

Appendix A

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

Product Name: Tablet PC



Trade Mark:

Test Model: DT1052

Environmental Conditions

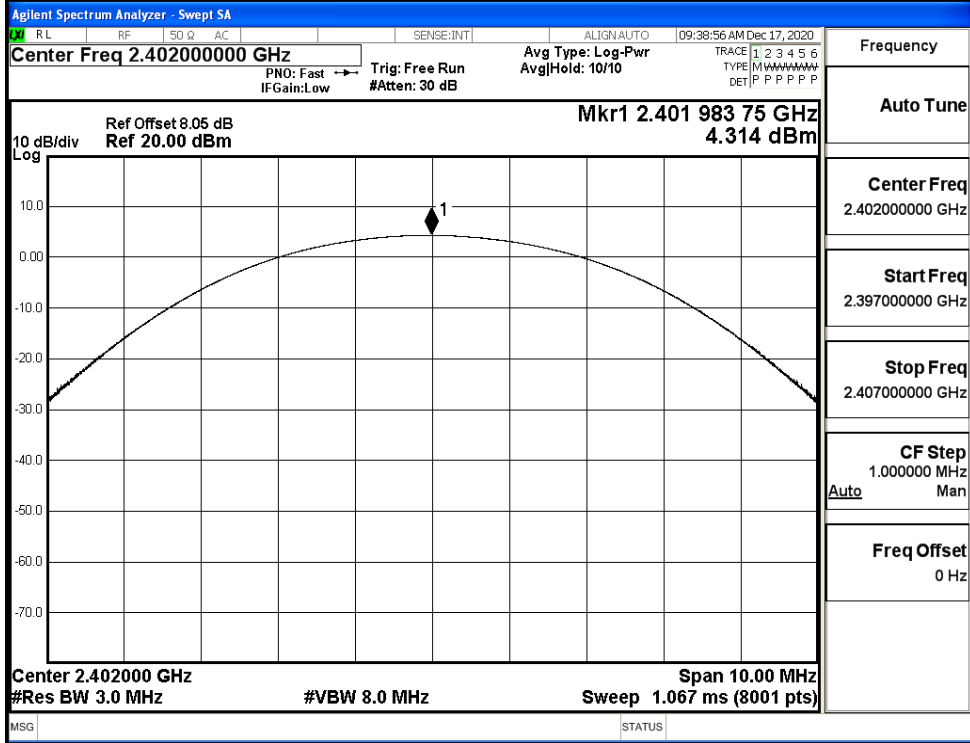
Temperature:	22.5° C
Relative Humidity:	53.7%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond Lu
Supervised by:	Li Huan

A.1 Maximum Conducted Peak Output Power

Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	4.314	21	PASS
	MCH	5.403	21	PASS
	HCH	4.661	21	PASS
$\pi/4$ DQPSK	LCH	3.701	21	PASS
	MCH	4.788	21	PASS
	HCH	4.008	21	PASS
8DPSK	LCH	3.761	21	PASS
	MCH	4.890	21	PASS
	HCH	4.081	21	PASS

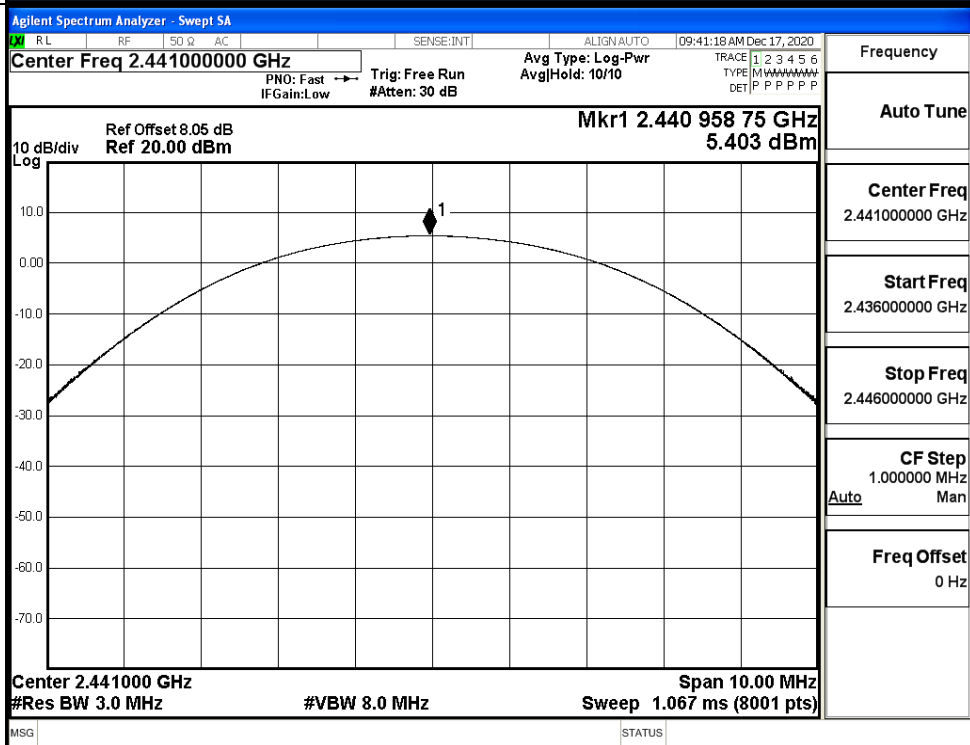
Test Graphs

GFSK/LCH

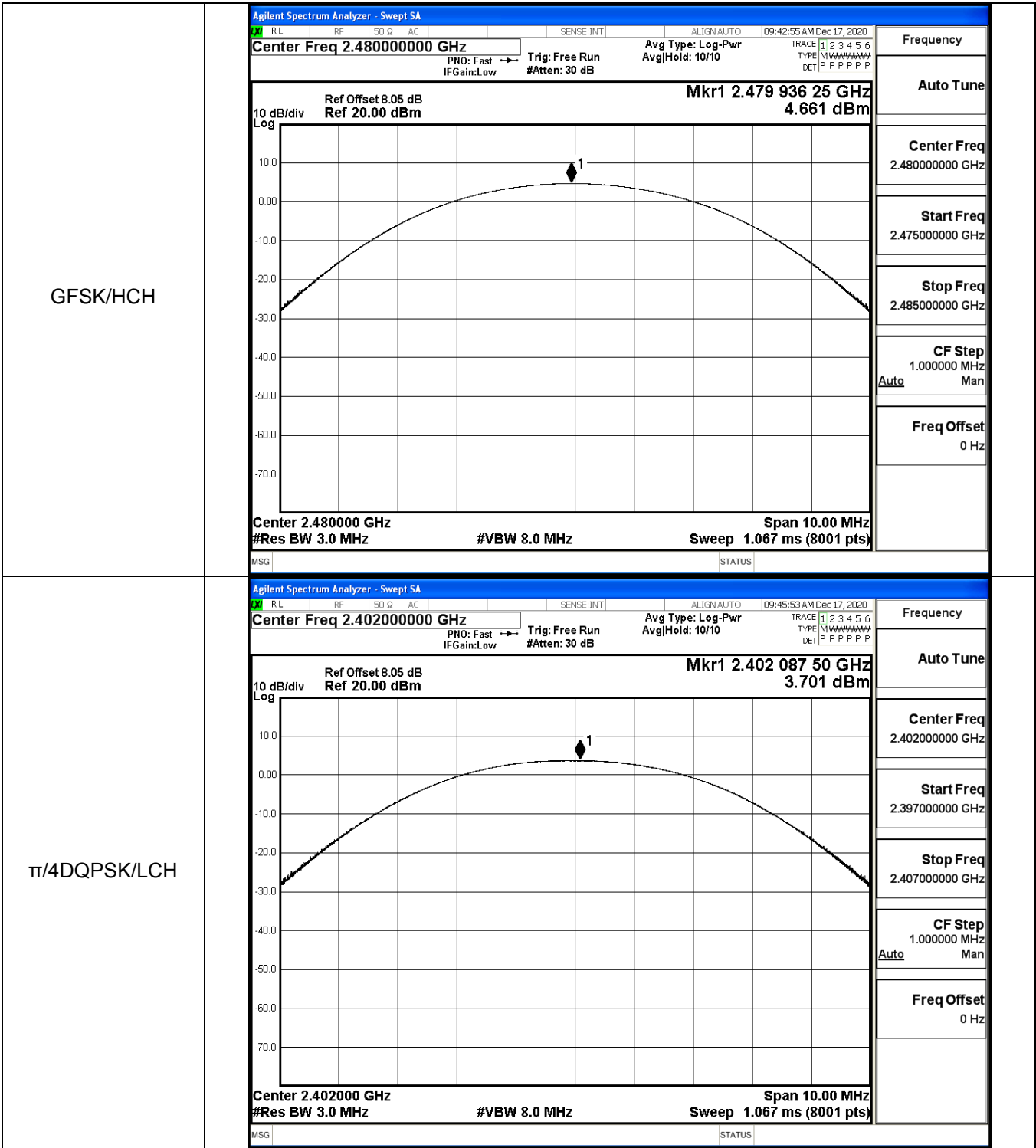


Frequency	2.402000000 GHz
Auto Tune	
Center Freq	2.402000000 GHz
Start Freq	2.397000000 GHz
Stop Freq	2.407000000 GHz
CF Step	1.000000 MHz
Auto	Man
Freq Offset	0 Hz

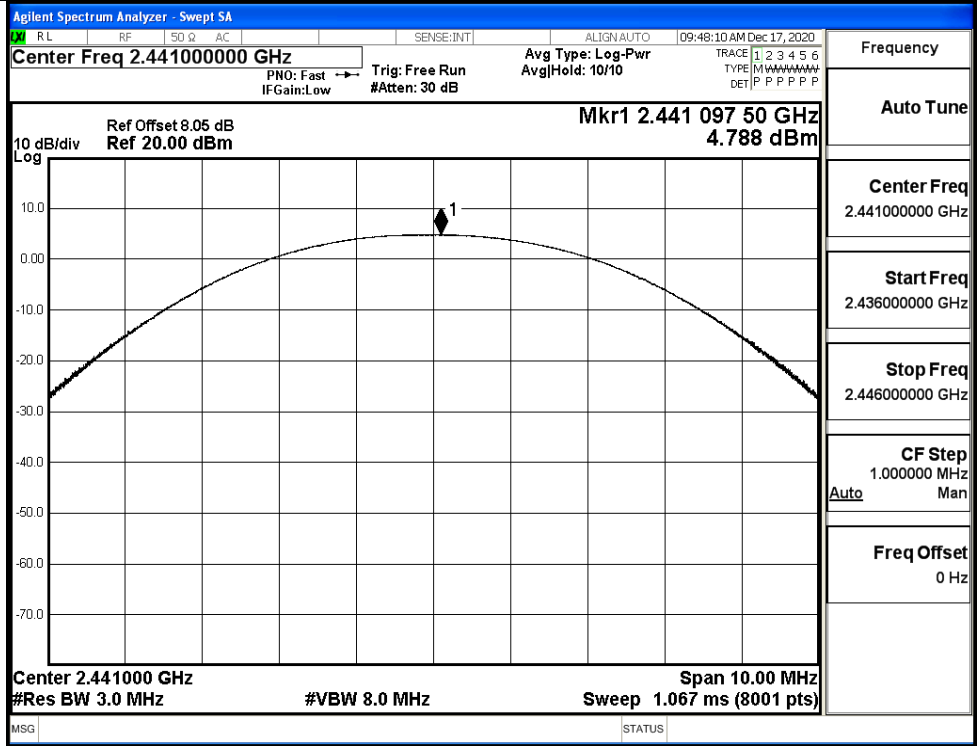
GFSK/MCH



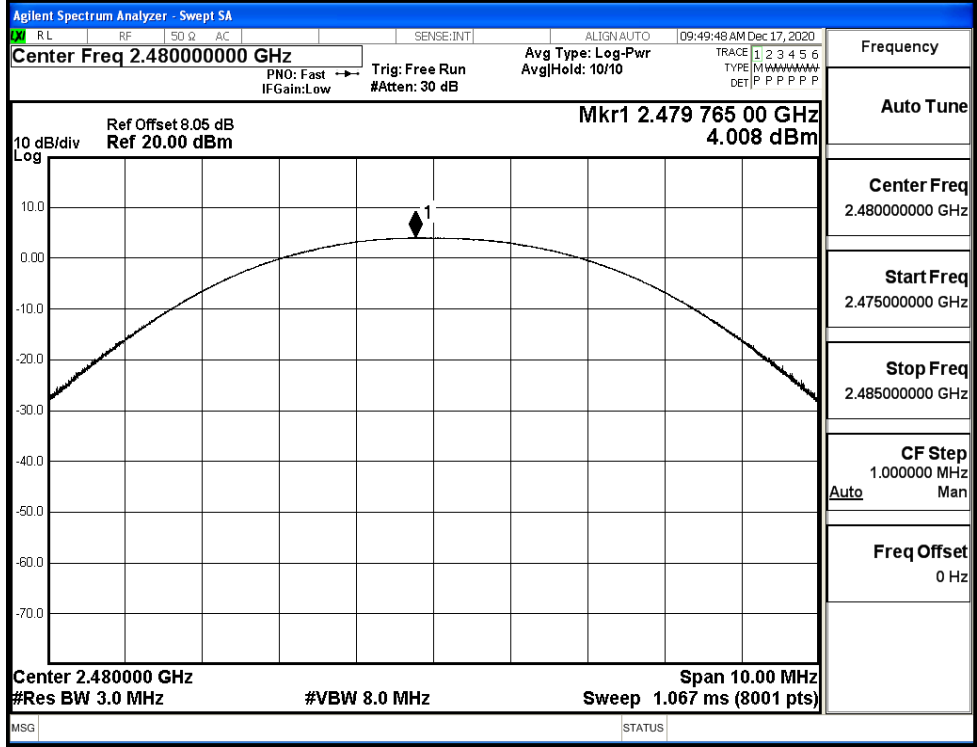
Frequency	2.441000000 GHz
Auto Tune	
Center Freq	2.441000000 GHz
Start Freq	2.436000000 GHz
Stop Freq	2.446000000 GHz
CF Step	1.000000 MHz
Auto	Man
Freq Offset	0 Hz



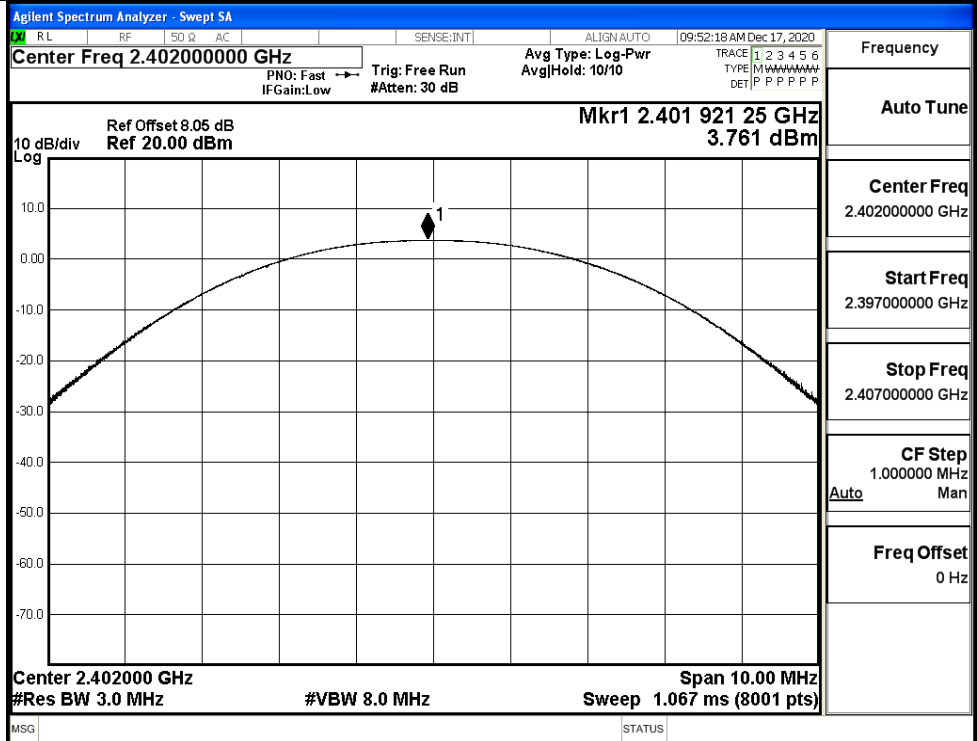
$\pi/4$ DQPSK/MCH



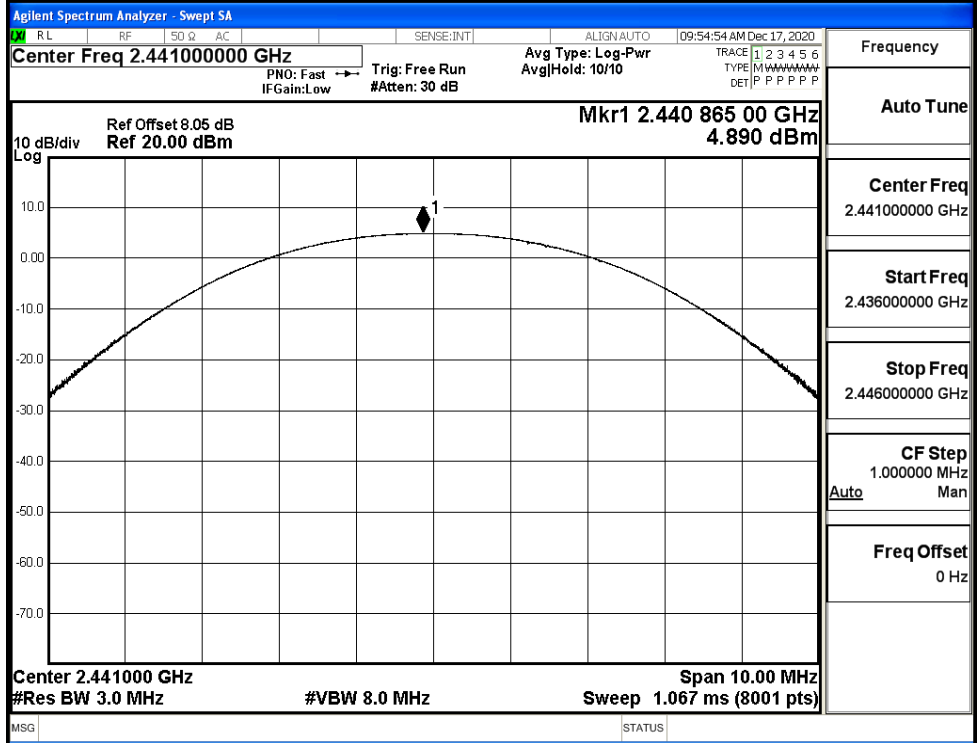
$\pi/4$ DQPSK/HCH



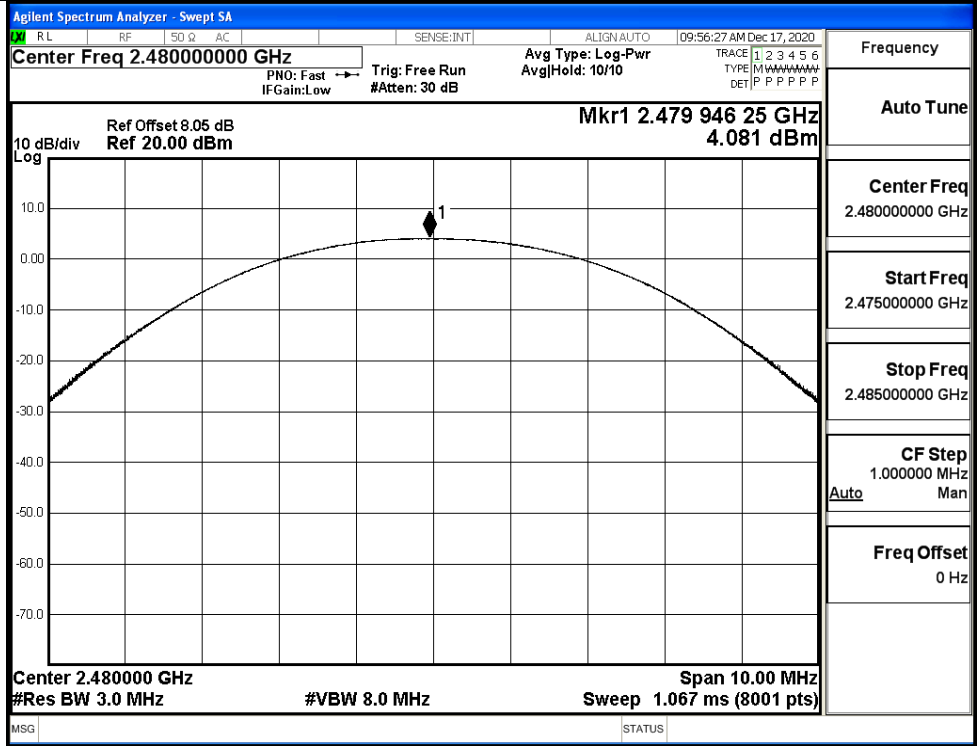
8DPSK/LCH



8DPSK/MCH

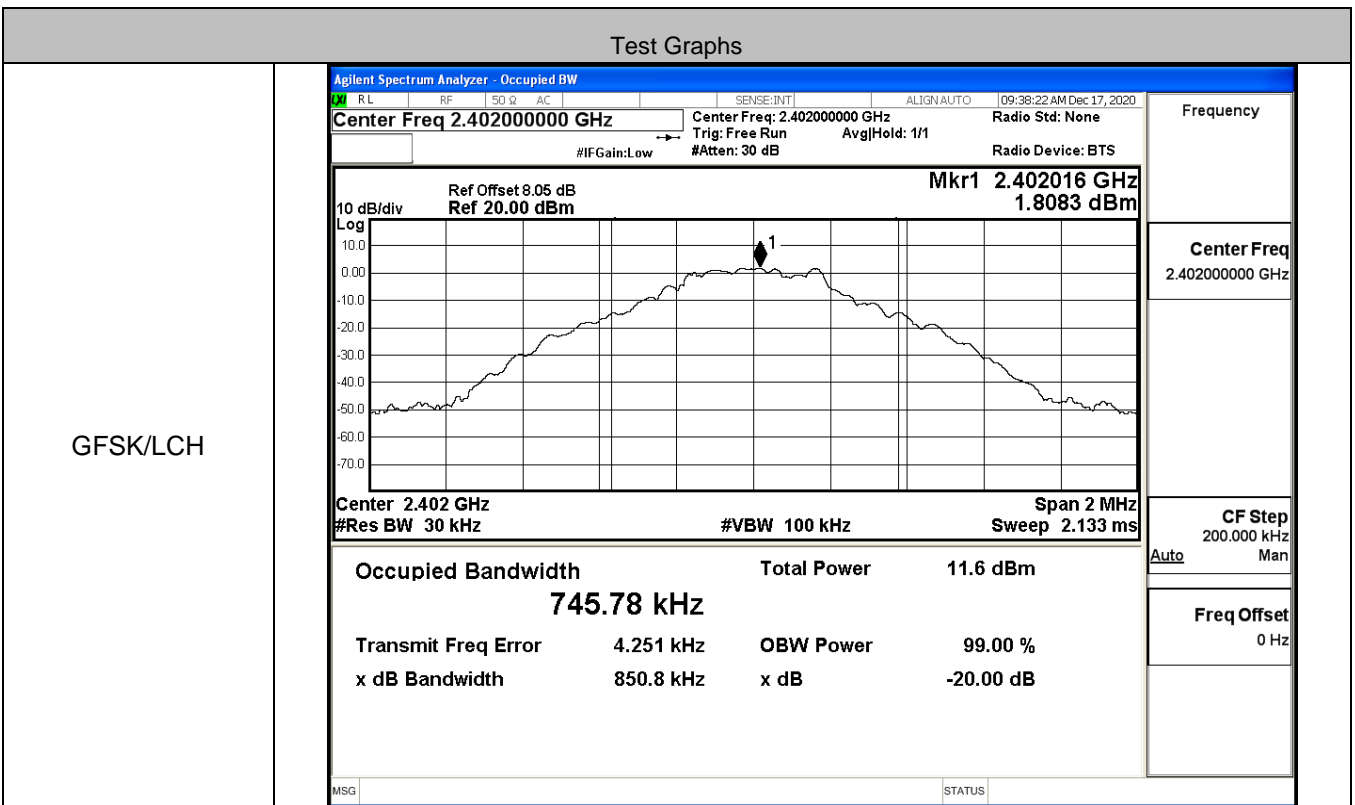


8DPSK/HCH

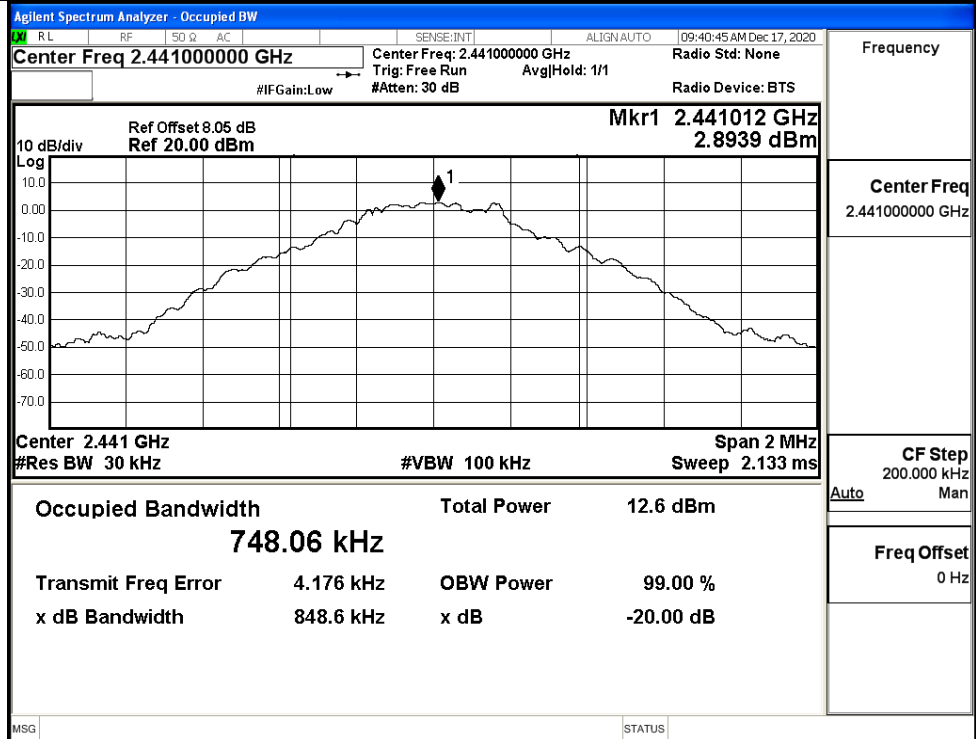


A.2 20dB Bandwidth

Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.8508	Not Specified	PASS
	MCH	0.8486	Not Specified	PASS
	HCH	0.8625	Not Specified	PASS
π/4DQPSK	LCH	1.272	Not Specified	PASS
	MCH	1.273	Not Specified	PASS
	HCH	1.272	Not Specified	PASS
8DPSK	LCH	1.268	Not Specified	PASS
	MCH	1.278	Not Specified	PASS
	HCH	1.267	Not Specified	PASS

