Appendix A

RF Test Data for BT V4.1(BDR/EDR) (Conducted Measurement)

Product Name: Look tablet

Trade Mark: Look2innovate

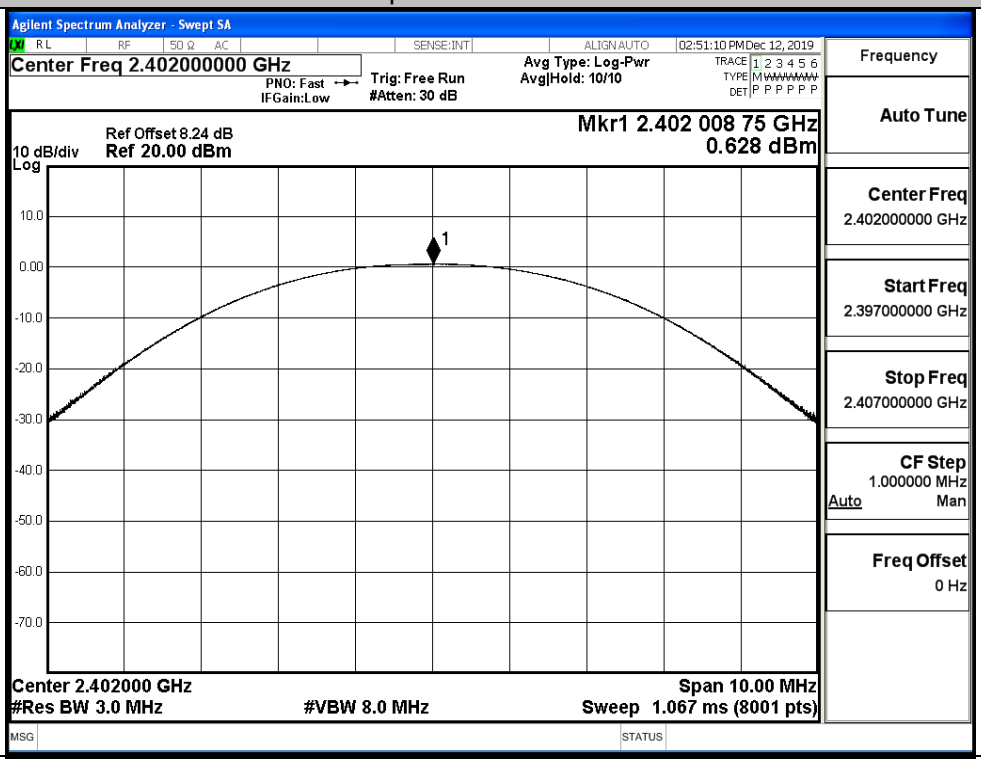
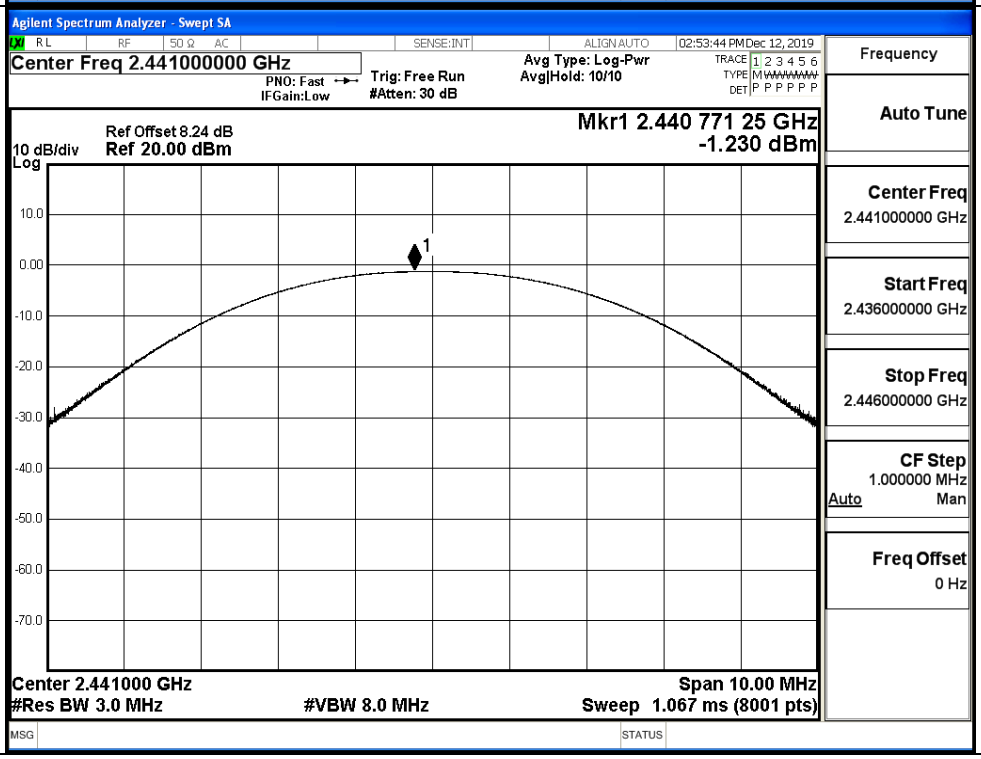
Test Model: LKTABLET1

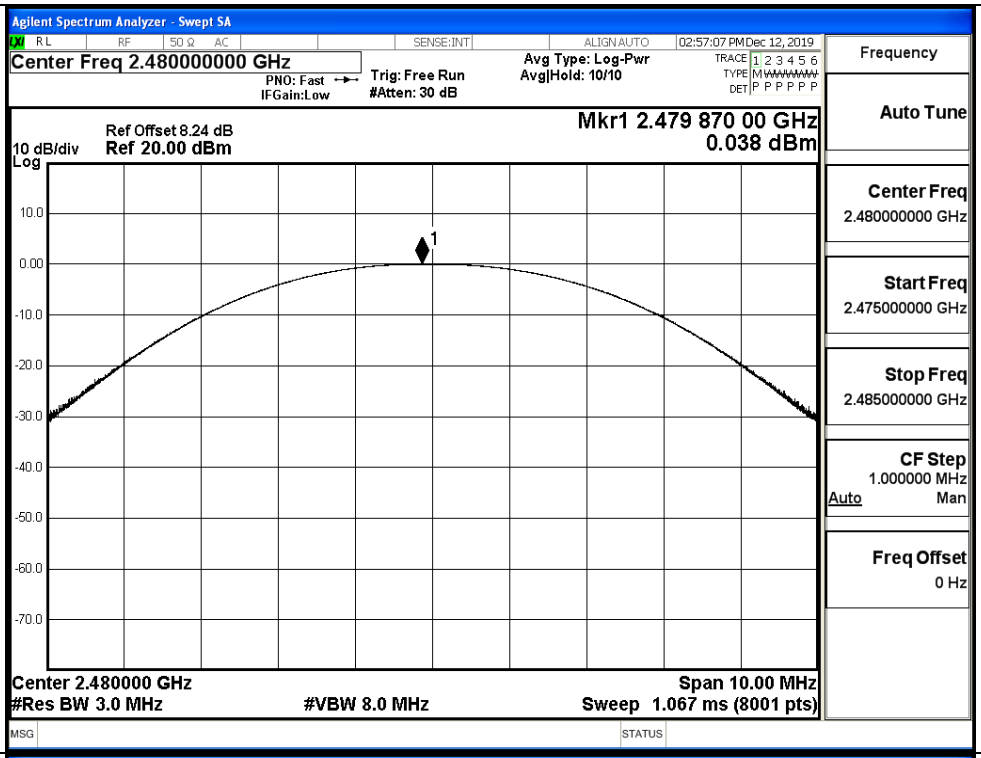
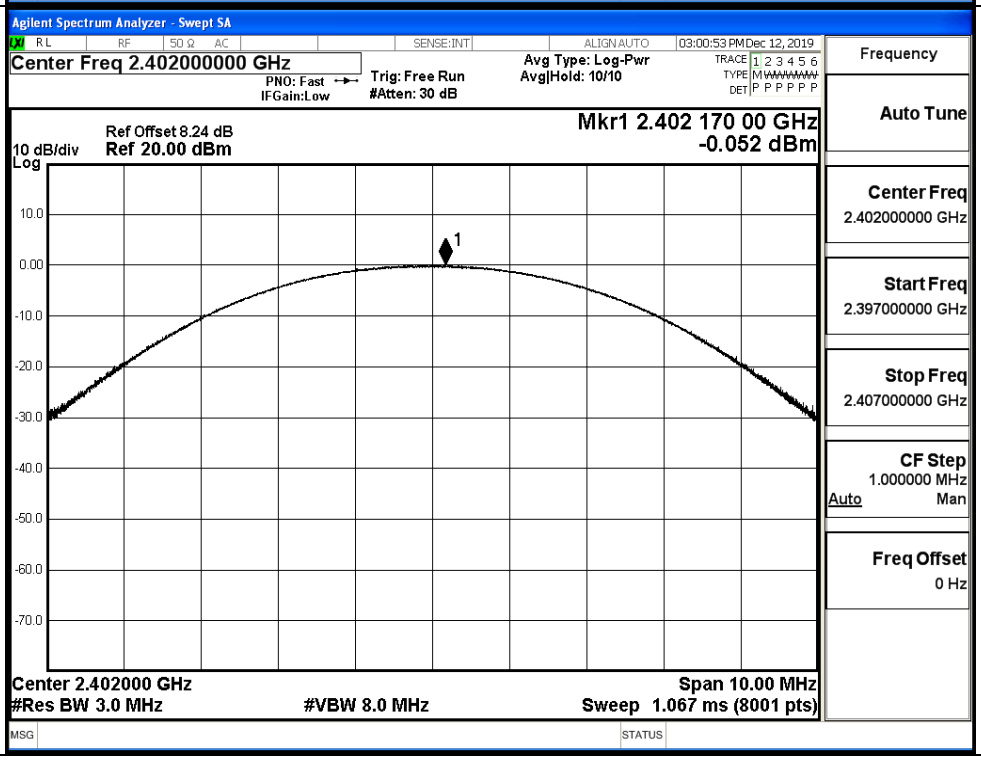
Environmental Conditions

Temperature:	22.8° C
Relative Humidity:	54.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Alisa Huang
Supervised by:	Wang Chuang

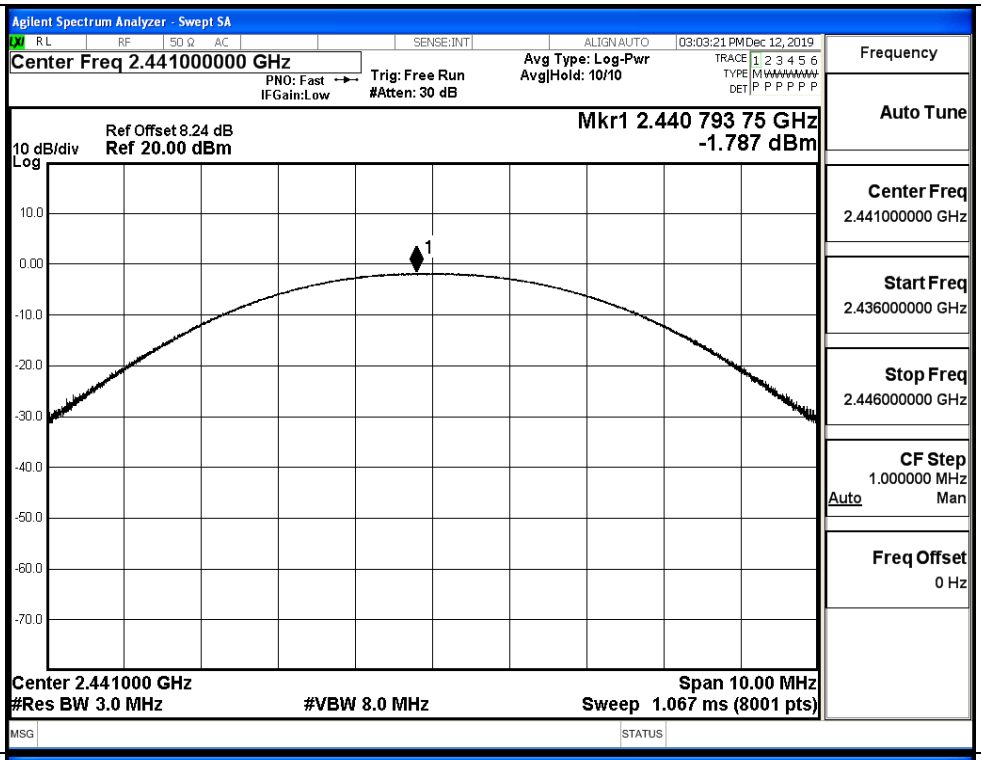
A.1 Maxmum Conducted Peak Output Power

Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	0.628	21	PASS
	MCH	-1.230	21	PASS
	HCH	0.038	21	PASS
π/4DQPSK	LCH	-0.052	21	PASS
	MCH	-1.787	21	PASS
	HCH	-0.770	21	PASS
8DPSK	LCH	0.157	21	PASS
	MCH	-1.595	21	PASS
	HCH	-0.488	21	PASS

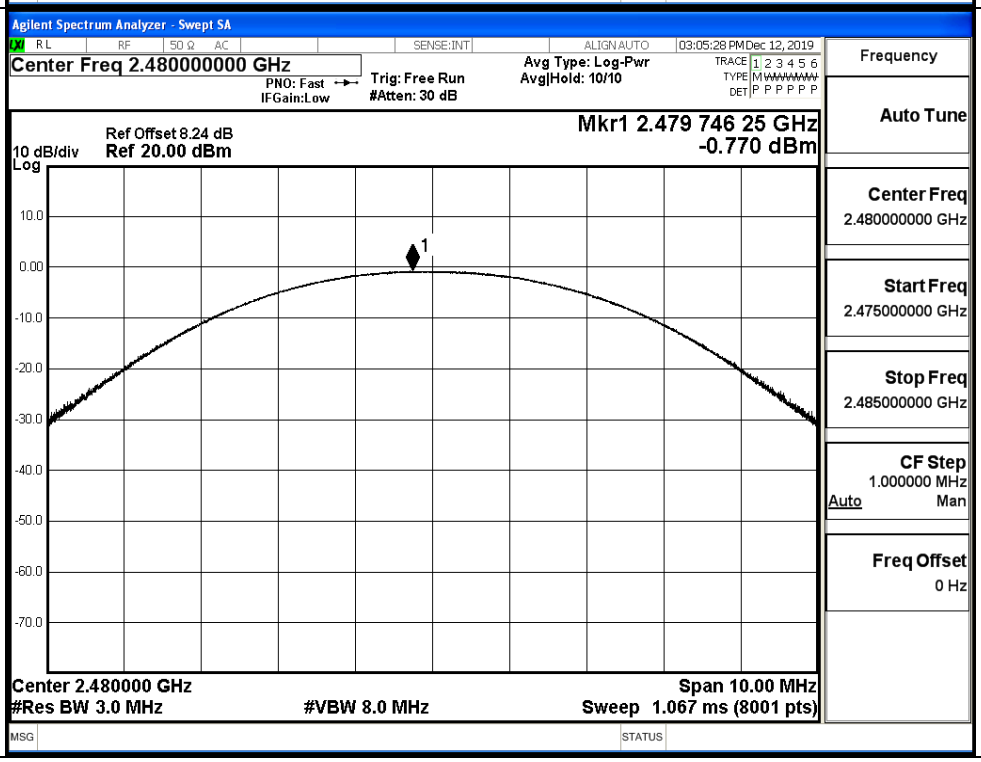
Test Graphs		
GFSK/LCH		
GFSK/MCH		

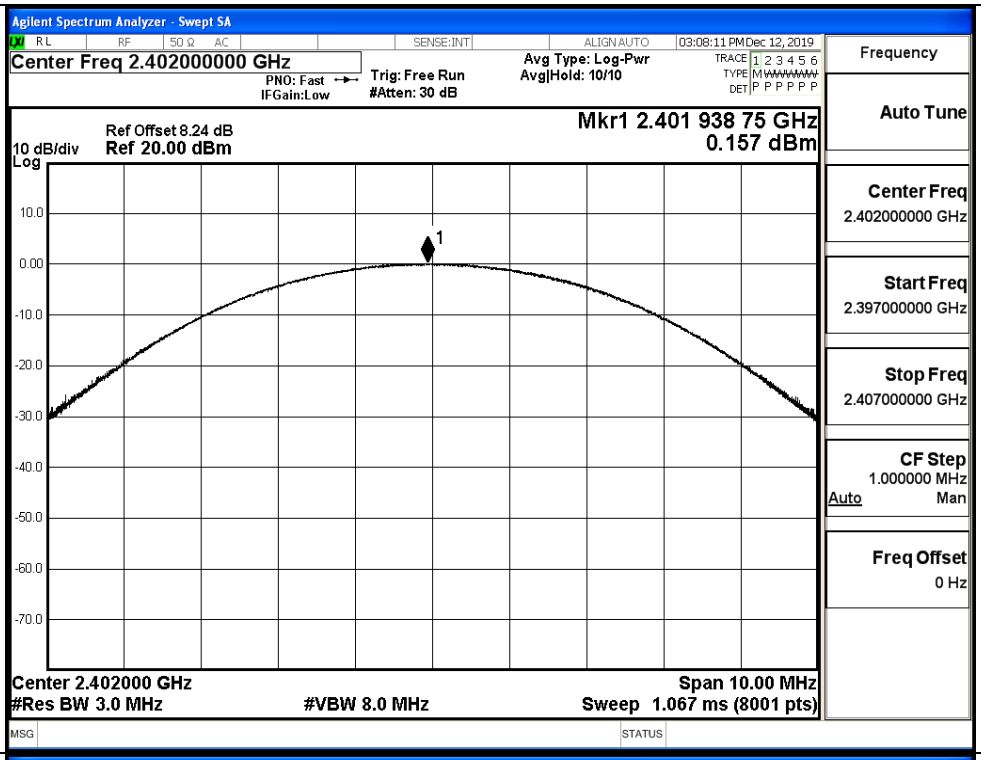
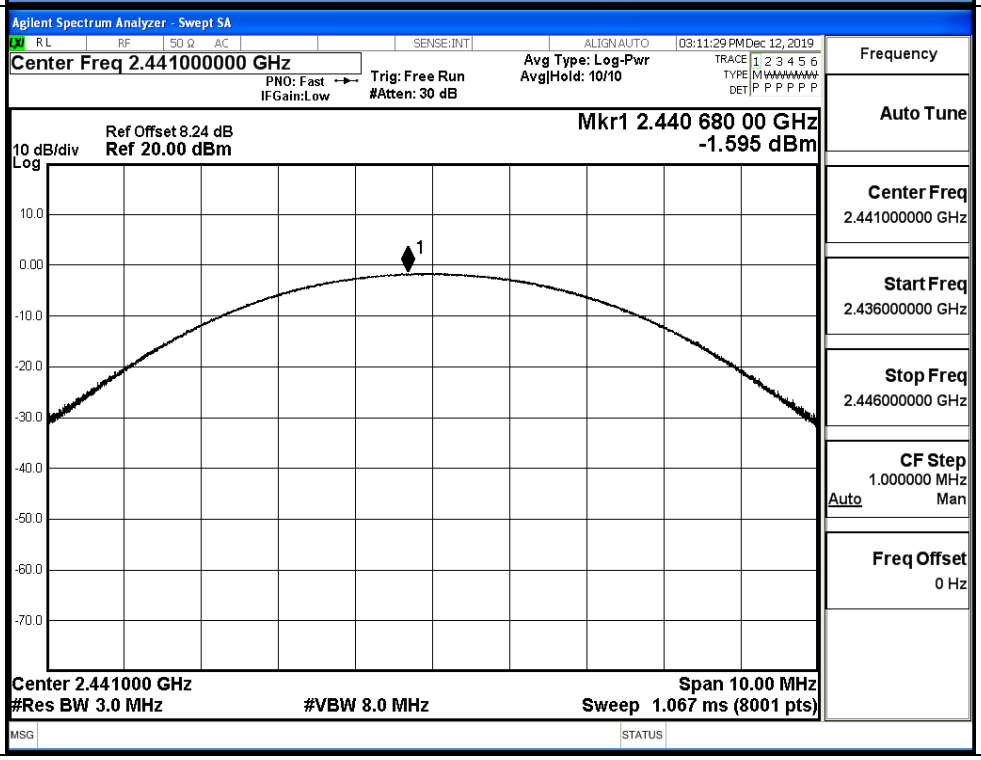
GFSK/HCH	
π/4DQPSK/LCH	

