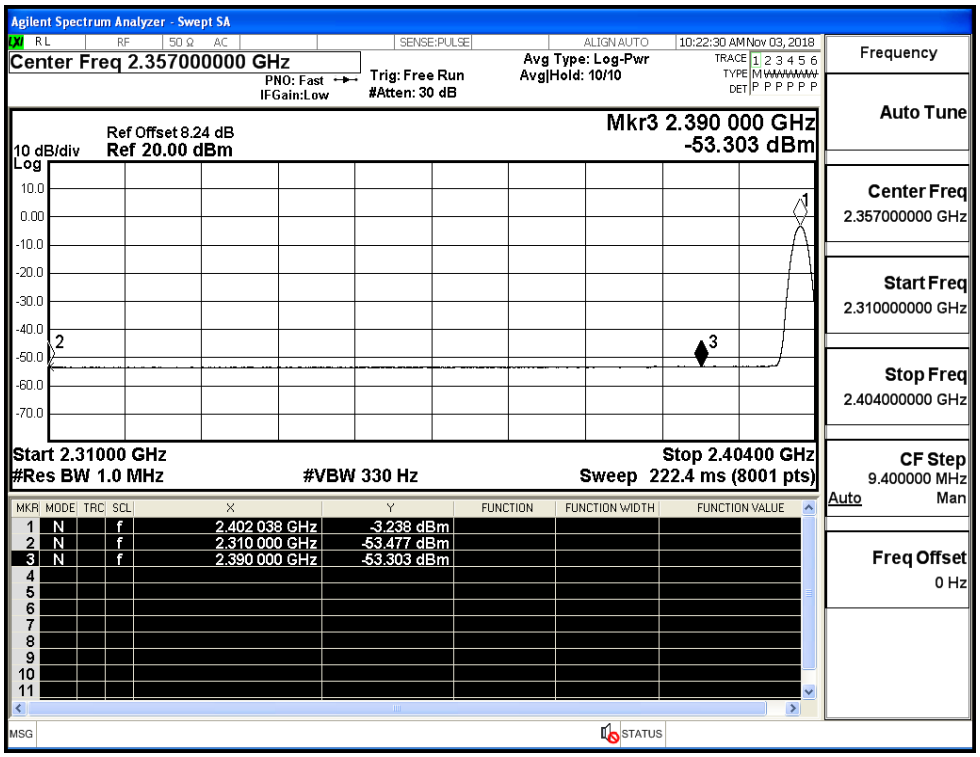
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_Average (High Channel)



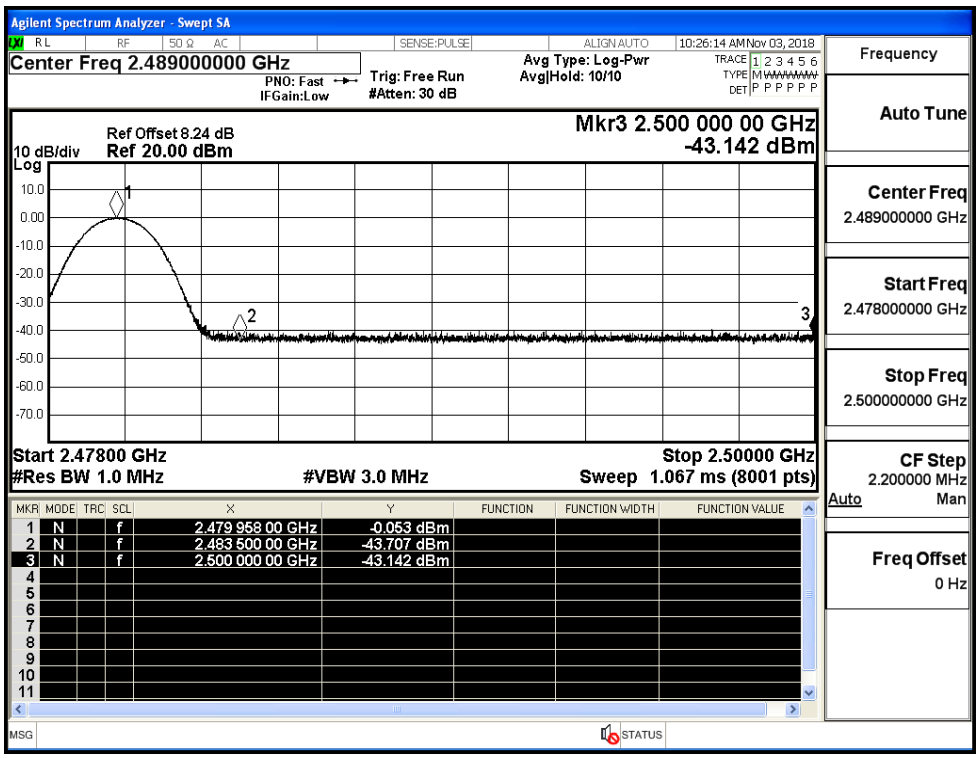
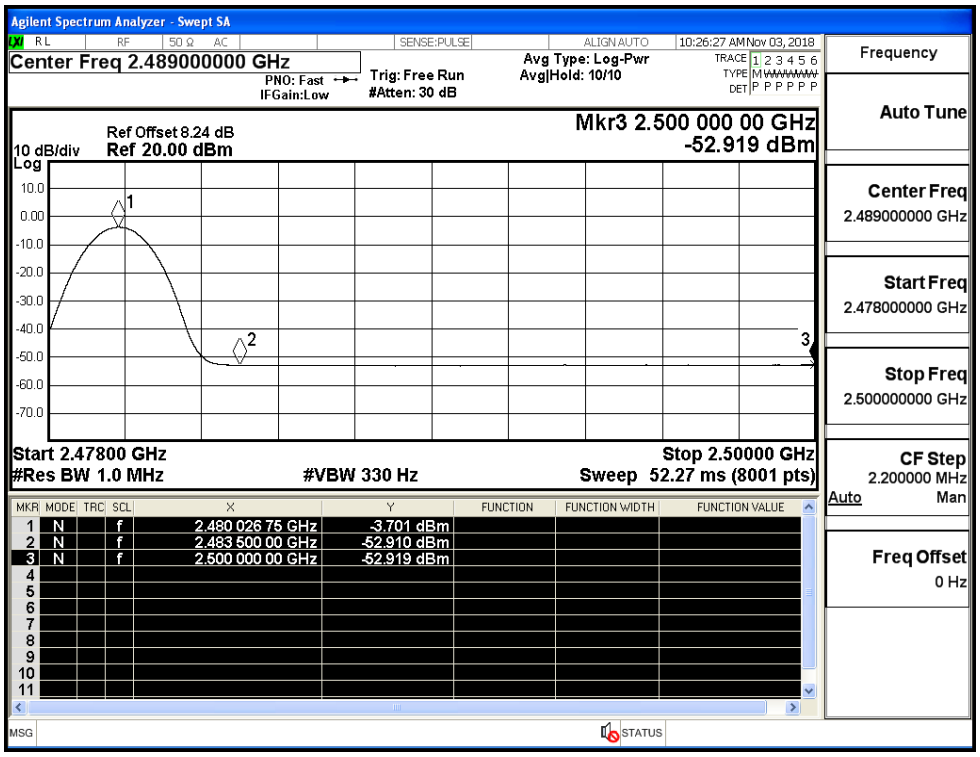
Restrict-band band-edge measurements_Hopping Off_8DPSK_PEAK (Low Channel)



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)