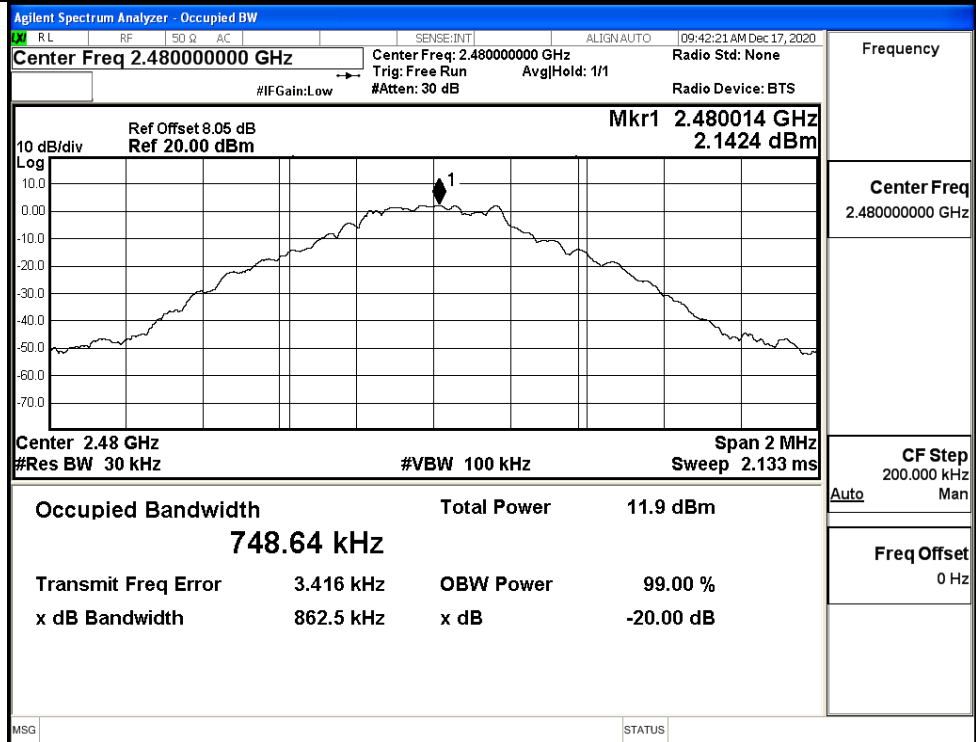


GFSK/MCH



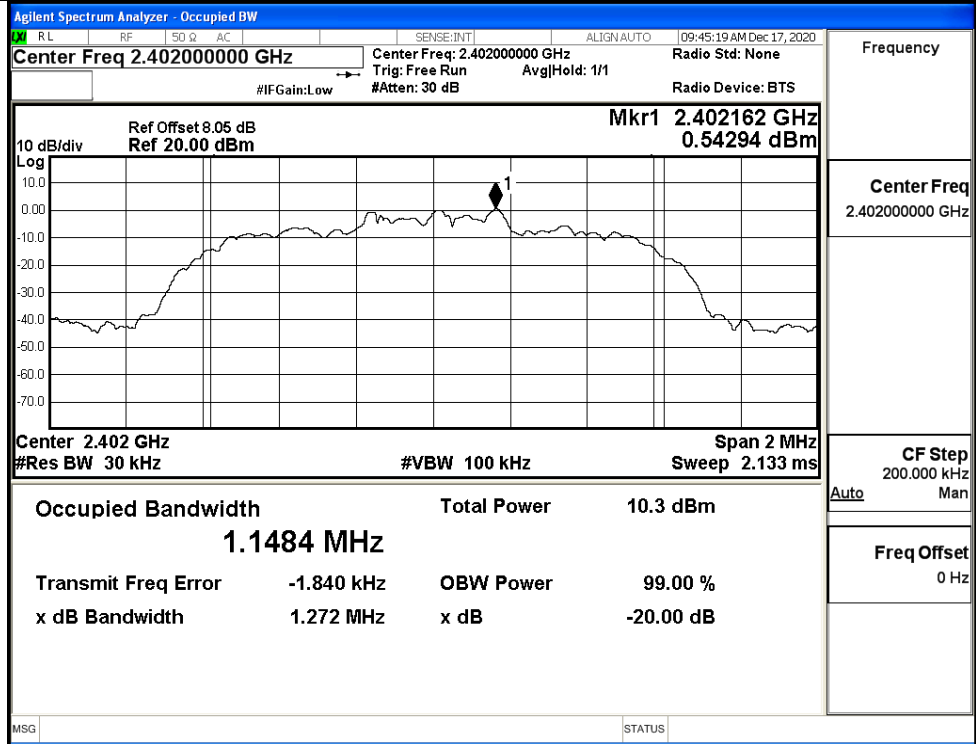
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Center Freq	2.441000000 GHz
CF Step	200.000 kHz
Auto	Man
Freq Offset	0 Hz

GFSK/HCH

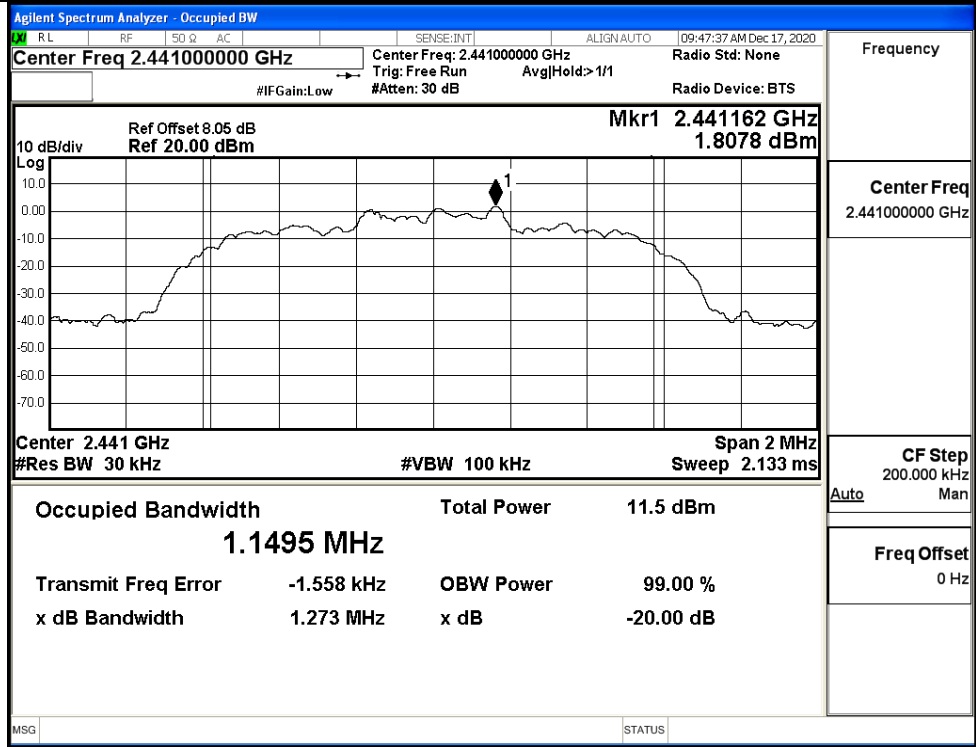


Frequency	2.480000000 GHz
Center Freq	2.480000000 GHz
CF Step	200.000 kHz
Auto	Man
Freq Offset	0 Hz