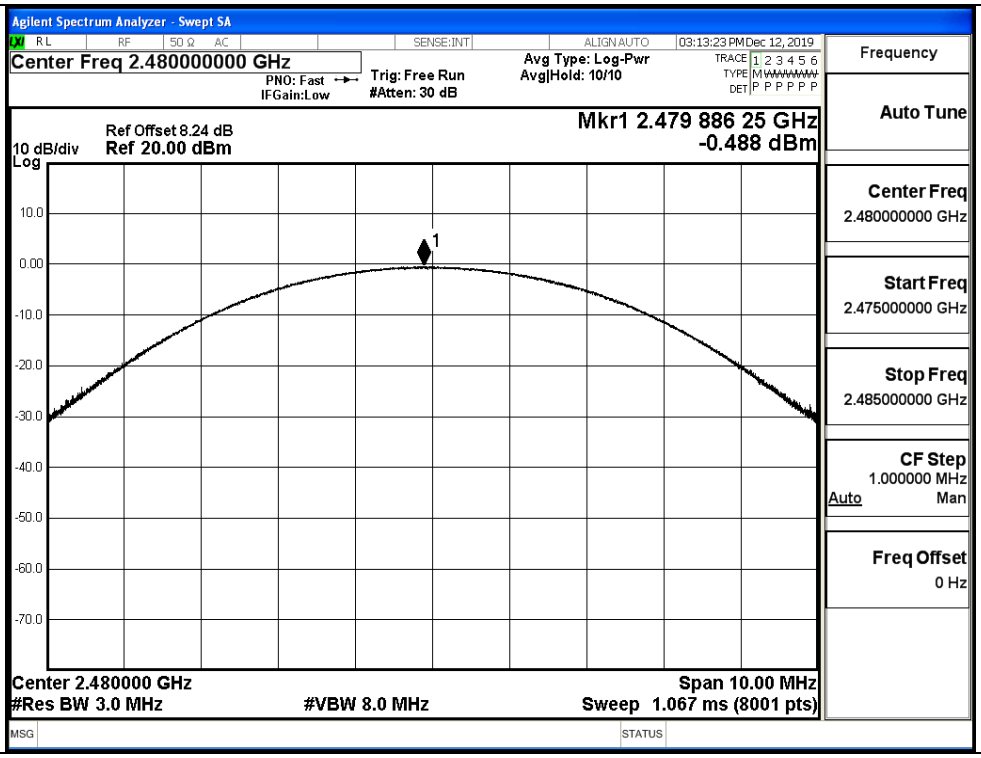
π/4DQPSK/MCH



π/4DQPSK/HCH



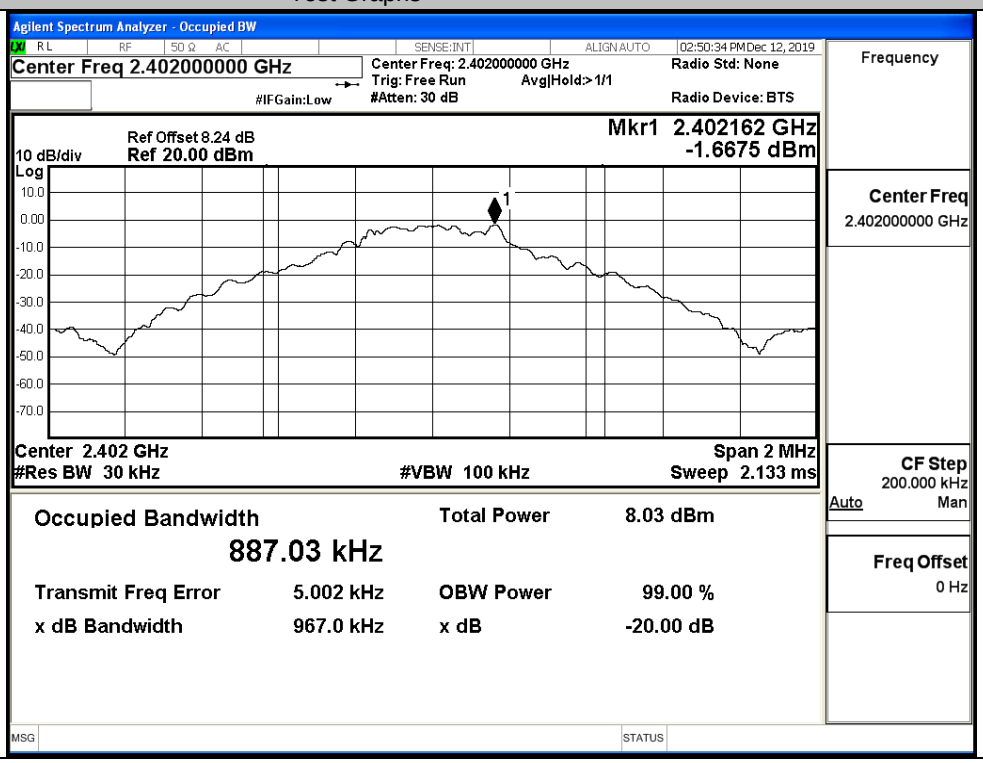
8DPSK/LCH	
8DPSK/MCH	

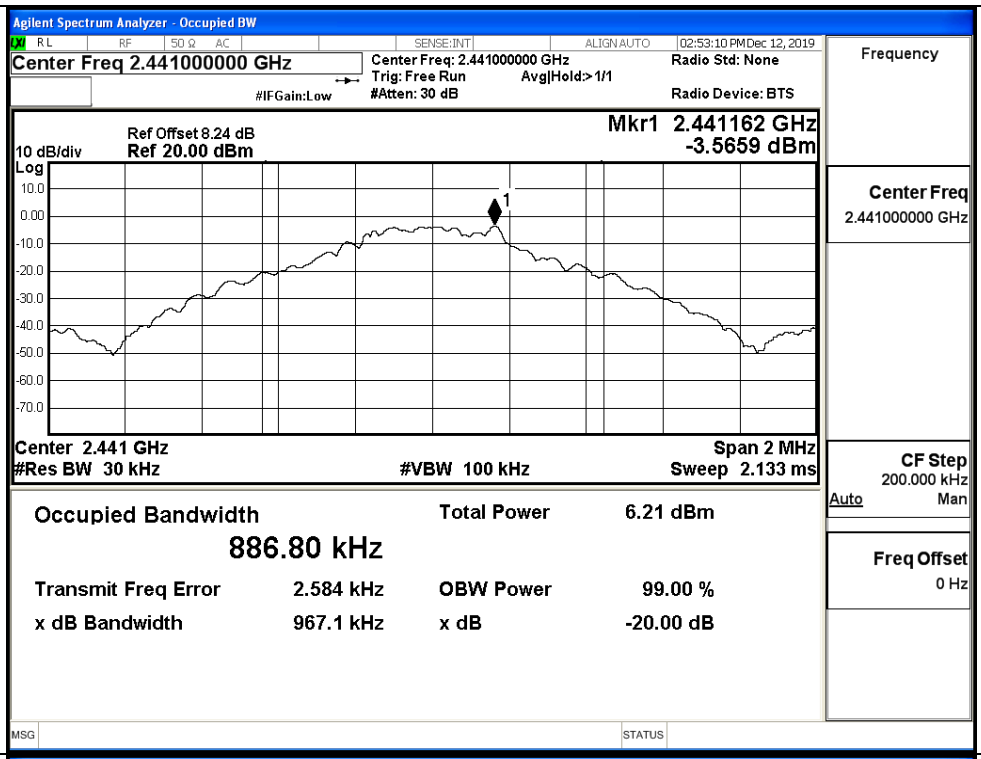
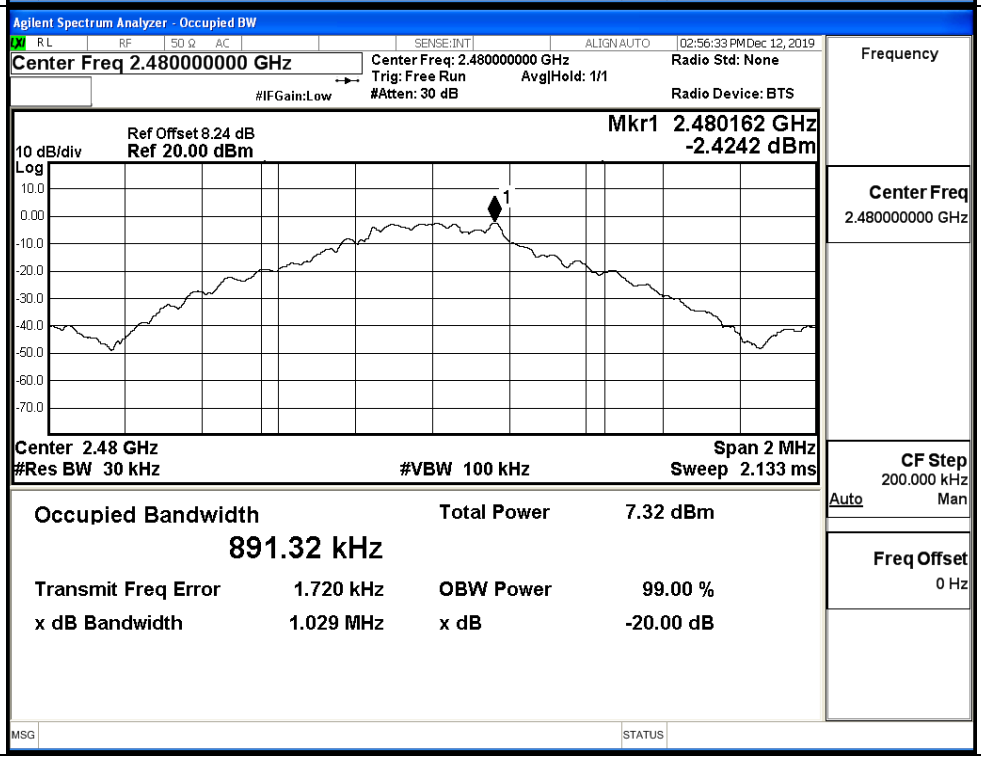
8DPSK/HCH		

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
03:13:23 PM Dec 12, 2019
Ref Offset 8.24 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 2.479 886 25 GHz
-0.488 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

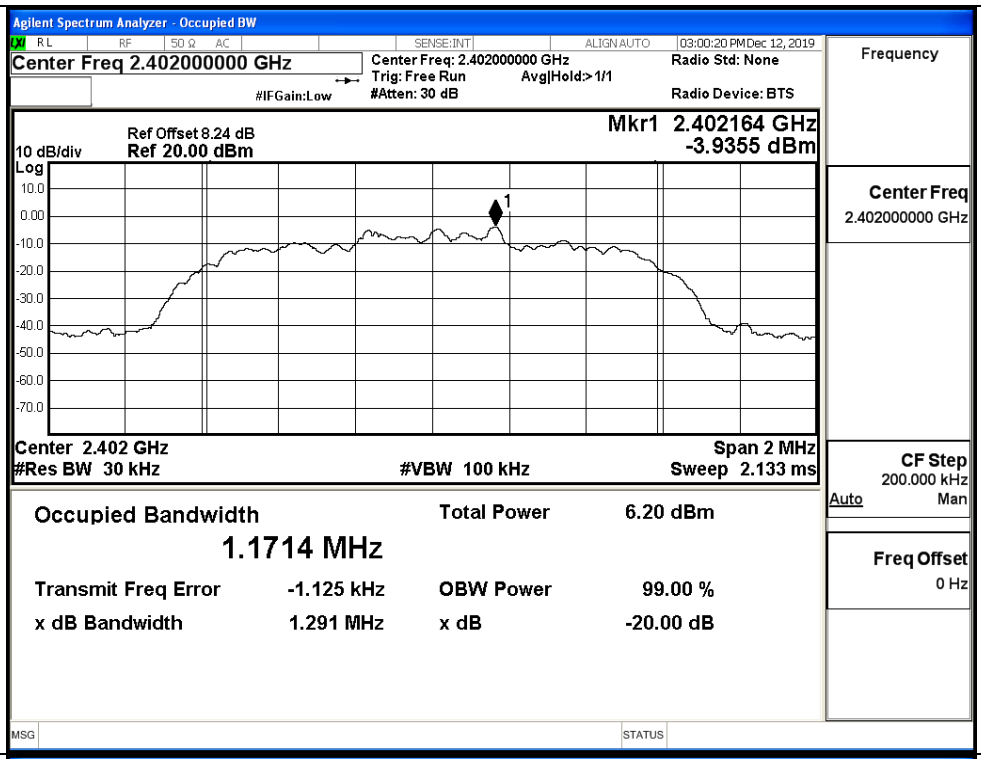
A.2 20dB Bandwidth

Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.9670	Not Specified	PASS
	MCH	0.9671	Not Specified	PASS
	HCH	1.029	Not Specified	PASS
π/4DQPSK	LCH	1.291	Not Specified	PASS
	MCH	1.294	Not Specified	PASS
	HCH	1.291	Not Specified	PASS
8DPSK	LCH	1.292	Not Specified	PASS
	MCH	1.297	Not Specified	PASS
	HCH	1.293	Not Specified	PASS

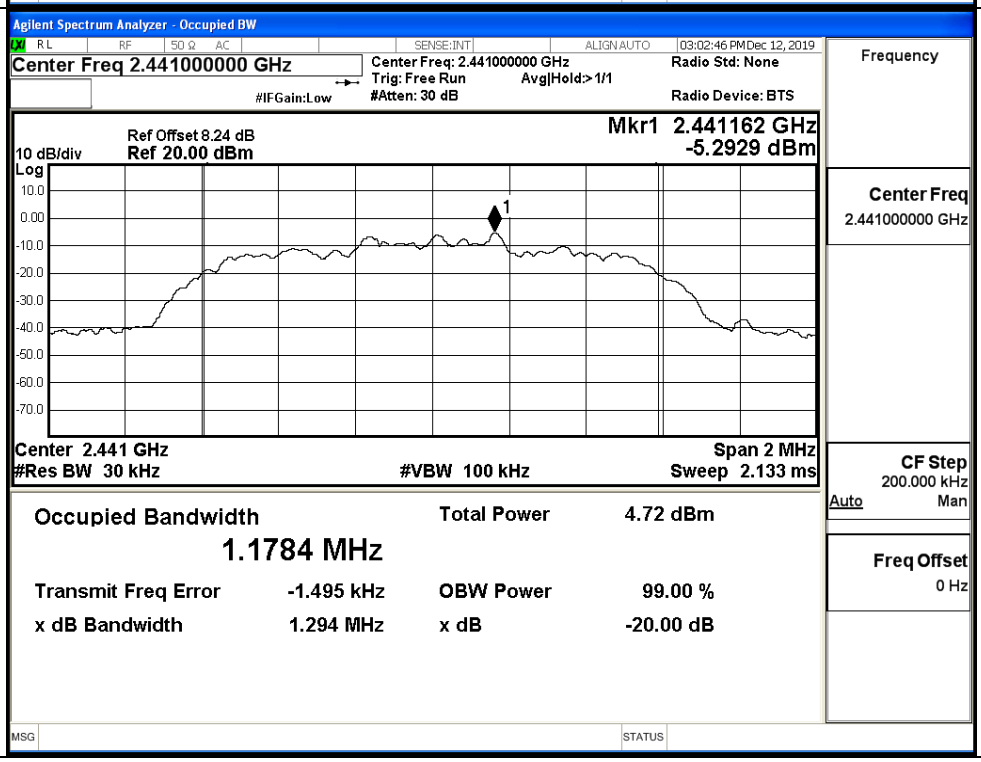
Test Graphs	
GFSK/LCH	

GFSK/MCH	
GFSK/HCH	

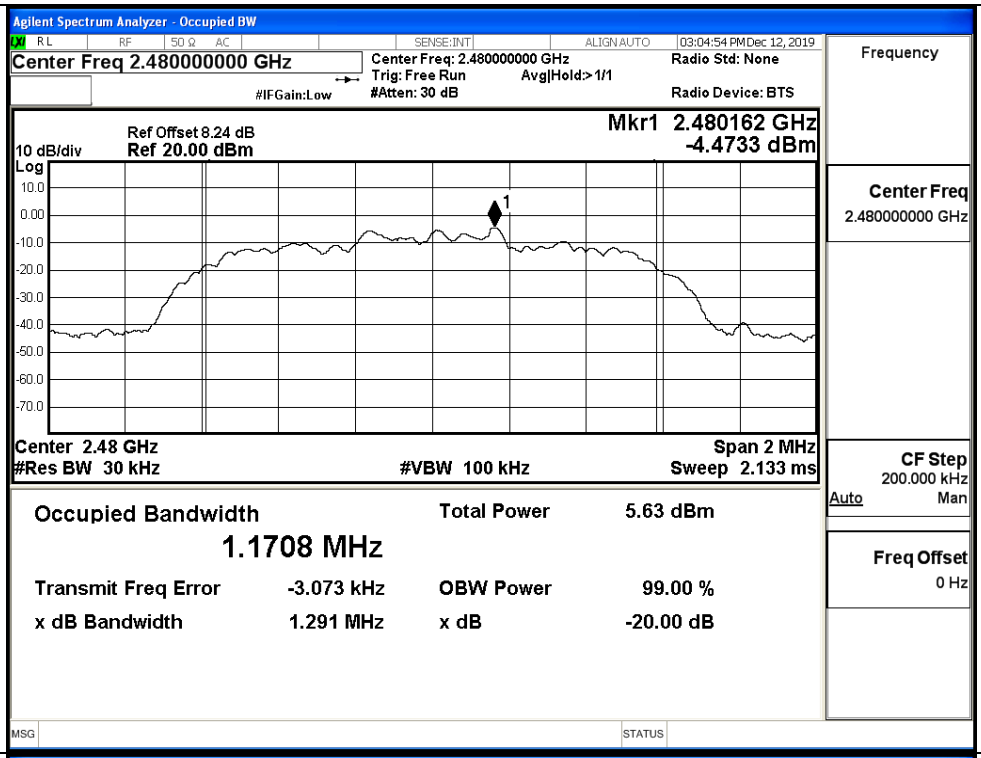
π/4DQPSK/LCH



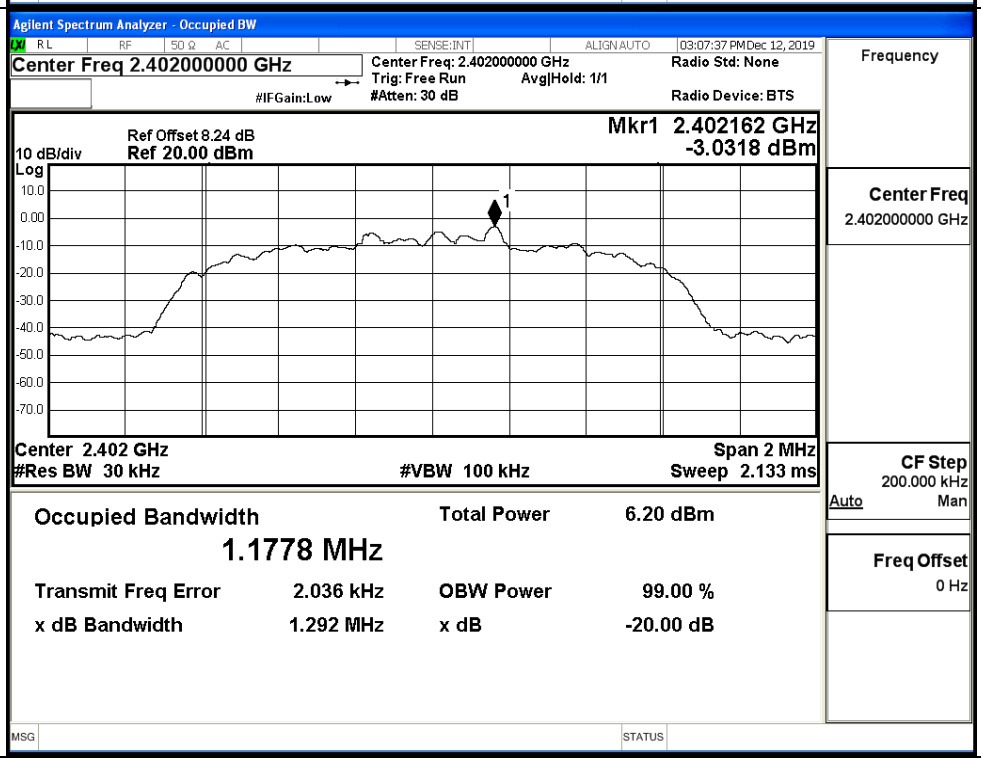
π/4DQPSK/MCH

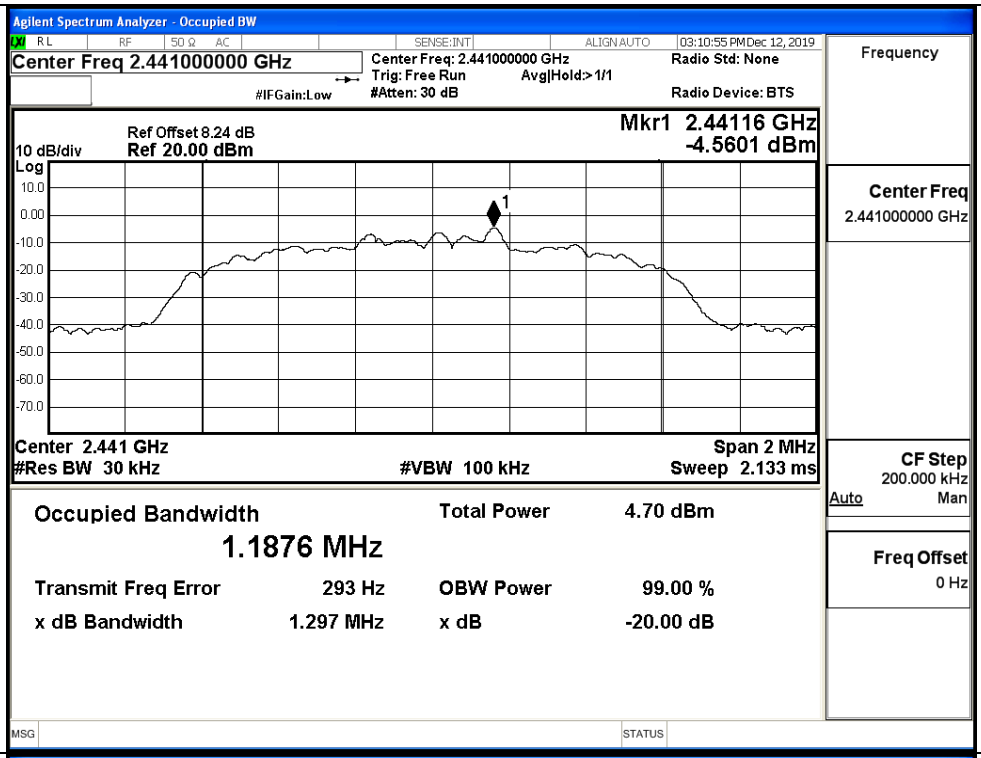
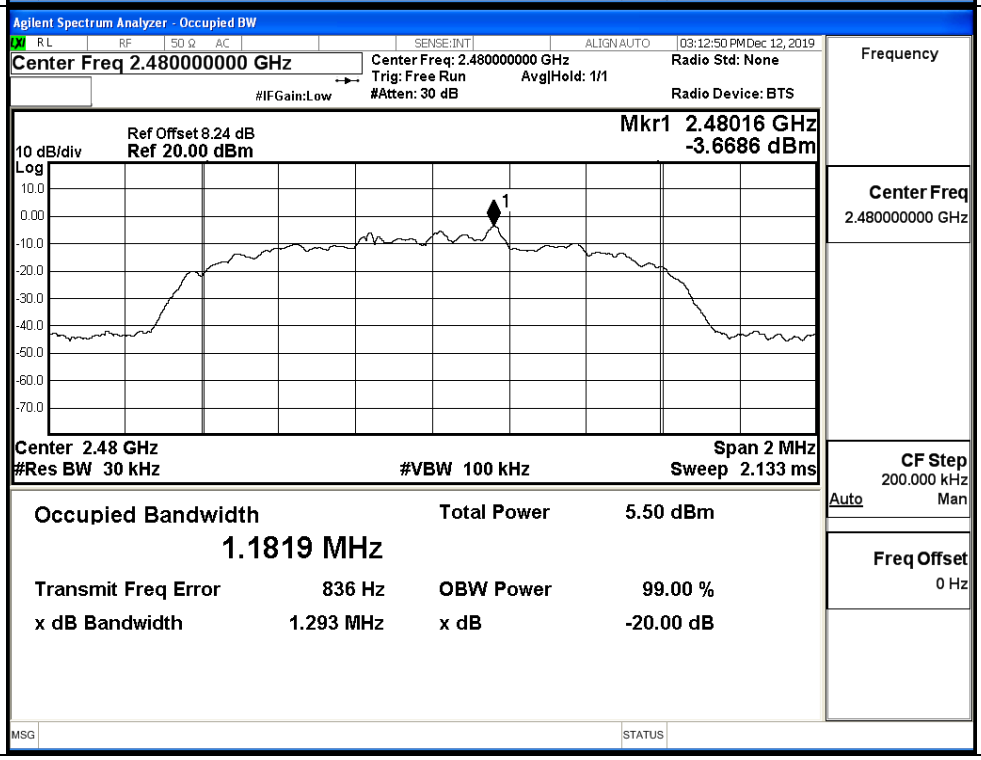


π/4DQPSK/HCH



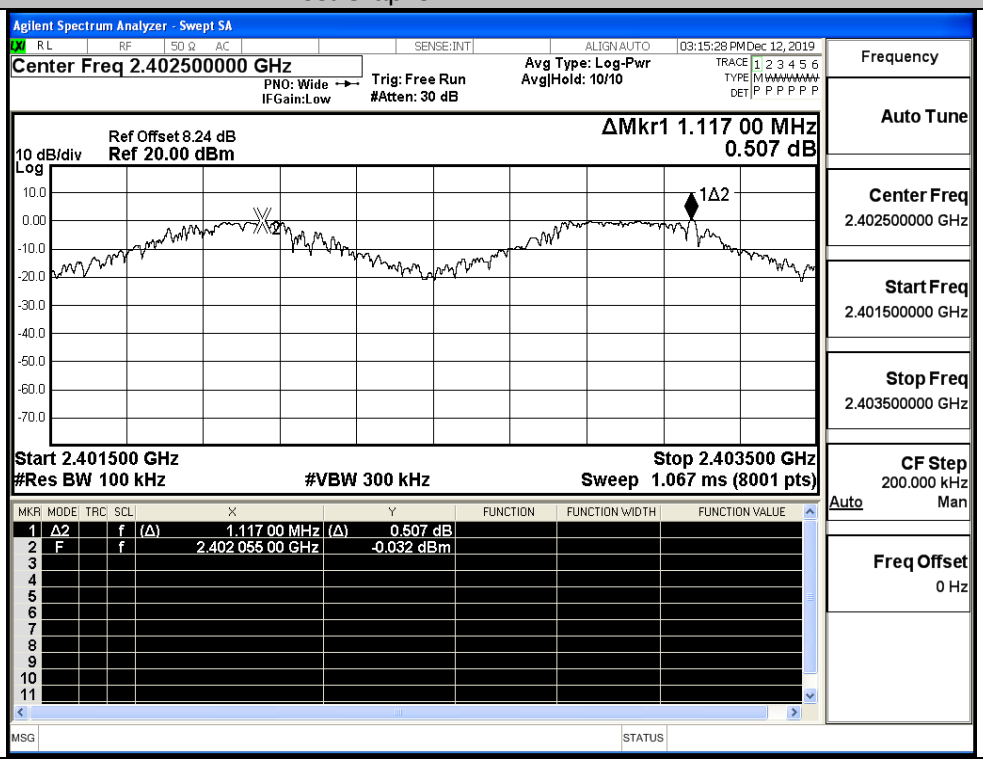
8DPSK/LCH



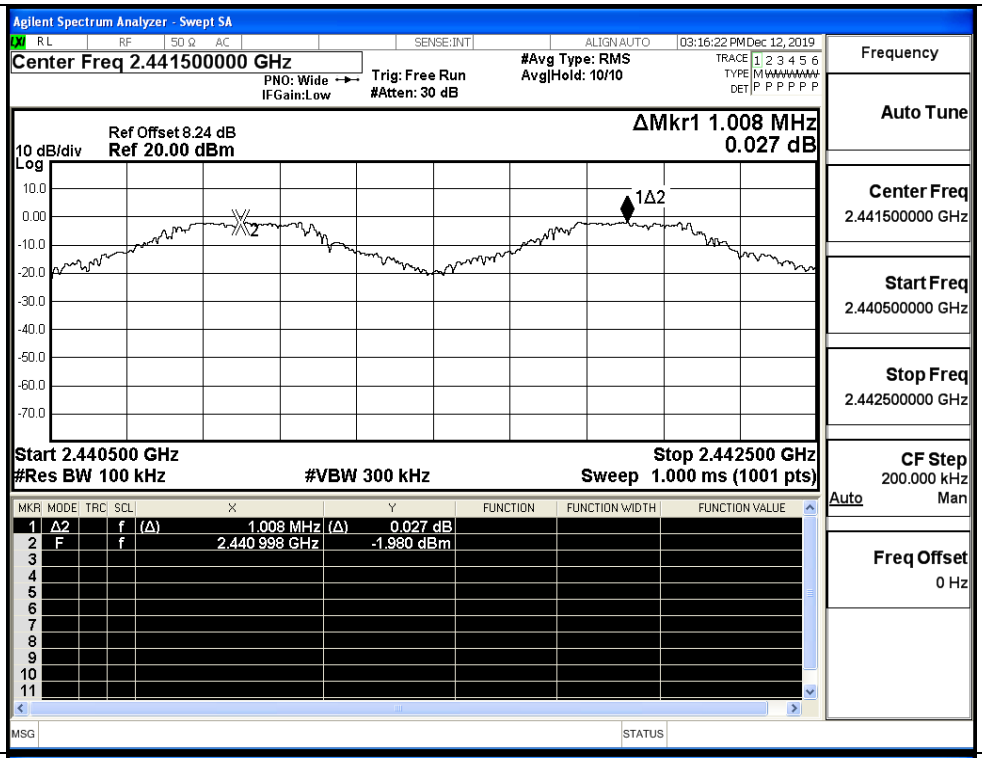
8DPSK/MCH		
8DPSK/HCH		

A.3 Carrier Frequency Separation

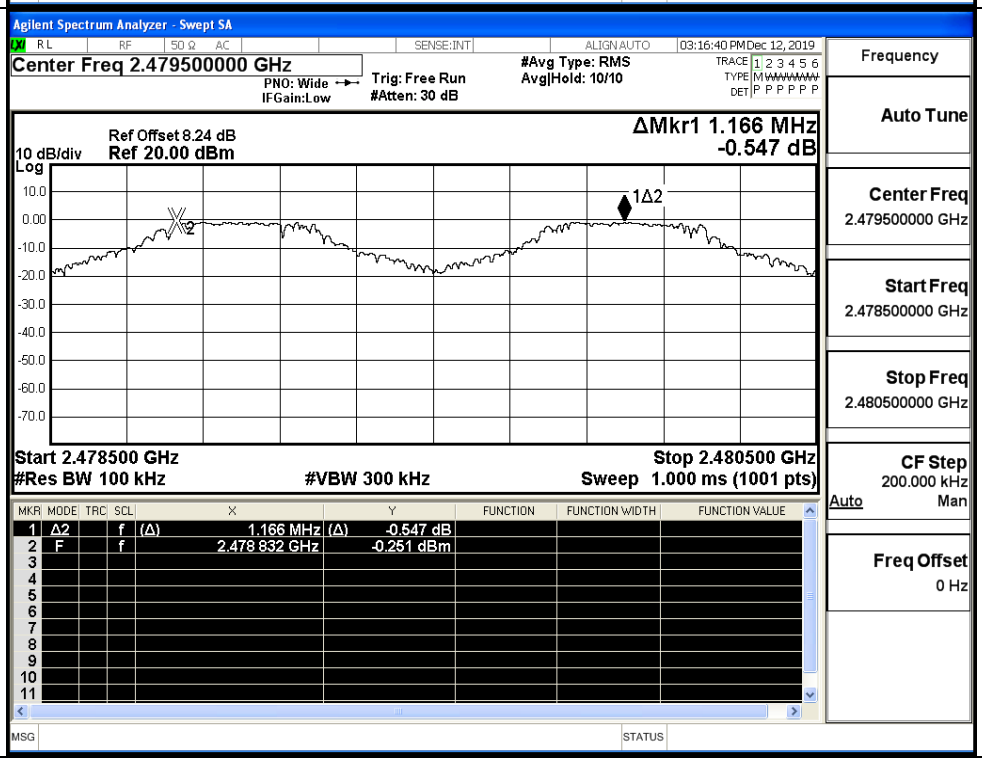
Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.117	0.686	PASS
	MCH	1.008	0.686	PASS
	HCH	1.166	0.686	PASS
π/4DQPSK	LCH	1.148	0.863	PASS
	MCH	1.022	0.863	PASS
	HCH	0.998	0.863	PASS
8DPSK	LCH	1.156	0.865	PASS
	MCH	1.176	0.865	PASS
	HCH	1.128	0.865	PASS