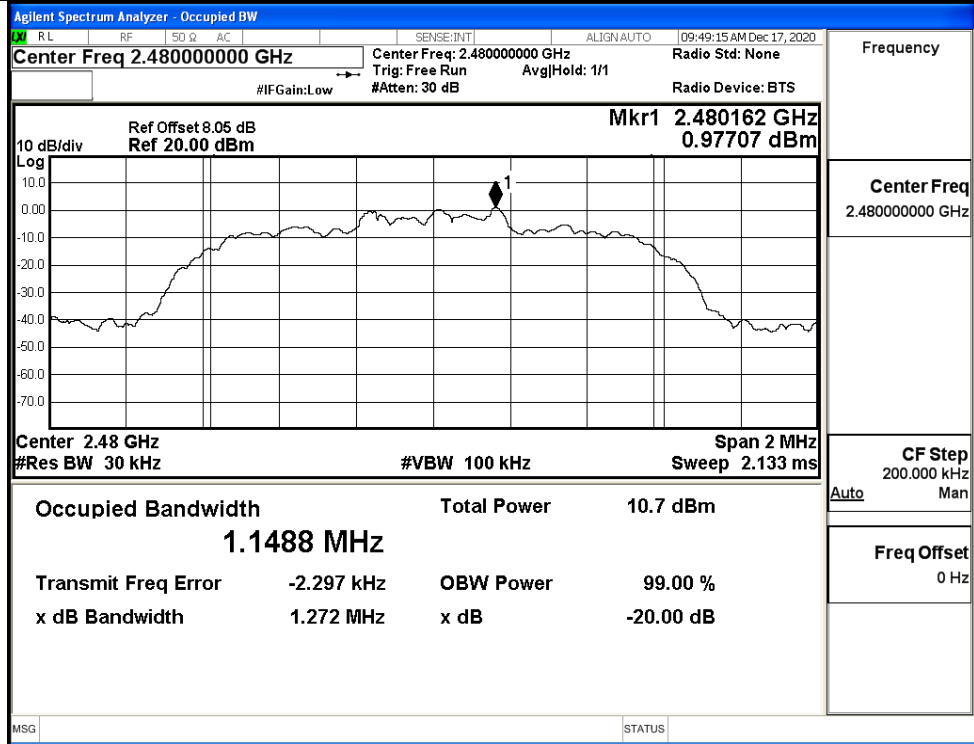
$\pi/4$ DQPSK/LCH



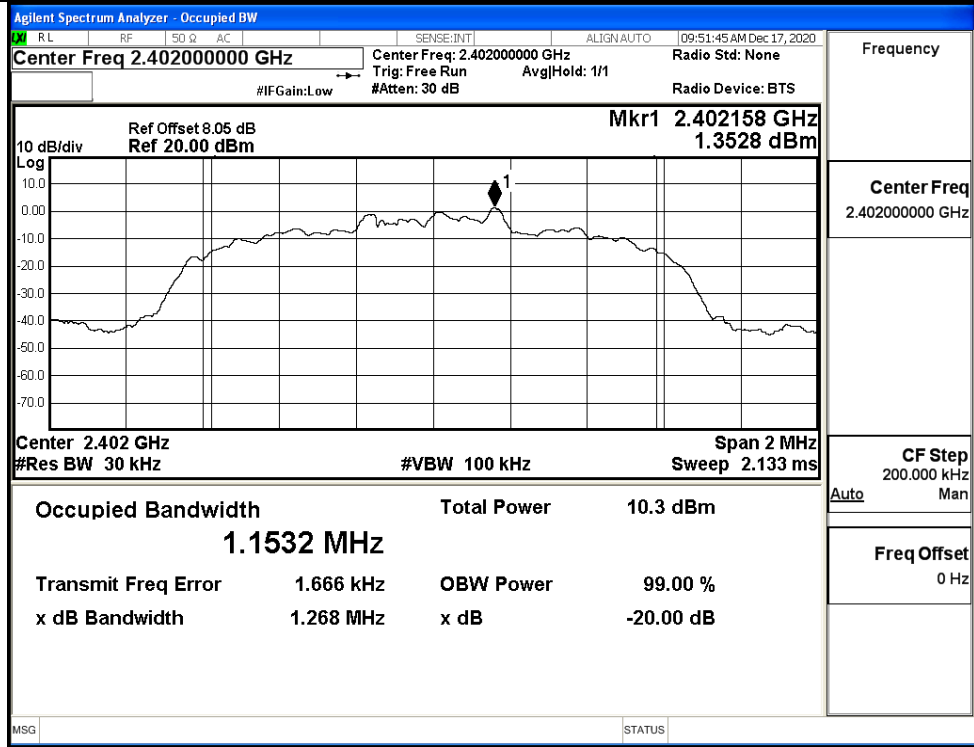
$\pi/4$ DQPSK/MCH



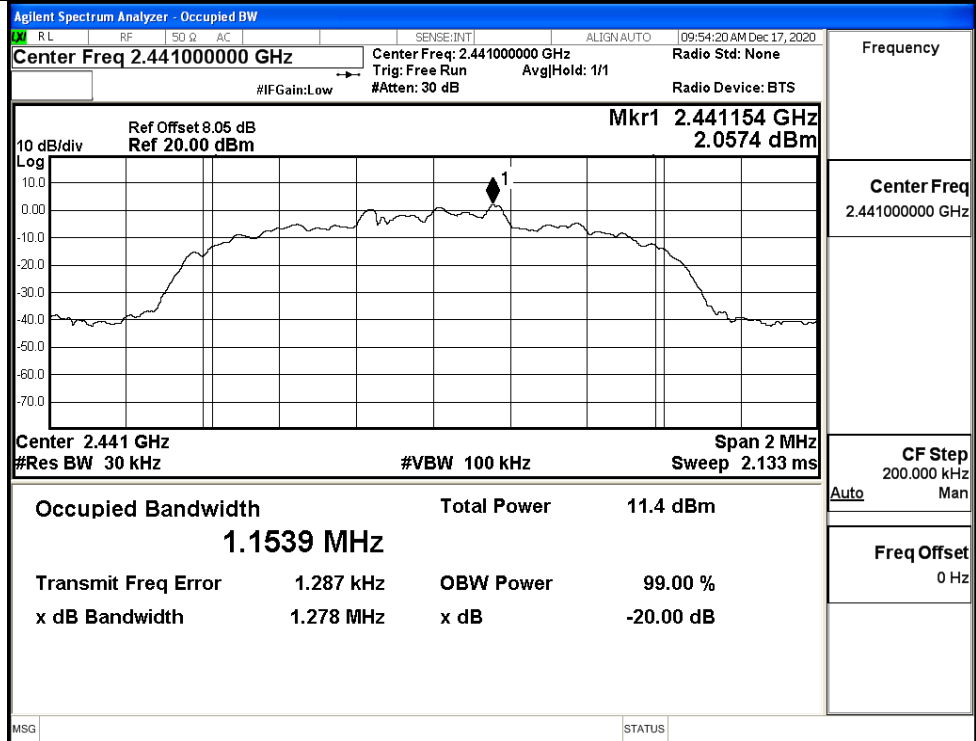
$\pi/4$ DQPSK/HCH



8DPSK/LCH



8DPSK/MCH



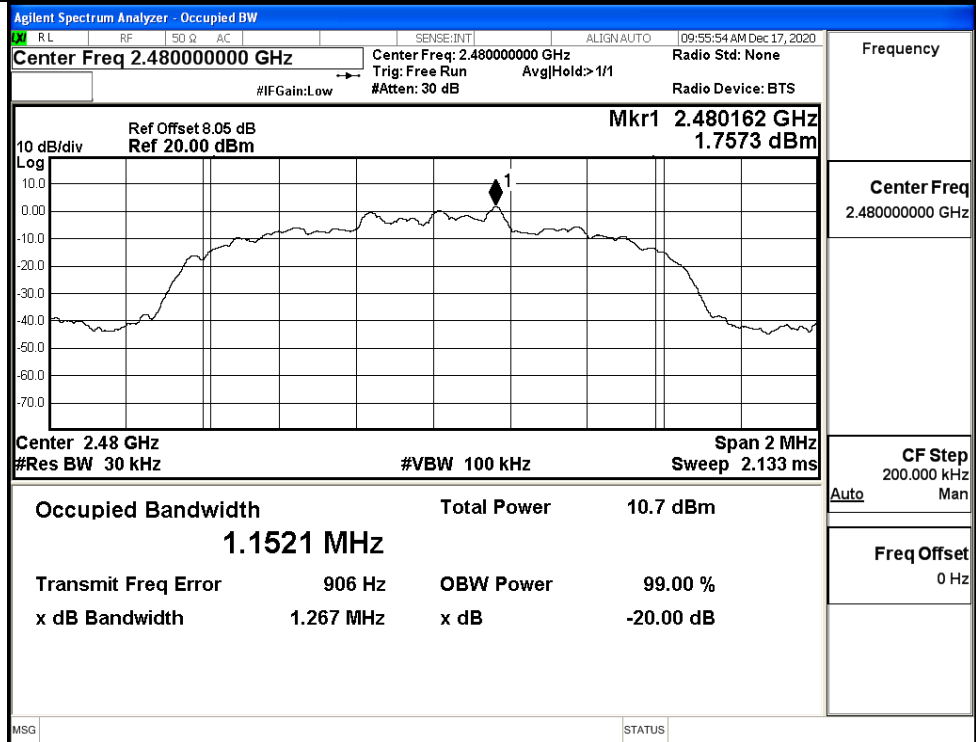
Frequency

Center Freq
2.441000000 GHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

8DPSK/HCH



Frequency

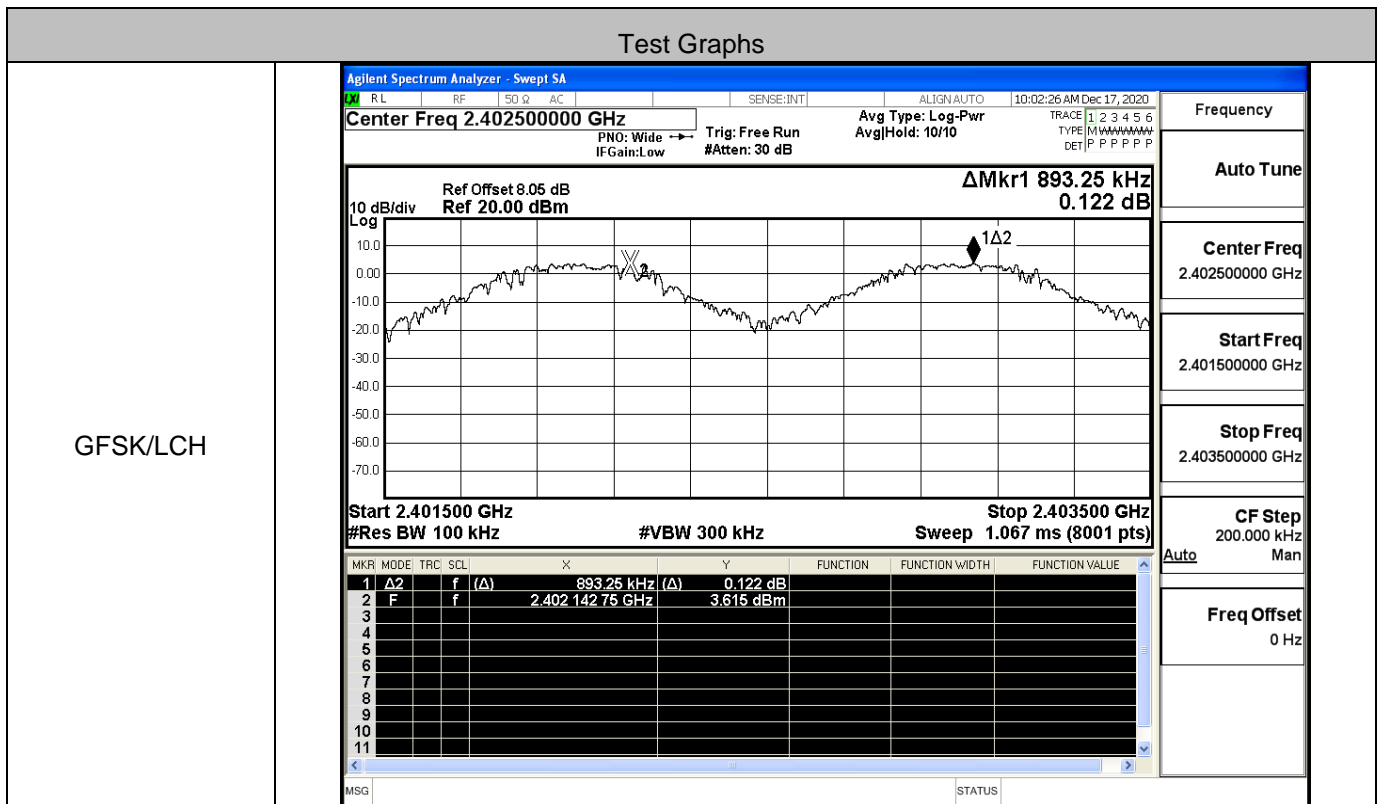
Center Freq
2.480000000 GHz

CF Step
200.000 kHz
Auto Man

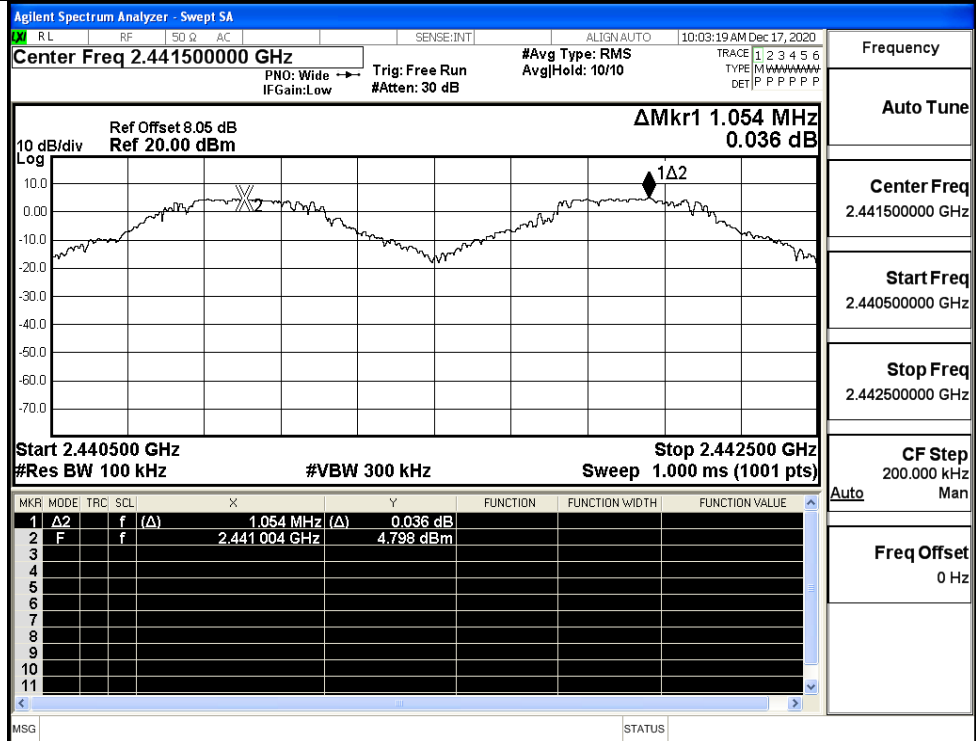
Freq Offset
0 Hz

A.3 Carrier Frequency Separation

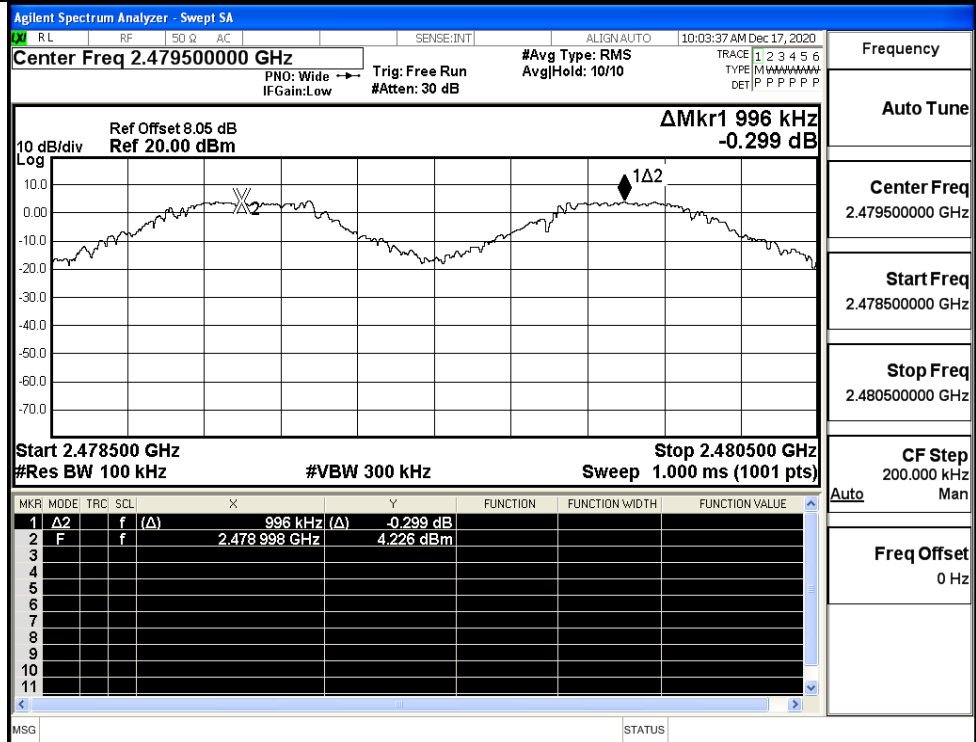
Mode	Channel	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.893	0.8508	PASS
	MCH	1.054	0.8486	PASS
	HCH	0.996	0.8625	PASS
π/4DQPSK	LCH	1.020	0.849	PASS
	MCH	1.262	0.849	PASS
	HCH	0.964	0.849	PASS
8DPSK	LCH	1.084	0.852	PASS
	MCH	0.988	0.852	PASS
	HCH	0.942	0.852	PASS



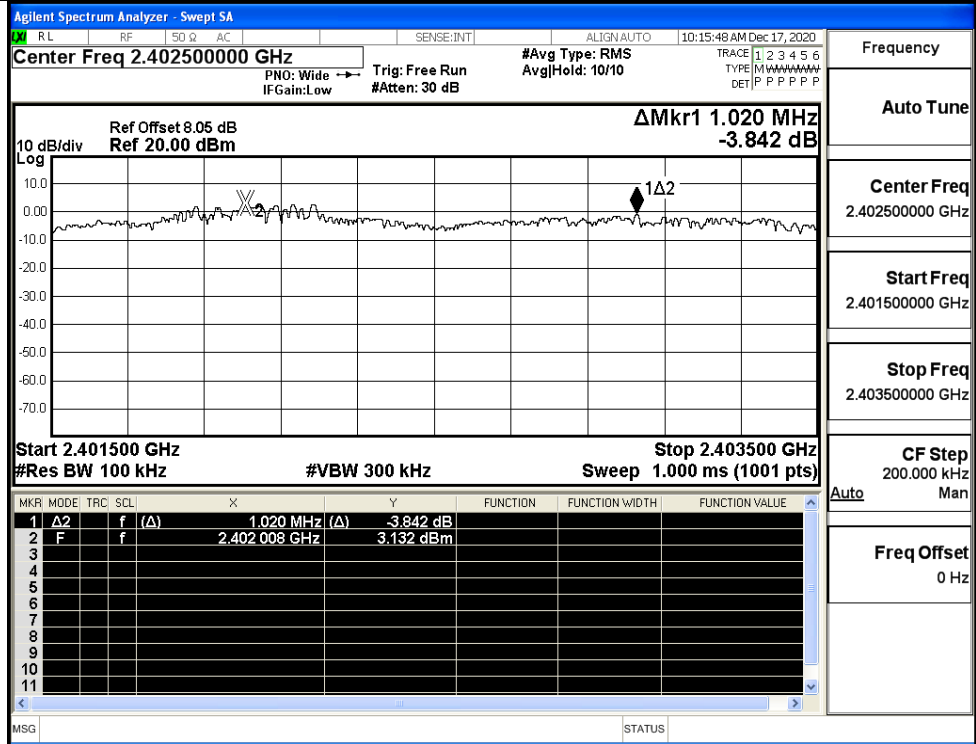
GFSK/MCH



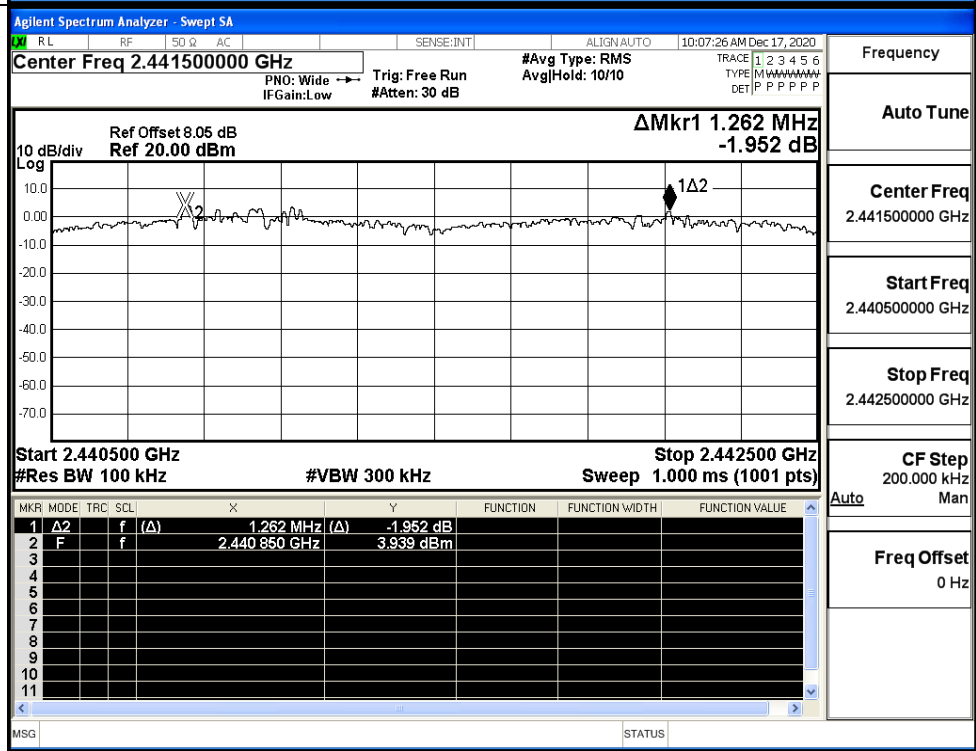
GFSK/HCH



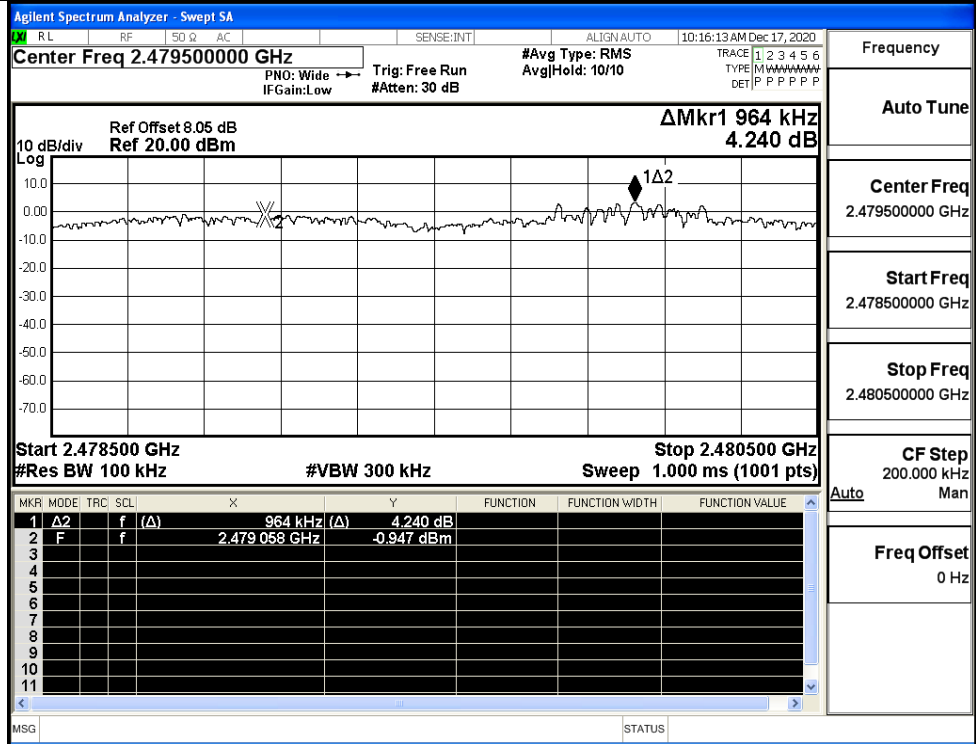
$\pi/4$ DQPSK/LCH



$\pi/4$ DQPSK/MCH

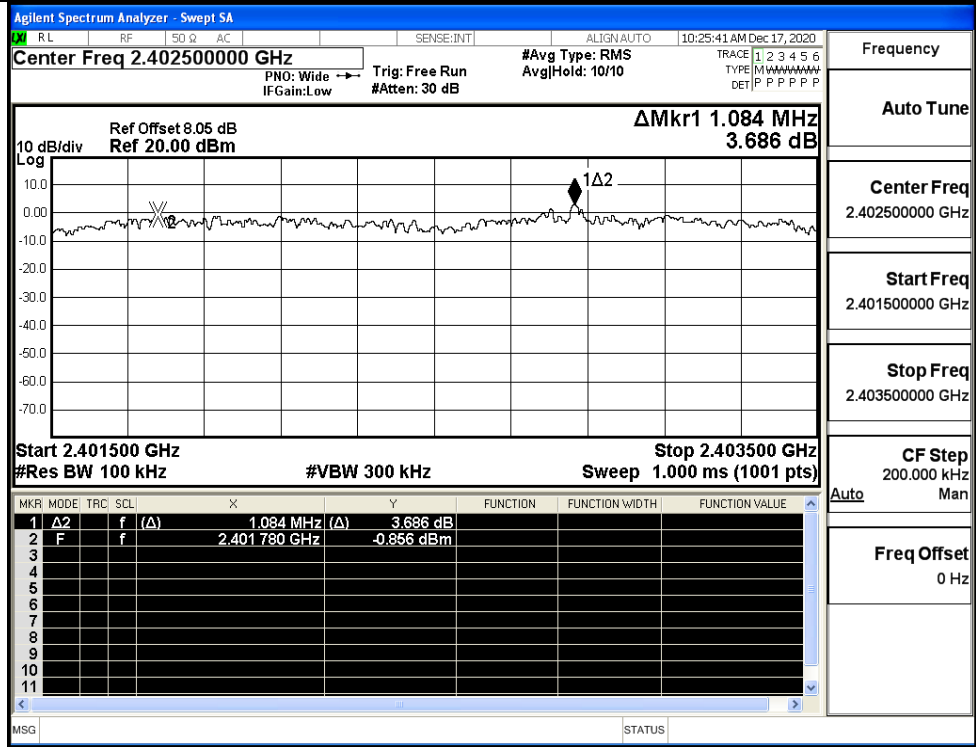


π/4DQPSK/HCH



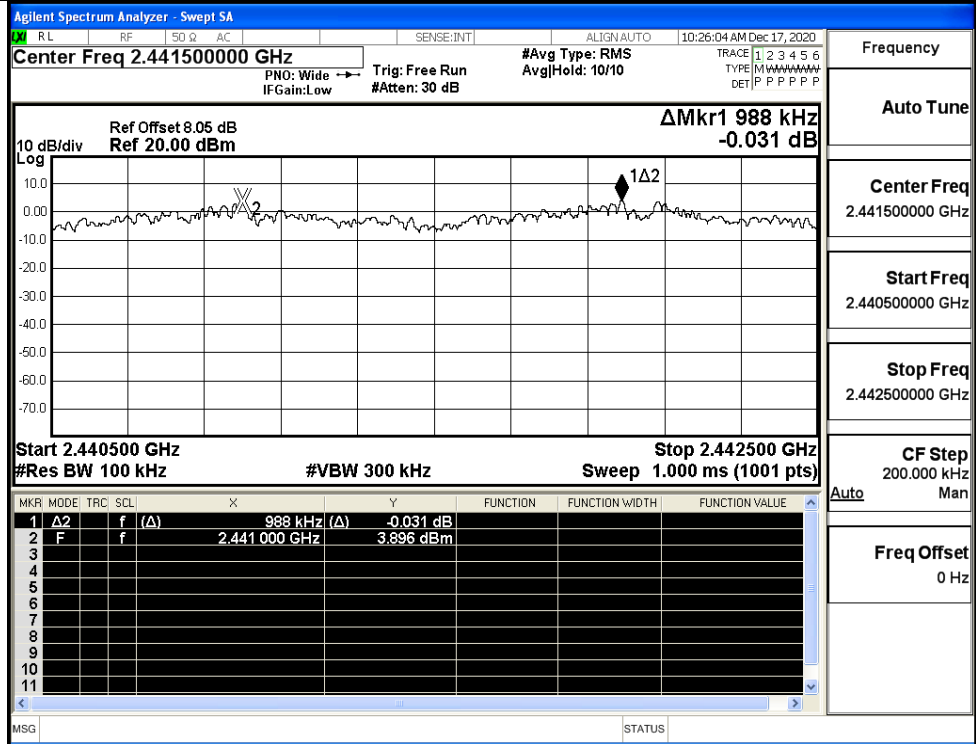
Frequency	2.479500000 GHz
Auto Tune	
Center Freq	2.479500000 GHz
Start Freq	2.478500000 GHz
Stop Freq	2.480500000 GHz
CF Step	200.000 kHz
Auto	Man
Freq Offset	0 Hz

8DPSK/LCH



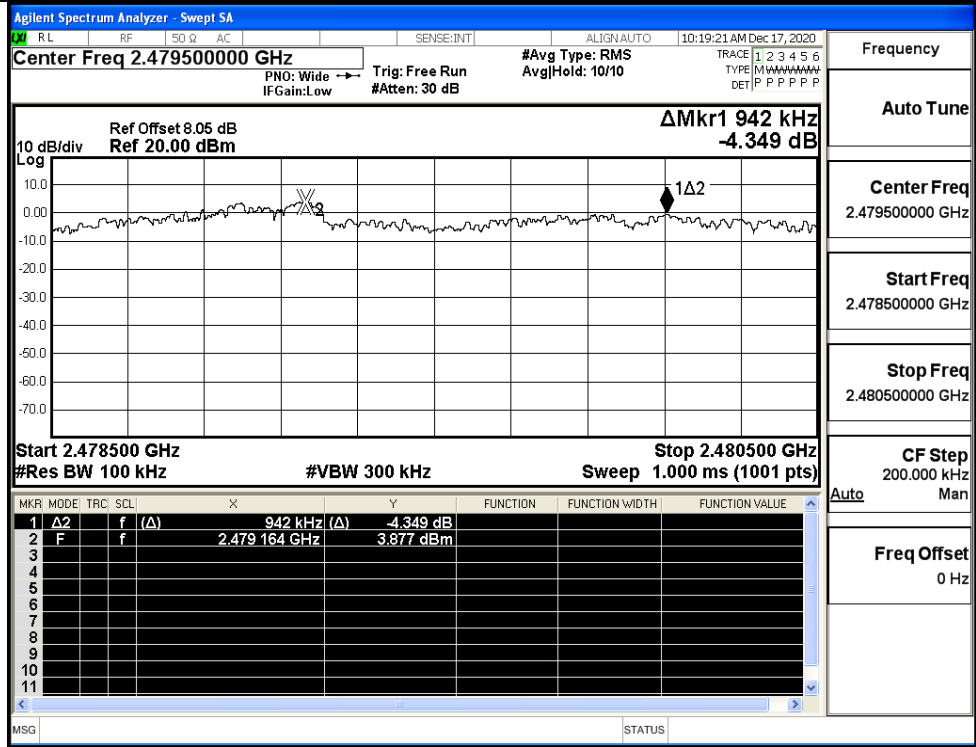
Frequency	2.402500000 GHz
Auto Tune	
Center Freq	2.402500000 GHz
Start Freq	2.401500000 GHz
Stop Freq	2.403500000 GHz
CF Step	200.000 kHz
Auto	Man
Freq Offset	0 Hz

8DPSK/MCH



Frequency	2.441500000 GHz
Auto Tune	
Center Freq	2.441500000 GHz
Start Freq	2.440500000 GHz
Stop Freq	2.442500000 GHz
CF Step	200.000 kHz
Auto	Man
Freq Offset	0 Hz

8DPSK/HCH

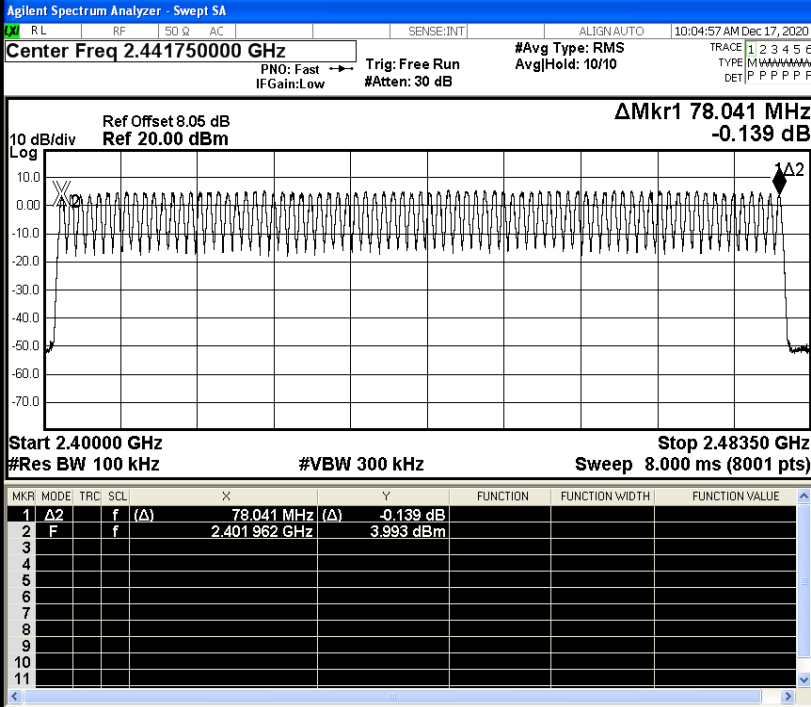
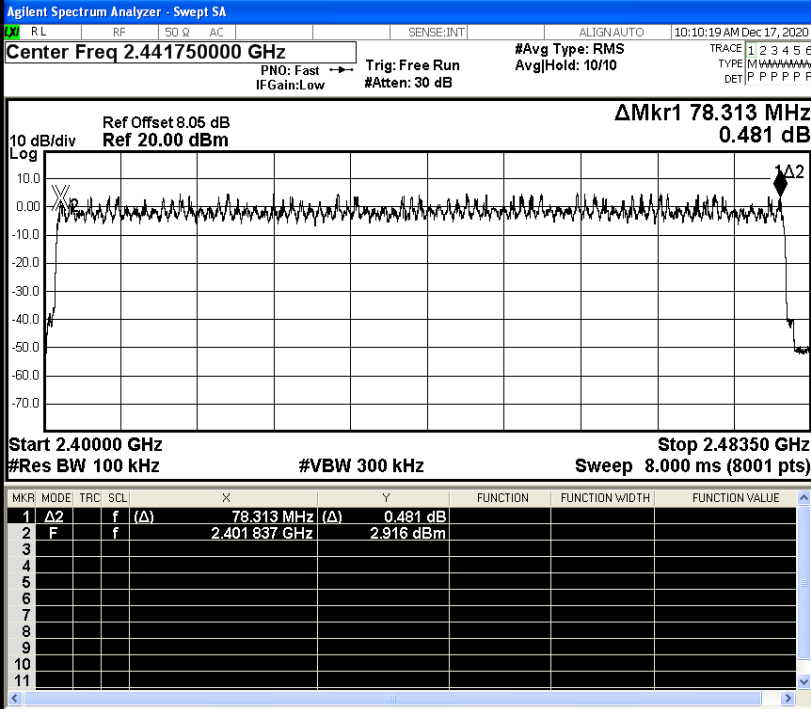


Frequency	2.479500000 GHz
Auto Tune	
Center Freq	2.479500000 GHz
Start Freq	2.478500000 GHz
Stop Freq	2.480500000 GHz
CF Step	200.000 kHz
Auto	Man
Freq Offset	0 Hz