Test Graphs		
GFSK/LCH		

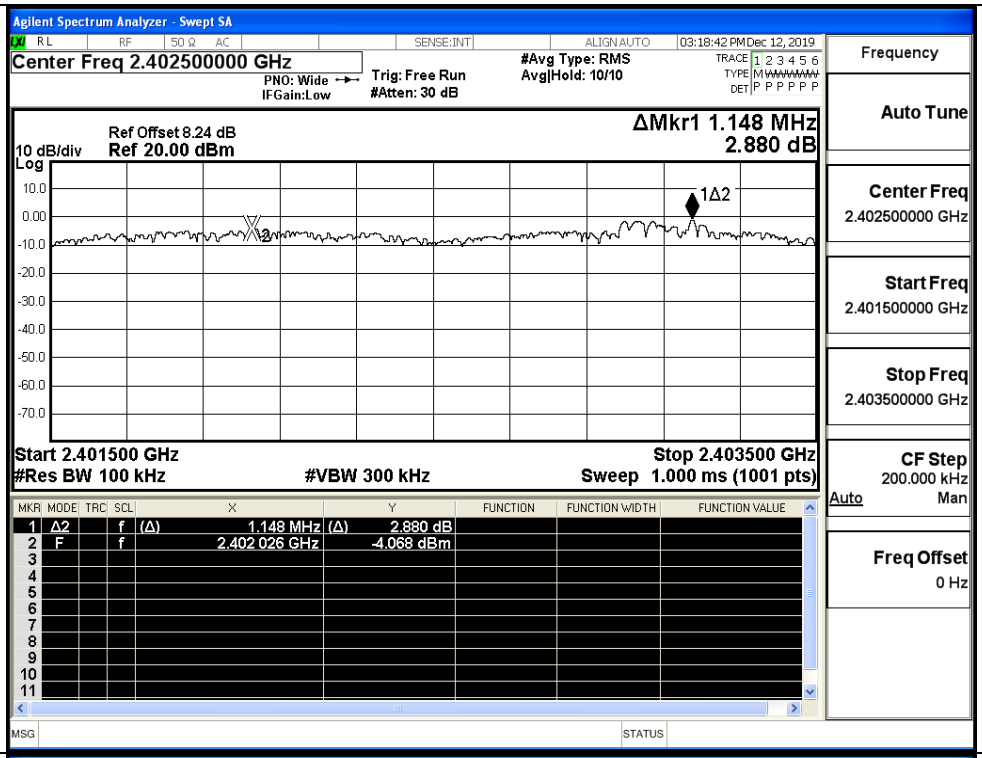
GFSK/MCH



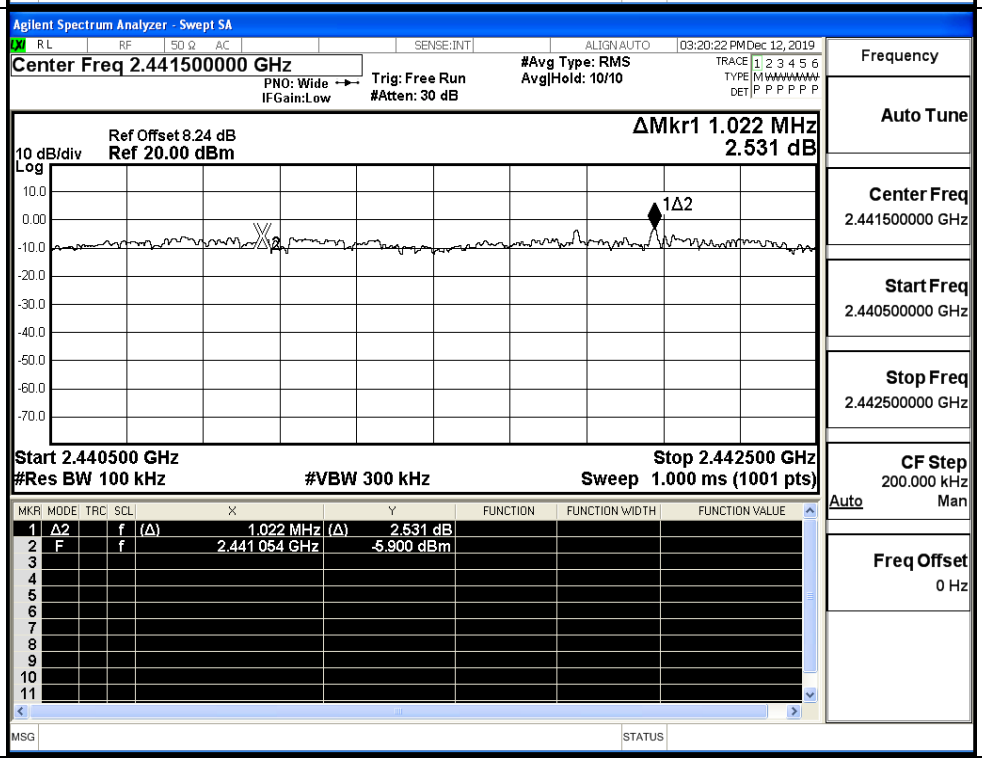
GFSK/HCH



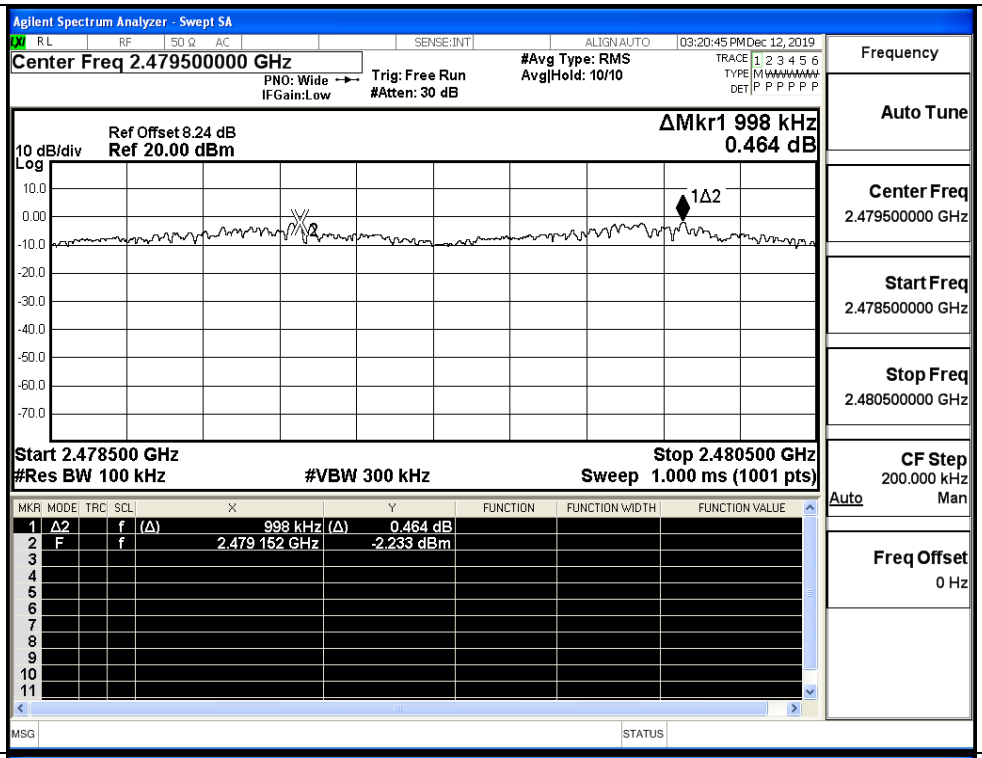
π/4DQPSK/LCH



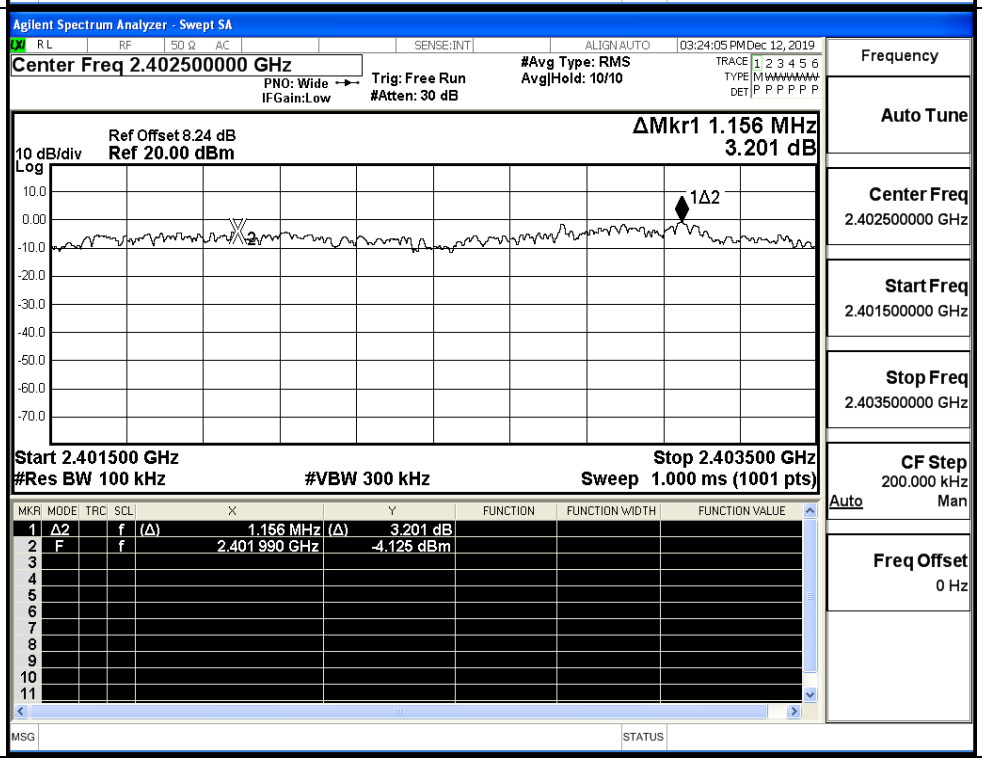
π/4DQPSK/MCH

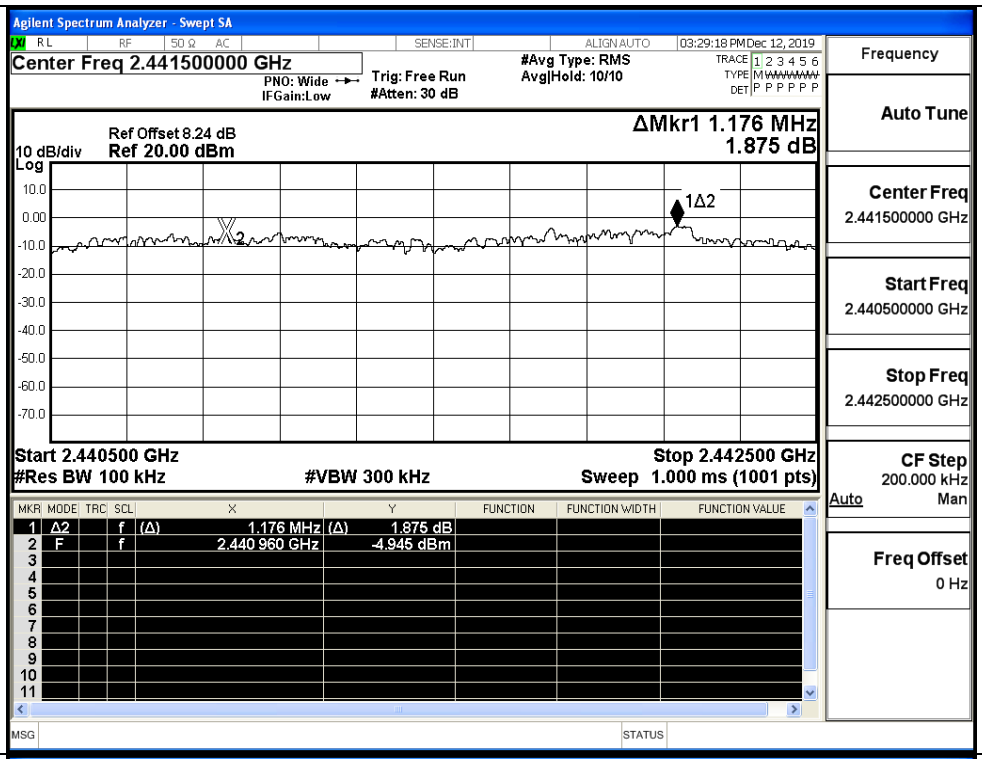
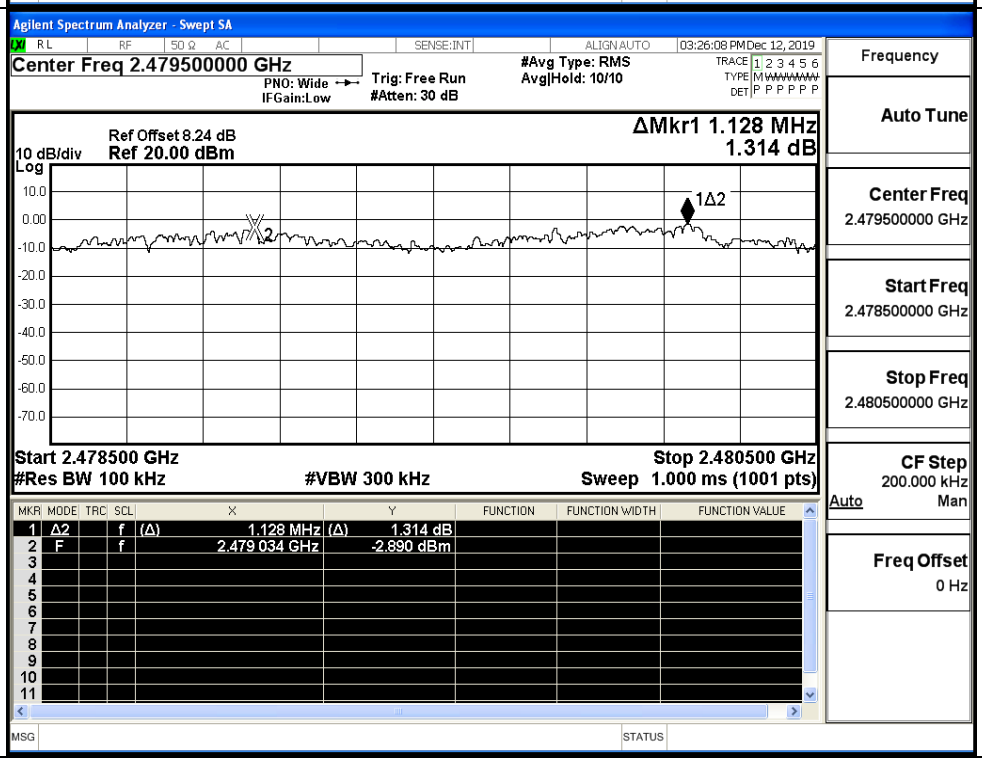


π/4DQPSK/HCH



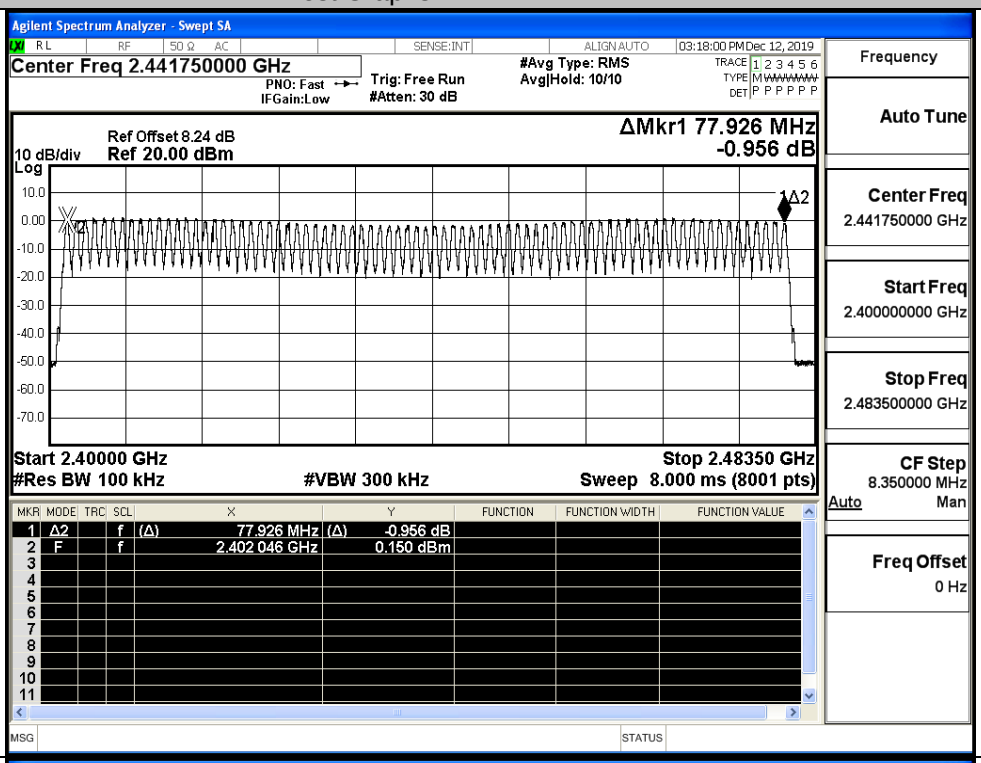
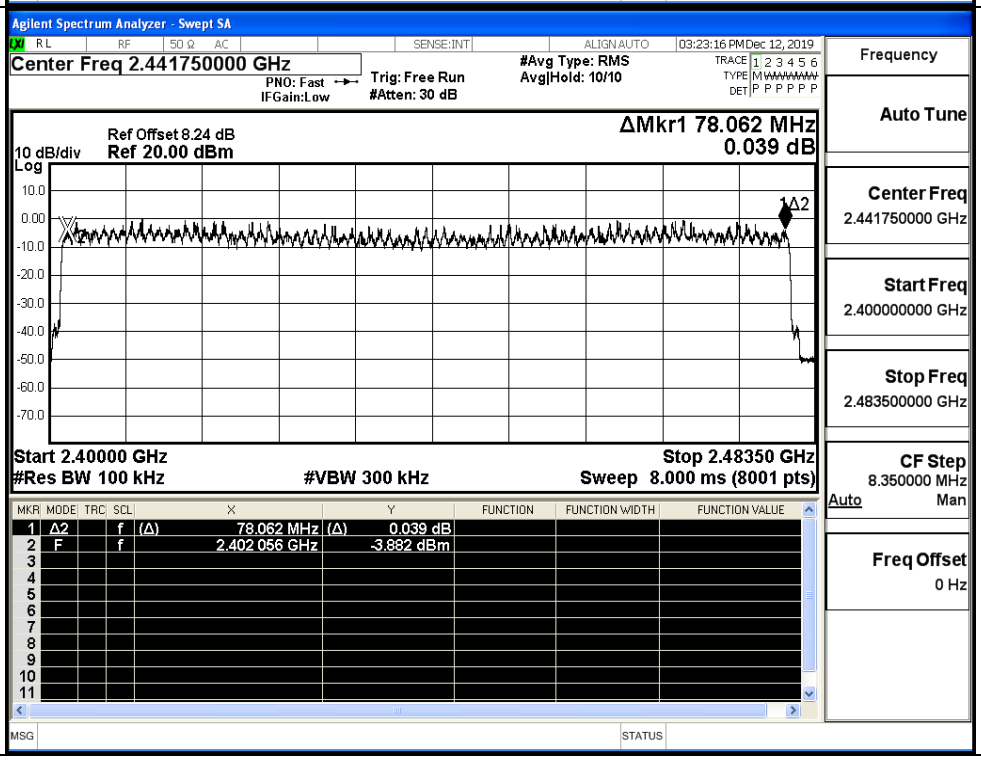
8DPSK/LCH



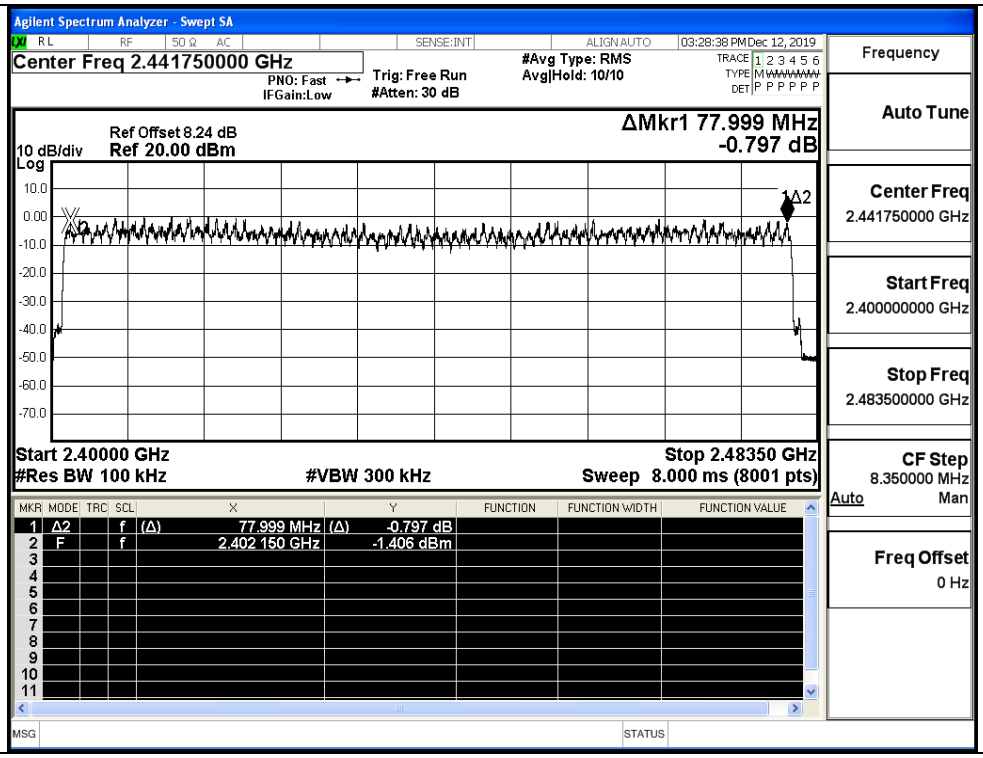
8DPSK/MCH		
8DPSK/HCH		

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

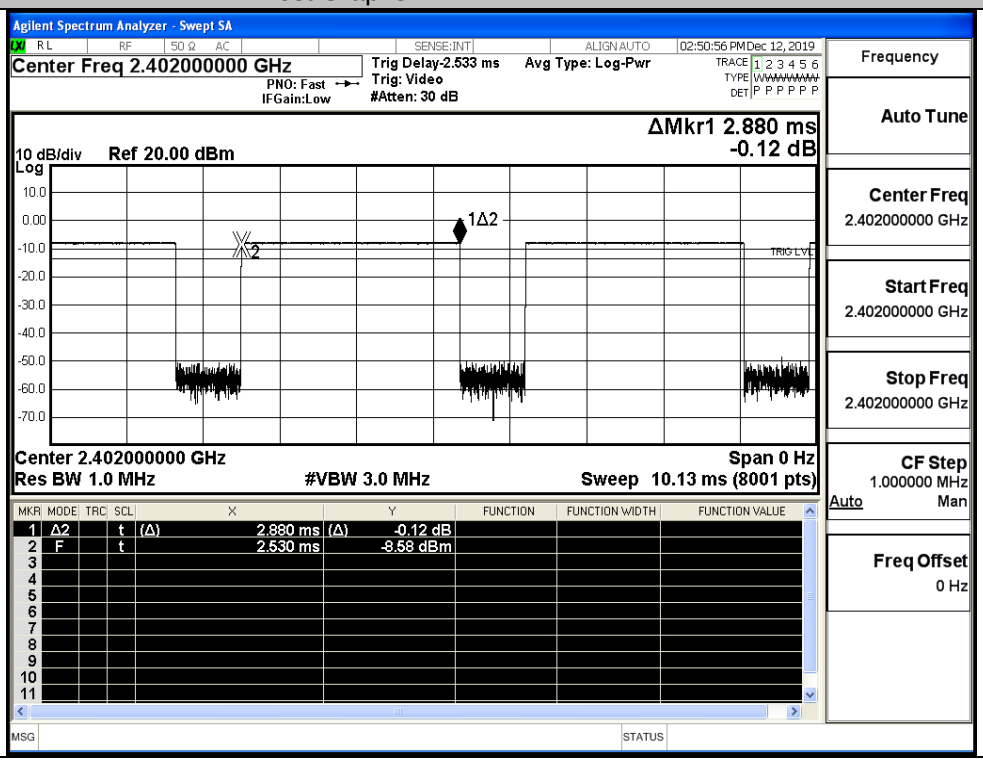
Test Graphs		
GFSK/Hop		
π/4DQPSK/Hop		

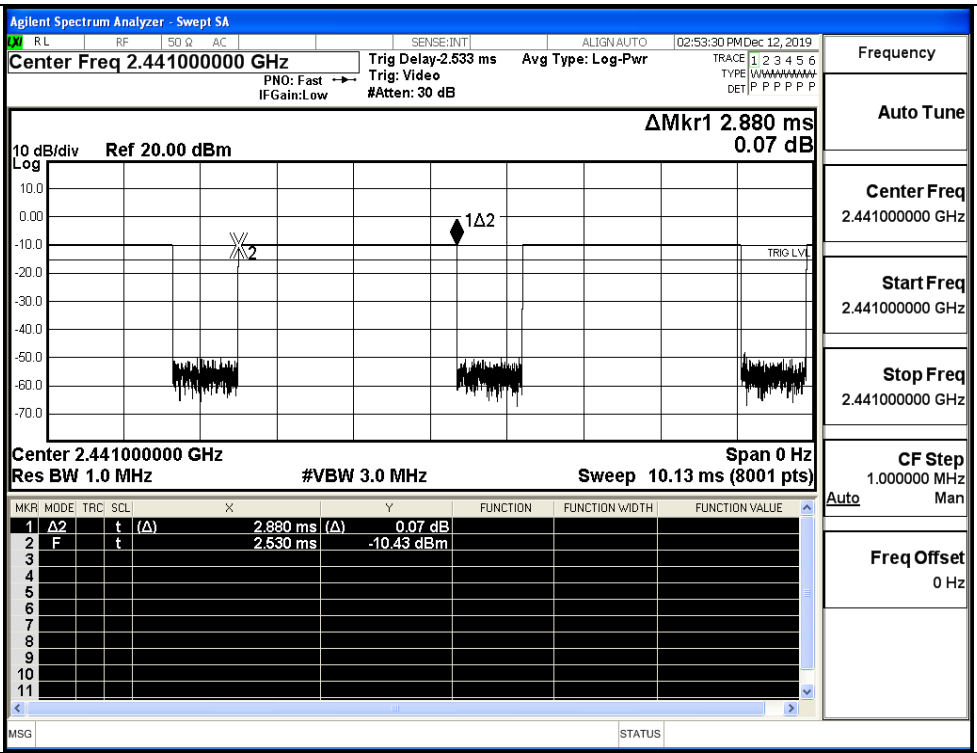
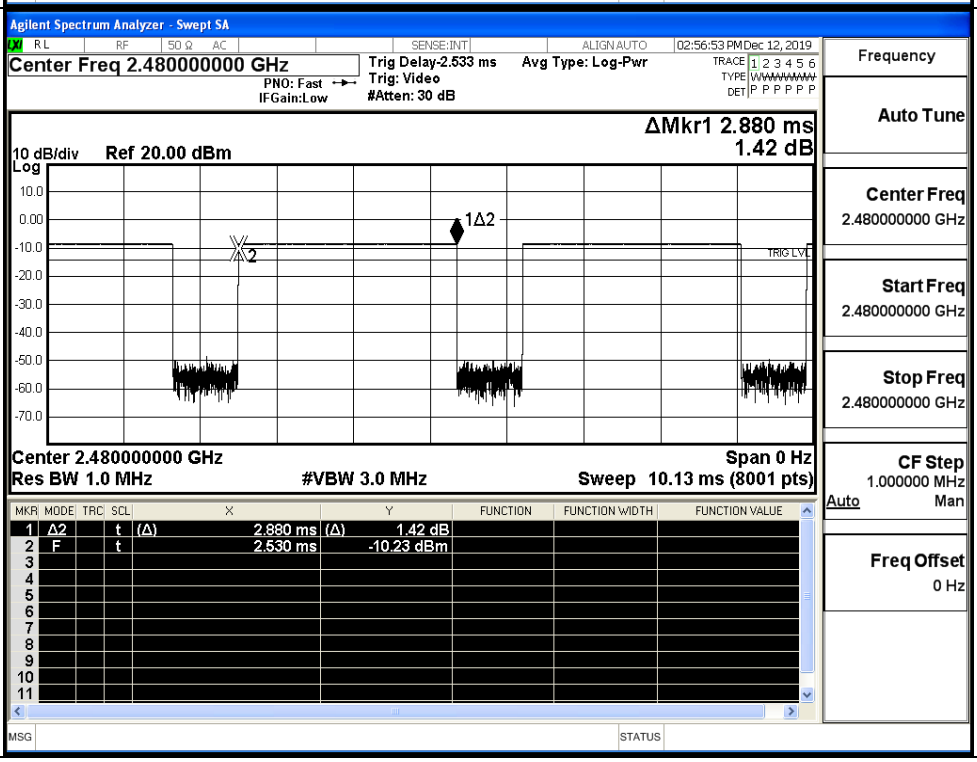
8DPSK/Hop


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
03:28:38 PM Dec 12, 2019
Ref Offset 8.24 dB
10 dB/div
Ref 20.00 dBm
ΔMkr1 77.999 MHz
-0.797 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) 77.999 MHz (Δ) -0.797 dB
2 F f 2.402 150 GHz -1.406 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

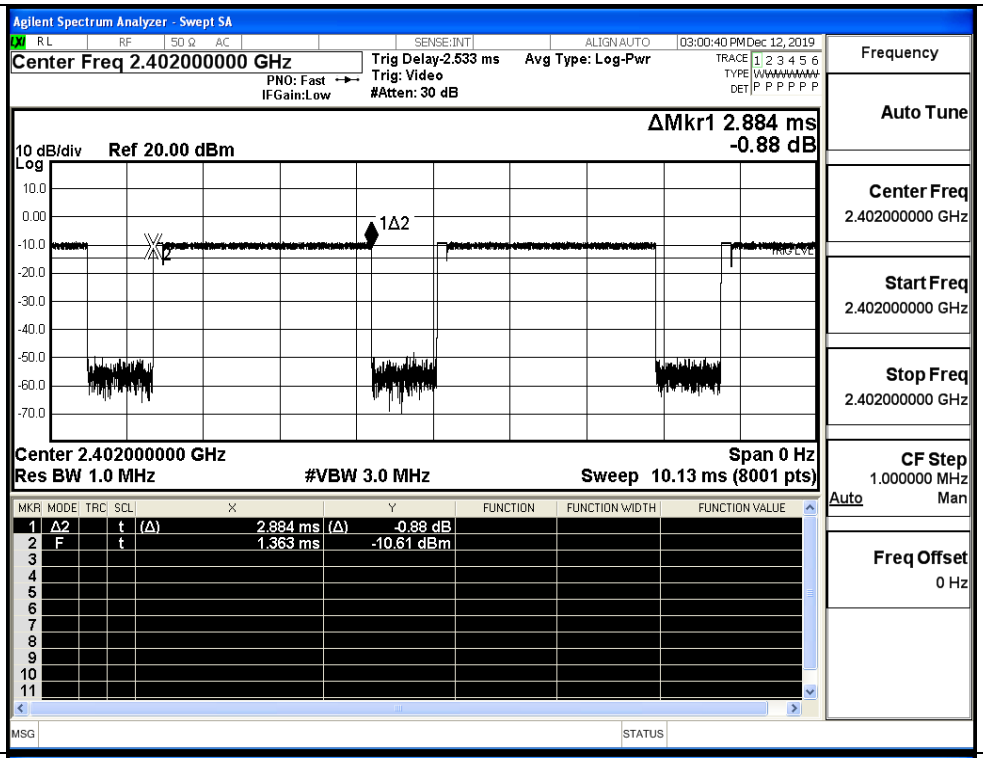
A.5 Dwell Time

Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.88	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	2.88	106.7	0.308	0.4	PASS
	3DH5	MCH	2.88	106.7	0.308	0.4	PASS
	3DH5	HCH	2.88	106.7	0.308	0.4	PASS

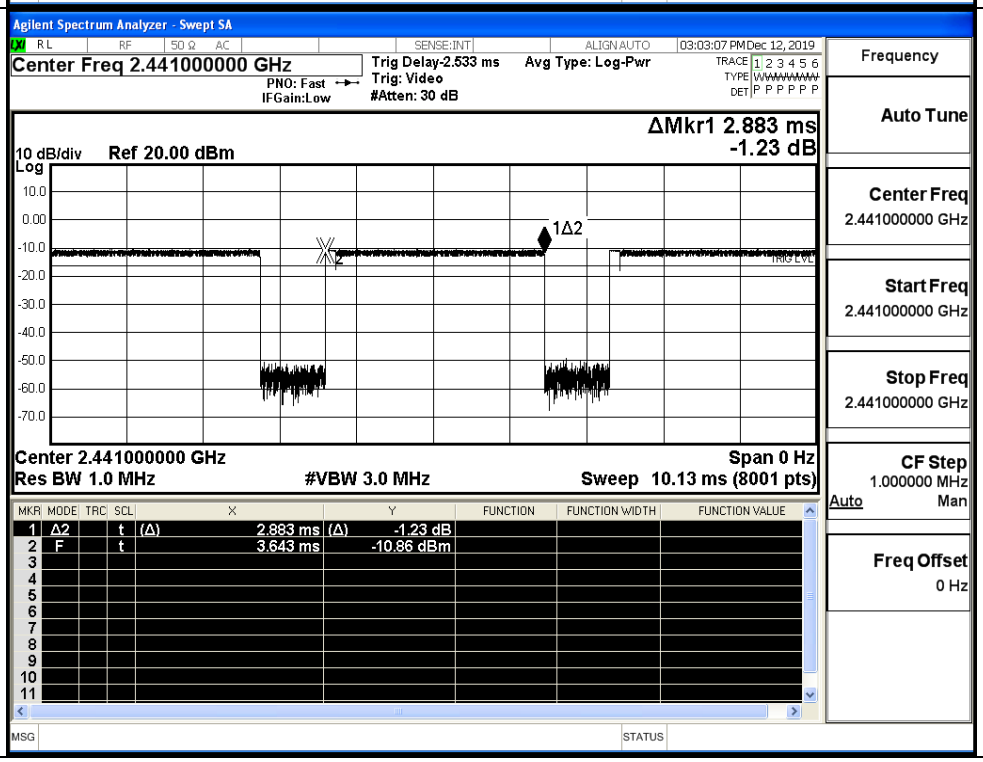
Test Graphs	
GFSK_DH5/LCH	

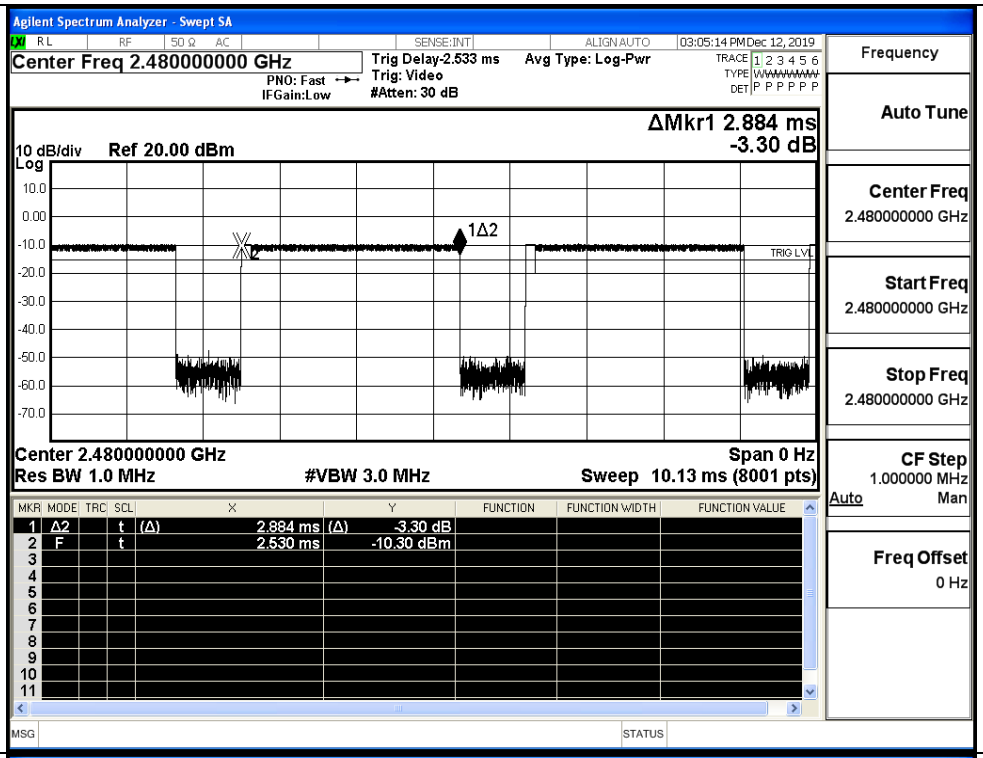
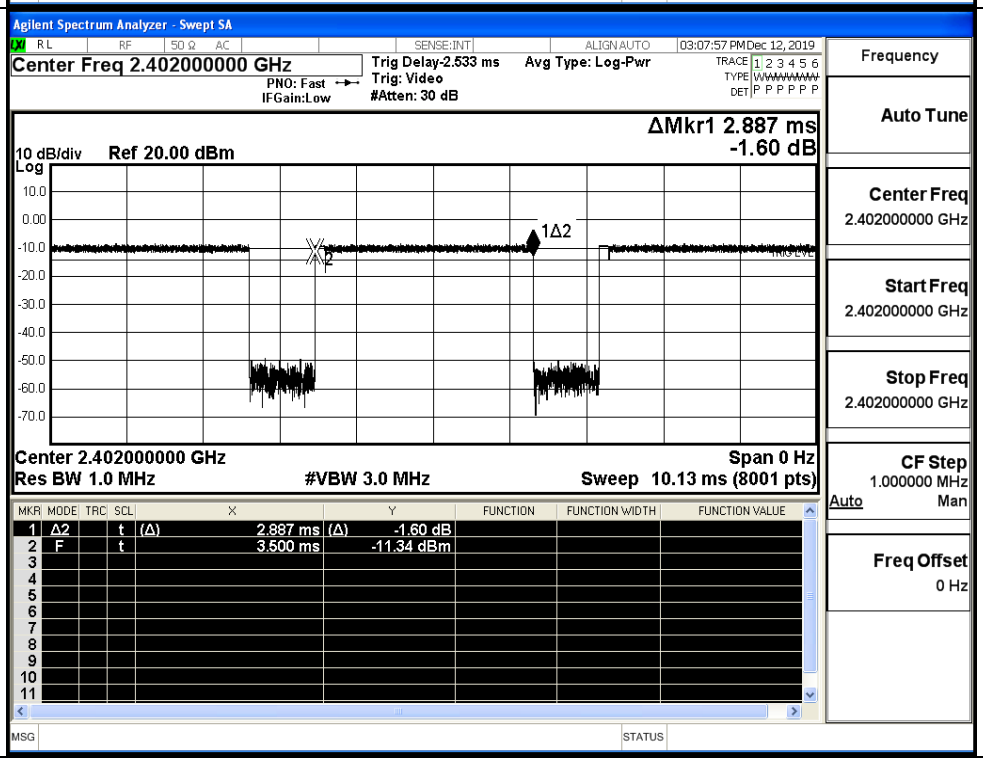
GFSK_DH5/MCH	
GFSK_DH5/HCH	

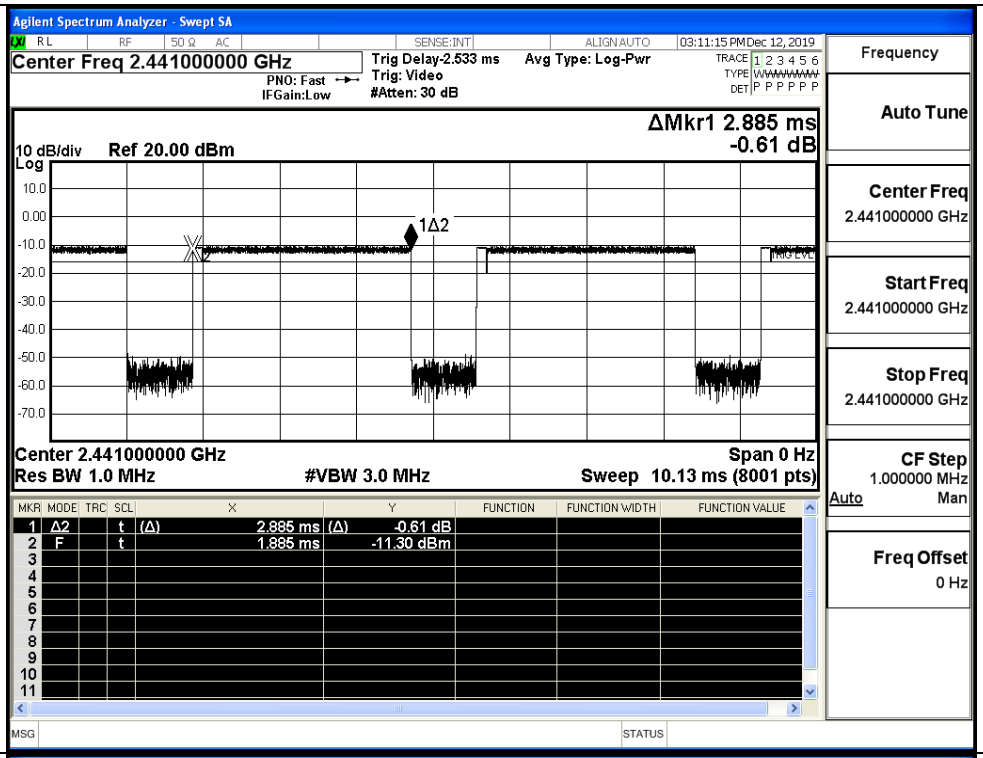
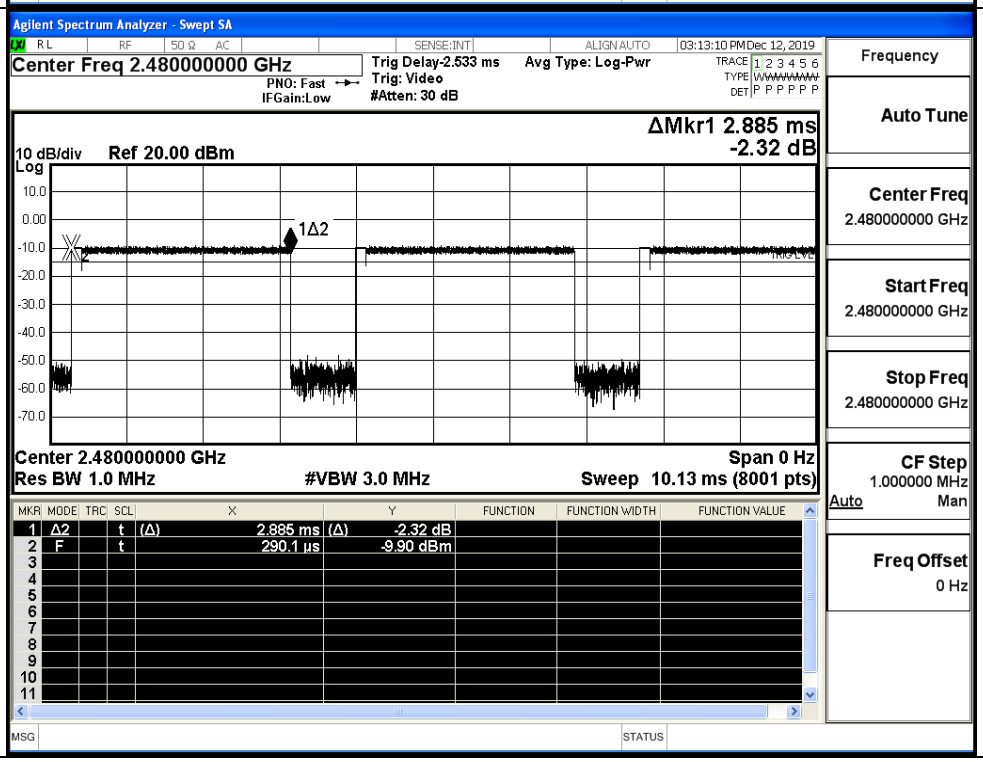
π/4DQPSK
_2DH5/LCH