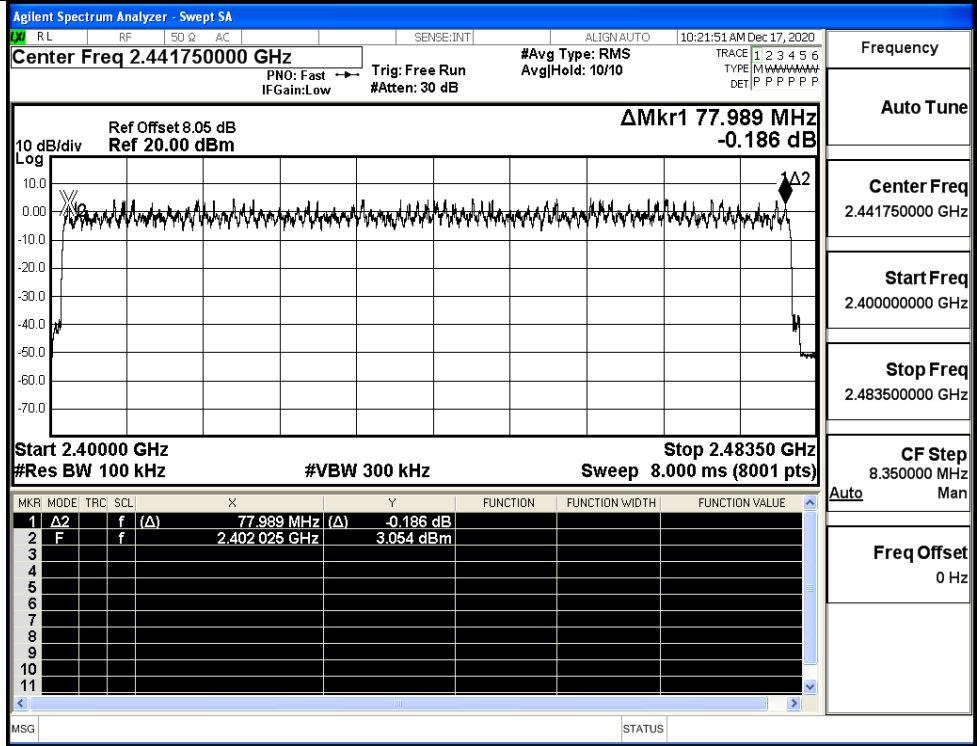
A.4 Hopping Channel Number

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

Test Graphs

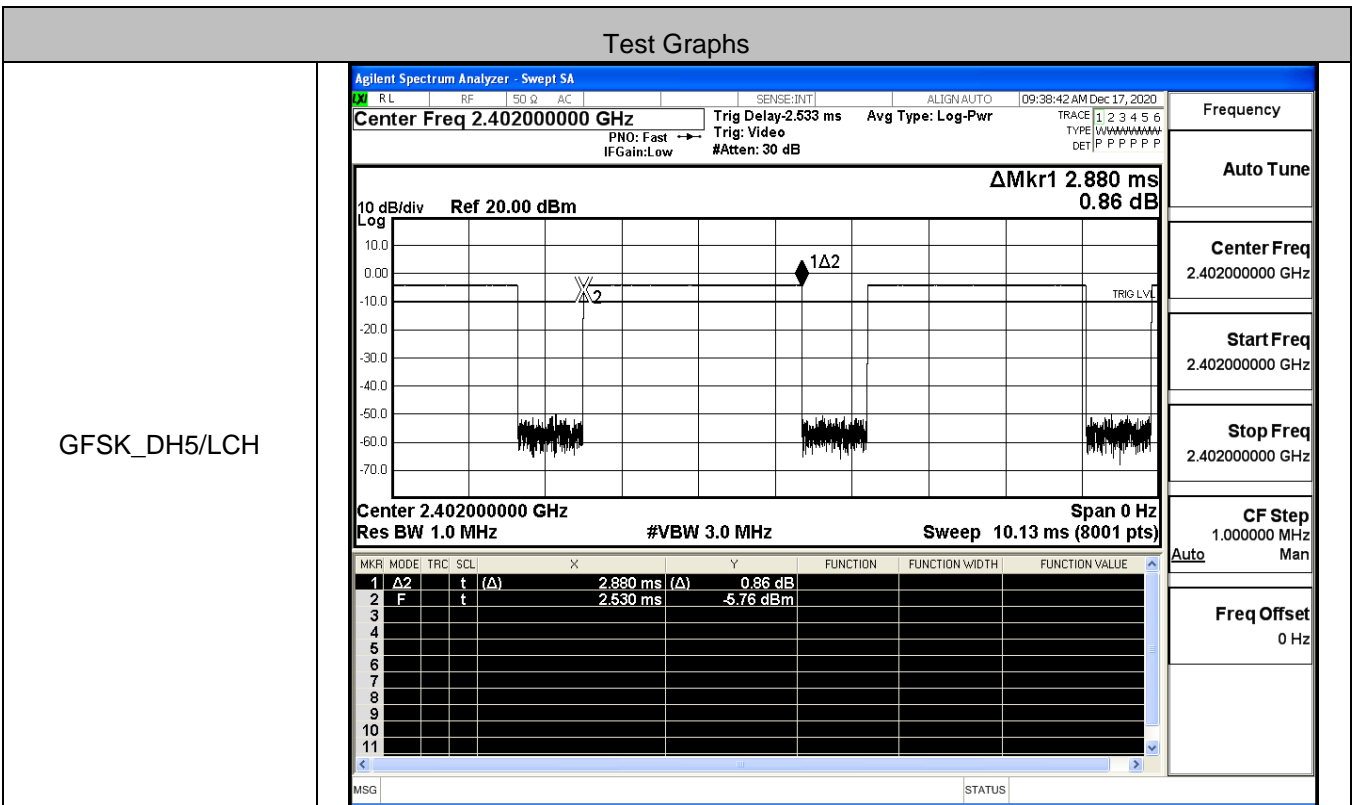
<p>GFSK/Hop</p>	 <p>Agilent Spectrum Analyzer - Swept SA</p> <p>Center Freq 2.441750000 GHz</p> <p>Ref Offset 8.05 dB Ref 20.00 dBm</p> <p>ΔMkr1 78.041 MHz -0.139 dB</p> <p>Start 2.40000 GHz Stop 2.48350 GHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 8.000 ms (8001 pts)</p> <table border="1"> <thead> <tr> <th>MKR</th> <th>MODE</th> <th>TRC</th> <th>SCL</th> <th>X</th> <th>Y</th> <th>FUNCTION</th> <th>FUNCTION WIDTH</th> <th>FUNCTION VALUE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Δ2</td> <td>f</td> <td>(Δ)</td> <td>78.041 MHz (Δ)</td> <td>-0.139 dB</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>F</td> <td>f</td> <td>(Δ)</td> <td>2.401 962 GHz</td> <td>3.993 dBm</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	Δ 2	f	(Δ)	78.041 MHz (Δ)	-0.139 dB				2	F	f	(Δ)	2.401 962 GHz	3.993 dBm				<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.441750000 GHz</p> <p>Start Freq 2.400000000 GHz</p> <p>Stop Freq 2.483500000 GHz</p> <p>CF Step 8.350000 MHz</p> <p>Freq Offset 0 Hz</p>
MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE																					
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2	F	f	(Δ)	2.401 962 GHz	3.993 dBm																								
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MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE																					
1	Δ 2	f	(Δ)	78.313 MHz (Δ)	0.481 dB																								
2	F	f	(Δ)	2.401 837 GHz	2.916 dBm																								

8DPSK/Hop

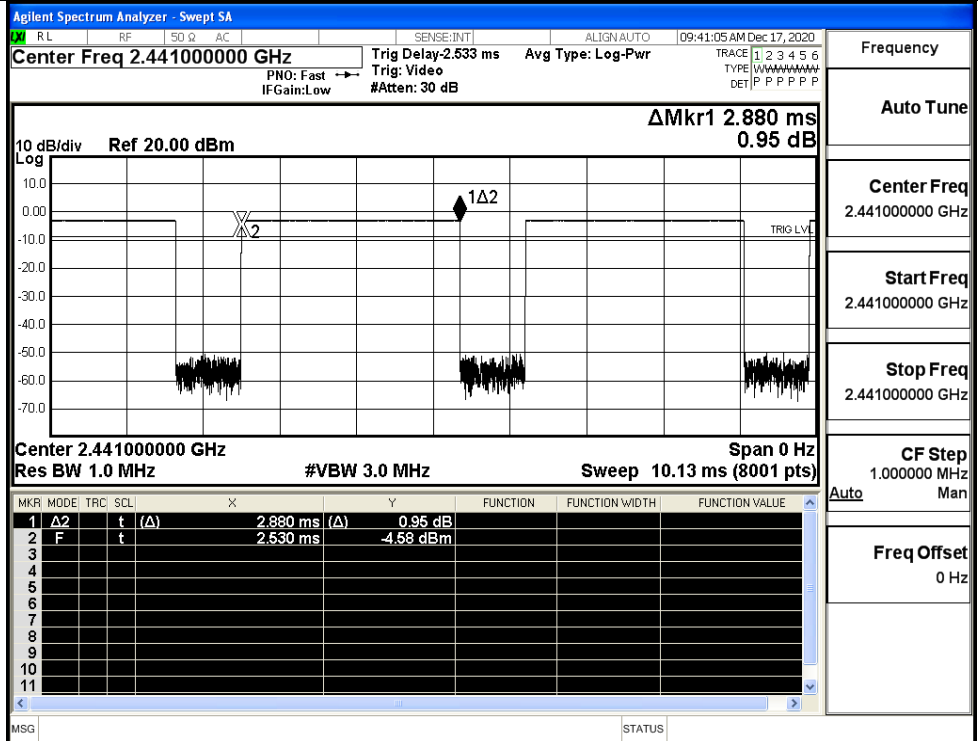


A.5 Dwell Time

Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.880	106.7	0.307	0.4	PASS
	DH5	MCH	2.880	106.7	0.307	0.4	PASS
	DH5	HCH	2.880	106.7	0.307	0.4	PASS
π/4DQPSK	2DH5	LCH	2.884	106.7	0.308	0.4	PASS
	2DH5	MCH	2.884	106.7	0.308	0.4	PASS
	2DH5	HCH	2.884	106.7	0.308	0.4	PASS
8DPSK	3DH5	LCH	2.885	106.7	0.308	0.4	PASS
	3DH5	MCH	2.885	106.7	0.308	0.4	PASS
	3DH5	HCH	2.885	106.7	0.308	0.4	PASS