π/4DQPSK
_2DH5/MCH

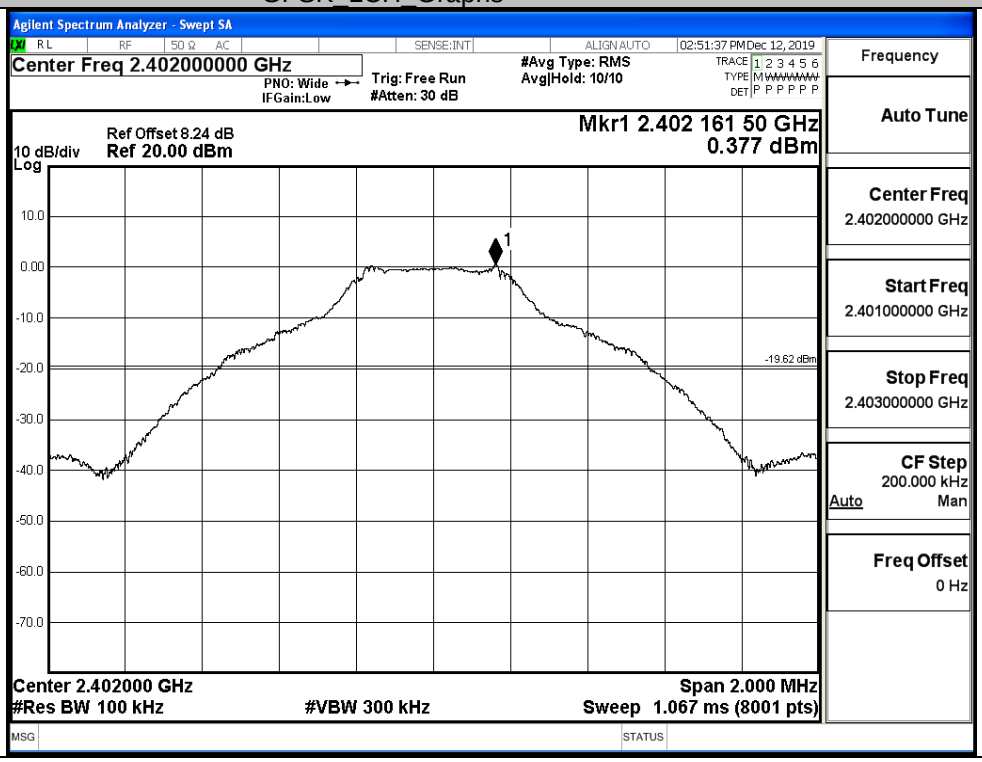


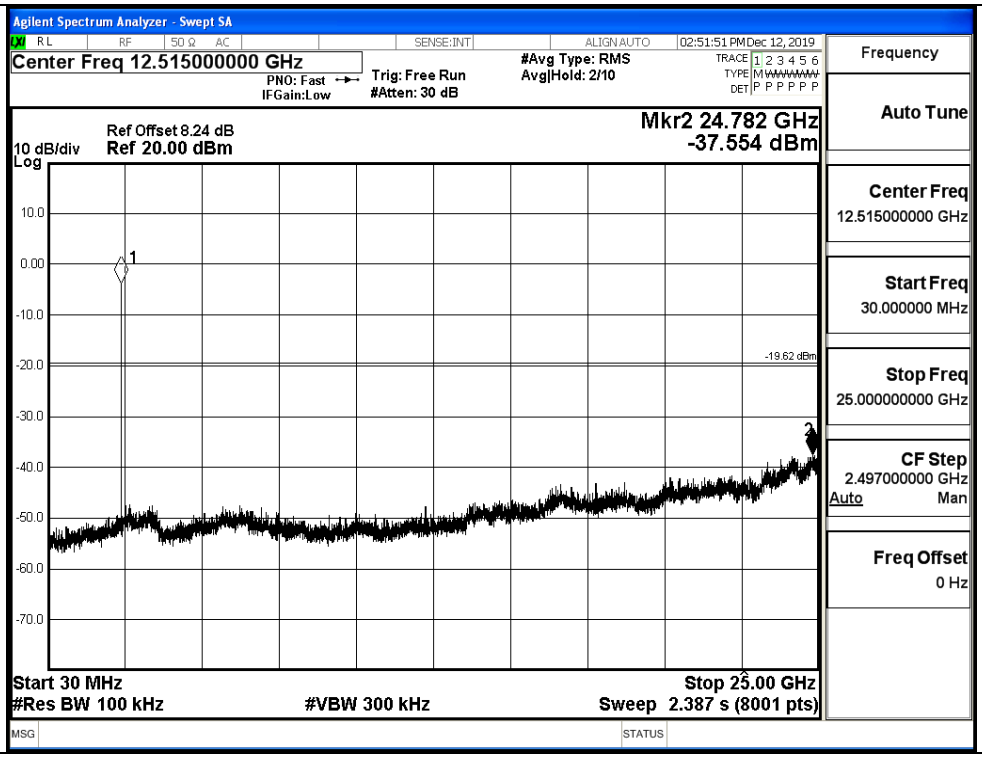
π/4DQPSK _2DH5/HCH	
8DPSK _3DH5/LCH	

8DPSK _3DH5/MCH	
8DPSK _3DH5/HCH	

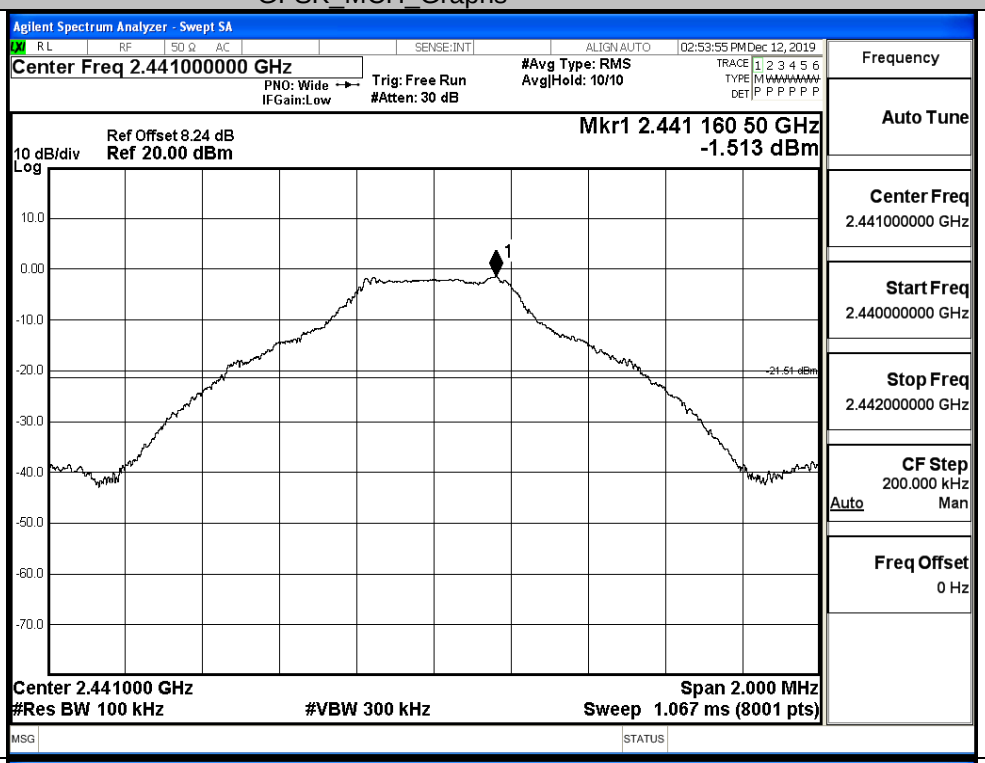
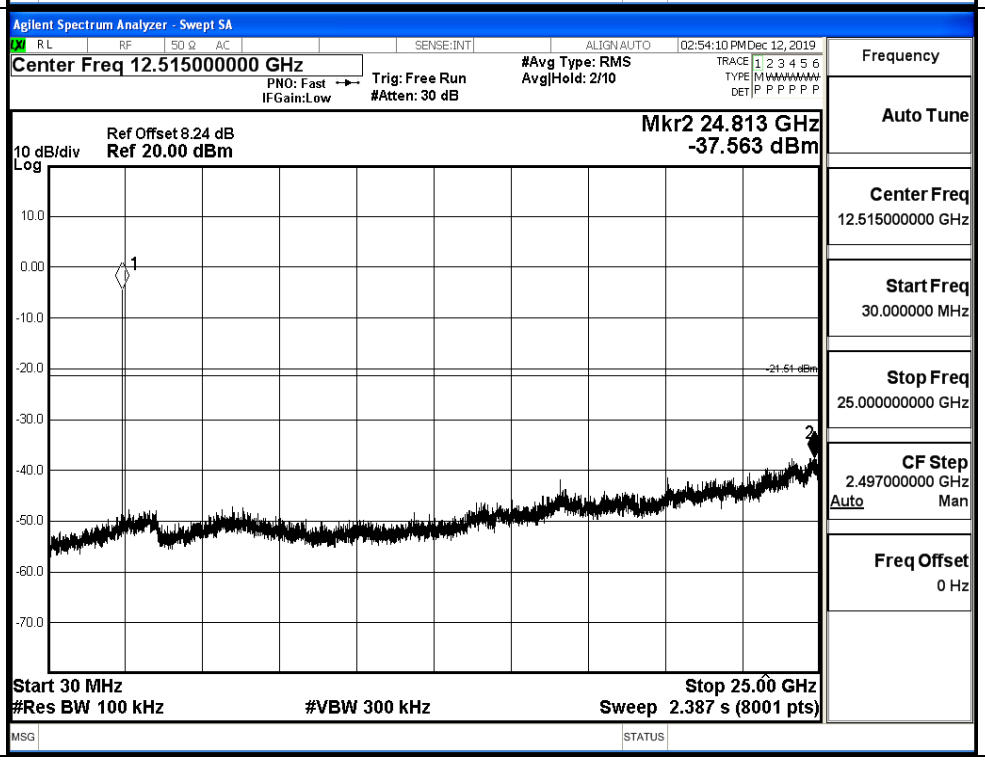
A.6 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	0.377	-37.554	-19.623	PASS
	MCH	-1.513	-37.563	-21.513	PASS
	HCH	-0.292	-35.672	-20.292	PASS
π/4DQPSK	LCH	-0.97	-36.106	-20.970	PASS
	MCH	-2.533	-36.381	-22.533	PASS
	HCH	-1.608	-36.408	-21.608	PASS
8DPSK	LCH	-0.926	-36.919	-20.926	PASS
	MCH	-2.509	-37.288	-22.509	PASS
	HCH	-1.658	-34.874	-21.658	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
02:51:51 PM Dec 12, 2019
Ref Offset 8.24 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr2 24.782 GHz
-37.554 dBm
-19.62 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		

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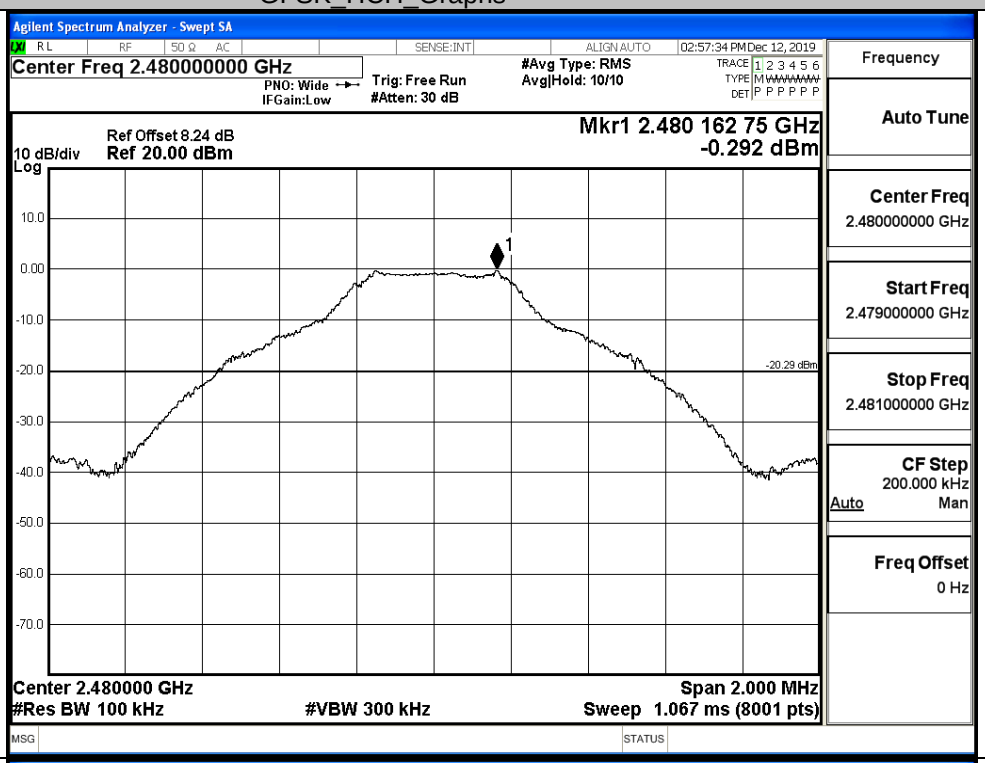
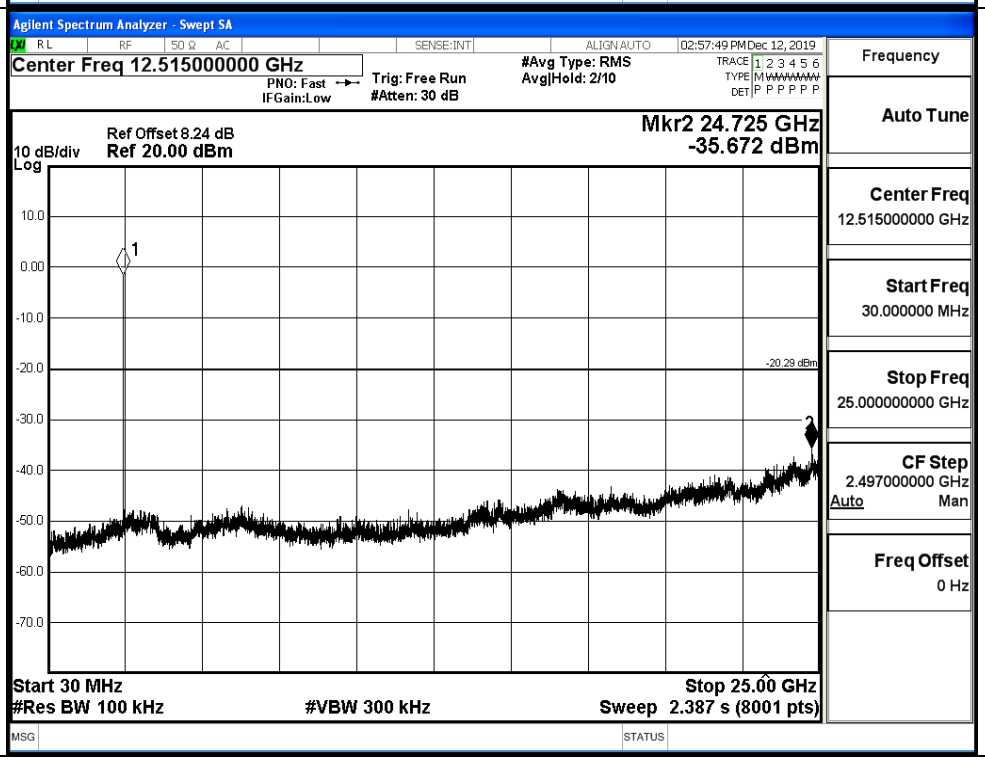
Pref			
Puw			

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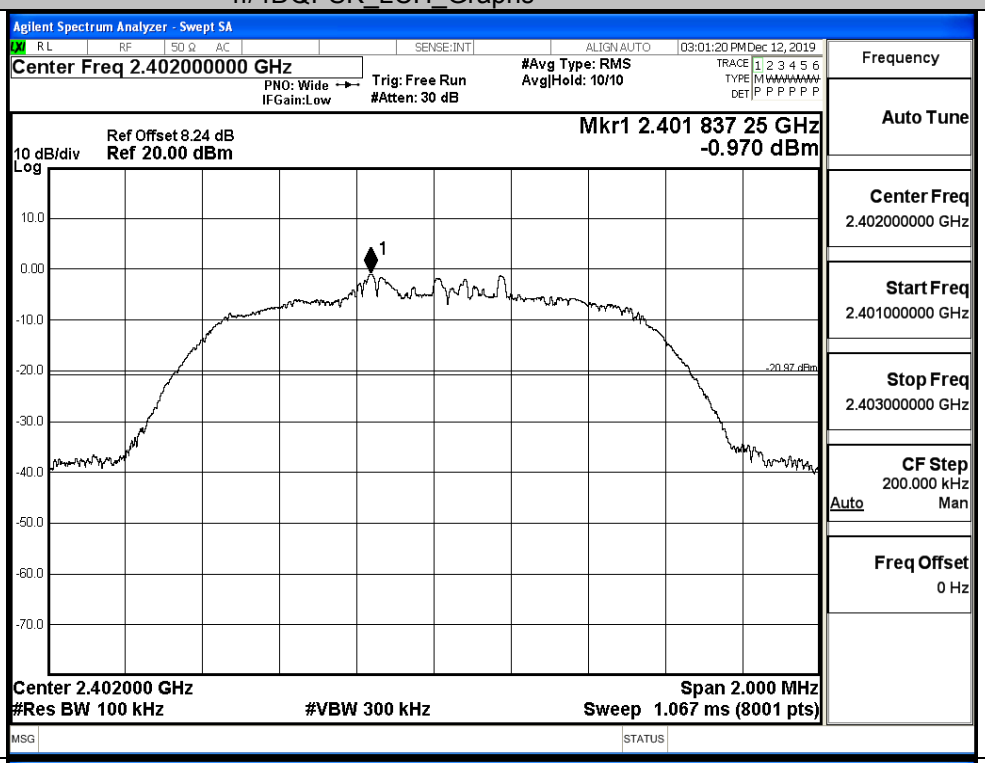
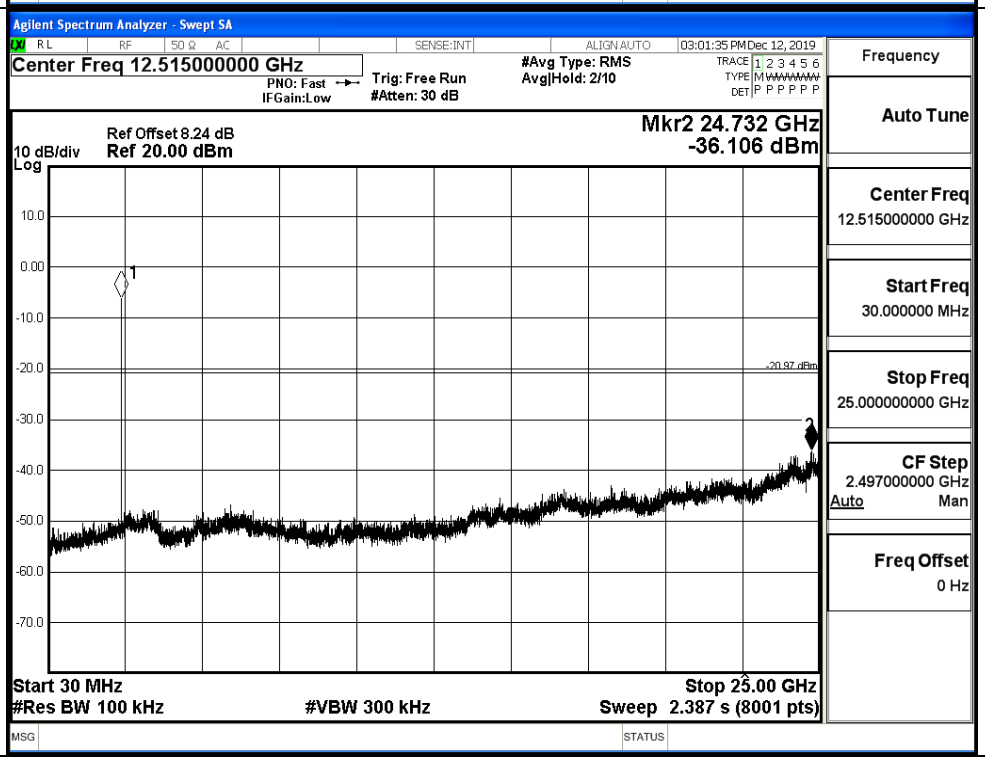
Pref		
Puw		

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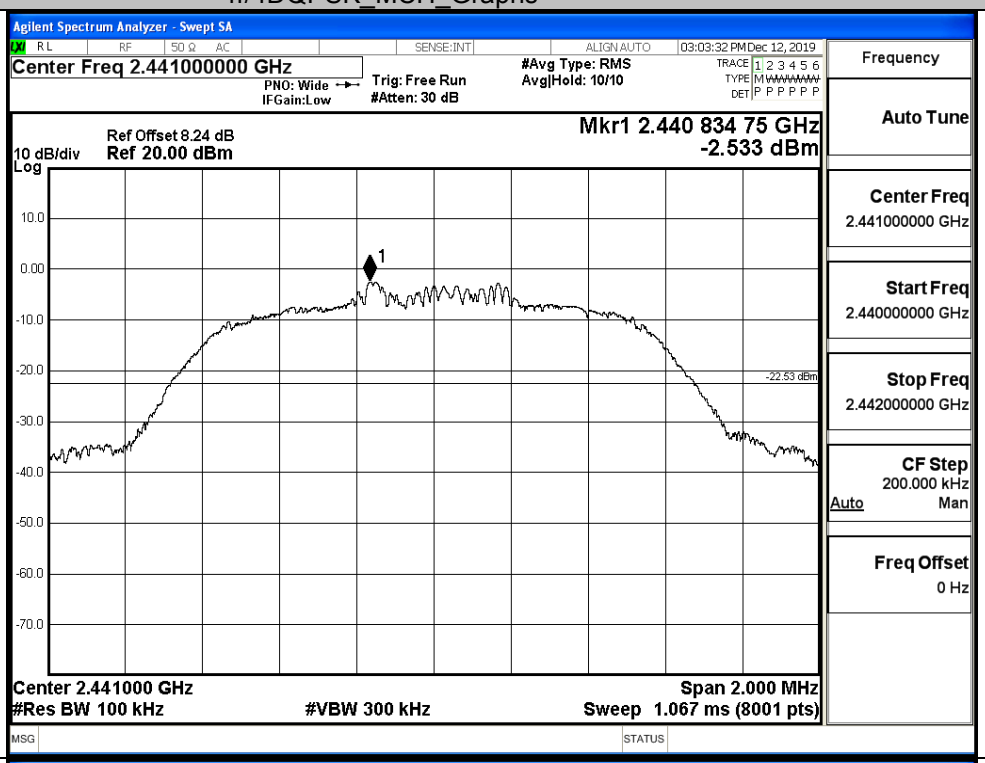
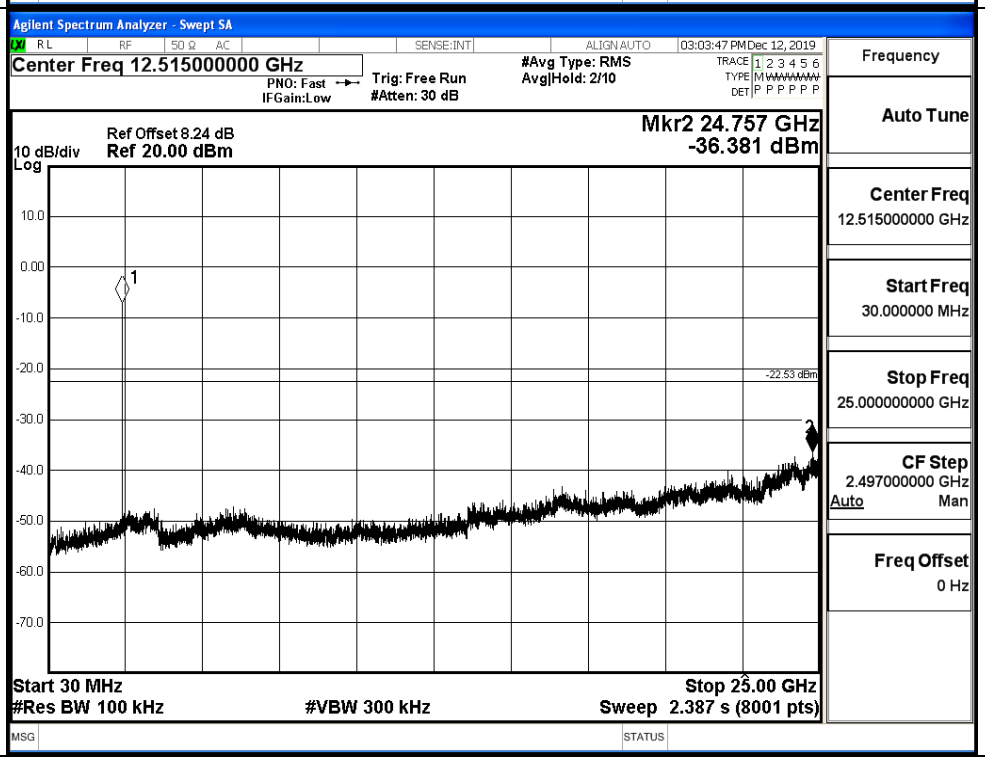
Pref			
Puw			

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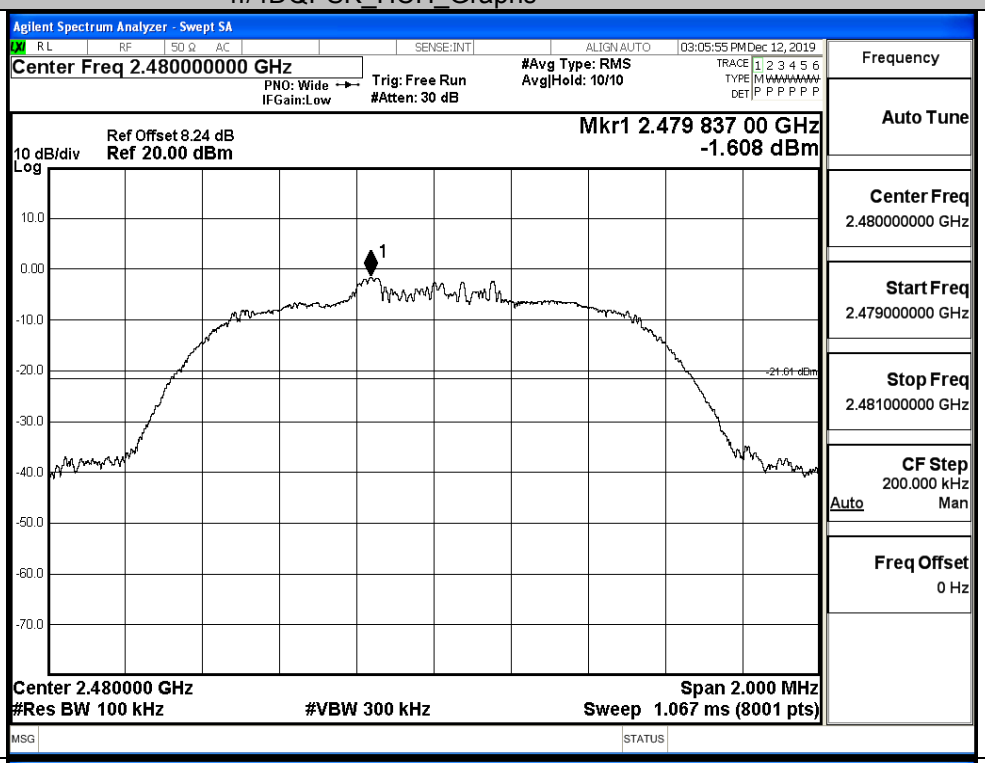
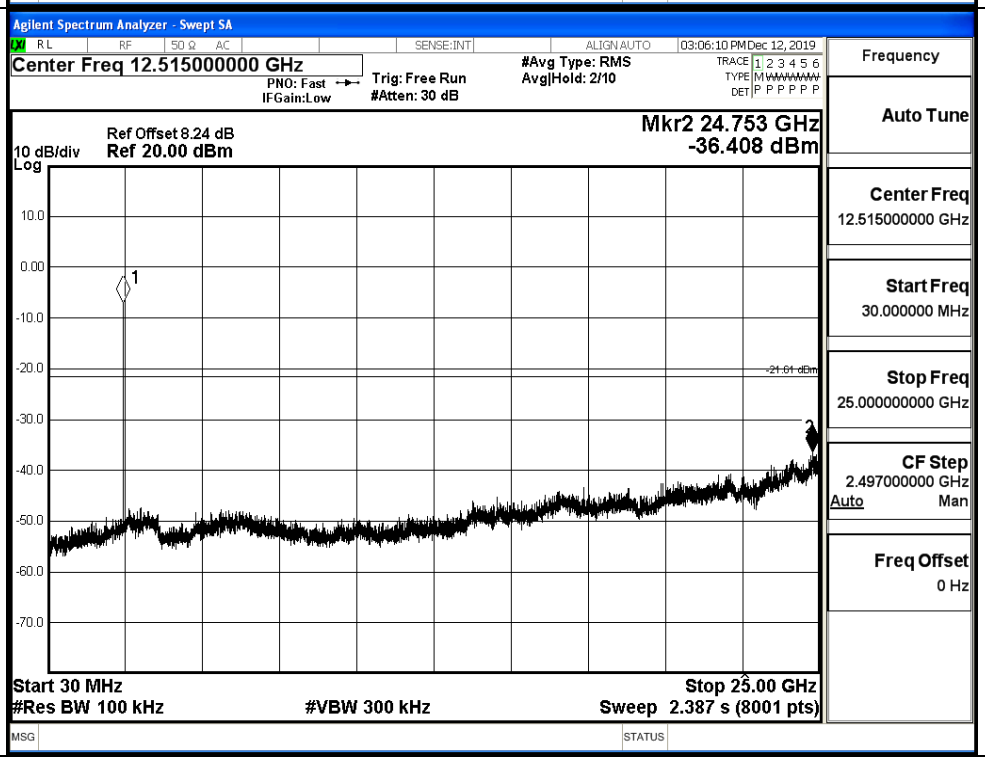
Pref			
Puw			

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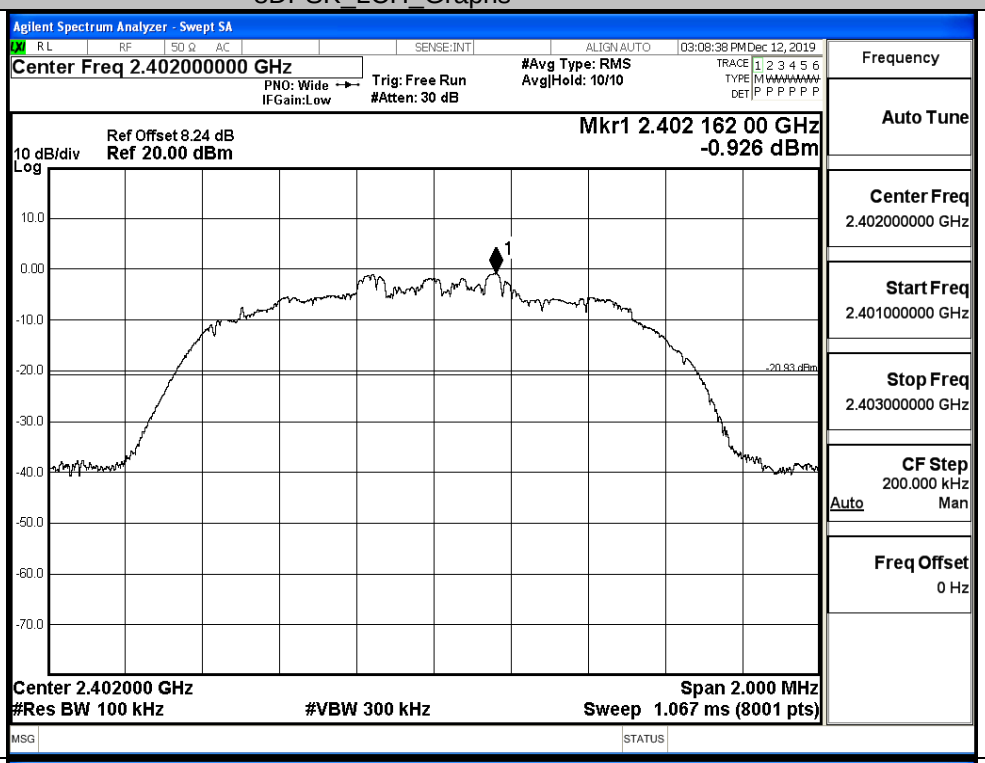
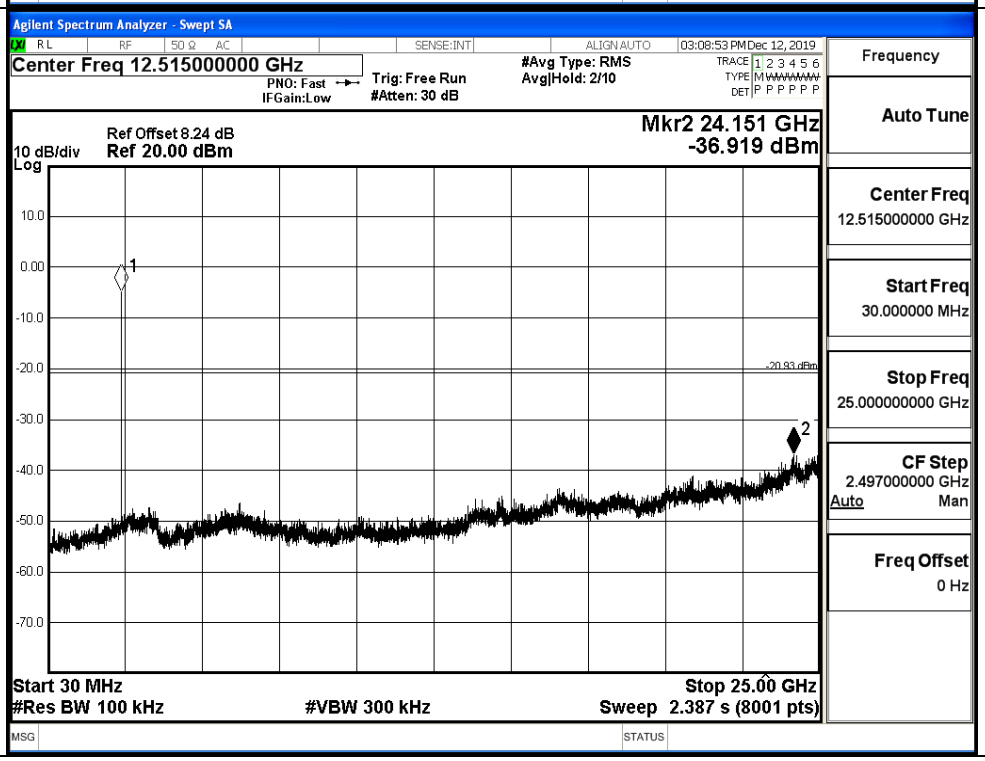
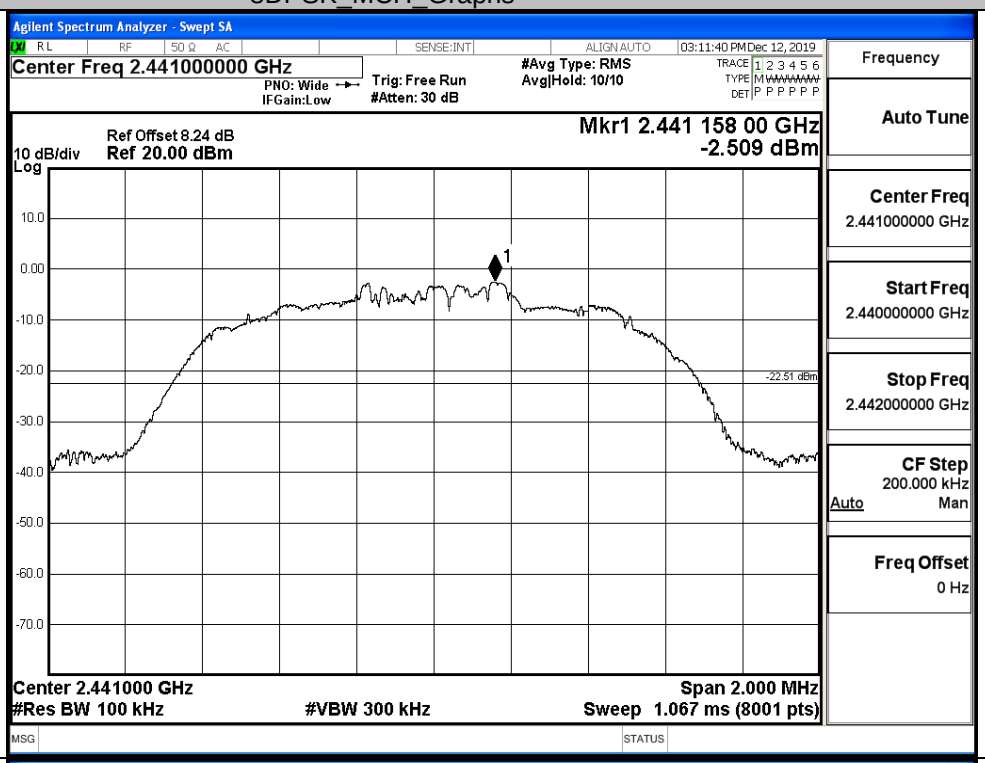
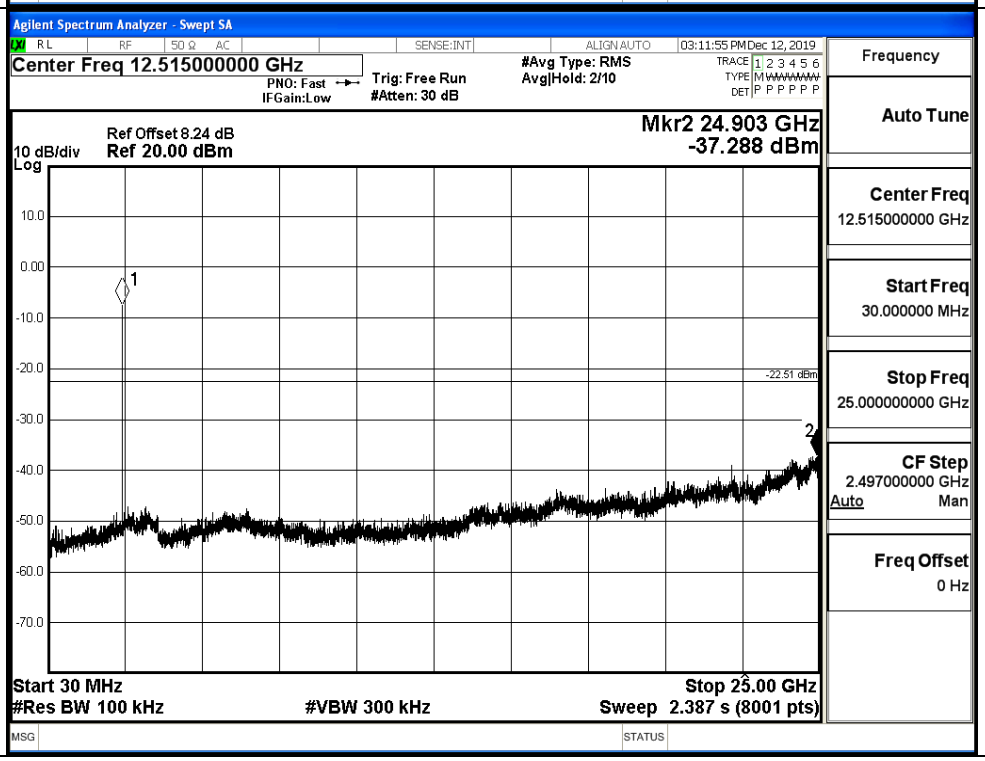
Pref		
Puw		

8DPSK_MCH_Graphs		
Pref		
Puw		

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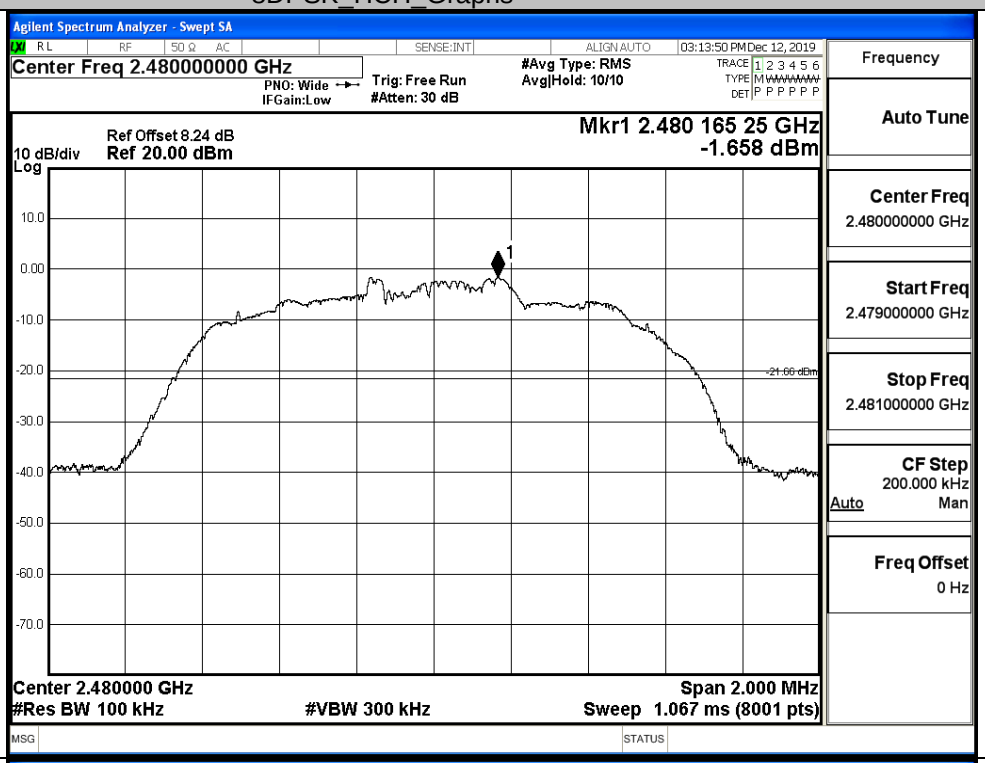
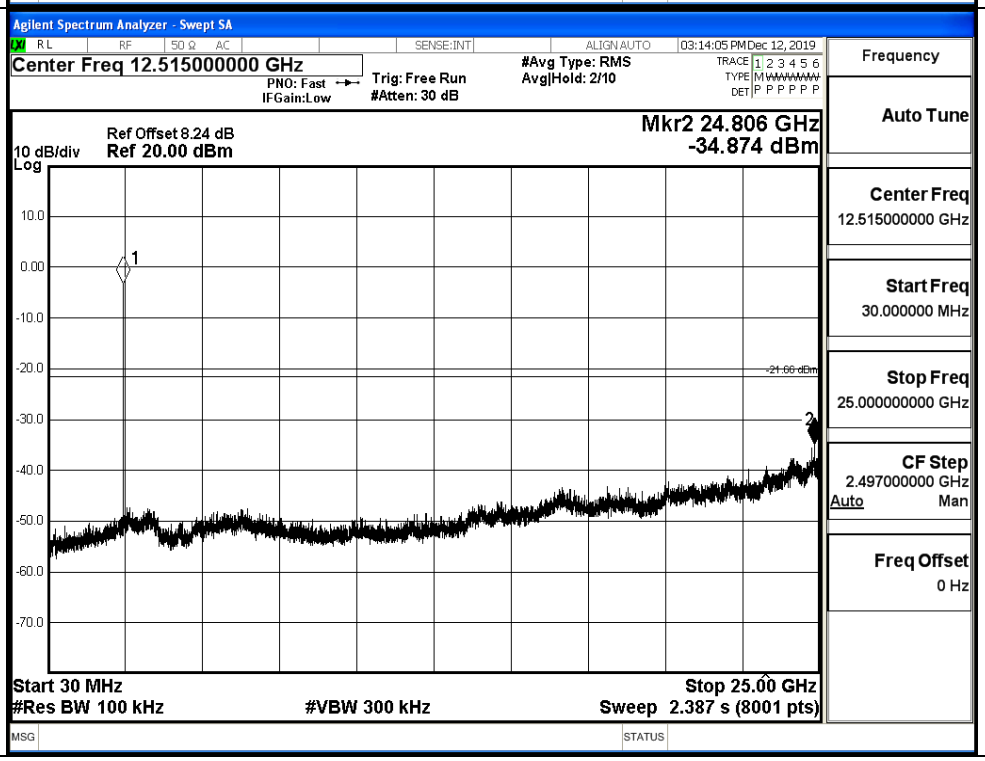
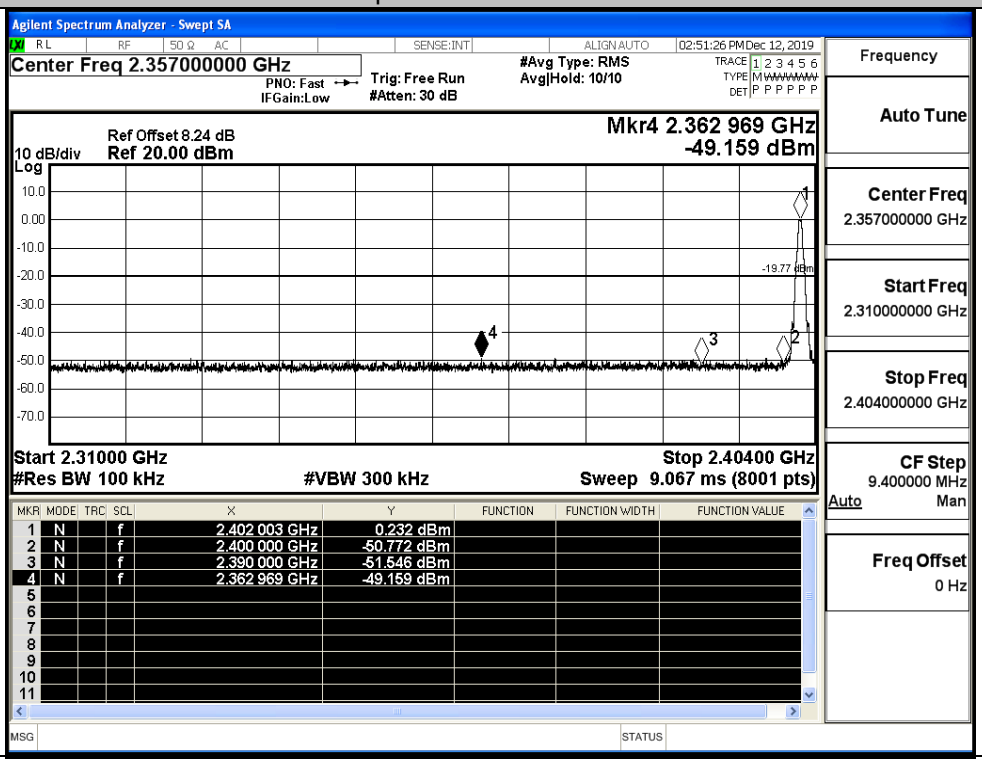
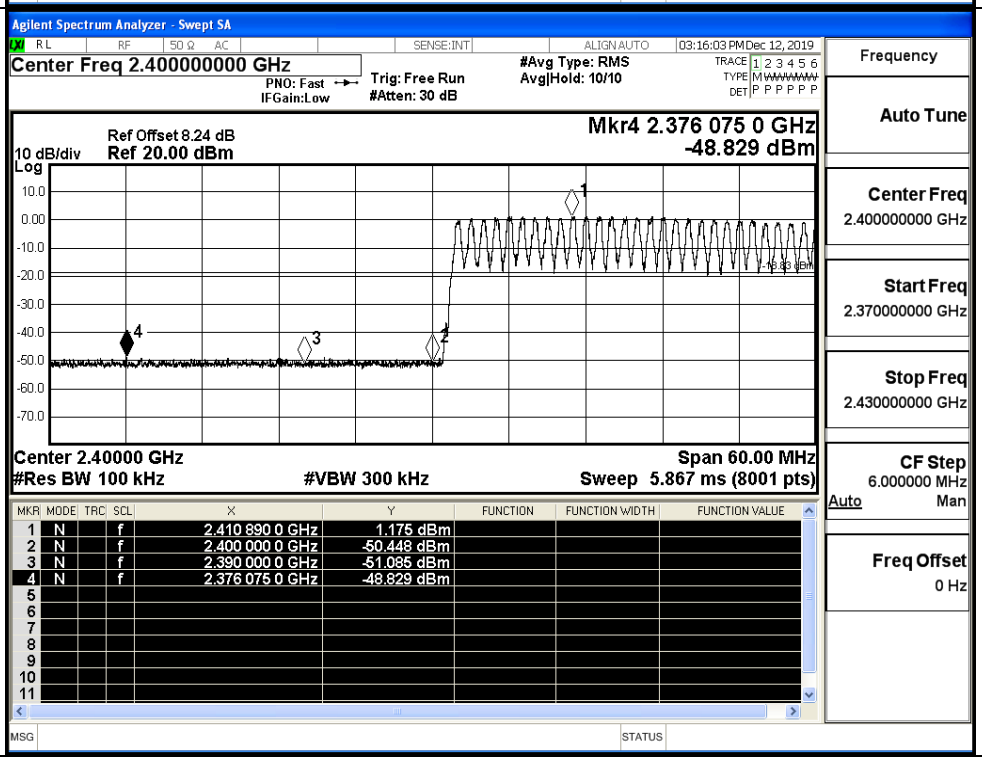
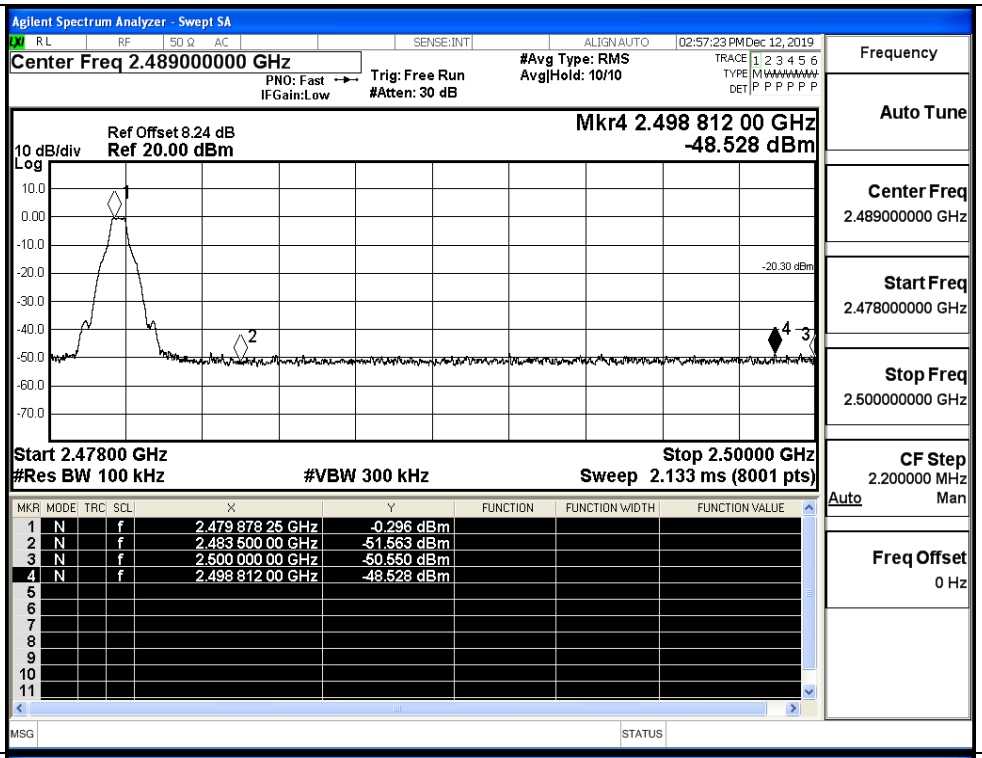
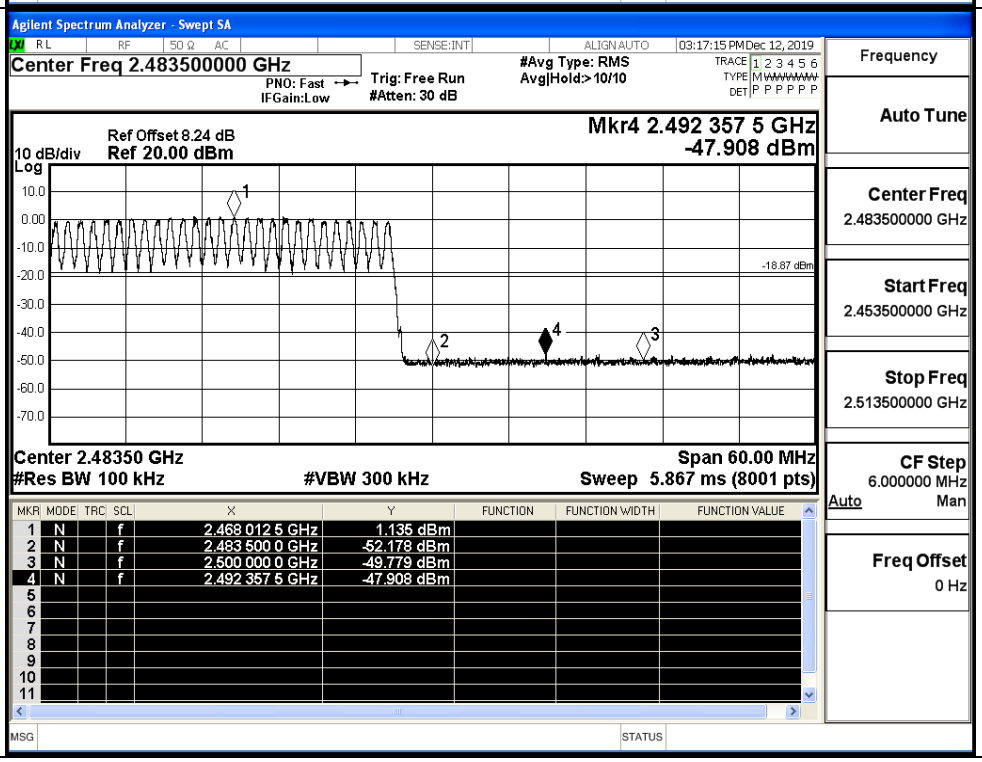
Pref		
Puw		