GFSK_DH5/MCH



Frequency

Auto Tune

Center Freq 2.441000000 GHz

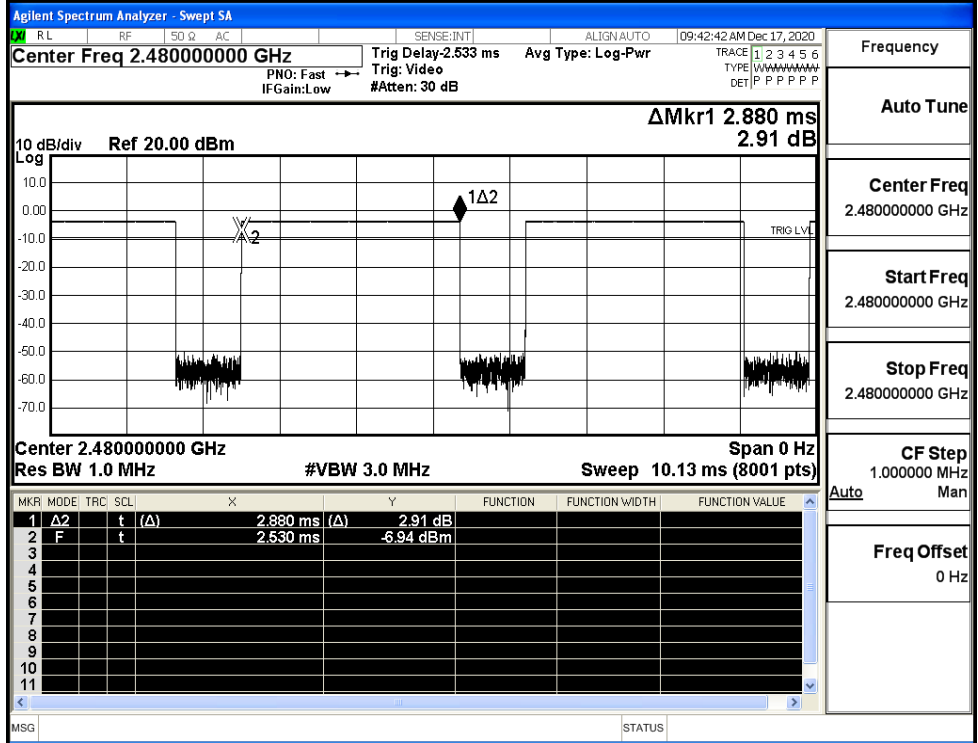
Start Freq 2.441000000 GHz

Stop Freq 2.441000000 GHz

CF Step 1.000000 MHz

Freq Offset 0 Hz

GFSK_DH5/HCH



Frequency

Auto Tune

Center Freq 2.480000000 GHz

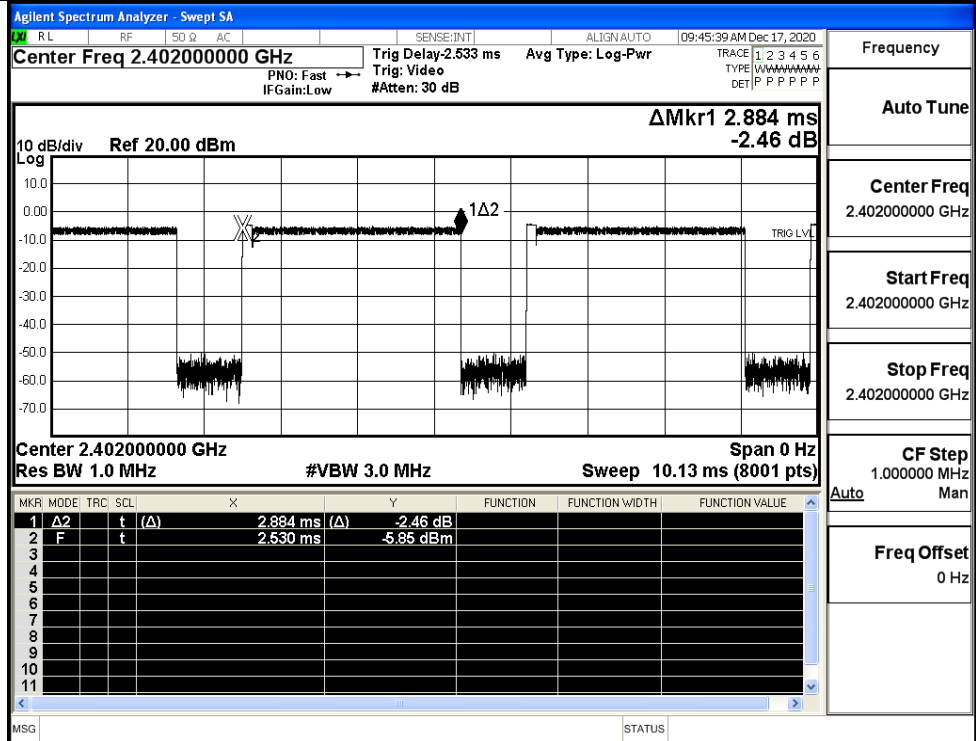
Start Freq 2.480000000 GHz

Stop Freq 2.480000000 GHz

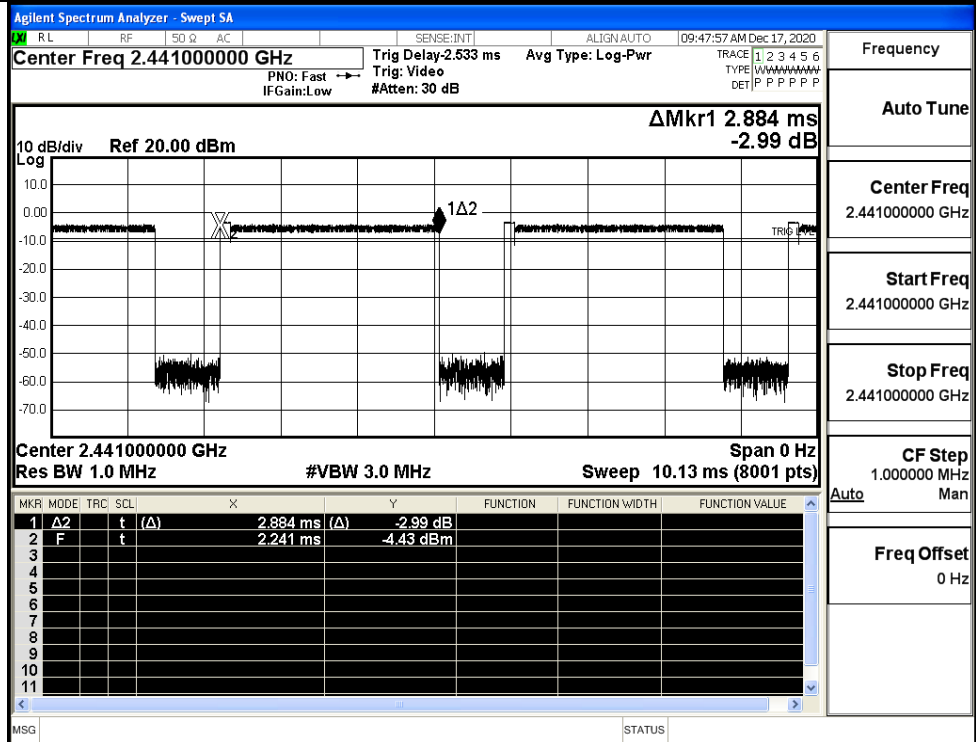
CF Step 1.000000 MHz

Freq Offset 0 Hz

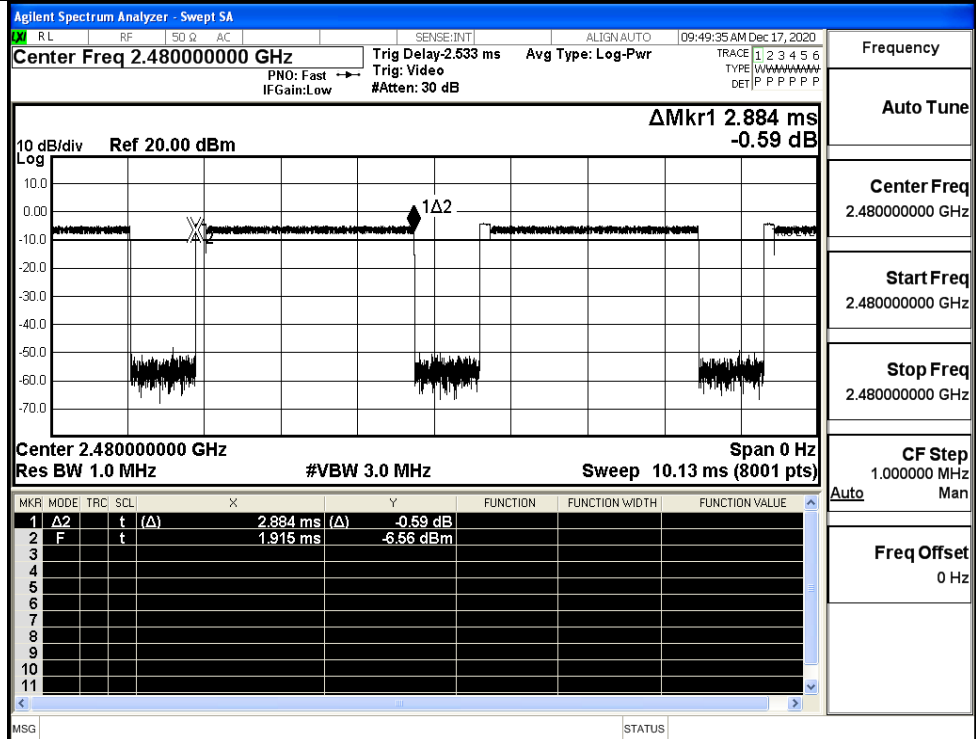
$\pi/4$ DQPSK
_2DH5/LCH



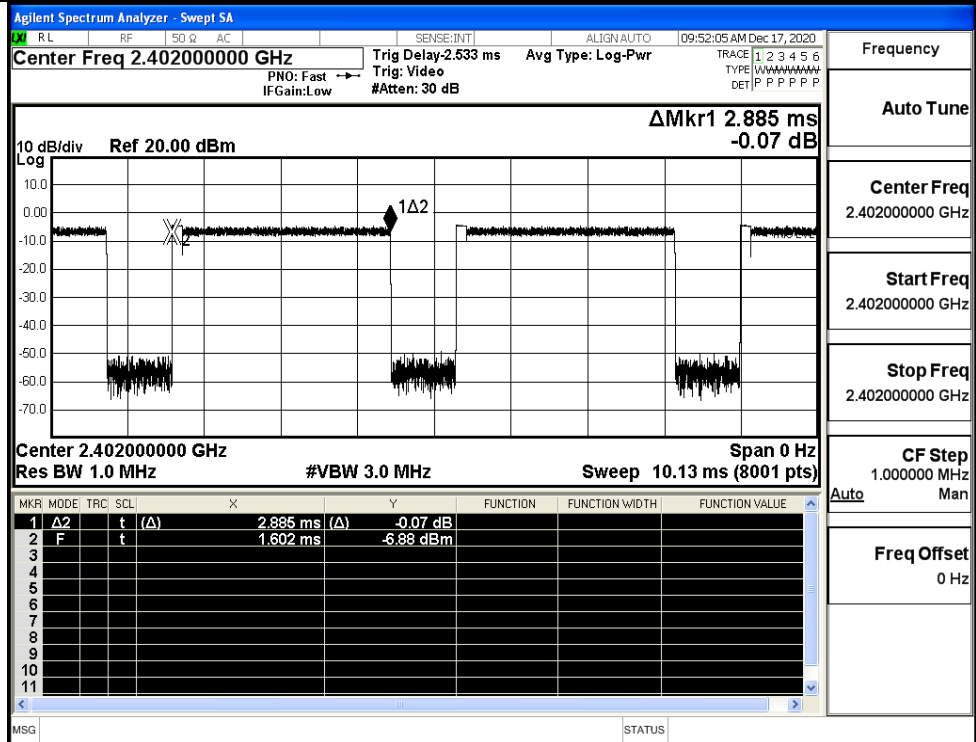
$\pi/4$ DQPSK
_2DH5/MCH



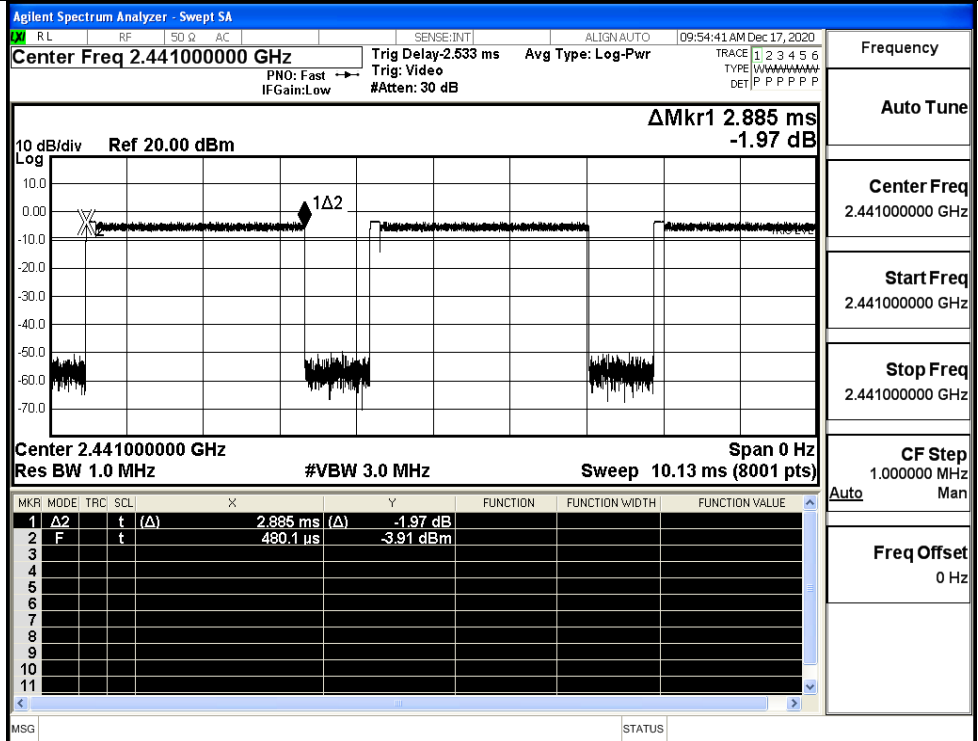
π /4DQPSK
_2DH5/HCH



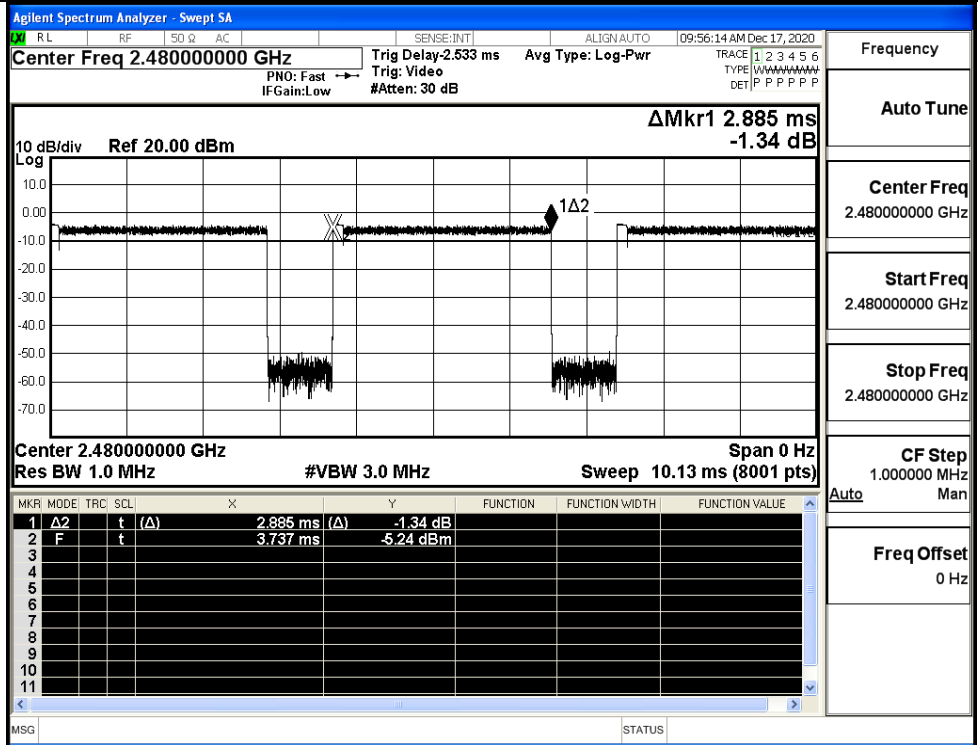
8DPSK_3DH5/LCH



8DPSK_3DH5/MCH



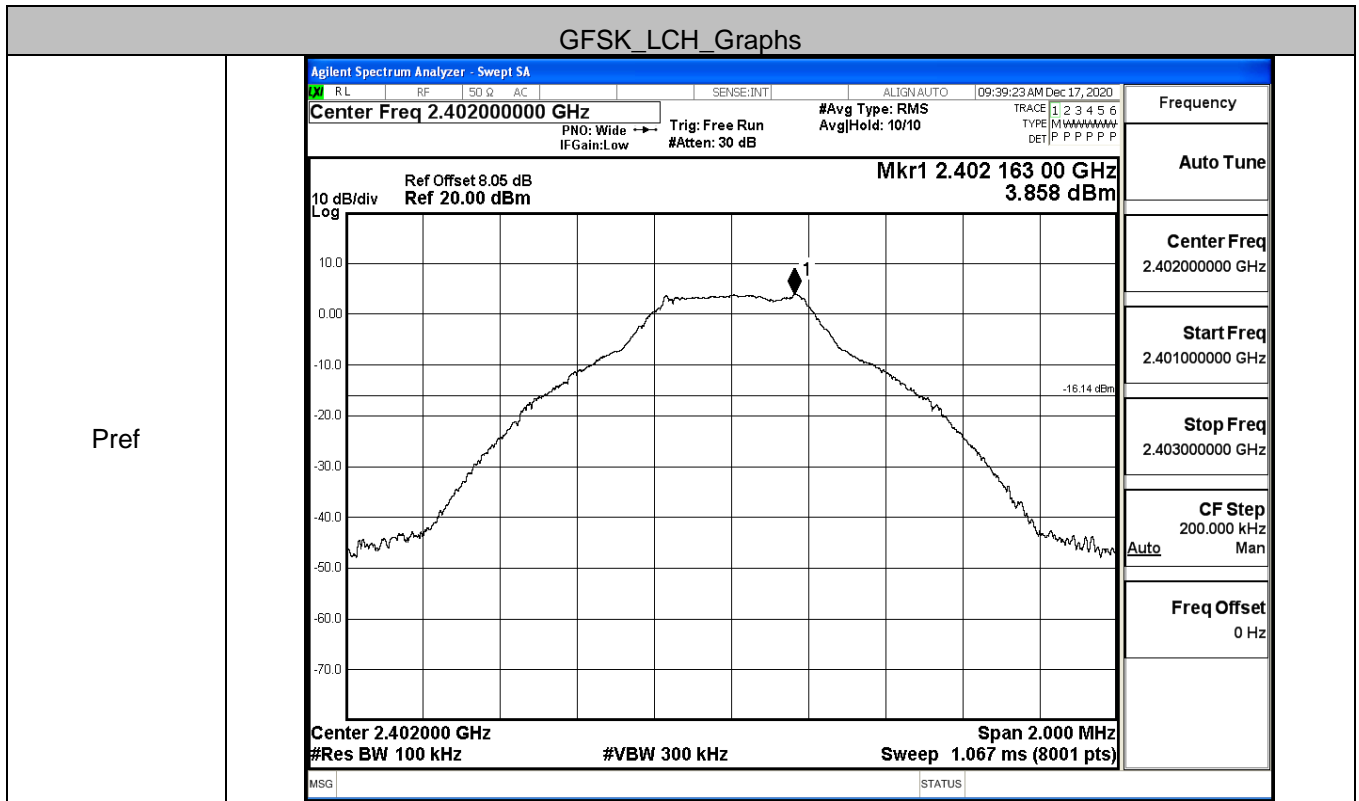
8DPSK_3DH5/HCH



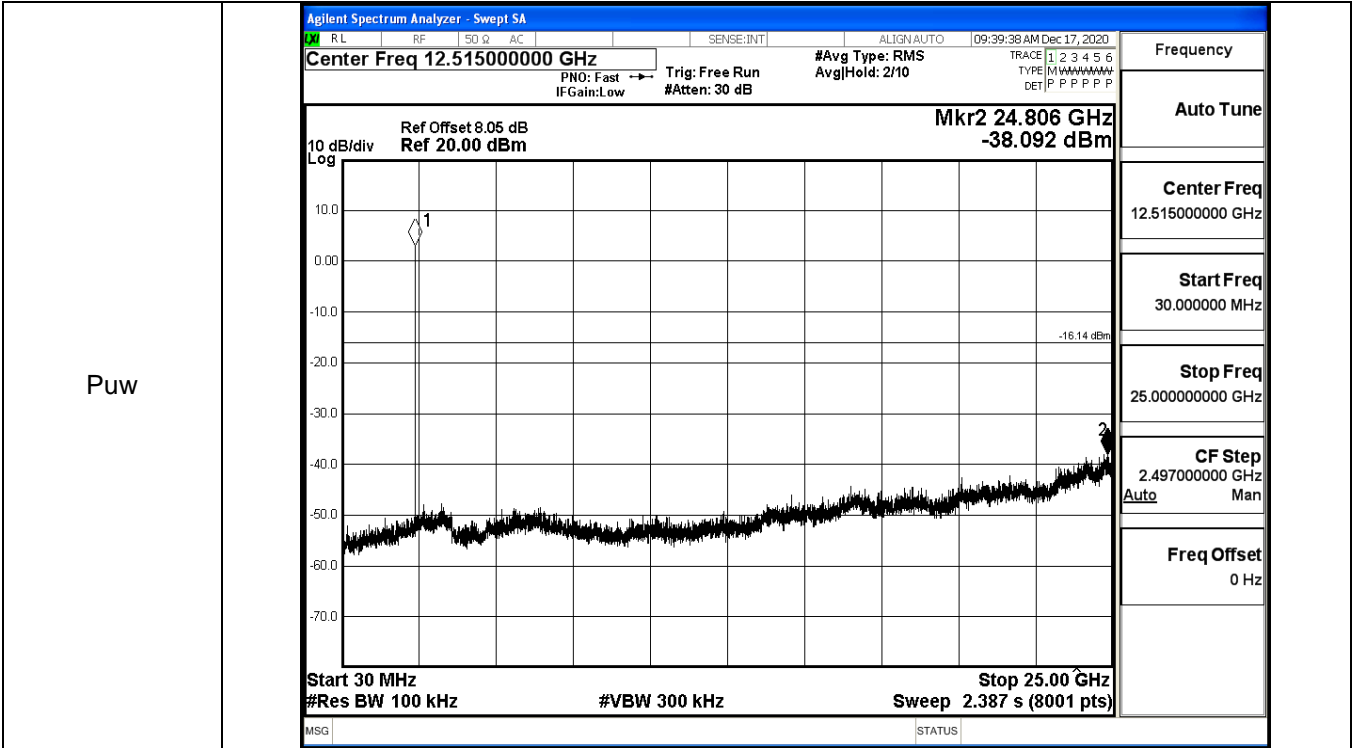
A.6 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	3.858	-38.092	-16.142	PASS
	MCH	5.006	-37.602	-14.994	PASS
	HCH	3.964	-38.355	-16.036	PASS
π /4DQPSK	LCH	3.470	-37.200	-16.530	PASS
	MCH	4.474	-37.914	-15.526	PASS
	HCH	3.675	-38.439	-16.325	PASS
8DPSK	LCH	3.253	-37.632	-16.747	PASS
	MCH	4.635	-37.280	-15.365	PASS
	HCH	3.798	-36.873	-16.202	PASS

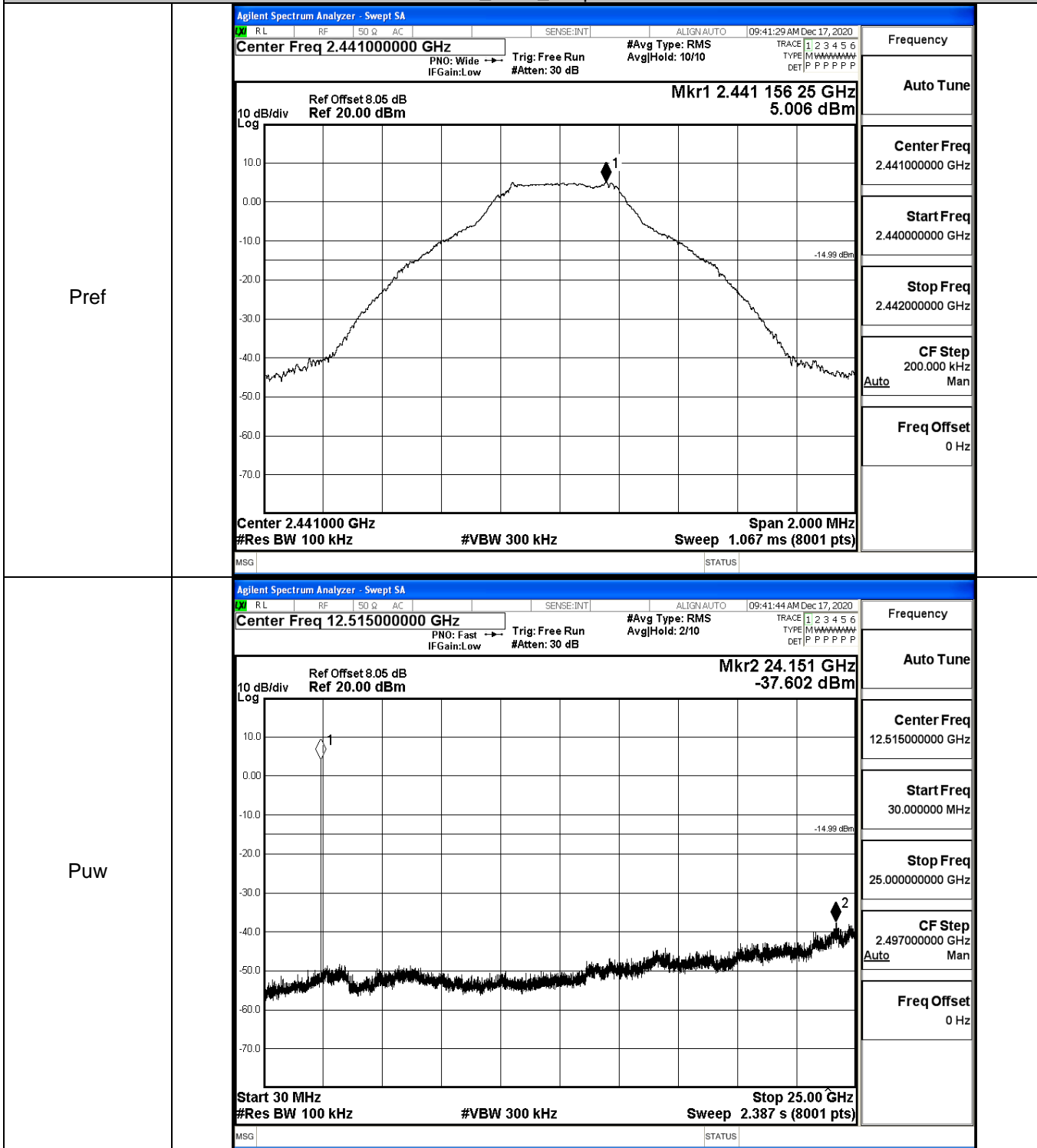
GFSK_LCH_Graphs



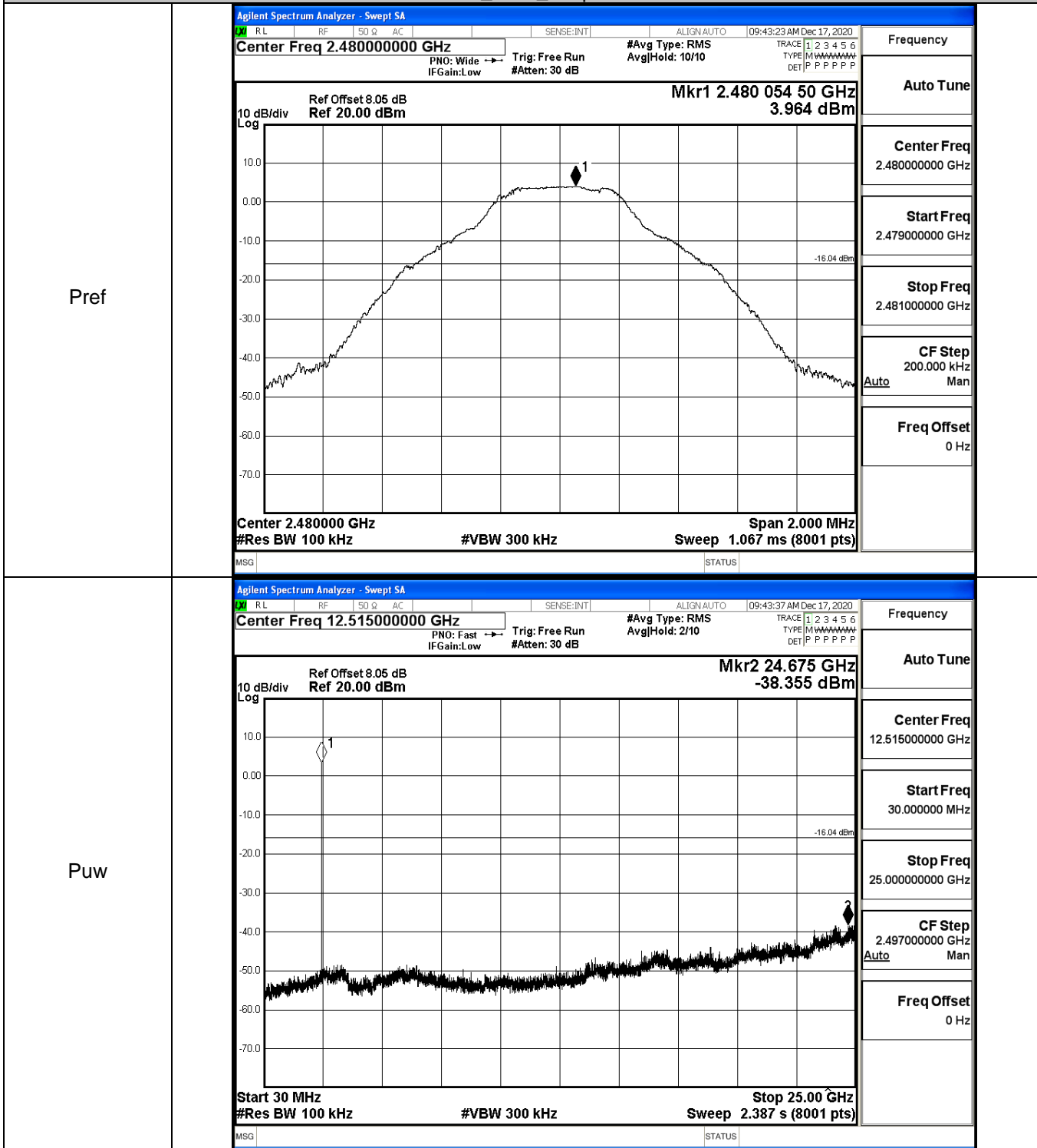
Pref



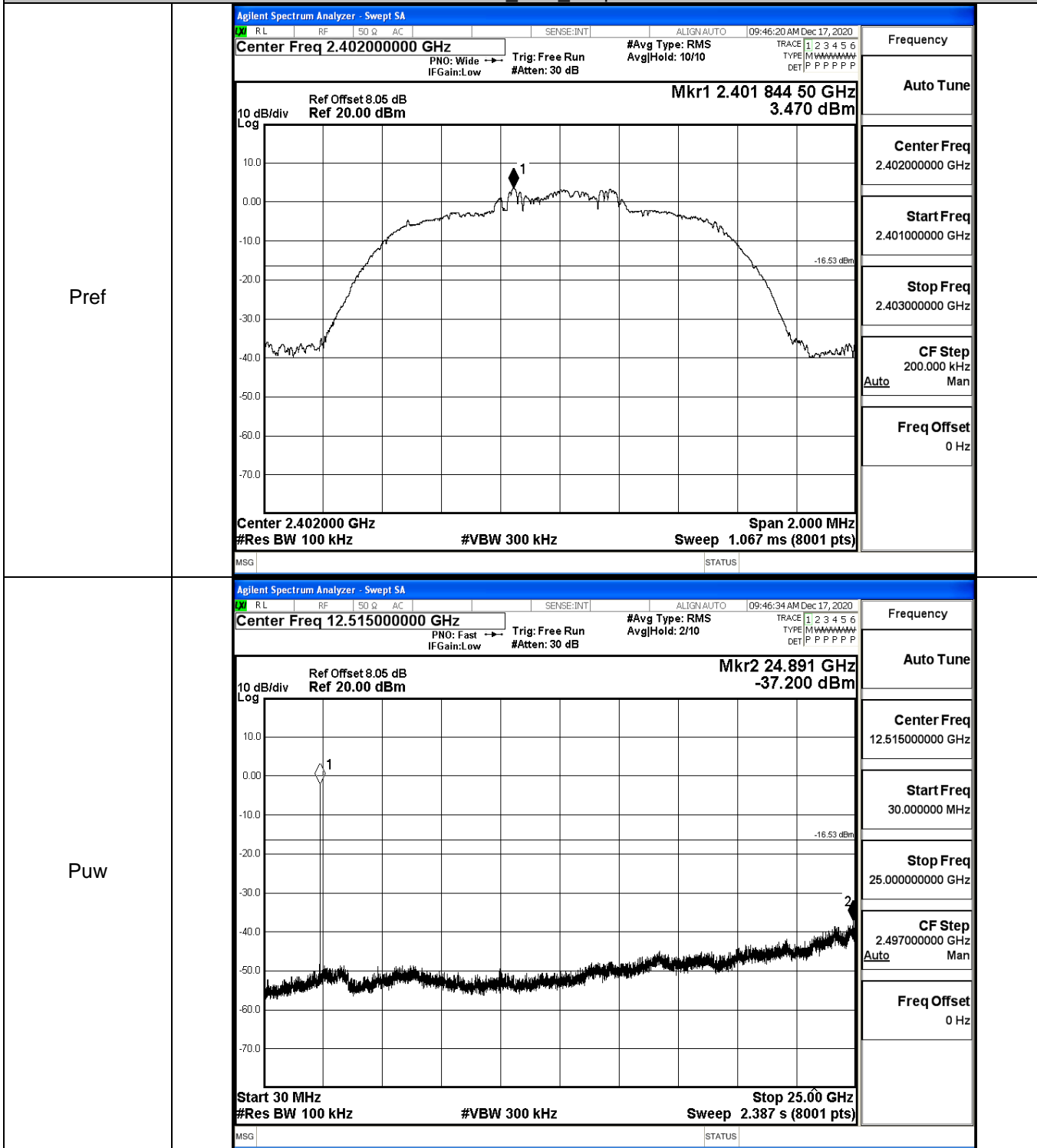
GFSK_MCH_Graphs



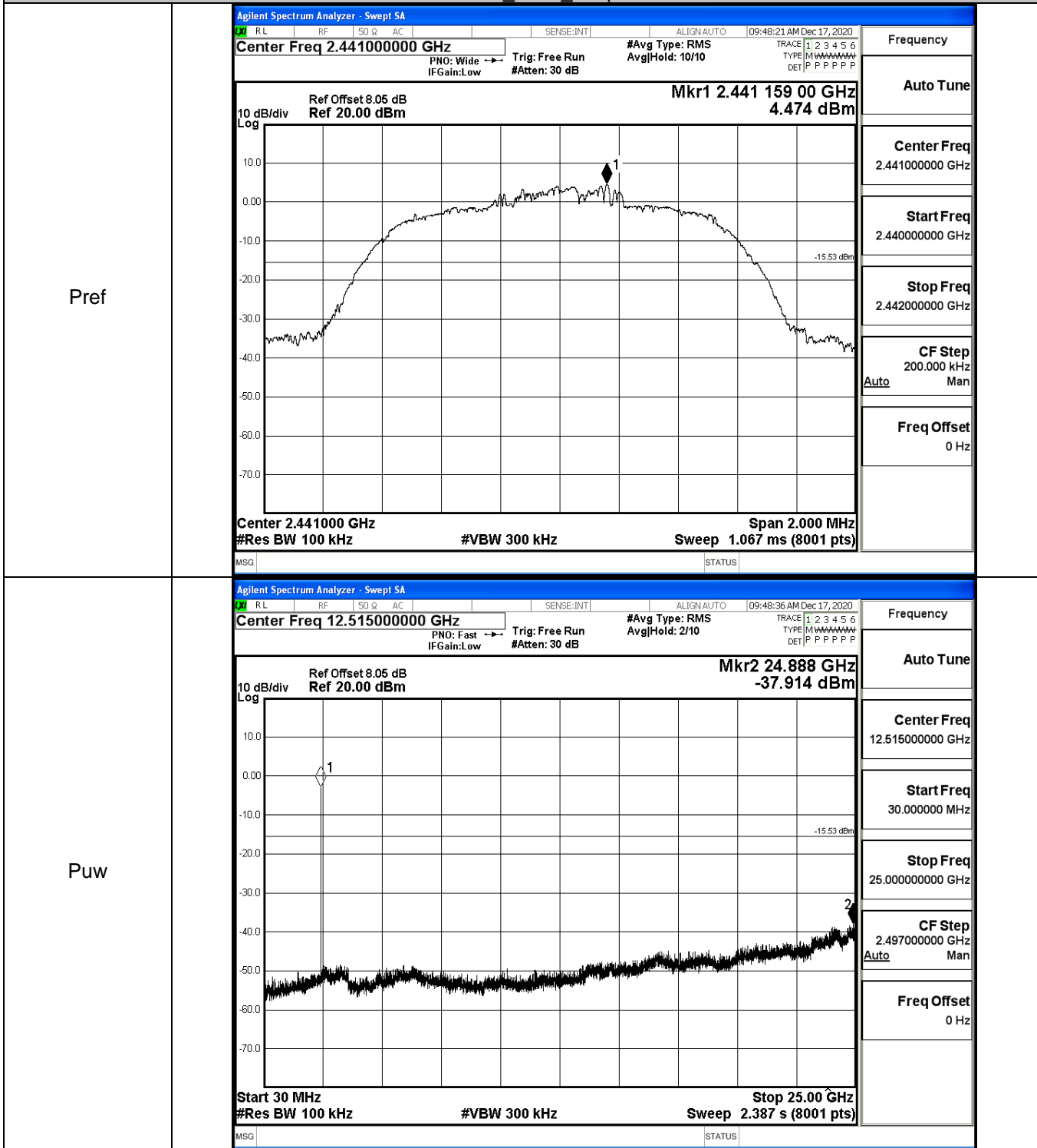
GFSK_HCH_Graphs



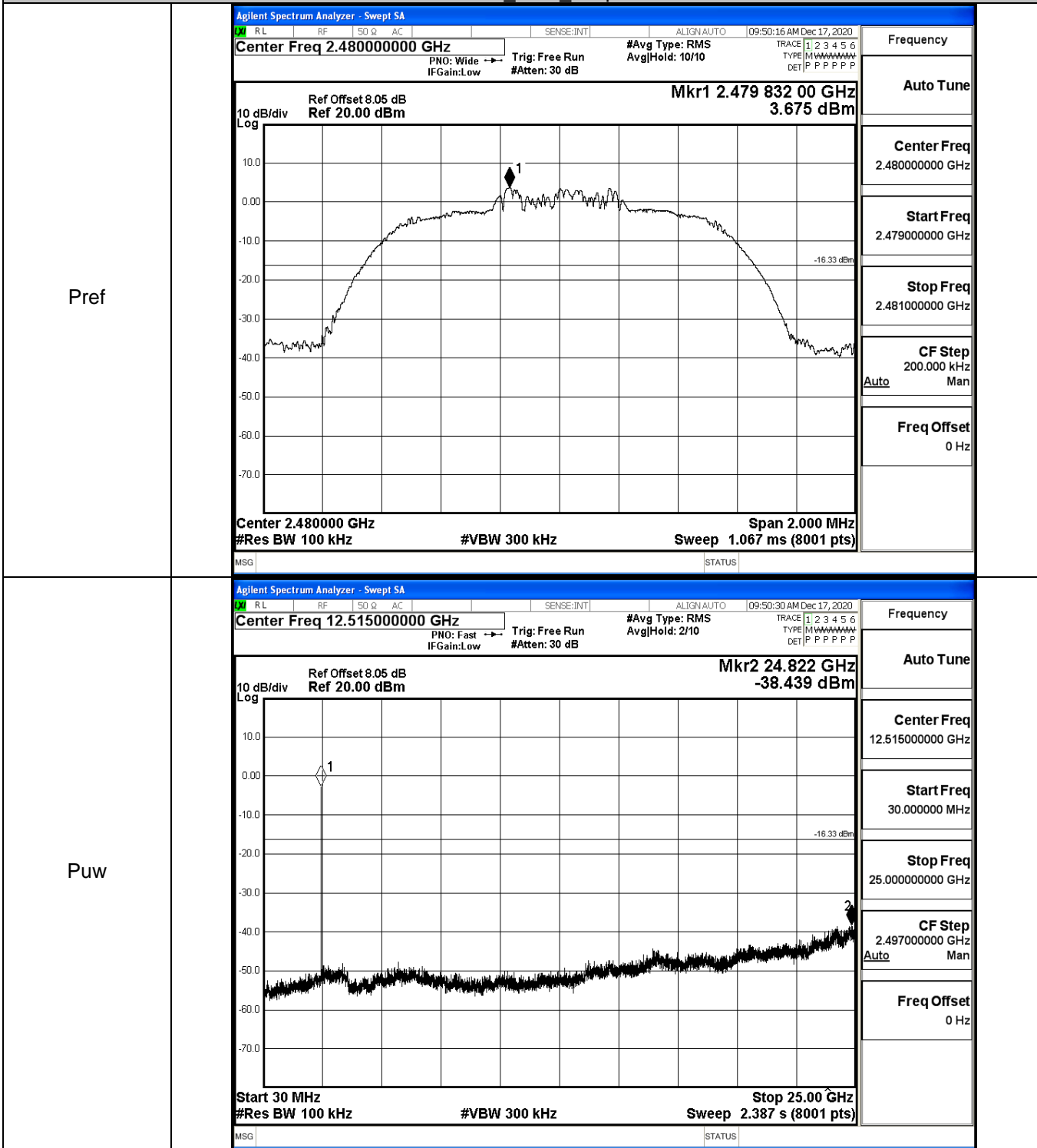
$\pi/4$ DQPSK_LCH_Graphs



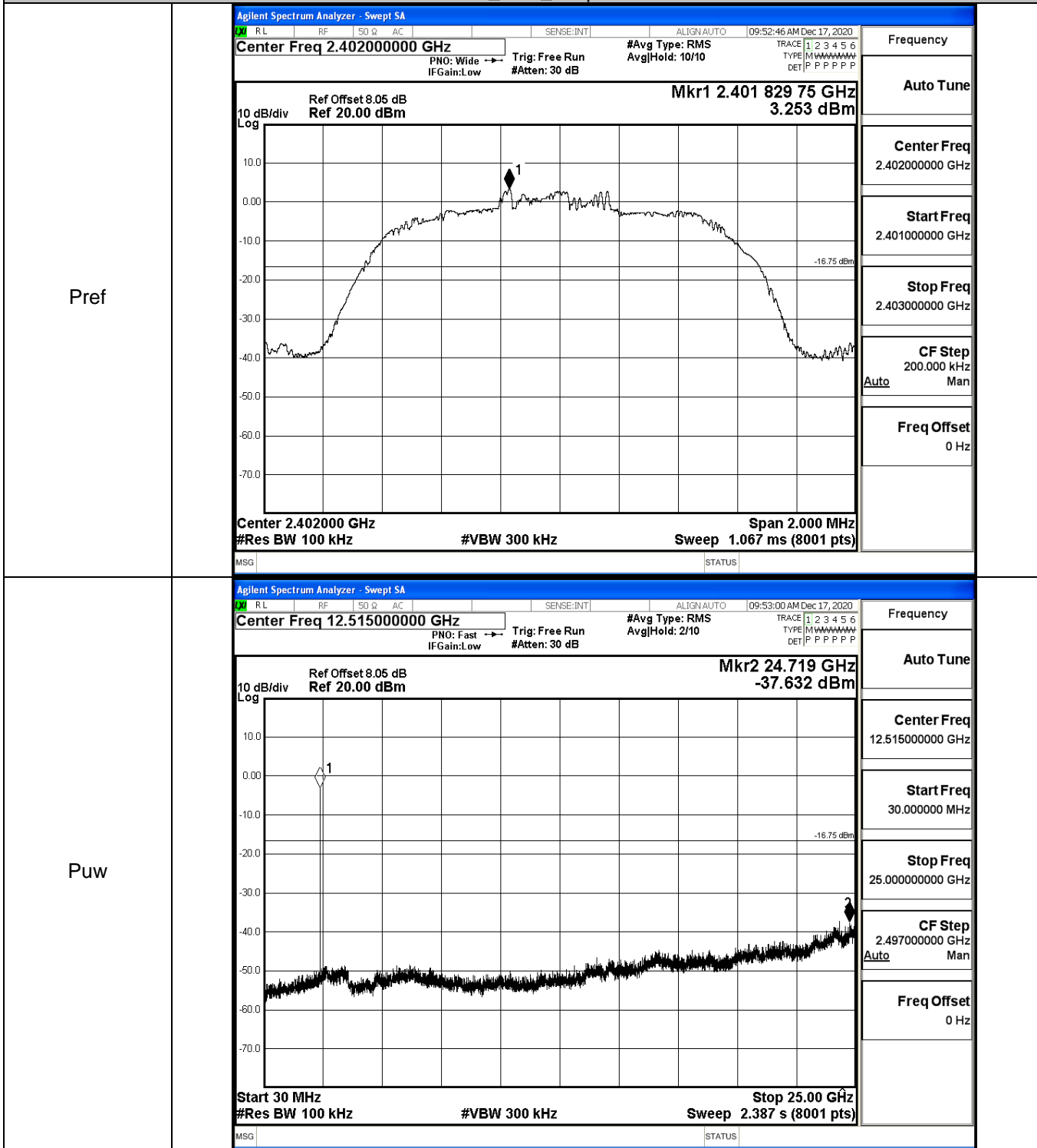
$\pi/4$ DQPSK_MCH_Graphs



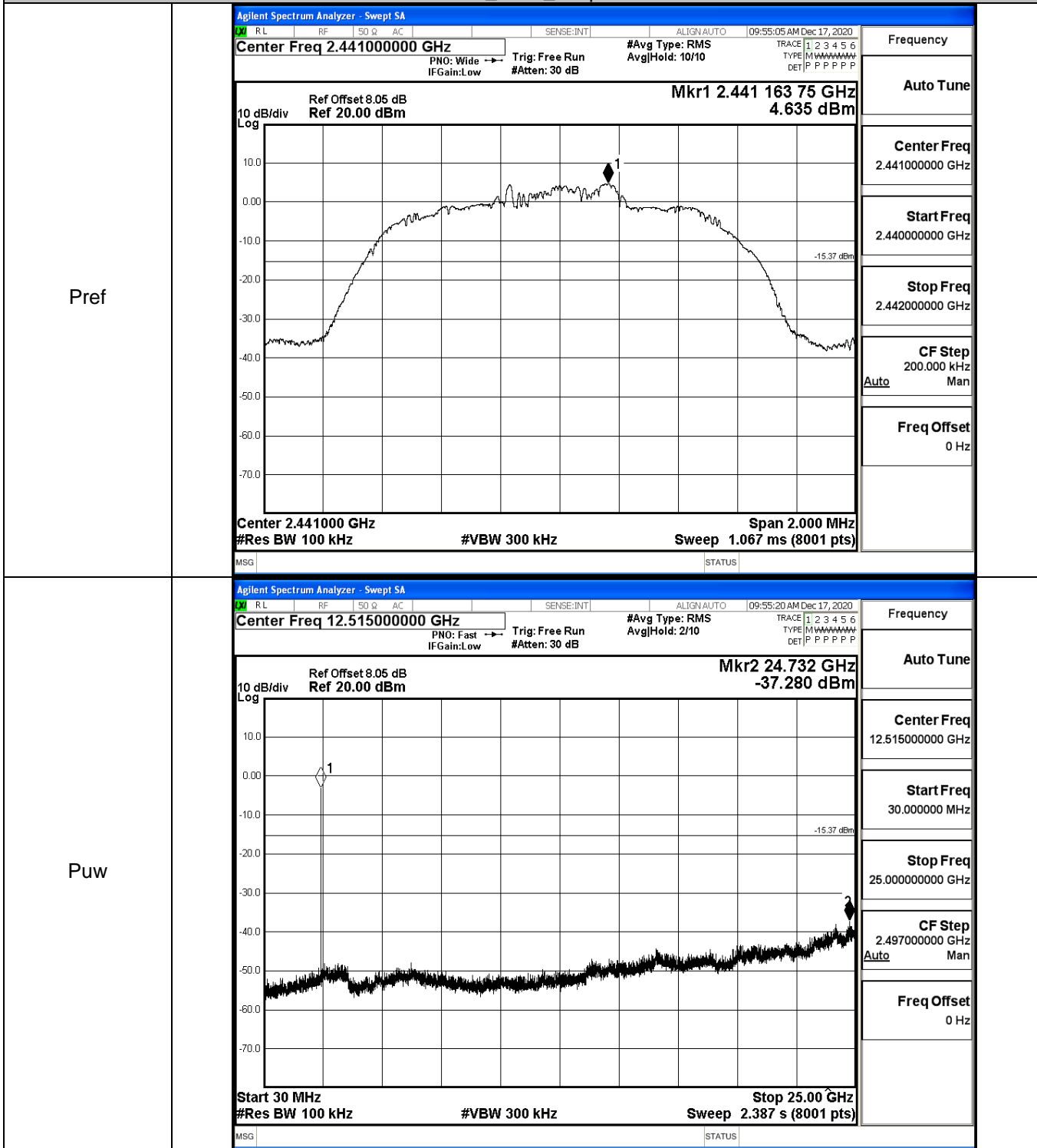
$\pi/4$ DQPSK_HCH_Graphs



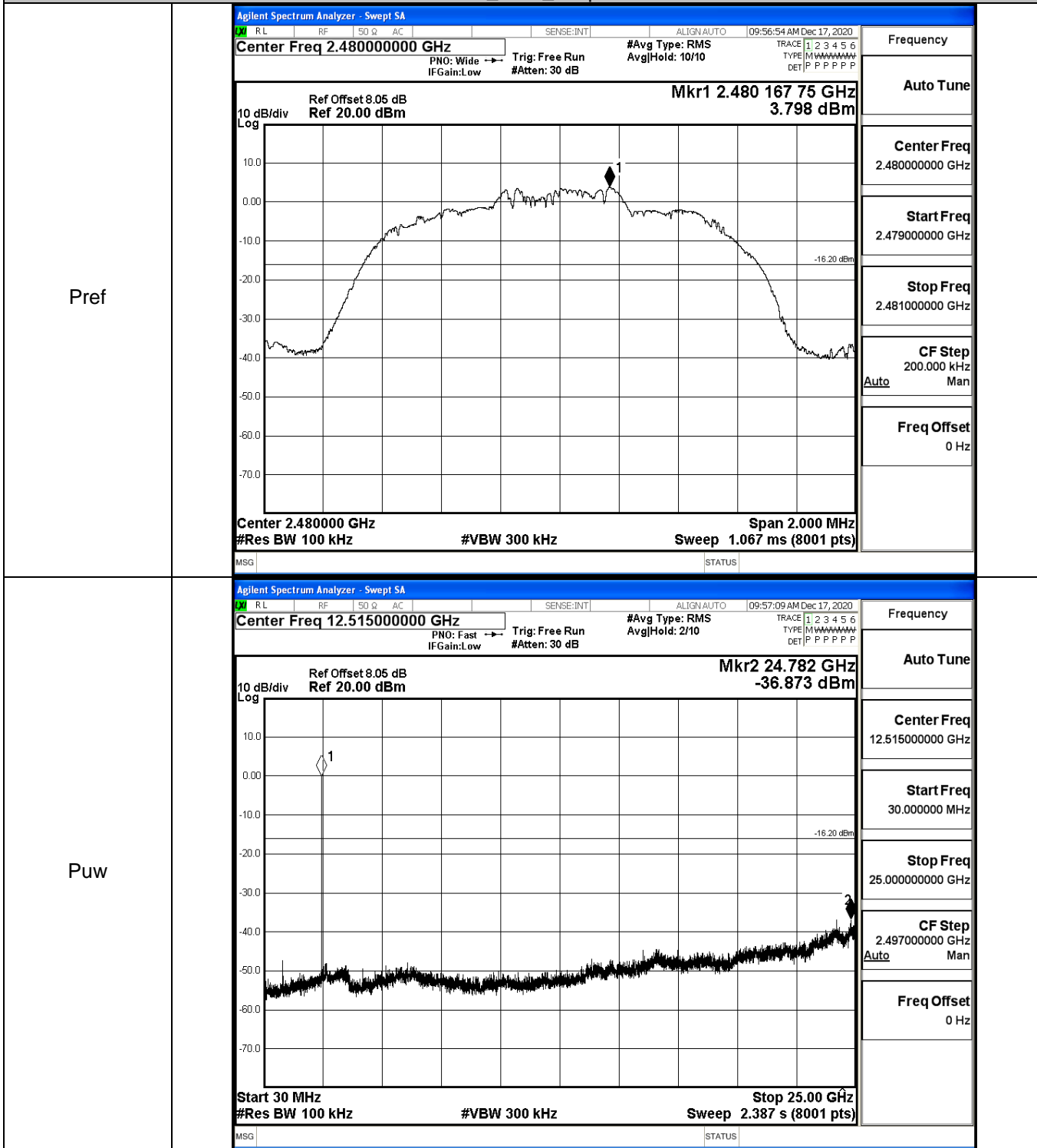
8DPSK_LCH_Graphs



8DPSK_MCH_Graphs



8DPSK_HCH_Graphs

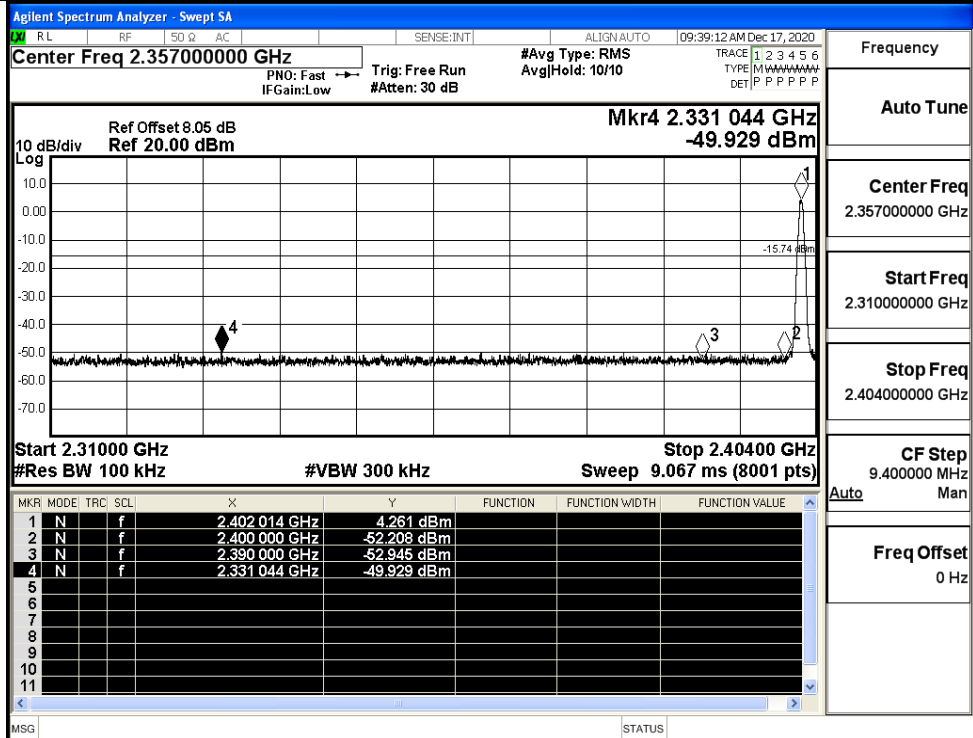


A.7 Band-edge for RF Conducted Emissions

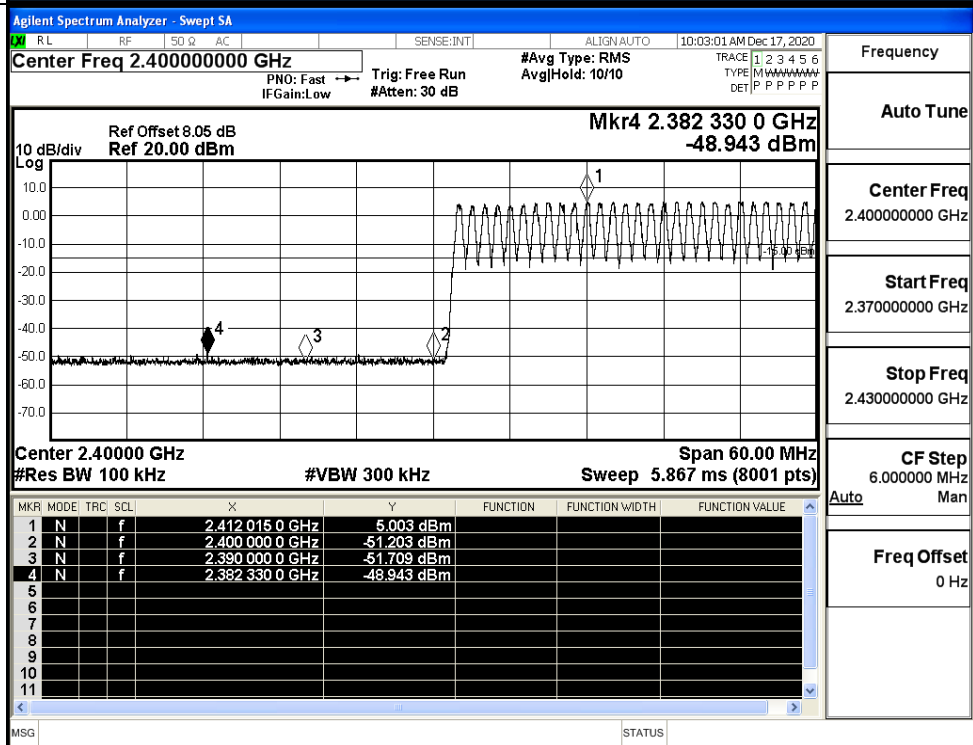
Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	4.261	Off	-49.929	-15.74	PASS
			5.003	On	-48.943	-15	PASS
	HCH	2480	4.370	Off	-49.204	-15.63	PASS
			5.387	On	-48.856	-14.61	PASS
$\pi/4$ DQPSK	LCH	2402	2.895	Off	-49.573	-17.11	PASS
			4.437	On	-48.842	-15.56	PASS
	HCH	2480	3.641	Off	-49.536	-16.36	PASS
			4.720	On	-49.142	-15.28	PASS
8DPSK	LCH	2402	3.244	Off	-49.802	-16.76	PASS
			4.552	On	-48.740	-15.45	PASS
	HCH	2480	3.585	Off	-49.346	-16.42	PASS
			4.811	On	-48.845	-15.19	PASS