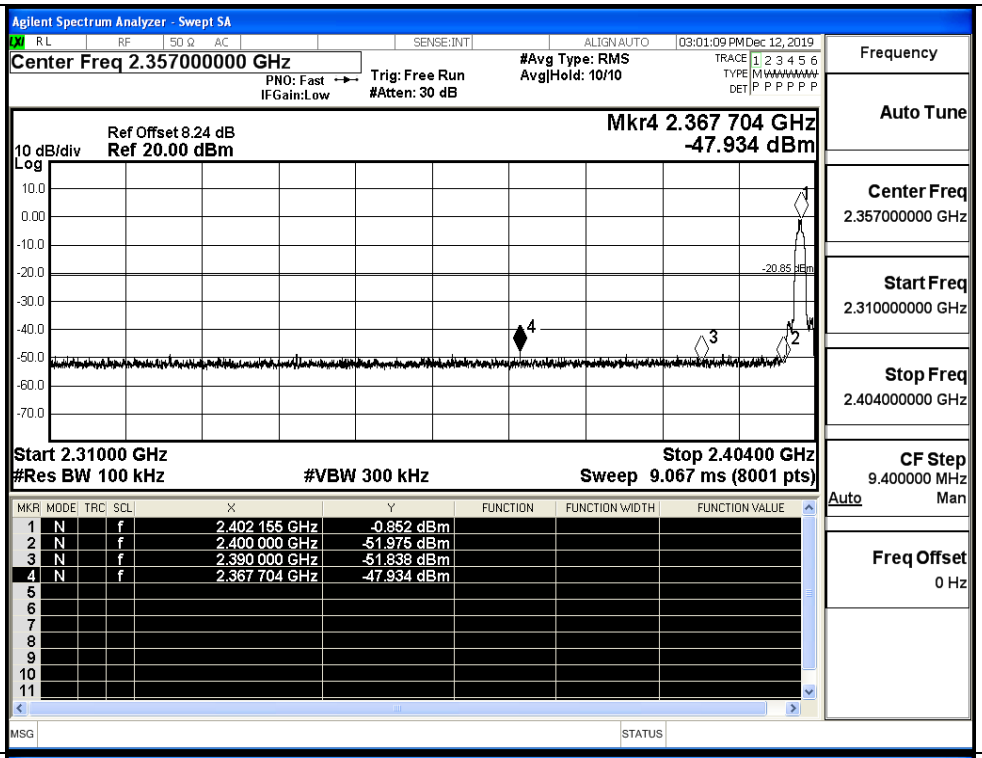
A.7 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	0.232	Off	-49.159	-19.77	PASS
			1.175	On	-48.829	-18.83	PASS
	HCH	2480	-0.296	Off	-48.528	-20.3	PASS
			1.135	On	-47.908	-18.87	PASS
π/4DQPSK	LCH	2402	-0.852	Off	-47.934	-20.85	PASS
			-0.101	On	-48.628	-20.1	PASS
	HCH	2480	-1.909	Off	-48.630	-21.91	PASS
			-0.568	On	-47.800	-20.57	PASS
8DPSK	LCH	2402	-3.058	Off	-49.012	-23.06	PASS
			0.009	On	-48.515	-19.99	PASS
	HCH	2480	-1.666	Off	-48.759	-21.67	PASS
			-0.399	On	-47.779	-20.4	PASS

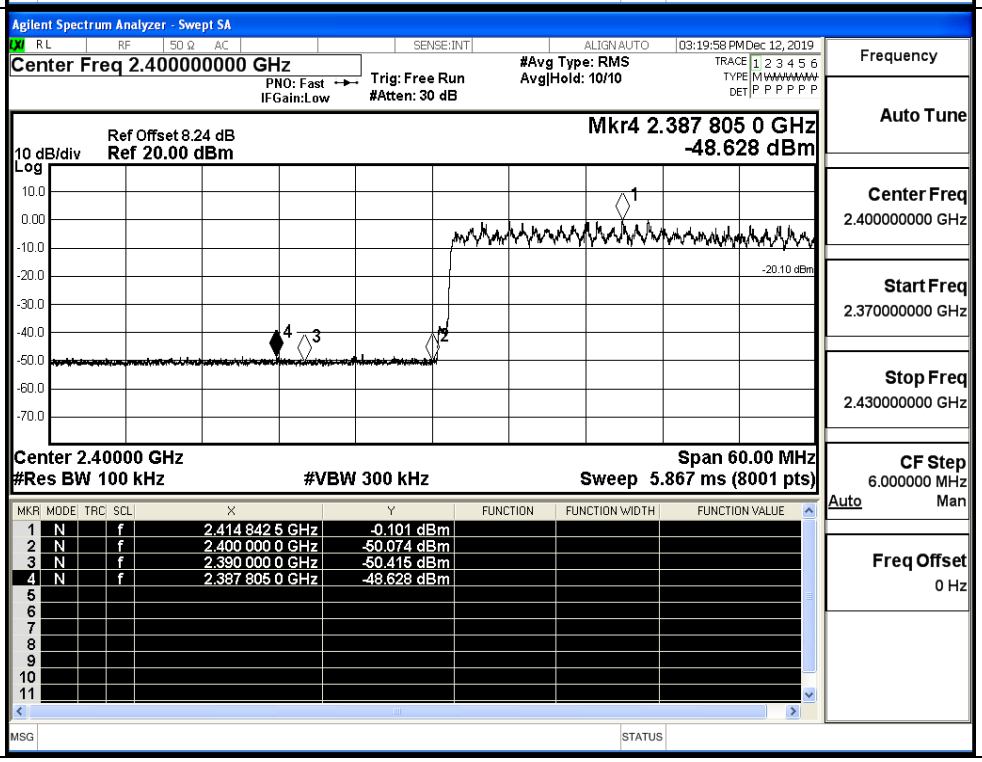
Test Graphs	
GFSK/LCH/No Hop	
GFSK/LCH/Hop	

GFSK/HCH/No Hop	
GFSK/HCH/Hop	

π/4DQPSK/LCH/No Hop



π/4DQPSK/LCH/Hop



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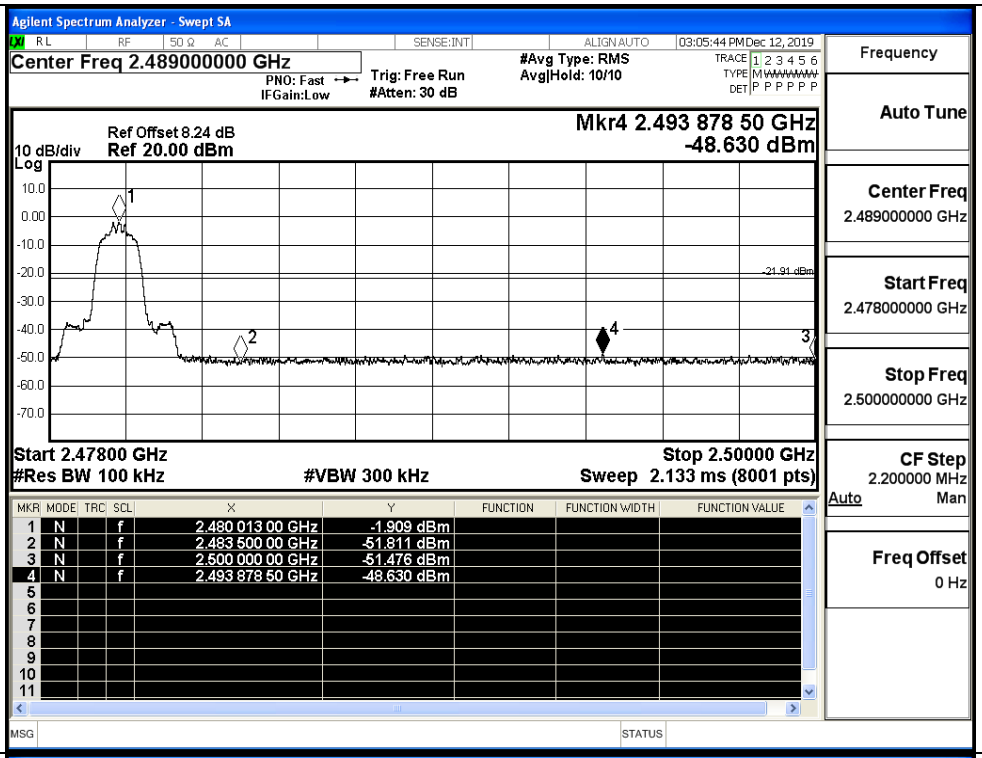
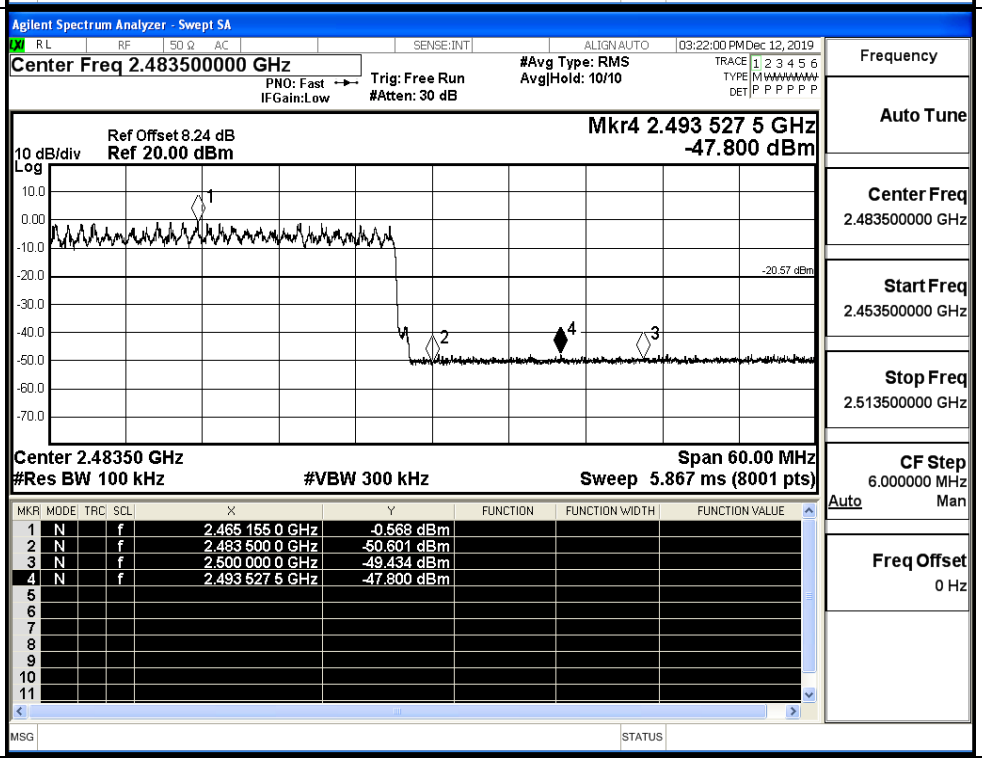
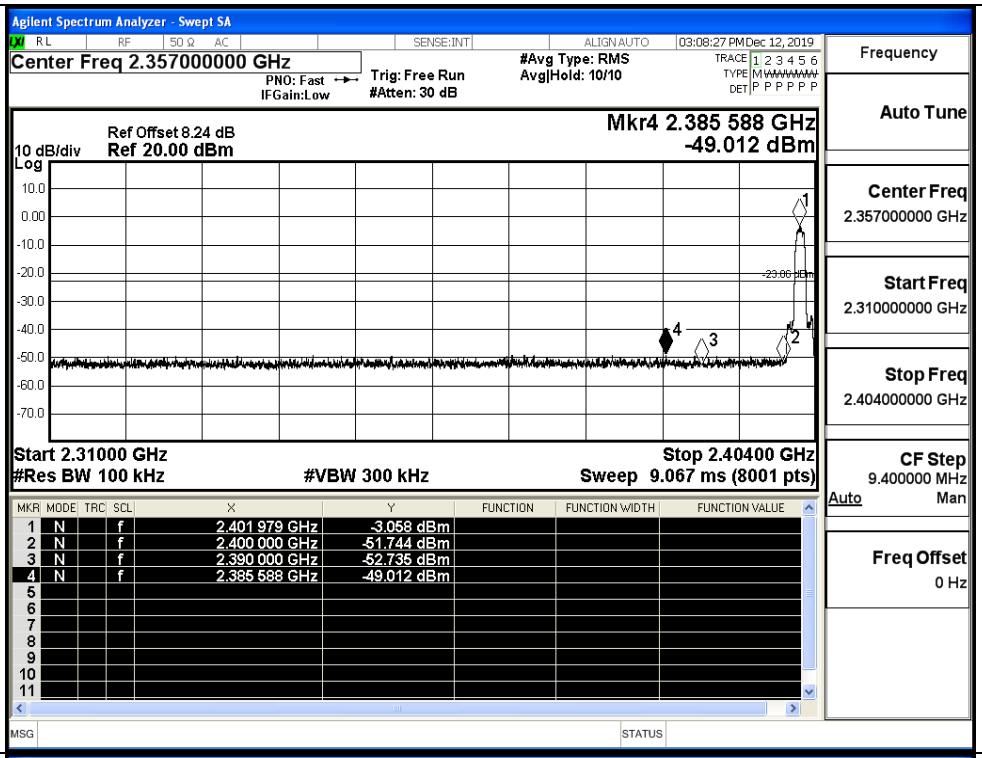
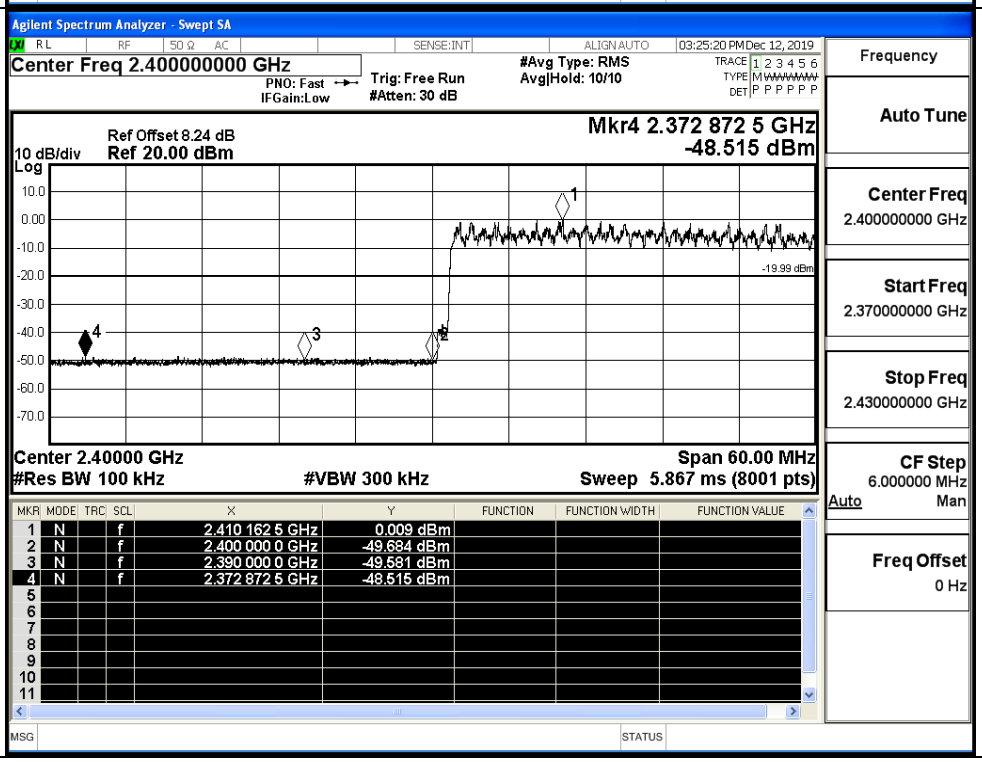
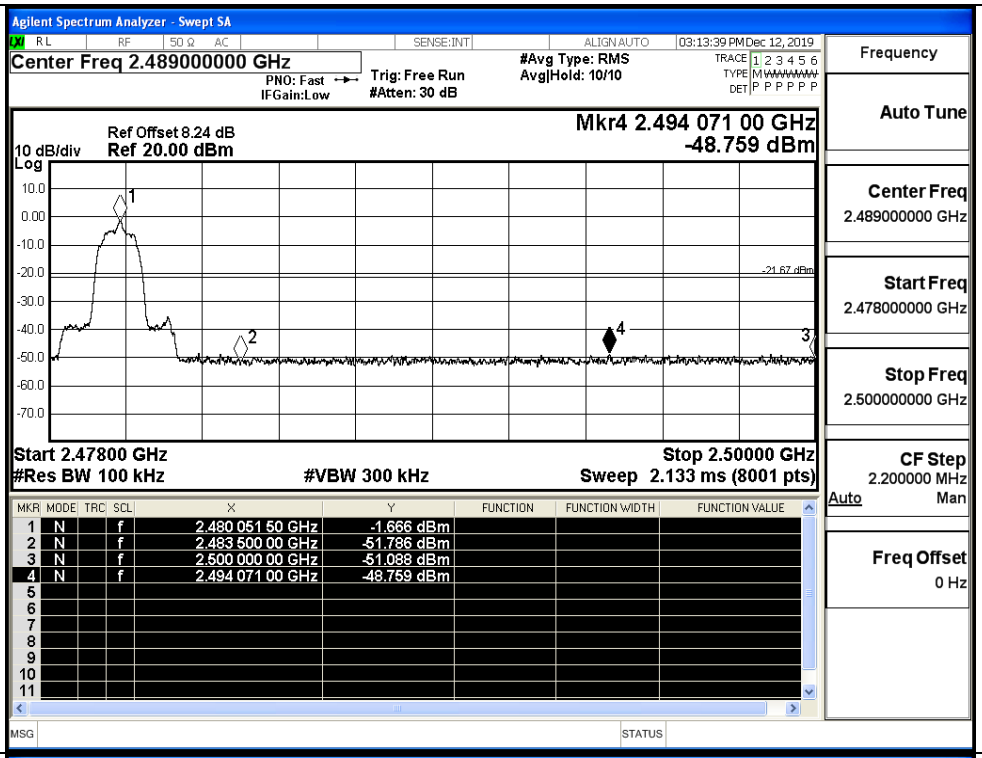
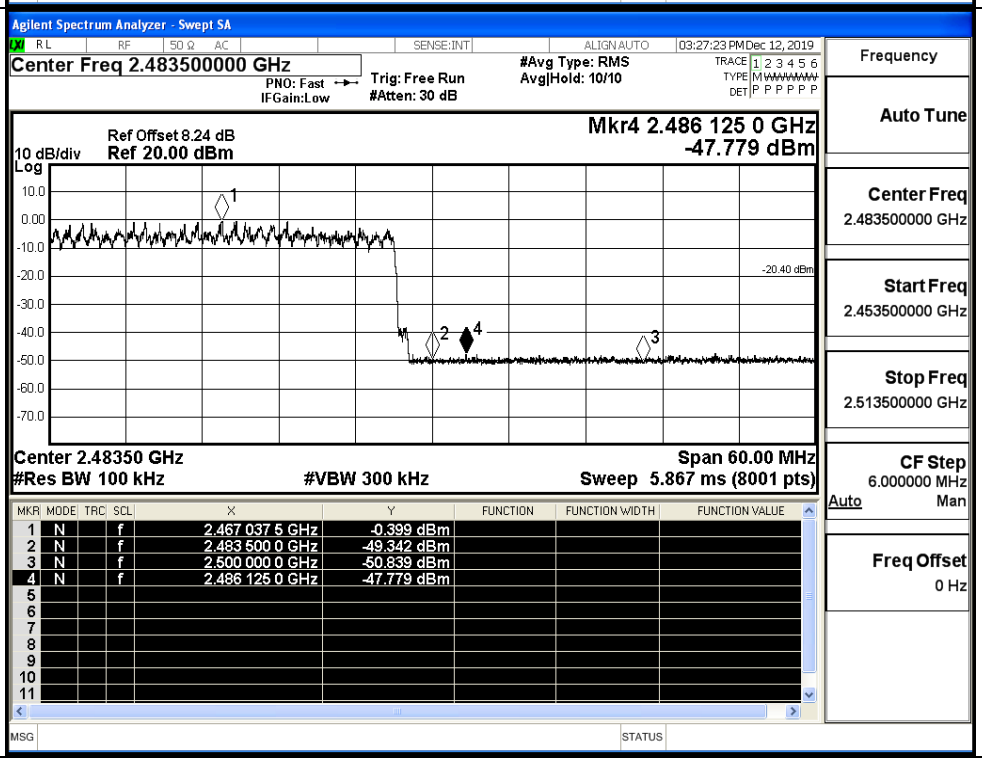


π/4DQPSK/HCH/Hop



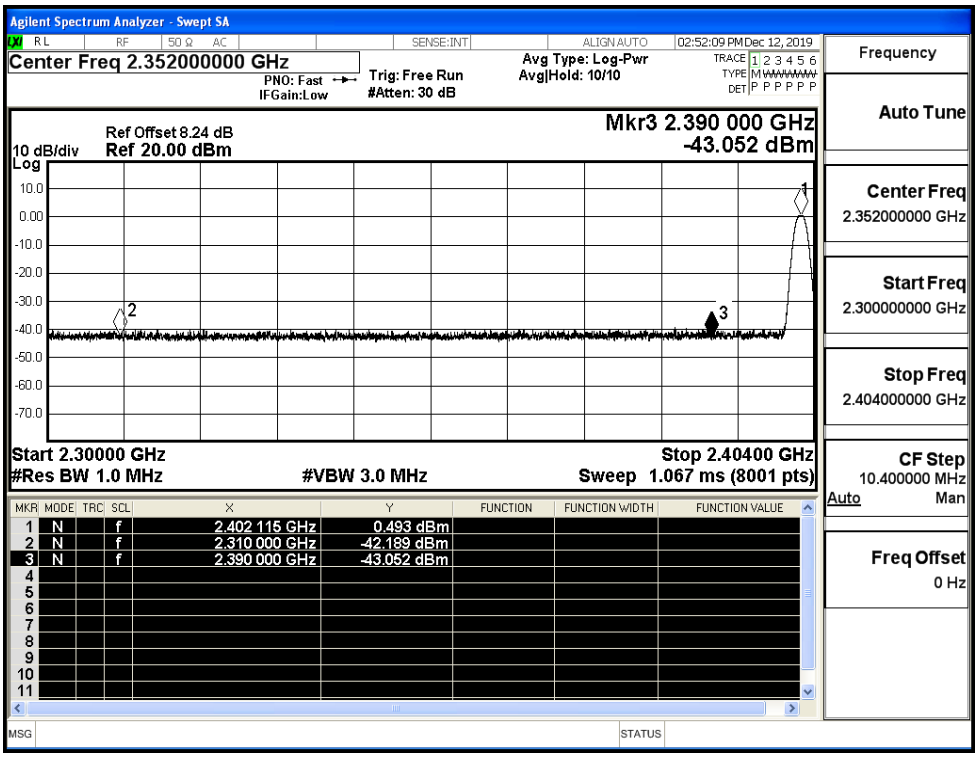
8DPSK/LCH/No Hop	
8DPSK/LCH/Hop	

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

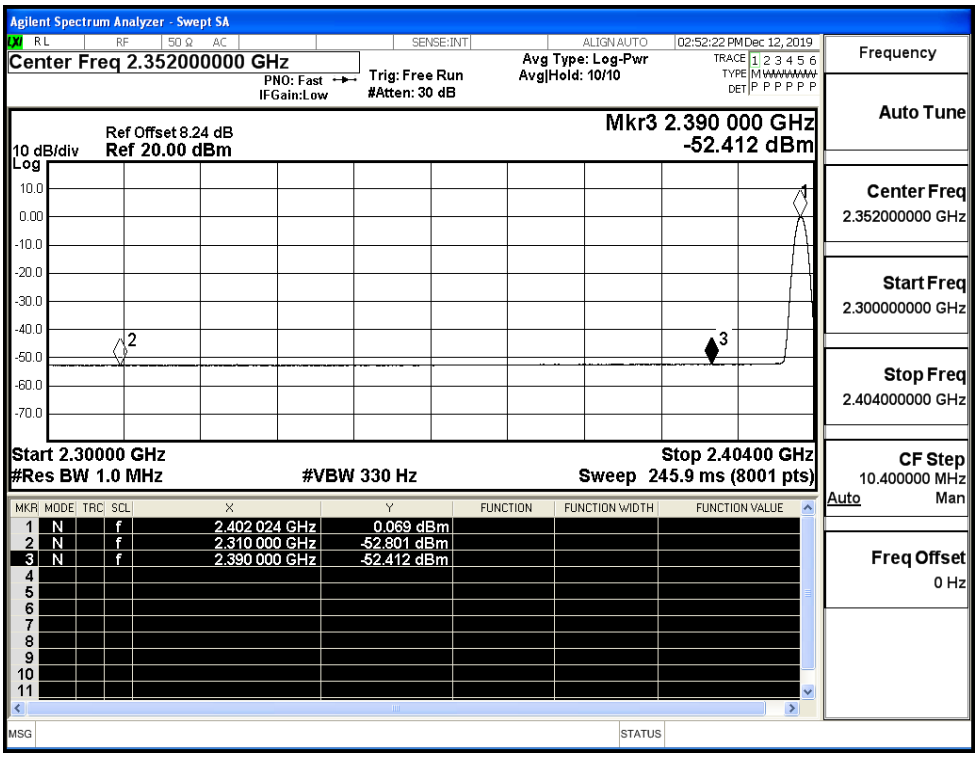
A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-42.19	2.0	0	53.07	PEAK	74	PASS
	Off	2310.0	-52.80	2.0	0	42.46	AV	54	PASS
	Off	2390.0	-43.05	2.0	0	52.21	PEAK	74	PASS
	Off	2390.0	-52.41	2.0	0	42.85	AV	54	PASS
	Off	2483.5	-40.96	2.0	0	54.30	PEAK	74	PASS
	Off	2483.5	-51.83	2.0	0	43.43	AV	54	PASS
	Off	2500.0	-41.00	2.0	0	54.26	PEAK	74	PASS
	Off	2500.0	-51.57	2.0	0	43.69	AV	54	PASS
π/4DQPSK	Off	2310.0	-42.21	2.0	0	53.05	PEAK	74	PASS
	Off	2310.0	-52.68	2.0	0	42.58	AV	54	PASS
	Off	2390.0	-42.12	2.0	0	53.14	PEAK	74	PASS
	Off	2390.0	-52.12	2.0	0	43.14	AV	54	PASS
	Off	2483.5	-41.79	2.0	0	53.47	PEAK	74	PASS
	Off	2483.5	-51.75	2.0	0	43.51	AV	54	PASS
	Off	2500.0	-41.10	2.0	0	54.16	PEAK	74	PASS
	Off	2500.0	-51.59	2.0	0	43.67	AV	54	PASS
8DPSK	Off	2310.0	-42.32	2.0	0	52.94	PEAK	74	PASS
	Off	2310.0	-52.74	2.0	0	42.52	AV	54	PASS
	Off	2390.0	-41.62	2.0	0	53.64	PEAK	74	PASS
	Off	2390.0	-52.29	2.0	0	42.97	AV	54	PASS
	Off	2483.5	-40.99	2.0	0	54.27	PEAK	74	PASS
	Off	2483.5	-51.79	2.0	0	43.47	AV	54	PASS
	Off	2500.0	-40.43	2.0	0	54.83	PEAK	74	PASS
	Off	2500.0	-51.53	2.0	0	43.73	AV	54	PASS

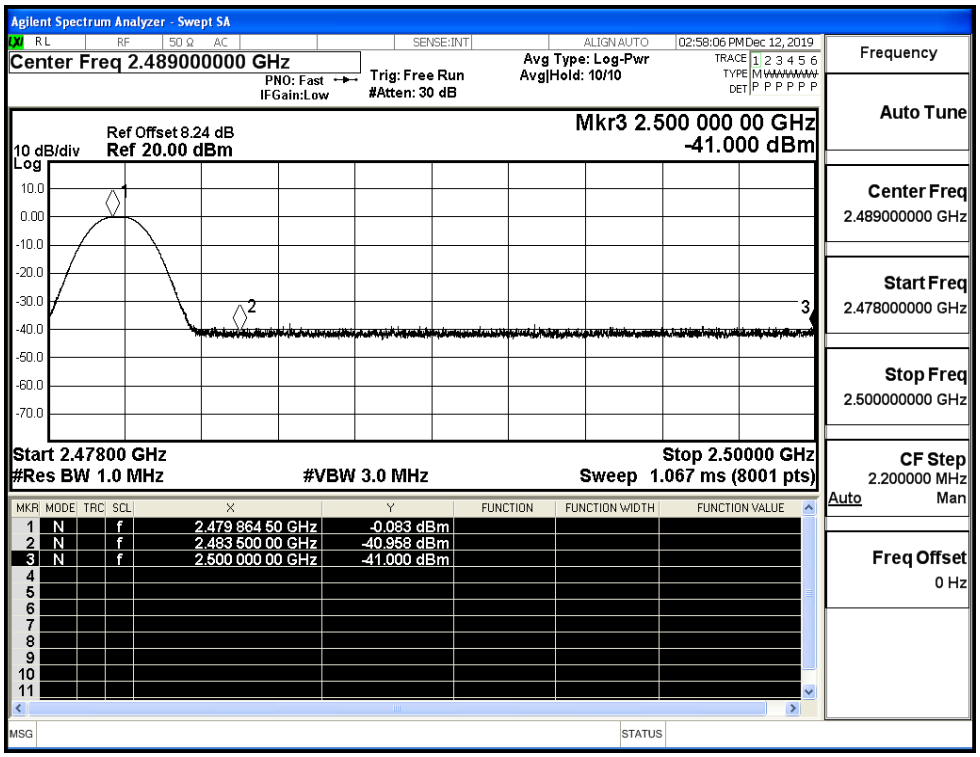
Restrict-band band-edge measurements_Hopping Off_ GFSK_PEAK (Low Channel)



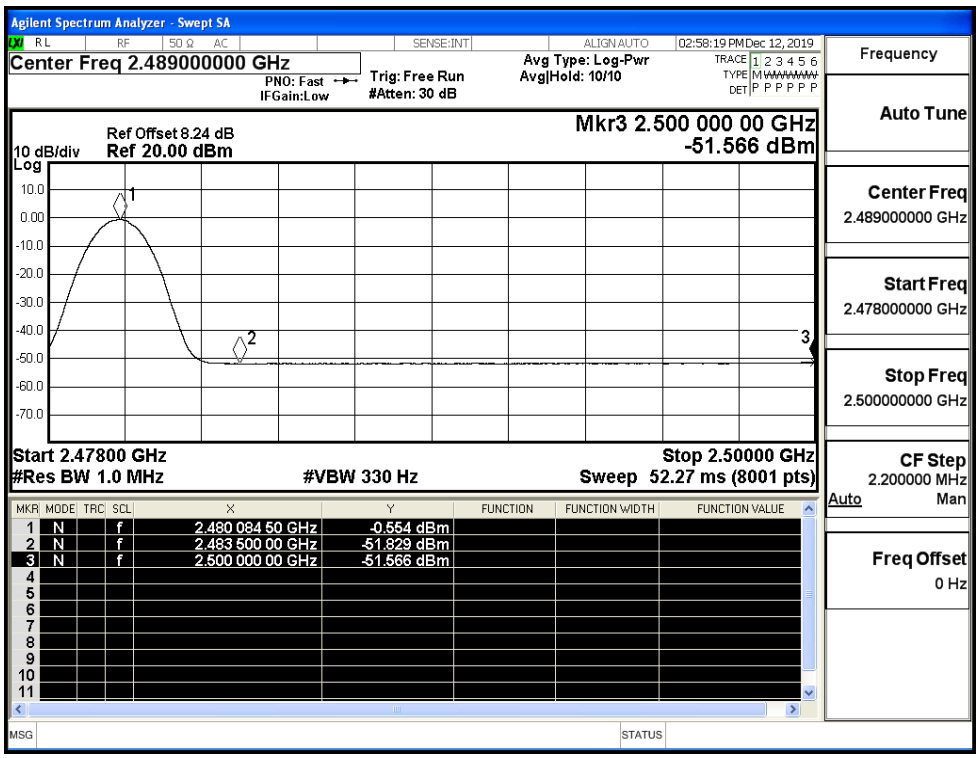
Restrict-band band-edge measurements_Hopping Off_ GFSK_Average (Low Channel)



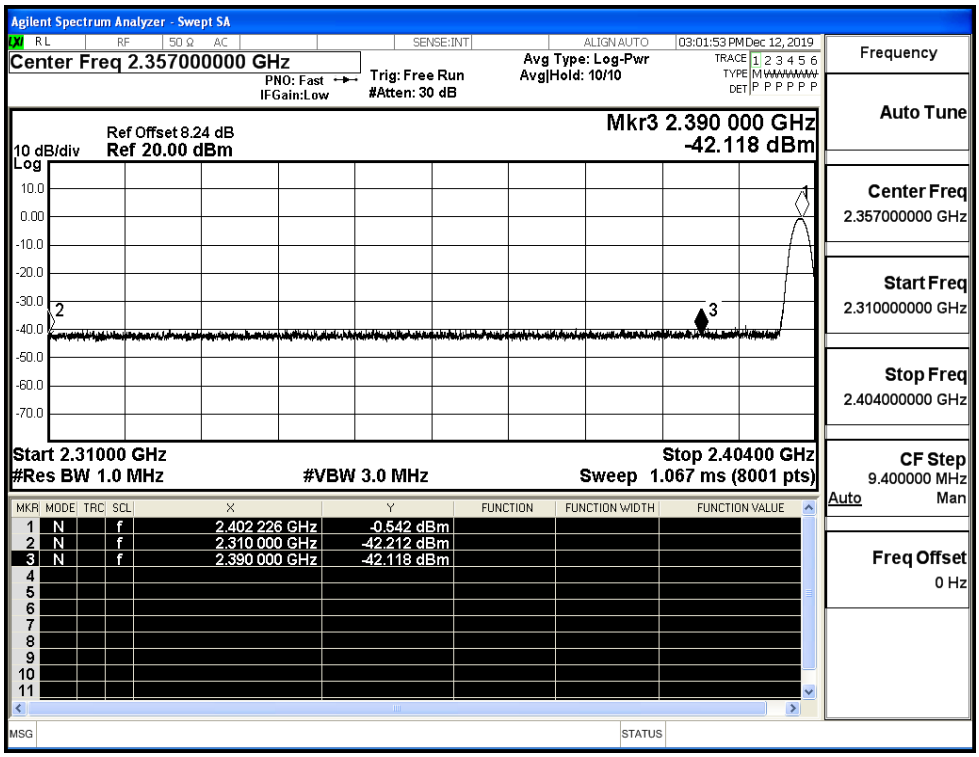
Restrict-band band-edge measurements_Hopping Off_ GFSK_PEAK (High Channel)



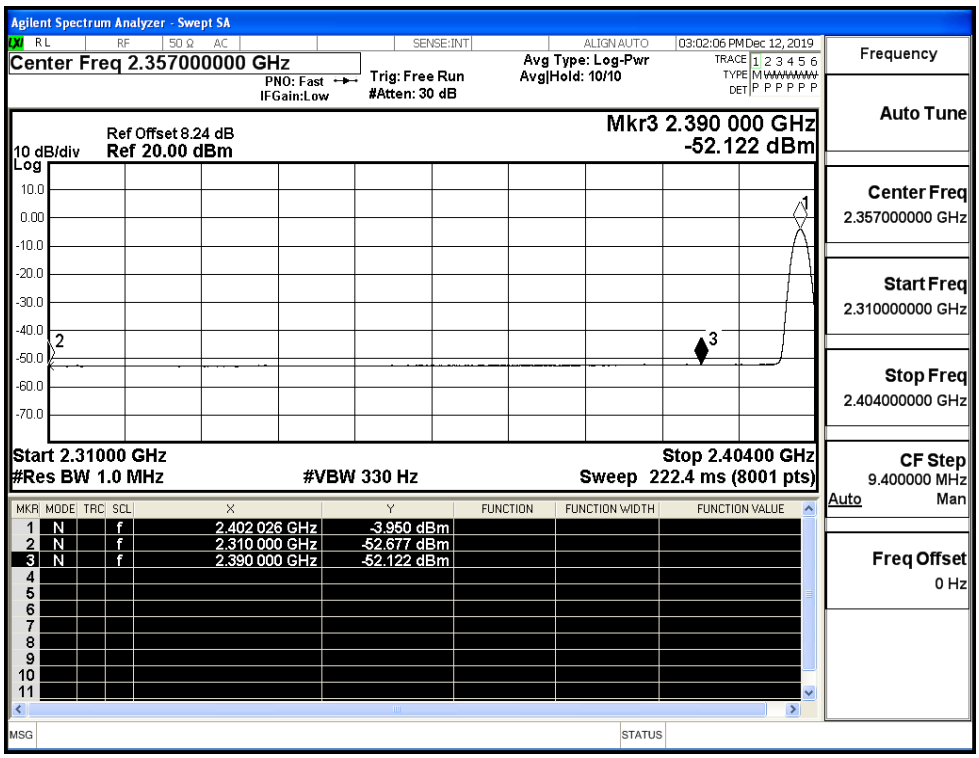
Restrict-band band-edge measurements_Hopping Off_ GFSK_Average (High Channel)



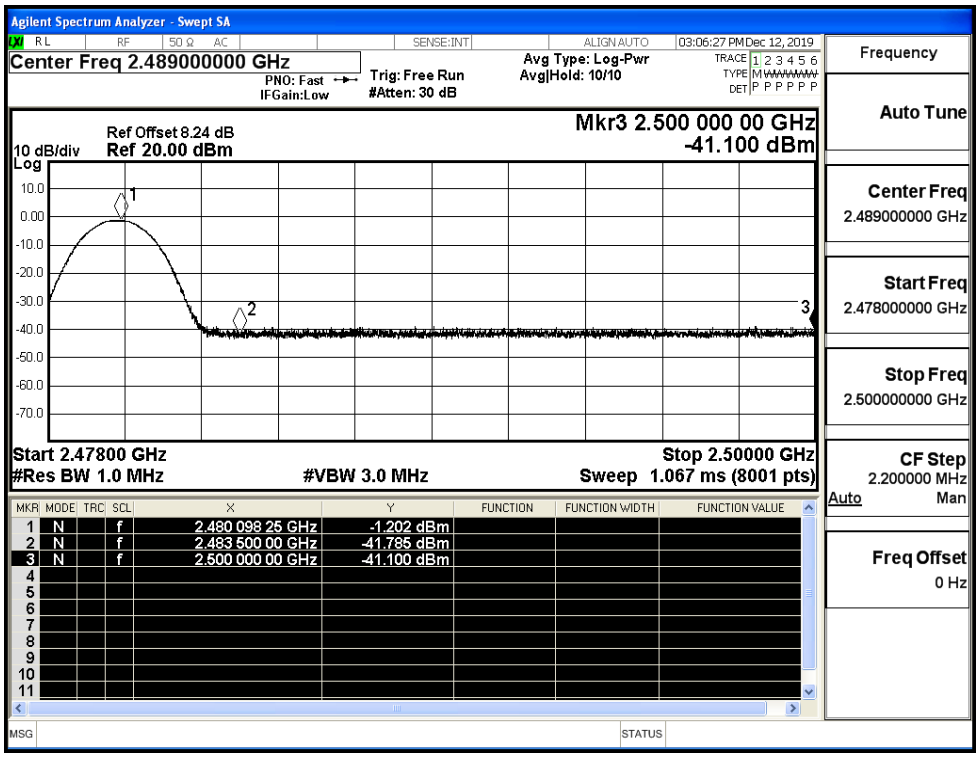
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_PEAK (Low Channel)



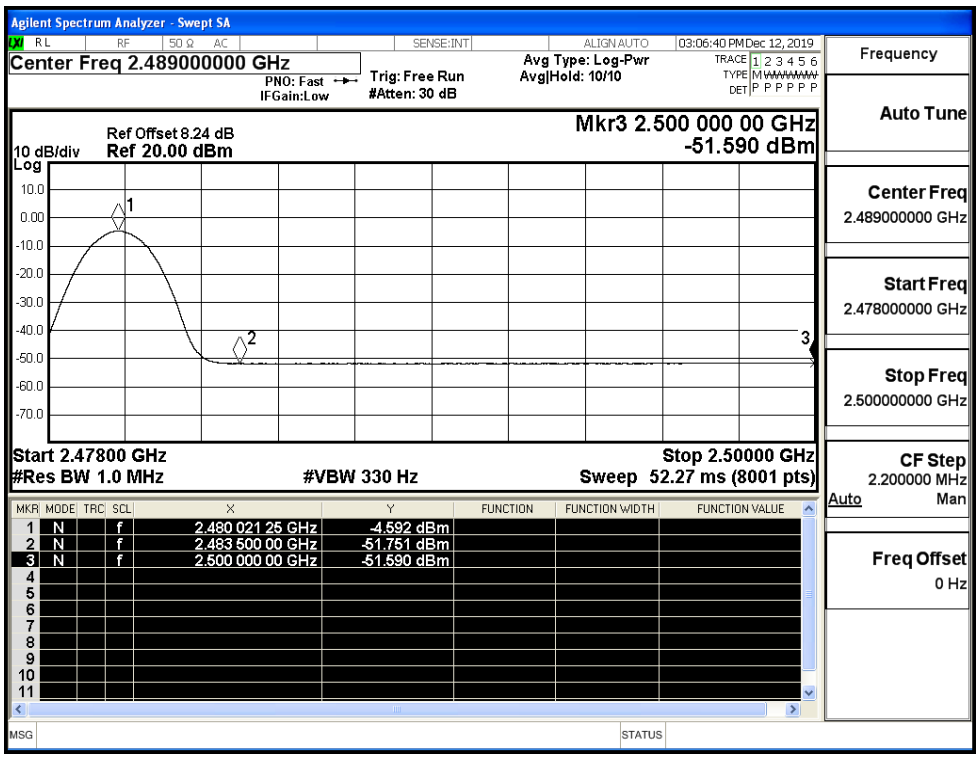
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_Average (Low Channel)



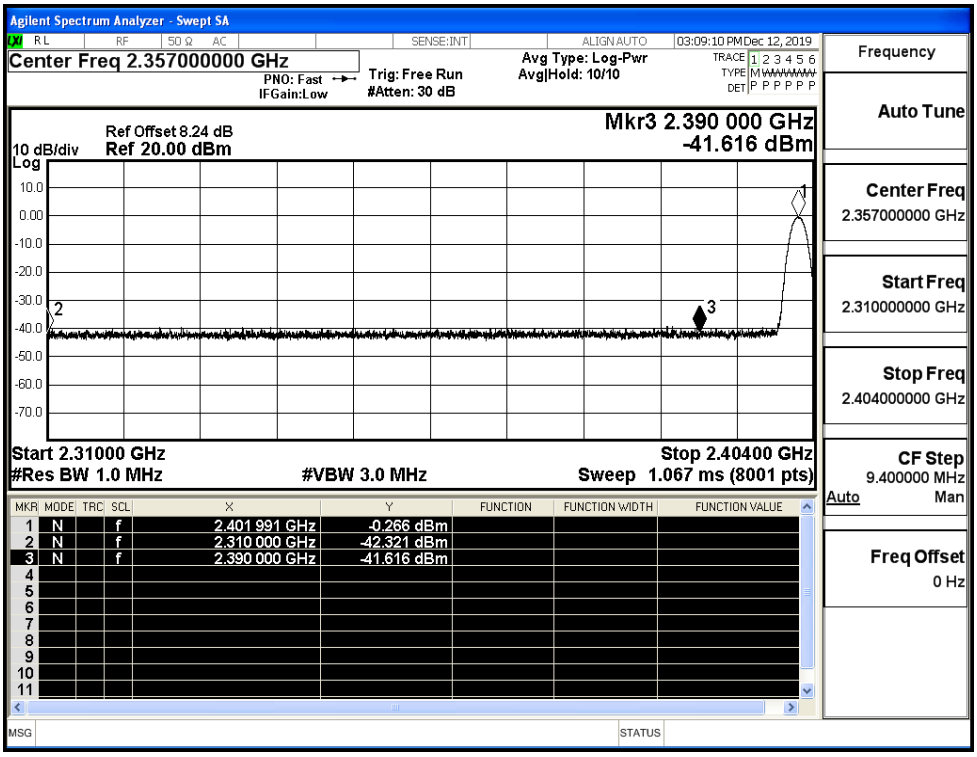
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_PEAK (High Channel)



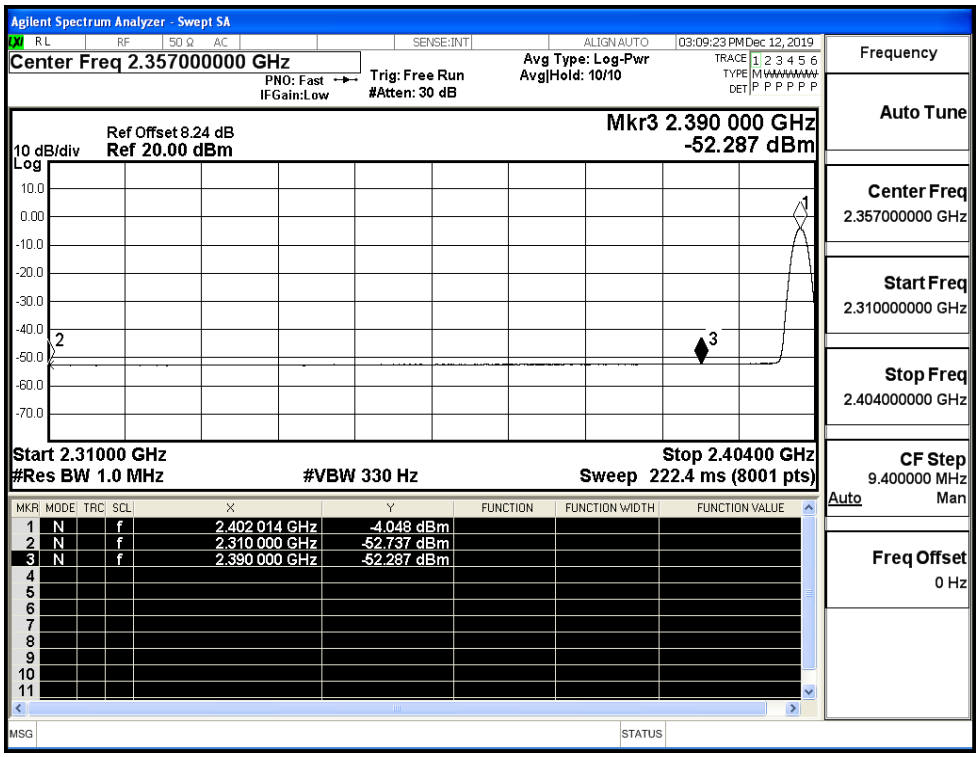
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_Average (High Channel)



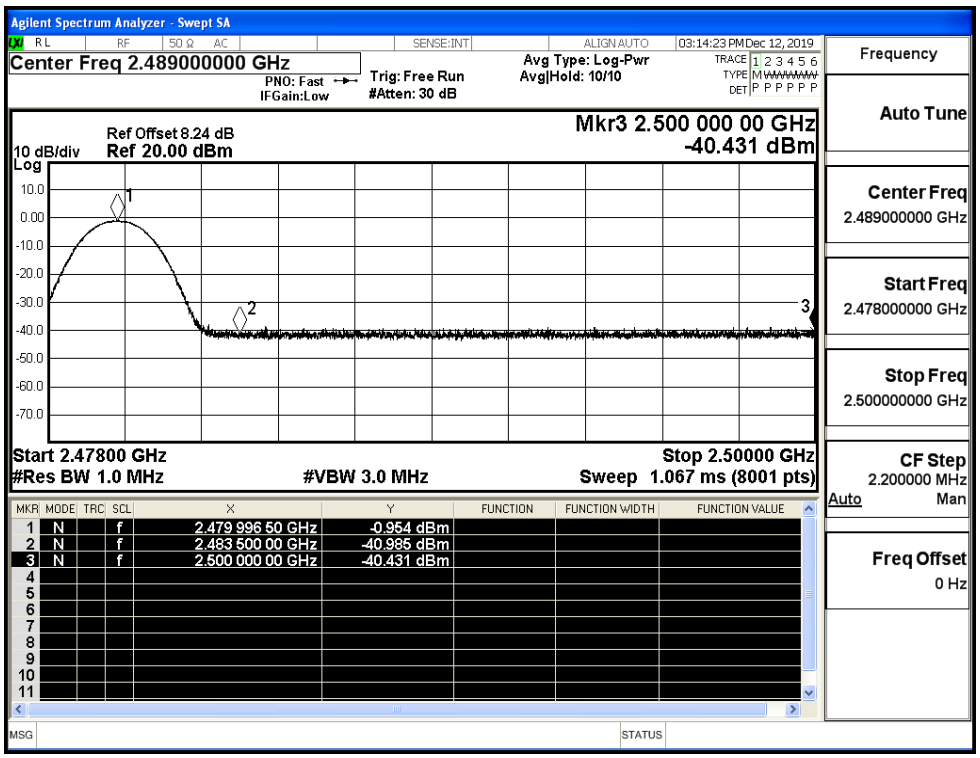
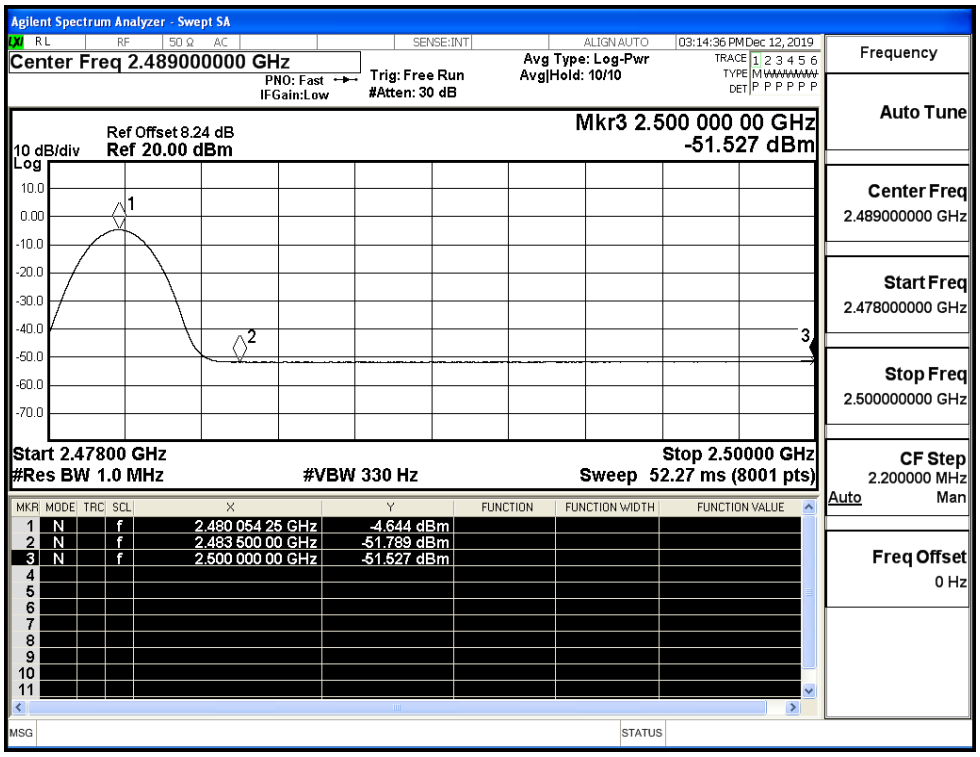
Restrict-band band-edge measurements_Hopping Off_8DPSK_PEAK (Low Channel)



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)