Test Graphs

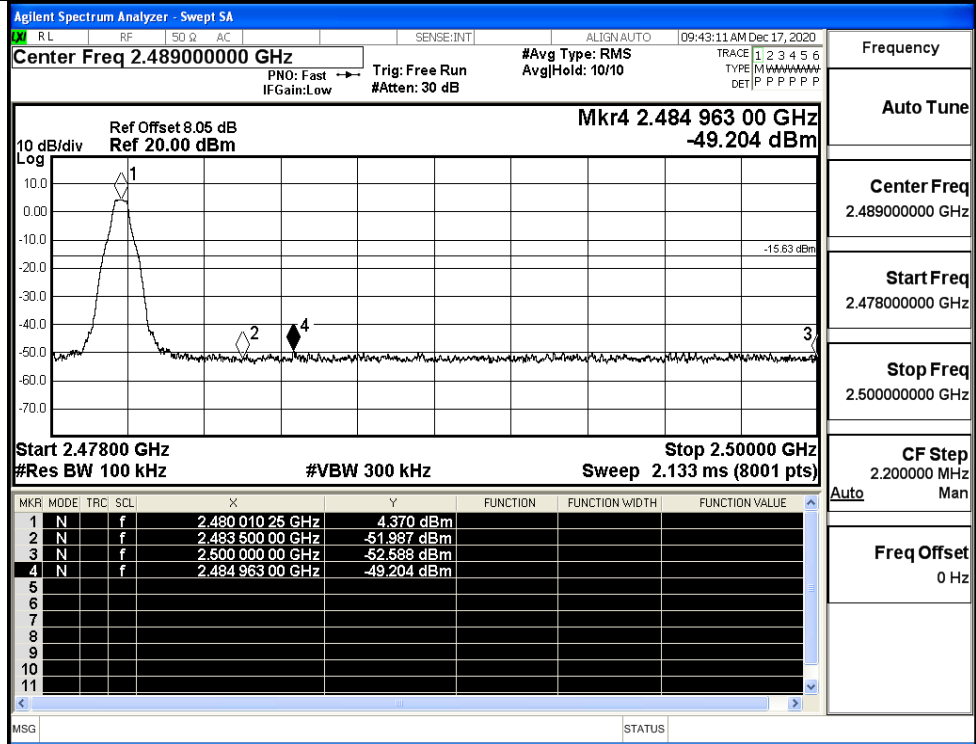
GFSK/LCH/No Hop



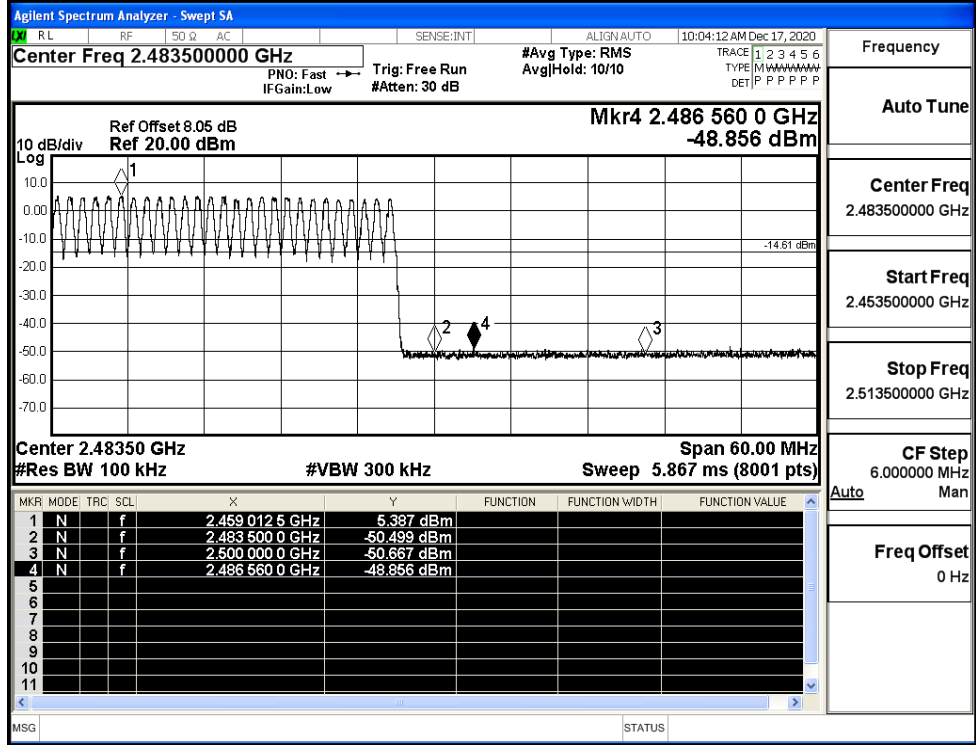
GFSK/LCH/Hop



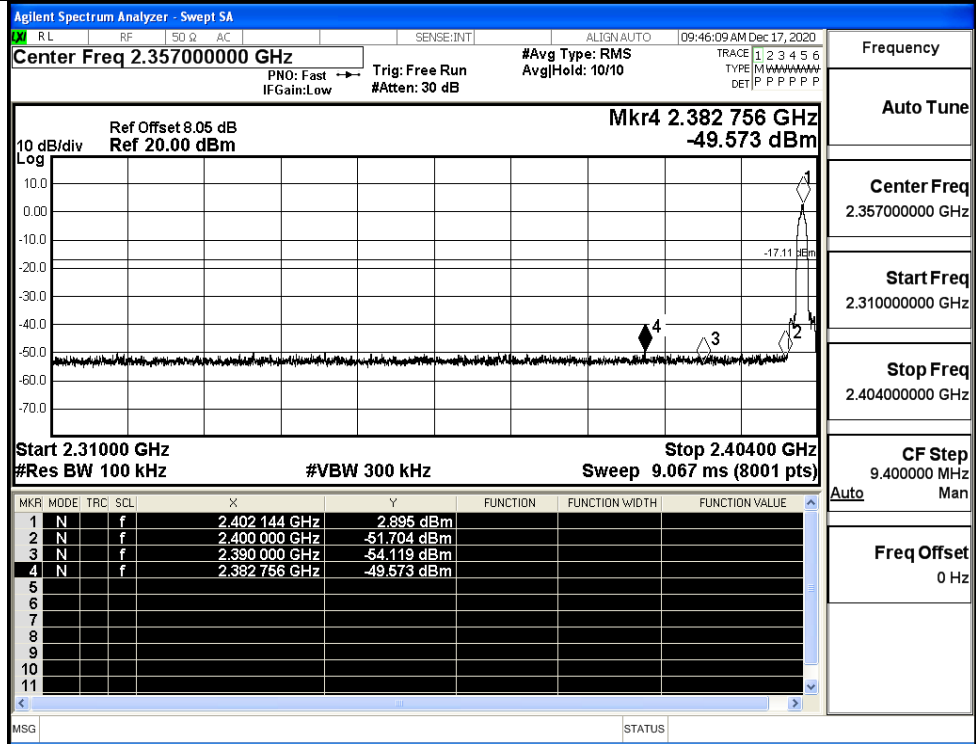
GFSK/HCH/No Hop



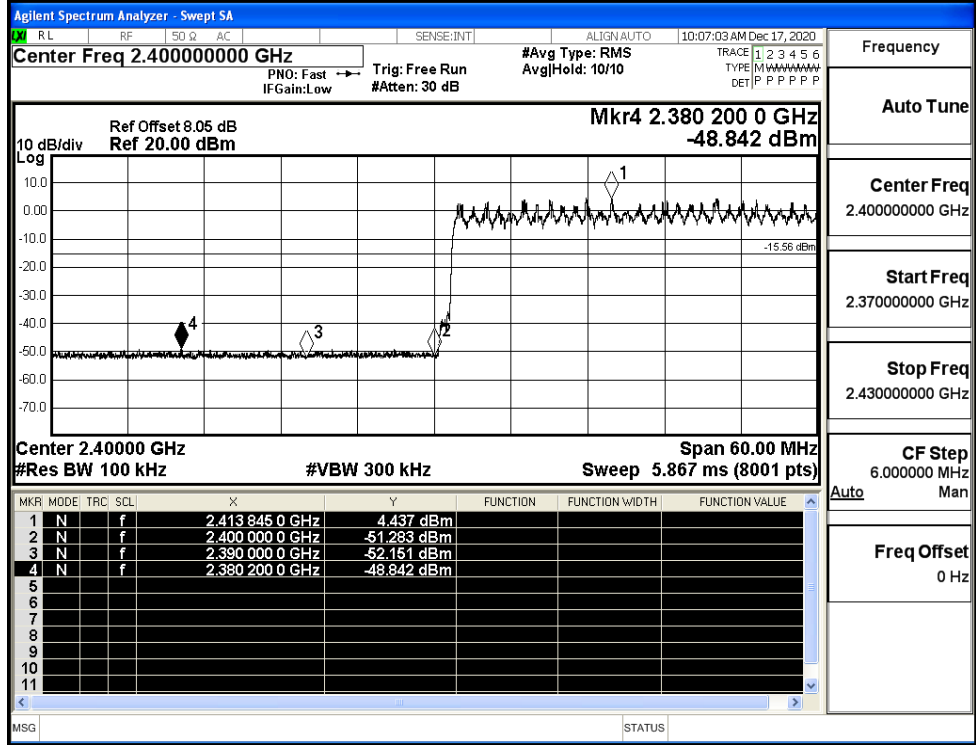
GFSK/HCH/Hop



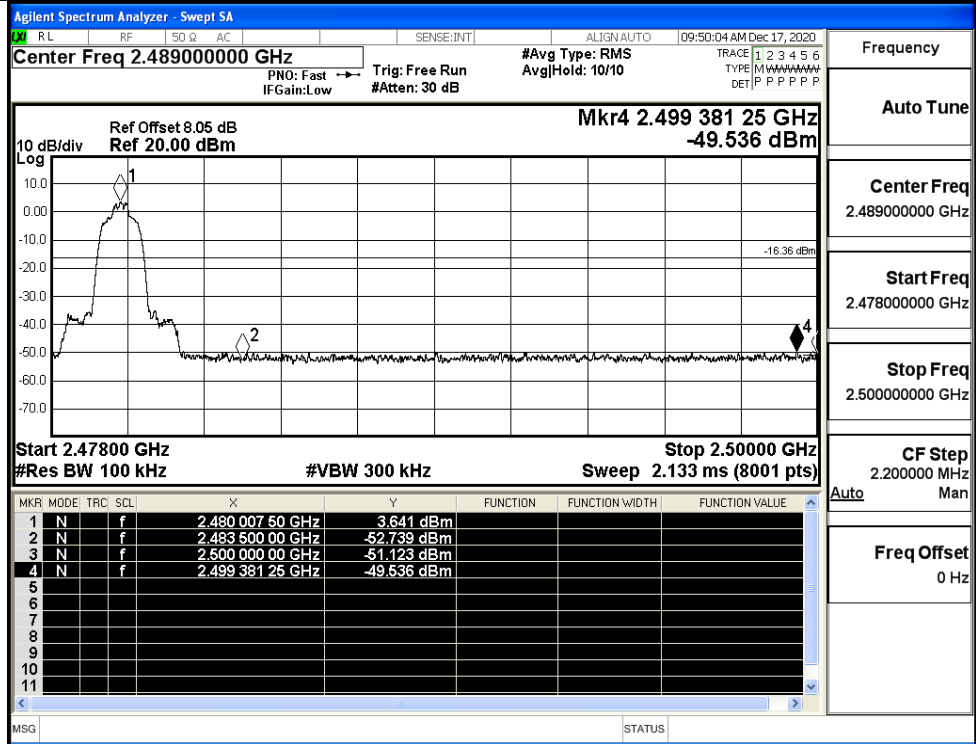
$\pi/4$ DQPSK/LCH/No Hop



$\pi/4$ DQPSK/LCH/Hop

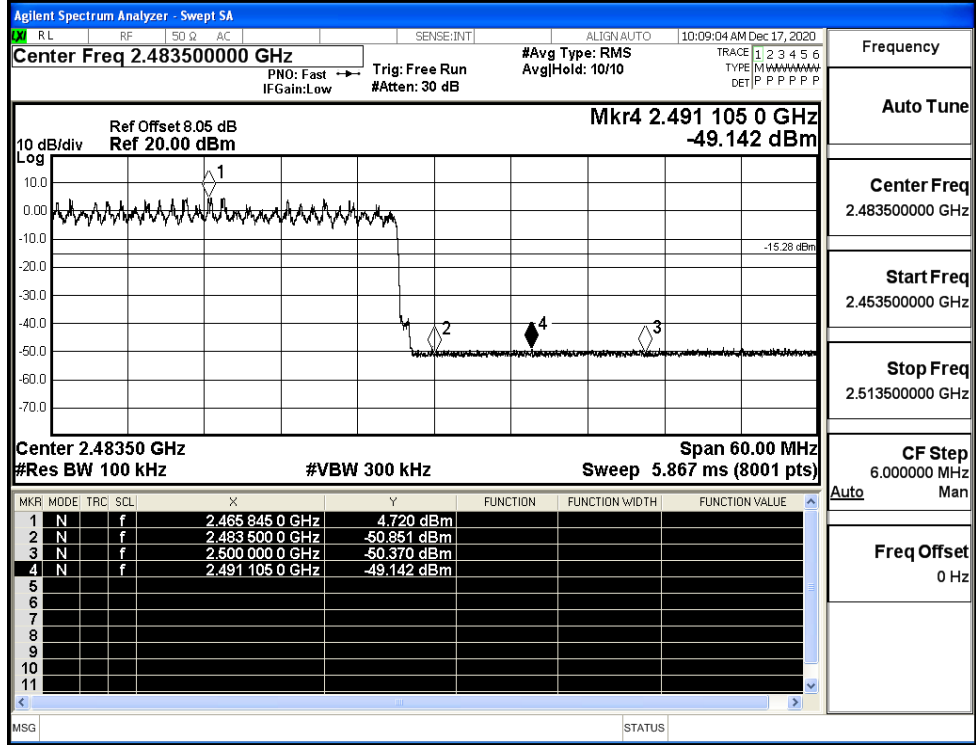


$\pi/4$ DQPSK/HCH/No Hop



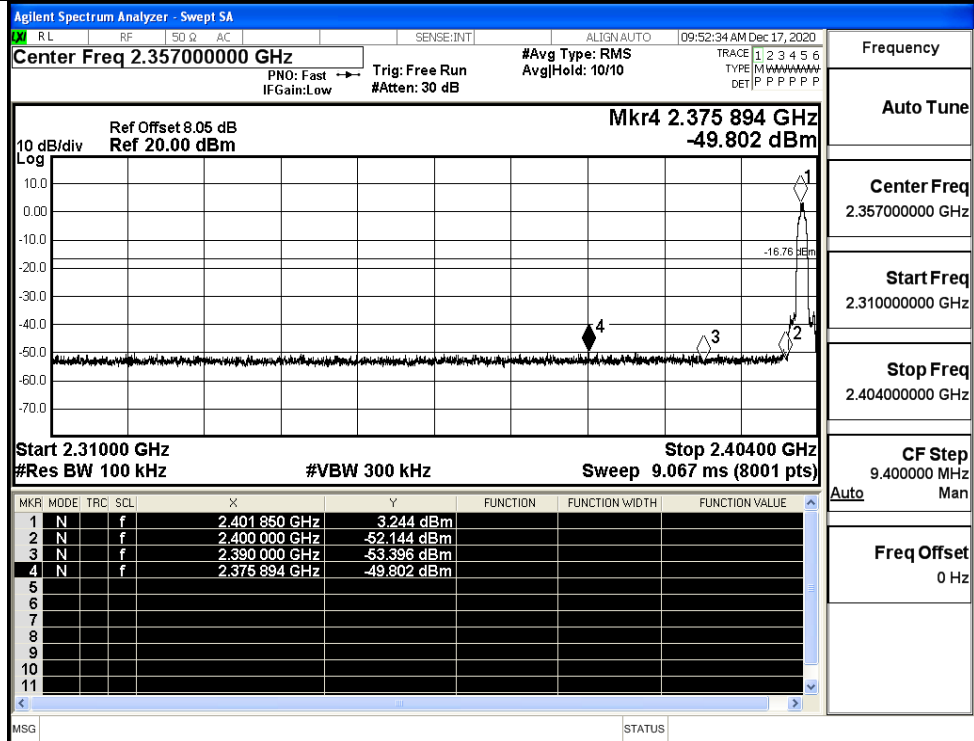
Frequency	2.489000000 GHz
Auto Tune	
Center Freq	2.489000000 GHz
Start Freq	2.478000000 GHz
Stop Freq	2.500000000 GHz
CF Step	2.200000 MHz
Freq Offset	0 Hz

$\pi/4$ DQPSK/HCH/Hop



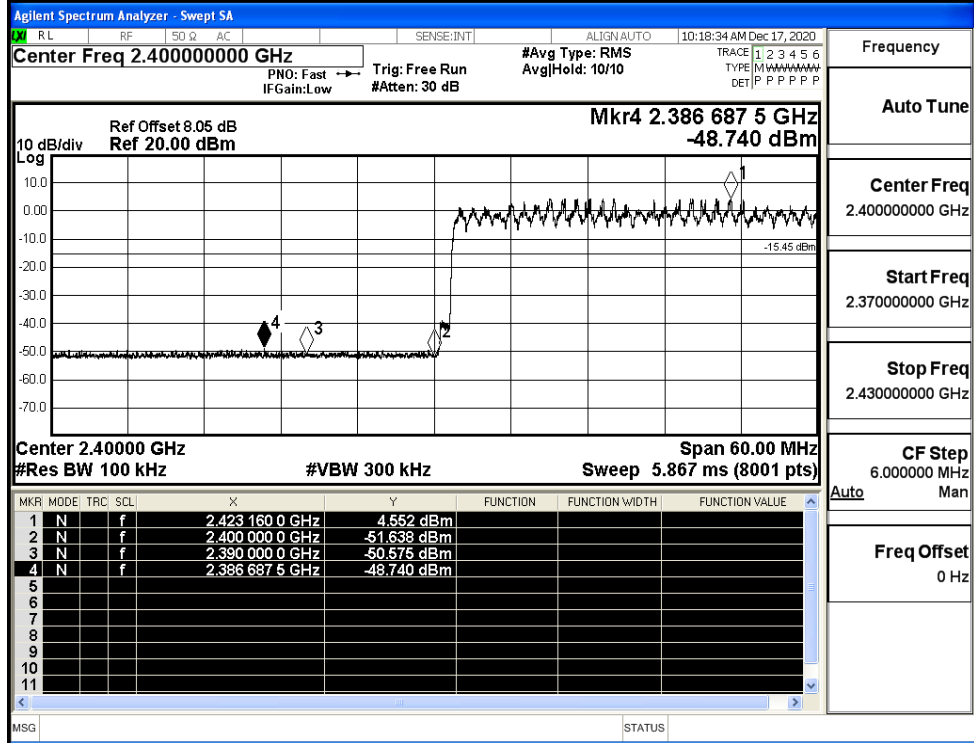
Frequency	2.483500000 GHz
Auto Tune	
Center Freq	2.483500000 GHz
Start Freq	2.465845000 GHz
Stop Freq	2.513500000 GHz
CF Step	6.000000 MHz
Freq Offset	0 Hz

8DPSK/LCH/No Hop



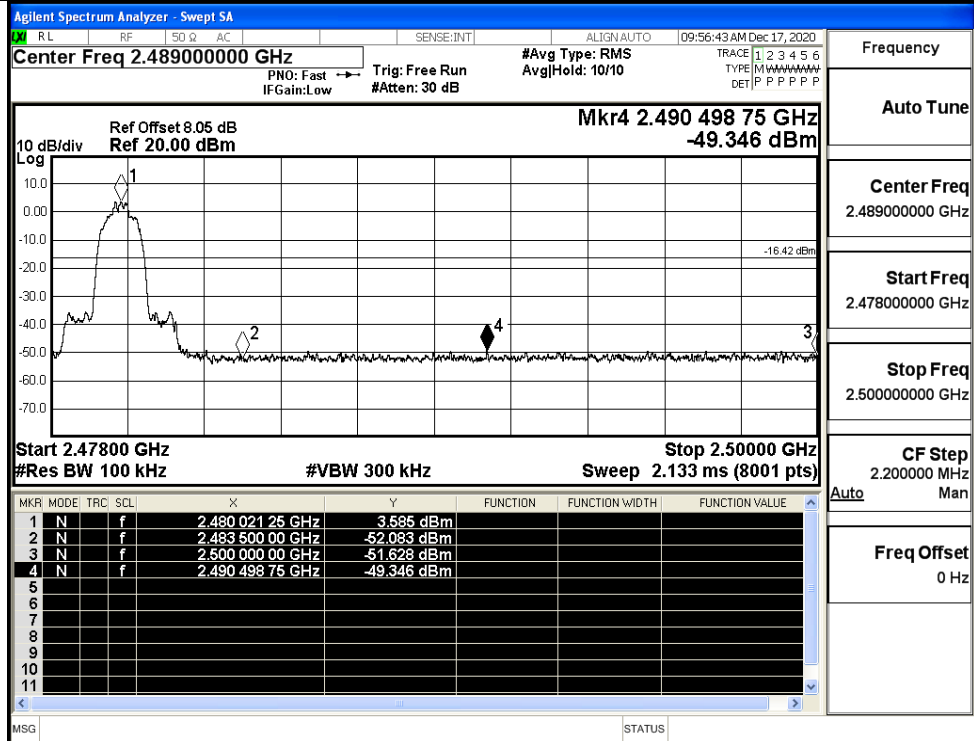
Frequency
Auto Tune
Center Freq
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Start Freq
2.310000000 GHz
Stop Freq
2.404000000 GHz
CF Step
9.400000 MHz
Auto Man
Freq Offset
0 Hz

8DPSK/LCH/Hop



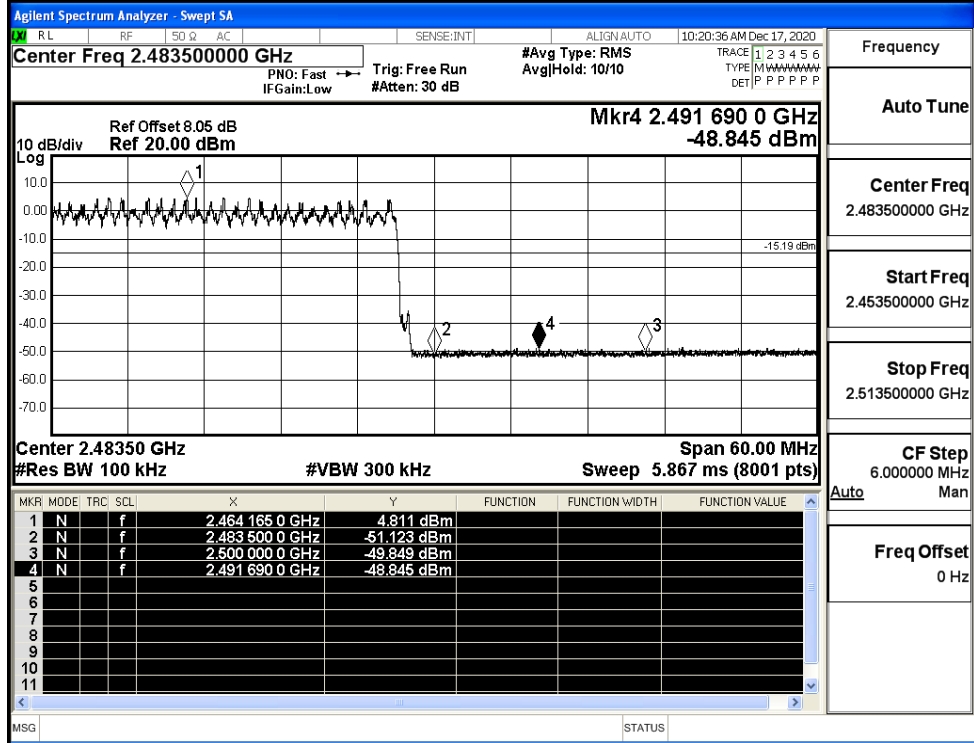
Frequency
Auto Tune
Center Freq
2.400000000 GHz
Start Freq
2.370000000 GHz
Stop Freq
2.430000000 GHz
CF Step
6.000000 MHz
Auto Man
Freq Offset
0 Hz

8DPSK/HCH/No Hop



Frequency
Auto Tune
Center Freq
2.489000000 GHz
Start Freq
2.478000000 GHz
Stop Freq
2.500000000 GHz
CF Step
2.200000 MHz
Freq Offset
0 Hz

8DPSK/HCH/Hop

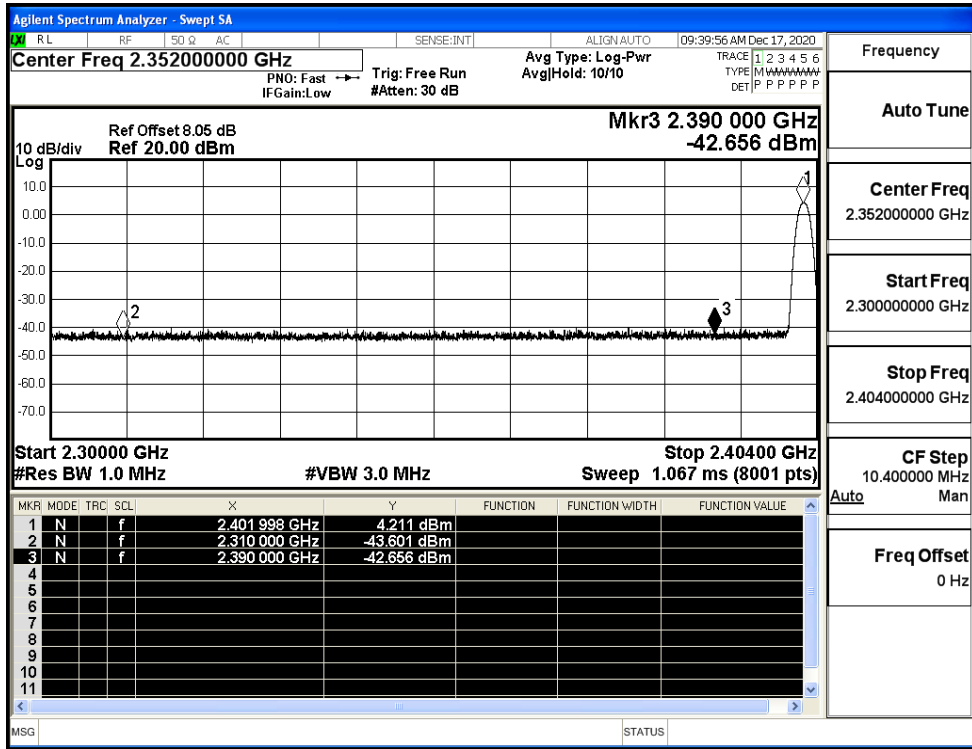


Frequency
Auto Tune
Center Freq
2.483500000 GHz
Start Freq
2.453500000 GHz
Stop Freq
2.513500000 GHz
CF Step
6.000000 MHz
Freq Offset
0 Hz

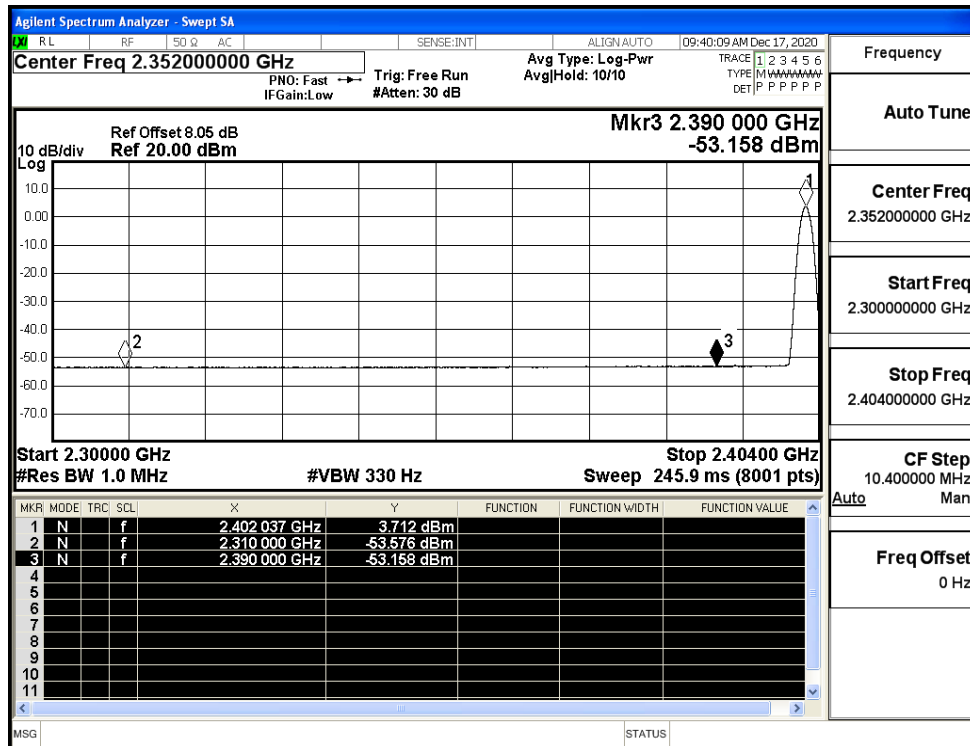
A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-43.60	2.0	0	53.63	PEAK	74	PASS
	Off	2310.0	-53.58	2.0	0	43.65	AV	54	PASS
	Off	2390.0	-42.66	2.0	0	54.57	PEAK	74	PASS
	Off	2390.0	-53.16	2.0	0	44.07	AV	54	PASS
	Off	2483.5	-42.64	2.0	0	54.59	PEAK	74	PASS
	Off	2483.5	-52.51	2.0	0	44.72	AV	54	PASS
	Off	2500.0	-42.32	2.0	0	54.91	PEAK	74	PASS
	Off	2500.0	-52.38	2.0	0	44.85	AV	54	PASS
$\pi/4$ DQPSK	Off	2310.0	-42.65	2.0	0	54.58	PEAK	74	PASS
	Off	2310.0	-53.44	2.0	0	43.79	AV	54	PASS
	Off	2390.0	-42.45	2.0	0	54.78	PEAK	74	PASS
	Off	2390.0	-53.02	2.0	0	44.21	AV	54	PASS
	Off	2483.5	-41.88	2.0	0	55.35	PEAK	74	PASS
	Off	2483.5	-52.49	2.0	0	44.74	AV	54	PASS
	Off	2500.0	-41.88	2.0	0	55.35	PEAK	74	PASS
	Off	2500.0	-52.44	2.0	0	44.79	AV	54	PASS
8DPSK	Off	2310.0	-43.12	2.0	0	54.11	PEAK	74	PASS
	Off	2310.0	-53.35	2.0	0	43.88	AV	54	PASS
	Off	2390.0	-41.83	2.0	0	55.40	PEAK	74	PASS
	Off	2390.0	-53.06	2.0	0	44.17	AV	54	PASS
	Off	2483.5	-41.74	2.0	0	55.49	PEAK	74	PASS
	Off	2483.5	-52.41	2.0	0	44.82	AV	54	PASS
	Off	2500.0	-42.13	2.0	0	55.10	PEAK	74	PASS
	Off	2500.0	-52.42	2.0	0	44.81	AV	54	PASS

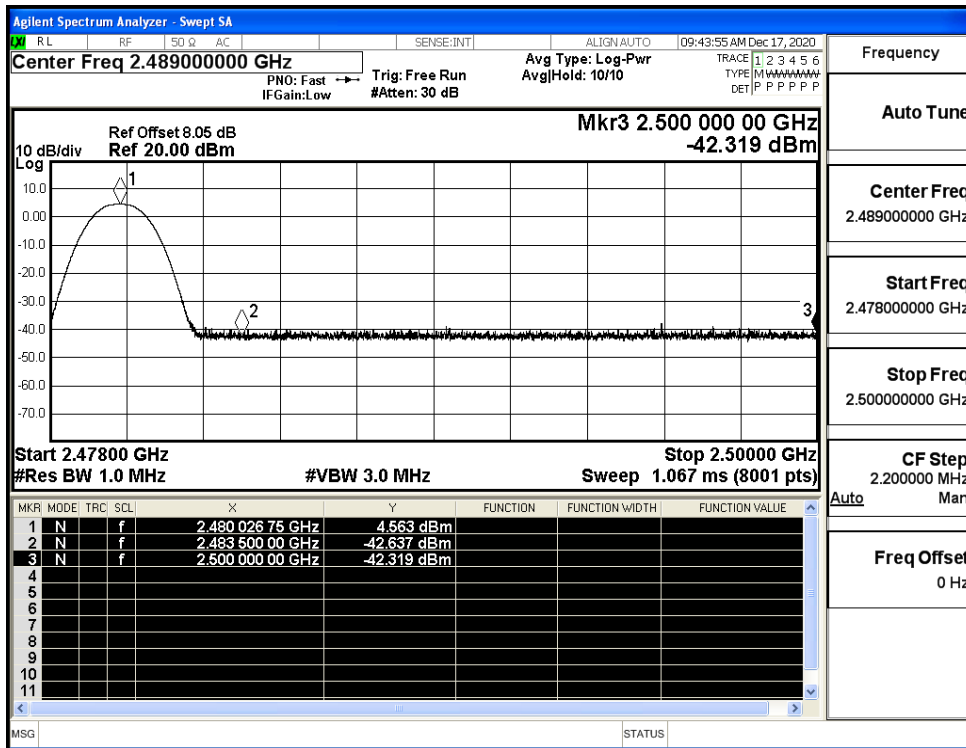
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (Low Channel)



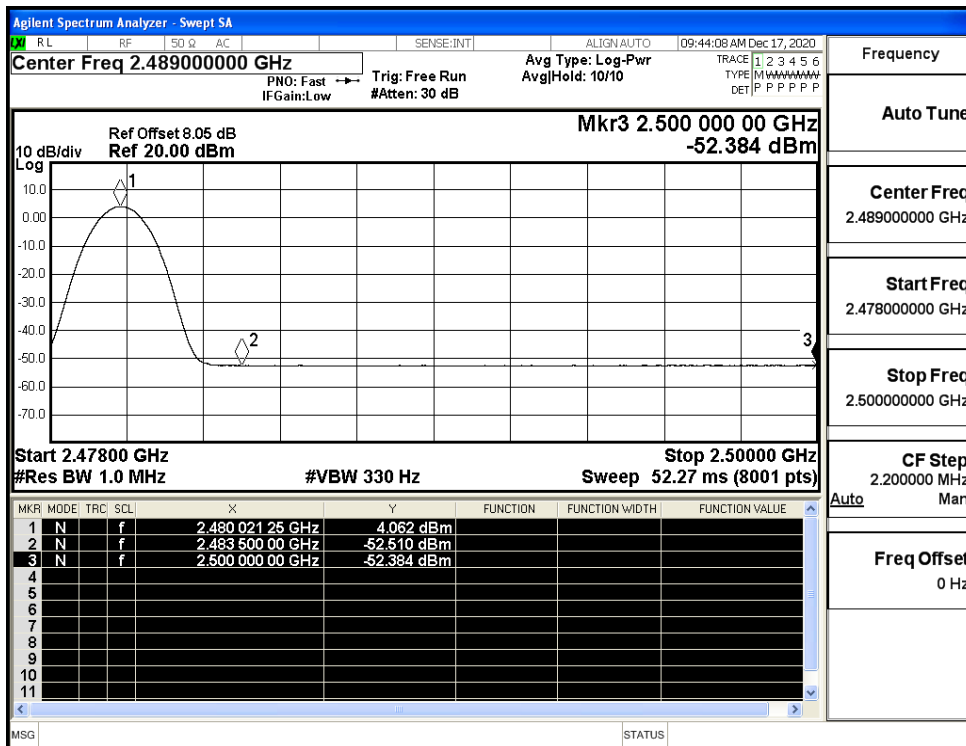
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (Low Channel)



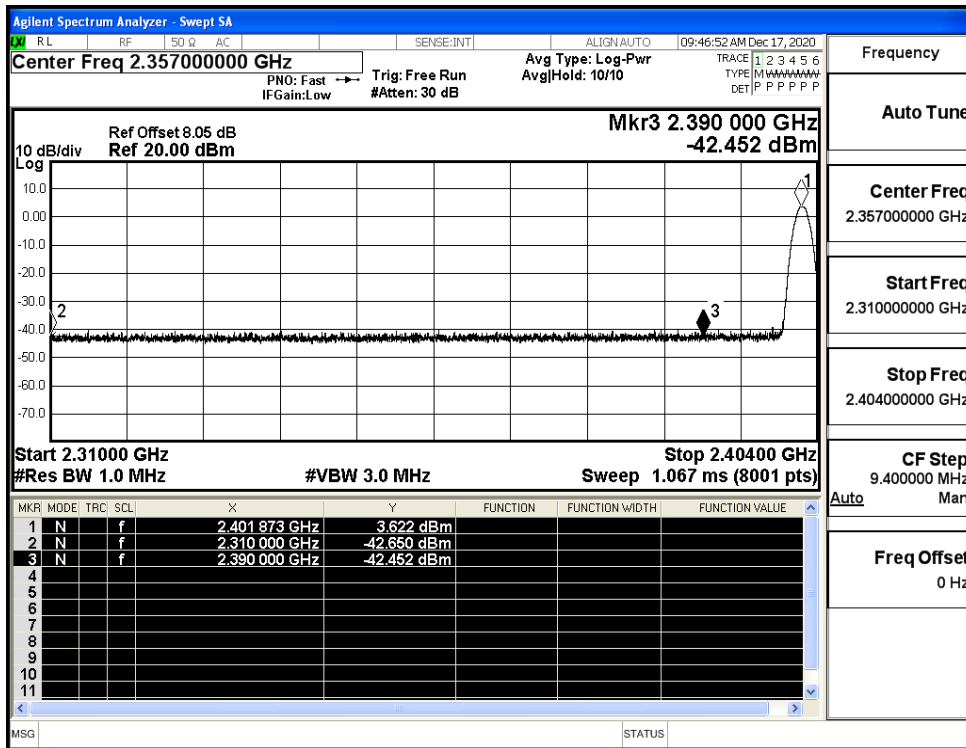
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (High Channel)



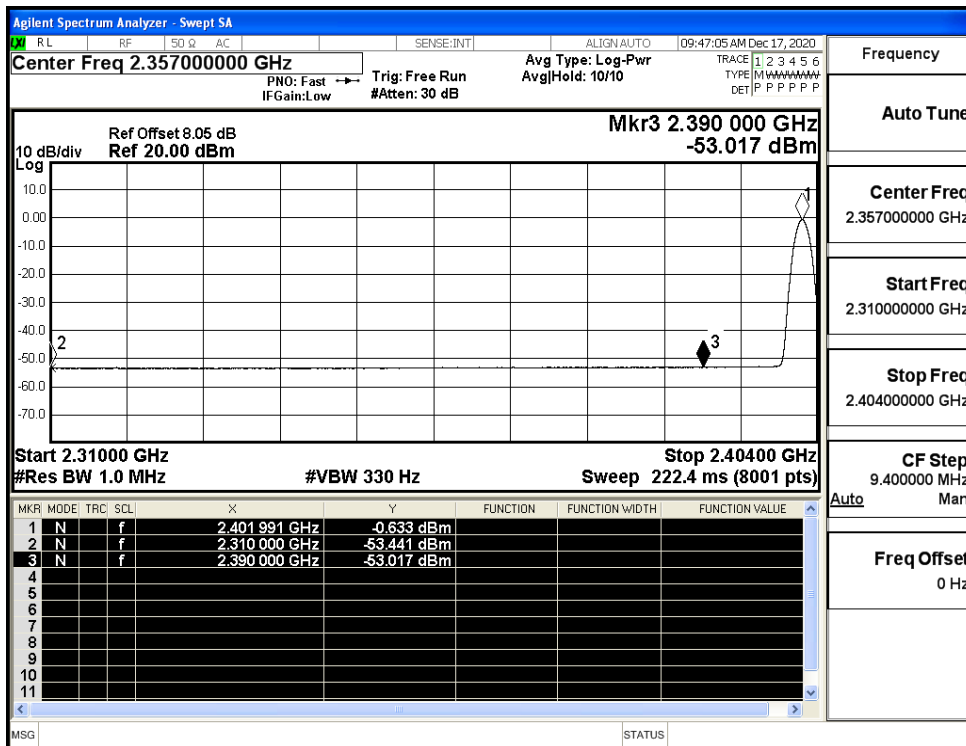
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (High Channel)



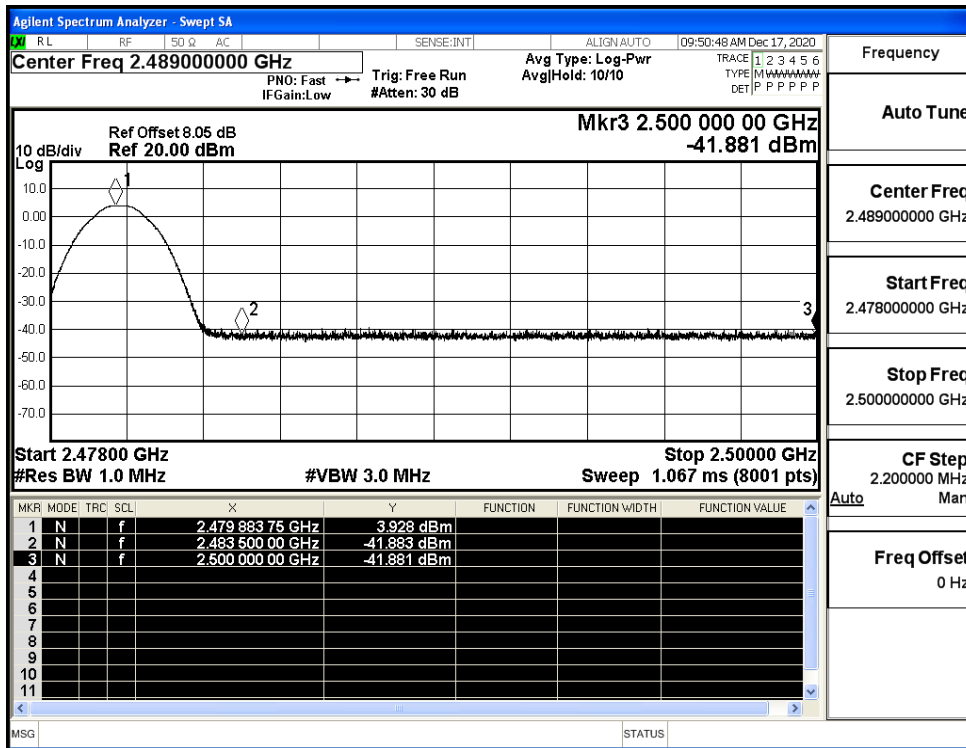
Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_PEAK (Low Channel)



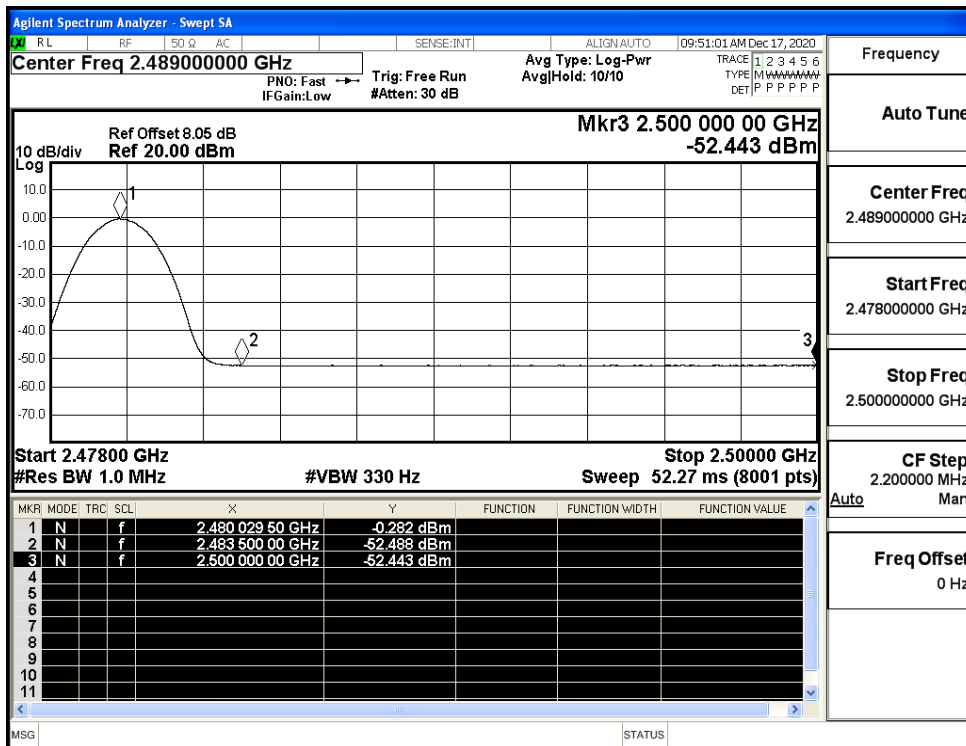
Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_Average (Low Channel)



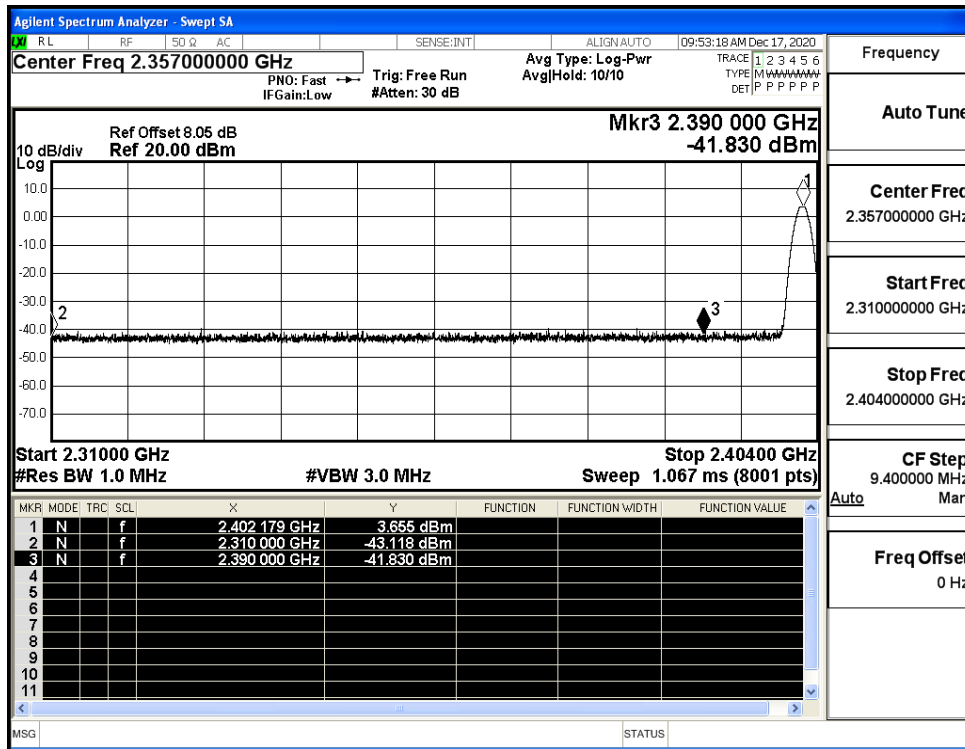
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_PEAK (High Channel)



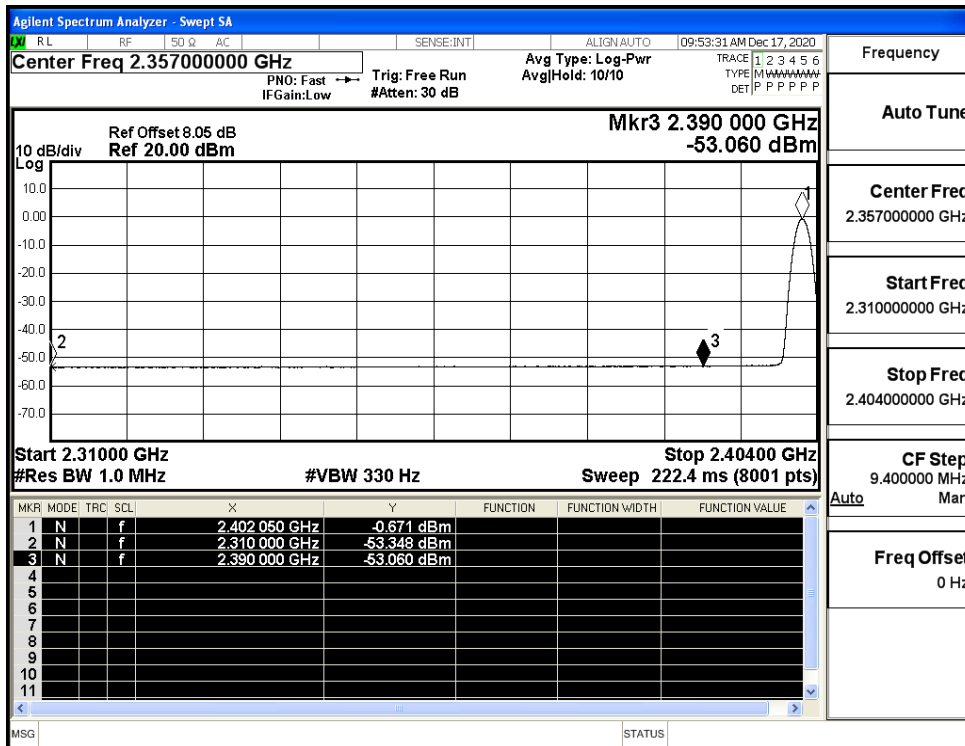
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_Average (High Channel)



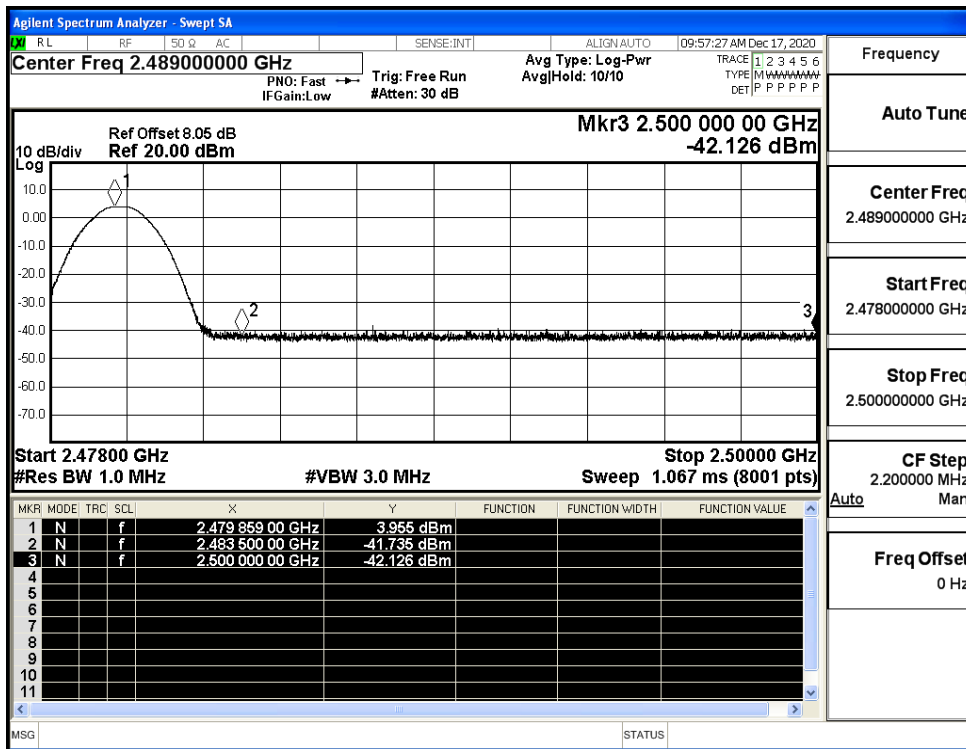
Restrict-band band-edge measurements_Hopping Off_8DPSK_PEAK (Low Channel)



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)

